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

2. PRESENTATIONS

   a) E-11-012, 2011 Roundabout Education Campaign Launch

3. DELEGATIONS

   a) E-11-008, Ottawa Street Transportation Study from Elmsdale Drive to Imperial Drive – Recommended Design Alternative (Staff Presentation)
      i) Ron Wright, Kitchener
      ii) Evan Rosamond, Kitchener

4. REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

   ADMINISTRATION

   a) Transportation and Environmental Services - Overview of Major Issues and Priorities (Roads and Transit) (Staff Presentation)

   DESIGN AND CONSTRUCTION

   b) Installation of Regional Watermain Integrated Urban System to St. Agatha and Associated Road Work, St Agatha Township of Wilmot, Information Package in Advance of Public Information Centre

   RAPID TRANSIT

   c) E-11-010, Rapid Transit Project Overview

INTER-DEPARTMENTAL REPORTS

   d) E-11-011/CR-FM-11-001, GRT Strasburg Road Facility Expansion Project Update

REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

COMMUNITY PLANNING

   e) P-11-005, Monthly Report of Development Activity for December 2010
TRANSPORTATION PLANNING

f) P-11-007, Active Transportation Advisory Committee

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g) P-11-008, GTA West Corridor – Update Report

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5. INFORMATION/CORRESPONDENCE

a) Memo re: Weber Street, College Street to Guelph Street Environmental Assessment Study – Public Input Meeting

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6. OTHER BUSINESS

a) Council Enquiries and Requests for Information Tracking List

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7. NEXT MEETING – February 15, 2011

8. ADJOURN

9. MOTION TO GO INTO CLOSED SESSION

THAT a closed meeting of the Administration & Finance and Community Services Committees be held on Tuesday, January 25, 2011 immediately following Planning & Works Committee 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) personal matters about identifiable individuals, potential litigation and related legal advice subject to solicitor-client privilege - financial matters
b) personal matters about identifiable individuals - committee appointments
c) personal matters about identifiable individuals - committee appointments
d) personal matters about identifiable individuals - committee appointments
e) personal matters about identifiable individuals - committee appointments
# NEXT MEETINGS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tr>
<td><strong>Planning and Works Committee</strong></td>
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<tr>
<td>February 15, 2011</td>
<td>9:00 A.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>March 8, 2011</td>
<td>9:00 A.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<td><strong>Planning, Housing and Community Services</strong></td>
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<td>TBA</td>
<td>TBA</td>
<td>Public Meeting for Greenlands Network Implementation Guideline</td>
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<td><strong>Transportation and Environmental Services</strong></td>
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<tr>
<td>January 27, 2011</td>
<td>5:00 P.M.</td>
<td>St. Agatha Watermain, Erb Road between Wilmot Line and Notre Dame Drive, Information Package in Advance of Public Information Centre</td>
<td>St. Agatha Community Centre, 207 Erb’s Road West</td>
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TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: January 25, 2011

FILE CODE: T04-10

SUBJECT: 2011 ROUNDABOUT EDUCATION CAMPAIGN LAUNCH

RECOMMENDATION:

For information.

SUMMARY:

NIL

REPORT:

Regional staff are pleased to advise that they are embarking on another annual roundabout education campaign. This year’s campaign will feature a “Practice Makes Perfect” motto. The campaign will promote 4 primary driving behaviours at roundabouts including:

1. Signaling;
2. Yielding;
3. Yielding to pedestrians; and
4. No overtaking.

Members of Regional Council have been asking staff to do more public education and to accommodate Council’s request for more education, the Region will be spearheading several campaign initiatives including:

- A series of 4 new instructional television commercials to be aired on CTV;
- Airing commercials on the Kitchener Auditorium jumbotron;
- New pamphlets and updated general brochure (see Appendix A);
- The Great Roundabout Radio Contest;
- Grand River Transit bus-back advertisements;
- Peer-led in-school student educational programs;
- Connections Newsletter and Region News ads;
- Regional website update; and
- Facebook.com, Youtube.com and Twitter.com social media.

Region staff are very pleased to announce that they were able to partner with the Kitchener Rangers organization to develop a new series of television commercials. Despite a busy schedule, Kitchener Rangers Public Relations staff, coach and players volunteered their time, services and facilities to help the Region develop four new instructional television commercials. Staff are pleased that the Rangers organization support the vision of staff, roundabouts and the “Practice Makes Perfect” motto. Figure 1 illustrates the Ranger players in action during the filming of the commercial.
The television commercial produced by CTV will begin airing on CTV January 25, 2011 and will run for 5 weeks. As well, Regional staff will again target popular internet websites such as Youtube.com and Facebook.com to promote the commercial and Regional website and to educate the public. This year will see Twitter.com added to the social networking stream. Over the past 2 years Corporate Communications staff found that these social networking websites attracted a large audience and therefore continue to take advantage of these avenues to reach the public.

Region staff are also pleased to introduce an exciting contest that will provide students the opportunity to produce radio advertisements for each of the four primary driving behaviours that the educational campaign is promoting. Students will be required to research roundabout driving etiquette and winning submissions will be aired on local radio stations.

Lastly, Transportation staff worked closely with Information Technology staff to develop a new front page on the Regional roundabout website. This new webpage will be launched concurrently with the television commercial on January 25, 2011. The public may access this page by perusing the Regional website or by accessing it directly by typing www.GoRoundabout.ca
CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to optimize the use of existing infrastructure (Strategic Objective 5.1).

FINANCIAL IMPLICATIONS:

The cost to undertake all these initiatives is approximately $110,000. Funding for these initiatives is provided for in the Roundabout Education Program in the 2010 Transportation Capital Program which includes approximately $110,000.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A – Pamphlets and Brochure

PREPARED BY:  Bob Henderson, Manager, Transportation Engineering

APPROVED BY:  Thomas Schmidt, Commissioner of Transportation and Environmental Services
**LET'S IMPROVE, SIGNAL YOUR MOVE!**

**How do I signal at a roundabout?**

**Turning right**
- Signal right as you approach the roundabout.
- Maintain your signal through the roundabout.
- Maintain your signal as you exit.

**Going straight**
- Do not signal as you approach the roundabout.
- Signal right prior to your exit only.

**Turning left**
- Signal left as you approach the roundabout.
- Maintain your signal through the roundabout.
- Signal right prior to your exit.

**Going full circle (U-turn)**
- Signal left as you approach the roundabout.
- Maintain your signal through the roundabout.
- Signal right prior to your exit.

**Region of Waterloo**

TRANSPORTATION AND ENVIRONMENTAL SERVICES

150 Frederick Street, 7th Floor
Kitchener ON N2G 4J3 Canada
Phone: 519-575-4559
Email: transportation@regionofwaterloo.ca

For more information check our website:

www.GoRoundabout.ca
HOW TO CROSS
► Step up to the curb and point your finger across the crosswalk.
► Do not start to cross if a driver cannot safely stop.
► Look and listen for a safe gap in the traffic flow.
► As you cross, keep pointing until you reach the far side of the road.
► Watch for drivers in the next lane. Make sure that the driver sees you.

TIPS FOR PEDESTRIANS
► Drivers are more likely to yield if you show that you intend to cross.
► Walk to the crosswalk briskly and deliberately.
► Look at the drivers – make eye contact.
► Start to cross as soon as you are sure that the driver intends to slow or stop.

REMEMBER
► Use the sidewalks and crosswalks around the outside of the roundabout.
► Do not cut across the middle of the roundabout.
► Wait on the splitter island.

TIPS FOR MOTORISTS
► Expect pedestrians.
► Yield to pedestrians at all crosswalks.

For more information check our website:
www.Goroundabout.ca
Or call 519-575-4558
What do the signs at a roundabout mean?

- Roundabout ahead.
- Choose your destination. Start planning your route.
- There are two entry lanes to the roundabout. Choose the correct lane for your destination.
- Yield to all traffic in the roundabout including pedestrians at crosswalks. Remember you may have to stop.
- Flag exit signs identify street names for each leg of the roundabout.
- Yield here to pedestrians.

Very Important:

- Look and plan ahead. Slow down!
- Pedestrians go first. When entering or exiting a roundabout, yield to pedestrians at the crosswalk.
- Look to the left, find a safe gap, then go.
- Don't pass vehicles in a roundabout.
- Remember to signal.

REMINDERS

- Drivers:
  - Keep to the right.
  - Signal left at the beginning and right when leaving.

- Cyclists:
  - Go on the right.
  - Use hand signals for left turn or stop.

For more information check our website:
www.GoRoundabout.ca

How to DRIVE, WALK and BIKE in a ROUNDABOUT

All about Roundabouts

www.GoRoundabout.ca
**WHAT IS A ROUNDABOUT?**

A roundabout is an intersection at which all traffic circulates counterclockwise around a centre island.

**ROUNDABOUTS:**
- Reduce motorist and pedestrian injury collisions
- Keep traffic moving
- Reduce unnecessary stops
- Reduce unnecessary idling and air pollution

**HOW TO DRIVE IN A ROUNDABOUT**

- Slow down when approaching a roundabout.
- Observe lane signs. Choose the correct entry lane.
- Expect pedestrians and yield to them at all crosswalks.
- Wait for a gap in traffic before entering the roundabout. Yield to traffic in the roundabout.
- Drivers in the roundabout always have the right-of-way.
- Do not pass other vehicles in the roundabout.
- Give large vehicles extra space because they might use both lanes.

**TIPS FOR DRIVERS OF LARGE VEHICLES**

When approaching a roundabout, straddle the entry lanes. Use both lanes in the roundabout. Don’t try to leave space for another vehicle to pass you.

**TIPS FOR PEDESTRIANS**

- Step up to the curb and point your finger across the crosswalk.
- Do not start to cross if a driver cannot safely stop.
- Look and listen for a safe gap in the traffic flow.
- As you cross, keep pointing until you reach the far side of the road.
- Watch for drivers in the next lane. Make sure that the driver sees you.

**TIPS FOR CYCLISTS**

A cyclist has two choices at a roundabout. Your choice will depend on your degree of comfort riding in traffic.

**For experienced cyclists:**
- Ride as if you were driving a car.
- Merge into the travel lane before the bike lane or shoulder ends.
- Ride in the middle of your lane; don’t hug the curb.
- Use hand signals and signal as if you were a motorist.
- Watch out for drivers’ blind spots.

**For less confident cyclists:**
- Dismount and walk your bicycle.
- Follow tips for pedestrians.

**What if an emergency vehicle comes through the roundabout?**

- If you have not yet entered the roundabout, pull to the right and let the emergency vehicle pass you.
- If you are in the roundabout, exit as normal, then pull to the right and let the emergency vehicle pass you.
- Do not stop inside the roundabout.

**How do I signal at a roundabout?**

**Turning right**

- Signal right as you approach the roundabout.
- Maintain your signal through the roundabout.
- Maintain your signal as you exit.

**Going straight**

- Do not signal as you approach the roundabout.
- Signal right prior to your exit only.

**Turning left**

- Signal left as you approach the roundabout.
- Maintain your signal through the roundabout.
- Signal right prior to your exit.

**Going full circle (U-turn)**

- Signal left as you approach the roundabout.
- Maintain your signal through the roundabout.
- Signal right prior to your exit.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: January 25, 2011

FILE CODE: T04-20, 7240, 7294

SUBJECT: OTTAWA STREET TRANSPORTATION STUDY FROM ELMSDALE DRIVE TO IMPERIAL DRIVE – RECOMMENDED DESIGN ALTERNATIVE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo take the following actions with respect to the Class Environmental Assessment for the Ottawa Street Transportation Study:

a) Approve the implementation of a roundabout at Ottawa Street and Alpine Road and a roundabout at Ottawa Street and Homer Watson Boulevard and related works in the City of Kitchener, all as presented in Report E-11-008

b) Direct staff to file the Notice of Completion for this Class Environmental Assessment by means of advertisement in the local newspaper and mailings to the adjacent property owners, tenants and agencies and place the Screening for Environmental Assessment files on the public record for a period of 30 days.

SUMMARY:

The Region of Waterloo is undertaking a Class Environmental Assessment study for the development of an operational and safety improvement strategy for the Ottawa Street Corridor between Elmsdale Drive and Imperial Drive, in the City of Kitchener. The study limits are indicated on the Key Plan in Appendix “A”. The study is being planned as a Schedule “B” Class EA project of the Municipal Class Environmental Assessment process (2007). The study is being directed by a Project Team consisting of staff from the Region of Waterloo, City of Kitchener, Ontario Ministry of Transportation, and Regional Councillors Tom Galloway and Jim Wideman.

The Project Team developed four Alternative Design Concepts. Each of the four Alternative Design Concepts was evaluated with respect to the traffic capacity, operations and safety in comparison to their potential environmental impacts on the natural environment, and the social environment and costs. Based on this evaluation, as well as a thorough review of all public input received, the Project Team has identified Alternative Design Concept Three - Roundabouts at the intersections of Ottawa Street with both Homer Watson Boulevard and Alpine Road as the Recommended Design Concept.

The two-roundabout solution would provide a 70% reduction in expected injury collisions, reduced speed and severity for other collisions, would reduce delay and congestion on Ottawa Street and intersecting roads from the Laurentian Centre entrance to the Hwy 7/8 crossing. The pedestrian environment would be improved with a reduction in pedestrian delay and expected pedestrian collisions and with improvement of some difficult highway ramp crossings. A safe and convenient cycling route would be provided by an off-road multi-use trail, which could be extended to provide interconnection to other planned road improvements with cycling facilities and to existing nearby City of Kitchener trails.
Public comments received are generally supportive of the evaluation of alternatives, but there remain some concerns regarding driver behaviour in roundabouts, traffic operations at roundabouts and pedestrian safety in crossing at roundabouts.

Design Concept 3 was presented as the Project Team’s Recommended Design Alternative at the Public Input Meeting (PIM) for the Ottawa Street Transportation Study project on November 23, 2010 at Regional Council Chambers to solicit comments from the general public and other stakeholders regarding the proposed improvements and potential impacts. The Project Team has reviewed and responded to all comments received. Subject to approval by Regional Council, the Class EA, Schedule “B” screening file for the project will be displayed for a 30 day public review and subsequent approval by the Ministry of Environment. Construction is currently planned for 2015.

The estimated cost for the Project Team’s Recommended Design Alternative is $5.5 million, depending on the costs for relocation of utilities and for property acquisition.

REPORT:

1. Background

The Region of Waterloo is undertaking a Class Environmental Assessment study for the development of an operational and safety improvement strategy for the Ottawa Street Corridor between Elmsdale Drive and Imperial Drive, in the City of Kitchener. The study is following Schedule “B” of the Municipal Class Environmental Assessment process (2007). The study limits are indicated on the Key Plan in Appendix “A”. The study is being directed by a Project Team consisting of staff from the Region of Waterloo, City of Kitchener, Ontario Ministry of Transportation and Regional Councillors Tom Galloway and Jim Wideman.

The study area has three intersections along Ottawa Street which have ranked in the Region’s 10 worst collision locations (2003-2007 inclusive). This section of Ottawa Street experiences unusual collision patterns resulting from congested peak hour operations, extensive queuing, weaving and high vehicle delays west of Homer Watson Boulevard. A key contributor to this congestion is traffic attempting to access the Highway 7/8 eastbound on–ramp. The resulting long eastbound queue was found to be a major contributor to the unusual collision patterns along Ottawa Street.

To address the identified safety concerns the Region undertook a review of the traffic signal timings within the corridor. Revised timing plans, where applicable were developed and implemented in order to optimize signal timings for progression and coordination along the corridor. This initiative was unsuccessful in resolving all the operational and safety concerns. Through the years 2001 to 2008, staff has implemented a number of countermeasures to address collisions at this location including red-light cameras, traffic signal head visibility improvements and pedestrian countdown signals. These countermeasures have resulted in some reductions in collisions at this location; however, the intersection continued to experience a large amount of unexpected collisions. In August 2008, Council directed staff to initiate the Ottawa Street Transportation Study to develop an operational and safety improvement strategy for the Ottawa Street Corridor between Elmsdale Drive and Imperial Drive, in the City of Kitchener.

Collisions

The collision experience in the study area includes 362 actual collisions versus 189 expected collisions for the period of 2005 to 2009. The collision data shows that:
Ottawa Street at Homer Watson Boulevard is ranked as the worst intersection in the Region in the 2009 collision study with 183 collisions in five years (2005 to 2009) where 84 were expected. This intersection was rated #1 for rear end and injury collisions and rated #4 for turning collisions.

The Alpine Road intersection experienced 79 actual collisions vs. 49 expected collisions and was rated #5 for rear end and #12 for injury collisions in five years (2005 to 2009).

The Strasburg Road intersection experienced 62 actual collisions versus 41 expected collisions and was rated #22 for injury collisions in five years (2005 to 2009).

The mid-block of Ottawa Street S. between Alpine Road and the signals at the Laurentian Power Centre experienced 38 actual collisions versus 15 expected collisions in five years (2005 to 2009).

Operational Issues

There are a series of competing traffic manoeuvres that contribute to the recorded delay and collision experience. The movements include:

- Alpine Road to northbound Homer Watson Boulevard;
- Alpine Road to southbound Homer Watson Boulevard;
- Eastbound Highway 7/8 off-ramp to southbound Homer Watson Boulevard;
- Alpine Road to on-ramp for eastbound Highway 7/8.

Calls for Emergency Services

When fire trucks respond to emergency calls from the Strasburg Road Fire Station, the Ottawa Street traffic signal coordination is automatically “over-ridden” to provide priority access for these emergency vehicles. Currently this affects the signal operations on Ottawa Street in both directions from Strasburg Road, even though the emergency vehicles are travelling in one direction for the call. As a result, traffic operations are adversely affected in the direction which does not benefit the emergency vehicles. After such events, it takes a considerable length of time for the traffic signals to return to their normal operating conditions, resulting in increased delays to area roadway traffic. On average there are about 40 of these pre-emption calls per day in this corridor.

Transit Delays

Currently, over 525 buses travel in the Ottawa Street Corridor on a daily basis. The travel time can vary between 6 minutes and 19 minutes. The delays in this corridor are adding significant operational costs to GRT. The Regional Transportation Master Plan (RTMP) identified the need for “Enhanced Transit” through the Ottawa Street corridor and there are plans for iXpress service and a high frequency connection to the proposed Rapid Transit (RT) system. This Ottawa Street service would feed directly into the proposed RT stop at Charles Street. The delays and costs to GRT are going to increase over time and therefore opportunities to reduce these delays will be considered as part of this project.

Demand for Eastbound Hwy 7/8 Movement

In the absence of other alternative routes to access Highway 7/8 eastbound within the study area, there is a significant demand to access the existing single-lane Highway 7/8 eastbound ramp (located on the east side of Homer Watson Boulevard) from eastbound traffic along Ottawa Street and northbound traffic on Homer Watson Boulevard. This cumulative demand along with the weaving and signal timing issues results in periods of considerable congestion and delay and contributes to the high collision frequency in the corridor.
Cycling, Pedestrian and Transit Needs
The Ottawa Street Corridor needs to accommodate all modes of transportation such as walking, bicycling, transit, and the needs of motorists. The Region of Waterloo is committed to providing a more integrated, sustainable and convenient transportation system. This improved system will provide greater access to jobs and services, improve air quality, and help to address increasing traffic congestion.

Future transportation direction and investment decisions within the Region of Waterloo are guided by the RTMP. The RTMP incorporates strategies focusing on public transit enhancements, bicycling and pedestrian facilities, and transit supportive land uses to effect a reduction in auto use through enhancement of non-auto related modes of travel. The Regional Cycling Master Plan identifies Ottawa Street as a future on road cycling route. No dedicated on-road or off-road cycling facilities currently exist.

The study has explored opportunities to address challenges for pedestrians to cross at many of the designated pedestrian crossings in the corridor, including long crossing distances at intersections, crossing against heavy right-turn vehicle traffic at signalized intersections and informal crossing of the existing Hwy 7/8 EB on-ramp from Homer Watson Boulevard, north of Hwy 7/8. Pedestrians also experience challenges crossing the existing Ottawa Street eastbound to Hwy 7/8 eastbound on-ramp.

Highway 7/8 Improvements and Block Line Road Extension
The Ministry of Transportation (MTO) current timing, to widen Highway 7/8 corridor from west of the Fischer-Hallman Road interchange to east of the Courtland Avenue interchange, is in 2011-2013. The City of Kitchener project for the Block Line Road Extension from the Hydro corridor, east of Homer Watson to Courtland Avenue is currently proposed to start construction in 2011, with completion expected in 2012. It is not expected that either this City project or the MTO planned Highway 7/8 improvements, when completed will resolve the congestion and delay issues along Ottawa Street.

2. Public Consultation Centre (PCC) October 28, 2009
Six Alternative Solutions for the study (including combinations of Alternative Solutions) were presented to the public for review and comments:

1. Improve adjacent roadway(s) to service some Ottawa Street traffic
2. Increase traffic capacity along Ottawa Street by adding through lanes
3. Enhance the service level of other modes of travel such as transit vehicles, cyclists and pedestrians
4. Provide a new on-ramp to Highway 7/8 from Westmount Road
5. Do intersection improvements and traffic control modifications
6. Do nothing

A combination of Alternatives 3, “Enhance the service level of other modes of travel such as transit vehicles, cyclists and pedestrians” and 5, “Do intersection improvements and traffic control modifications” was selected as the technically preferred solution to be carried forward for development of alternative design concepts. This solution specifically includes the enhanced level of transit service planned as part of the Transportation Master Plan, and the implementation of improved cycling and pedestrian facilities, in conjunction with intersection geometric and traffic control improvements.
In addition, four Alternative Design Concepts for the Intersection Improvement Solution were developed and assessed:

**Design Concept 1** - Maintain traffic signal control at the intersections of Ottawa Street with Homer Watson Boulevard and Alpine Road, with optimization of turn lanes, enhanced storage and modification of signal timing.

**Design Concept 2** - A roundabout at the intersection of Ottawa Street with Homer Watson Boulevard and traffic signal control improvements at the Ottawa Street/Alpine Road intersection.

**Design Concept 3** - A roundabout at each of the intersections of Ottawa Street with Homer Watson Boulevard and Alpine Road.

**Design Concept 4** - The “Do Nothing” Alternative, consisting of maintenance of existing conditions, and minor improvements at specific locations that would have little to no effect on addressing the overall study needs.

A combination of geometric, traffic control and signal timing improvements were considered to address the identified problems. In addition to the intersection improvements, each of Alternative Design Concepts 1, 2 and 3 includes:

- No additional through lanes for vehicles on Ottawa Street nor on Homer Watson Boulevard.
- Relocation of the existing Homer Watson southbound to Highway 7/8 eastbound on-ramp to a new Ottawa Street at Alpine Road on-ramp to eastbound Highway 7/8. This results in no direct southbound to eastbound Highway 7/8 access from Homer Watson Boulevard.
- Improved alignment of existing Hwy 7/8 eastbound on-ramp at Ottawa Street.
- A revision to emergency vehicle traffic signals pre-emption so that it only affects intersections along Ottawa Street in the direction of the responding vehicles.
- Reduced delays for Public Transit and monitoring of the future need for enhanced transit priority.
- An off-road multi-use trail along both sides of Ottawa Street from West of Alpine Road to Imperial Drive. This would be a replacement of the existing sidewalks. The study has identified opportunities to extend cycling facilities on both sides of Ottawa Street from West of Alpine Road to Strasburg Road on the north and south sides and to McLennan Park on the south side of Ottawa Street.

3. **Preferred Design Concept for Implementation**

After a thorough technical assessment of all four Alternative Design Concepts and a thorough review of all comments received from the public, the Project Team identified Alternative Design Concept 3 – A roundabout at each of the intersections of Ottawa Street with Homer Watson Boulevard and Alpine Road as the Preferred Design Concept for implementation for the following reasons:
Alternative Design Concept 3 is the only alternative that adequately provides for existing and future traffic operational needs. It is expected that Alternative Design Concepts 1 and 2 and the “Do Nothing Alternative” would result in unacceptable queue lengths, and delays for vehicles, including grid-lock on Ottawa Street eastbound from Alpine Road to Homer Watson Boulevard.

The addition of a second ramp for eastbound Ottawa Street motorists to access eastbound Highway 7/8 would effectively split the demand for the existing ramp and greatly reduce eastbound queues at the Homer Watson Boulevard intersection.

Alternative Design Concept 3 with roundabouts at the Alpine Road and Homer Watson Boulevard intersections would result in 70% fewer injury collisions at those intersections.

Alternative Design Concept 3 with roundabouts would significantly lower operating speeds at these two intersections. The lower vehicle speeds, combined with pedestrian priority, shorter crossings with splitter islands would help to enhance the pedestrian environment within the project limits. The elimination of the existing N-E loop ramp would also improve the pedestrian environment by eliminating the existing awkward pedestrian crossings of that ramp.

Alternative Design Concept 3 also provides opportunities for wide boulevards, enhanced landscaping and multi-use trails along Ottawa Street which would further enhance the pedestrian and cycling environment in this area and would be in keeping with the Region’s Transportation Master Plan and Transportation Corridor Design Guidelines.

Alternative Design Concept 3 supports the following additional benefits:

- Improved alignment of existing Hwy 7/8 eastbound on-ramp at Ottawa Street
- A revision to emergency vehicle traffic signals pre-emption so that it only affects intersections along Ottawa Street in the direction of the responding vehicles. Emergency vehicles will have very good routes through the roundabouts.
- Reduced delays for Public Transit and monitoring of the future need for enhanced transit priority.

Although the road widening needs for Alternative Design Concept 3 will directly impact approximately 4 properties, with approximately 2 properties, Rona and Weiland Ford Sales, expected to have land-use impacts (such as loss of parking), the Project Team intends to mitigate as much as possible any adverse property impacts. Potential mitigation measures will be considered when further refining the Recommended Design Concept through later detail design and negotiations for the necessary property. None of the Alternative Design Concepts would result in changes to property access.

Alternative Design Concept 3 will have only minor negative impact on the natural environment associated with, some re-grading and some reduction of green space. Improved operational performance of intersections under Alternative Design Concept 3 will result in reduced idling, and reduced start/stop acceleration and deceleration of vehicles and an associated reduction in noise, fuel consumption and exhaust emissions.

The estimated initial capital costs for Alternative Design Concept 3 is $0.9M higher than the estimated cost of Alternative Design Concept 1. The expected 20-year injury collision cost for Alternative Design Concept 3 is $4.5M less than for Alternative Design Concept 1. The estimated 20-year life-cycle cost for Alternative Design Concept 3 is the lowest of the 4 Alternative Design Concepts.
4. Concerns Raised by the Public at Public Input Meeting (PIM), November 23, 2010

In general public comments and suggestions for this study recognized the current traffic congestion and operational difficulties and supported the need for improvements on Ottawa Street, as well as identified a need for better accommodating pedestrians and cyclists. Other comments questioned the need for improvements and instead suggested redirecting traffic, especially trucks, to alternative roads. Others expressed concerns with traffic operations, support and opposition for roundabouts and concerns with potential property and access impacts.

A Public Input Meeting (PIM) of the Regional Municipality of Waterloo Planning and Works Committee was held on November 23, 2010 to present Alternative Design Concept 3 – Roundabouts at Ottawa Street/Alpine Road and at Ottawa Street/Homer Watson Boulevard as the Project Team’s Preferred Design Concept. Nine delegations addressed their comments and concerns to the Committee.

The main project-related issues raised related to:
- Driver Behaviour in Roundabouts
- Traffic Operation at Roundabouts
- Pedestrian and Cyclist Safety and Convenience
- Relocation of Existing Homer Watson Southbound to Highway 7/8 Eastbound Ramp

Since the November 23, 2010 PIM, the Project Team fully reviewed all of the issues raised and responded to them as follows:

- **Driver Behaviour in Roundabouts**: The Region’s experience to date with the existing fourteen roundabouts has been positive and staff have observed that most drivers generally understand how to drive roundabouts. Staff note the low number of injury collisions reported to date at each of the 14 existing roundabouts. Drivers in other parts of North America, such as Michigan and Colorado, have adapted to 3-lane roundabouts. Staff also believe that many drivers are still “on the learning curve” and just need more experience and education in order to drive the roundabouts with more confidence. To assist drivers on this “learning curve” Region staff are continuing their efforts at improving the Region’s public education for motorists, pedestrians and cyclists at roundabouts. “Frequently Asked Questions About Roundabouts” and additional educational information is provided at the Region’s web-site at [www.region.waterloo.on.ca/roundabouts](http://www.region.waterloo.on.ca/roundabouts).

- **Traffic Operation at Roundabouts**: Based on the technical assessment of the operational performance of each of the Alternative Design Concepts, the Project Team concluded that Design Concept 3, with roundabouts at both Alpine Road and Homer Watson Boulevard, is the only alternative that would adequately address the congestion and the collision problem. The traffic signal concepts (Design Concepts 1 and 2) would simply not work as intersection traffic would “back-up” from one signalized intersection to the other. The addition of a second ramp at Alpine Road to go eastbound on Highway 7/8 from Ottawa Street eastbound would effectively “split-up” the heavy eastbound movement to the highway between the two intersections resulting in a much shorter queue at the Homer Watson Boulevard intersection.

- **Pedestrian and Cyclist Safety and Convenience**: The safety of pedestrians crossing at the Ottawa/Alpine and Ottawa/Homer Watson intersections is a prime consideration in the Project Team’s evaluation of Design Concept 3. Data from numerous studies show that roundabouts provide a greater level of pedestrian safety than other types of intersections and have been proven to dramatically reduce pedestrian injury collision rates by up to 80%. 
There are relatively few serious pedestrian collisions at roundabouts because:

- There are fewer conflict points (32 at a signalized intersection and 8 at a roundabout) for motorists, cyclists and pedestrians;
- Vehicle speeds are low (approximately 40 km/h to 50 km/h);
- There is a lower speed differential between users (motorists, cyclists and pedestrians);
- The lower speeds and geometry reduce the severity of collisions that do occur; and
- Pedestrian crossing distances are shorter and crossing requires looking in one direction only.

According to Region of Waterloo Report E-09-104 (Operational Review of Roundabouts in the Region of Waterloo), the Region’s roundabouts are exhibiting good safety performance with relatively few injury collisions and no serious pedestrian injuries. Staff believe that with continued implementation of roundabouts and the resulting increased driver familiarity with them, and with continued public education efforts (see Project Team Response to comments on Driver Behaviour in Roundabouts and Public Education), the safety performance of roundabouts will continue to be superior to traffic signals. A good example of this excellent safety performance is in Melbourne, Australia, where each year there are 268 pedestrian collisions at 7,500 signalized intersections (1 pedestrian collision for every nine signalized intersections) and there are 11 pedestrian collisions each year at 4,000 roundabouts (1 pedestrian collision for every 364 roundabouts).

As per current Region practice, the ladder-type crossing pavement markings and signs would indicate pedestrians’ priority over entering and exiting vehicles at each roundabout. This priority combined with vehicles moving at slow speeds and the presence of splitter islands at roundabouts would provide a more pedestrian-friendly environment than at the existing traffic signals with much lower wait times for pedestrian crossings. At the existing traffic signals, pedestrians can be held up for more than a minute waiting for a “walk” signal.

Alternative Design Concept 3 includes the provision of an off-road multi-use trail along both sides of Ottawa Street from Alpine Road to Imperial Drive. This would be a replacement of the existing sidewalks. To accommodate cycling (as well as pedestrians), off road multi-use paths around roundabouts are being provided rather than on-road dedicated cycling lanes as per current Region practice. In discussions, the Regional Cycling Advisory Committee supported the use of off-road multi-use trails for this project. The study has also identified opportunities to extend cycling facilities on both sides of Ottawa Street from Alpine Road to Strasburg Road on the north side and to McLennan Park on the south side of Ottawa Street. The detailed design would also examine the feasibility of extending an off-road multi-use trail on the west side of Homer Watson Boulevard from Ottawa Street, north beneath Highway 7/8 for a potential future connection north to Meinzinger Park.

- **Relocation of Existing Homer Watson Southbound to Highway 7/8 Eastbound Ramp:** The Project Team considered keeping the existing loop-ramp from Homer Watson Boulevard southbound to Highway 7/8 eastbound open in addition to the proposed new access to eastbound Highway 7/8 for the Alpine Road roundabout. While having both ramps open provides more options to motorists, the Project Team rejected the idea because of two main reasons. Firstly, having both ramps in operation would result in an awkward merge point far along the existing loop-ramp at a location where motorists do not expect to merge. This potentially could result in collisions on the ramp. The Ministry of Transportation was also not in favour of both ramps merging for this reason. Secondly, removal of the existing loop-ramp would remove an existing awkward and potentially dangerous situation where southbound pedestrians on Homer Watson Boulevard, en route to the Laurentian Plaza, are crossing the existing loop-ramp at an informal crossing in a location where motorists are not expecting pedestrians. Therefore, removal of the existing loop-ramp would help to create a more
pedestrian-friendly environment for walkers intending to go west from southbound Homer Watson Boulevard.

More detailed responses by the Project Team to the issues raised by the public at the PIM are tabulated in Appendix “B”

6. Project Team Recommended Design Concept

Based on a review of the technical information gathered for this project, and in consideration of the evaluation of the environmental impacts and benefits/opportunities of the alternatives, as well as a thorough review of all public comments received, the Project Team is recommending Alternative Design Concept 3 – Roundabout at Ottawa Street/Alpine Road and Roundabout at Ottawa Street /Homer Watson Boulevard as the Recommended Design Concept for this Class EA Study. Please see Appendix “C” – Recommended Design Concept for a plan of Design Concept 3.

Increased active transportation and in particular increased transit mode share is vital to reduction of congestion in the study area and in the Region’s transportation network. To achieve mode share targets for transit in the Region and in the study area, effective enhancement of transit service is necessary. The Recommended Design Concept does not provide exclusive transit priority in the form of queue-jump lanes and signal priority for transit vehicles; however, it is expected that the reduced delay for all traffic will greatly assist transit in maintaining schedules.

It is recognized that the Recommended Design Concept would require additional property at the roundabout intersections and would involve some significant property impacts.

The Ministry of Transportation, (MTO) which has jurisdiction and ultimate approval authority for any changes to Highway 7/8 access ramps at this interchange, has been directly involved in this study. MTO has approved Alternative Design Concept 3, subject to further reviews of details as part of the detailed design process.

7. Project Cost

The capital cost for the Recommended Design Concept is estimated to be $5.5 million. The final cost will be further refined as part of the detailed design phase and will depend on costs for relocation of utilities and property acquisition. Cycling facilities and new sidewalks included in the estimated costs are approximately between $300,000 and $400,000.

8. Next Steps

All members of the public who have expressed an interest in this project have been notified directly of the opportunity to comment before a final decision is made for this project.

Subject to Regional Council approval of the Recommended Design Concept, the Screening for Environmental Assessment file will be completed and a “Notice of Study Completion” will be ‘filed’ in the public record for a 30 day review period. This filing will be advertised by mail-outs and notices in newspapers. If someone feels that the study did not fully address all of the issues, they can request that the Minister of Environment order the Project to a more detailed environmental assessment, referred to as a Part II Order request. The Minister of Environment must receive such requests in writing, with a copy sent to the Region’s Commissioner of Transportation and Environmental Services. The Minister will determine if a more detailed environmental assessment is required and the Minister’s decision will be final.
If there are no significant unresolved objections following the 30 day review period, the project will proceed to detailed design and construction. It is anticipated that the bulk of the construction of the improvements will occur in 2015.

CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Strategic Focus Area 2 (Growth Management) in terms of:

- Enhancing, developing, promoting and integrating sustainable and active forms of transportation (public transit, cycling, and walking).

It is also consistent with the development of Strategic Focus Area 5 (Infrastructure) in terms of:

- Providing infrastructure needed to accommodate planned growth.

FINANCIAL IMPLICATIONS:

The capital cost for the Recommended Design Concept is estimated to be $5.5 million. The 2010 Transportation Capital Plan (TCP) included $116,000 funding to complete the Class EA study (project #7240). Subject to approval of a Recommended Design Alternative by Regional Council, the required funding for design and construction of this project (project # 7294) in 2015, which is identified in the draft 2011 TCP, will be considered as part of Council’s 2011 budget deliberations.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Nil

ATTACHMENTS

Appendix A – Key Plan
Appendix B – Summary of Comments and Responses from PIM
Appendix C – Recommended Design - Concept 3

PREPARED BY: Wayne Cheater, Senior Project Manager, Transportation Expansion

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
Figure 1: Key Plan of Study Area  
Region of Waterloo  
Ottawa Street from Elmsdale Drive to Imperial Drive  
Class Environmental Assessment
APPENDIX “B-1”

Summary of Comments and Responses from the November 23, 2010 Public Input Meeting:

The PIM held on November 23, 2010, is documented in the official minutes of that meeting. The following is a summary of the comments and concerns that were expressed by delegations to the meeting and the Project Team’s response which was later provided to the delegations:

<table>
<thead>
<tr>
<th>No.</th>
<th>Comment by Delegation</th>
<th>Project Team Response</th>
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| 1   | Janis Bock, Kitchener, ON  
1) Passed on many observations of traffic snarls and congestion, heavy traffic, need to reduce accidents.  
a. Difficult getting to Right lane because of uneven lane use  
2) Poor planning located 3 major roads too close together  
3) Suggestions:  
a. Add a right-turn lane on Alpine Road, an additional eastbound lane on Ottawa between Alpine and Homer Watson and an additional eastbound lane on Ottawa east of Homer Watson  
b. Eliminate truck traffic from Alpine Village, and on Kingswood.  
c. Existing westbound left-turn lane at Homer Watson is too short, causing congestion.  
d. Do something about poor drivers – some are too bold and some are too timid.  
e. Use cameras for enforcement.  
4) How do you get drivers off their phones? What steps will be taken to educate drivers?  | 1) These observations are noted in the study.  
2) The close proximity of the major intersections contributes to operation and safety concerns.  
3) a) and c) The additional lanes and more have been considered and analysed but are not sufficient to resolve concerns with congestion or serious collisions. b) Kingswood Dr is already regulated and signed to prohibit heavy trucks. Alpine Rd provides access for heavy trucks to the local businesses. While Alpine Rd is not a through truck route, it does serve local businesses’ trucking needs. e) No legislation exists to enable use of automated technology to enforce rules of the road at roundabouts in the Region of Waterloo.  
4) (also 3 d.) The Region has an ongoing education program which is reviewed and updated regularly. This year education on the proper use of signals at roundabouts will be emphasized. |
### APPENDIX “B-2”

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<td><strong>Janis Bock, Kitchener, ON (cont’d)</strong></td>
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<td>5)</td>
<td>Does not think 2 roundabouts will reduce accidents.</td>
<td>5) The proposed roundabouts will reduce serious collisions due to reduced speeds, and improved angle of collisions. Injury collisions will be reduced by 70% or more.</td>
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<td>6)</td>
<td>Two 3-lane roundabouts will be “scary”.</td>
<td>6) Drivers in other parts of North America, such as Michigan and Colorado, have adapted well to 3-lane roundabouts.</td>
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<td>2</td>
<td><strong>Carolann Rowe, Kitchener, ON</strong></td>
<td></td>
</tr>
<tr>
<td>1)</td>
<td>The Highway Traffic Act does not provide for roundabouts.</td>
<td>1) The Highway Traffic Act provides directions for signalling at intersections. Roundabouts are intersections. The signs used at Region of Waterloo roundabouts are all used in accordance with the Highway Traffic Act. The Ministry of Transportation (MTO) is currently building roundabouts on Ontario highways. MTO’s active status with respect to roundabout implementation may provide the impetus for the Ministry to provide more specific information about roundabouts in any future revisions to the Highway Traffic Act.</td>
</tr>
<tr>
<td>2)</td>
<td>There will still be accidents at roundabouts</td>
<td>2) The proposed roundabouts will reduce serious collisions due to reduced speeds, and improved angle of collisions. Injury collisions will be reduced by 70% or more.</td>
</tr>
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<td>3)</td>
<td>Average drivers do not know how to drive in roundabouts</td>
<td>3) Drivers will become familiar with the use of the newer type of roundabouts proposed and will develop skills while maintaining the appropriate concern for defensive driving. Local drivers in Waterloo are still “on the learning curve” with respect to roundabouts; however, despite this lack of general expertise, there have been fewer injury collisions at the Region’s existing 14 roundabouts than would be expected at traffic signals.</td>
</tr>
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<td>4)</td>
<td>Fire truck drivers will drive through the middle of roundabouts</td>
<td>4) Very small roundabouts exist which allow emergency vehicles to drive through the central Island. The larger roundabouts proposed would not normally require emergency vehicles to leave the marked lanes, however there is provision of an emergency access apron around the central island.</td>
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**APPENDIX “B-3”**

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<td></td>
<td><strong>Carolann Rowe, Kitchener, ON (cont’d)</strong></td>
<td></td>
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<tr>
<td>5)</td>
<td>Road widening/extra lanes is preferred concept</td>
<td>5) The additional lanes have been considered and analysed but are not sufficient to resolve concerns with congestion or serious collisions.</td>
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<td>6)</td>
<td>Prefers signals versus yield condition</td>
<td>6) Experience of the Region and other road authorities is that signals do not assure safe operation.</td>
</tr>
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<td>7)</td>
<td>Most drivers are not defensive.</td>
<td>7) This observation is noted.</td>
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<td>8)</td>
<td>How will the Region educate the public about roundabouts?</td>
<td>8) The Region has an ongoing education program which is reviewed and updated regularly. This year education on the proper use of signals at roundabouts will be emphasized.</td>
</tr>
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<td>9)</td>
<td>Alberta has removed roundabouts because they don’t work.</td>
<td>9) Road authorities in Alberta are currently constructing new roundabouts in various locations. Many of the original “traffic circles” built in Edmonton in the 1950’s and 1960’s have been reconstructed or replaced by traffic signals because they had “outlived” their design lives. None of these traffic circles had more than 2 entry lanes and many had poor geometry which resulted in high entry speeds and poor yield compliance. These traffic circles cannot be easily compared to the roundabouts being built in Waterloo Region because they have vastly different geometry. It is worth noting that most signalized intersections built in the 1950’s and 1960’s have long since been replaced with much larger intersections.</td>
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## APPENDIX “B-4”

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<td>3</td>
<td><strong>Ron Wright, Kitchener, ON</strong>&lt;br&gt;1) Mainly concerned with: how wide will the pedestrian crossings be? It will be trouble to cross at 2 roundabouts. It took him 7 minutes, using a motorized wheelchair, to cross at Highway 401 &amp; Homer Watson.&lt;br&gt;2) Many people would use sidewalks from his Kehl Street neighbourhood near a retirement home. Is concerned with bikes on sidewalks.&lt;br&gt;3) Has trouble with drivers’ right-turns on red and concern that drivers at roundabouts will not look to their right for pedestrians because they are looking to their left to yield to on-coming traffic.</td>
<td>1) The crossings will be broken into crossings of 3 lanes or less of which all traffic will move in the same direction. The sections will be separated by raised “splitter islands” which will have accessible ramps and a minimum of 3m width for pedestrian refuge. The maximum crossing distance at the roundabouts would be about 11 metres wide. The crossing distance at the existing signals at Ottawa/Homer Watson is 31 metres wide.&lt;br&gt;2) The multi-use trails will be designed to accommodate both pedestrians and bicycles.&lt;br&gt;3) Pedestrians have the right-of-way at the Region’s roundabouts. This is indicated by pavement markings and signs on both the approach and exits to the roundabouts. For the most part, drivers at roundabouts in the Region are yielding to pedestrians who are acting appropriately. Since the first roundabout opened in the Region there has only been one minor collision involving a pedestrian; a good safety record when compared to traffic signals.</td>
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## APPENDIX “B-5”

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<td>4</td>
<td><strong>Dan Cain, Kitchener, ON</strong>&lt;br&gt;Drives a service van 4 times per day through Ottawa Street at Homer Watson Boulevard. He is totally in-favour of roundabouts, which keep traffic moving.&lt;br&gt;1) Drivers are a problem. The Region's web site is good. The Region should advertise it better.&lt;br&gt;2) Concerned that no roundabout is proposed for Strasburg Road.</td>
<td>1) More publicity for the roundabout education will be considered.&lt;br&gt;2) The collisions, congestion and delay at Strasburg Road have been acknowledged by the Project Team. The improvements being recommended in this study will have some impact at that location. The improvements proposed will reduce queues which would otherwise extend back as far as Strasburg Road resulting in gridlock.</td>
</tr>
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<td>5</td>
<td><strong>Ali Williams, Kitchener, ON</strong>&lt;br&gt;1) Concerned with impact of construction and need for coordination of different projects, including Hwy 7/8, 2 roundabouts, Block Line Road extension&lt;br&gt;2) Impacts on adjacent properties, including long-term impacts of noise and vibration</td>
<td>1) The plan for staging of the construction will provide coordination with Hwy 7/8, Block Line Road and other planned improvements&lt;br&gt;2) The construction to implement the proposed road improvements is not expected to create excessive noise or vibration.</td>
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**APPENDIX “B-6”**

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| 6  | **Bob Clements, Kitchener, ON**  
   1) Homer Watson @ Hanson is backed up in all directions and Homer Watson south of Ottawa Street backs up to Block Line Road  
   2) How do similar roundabouts in USA compare volume wise to the 2 proposed roundabouts?  
   3) Does not favour removal of existing N-E ramp  
   4) Should consider a Hwy 7/8 on-ramp at Strasburg Road  
   5) Improved EMS signal pre-emption should also govern traffic that opposes direction of EMS vehicle | 1) Those concerns are noted and addressed in this study.  
2) Existing newly opened roundabouts in Michigan which are similar in size to the ones proposed as part of this project are carrying in excess of 50,000 vehicles per day with capacity to accommodate much more traffic. The roundabouts proposed on Homer Watson will be designed to accommodate up to 61,959 vehicles per day in 2009, 67,415 in 2021 and 75,000 in 2031. Right-turn bypass lanes will reduce the traffic volumes to 55,900 vehicles per day in 2031.  
3) While keeping both ramps open provides more options to motorists, this was rejected for two reasons: firstly having both remain open would create an awkward merge point far along the existing loop ramp where motorists would not expect to merge; and secondly removal of the existing loop ramp would remove an existing awkward and dangerous situation where pedestrians are crossing the existing loop ramp at an informal mid ramp location where motorists are not expecting pedestrians.  
4) The Ministry of Transportation has rejected all proposals for additional Hwy 7/8 access on the basis of insufficient spacing available from existing access locations for safe highway operation.  
5) That is correct. The proposed changes to the controls will not disable red signals for traffic which opposes the travel of emergency vehicles. The improvement would be that intersections which are not in the path of emergency vehicle travel would not be impacted as they are under the present control system. |
### APPENDIX “B-7”

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| 7   | **Bill Allen, Kitchener, ON**  
Is a professional driver with 24 years driving experience and has driver through roundabouts approximately 6000 times. Roundabouts are great!  
1) Requested to see simulation of 3-lane roundabouts.  
2) Cut off Kingswood Drive so that no through traffic is possible. | 1) A video of 3-lane roundabout operation will be made available  
2) The City of Kitchener executed a formal traffic calming review for Kingswood Drive in 2005/06. Through this review, road closures were investigated, however the recommended plan that was implemented, with resident support, included speed humps and raised crosswalks to address the traffic issues on Kingswood Dr. |
| 8   | **Marjorie Brown, Kitchener, ON**  
1) Vehicles don’t stop for pedestrians at roundabouts. How do you plan to get people across? | 1) Drivers at other roundabouts in the Region do yield to pedestrians at marked crossings…. (further detail in response to Ron Wright above) |
| 9   | **Karl Euler, Kitchener, ON**  
Lives near the Concordia Club. Likes the roundabouts proposal.  
1) Are there similar roundabouts working in close proximity to each other in the USA?  
2) Could construction of the improvements start immediately? | 1) There are various examples of large roundabouts working in close proximity in the Unites States. The City of Avon, Colorado has 5 roundabouts in a row within a short overall distance, some with 3-lane entries. In Michigan, there are 3 high-capacity roundabouts at a highway interchange that are within 500 metres of each other.  
2) The Region will consider opportunities to accelerate the proposed schedule for construction, once project approval is obtained |
REGIONAL MUNICIPALITY OF WATERLOO AND TOWNSHIP OF WILMOT

INSTALLATION OF REGIONAL WATERMAIN INTEGRATED URBAN SYSTEM TO ST. AGATHA AND ASSOCIATED ROAD WORK

ST. AGATHA, TOWNSHIP OF WILMOT

INFORMATION PACKAGE

Public Information Centre
Date January 27, 2011
Time 5 pm to 7 pm

at

St. Agatha Community Centre
207 Erb’s Road West

Region of Waterloo
1. **What Work is Being Proposed?**

The Regional Municipality of Waterloo (Region), with input from the Township of Wilmot (Township), is undertaking the construction of a new watermain along Erb’s Road to supply water from the integrated urban system (Waterloo) to existing municipal water consumers in the village of St. Agatha in the Township of Wilmot. In conjunction with the new watermain construction, road reconstruction and resurfacing work will be completed in the vicinity of the village of St. Agatha. The limits of work are shown on Figure 1.

Included in the new watermain construction is:

- The installation of a new watermain along Erb’s Road from the Zone 7 Pumping Station (located at the intersection of Wilmot Line and Erb’s Road) to the intersection of Notre Dame Drive and Erb’s Road in St. Agatha;
- Modification of the Strauss Court Well House to monitor water quality, pressure and flow rates;
- Upgrades at the Zone 7 Pumping Station to monitor transmission flow rates and provide necessary pumping improvements to ensure adequate water service to St. Agatha (currently underway);
- Connection of the existing Strauss Court municipal water distribution system to the new watermain;
- Disconnection of the existing Strauss Court municipal water supply well from the water distribution system;
- The installation of replacement water service connections to properties along Erb’s Road that are currently connected to the municipal water supply system;
- Installation of new water service connections to the property limit along Erb’s Road between Strauss Court and Notre Dame Drive for property owners who may wish to connect to the municipal water distribution system in the future, the cost of which to be at the property owner’s expense;
- Disconnection of the existing Sararas and Schwartzentruber water supply wells from the municipal water distribution system; and
- Restoration of all areas affected by construction to pre-existing conditions.

The road reconstruction and resurfacing work will include:

- Complete replacement of asphalt from the intersection of Notre Dame Drive and Erb’s Road to the Esso Station within the limits of the existing curb;
- Complete replacement of asphalt from Esso Station to Strauss Court including paved shoulders;
- Mill and repave the existing surface asphalt from the southern limit of St. Agatha on Notre Dame Drive to Erb’s Road; and
- Miscellaneous repairs to existing paved shoulder and curbs to promote surface drainage.

2. **What is the Purpose of This Public Information Centre?**

This evening’s Public Information Centre (PIC) is an opportunity for St. Agatha residents to:

- Review and discuss with Region/Township staff the background information and studies conducted to date;
- Review poster boards and project design drawings illustrating the proposed work;
- Review the construction schedule and limits of work; and
3. **Why is the St. Agatha Watermain Being Installed and How Has It Been Approved Under the Municipal Class Environmental Assessment (EA)?**

Municipal potable water is currently provided to St. Agatha via a series of Region-owned and privately-owned communal wells installed within the village limits. These wells are currently operated and maintained by the Region. Ongoing monitoring of the wells is carried out by Region staff to confirm that the water quality meets the Ontario Drinking Water Standards, Objectives and Guidelines criteria. These wells are known to have nitrate concentrations below but close to the Ontario Drinking Water criteria.

In 2005, the Region completed a Schedule B Class EA which identified the construction of a watermain from the Integrated Urban System in Waterloo to St. Agatha as the preferred long term solution for supplying water to St. Agatha that will continue to meet the Ontario Drinking Water criteria for nitrate. At that time, it was decided that the timing of the new watermain construction would be determined based on the results of the ongoing monitoring.

Since 2005, nitrate concentrations have increased slightly but have remained below the Ontario Drinking Water criteria. The Region has decided that it is prudent to construct the new watermain now, while nitrate concentrations still remain below the Ontario Drinking Water criteria, to ensure a reliable and secure water supply for St. Agatha. In addition to ensuring security of water supply, the Region has also determined that the new watermain will be more cost-effective to operate and maintain than the existing water supply wells in St. Agatha. Construction of the new watermain is pre-approved as a Schedule A+ project under the Municipal Class EA.

4. **Why Are the St. Agatha Road Improvements Being Constructed And How Have They Been Approved Under The Municipal Class Environmental Assessment (EA)?**

As part of the Region’s long term transportation maintenance and planning strategy, road resurfacing and reconstruction are required in the vicinity of St. Agatha. These road works are being coordinated with the watermain construction to save costs and reduce future disruption to the community and to traffic.

Erb’s Road within the village limits (Strauss Court to Notre Dame Drive) will be reconstructed at the same time as the watermain construction. This work will include full removal and replacement of the asphalt, replacement of granular subbase as required, and repair of curbs and shoulders as required. The base asphalt will be replaced in 2011 and 50 mm of surface asphalt will be placed in 2012. This will allow for the repair of any defects resulting from the 2011 construction prior to final surface asphalt placement in 2012.

Erb’s Road from Ira Needles Boulevard to Strauss Court will be resurfaced in 2012, following construction of the watermain in 2011. This work will include milling to remove the existing surface asphalt and placement of new surface asphalt. As above, this will allow for the repair of any defects resulting from the 2011 watermain construction prior to final surface asphalt placement in 2012.

In 2009, Notre Dame Drive was milled and repaved from Petersburg to the southern limit of St. Agatha. The remaining section of Notre Dame Drive from the southern limit of St. Agatha to Erb’s Road will be milled and repaved in 2011.
Construction of the road works is pre-approved as a Schedule A+ project under the Municipal Class EA.

5. **How is the Construction Project Being Managed?**

A "Project Team" consisting of Region and Township staff along with technical design consultants Gamsby and Mannerow Limited (GML) is managing this project. GML will complete the final design and provide contract administration for the construction of the watermain and road improvements.

6. **How Much Will the Construction Project Cost?**

The total estimated cost for the project, including construction and engineering costs, is estimated to be approximately $3,200,000. A portion of the estimated total project cost ($2,300,000) will be funded from the Water Capital Reserve Fund and the remaining portion ($900,000) of the estimated total project cost will be funded from the Transportation Capital Base Program, subject to Regional Council approval of the 2011 Capital budgets.

7. **What is the Schedule and Expected Duration of the Construction Project?**

The contract tender package for the construction project is scheduled to be advertised on February 8, 2011 and the tender is planned to close on March 1, 2011. A recommendation to Regional Council to accept the tender is planned for March 23, 2011, subject to receipt of satisfactory tenders.

The total duration of the construction period is expected to be approximately three to four months. Watermain construction is expected to begin in early April 2011 and be completed by July 2011. The contract will be structured to have the work within St. Agatha completed first (April to May 2011) before proceeding with completion of the works from Strauss Court to Wilmot Line. Miscellaneous restoration work such as road rehabilitation, driveway reinstatement, ditch re-grading and seeding will be completed following completion and commissioning of the watermain.

8. **Will Traffic be Disrupted During Construction?**

Yes. In order to install the watermain piping, service connections and remove/replace asphalt it will be necessary to close Erb’s Road from the intersection at Notre Dame Drive to Strauss Court for an estimated period of approximately 4 weeks during April to May, 2011. Traffic will continue to flow north and south along Notre Dame Drive with minor disruptions. Traffic on Erb’s Road from west of the intersection at Notre Dame Drive will be able to make a left or right turn at the intersection with minor disruption.

During the time that Erb’s Road within the Village of St. Agatha is closed, a detour will be in place to divert traffic traveling westward along Erb Street/Erb’s Road, south along Ira Needles to Highland Road/Snyder’s Road, westward to Notre Dame Drive and north to Erb’s Road. This detour will similarly divert eastbound traffic traveling along Erb’s Road west of Notre Dame Drive along the same route.

Figure 1 provides the detour routing that will be in effect during construction.

Property owners/occupants along the closed road will at all times be provided local access to their properties when the road closure and detour is in effect. Local residents and businesses will be provided notice of the road closure a minimum of one week in advance of the road closure. Detour routing signage will be provided and maintained by the Region.
during the road closure. Directional signs will be provided by the Region to identify that access is open to businesses within the closed road area.

Along Erb’s Road from Strauss Court to Wilmot Line the watermain will essentially be constructed in the shoulder of the eastbound (south) lane. Due to the proximity of the watermain to the edge of road it will be necessary to divert traffic around the work area. For this section of watermain construction, two-way traffic will be maintained adjacent to the daily active construction area with flag persons directing traffic around the pipe installation or any road restoration activities.

9. Will Areas on and Fronting My Property be Disturbed During Construction?

Yes. The approximate limits of construction disruption are shown on the display boards.

During construction, the contractor will be required to minimize disruption to lawns, trees, shrubbery, flower beds, driveways, ditches, etc. In instances where the existing conditions are disturbed during construction, the contractor will be required to restore these areas to pre-construction conditions or better.

10. How Will Property Access be Maintained During Construction?

During construction every effort will be made to maintain local access to properties at all times. Depending on the nature of the work, it may be necessary to close an access for a short duration (one work day or less) while excavation and backfilling work proceed across the access. The contractor will be required to provide at least 48 hours advance notice of any such access closure and to coordinate the timing of the closure with the property owner.

11. How Will Garbage and Recyclables be Handled?

In the event that garbage and recyclables collection vehicles are not able to access the front of your driveway, the contractor will be required to move your containers to the end of the construction area on the morning of collection and return them to your property following collection. Please clearly mark your address on your containers to assist in proper return.

12. Will New Municipal Water Service Connections be Made Available to Property Owners Adjacent to the New Watermain?

Those property owners within the village of St. Agatha and along Erb’s Road who are currently connected to the municipal water supply system will be connected to the new watermain at no cost, since the current users in the village of St. Agatha have already prepaid their share of costs.

Properties within the village of St. Agatha on Erb’s Road (between Strauss Court and Notre Dame Drive) that are not currently connected to the municipal water supply system will be provided with water service connection stubs to the property line including the installation of a curb stop. Property owners along this section of Erb’s Road that are not currently connected to the municipal water supply system and who wish to connect to the municipal water supply system in the future would need to contact the Region and arrange to pay for the connection and metering costs.

Those properties along Erb’s Road outside of the village of St. Agatha (east of Strauss Court) that are currently supplied by private wells and are not currently connected to the Regional water supply system will not be provided with service connections to the new watermain.
No other new municipal water service connections are planned within or outside the limits of St. Agatha.

13. **Will Sidewalks be Constructed Within the Limits of St. Agatha?**

   It is customary on all Regional road projects to consider the installation of sidewalks on both sides of the roadway. Sidewalks are generally installed when there are cost savings realized by constructing the sidewalks in combination with other work. However, the planned 2011 construction on Erb's Road does not include the replacement of curbs and boulevards and, as such, there would be no cost advantage to installing the sidewalks in conjunction with the other 2011 work. New sidewalk in St. Agatha will not be installed in 2011 but may be considered at some future date.

14. **Will Bicycling Lanes be Provided Within the Limits of St. Agatha?**

   Erb's Road is a designated cycling route in the Region of Waterloo's Cycling Master Plan. The existing pavement lane width on all four Regional road legs in the village of St. Agatha is 4.0 metres which will accommodate a shared use lane for vehicles and cyclists. It is proposed that new pavement markings be installed after the watermain/pavement work to physically mark the road as an enhanced shared-use facility for cycling. This will match the existing markings on Erb’s Road west of Notre Dame Drive.

15. **Will Fire Protection (Hydrants) be Provided With the New Watermain?**

   No. Fire protection (hydrants) will not be provided with the new watermain.

16. **Will My Water Service be Disrupted During Construction?**

   It is anticipated that property owners in St. Agatha that are currently connected to the municipal water supply system will have their municipal water supply disrupted for a period not to exceed one working day when the final connection is made at the intersection of Erb’s Road and Notre Dame Drive. Similarly, for those property owners that are currently connected to the municipal water supply system on Strauss Court and outside the limits of St. Agatha there will be minor disruptions of 4 to 8 hours during final connections. All of the distribution and service piping will be in place, tested and disinfected before any final connection is made. Property owners will be advised at least 48 hours in advance of any water service disruption.

17. **Will I Notice Changes in My Water Pressure?**

   Under the existing system some property owners have reported large fluctuations in water pressure over the course of a day. Overall, the new water transmission system will deliver more consistent and stable pressures to the community of St. Agatha at similar pressures which are currently experienced.
18. **Will My Individual Water Usage be Metered?**

For those consumers currently connected to the municipal water supply system, there will be no change to the existing metering system.

Those property owners who wish to connect to the new watermain between Notre Dame Drive and Strauss Court must apply to the Township for a Plumbing Permit and purchase a water meter. The water meter must be paid for by the property owner and installed by a licensed plumber. The Township will read the water meter on a monthly basis and bill the property owners in accordance with current rates.

19. **Can the Water Meter be Installed Outside My Residence?**

No. The water meter must be mounted inside to keep it from freezing. A remote sensor will be wired from the meter to the outside of the building so that Township/Region staff can obtain their water meter readings without entering the house.

20. **Will There be a Change in How My Water is Disinfected?**

Yes. The existing St. Agatha water supply system employs chlorination for disinfection. This consists of the addition of chlorine to the drinking water which reacts to form a free chlorine residual. Free chlorine is a disinfectant used in drinking water to remove bacteria and viruses. The new water supply system from Waterloo utilizes chloramination rather than chlorination for disinfection.

21. **What is Chloramination?**

Chloramination is the combined use of small amounts of ammonia and chlorine to provide a secondary disinfection system. The chlorine and ammonia react to form chloramine, to provide disinfection capabilities throughout the distribution system. Like chlorine, chloramine removes bacteria and viruses from drinking water.

22. **Is Chloraminated Water Safe?**

Yes. Chloraminated water is safe for people and animals to drink and use for all other general household activities. However, as with chlorine, precautions must be taken to remove or neutralize chloramine during any kidney dialysis process, in the preparation of water for fish tanks and ponds, and for businesses requiring highly processed water.

Chloramine has been used as a disinfectant in Canada and the United States for decades. Chloramine is recognized by the Ontario Ministry of the Environment (MOE) and Health Canada as a safe disinfectant and is approved for consumption by all persons including infants, children, and pregnant women.

23. **Will the Water With Chloramine Disinfection Taste Different?**

Possibly, but most consumers should not notice the change. In fact, many consumers in other areas report chloramine improves the taste and odour of drinking water.
24. **Do I Need to Take Any Precautions or Do Anything Different When Using Chloraminated Water?**

The majority of consumers will not be affected by the change to chloramination. However, there are two groups who need to take precautions with chloraminated water: kidney dialysis patients and owners of fish, reptiles and amphibians. Customers on dialysis machines should contact their physicians for more information. Fish, aquarium and pond owners should be aware that like chlorine, chloramines should be removed from tap water prior to use in aquariums and ponds. Chloramine can be removed from water with inexpensive water treatment products (drops or tables) or specified carbon filters. These products are readily available at most local pet supply stores.

25. **How Can I Voice My Comments at This Stage?**

The Region and the Township value hearing your questions, comments or concerns and are interested in receiving feedback from property owners about this construction project. In order to assist us in reviewing any questions, comments or concerns you may have regarding this project, we ask that you mail, fax or e-mail your comments to the Region by no later than February 14, 2011.

We thank you for your involvement and should you have any questions or concerns at any time during this project, please contact:

Mr. Guy L. Treadwell, CET  
Project Manager, Design and Construction  
Regional Municipality of Waterloo  
Kitchener, Ontario, N2G 4J3  
Telephone: 519-575-4738  
Facsimile: 519-575-4430  
Email: gtreadwell@regionofwaterloo.ca
TO: Chair Jim Wideman and Members of Planning and Works Committee

DATE: January 25, 2011

FILE CODE: A02-30/PW

SUBJECT: RAPID TRANSIT PROJECT OVERVIEW

RECOMMENDATIONS:

For information

SUMMARY:

The Region of Waterloo continues to plan for significant population and employment growth over the next two decades. The Provincial Growth Plan for the Greater Golden Horseshoe projects the Region’s population will increase to 729,000 people by 2031, and that employment will increase to 366,000 by 2031. This is an increase from today of nearly 200,000 people and 80,000 jobs.

To provide for the projected growth, the Region will have to either continue its pattern of outward growth or encourage greater intensification in existing developed areas. High-quality rapid transit has been identified as a crucial component in managing growth, facilitating intensification and minimizing/reducing future “urban sprawl”. A high-quality rapid transit system is vital for the Region to evolve into a more compact urban form, helping to prevent sprawl and protect sensitive environmental landscapes and high quality farmlands from urban encroachment. The rapid transit system being considered in the Region has the multiple goals of providing transportation choice, meeting future transportation needs, and building a viable, vibrant and sustainable community.

If the Region continues with current trends of auto use, the road network will need to expand by at least 500 additional lane-kilometres of traffic by 2031. As development spreads outward and congestion grows on the major arterial roads, further road construction will become necessary, including impractical road widenings through mature neighbourhoods. Without rapid transit, the road expansion costs including property would be in the range of $1.4 to $1.5 billion. On top of the high cost, this road expansion would seriously threaten the quality of life in much of the community. Achieving higher transit ridership targets will not eliminate the need for road improvements, but it can reduce the amount of road construction required and reduce road expansion costs by $400 to $500 million.

With little opportunity to add or expand the road networks in our core areas, and the expected increase in population, Regional Council has repeatedly identified rapid transit as the most sustainable transportation solution to meet our community’s future transportation needs.

In 2006, the Region began the Rapid Transit Environmental Assessment (EA) to identify the best possible rapid transit system for Waterloo Region. In June 2009, after extensive public input, Regional Council approved a preferred technology and an implementation staging plan for Waterloo Region’s rapid transit system.

This report reviews the rationale for building rapid transit, its long-term benefits, and the process used to substantiate the recommendations approved in June 2009. It also outlines the work being done to address affordability concerns, with implementation options for the rapid transit project,
including bus rapid transit (BRT) and combinations of light rail transit (LRT) and adapted BRT, to be brought forward in a report in February 2011.

REPORT:

1.0 Why Rapid Transit?

1.1 Overview

Waterloo Region has consistently ranked as one of the fastest growing communities in Canada. The Region’s population has increased by approximately seventeen per cent over the past decade, or more than 7,500 people per year.

Given this tremendous growth and the challenges that it is creating, in 2003 Waterloo Region developed the Regional Growth Management Strategy (RGMS) entitled Planning Our Future. This strategy identified where, when and how additional residents and jobs should be located to focus growth in a sustainable manner. The RGMS is solidly anchored on a proposed rapid transit system located within the linear urban corridor formed by the Cities of Cambridge, Kitchener and Waterloo. The RGMS seeks to address the housing, transportation, source water and environmental protection challenges that the Region faces through the promotion of a different urban form that balances greenfield development with reurbanization.

Growth management is critical as the Region continues to plan for significant population and employment growth over the next two decades. The Province’s Places to Grow: Growth Plan for the Greater Golden Horseshoe projects that the Region’s population will increase to 729,000 people by 2031, and that employment will increase to 366,000 by 2031. This is an increase from today of nearly 200,000 people and 80,000 jobs, roughly equal to the current population and employment of the City of Kitchener. As shown in Figure 1, Regional growth trends to date have been on track with these projections.

Figure 1: Actual and Forecasted Regional Population Growth

To provide for the projected growth, the Region will have to either continue its pattern of outward growth or encourage greater intensification in existing developed areas. High-quality rapid transit has been identified as a crucial component in managing this growth, facilitating intensification and minimizing/reducing future “urban sprawl”. An attractive, convenient, comfortable street-level link, serving a central spine in the context of an integrated Regional transit system, is key to managing the Region’s growth. It can help ensure a thriving inner core – where a significant part of the
population lives, works and shops – which is vital to maintaining and enhancing the quality of life across the entire Region. It is the next major step in the public transit system, in Waterloo Region, that has seen a significant climb in transit use over the past decade – from approximately 3,000 in 2005 to 9,000 daily riders on iXpress service alone and from roughly 9 million in 1999 to 18 million annual ridership Region-wide.

Investment in rapid transit in Waterloo Region is a key part of a broader strategy to encourage compact and transit-supportive communities, and provide greater transportation choice for Regional residents. Based on the EA work to date and experience in other municipalities, the rapid transit project would result in wide-ranging economic, social, and environmental benefits. These include reduced congestion, increased transit ridership, re-urbanization and intensification, improved mobility, environmental benefits, urban revitalization and enhanced public safety and health. Different rapid transit technologies and project staging options would determine the extent to which these objectives are achieved over time.

1.2 Reduced Congestion

The total number of trips on the Region’s transportation system is forecast to increase more than 36 per cent by 2031. The increase in trips will place more demands on a transportation system that is already close to capacity. Symptoms of strain on the network include:

- growing congestion, which is increasingly affecting the ability to provide reliable, competitive transit service;
- the economic disruption from congestion and overall difficulty of getting around within the community;
- the impacts on the environment and public health; and
- the increasing personal and societal costs of transportation and mobility within the community.

As noted in the *Regional Transportation Master Plan – Moving Forward 2031*, if the Region continues with current trends of auto use, the road network will need to expand by at least 500 additional lane-kilometres of traffic by 2031. As development spreads outward and congestion grows on the major arterial roads, further road construction will become necessary, including disruptive road widenings through mature neighbourhoods. Without rapid transit, the road expansion costs including property would be in the range of $1.4 to $1.5 billion. On top of the high cost, this road expansion would seriously threaten the quality of life in much of the community.

Conversely, rapid transit as a centrepiece of an expanded transit network solution can help shift a substantial amount of future auto travel to transit. It can also encourage re-urbanization, with resulting intensification that can in turn promote a much higher percentage of trips by walking, cycling and transit. Achieving higher transit ridership targets will not eliminate the need for road improvements, but it can reduce the amount of road construction required and reduce road expansion costs by $400 to $500 million. Staff are developing the *Moving Forward Transit Program*, an integrated rapid transit project that brings together improvements identified in the Regional Transportation Master Plan and required to create a fully functional rapid transit system.

1.3 Increased Transit Ridership

Improved transit service in the central transit corridor and throughout the Region would result in a significant modal shift to transit. Rapid transit can improve travel conditions through reduced travel times, higher frequencies, improved journey quality, and improved reliability. The net effect is a change in patterns of accessibility, extending the distances that people will be prepared to travel by transit, reducing the costs of existing travel, and easing the movement of people and goods in the Region.
With rapid transit, increased ridership can result in a lower operating cost per passenger trip and a range of other socio-economic benefits, including:

- reduced vehicle operating costs (based on the reduction in vehicle kilometres travelled); and
- reduced number of traffic accidents (associated with transfer of travel to a much safer mode).

1.4 Re-urbanization and Intensification

Rapid transit, as a strategic street-level system along the central transit corridor, can be a significant catalyst for achieving re-urbanization and economic and demographic intensification. Intensification and redevelopment resulting from rapid transit is expected to shape urban form in a more efficient manner and thereby avoid, delay or minimize the expansion of urban areas into the Region’s valuable agricultural, environmental and rural areas. This in turn would protect our community’s food and water supply and diverse economy.

The prospect of future rapid transit can affect the desirability of real estate within the Region. Twice in the past six months, the Region has been named as one of the top places to invest in Canada. Recognition was based on, among other things, facilitating brownfield redevelopment and planning for the Region’s rapid transit project. Rapid transit can enhance land image, value and desirability.

1.5 Improved Mobility and Improved Connections

By serving major destinations, rapid transit can connect key nodes such as the city centres, the universities, the Research and Technology Park, Grand River Hospital, and major shopping malls. This connection would provide increased access to cultural, commercial and residential opportunities. People will be able to access an expanded pool of facilities via rapid transit, such as employment and training centres, community facilities, places of worship, health centres, retail, and parks.

With the recently announced plans for a multimodal transit facility in the area of King Street and Victoria Street, rapid transit can also facilitate inter-regional trips connecting Waterloo Region with major destinations throughout the Greater Golden Horseshoe.

1.6 Reduced Emissions

Emissions resulting from passenger road transportation are a major contributor to air pollution and climate change. In fact, transportation is one of the single largest sources of air pollution in Canada. By shifting travel to transit and out of private cars, the rapid transit project can reduce greenhouse gas emissions.

1.7 Prosperous Community

Strategic investment in rapid transit can provide significant opportunities to encourage and stimulate additional economic productivity. In particular, it can contribute to the creation of new jobs or increased employment through:

- jobs associated with constructing, operating and maintaining the rapid transit system;
- jobs arising as a result of the improved travel conditions; and
- access by employees to jobs that were previously inaccessible by public transit and access by employers to a wider workforce living within acceptable travel times and costs.

More broadly, investment in rapid transit can help to establish the infrastructure required to support the knowledge-based economy in Waterloo Region. It can create an important physical link
mirroring the economic links among the universities, companies/business districts, and the labour force that together form one of Canada’s leading knowledge-based economies.

1.8 Improved Public Safety and Security

A rapid transit system integrated with the urban environments along the central transit corridor can allow the rehabilitation of the streetside pedestrian environment, thereby enhancing the safety and security for pedestrians and residents. Increased pedestrian movement associated with the stations can provide additional activity and watchfulness, which helps create vibrant and safe places to live. While walking or using transit, passengers have a chance to interact with one another, creating a stronger community and greater sense of security. Rapid transit implementation can include improved pedestrian signage, lighting, crossing facilities and walkway surfaces, all aimed at improving the pedestrian experience.

1.9 Improved Public Health

A rapid transit system would reduce vehicle kilometres travelled and provide public health benefits based on improved air quality and on increased use of active transportation, resulting in fewer hospital admissions.

2.0 Rapid Transit Environmental Assessment

In 2006, the Region initiated an individual EA to select the rapid transit technology, routes and station locations that would best meet the RGMS goals, as well as the Region’s future transportation needs and land-use objectives. A summary of the individual phases and their findings are described below.

2.1 Phase 1 – Completed July 2006

Phase 1 of the EA determined that rapid transit is the preferred transportation strategy for Waterloo Region as compared to expanding the road network or improving conventional transit. Using multiple criteria based on the goals and objectives of RGMS, the evaluation concluded that rapid transit:

- best achieves the goals of the RGMS;
- is consistent with the Provincial Policy Statement and conforms with the Provincial Places to Grow Growth Plan for the Greater Golden Horseshoe;
- supports reurbanization objectives, downtown revitalization and innovative urban design;
- increases transportation choice and transit ridership;
- is the least expensive form of motorized transportation when considering personal transportation costs;
- contributes to the Region’s countryside protection goal by facilitating reurbanization and reducing the pressure to expand urban boundaries;
- provides a safe mode of transportation and promotes an active and healthier lifestyle; and
- utilizes the least amount of land and minimizes the impact on air quality and greenhouse gas emissions.

Two Public Consultation Centres were held in April 2006 and were attended by 145 individuals. The majority who provided comment recognized the rapid transit project as the most effective transportation strategy for meeting the Region’s RGMS goals and future transportation needs. Regional Council approved rapid transit as the Region’s transportation strategy in July 2006.
2.2 Phase 2 – Steps 1, 2 and 3a, b

Step 1 – Completed February 2007

Step 1 began with a public information session and workshop in September 2006 to discuss potential rapid transit destinations, routes and station locations, as well as those characteristics of rapid transit that the public feels are most important.

Using the EA Terms of Reference and the input from the workshop, the rapid transit Project Team developed criteria to evaluate 10 rapid transit technologies (BRT, LRT, commuter rail, diesel multiple units, aerobus, automated guideway transit, magnetic levitation, monorail, personal rapid transit and subway) and their associated route designs. Based on the results of the evaluation, BRT and LRT operating on a mix of on/off road route designs were short-listed because they had the greatest potential to:

- Support the Region’s redevelopment and intensification objectives;
- Optimize the use of existing off-road routes and serve major destinations using on-road routes; and
- Be compatible with existing and planned built neighborhoods.

The results of the evaluation, and the recommended short-list of rapid transit technologies and route designs, were presented to the public and stakeholder groups for input at a series of Public Consultation Centres (PCCs) and presentations throughout January 2007. More than 350 community members attended the PCCs and took the opportunity to review the information presented. The majority of those who provided comments agreed with the results of the evaluation and the proposed short list or stated a preference for BRT or LRT.

Step 2 – Completed February 2008

Step 2 began in March 2007 with a public workshop. The workshop helped to identify the list of route and station location alternatives to be evaluated for both BRT and LRT in terms of the greatest benefits (e.g. reurbanization potential, ridership, travel time savings, ability to serve concentrations of employment) and lowest negative impacts. More than 450 community members came together to provide ideas, with more than half identifying themselves as property owners along routes. Of those who commented, more than 60 per cent agreed with the proposed route and station locations.

In consultation with the local municipalities and the public, the Region finalized a list of 91 route, station location and technology alternatives in the seven segments of the Study Area and began an in-depth evaluation based on 21 different criteria approved in the Terms of Reference by the Ontario Minister of the Environment. These criteria were grouped in four different categories:

- Transportation;
- Social and Cultural Environment;
- Natural Environment; and
- Economic Impact.

The evaluation resulted in more than 5,000 individual pieces of data using different units of measurement (hectares, dollars, ridership, greenhouse gas emissions). The Project Team used the results to rank each alternative. The results of the ranking demonstrate how each route and technology alternative perform against the other alternatives in the same segment in each of the four broad categories. Those alternatives that provided the greatest benefits and the fewest impacts were ranked highest.
The rankings were then presented at a series of Public Consultation Centres in January 2008, which were attended by approximately 1,350 people. The majority of public comments received indicated general support for the top-ranked route alternatives, a strong preference for LRT technology over BRT technology, and the importance of serving core areas and areas of high employment, commercial, retail and institutional land-uses.

**Step 3a – Completed August 2008**

In Step 3a, the Project Team used combinations of the top ranked route and technology options from Step 2 to assemble a short list of complete BRT and LRT system alternatives for the entire study area, along with staging options.

Each system alternative also had a number of different route variations. A field review was conducted along each variation to identify engineering considerations that could pose obstacles to construction or implementation of a final system. The purpose of this review was to look for engineering challenges that could impact the feasibility of the rapid transit system alternatives. Those rapid transit route variations that had multiple challenges or severe constraints considered too great to reasonably overcome were eliminated from further consideration.

The Project Team presented the details of the technical analysis and the short-listed LRT and BRT system alternatives at a series of three public consultation centres in June 2008. Approximately 880 people attended the public consultation centres. The majority of public comments received indicated support for the rapid transit project and a strong preference for LRT over BRT. In August 2008, the final short list was presented to Regional Council, which included one BRT option and one LRT option.

**Step 3b – Completed June 2009**

In Step 3b, the Project Team completed the Multiple Account Evaluation (MAE) to assess the costs and benefits of the rapid transit systems short-listed in Step 3a. The purpose of this evaluation was to determine which rapid transit system would best meet the goals of the RGMS and provide the greatest transportation, environmental, land-use and economic development, and social and community benefits to the Region.

The MAE provided for flexibility in measuring benefits, allowing decision makers to consider quantitative measures of benefits that were difficult or impossible to translate into dollars and a broader and more targeted representation of project benefits. To reflect the goals of the RGMS, the evaluation accounted for costs and revenue, travel times, accident avoidance, greenhouse gas emissions, air quality, residential development, new jobs, land value uplift, public health, community liveability and disruption during construction. The MAE established the preferred project alternative as a staged implementation of a light rail transit system with the initial stage consisting of a combination of LRT and adapted BRT, with future transition to full LRT through the central transit corridor. For a complete description of the evaluation results, see Appendix B of Report E-09-073, available for viewing by Regional Councillors in the Council Reference Library and for all on-line at www.region.waterloo.on.ca/rapidtransit.

In June 2009, after more than five years of study, and extensive public input, Regional Council approved LRT as the preferred technology for Waterloo Region’s rapid transit system and the preferred implementation staging plan. Recognizing that the ridership, development potential and capital and operating costs vary along the route, Regional Council endorsed implementing the rapid transit project in stages. Council also approved an allocation of $1,000,000 annually for an initial 10-year period to implement transit-supportive strategies in Cambridge. Finally, Council directed staff to pursue funding for the project from the Provincial and Federal governments, and noted that all of the
recommendations were subject to achieving acceptable funding agreement(s) which would be brought back to Council for approval.

### 2.3 Summary of Public Consultation

During the EA process, the Region undertook extensive consultation with and outreach to the public, agencies, community stakeholders, property owners, and the business community both within and outside of the EA process using a variety of formats, as follows:

- On four different occasions, more than 250,000 residential and business addresses received rapid transit newsletters;
- More than 140 newspaper news stories, features, editorials and letters to the editor have appeared since the EA began in 2005;
- Approximately 3,500 people attended 33 Public Consultation Centres (PCCs), Workshops and Focused Consultation events and provided more than 1,000 official formal comments;
- More than 2,500 businesses, located either along the proposed short-listed rapid transit routes or within a 200-metre radius of proposed rapid transit stations, received personal door-to-door visits as part of the Business Outreach Program;
- Staff hosted three “storefront” locations for two months, to provide additional opportunities for business and property owners along the proposed route to ask questions and provide comments;
- Staff presented the results of the MAE to the Municipal Councils in the Cities of Cambridge, Kitchener, Waterloo and the Township of Woolwich;
- The Rapid Transit InfoLine (phone), the Rapid Transit InfoBox (e-mail rtinfo@Region.waterloo.on.ca) and the rapid transit website were advertised widely on all rapid-transit-related communications and the public was encouraged make contact with their questions and comments. Currently, the rapid transit website has an average of approximately 200 visits each day;
- The Rapid Transit Facebook page now has more than 500 Fans with 4 per cent aged 13 to 17, 34 per cent aged 18 to 24, 36 per cent aged 25 to 34, and 26 per cent over age 35;
- Rapid transit videos appear on YouTube and the Waterloo Region Record’s website; and
- Information about the rapid transit project was provided at more than 60 different public outreach events such as community stakeholder meetings, public events, presentations to groups, and educational displays where attendance was not recorded.

### 2.4 Ongoing Project Tasks

Following the June 2009 Council recommendations, staff continued to refine the rapid transit project and undertook a number of assignments, including:

- developing and submitting a business case for consideration by both levels of senior governments to secure funding for the project;
- consulting with regulatory authorities (e.g. future operations along the rail corridors);
- developing functional designs for:
  - the grade separation of King Street at the CN Guelph Subdivision in Kitchener (adjacent to the proposed multimodal hub);
  - the adapted BRT route on Highway 401 and Hespeler Road;
  - the route alignment along the Hydro Corridor in south Kitchener and the alternative on Fairway Road;
  - intersection design for the future Block Line Extension and Courtland Avenue integrated with rapid transit;
  - route options along Ottawa Street in view of the recently completed Regional Transportation Master Plan and its recommendations;
• completing site specific surveys to refine the design and minimize property impact; and
• refining project costs based on the above design work as well as further structural and utilities review.

3.0 Funding Status

On June 28, 2010, the Province of Ontario announced an investment of $300 million towards the capital cost of constructing a rapid transit system in Waterloo Region. On September 2, 2010, the Government of Canada announced that it will provide one-third of eligible costs, up to $265 million, to support the construction of the Region’s rapid transit project. The estimated capital cost of the Council-approved rapid transit project in 2009 was $790 million. The Provincial and Federal governments together have committed to funding more than 2/3 of the estimated project cost, to a combined level of up to $565 million.

4.0 Next Steps

Once the Provincial and Federal governments had announced their funding commitments, staff recognized that it would be prudent to revisit the overall funding plan. During the fall of 2010, concerns were raised about the affordability of the rapid transit project, specifically in terms of the Region’s contribution. Staff have been undertaking an objective review of project implementation options for Council’s consideration, to identify a rapid transit project that is affordable to the Region, and provides best value to the community. This includes:

• investigating cost-saving strategies that could be implemented to reduce the cost of the rapid transit project without compromising its operation. For example, cost-saving opportunities have been found through a review of the electrical power supply, communications system, maintenance yard, track spacing (cross-sectional width), track depth (thinner track structure), and utility relocation costs; and
• identifying implementation options for the rapid transit project, including BRT and combinations of LRT and adapted BRT. To facilitate comparison, for each option staff will provide revised capital and net operating cost estimates that take into account the impacts of project timing and inflation.

Subject to Regional Council consideration, staff anticipate that next steps in 2011 for the rapid transit project would include:

• February 15: providing information on various implementation options to Planning and Works Committee and requesting approval to go to the public with the information;
• February/March: undertaking further public consultation regarding implementation options;
• April: providing feedback to Planning and Works Committee regarding public consultation and identifying a preliminary preferred option;
• April/May: undertaking public consultation regarding the preliminary preferred option;
• Late May: Public Input Meeting regarding the preliminary preferred option;
• June: Council approval;
• July/August/September: completing Environmental Project Report; and
• October: commencing 6-month Transit Project Assessment (the expedited Provincial EA process for transit projects).
In addition, staff will:

- work with Provincial and Federal governments on funding agreements; and
- work towards a recommendation of the most effective method of financing and procurement to deliver the rapid transit project.

CORPORATE STRATEGIC PLAN:

The report supports several objectives of Council’s Strategic Focus. These include:

Focus Area 1: Environmental Sustainability: Protect and Enhance the Environment.
Focus Area 2: Growth Management: Manage and shape growth to ensure a livable, healthy, thriving and sustainable Waterloo Region.
Focus Area 5: Infrastructure: Provide high quality infrastructure and asset management to meet current needs and future growth.

FINANCIAL IMPLICATIONS:

As part of the report to Planning and Works Committee on February 15, 2011, staff will present implementation options for the rapid transit project including the project costs and the Region's share of the capital costs.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The rapid transit Project Team includes representatives from Regional Council, the CAO’s office, Communications, Community Planning, Finance, Legal, Public Health, Social Services, Transit Development, Transportation and Environmental Services, Transportation Planning and Transit Services.

ATTACHMENTS:

NIL

PREPARED BY: Darshpreet Bhatti, Manager, Rapid Transit Engineering

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
TO: Chair Jim Wideman and Members of the Planning & Works Committee

DATE: January 25, 2011

FILE CODE: A20-30 (A)

SUBJECT: GRT STRASBURG ROAD FACILITY EXPANSION PROJECT UPDATE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve proceeding with the Construction Tender for the expansion and renovation of the Grand River Transit Strasburg Road Bus Storage and Maintenance Facility as described in Report E-11-011/CR-FM-11-001, dated January 25, 2011,

AND THAT the Regional Municipality of Waterloo grant pre-budget approval for the Strasburg Road Facility Expansion project and include an increase to the project budget of $1.9 million to be funded from development charges and debentures.

SUMMARY:

Nil.

REPORT:

Background

Regional Council approved in principle the 2008 Transit Facilities Strategy Update (report E-08-032/CR-FM-08-007 dated May 13, 2008) subject to budget approval as part of the 2009 budget process. This strategy identified an immediate need to expand bus storage and bus maintenance capacity at the GRT Strasburg Road Transit Facility, located at 250 Strasburg Road, Kitchener, Ontario. The strategy recommended expansion of the Strasburg Road facility to its full capacity of 250 buses. In January 2010, Regional Council approved (report E-10-010/CR-FM-10-001) entering into an Agreement with Morrison Hershfield Limited to provide standard architectural and engineering services for the design and construction administration of the GRT Strasburg Road Facility Expansion.

The project consists of the relocation of Chandler Drive to the north, the construction of a new maintenance facility, approximately 110,000 square feet, and the renovation and expansion of the existing building. The Region is acquiring additional lands from the City of Kitchener for this development.

Detailed Design

The preliminary design of this project was completed by Giffels Associates Limited in early 2009 and included a project cost estimate based on the functional space requirements of the site and preliminary design drawings.
During detailed design, the project team consisting of Morrison Hershfield, representatives from Grand River Transit (GRT) and Facilities Management reviewed and verified the program requirements.

Some objectives of the design included:
- Providing storage capacity for 250 conventional buses
- Utilizing energy efficient equipment for reduction in operating costs
- Providing daylight to occupied areas for improved lighting
- Doubling the quick service bays, including bus wash system
- Increasing the area and equipment to service 250 buses

Regional Transportation Master Plan (RTMP) Facility Requirements

GRT currently operates two facilities with a combined storage for 227 conventional transit buses. The Kitchener facility on Strasburg Rd has storage for 165 buses and the Cambridge facility on Conestoga Blvd has storage for 62 buses. The expansion of the Strasburg Rd facility will increase the combined storage to 312 conventional transit buses. The Regional Transportation Master Plan forecasts the transit fleet will grow to 429 conventional buses (12 meters) and 172 articulated buses (19 meters) by 2031. The introduction of articulated buses is expected in 2017. The 2008 Transit Facilities Strategy Update is being updated to reflect the RTMP requirements and will outline facility options to accommodate this expected fleet growth including the introduction of articulated buses.

Geotechnical Investigation Results

During the preliminary design stage a preliminary geotechnical investigation was completed. Eight boreholes were drilled to a depth of approximately five metres, located around the perimeter of the proposed building. At the location of these 8 boreholes, the soils were considered adequate to support the building.

Through detailed design a geotechnical investigation was completed and included 33 boreholes drilled, in and around the new building footprints, to eight metre depths. Buried topsoil, fill, peat and organic silt soils were encountered, some to a depth of 7m below grade. Since these soil types are compressible and therefore not suitable for supporting building foundations or floor slabs, it is recommended that these soils be removed and replaced with engineered fill or drilled caissons. This amount of soil remediation was not anticipated and will have an impact to the construction budget.

Based on information from these existing boreholes, the cost to replace the unsuitable soil with engineered fill or drilled caissons has been estimated at $1.5 million plus a contingency of 25%, as the extent of the unsuitable conditions cannot be fully known until excavation is complete (total $1.9 million). The Project Team recommends proceeding with the remediation of these soils, and further recommends tendering for both an option to remove and replace the soil and caissons to determine the most cost effective method of remediation.

Project Cost and Schedule

A detailed construction cost analysis was recently performed by the consultants upon completion of the 60% design development submission. This cost estimate indicated this project can be completed on budget with the exception of the unexpected soil remediation costs.

It is expected that the construction tender will be issued late February/early March with construction beginning in summer of 2011. It is anticipated that the new maintenance facility will be completed in spring of 2013 and the renovations and addition to the existing building will be complete in 2014.
Leadership in Energy & Environmental Design (LEED)

The project is being designed and constructed to meet a minimum of LEED Silver certification through the Canada Green Building Council (CaGBC). Using energy efficient mechanical systems, the new maintenance facility is anticipated to achieve an energy savings of approximately 66%.

Regional Council has approved a separately funded project for the installation of Solar Photovoltaic Systems (PV) onto Regional facilities. The GRT project will include 250kW of PV’s on the new maintenance facility and up to 250kW on the existing building, including the new roof of the expansion area resulting in a PV installation approximately three times the size of the installation at the Regional Operations Centre. Additional LEED points can also be achieved as a result of the PV installation which could shift the project from LEED Silver to LEED Gold certification. The electricity generated by the solar panels will be fed directly back into the grid. The cost of the PV installation will be paid from a separate approved budget and will not impact the GRT project budget. All revenues created from the sale of the electricity will be captured by the Region of Waterloo.

Using the Green Roof Assessment Tool (CR-FM-10-002), if a building achieves ≥15 points a green roof should be considered. After completing the assessment of the buildings at 250 Strasburg Road they scored a total of 15 points. As such a green roof was considered, however, it was determined that the environmental benefits of a green roof are already being achieved using alternative measures for the entire project. The following measures have been incorporated into the design; the use of highly reflective roofing to reduce heat island effect, collecting rain water to use for bus washing thereby reducing the rate of storm water, and reducing energy consumption within the building through the use of energy efficient mechanical and electrical equipment.

Green Municipal Fund Application

The GRT expansion project is eligible for funding through the Federation of Canadian Municipalities (FCM) under the Green Municipal Fund (GMF)-Energy Sector. The project must demonstrate an anticipated reduction in design energy consumption of at least 60% compared to the Model National Energy Code for Buildings (MNECB), of which a minimum of 40% must come from energy efficiency measures and the remainder may come from renewable energy production (solar panel installation).

The current energy modeling indicates that this project is 66% below the Model National Energy Code for Buildings (MNECB) which is a result of energy efficient mechanical and electrical equipment within the design as well as the planned 500KW PV installation.

FCM offers below-market loans, usually in combination with grants, to implement capital projects. Funding is provided for up to 80% of eligible costs. The loan maximum is $10 million, and the grant amount is set at up to 20% of the loan to a maximum of $1 million. The application for this project has been submitted and is currently under review with FCM.

CORPORATE STRATEGIC PLAN:

The construction of the Grand River Transit Strasburg Road Facility Expansion will support Focus Area 5 of the Corporate Strategic Plan: Infrastructure: Provide high quality infrastructure and asset management to meet current needs and future growth.

The project also supports Focus Area 1: Environmental Sustainability: Protect and Enhance the Environment, as the bus maintenance building will be designed and constructed to meet the LEED® Canada Silver standard for environmental conservation and energy efficiency per Regional Council Policy.
FINANCIAL IMPLICATIONS:
The approved 2010 GRT Capital Budget and 10 Year Capital Forecast includes $44,200,000 (from 2010 to 2014) to complete this phase of the Strasburg Road garage expansion to be funded from development charges and debentures. It is anticipated that the project may be completed within the approved budget, however the unexpected soil remediation could increase project costs by up to $1.9 million, resulting in a 4% increase to the project budget. Pre-budget approval to proceed with the project and to include an increase to the approved project budget of $1.9 million, to be funded from development charges and debentures, is requested.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:
This project is a joint initiative between Transit Services and Facilities Management & Fleet Services.

ATTACHMENTS:  NIL

PREPARED BY:  Eric Gillespie, Director, Transit Services
               Kimberly Lane, Senior Project Manager, Facilities Engineering

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

DATE: January 25, 2011

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR DECEMBER 2010

RECOMMENDATION:


SUMMARY:

In accordance with the Regional By-law 01-028, as amended, the Commissioner of Planning, Housing and Community Services has:

1. Approved the following part lot control exemption by-laws;
2. Accepted the following plan of condominium;
3. Draft approved the following plan of condominium; and
4. Released for registration the following plans of condominium.

REPORT:

City of Cambridge

1. Draft Approval of Plan of Condominium 30CDM-10106
   Applicant: Preston Meadows Developments Ltd.
   Location: 505, 535, 565 Margaret Street
   Proposal: To permit the development of 61 rental apartment units, 82 townhouse units and 56 condominium apartment units.
   Commissioner’s Approval: December 3, 2010

2. Registration of Draft Plan of Condominium 30CDM-07102
   Draft Approval Date: February 25, 2008
   Phase: Entire Plan
   Applicant: Cerniuk Construction Ltd.
   Location: 386 River Road
   Proposal: To permit the development of 15 single detached units.
   Processing Fee: Paid December 21, 2010
   Commissioner’s Release: December 21, 2010
City of Kitchener

1. **Registration of Draft Plan of Condominium 30CDM-08208**
   Draft Approval Date: September 4, 2008
   Phase: Stage 3
   Applicant: Savic Homes Ltd.
   Location: 975 Strasburg Road
   Proposal: To permit the development of 15 townhouse units.
   Processing Fee: Not required.
   Commissioner’s Release: December 14, 2010

2. **Registration of Draft Plan of Condominium 30CDM-03204**
   Draft Approval Date: December 19, 2007
   Phase: Entire Plan
   Applicant: 1813072 Ontario Inc.
   Location: 501-545 Morrison Road
   Proposal: To permit the development of 23 single detached units.
   Processing Fee: Not required
   Commissioner’s Release: December 21, 2010

3. **Registration of Draft Plan of Condominium 30CDM-10207**
   Draft Approval Date: October 4, 2010
   Phase: Entire Plan
   Applicant: ClaySam Homes
   Location: 305 Briameadow Drive
   Proposal: To permit the development of 14 parcels of Tied Land townhouses and .66ha of common elements.
   Processing Fee: Not required.
   Commissioner’s Release: December 24, 2010

4. **Registration of Draft Plan of Condominium 30CDM-10203**
   Draft Approval Date: July 21, 2010
   Phase: Stage 1
   Applicant: Carson Reid Homes
   Location: 300-322 Fallowfield Drive
   Proposal: To permit the development of 17 townhouse units.
   Processing Fee: Not required.
   Commissioner’s Release: December 24, 2010

City of Waterloo

1. **Application for Plan of Condominium 30CDM-10408**
   Date Accepted: December 10, 2010
   Applicant: Jameshill Developments Ltd.
   Location: 223 Erb Street West
   Proposal: To permit the development of 72 residential condominium units.
   Processing Fee: Paid November 29, 2010
Township of Wilmot

1. Part Lot Control Exemption By-law 2010-49
Applicant: Churchill Homes
Location: Hostetler Road
Proposal: To permit the creation of 6 semi-detached units.
Processing Fee: Paid December 20, 2010
Commissioner’s Approval: December 20, 2010

Township of Woolwich

1. Part Lot Control Exemption By-law 80-2010
Applicant: Empire Communities (Riverland)
Location: Trowbridge Street
Proposal: To permit the creation of 9 townhouse units.
Processing Fee: Paid December 6, 2010
Commissioner’s Approval: December 6, 2010

2. Registration of Draft Plan of Condominium 30CDM-10703
Draft Approval Date: June 25, 2010
Phase: Phase 2
Applicant: Thomasfield Homes Ltd.
Location: 31 Townsend Drive, Breslau
Proposal: To permit the development of 22 townhouse units.
Processing Fee: December 16, 2010
Commissioner’s Release: December 16, 2010

Residential Subdivision Activity January 1, 2010 to December 31, 2010

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*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:

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<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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*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 Consultation/Coordination**

These planning approvals, including associated 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 consistent with the streamlining objectives reflected in Focus Area 1: Manage Regional Growth to Enhance Quality of Life in the Corporate Strategic Plan.

**FINANCIAL IMPLICATIONS:**

NIL

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

NIL

**ATTACHMENTS:**

NIL

**PREPARED BY:** Andrea Banks, Program Assistant

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

DATE: January 25, 2011

FILE CODE: D10-70

SUBJECT: ACTIVE TRANSPORTATION ADVISORY COMMITTEE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo disband the Regional Cycling Advisory Committee and establish the Active Transportation Advisory Committee and approve the following with regard to the Active Transportation Advisory Committee, as described in Report No. P-11-007, dated January 25, 2011:

a) Approve the Terms of Reference for the Active Transportation Advisory Committee, as attached to Report No. P-11-007, dated January 25, 2011, and;

b) Appoint a Council representative for the Active Transportation Advisory Committee for the current term of Council.

SUMMARY:

The Region’s new Transportation Master Plan recommends developing an Active Transportation Master Plan (ATMP) to encourage higher rates of walking and cycling and to integrate active transportation as part of a balanced transportation network. The new ATMP will update the 2004 Cycling Master Plan and include a new component focused on pedestrian movement. To coordinate feedback from the walking and cycling communities, staff recommends establishing an Active Transportation Advisory Committee (ATAC) to build on the fourteen years of success achieved by the Regional Cycling Advisory Committee (RCAC). In a role similar to the RCAC, the ATAC would serve as a forum for the public to raise their viewpoints on particular active transportation issues and advise Regional Council and staff on cycling and pedestrian issues.

REPORT:

The Regional Cycling Advisory Committee (RCAC) was formed in June 1996 to advise Council on the policies, strategies and programs required to implement the Cycling Master Plan (CMP). Since its inception, the RCAC has worked to improve the cycling environment in Waterloo Region and they have achieved several notable successes including increasing the cycling mode share to 1.6 per cent in 2006 from 1.1 per cent in 2001. In 2006, as part of the Urban Transportation Showcase Program (UTSP), the Region of Waterloo became the second municipality in Canada to install bike racks on all of its buses. Grand River Transit also developed its innovative cycling and transit map with the help of the RCAC. The Region now boasts over 309 kilometres of cycling facilities and many of these projects were reviewed by the RCAC. The Committee was also an important stakeholder in planning the pedestrian and cycling bridge across Highway 401 and many RCAC members have partnered with Public Health to become CAN-Bike instructors. The RCAC had their final meeting at the end of the previous term of Council and the RCAC members were advised about the new direction for this transportation committee.
In 2004, Regional Council adopted a Regional Cycling Master Plan (CMP) update to encourage higher cycling rates with an expanded regional network of connected cycling facilities. A year later, Regional Council adopted the Region of Waterloo Pedestrian Charter with the expressed purpose of fostering awareness and support for walking. In 2010, Council approved the Regional Transportation Master Plan (RTMP) which prioritizes walking and cycling as an integrated part of a balanced transportation network. To more efficiently coordinate cycling and pedestrian infrastructure and services with land use, transit, and vehicle access, the RTMP recommends creating an Active Transportation Master Plan (ATMP) to update the existing Cycling Master Plan and to add pedestrian priorities. An Active Transportation Advisory Committee has been identified as an important advisory body for the creation of the ATMP, as well as to advise the Region on additional measures and policies required to implement the Region’s commitment to active transportation.

Building on the Success of the RCAC

Although cycling is becoming established as a utilitarian mode of transportation, there is still more work to do. A new Committee, if approved, would build on the momentum of the RCAC and establish broader support for an improved walking environment region wide. The new RTMP has established the need to consider walking and cycling together.

Proposed role of the Active Transportation Advisory Committee

The facility needs of pedestrians and cyclists are often different, but the same elements known to encourage higher cycling rates - namely higher densities, accessibility, intermodal connectivity and the presence of supportive infrastructure - also encourage higher walking rates. These complementary interests will assist the ATAC in their role as advisors to Regional Council and staff on the planning and effectiveness of active transportation facilities. The ATAC would also support the development of new active transportation policies, strategies and programs and be involved in active transportation programming on an ongoing basis. The Regional Transportation Master Plan, Context-Sensitive Regional Transportation Corridor Design Guidelines, the Region of Waterloo Pedestrian Charter, Cycling Master Plan, new Active Transportation Master Plan and the Regional Official Plan would serve as a policy foundation for the ATAC’s work.

Committee Membership

The proposed ATAC Terms of Reference recommends that the membership include one Council member, three representatives from each of the three Cities and 3 representatives from the four Townships. The twelve members appointed at large should include balanced representation from the cycling and pedestrian communities.

Area Municipal Consultation/Coordination

To provide balanced community representation on the Active Transportation Advisory Committee, the Region will consult with the Area Municipalities when advertising for citizen appointees.

CORPORATE STRATEGIC PLAN:

The Active Transportation Advisory Committee helps to fulfill the objectives of Focus Area Two, Growth Management. By supporting the Region’s guidelines for context-sensitive road corridors and other balanced Regional transportation policies, the Committee is helping to encourage compact urban design and provide a long term strategy for cycling and walking facilities.
FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Public Health and Design and Construction were consulted for this report and are in concurrence with its recommendations.

ATTACHMENTS:

Attachment 1 - Terms of Reference for the Active Transportation Advisory Committee

PREPARED BY: John Hill, Principal Planner

APPROVED BY: Rob Horne, Commissioner of Planning Housing and Community Services
The following terms of reference for the Active Transportation Advisory Committee is proposed to Regional Council within Section 75 (1) of the Procedural By-law 00-031, as amended. “Subject to the provision of any general or special Act, the Council, in establishing any Advisory Committee, will set forth Terms of Reference of the Committee and such other provisions as the Council deems proper.”

Terms of Reference

Active Transportation Advisory Committee
(ATAC)

1. Purpose, Mandate and Scope

A. The Active Transportation Advisory Committee, upon request of the Regional Municipality of Waterloo or the Commissioner of Planning, Housing & Community Services, will:

   a) Assist the Region in developing new active transportation policies, strategies and programs.

   b) Advise Regional Council and staff on measures and policies required to implement the Region’s commitment to active transportation in the Transportation Master Plan, Context-Sensitive Regional Transportation Corridor Design Guidelines, Cycling Master Plan and the Regional Official Plan.

   c) Advise Regional Council and staff on cycling and pedestrian (active transportation) issues in accordance with the Regional Transportation Master Plan, Context-Sensitive Regional Transportation Corridor Design Guidelines, the Region of Waterloo Pedestrian Charter, Cycling Master Plan and the Regional Official Plan.

   d) Advise Regional Council and staff in addressing active transportation issues received from other governments and agencies (i.e., studies, policies, programs, legislation, etc.).

   e) Assist in monitoring the extent and effectiveness of active transportation facility construction and support programming (encouragement, education and enforcement) on an ongoing basis.

B. The Active Transportation Advisory Committee will serve as a forum for the public and/or agencies to raise their viewpoints on particular cycling and pedestrian issues and/or findings.

C. The Active Transportation Advisory Committee will endeavour to increase public awareness and understanding of issues taken up by the Committee.

2. Reporting

The Active Transportation Advisory Committee reports to Regional Council through the Commissioner of Planning, Housing & Community Services to the Planning and Works Committee.
3. **Memberships**

A. The Regional Municipality of Waterloo will appoint thirteen members to the committee. The thirteen members will be composed of a Regional Councillor and twelve members at large appointed on a four year staggered cycle. If possible, three (3) representatives from each of the three (3) urban Area Municipalities and three (3) representatives from the four (4) rural Area Municipalities should be chosen to provide a balanced regional perspective on cycling and pedestrian issues.

B. Committee members may serve up to eight years (two consecutive four year terms) in accordance with Regional Council Policy.

C. Membership should be drawn from residents with skills and demonstrated expertise in cycling and pedestrian areas of concern and not as representatives of particular agencies, organizations or interest groups.

D. Members will be appointed on the basis of experience, interest and availability to attend meetings and serve on the occasional sub-committee.

E. The Commissioner of Planning, Housing & Community Services or his/her designate shall be in attendance at all meetings.

4. **Selection of Members**

A. Individuals will become members of the committee through citizen appointment by advertisement.

B. The representative Regional Councillor will be appointed by Regional Council.

5. **Terms of Office**

A. Appointments of twelve (12) persons appointed by Regional Council for up to four (4) years, in such a way that at least five (3) members will be reappointed or replaced every year; terms are as follows:

   a) One (1) year term, maximum of eight (8) years;
   b) Two (2) year term, maximum of eight (8) years;
   c) Three (3) year term, maximum of nine (9) years;
   d) Four (4) year term, maximum of eight (8) years; and
   e) One (1) member of Regional Council, appointed for the term of each Council.
5. Meetings

A. The Committee will elect annually a Chair and Vice-Chair from among its members at the first meeting of each calendar year. The Chair should be able to devote some time between meetings to work with Regional staff or attend the occasional meeting of the Regional Planning and Works Committee or Council when circumstances warrant.

B. It is expected that there will be approximately one (1) meeting per month. These meetings will be open to the public. Closed Sessions will only be held in strict compliance with the Regional Procedural By-law.

C. Members will from time to time be expected to serve on sub-committees reviewing particular issues.

D. The Committee will from time to time invite other persons or groups, such as Area Municipality Trails Advisory Committees and other cycling or pedestrian organizations, to participate in Committee deliberations in order to benefit from additional expertise pertaining to subjects being discussed or to be briefed on the policies and activities of government bodies or other organizations dealing with matters relating to these subjects.

E. Direct staff support to the committee will be provided by the Transportation Planning Division of the Planning, Housing & Community Services Department. An annual budget for the Committee’s operation will be, as required, included in the budget of the Transportation Planning Division.

6. Committee Procedures

A. The quorum for a meeting shall be seven (7) members. A reduced quorum may be considered when a member has formally resigned from the Committee or when fewer than thirteen (13) members have been appointed by Regional Council.

B. Committee decisions will be made by majority vote.

7. Agenda Preparation for the Meeting

Meeting agenda will be provided by the Transportation Planning Division of the Planning, Housing & Community Services Department in consultation with Committee members.

8. Minutes of the Meeting

Staff support to the Active Transportation Advisory Committee will be provided by the Clerks Department.

9. Remuneration

Members will be reimbursed if a submission is made for mileage and incidentals (parking, long distance telephone, bus tokens, meals and snacks) as required.
10. Conflict of Interest

All members shall adhere to the Conflict of Interest Policy for Advisory Committees, approved by Council on May 28, 2003. All members shall review and complete the agreement and signature form attached to the policy. Signature forms are to be returned to the Committee Clerk for safe keeping.

Members are expected to undertake their responsibilities on an impartial and objective basis. Any member whose financial interests could be in conflict with the interests of the Region is obliged to disclose same at the meeting. Members will not participate in any decision or recommendation in which they or their immediate family has any financial interest except in common with residents of the municipality.

If a conflict of pecuniary interest arises the member is required to declare the conflict including the reason for declaration.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: January 25, 2011

FILE CODE: D09-30/GTAWC

SUBJECT: GTA WEST CORRIDOR - UPDATE REPORT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo recommend that the Ontario Ministry of Transportation examine corridor protection opportunities north of Highway 401, connecting Waterloo Region to the Greater Toronto Area, to support potential growth beyond the 2031 timeframe as outlined in Report No. P-11-008, dated January 25, 2011.

SUMMARY:

In the Greater Toronto Area (GTA), the Ontario Ministry of Transportation (MTO) is working on an Environmental Assessment for the GTA West Corridor, a proposed transportation corridor between the City of Brampton and the City of Guelph. The study has identified a draft Transportation Development Strategy that would combine improvements in transportation system efficiency, Transportation Demand Management (TDM) measures, significant investments in public transit, improvements to existing highways and construction of a new highway. The Region supports this direction and is working with MTO on a regional planning study that will help define the efficiency improvements and leverage investments in inter-regional transit. Regarding the highway component, Transportation Planning staff recommend that MTO examine transportation corridor protection opportunities along the Alternative 4-4 and 4-5 alignments, since the implications of growth beyond the study's 2031 planning horizon suggest that there would be many benefits from a corridor connecting Waterloo Region to the GTA. This corridor could ultimately connect to the New Highway 7 proposed between Guelph and Kitchener.

REPORT:

In the Greater Toronto Area (GTA), the Ontario Ministry of Transportation (MTO) is working on an Environmental Assessment for the GTA West Corridor, a proposed transportation corridor north of Highway 401 between the City of Brampton and the City of Guelph. MTO has recognized the Region as an "area of influence" on the study because the Region generates significant traffic that could use the new corridor.

MTO hosted a Public Information Centre (PIC) in June 2010 to enable public review and solicit comments regarding the draft multi-modal Transportation Development Strategy for the GTA West Corridor. At the PIC, MTO highlighted the transportation issues facing the GTA and noted that a strategy combining improvements in transportation system efficiency, Transportation Demand Management (TDM) measures, significant investments in public transit, improvements to existing highways and limited construction of new highways would address those issues to the 2031 planning horizon year. According to the project schedule, this was the last PIC prior to MTO completing the study, and MTO will release the Transportation Development Strategy soon. Regional Council reviewed the PIC in Report P-10-069 (September 7, 2010) and supported MTO's direction in creating the strategy. Council recommended that MTO incorporate the findings of an upcoming road pricing study by Metrolinx into the TDM component of the strategy.
During this study, Regional Council has encouraged MTO in its efforts and has noted that regional planning of Transportation Demand Management and public transit initiatives will be necessary to achieve the full benefits of these measures. Regional planning will help to leverage important investments in public transit, such as the recently announced property acquisitions near King Street and Victoria Street, the proposed construction of a railway grade separation at Weber Street, and the extension of the Georgetown GO Transit rail passenger service to downtown Kitchener starting in 2011. MTO has responded and has started data collection for a regional transportation study, similar to those conducted for Metrolinx in the GTA. The study area would include the Region of Waterloo, the Cities of Brantford and Guelph, and Brant and Wellington Counties.

Regarding the highway component of the GTA West Corridor Transportation Development Strategy, the analysis presented at the PIC suggests that highway Alternatives 4-2 and 4-3 (Attachment 1) will offer the most appropriate combination of transportation performance and economic development with limited impacts to the natural and social environments. While these findings are consistent with the study Terms of Reference that established 2031 as the planning horizon year, the long-term nature of highway construction projects suggests that it would be prudent to examine the implications of growth beyond 2031. Since Alternatives 4-2 and 4-3 would connect to Highway 401 around the Town of Milton, this would leave the Region with only one 400-series highway connecting it to the GTA highway system. Alternatives 4-4 and 4-5 (Attachment 2), which would end near the City of Guelph, could provide the following benefits to the Region:

- Improved connection to/from the GTA via the new Highway 7;
- Improved access to highways that would support the creation of industrial employment;
- Transportation system redundancy that would improve emergency management;
- Adherence to highway planning principles that create highway “cells” to direct growth; and,
- Consistency with existing corridor protection parallel to Highway 401 east of the GTA.

Consequently, while the Region supports the study findings to date under the established Terms of Reference, MTO should consider examining corridor protection for Alternatives 4-4 and 4-5 to facilitate long term planning beyond 2031.

Next Steps

Transportation Planning staff will forward a copy of this report to MTO for consideration. Staff will also comment on the final Transportation Development Strategy after its release by MTO for public consultation.

Area Municipal Consultation/Coordination

Transportation Planning has circulated a copy of this report to all Area Municipalities.

CORPORATE STRATEGIC PLAN:

Under the terms of the former Strategic Plan ending 2010, this work is consistent with Focus Area Five (Infrastructure) since it provides the infrastructure needed to accommodate planned growth and advocates for improvements to inter-city transportation services.

FINANCIAL IMPLICATIONS:

NIL
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Attachment 1 - Highway Alternatives 4-2 and 4-3
Attachment 2 - Highway Alternatives 4-4 and 4-5

PREPARED BY: Geoffrey Keyworth, Senior Transportation Planning Engineer

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
ATTACHMENT 1 – HIGHWAY ALTERNATIVES 4-2 AND 4-3

- GTA West Corridor (4 lane highway) ends around Hwy 401 & Hwy 407 interchange
- Hwy 401 is 10 lanes west of Milton and 12 lanes through Milton

- GTA West Corridor (4 lane highway) ends at Hwy 401 in Milton
- Hwy 401 is 10 lanes west of Milton and 10 lanes through Milton
ATTACHMENT 2 – HIGHWAY ALTERNATIVES 4-4 AND 4-5

- GTA West Corridor (4 lane highway) ends in north Guelph or Township of Guelph/Eramosa
- Hwy 401 is 8 lanes west of Milton and 10 lanes through Milton

- GTA West Corridor (4 lane highway) ends in south Guelph or Township of Puslinch at Hanlon Expressway
- Hwy 401 is 10 lanes west of Milton and 12 lanes through Milton
The Regional Municipality of Waterloo is currently completing a Class Environmental Assessment Study for Weber Street from College Street to Guelph Street, in the City of Kitchener. As part of this study, public consultation meetings were held on April 15, 2010 and November 30, 2010. At these meetings the project problems and objectives, alternative solutions, preferred solution, alternative design concepts and preferred design concept were presented and public comments received.

The Project Team has made some revisions to the preferred design concept in response to the public comments and staff are considering scheduling an evening Public Input Meeting (PIM) of Planning and Works Committee for Tuesday, March 8, 2011, to present this design concept and receive public input prior to finalizing the Environmental Study Report for presentation to Regional Council. The PIM will be held in Regional Council Chambers. It is also proposed that this meeting occur at 7:00 p.m. to provide a better opportunity for attendance to interested members of the public.

It is requested that members of Committee advise of any concerns regarding this date. Alternatively, staff would also be available on the night of March 22, 2011 for a PIM.

A staff report with further project details will be submitted for Committee’s information as part of the agenda package for the March 8, 2011 Planning and Works Committee meeting. For further information regarding this project, please contact Peter Linn, P.Eng, Senior Project Manager at 575-4757, Ext. 3773.

cc: Mike Murray
   Chief Administrative Office
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
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<tr>
<td>01-Dec-09</td>
<td>P&amp;W</td>
<td>Staff report on obtaining changes to Highway Traffic Act to give right of way to pedestrians</td>
<td>Transportation and Environmental Services</td>
<td>May-2011</td>
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