MEDIA RELEASE: Friday, May 4, 2012, 4:30 p.m.

REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA

Tuesday, May 8, 2012
9:00 A.M.
Regional Council Chamber
150 Frederick Street, Kitchener, Ontario

1. MOTION TO GO INTO CLOSED SESSION

   THAT a closed meeting of the Planning and Works Committee be held on Tuesday, May 8, 2012 at 8:45 a.m. 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) proposed or pending acquisition of land in the City of Kitchener

2. MOTION TO RECONVENE IN OPEN SESSION

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

4. DELEGATION

   a) Michael Druker, Tri-Cities Transport Actio Group, Re: New Cycling Infrastructure Increases Cycling Rates – A Case Study in Guelph

   b) Mike Morrice, Executive Director, Re: Sustainable Waterloo Region Annual Report

5. REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES

   COMMUNITY PLANNING

   a) P-12-036, Proposed Reurbanization Community Advisory Panel and Ongoing Public Consultation Opportunities

   COMMUNITY SERVICES

   b) P-12-054, Year End 2011 Population and Household Estimates for the Region of Waterloo

   TRANSPORTATION PLANNING

   c) P-12-055, Recommended Grand River Transit 2012 Fare Structure

   INTER-DEPARTMENTAL REPORT

   d) E-12-047/P-12-043, 2012 Water And Wastewater Monitoring Report

REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES
DESIGN AND CONSTRUCTION

e) E-12-027, Franklin Boulevard Improvements, Pinebush Road to Myers Road, City of Cambridge – Construction Phasing

f) E-12-045, Recommended Intersection Improvements at Ottawa Street and Trussler Road, City of Kitchener

g) Belmont Avenue Raw Watermain, Gage Avenue to Glasgow Street, City of Kitchener, Pre-construction Information Package – Public Information Centre

RAPID TRANSIT

h) E-12-057, Municipal Utility Relocation – Cost Sharing for Rapid Transit

TRANSIT

i) E-12-043, GRT Customer Issue Report

TRANSPORTATION

j) CR-RS-12-026/E-12-056, Southern Ontario Locomotive Restoration Society – Extension of Agreements for Operation of Tourist Train

k) E-12-053, Reserved Cycling Lanes, Bridge Street (Regional Road 52) from Northfield Drive (Regional Road 22) to Lexington Road, City of Waterloo

WATER

l) E-12-044, Standard of Care – Safe Drinking Water Act

m) E-12-046, 2011 Management Review for Quality Management System - Water Services

n) E-12-052, Strange Street Water Supply System Class Environmental Assessment Update: Notice of Completion

6. INFORMATION/CORRESPONDENCE

a) Memo Re: Universal Transit Pass (U-Pass) Program Update

7. OTHER BUSINESS

a) Council Enquiries and Requests for Information Tracking List

8. NEXT MEETING – May 29, 2012

9. ADJOURN
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
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<tr>
<td><strong>Planning and Works Committee</strong></td>
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<tr>
<td>Tues, May 29, 2012</td>
<td>9:00 A.M.</td>
<td>Public Meeting re: Proposed ROPP Amendment, Thomasfield Homes Ltd., Breslau Settlement Area, Township of Woolwich</td>
<td>Council Chamber 2nd Floor, Regional Administration Building 150 Frederick Street Kitchener, Ontario</td>
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<tr>
<td>Tues., May 29, 2012</td>
<td>9:15 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>Tues., June 19, 2012</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>Tues., May 15, 2012</td>
<td>5:00 P.M.</td>
<td>CTC Community Building Strategy – Uptown Waterloo Walking Tour</td>
<td>Waterloo Town Square Bell King and Willis Way King and Willis Way Waterloo, Ontario</td>
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<tr>
<td>Tues., May 15, 2012</td>
<td>7:00 P.M.</td>
<td>CTC Community Building Strategy Forum 2 – Creating Great Places, Keynote Speaker G.B. Arrington</td>
<td>Knox Church 50 Erb Street Waterloo, Ontario</td>
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<tr>
<td>Thur., May 17, 2012</td>
<td>8:00 A.M. – 4:30 P.M.</td>
<td>Stakeholder Forum Sustainable Solutions – A Concept Facility for Soil and Material Management</td>
<td>Holiday Inn 200 Holiday Inn Drive Cambridge, Ontario</td>
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<td>Thurs., May 17, 2012</td>
<td>3:00 – 7:00 PM</td>
<td>Open House re: CTC Community Building Strategy Forum 2 – Creating Great Places</td>
<td>CBS Storefront 220 King Street West Kitchener, Ontario</td>
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<tr>
<td>Tues., June 12, 2012</td>
<td>6:00 P.M. – 7:30 P.M.</td>
<td>CTC Community Building Strategy Forum 3 – Strengthening the Region Keynote Speaker Sue Zielinski</td>
<td>Galt Little Theatre 47 Water Street South Cambridge, Ontario</td>
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<td>Thu., June 14, 2012</td>
<td>3:00 P.M. – 7:00 P.M.</td>
<td>Open House re: CTC Community Building Strategy Forum 3 – Strengthening the Region</td>
<td>CBS Storefront 220 King Street West Kitchener, Ontario</td>
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<td><strong>Transportation and Environmental Services</strong></td>
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<tr>
<td>May 9, 2012</td>
<td>5:30 P.M.</td>
<td>Information Centre re: Belmont Ave. Raw Water-main Upgrade, Information Package in Advance of Pre-construction</td>
<td>Regional Administration Building, 150 Frederick Street, Room 110, 1st Floor Kitchener, Ontario</td>
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New Cycling Infrastructure Increases Cycling Rates – A Case Study in Guelph

report prepared by Michael Druker

The Tri-Cities Transport Action Group (TriTAG) is a Waterloo Region organization dedicated to improving walking, cycling, and transit. In the summer of 2010, we heard of Guelph's plans for installing new cycling infrastructure and decided to make a case study of cycling rates before and after the specific addition of cycling infrastructure.

We found that the introduction of cycling infrastructure increased the number of cyclists in an AM peak period. Moreover, providing an appropriate and more comfortable space for riding resulted in a decrease in sidewalk cycling, but a three-fold increase in cycling “in the road”.

Data on cyclists and pedestrian counts was collected at four screenlines. We kept as much constant as possible between the before and after counts, and two of the locations were controls. The two counts both took place on a Tuesday morning peak period, from 7:30am to 9:00am on June 29, 2010 and July 5, 2011, and both counts at each location were taken by the same person. Construction of the cycling infrastructure was completed by the time of the second count, but without much time for adjustment of travel patterns.

We found that the new infrastructure had a substantial positive effect on cycling rates.

In our control locations, there was a 19% increase in cycling rates paired with a 17% decrease in walking. This may reflect weather differences between the two days. Overall there was no difference in our active transportation counts, including both cycling and walking together (+1%).

In the new infrastructure locations, there was a 60% increase in cycling with an 8% decrease in walking – for an overall 21% increase in active transportation counts. The most drastic cycling increase occurred on Stone Road, where cycling nearly doubled with the new cycle tracks.

We are aware that the City of Guelph has engaged in a public campaign against sidewalk cycling. There is indeed a slight decrease in sidewalk riding in our control locations (-16%). But it is notable that despite the overall 60% increase in cycling in the new infrastructure locations, there is a 37% drop in sidewalk riding. In those locations, the number of cyclists riding on the road nearly tripled. This finding demonstrates that cyclist behaviour is significantly dependent on the opportunities and conditions for comfortable cycling.

In conclusion, this case study provides support for the construction of cycling infrastructure, and separated infrastructure in particular as a means of increasing the role of active transportation modes.
Appendix 1: Locations

1. Control: Edinburgh Road just south of Raglan Street. No change in conditions. This is a narrow two-lane suburban corridor with some residential frontage, sidewalks, and no bike lanes. Google Street View: [http://g.co/maps/x37fb](http://g.co/maps/x37fb)

2. Control: Gordon Street at the Speed River bridge. No change in conditions. This is a narrow two lane urban corridor with sidewalks and wide bike lanes. Google Street View: [http://g.co/maps/7ansu](http://g.co/maps/7ansu)

3. New Infrastructure: Gordon Street just south of Monticello Crescent. Conventional on-street bike lanes were added to this 4-lane suburban arterial. There are few nearby alternative corridors. Google Street View (before changes): [http://g.co/maps/wrkxm](http://g.co/maps/wrkxm)

4. New Infrastructure: Stone Road just west of Gordon Street. Bike lanes added that are mostly separated from the roadway by a curb. This is a very wide suburban arterial corridor with 4 lanes. Google Street View (before changes): [http://g.co/maps/zhvdg](http://g.co/maps/zhvdg)

Appendix 2: Counts

<table>
<thead>
<tr>
<th></th>
<th>Control Locations</th>
<th>New Infrastructure Locations</th>
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<tr>
<td></td>
<td>2. Gordon St. at Speed River</td>
<td>4. Stone Rd, west of Gordon St.</td>
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<tr>
<td></td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>Cycling (road)</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Cycling (sidewalk)</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Cycling (total)</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Walking</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>Cycling (road)</td>
<td>32</td>
<td>74</td>
</tr>
<tr>
<td>Cycling (sidewalk)</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td>Cycling (total)</td>
<td>65</td>
<td>98</td>
</tr>
<tr>
<td>Walking</td>
<td>58</td>
<td>66</td>
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</table>
Our findings in the 2011 Report

Regional Carbon Initiative (RCI) Membership grew from 29 to 41 members in 2011, these members are making commitments, these commitments are being strategically targeted through action plans, which are being mainly led by green teams.

Membership grew from 29 to 41 members in 2011

- Sustainability in Waterloo Region is growing and thriving and there is an increased level of engagement within community

RCI members are making commitments

- RCI members committed to reduce 42,550 tonnes of C0\textsubscript{2}e - the equivalent of taking 9552 cars off the road.

These commitments are being strategically targeted through action plans

- Our members are working on plans to improve their sustainability areas, and almost 30% have an action plan already in place - almost 3.5 times higher than last year.

These action plans are being mainly led by Green Teams

- In 2010 35% of all RCI member projects were done with a green team. In 2011 the number was 75%
- RCI members with Green Teams are 21% more likely to have a Measurable Action Plan

Direct correlation between length of membership and increase in measurable environmental successes

- 55% of returning members have created an action plan to reduce emissions in at least one part of their organizations.
TO: Chair Wideman and Members of the Planning and Works Committee

DATE: May 8, 2012

FILE CODE: A02-40

SUBJECT: PROPOSED REURBANIZATION COMMUNITY ADVISORY PANEL AND ONGOING PUBLIC CONSULTATION OPPORTUNITIES

RECOMMENDATION:

THAT the Regional Municipality of Waterloo establish a Reurbanization Community Advisory Panel, as described in Report No. P-12-036, dated May 8, 2012, and more specifically:

a) Approve the attached Terms of Reference for the Reurbanization Community Advisory Panel; and

b) Direct staff to invite participants to the Reurbanization Community Advisory Panel.

SUMMARY:

With the adoption of the Regional Growth Management Strategy in 2003, the approval of the new Regional Official Plan in 2009 and the completion of the Region of Waterloo Strategic Focus (2011-2014) there is a strong focus on the integration of transportation and land use planning, including the promotion of reurbanization and more sustainable forms of transportation. Increases in the number of reurbanization units (growing from 15% of all building permits in 2003, to 55% in 2011) is evidence of this transition, as is the more than doubling of GRT transit ridership since 2000.

In the past several years, significant momentum has been generated by the approval of several key projects. Included in this is the initiation of the rapid transit project connecting Waterloo, Kitchener and Cambridge, as well as the new Region of Waterloo Transit Hub and the Central Transit Corridor Community Building Strategy. To coordinate key stakeholder feedback on these and other intersecting projects and to provide another means of public consultation, staff recommend establishing a Reurbanization Community Advisory Panel. The Reurbanization Community Advisory Panel would serve as a forum for key stakeholder groups to raise their viewpoints on particular issues, provide important input, and offer advice to Senior Staff at key project milestones.

The Panel would be comprised of up to 11 core representatives, representing the three elements of sustainability (environment, economic and social). However, additional public input would be made possible through the invitation of other community members from specific sectors, depending on the issue under consideration. This will provide for greater community involvement than a fixed panel membership. Further, communication with all of the Stakeholder Organizations included in the broader listing (please see Attachment 2) would be ongoing and regular.

REPORT:

Over the past decade, Waterloo Region has experienced several significant transitions that will have far reaching implications for the form and function of our community. During this period, this community has seen a shift in the traditional economic base, changes in the cultural and
demographic mix of the population as well as a new focus on a more sustainable and environmentally friendly approach to community building. Waterloo Region is widely recognized as a vibrant, innovative, growing community – one in which the opportunities and challenges related to growth have been carefully considered and planned for as part of the overall policy framework. This framework has been developed through several key initiatives at the Provincial, Regional and Area Municipal level.

One of the key elements of this planning framework, initiated with the adoption of the Regional Growth Management Strategy in 2003, is a new approach to the coordination of transportation and land use planning and an associated focus on reurbanization, which is an increasingly visible trend. For example:

- The number of reurbanization units as a percentage of total new units constructed in Waterloo Region has grown from approximately 15% in 2003 to approximately 50% in 2010 and 55% in 2011;
- There have been approximately 5000 residential units and almost $1.34 billion in non-residential development building permits issued within proposed RT station areas\(^1\) since 2003; and
- Almost 30% of all residential unit building permits were issued for development within the proposed RT station areas in 2011.

Further, the transition to more sustainable modes of transportation (as evidenced by GRT ridership, which has more than doubled since 2000) supported by the implementation of a rapid transit system along the primary reurbanization corridor (also known as the central transit corridor) that connects the cities of Cambridge, Kitchener and Waterloo forms the spine of the overall strategy. In June 2011, Regional Council affirmed this direction by approving a light rail transit (LRT) to be implemented through a staged approach. Stage one of the project will include LRT from Conestoga Mall in Waterloo to Fairview Park Mall in Kitchener as well as an adapted bus rapid transit system (aBRT) from Fairview Park Mall to the Ainslie Street Bus Terminal in Cambridge. Stage two will include the implementation of a full LRT corridor from Waterloo to Cambridge.

With several pieces of the overall growth management/reurbanization framework in place in Waterloo Region, there is significant momentum related to several intersecting projects now underway. The projects include:

- The Central Transit Corridor Community Building Strategy;
- Planning for the Region of Waterloo’s new Transit Hub at King and Victoria Streets in Kitchener;
- The Transit Supportive Strategy for Cambridge; and
- Area Municipal/Region Parking Coordination Initiatives.

Proposed Reurbanization Community Advisory Panel Role

In order to ensure the ongoing engagement of key community stakeholders throughout the implementation of these various initiatives, staff recommend the creation of a new Reurbanization Community Advisory Panel. This panel would replace the former RGMS/RT Public Advisory Committee and provide for:

- Additional flexibility;
- Broader range of stakeholder participation; and
- More efficient use of the community’s time.

The proposed Terms of Reference are included as Attachment 1 of this report.

\(^1\) Considered areas within 800 meters of a Rapid Transit station location.
This panel is anticipated to provide important input and advice to Senior Staff at key project milestones. The intent is to invite a number of individuals to be part of an identified pool of community stakeholders for the Region to convene at the direction of the Commissioner of Planning, Housing and Community Services – with the exact number and composition dependant on the subject or project at hand. Core representatives from each of the following areas; agriculture, arts/culture/heritage, development finance, real estate industry, economic development, education, environment, health/social welfare and tourism, would also be selected in order to ensure a minimum level of consistency throughout the duration of the panel, as shown in Attachment 2.

Participation in the panel may be facilitated either “in person” or via a more virtual or online forum. This will offer additional flexibility to both the participants as well as staff. It should also be noted that this Reurbanization Community Advisory Panel would not perform any development review functions and would not replace the Rapid Transit Office’s consultation process (though efforts to coordinate will be made).

**Participation**

The Panel would be comprised of up to 11 “core representatives”, representing the three elements of sustainability (environment, economic and social). However, additional public input would be made possible through regular consultation of other community members from specific sectors, depending on the issue under consideration. This will provide for greater community involvement than a fixed panel membership. Further, communication with all of the Stakeholder Organizations included in the broader listing (please see Attachment 2) will be ongoing and regular.

**Ongoing Consultation Opportunities**

While it is anticipated that the Reurbanization Community Advisory Panel will serve as a forum for the various stakeholders to raise their viewpoints on particular reurbanization planning issues, it will not replace other public consultation forums (for example Rapid Transit-specific consultation).

This consultation program currently includes:

- Workshops, Forums and Information Displays at Public Events (Multi-Cultural Festival);
- Open Houses and Public Meetings;
- Targeted Stakeholder Meetings and Working Groups (Home Builders Liaison, Reurbanization Working Group, Brownfields Working Group);
- Speaking Engagements and Learning/Educational Opportunities (Key note Speaking, Post-Secondary Lectures);
- Targeted Social Marketing;
- Community Walking Tours;
- Storefront and staff availability;
- Website ([www.regionofwaterloo.ca/reurbanization](http://www.regionofwaterloo.ca/reurbanization), [www.centraltransitcorridor.ca](http://www.centraltransitcorridor.ca))
- On-line/Social Media and Email (Facebook, Twitter, Interactive Webcasts, Online Discussion Boards);
- Print Communication (Region News) and other Trade Publications; and
- Traditional Media Relations (Print, Radio, TV).

In addition, Area Municipalities continue to participate as key partners in the implementation of various initiatives underway.
Area Municipal Consultation

Staff of the Area Municipalities will continue to be consulted throughout the course of individual project implementation. Area Municipal staff provided valuable input with respect to the stakeholder organization lists.

CORPORATE STRATEGIC PLAN:

The Reurbanization Community Advisory Panel directly addresses Focus Area 2: Growth Management and Prosperity (Manage growth to foster thriving and productive urban and rural communities) and the Strategic Objective 2.1. Encourage compact, livable urban and rural settlement form.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Transportation and Environmental Services (Rapid Transit) and Finance have been consulted in the preparation of this report.

ATTACHMENTS:

Attachment 1 – Draft Terms of Reference Reurbanization Community Advisory Panel
Attachment 2 – Proposed Community Stakeholder Organizations

PREPARED BY: Brooke Lambert, Interim Manager, Reurbanization

APPROVED BY: Rob Horne, Commissioner of Planning, Housing and Community Services
Attachment 1
DRAFT Terms of Reference
Reurbanization Community Advisory Panel

1. **Mandate**

A. The Reurbanization Community Advisory Panel in its various compositions, will advise the Commissioner of Planning, Housing and Community Services, and will more specifically:

   a) Assist the Region in development of reurbanization strategies and programs and offer advice, where necessary regarding:
      - public consultation programs;
      - community-building and visioning exercises; and
      - coordination of key strategies, studies and policy direction.

   b) Advise on measures required to implement the Region’s commitment to reurbanization initiatives;

   c) Assist in monitoring the extent and effectiveness of reurbanization activities and support programming (encouragement, education and enforcement) on an ongoing basis.

   d) The Reurbanization Community Advisory Panel will serve as a forum for the various stakeholder agencies and members of the community to raise their viewpoints on particular reurbanization issues and/or findings.

2. **Advising Relationship**

A. The Reurbanization Community Advisory Panel will provide advice to the Commissioner of Planning, Housing and Community Services or his delegate.

3. **Participation**

A. The Panel will be comprised of a number of individuals representing key stakeholder organization or areas of expertise, primarily from the following areas; agriculture, arts/culture/heritage, development finance, real estate industry, economic development, education, environment, health/social welfare and tourism.

B. Participants will be selected on the basis of experience, interest, and availability to participate. A group of “core” participants will be selected to provide for some consistency for the duration of specific projects.

C. The Commissioner of Planning, Housing and Community Services or his delegate shall chair the Panel.

4. **Selection of Participants**

A. Individuals will be invited to participate based on demonstrated expertise/specialized knowledge or by recommendation from appropriate stakeholder organizations.
B. Participation on the Panel will be voluntary with length of service determined on a case-by-case availability.

5. **Convening of the Panel**

   A. The panel will be convened by the Commissioner of Planning, Housing and Community Services.

   B. Participants may provide comment in-person or via an online forum, depending on the nature of the subject or specific project needs.

   C. Participants will be provided with relevant meeting materials, including an agenda and relevant support materials, for review in advance of Panel discussions.

   D. Participants will recognize the legitimacy of the interests and concerns of others, and expect that their interests and concerns will also be respected.

6. **Minutes**

   A. Staff support to the Reurbanization Community Advisory Panel will be provided by Planning, Housing and Community Services.

7. **Remuneration**

   A. Participants will be reimbursed if a submission is made for mileage and incidentals.

8. **Conflict of Interest**

   All panel participants shall adhere to the Conflict of Interest Policy for Advisory Committees, approved by Council on May 28, 2003. All participants shall annually review and complete the agreement and signature form attached to the policy.

   Participants are expected to undertake their responsibilities on an impartial and objective basis. Any participant whose financial interests could be in conflict with the interests of the Region is obliged to disclose same at the meeting. Individuals 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 individual is required to declare the conflict including the reason for declaration.
Attachment 2
Proposed Community Stakeholder Organizations
(Overall pool that may be invited for input on the panel as required)

*Proposed core representative organization (up to 11 in total)

**Agriculture**
- Ontario Federation of Agriculture*

**Arts, Culture & Heritage**
- Creative Enterprise Enabling Organization*
- Kitchener-Waterloo Art Gallery
- Kitchener Public Library
- Waterloo Public Library
- Heritage Planning Advisory Committee
- Wonderful Waterloo
- Local Municipal Heritage Advocacy Groups

**Development/Finance/Real Estate Industry**
- Waterloo Region Home Builders Association*
- Developers
- Financial Representatives
- K-W Real Estate Board
- Cambridge Real Estate Board
- Reurbanization Working Group
- Cambridge BIAs
- Kitchener BIAs
- Waterloo BIAs

**Economic Development**
- Canada’s Technology Triangle
- Kitchener/Waterloo Chamber of Commerce
- Cambridge Chamber of Commerce
- Prosperity Council*
- UW Research and Technology Park
- Communitech
- Waterloo Region Small Business Centre
- Accelerator Centre

**Education**
- University of Waterloo*
- Wilfrid Laurier University*
- Conestoga College*
- Waterloo Regional Public School Board
- Waterloo Regional Catholic School Board

**Environment**
- Grand River Conservation Authority
- Ecological and Environmental Advisory Committee*
- Sustainable Waterloo

**Health/Social Welfare**
- Grand River Hospital
- Kitchener Downtown Community Health Centre
- Langs Farm Community Health Centre
- Health Practitioner
- Grand River Accessibility Advisory Committee*
- Family & Children’s Services
- Canadian Mental Health Association
- K-W Social Planning Council
- Social Planning Council of Cambridge and North Dumfries
- Capacity Waterloo Region

**Tourism**
- Waterloo Regional Tourism Marketing Corporation*

**Transportation**
- Active Transportation Advisory Committee*
- TriTAG
- Taxpayers for Sensible Transit
- Grand River Car Share
- TravelWise Working Group

Please note: This is not an exhaustive list, and does not preclude other community stakeholder organizations from participating, as appropriate.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: May 8, 2012

FILE CODE: D15-60 (A)

SUBJECT: YEAR END 2011 POPULATION AND HOUSEHOLD ESTIMATES FOR THE REGION OF WATERLOO

RECOMMENDATION:


SUMMARY:

Each year, an estimate of the year-end population and households is produced for the Region and each Area Municipality by Regional staff (see Figure 1). The Regional population as of year-end 2011 is estimated at 553,000 including full-time university and college students residing in the Region. The estimated number of households (occupied dwellings) is 196,420, an increase of 3,780 or 1.96% over 2010.

The annual population growth rate was 1.78%, representing an increase of 9,700 people over 2010. This growth rate was moderately lower than the previous year’s growth of 1.98%, and generally consistent with the 15 year average rate of 1.72%. The Region’s continuing growth reflects the diversity of the local economy, low interest rates, and the community’s desirability from a quality of life point of view. The population growth is on track with the projections contained in the Province of Ontario’s Places to Grow, Growth Plan for the Greater Golden Horseshoe.

In February 2012, Statistics Canada released initial results from the May 2011 Census of Canada, showing a Census population of 507,096 and the number of dwellings occupied by usual residents at 191,599. These results, detailed in Report No. P-12-056, are the basis for the Region of Waterloo’s 2011 year-end population and household estimates of 553,000 and 196,420 respectively. The Regional figures provide a better estimate of the total number of people and households that require services such as water, transit and policing, as they additionally include an estimate of full-time post-secondary students, and the Census undercount, at year-end. A comparison of various published population figures for 2011 is provided in Table 1 of this report.

The tables in Figures 1 and 2 of this report are proposed to be included in a Planning Information Bulletin to be distributed to Area Municipalities and other parties, as well as being posted on the Region’s website.

Population estimates are used by many Regional and Area Municipal departments, agencies, boards, and community groups to understand land use, plan infrastructure and service programs, calculate service costs per resident, assess housing needs and track health and social services trends.
REPORT:

Population and Household Estimates

Figure 1 provides the year-end 2011 population and household estimates for all Area Municipalities, with 2010 comparators. The population estimate for year-end 2011 is 553,000. This represents an increase of 9,700 people or 1.78% over the 2010 population estimate of 543,300. Of the Area Municipalities, Woolwich continues to experience the highest growth rate from 2010, at 3.4%, representing 780 additional people. In absolute growth, Kitchener again grew the most, with 4,400 new residents, representing an annual growth rate of 1.9%.

The estimated number of households in the Region is 196,420. Households are equivalent to “occupied dwellings”. Growth in households from 2010 is 3,780 units (1.96%), similar to the growth in the previous year. In 2011, the largest increase in the number of households occurred in Kitchener, which grew by 1,790 occupied units, accounting for almost one half of the Regional growth of households. In percentage increase, Woolwich had the largest growth in households, with 330 new households representing a 4.2% annual growth rate.

In recent years, there has been a shift in the type and location of residential growth experienced in the Region. While the majority of the activity continues to occur in the greenfields, significant re-urbanization is evident in the cores of the three cities, resulting significant increases in density. The level of re-urbanization is already meeting the minimum requirement set out by ‘Places to Grow’, and is supportive of the Region’s Rapid Transit initiative. The variety of housing types is also increasing, catering to the needs of an aging and increasingly diverse population.

| Year-end 2011 Population and Household Estimates for the Region of Waterloo* |
|-----------------------------------------------|---------------------|-------------------|-------------------|----------------------|-----------------------------|-------------------|
| Total Population Year-end 2011*              | 553,000             | 132,300           | 232,200           | 9,650                | 124,600                     | 19,650            | 19,880            | 23,450             |
| Population in Regular Households             | 537,100             | 130,700           | 229,100           | 9,570                | 115,400                     | 19,600            | 19,670            | 22,620             |
| Population in Collective Dwellings***        | 15,900              | 1,600             | 4,100             | 80                   | 9,200                       | 10                | 210               | 330                |
| Total Population Year-end 2010*              | 543,300             | 130,400           | 228,800           | 9,550                | 122,900                     | 19,660            | 19,330            | 22,670             |
| Additional Population                        | 9,700               | 1,900             | 4,400             | 130                  | 170                         | 190               | 560               | 780                |
| Population Change 2010-2011 (%)              | 1.78                | 1.5               | 1.9               | 1.4                  | 1.4                         | 1.8               | 2.8               | 3.4                |
| Households Year-end 2011*                    | 196,420             | 47,090            | 87,720            | 3,260                | 39,980                       | 3,170             | 7,060             | 8,120              |
| Households Year-end 2010*                    | 192,640             | 46,250            | 85,930            | 3,200                | 38,510                       | 3,110             | 6,880             | 7,290              |
| Additional Households                        | 3,780               | 840               | 1,790             | 60                   | 470                         | 60                | 210               | 330                |
| Household Change 2010-2011 (%)               | 1.96                | 1.8               | 2.1               | 1.8                  | 1.2                         | 1.9               | 3.1               | 4.2                |
| Persons per Unit*                            | 2.73                | 2.78              | 2.60              | 2.94                 | 2.93                        | 2.42              | 2.76              | 2.81               |

* Although based on the Census of 2011, this number includes adjustments for students (including foreign temporary residents), Census undercoverage, and vacancy rates. Due to various corrections and adjustments, direct comparisons to last year's estimates are not valid.

** Municipal Totals may not add due to Independent Cunning.

*** Collective Dwellings include student residences, nursing homes, hospitals, etc.

The calculated Persons Per Unit (PPU) for year-end 2011 is 2.73, representing the estimated Regional population in regular households in relation to the number of households in the Region. This PPU value includes the students who are resident in the Region, as well as the undercoverage rate applied to Regional population estimates. It should be noted that the average number of persons per unit (PPU) has been declining for several decades according to Census data. This
trend has been the result of smaller and fewer families, increased economic well-being and independence, and an aging population. However, the overall PPU calculated using the above definition has resulted in relatively flat overall PPUs for the past five years, due to the increase in the number of post-secondary students in the Region, who live in units with much higher PPUs.

**Methodology**

An estimate of the current population and households in the Region is prepared by Planning, Housing and Community Services staff each year. The estimate is primarily based on the most recent Census of Canada, which was May 2011. Initial data (population and dwellings) from this Census became available in February, 2012 and has been incorporated into the figures in this report. The Census data is further described in Report No. P-12-056. Additional demographic and dwelling characteristics data, which will shed further light on students and other aspects of population and dwellings, will become available in subsequent Census releases through 2012, and through the National Household Survey into 2013. Future estimates of 2011 population and dwellings will be adjusted as required, based on this forthcoming data.

However, the estimate of population contained in this report differs from the population reported by the Census in several ways. To best reflect the total number of people consuming services at year-end within the Region, adjustments are made to include:

- the Census net undercoverage (those people who were missed or double counted by the Census). Net undercoverage will not be available from Statistics Canada until 2013/2014. Until then, a four per cent undercoverage is assumed, consistent with 2006, and with Places to Grow assumptions;
- temporary residents in the Region, most notably students who study at our post-secondary institutions; and
- growth during the time period from mid-May to year-end.

The student estimates based on recent data from the University of Waterloo, Wilfrid Laurier University and Conestoga College represent a substantial component of the difference between Census and Regional population estimates, and of the growth in total population. There are now an estimated 44,510 students residing in the Region as of year-end 2011, with approximately 8,090 in student residences, and the rest living either at home, or elsewhere in the community.

By including these factors, the Census population of 507,096 published by Statistics Canada, reflecting May 2011, is adjusted to a Regional 2011 year-end population estimate of 553,000.

Similarly, the household estimate contained in this report differs from the number of dwellings occupied by usual residents reported in the Census, due to the following adjustments:

- vacancy rates in rental accommodations, which have fallen to a relatively low value of 1.7% in 2011 (from 2.6% in 2010) as reported by Canada Mortgage and Housing Corporation (CMHC);
- some student households, since the Census figure does not include dwellings solely occupied by foreign and temporary residents; and
- growth during the time period from mid-May to year-end.

Population and household estimates were last anchored to Census estimates in 2006. In the subsequent inter-censal years (2007-2010), the households and their related population were extrapolated using building activity. An estimated occupancy date was assigned to each building permit, and this date determined when new dwellings were added to the inventory of occupied units. These sources were supplemented by data from the Municipal Property Assessment Corporation (MPAC), correlated with a visual inspection of recent aerial photography, and data such as vacancy
rates published by Canada Mortgage and Housing Corporation (CMHC). As a result, the growth in households is not identical to building activity in each year.

The actual 2011 Census count was lower than had been anticipated using the building activity method. However, the new data for students at the three post-secondary institutions has pushed the student component of the total population higher than previously estimated. This had the most profound effect in the City of Waterloo, which has the highest temporary student population.

Comparison of Population Estimates from Different Sources

Table 1 provides a comparison of 2011 population estimates from the Census, Places to Grow, and the Region.

<table>
<thead>
<tr>
<th></th>
<th>As of May 10, 2011, population in regular dwellings and collectives</th>
<th>Additionally including an estimate of those who were missed in the census (4%).</th>
<th>As of December 31, 2011, additionally including post-secondary students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census of Canada</td>
<td>507,096</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Places to Grow</td>
<td></td>
<td>526,000</td>
<td>527,380</td>
</tr>
<tr>
<td>Schedule 3 forecast for 2011 equivalent using 2011 Census</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region of Waterloo, Planning Information Bulletin</td>
<td></td>
<td></td>
<td>553,000</td>
</tr>
</tbody>
</table>

The Province of Ontario published a 2031 figure of 729,000 people for the Region of Waterloo in the Places to Grow (P2G) Growth Plan for the Greater Golden Horseshoe (2006). This is the population figure that the Region of Waterloo’s Regional Official Plan (ROP) must plan to achieve. The Growth Plan also provided an interim forecast of 526,000 people in 2011. Using the P2G population definition, which excludes students, the Region’s population for 2011 would be 527,380, which nominally exceeds the P2G forecast.

General publications produced by the Region have shown a current population of 550,000. Although slightly different from the current estimate, this rounded figure is appropriate for general use.

The Region of Waterloo road signs, last updated in 2010, show a population of 545,000. Since the population number is updated on a two-year cycle, a new estimate will be provided later this year, reflecting the 2012-2014 period.

Population and Household Trends

As the 2011 Census has provided the most recent anchor point, adjustments of population and dwelling estimates that had previously been based on 2006 Census data is required. This new data, as well as cancellation of building permits and other updates to historical data, necessitates retroactive adjustments be made to previous years’ population and household estimates. Figure 2 provides revised estimates for the 1991-2011 period, together with a preliminary forecast for year-end 2012. Figure 3 illustrates the growth rates for the same period.
The 15-year period from 1997 to 2012 approximates one complete cycle in the housing market, during which the Region’s population grew by an average of 8,640 per annum, or 1.72%. Due to CMHC reports of a sharply higher vacancy rate in 2009, the number of occupied dwelling units in that year appears to show a subtle decrease over the previous year. However, this returned to more normal levels in 2010. The most recent five-year period, from 2006 to 2011, has been characterized by relatively high levels of growth in Waterloo Region, with average annual growth in this period of 7,540 people (1.41%) and 2,870 households per year (1.50%) despite the flat value in 2009.

Figure 2
Long-term Trends in Population and Households

<table>
<thead>
<tr>
<th>Year-end</th>
<th>Population</th>
<th>Change (%)</th>
<th>Households</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>398,900</td>
<td>-</td>
<td>137,140</td>
<td>-</td>
</tr>
<tr>
<td>1992</td>
<td>406,000</td>
<td>1.80</td>
<td>140,260</td>
<td>2.28</td>
</tr>
<tr>
<td>1993</td>
<td>411,300</td>
<td>1.30</td>
<td>143,090</td>
<td>2.02</td>
</tr>
<tr>
<td>1994</td>
<td>417,500</td>
<td>1.49</td>
<td>146,280</td>
<td>2.23</td>
</tr>
<tr>
<td>1995</td>
<td>420,500</td>
<td>0.73</td>
<td>148,080</td>
<td>1.23</td>
</tr>
<tr>
<td>1996</td>
<td>423,400</td>
<td>0.69</td>
<td>149,640</td>
<td>1.05</td>
</tr>
<tr>
<td>1997</td>
<td>429,500</td>
<td>1.44</td>
<td>152,010</td>
<td>1.68</td>
</tr>
<tr>
<td>1998</td>
<td>436,800</td>
<td>1.71</td>
<td>154,950</td>
<td>1.93</td>
</tr>
<tr>
<td>1999</td>
<td>445,300</td>
<td>1.94</td>
<td>158,270</td>
<td>2.14</td>
</tr>
<tr>
<td>2000</td>
<td>453,900</td>
<td>1.93</td>
<td>161,590</td>
<td>2.10</td>
</tr>
<tr>
<td>2001</td>
<td>462,700</td>
<td>1.93</td>
<td>164,620</td>
<td>1.88</td>
</tr>
<tr>
<td>2002</td>
<td>472,600</td>
<td>2.15</td>
<td>167,560</td>
<td>1.79</td>
</tr>
<tr>
<td>2003</td>
<td>483,100</td>
<td>2.21</td>
<td>170,860</td>
<td>1.97</td>
</tr>
<tr>
<td>2004</td>
<td>495,900</td>
<td>2.67</td>
<td>175,100</td>
<td>2.48</td>
</tr>
<tr>
<td>2005</td>
<td>506,600</td>
<td>2.14</td>
<td>178,810</td>
<td>2.14</td>
</tr>
<tr>
<td>2006</td>
<td>515,300</td>
<td>1.71</td>
<td>182,070</td>
<td>1.81</td>
</tr>
<tr>
<td>2007</td>
<td>522,000</td>
<td>1.30</td>
<td>184,860</td>
<td>1.53</td>
</tr>
<tr>
<td>2008</td>
<td>532,800</td>
<td>2.08</td>
<td>188,920</td>
<td>2.20</td>
</tr>
<tr>
<td>2009</td>
<td>532,800</td>
<td>0.00</td>
<td>188,660</td>
<td>-0.14</td>
</tr>
<tr>
<td>2010</td>
<td>543,300</td>
<td>1.98</td>
<td>192,640</td>
<td>2.11</td>
</tr>
<tr>
<td>2011</td>
<td>553,000</td>
<td>1.78</td>
<td>196,420</td>
<td>1.96</td>
</tr>
<tr>
<td>2012*</td>
<td>566,300</td>
<td>1.33</td>
<td>199,590</td>
<td>1.61</td>
</tr>
</tbody>
</table>

5-yr average: 7,540 1.42 2,870 1.50
15-yr average: 8,640 1.73 3,119 1.77

* Projected.
Area Municipal Consultation/Coordination

This report has been circulated to all Area Municipalities.

CORPORATE STRATEGIC PLAN:

Many of the objectives and actions contained in the Corporate Strategic Plan rely on estimates of population and households, including Strategic Objectives 2.2 “Develop, optimize and maintain infrastructure to meet current and projected needs”, 3.1 “Implement a Light Rail Transit System in the Central Transit Corridor, fully integrated with an expanded conventional transit system”, and 5.3 “Ensure Regional programs and services are efficient and effective and demonstrate accountability to the public”.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Virgil Martin, Planning Information Specialist
Margaret Parkin, Manager, Planning Information and Research

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

DATE: May 8, 2012

FILE CODE: D28-60(A)

SUBJECT: RECOMMENDED GRAND RIVER TRANSIT 2012 FARE STRUCTURE

RECOMMENDATION:

That the Regional Municipality of Waterloo approve the following regarding implementation of the 2012 Grand River Transit (GRT) fare structure as described in Report No. P-12-055, dated May 8, 2012:

a) Implement the GRT fare structure as detailed in Table 1 on July 1, 2012;

b) Coordinate MobilityPLUS fares with conventional transit fares by providing discounted tickets and monthly passes to provide fare parity, as required by the Accessibility for Ontarians with Disabilities Act (AODA) and;

c) Amend the Region’s Fees and Charges By-law No. 12-001 with respect to the approved 2012 GRT fares.

SUMMARY:

The approved 2012 Regional Budget included a 9% increase to Grand River Transit (GRT) fares. Fare increases help the transit system keep pace with increased costs and sustain on-going service improvements. Two fare options were developed and presented to the public at a Public Consultation Centre held on Wednesday April 22, 2012. Following the public feedback that was obtained, staff is recommending the fare change, as outlined in Table 1 of this report, be implemented on July 1, 2012.

The Accessibility for Ontarians with Disabilities Act (AODA) requires fare parity with conventional transit services for customers using the MobilityPLUS specialized transit service. It is proposed that on July 1, 2012, monthly passes and discounted tickets would also be introduced to MobilityPLUS to comply with AODA.

Various programs exist to assist residents who may not have the means to pay the full transit fare. The Transit for Reduced Income Program (TRIP) provides a subsidy for those who live on a reduced income while the Transit Affordability Pass Program (TAPP) assists those Ontario Works participants who are upgrading their education or attending English as a Second Language (ESL) programs. These programs continue to be offered to the community.

The UPASS price was set via negotiations with the student associations and was approved by Council on March 28, 2012.

Regional staff has met with School Board transportation staff to discuss the proposed 8.7% increase in the school board funded term pass. School Board transportation staff has indicated that their
funding is set by the Ministry of Education and are concerned that they cannot absorb the proposed 8.7% rate increase in the school term pass. Regional staff will continue to negotiate with School Board officials and plan to submit a report recommending a new price for the school board funded term pass to Planning and Works Committee at the June 19, 2012 meeting.

REPORT:

The approved 2012 Regional Budget includes a 9% increase to (GRT) fares effective July 1, 2012, consistent with the 2011-2014 Grand River Transit (GRT) Business Plan. The goal of the GRT Business Plan is to implement a fare strategy to keep pace with increasing costs, sustain service improvements and balance the municipal contribution to transit operating costs with transit revenues.

Fare Change Proposal

Two options were developed for public consideration that achieves the overall 9% average fare increase as shown in Appendix 1. The difference between the two options is that Option 1 has a lower cash fare but higher monthly pass prices. Option 2 rewards the frequent rider by continuing to provide significant discounts to riders who use tickets and monthly passes, and is being recommended in this report.

Public Consultation

Feedback from the public was obtained through several means including:

- A Public Consultation Centre (PCC) held on April 18th at the Regional Administrative Headquarters
- Displays of the options at the Charles Street Transit Terminal in Kitchener and the Ainslie Street Transit Terminal in Cambridge,
- Information posted on the [www.grt.ca](http://www.grt.ca) website

Twenty four people signed in at the PCC. Including people providing comments at the terminals and on the website, sixty-eight comments were received about the fare changes related to conventional transit. Option 2 was favoured by 64% of the people selecting a preference. Generally, they saw the benefit for those who use transit more frequently. Twelve respondents preferred no fare increase.

Comments related to MobilityPLUS supported the fare parity although 5 people supported Option 1 and 3 people supported Option 2 in terms of the fare increase.

Other comments were generally related to service and fare affordability. These issues will be dealt with as service adjustments are made.

A summary of comments is contained in Appendix 2.

Recommended Fare Change

Following the review of comments from the public, the fare changes as shown in Table 1 are being recommended.

The proposed Option 2 fare change would still result in fare levels that are below the average of comparable Ontario systems as illustrated in Appendix 3. The frequent rider would continue to be rewarded with discounted passes and tickets which encourages continued ridership growth.
The UPASS price is set via negotiations with the student associations. These prices were recommended to Planning and Works Committee in report P-12-040 dated March 20, 2012 and approved by Council on March 28, 2012. The prices shown in Table 1 take effect on September 1, 2012.

Table 1: Recommended July 1, 2012 GRT Fares

<table>
<thead>
<tr>
<th>Fare Type</th>
<th>Current Fares</th>
<th>% Riders (2011)</th>
<th>2012 Fares</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Monthly Pass</td>
<td>$63.00</td>
<td>14.0%</td>
<td>$68.00</td>
<td>7.9%</td>
</tr>
<tr>
<td>Reduced Monthly Pass</td>
<td>$52.00</td>
<td>7.4%</td>
<td>$56.00</td>
<td>7.7%</td>
</tr>
<tr>
<td>Adult Tickets (Sold in Strip of five)</td>
<td>$9.75</td>
<td>10.6%</td>
<td>$10.50 ($2.10 each)</td>
<td>7.7%</td>
</tr>
<tr>
<td>Reduced Tickets (Sold in Strip of five)</td>
<td>$8.25</td>
<td>5.4%</td>
<td>$9.00 ($1.80 each)</td>
<td>9.1%</td>
</tr>
<tr>
<td>Cash Fare</td>
<td>$2.50</td>
<td>9.5%</td>
<td>$3.00</td>
<td>20.0%</td>
</tr>
<tr>
<td>Corporate Pass</td>
<td>$54.05</td>
<td>0.7%</td>
<td>$58.35</td>
<td>7.9%</td>
</tr>
<tr>
<td>College Pass^1 (per 4-month term)</td>
<td>$204.00</td>
<td>3.9%</td>
<td>$227.00</td>
<td>11.3%</td>
</tr>
<tr>
<td>Student Summer Pass^1 (July &amp; August)</td>
<td>$87.00</td>
<td>0.2%</td>
<td>$95.00</td>
<td>9.2%</td>
</tr>
<tr>
<td>Day Pass</td>
<td>$5.00</td>
<td>0.6%</td>
<td>$6.00</td>
<td>20.0%</td>
</tr>
<tr>
<td>TRIP Pass</td>
<td>$35.00</td>
<td>5.1%</td>
<td>$38.00</td>
<td>8.6%</td>
</tr>
<tr>
<td>U-PASS^3</td>
<td>$60.64</td>
<td>25.9%</td>
<td>$67.50</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

Average Fare Increase: 9%

NOTES:

1 - Photo I.D. charge of $5.00 required - one time fee for Adult and Senior Reduced Monthly Passes; per year for Student Reduced Monthly Passes; per term for Summer Pass, College Pass (except Conestoga College) and High School Pass (paid by student)
2 - Reduced fares are available to seniors, elementary & high school students
3 - As approved by Regional Council on March 28, 2012
   - Children under five ride free with a paying customer
   - Permanent Registered MobilityPLUS users rider conventional transit vehicles for free
   - Percent of riders does not include free rides

School Board Funded Term Passes

The proposed price for school board funded five-month term passes would increase by 8.7% from $230.00 to $250.00. Currently, the GRT school board funded term pass is valid any time Monday to Friday except on statutory holidays and Christmas and March breaks. Regional staff has met with School Board transportation staff to discuss the proposed term pass price increase.
School Board transportation staff has indicated that their funding is set at 2% by the Ministry of Education and are concerned that they cannot absorb the proposed 8.7% rate increase in the school term pass. Regional staff will continue to negotiate with School Board officials and plan to submit a report recommending a new price for the School Board funded term pass to Planning and Works Committee at the June 19, 2012 meeting.

For comparison purposes, staff evaluated similar school board funded student pass programs in some Ontario municipalities. For example, the Hamilton Street Railway (HSR) charges the Hamilton-Wentworth District School Board a price of $53.50 per month per student for a pass that is valid between 6:00 AM and 6:00 PM. If not provided with a school board funded pass, the price for a high school student to directly purchase a monthly pass valid during the full HSR service day is $71.00. The school board funded pass is provided at an effective discount rate of 25%.

Similarly, York Region Transit charges Student Transportation Services of York Region a price of $72.25 per month per student. The price for a student to directly purchase a monthly pass is $85.00. The School Board funded pass is provided at a discount rate of 15%.

If the proposed fare change is approved, the price of a school board funded term pass would increase from $46.00 to $50.00 per month. The proposed $50 monthly pass for Student Transportation Services of Waterloo Region would represent a 12% discount in comparison to the regular reduced monthly pass and would continue to be lower in price than what other transit agencies charge their respective school boards.

**Fare Affordability**

The Region provides a subsidy to those who live on a reduced income and want to purchase a bus pass. The Transit for Reduced Income Program (T.R.I.P.) currently provides a discount of $28.00 per month to those who are eligible. For 2012, this discount is proposed to be increased to $30.00 to reduce the effect of the fare change on these customers. Residents may qualify for T.R.I.P. if their income falls below the low income cut-off as determined by Statistics Canada. In the 2012 Regional budget, an additional $305,000 was included to bring the subsidy to a total of $746,000 which will allow approximately 2000 people to be served each month. There are currently about 1400 T.R.I.P. passes sold each month.

With the implementation of the funding increase, it is anticipated that the current waiting list of approximately 1000 people will be accommodated.

Additionally, the Region offers a free bus pass through the Transit Affordability Pass Program (TAPP) to Ontario Works participants who are upgrading their education or attending English as a Second Language program. Approximately 820 residents are currently served by this program.

**MobilityPLUS fares and fare parity**

The Accessibility for Ontarians with Disabilities Act (AODA) requires communities to introduce fare parity between conventional and specialized transit services on or before January 1, 2013. Currently MobilityPLUS customers pay $2.50 per ride, which is based on the cash fare price offered to conventional transit customers. They do not currently have access to the other fare categories outlined above in Table 1. In conjunction with the July 1st fare increase, it is proposed that the MobilityPLUS fare structure would be broadened to include all fare categories available to conventional transit customers to meet the requirements of the AODA. This proposal was received positively by MobilityPLUS customers who provided feedback on this proposal.
MobilityPLUS - Township Zone fares

While preparing for the early implementation of fare parity between Mobility PLUS and conventional transit services, the issue of Zone fares were identified. Currently customers travelling from the township areas into the urban areas and back pay an additional transit fare for each municipal boundary they travel across. This may be an AODA issue for customers travelling from Elmira into the urban areas since there is a conventional transit service available for customers to travel on a single fare rather than the multiple fares required when traveling on Kiwanis Transit. This issue is being researched by legal services. A separate report on the issue will be presented in the future to ensure AODA compliance by the required date of January 1, 2013.

Next Steps

If the recommended fare changes are approved, staff would implement these changes effective July 1, 2012.

If the changes are approved, staff will inform the customers through a number of means. This will include:

- Ads at fare agent locations
- A revised fare guide
- Posters at shelters, terminals and on buses
- Ads in local newspapers
- Electronic notifications on the website, on Facebook, via Twitter and Rider Alerts and automated messages on the phone system
- Radio spots on local stations

Area Municipal Consultation/Coordination

Area Municipalities were circulated the 2011-2014 GRT Business Plan for information and comment. This document outlined the general fare strategy being proposed. The municipalities were also circulated a copy of this report for information.

CORPORATE STRATEGIC PLAN:

The 2012 transit fare changes help sustain ongoing service improvements and therefore support the implementation of the Council’s Strategic Focus, identified under Focus Area 3: Sustainable Transportation: Develop greater, more sustainable and safe transportation choices. The plan will aid with Strategic Objective Action 3.1.2: Expand the bus network and begin to integrate it with the future Light Rail.

FINANCIAL IMPLICATIONS:

The proposed fare change is expected to increase revenue by $866,000 in 2012 and is included in the 2012 GRT revenue budget. On an annual basis the proposed fare change would increase revenues by $1,732,000.

With the implementation of the MobilityPLUS fare parity, as required by the AODA, it is anticipated that there will be a revenue reduction of between $37,500 and $50,000 in 2012. This amount can be accommodated within the 2012 MobilityPLUS budget. On an annual basis the revenue impact would range between $75,000 and $100,000, which will be reflected in the 2013 GRT revenue budget.
The additional revenue is expected to generate a 1.2% improvement in the cost recovery ratio of GRT in 2012 with the revenue/cost ratio projected to be 37.6% for the year. This revenue will offset the short-term effects of the 2011 service expansion on the cost recovery ratio and contribute to achieving a balance between the contributions to transit operating costs from customer revenue and municipal subsidy by 2014.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Staff from Planning, Housing and Community Services, Finance and Transportation and Environmental Services worked together to develop these transit fare options.

ATTACHMENTS:

Appendix 1 - Proposed Transit Fare Change Options Presented for Public Consideration
Appendix 2 - Summary of Feedback from Public Consultation
Appendix 3 - Current and Average Fares for comparable Ontario Transit Systems

PREPARED BY:  Blair Allen, Supervisor Transit Development

APPROVED BY:  Rob Horne, Commissioner of Planning, Housing and Community Services
## Appendix 1: Proposed Transit Fare Change Options Presented for Public Consideration

<table>
<thead>
<tr>
<th>Fare Type</th>
<th>Current Fares</th>
<th>% Riders (2011)</th>
<th>2012 Fares</th>
<th>% change</th>
<th>2012 Fares</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adult Monthly Pass</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$63.00</td>
<td>14.0%</td>
<td>$69.00</td>
<td>9.5%</td>
<td>$68.00</td>
<td>7.9%</td>
</tr>
<tr>
<td><strong>Reduced Monthly Pass</strong>&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td>$52.00</td>
<td>7.4%</td>
<td>$57.00</td>
<td>9.6%</td>
<td>$56.00</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>Adult Tickets</strong></td>
<td>$9.75</td>
<td>10.6%</td>
<td>$10.50</td>
<td>7.7%</td>
<td>$10.50</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>Reduced Tickets</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>$8.25</td>
<td>5.4%</td>
<td>$9.00</td>
<td>9.1%</td>
<td>$9.00</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Cash Fare</strong></td>
<td>$2.50</td>
<td>9.5%</td>
<td>$2.75</td>
<td>10.0%</td>
<td>$3.00</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>Corporate Pass</strong></td>
<td>$54.05</td>
<td>0.7%</td>
<td>$59.20</td>
<td>9.5%</td>
<td>$58.35</td>
<td>7.9%</td>
</tr>
<tr>
<td><strong>College Pass</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$204.00</td>
<td>3.9%</td>
<td>$231.00</td>
<td>13.2%</td>
<td>$227.00</td>
<td>11.3%</td>
</tr>
<tr>
<td><strong>Student Summer Pass</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$87.00</td>
<td>0.2%</td>
<td>$97.00</td>
<td>11.5%</td>
<td>$95.00</td>
<td>9.2%</td>
</tr>
<tr>
<td><strong>Day Pass</strong></td>
<td>$5.00</td>
<td>0.6%</td>
<td>$6.00</td>
<td>20.0%</td>
<td>$6.00</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>TRIP Pass</strong></td>
<td>$35.00</td>
<td>5.1%</td>
<td>$39.00</td>
<td>11.4%</td>
<td>$38.00</td>
<td>8.6%</td>
</tr>
<tr>
<td><strong>U-PASS</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>$60.64</td>
<td>25.9%</td>
<td>$67.50</td>
<td>11.3%</td>
<td>$67.50</td>
<td>11.3%</td>
</tr>
<tr>
<td><strong>High School 5-month Term Pass</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$230.00</td>
<td>11.4%</td>
<td>$250.00</td>
<td>8.7%</td>
<td>$250.00</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

**Average Fare Increase: 9%**

**NOTES:**

1 - Photo I.D. charge of $5.00 required - one time fee for Adult and Senior Reduced Monthly Passes; per year for Student Reduced Monthly Passes; per term for Summer Pass, College Pass (except Conestoga College) and High School Pass (paid by student)

2 - Reduced fares are available to seniors, elementary & high school students

3 - As approved by Regional Council on March 28, 2012

- Children under five ride free with a paying customer
- Permanent Registered MobilityPLUS users ride conventional transit vehicles for free
- Percent of riders does not include free rides
Appendix 2: Summary of Feedback from Public Consultation

Comments from Conventional Transit Customers

Total Responses: 68

Fare Change Option Preference
56 respondents stated a preference

Responses in favour of Option 1

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated preference for option 1 with no further comment</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Prefer it because it has the lower proposed cash fare</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Responses in Favour of Option 2

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated preference for option 2 with no further comment</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Pass prices in Option 2 are lower than in Option 1</td>
<td>13</td>
<td>Monthly pass prices are designed to reward the frequent rider by offering a lower cost per trip</td>
</tr>
<tr>
<td>Option 2 has a deeper discount for frequent users that will help ridership to continue to increase</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Proposed $3.00 cash fare matches other area systems</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Easier to carry/ count a $3.00 cash fare</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>
General comments about the fare change

**Service comments**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred neither fare change option; would prefer no increase</td>
<td>12</td>
<td>Fare increases are required to help offset increased costs and allow service improvements; significant service increases were implemented in 2011</td>
</tr>
<tr>
<td>Service levels and quality do not merit the level of fare increase</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Willing to pay increased fares if doing so contributes to improved service</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Why are the fares being increased?</td>
<td></td>
<td>The network should be improved before fares are increased</td>
</tr>
</tbody>
</table>

**Fare affordability comments**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fare change will limit ridership growth</td>
<td>4</td>
<td>Increased fares will reduce ridership growth rates. Continued service improvements are expected to more than offset this reduction</td>
</tr>
<tr>
<td>Fare increase will present a hardship to those on fixed income</td>
<td>2</td>
<td>Council approved an increase to the TRIP budget this year, which is being used to minimize the additional cost of the TRIP pass while reducing waiting lists as much as possible</td>
</tr>
<tr>
<td>Increases to TRIP pass prices will present a hardship to OW recipients</td>
<td>1</td>
<td>Council approved an increase to the TRIP budget this year, which is being used to minimize the additional cost of the TRIP pass while reducing waiting lists as much as possible</td>
</tr>
</tbody>
</table>

**Rate and frequency of fare increase comments**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would like to see changes phased in over a number of years rather than one large increase</td>
<td>2</td>
<td>This approach would decrease level of discount that is rewarding frequent rider</td>
</tr>
<tr>
<td>Would prefer to see the cash fare stay low and other fares increased further</td>
<td></td>
<td>Strategy in Business Plan is to balance goals of increased revenue to sustain service improvements with</td>
</tr>
<tr>
<td>Strategy of annual fare increases until 50% R/C is in opposition to goals of increasing ridership</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Would prefer to see increases limited to inflationary adjustments only

This would affect ability to attain goal of improving service and balance R/C

Would like transit use to be more affordable

Keep fares low by reducing variable operating costs

Operating efficiencies are reviewed regularly

Had no preference because ticket prices are the same in both options

Will there be additional increases before 2015?

GRT Business Plan identifies annual fare changes to attain goals

This fare change is too soon after the last one

---

**General comments about GRT service**

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would like to see improved level of service on Sundays</td>
<td>4</td>
<td>Cambridge &amp; iXpress being improved in September 2012</td>
</tr>
<tr>
<td>Priority seating on buses has a conflict issue between seniors or people with mobility devices and customers using strollers</td>
<td>3</td>
<td>Updated policy has been put in place</td>
</tr>
<tr>
<td>Very happy with quality of service</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Would like to see buses run until midnight, in the Cambridge area</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Extend Route 3 later on Sundays to fill service gap caused by construction detour on Route 8</td>
<td>1</td>
<td>Limited resources to allow this; Route 11 will cover most of gap</td>
</tr>
<tr>
<td>GRT routes divert too frequently and too far from main roads contributing to long travel times</td>
<td>1</td>
<td>Network redesign process is addressing this</td>
</tr>
<tr>
<td>2011 service changes were a great improvement to the system</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Service is overall a good value</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Service quality has been improving</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Would like to see earlier Sunday morning service on iXpress</td>
<td>1</td>
<td>Service to begin 2 hours earlier in September 2012</td>
</tr>
<tr>
<td>Very happy with service quality</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Looking forward to future service improvements from GRT Business Plan</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>When will cameras and audio recording be in operation on GRT buses?</td>
<td>1</td>
<td>Planned activation in May 2012</td>
</tr>
<tr>
<td>Excited about future express routes proposed for 2013 &amp; 2015</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>iXpress should start to serve proposed RT station locations</td>
<td>1</td>
<td>Being introduced where practical after review</td>
</tr>
<tr>
<td>Service to industrial areas needs to be improved</td>
<td>1</td>
<td>Being considered as staff review each area</td>
</tr>
<tr>
<td>Issue</td>
<td>Count</td>
<td>Action</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Would like service to intersection of Water St &amp; Myers Rd</td>
<td>1</td>
<td>Will be considered as staff review area</td>
</tr>
<tr>
<td>Would like to see service return to Rousse Ave area of Cambridge</td>
<td>1</td>
<td>Will be considered as staff review area</td>
</tr>
<tr>
<td>Request for later evening service and weekend service on Route 2 Forest Hill</td>
<td>1</td>
<td>Will be considered as staff review area</td>
</tr>
<tr>
<td>Complaints about poor customer service</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Comments from MobilityPLUS Transit Customers

Total Responses: 8

MobilityPLUS Fare Change Option Preference

Responses in favour of Option 1

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefer it because it has the lower proposed cash fare</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Prefer it because it will be long lasting</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Using it for this reason</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Stated preference for option 1 with no real explanation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

Responses in Favour of Option 2

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated preference for option 2 with no further comment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Fare affordability comments

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happy to see the two services offering the same payment options. I have thought for years that it is not very fair to have less option for discount through Mobility plus than for conventional buses. It has been a lot more affordable and also predictable to take the conventional bus. Paying extra high fees to use Mobility plus when it offers 15 minute windows before and after your ride time, and requires you to be ready the whole period of time whereas the driver can leave after 5 minutes never seemed economical to me. Now that it is the same fee, when weather is wintery there's no reason not to take mobility plus for a bit more convenience.</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Service is excellent drivers are very helpful really appreciate MP at night or where locations is unknown by customer. Taxi companies that provide MP service will overcharge by up to $8/trip

---

### General comments about MobilityPLUS/GRT service

<table>
<thead>
<tr>
<th>Comment</th>
<th>Count</th>
<th>Staff response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The service to date has been been awesome, really appreciate the transportation option.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Running on the hour and half hour service only for all buses. Two day advance booking - MP too busy. 30 minute window too long - should be 15 minutes.</td>
<td>1</td>
<td>Current policy balances capacity of system and passenger demand</td>
</tr>
<tr>
<td>Two day advanced bookings- MP too busy 30 minutes window too long should be 15 minutes</td>
<td>1</td>
<td>Current policy balances capacity of system and passenger demand</td>
</tr>
<tr>
<td>Save a considerable amount of money on gas if the busses didn't idle for 10 minutes at a time</td>
<td>1</td>
<td>Idling policy in place that considers the environment &amp; passenger considerations</td>
</tr>
</tbody>
</table>
### Appendix 3 - Current (2011) and Average Fares for comparable Ontario Transit Systems

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Exact cash fare</th>
<th>Adult Ticket</th>
<th>Reduced Ticket</th>
<th>Adult Monthly Pass</th>
<th>Reduced monthly pass</th>
<th>2010 Average Fare</th>
</tr>
</thead>
<tbody>
<tr>
<td>York Region</td>
<td>$3.50</td>
<td>$2.80</td>
<td>$1.65</td>
<td>$115.00</td>
<td>$50.00</td>
<td>$2.59</td>
</tr>
<tr>
<td>Brampton</td>
<td>$3.25</td>
<td>$2.75</td>
<td>$1.60</td>
<td>$107.00</td>
<td>$47.00</td>
<td>$2.11</td>
</tr>
<tr>
<td>Ottawa</td>
<td>$3.25</td>
<td>$2.60</td>
<td>$2.60</td>
<td>$94.00</td>
<td>$37.00</td>
<td>$1.54</td>
</tr>
<tr>
<td>Mississauga</td>
<td>$3.25</td>
<td>$2.60</td>
<td>$1.75</td>
<td>$120.00</td>
<td>$47.00</td>
<td>$1.94</td>
</tr>
<tr>
<td>Toronto</td>
<td>$3.00</td>
<td>$2.60</td>
<td>$1.75</td>
<td>$126.00</td>
<td>$104.00</td>
<td>$1.95</td>
</tr>
<tr>
<td>GRT Proposed Option 2</td>
<td>$3.00</td>
<td>$2.10</td>
<td>$1.80</td>
<td>$68.00</td>
<td>$56.00</td>
<td>$1.24</td>
</tr>
<tr>
<td>Durham Region</td>
<td>$2.90</td>
<td>$2.63</td>
<td>$1.79</td>
<td>$97.00</td>
<td>$39.00</td>
<td>$1.89</td>
</tr>
<tr>
<td>GRT Proposed Option 1</td>
<td>$2.75</td>
<td>$2.10</td>
<td>$1.80</td>
<td>$69.00</td>
<td>$57.00</td>
<td>$1.24</td>
</tr>
<tr>
<td>London</td>
<td>$2.75</td>
<td>$1.90</td>
<td>$1.43</td>
<td>$81.00</td>
<td>$57.50</td>
<td>$1.32</td>
</tr>
<tr>
<td>Sudbury</td>
<td>$2.70</td>
<td>$2.05</td>
<td>$1.55</td>
<td>$76.00</td>
<td>$46.00</td>
<td>$1.51</td>
</tr>
<tr>
<td>Thunder Bay</td>
<td>$2.60</td>
<td>$1.75</td>
<td>$1.75</td>
<td>$69.50</td>
<td>$59.50</td>
<td>$1.41</td>
</tr>
<tr>
<td>Hamilton</td>
<td>$2.55</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$87.00</td>
<td>$87.00</td>
<td>$1.59</td>
</tr>
<tr>
<td>Windsor</td>
<td>$2.50</td>
<td>$2.10</td>
<td>$1.60</td>
<td>$79.00</td>
<td>$40.00</td>
<td>$1.76</td>
</tr>
<tr>
<td>Ontario Comparable System Average</td>
<td>$2.85</td>
<td>$2.34</td>
<td>$1.78</td>
<td>$86.69</td>
<td>$53.96</td>
<td>$1.74</td>
</tr>
</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: May 8, 2012

FILE CODE: C06-60/E02-30/WWWMR.12

SUBJECT: 2012 WATER AND WASTEWATER MONITORING REPORT

RECOMMENDATION:

THAT the Regional Municipality of Waterloo accept the 2012 Water and Wastewater Monitoring Report summarized in Report E-12-047/P-12-043, dated May 8, 2012, as the account of water supply and wastewater treatment capacity as of December 31, 2011.

SUMMARY:

The 2012 Water and Wastewater Monitoring Report (2012 WWWMR) outlines the ability of the Regional water supply and wastewater treatment facilities to accommodate demands to 2021. The full report will be made available on the Region’s Water Services website and at the Water Services administration office. Draft copies of the report have been circulated to the cities of Cambridge, Kitchener and Waterloo and also to the townships of North Dumfries, Wellesley, Wilmot and Woolwich.

Water supply capacity was adequate to meet the actual maximum demands in all communities supplied by a Regional system in 2011. Wastewater treatment capacity was sufficient at all Regional plants to treat the actual average flows in 2011. Water supply and wastewater capacities in 2021 are based on the implementation of works from the Region’s current capital programs and both water supply capacity and wastewater capacity is anticipated to be adequate to accommodate all current development commitments. The allocation of remaining capacity to new development is determined by Region of Waterloo staff in cooperation with the local area municipalities. The available capacity expressed in this report is the capacity available to service all future Planning Act approvals (subdivisions, condominiums, consents, zoning bylaw amendments and minor variances) and/or any building permits issued for development outside of residential plans of subdivision that complies with existing zoning.

With the adoption of the Places to Grow: Growth Plan for the Greater Golden Horseshoe, municipalities are now required to provide for a minimum of 40% of new residential units (phased in with full implementation by 2015) within the built-up areas. The Region is presently in discussion with the local area municipalities regarding the current methodology and whether there is a need to take into consideration reserving capacity for development in the built-up areas to be applied to the 2013 WWWMR and beyond. A report detailing any necessary refinements to the current methodology will be presented to Council in the fall of 2012 after consultation with the Waterloo Region Homebuilders’ Association.

The first step in this process is presented in the 2012 report by identifying commitments in two categories: Designated Greenfield Area (DGA) and Built-Up Area (BUA). Except for the splitting of commitments, the methodology used in the 2012 WWWMR has not changed from the 2011 report and does not impact any current development commitments.
REPORT:

Water Services produces the annual Water and Wastewater Monitoring Report with input from the Region's Planning, Housing and Community Services (PHCS). The purpose of this report is to:

1. Document actual water consumption and wastewater flows;
2. Provide a basis for water consumption and wastewater flow forecasts required in preparing the capital budgets and user rates;
3. Document water production and wastewater treatment capacities;
4. Update Regional Council with respect to remaining uncommitted capacities of water supply and wastewater treatment infrastructure; and
5. Provide a basis for Water Services staff to provide comment on the water and wastewater aspects of development applications.

In addition, the 2012 WWWMR report will be one of the inputs used in preparing the 2013 water and wastewater capital budget, longer term water and wastewater capital forecast, and in formulating responses to development applications.

Main Changes from the 2011 WWWMR

The main changes from the 2011 WWWMR are as follows:

- Commitments have been split into two categories; Designated Greenfield Area (DGA) and Built-Up Area (BUA). Commitments in each category are defined by which geographic boundary the commitment exists in as defined by the Region’s Official Plan, 2009.

- Water consumption patterns and wastewater flows are a function of yearly weather fluctuations. In 2011, the annual precipitation was the fourth highest on record since 1914. The third wettest was 2008. However the seasonal impacts at the wastewater treatment plants show generally average or slightly above average flows which indicates an improvement in Inflow and Infiltration contributions in some systems.

2012 Water Supply Capacity and Commitments

Water supply capacity was adequate to meet the actual maximum demands in all communities supplied by a Regional system in 2011. Water supply capacities in 2021 are based on the implementation of works from the Region’s current capital programs. Table 1, attached, summarizes the remaining water capacity as of December 31, 2011.

The Integrated Urban System (IUS) (Cambridge, Kitchener, Waterloo, Elmira and St. Jacobs water systems) has 76,739 m³/d of remaining capacity, which is equivalent to 193,774 people.

The Baden/New Hamburg water system has 7,207 m³/d of remaining capacity, which is equivalent to 19,107 people.

The Ayr water system has 2,722 m³/d of remaining capacity, which is equivalent to 5,518 people.

The Wellesley water system has 1,917 m³/d of remaining capacity, which is equivalent to 5,809 people.

The St. Clements water system has 1,321 m³/d of remaining capacity, which is equivalent to 4,002 people.
Small Water Supply Systems

There are 12 small water supply systems owned and operated by the Region. These systems include: Conestogo (Conestoga Golf Course and Conestoga Plains), Maryhill (Maryhill and Village Heights) and West Montrose in Woolwich; Linwood and Heidelberg (reported as one system including a portion of Heidelberg in Woolwich) in Wellesley; Foxboro Green and New Dundee in Wilmot; and Roseville and Branchton Meadows in North Dumfries. In 2011 the community of St. Agatha was connected to the IUS and the St. Agatha water supply system was decommissioned.

All numbers reported, excluding actual average and maximum day demand figures, are design numbers based on MOE water usage guidelines for small communal water supply systems. Most of these systems were designed to only service specific subdivisions in the respective settlement areas and have no additional capacity to service units beyond those subdivisions. Given the complexity of calculating available capacity for the small systems, available system capacity will be evaluated on an individual basis prior to commenting on development applications. Table 2 summarizes the data on small water systems.

2012 Wastewater Treatment Capacity and Commitments

Wastewater treatment capacity was sufficient at all Regional plants to treat the actual average flows in 2011. Wastewater capacities in 2021 are based on the implementation of works from the Region’s current capital programs; Table 3 summarizes the remaining wastewater capacity as of December 31, 2011.

The Kitchener WWTP has 40,776 m$^3$/d of remaining capacity, which is equivalent to 128,190 people.

The Waterloo WWTP has 4,745 m$^3$/d of remaining capacity, which is equivalent to 13,210 people.

The Galt WWTP has 18,143 m$^3$/d of remaining capacity, which is equivalent to 41,326 people.

The Preston WWTP has 5,601 m$^3$/d of remaining capacity, which is equivalent to 10,729 people. The Preston WWTP has a rated capacity of 16,820 m$^3$/d. The treatment capacity had previously been limited to 14,520 m$^3$/d due to additional organic loading from the Industrial Road Service Area (IRSA). Beginning in the summer of 2009, the effluent from the IRSA has been gradually diverted from Preston WWTP to Galt WWTP, as recommended in the 2007 Wastewater Master Plan. At year end 2011, the diversion was completed and it is estimated that all of the effluent from the IRSA is being diverted to Galt. The benefit to Preston WWTP is twofold: the reduction for the organic loading will no longer be required and the actual hydraulic loading to Preston will be reduced. The rated capacity of the Preston WWTP is no longer restricted by the organic loading, and the rated capacity is 16,820 m$^3$/d. Due to the robust nature of the Galt WWTP there will be no reduction due to the organic load in rated treatment capacity.

In the 2011 WWWMR wastewater capacity was reserved for the Boxwood Industrial Subdivision in the Preston Wastewater Service Area in the amount of 1,860 m$^3$/d. This number will be assessed annually and adjusted according to the rate of build out of the subdivision. Since there has been no occupancy of the Boxwood Industrial Subdivision no adjustment has been made in the 2012 WWWMR.

The Hespeler WWTP has 889 m$^3$/d of remaining capacity, which is equivalent to 2,692 people.

The Elmira WWTP has 1,777 m$^3$/d of remaining capacity, which is equivalent to 4,099 people. The Region has initiated a Wastewater Master Plan to optimize wastewater treatment in Elmira and St. Jacobs. This Master Plan is expected to be complete by the fall of 2012 and future WWWMRs will consider any recommendations from this master plan. Implementation of the Region’s wastewater capital program is anticipated to provide adequate wastewater treatment to accommodate all planned development until 2021 and beyond. Therefore, the Region’s capital budget and longer term forecasts provide for all known wastewater treatment commitments.
The St. Jacobs WWTP has 470 m$^3$/d of remaining capacity, which is equivalent to 833 people.

The Baden/New Hamburg WWTP has 760 m$^3$/d of remaining capacity, which is equivalent to 2,312 people.

The Ayr WWTP has 1,078 m$^3$/d of remaining capacity, which is equivalent to 3,463 people. The Wellesley WWTP has 300 m$^3$/d of remaining capacity, which is equivalent to 1,236 people.

**Servicing Agreements**

Servicing commitments are made through separate servicing agreements between the Region and the developer, which are executed once a draft approved plan of subdivision is ready to proceed to registration/final approval. Developers seek an agreement for servicing just prior to registration of the plan of subdivision or final approval. The servicing agreement expires within six to 18 months of being signed, at which time the developer would be required to seek a new commitment for servicing if registration of the plan of subdivision or final approval of the consent has not taken place.

Since 1996, the time of the registration of a plan of subdivision has traditionally been the point at which the capacity of water and wastewater systems is committed to new subdivisions in accordance with MOE policies. However, since 2004, a significant portion of all residential development has occurred outside of plans of subdivision. This includes development on previously existing lots of record both within the built up areas and within the greenfield areas. These units are typically townhouse or apartment units and are often registered as plans of condominium. This number is expected to increase particularly in the City of Waterloo as there is little remaining designated greenfield area and a large number of applications for site plans and plans of condominiums already in process.

Section 51 (24) (i) of the Planning Act obliges the Region to ensure the “adequacy of utilities and municipal services.” In addition ROP Policy 5.D.1 states that the “servicing requirements for planned development and projected growth will be monitored to ensure that the total system capacities are not exceeded, and to provide sufficient lead time for the planning, design, approval, financing and construction of new facilities.”

In 1996, Regional Council by Report PC-96-061/ E-96-138 revised the conditions of draft approval for plans of subdivision to include a new condition requiring an Agreement for Servicing. However, before future, unbuilt service capacity is considered, three criteria must be met:

1. The capacity expansion project must be imminent for construction and thereby included within the first five years of the 10 Year Capital Forecast;
2. There must be a sound technical basis for the anticipated new capacity associated with the project, as a result of completion of the Environmental Assessment, a suitable master plan or other Regional engineering evaluation; and
3. Approval of new draft plans of subdivision will be guided by Area Municipal Staging of Development programs and will not exceed 50% of the estimated capacity of major planned service capacity projects or 75% of minor planned projects.

It is important to note that the actual service capacity of a water or wastewater facility to be delivered from a future project cannot be guaranteed until a Certificate of Approval is issued by the MOE.

In 2011, the Region completed a Water and Wastewater Treatment Master Plan for the Baden/New Hamburg service area. This study will determine the best wastewater treatment alternative to service this community in the long term. The Region has begun a similar study for the Elmira and St. Jacobs service areas. Funds for the implementation of projects identified in these studies will be included in future Water and Wastewater Capital Programs. The 2011 Wastewater Capital Program already includes funds to ensure adequate future capacity for servicing the Hespeler service area.
With the adoption of the *Places to Grow: Growth Plan for the Greater Golden Horseshoe*, municipalities are now required to provide for a minimum of 40% of new residential units (phased in with full implementation by 2015) within the built-up areas. The Region is presently in discussion with the local area municipalities regarding the current methodology and whether there is a need to take into consideration reserving capacity for development in the built-up areas to be applied to the 2013 WWWMR and beyond. A report detailing any necessary refinements to the current methodology will be presented to Council in the fall of 2012 after consultation with the Waterloo Region Homebuilders’ Association and other key stakeholders.

The first step in this process is presented in this 2012 report by identifying commitments in two categories: Designated Greenfield Area (DGA) and Built-Up Area (BUA). Except for the splitting of commitments, the methodology used in the 2012 WWWMR has not changed from the 2011 report and does not impact any current development commitments.

**CORPORATE STRATEGIC PLAN:**

The Water and Wastewater Monitoring Report supports “Focus Area 2: Growth Management - Manage and shape growth to ensure a livable, healthy, thriving and sustainable Waterloo Region.”

**FINANCIAL IMPLICATIONS:**

The financial implications of this report will be addressed in the preparation of the 2013 Water and Wastewater Capital Programs.

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE**

Information & Research, Planning, Housing and Community Services has been consulted in the preparation of this report.

**ATTACHMENTS:**

Table 1: Remaining Water and Wastewater Capacity as of December 31, 2011
Table 2: Small Rural Water System Summary as of December 31, 2011
Table 3: Commitments as of December 31, 2011
Table 4: Remaining Water and Wastewater Capacity as of December 31, 2011 (IMPERIAL)
Table 5: Small Rural Water System Summary as of December 31, 2011 (IMPERIAL)
Table 6: Commitments as of December 31, 2011 (IMPERIAL)

**PREPARED BY:** Nathan Morris, Coordinator, Servicing and Development Planning
Kevin Dolishny, Senior Project Engineer, Servicing and Development Planning
Brenna MacKinnon, Manager, Greenfield Planning

**APPROVED BY:** Thomas Schmidt, Commissioner, Transportation and Environmental Services
Rob Horne, Commissioner of Planning, Housing and Community Services
### TABLE 1: REMAINING WATER AND WASTEWATER CAPACITY AS OF DECEMBER 31, 2011

<table>
<thead>
<tr>
<th>WATER</th>
<th>2011 CAPACITY (1000 m³/d)</th>
<th>MAX DAY / WEEK PROJECTED FLOW (1000 m³/d)</th>
<th>COMMITTED FLOW (1000 m³/d)</th>
<th>REMAINING CAPACITY (1000 m³/d)</th>
<th>MAX DAY / WEEK FLOWS PER CAPITA (m³/d/PEOPLE)</th>
<th>REMAINING CAPACITY (PEOPLE)</th>
<th>(F = \frac{D}{E} \times 1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEGRATED URBAN WATER SYSTEM</td>
<td>292.02</td>
<td>193.56</td>
<td>21.73</td>
<td>76.74</td>
<td>0.3960</td>
<td>193,774</td>
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<tr>
<td>BADEN-NEW HAMBURG</td>
<td>12.61</td>
<td>4.55</td>
<td>0.85</td>
<td>7.21</td>
<td>0.3772</td>
<td>19.107</td>
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</tr>
<tr>
<td>AYR WATER SYSTEM</td>
<td>5.53</td>
<td>2.10</td>
<td>0.70</td>
<td>2.72</td>
<td>0.4933</td>
<td>5,518</td>
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</tr>
<tr>
<td>WELLESLEY</td>
<td>3.00</td>
<td>0.96</td>
<td>0.13</td>
<td>1.92</td>
<td>0.3301</td>
<td>5,809</td>
<td></td>
</tr>
<tr>
<td>ST. CLEMENTS</td>
<td>1.77</td>
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<td>0.00</td>
<td>1.32</td>
<td>0.3301</td>
<td>4,002</td>
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<tr>
<td>WASTEWATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>KITCHENER WWTP</td>
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<td>239</td>
<td>3.37</td>
<td>0.76</td>
<td>0.3288</td>
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<td>WATERLOO WWTP</td>
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<td>4.87</td>
<td>5.44</td>
<td>4.75</td>
<td>0.3592</td>
<td>13,210</td>
<td></td>
</tr>
<tr>
<td>GALT WWTP</td>
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<td>36.43</td>
<td>2.22</td>
<td>18.15</td>
<td>0.4391</td>
<td>41,326</td>
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</tr>
<tr>
<td>PRESTON WWTP</td>
<td>16.82</td>
<td>9.29</td>
<td>1.93</td>
<td>5.60</td>
<td>0.5220</td>
<td>10,729</td>
<td></td>
</tr>
<tr>
<td>HESPELER WWTP</td>
<td>9.32</td>
<td>8.14</td>
<td>0.29</td>
<td>0.89</td>
<td>0.3303</td>
<td>2,492</td>
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<tr>
<td>ELMIRA WWTP</td>
<td>7.80</td>
<td>4.16</td>
<td>1.65</td>
<td>1.99</td>
<td>0.4338</td>
<td>4,594</td>
<td></td>
</tr>
<tr>
<td>BADEN-NEW HAMBURG WWTP</td>
<td>5.20</td>
<td>3.87</td>
<td>0.57</td>
<td>0.76</td>
<td>0.3288</td>
<td>2,312</td>
<td></td>
</tr>
<tr>
<td>AYR WWTP</td>
<td>3.00</td>
<td>1.32</td>
<td>0.60</td>
<td>1.08</td>
<td>0.3112</td>
<td>3,483</td>
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<tr>
<td>ST. JACOB'S WWTP</td>
<td>1.45</td>
<td>0.98</td>
<td>0.00</td>
<td>0.47</td>
<td>0.5640</td>
<td>833</td>
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<tr>
<td>WELLESLEY WWTP</td>
<td>1.10</td>
<td>0.71</td>
<td>0.09</td>
<td>0.30</td>
<td>0.2427</td>
<td>1,256</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 2: SMALL RURAL WATER SYSTEM SUMMARY AS OF DECEMBER 31, 2011

<table>
<thead>
<tr>
<th>WATER</th>
<th>2011 CAPACITY (m³/d)</th>
<th>MAX DAY PROJECTED FLOW (m³/d)</th>
<th>COMMITTED FLOW (m³/d)</th>
<th>REMAINING CAPACITY (m³/d)</th>
<th>D = A - B</th>
<th>MAX DAY FLOWS PER CAPITA (m³/d/PEOPLE)</th>
<th>REMAINING CAPACITY (PEOPLE)</th>
<th>F = D / E * 1000</th>
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<tbody>
<tr>
<td>CONESTOGA GOLF COURSE</td>
<td>601</td>
<td>536</td>
<td>N/A</td>
<td>65</td>
<td>1,0364</td>
<td>Case by Case</td>
<td></td>
<td></td>
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<tr>
<td>CONESTOGA PLAINS</td>
<td>786</td>
<td>207</td>
<td>N/A</td>
<td>579</td>
<td>0.5550</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARY HILL</td>
<td>157</td>
<td>118</td>
<td>N/A</td>
<td>39</td>
<td>0.7408</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARY HILL VILLAGE HEIGHTS</td>
<td>820</td>
<td>127</td>
<td>N/A</td>
<td>690</td>
<td>0.8686</td>
<td>Case by Case</td>
<td></td>
<td></td>
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<tr>
<td>WEST MONTROSE</td>
<td>238</td>
<td>160</td>
<td>N/A</td>
<td>78</td>
<td>0.9056</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEIDELBERG</td>
<td>829</td>
<td>422</td>
<td>N/A</td>
<td>407</td>
<td>0.4186</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINWOOD</td>
<td>605</td>
<td>316</td>
<td>N/A</td>
<td>289</td>
<td>0.3710</td>
<td>Case by Case</td>
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</tr>
<tr>
<td>FOXBORO</td>
<td>527</td>
<td>160</td>
<td>N/A</td>
<td>367</td>
<td>0.3960</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW DUNDEE</td>
<td>983</td>
<td>422</td>
<td>N/A</td>
<td>561</td>
<td>0.7207</td>
<td>Case by Case</td>
<td></td>
<td></td>
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<tr>
<td>ST AGATHA SA3/SA4</td>
<td>518</td>
<td>81</td>
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<td>437</td>
<td>1.0684</td>
<td>Case by Case</td>
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<td></td>
</tr>
<tr>
<td>ROSEVILLE</td>
<td>358</td>
<td>191</td>
<td>N/A</td>
<td>167</td>
<td>0.6587</td>
<td>Case by Case</td>
<td></td>
<td></td>
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<tr>
<td>BRANCHTON</td>
<td>130</td>
<td>114</td>
<td>N/A</td>
<td>16</td>
<td>0.9471</td>
<td>Case by Case</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(A) See Water Distribution Master Plan and Wastewater Treatment Master Plan for capacity details of each system
(B) See section 2.4 and 2.6 and appendix B & C for details of how average flow is calculated for individual systems
(C) See Table 3 for details about how committed flow is calculated from committed population in the DGA and BUA
(D) Both Water systems and Wastewater systems average/max day/week flow equals the average of the previous 5 years per capita flow
(E) See Section 2.4 and 2.5 for an explanation of average/max flows per capita
(F) Remaining Capacity divided by Average/Max Flow Per Capita multiplied by 1000. Any new service in the small rural systems must be reviewed by the Region of Waterloo Water Services staff and will be evaluated on a case by case basis
### TABLE 3: COMMITMENTS AS OF DECEMBER 31, 2011

<table>
<thead>
<tr>
<th>WATER SYSTEM</th>
<th>COMMITMENTS (PEOPLE)</th>
<th>MAX DAY / WEEK FLOWS PER COMMITMENTS (m$^3$/d)</th>
<th>COMmitted m$^3$/d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DGA</td>
<td>BUA</td>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Urban Water System</td>
<td>43,259</td>
<td>11,608</td>
<td>54,867</td>
</tr>
<tr>
<td>Baden-New Hamburg</td>
<td>1,725</td>
<td>538</td>
<td>2,263</td>
</tr>
<tr>
<td>Ayr Water System</td>
<td>1,428</td>
<td>0</td>
<td>1,428</td>
</tr>
<tr>
<td>Wellesley</td>
<td>366</td>
<td>13</td>
<td>379</td>
</tr>
<tr>
<td>St. Clements</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WASTEWATER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchener WWTP</td>
<td>25,082</td>
<td>4,703</td>
<td>29,785</td>
</tr>
<tr>
<td>Waterloo WWTP</td>
<td>10,544</td>
<td>4,595</td>
<td>15,139</td>
</tr>
<tr>
<td>Galt WWTP</td>
<td>3,292</td>
<td>58</td>
<td>5,061</td>
</tr>
<tr>
<td>Preston WWTP</td>
<td>67</td>
<td>58</td>
<td>125</td>
</tr>
<tr>
<td>Elmira WWTP</td>
<td>3,673</td>
<td>134</td>
<td>3,807</td>
</tr>
<tr>
<td>Baden-New Hamburg WWTP</td>
<td>1,725</td>
<td>6</td>
<td>1,731</td>
</tr>
<tr>
<td>Ayr WWTP</td>
<td>1,428</td>
<td>0</td>
<td>1,428</td>
</tr>
<tr>
<td>St. Jacobs WWTP</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Wellesley WWTP</td>
<td>363</td>
<td>13</td>
<td>376</td>
</tr>
</tbody>
</table>

(A) See appendix D for a detailed breakdown of committed population from known development
(B) Average of the previous five years. See Section 2.5 and 2.6 for an explanation of the Average/Max Flow Per Capita Per Day in Column ‘B’
(C) Column ‘A’ multiplied by column ‘B’

*Preston WWTP commitments include 1860 m$^3$/day for the Boxwood Industrial Subdivision, and Ayr WWTP commitments include 154 m$^3$/day for the Schneider’s property.
**TABLE 4: REMAINING WATER AND WASTEWATER CAPACITY AS OF DECEMBER 31, 2011 (IMPERIAL)**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D = A - (B+C)</th>
<th>E</th>
<th>F = D / E * 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Urban</td>
<td>64.24</td>
<td>42.58</td>
<td>4.75</td>
<td>16.88</td>
<td>87</td>
<td>193,774</td>
</tr>
<tr>
<td>Water System</td>
<td>2.77</td>
<td>1.00</td>
<td>0.19</td>
<td>1.582</td>
<td>83</td>
<td>19.107</td>
</tr>
<tr>
<td>Ayr Water System</td>
<td>1.22</td>
<td>0.46</td>
<td>0.15</td>
<td>0.60</td>
<td>108</td>
<td>5,518</td>
</tr>
<tr>
<td>Wellesley</td>
<td>0.66</td>
<td>0.21</td>
<td>0.03</td>
<td>0.42</td>
<td>73</td>
<td>5,809</td>
</tr>
<tr>
<td>St. Clements</td>
<td>0.39</td>
<td>0.10</td>
<td>0.00</td>
<td>0.29</td>
<td>73</td>
<td>4,002</td>
</tr>
<tr>
<td><strong>WASTEWATER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchener WWTP</td>
<td>26.99</td>
<td>15.94</td>
<td>2.08</td>
<td>8.97</td>
<td>69.97</td>
<td>128,190</td>
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<tr>
<td>Waterloo WWTP</td>
<td>12.33</td>
<td>10.09</td>
<td>1.20</td>
<td>1.04</td>
<td>79.02</td>
<td>13,210</td>
</tr>
<tr>
<td>Galt WWTP</td>
<td>12.49</td>
<td>8.01</td>
<td>0.49</td>
<td>3.99</td>
<td>114.83</td>
<td>10,729</td>
</tr>
<tr>
<td>Preston WWTP</td>
<td>3.70</td>
<td>2.04</td>
<td>0.42</td>
<td>1.23</td>
<td>114.83</td>
<td>10,729</td>
</tr>
<tr>
<td>Hespeler WWTP</td>
<td>2.05</td>
<td>1.79</td>
<td>0.20</td>
<td>0.20</td>
<td>72.65</td>
<td>2,692</td>
</tr>
<tr>
<td>Elmira WWTP</td>
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<td>0.44</td>
<td>95.38</td>
<td>4,594</td>
</tr>
<tr>
<td>Baden-New Hamburg WWTP</td>
<td>1.14</td>
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<td>0.13</td>
<td>0.17</td>
<td>72.32</td>
<td>2,312</td>
</tr>
<tr>
<td>Ayr WWTP</td>
<td>0.66</td>
<td>0.29</td>
<td>0.13</td>
<td>0.24</td>
<td>68.45</td>
<td>3,463</td>
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<td>St. Jacobs WWTP</td>
<td>0.52</td>
<td>0.22</td>
<td>0.00</td>
<td>0.10</td>
<td>124.06</td>
<td>833</td>
</tr>
<tr>
<td>Wellesley WWTP</td>
<td>0.24</td>
<td>0.16</td>
<td>0.02</td>
<td>0.07</td>
<td>53.38</td>
<td>1,236</td>
</tr>
</tbody>
</table>

**TABLE 5: SMALL RURAL WATER SYSTEM SUMMERY AS OF DECEMBER 31, 2011 (IMPERIAL)**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D = A - B</th>
<th>E</th>
<th>F = D / E * 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woolwich</td>
<td>132</td>
<td>118</td>
<td>N/A</td>
<td>14</td>
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(A) See Water Distribution Master Plan and Wastewater Treatment Master Plan for capacity details of each system
(B) See section 2.4 and 2.6 and appendix B & C for details of how average flow is calculated for individual systems
(C) See Table 3 for details about how committed flow is calculated
(D) Both Water systems and Wastewater systems average flow equals the average of the previous 5 years per capita flow
(E) See Section 2.4 and 2.5 for an explanation of average flows per capita
(F) Remaining Capacity divided by Average Flow Per Capita multiplied by 1000. Any new service in the small rural systems must be reviewed by the Region of Waterloo Water Services staff and will be evaluated on a case by case basis
### Water

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*(A)* See appendix D for a detailed breakdown of committed population from known development.
*(B)* Average of the previous five years. See Section 2.5 and 2.6 for an explanation of the Average/Max Flow Per Capita Per Day in Column ‘B’.
*(C)* Column ‘A’ multiplied by column ‘B’.
*(D)* Preston WWTP commitments include 409,143 g/day for the Boxwood Industrial Subdivision, and Ayr WWTP commitments include 33,875 g/day for the Schneider’s property.
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction

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

DATE: May 8, 2012

FILE CODE: T04-20, 5549

SUBJECT: FRANKLIN BOULEVARD IMPROVEMENTS, PINEBUSH ROAD TO MYERS ROAD, CITY OF CAMBRIDGE – CONSTRUCTION PHASING

RECOMMENDATION:

THAT the Regional Municipality of Waterloo, in order to minimize delays in construction and the impacts on the community, traffic and the cost of construction, take no action with respect to the City of Cambridge’s request to alter the construction phasing as originally planned per Report E-11-047 and as presented to Regional Planning and Works Committee on May 3, 2011 for the Franklin Boulevard Improvements from Pinebush Road to Myers Road.

SUMMARY:

Proposed improvements on Franklin Boulevard include the construction of eleven modern roundabouts within the 8.0 km of road reconstruction from Myers Road to Pinebush Road in the City of Cambridge. Please refer to Appendix ‘A’ Figure 1 for a key plan of the project limits.

Recognizing the potential for significant impacts on traffic and disruption to the local community during the project’s construction phases, Region staff has worked with City of Cambridge staff and the Conestoga Heavy Construction Association (CHCA) in developing a construction phasing plan that starts construction of the improvements as early as possible, and keeps the number of years of construction to a minimum in order to limit the disruption and inconvenience to adjacent property owners and the travelling public during construction.

Staff developed a Construction Phasing Plan that schedules construction of Franklin Boulevard over two (2) years. This construction phasing plan was detailed in Report E-11-047 and presented for information to City of Cambridge Council on April 18, 2011, and members of Regional Council at the Planning and Works Committee on May 3, 2011.

Subsequently, City of Cambridge Council passed a motion requesting that should the Region proceed with roundabouts on Franklin Boulevard, that:

- There be no more than three (3) roundabouts in the first phase, and that the first phase limits be from Pinebush Road to Bishop Street;
- The Region conduct a thorough public feedback review process over the course of one (1) year after the completion of the first phase before determining to proceed with roundabouts on future phases; and
- The Region communicate on the use of roundabouts to the residents of the City and Region on a regular basis.
In addition, the Region received a letter from the Waterloo Catholic District School Board (WCDSB) requesting that a roundabout not be constructed at the Franklin Boulevard/Saginaw Parkway intersection, and as well received concerns from the Grand River Accessibility Advisory Committee (GRAAC) and the Canadian National Institute for the Blind (CNIB) regarding the challenges experienced by visually impaired persons when crossing at roundabouts and other intersections in Waterloo Region.

Staff has conducted a comprehensive review of the possible consequences of altering the Franklin Boulevard construction phasing as per the City’s request. In conducting its review, staff considered the cost, timing and impacts to the local community and travelling public of the altered phasing. Based on this review, staff has concluded that building only three (3) roundabouts first and delaying construction of the remaining roundabouts would have significant negative consequences including a minimum two (2) year delay in the completion of the project, a potential increase in construction costs and an increase in the traffic disruption to the community. Therefore, staff is recommending that the Franklin Boulevard construction phasing remains as originally developed as per Report E-11-047.

As a result of the recent Homer Watson Boulevard/Block Line Road roundabout safety review (Report E-12-006), a number of post-construction refinements were proposed at this location. The refinements at the Homer Watson Boulevard/Block Line Road roundabout will also be incorporated into the design and construction of the roundabouts for the Franklin Boulevard project. In addition, Region staff has identified a number of initiatives in further addressing roundabout education and implementation (as indicated within this report) which will be undertaken during detailed design, as well as prior to, during and immediately after construction of the roundabouts along Franklin Boulevard.

On April 12, 2012 Region staff met with representatives of the WCDSB to discuss student crossing concerns at the proposed Franklin Boulevard/Saginaw Parkway roundabout. Region staff will be working closely with WCDSB and St. Benedict’s Catholic High School staff in reviewing pedestrian crossing safety at the proposed Franklin Boulevard/Saginaw Parkway roundabout and in continuing communication efforts in educating students on pedestrian crossing at roundabouts.

Region staff also met with the Grand River Accessibility Advisory Committee (GRAAC) and Canadian National Institute for the Blind (CNIB) on April 26, 2012 and will be continuing to meet with them in exploring ways to address accessibility concerns at all intersections within the Region.

REPORT:

1.0 Background

The Franklin Boulevard Improvements Class Environmental Assessment (EA) was completed by the Region and approved by Regional Council on March 24, 2010.

The proposed roadway improvements include approximately 8.0 km of road along Franklin Boulevard from Myers Road to Pinebush Road and an additional 3.5 km of related side street improvements in the City of Cambridge, with the construction of eleven modern roundabouts. Please refer to Appendix ‘A’ Figure 1 for a key plan of the project limits.

Construction of a project of this size cannot be completed in one (1) year without significant adverse impacts to the local community and the travelling public. In addition, constructing the project in a single contract would require acquisition of all properties prior to tendering which would result in delays to starting construction. Therefore staff developed a construction phasing plan involving multiple separate construction phases.
Region staff worked with City of Cambridge staff and the Conestoga Heavy Construction Association (CHCA) in developing a construction phasing plan that:

- Starts construction of the improvements as early as possible in addressing the traffic capacity and collision improvement needs; and
- Keeps the number of years of construction to a practical minimum in order to limit the disruption and inconvenience to adjacent property owners and the travelling public during construction.

In working with City of Cambridge staff and the CHCA, staff developed a Construction Phasing Plan that schedules construction of Franklin Boulevard over two (2) years. This construction phasing plan (as detailed in Report E-11-047) was presented for information to City of Cambridge Council on April 18, 2011 and members of Regional Council at the Planning and Works Committee on May 3, 2011.

This construction phasing plan included:

- **Year 1 Construction**
  - Pinebush Road to north of Can-Amera Parkway, including roundabouts with some 3-lane approaches at Pinebush Road, Sheldon Drive and Bishop Street; and
  - north of Clyde Road southerly to south of Main Street, including 2-lane roundabouts at Clyde Road, Savage Drive and Main Street.

- **Year 2 Construction**
  - north of Can-Amera Parkway southerly to north of Clyde Road, including roundabouts with some 3-lane approaches at Can-Amera Parkway and Saginaw Parkway, signalized intersection improvements at Glamis Road/Robson Avenue and a 2-lane roundabout at Avenue Road, and
  - south of Main Street southerly to south of Champlain Boulevard, including 2-lane roundabouts at Dundas Street and Champlain Boulevard.

Subsequent to presentation of this construction phasing plan to Regional Council in May 2011, City of Cambridge Council passed a motion requesting that should the Region proceed with roundabouts on Franklin Boulevard:

- That there be no more than three (3) roundabouts in the first phase and that the first phase limits be from Pinebush Road to Bishop Street;
- That the Region conduct a thorough public feedback review process over the course of one (1) year after the completion of the first phase before determining to proceed with roundabouts on future phases; and
- That the Region communicate on the use of roundabouts to the residents of the City and Region on a regular basis.

In August, 2011, the Region of Waterloo implemented its first roundabout with a 3-lane approach at the intersection of Homer Watson Boulevard and Block Line Road. Soon after the opening of the roundabout, there was a higher-than-expected number of fail-to-yield collisions at the roundabout as well as a pedestrian collision involving a Grand River Transit (GRT) bus.

Members of the public including students and officials at the WCDSB expressed concern regarding pedestrian safety at the Homer Watson/Block Line roundabout. About the same time, the Region received a letter from the WCDSB requesting that a roundabout not be constructed at the Franklin Boulevard/Saginaw Parkway intersection.
Please refer to Appendix ‘B’ WCDSB letter of October 26, 2012. Staff conducted a safety review of the Homer Watson/Block Line roundabout utilizing a specialized road safety consultant and staff submitted a report with safety countermeasure recommendations to the Region’s Planning and Works Committee on January 31, 2012. At the January 31, 2012 meeting, the Region’s Planning and Works Committee received delegations from the Grand River Accessibility Advisory Committee (GRAAC), the Canadian National Institute for the Blind (CNIB) and members of the public regarding the challenges experienced by visually impaired persons when crossing at roundabouts and other intersections on Regional and local roads in Waterloo Region. At the January 31, 2012 meeting, the Region’s Planning and Works Committee approved the countermeasures recommended for the Homer Watson/Block Line roundabout, and directed staff to consult with GRAAC and CNIB to identify ways to address accessibility concerns at all intersections within the Region.

2.0 City of Cambridge Request to Change Construction Phasing

Staff has thoroughly reviewed the City of Cambridge Council’s motion requesting to alter the construction phasing, and staff’s assessment of the motion’s requests is as follows:

2.1 Request to Build Three (3) Roundabouts in the First Phase and Conduct a Thorough Public Feedback Review before Proceeding with the Remaining Roundabouts

Building only three (3) roundabouts in the first year of construction represents approximately half of the work originally planned for the first year and would therefore require the addition of one (1) more construction year to the project schedule in order to construct the remaining portion of the currently scheduled Year 1 construction phase. Abiding by the City’s second request of conducting a through public feedback review after building/operating the first three (3) roundabouts would add at least another year to the project schedule before construction of the second portion of the original Year 1 construction phase could commence. Therefore, the total estimated project delay resulting from accommodating the City’s requests would be a minimum of two (2) years. Staff has summarized the impacts of this delay to the Franklin Boulevard project as follows:

- Delay (by a minimum of 2 years) construction completion of badly-needed improvements that will reduce injury collisions and congestion along the corridor;
- Increase construction costs for the remainder of the project (due to normal “construction escalation”) by an estimated 10% and increase “throwaway” costs due to overlaps of adjacent contracts;
- Result in at least one (1) additional year of construction activities in the corridor causing additional disruption to the travelling public and adjacent property owners; and
- Due to the need to coordinate the Franklin Boulevard construction with construction of other scheduled road improvement projects in Cambridge, the resulting two (2) year delay could potentially cause delays to other Region and City road projects in the area, resulting in increased traffic congestion over a longer period of time.

The Class EA concluded that roundabouts are the best solution for this project; however, should Regional Council wish to construct the first three roundabouts at the north end of the project but ultimately install traffic signals for the remainder of the project, it would require the widening of Franklin Boulevard from 4 to 6 lanes between Bishop Street and Avenue Road, making it look and operate like Hespeler Road.
Introducing any signalized intersection in lieu of a roundabout as proposed along the Franklin Boulevard corridor, would disrupt the synergy of the benefits derived from the roundabout corridor and along with “six-laning” of Franklin Boulevard would result in the following adverse consequences:

- Greater number and severity of motorist and pedestrian collisions would occur;
- Increased travel time for commuters along the corridor; Increased delay for pedestrians crossing a wider Franklin Boulevard at signalized intersections;
- Inability to include a multi-use trail without additional adverse property impacts at mid-block locations;
- Narrower boulevards and centre medians that would reduce opportunities for landscaping enhancements along the corridor; and
- Due to the requirement to eliminate the centre median for portions of the project, restricted ability for access/egress management from adjacent properties along the corridor would occur and it would reduce much needed traffic capacity as a result of increased traffic friction from left turning motorists.

In addition, any introduction of signalized intersections in lieu of roundabouts and the resulting “six-laning” of portions of the project would represent significant changes to the approved Class EA. If these changes were to be implemented, the Class EA Study would have to be significantly amended (including additional public consultation and study costs) and would result in at least a one (1) year delay in re-obtaining approval for this project. Also, implementing any signalized intersections and “six-laning” would require acquiring a list of additional properties (along the corridor) currently not identified for acquisition. Acquiring these additional properties would add an additional two (2) years to the project schedule.

In summary, if it were decided to implement signalized intersections and six lanes for this project, it would add a minimum delay of three (3) years to the previously estimated two (2) year delay associated with changing the construction phasing. An additional adverse impact would be that the Region would have already purchased a significant amount of property for the roundabouts, much of which would no longer be required should a signalized corridor be favoured.

As a result of the negative consequences of deviating from the current Construction Phasing Plan, staff recommends that the two (2) year phasing for construction of the Franklin Boulevard improvements (which includes the construction of 11 roundabouts as per Report E-11-047) be maintained as originally planned.

2.2 Communication on the Use of Roundabouts to the Residents of the City and Region on a Regular Basis

Every year since 2004, the Region of Waterloo has provided residents with information on how to use roundabouts. In the past few years, roundabout education campaigns have covered topics such as:

- *Pedestrians Take the Lead* – How to walk a roundabout, (2009);
- *Look and Plan Ahead* – Importance of roundabout signing, (2010); and
Staff is planning to continue with its roundabout public education efforts in 2012 and in the next several years. Every year, a working group consisting of staff from the Region, the three Cities and Regional Police Services work to develop the upcoming roundabout education campaign for the next year and takes into account roundabout collision history, observed roundabout operations and public concerns raised about roundabouts when developing the goals of each year’s campaign.

In addition, as a result of the Homer Watson Boulevard/Block Line Road roundabout safety review, further measures are being considered towards improving public awareness and education on the use of roundabouts, as detailed in Section 3.0 of this report.

3.0 Roundabout Refinements from Homer Watson Boulevard/Block Line Road

As a result of the recent Homer Watson Boulevard/Block Line Road roundabout safety review (Report E-12-006), a number of post-construction refinements were proposed at this location. The refinements at the Homer Watson Boulevard/Block Line Road roundabout will be incorporated into the design and construction of the roundabouts for the Franklin Boulevard project.

Region staff met with representatives of the Waterloo District Catholic School Board (WCDSB) and St. Benedict’s Catholic High School on April 12, 2012 to discuss the proposed roundabout at Franklin Boulevard/Saginaw Parkway and their concerns with student crossing at roundabouts. At the meeting Region staff identified additional measures which will be undertaken as a result of the Homer Watson Boulevard/Block Line Road safety review as detailed in this report. Staff from the Waterloo Catholic District School Board and St. Benedict’s Catholic High School remain concerned with a roundabout at the Franklin Boulevard/Saginaw Parkway intersection and student crossing safety. Region staff will be working closely with Waterloo Catholic District School Board and St. Benedict’s Catholic High School staff in reviewing the detailed design of the Franklin Boulevard/Saginaw Parkway roundabout for pedestrian crossing safety and in continuing communication efforts in educating students on pedestrian crossing at roundabouts.

In addition, on April 26, 2012 Region staff met with the Grand River Accessibility Advisory Committee (GRAAC) and representatives of the Canadian National Institute for the Blind (CNIB). Region staff will further continue to meet with representatives of GRAAC and CNIB in exploring ways to address accessibility concerns in Waterloo Region.

As a result of the Homer Watson Boulevard/Block Line Road roundabout safety review, staff will be taking the following steps during the detailed design of this project:

1) Monitor and assist with discussions between Regional staff and members of the GRAAC and CNIB to explore ways to address accessibility concerns at roundabouts and incorporate into the design of this project whatever measures are approved;

2) Continue discussions with staff and representatives of the Waterloo Catholic District School Board and St. Benedict’s Catholic High School to address their pedestrian crossing concerns at the Franklin Boulevard/Saginaw Parkway roundabout;

3) Conduct an initial review to re-confirm the ultimate need for 3 lane approaches at the roundabouts and to consider the possibility of initially constructing only 2 lane approaches and phasing in a third lane at a future date when needed; and

4) Incorporate into the design all applicable countermeasures that have resulted in a reduction in collisions at the Homer Watson Boulevard/Block Line Road roundabout.
In addition to the tasks identified above, staff will also look to incorporate into the Franklin Boulevard project other measures as a result of the Homer Watson Boulevard/Block Line Road roundabout safety review, including:

1) Explore alternative methods during construction of the roundabouts to condition drivers not to expect free-flow conditions and to expect a yield condition upon the opening of the roundabouts;

2) When roundabouts are under construction, explore new ways to better direct motorists’ attention to roundabout education and awareness;

3) Anticipate those legs of the roundabouts that might involve drivers unfamiliar with roundabouts and adjust public education initiatives accordingly;

4) Develop a comprehensive roundabout education and awareness campaign timed for implementation just in advance of opening the roundabouts within the project limits;

5) Work with the Waterloo Catholic District School Board and St. Benedict’s Catholic High School staff and students to develop a roundabout education and awareness campaign for the roundabout at the Franklin Boulevard/Saginaw Parkway intersection; and

6) Enhance immature landscaping within the central island to increase the visible presence of new roundabouts.

The City of Cambridge and Waterloo Catholic District School Board have been notified of staff’s response to their phasing and roundabout requests per this report and that this report has been placed on the Region’s May 8, 2012 Planning and Works Committee meeting agenda for consideration.

4.0 Project Schedule

Detailed design and property acquisitions are currently underway on an aggressive schedule so that road construction work can commence in 2014. Regional Property Acquisition staff are making best efforts to incorporate efficiencies in the Region’s property acquisition process in order to meet the 2014 construction start.

CORPORATE STRATEGIC PLAN:

This project is consistent with the development of Focus Area 2 – Growth Management and Prosperity by optimizing infrastructure to meet current and projected needs.

The improvements on Franklin Boulevard when complete will support Focus Area 3 – Sustainable Transportation by optimizing existing road capacity to safely manage traffic.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS

Appendix A – Figure 1: Key Plan – Construction Phasing, Franklin Boulevard Road Improvements

Appendix B – Waterloo District Catholic School Board Letter

PREPARED BY:  William Gilbert, Senior Project Manager, Transportation Expansion

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
FIGURE 1: Key Plan – Recommended Construction Phasing
Franklin Boulevard Road Improvements
Region of Waterloo
APPENDIX “B”

October 26, 2011

Mr. Ken Selling
Chair, Regional Municipality of Waterloo
150 Frederick St., P.O. Box 9051, Station C,
Kitchener, ON
N2G 4J3

Dear Mr. Silling:

I am writing to let you know that on Monday night the Board of Trustees of the Waterloo Catholic District School Board unanimously passed the following motion:

THAT the Chair of the Board immediately write to the Chair of the Regional Municipality of Waterloo asking that, given the Waterloo Catholic District School Board’s serious concerns about the safety of WCSSB students, the Region of Waterloo abandon plans to install a traffic roundabout at the intersection of Franklin Boulevard and Saginaw Parkway in Cambridge and that the Regional Municipality of Waterloo maintain that intersection as a signalized intersection.

This motion is not intended as a comment on the overall appropriateness of roundabouts. Rather, it is intended to convey our opinion that there are both appropriate locations for traffic roundabouts and inappropriate locations. The planned Franklin-Saginaw roundabout is not only immediately adjacent to St. Benedict Catholic Secondary School but is also near four elementary schools.

We have maintained since 2007 that the traffic roundabout at the intersection of Homer Watson Boulevard and Block Line Road in Kitchener – a short distance from St. Mary’s High School, Waterloo Region’s largest secondary school – should not have been built.

Of course, that roundabout was indeed built and we are very appreciative of the efforts of regional staff and the Waterloo Regional Police Service in responding to our numerous requests for safety improvements to protect our students. However, despite those improvements, on October 7, 2011 a St. Mary’s student was struck by a Grand River Transit bus and seriously injured while crossing the roundabout.

With so much evidence now showing that locating a traffic roundabout on a major thoroughfare adjacent to a large secondary school is dangerous to the safety of our students we have no choice but to ask the Region to abandon plans for the Franklin-Saginaw roundabout.

We look forward to Regional Council taking up this request at the earliest opportunity.

Sincerely,

Manuel da Silva
Chair of the Board

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

DATE: May 8, 2012

FILE CODE: T04-20, 7272

SUBJECT: RECOMMENDED INTERSECTION IMPROVEMENTS AT OTTAWA STREET AND TRUSSLER ROAD, CITY OF KITCHENER

RECOMMENDATION:

THAT the Regional Municipality of Waterloo approve the ultimate implementation of a two-lane roundabout on Ottawa Street at Trussler Road, in the City of Kitchener, all as presented in Report E-12-045 dated May 8, 2012.

SUMMARY:

Future road improvements will be necessary to reduce delays at the intersection of Ottawa Street and Trussler Road resulting from anticipated traffic growth at this location. Conventional road improvements would include additional turn and through lanes and replacement of the existing temporary traffic signals.

In accordance with Regional policy (adopted April 9, 2003), Regional staff assessed the feasibility of constructing a roundabout in lieu of conventional road improvements at this intersection. Based on input from the public, and in consideration of safety performance, traffic capacity and total life-cycle costing, staff are recommending the ultimate implementation of a two-lane roundabout because a roundabout would result in fewer injury collisions and fewer delays to motorists than conventional road improvements. This intersection also falls along an existing roundabout corridor (Trussler Road / Ira Needles Boulevard). Although currently scheduled for construction in 2014, staff recommend that this project be deferred and the timing be determined based on a future traffic analysis to be conducted after the completion of the Ministry of Transportation Highway 7/8 widening project.

REPORT:

1. Background

The intersection of Trussler Road and Ottawa Street lies south of Highway 7/8 and the Ira Needles Boulevard roundabout corridor. This intersection is used heavily by commuters in south-west Kitchener travelling to and from destinations in Waterloo, downtown Kitchener and points beyond via Highway 7/8 and Highway 401. Trussler Road also forms the north-south border between the City of Kitchener and the Township of Wilmot. Please see Appendix A for a key plan of the project location.

Originally, the traffic control at the Ottawa/Trussler intersection consisted of a two-way stop condition with stop signs on Trussler Road. To address heavy delays to commuters on Trussler Road, the intersection was converted to a four-way stop in 2007. In 2009, staff undertook a traffic operations review of the intersection and concluded that traffic signals were warranted. As per Regional policy (adopted April 9, 2003), staff commissioned an Intersection Control Study to compare the advantages and disadvantages of a roundabout in lieu of conventional road improvements at this intersection. As an interim measure, temporary traffic signals were installed at this location in 2010.
2. **Comparison of Roundabout and Conventional Road Improvements**

The 2009 Intersection Control Study (ICS) included traffic analysis for the horizon year 2025. The ICS also accounted for the planned ultimate widening of Trussler Road from two lanes to four lanes within a 10-20 year timeframe as per the Region’s Transportation Master Plan.

The conventional road improvements concept is shown in Appendix B-1 and includes road widening to add left turn lanes on all four approaches, a westbound right turn lane, new traffic signals, cycling lanes and one additional through lane in each direction on Trussler Road. The roundabout concept plan is shown in Appendix B-2 and includes cycling lanes and two lanes on all four approaches. These concepts were developed in their ultimate state to allow staff to identify the maximum property impacts associated with their implementation.

In addition to assessing the safety performance of each alternative and the user delays associated with accommodating the anticipated traffic, a key component of the ICS assessment is to determine the total Life Cycle Cost (LCC) of each alternative. The LCC includes all costs associated with the implementation and maintenance of the alternatives over a 20-year period. The LCC also includes for each alternative an estimate of the injury crash costs based on the expected injury crashes over the 20-year period. Based on this assessment of total costs, it has been determined the total LCC of the roundabout would be slightly lower than the LCC of the conventional road improvements. Although the roundabout’s construction costs are higher, the slightly lower LCC is due mostly to the expectation of fewer injury collisions at the roundabout than would be expected at the traffic signals. Please refer to Table 1 in Appendix D for a detailed breakdown of the Life Cycle Cost for each alternative.

3. **Public Consultation**

Prior to developing a recommended option for this project, staff sought public input on the roundabout and the conventional road improvement alternatives. Notices were placed in the Kitchener-Waterloo Record on March 23 and March 27, 2012. Letters were also hand delivered to property owners/residents within the immediate vicinity of the intersection on March 19, 2012 and project notification sign boards were placed at all four legs of the existing intersection on March 26, 2012 for a period of three weeks. Copies of the newspaper notices and the hand-delivered letters are presented in Appendices E and F respectively. The material presented to the public indicated a staff preference for the roundabout concept.

4. **Main Issues Raised by the Public**

A total of 9 comments were received from the public. Two of the comments received were in direct support of the roundabout. Three of the comments did not support the roundabout. The remaining comments raised a variety of issues / questions. Please refer to Appendix C for all comments received and staff responses. Through submissions received and discussions with adjacent property owners and City of Kitchener staff, Region staff has identified the main public concerns as follows:

**Property Requirements**

Property acquisition will be required as the proposed roundabout extends beyond the existing Regional right of way on three corners of the intersection. At one of the corners (southeast quadrant) the land is already owned by the Region. On the other two corners, affected property owners have indicated they are concerned with the impacts on their property.
Staff Response:

The acquisition of private property beyond the existing right-of-way is necessary for both the roundabout and traffic signal concepts in their ultimate condition; however, the roundabout concept requires more property than the traffic signals concept. Two properties would be affected by land acquisition for either concept; one in the southwest quadrant owned by a resident and one in the northwest quadrant owned by a developer.

The property in the southwest quadrant (#1044 Knechtel Court) was part of a recent severance application and a portion of the land was dedicated to the Region to the right-of-way limit defined in the Region’s Official Plan (ROP). Because the property sits about 3m below Trussler Road, local widening of the intersection (for turn lanes or a roundabout) would require grading beyond the right-of-way limit defined in the ROP. Therefore some additional property is required from this land owner to construct the ultimate road improvements. While the Region has not entered into any further negotiations with the owner of this property, he has been advised that staff are currently reviewing the future needs at the intersection and that additional land may be required. The owner has been advised that Region staff are not permitted to enter into property negotiations prior to Council approval of the recommended intersection improvements. It is staff’s understanding that the owner of this property is willing to enter into negotiations to convey the land required once it has been defined by the Region with Council approval and it is prudent to take this opportunity to negotiate for the required lands.

The property in the northeast quadrant (#2220 Ottawa Street South) is owned by a local developer and the house on the property is currently rented for residential use. The property is perched about 3m above Trussler Road and includes a swimming pool, shed and trees in the back yard which are very close to existing Trussler Road. Any widening of the intersection (for turn lanes or a roundabout) would require removal of the swimming pool, shed and some of the trees in the back yard. A retaining wall is required to avoid the requirement to remove the existing house, which is also quite close to Trussler Road. While the Region has not entered into any negotiations with the owner of this property, staff met with both the owner and the tenants to review the proposed design alternatives and to discuss the potential impacts. Staff will make best efforts to shift and adjust the road work and retaining wall as necessary to minimize the amount of land and tree removals required to construct the intersection improvements. As part of property negotiations, staff will have discussions with the property owner and will negotiate adequate compensation/mitigation for the loss of the swimming pool, shed and trees.

Safety

Some members of the public were concerned that more accidents would occur at the roundabout than at a signalized intersection and that it would be less safe for pedestrians.

Staff Response:

Research from around the world, including North America, continues to confirm that roundabouts outperform traffic signals in terms of reducing motorist and pedestrian injuries. Recently, Region staff confirmed that this trend is also true for the roundabouts on Regional roads in Waterloo Region. Staff are confident that with continued implementation of roundabouts, continued public education efforts, and the resulting increased driver familiarity, the safety performance of roundabouts will continue to be superior to traffic signals.
The majority of drivers using the roundabout on Trussler/Ottawa will be already familiar with roundabouts as there are 6 roundabouts to the north of the intersection on Ira Needles Boulevard.

**Heritage Impacts**

The property at #2220 Ottawa Street South may be of historical significance.

**Staff Response:**

The City of Kitchener has indicated that this property is currently listed as a non-designated property of cultural heritage value or interest but it has not yet been placed on the Municipal Heritage Register. It is staff’s understanding that the heritage interest is in the structure, which would not require removal with either of the design concepts if a retaining wall is constructed.

5. **Recommended Alternative**

Based on the technical study, the current experience with the Region’s existing roundabouts and input received from the public regarding this project, staff believe the two-lane roundabout is a better ultimate option for this intersection because:

- The roundabout would result in fewer injury collisions than the signalized intersection; and
- The roundabout would result in fewer delays to all users.

Although the estimated $1.9 million cost to initially construct the roundabout is more than the estimated $1.7 million cost of the conventional road improvements, the overall life-cycle costs of the roundabout ($2.5 million) are slightly lower than the overall life-cycle costs of traffic signals when one considers the cost of all the injury collisions that would be potentially avoided by implementing a roundabout. In addition to the increased benefit regarding reduced injury collisions, reduced delays and lower life-cycle costs, the roundabout would also reduce idling times resulting in fuel savings and reduced vehicle emissions. The majority of drivers using the roundabout would be familiar with roundabouts as this intersection falls along the Trussler Road/Ira Needles Boulevard roundabout corridor.

Given the benefits of a roundabout when compared to traffic signals, staff is recommending the ultimate implementation of a two-lane roundabout at the intersection of Ottawa Street and Trussler Road.

6. **Timing of Roundabout Construction**

Improvements at the intersection of Ottawa Street and Trussler Road are included in the Region’s 2012 Transportation Capital Program for construction in 2014. In 2011 the Region undertook some minor road widening at this location to install a southbound left turn lane. The need for this left turn lane was identified to address existing delays for southbound traffic on Trussler Road. In addition, staff are anticipating a short-term increase in traffic at this location resulting from the Ministry of Transportation (MTO) Highway 7/8 widening from Fischer-Hallman Road to Courtland Avenue planned for the years 2012-2015. It is expected that drivers may choose Trussler Road as an alternate route to avoid delays on the highway and other Regional roads during the MTO contract.

Future traffic forecasts (including the subdivision traffic in the area east of Trussler Road and north of Ottawa Street) and operations for the intersection of Trussler Road and Ottawa Street have been analysed.
Based on slower background traffic growth in the area and additional capacity created by the newly constructed southbound left turn lane, it has been determined that a significant increase in capacity will not be required at the intersection until the 2020 to 2025 timeframe. As a result, staff are recommending that this project be deferred from its current timing in the Transportation Capital Program to a future date to be determined based on a review of traffic forecasts after the completion of MTO’s Highway 7/8 project. During future detailed design of the roundabout, staff will review future traffic capacity needs and will consider the appropriate lane configuration for the ultimate two-lane roundabout at the time of opening.

CORPORATE STRATEGIC PLAN:

As part of the Region’s Strategic Focus, this project satisfies Focus Area 1: Environmental Sustainability in that it would protect and enhance the environment by improving air quality. The proposed roundabout would result in shorter queues and reduce fuel consumption and emissions. This project also satisfies Focus Area 2: Growth Management and Prosperity in that it will help to optimize infrastructure to meet current and future needs.

FINANCIAL IMPLICATIONS:

The 2012 Transportation Capital Program includes $2.717 million for this project to be funded from the Development Charges Reserve Fund. Staff recommend retention of 2012 funds for additional design and property acquisition and that the balance of the funds for this project be deferred to a future year as part of the 2013 Transportation Capital Program.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Nil.

ATTACHMENTS

Appendix A – Key Plan
Appendix B-1 – Proposed Traffic signal Alternative
Appendix B-2 – Proposed Roundabout Alternative
Appendix C – Summary of Comments provided by the public and staff responses
Appendix D – Table 1: Life Cycle Cost Comparison
Appendix E – Public Notice – March 23 and March 27, 2012

PREPARED BY: Frank Kosa, Senior Project Manager, Design and Construction

APPROVED BY: Thomas Schmidt, Commissioner of Transportation and Environmental Services
APPENDIX B-1

TRUSSLER ROAD
OTTAWA STREET
INTERSECTION
TRAFFIC SIGNAL OPTION

#1044 KNECHTEL COURT

#2220 OTTAWA STREET SOUTH

NOTE: TURN LANE STORAGE LENGTHS TO BE VERIFIED
APPENDIX C-1
INTERSECTION IMPROVEMENTS AT OTTAWA STREET AND TRUSSLER ROAD,
CITY OF KITCHENER

Public Comments
Comments Received and Staff Responses

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Received</td>
<td>I disapprove of other roundabout going in. Obviously the region did not learn its mistake about the roundabout near St. Mary's school. The region was to do another blunder with the Ottawa and Trussler intersection by thinking of putting in a roundabout there. Fix that intersection but leave the lights there or there will be a lot of accidents. I believe roundabouts do not work in this region and we should go back to traffic lights.</td>
<td>Thank you for your email. The Region often receives similar comments when proposing new roundabouts as many people perceive that roundabouts are more dangerous than signalized intersections. In fact, research from around the world, including North America, continues to confirm that roundabouts outperform traffic signals in terms of pedestrian and motorist safety. Recently, Region staff confirmed that this characteristic is also true for the roundabouts on Regional roads. Staff are confident that with continued implementation of roundabouts and the resulting increased driver familiarity with them, and with continued public education efforts, the safety performance of roundabouts will continue to be superior to traffic signals. While a roundabout is currently preferred by staff at the Ottawa Street and Trussler Road intersection based on preliminary studies, it has not yet been approved. Your comments will be noted in the report to the Planning and Works Committee for this project. If you would like more information about the studies mentioned above or if you have additional comments or questions on the Ottawa/Trussler project, please feel free to contact me.</td>
</tr>
</tbody>
</table>
### APPENDIX C-2

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Received (follow up email cont'd)</td>
<td>I would like more information on the project. I do not agree with the studies out there about roundabouts being safer. You could get side wacked by the other person going the other way. Look at the mess the region did on the roundabout on Homer Watson. We as tax payers have to PAY for the screw up, the region did on that roundabout I still believe that traffic lights are safer.</td>
<td>Accidents can occur at any type of intersection. However, vehicular collisions that occur at roundabouts are generally less severe and less likely to injure the people involved than those that occur at traffic signals. When an entering vehicle fails to yield and collides with a vehicle circling in the roundabout, it is typically a glancing blow rather than a direct 90 degree hit due to the curved entry into the circulatory roadway. Speeds are also typically lower at roundabouts than at signalized intersections which tends to further reduce the severity of collisions. Research locally and from around the world consistently confirms the safety benefits of roundabouts. As an example, in the United States, the Federal Highway Administration has recently listed roundabouts as a “Proven Safety Countermeasure” (see link below): <a href="http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_005.pdf">http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_005.pdf</a> As noted previously, a roundabout has not yet been approved at the Ottawa Street/Trussler Road intersection, but improvements are required at this location to address current and anticipated capacity issues. In particular, the southbound left turn movement (south on Trussler turning left onto Ottawa) is currently quite heavy and during peak times the left turn lane backs up and sometimes blocks the southbound through lane. With the MTO planning work on the expressway at Fischer-Hallman Road in the next couple of years, we expect that the Ottawa/Trussler intersection is going to see an increase in traffic during that time. As an interim measure, the Region increased the length of the southbound left turn lane in 2011 to help address these short term issues. In the longer term it is expected that new development in the area will increase traffic further beyond the capacity of the existing intersection. New turn lanes are warranted to address the anticipated traffic growth which would also require replacement of the existing temporary traffic signals. As per current Regional policy, staff is to consider a roundabout at all locations where additional turn lanes are warranted. Staff engaged a</td>
</tr>
<tr>
<td>Name</td>
<td>Comments and Concerns</td>
<td>Staff Response</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Email Received (follow up email cont'd)</td>
<td></td>
<td>consultant to conduct a study comparing the performance of traffic signals with a modern roundabout at this location. Based on this study and subsequent reviews of the design options and costs, a roundabout is preferred by staff primarily because it would result in fewer serious collisions and fewer delays. This intersection also falls along an existing roundabout corridor (Trussler Road / Ira Needles Boulevard). Sketches of the two alternatives are attached for your reference. Currently, staff is planning on making a recommendation to the Region’s Planning and Works Committee at its regularly scheduled meeting on May 8, 2012. Construction of the selected alternative is tentatively scheduled to take place in 2014, subject to timely property acquisitions and receipt of all necessary approvals. If you would like additional information or if you would like to meet to review the plans, please feel free to give me a call.</td>
</tr>
<tr>
<td>Email Received (follow up email)</td>
<td>You do not get the big picture, I still believe that traffic light are better.</td>
<td>No further response.</td>
</tr>
<tr>
<td></td>
<td>Especially the roundabouts on Ira Needles which are a complete disaster.</td>
<td></td>
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<tr>
<td></td>
<td>If I get hurt in the roundabout if you build it, I will be suing the region over this fiscal, also any repairs that have to be made to my car because some idiot does not know the roundabout I will be sending the repair bills to the region. Roundabouts are good overseas but not here in Canada(Region of Waterloo). Also if it is built I will avoid the roundabout and find another route.</td>
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</table>
### APPENDIX C-4

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerry Rommens (email)</td>
<td>Our farm lies on the west side of Trussler, north of Ottawa and just south of the highway. We are actually at the crest of the hill, closer to the expressway. Traffic is moving very quickly by the time it gets to us. I disagree strongly about the impact it will have on the ability to turn safely into and out of our drive. Please do contact the police to check on the number of rear end accidents that have already happened in front of our house. I have witnessed 4 and there have been many I have not seen but seen the aftermath. The police spend a great deal of time in our driveway picking off speeders. We can’t stop progress, nor do we want to, but we also want to continue to do business.</td>
<td>I certainly believe that you’ve been witness to a number of accidents in front of your property as your driveway is quite close to the expressway ramps, Trussler Road merges from two lanes to one lane in the southbound direction just north of your driveway and it wouldn’t be surprising that speeds would be high in this area. As you are quite far from the Ottawa/Trussler intersection, I really don’t anticipate that a roundabout at that location would further inhibit turns in and out of your driveway. However, I will pass your concerns along to Transportation and request that they have a look at the collision history at this location.</td>
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</table>

Transportation response: Thank-you for forwarding your concerns and allow us the opportunity to respond.

I can understand your concerns given that traffic volumes have definitely increased along Trussler Road. I do however agree with Mr. Kosa’s statement that a roundabout installation at the Trussler Road/Ottawa Street intersection will likely not affect your ability to turn into or out of your access.

A review of the five year collision history (2006 to 2010) shows that there were 5 rear-end type collisions that occurred near your access. According to the Motor Vehicle Accident Reports (MVAR), 1 of those collisions were the result of a resident turning into an access. To provide a comparison, Fischer-Hallman Road between Ottawa Street and Activa, experienced 19 rear-end collisions during the same five-year period.
<table>
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<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Regional staff will be considering profile adjustments in this area when road construction is warranted. These profile adjustments may further improve the sight distance to slowed or turning vehicles. However, timing of such works are currently undetermined. I hope I have provided addition insight regarding the collision history. If you have any further questions or concerns please do not hesitate to contact me.</td>
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<tr>
<td>Phone Call</td>
<td>The caller lives near the roundabout at Ira Needles Boulevard and University Avenue. He indicated that he enjoys using the roundabouts in the Region and thinks that it would be a great idea to install a roundabout at Ottawa Street and Trussler Road.</td>
<td>Staff thanked the caller for his positive feedback.</td>
</tr>
<tr>
<td>Phone Call</td>
<td>The caller backs on to Trussler Road and inquired whether a noise study has been conducted for the proposed intersection improvements.</td>
<td>Staff indicated that the current focus is on selecting the preferred alternative for this location. Whether traffic signals or a roundabout are implemented, a noise study may be required during the detailed design stage.</td>
</tr>
<tr>
<td>Township of Wilmot Councillor Al Junker, through Gary Charbonneau (email)</td>
<td>I received a copy of the Region's notice concerning this intersection. Has there been any consultation with the residents of Mannheim prior to the publication of this notice? Considering the impact this proposal will have on their daily commute I believe there should be. Have I missed something?</td>
<td>The intersection improvements are considered a Schedule A+ project under the Municipal Class EA process. Although public consultation is not required (notification is sufficient), this project has followed the Region's typical protocol for intersection improvements where a roundabout is being considered in that: - Notices were placed in the Kitchener-Waterloo Record on March 23 and March 27, 2012. - Letters were hand delivered to property owners/residents within the immediate vicinity of the intersection on March 19, 2012.</td>
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</table>
### APPENDIX C-6

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Township of Wilmot Councillor Al Junker,  through Gary Charbonneau (email cont'd)</td>
<td></td>
<td>- Project notification sign boards were placed at all four legs of the existing intersection on March 26, 2012 and will remain there for a period of three weeks.</td>
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<td></td>
<td>All of the above noted that a roundabout is currently being considered and provided my contact information.</td>
<td></td>
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<tr>
<td></td>
<td>In addition, a separate letter was hand delivered to the tenants at #2220 Ottawa Street South (NE corner of the intersection) and copied to the property owner on March 19, 2012. A meeting was held with the tenants and the owner at this property on March 26, 2012 to review impacts identified in the preliminary plans. Previous discussions were also held with the property owner at #1044 Knechtel Court (SW corner of the intersection).</td>
<td></td>
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<td></td>
<td>A report with the recommended alternative is scheduled to go to the Planning and Works Committee on May 8, 2012, with construction currently anticipated in 2014. Feedback obtained from the public will be considered in determining the final recommended alternative and will be included in the committee report.</td>
<td></td>
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<td></td>
<td>I trust that you will pass this response on to the local councillor, Mayor and CAO and let me know if there are any further questions.</td>
<td></td>
</tr>
<tr>
<td>Phone Call</td>
<td>The caller lives at #282 Woodridge Avenue. He questioned whether Knechtel Court would be closed at Trussler Road if the roundabout goes ahead. He noted that many people currently use Knechtel Court to bypass the Trussler Road/Ottawa Street intersection.</td>
<td>Staff recommended that the caller contact the Township of Wilmot with this question as the road falls under their jurisdiction.</td>
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</table>
## APPENDIX C-8

<table>
<thead>
<tr>
<th>Name</th>
<th>Comments and Concerns</th>
<th>Staff Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unidentified caller (voice message)</td>
<td>A resident called to have her opinion noted that she would prefer to have lights at the Ottawa/Trussler intersection instead of a roundabout. She did not want to leave her name but just wanted her opinion noted.</td>
<td>No response.</td>
</tr>
<tr>
<td>Voice message</td>
<td>The caller noted that he drives through the Ottawa/Trussler intersection each day and feels that the roundabout would be a great idea.</td>
<td>No response.</td>
</tr>
<tr>
<td>Stephen Farhood (letter to the editor – KW Record)</td>
<td>I am 29 years old and have lived in Waterloo Region my entire life. The other day I was driving home from work and noticed a sign on the side of the road: “Proposal for roundabout at Ottawa and Trussler.” Is that really necessary? I recently moved out by Highland and Ira Needles. Every single day I take Ira Needles and every day it’s a new adventure. Close calls, pedestrians almost being hit and just a general lack of knowledge of how to even drive. Not to mention the fact that at 5 o’clock, forget it! Traffic backed up roundabout to roundabout. All anyone ever says, though, is that the logical fix for that is just to add another two lanes. Is it though? Roundabouts first entered the region eight years ago ... eight years! And it seems as if only a fraction of people have figured them out. How long do we go continuing to put in more roundabouts before we realize maybe they aren’t working? How would you grade yourself in your roundabout driving skills? It seems the future looks pretty round and from what I’ve seen so far, nobody would pass.</td>
<td>No response.</td>
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</tbody>
</table>
### Intersection Improvements at Ottawa Street and Trussler Road

**Table 1: Life-Cycle Cost, Operational and Safety Comparison**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Traffic Signals</th>
<th>Roundabout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Construction Cost</td>
<td>$1,720,000</td>
<td>$1,950,000</td>
</tr>
<tr>
<td>Property Cost</td>
<td>$175,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Injury Crash Cost (Present Value)</td>
<td>$533,000</td>
<td>$179,000</td>
</tr>
<tr>
<td>Annual Traffic Signal/Lighting Maintenance (Present Value)</td>
<td>$60,000</td>
<td>-</td>
</tr>
<tr>
<td>Annual Lighting/Landscaping Maintenance (Present Value)</td>
<td>-</td>
<td>$36,000</td>
</tr>
<tr>
<td><strong>Total Relative Life-Cycle Cost (Present Value)</strong></td>
<td><strong>$2,488,000</strong></td>
<td><strong>$2,465,000</strong></td>
</tr>
<tr>
<td>Safety Performance Expected</td>
<td>1.55</td>
<td>0.52</td>
</tr>
<tr>
<td>Injury Collision Per Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational Performance 2025</td>
<td>LOS ‘A’ – ‘C’</td>
<td>LOS ‘A’</td>
</tr>
<tr>
<td>Overall Assessment</td>
<td>PREFERRED</td>
<td></td>
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</table>
INTERSECTION IMPROVEMENTS
OTTAWA STREET AT TRUSSLER ROAD, KITCHENER

Based on current traffic levels and projections for anticipated growth, there is a need to implement improvements at the intersection of Ottawa Street and Trussler Road in Kitchener. New turn lanes are warranted at this intersection which would also require replacement of the existing temporary traffic signals. As per current Regional policy, staff is to consider a roundabout at all locations where additional turn lanes are warranted. Staff engaged a consultant to conduct a study comparing the performance of traffic signals with a modern roundabout at this location. Based on this study and subsequent reviews of the design options and costs, a roundabout is preferred by staff primarily because it would result in fewer serious collisions and fewer delays. This intersection also falls along an existing roundabout corridor (Trussler Road / Ira Needles Boulevard).

Staff wish to obtain input from adjacent property owners and other interested members of the public prior to making a final recommendation to Regional Council. Currently staff is planning on making a recommendation to the Region’s Planning and Works Committee at its regularly scheduled meeting on Tuesday, May 8, 2012. Construction of the selected alternative is tentatively scheduled to take place in 2014 subject to timely property acquisitions and receipt of all necessary approvals.

If you have any questions or comments about the intersection improvements or if you would like additional information about the upcoming Planning and Works Committee Meeting, please contact the Region’s Project Manager:

Frank Kosa, P.Eng
Senior Project Manager
Regional Municipality of Waterloo
Transportation and Environmental Services
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3
Telephone: (519) 575-4757 x3185
Email: fkos@regionofwaterloo.ca

All comments and information received from individuals, stakeholder groups and agencies regarding this project are being collected to assist the Region of Waterloo in making a decision. Under the Municipal Act, personal information such as name, address, telephone number, and property location that may be included in a submission becomes part of the public record. Questions regarding the collection of this information should be referred to the Region’s representative as indicated above.
APPENDIX F-1

TRANSPORTATION AND
ENVIRONMENTAL SERVICES
Design and Construction
150 Frederick Street
Kitchener ON N2G 4J8 Canada
Telephone: 519-575-4550
Fax: 519-575-4430
www.regionofwaterloo.ca

Date:
March 19, 2012

HAND DELIVERED

PROPERTY OWNERS AND TENANTS

Re: Intersection Improvements – Ottawa Street at Trussler Road, Kitchener

Based on current traffic levels and projections for anticipated growth, there is a need to implement improvements at the intersection of Ottawa Street and Trussler Road in Kitchener. New turn lanes are warranted at this intersection which would also require replacement of the existing temporary traffic signals. As per current Regional policy, staff is to consider a roundabout at all locations where additional turn lanes are warranted. Staff engaged a consultant to conduct a study comparing the performance of traffic signals with a modern roundabout at this location. Based on this study and subsequent reviews of the design options and costs, a roundabout is preferred by staff primarily because it would result in fewer serious collisions and fewer delays. This intersection also falls along an existing roundabout corridor (Trussler Road / Ira Needles Boulevard).

Staff wish to obtain input from adjacent property owners and other interested members of the public prior to making a final recommendation to Regional Council. Currently, staff is planning on making a recommendation to the Region’s Planning and Works Committee at its regularly scheduled meeting on May 8, 2012. Construction of the selected alternative is tentatively scheduled to take place in 2014, subject to timely property acquisitions and receipt of all necessary approvals.

Preliminary sketches of the signalized alternative and the preferred roundabout alternative are included with this letter for your information. If you have any questions, concerns or comments about the intersection improvements or if you would like additional information about the upcoming Planning and Works Committee Meeting, please contact us at the number above. Your response prior to April 4, 2012 would be appreciated.

Sincerely,

Frank Kosa, P. Eng.
Senior Project Manager,
Design and Construction

cc: Bruce Erb, RMOW
Paula Sawicki, RMOW
Steve van De Keere, RMOW
Thomas Schmidt, RMOW
Mike Murray, RMOW
Regional Council
John McBride, City of Kitchener
Kelly Galloway, Ward 5 Councillor, City of Kitchener
Al Junker, Ward 1 Councillor, Township of Wilmot

Document #: 996902
APPENDIX F-2

TRANSPORTATION AND
ENVIRONMENTAL SERVICES
Design and Construction
150 Frederick Street
Kitchener ON N2G 4J3 Canada
Telephone: 519-975-4560
Fax: 519-975-4430
www.regionofwaterloo.ca

Refer To:
Frank Kosa, 575-4757 x3185

File No:
7272

Date:
March 19, 2012

HAND DELIVERED

TENANTS – 2220 OTTAWA ST. S., KITCHENER

Re: Intersection Improvements – Ottawa Street at Trussler Road, Kitchener

Dear Sir/Madam,

I would like to meet with you to review proposed changes at the intersection of Ottawa Street and Trussler Road. The Region is considering improvements that would either include new turn lanes or a new roundabout to handle the current traffic levels and projected traffic growth in the area. Either option would have impacts at your residence affecting a fairly large portion of the back yard.

Because the yard is perched about 3m above Trussler Road, local widening of the intersection would require a retaining wall to limit the amount of grading on to the property. However, as the pool, shed and trees in the back yard are relatively close to the roadway, even with a retaining wall it is likely that these features would need to be relocated regardless of the selected alternative for the intersection improvements.

We have met with the owner of the property (Active Holdings Inc.) to review conceptual drawings and we plan on meeting with them again to further discuss the updated plans. Although the changes will impact Active as the owner of the land, we recognize that this is your home and you will be affected most directly. We would appreciate your feedback and would like to set up a meeting with you as soon as possible.

The roundabout is preferred by Region staff based on a study comparing the expected performance of traffic signals with a modern roundabout at this location mainly because it would result in fewer serious collisions and fewer delays. Preliminary sketches of the signalized alternative and the preferred roundabout alternative are included with this letter for your information.

Staff currently intend on making a recommendation on the preferred alternative to the Region’s Planning and Works Committee at its regularly scheduled meeting on May 8, 2012. Construction of the selected alternative is tentatively scheduled to take place in 2014.

Document #: 1130082
Please contact me with your questions/concerns and to set up a meeting to discuss the intersection improvements further. Your response prior to March 28, 2012 would be appreciated.

Sincerely,

Frank Kosa, P. Eng,
Senior Project Manager,
Design and Construction

cc: Bruce Erb, RMOW
    Paula Sawicki, RMOW
    Steve van De Keere, RMOW
    Thomas Schmidt, RMOW
    Mike Murray, RMOW
    Regional Council
    John McBride, City of Kitchener
    Kelly Galloway, Ward 5 Councillor, City of Kitchener
    Al Junker, Ward 1 Councillor, Township of Wilmot
    Paul Britton – MHBC Planning
    Larry Masseo – Activa Holdings Inc.
BELMONT AVENUE RAW WATERMAIN

GAGE AVENUE TO GLASGOW STREET
CITY OF KITCHENER

PRE-CONSTRUCTION
INFORMATION PACKAGE

Public Information Centre
Wednesday, May 9, 2012
5:30 PM to 9:30 PM

at

Region of Waterloo Administrative Headquarters,
150 Frederick Street, Room Number 110,
KITCHENER

Region of Waterloo
1. **What Is The Purpose Of This Public Information Centre?**

The Region of Waterloo (Region) plans to upgrade the existing 300mm diameter raw watermain to 450mm diameter on Belmont Avenue from Glasgow Street to Gage Avenue. The Region has scheduled the construction of this project in 2012.

This evening’s Public Information Centre (PIC) is an opportunity for local residents and business operators to:

- Review and discuss with Region staff the project background;
- Review the construction schedule and limits of work;
- Review the traffic solutions on Belmont Avenue during the construction period;
- Review the public transportation (Grand River Transit - GRT) routes during the construction;
- Discuss local access to businesses and private residences;
- Ask Region personnel any questions related to the construction project;
- Discuss the impacts of the construction on specific properties.

2. **Has The Belmont Avenue Raw Watermain Been Approved Under The Class Environmental Assessment Process?**

Yes. This project is approved as a Schedule C Class Environmental Assessment (Class EA). This gives the Region opportunity to introduce this project to the public and answer questions about this project.

3. **Why Is The Raw Watermain Being Upgraded?**

An existing raw watermain is located along Gage Avenue, Belmont Avenue and Glasgow Street. Raw water is pumped from four production wells through this raw watermain to the Strange Street Pumping Station. This raw watermain has experienced failures in the past and is currently scheduled for replacement and capacity increase. This project consists of the following sections.

3.1 **Upgrading To 450 mm Diameter On Belmont Avenue From Gage Avenue To Glasgow Street**

The existing raw watermain will be replaced with a 450 mm diameter pipe to meet the present and future flow requirements. This section will be completed in 2012.

3.2 **Upgrading To 450 mm Diameter On Glasgow Street From Westmount Road To Knell Drive**

This section of 450 mm diameter raw watermain on Glasgow Street will be constructed in 2013 in conjunction with road reconstruction by the City of Kitchener.
3.3 Upgrading To 450 mm Diameter On Glasgow Street From Belmont Avenue To Westmount Road

This section of 450 mm diameter raw watermain on Glasgow Street will be constructed in 2014 in conjunction with road reconstruction by the City of Kitchener.

4. How Will The Raw Watermain Be Upgraded?

This project consists of the following two components including pavement restoration.

4.1 Construction Of A New 450 mm Diameter Raw Watermain

The construction of the 450 mm diameter raw watermain will be on a new alignment, offset from the existing raw watermain alignment by 1.5 metre (approximate) on the eastern side of the road. The proposed watermain will be connected at the intersection of Belmont Avenue and Glasgow Street with the existing raw watermain. The other end of the watermain will be connected at the intersection of Belmont Avenue and Gage Avenue with the new raw watermain that was installed in 2009. The existing raw watermain on Belmont Avenue will be abandoned, capped at both ends, and filled with lean concrete.

4.2 Pavement Restoration Over Watermain Trenches

Once construction of the raw watermain has been completed, the base layers of asphalt and granular materials will be restored within the watermain trench. The surface layer of asphalt pavement will be removed and replaced over the entire driving lane affected by the watermain construction.

5. How Much Will The Belmont Avenue Raw Watermain Cost And How Is It Funded?

The estimated cost of the project is $600,000, which includes construction of the watermain, road restoration and all engineering costs. This cost will be funded from the Region of Waterloo Water User Rates and Regional Development Charges.

6. What Is The Expected Duration Of The Construction Project?

The total construction duration is expected to be approximately two months. The work is scheduled to start in July 2012 with completion toward the end of August 2012.

7. Will Traffic Be Disrupted During Construction Of The Watermain?

Two-way traffic will be maintained during construction of the watermain on Belmont Avenue. Access to private properties and business establishments from Belmont Avenue will be maintained during construction. Signage will be posted at appropriate locations in order to direct members of the public to businesses during the construction.

Traffic signage will be installed at Gage Avenue and Glasgow Street to assist motorists. All necessary information regarding temporary bus stop locations will be posted at the current bus stops well ahead of any changes required by the construction, and will also be posted on the Region’s web site: www.grt.ca. Pedestrian traffic will not be affected during the construction.
8. **How Will Property Access Be Maintained During Construction?**

The Contractor will be required to maintain local access to all properties fronting Belmont Avenue during the construction.

For commercial and institutional properties with multiple driveways at least one access will be maintained at all times. Depending on the work that is underway, it will be necessary to close individual driveways for short periods of time (generally one day or less). The Contractor will provide advance notice of all such closures, coordinate the timing of the closure with the property owner, and arrange for alternate vehicle parking locations.

9. **Will Water/Sanitary Services Be Disrupted During Construction?**

This project is to replace the raw watermain. The existing distribution watermain and sanitary system will not be disrupted.

10. **Will Water Pressure Be Affected After Construction?**

Existing water pressures will not be affected after construction.

11. **How Will Garbage And Recyclables Collection Be Done During Construction?**

During periods when Belmont Avenue is not accessible to garbage and recyclables collection vehicles, the Contractor will collect containers from the front of property, move them to the end of the construction zone for collection and return them to the property following collection. Individuals will be requested to clearly label their containers with their address to ensure proper return.

12. **How Will Noise, Vibration, And Dust Be Controlled During Construction?**

There will be the potential for noise, vibration, and dust during construction of the watermain and road improvements. In general, the Contractor will be required to undertake the following measures during construction:

- Restrict construction activities to normal working hours from 7 a.m. to 7 p.m. Monday through Friday. (It is possible that the contractor will work some Saturdays);
- Establish and maintain site procedures such that noise levels from construction areas are minimized and comply with the City of Kitchener Noise By-law and Ministry of the Environment (MOE) standards;
- Minimize dust nuisance resulting from construction activities at all locations on the site;
- Fully comply with the Occupational Health and Safety Act.

13. **How Will Driveways, Lawns, Retaining Walls And Landscaping Be Reinstated?**

All driveways, lawns, retaining walls and landscaping, if damaged or disturbed by construction, will be reinstated to pre-construction or better condition. Lawns will be reinstated with topsoil and sod.
14. **How Can I Voice My Comments At This Stage?**

The Region of Waterloo values your comments and is interested in receiving feedback from property owners and business owners about this construction project. If you wish to provide any information, or to further discuss your situation, you can contact the project staff noted below by phone, mail, fax or email.

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

<table>
<thead>
<tr>
<th>Badrul Khan, P. Eng.</th>
<th>or</th>
<th>Mr. Hennie Fourie, P. Eng.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Project Manager, Design &amp; Construction</td>
<td>Manager, Environmental Projects, Design &amp; Construction</td>
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<tr>
<td>Regional Municipality of Waterloo</td>
<td>Regional Municipality of Waterloo</td>
<td></td>
</tr>
<tr>
<td>150 Fredrick Street, 6th Floor</td>
<td>150 Fredrick Street, 6th Floor</td>
<td></td>
</tr>
<tr>
<td>Kitchener, Ontario N2G 4J3</td>
<td>Kitchener, Ontario N2G 4J3</td>
<td></td>
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<tr>
<td>Tel: 519-575-4757 ext. 3648</td>
<td>Tel: 519-575-4488</td>
<td></td>
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<tr>
<td>Fax: 519-575-4430</td>
<td>Fax: 519-575-4430</td>
<td></td>
</tr>
<tr>
<td>E-mail: <a href="mailto:bkhan@regionofwaterloo.ca">bkhan@regionofwaterloo.ca</a></td>
<td>E-mail: <a href="mailto:hfourie@regionofwaterloo.ca">hfourie@regionofwaterloo.ca</a></td>
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</tbody>
</table>
TO: Chair Jim Wideman and Members of Planning and Works Committee
DATE: May 8, 2012
FILE CODE: A02-30/PW
SUBJECT: MUNICIPAL UTILITY RELOCATION – COST SHARING FOR RAPID TRANSIT

RECOMMENDATION:
For information only

SUMMARY:

On June 15, 2011 Regional Council approved light rail transit ("LRT") as the preferred technology from Conestoga Mall in the City of Waterloo to the Ainslie Street Terminal in the City of Cambridge. The approved Stage 1 of the project will include LRT from Conestoga Mall in Waterloo to Fairview Park Mall in Kitchener and is slated for construction in 2014 with completion in 2017. Stage 2 of the project is from Fairview Park Mall in Kitchener to the Ainslie Street Terminal in Cambridge. Although the construction timing of Stage 2 is unknown, the Environmental Process is slated to commence in 2014.

Construction of Stage 1 will warrant relocation or replacement of some of the existing municipal utilities which are located within the proposed rapid transit corridors in Kitchener and Waterloo, while Stage 2 will warrant relocation or replacement of some of the existing municipal utilities which are currently located within the proposed rapid transit corridors in the south part of Kitchener and in Cambridge. A map of the Stage 1 and Stage 2 corridors is attached hereto and marked as Schedule “A”.

Over the last several months staff from each of the City of Waterloo, the City of Kitchener, the City of Cambridge and the Region of Waterloo have collaborated with one another on the general principles for when relocation or replacement of existing municipal infrastructure is required. Some of the existing infrastructure along the rapid transit corridors is nearing or exceeding its anticipated life expectancy and is already budgeted by the local municipality for replacement due to its age/condition, while some infrastructure needed to be relocated due to the construction and operation of the rapid transit system.

Along with this, cost sharing principles for the accommodation or relocation of municipal utilities as it relates to the construction and operation of the LRT project were investigated. To capture the context of the cost sharing discussion and decisions staff is proposing to develop a Memorandum of Understanding ("MOU") between the Region and the Cities of Waterloo and Kitchener as they both have a significant amount of existing buried infrastructure which will warrant relocation or replacement during Stage 1 of the LRT. Although City of Cambridge staff have been involved in discussions with the Region of Waterloo and the Cities of Waterloo and Kitchener, and their comments have been integral to the decisions made to date, it has been agreed by staff from the Region of Waterloo and the City of Cambridge that a MOU for the cost sharing for the accommodation or relocation of municipal utilities in Cambridge will be pursued closer to the time when construction of Stage 2 LRT, which goes to the Ainslie Street Terminal in Cambridge, is to occur.
REPORT:

Background

Throughout 2011 and 2012, Regional staff has been meeting with staff from local area municipalities for discussion about the construction and operation of the proposed rapid transit system and its influence on existing municipal infrastructure. Although the initial discussions which took place were based on “functional level” details which were provided through the drawings generated by the Transit Project Assessment (“TPA”), additional details about location, age and in some cases the known condition of existing buried infrastructure within the rapid transit corridors was provided. At this early stage, it was apparent that some of the existing infrastructure would require replacement due to its age/condition, while some infrastructure needed to be relocated due to the construction and operation of the rapid transit system. Although some of the existing infrastructure along the rapid transit corridors, which warrants relocation or replacement, is nearing or exceeding its anticipated life expectancy local municipalities had already budgeted and proposed replacement of the aged infrastructure within their capital programs.

Guiding principles relating to separation between the LRT rapidway and existing/proposed/relocated watermains and sanitary sewers have been developed between the Region of Waterloo and the area municipalities. In general, the guiding principles identify that existing watermains and sanitary sewers need to be relocated out from under the proposed rapidway to a horizontal location of at least 2.5 metres from the rapidway. It is felt that if these separations can be achieved, then operations and maintenance staff can safely work on the buried infrastructure while minimizing disruption to the operation of the LRT.

During the summer and fall of 2011, a detailed topographic survey of the Stage 1 LRT corridors, which is from Conestoga Mall in Waterloo to Fairview Park Mall in Kitchener, was completed. Included in the topographic survey was a comprehensive field locate of all existing underground municipal and private infrastructure. Once completed, the rapid transit functional design was overlaid such that a more accurate assessment of whether relocation or replacement of existing municipal and private infrastructure could be completed. This information was provided to staff of the cities as well as all other private utilities which are tenant to the rapid transit corridors.

In the fall of 2011, Region of Waterloo staff met again with staff from the area municipalities to reach agreement on guiding principals of separation between existing municipal infrastructure and the proposed LRT rapidway. At this time it was also agreed that a Memorandum of Understanding (MOU) be created to outline the general principles for cost sharing for the accommodation or relocation of municipal utilities as it relates to the LRT project.

If it is determined that existing water and/or sanitary infrastructure needs to be relocated to accommodate the construction and/or operation of the LRT project, the following table applies:
<table>
<thead>
<tr>
<th>Age (from 2014)</th>
<th>Years of Construction</th>
<th>Proposed Cost Sharing</th>
</tr>
</thead>
</table>
| 1-40           | 1974 to 2013          | - Region of Waterloo pays 100% to relocate, rehabilitate, replace, and/or reinforce, in kind, except where monies are currently allocated in the municipal 10 year program.  
- Where monies are currently allocated, replacement is to be 100% funded from these monies. Region of Waterloo would only fund the additional costs related to relocation.  
- Area Municipality pays 100% for any upgrade in size and addition or change of appurtenances. |
| 41-80          | 1973 to 1934          | - Region of Waterloo shares 50% of the cost with the area municipality to relocate, rehabilitate, replace, and/or reinforce, in kind, except where monies are currently allocated in the municipal 10 year capital program.  
- Where monies are currently allocated, replacement is to be 100% funded from these monies. Region of Waterloo would only fund the additional costs related to relocation.  
- Area Municipality pays 100% for any upgrade in size and addition or change of appurtenances. |
| Over 80 years  | Prior to 1934         | - Area Municipality pays 100%. Area Municipality pays 100% for any upgrade in size and addition or change of appurtenances. |

The City of Waterloo and the City of Kitchener have reviewed the detailed topographic survey drawings, and using the guiding principles developed between the Region and the area municipalities, a determination of which infrastructure will need to be relocated has been made. By applying the principles found in the table above, the City of Waterloo and the City of Kitchener have estimated both their share and the Region’s share for relocation of their infrastructure. Staffs from both cities have recently approached their Councils to advise of the status of the municipal utility relocation discussions with the Region and to seek approval to work with the Region in the pursuit of a MOU.

**Next Steps**

Staff anticipates that the next steps will include:

May-Aug 2012: refine the functional design to confirm utility relocation needs;  
June 2012: finalize terms of MOU with City of Waterloo and City of Kitchener;  
July-September 2012: discussion with Cities relating to timing/responsibilities for work identified; and  
October 2012: prepare final agreement for Council approval.

**CORPORATE STRATEGIC PLAN:**

The report supports Focus Area 3.1 of Council’s Strategic Focus: Implement a light rail transit system in the central transit corridor, fully integrated with an expanded conventional transit system.
FINANCIAL IMPLICATIONS:

The Region of Waterloo rapid transit budget includes $130 million for its share of costs to relocate existing municipal and private utility infrastructure associated with Stage 1 of the LRT. It is anticipated that the Region’s share of all municipal and private utility relocation costs associated with Stage 1 of the LRT will not exceed the stated budget.

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. Consultation has taken place with staff from Transportation Division as well as Design and Construction Division.

ATTACHMENTS

Appendix A – Region of Waterloo LRT Key Plan

PREPARED BY:  Greg Proctor, Project Manager, Rapid Transit

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Transit Services (GRT)

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

DATE: May 8, 2012
FILE CODE: M04-50

SUBJECT: GRT CUSTOMER ISSUE REPORT

RECOMMENDATION:
For information.

SUMMARY:
This report provides a comparative summary and analysis of the GRT customer issues for the period 2009 to 2011 along with information on the use of the EasyGO automated customer information services such as the web based transit trip planner and the automated telephone and text messaging services for scheduled information.

REPORT:
Below is a comparative summary of GRT customer issues for the period 2009 to 2011 in four broad service categories. In the attached GRT Customer Service and Trends report, each of these service categories is graphically and numerically divided into various sub-categories along with a brief overview and analysis.

In addition a comparative summary of the customer use of the automated EasyGO services is also provided. This technology provides customers with access to schedule information though an automated phone service or by text message and also provides a trip planner on the website www.grt.ca. With the completion of GPS technology expected on all buses by the end of 2012, transit schedule information will eventually be offered based on actual bus time instead of scheduled information.

<table>
<thead>
<tr>
<th>Category</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</thead>
<tbody>
<tr>
<td>Fares</td>
<td>77</td>
<td>74</td>
<td>78</td>
</tr>
<tr>
<td>Bus Stop Environment</td>
<td>343</td>
<td>288</td>
<td>432</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>1,432</td>
<td>1,346</td>
<td>1,541</td>
</tr>
<tr>
<td>Operations</td>
<td>1,485</td>
<td>1,327</td>
<td>1,571</td>
</tr>
<tr>
<td>Total</td>
<td>3,337</td>
<td>3,035</td>
<td>3,622</td>
</tr>
</tbody>
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Total Ridership: 16,599,974 18,050,000 19,722,186

Number of issues per 100,000 riders: 20 17 18

EasyGO usage:

<table>
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<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web based trip plans</td>
<td>436,578</td>
<td>779,610</td>
<td>998,386</td>
</tr>
<tr>
<td>Text message schedule inquiries</td>
<td>429,931</td>
<td>1,363,540</td>
<td>2,912,705</td>
</tr>
<tr>
<td>Automated telephone schedule inquires</td>
<td>1,024,257</td>
<td>961,473</td>
<td>828,386</td>
</tr>
</tbody>
</table>
Despite the significant increase in service hours in September, a 5% fare increase in July and the use of social media to enhance the dialogue with transit customers, the number of recorded issues per 100,000 riders remained stable in 2011. The 70,000 annualized hours of new services in 2011 included the introduction of an iXpress route along Fischer-Hallman which resulted in moving the popular Route 12 to Westmount Road, prompting many inquiries. There were also more customers relying on GRT services in 2011 as ridership grew by 9% to 19,722,186 annual riders.

GRT attempts to respond to all operational issues within 24 to 72 business hours of receipt. The information obtained from these customer issues is used to improve service delivery, enhance customer service training and to develop rider awareness programs.

This feedback has been instrumental in identifying customer demand for additional bus service in certain areas of the community such as around the Universities or into the Doon South area and also to identify where service hours need to be extended on holidays, weekends or during peak periods to better meet community demand. Issues regarding the environment at bus stops, including cleanliness or requests for shelters, benches or landing pads are also generated and managed through this process. In addition, employee compliments and performance related concerns are often prompted through this customer driven process.

CORPORATE STRATEGIC PLAN:

Strategic Objective – Service Excellence: Foster a culture of citizen centered customer service that is responsive to community needs and suggestions.

FINANCIAL IMPLICATIONS:

The cost of updating and maintaining the GRT customer service database and the analysis of this information is included in the annual operating budget.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation Planning also utilize this customer information to assist with transit service planning.

ATTACHMENTS

GRT Customer Service Trends and Issues

PREPARED BY: Eric Gillespie, Director, Transit Services

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

In 2011 there were 587 more customer issues recorded than in 2010 (3,622 vs. 3,035). There are a number of reasons for this increase in 2011 including; using social media to encourage customer feedback, introducing new routes, extending service hours on some bus routes, making routing changes, and introducing a transit fare increase. There were also more customers relying on GRT services last year as ridership grew by 9% to 19,722,186 annual riders.

In 2011 GRT launched their Twitter and Facebook accounts. These social media sites allow transit information such as service delays, detours and upcoming events to be communicated in a timelier manner. Social media sites also allow customers to provide feedback to GRT in a more informal forum. Both Twitter and Facebook now assist customers by linking them to an online feedback form on the GRT website to provide more detailed information. In 2011 GRT received 199 more email correspondents than the previous year.

A major service change was also launched in 2011 with the introduction of 70,000 hours of new bus service. The hours of service were extended on some bus routes, while new routes such as a second iXpress route on Fischer-Hallman Rd were introduced. As part of this service expansion some bus routes were also modified such as the popular Route 12 which now operates along Westmount Rd instead of Fischer-Hallman. Service was also introduced to the new Conestoga College campus and a large number of university specials were added to help alleviate passenger congestion which had been a major area of customer concern in late 2010 and early 2011. While promoting the route changes, service expansion and the 5% fare increase, customers were encouraged to provide comments, suggestions and concerns.

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<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership:</td>
<td>16,599,974</td>
<td>18,050,000</td>
<td>19,722,186</td>
</tr>
<tr>
<td>Customer Issues:</td>
<td>3337</td>
<td>3035</td>
<td>3622</td>
</tr>
<tr>
<td>Issues per 100,000 riders:</td>
<td>20</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>
Below is a visual representation of the number of issues received for the period 2009 to 2011 and a breakdown of the number of issues received each year by service category.

GRT summarizes customer issues into four main service categories. These categories are Operations, Service Delivery, Bus Stop Environment and Fares which are discussed in detail below.

**Operations**

43.3% or 1,571 customer issues in 2011 were categorized as operational concerns. These issues include on board incidents/accidents, customers missed at bus stops, driving performance and interpersonal concerns. The percentage of customer issues in the operations category has remained
stable over the past few years representing 42% – 49% of all customer issues. Route changes, passenger loads, construction and detours all affect the number of issues received in this category.

GRT attempts to respond to all operational issues within 24 to 72 business hours of receipt. GRT reviews each issue and the information obtained from these issues are then used to assist in the development of customer service training, rider awareness programs and new customer service strategies.

A summary of these categories for 2011 are outlined in the chart below.

Service Delivery:

Service Delivery concerns account for 42.5% or for 1,541 customer issues received in 2011. Customer concerns regarding schedule adherence was the primary issue followed by requests for new service. In 2011, schedule adherence concerns were directly related to the increase in ridership among university and college students. Increased student enrollment and rider demand at both universities and Conestoga College contributed to issues with crowded buses and schedule adherence, especially during peak travel periods. GRT also recorded a number of requests for new service within the urban area as well as requests for service to some of the outlying townships.
Many customers are choosing transit as a viable means of transportation and are requesting bus service be extended to better meet their travel needs.

Bus Stop Environment:

Issues relating to the Bus Stop Environment category include requests for new stops, shelters and the maintenance of existing bus stop locations. Bus stop environment issues account for 11.9% or 432 customer issues in 2011. There has been an increase in the number issues relating to the Stop Condition. In 2011 many stops were moved and replaced due to various route changes. The introduction of new routes and changes made to existing routes required new stop amenities as well.
Fares

The majority of issues in this category relate to the criteria and use of transit fare products. In 2011 2.1% or 78 issues were generated in the Fares category.

GRT's Agenda for the Future

GRT is focused on improving both the quality and the accessibility of services provided to customers. With the delivery of 20 replacement buses this summer the GRT fleet will be fully low floor and accessible. In addition, GRT is implementing accessible web-based trip schedules, permanent priority seating and installing cameras on the buses. These endeavors will improve accessibility, service quality and public safety.

GRT is also preparing for the introduction of light rail. This was evident in 2011 with the introduction of a new iXpress service along the Fischer-Hallman corridor. This is the first in a series of seven express routes to be introduced over the next few years to implement a GRT bus network to better support the aBRT or LRT services.

These future improvements will have an impact on transit riders and will provide ongoing opportunities for continued dialogue with our customers and the broader community.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: May 8, 2012   FILE CODE: L04-20

SUBJECT: SOUTHERN ONTARIO LOCOMOTIVE RESTORATION SOCIETY – EXTENSION OF AGREEMENTS FOR OPERATION OF TOURIST TRAIN

RECOMMENDATION:

THAT the Regional Municipality of Waterloo extend, for an additional one year term, the existing agreements to permit the Southern Ontario Locomotive Restoration Society to operate a tourist train and locomotive restoration operation on the Waterloo Spur Railway owned by the Regional Municipality of Waterloo as described in Report CR-RS-12-026/E-12-056 dated May 8, 2012 with such agreements to be to the satisfaction of the Regional Solicitor.

SUMMARY:

NIL

REPORT:

The Region of Waterloo has entered into two agreements with Southern Ontario Locomotive Restoration Society (SOLRS), a non-profit corporation that operates the Waterloo Central Railway between Waterloo and St. Jacobs. The recreational train service has been in operation since the summer of 2007.

The first agreement (the Operating Agreement) is an agreement that authorizes SOLRS to use the Waterloo Spur railway line owned by the Region to operate a tourist train service from the City-owned train station in Waterloo to St. Jacobs. This agreement expires on June 25, 2012. SOLRS has expressed an interest in renewing this agreement and City of Waterloo staff has advised that they intend to recommend the extension of the existing agreement between the City of Waterloo and SOLRS for use of the railway station for an additional one year period as well.

The second agreement (the Building License Agreement) is a license agreement permitting SOLRS to construct and operate a building on Region-owned lands in the Village of St. Jacobs adjacent to the Waterloo Spur railway. A building has been constructed on these lands by SOLRS which facilitates the operation of its recreational train service. This agreement, between the Region of Waterloo and SOLRS, expires in June of 2012. Regional staff recommends extending the term of both agreements for a one year period until June of 2013.
There are a number of factors that could affect the Region’s decision to extend both agreements for a longer term beyond June of 2013. Approximately 4.5 kilometers of the Waterloo Spur will be required to accommodate the LRT system from Waterloo Square to Northfield Drive and it is unlikely that the LRT and the SOLRS service could both operate on that section of the spur, however it would be possible for SOLRS to continue its tourist train operation from Northfield Drive north to St. Jacobs and Elmira. Construction of the LRT could commence as early as 2014. Regional staff has kept SOLRS apprised of the Region’s LRT project and its implications for the continued use of the Waterloo Spur.

CORPORATE STRATEGIC PLAN:

These agreements support the strategic objective “optimize the use of existing infrastructure and ensure it is adequately maintained”.

FINANCIAL IMPLICATIONS:

The Region of Waterloo is reimbursed by SOLRS for any direct costs incurred in supporting the operations of the recreational train service and receives an annual fee of $1,500 for use of the Regional lands in St. Jacobs.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY:  
John Hammer, Director of Transportation  
Jeff Schelling, Solicitor (Corporate)

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

DATE: May 8, 2012

FILE CODE: T01-20/52

SUBJECT: RESERVED CYCLING LANES, BRIDGE STREET (REGIONAL ROAD 52) FROM NORTHFIELD DRIVE (REGIONAL ROAD 22) TO LEXINGTON ROAD, CITY OF WATERLOO

RECOMMENDATION:

THAT the Regional Municipality of Waterloo amend Traffic and Parking By-law 06-072, as amended, to:

   a) Add to Schedule 1, No Parking Anytime on both sides of Bridge Street (Regional Road 52) from Northfield Drive (Regional Road 22) to Lexington Road; and

   b) Add to Schedule 24, Reserved Bicycle Lanes Anytime on both sides of Bridge Street (Regional Road 52) between Northfield Drive (Regional Road 22) and Lexington Road in the City of Waterloo, as outlined in Report E-12-053 dated May 8, 2012.

SUMMARY:

NIL

REPORT:

Regional staff were requested to review the need for reserved cycling facilities on Bridge Street between Northfield Drive and Lexington Road. It was cited that this section of Bridge Street currently has the width to allow for reserved cycling facilities and was requested that signage and pavement markings be installed to denote a reserved cycling lane on both sides of Bridge Street.

Currently, reserved cycling lanes are installed on both sides of Bridge Street from University Avenue to Lexington Road. Installing reserved cycling lanes on this section of Bridge Street will provide continuous reserved cycling lanes from Northfield Drive to University Avenue.

The reserved cycling lanes will require the removal of existing on-street parking on both sides of Bridge Street from Northfield Drive to Lexington Road. From November 28 to December 12, 2011, Transportation staff placed information signs along Bridge Street requesting comments on the proposed reserved cycling lanes from the public through the Region’s website or via telephone; an internet questionnaire was setup to receive comments and a phone number was provided. As a follow up to the web survey, 45 questionnaires were hand delivered to residents fronting Bridge Street within the proposed limits, also requesting comments on the proposed changes.

A total of 18 responses were received which show that 56% (10 of 18) are in favour of installing reserved cycling lanes on both sides of the road. Those residents in opposition of reserved cycling lanes support on-road parking. A parking review was conducted in the area of Bridge Street.
between Lexington Road and Northfield Drive on three occasions for a one hour period; Tuesday April 17th (7 pm to 8 pm), Thursday April 19th (7 pm to 8 pm), and Friday April 2oth (1:00 pm to 2:00 pm). Staff did not observe vehicles parked on the roadway at any time during this study.

The questionnaire indicated that proposed cycling lanes would be installed from Northfield Drive to 34 metres south of Hillside Street. Comments received from City of Waterloo staff and residents in favour of the reserved cycling lanes requested that Regional staff review extending the limits of the proposed cycling lanes to Lexington Road. In this regard, the continuous cycling lane between Northfield Drive and Lexington Road will require the removal of the existing southbound right-turn lane in order to provide sufficient width for cyclists and motorists. A review of the operational service levels with the removal of the right-turn lane does not indicate any significant concerns. Figure 1 illustrates the proposed reserved cycling lanes and no parking anytime restriction along Bridge Street between Northfield Drive and Lexington Road.

City of Waterloo staff has been contacted and support the amended proposal to remove the southbound right-turn lane and installing a continuous cycling lane from Northfield Drive to Lexington Road. Figure 2 illustrates the proposed lane configuration of the southbound approach to Lexington Road without a right-turn lane.

Figure 1 - Proposed Reserved Cycling Lanes/No Parking Anytime on Bridge Street
CORPORATE STRATEGIC PLAN:

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

FINANCIAL IMPLICATIONS:

The cost of installing the reserved cycling lanes along Bridge Street between Northfield Drive and Lexington Road is approximately $5000 and is provided for in the Region’s transportation budget.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Council and Administrative Services Division will be required to prepare the amending by-law.

ATTACHMENTS:

NIL

PREPARED BY:  Valerie Pearcey, Engineering Technologist (Traffic)

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
The Safe Drinking Water Act (SDWA), 2002, builds on Justice O’Conner’s underlying principles and recognizes that the people of Ontario are entitled to expect that their drinking water will be safe. One key component of the SDWA includes the Statutory Standard of Care for municipal owners. This Standard of Care provision under the Act will come into force by the Ministry of Environment on January 1, 2013. The Ministry has issued a guidance manual for municipal council, Taking Care of your Drinking Water. This report provides a brief overview of the responsibilities under the Act as detailed in the guidance manual. Copies of this document were sent to all Councillors last year by the Province. If you have not received a copy, staff can provide you with one. A copy has also been placed in the Councillors’ library.

Based on the definition of Owner in the SDWA, Region of Waterloo Council is considered the Owner of the Region’s water supply systems and the North Dumfries and Wellesley water distribution systems. As the Owner, Council has the responsibility for oversight of the water systems and to ensure informed decision-making associated to the policies, management and processes related to the water system. The Region’s Water Service staff is considered the operating authority providing these operating services. The operating authority is responsible for the day to day operations of the drinking water system, its management, maintenance and alterations. A detailed summary of the roles and responsibilities for the operating authority have been documented under the Drinking Water Quality Management System (DWQMS) which was approved by Council in report E-11-045.

Several key duties for owners and operating authorities include providing drinking water that meets the provincial Drinking Water Quality Standard, compliance with the SDWA and associated regulations, and to ensure appropriate management of the water systems. The SDWA defines the legal responsibility for decision-making in section 19 of the Act. This section requires that the owners and operating authorities exercise the level of care, diligence and skill with regard to a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation and that the owners and operating authorities exercise this due diligence honestly, competently and with integrity.
The three key messages for Municipal Councillors are as follows:

1. **It's Your Duty:** The statutory standard of care for individuals who have oversight responsibilities for municipal drinking water systems can extend to Municipal Councillors as of January 1, 2013. There are legal consequences for negligence.

2. **Be Informed:** Ask questions. Get answers. Councillors don’t have to be an expert in drinking water operations, but they do need to be informed about them. Council decisions can have an impact on public health. Councillors should seek advice from those with expertise and act prudently on that advice.

3. **Be Vigilant:** Complacency can pose one of the greatest risks to drinking water systems. It is critical that councillors never take drinking water safety for granted or assume all is well with the drinking water systems under their care and direction. The health of the community depends on diligent and prudent oversight of its drinking water systems.

One of the more significant duties in section 11 of the SDWA for the Owner is to ensure attainment of a drinking water licence for their municipal drinking water systems and to approve a financial plan. The licence requirements include the accreditation of the operating authority and Ministry approval of the Drinking Water Quality Management System. The Region of Waterloo received the Drinking Water Licences for its 15 drinking water systems in May 2011. The quality management system documents the procedures for complying with sampling, analyses, monitoring, notification and reporting requirements identified in this section of the Act. To meet the financial requirements, the Region’s financial plan for the drinking water systems was presented to and approved by Council in June 2011 in report E-11-046.

Region staff supports this Standard of Care through the development of the DWQMS, a renewable Five Year Financial Plan and the Asset Management Program. The following reports to Council will support the Standard of Care component of the SDWA and state of good repair of the Region’s water infrastructure:

- Water Quality Annual Report approved by February 28
- Summary Report approved by March 31
- DWQMS – Annual Management Review, delegated to senior management staff including summary of audit results – presented annually
- Approval of Financial Plan every three years.

A course for Municipal Councillors and Mayors has been developed by the Province and the training is delivered by the Walkerton Clean Water Centre. This course is designed to inform Municipal Councillors and officials of their oversight responsibilities under Section 19 of the SDWA. Several examples of waterborne disease outbreaks are examined which highlight the importance of competent oversight. The course also describes some general information about drinking water systems, the multi-barrier approach to drinking water treatment and some of the risks associated with drinking water production and distribution. Staff will arrange for this training for members of Council and interested senior management in Fall 2012.
CORPORATE STRATEGIC PLAN:

Compliance with the Safe Drinking Water Act and Standard of Care supports Focus Area 1: Protect the Quality & Quantity of our Drinking Water Sources.

FINANCIAL IMPLICATIONS:

All costs related to the Municipal Drinking Water Licence have been budgeted for in the 2012 Water Supply Operating Budget, at a cost of $1500 for up to 25 participants.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Legal department.

ATTACHMENTS:

Nil

PREPARED BY: Olga Vrentzos, Manager, Water Operations and Maintenance

APPROVED BY: Thomas Schmidt, Commissioner, Transportation & Environmental Services
REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Water Services

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

DATE: May 8, 2012

FILE CODE: C06-60/PWC/WS.12

SUBJECT: 2011 MANAGEMENT REVIEW FOR QUALITY MANAGEMENT SYSTEM – WATER SERVICES

RECOMMENDATION:

For Information Only

SUMMARY: NIL

REPORT:

In response to the Walkerton Inquiry, the Safe Drinking Water Act, 2002 has a requirement for owners of large and small municipal drinking water systems to obtain a Municipal Drinking Water Licence in order to use or operate a drinking water system.

For the Ministry of Environment (MOE) to issue a Municipal Drinking Water Licence, a municipality requires establishment of a DWQMS, accreditation of the operating authority, an approved Financial Plan, valid Permit(s) to Take Water and Drinking Water Works Permit(s). The requirements for the DWQMS were released by the Province in October 2007 and were legislated under Ontario Regulation 188/07. The DWQMS Standard provides a framework for the development and implementation of a quality management system for drinking-water systems. The DWQMS follows the framework of the ISO management system standards through the adoption of the “Plan-Do-Check-Improve” cycle and brings a strong focus to the concepts of internal audit, measurement, monitoring and maintenance. The standard requires a drinking-water system owner create an operational plan based on 21 elements identifying roles and responsibilities at all levels within the organization that have input to the operation of its drinking-water system. The key requirements of the DWQMS Standard are as follows:

- Establish and endorse a DWQMS policy;
- Complete a risk assessment and implement adequate controls;
- Define roles, responsibilities, and authorities including owners, top management and the DWQMS Management System Representative;
- Establish competency and training requirements for personnel whose work affects water quality;
- Establish procedures for communication;
- Ensure reliable, consistent procurement of supplies and services;
- Monitor water quality parameters and equipment performance;
- Establish emergency response procedures;
- Conduct internal audits and annual reviews; and
- Provide continuous improvement
The DWQMS policy was approved by Regional Council in 2008 (P&W Report E-08-007) with the key objectives of continuous improvement, compliance to legislation and communication to staff on policies and programs. A financial plan was presented and approved by Council in 2011 which confirmed our financial sustainability (E-11-046). An update of the DWQM program and confirmation of our Municipal Drinking Water Licence was summarized in P&W report E-11-045. The application for full accreditation was submitted this January 2012 to the Ministry of the Environment and we are currently waiting for the final third party audit to complete this licensing process.

One of the requirements for accreditation is to conduct a management review every 12 months. The management review occurred January 3, 2012 at the Mannheim WTP and included the compliance group (Frank Infante – Supervisor, Process and Compliance, Peter Clarke – Water Quality Specialist, Michael Mortimer – Water Quality Specialist, Tim Walton – Supervisor, Process and Compliance) and top management which as defined by the QMS procedure are Thomas Schmidt – Commissioner, Transportation and Environmental Services, Nancy Kodousek – Director, Water Services and Olga Vrentzos – Manager, Operations and Maintenance. The purpose of the management review is to evaluate the QMS for suitability, adequacy and effectiveness, as well as to follow-up from previous management reviews, staff suggestions and review of status of management action items identified throughout the year. There were no staff suggestions and this review is the first in the cycle. As part of the annual management review process, top management is required to provide the results of the management review, identify deficiencies and note decisions and action items to the system owner, Regional Council. The minutes from the management review along with the identified deficiencies, decisions and action items can be found in Appendix A: QMS Management Review 2011 Meeting Minutes.

CORPORATE STRATEGIC PLAN:

Compliance with the Safe Drinking Water Act and attainment of DWQMS supports Focus Area 5: Ensure Operation Effectiveness and Efficiency to enhance responsibility and transparency to citizens.

FINANCIAL IMPLICATIONS: NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE: NIL

ATTACHMENTS

APPENDIX A: Water Services QMS Management Review 2011 Meeting Minutes

PREPARED BY: Olga Vrentzos, Manager, Water Operations and Maintenance

APPROVED BY: Thomas Schmidt, Commissioner, Transportation & Environmental Services
APPENDIX A

Water Services QMS Management Review 2011 Meeting Minutes

DATE: January 3rd, 2012
TIME: 1:00 – 4:00pm
PLACE: MANNHEIM BOARDROOM

PRESENT
Thomas Schmidt, Commissioner, Transportation and Environmental Services
Nancy Kodousek, Director, Water Services
Olga Vrentzos, Manager, Operations and Maintenance
Frank Infante, Supervisor, Process and Compliance
Peter Clarke, Water Quality Specialist
Tim Walton, Supervisor, Process & Compliance
Mike Mortimer, Water Quality Specialist

1) **QMS IMPLEMENTATION STATUS AND AGENDA**
   Frank provided an overview on the QMS implementation and reviewed the purpose and objectives for the Management Review.

2) **REVIEW OF QMS POLICY**
   The QMS policy was reviewed by the management review team. The consensus was that the policy meets the requirements of the DWQMS. No amendments to the policy are required at this time.

3) **DWQMS MANAGEMENT REVIEW REQUIREMENTS**
   All Management Review items required by the DWQMS were discussed via presentation format. Refer to DOCS #1074173 for a detailed description of topics and speakers.

4) **ROUNDTABLE DISCUSSION**
   The review allowed for open discussion throughout the presentations. The following comments were noted as Action Items.

   I. **Management Review reports to Owner** – report to council in conjunction with the Annual Summary Report.
      **Action:** Nancy K. / Olga V. to determine the best format in which to do so.

   II. **Incidents of Regulatory Non-Compliances** – request for more context, including proactive measures taken, with some of the incidents noted. This recommendation will be reflected in the Annual Summary Report as well as subsequent Management Reviews.
      **Action:** Frank I.
III. **Adverse Water Quality Incidents**

   a. **BWA (Roseville)**

      Provide more information on the probable cause of this event including chlorine residuals leading up to the event. This recommendation will be reflected in the Annual Summary Report.

      **Action:** Frank I.

   b. **Chloramine Adverse Events**

      More context on the chloramine adverse events as most are short term spikes and this should be clearly identified. This recommendation will be reflected in the Annual Summary Reports, and subsequent Management Reviews.

      **Action:** Mike M.

IV. **Deviations from Critical Control Limits and Response Actions** – Ensure that future “reservoir overflow” events, required to address off spec water (low UV or chlorine) at the Mannheim WTP, are referenced as “clearwell overflow” events instead.

V. **Results of Infrastructure Review** – It was agreed that the procedure be revised to reflect programs/process currently in place (rural/urban). Reference documents to be provided to the QMS team for inclusion in the procedure.

      **Action:** Nancy K. /Olga V. to provide reference documents to QMS team.

5) **Next Steps**

   QMS Team recommends holding another Management Review in 6 months with Nancy and Olga. Thomas will attend annual review.
TO: Chair Jim Wideman and Members of the Planning and Works Committee  
DATE: May 8, 2012  
FILE CODE: E03-20/4920  
SUBJECT: STRANGE STREET WATER SUPPLY SYSTEM CLASS ENVIRONMENTAL ASSESSMENT UPDATE: NOTICE OF COMPLETION  

RECOMMENDATION:

THAT the Regional Municipality of Waterloo Receive the report entitled “Strange Street Water Supply System Class Environmental Assessment Update” prepared by Stantec, dated March 2012, according to Report E-12-052 dated May 8, 2012;  
AND THAT Transportation and Environmental Services staff issue the Notice of Completion of Environmental Study Report, and file the Environmental Study Report for public review in accordance with Municipal Class Environmental Assessment requirements.

SUMMARY:

The Strange Street Water Supply System (WSS) is located in the central part of the City of Kitchener. In 2001, the Region completed the Kitchener West Side Study Municipal Class Environmental Assessment to evaluate upgrade requirements for the Strange Street WSS and several of the components identified in this 2001 Class EA have been completed.

The 2001 Class EA had a validity of five years from the date of its completion. Thus Regional Council approved and assignment to update the Strange Street WSS Class EA and Preliminary Design (Update) (Report E-10-001, dated January 5, 2010). The Update study reviewed the recommendations from the 2001 Class EA, addressed any regulatory and technical changes since 2001, reviewed the results of the completed infrastructure upgrades and updated the proposed works in the 2001 Class EA for the Strange Street WSS.

Throughout the Update, consultation with the public, adjacent property owners and government agencies was conducted including two public open houses. During the Update the work proposed for the project was re-evaluated against environmental, social, economic and technical criteria.

The major components of the proposed work include:  
• replacement of production well K13 with K13A;  
• replacement of the raw watermain along Glasgow Street and Belmont Avenue;  
• installation of water treatment equipment at the Strange Street pumping station to remove iron and manganese; and  
• centralized chlorination taking place at the existing pumping station instead of the individual and minor modifications to the existing reservoir.

The background studies, evaluation of upgrade requirements, public consultation and proposed work have been documented in an Environmental Study Report (ESR) for this study. Regional staff is recommending that the Notice of Completion be issued and the ESR be made available for 30 day public review in order to complete the required Class Environmental Assessment Process.
REPORT:

Background

The Strange Street Water Supply System (WSS) is located in the City of Kitchener and currently consists of five production wells (K10A, K11A, K13, K18 and K19), a storage reservoir, a pumping station and a raw watermain which transports the water from the production wells to the pumping station prior to distribution. In 2001, the Region completed the Kitchener West Side Study Municipal Class Environmental Assessment for the Strange Street WSS. Many of the components identified in this 2001 Class EA have been completed, including well rehabilitation and the installation of a new production well (K19) and a replacement production well (K11A). A portion of the watermain has been replaced on Gage Avenue, east of Belmont Avenue, and two older production wells (K12 and K17) have been decommissioned and well K18 has been connected to the watermain on Glasgow Street.

Municipal Class Environmental Assessment

The 2001 Class EA had a validity of five years from the date of its completion and thus the Strange Street Water Supply System Class Environmental Assessment was initiated in 2010 with the following objectives:

- Review and update the Class EA completed in 2001;
- Review recommendations from 2001 including those completed to date;
- Investigate current condition of existing infrastructure; and
- Update the preliminary design to for the proposed facilities.

In January 2010, Regional Council approved retaining Stantec Consulting Ltd. to complete the Strange Street WSS Class EA and Preliminary Design Update (Update) (Report E-10-001, dated January 5, 2010). The Update has been conducted in accordance with the Municipal Engineers Association Class Environmental Assessment Process (October 2000, as amended in 2007) including public consultation and preparation of the Environmental Study Report (ESR). The preliminary design report for the proposed facilities will be completed following the filing of the ESR.

As part of the Update a detailed hydrogeologic assessment for the Strange Street Water Supply area was completed. This included a review of the hydrogeologic investigation that was completed in 2000 (as part of the 2001 Class EA), review of any new water quality and production well performance data, and the construction and testing of a new test well. Through this assessment it was confirmed that the sustainable aquifer yield of 120 L/s for the well field, determined in the 2000 groundwater investigation, is still valid. To sustain this yield, the study recommended replacement of K13 as the performance of the existing well has declined beyond rehabilitation. The new test well drilled in Gzowski Park showed a good alternative for future supply, if replacement of any of the existing wells is not feasible.

Similarly to the 2001 Class EA, treatment for iron and manganese removal is still required, as iron and manganese levels are near the Province’s Aesthetic Objective of 0.30 mg/L and 0.05 mg/L respectively.

It was confirmed that the raw watermain along Glasgow Street (Knell Drive to Belmont Avenue West) and Belmont Avenue West (Glasgow Street to Gage Avenue) is a constraint due to the age of the infrastructure and requires replacement. Replacement of the watermain along Glasgow Street will be coordinated with the City of Kitchener as part of their road reconstruction works identified for this area in 2013 and 2014. The watermain on Belmont Avenue will be done by the Region’s Design & Construction Division in 2012.
As required by the Class EA process, the work identified in this project was re-evaluated based on potential impacts on the natural, social, technical and economical environments. The proposed work for upgrading the Strange Street System is summarized below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Proposed Work</th>
<th>Budgetary Cost Estimate</th>
<th>Proposed Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Watermain</strong></td>
<td>Replacement of the raw watermain on Glasgow St. on Belmont Ave W</td>
<td>$1,500,000</td>
<td>2012 - 2014</td>
</tr>
<tr>
<td><strong>2. Wells</strong></td>
<td>Replace K13 with K13A at the existing site.</td>
<td>$600,000</td>
<td>2014 – 2015</td>
</tr>
<tr>
<td><strong>3. Iron and Manganese Treatment</strong></td>
<td>Provide treatment for iron and manganese. Consult with the City of Kitchener Heritage Advisor on any changes to the building façade.</td>
<td>$2,500,000</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td><strong>4. Chlorine Disinfection</strong></td>
<td>Optimize chlorination treatment.</td>
<td>$400,000</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td><strong>5. High Lift Pumps</strong></td>
<td></td>
<td>$1,500,000</td>
<td>2015 - 2018</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$6,500,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Public and Agency Consultation**

The evaluation process incorporated public consultation including two Public Information Centres and meetings with affected property owners. Notices of the Public Information Centres were mailed to property owners within the study area, appropriate agencies and were posted in the Waterloo Region Record.

Public information Centres (PICs) regarding the Update were held June 24, 2010 and October 20, 2011. The PICs were held at Westmount Public School. During the first PIC concerns were expressed by residents living on Knell Drive, the location identified in the 2011 study for a potential future replacement well. The concerns were in regards to the impact a new well house could have on a green area in their neighbourhood. Based on the comments received, other potential locations for the test well were identified and prioritized. The test well was ultimately installed in Gzowski Park located at the corner of Westmount Road and Chopin Drive.

**Next Steps**

Subject to Regional Council approval of the recommendations of this report, a Notice of Completion of the Update will be issued according to Class EA requirements, by means of advertisements in local newspapers and mailings to affected property owners, municipalities and agencies. Upon Region Council approval, the ESR will be made available for a 30 day public review period.

Following approval of the ESR, the Region will proceed with the update of the preliminary design.

**CORPORATE STRATEGIC PLAN:**

Implementation of the updated preferred alternative for the Strange Street Water Supply System Class EA will support the Region’s Strategic Plan Focus Area 2: Growth Management and Prosperity, Strategic Objective 2.2, Develop, optimize and maintain infrastructure to meet current and projected needs.
FINANCIAL IMPLICATIONS:

The Region’s 2012 Ten Year Water Capital Program provides $10.3 million between 2012 and 2018 for the design, construction administration and construction of the Strange Street Water Supply Project. More detailed cost estimates will be developed during the preliminary and detailed design phases of the project.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Pam Law, Project Engineer, Water Services

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

From: Gethyn Beniston, Principal Planner, Transit

Subject: Universal Transit Pass (U-Pass) Program Update

File No: D28-60(A) / UPASS

On March 28, 2012, Regional Council approved report P-12-040, that recommended the Region enter into new agreements with associations representing all full-time undergraduate and graduate students at Wilfrid Laurier University and at the University of Waterloo. The new agreements include:

- An increase in price to $67.50 per term for all full-time students, effective September 1, 2012, and;
- Annual price increases to be determined by the average increase to GRT fares, as approved by Regional Council each year.

The report also noted that only the Wilfrid Laurier University Graduate Students Association remained outstanding and required a referendum to approve the proposed price increase. On March 28, 2012 that referendum was successful, with 59% of voters responding in support of continuing participation in the program.

New formal agreements have been developed in collaboration with all participating student groups and are expected to be executed.

In early February 2012, students at Conestoga College also held a successful referendum in support of entering into a U-Pass program with the Region. The Conestoga College U-Pass was approved by students with a price of approximately $90.00 per term, beginning in September 2013. This is based on the expectation that implementing the program would require approximately 18,000 added annual hours of service and 10 additional buses. The Conestoga College U-Pass would be priced higher than the UW and WLU U-Pass because of the proportionately more dedicated service to this program and therefore higher costs to serve the peripheral location of the Doon and new Cambridge campuses in comparison to the more urbanized setting of the UW and WLU campuses. Students also understand that any agreement between the Region and students at Conestoga College would be conditional on Regional Council approval.

Staff is working to refine potential service proposals to serve the College campuses for Regional Council’s consideration including any financial implications to be incorporated into the 2013 proposed Regional budget.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-Aug-11</td>
<td>P&amp;W</td>
<td>One year review of Report E-11-085 re: Parking on Bleams Road</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>16-Aug-11</td>
<td>G. Lorentz</td>
<td>Staff report back to Committee regarding how many gravel pits in the Region have not been restored.</td>
<td>Planning, Housing &amp; Community Services</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>18-Oct-11</td>
<td>C. Millar</td>
<td>Staff review the aesthetics of the bridge repairs to the Main Street, Cambridge</td>
<td>Transportation and Environmental Services</td>
<td>19-Jun-2012</td>
</tr>
<tr>
<td>10-Jan-12</td>
<td>P&amp;W</td>
<td>Update report on proposed Source Protection Policies after GRCA Source Protection Committee public consultation is completed</td>
<td>Transportation and Environmental Services</td>
<td>Summer 2012</td>
</tr>
<tr>
<td>31-Jan-12</td>
<td>P&amp;W</td>
<td>That staff meet with representatives of the Canadian National Institute for the Blind and the Grand River Accessibility Advisory Committee to develop solutions for the visually- and hearing-impaired at all roundabouts and intersections in the Region of Waterloo.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>G. Lorentz</td>
<td>Staff review the safety of the intersection of Yellow Birch Drive and Ira Needles Boulevard</td>
<td>Transportation and Environmental Services</td>
<td>September 2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>P&amp;W</td>
<td>Report outlining consultant contracts, identifying the tender cost with upset limits and the final cost of the contract.</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>28-Feb-12</td>
<td>J. Brewer</td>
<td>Report regarding reducing the speed limit from 70 kilometers per hour (70 kms) on Can-Amera Parkway approaching the Roundabout at Conestoga Boulevard.</td>
<td>Transportation and Environmental Services</td>
<td>Fall 2012</td>
</tr>
<tr>
<td>Meeting date</td>
<td>Requestor</td>
<td>Request</td>
<td>Assigned Department</td>
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<tr>
<td>07-Mar-12</td>
<td>C. Millar</td>
<td>Town of Halton Hills Resolution regarding Provincial Regulations relating to Commercial Fill Operations referred to staff for review and report.</td>
<td>Planning, Housing &amp; Community Services</td>
<td>Spring 2012</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>D. Craig</td>
<td>Report on possible enhancements similar to what is proposed for Weber Street in Kitchener at the railway overpass for the Delta construction in Cambridge.</td>
<td>Transportation and Environmental Services</td>
<td>14-Aug-2012</td>
</tr>
<tr>
<td>28-Mar-12</td>
<td>Council</td>
<td>Staff to review the operation of the roundabout and report back to Council in 2013.</td>
<td>Transportation and Environmental Services</td>
<td>2013</td>
</tr>
</tbody>
</table>