Present were: Vice-Chair G. Lorentz, L. Armstrong, J. Brewer, T. Cowan, D. Craig, R. Deutschmann, T. Galloway, J. Haalboom, B. Halloran, R. Kelterborn, C. Millar, J. Mitchell, K. Seiling, S. Strickland, and *C. Zehr

Members absent: J. Wideman

MOTION TO GO INTO CLOSED SESSION

MOVED by T. Cowan
SECONDED by D. Craig

THAT a closed meeting of the Planning & Works Committee be held on Tuesday, February 15, 2011 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 Waterloo
b) personal matters about identifiable individuals – committee appointments
c) potential litigation and receiving of legal advice and opinion that is subject to solicitor-client privilege related to a proceeding before an administrative tribunal
d) proposed or pending acquisition of land in the Township of Wilmot

CARRIED

MOTION TO RECONVENE IN OPEN SESSION

MOVED by B. Halloran
SECONDED by C. Zehr

THAT the meeting reconvene into Open Session.

CARRIED

DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

R. Deutschmann declared a non-pecuniary interest under item 5d) due to he and his spouse being shareholders of corporations that have in interest in a property at 10 Duke Street West, Kitchener.
DELEGATIONS

a) E-11-020, Fountain Street - King Street Improvements, Shantz Hill Road to Eagle Street, City of Cambridge Class Environmental Assessment, Recommended Design Concept

Wayne Cheater, Senior Project Manager provided a presentation. He highlighted the project area, the recommended design concept, benefits of the recommended design concept, cost of the recommended design, issues raised by the public and the next steps. He also noted that the project team was not in full agreement with concept 6. A copy of the presentation is appended to the original minutes.

Committee members asked staff why a roundabout is being recommended at a 3 way intersection. W. Cheater noted that roundabouts with high left hand turn work very well. He also noted that the roundabout will reduce delays, be easier for pedestrians to cross because of fewer lanes and would also reduce the severity of collisions.

Committee members asked staff to provide information at this specific intersection with respect to severe collisions.

i) John Doherty, Gowlings and Victor Labreche, Labreche Patterson & Associates appeared before Committee representing 255 King Street Inc./Faisal Susiwala. Victor Labreche gave a brief overview of the property and the Development Plan. He gave a summary of current ROP, City Official Plan and Zoning By-law highlighting that a roundabout at this intersection is not in keeping with the general intent. John Doherty highlighted the impacts of the Region’s preferred Plan, the benefits of Option 2 and also provided and alternative to proposal concept 2 for consideration. A copy of the presentation is appended to the original minutes.

V. Labreche responded to questions from the Committee members regarding providing paper work that would commit to replicating a Heritage Building on this property. He noted that they have met with senior staff from both the City and the Region and have minutes to those meetings discussing the development; he also noted that they could provide something in writing committing to this type of proposal.

ii) John Doherty, Gowlings representing Mr. and Mrs. Huntley the owners of 246 Fountain Street S. and 275 Abraham Street, Cambridge, ON appeared before Committee expressing his clients' concerns with the scope of the Class EA being too narrowly defined and that more comprehensive traffic study should be required for the traffic pressures that originate just outside the actual study area. He noted that the EA did not consider the MTO initiatives (Highway 8 connection, Highway 401 widening), Limerick subdivision and Conestoga College expansion. He also highlighted that there is no evidence for the need for sidewalks on both sides of the roadway. He asked the Committee to defer this project pending further studies. A copy of the presentation is appended to the original minutes.

*C. Zehr left the meeting at 10:15 a.m.

iii) Martin Wiens, Cambridge, ON appeared before Committee on behalf of his family who own property at 319 Shantz Hill Road. He stated that their property will be impacted as part of the preferred design for this project and highlighted how the impact would affect the property. He noted that Shantz Hill was not part of the original study. He provided Committee with a number of suggestions to improve traffic congestion in that area. A copy of the presentation is appended to the original minutes.
Committee members asked for clarification on Shantz Hill Road widening. W. Cheater stated that the realignment of Shantz Hill will occur no matter what design concept is chosen because the curve is tight and the realignment is required. He also noted that Shantz Hill was included in the study.

iv) John Waring, 237 King St. W. Condo Association President did not appear as a delegation.

v) Bob McMullen, Cambridge, ON appeared before Committee noting that he is a long term resident to that area and a cyclist. He expressed his opposition to the plans for pavement changes in and around King-Eagle intersection. He noted his concerns were on the streetscape and pedestrian impact of this project. He suggested that more pavement and lanes don’t benefit pedestrians and that this project is automobile focused. A copy of the presentation is appended to the original minutes.

Some Committee members expressed concerns with the historical aspects of that area being preserved and noted that a roundabout was not in keeping with the streetscape.

Some Committee members highlighted that more information was required on the size of the roundabout, severity of collisions at that intersection, and consideration for alternative concepts. K. Seiling brought forward a motion to refer this issue back to the project team and staff.

MOVED by K. Seiling
SECONDED by J. Mitchell

THAT Report E-11-020 Fountain Street - King Street Improvements, Shantz Hill Road to Eagle Street, City of Cambridge Class Environmental Assessment, Recommended Design Concept be referred to the project team and staff for further consideration.

CARRIED

b) Memo re: South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment Study, City of Cambridge and Township of North Dumfries – Recommended Design Alternative - Supplementary Information to Report E-10-088

E-10-088, South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment, City of Cambridge and Township of North Dumfries - Recommended Design Alternative (deferred from November 16, 2010).

William Gilbert, Senior Project Manager provided a presentation. He highlighted the project team recommended design alternative, discussed issues raised by delegations at the November 16, 2010 Planning and Works meeting, benefits of the recommended design alternative and the next steps. A copy of the presentation is appended to the original minutes.

i) Susan Shackleton, Cambridge, ON appeared before Committee regarding the health and well-being of humans. She noted that roughly 80-100 homes will be backing on to South Boundary Corridor. She highlighted some studies that show the affects of road traffic and air pollution on health. She noted that Waynco Road should be utilized for this corridor. A copy of the presentation is appended to the original minutes.

ii) Kevin Fergin, Stantec Engineering appeared before Committee representing Activa Holdings Inc. with respect to the proposed South Boundary Road and the impacts associated with the preferred alignment on Activa’s proposed draft plan of subdivision. K. Fergin provided a powerpoint presentation that showed his clients’ proposed draft plan and
how the preferred South Boundary alignment would influence that plan. He outlined many factors that would impact his clients’ land and requested that Region’s staff work with his client to refine the corridor alignment across the subject lands in an effort to minimize the loss of developable land. A copy of the presentation is appended to the original minutes.

Committee members inquired about compensation for lands undevelopable because a portion of the land or all of the land is expropriated. Debra Arnold, Regional Solicitor responded that the Region must pay fair market value for those lands, based on the highest and best use for those lands (not necessarily what the property owner hoped would happen with respect to development approvals but rather what, in the opinion of a professional land use appraiser, was the probable highest and best use for those lands.) If a partial taking of lands diminishes the developability of the remaining parcel still owned by the property owner, then under the Expropriations Act the property owner may be entitled to damages for injurious affection, i.e. damages for the diminution in value of the remaining lands.

Committee members were concerned with delegations and Forward Baptist Church not being satisfied with the project. D. Craig brought forward a motion to refer the project back to staff.

MOVED by D. Craig
SECONDED by T. Galloway

THAT Report E-10-088, South Boundary Corridor and Franklin Boulevard Extension Class Environmental Assessment, City of Cambridge and Township of North Dumfries - Recommended Design Alternative be referred back to staff.

CARRIED

Planning and Works Committee took a 5 minute break at 11:55 a.m.

RAPID TRANSIT

c) E-11-021, Rapid Transit Implementation Options

Received for information.

Nancy Button, Director Rapid Transit provided a presentation. She outlined the rapid transit technology, compared BRT and LRT, LRT Staging, Adapted BRT (aBRT), converting to LRT, implementation options and public consultation. A copy of the presentation is appended to the original minutes.

Committee members discussed at length the public consultation process and what should be included in the presentation; benefits with comparisons, created jobs, a breakout of capital and operating costs, emphasis on do nothing option include photos of Westmount Road as 6 lanes, revenue opportunities and creative financing.

Some Committee members inquired about including the Townships in the public consultation process. Staff indicated that they would arrange for a public consultation in St. Jacobs.

In response to questions from the Committee members regarding creative financing, staff noted that once there are fewer options it will be easier to determine the financing.
*C. Zehr entered the meeting at 12:55 p.m.

Some Committee members expressed their concern with the bias on LRT and the lack of consideration for the City of Cambridge. It was pointed out that residents of Cambridge don’t want to pay the same as the City of Kitchener and the City of Waterloo if they are not receiving the same level of service for Rapid Transit.

i) Robert Milligan, New Dundee appeared before Committee regarding smart staging of the LRT. He provided Committee members with specific reasons as to what is currently wrong with the Region’s Rapid Transit Options and provided suggestions to improve the plan, for example using the rail right-of-way from Stockyards Market to Ainslie Terminal. He recommended that Regional Council direct staff to set-up an Innovative RTI Options Team to explore new ways to cost-effectively extend the LRT to Ainslie Terminal in the first stage. *A copy of the presentation is appended to the original minutes.*

Planning and Works Committee adjourned for lunch at 1:05 p.m.

**MOTION TO GO INTO CLOSED SESSION**

MOVED by J. Haalboom
SECONDED by T. Cowan

THAT a closed meeting of the Administration & Finance and Community Services Committees be held on Tuesday, February 15, 2011 at 1:25 p.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) Receiving of legal advice and opinion that is subject to solicitor-client privilege related to a construction project
b) Personal matters about identifiable individuals, potential litigation and related legal advice subject to solicitor-client privilege – financial matters

CARRIED

Planning and Works Committee reconvened at 2:15 p.m.

**REPORTS – PLANNING, HOUSING AND COMMUNITY SERVICES**

**COMMUNITY PLANNING**


MOVED by T. Galloway
SECONDED by C. Millar


CARRIED
b) P-11-013, Appeals to the New Regional Official

Rob Horne, Commissioner Planning, Housing and Community Services briefly highlighted the report noting the recommendation and the list of appeals.

MOVED by R. Kelterborn
SECONDED by C. Millar

THAT the Regional Municipality of Waterloo approve the following actions, as described in Report P-11-013, dated February 15, 2011 with respect to the new Regional Official Plan:

a) Ratify the Notice of Appeal dated January 21, 2011 filed by the Regional Commissioner of Planning, Housing and Community Services at the direction of Regional Council with respect to the Notice of Decision of the Minister of Municipal Affairs and Housing dated December 22, 2010;

b) Request the Ontario Municipal Board to move immediately toward a pre-hearing to identify the parties and participants of the hearing, and clarify and/or reduce the number of issues under appeal; and

c) Authorize Regional staff to participate and take any necessary steps in the Ontario Municipal Board process, including the negotiation and resolution of appeals, and direct the Regional Solicitor to retain such experts and legal counsel, all as deemed necessary and appropriate, by the Regional Solicitor and the Commissioner of Planning, Housing and Community Services to protect the Regional interest in this matter, as expressed by Regional Council through the adoption of the new Regional Official Plan on June 16, 2009 and in subsequent submissions to the Province.

CARRIED

TRANSPORTATION PLANNING

c) P-11-014, Amendment to Regional Municipality of Waterloo Controlled Access By-Law #58-87 for the Closure of Two Accesses to Regional Road #28 (Homer Watson Boulevard) and for Two New Accesses to Regional Road #28 (Homer Watson Boulevard), City of Kitchener

Some Committee members opposed the two new accesses because of the location being close to a hill and felt that it was premature to approve the controlled accesses since the site plan isn't approved yet.

MOVED by S. Strickland
SECONDED by R. Deutschmann

THAT the Regional Municipality of Waterloo approve an amendment to Controlled Access By-law #58-87 to close a right-in, right-out, left-in only access on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 257 metres south of Block Line Road and a right-in, right-out only access on the east side of Regional Road #28 (Homer Watson Boulevard) to the commercial block south of Block Line Road in the City of Kitchener.

AND THAT the Regional Municipality of Waterloo approve an amendment to Controlled Access By-law #58-87 for a right-in, right-out, left-in only access on the east side of Regional Road #28 (Homer Watson Boulevard) approximately 251 metres south of Block Line Road and a right-in,
right-out only access on the east side of Homer Watson Boulevard approximately 145 metres south of Block Line Road in the City of Kitchener with both accesses being subject to approval of a site plan by the City of Kitchener as described in P-11-014, dated February 15, 2011.

CARRIED
(J. Haalboom opposed)

REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

DESIGN AND CONSTRUCTION

d) E-11-001, Pre-Budget Funding Approval for 2011 Construction Contracts

MOVED by J. Haalboom
SECONDED by R. Kelterborn

THAT the Regional Municipality of Waterloo grant pre-budget approval in the amount of $21.965 million prior to finalization of the 2011 Regional budget in March 2011, to allow the tendering and contract award of selected 2011 capital projects in the first quarter of 2011.

CARRIED

e) E-11-018, Consultant Selection - Class Environmental Assessment and Preliminary Design Study; Ottawa Street Improvements from King Street to Mill Street, City of Kitchener

MOVED by S. Strickland
SECONDED by J. Mitchell

THAT the Regional Municipality of Waterloo enter into a Consulting Services Agreement with AECOM to provide consulting engineering services for the Class Environmental Assessment and Preliminary Design Study for the proposed improvements to Ottawa Street between King Street and Mill Street in the City of Kitchener for an upset limit fee of $402,612.00 plus applicable taxes.

AND THAT the Regional Municipality of Waterloo grant pre-budget approval, for this phase of the project, prior to approval of the 2011 Ten Year Transportation Capital Program.

CARRIED

f) E-11-022, Kitchener Wastewater Treatment Plant 1 Upgrades – Purchase of High Speed Turbo Blowers

MOVED by T. Galloway
SECONDED by J. Haalboom

That the Regional Municipality of Waterloo accept the proposal of HSI Inc. for the supply of two (2) high speed turbo blowers for the Kitchener Wastewater Treatment Plant (WWTP) Plant 1 in the amount of $508,367.79 including applicable taxes.

CARRIED
g) CR-RS-11-009, Fairway Road Extension - Servicing Agreement with Grand River Conservation Authority and Rockway Holdings Ltd.

MOVED by B. Halloran
SECONDED by K. Seiling

THAT the Regional Municipality of Waterloo enter into an agreement with Grand River Conservation Authority and Rockway Holdings Ltd. to provide for installation of sanitary and storm sewer services under the Fairway Road Extension for future potential servicing of lands owned by Rockway Holdings Ltd. and Grand River Conservation Authority, and a storm sewer channel across lands owned by Grand River Conservation Authority to service the Fairway Road Extension, as described in Report No. CR-RS-11-009, subject to such agreement being satisfactory to the Commissioner of Transportation and Environmental Services and the Regional Solicitor.

CARRIED

TRANSIT

h) E-11-025, Mobile Video Surveillance Update

Committee members thanked staff for the report and for suspending the trial run until public consultation is complete and asked staff how many incidents occur on buses. Staff indicated that they would provide Committee members with that information.

Some Committee members expressed concerns with video taping the public. It was noted that in the City of London the public was in favour of video surveillance on buses for safety.

MOVED by B. Halloran
SECONDED by K. Seiling

THAT The Regional Municipality of Waterloo approve in principle draft Grand River Transit Policy – Onboard Mobile Surveillance Systems, attached as Appendix A to this Report, and consult the public in relation to the draft Policy, pursuant to Report E-11-025 dated February 15, 2011.

CARRIED
(J. Mitchell opposed)

WATER

i) E-11-013, Preparation of the Updated Grand River Assessment Report Under the Clean Water Act

Received for information.

j) E-11-014, 2010 Annual Water Quality Report for the Region of Waterloo Rural and Integrated Water Systems

Received for information.

k) E-11-017, Kitchener Wastewater Treatment Plant 1 Upgrades – Extension of Consultant’s Assignment
MOVED by J. Haalboom
SECONDED by S. Strickland

That the Regional Municipality of Waterloo extend AECOM’s consulting assignment for the Pre-Design of the Kitchener Wastewater Treatment Plant Upgrades (Planning & Works Report E-10-071 of June 22, 2010) to include engineering services for the detailed design and services during construction for Plant 1 Upgrades at an additional upset fee limit of $330,000.00 plus applicable taxes at a grand total of $2,428,275 plus applicable taxes.

CARRIED

h) E-11-019, Consultant Selection for the West Montrose Water Supply System Class EA

MOVED by T. Cowan
SECONDED by J. Brewer

THAT the Regional Municipality of Waterloo enter into a Consulting Services Agreement with AECOM Canada Ltd. of Kitchener, Ontario, to provide consulting engineering services for undertaking the West Montrose Water Supply System Class Environmental Assessment (EA) preliminary design and disinfection upgrades, at an upset limit of $478,215 plus applicable taxes, as per Report E-11-019, dated February 15, 2011.

AND THAT the Regional Municipality of Waterloo grant pre-budget approval, for this phase of the project, prior to approval of the 2011 Ten Year Water Capital Program.

CARRIED

INFORMATION/CORRESPONDENCE

a) Memo re: Breslau Commuter Parking Lot - Project Update

Received for information.

Committee members inquired about the remaining lands. Staff noted that they have no current plans for the land but continue to monitor it.

OTHER BUSINESS

a) Council Enquiries and Requests for Information Tracking List was received for information.

NEXT MEETING – March 8, 2011

ADJOURN

MOVED by C. Millar
SECONDED by T. Cowan

THAT the meeting adjourn at 2:35 p.m.

CARRIED

COMMITTEE VICE-CHAIR, G. Lorentz

COMMITTEE CLERK, E. Flewwelling
FOUNTAIN STREET – KING STREET IMPROVEMENTS, CLASS ENVIRONMENTAL ASSESSMENT, CAMBRIDGE RECOMMENDED DESIGN ALTERNATIVE

PLANNING & WORKS COMMITTEE
FEBRUARY 15, 2011
Recommended Design Concept (#6)
Recommended Design Concept No. 6

King Street E. @ Eagle Street Conventional Intersection
Recommended Design Concept No. 6

- Improved Curve Geometry, increased visibility
- Property Constraints
- Improved left-turn entry to Riverside Park
Recommended Design Concept No. 6

King Street W. @ Fountain Street Roundabout Intersection
Recommended Design Concept No. 6

Shantz Hill Road @ Fountain Street Realigned Intersection improvements
Benefits of the Recommended Design Concept

• 50% better delay reduction than any other concept
• Substantial Reduction in injury collisions
• Improved pedestrian environment
• Improved cyclist facilities
• Improved left-turn accesses into park and condos
• Reduced noise and idling/air pollution
• No major impacts on the Speed River system or the flood plain
• No removals or alterations of designated or inventoried Heritage buildings
Cost of the Recommended Design

- "Do nothing" $11.0 million
- Design Concept 2 $3.4 million
- Recommended Design $0.1 million
  Concept 6

TOTAL $14.5 million
Issues Raised By the Public

1. Driver Behaviour in Roundabouts
2. Traffic Operations at Roundabouts
3. Divert Traffic Elsewhere
4. Property Impacts
5. Heritage Streetscape Impacts
Realigned Intersection - Concept 2
Next Steps:

- Regional Council approval of the Recommended Design Alternative,
- File the Environmental Study Report (ESR) 30 day review period.
- Detailed design starting mid 2011
- Property acquisitions, and utility relocations. 2012-2014
- Construction of the improvements will occur in 2015,
Questions?

Thank-you.

Recommended Design Concept (#6)
• 3 Extra Slides follow.
Plate 1: The Three Hotels at King and Fountain Streets
(Date unknown, View West, from Langan 2000:10)
A New Bridge?
Alternative Design Concept No. 2

King Street W. @ Fountain Street
Realigned Intersection improvements
1. Overview

- Labreche Patterson and Gowlings representing 250 King Street Inc./Faisal Susiwala.
- The Site – approx. 6.3 acres in total size.
- Labreche Patterson has provided two previous commenting letters to the Region on Sept. 2, 2009 and March 16, 2010 as well as made a previous delegation presentation at the last Public Meeting on June 8, 2010 all outlining our concerns with and objection to the recommended option #6 being a roundabout at this intersection.
- Access/driveway ownership – access to the Kressview Condo apartments at the top of the hill located on Mr. Susiwala’s lands, subject to right-of-way in favour of the condominium complex.
- In the current ROPP, the property is the “Urban Area” within areas designated “Commercial Core Area”.
- The property is located in the “Built-up Area” designation in the adopted ROP. Will come back to reference OP, that this committee needs to consider before endorsing an intersection design at King and Fountain Sts.
- Historic use of the lands – Kressview Hotel – refer to picture
- Current Zoning (as-of-right land use development permission today)
- Developable Area – Refer to Labreche Patterson plan

2. The Development Plan

- Has been worked on for a number of years since acquired site in spring of 2006 including consultations with senior staff at the Region and the City and politicians who all expressed keen interest in facilitating full development of the lands.
- At least six newspaper articles reporting on various discussions and ideas ongoing for the development of this important site at this prominent and historic intersection.
- This site represents the only undeveloped site and with significant potential within the EA corridor.
- Multi-storey "high-end" hotel and conference centre with this and related
amenities directly fronting King Street, replicating the historical appearance of the site/corner (previous slide) was the goal.

- In addition a multi storey condominium complex of up to 176 units is the current zoning permissions oriented to the rear of the site, envisioned this to be slightly higher than the hotel/conference centre.

- Sufficient parking for own site (and possibly including potential of collaborating with the owner of the Preston Springs to assist in re-development of their site particularly as to shared parking). Note: current zoning allows a zero setback to street property lines for any underground or deck parking structures on our client's lands.

3. **Summary of Current ROP, City Official Plan and Zoning By-law**

- From a planning perspective, a roundabout option appears at odds with several policies of the ROP.

- Preston area and this site is within a “Community Core Area” (Policy 7.4.1)

- We believe that this is the first time a roundabout is being considered within a designated “Community Core Area” which needs to be carefully considered as it could have negative ramifications to the future viability of the Preston core area.

- Chapter 8 – Economic Viability, - one of the guiding principles state: “Viable Community Core Areas in the City and Township Urban Areas are important as continuing focal points for community identity and economic development.”

- Policy 8.3 – Regional Commercial Structure – defines the regional social, physical and economic significance in the following order: Community Core Areas, Regional Shopping Centres, then Power Centres.

- Chapter 11 – Transportation Opportunities – in the opening statement to the policies in this chapter it notes: “Peoples values concerning transportation are changing, thereby causing shifts in their travel behavior. As a result, people frequently chose to travel by environmentally-friendly modes of transportation, are more willing to accept congestion, and continue to reduce their need to make trips. Community Core Areas provide a good opportunity to promote this behavior change by supporting a more people-friendly vibrant atmosphere.”

- Under the recent adopted ROP this area of Preston would be considered a “Major Local Node” and the policy states that these areas “refer to an existing or planned cluster of development located along or at key intersections of a transit corridor. These nodes will be planned and developed to accommodate additional population and/or employment growth consistent with existing or planned transit service levels.”

- Cambridge Official Plan: subject lands within the “Community Core Area” of Preston Town Centre. The OP specifically notes that this is “an area which
benefits from the preservation of historic buildings, including their adaptive re-use and also encompasses the historic Cambridge Mill area located in the vicinity of the intersection of King and Fountain Streets.”

- Important to note that both the Regions and City of Cambridge Heritage Advisory Committees are not in favour of a roundabout at this intersection as its impact would be too significant to this historic streetscape.

- The full as-of-right development potential for the vacant subject property would most certainly restore and enhance this historic streetscape and intersection but only if option 2 was endorsed.

- The OP specifically notes that this will be an area for intensification and mixed use development.

- Further the OP states: “It is the policy of the City to provide for the integration of development in the Preston Town Centre compatible with existing or permitted uses, other proposed development, and which priories pedestrian and vehicular linkages.” Emphasis is on pedestrians first.

4. Impacts of the Region preferred Plan

- Has already delayed the development pending determination of the taking as until that issue is resolved client doesn't know what can really be developed, nor are potential hotel chains able to commit to the site.

- More than $50M anticipated to be invested in development.

- Roundabout results in shooting traffic past site and away from this portion of the Preston Downtown core.

- The taking will destroy the streetscape restoration opportunity by reducing the frontage to such an extent as to make it useless for development and streetscape.

- The lack of frontage requires a complete re-orientation of the site layout to driveway(s)

- The existing access will be too close to the roundabout for safe exit/entrance L turn out/in both for our site and for the Kressview condo

- If current roundabout design option endorsed this will significantly impact site slope/drainage making it that much more difficult to develop the lands to its full and most appropriate potential.

- Given the existing topography in this area, we don't believe proper considerations have been given to final grading impacts on the lands directly abutting the roundabout.
5. **Benefits of Option 2 and full development of 255 King Street West**

- Preserves the streetscape/frontage-allows the hotel to be fronting onto King
- W/o roundabout enables traffic to access site safely, as this site also has a second means of access available to it as it also has frontage on Fountain Street.
- As found on page 33 of staff's report (Concepts Evaluation Summary), from a traffic engineering perspective Option #2 operates at the same level of services as a roundabout all both to the horizon year of 2023, except for a minor difference in the PM maximum queue length.
- Allows for the best and highest use development potentials for the subject lands and in support and benefit to the Preston Core area, the City and Region policies.
- Less /more?? cost than preferred option (i.e., true land taking costs, such as grading implications, need for extensive retaining walls, injurious affection).

6. **Alternative Proposal 2 concept for consideration**

- Extends and enhances the road frontage/streetscape opportunity for both 255 King and for Preston Springs
- Assumes that traffic operates at same level B (subject to study review)
- Cost of roadwork is assumed similar
- Acknowledge would lead to full buy-out of The Pines, but that is likely required under the preferred roundabout option and acknowledged in the staff recommendation report, since we do not believe you can take a wing off the Pines building and operations and leave it functional.
- Allows for enhanced walkways and streetscape opportunities in front of both Preston Springs and 255 King Street.

7. **Further alternative Proposal 6 concept for consideration**

- Conceptual slide
Impacts to 255 King St. W. from Class EA Proposed Improvements re Fountain Street – King Street
Historical Streetscape
Developable Area

- 237 King St. W.
- 255 King St. W.
- Two-zone flood line
Region’s Preferred Alternative (#6)
Owner’s Preferred Alternative (#2)
Further Alternatives
Summary of Concerns

- Insufficient design alternatives considered
- Significant land losses/injurious affection impacts
  - Loss of river orientation
  - Loss of street and pedestrian orientation
  - Site access problems
  - Grading considerations
- Development delays (until Region plans finalized)
July 21, 2010

VIA FAX

Wayne Cheater
Senior Project Manager - Transportation Expansion
Region of Waterloo
150 Frederick Street, 6th Floor
Kitchener, ON N2G 4J3

Dear Mr. Cheater:

Re: Clients: Delos and Margaret Huntley

Project: Fountain Street – King Street Improvements Class
Environmental Assessment, Shantz Hill Road To Eagle Street,
City Of Cambridge – Public Input Meeting For Preferred Design
Concept

Affected Properties: 275 Abraham Street & 246 Fountain Street South, Cambridge, Ontario

We are the lawyers for Delos and Margaret Huntley, whose properties at 275 Abraham Street and
246 Fountain Street South in the City of Cambridge will be affected by the Fountain Street – King
Street Improvements presently under consideration through the Class Environmental Assessment
process (“the Class EA”).

We have reviewed the Region’s Staff Report E-10-060 and the Preliminary Plan of Preferred
Concept set out therein. We have also reviewed a preliminary land requirement drawing provided to
us by your consultant, Stantec, on June 10, 2010. Based upon our review of those materials, we
wish to provide the following comments on behalf of our clients.

Comprehensive Traffic Study Required

The Class EA study area is too narrowly defined to appropriately address and solve the traffic
issues set out in the Problem Statement. The study area is under pressure because it presently
serves as a connector route between different areas of Cambridge, between Cambridge and Hwy.
401, and also between Cambridge and Kitchener. The areas that contribute the majority of the
traffic flows are located entirely outside of the study area. Other development and development
initiatives outside of the study area therefore have the potential to significantly impact traffic flows
through the study area. This is not reflected in the current Class EA. For example, the Class EA has
not considered Ministry of Transportation (“MTO”) initiatives, such as MTO plans for improved
connections between Hwy. 8 and Hwy. 401. The Class EA has also not considered surrounding
development plans such as the Limerick subdivision and the Conestoga College expansion. Such
coordination is essential in order to ensure that all possible solutions to the Problem Statement are
identified and analysed.
In the circumstances, the Class EA process should be put on hold until surrounding development plans are finalized and long-term traffic patterns for the area are better defined. If the Class EA continues, then, at a minimum, the study area should be significantly expanded to include the areas contributing traffic flows into the study area as currently defined. The Class EA should also consider the potential for design alternatives that require coordination with surrounding development plans, in particular MTO's Hwy. 8 to Hwy. 401 connection improvements.

Sidewalk Design Alternatives Not Considered

While the Class EA was to include the development of alternative solutions and design concepts to address the Problem Statement, all designs under consideration provide for sidewalks on both sides of Fountain Street South and Shantz Hill Road. In our view, this is a flaw in the Class EA process undertaken to date and the Class EA should be varied to include detailed consideration of sidewalk design alternatives, including the option of maintenance of the status quo with sidewalks only being available on the east side of Fountain Street South and on the south side of Shantz Hill Road.

The main purpose of the Class EA is to develop solutions to ease traffic delays experienced by motorists in the Fountain Street – King Street corridor. The Class EA does not appear to us to be truly connected to sidewalk deficiencies, of which we have seen no evidence. Rather, our understanding is that the Region wishes to install sidewalks on both sides of the roadways simply because this is now Region policy and not because of any evidence that the existing sidewalks are not providing an acceptable level of service for this area.

The approach taken with regards to sidewalks in the Class EA process is concerning because the addition of sidewalks to both sides of the roadways will significantly increase the impacts to our clients’ properties. Impacts to our client's properties could be reduced significantly if the status quo, of sidewalks only being available on the east side of Fountain Street South and on the south side of Shantz Hill Road, were maintained.

In our view, the addition of a sidewalk along the west side of Fountain Street South or along the north side of Shantz Hill Road is inappropriate for the following reasons:

1. There is no evidence of a need for sidewalk improvements in this area;
2. The lands on the west side of Fountain Street are within a GRCA regulated zone and are categorized as “Steep” to “Oversteep”. Installation of a sidewalk will contribute to slope instability and result in further variation of the natural river valley grades. We will be discussing this issue with GRCA directly;
3. There is very little development on the west side of Fountain Street and on the north side of Shantz Hill Road (principally low density residential on large lots), therefore limited pedestrian movements would be anticipated;
4. There are no pedestrian destinations, such as commercial sites or intersecting roadways, along the west side of Fountain Street and the north side of Shantz Hill Road where the sidewalks are proposed. In effect, the proposed sidewalk would be a sidewalk to nowhere.
5. The Highway 401 crossing to the north and the lack of pedestrian destinations constitutes a significant deterrent to pedestrians. Again, limited pedestrian movements would be anticipated; and

6. Pedestrian movements can be satisfactorily accommodated along the east side of Fountain Street and on the south side of Shantz Hill road or through the residential areas.

We therefore submit that the Class EA should be varied to include detailed consideration of sidewalk design alternatives, including the option of maintenance of the status quo with sidewalks only being available on the east side of Fountain Street South and on the south side of Shantz Hill Road.

Expected Property Impacts

With the design of the preferred alternative as it now stands, our clients' properties are likely to be adversely impacted in at least the following ways:

1. Significant land taking requirements;

2. Significant tree impacts, including possible loss of at least one healthy and mature oak tree;

3. Slope stability problems. GRCA mapping confirms that the land taking and construction to property impacts would occur in a GRCA regulated area that is categorized as "Steep" to "Oversteep";

4. Large increase in the Region owned boulevard area on the north side of Shantz Hill Road. The expansion of the boulevard area will be expected to result in additional burden to our clients, due to the limited maintenance activities normally undertaken by the Region on boulevard lands;

5. Access and nuisance issues during construction.

We submit that the Class EA process should further investigate design alternatives that will minimize or eliminate such property impacts to our clients' lands. The Class EA process should also articulate how any remaining impacts will be mitigated and provide commitments to such mitigation (e.g. no net tree loss policy, replanting commitments, boulevard maintenance arrangements or ex gratia disposition of boulevard area to our clients).

We trust these concerns will receive the Project Team's careful consideration. In addition, we would ask that we be registered as a delegation the next time this matter comes before Regional Council, so that we may review our clients' concerns at that time.
Sincerely,

GOWLING LAFLEUR HENDERSON LLP

John S. Doherty
JSD:pl

cc. Members of Regional Council
cc Graham Vincent

WAT_LAW\45169511
Impacts to 275 Abraham St. & 246 Fountain St. S. from Class EA Proposed Improvements re Fountain Street – King Street
Class EA Problems

- Class EA too narrowly defined
- Comprehensive traffic study required
- Traffic pressures originate outside Class EA study area
Class EA Problems

• Class EA did not consider:
  • MTO initiatives (Hwy. 8 connection, Hwy. 401 widening)
  • Limerick subdivision
  • Conestoga College expansion

• No consideration of sidewalk alternatives (including status quo)
Region’s Preferred Alternative (#6)
Preferred Alternative Problems

• Sidewalks on both sides increases impacts to subject properties

• No evidence of need for sidewalks on both sides

• Sidewalk location on west side of Fountain St. is in GRCA regulated zone of “Steep” to “Oversteep”
Preferred Alternative Problems

- Significant land taking
- Significant tree impacts
- Slope stability issues
- Increase in Region owned boulevard > Maintenance issues
Preferred Alternative Problems

- No demand/destination for Shantz Hill north sidewalk
Preferred Alternative Problems

- No demand/destination for Shantz Hill north sidewalk
Preferred Alternative Problems

• Fountain St. west sidewalk set deep into steep slope
• Fountain St. west sidewalk set deep into steep slope
• Committee should defer decision pending further study
• Comprehensive traffic study required
• Further consideration of alternatives (more broadly defined)
• Further consideration of sidewalk design alternatives
• Further consideration of road alignments
• Further mitigation of impacts required
Thank You

John Doherty
Waterloo Region Office
519-575-7518
john.doherty@gowlings.com
How we got involved in the process

The Findlings have lived on Shantz Hill since 1958, and when I married into that family nearly 25 years ago, Gerda and I lived there for the first two years. All of us are very familiar with the Hill, and we feel that the changes made over the years have not been the best. Installation of lights at the bottom of Shantz Hill was supposed to be an improvement; we feel it has had an adverse effect on traffic.

When we saw the first notices in the paper about this Study, the parameters described in those notices did not suggest the widening of Shantz Hill or the consequent expropriation of our land. Although we would have liked to attend the earliest meetings, life circumstances caused us to prioritize and we missed the first two public meetings. I have since perused the Project website and I find no references from those meetings to the inclusion of Shantz Hill in the Study.

Prior to the third public meeting, I saw roadside notices and again thought to attend as an interested party. I was shocked when my mother-in-law showed me a notice of meeting that had come to her mailbox: it was accompanied by a letter indicating that our properties were to be impacted as part of the preferred design for the Fountain Street – King Street improvements. No notice ever came to my home, although I am a property owner who is to be impacted.

The invitation to the June 8, 2010 meeting in Preston is the first one which spelled out the fact that this project was expected to impact our properties. We therefore made it a priority to attend that meeting, but we were not prepared to speak at that time, since everything was news to us. Since that meeting I have spent considerable time studying the report E-10-060 and other documents available on the Region’s website. I still feel woefully underinformed. Nevertheless, I determined to make my thoughts known to you, the Committee who must decide on this proposal.

I truly believe that the Study Area has not been properly served by the inadequate discussion that has occurred to date. I hope that you will take more time to develop a vision for the area before redesigning the traffic structures for the area. However my strongest feelings have to do with our properties on Shantz Hill, and with respect to those I urge this Committee to start a new Study, in view of the fact that we do not fall within the mandate of the current Process.

To this end I have submitted these many pages of observation, opinion and analysis, in hope that you will take it to heart and in some way profit by it.

Thank you in advance for your consideration of my input.

Sincerely,

Martin Wiens
Purpose and Scope of the Class Environmental Assessment Study
as advertised prior to the first Public Consultation on April 23, 2009

"The Region of Waterloo is undertaking a Class Environmental Assessment (EA) Study to consider road improvements on Fountain Street from Shantz Hill Road to King Street and on King Street from Fountain Street to Eagle Street, in the City of Cambridge."

"The Fountain Street – King Street Class Environmental Assessment was initiated to examine traffic congestion and higher than expected collisions on the Fountain Street – King Street corridor."

Quotations from page 1 of Report E-10-060, June 8, 2010

Goals of the Proposed Project
as indicated by the authors of Report E-10-060
which was distributed at the third Public Consultation held June 8, 2010

- increased capacity (deemed not possible by the authors)
- reduction in the number of collisions, especially southbound left turns from Fountain Street to King Street, and weaving collisions on Fountain Street southbound from King
- addition of dedicated on-road cycling lanes on both sides of the road
- improvements to pedestrian movement (i.e. sidewalks on both sides of the road)
- improved Bus Transit efficiency through “queue jump lanes”
- improved response times for Emergency Services (similar issue as for buses)
- “streetscaping”
Comments on the Purpose and Scope of the Study

1. The study was initiated to address issues on Fountain Street and King Street. Shantz Hill Road and Eagle Street were boundaries or endpoints. While it seems reasonable to think that some very localized work on each of those intersections might come up for discussion, it was not reasonable to think that widening of Shantz Hill Road would be on the table. Therefore this Class Environmental Assessment Study cannot include the widening of Shantz Hill Road. Rather, widening Shantz Hill Road must become the subject of its own Class Environmental Assessment Study.

2. The Study was initiated “to address traffic congestion and higher than expected collisions” on Fountain Street and on King Street.

The advertisements did not indicate that cycling lanes, sidewalks, and “streetscaping” were on the list as requirements. While it is understandable to want these things, they are the “extras” which result in significant property impacts. Thus people reading the advertisements had insufficient warning as to the true scope (and thus possible widespread property impacts) of the changes which would be proposed.

3. I applaud a comprehensive approach to planning and construction of major road projects. However, it seems to me that not enough planning has happened yet, and the vision is still too small while the pressure to finish the project is too strong.

Comments on the most recently-stated goals for the Project

1. The goals are good goals. However, more thought is needed about how to properly realize those goals. The desired look and feel of the entire area must be considered, including open spaces, the riverfront, and built features. More discussion is needed to refine and in some areas to redesign the plans.

2. Unless the gas station is removed, no plans for the area can really be ideal. Therefore, first pursue acquisition of the entire gas station property. Do so patiently and amicably, but work at it diligently and in a collaborative spirit. Offer incentives and assistance, rather than threats of expropriation.

3. If the cooperation of the gas station owners cannot be secured in a time frame commensurate with the need for basic infrastructure maintenance/renewal in the area, be content to stay with largely the status quo. Not all goals have to be realized this time around; be willing to put off implementing cycling lanes, more sidewalks, and “streetscaping”. Instead, work within the constraints of the current road allowances, and implement some simple changes which will decrease congestion, reduce collisions, and allow transit and emergency vehicles to have priority.
Thoughts on Traffic issues related to Shantz Hill

Congestion is not an issue on Shantz Hill itself; nor is Shantz Hill part of the Study Area. However, for argument’s sake we can consider traffic issues on or near Shantz Hill.

Traffic congestion on westbound Fountain approaching Shantz Hill is created by several factors: cars lined up waiting to go straight on Fountain at the bottom of Shantz Hill, cars trying to turn left into the gas station near the bottom of Shantz Hill, cars weaving because they realize they are in the wrong lane, or suddenly change their minds about which lane they want.

I have witnessed many near-collisions on westbound Fountain between King and Shantz Hill caused by vehicles suddenly changing from the right to the left lane to get into the gas station; other vehicles suddenly stop in the left lane to make the left turn into the gas station without first signaling (because the distances are so short and decisions are made in haste), and then other vehicles recklessly make lane changes from left to right to get around them.

If left turns were disallowed on westbound Fountain between King and Shantz Hill (i.e. not just forbidden but in fact made impossible) then a large number of collisions or near-collisions, and a large percentage of peak-time gridlock would be prevented just by this reality.

If, in addition, no westbound straight-through traffic were allowed on Fountain at the bottom of Shantz Hill, then only one lane would be required for westbound traffic in this area. Yes, it seems a radical idea, but if we are serious about decreasing collisions and improving pedestrian safety, it should be considered. This change would mean that all westbound traffic on Fountain between King and Shantz Hill would be forced to go up Shantz Hill.

This ought to be no great hardship for vehicles traveling to points south or west of the Grand River, as they can get on the Highway 401 westbound and exit at Homer Watson.

Vehicles trying to reach points on Fountain Street would be able to go up Shantz Hill to Preston Parkway and access their destinations in that way.

Any objections to the above idea, such as concerns about traffic infiltration into the Preston Heights residential area, deserve fair consideration. However, they also underscore the fact that Cambridge permitted that area to be developed without sufficient thought for the future, and that Cambridge should proceed with great caution with respect to allowing development which will increase the load on the Fountain Street corridor, in particular the proposed development of Limerick Road. Notably, the plans for Limerick Road require the removal from Cambridge’s Official Plan of references to a “proposed freeway or major arterial road” through those lands. A major arterial road may not be needed to alleviate the issues in the Fountain/King/Eagle area, but then again it might: Cambridge Council should proceed thoughtfully on this issue.
Thoughts on a Roundabout for the King/Fountain Intersection

1. A good idea, IF it can be built to a suitable size. I doubt that this can be accomplished here, due to the proximity of the river tributary and to the strong motivation to keep the Preston Springs Hotel. If it is going to be built too small, don’t bother; wait till it can be done properly.

2. Not a good place for cyclists, because it is such a high-traffic area.

3. Not good for pedestrians; drivers have too many concerns to pay proper attention to them.

4. Once placed, we will be stuck with that location for 50 years or more. Let’s get it right or think about it longer. This whole area is and will be a prominent aesthetic feature for Cambridge.

5. Ultimately, this area does require some variation on a roundabout: I envision one large one which utilizes several yet-to-be-built bridges. Alternatively I can see more of an oval, whereby Fountain Street is effectively split into two streams with a large boulevard between them. My vision necessitates acquisition of the properties bounded by the river, King and Fountain up to and including the gas station. This should not be done with a heavy hand but with incentives and cooperation; be willing to take no for an answer. Until those properties are acquired, the idea should be put on hold. Keep in mind there is no real urgency; this would be nice to do but it is not essential. Small changes to the status quo in the area will suffice to address traffic safety and congestion concerns.
Miscellaneous Thoughts

Dover Mill is a small part of the problems in the area, but could be a big part of any solution. It eventually will leave this site; the question is when.

The fact, mentioned by Councillor Brewer at the PCC on 8 June 2010, that there have been fruitless conversations with Dover Mill in the past should not mean that there will be no more discussion. P&H Milling may have different interests than the previous owners. In any case, P&H leadership surely knows that the opportunities for the site are dwindling. Therefore they should be approached neither with threats (of expropriation, which is obviously prohibitively expensive not only because of their expensive installation but also because of their legal resources) nor with begging (i.e. offering ridiculous incentives which cost the taxpayer unreasonable sums). Rather, they should be approached on the basis that it is in their interest to gradually divest themselves of the site.

The City of Cambridge and the Region of Waterloo should begin discussions on a concrete 20-year plan (shorter would be nice) by which P&H could retire that site in stages without disrupting their operations or losing too much capital investment i.e. money spent recently to keep it functioning. Keep in mind that it is costing P&H significant sums to operate there rather than elsewhere i.e. in more modern facilities with better access. At some point they will find it profitable to make a switch; the City and Region should be working with them to make it feasible a little sooner. In any case keep talking, but in the meantime do not disrespect the property owners with smaller budgets.

As Jerry Van Dyke declared on 8 June 2010, the gas station on Fountain at the bottom of Shantz Hill will not be there forever. Talk to those owners about their plans. Work with them to facilitate their exit. Don’t rush them or pressure them. Make them an offer and leave it on the table for a while. People change their minds. Take expropriation off the table; use a carrot, not a stick. Be willing to wait. The situation is not urgent enough to justify the use of force. Recognize, however, that this property is key to a really excellent vision for the area.

Continue talking with The Pines and about their goals and vision. Give them more time, and take expropriation off the table. Instead, offer them something better than their current situation. I can see The Pines staying there as part of a waterfront park-like setting, similar to Spencer’s on the Waterfront in Burlington. If they are open to something, talk about it. If not, wait and talk again.

The Fireplace Store is hard to place in my picture of a really exciting waterfront setting in this area. Nevertheless these owners deserve the same respect we all desire. Back off on expropriation threats. Offer them incentives to move, but respect their preferences. Give them more time if they need it, and assist them with costs of any move if they are willing to move. If they are holdouts, so be it: don’t run roughshod over them. There is no crisis here to demand that this project go ahead as scheduled. Minor changes as described elsewhere will suffice for many years if necessary.
If we wait, we may well discover that revolutions in vehicle technology and usage results in diminished pressure on our roads, rather than increased pressure. The intense pressure to keep up with growth may be about to wane, like a wave crashing on a beach.

There is no pressing need for sidewalks on the north side of Fountain between King and Shantz Hill. Nor is a sidewalk urgently needed on the east side of Shantz Hill. If the residents there are clamoring for one, this was not noted in the Report given out on June 8, 2010.

Congestion is not a significant problem on Shantz Hill, and then only because of the domino effect. Widening Shantz Hill does nothing to alleviate the issues in the Study Area. Shantz Hill itself is not part of the Study Area.

Traffic lights stop traffic. When we stop traffic, we need space for the stopped vehicles. So, an intersection with traffic lights requires more lanes of traffic for a given distance than would a through road. If we take away unnecessary lights, we reduce the need for more “on-road parking” (aka lanes).

Collisions can be diminished by redesigning the lanes on the existing roadways. For an experiment, use mainly paint and some signage, plus some flimsy barriers (for mainly psychological persuasion) to restrict drivers’ options on Fountain between King and Shantz Hill, thus reducing weaving or sudden stops.

Keep the project simple and make minimal changes for now. Long-term needs are not certain, and the immediate desire for improved traffic flow on Fountain and King can be addressed simply. The congestion is not that bad yet, and collisions can be addressed without major reconstruction. While cycling lanes and pedestrian improvements are good things, these plans do a poor job – really just give an appearance – of addressing them. As for transit/emergency vehicle efficiencies, there are short-term solutions that require only minor changes.

No design alternative should be characterized as “do-nothing”, not only because every one of the alternatives represents a significant project but because every alternative will involve some change to the status quo.

There are basic project tasks that are necessary; these should be clearly defined and not confused with optional improvements or features. It is not clear to me what construction tasks or features are included in the basic project concept.
It is not right to say that the basic project will cost almost as much as the enhanced project. First, because many non-essentials are being forced into the basic project (even though it was falsely termed “do-nothing”). Second, because the basic project has NO property impacts while the enhanced project has large property impacts (again, attempts to include property impacts in the basic project inflate its cost unduly and skew people’s perceptions). Third, both the cost of compensating property owners and the cost of the actual project features will be significantly higher than acknowledged. So there is an unfair bias being generated against a simpler approach to problems in this area, while a truly excellent vision for the area has yet to be articulated.

On Cycling:

Keep cyclists off the road on this stretch of Fountain and on Shantz Hill; these areas are too dangerous under present conditions because of the many decisions faced by drivers in a short span. Certainly cyclists have a right to use the roads here as they are, but it does not need to be encouraged at this time to the detriment of property owners’ rights, when in fact there are better solutions.

There should be an off-road cycling path along the river once deals are made with Fireplace Store, The Pines, and the gas station. Even if this takes a long time, it will be far superior to any rushed design which places cyclists in close proximity to cars on this particular set of roads. Although cycling lanes are part of a master plan, implementing them here and now under this proposal gives an appearance of doing good when in fact it benefits no one. A master plan is a guide for the long-term; take the long-term view and work on relationships in the area that will allow you to build the right kind of path in the right place.

Better than cycling lanes on the dangerous Shantz Hill, create a cycling detour path through the ravine from the bottom of Shantz Hill to the top of Preston Parkway. Keep cyclists out of harm’s way and gain back one lane either for general vehicle traffic or for transit priority.
Problems with the Process

There has not yet been proper discussion, and there has not yet been real consultation.

I know this without a doubt, because no one has approached us, and yet we got a notice about EXPROPRIATION.

To put Expropriation on the table is wrong and unnecessary. First, it reveals an impatience akin to panic on the part of planners, because expropriation should be rarely used whereas here it is being treated as a commonplace tool; this suggests that the planners feel there is an imminent crisis to be averted. Second, it implies that there was never a real intention of being guided or directed by the input received from public meetings; rather, public input was needed to identify selling points for the plans developed by the Project Team. Finally, it shows disregard for the people impacted by these plans. Expropriation is a tool to be used in extreme cases when the all other efforts have failed and there is a very important benefit for the many to be gained by displacing the very few; in this case no efforts have been made and the dire need of the many has not been proven.

You may say to us: it was not intended as a threat, it was just for information. Very well, but it does create pressure. That pressure is unnecessary and unfair.

My reading of the project website matches my observation at the third Public Meeting that the communication at these meetings is largely one-way: the Project Team sharing their ideas and plans. This is good and necessary, but it does not create a collaboration, which is needed. At the same time, many of those who speak are already there under pressure from a notice of a probable property impact. In addition, the format is intimidating rather than welcoming. So it is not really an environment that lends itself to visionary thinking and open discussion.

However, the focus at these meetings should have been to explore possibilities, and engage the stakeholders in a no-pressure discussion.

There would at no time have been anything wrong with making offers to acquire property along the way, provided it was not done under the pressure of timelines – which is what the threat of expropriation creates.

The letter we received indicates that “typically over 90% of all required lands and interests are acquired through the negotiation process”. The misleading implication here is that this is a good record, when in fact it is an abysmal record! The 90% figure itself is far too low: you should be aiming for 99% or better. Couple this with the fact that the negotiation is motivated by the threat of expropriation, and you find that even the “negotiated 90%” was acquired under duress! That is not grounds for self-congratulation.
This Study has not yet identified a truly excellent vision for the area in question. If the proposed road improvements are going to involve significant property impacts, then the entire riverfront area should be considered in terms of what we eventually want to see there. If we are going to displace or disrupt the lives, livelihoods, dreams and aspirations of people who as property-tax payers have carried the responsibility of funding the infrastructure and services provided by local governments, then we ought to do so with more than just a short-term limited view. This will require much more and better discussion than has happened so far.

The imminent threat of expropriation must be removed before the necessary discussions can proceed. Threat of expropriation prevents stakeholders from participating as equals in a discussion of possibilities for the area. It makes it difficult for them to say, “Yes, I can envision this or that if we did such and such.” So far the discussion has all been directed by what the Project Team imagines the limits of the project to be; this must change.

If all we want to talk about is roads, then let’s go with the status quo and maintain what we have. The small changes I have proposed should suffice for several years.

If we want a plan that works for people and provides real opportunities for recreation and beauty, then we need to look at the bigger picture. I understand that it may not be the mandate of the Region of Waterloo to beautify the riverfront in the King and Fountain Street area, or to make it accessible to the community as a recreational space. Surely, though, the City of Cambridge must be interested in furthering this; therefore by all means have the two work together with each other and with local property owners to flesh out the vision without timelines. Until then, change as little as possible; otherwise we not only fall short of what we might have achieved, but we in fact limit our opportunities ever to reach it.
Analysis of the Traffic Congestion and Collision-related Issues in the Study Area with suggestions for mitigating them:

Intersection at King and Fountain

1. Congestion on northbound Fountain at King occurs because when more than six cars are stopped for the lights it blocks off the right turn lane; this then backs up traffic at the previous intersection (Fountain and Shantz Hill).

Suggestion: Close this through lane.

Traffic would flow smoothly eastbound around the corner from Fountain onto King; this represents the majority of the traffic and therefore deserves precedence. This change would also reduce southbound left turn collisions at this intersection, and reduce congestion at the previous intersection (Fountain and Shantz Hill). Most of those who travel north at this intersection are coming from west of the Grand River; they have other options so this change would inconvenience very few, and then only until a better long-term solution is found through negotiation and discussion.

This change would also allow for a smoother left turn for westbound traffic coming from King onto Fountain.

2. Congestion on northbound Fountain at King occurs in part due to Dover Mill truck traffic. Dover Mill does a pretty good job of minimizing traffic interruptions, but the main concern here is safety of Dover Mill employees and the danger of collisions because eastbound drivers are often surprised to have to stop as they come around the bend.

Suggestion: There should be ongoing friendly discussions aimed at mitigating Dover Mill’s traffic impact, especially at peak times. Work with Dover Mill ownership to develop a plan to end these disruptions entirely.

3. Congestion on southbound Fountain at King occurs only at peak times, and is largely due to traffic from ATS and Toyota. Much of this congestion is due to domino effect from congestion at the lights ahead (Fountain and Shantz Hill), as well as from vehicles attempting left turns into or out of The Pines and the gas station. Note that it is not urgently necessary to eliminate backups on southbound Fountain at King, since this is strictly a peak-time issue related to shift change at a few employers, and ultimately those drivers have various other options available. Very few could truthfully argue that this path is essential to them.
Suggestion: prevent left turns into or out of The Pines and the gas station. Make other changes which are described in following pages/paragraphs concerning the intersection of Fountain and Shantz Hill.

By eliminating congestion in the lanes ahead, southbound flow on Fountain at King would see less congestion.

4. Congestion on southbound Fountain at King is due in part to delays caused by vehicles attempting left turns. Since this location lacks a dedicated left turn lane, any vehicle which has to wait for a left turn will stop all traffic behind it. Any left-turn collisions that result will further back up traffic.

Suggestion: Forbid and prevent southbound left turns here.

No more southbound left turn collisions. While this would be a minor inconvenience to people regularly heading into Preston by this path, the Study clearly indicated collisions here as a major issue in its opening discussions. The reduction in congestion for all drivers in this area, and the improved safety to all traffic at this intersection, demands that this option be seriously considered. Further, this change sets the stage for the removal of lights at this intersection, which would mean that westbound traffic on King could flow unimpeded.

This prohibition of left turns need not be permanent; it would be a measure that takes away the need for hasty decisions. Furthermore it could be implemented virtually immediately and might do much good between now and the actual time of the proposed construction.

5. Traffic on southbound Fountain approaching King does not really need to have right of way to go straight through that intersection. However, it does require a safe way to enter the flow of traffic turning left from westbound King onto Fountain.

Suggestion: Place a stop sign on southbound Fountain at King. Take away the lights at Fountain and King, giving right of way to traffic flowing west from King to Fountain and east from Fountain to King. (This requires suggestions 1 and 4 as preconditions).

Alternative suggestion: Use a yield sign on southbound Fountain at King, with the above.

With these changes, east/west traffic would flow between King and Fountain without stopping; this would greatly reduce congestion in both directions. This would result in reduced congestion on southbound Shantz Hill, as well as on eastbound Fountain approaching Shantz Hill.
These changes would also reduce collisions at Fountain and King. Only one left turn lane would be required from westbound King onto Fountain, although two would continue to be an option.

The stop (or yield) sign would not greatly inconvenience drivers on southbound Fountain at King because while they would be forced to stop (or slow down), they would then be free to proceed as soon as it is safe to do so rather than waiting for the arbitrary timing of a light. Furthermore the improved traffic flow from westbound King to Fountain should result in many opportunities to enter the flow, especially since the right lane on westbound King would still be the right turn lane.

6. Congestion on westbound King Street at Fountain occurs first of all because there are lights at the intersection.

Suggestion: Remove the lights. See suggestions 1, 4, 5. Give right-of-way to vehicles turning left (and right) from King onto Fountain.

If just one left turn lane is used from King to Fountain, then the right-hand lane on Fountain heading toward Shantz Hill can be dedicated to southbound traffic on Fountain Street approaching King; these vehicles would then not have to face either a stop sign or a yield sign as per suggestion 5. However, there would remain a need for the left lane (i.e. traffic coming from the left turn lane on westbound King) to merge right in order to ascend Shantz Hill – unless two lanes were permitted to turn up Shantz Hill (see suggestions to follow). If two left turn lanes are used from King to Fountain, then a stop or yield is required for southbound traffic on Fountain at King. Right turns from King to Fountain would continue much as before.

This change would have a large positive impact on the current state of traffic on westbound King between Eagle and Fountain, during peak times. It would also have a significant effect on reducing weaving collisions on Fountain, especially if left turns were completely disallowed on Fountain between King and Shantz Hill.

Some motorists would be inconvenienced, but the dramatic improvement to traffic flow and safety in the area would more than compensate.

A roundabout would not have the same beneficial effect on traffic flow in this direction, due to competition from traffic entering at other points, combined with the many other distractions in this area (too much happening in too short a distance). A roundabout does have the advantage of maintaining flow in many directions, whereas the above suggestions require a prohibition on two possible paths through the intersection at King and Fountain. However, the above suggestions could be implemented very quickly with little disruption to traffic and with no property impacts; at the very least they should be considered in the short term before large-scale construction begins in the area.
7. Another reason for congestion on westbound King Street at Fountain is based on two combined factors: the fact that the right lane is used for both right and left turns, and the fact that the left lane, which is used only for left turns, is not the through lane for the traffic going up Shantz Hill. This causes two problems: sudden traffic stops (leading to everyday severe congestion but only at peak times) and weaving (leading to collisions leading to nearly total gridlock at peak times).

Suggestion: see previous suggestions. In particular, prevent left turns from Fountain between King and Shantz Hill, and have both lanes on Fountain turn right onto Shantz Hill.

Alternative suggestion: dedicate the right lane on westbound King at Fountain to right turns only. Make the left lane the only left turn lane at this intersection, and make its receiving lane (the left lane on Fountain between King and Shantz Hill) the through lane to the right turn up Shantz Hill. Thus the right lane on Fountain coming from King would be reduced to a merge lane for traffic coming from southbound Fountain at King; these vehicles would then require a yield but not a stop sign. With this plan it would be possible to maintain one part of the left lane approaching Shantz Hill as a left turn area for vehicles entering the gas station (although this seems undesirable for reasons already indicated).

8. A third reason for peak time congestion on westbound King Street at Fountain lies in the fact that the left lane faces a stop light at Shantz Hill and therefore backs up nearly as far as King Street, causing the left-hand lane of westbound King at Fountain to come to a standstill, even when they have the green light.

Suggestion: (in combination with all the foregoing suggestions) forbid straight-through traffic on westbound Fountain at Shantz Hill.

The vehicles traveling to points west of the Grand River would then go up Shantz Hill and use that westbound stretch of Highway 401 which is never backed up, while the few locals who are inconvenienced have the option of using Preston Parkway.

The two westbound lanes between King Street and Shantz Hill could then be used as follows: right lane receives traffic coming from southbound Fountain, left lane receives traffic westbound from King, both flow unimpeded to the right up Shantz Hill, or merge first and turn right up Shantz Hill as one lane, leaving room for left turns into the gas station OR for some kind of transit priority feature.

The result: no more gridlock westbound on King or Fountain approaching Shantz Hill. Fewer weaving collisions would occur, as there would be no reason to change lanes here.
Variations to suggestion 8 include the question of whether or not to allow any left turns at all from westbound Fountain between King and Shantz Hill. I suggest allowing none, unless the left lane is made to merge with the right lane before such left turn point(s). Even then I would suggest only one left turn point be allowed, and that if such left turn be allowed, the portion of the lane after such point be painted with hatch marks up to, through, and past the right turn going up Shantz Hill; this area would then be reserved for transit and emergency vehicles and trucks swinging wide. The remaining traffic would then have only one lane – the right lane as at present – for a flow lane around the corner.

Even with this concession, there would be few weaving issues and much less congestion simply because there would be fewer stopped cars in the left lane, and these stopped cars would be further away from the place where cars in the left lane need to merge right to get up Shantz Hill. Currently vehicles turning left from King onto Fountain just barely get around the corner before they are confronted with a vehicle stopped and waiting to turn left into The Pines: this is ridiculous and simple to fix; certainly not a reason to do a major reconstruction of the area, and not a reason to rush such a project.

Intersection at Fountain and Shantz Hill

1. Congestion occurs on westbound Fountain approaching Shantz Hill during peak times, for reasons already indicated but worth reviewing: two lanes approach the intersection, but only the right lane flows unimpeded around the corner and up Shantz Hill. The result is that people in the left lane back on westbound King Street, being in the through lane at that point, have to change lanes to the right to remain in what is in fact the primary travel path in this direction: up Shantz Hill. However, these vehicles have two problems to contend with: peak-time traffic backups from the lights ahead, and unexpected obstacles in the form of slow or stopped vehicles turning left into The Pines and the gas station.

Suggestion: restrict and prevent left turns on this stretch. If that seems too drastic, allow just one left turn location; it should be located much closer to the bottom of Shantz Hill to prevent sudden stoppages to traffic in that lane. Forbid and prevent westbound traffic on Fountain from straight-through travel at Shantz Hill; instead force it up Shantz Hill to the 401 or to Preston Parkway.

These measures, together with others to follow, would dramatically alleviate peak-time congestion and any-time collisions.
2. Congestion occurs on eastbound Fountain approaching Shantz Hill during peak times; it really is not that bad. Vehicles coming from west of the Grand River should be using Highway 401; it is a much faster route. Local people can and do use Preston Parkway.

   Suggestion: install a stop or yield sign for eastbound traffic on Fountain at Shantz Hill. Remove the lights and give right-of-way to traffic coming down Shantz Hill. Forbid and prevent left turns from eastbound Fountain onto Shantz Hill.

   With these inexpensive changes, traffic coming down Shantz Hill would flow uninterrupted, barring issues arising at Eagle Street, Dover Mill, or the King/Fountain intersection. Eastbound traffic on Fountain would suffer few delays, and safety of the intersection would be greatly improved.

3. Congestion on southbound (downhill direction) Shantz Hill is minimal, even at peak times. Even then it occurs mainly due to domino effect from the King/Fountain intersection and from Dover Mill issues. It is slightly exacerbated by vehicles making late left turns from eastbound Fountain during these times. There is no congestion as such outside of peak times, other than the fact that vehicles throughout the day have to wait for the light itself. This may be the most significant yet under-reported problem in the area: the fact that the main travel path is blocked regularly throughout the day for no good reason except the timing of the lights.

   Suggestion: implement the measures in 1 and 2 above. Implement also suggestions 1 through 8 concerning the intersection at King and Fountain.

   With these changes, traffic coming down Shantz Hill could flow unimpeded onto Fountain Street. There it would face no significant delays, even at peak times.

4. Collisions occasionally occur on Shantz Hill due to excessive speed of southbound vehicles coming through the intersection at the top of the Hill and thus not being prepared to stop for the lights. Removing the lights might actually reduce these collisions because the queues would disappear, giving more stopping distance. However, traffic calming measures would be useful here.

   Suggestion: Provide only one through lane from southbound King Street (i.e. at the 401) onto southbound Shantz Hill Road. Make the current lefthand downhill lane into a queue jump lane for transit and emergency vehicles; use the righthand downhill lane as the main traffic path.

   By providing fewer lanes i.e. a narrower driving path, drivers are encouraged to slow down. This would reduce the number of collisions. Because there would be no stop at the bottom, one lane suffices to keep traffic flowing.
Proposal for an inexpensive Due Diligence Experiment

Run this experiment for a month or more as soon as possible. Put up appropriate signage a month in advance to give notice to motorists of the changes that are coming, and their duration (as is customary with any planned traffic diversion).

1. Place a yield sign on southbound Fountain Street at King Street, and provide a short merge lane for joining the westbound flow of traffic from King.

2. Forbid left turns from southbound Fountain Street to King Street.

3. Close the straight-through lane on northbound Fountain Street at King Street; allow only right turns onto King Street.

4. Cover the lights at King and Fountain. Give right-of way to westbound vehicles turning left or right from King onto Fountain and to eastbound vehicles turning right onto King.

5. Place a yield sign on eastbound Fountain Street at Shantz Hill, and provide a merge area for joining the eastbound flow of traffic from Shantz Hill.

6. Forbid left turns from eastbound Fountain Street onto Shantz Hill.

7. Close the straight-through lane on westbound Fountain Street at Shantz Hill; allow only right turns up Shantz Hill.

8. Cover the lights at Fountain and Shantz Hill. Give right-of-way to southbound vehicles turning left or right from Shantz Hill onto Fountain, and to westbound vehicles turning right from Fountain to go up Shantz Hill.

9. Change the lights at the top of Shantz Hill to allow uphill through traffic to flow at all times except when the pedestrian crossing is required. Left turns from Preston Parkway now turn exclusively into the left lane of northbound King Street while the northbound (uphill) through lane on Shantz Hill lines up with the righthand lane of northbound King Street. Continue to let these lights govern southbound traffic as well as all traffic turning to or from Preston Parkway.
11. Repaint lines on Shantz Hill as follows. Instead of four vehicle lanes, make only three: one downhill, one uphill, and one center lane. Dedicate the center lane as a queue jump lane for buses and emergency vehicles. There would now be half a lane on either side of the road to be used as an on-road cycling lane.

Keep a left turn lane at the top of Shantz Hill for north (uphill) bound vehicles to turn left onto Preston Parkway. There is now only one through lane for northbound vehicles on Shantz Hill at Preston Parkway.

The single downhill lane must split at the bottom of Shantz Hill into left and right turn areas; the left turn area would encroach on the queue jump lane while the right turn area would encroach on the cycling lane.

12. Repaint lines on westbound King Street as follows. Make the right lane strictly a right turn lane and the left lane strictly a left turn lane; thus only one lane of traffic is allowed to turn left onto Fountain Street.

13. Repaint lines on westbound Fountain Street between King and Shantz Hill as follows. On Fountain Street, make the right lane the only lane for through travel to Shantz Hill, with the left lane being a queue jump lane for buses and emergency vehicles. Create a short merge lane on the right, for vehicles coming from southbound Fountain at King.

14. Prevent the use of the left lane on westbound Fountain between King and Shantz Hill as a left turn lane; reserve it as a queue jump lane.

15. Place detour signage at the Blair roundabout or other similar access points, indicating that there are no left turns from Fountain onto Shantz Hill, and no through traffic on Fountain at King.

16. Place similar detour signage at Fountain Street North and Cherry Blossom Road, indicating that there are no left turns from Fountain onto King, and no through traffic on Fountain at Shantz Hill.

Why this experiment should be tried immediately:

Immediate benefits to traffic flow and safety, while buying time to negotiate for the properties needed to do something really fantastic in the area.
Results to Expect from the Experiment

1. Elimination of left turn collisions from southbound Fountain to eastbound King Street.

2. Elimination of left turn collisions from eastbound Fountain to northbound Shantz Hill.

3. Little or no congestion, even at peak times, in northbound traffic from westbound King Street at Eagle to westbound Fountain, then to northbound Shantz Hill, the 401 and beyond.

4. Little or no congestion, even at peak times, in southbound traffic from Shantz Hill to eastbound Fountain, and onto eastbound King.

5. No queues on southbound Shantz Hill.

6. Dramatic reduction in weaving collisions on westbound Fountain between King and Shantz Hill.

7. Short queues and short wait times at eastbound Fountain approaching Shantz Hill.

8. Short queues and short wait times at southbound Fountain approaching King.

9. Notice that Shantz Hill as it is has adequate room for cycling lanes and queue jump lanes, as well as through lanes for traffic. No sidewalk is needed on the east side, but may be added on the east side if desired by the residents.

10. No need to expropriate land to address traffic safety and flow issues.

11. Significant cost savings.

Note: this solution is not a complete or perfect one; neither is the one proposed. Land acquisition in the area should be pursued, but not under the kind of timeline set by the project team, and not under threat of expropriation. This solution is offered to demonstrate that there is no imminent crisis that justifies a measure as extreme as land expropriation.

The goal of this experiment is to encourage a more thoughtful approach to developing a vision for the King/Fountain riverfront, beyond just transportation concerns.
“However beautiful the strategy, you should occasionally look at the results.” [W.C.]

#1. “due to capacity constraints … adjacent to study limits … capacity improvements would be limited.”

#2. “improvements to the corridor will be operational in nature rather than capacity expansion.”

Translation: the 4 different single lane feeder roads serve as narrow funnel points and absolutely prohibit any increase in traffic volume!
Politically correct versus reality

“Kitchener can no longer afford to make the privately owned automobile the king of the road”

“Cambridge is looking for ways to encourage a modal shift in how people get around the city .... Means less emphasis on cars and more on walking, cycling and public transit.”

“The plan aims to create a system that better balances moving people by giving priority to walking, cycling, transit and automobiles in that order”
Auto-focused project

Average daylight hours on King Street:  7 days  x  14 = 98 hours

Average peak traffic hours on King:   5 days  x  1.4  = 7 hours

text-redacted road widening dedicated to 7% of time
93 % of time in my neighbourhood!
“Much higher than expected collisions .... At King Street and Chopin Drive ...... associated with left turns

Has anybody plotted the time frame for this abnormally high accident rate?

Is there the slightest chance it is associated with peak use hours?

“[1974] severe congestion will lead to the use of residential streets and intolerable levels of community disruption”
Why create an a new orphan lane?
What results will more pavement and lanes have?

1. Less peak rush hour daily congestion - no
2. Impact on non-peak pedestrian walkability - yes
3. Dover St. merge will be chaotic, and lead to diversion traffic.

4. Wide roads with fast moving traffic make it very difficult and unsafe to get around on foot. Road design should tell drivers pedestrians are here.

5. Neighbourhood parks and public spaces are important places for socializing and exercising. People tend to prefer spaces that are busy, have playgrounds, and activities in them. Have we created a suitable access route for this to occur?
Funnel factor – things you cannot change
Slide #1:

Chair, members of the committee and staff, thank you for this opportunity to present my observations on one segment of your proposed road project in my neighbourhood.

In this presentation, I intend to use a combination of comments and photos to illustrate the basis for my opposition to the plans for pavement changes in and around the King-Eagle intersection.

I have little or no interest in the two other major components of the project. I will let the study conclusions speak for themselves.

My concerns are focused on the streetscape and pedestrian impact of this project.

Slide #2: Series of recent public statements about auto-centric planning

But lets looks at time frame reality for these plans --- add photos of slow traffic ..... 4 in quadrant.

Slide #3: Calculation of peak hour auto use/rush hour as a percentage of normal daylight pedestrian use.

Which begs the question, are the auto centered factors or pedestrian features being answered by the addition of driving lanes and pavement?

Slide #4: This is the 93% time traffic reality that your project will alter. .... To what benefit?

What positive results will the addition of more pavement and new lanes produce?

Slide #5: Refer in notes to 1974 study; do police data present any time analysis. My guess would be that the majority of accidents occur during rush hour.
City of Cambridge spent more than $10,000 signing every block on Hamilton Street as the designated cycle route between Chopin and Bishop Street. This was done in conjunction with the Regional cycle master plan. King St. was not selected as the preferred route.

You should know that the green area is a promised “history park” that will celebrate the founding nature of Cambridge Mills. It will contain a variety of informative signage to celebrate the origins of our city. This park will be for walking and sitting. The entirety of this streetscape must be pedestrian friendly because it is adjacent to existing Riverside Park, largest in city with only one ‘access route’ for most pedestrians, namely the sidewalk. There are no cross walks.

Slide #6: Merging of lanes at Dover Street will create chaotic lane movement one block from library. It will also lead to southbound traffic diverting to use Hamilton St. Has any baseline data been collected to measure the diversion afternoon rush hour traffic entering King St. from Duke St.

Slide #7:

Summary: some points that

.. Pedestrian, smog, Jane Jakob hikes ... walkability, priority for whom,

Two requests:

[1] delay any decision until the bridge over Grand is opened to see what happens to some traffic flow patterns.

[2] Ask for recorded vote

Thank you

Extra Slide #8:
And in addition

And add to these scenes all of the more recent urban intensification projects and an 85 h increase in industrial lands, all done without any traffic improvements
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

PROJECT TEAM
RECOMMENDED DESIGN ALTERNATIVE

Presentation to Region of Waterloo
Planning and Works Committee
February 15, 2011

REGION OF WATERLOO
TRANSPORTATION AND ENVIRONMENTAL SERVICES
Design and Construction
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Key Plan of Study Area
Project Team Recommended Design Alternative

- Initial 2 lane construction to accommodate 4 lanes
- Urban Cross-section with Raised Centre Medians
- Multi-use trails
- Vegetated buffers and landscaping where feasible
- Roundabouts at all intersections with an overpass bridge carrying South Boundary Road over Cheese Factory Road
Issues from November 16, 2010 Delegations

Mr. Fergin on behalf on Activa Holdings Inc.
(south of Dundas St, north/east of Branchton Rd)

• Impacts of the SBR Corridor Alignment on Activa's Proposed Draft Plan of Subdivision
  • Dundas Street Intersection Shift
  • Joint Use Stormwater Management Facility
  • Advancing SBR Phase 2 Design
  • Adjustment in Countryside Line
Issues from November 16, 2010 Delegations

Mr. Collishaw on behalf of Development Interests in the Southeast Galt Community area (north/east of Dundas Street)

• Initiating the East Boundary Corridor Study north/east of Dundas St.
Issues from November 16, 2010 Delegations

Mr. Adams on behalf of the Forward Baptist Church  
(southeast corner of Franklin Blvd at Myers Rd)

• Property Impacts to the Church's property at the proposed Franklin Blvd and Myers Rd Roundabout
Issues from November 16, 2010 Delegations

Mr. Hardacre on behalf of Sunvest Development Corp.
(west of Cheese Factory Road)

- Request for SBR alignment shift
Benefits of Recommended Design Alternative

- Corridor alignment best balances effective traffic operations with least impact on the environment
- Allows for initial phasing of the road improvements
- Roundabouts - reduce number of future injury collisions
- Roundabouts and the centre median create greater landscaping opportunities
- Multi-use trails provide for a balanced approach to accommodating alternative transportation modes
Next Steps

- February 2011 - Regional Council Approval
- March 2011 - Filing of Environmental Study Report
- 2011/2014 - Detail design, and property acquisition
- 2015/2016 - Phase 1 Construction to 2 lanes (Water St to Franklin Blvd, including Franklin Blvd Extension)
• End
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Dundas Street – Roundabout
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Region Approved Corridor Alignment
Class Environmental Assessment Study (Class EA)

- This study is being undertaken to address current traffic congestion and provide for projected future growth
- Municipal Class EA planning process
- Project Team
- Extensive Public Consultation
- Corridor Alignment Approved by Council April 8, 2009
Design Alternatives

• Cross-Section

• Traffic Control Options at Intersections
  • Stop Controlled – Signalized – Roundabout

• Comparative Evaluation – Intersection Control Design Alternatives
  • Traffic and Operations
  • Social/Natural/Cultural Environment
  • Economic
Main Issues Raised by the Public Throughout the Study

- Corridor Location and Impacts with Proximity to Langlaw Drive
- Property Impacts
- Roundabout Operations
- Landscaping
Main Issues Raised by the Public Throughout the Study

Corridor Location and Impacts with Proximity to Langlaw Drive

- Requests for using Waynco Road to the south
- Noise and air quality impacts

Project Team Response:

- Waynco Road was not preferred - significant environmental and property impacts, less effective traffic operations
- No locations meet warrants for noise attenuation except for an isolated location on the Franklin Blvd extension
- Staff will review the feasibility of adding a berm and additional planting along Langlaw Drive
Main Issues Raised by the Public Throughout the Study

**Property Impacts**
- Loss of property (full or partial)
- Property impacts on parking, access and land development

**Project Team Response:**
- Corridor alignment best balances effective traffic operations with least impacts on the natural and social environment
- Layout of the roundabouts have been optimized
- Some driveway and parking impacts will be mitigated as part of detail design
Main Issues Raised by the Public

Traffic Operation at Roundabouts

• Concern for the ability of roundabout's to safely accommodate traffic, trucks, pedestrians, and cyclists

Project Team Response:

• The traffic analysis for the roundabouts on South Boundary Rd and Franklin Blvd indicate they will provide the needed capacity for the anticipated 10 year horizon in traffic growth
• Roundabouts assist in providing speed control and provide a greater level of operation as compared to traffic signals
• Studies have shown that roundabouts provide a greater level of safety than other intersection options (reduction in injury collision rates, shorter pedestrian crossing distances, typically lower speeds through the intersection)
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Water Street – Roundabout
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Cheese Factory Road – Grade Separated Overpass
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Franklin Boulevard – Roundabout
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Branchton Road – Roundabout
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
South Boundary Road at Dundas Street – Roundabout
SOUTH BOUNDARY ROAD AND FRANKLIN BOULEVARD EXTENSION
CLASS ENVIRONMENTAL ASSESSMENT
City of Cambridge and Township of North Dumfries

Recommended Design Alternative
Franklin Boulevard at Myers Road – Roundabout
traffic in Canada has also gone down. However, there is still cause for concern because:

- The number of vehicles on Canada's roads and highways has increased over the years; and,
- More people are driving sport-utility vehicles (SUVs), which consume more fuel than cars and therefore cause more air pollution.

**The Health Effects of Traffic-Related Air Pollution**

The following is a summary of the main pollutants produced by road traffic and the way they may affect your health:

**Nitrogen oxides:** These are created when vehicle engines burn nitrogen that is present in the air and nitrogen compounds found in fossil fuels. Nitrogen oxides can irritate airways, especially your lungs.

**Carbon monoxide:** This gas is produced by incomplete combustion of gasoline and diesel fuel. All engine exhaust contains a certain amount of carbon monoxide, but the amount will increase if your vehicle engine is poorly maintained. Carbon monoxide decreases the ability of your blood to carry oxygen.

**Volatile organic compounds (VOCs):** These are a large family of carbon-containing compounds that evaporate easily. Engine exhaust contains a number of different VOCs. Some of them, such as benzene and 1,3-butadiene, are cancer-causing agents, although the risk at current levels in the environment is small.

**Fine particulate matter:** These tiny particles contain many substances, including metals, acids, carbon, and polycyclic aromatic hydrocarbons. Some of these particles are emitted in vehicle exhaust, while others are formed in the atmosphere through chemical reactions between the various pollutants found in exhaust. Particulates are known to aggravate symptoms in individuals who already suffer from respiratory or cardiovascular diseases.

**Ground-level ozone:** This is not emitted directly by vehicle engines, but is formed by chemical reactions between nitrogen oxides and VOCs. These reactions are stimulated by sunlight, and this is why concentrations of ground-level ozone are higher during the summer months. Ground-level ozone irritates airways and can trigger reactions in people who have asthma.


10/02/2011
Ground-level ozone should not be confused with the ozone layer in the stratosphere, which provides protection from the sun's ultraviolet rays.

The air pollution from road traffic causes two types of effects on health:

**Acute Effects**: These effects occur rapidly (in a few hours or days) following exposure to high levels of pollutants. In certain cases, air pollution may worsen symptoms for people with existing heart and lung conditions. Scientific research carried out in Canada and in other countries has shown that the number of deaths and hospitalizations related to respiratory and cardiac conditions increases when the levels of ground-level ozone or fine particulate matter increase.

**Chronic Effects**: These occur over time following extended exposures (months or years). Scientific studies in Europe have shown that children living in areas with higher traffic density have more respiratory symptoms than other children.

**Minimizing Your Risk**

You can help to minimize risks for all Canadians by taking steps to reduce traffic-related air pollution.

- Whenever possible, use public transit, bicycle or walk instead of using your vehicle.
- If public transit is not available, try to car pool.
- Take fuel efficiency into account when you buy a vehicle. Natural Resources Canada produces a Fuel Consumption Guide. To obtain a copy, see the Need More Info? section below.
- Turn off the engine of your car when you stop for more than 10 seconds, unless you are in traffic or at an intersection.
- Keep your vehicles well maintained.

In addition, you can take steps to help minimize your risk of health effects from traffic-related air pollution:

- Pay attention to air quality forecasts in your community, and tailor your activities accordingly. Avoid or reduce strenuous outdoor activities when air pollution levels are high, especially in the afternoon during summer months when ground-level ozone reaches its peak. Choose indoor activities instead.
- Avoid or reduce exercising near areas where traffic is heavy, especially during rush hour.
Children born to mothers living near vehicle-polluted freeways might be twice as likely to have autism, an intriguing new study has found.

Focusing on children living in three California cities, the study examined whether a pregnant mother's increased exposure to vehicle pollutants puts her offspring at greater risk of having autism.

A team of investigators behind the study said Friday this is the first to establish a link between autism risk and exposure to vehicle emissions.

Lead author Dr. Heather Volk and her colleagues "found that living within 300 metres of a freeway at birth was associated with a two-fold increase in autism risk," a press release stated.

They assessed preschool children living in Los Angeles, San Francisco and Sacramento.

The child participants were 24 to 60 months old when the Childhood Autism Risks from Genetics and the Environment (CHARGE) study began.

Researchers looked at the proximity of each child's home to a major road or freeway during the first, second and third trimesters of pregnancy, and at the time of birth.

Researchers didn't measure the amount of pollution exposure.

The study's findings are supported by previously-uncovered evidence that oxidative stress and inflammation contribute to autism development, the authors said.

The potential link between autism and traffic-related pollution was explored by researchers from Children's Hospital Los Angeles, the Keck School of Medicine of the University of Southern California, and the U.C. Davis MIND Institute. Their findings are being published in the online journal Environmental Health Perspectives.

It's the latest effort by researchers to determine the root cause or causes of autism, a developmental disorder which has long been associated to genetic factors.

An analysis by the U.S. Centers for Disease Control and Protection revealed an alarming statistic — autism cases jumped 57 per cent between 2002 and 2008.

Volk and her colleagues believe the sharp increase cannot be attributed alone to improved diagnosis and the public's increased awareness.

Some believe environmental factors such as pollution, in addition to a strong genetic risk, might be one possible explanation. The authors said their study supports that theory but cautioned that little is known about pollution's effects. More research is necessary, they said.

"We expect to find many, perhaps dozens, of environmental factors over the next few years with each of them probably contributing to a fraction of autism cases," said Dr. irva Hertz-Picciotto, CHARGE's principal investigator, in the press release. "It is highly likely that most of them operate in conjunction with other exposures and/or with genes."

Other studies have uncovered links between pollution and physical and developmental effects on the fetus, or cognitive developmental delay in infants.

People with autism can have difficulty relating to others, have speech and language problems, limited and repetitive interests and behaviours.
Is Your Zip Code Healthy?

There's Something in the Air
Step outside your home and take a look around. Mounting research is demonstrating that there are definite health risks to living near heavy traffic and constant noise.

"Within 100 to 200 meters of a major road is where you'll find elevated levels of a handful of major pollutants," says Jonathan Levy, ScD, associate professor of environmental health and risk assessment at the Harvard School of Public Health. "Nitrates in the air and truck exhaust are most concentrated within this zone—though vehicle emissions can travel up to 500 meters. Stop-and-go driving—whether it's on city streets or suburban freeways—generates as much as three times the pollution of free-flowing traffic."

The health costs can be chronic respiratory problems like asthma and bronchitis. Other research suggests that car pollution may harm the cardiovascular system, triggering clot and inflammation in blood vessels, hardening the arteries, and elevating blood pressure. Exposure to exhaust pollutants has also been linked to cancer (breast, lung, leukemia) and preterm birth.

The Sound of Traffic

Besides cars and trucks, the din of unwanted sound from construction, booming stereo, barking dogs—you name it—acts as a stressor, eliciting the body's fight-or-flight response, which can translate to higher blood pressure and heart rate. The World Health Organization estimates that roughly 3 percent of heart disease in Europe is attributable to long-term exposure to traffic noise.

Save Yourself

"Within 100 to 200 meters of a major road is where you'll find elevated levels of a handful of major pollutants," says Jonathan Levy, ScD, associate professor of environmental health and risk assessment at the Harvard School of Public Health. "Nitrates in the air and truck exhaust are most concentrated within this zone—though vehicle emissions can travel up to 500 meters. Stop-and-go driving—whether it's on city streets or suburban freeways—generates as much as three times the pollution of free-flowing traffic."

The health costs can be chronic respiratory problems like asthma and bronchitis. Other research suggests that car pollution may harm the cardiovascular system, triggering clot and inflammation in blood vessels, hardening the arteries, and elevating blood pressure. Exposure to exhaust pollutants has also been linked to cancer (breast, lung, leukemia) and preterm birth.

The Upside to City Living

Urban dwellers can take comfort in the fact that their mean streets also give them plenty of opportunities to improve their health. "People who live in walkable communities have exercise built into their daily life, as opposed to those who are dependent on the automobile," says Andrew Darrell, New York regional director of the Living Cities program at Environmental Defense, a national nonprofit dedicated to finding solutions to environmental problems. A study in the American Journal of Preventive Medicine found that people living in neighborhoods with a mix of shops and businesses in easy walking distance were 35 percent less likely to be obese.

There's also virtue in a city's social density. "Because people live so close to each other, they tend to develop deeper social networks," says Darrell. "It's hard not to make friends or find supportive individuals when you're so tightly packed, he says.

Ultimately, where you live may be a matter of environmental trade-offs. "If you're near a major road but..."
The Southern California Particle Center and Supersite (SCPCS) seeks to explore health and exposure issues related to mobile source pollution. With funding from the U.S. EPA and California Air Resources Board, investigators at the SCPCS work to better understand why airborne particulate matter emitted from cars and trucks causes adverse health outcomes. As part of our research, we have taken measurements on and near major freeways in Los Angeles in an effort to characterize the particles found there. These and other scientific studies have sparked media attention and community interest, generating many questions regarding where to buy property and whether health is affected by living in a particular location. It is impossible for us to answer individual questions about potential risks in specific locations. We can, however, offer some general guidance on what is currently known about exposure to pollution and the related health effects of living near busy roads and freeways.

Numerous studies have linked traffic-related air pollution with respiratory problems such as asthma and chronic bronchitis. Studies have found decreased lung function, increased hospital visits for people with respiratory diseases, increased absenteeism from work and school, and increased morbidity (illnesses) and mortality (deaths) associated with exposure to particulate matter. All of these effects were observed at levels common in many U.S. cities. (Pope)

New studies show that long-term exposure to particulate matter has also been linked to increased illness and death rates from cardiovascular (heart-related) disease, and that sudden increases in air pollution may even cause more heart-related illnesses and deaths than is seen from lung disease. (Pope, Johnson) Some particles in air pollution, given their tiny size, are able to pass through the cellular tissues in the lungs and enter the circulation system. Their presence in the lungs may also induce a series of events that ultimately affect the heart. (Utell)

Of growing concern to the general public is whether living near a freeway is detrimental to health. The closer people are to the source of traffic emissions, the higher their exposure is to many of the constituents of exhaust. Compelling evidence suggests that people living, working, and going to school near roads with heavy traffic may have an increased risk of adverse health effects associated with exposure to mobile source pollution. These “traffic density” studies have observed development and increased aggravation of asthma (Montemayor), decreased lung function in children (Brunekreef), and low birth weight and premature births for mothers living near major roadways (Ritz).

Taking this research into consideration, it is easy to see why new homebuyers are concerned with how close property is to a busy road or freeway. Unfortunately scientists cannot say exactly how close is “too close” at this point. European studies have shown increased respiratory health problems in children who live or go to school within 100 meters (~330 feet) of a busy roadway, with the greatest risks appearing in the first 50 meters (~165 feet). Studies conducted by SCPCS investigators here in LA show that carbon monoxide and ultrafine particles—the smallest portion of particulate matter emissions and potentially the most toxic—are extremely high on or near the freeway, dropping to about half that concentration 50-90 meters (~165-295 feet) from the freeway. After about 300 meters (~990 feet) the concentration of particulate matter reaches the “ambient” level—the normal level in the air without the influence of any nearby sources. In 2003 the California state legislature enacted a new law that new schools must be built at least 500 feet from very busy roadways.

Besides the actual distance from a roadway, there are a number of additional factors that influence exposure to mobile source pollution when at home:

- Weather - temperature, humidity, wind direction and speed all affect the concentration of pollution;
- Placement of the house - is it upwind or downwind of the major roadway? That is, does the wind blow pollutants from the cars and trucks toward the property?
- Construction/design of the house - older houses may have greater air exchange between indoors and outdoors with more outside air getting inside and therefore potentially increasing exposure to pollutants;
- Type of filtration system installed in the home - few homes have HEPA (High Efficiency Particulate Air) filters, but they have been shown to remove significant amounts of the particulate matter from the air.

There are also a number of personal factors to consider when determining what your personal exposure may be, such as:

- Will I be at home during peak traffic times?
- Will I spend much time outdoors during these times?
- Will I open my windows or will I use central heating and cooling?
- How much time do I spend on the freeway? [On-road studies are currently being conducted which may show that if you have a considerable commute, the exposure you receive during your time on the freeway may well overshadow your level of exposure at home.]
Other resources for questions on particle measurements and possible health effects:

South Coast Air Quality Management District
http://www.aqmd.gov
General phone number – (800) CUT-SMOG (800-288-7664)

California Air Resources Board
http://www.arb.ca.gov
Community Health / Environmental Justice Section – (866) 397-5462

Air Pollution and Respiratory Health, National Center for Environmental Health, CDC
http://www.cdc.gov/nceh/airpollution/default.htm

U.S. EPA – Air
http://www.epa.gov/ebtpages/air.html

For more detailed information about the topics presented above, please reference the following citations.


Asthma - acute exacerbation and possible onset


Cardiovascular effects


New York Daily News: Perspective on air pollution

"Wake up to the most dangerous air pollution: Fine particulate matter kills thousands in N.Y.C., L.A."

Co-authored by STEP's Wig Zamore

"Fine particulate matter is especially insidious because it is virtually invisible, odorless, and tasteless. All of us are exposed, but few are aware of it. Despite the substantial impact on our health, it is not well-known to the public compared with many environmental exposures that pose far smaller health risks, such as electromagnetic fields from cell phones or the hazardous chemicals at waste sites. In terms of health risks and number of people affected, particulate matter should rank in importance with other public health concerns such as smoking and secondhand smoke exposure and obesity trends."
Highway to asthma? New results from a study in Lima, Peru

Many people are aware of the traffic-related dangers of major roadways in developing countries. Road traffic injuries are the 11th leading cause of death globally, and 90 percent of these deaths occur in low- and middle-income countries. However, less is known about the critical link between living near highways and other health outcomes, including respiratory disease. Yesterday, a study published in the Journal of Allergy & Clinical Immunology found that teenagers living close to a heavily transited roadway in Lima, Peru, are more likely to have asthma and allergies than teenagers living farther away. This study is one of the first to explore the relationship between traffic exposure and asthma in developing countries.

The study included 725 adolescents between the ages of 13 and 15 years who lived near a highly trafficked avenue in Pampas de San Juan de Miraflores (Las Pampas), a shantytown located in the outskirts of Lima. The researchers found that adolescents living within 100 meters of the avenue were twice as likely to have asthma symptoms as adolescents living over 384 meters away. In addition, adolescents living closer to the avenue were more likely to test positive for various allergies. However, the study did not find an association between proximity to the road and exhaled nitric oxide (eNO), a common measure used to test people for asthma and respiratory tract infections. Furthermore, researchers did not find an association between indoor household particulate matter and proximity to the avenue.

Today, more than half of the world’s population lives in urban areas, and by 2050 the World Health Organization (WHO) predicts that 70 percent of people will live in urban areas. The majority of this rapid urbanization is occurring in developing countries, with many people moving into shantytowns and slums much like Las Pampas. This rapid growth often outpaces planning and infrastructure, resulting in inadequate or unsafe housing, dense traffic and air pollution, and poor water and sanitation services. The health consequences of this unchecked urban growth are broad, ranging from increases in interpersonal violence to infectious disease, and now, as this study suggests, a greater risk of asthma and allergies. Governments must start to address these new challenges with improved urban planning and policy changes in order to reduce risk factors for disease, including policies to regulate traffic and automobile emissions in settings similar to those of Las Pampas, Peru.
South Boundary Road EA
ACTIVA HOLDINGS INC.
1589805 Ontario Inc.
South Boundary Road
Proposed Regional Alignment

POTENTIAL STERILIZED LANDS (APPROX. 1.5 ACRES)

OPEN SPACE
DRAFT PLAN LANDS
DRIPLINE

WETLAND LIMIT

10m SETBACK FROM DRIPLINE
30m SETBACK FROM WETLAND

PER STANTEC EIS 2007 & APPROVED BY GRCA

10m SETBACK FROM DRIPLINE

PROPOSED SOUTH BOUNDARY ROAD ALIGNMENT (60m ROW)

DRAFT PLAN LANDS
EXISTING RESIDENTIAL

TRIANGLE PROFILE
DRAFT PLAN LANDS

CURRENTLY PROPOSED
DRAFT PLAN LANDS

ACTIVA LANDS

DUNDAS STREET (HIGHWAY 8)

BRANCHTON ROAD

TOWNSHIP OF NORTH DUMFRIES
CITY OF CAMBRIDGE

TOWNSHIP OF NORTH DUMFRIES
Revised South Boundary Road
Stantec Alignment
South Boundary Road
Proposed Regional Alignment (Aerial)
Revised South Boundary Road Stantec Alignment (Aerial)
Rapid Transit
Implementation Options
Presentation Outline

• Rapid transit technology
• Comparing BRT & LRT
• LRT Staging
• Adapted BRT (aBRT)
• Converting to LRT
• Implementation options
• Public consultation
Rapid Transit

- Move people
- Shape urban form
Rapid Transit Technology

- Aerobus
- Automated Guideway Transit
- Bus Rapid Transit
- Commuter Rail
- Diesel Multiple Units
- Light Rail Transit
- Magnetic Levitation
- Monorail
- Personal Rapid Transit System
- Subway
Rapid Transit Technology

- Aerobus
- Automated Guideway Transit
- Bus Rapid Transit
- Commuter Rail
- Diesel Multiple Units
- Light Rail Transit
- Magnetic Levitation
- Monorail
- Personal Rapid Transit System
- Subway
Comparing BRT & LRT

- Multiple Account Evaluation (MAE)
  - Flexible
  - Quantitative
  - Broader representation
Comparing BRT & LRT: MAE

Index

BRT

LRT

cost
user
environmental
land use
social

cost
user
environmental
land use
social
Comparing BRT & LRT: COSTS

<table>
<thead>
<tr>
<th>BRT</th>
<th>LRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$$</td>
</tr>
</tbody>
</table>
### Comparing BRT & LRT: CAPACITY

<table>
<thead>
<tr>
<th>Standard Bus</th>
<th>Articulated Bus</th>
<th>Two-Car Train</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart1" alt="Bus Seats" /></td>
<td><img src="chart2" alt="Articulated Bus Seats" /></td>
<td><img src="chart3" alt="Train Seats" /></td>
</tr>
</tbody>
</table>
Comparing BRT & LRT: CAPACITY

Ottawa: BRT at capacity
Comparing BRT & LRT: CAPACITY

**BRT**
- Over capacity by 2031
- Signal priority impractical
- No room for more buses

**LRT**
- Capacity beyond 2031
- More room for passengers
- More doors
- Signal priority
Comparing BRT & LRT: URBAN FORM

Increase in Land Values

- BRT: $75 million
- LRT: $370 million
Comparing BRT & LRT: URBAN FORM

Increase in Employment in Station Areas

- BRT: 11,500 new jobs
- LRT: 23,000 new jobs
Comparing BRT & LRT: TRANSPORTATION

Transportation User Benefits

<table>
<thead>
<tr>
<th></th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRT</td>
<td>360</td>
</tr>
<tr>
<td>LRT</td>
<td>523</td>
</tr>
</tbody>
</table>
Comparing BRT & LRT: ENVIRONMENT

Reduction in Greenhouse Gas Emissions

- BRT: 12,210 tonnes/year reduced
- LRT: 22,260 tonnes/year reduced
LRT Staging: Other Municipalities

Length of LRT Constructed (km)

- Edmonton: 1978, 7 km
- Calgary: 1981, 11 km
- Vancouver: 1985, 29 km
- Portland: 1986, 24 km
- Portland: 1986, 28 km

Edmonton, Calgary, Vancouver, Portland.
Existing Passenger Activity in CTC

- South of Fairview Park Mall: 6,400 passenger boardings / weekday
- North of Fairview Park Mall: 29,200 passenger boardings / weekday

LRT Staging: Waterloo Region
aBRT

VIVA

ZÜM

- Mixed traffic
- Curbside stations
aBRT

- Queue jumping
- Signal priority
aBRT

- More stations
- Streetscaping, bicycle & pedestrian amenities
- Pre-boarding fares
- Passenger information systems
aBRT
Bus by-pass shoulders (for BRT & aBRT)
aBRT

Complemented by express routes
Converting to LRT

aBRT can continue during LRT conversion
Converting to LRT

Very difficult to convert BRT to LRT

- High investment
- BRT at capacity
- Service disruption
Refining the Options

<table>
<thead>
<tr>
<th>Amount Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities, civil works and vehicles</td>
</tr>
<tr>
<td>Maintenance yard</td>
</tr>
<tr>
<td>Electrical supply</td>
</tr>
</tbody>
</table>
Implementation Options:

L1, L2, L3 & L4

36 km of rapid transit from Conestoga Mall to the Ainslie St Bus Terminal

Changes from LRT to aBRT at:

L1 – Ottawa St
L2 – Block Line Road
L3 – Fairview Park Mall
L4 – Sportsworld Dr
Implementation Options:

L5, L6, L7 & L8

34 km of rapid transit from Northfield Dr to the Ainslie St Bus Terminal

Changes from LRT to aBRT at:

L5 – Ottawa St
L6 – Block Line Road
L7 – Fairview Park Mall
L8 – Sportsworld Dr
Implementation Options: L9, B10 & BU11

L9, B10: rapid transit from St Jacobs Farmers’ Market to the Ainslie St Bus Terminal

L9 – all LRT (39 km)
B10 – all BRT (38 km)

BU11: no rapid transit
Moving Forward Transit Program

- Rapid transit
- GRT re-orientation & expansion
- Integration with GO & VIA
- Intelligent Transportation Systems
- Smart card technology
- Transit stations
- Road improvements
- Park ‘n’ ride facilities
<table>
<thead>
<tr>
<th>Region's Share of Capital Cost ($ millions)</th>
<th>Net O&amp;M by 2031 ($ millions/year)</th>
<th>Annual Incremental Household Impact for 6 Years ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>129</td>
<td>8.6</td>
</tr>
<tr>
<td>L2</td>
<td>213</td>
<td>9.1</td>
</tr>
<tr>
<td>L3</td>
<td>253</td>
<td>9.1</td>
</tr>
<tr>
<td>L4</td>
<td>395</td>
<td>11.6</td>
</tr>
<tr>
<td>L5</td>
<td>105</td>
<td>8.2</td>
</tr>
<tr>
<td>L6</td>
<td>189</td>
<td>8.8</td>
</tr>
<tr>
<td>L7</td>
<td>215</td>
<td>8.7</td>
</tr>
<tr>
<td>L8</td>
<td>357</td>
<td>11.2</td>
</tr>
<tr>
<td>L9</td>
<td>985</td>
<td>15.5</td>
</tr>
<tr>
<td>B10</td>
<td>168</td>
<td>9.0</td>
</tr>
<tr>
<td>BU11</td>
<td>500</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Public Consultation: Timeline

- Feb/Mar: public consultation
- Apr: preliminary preferred option
- Apr/May: public consultation
- June: Council approval
Public Consultation: Purpose

• Share information & respond to questions
• Seek public input on:
  – Technology
  – Design
  – Options
  – Evaluation
Public Consultation Centres

• Mar 3: Kitchener & Waterloo
• Mar 9: Cambridge & Waterloo
• Mar 10: Cambridge & Kitchener
Public Consultation: Booths

- Sat Mar 5: Fairview Park Mall & Kitchener Farmers’ Market
- Sat Mar 12: Conestoga Mall
- Sat Mar 19: Cambridge Centre Mall

- Joint with Roundabout Education Program
Public Consultation: Events

• Displays
• All-Council meeting
• Speaking engagements
Public Consultation: Notification

- Website
- Television
- Newspaper
- Roadside signs
- Notices to contact list

- The Record
- Cambridge Times
- Waterloo Chronicle
- Ayr News
- Woolwich Observer
- New Hamburg Independent
- Elmira Independent
Transformation
Rapid Transit Implementation Options

Questions?
From: Robert Milligan <mill@continuum.org>

Subject: Smart Staging+ Based on Precedent as Key to LRT Success

Date: February 15, 2011 2:14:46 AM GMT-05:00

Smart Staging+ Based on Precedent as Key to LRT Success,

None of the Region's current proposed LRT options adequately deal with worsening traffic congestion and were not designed to do so from the beginning.

Rapid Transit Initiative staff and many Regional Councillors -- especially Chair Ken Seiling -- are to be commended for their strong support of an LRT as a concept. Also, constructive critics such as Mayor Doug Craig should also be appreciated because of their efforts help to ensure that we have the best Rapid Transit system design possible.

And there is no doubt that the vast majority of citizens and current Regional Councillors would support an enhanced LRT system design if it affordably intensified our urban cores and actually decreased the accelerating road congestion.

BUT, the RAPID TRANSIT IMPLEMENTATION OPTIONS plan as it was formerly presented today does not include such an enhanced LRT system design option. As with their slightly different earlier version, these current options force 2 tracks and ugly overhead wires frequently along a street -- using parallel streets (King/Caroline & Charles/Duke) since deemed necessary. Going south from the Stockyards Market (or Northfield or the Conestoga Mall), down to the Fairway Mall (or beyond to Sportsworld Dr.), the rail corridor used is mostly the Region owned Elmira spur. The CN & CP Budd spur corridors are used only when necessary.

Unfortunately, all the LRT involving options still cost too much and accomplish too little. The exclusive BRT option would do even less than these LRT/BRT combinations to attract middle class drivers from their cars. All these Regional options would DOOM our Region to worsening peak-period traffic jams and help brand us as the Region of Great Innovation Failure!

Here are some more specifics on what's wrong with the Region's Rapid Transit Options. The LRT component of all options costs much too much per km.; the ridership would continue to be mostly students (who will not encourage developers); travel time will be much longer because: 1) the BRT route in Cambridge is very circuitous and much slower (c.f. a more direct King-Coronation-Dundas, Mill Creek route), and 2) an extra transfer will be necessary for longer trips because the LRT does not extend to Ainslie Terminal. Etc.

Then how can we build on the current LRT system design to flip it from potential failure to likely great success -- and with a budget of $790M or less, including a Cambridge LRT!? Smart & proven staging is the answer.

I owe my inspiration here to an unlikely Regional Councillor, Mayor Doug Craig of Cambridge.
Early on in the Rapid Transit Initiative process, Mayor Craig wisely said that he would like the LRT to utilize the relatively unused (CN) rail corridor that runs parallel to the CP tracks and King-Coronation-Dundas Street. But when staff and a majority of Regional politicians inexplicably decided to make urban core intensification virtually the sole RTI goal and Cambridge was not to have an LRT until 2035, Doug shifted to stating that he preferred a BRT for all of the Tri Cities.

Over 2 years ago, Doug's rail right-of-way IDEA helped spark my extended IDEAS. I thought,"Why not use the whole rail right of way corridor from a Stockyards Market terminal to the Ainslie Terminal?" (The route: Waterloo spur line, Caroline St., Iron Horse rail/trail, Kitchener HUB (both connect to and by-pass), CN and CP spur lines, new track past Grand River Bridge until Dolph St.. old CN track, new track from Hespeler Rd., through main CP line existing 2-track tunnel and along the Mill Creek rail/trail, then along the side of Wellington St.)

I had realized back then that whole rail right-of-way from Stockyards Market to Ainslie Terminal is grossly under-utilized. It would cost only about 1/12 the cost of putting 2 electrified tracks along a street (based on experience of the very successful Ottawa O-train diesel-electric LRT on upgraded CP freight track with new passing track at stations). And most of the stations in the current RTI plan -- and more such as a Union/Belmont Station 5 minutes from Sun Life -- could be included initially (with the rest covered by more slowly staged intensification corridors)"

So, my main LRT iterative-design-focus for the last two years has been the grossly under-utilized rail right-of-way corridor from Stockyards (or Northfield) to Ainslie. Why can't RTI staff and key Regional politicians see that this rail transportation corridor would enable the LRT to be very rapid, have a shorter route, be safer, cheaper, of higher passenger capacity, ...

And (as mentioned previously), the fact that track on the rail right-of-way would cost as little as 1/12 the the cost per km. of 2 tracks along a road. What an inexpensive opportunity for a great LRT system design! If designed smartly in collaboration with the railways (e.g. give them a large net advantage over disadvantage), then it could become the inexpensive backbone of an integrated LRT and bus network.

Further, such an approach to design would enable a more controlled staging of intensification road corridors -- beginning with Caroline-Alan-King-HUB LRT road corridor as the first (and exemplar). And the Hespeler Rd. intensification road corridor could be built once a plan is worked out to lessen traffic by diverting truck traffic onto Industrial Rd. and/or some form of Highway 24 eastern by-pass.

As both these intensification road corridors would be spared the major responsibility for peak-period traffic, they could be built with a much less expensive single-track with Union St (KW) and Cambridge Mall Stops having a passing track. (In non-peak periods, both these intensification road corridors could have more frequent stops to help increase intensification and better serve customers/clients for businesses.)
As suggested by the O-Train LRT in Ottawa and examples elsewhere, further staging is possible to reduce the initial capital costs:
1. The single tracks with passing tracks on the LRT rail right-of-way can be expanded to a second full length track and be done in stages;
2. The initial rail vehicle could have proven diesel-electric propulsion (or even a diesel-electric hybrid) with an ultra-capacitor to capture braking energy and help acceleration (either on-board or at station/stop) whose propulsion system could be upgraded either to a very cost-effective battery, a hydrogen fuel-cell, a hydrogen combustion engine, or ?;
3. Even an overhead wire (catenary) electrical power system could be gradually added (this normally represents about 1/4 of the initial LRT capital cost).

Because exclusive access to the CP and GEXR/CN portions of the rail right-of-way is critical to the success of this suggested LRT system design option -- although a more costly occasional railway day-use version would be viable also -- successful collaboration with the railways is essential. And because the Regional LRT system would have so much to gain form using this rail right-of-way, the Region can afford to be very generous with the railways including the building of a new inter-railway exchange yard on adjacent MTO land defined by the CP tracks, Hwy 8, and 200m from both Sportsworld Dr. and the Grand River. This would enable CP to not have to use the spur line up to the Couttiand exchange yard (the few customers they have along this section of spur line could be sold to GEXR or GEXR would service them at night on behalf of CP.

GEXR/CN could operate exclusively at night with financial incentives from the Region -- and perhaps use CP track to better connect with their Cambridge operations.

A further financial benefit in extending the LRT to Cambridge initially is that the some of the MTO land south of Sportsworld Dr. could be made available very inexpensively for the LRT maintenance facility.

And my LRT system design option would Intelligent Transportation System technology to not only help enable timely and safe use of passing tracks but to also enable the saving of SMs in capital costs by the sharing of existing bridges and underpass -- even possibly with some railway day use of the track especially when combined with an automatic braking system for missed red signals. I should add that the two options that I am proposing will mean much less street disruption during construction. And I would suggest the list of RTO options be considered as an OPERC LIST.

Robert Milligan, New Dundee, ON
For Planning and Works Committee Feb. 15, 2011
Regional Government of Waterloo in Regard to the report, "RAPID TRANSIT IMPLEMENTATION OPTIONS"

Recommendation: That Regional Council direct staff to set-up an Innovative RTO Options Team to explore new ways to cost-effectively extend the LRT to Finslie Terminal in the first stage. It would be led by Graham Vincent and have as members Darshpreet Bhatti, a rep. from Tri-Teg & TST, and Robert Milligan. Others would be considered.