

Partnership of

Canada



**Canada-United States-Ontario-Michigan
Border Transportation Partnership**

**Detroit River International Crossing
Environmental Assessment**

**Public Information Open House #6
Summary Report**

June 2008

URS

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1.0 Introduction

The Border Transportation Partnership representing the governments of Canada, the United States, Ontario, and Michigan is committed to working together to determine the long-term border crossing needs at the Windsor-Detroit Gateway. The Partnership is moving forward with the route planning and environmental studies to create additional crossing capacity.

The Ontario Ministry of Transportation (MTO) is leading the Canadian work program in coordination with Transport Canada. URS Canada Inc. has been retained as part of the Study Team to assist in undertaking the route planning and environmental assessment in accordance with the Ontario Environmental Assessment Act (OEAA) and Canadian Environmental Assessment Act (CEAA).

Governments at all levels are committed to completing the work as rapidly as laws and regulations permit, while ensuring interested and affected parties have adequate opportunities to have their perspectives considered. Public input is an essential part of this project. The Detroit River International Crossing Project is a unique opportunity for all interested persons and organizations to contribute to the planning of a major transportation undertaking.

The consultation program for the DRIC Study incorporates Public Information Open Houses (PIOHs) throughout the Study, generally timed with major milestones in the environmental assessment as follows:

Task/Milestone		
Identify Study Area Features	Initial Public Outreach	March 2005
Identify Initial Set of Crossing, Plaza and Connecting Route Alternatives	PIOH #1	June 2005
Identify Area of Continued Analysis	PIOH #2	Dec. 2005
Identify Practical Crossing, Plaza and Access Road Alternatives	PIOH #3	March 2006
Update on Analysis of Practical Alternatives	PIOH #4	Dec. 2006
Update on Analysis of Practical Alternatives (Introduction of Parkway Alternative)	PIOH #5	August 2007
Evaluation of Practical Alternatives & Selection of the Technically and Environmentally Preferred Alternative	PIOH #6	June 2008

This report summarizes the notification and display material prepared for the sixth PIOH meeting including pre-PIOH activities, attendance, and the public input and comments provided at the Open House sessions.

2.0 Purpose

The sixth round of Public Information Open House (PIOH) meetings were held to present to the public the analysis and evaluation process leading to the selection of the Technically and Environmentally Preferred Alternative (TEPA). The two (2) sessions of PIOH #6 were held as follows:

Wednesday June 18, 2008

2:00 p.m. to 8:00 p.m.
Holiday Inn Select Hotel, Ballroom
1855 Huron Church Road
Windsor, Ontario

Thursday June 19, 2007

2:00 p.m. to 8:00 p.m.
Macedonian Community Centre
5225 Howard Avenue
LaSalle, Ontario

The format for the PIOHs was informal drop-in sessions with displays showing the analysis and evaluation completed for the Seven Major Evaluation Factors (Changes to Air Quality, Protection of Community and Neighbourhood Characteristics, Maintain Consistency with Existing and Planned Land Use, Protect Cultural Resources, Protect the Natural Environment, Improve Regional Mobility, and Cost and Constructability). The Study Team was available to answer questions, explain the extensive technical work that had been completed, discuss elements of the TEPA, and to receive feedback from the public.

The purpose of the PIOH was to share the latest project information with the public, present the analysis and evaluation process leading to the selection of the Technically and Environmentally Preferred Alternative, and receive comments on the work completed to date. As well, the public was invited to provide their ideas and comments on the analysis and evaluation, leading to the selection of the TEPA. Representatives from the Ontario Ministry of Transportation's property section were available during the PIOH meetings to respond to specific questions regarding property acquisition. Property representatives were situated in a separate and private room which was equipped with plans of the TEPA.

The open house sessions also offered members of the public the opportunity to complete sign-up forms to register for PIOH #6 Workshop sessions to be held later in June.

3.0 Public Notification

Prior to the PIOH #6 meetings, the following notification activities were carried out to notify the public:

1. An advertisement was published in the following newspapers on the specified dates:

<u>Newspaper</u>	<u>Date of Insert</u>	<u>Circulation (approx.)</u>
Windsor Star	Tuesday June 10, 2008.....	80,000
Harrow News	Tuesday June 10, 2008.....	1,400
Kingsville Reporter.....	Tuesday June 10, 2008.....	2,200
Essex Voice	Tuesday June 10, 2008.....	6,200
Leamington Post & Shopper	Wednesday June 11, 2008.....	3,600
Essex Free Press.....	Wednesday June 11, 2008.....	3,500
Le Rempart (French).....	Wednesday June 11, 2008.....	7,300
Amherstburg Echo	Thursday June 12, 2008.....	8,300
LaSalle Post.....	Thursday June 12, 2008.....	9,800
Windsor Star	Saturday June 14, 2008	80,000

2. PIOH meeting dates and locations were announced at media events held in advance of the PIOHs. A Media Briefing session was held on June 18th.
3. Notices (see Appendix A) were mailed directly to over 5,800 persons on the Study Team's general public mailing list as well as project Advisory Group contact lists.
4. Notices (see Appendix A) were mailed directly to over 37,000 property owners (as identified on property assessment roll plans supplied by municipalities) and residents within the Area of Continued Analysis.
5. Details of the PIOHs were posted on the project website at www.partnershipborderstudy.com in advance of the meetings.
6. Public Service Announcements were placed on local community electronic billboards and websites in advance of the meetings.

4.0 Advisory Group Meetings

Meetings were held in Windsor with the DRIC Advisory Groups for the purpose of presenting a summary of the analysis and evaluation leading to selection of the Technically and Environmentally Preferred access road (The Windsor-Essex Parkway) as well as an update on the analysis of practical plaza and crossing alternatives. The meetings were held as follows:

Municipal Advisory Group	May 15, 2008
Community Consultation Group	May 21, 2008
Schools Advisory Group	May 22, 2008

Notes of these meetings are provided in Appendix B.

5.0 Presentations to Councils

Presentations were made to local municipal councils for the purpose of presenting a summary of the analysis and evaluation leading to selection of the Technically and Environmentally Preferred Access Road (The Windsor-Essex Parkway). The presentations were made as follows:

City of Windsor Council.....	May 26, 2008
Town of Tecumseh Council	May 27, 2008
County of Essex Council.....	June 4, 2008
Town of LaSalle Council	June 10, 2008

6.0 Display Material

The following display material was presented at the Public Information Open House meetings (see Appendix D):

- The Border Transportation Partnership
- Contact Information – Canadian Study Team
- Purpose of the DRIC Study
- Evaluation Process

- CEAA Process
- Coordination of CEAA & Ontario EA Processes
- Governance
- Chronology of DRIC
- Evaluation Methods
- Study Process
- Illustrative Alternatives Studied
- Practical Alternatives Studied
- Public Information Open House #5
- Results of Consultation – Parkway Refinements
- Summary of Analysis – Access Road Alternatives
- Parkway Connects Communities
- The Windsor-Essex Parkway
- Summary of Analysis – Access Road Alternatives
- Arithmetic Weighting-Scoring Results
- Why Not GreenLink?
- Summary of Analysis – Plaza and Crossing Alternatives
- Canadian Crossing – Plaza Alternatives
- Summary of Analysis – Plaza and Crossing
- Contact Information – U.S. Study Team
- The Windsor-Essex Parkway
- Comparison of Tunnel Lengths and Local Features
- Bridge Type Study
- Bridge Types
 - Plaza B1 Cable Stayed Bridge
 - Plaza B1 Suspension Bridge
- Changes to Air Quality
 - Air Quality Monitoring
- Protection of Community and Neighbourhood Characteristics
- Maintain Consistency with Existing and Planned Land Use
- Protect Cultural Resources
 - Archaeological Features
 - Built Heritage Features
- Protect the Natural Environment
 - Vegetation Communities and Fish Habitat & Watercourses
- Improve Regional Mobility
 - Travel Times to Plaza B1
- Cost & Constructability
- Geotechnical Explorations and Analyses – Access Road
- Results of Deep Borehole Drilling – Crossing Locations

- Proposed Construction Mitigation
- Context Sensitive Solutions (CSS)
- Property Acquisition – What You Should Know
- Next Steps

In addition, the following video simulations of the TEPA were displayed on monitors:

- Informational video for The Windsor-Essex Parkway;
- Simulated aerial “fly-over” of The Windsor-Essex Parkway.
- Simulated aerial “fly-over” of Plaza B1 and Crossing B.
- Traffic simulation depicting predicted and future traffic conditions in The Windsor-Essex Parkway corridor.

The attendees were provided with a handout package that contained a copy of the display material (see Appendix C), fact sheets and a CD which contained fact sheets, bridge types, images, display boards and TEPA plans. Comment sheets were made available to all attendees. Sign-up sheets for the Workshop sessions were available at numerous locations throughout the meeting room.

7.0 Attendance and Comments

A total of **1,000** members of the public chose to sign the visitor’s register for the two PIOH meetings (see table below).

In addition to verbal comments, the Study Team encouraged visitors to express in writing, all comments they had regarding the information presented. In total, **189** written comment sheets were submitted at the PIOHs. In addition, **7** comment sheets were received via postal mail, fax, e-mail or via the Study Team website.

A breakdown of attendance and comments by meeting date/venue is provided as follows:

Date / Venue	Total Attendance	Written Comment Sheets Received
June 18, 2007 – Windsor, Ontario	658	110
June 19, 2007 – LaSalle, Ontario	342	79
Total Comments received via postal mail, fax, e-mail or Study Team website	-	7
Total	1,000	196

Attendees were encouraged to provide input to a number of questions on the comment sheets. The following lists the questions asked and the most frequent written responses received.

Question 1 –Please provide any comments you have regarding the evaluation process and choice of the technically and environmentally preferred access road (the Windsor-Essex Parkway) and plaza/crossing (Plaza B1, Crossing B).

Most frequent responses to Question 1:

- Excellent choice; DRIC picked best option considering environment
- Who is responsible for maintenance of parks and green spaces and snow removal?
- Questions why DRIC did not fully evaluate City of Windsor's GreenLink proposal
- Incorporate roundabouts into traffic design
- Start work as soon as possible; no delays; get it done
- Concerned about property value for homes close to proposed route
- Increase amount of tunneling; tunnel whole route; cover more areas
- Question about mitigation measures during and after construction (i.e. noise barriers, fencing around properties)
- DRIC's presentation is best for safety (vehicle breakdown and access), fire protection and ventilation demands
- Add more access points to pathways and walkways as well as to proposed route
- Support for Plaza B1/Crossing B
- Support for City of Windsor's GreenLink proposal
- Move road to less densely populated area

Question 2 – What mitigation methods should be explored as the Technically and Environmentally Preferred Alternative proceeds into the next phase of study/design?

Most frequent responses to Question 2

- Increase depth of below-grade sections; keep trucks below grade level
- More/full tunneling to connect communities and provide community areas on overpasses
- Seriously consider and discuss mitigation measures to lessen noise and pollution impacts (e.g. noise barriers, berms, natural filtration such as trees, shrubs, etc.)
- Concerned about noise and vibration impacts during and after construction; concerned about smog & pollution
- Save the older trees existing in greenspaces
- Requests for sound walls/barriers on properties
- This new route and crossing are needed – get it done

Question 3 – Do you feel that the tunnel locations provide adequate community connections and access to greenspace? If your answer is no, please provide your suggestions for improvements.

Most frequent responses to Question 3

- Tunnels are too short; increase length; join tunnels together; full tunneling
- Suggestions for alternate tunnel locations or modifications to proposed tunnel sections
- Support for DRIC tunnel locations and length; great proposal for the communities
- Incorporate longer tunnels like City of Windsor's GreenLink proposal
- Increase number of trees in greenspaces to help air quality

Question 4 – Please provide your comments on the analysis completed for the Seven Major Evaluation Factors listed in the table below. Consider the following:

- Do you have any concerns relating to the results of the analysis of the preferred crossing, plaza, or access road locations?
- Are there any other issues that you feel should be addressed?

Most frequent responses to Question 4 – Changes to Air Quality

- Tunnels are required in residential areas and around schools
- Concerned about air quality, diesel fumes, gas emissions
- Concerned about human health, especially during construction
- Longer tunnels/full tunneling will address air quality concerns
- Support for City of Windsor's GreenLink proposal

Most frequent responses to Question 4 – Protection of Community and Neighbourhood Characteristics

- This is one of the most important factors
- Amount of greenspace should be increased; will increase community connections
- DRIC has done a fair analysis; support choice of bridge and plaza
- Concern about value/quality of property close to planned route
- Longer tunnels will connect neighbourhoods and communities

Most frequent responses to Question 4 – Maintain Consistency with Existing and Planned Land Use

- Existing and planned uses should be preserved at all costs
- Ensure planned route is consistent with community plans or planned land use will have to be altered
- Incorporate more green spaces and green links

Most frequent responses to Question 4 – Protect Cultural Resources

- Protect cultural resources at all costs
- Support for DRIC's work in responding to this factor
- Good that DRIC avoided the Sandwich west historic area
- Should increase tree vegetation
- Full tunneling would help continuity and would protect schools, parks and neighbourhoods
- Concerns about property value

Most frequent responses to Question 4 – Protect the Natural Environment

- Provide maximum amount of greenspace as possible; do all you can do
- Good that DRIC avoided Ojibway Park; work to integrate trails for people and wildlife
- This was an excellent and thorough analysis. Great work and great information.
- Increase length of tunnels to protect natural environment areas

Most frequent responses to Question 4 – Improve Regional Mobility

- Improving regional mobility is a very important factor; DRIC has done a good job
- Improvements to regional mobility are desperately needed
- Good work by DRIC – gets trucks off city streets; additional highway gives locals more options
- Concern about bottlenecks at customs

Most frequent responses to Question 4 – Cost & Constructability

- Cost should not be a factor; other factors are more important than cost
- Only have one chance – do it right the first time; will only cost more to fix it in the future
- Concerns that DRIC is focusing too much on cost
- Keep costs down to where it is affordable
- This road project should be a priority for our tax dollars; money should be spent to protect the air quality and health of the surrounding people

Question 5 – Other Comments

Most frequent responses to Question 5

- Continue to listen to the communities and incorporate public input
- Cost should not be a factor; built it whatever the cost
- Preference for City of Windsor's GreenLink proposal
- Concerned about emergency access to communities and in tunnels
- Concerned about impact to property and property values; buy my home
- Question about proposed traffic routes/road closures during construction
- Support for DRIC Team: excellent presentation; lots of detail; knowledgeable and helpful staff
- Suggestions for alternate route locations
- Request for more access points to proposed route, service roads and green areas
- DRIC should speak with the City of Windsor and both sides should compromise on a solution
- Concern for environmental mitigation in the area of the plaza
- Preference for at-grade or below-grade roadway without tunneling
- Good project; will enhance Windsor; plan looks great; get it done
- Consider reverse customs/immigration
- More tunneling; more greenspace over highway
- Worried about vibration/added vibration with trucks traveling underground

8.0 PIOH 6 Workshop Sign-ups

At the PIOH sessions, the public was invited to register for workshops to be held June 24 & 25, 2008 to discuss features of the Technically and Environmentally Preferred Alternative and potential impact mitigation strategies with the study team. In total, **110** individuals attended both of the workshops.

APPENDIX A - Newspaper Advertisement and Public Mailout

Public Information Open House Meetings

Wednesday June 18, 2008

**Detroit River
INTERNATIONAL CROSSING
STUDY**

Thursday June 19, 2008

The Canadian and United States Detroit River International Crossing (DRIC) study team continues to work towards the identification of the preferred end-to-end solution for a new border transportation system linking Highway 401 in Ontario to Interstate 75 in Michigan.

The community has an important role to play in the environmental assessment for the DRIC Study. Through our ongoing consultation you are sharing your ideas and we're listening. Now you have another opportunity to both **find out all the latest information** on this important study and **be heard by study team members**.

Get Involved The Canadian study team listened to community concerns about the need to improve quality of life through better air quality, less noise, and getting trucks off local streets. Input received at nearly 300 meetings held with members of the public, government agencies and other important stakeholders has been instrumental in the development and analysis of alternative solutions. The Windsor-Essex Parkway was recently announced as the technically and environmentally preferred alternative for the Canadian access road portion of the new border transportation system.



Visit the Open Houses At these Open Houses, the analysis and evaluation process leading to the selection of the preferred alternative will be presented. You are encouraged to attend the Open Houses, view the materials on display, and speak to the study team representatives including experts who will be available to explain the extensive technical work that has been completed.



Public Information Open Houses

June 18th, 2008
2:00 P.M. to 8:00 P.M.
Holiday Inn Select, Ballroom
1855 Huron Church Rd.
Windsor

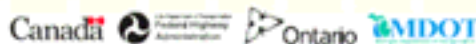
June 19th, 2008
2:00 P.M. to 8:00 P.M.
Macdonian Community Centre
5225 Howard Avenue,
LaSalle

Is Your Property Impacted? We want to hear from you. In response to feedback from the community, property purchase requests from land owners currently located within the technically and environmentally preferred alternative access road will be handled on a case-by-case basis. Other residential and commercial properties may also qualify. This will help to reduce uncertainty for those whose properties may be affected. Please contact us for further information.

Come to the Workshops The study team is also organizing two public workshops to provide additional opportunities for you to consider the analysis and provide comments on the technically and environmentally preferred alternative (TEPA). Workshops will be held on Tuesday June 24 and Wednesday June 25, 2008, from 6:30 p.m. to 9:00 p.m. at St. Clair College Campus Main Building, Room 322 (2000 Talbot Road West, Windsor).

Registration for a workshop is required to attend. To pre-register, call 519-969-9696 or email info@partnershipborderstudy.com

Background The Detroit River International Crossing (DRIC) study is a bi-national planning study being conducted in accordance with the requirements of the Ontario Environmental Assessment Act (OEAA) and the Canadian Environmental Assessment Act (CEAA) in Canada and coordinated with the U.S. National Environmental Policy Act (NEPA) in the United States. The Ontario Ministry of Transportation (MTO), in coordination with Transport Canada, is leading the Environmental Assessment study in Canada and has retained URS Canada Inc. to assist in this undertaking.



Information collected at these Open Houses and Workshops will be used in accordance with the Freedom of Information and Protection of Privacy Act and the Access to Information Act. With the exception of personal information, all comments become part of the public record.



For more information visit us at
www.weparkway.ca
or
www.partnershipborderstudy.com

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APPENDIX B - Notes of Advisory Group Meetings

Project:	Detroit River International Crossing	Meeting No.
Project No.	33015387	Date: May 15, 2008
Location:	Mackenzie Hall, Windsor, Ontario	Time: 2:00 p.m.
Purpose:	Meeting with Representatives of the Municipal Advisory Group (MAG)	
Present:	<i>MAG Representatives:</i> Mark Galvin, City of Windsor Dev Tyagi, City of Windsor Thom Hunt, City of Windsor Josette Eugeni, City of Windsor David Estrin, Gowlings Peter Walker, Walker, Nott, Dragicevic Assoc. Ltd. Tom Bateman, County of Essex Jaime Garcia, County of Essex Brian Gregg, County of Essex Dan Piescic, Town of Lakeshore Larry Silani, Town of LaSalle Bob Hayes, Town of LaSalle	<i>Study Team Representatives:</i> Dave Wake, MTO Roger Ward, MTO Joel Foster, MTO Mike Harrison, MTO Mohammed Alghurabi, MDOT Murray Thompson, URS Canada Len Kozachuk, URS Canada Stacey Drummond, URS Canada

The purpose of the meeting was to provide an update of the DRIC Study, to review and discuss the Windsor-Essex Parkway, results of the access road assessment, status of the U.S. Study and next steps. Time was also allotted for the City of Windsor to present on the GreenLink proposal.

Introductions and opening remarks were provided by Dave Wake (MTO). Dave announced no decision has yet been made on the crossing. A copy of the slide package was handed out.

Murray Thompson (URS) presented slides on the Windsor-Essex Parkway. Len Kozachuk (URS Canada) presented a summary of the assessment of the access road alternatives, and advised technical report information is being released in the coming days/by the end of the month.

Mohammed Alghurabi (MDOT) presented the status of the U.S. Study. The status of the DEIS was reviewed – it was placed on record February 29th. In response to requests, FHWA has extended the comment period to May 29th. After the comment period, the DEIS will sit with Canada to select preferred. The FEIS will be ready by the end of Fall 2008 and will be followed by a 30-day public review period. There are seven U.S. agencies cooperating in the review. The ROD is expected by the end of 2008.

Murray Thompson presented on the next steps in the Study as follows:

Engineering

- Will be wanting to discuss utility relocations and staging in more detail.

Environmental

- A number of studies will occur

Consultation

- Public Information Open House meetings will be held later this spring. There will be two open house dates (one in Windsor and one in LaSalle/Tecumseh) and two workshop dates. The expectation is the Open Houses will deal with an end-to-end solution.
- It was noted that the evaluation with the U.S. Team must be completed before an announcement on the crossing

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is made; currently the U.S. Team is in a public review period.

- Following May 29th, comments will be reviewed and teams will collaborate. It was noted an announcement in early June is not expected.

The following summarizes meeting discussions:

- David Estrin (Gowlings) questioned how MAG group comments led to the development of the Laurier Parkway Extension Connection. Murray Thompson (URS) responded early on, discussions about diverting traffic off Howard, a 2-lane road the City is not supportive of widening; in September 2007, walked through a short list. Selection/refinements/changes from August to May 2007 brought changes.
- Need more detail as to how these decisions came about – refinements and rationale
- This is not meaningful consultation
- Spring Garden Tunnel – how did this come about? Different lengths of tunnels and changes to locations
- Oliver Estates – product of a meeting requested by residents
- Villa Borghese – proximity to residents, spacing of intersections/proximity to residences
- There is a wealth of information already on the website – full cost estimate? Yes
- Some residents have been shielded, some not
- Discuss how alternative was developed
- Discuss changes to trail system – “extra” trail was optimized
- Why are tunnels no longer than 240m? long enough to address amenities; beyond 240m, mechanical ventilation is required and we are looking to avoid the added maintenance and operations complexity of tunnels
- How was PPS used? In generation and assessment
- This is not a planning study – elaborate; so you believe you have to have regard (??)
- You have critiqued the GreenLink – is there any more press releases coming? Response to Windsor’s letter of March will be discussed at staff meeting
- We are not going to provide a direct analysis in a report of GreenLink vs. The Parkway – Dave Wake (MTO) confirmed
- We will be arranging a meeting with staff to share comments on further materials
- When will engineering start? ASAP, on what we can; end date is the end of the year for determining property impacts for reflection in the EA
- Timeline – August/September → draft circulation; end of year → final document
- Land use changes – who does that?
- Highway 401 to plaza will be a provincial roadway – service roads? Ownership needs to be resolved; further discussions with City and County will be needed
- Harmonization of Planning Act and EA Act – need to look into that
- What portion of the 240 acres is publicly accessible?
- Postcards – who is getting these? All residents of Windsor, LaSalle and Tecumseh
- Reports – is there a draft EA? Yes, mid to late summer with summary information available at Open Houses
- Meetings with municipalities – before announcement, due to unavailability of municipal representatives

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- Who else was briefed in advance of May 1st? Dave Wake (MTO) will see what he can do
- Two more rounds of open houses will follow – June and September.
- Submission of the draft report: mid to late summer, with the final by the end of the year.
- Decision before date is problematic for process

The meeting adjourned at 2:00 p.m.

Submitted by: Len Kozachuk, URS Canada

Copies To: DRIC Project File



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Meeting notes from:

**The Sixteenth Meeting of the
Detroit River International Crossing
*Community Consultation Group***

Meeting Date/Location:

May 21st, 2008
Macedonian Community Centre — LaSalle, Ontario

Facilitator: Glenn Pothier, President, GLPi

Meeting Purpose

This sixteenth meeting of the Community Consultation Group (CCG) was focused on providing an update on Study progress and sharing noise impact assessment-related information. More specifically, the meeting was designed to:

- Provide an overview of the noise impact assessment process and findings — and the range of mitigation options available.
- Walk participants through the technically and environmentally preferred access road (i.e. the updated Windsor-Essex Parkway option).
- Update members on the status of the work/analysis on the plaza and crossing project components, and U.S. study progress.
- Provide an update on the property acquisition process.
- Provide an overview of next steps in the project, including the meetings schedule.
- Allow for public/CCG member comments and questions about issues of their choosing.

Summary of Meeting Highlights

Opening Remarks

- Glenn Pothier, the independent meeting facilitator, called the group to order, welcomed all participants, introduced project team members, and provided an overview of the meeting agenda.

Review of the August 21/07 CCG Meeting Summary

- Glenn Pothier noted that the summary of the August 21/07 CCG meeting had been previously distributed to all CCG members, but that this had not occurred until quite recently. He then asked for feedback regarding any substantive errors or omissions. No comments were offered. Glenn then offered the option for members to provide any comments on the summary up to and including June 6/08. No comments were received by that date.

Public Comment

- Glenn Pothier reminded the group that in the interest of openness, transparency and accountability, any member of the public can attend a CCG meeting as an observer. He then asked if any comments/questions were forthcoming from observers at this time. None were raised.

Noise Impact Assessment

- Fred Bernard of SENES provided a presentation on the noise impact assessment process, selected findings and mitigation options. More specifically, he:
 - Explained how a noise impact assessment is conducted and noted that the results of the noise analysis is incorporated into the broader Social Impact Assessment, which is also being conducted as part of the DRIC study.
 - Noted that noise and sound are typically described as the same thing, and are measured in decibels (and that a decibel, or dBA, is the measure used to gauge the way a human interprets sound);
 - Noted that the noise impact assessment for DRIC was conducted according to a work plan that adheres to both the Ontario Ministry of Transportation and Ministry of Environment protocols (and that was approved by both ministries);
 - Explained that the noise impact assessment compares future conditions pertaining to the different options to the ‘no-build’ scenario — and that any changes resulting in noise increases of greater than 5 dBA (that are sustained over a certain time period), require mitigation measures to lessen potential impacts;
 - Described the two models that are used to predict noise impacts for the DRIC Study: The STAMSON model (which is typically used on transportation projects) captures all transportation sources, and the CADNA model, which was used primarily for the plaza and crossing analysis (the CADNA model incorporates transportation sources and stationary sources);
 - Noted that noise is modeled from transportation sources such as engines and tires on pavement, and that the model accounts for various vehicle types: cars, trucks, buses and so forth;
 - Described the range of factors that the model takes into account, including such things as roadway elevations and local topography (the latter being important given that topography influences how far noise will travel within a certain area);
 - Noted that sensitive noise receptors — including homes, schools, retirement and seniors facilities, hospitals, etc. — are also mapped and examined, and he reminded the group that, as a general rule of thumb, the further away one is from traffic, the less traffic one will hear;
 - Noted that there are no areas along the access road alternatives where changes in noise exceeds 10 dBA (with mitigation) — and that mitigation measures such as berms or noise wall barriers (typically 5 metres high) can reduce noise by 5 dBA or more. He also noted that there are certain areas in the Spring Garden/Malden Road area that may experience a change in noise greater than 5 dBA and that further investigation is required for these locations.
- Both during and following Mr. Bernard’s presentation as described above, CCG members offered a number of comments and questions to which various DRIC team members responded:

Question: What is the difference between dB and dBA?

Response: dB is an indicator of measured sound — whereas dBA refers to the A-scale, that is, sounds that either a human can or cannot hear.

Question: What is the ambient noise level?

Response: Ambient noise varies from area to area. Ambient noise can range from 55 dBA to 70 dBA, depending on the location, the volume of traffic and other noise sources. The noise impact analysis that was conducted for this study looked at the future ‘no build’ scenario out to the year 2035. The predicted range in ambient noise is from 60 dBA to 80 dBA.

Comment: The Spring Garden/Armanda Street area already experiences noise impacts due to the location of EC Row Expressway. Area residents are concerned about what the future noise levels will be in this location as a result of this project.

Response: [Comment noted.]

Question: What is the distance between the new roadway and existing residences along the route?

Response: Depending on the route segment, the roadway could be as close as 15m or as far away as 50m.

Question: Is there a safe noise level for both adults and children — is noise measured differently for each?

Response: Noise levels/limits are developed for both adults and children. Requirements applicable to the DRIC pertain to any noise level change greater than 5dB. There is no outdoor noise threshold as there may be for indoor (occupational) conditions. [The fact that there is no safe outdoor level established was deemed unacceptable by a CCG member].

Comment/Question: In some homes, you can currently feel vibration from passing vehicles. Is vibration a factor that is considered as part of the analysis?

Response: Vibration is considered as part of the impact assessment and is documented as part of the community and neighbourhood impacts.

Question: What are the existing noise levels within the study area?

Response: The existing noise levels within the study area range between 55 dBA and 70 dBA. Any noise level resulting from a DRIC project

component that exceeds the current level by more than 5 dBA would require mitigation measures.

Question: What are recommended safe noise levels?

Response: There is no recommended level. In this approach, what is considered safe is the existing noise level plus an increase of 5 dBA.

Comment: It is totally unacceptable that there is no recommended safe noise level.

Response: [Comment noted.]

Comment/Question: In the noise presentation, Crossing C and Plaza A are shown. Why are you focusing on these two locations in particular?

Response: Crossing C and Plaza A are located near residential lands and are, therefore, among the most sensitive locations within the study area.

Question: What are some reference examples for sounds pertaining to different dBA levels — for example, 40 dBA, 50 dBA, 80 dBA?

Response: As a few examples, a human voice is normally 50-55 dBA, heavy truck traffic is 70-75 dBA, crickets on a summer night is 55-60 dBA.

Question: Has the noise model taken into account the noise from jake brakes?

Response: The Ministry of Environment model does not specifically deal with noise from jake braking.

Comment: It is unacceptable that the model does not account for jake braking.

Response: The comment will be noted, but when the roadway grade is less than 3 percent, there is no need to jake brake.

Question: What is the dBA assessment in the Howard Avenue/Oliver Farms area? Do you have the specific numbers? How will you mitigate noise increases?

Response: With a five-foot sound barrier and berming, the predicted noise in this area will be within 5 dBA of the existing level. Though there are specific numbers for the Howard Avenue/Oliver Farms location, we do not have them with us this evening — this information could be made available at a future meeting. Over the summer, Context Sensitive Solutions workshops will be held with the community to get public input on various design issues, including noise walls, berms and other noise mitigation strategies.

Question: In an industrial setting, what is the level of dBA that is detrimental to human hearing?

Response: For eight hours of exposure, a noise level of 85 dBA and above is detrimental. Normal noise levels are between 55 and 70 dBA.

Question: Is vibration dealt with separately from noise?

Response: We model and assess a combination of the two, both noise and vibration. Though noise and vibration are regulated differently and have their own requirements, they are assessed together.

Comment: It's unacceptable to separate noise and vibration.

Response: [Comment noted.]

Question: What amount of time was spent monitoring noise? The DRIC U.S. study monitored noise in 15-minute segments.

Response: Noise modeling was based on traffic predictions, not noise monitoring.

Question: Where do the STAMSON inputs come from and how well does the noise model represent existing conditions?

Response: The STAMSON noise model is based on data from multiple studies and has proven over time to be very accurate and reliable. Modeled results are very close to actuals — they are generally within 1-1.5 dBA when compared to the existing situation. The STAMSON model was developed by the Ministry of Environment some time ago and it is the standard by which noise modeling is conducted.

Comment: When considering noise barriers such as berms or sound walls, please incorporate something better for Windsor than the “normal” or “standard” that's typically used elsewhere.

Response: As mentioned earlier, there will be consultation on these and other design issues.

Question: Is the decibel level lower with a below-grade freeway?

Response: Yes, compared to an at grade option. There is a drop in decibel level due to the embankment walls acting as a noise barrier.

Question: If the existing noise is 70 dBA at the surface, what is it below-grade — is there a standard percentage drop by number of feet you go down?

Response: The noise level below grade could drop by about 3 dBA. It varies from situation to situation — there is no precise linear relationship.

Question: Can you please clarify what is meant by the words used in slide 12?

Response: Noise mitigation measures such as berms and/or barriers can reduce noise levels by <5 dBA in most areas. Future noise study is being conducted in the Malden Road/Spring Garden area.

Question: Were sound levels monitored throughout the study area?

Response: Sound levels were determined through noise modeling. Ambient levels were not monitored.

Question: This seems unbelievable — how do you establish ambient noise levels without noise monitoring?

Response: The noise model approved by MOE predicts what will happen in the future, with the additional traffic. The model is well researched and has been used reliably for many years in a variety of jurisdictions. It is accurate at determining existing and predicting future noise levels. It takes into consideration such things as pavement surface, topography, speed, and traffic volume. The model provides the accurate ambient noise levels similar to a noise monitor. The noise model has been calibrated over the years and is considered to be the industry standard.

- *Note: Following a number of further comments concerning the lack of current noise level monitoring, the facilitator noted that the community's concern about this topic would be identified in the meeting summary as per this special note.*

Question: Do vibrations increase when a roadway goes below grade or in a tunnel?

Response: No, not necessarily. It's not a given that vibration levels increase as the roadway level decreases.

Comment: Your answer is unacceptable.

Response: [Comment noted.]

Comment: I understand that the proposed route will result in noise increases in some cases, but also decreases due to the fact that trucks will not be starting and stopping anymore as they currently do on Huron Church.

Response: [Comment noted.]

Update on Canadian Study Progress

- Murray Thompson (Project Manager, URS Canada) began the update by referencing the May 1st announcement of the technically and environmentally preferred alternative for the access route — that is, the updated Windsor-Essex Parkway — and noting the website address at which additional information can be found (www.weparkway.ca). He then briefly described the original access road alternatives and the analysis resulting in both the ‘at grade’ and ‘full tunnel’ options not being considered further by the study team given that they do not provide the best balance of advantages and disadvantages. Mr. Thompson noted that the Parkway alternative was initially shown to the public some months ago and that public input led to the updated version brought forward as the recommended one. He then reviewed the Parkway, explaining where the tunnel locations and ramps are located, and where design changes were made as compared to the August 2007 design. He also explained that the Laurier Parkway was part of the design as it will help get traffic to and from Howard Avenue and Highway 3.
- Following Mr. Thompson’s overview, Len Kozachuk (Deputy Project Manager, URS Canada) reminded the group of the seven evaluation factors used to assess the access road, plaza and crossing alternatives: changes in air quality; protection of community and neighbourhood characteristics; consistency with existing and planned land use; protection of cultural resources; protection of the natural environment; improved regional mobility; and cost and constructability. He then described how the alternatives — and, in particular, the Windsor-Essex Parkway — performed against each of them.
- Following Mr. Thompson’s and Mr. Kozachuk’s remarks as described above, CCG members offered a number of comments and questions:

Question: With the new connection to Windsor Airport why are improvements to Laurier Parkway being considered?

Response: The improvements at the Windsor Airport will strictly be for passenger traffic. Improvements to Laurier Parkway are part of the future plans for that area given anticipated growth — including employment growth. Through discussions with MTO and the City of Windsor, the extension of Laurier Parkway was determined to be necessary to serve a future need.

Comment: It’s archaic to make MTO the sole government agency responsible for the DRIC decision and determining the location of the access route and size of the tunnels. These decisions should be made by a combination of government

departments and ministries, and in cooperation with such bodies as the Ministry of the Environment, the Ministry of Health, Environment Canada and Health Canada. The benefits of a tunnel should be considered for health and environmental reasons. We're doing more for trucks than for people.

Response: The Detroit River International Crossing study is an environmental assessment. The overall study approach and models used have been shared with, reviewed and commented on by the Ministry of the Environment and others that were mentioned. The Ontario Ministry of Transportation and Transport Canada engaged multiple departments and ministries to comment on how the DRIC study team intended to this work. They provided the DRIC team with important feedback and recommendations. Everything produced for this study has been shared with various ministries, departments, agencies and levels of government.

Comment: From the beginning of this study, the objective should have been to focus on how the project impacts residents.

Response: That has been an important aspect of the work.

Question: How much land is covered by tunnels in the Windsor-Essex Parkway as compared to the GreenLink?

Response: The Windsor-Essex Parkway covers 1.8 kilometres of land with tunnels, and the GreenLink covers 3.8 kilometres.

Question: What is the estimated cost of the Windsor-Essex Parkway compared with the GreenLink?

Response: The Windsor-Essex Parkway is \$1.6 billion and the GreenLink is between \$2.3 to \$2.5 billion — based on DRIC's cost estimates.

Question: Why was GreenLink priced differently by DRIC compared to the City?

Response: Different cost parameters were used, which results in variation between the two.

Comment: I think the GreenLink proposal is an improvement over the Windsor-Essex Parkway. There is a reluctance to spend more money. You should spend more to get more.

Response: [Comment noted.]

Question: What is the study currently taking place between Malden Road and Matchette Road?

Response: That is part of the DRIC initiative — snake counts are currently being conducted in this area by LGL Limited.

Question: Is there a measurable improvement in air quality with the use of tunnels?

Response: There is a reduction in PM2.5 within the first 50m of the tunnel. Other than that, there is no notable difference.

Question: By recommending the Parkway, is air quality being sacrificed to save money?

Response: Again, there is no notable difference in the air quality analysis between the Parkway and the GreenLink.

Question: Who will maintain the Windsor-Essex Parkway — who is responsible for the cost of maintenance?

Response: The Ministry of Transportation will maintain the highway portion of the Parkway. It is yet to be determined who will maintain the greenspace or the service roads — it will be either the Province or the City.

Question: Why was the tunnel at Cousineau not extended over a greater distance?

Response: Each tunnel must be a certain distance apart from the others. Tunnels longer than 240m require mechanical ventilation. We understand and have noted the request to extend the tunnel at Cousineau. We also understand that there is a perception that tunnels reduce air quality impacts. Our analysis concludes that there is no measurable difference in air quality between a shorter or longer tunnel.

Comment: The Cousineau tunnel should be extended near the school – do it for the school children.

Response: We will consider the suggestion.

Question: Will Matchette Road remain open if you choose Plaza A?

Response: Yes, Matchette Road will remain open, but it would be realigned.

Comment: You should extend the tunnel at Cousineau by the six homes not just by the school.

Response: [Comment noted.]

Comment/Question: Those residents that are disrupted by the new freeway and plaza and crossing should be told what the noise impacts will be. What are the noise conditions and mitigation approaches that will be used for homes along the route during construction?

Response: The next step of this study will explore various mitigation options available for the areas that will be impacted.

Question: What is the target date for construction to begin?

Response: Once the environmental assessment is approved — and assuming no unexpected delays — construction would begin later in 2009, though utilities may be relocated earlier.

Question: How will traffic be maintained during construction?

Response: As shown previously in video animations, the construction will be conducted in stages, with the goal of keeping traffic moving on Huron Church and surrounding roads during the entire construction period.

Question: What type of work is currently being conducted along Ojibway Parkway?

Response: There is active fieldwork being conducted by our biologists in this area.

Question: The federal government has allocated \$400 million for this project — will more money be coming from them in the future?

Response: The federal government has committed to providing 50% of the total eligible construction costs. That final figure has not yet been determined.

- Len Kozachuk then provided a brief overview of the potential plaza and crossing locations, noting that the analysis of these is ongoing and that no decision can be made until this work and the U.S. process is complete. Murray Thompson then reviewed the deep drilling work that was recently completed in the plaza and crossing locations. He described the comprehensiveness of the program and some of the techniques used, noting that drilling occurred to a depth of 500m in order to determine suitability for an approach road and bridge footings. Mr. Thompson emphasized that all findings were reviewed by an independent group of professionals who are experts in geology and rock mechanics. He then described the findings and their implications for the plaza/crossing locations.
- Following Mr. Thompson's and Mr. Kozachuk's remarks as described above, CCG members offered a number of comments and questions:

Question: If the government decides not to build a new crossing, would you still build the new access road?

Response: The government is committed to building an end-to-end transportation facility to provide alternative transportation capacity in the Windsor-Essex region — this includes a new access road, plaza and bridge.

Question: The U.S. EIS has extended its response period by another month — how does this affect the Canadian study?

Response: The study team hopes to make an announcement on the plaza and crossing in late spring — that is, before June 21st — and we intend to be on schedule.

Question: In analyzing the feasibility of Crossing C and given the anomalies located in this area, would the weight of the vehicle traffic and the vibration from the truck traffic make this crossing option undesirable?

Response: The weight of the vehicle traffic is small compared to the weight of the bridge. The anomaly consists of areas where there is gravel rubble, rather than solid rock. It is these areas that need future study to determine if it is safe to continue to pursue a crossing there.

Comment: I would like to see analysis of the impact of truck vibration on the bridge and the impact on geological form.

Response: [Comment noted.]

Comment: I'm sensing that Plaza B/Crossing X11 is the most viable. There are issues with Plaza A due to its proximity to residential areas and with Plaza C/Crossing C due to the geological conditions of the area.

Response: We cannot make an announcement until the analysis is fully complete and the U.S. team finishes their EIS comment review period — again, we are talking about an end-to-solution that works for both countries.

Suggestions for PIOH 6

- Glenn Pothier asked CCG members for their value adding ideas on how the project team can best convey and communicate information to the public at the next round of Public Information Open Houses (PIOHs) — particularly given that familiarity with and understanding of the project can differ greatly among attendees. More specifically, he asked for responses to the following question:

How can the project team best communicate recent progress and a forward-looking orientation, without unduly disadvantaging those without a historical knowledge of the project? CCG members offered a number of ideas as described below, some of which go beyond the PIOH forum:

- Display specific mapping that will show the entire facility as it will look in its expected location.
- Use large maps that clearly compare the Windsor-Essex Parkway and GreenLink — both the similarities and the differences.
- Present the air quality analysis that clearly shows the difference between the Parkway and GreenLink proposals — explain why you believe ventilation is not a good idea and the danger posed by stacks releasing unclear air into the area.
- Be fair in your assessment of GreenLink — there are potential benefits that go beyond air quality.
- Better explain that roadway emissions account for less than 10% of air pollution in the Windsor-Essex region.
- Show how keeping the trucks moving on a new access road will benefit air quality.
- Provide larger-sized maps generally.
- Show how your proposal connects communities/neighbourhoods and explain why it should be considered community-friendly.
- Tell people what you will or can do to reduce noise to below existing levels — current levels are not acceptable.
- Consider providing an overview of all of the original 15 location options — and why some were eliminated.
- Describe the number of jobs that will be created during construction and the economic benefits to the City.
- Hold smaller discussion sessions concurrent with the PIOH — have specific topics addressed in separate rooms.
- Bring PIOH materials into the local schools (high school and elementary) to get student/youth opinions.
- Get Cogeco (the local cable channel) to tape and replay a ‘video tour’ of the PIOH.
- Participate in local phone-in radio shows to provide information about and explain the project.
- Set-up displays in local community rooms at various venues that are ‘hot spots’ — and entice people with free snacks/coffee.
- To help increase attendance at the PIOHs:
 - Send notices to individual neighbourhoods along or in close proximity to the access route, plaza and crossing areas.
 - Reach border commuters by handing out information to people as they clear customs.
 - Provide handouts to shoppers in malls, plazas, and stores generally in close proximity to the route.
 - Provide notices to be sent home with students from local schools.

- One participant urged the DRIC team to continue dialogue with the City of Windsor with a view to finding a compromise solution acceptable to all. The Project Team noted that discussion with the City is ongoing though there is no guarantee that all parties will agree on a particular solution.

Property Acquisition Update

- In response to a pre-meeting CCG member request, Roger Ward (Senior Project Manager, MTO) provided an update on the DRIC-related property acquisition process. More specifically, he noted that:
 - There is now a more defined area for the access route — namely, the technically and environmentally preferred Windsor-Essex Parkway option. There is still uncertainty regarding impacts relating to the plaza/crossing areas.
 - The Ministry is open to discussing property acquisition on a ‘willing seller/willing buyer’ basis.
 - No expropriation has taken place — there is no authority for this to happen at this stage in the process given that the environmental assessment report is not approved.
 - To date, there have been over 400 enquiries regarding property acquisition. There are 65 signed agreements and nearly 200 more cases are in various stages of negotiation.
 - The acquisition process differs for residential and commercial properties.
- Following Mr. Ward’s presentation, CCG members offered a number of comments and questions:

Comment/Question: Thank you for sharing the statistics with CCG members. It’s important to realize that some homeowners who are approaching MTO to explore the purchase of their properties are not merely ‘enquiring’ — some are desperate and fearful of future expropriation, and want some type of resolution sooner than later. Of those you’ve spoken with, how many have had formal appraisals or offers made?

Response: Of the 200 or so properties that are currently being negotiated, there are a number of homes that have had appraisals done and offers have been made. It’s an ever-changing amount and I don’t have an exact number available this evening.

Question: Are you experiencing a normal rate of progress in terms of acquiring property?

Response: No. The DRIC property acquisition phase has started earlier than normal. It's unusual to be this far along this early in the process — before receiving formal environmental assessment approval.

Question: Have all of MTO's acquisition offers been made in situations involving homeowner hardship?

Response: No. Each property is looked at on a case-by-case basis. Of the 65 signed purchase agreements, none was done due to hardship.

Question: What steps has MTO taken once a property is vacant to ensure that the building and surrounding area do not deteriorate, and that the safety of the neighbouring residents is maintained?

Response: MTO is in the process of hiring landscaping companies to maintain the lawns and generally keep the grounds in good shape. We are also looking at issues of security. Some homeowners have chosen to extend their closing dates and will continue to live in and maintain their properties. MTO assumes liability for a property once it takes ownership of it.

Question: When will properties be expropriated?

Response: If expropriation is required it cannot happen until after the DRIC study has received EA approval, which is estimated to occur at the end of 2008 or the beginning of 2009.

Question: Has MTO contacted all homeowners identified as being displaced and from whom you want to purchase property?

Response: No. However, MTO has invited them to past PIOHs and will be notifying them of the upcoming PIOH. Again, at this point, property acquisition is still on a willing buyer/seller basis.

Comment: It appears that some people are engaging in property speculation. One person has purchased two homes on Bethlehem in anticipation of the entire street being purchased by MTO.

Response: Speculation is always risky and people may be acting with incorrect information. Based on the Windsor-Essex Parkway plans, the entire Bethlehem Street will not be required. The recent market sale of a home will be used in determining a fair market value. People should not assume that MTO's property buying can be used to make money by flipping properties.

Update on U.S. DRIC Study Progress

- Len Kozachuk (Deputy Project Manager, URS Canada) provided an update on the U.S. component of the study. More specifically, he noted that the US DRIC Team submitted their Draft Environmental Impact Statement (DEIS) containing their analysis and that this is now part of the public record. The DEIS was submitted on February 29th and the public comment period was extended to May 29th. The documentation on their preferred alternative should be complete by the end of the summer. The Record of Decision will be at the end of 2008/beginning of 2009.

Question: There is currently construction at the Ambassador Bridge at I-75 — how can the U.S. government afford another bridge/interchange?

Response: The Federal Highway Administration and Michigan Department of Transportation are fully aware of the gateway improvements occurring in Detroit and the cost of these. They are partners in this process and have repeated their commitments to the new crossing. They are looking at alternative means for financing a new crossing.

Next Steps

- Len Kozachuk provided a brief overview of next steps. In so doing, he noted that:
 - Additional analysis on certain engineering and environmental items will be completed for the technically and environmentally preferred access route option (and the plaza/crossing alternatives).
 - The team should be in a position to announce the technically and environmentally preferred plaza and crossing locations in the not too distant future — and this will be done at an upcoming PIOH.
 - The team will continue with its comprehensive consultation program and there will be some Context Sensitive Solutions workshops in the coming months.
 - The formal documentation for the Canadian portion of the environmental assessment (both federal and provincial) will be completed by the end of this year.

- Following Mr. Kozachuk's overview, a CCG member offered a comment:

Comment: Just a reminder that there have been a number of requests to have a meeting on governance-focused topics.

Response: [Comment noted.]

- In response to a question, Glenn Pothier noted that there is currently no specific date planned for the next CCG meeting, but that it is likely to take place in the

next few months – possibly July or August. A notice will be sent to CCG members when a date has been set.

Open Forum/Public Comment

- Glenn Pothier asked whether the Study Team had any further business to add to the meeting agenda. No issues were raised.
- Glenn Pothier then asked whether CCG members had any further business to add to the meeting agenda. No issues were raised.
- Glenn Pothier then made the ‘second round’ call for any comments/questions from meeting observers — resulting in the following:

Comment: MTO has purchased the homes of my neighbours and they will be moving out in a month or so. I would like some assurance that their lawns will be maintained when their homes are vacant.

Response: Your concern is clearly understood. As noted earlier, we are currently getting quotes from landscaping companies. We hope to have agreements within a few weeks. We are also looking at security issues.

Comment: The Citizens Environmental Alliance is holding a meeting on May 24th at the Windsor Public Library.

Response: [Comment noted.]

Closing Remarks

- Glenn Pothier thanked the group for their attendance and participation.
- The meeting was formally adjourned (having run from approximately 6:35 to 9:40 p.m.).

Attendance (names listed in order as recorded on the participant sign-in sheet)

CCG Members and Public Observers:

R. Benson
E. Oleksiuk
Pierre Quenneville
Frank Mallat
Louann Sharp
Lucy Malizia
Denise & Paul Ausman
Moe Haas
June & Robert Thibert
Jim Martin
Domenic Troiani
Alice DiCaro
Mike Duchene
Kevin O'Neil
Larry & Mary Stiers
Jaye Lacerte
Terry Kennedy
Mary Ann Cuderman
Bill Marshall
Patrick Petro
Clara Deck
Alan McKinnon
Ian Naisbitt
Ray Bezaire
Leona Fracas

Partnership:

Dave Wake, Roger Ward, Joel Foster, Mike Harris, Lynn Sebastien — Ontario Ministry of Transportation

Consultant Team:

Murray Thompson, Len Kozachuk, Irene Hauzar — URS Canada
Fred Bernard, Sandy Willis — SENES.



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Summary of:

**The Fifth Meeting of the
Detroit River International Crossing
*Schools Advisory Group***

Meeting Date/Location:

May 22nd, 2008/Holiday Inn — Windsor, Ontario

Facilitator: Glenn Pothier, President, GLPi

Meeting Purpose

This fifth meeting of the Schools Advisory Group (SAG) focused on updating Study progress for both the Canadian and U.S. components of the project. More specifically, the meeting was designed to:

- Walk members through the technically and environmentally preferred access road, The Windsor-Essex Parkway;
- Update members on the status of the work/analysis on the plaza and crossing project components;
- Provide an update on the property acquisition process;
- Update members on the status of the U.S. study;
- Provide an overview of next steps in the project, including the meetings schedule; and
- Allow for public/SAG member comments and questions about issues of their choosing.

Summary of Meeting Highlights

Opening Remarks

- Glenn Pothier, the independent meeting facilitator, called the Group to order, welcomed all participants and introduced project team members. He then invited participants to introduce themselves.
- Mr. Pothier then briefly recapped the purpose of and highlights from the previous SAG meeting (March 1st, 2007). More specifically, he noted that this meeting had focused on a number of items:
 - An overview and update on a variety of consultation activities;
 - A presentation of results from air quality monitors placed adjacent to the proposed access route;
 - An overview and discussion of access road construction staging and related traffic management approaches;
 - A general project status update and overview of next steps; and
 - Responses to participant questions/comments.
- Mr. Pothier also noted that the summary of the March 1st meeting had been prepared and distributed to members (and posted on the project website). He then asked if there were any errors or omissions concerning either the summary format or substance. None were identified.
- Mr. Pothier then provided an overview of the evening, including an itemized review of the agenda items. He also noted that no observers were in attendance and that the ‘public comment’ components of the agenda would not be applicable to this meeting.

Update on Canadian Study Progress: Access Road

- Glenn Pothier then introduced the next meeting item: an update on Canadian Study progress by Mr. Len Kozachuk (Deputy Project Manager, URS Canada).
- Mr. Kozachuk referenced the May 1st announcement of the technically and environmentally preferred alternative for the access route — The Windsor-Essex Parkway — noting the website address at which additional information can be found (www.weparkway.ca). He then briefly described the original access road alternatives and the analysis resulting in both the ‘at grade’ and ‘full tunnel’ options not being considered further by the study team given that they do not provide the best balance of advantages and disadvantages. Mr. Kozachuk noted that the Parkway alternative was initially shown to the public some months ago and that public input led to the updated version brought forward as the recommended one. He then reviewed the Parkway, explaining where the tunnel locations and ramps are located, and where design changes were made as compared to the August 2007 design.
- Mr. Kozachuk also reminded the group of the seven evaluation factors used to assess the access road, plaza and crossing alternatives: changes in air quality; protection of community and neighbourhood characteristics; consistency with existing and planned land use; protection of cultural resources; protection of the natural environment; improved regional mobility; and cost and constructability. He then described how the alternatives — and, in particular, the Windsor-Essex Parkway — performed against each of them.
- Following Mr. Kozachuk’s remarks as described above, SAG members offered a number of comments and questions:

Question: How far below grade will the Parkway road profile be?

Response: The below grade portions of the Parkway will be five metres deep on average — and could be up to seven metres or so depending on the location. For the tunneled sections, the roof decks will be at grade.

Comment/Question: The GreenLink proposed by the City of Windsor incorporates larger tunneled sections. Have you discussed this with the city and looked at the potential for longer tunnels?

Response: The study team has reviewed the GreenLink proposal. It has the same property envelope as the Parkway alternative, though it does have longer tunnel sections. The tunnels for the Windsor-Essex Parkway have been limited to 240 metres or less and have been spaced a reasonable distance from one another, in part, to address potential fire and life safety issues. In addition, tunnels longer than 240 metres require mechanical ventilation in order to assist airflow in the tunnel. While there is the

potential to lengthen some tunnel sections, there is no current intent to go beyond the 240 metre limit.

Question: Will the tunnel lengths of the Windsor-Essex Parkway design be increased?

Response: Again, while we can consider lengthening some tunnel sections, there is no current intent to go beyond the 240 metre limit. We will take your comments back to the design team.

Question: Given the recent announcement of the DRIC team's preferred access road as being the Windsor Essex Parkway is there any opportunity for other alternatives to be considered — or is everything pretty much decided?

Response: Though the announcement stands and the Windsor-Essex Parkway continues to be the team's preferred access road, we remain interested in hearing people's comments and views. The DRIC team is open to other suggestions.

Comment: Some of the proposed Windsor-Essex Parkway tunnels are too short — they should be lengthened to allow for greater community connectivity. The tunnel at Oakwood should be lengthened. The tunnel at Bellewood/Grand Marais/Huron Estates should also be lengthened.

Response: Comment noted

Question: When is the government going to make a final decision?

Response: The project team is currently taking public comments and will be holding another Public Information Open House (or PIOH) in September or the early fall. Further comments will be taken following that round of public sessions. The DRIC Study Team will then submit the formal Environmental Assessment report to the Ministry of the Environment by the end of 2008 and will submit the technical work to Federal review agencies. There is a further public commenting period following these submissions.

Question: Will the Public Information Open Houses scheduled for September show the final plan?

Response: Nothing is final until it is submitted to and approved by the Ontario Minister of the Environment. The early fall PIOHs will feature the most up-to-date information. Following these meetings, the DRIC Study Team will continue to take comments/suggestions on the technically and environmentally preferred alternative for both the access road and the plaza/crossing locations. Between now and September there will be

additional opportunities for the public to submit comments to the study team. Formal meetings with other groups will also occur.

Question: Are you reviewing the GreenLink proposal with the City of Windsor?

Response: We have been exchanging information about both the Windsor-Essex Parkway and GreenLink proposal, and are discussing these with the City of Windsor.

Question: Is the City of Windsor involved in the decision-making process for the final recommended alternative? Does the City support the Windsor-Essex Parkway?

Response: The Minister of Environment makes the final decision. The process will take all points of view into consideration. Though it's not for us to speak on behalf of the City of Windsor, they have been quite clear in the stated preference for their own GreenLink proposal.

Comment/Question: Both the GreenLink and the Windsor-Essex Parkway proposals offer a lot of greenspace. Who will pay for it and maintain it?

Response: The six lanes of new freeway and the immediately adjacent greenspace in the right-of-way will be the responsibility of the Ontario Ministry of Transportation. The service road and potential open space components will be a matter for further discussion with the City and County. An agreement will need to be reached on who will maintain this greenspace.

Question: Is the interchange design of the Windsor-Essex Parkway final?

Response: There is a lot of geometry — related to safety and other considerations — that dictates the design of the roadway and where the service road is located. Though the proposed design is quite firm and the rationale for it is strong, there could still be some modest tweaking to the alignment — but there would have to be a compelling case for it.

Question: Why is there a Todd Lane loop?

Response: In consultation with the local municipal emergency services representatives, a recommendation was made to include a Todd Lane loop to provide greater access to the freeway in the event of an emergency. We see benefit to this placement and a strong need for the access road in this location.

Comment/Question: 14,000 residents filled-out cards in support of the GreenLink option — will DRIC take this into consideration?

Response: We look at all information, but it's important to remember that this is an environmental assessment, not a popularity contest or referendum. This is a rigorous process requiring the conduct of analysis based on the seven evaluation factors and subsequent submission of results to the Minister of the Environment. We have to be able to defend our recommendation. We need to understand why the public values the GreenLink proposal. Both the GreenLink and the Parkway alternative have a lot of similar features. To a large degree, the Windsor Essex Parkway is achieving the same things as the GreenLink.

Comment: I believe that the GreenLink proposal provides more protection to the residents of Huron Estates and other communities. I see the GreenLink as allowing for greater continuity and greenspace — it seems to produce less separation of residential neighbourhoods.

Response: We hear that point of view and understand it. However, we believe that the updated Windsor-Essex Parkway design does a pretty good job of achieving the range of things you mentioned. We will continue to look at tunnel lengths up to 240 metres, though spacing between tunnels is also a concern.

Comment: GreenLink gives you longer tunnels, more covered roadway and more greenspace on top.

Response: The GreenLink proposal provides for somewhat greater coverage, but at significantly greater cost. We went so far as to evaluate an end-to-end tunnel option, but the analysis determined that it has no benefits in air quality. So we looked at how long do the tunnels have to be to connect communities? A tunnel length of 240 metres is quite long and we think the proposed tunnels do a very reasonable job of connecting communities. When we examined the GreenLink proposal we estimated the cost to be between \$2.3 – 2.5 billion compared to \$1.6 billion for the Windsor-Essex Parkway; that means the GreenLink costs about \$7-900 million more. We need to determine if there are additional benefits associated with GreenLink that are worth the cost — particularly given that both alternatives connect communities.

Question: Does the DRIC team have a certain budget range that it must work within?

Response: No. The example given is simply to illustrate that the GreenLink option is considerably more expensive than the Windsor-Essex Parkway. A key question is whether the perceived benefits of GreenLink justify spending an extra 900 or so million dollars.

Question: Is there a set budget for the landscaping associated with the Windsor-Essex Parkway.

Response: No, a landscape budget has not yet been determined.

Comment/Question: The Greater Essex District School Board is in support of the GreenLink proposal. Have you heard why they support this option or have you heard about the preferences of other school boards?

Response: We have invited the area school boards to comment, but have not heard from all of them. We have not heard specifically why the Greater Essex Board supports the GreenLink proposal, though we suspect it has to do with reasons of perceived connectivity. We know that Oakwood School is concerned about tunnel portal locations. We also know that some individual schools have not indicated a preference for one option over the other, reflecting a lack of consensus about the issue.

Question: I understand that DRIC wants to limit the tunnel lengths to 240 metres — but what is the minimum space requirement between tunnels?

Response: Though it can vary by location, 200 metres is the typical minimum space requirement between tunnels.

Update on Canadian Study Progress: Plaza and Crossing

- Len Kozachuk then provided a brief overview of the potential plaza and crossing locations, noting that the analysis of these is ongoing and that no decision can be made until this work and the U.S. process is complete. He then reviewed the deep drilling work that was recently completed in the plaza and crossing locations — and described the findings and their implications.
- Following Mr. Kozachuk's remarks as described above, SAG members offered a number of comments and questions:

Question: Will trucks be parking at the new plaza and will there be queuing?

Response: The queuing should typically be minimal. However, trucks will be inspected at the plaza, including facilities for secondary inspection — they would be parked while this takes place. The plaza size is between 80-100 acres and the U.S. side is looking at a plaza site of 150 acres — both are certainly large enough to handle inspections and short-term parking.

Comment: I'm concerned about idling trucks at the plaza.

Response: The DRIC study team has consulted with the Canada Border Services Agency and has determined an appropriate number of parking spots for both cars and trucks. Though trucks will idle while at the main inspection booth, the traffic should be fairly smooth flowing. When trucks get inspected they will be required to turn their engines off.

Comment/Question: A recent Globe and Mail article stated that it is taking longer to cross the border. The DRIC study contradicts this information. You seem to assume a smooth traffic flow, but what if we end up simply shifting the trucks that used to back-up on Huron Church to parking on the new plaza site?

Response: The new plaza will include additional inspection booths and the study team has used reasonable assumptions for processing times and so forth for the traffic modelling. In addition, the Canada Border Services Agency has conducted their own modelling of traffic movements in the plaza and found no issues with backups given what we are proposing. Traffic should flow well under typical conditions. However, under severe conditions related to national security or other events, there may be periodic traffic back-ups.

Question: Will there be a holding area for truck traffic located outside Windsor?

Response: None is currently proposed. Both the Canada Border Services Agency and the U.S. side used the best available times from a processing point of view in determining the size of the new customs plaza. Though marshalling yards were looked at, each plaza (both Canadian and U.S.) was designed to accommodate traffic in a worst-case scenario.

Question: How are Canadian inspections dealt with? Does staff at Border Services support the plaza approach?

Response: Inspections will occur on the plaza for Canadian bound traffic. Truckers will pre-notify the border one hour prior to reaching the border. This will help determine which trucks will be sent to secondary inspection. The Canada Border Services Agency has reviewed our work and been a part of the process. They have already started an initiative to ensure appropriate human resources are in place for staffing the new plaza. Our U.S. counterparts are also doing the same. There is a sincere attempt to work together to make this happen.

Comment: It will take five years for the U.S. Government to get the funding in place to get the appropriate amount of staffing at the new plaza.

Response: [Comment noted.]

Update on Canadian Study Progress: Property Acquisition

- Roger Ward (Senior Project Manager, MTO) provided an update on the DRIC-related property acquisition process. More specifically, he noted that:
 - There is now a more defined area for the access route — namely, the technically and environmentally preferred Windsor-Essex Parkway option. There is still uncertainty regarding impacts relating to the plaza/crossing areas.
 - The Ministry is open to discussing property acquisition on a ‘willing seller/willing buyer’ basis.
 - No expropriation has taken place — there is no authority for this to happen at this stage in the process given that the environmental assessment report is not approved.
 - To date, there have been over 400 enquiries regarding property acquisition. There are 65 signed agreements and nearly 200 more cases are in various stages of negotiation.
 - The acquisition process differs for residential and commercial properties.
- Following Mr. Ward’s presentation, SAG members offered a number of comments and questions:

Question: At this stage of the process, should interested parties approach the Ministry concerning property acquisition?

Response: Yes, that’s correct. At the next stage of the process, letters will be sent to all impacted property owners.

Comment/Question: Some homeowners have already approached the Ministry of Transportation (MTO) to purchase their homes. Have letters been sent to all homeowners that will be displaced?

Response: Registered letters will be sent out to all affected homeowners prior to the next Public Information Open House.

Question: Is it true that the Ministry is looking to buy land beyond that which is required for the preferred alternative — would you buy property to increase the amount of greenspace?

Response: In answer to the first question, this would only occur in cases of hardship. Each property is evaluated on a case-by-case basis. Regarding the second question, the Ministry of Transportation is not looking to increase the amount of property it purchases for the purpose of expanding the proposed greenspace associated with the Parkway design.

Comment/Question: The Ambassador Bridge Company purchased land and homes on Indian Road. These homes are now vacant and unsightly, and there are

concerns about maintenance and vandalism. How will MTO ensure this doesn't happen to the houses it buys?

Response: The Ministry of Transportation is in the process of hiring landscaping companies to help maintain the lawns and grounds of homes that are currently vacant in the Highway 3/Talbot Road area. In addition, MTO is looking to hire a security company to help prevent any vandalism. Some of the properties that have already been purchased by MTO have been leased back to the owners so that they can remain in them until a later date. In some instances, homeowners have chosen to extend their closing dates and will continue to live in and maintain their properties.

Comment: Vacant homes are a safety concern for adjacent neighbours.

Response: MTO is aware of this concern and is looking into hiring a property management company to help ensure that vacant homes are safe and not a blight on the rest of the community.

Update on U.S. DRIC Study Progress

- Len Kozachuk provided an update on the U.S. component of the study. More specifically, he noted that the US DRIC Team submitted their Draft Environmental Impact Statement (DEIS) containing their analysis and that this is now part of the public record. The DEIS was submitted on February 29th and the public comment period was extended to May 29th. The documentation on their preferred alternative should be complete by the end of the summer. The Record of Decision will be at the end of 2008/beginning of 2009.
- Though there were no specific questions of fact or clarification concerning the U.S. update, SAG members did offer some questions and comments in response to the facilitator's request for any 'additional business':

Question: How will the new crossing work and who will own/be responsible for it?

Response: The new crossing will be tolled, similar to all border crossings between Canada and the United States. The issue of ownership has not been fully determined. It is possible that the crossing will be publicly owned, but built by the private sector. The details of the construction/ownership of the new crossing are yet to be worked out.

Comment/Question: I understand that the Environmental Assessment report will be submitted to the Minister of Environment in December 2008. Sometime after that the government will make an announcement. Though some senior members of the government appear to be supportive of what DRIC is proposing, local MPPs have not yet thrown their support behind this project. Does that concern you?

Response: Our job is to conduct a rigorous environmental assessment process. We've been doing that and sharing various data, findings and reports throughout. The MPPs will continue to be involved as the team carries on with the study and additional meetings, and completes the environmental assessment process.

Comment: The 15 alternatives were determined three years ago and all this work since then is just lip service. The preferred alternative was decided back then.

Response: That's really not the case. The DRIC Environmental Assessment has been an open, transparent, rigorous public process. It is a bi-national effort that has been both thorough and systematic. All the analysis and related decisions are defensible.

Comment: It is hard to accept that so many people will be displaced by your preferred option when, within the study area, there is so much vacant land available. It is hard to understand the logic.

Response: All the data and analysis leading to the selection of the technically and environmentally preferred access road solution and the short-list of plaza and crossing locations is published and available for review by the public. The Illustrative Alternatives report found on the project website — www.partnershipborderstudy.com — explains why each alternative was discounted and how the study team arrived at the Area of Continued Analysis.

- At the request of one participant who was unfamiliar with the original 15 crossing alternatives, Mr. Kozachuk provided a brief overview of the broad groupings of them and the related strengths/weaknesses of the options. At a higher-level he noted that: With reference to the southern alternatives, much of the traffic was going to/coming from the core areas of Windsor and Detroit and would not be attracted by these options; similarly, the eastern alternatives did not attract enough cars to make the crossing economically viable; the DRTP alternative did not provide a viable connection on the U.S. side.

Next Steps

- Mr. Kozachuk provided a brief overview of next steps. In so doing, he noted that:
 - Additional analysis on certain engineering and environmental items will be completed for the technically and environmentally preferred access road option (and the plaza/crossing alternatives). Surveyors continue to take measurements and additional fieldwork concerning natural habitat is taking place.
 - The team should be in a position to announce the technically and environmentally preferred plaza and crossing locations in the not too distant future — and this will likely be done at an upcoming PIOH scheduled for June. This PIOH will also focus on the Windsor-Essex Parkway.
 - Another round of PIOHs is planned for the fall and will include a discussion of mitigation strategies.
 - The team will continue with its comprehensive consultation program — including Council and stakeholder meetings — and there will be some Context Sensitive Solutions workshops in the coming months.
 - The formal documentation for the Canadian portion of the environmental assessment (both federal and provincial) will be completed by the end of this year.
- Following Mr. Kozachuk's overview, SAG members offered a number of questions and comments:

Comment: It would be beneficial to bring this information into the schools. This is something that could be considered for the next school year.

Response: [Comment noted.]

Question: How ready is the DRIC study team to announce an end-to-end solution — are you 90% ready/complete...less, more?

Response: If you're looking for a number, we are about 80% ready. However, we have yet to conduct the two remaining public information open houses and to assess what may come out of them.

Comment/Question: The DRIC study team has always said that it wishes to improve quality of life and protect community and neighbourhood characteristics. The new freeway will include trucks that carry hazardous waste material. How does this protect the community? What portion of such traffic will be diverted to Sarnia?

Response: Hazardous goods are currently transported along Huron Church/Highway 3. The transportation of such goods on the new route/crossing would not create a situation that does not already exist. With

the Windsor-Essex Parkway design, the accident rates are expected to be much lower than they are today with arterial roads and numerous traffic lights. Some truck traffic will continue to use the Sarnia crossing because they continue to have business there or find that crossing location more advantageous. With the new freeway facility in place, it will be a lot safer for truck traffic.

Question: Will the air filtration system that exists in schools be improved?

Response: It is likely a question to be answered by the appropriate school board.

Question: Will the Oakwood School have additional trees planted as a result of this project?

Response: This idea will be forwarded for inclusion in the upcoming Context Sensitive Solutions workshop — and for the consideration of the project team.

Comment: How is public input taken into consideration?

Response: The study team listens to and takes seriously public input. The team has to make a judgement based on all the input, including the scientific evidence. Public comments are an important part of the mix and give the study team a sense of community concerns and aspirations.

- Glenn Pothier noted that the next Schools Advisory Group meeting is tentatively planned for the fall of 2008 — potentially in October or November following the resumption of the school year. A notice will be sent to SAG members, including a meeting agenda.
- Glenn Pothier then asked if either the Project Team or SAG members had any other business they would like to bring to the group's attention. There were no additional items mentioned.

Closing Remarks

- Glenn Pothier thanked the group for their attendance and participation, and brought the meeting to a close.
- The meeting was then formally adjourned, having run from approximately 6:40 to 8:30 p.m.

Attendance (names listed in order as recorded on the sign-in sheets)

Schools Advisory Group members:

Barb Fistrovic, Oakwood School

Kam Pandya, Oakwood School

Yogini Pandya, Oakwood School

Irene Savva, Oakwood School

Margaret Suh, Oakwood School

Sandy Cremascos, Oakwood School

Paul Cremascos, Oakwood School

Partnership:

Roger Ward — Ontario Ministry of Transportation

Consultant Team:

Len Kozachuk and Irene Hauzar — URS Canada

APPENDIX C - Display Material Handout package

Welcome to the Sixth
Public Information Open House
for the

DETROIT RIVER INTERNATIONAL CROSSING
E N V I R O N M E N T A L A S S E S S M E N T

June 18 & 19, 2008

>> Please Sign In <<

Members of the Study Team are available to discuss any questions that you may have.



U.S. Department of Transportation
**Federal Highway
Administration**



Ontario



The Detroit River International Crossing Study follows an Environmental Assessment process that is a proven, legislated process used throughout Ontario and Canada on infrastructure projects, ranging from simple road widenings to complex long span bridges.

The task of completing the DRIC EA falls to the Border Transportation Partnership, a dedicated bi-national team of leading engineers, planners, and policy experts from Transport Canada, the Ontario Ministry of Transportation, the U.S. Federal Highways Administration, and the Michigan Department of Transportation – committed to a new border crossing by 2013.

Ministry of Transportation

Windsor Border Initiatives Implementation Group

949 McDougall Street, Suite 200, Windsor
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URS Canada Inc.

DRIC Project Office

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Mr. Murray Thompson
Project Manager
Tel. 905-882-4401

Mr. Roger Ward
Senior Project Manager
Tel. 519-873-4586

Mr. Len Kozachuk
Deputy Project Manager
Tel. 905-882-3540

www.weparkway.ca
www.partnershipborderstudy.com
1-800-900-2649 (Toll Free)

To provide for the safe, efficient and secure movement of people and goods across the Canada-U.S. border in the Detroit River area to support the economies of Ontario, Michigan, Canada and the U.S.

To construct a new end-to-end transportation system that will link Highway 401 to the U.S. interstate system with inspection plazas and a new river crossing in between.

In meeting the purpose, this study must address the following regional transportation and mobility needs:

- Provide new border crossing capacity to meet increased long-term travel demand;
- Improve system connectivity to enhance the continuous flow of people and goods;
- Improve operations and processing capabilities at the border; and
- Provide reasonable and secure crossing options (i.e. network redundancy).

The Study Team seeks to implement transportation solutions which minimize community and environmental impacts as much as possible. In particular, the Canadian Study Team is looking to address the local communities' goals to:

- *Improve quality of life*
- *Take trucks off local streets*
- *Improve traffic movement across the border.*

The assessment of Crossing, Plaza and Access Road alternatives is being conducted in accordance with the Environmental and Technical Work Plans and is based on the following factors and measures:

Factors	Performance Measures for Assessment of Practical Alternatives	
Changes to Air Quality	Particulate Matter Gaseous Pollutants	
Protection of Community and Neighborhood Characteristics	Residences and Social Features Existing Businesses Residents and Social Features	Noise and Vibration Community and Neighbourhood Impacts to Access
Maintain Consistency with Existing and Planned Land Use	Land Use (existing and planned) Development Plans Contaminated Sites/Disposal Sites	
Protect Cultural Resources	Built Heritage Features Parklands	Archaeological Features
Protect the Natural Environment	Ecological Landscapes Communities/Ecosystems Population/Species	Surface Water/Groundwater Recharge Areas Other Natural Resources
Improve Regional Mobility	Highway Network Effectiveness Continuous/ongoing River Crossing Capacity Operational Considerations of Crossing System (River Crossing and Plaza)	
Cost and Constructability	Cost Construction Duration	Construction Risk Utility Impacts

The **Canadian Environmental Assessment Act** (the Act) applies to federal authorities when they contemplate certain actions in relation to a *project* (e.g. funding and certain regulatory permits). Federal departments that have an environmental assessment (EA) responsibility in relation to a project are called Responsible Authorities (RAs).

Transport Canada (TC) is an RA for the Detroit River International Crossing project because TC is a co-proponent of the project, together with the Ontario Ministry of Transportation. As an RA, TC must ensure that an environmental assessment is carried out under the Act. The Windsor Port Authority also has an EA responsibility under the *Canada Port Authority Environmental Assessment Regulations*. The DRIC study has been designated to coordinate the federal and provincial EA requirements.

The CEAA process was formally initiated in March 2006, and a Notice of Commencement was posted on the Canadian Environmental Assessment Register, registry number 06-01-18170. Federal authorities also participating in the assessment include:

Environment Canada	Foreign Affairs Canada	Canadian Transportation Agency
Health Canada	Natural Resources Canada	Canada Border Services Agency
Fisheries and Oceans Canada		

Federal authorities have been participating in the coordinated EA process since it began in 2004, by reviewing the draft work plans to ensure that the information being collected as part of the DRIC process will be sufficient to meet federal information needs under CEAA.

Draft federal Environmental Assessment Guidelines have been developed to outline the specific requirements of the CEAA process. These guidelines were made available for public review in December 2006, and are currently being updated to reflect public input. In addition, the federal Public Participation Plan was developed, to describe the opportunities the public will have to provide input directly into the federal process. Both of these documents are available on the CEAA website at www.ceaa.gc.ca.

For more information about the CEAA process please contact:

Mr. Mohammad Murtaza
Senior Program Officer
Canadian Environmental Assessment Agency
55 St. Clair Avenue East
9th Floor, Room 907
Toronto, Ontario M4T 1M2
Tel: 416-952-1585, Fax: 416-952-1573
E-mail: mohammad.murtaza@ceaa-acee.gc.ca

Ms. Kaarina Stiff
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330 Sparks Street
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Ottawa, Ontario K1A 0N5
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E-mail: stiffk@tc.gc.ca

This study is being undertaken through a coordinated federal-provincial Environmental Assessment (EA) process. Both governments have agreed to coordinate their respective EA processes as outlined in the *Canada-Ontario Agreement on EA Cooperation* (November, 2004), which states that federal and provincial governments:

"will coordinate the environmental assessment processes whenever projects are subject to review by both jurisdictions... The agreement maintains the current level of environmental standards and the legislative and decision-making responsibilities of both governments. While projects requiring both provincial and federal environmental assessment approvals will still require separate approvals, decisions will be based on the same body of information and there will be an ability to make decisions concurrently".

The federal EA process was initiated early in the project planning stages in order to maximize opportunities for coordination with the provincial EA process.

All technical studies being prepared as part of the provincial individual EA process will form the basis for meeting the requirements of the *Canadian Environmental Assessment Act*.

Federal departments provided input into the development of the Work Plans developed for each of the various disciplines required for this study, as part of the coordinated process.

Public Oversight

The Partnership has heard that public oversight of a new crossing is important. We are committed to protecting the public interest with public oversight. The Partnership is exploring various forms of collaboration and innovation with the private sector, while maintaining an appropriate level of public oversight.

New Crossing and Plaza

The Government of Canada is the lead partner in the implementation of the bridge and inspection plaza on the Canadian side of the crossing system. Canada has indicated it intends to explore the opportunity for private-sector participation in the construction, financing, and operation of the new bridge. A public-private partnership will not affect the ownership of the new crossing and the Government of Canada remains committed to public ownership of the new bridge and inspection plaza.

New Access Road

Ontario is the lead partner in the implementation of the access road from Highway 401 to the new plaza in Canada and is also exploring various roles for the private sector in the delivery of the access road. The Government of Canada, in recognition of the importance of this project, has committed to cover 50 per cent of the eligible capital costs of the new access road.

Study Process

An Ontario Environmental Assessment Terms of Reference, outlining the process for the Detroit River International Study, was prepared by the Partnership.

Submitted Terms of Reference, May 2004



Consultation

Public Information Open House, June 2003
Meetings with private sector and agencies
Meetings with Municipalities (Sarnia, Windsor, LaSalle, Essex County, Tecumseh, Amherstburg)
MOE Approval, September 2004

Coordinate the U.S. and Canadian work programs.
Investigate engineering, social, economic, cultural and natural environment.
Present assessment of impacts for public review.
Incorporate public and agency input.

Initiated Environmental Assessment, January 2005



Public Information Open Houses scheduled at study milestones
Meetings with public, private sector and agencies throughout the study.
Community Consultation Group formed.

Study Process

Developed initial set of alternatives based on public, agency and municipal input, Guiding Principles and recommendations made by other studies.

Identified sensitive community features.

Sought public input on the level of importance of each evaluation factor.

Developed Illustrative Crossing, Plaza Locations & Connecting Route Alternatives in Canada and the U.S., Summer 2005



Consultation

Initial Public Outreach, April 2005
Workshops

Tours of Detroit River area

Meetings with public, private sector municipalities and agencies

Public Information Open House 1, June 2005

Based on the assessment of Illustrative Alternatives, Area of Continued Analysis was identified.

Assessment considered Specialists' Evaluation and public input to level of importance of Evaluation Factors.

At-grade and below-grade alternatives considered.

Identified Area of Continued Analysis, Fall 2005



Workshops

Tours of Detroit River area

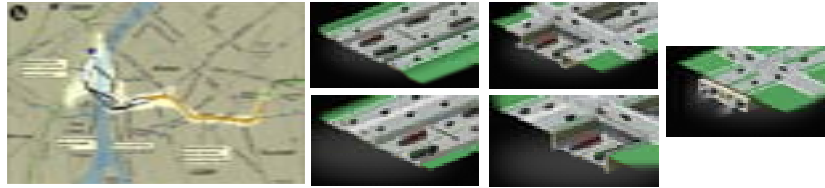
Meetings with public, private sector municipalities and agencies

Public Information Open House 2, November 2005

Study Process

Established Guiding Principles in generating practical alternatives.
Specific options generated based on community objectives, public, agency, municipal and specialists input.

Identified Practical Crossing, Plaza and Access Road Alternatives, Spring 2006



Consultation

Public Workshops to define specific options and explore Context Sensitive Solutions.
Tours of Detroit River area.
Meetings with public, private sector municipalities and agencies.
Public Information Open House 3, March 2006.

Study Team sought and gathered information on key community features.
Field data, modeling, design work and secondary source info, incorporated in analysis of impacts and benefits.
Compile all analysis data.

Present Preliminary Analysis of Practical Alternatives, December 2006



Context Sensitive Solutions Workshops
Tours of Detroit River area
Workshops
Meetings with public, private sector municipalities and agencies
Public Information Open House 4, December 2006

Used knowledge gained from analysis of original practical alternatives and community input to develop the Parkway alternative.
Continued with foundation investigations for the plaza and crossing alternatives.
Compiled data, finalize and present analysis to public.

Update of Preliminary Analysis of Practical Alternatives, August 2007



Meetings with public, private sector municipalities and agencies
Public Information Open House 5, August 2007

The evaluation process used during the Illustrative and Practical Alternatives phase to determine the Technically and Environmentally Preferred Alternative has involved two methods: **Reasoned Argument Method** and **Arithmetic Method**. The Reasoned Argument is the primary evaluation method with the Arithmetic approach used to substantiate the findings of the Reasoned Argument evaluation.

Reasoned Argument Method

Considers the **advantages** and **disadvantages** of each alternative and the relative significance of the impacts. The rationale to be used to select alternatives over others was derived from the following sources:

- National and international significance of the crossing;
- Government legislation, policies and guidelines;
- Existing Land Use and Municipal policy;
- Technical Considerations
- Issues and concerns identified during consultation; and
- Study Team expertise.

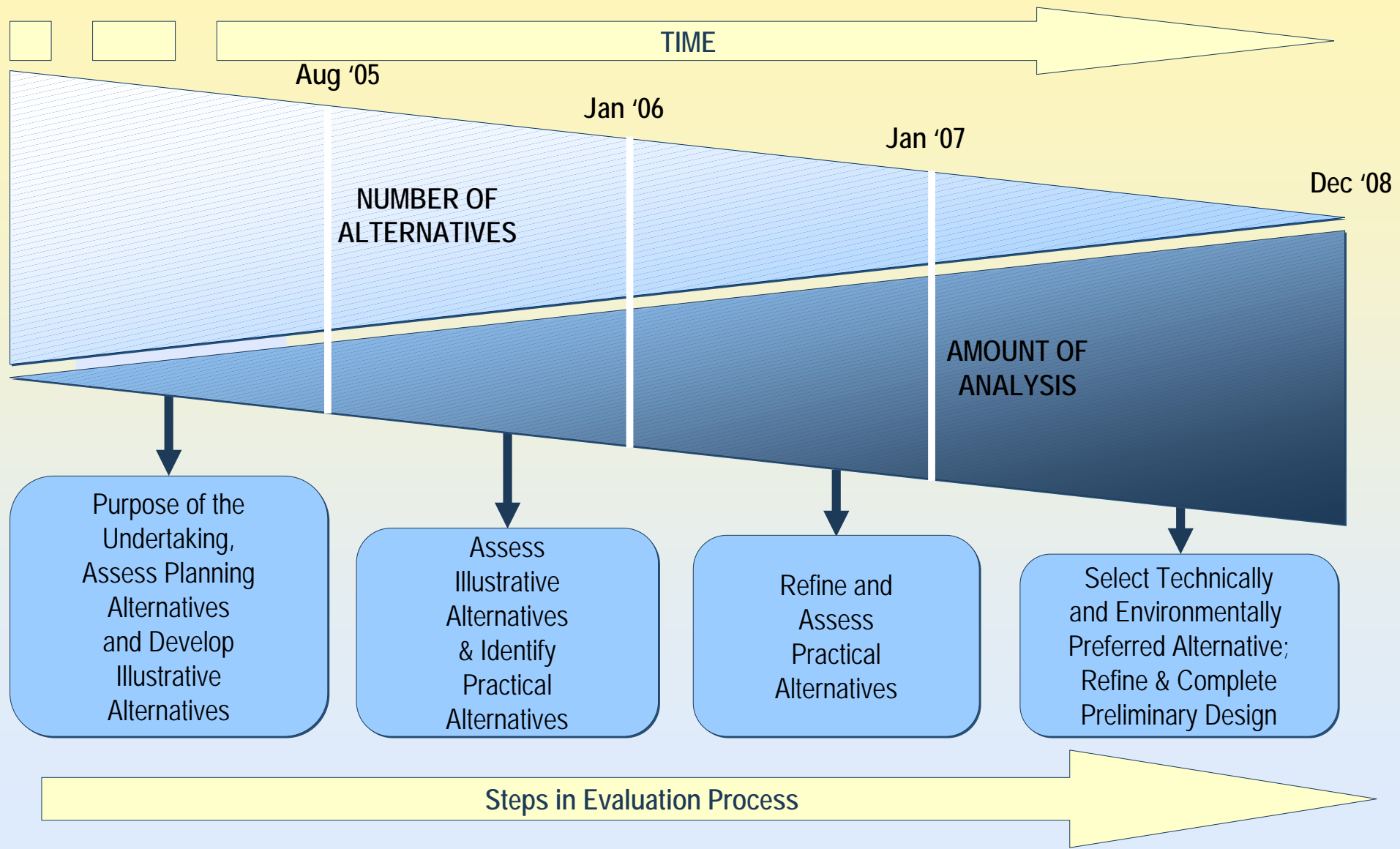
Arithmetic Method

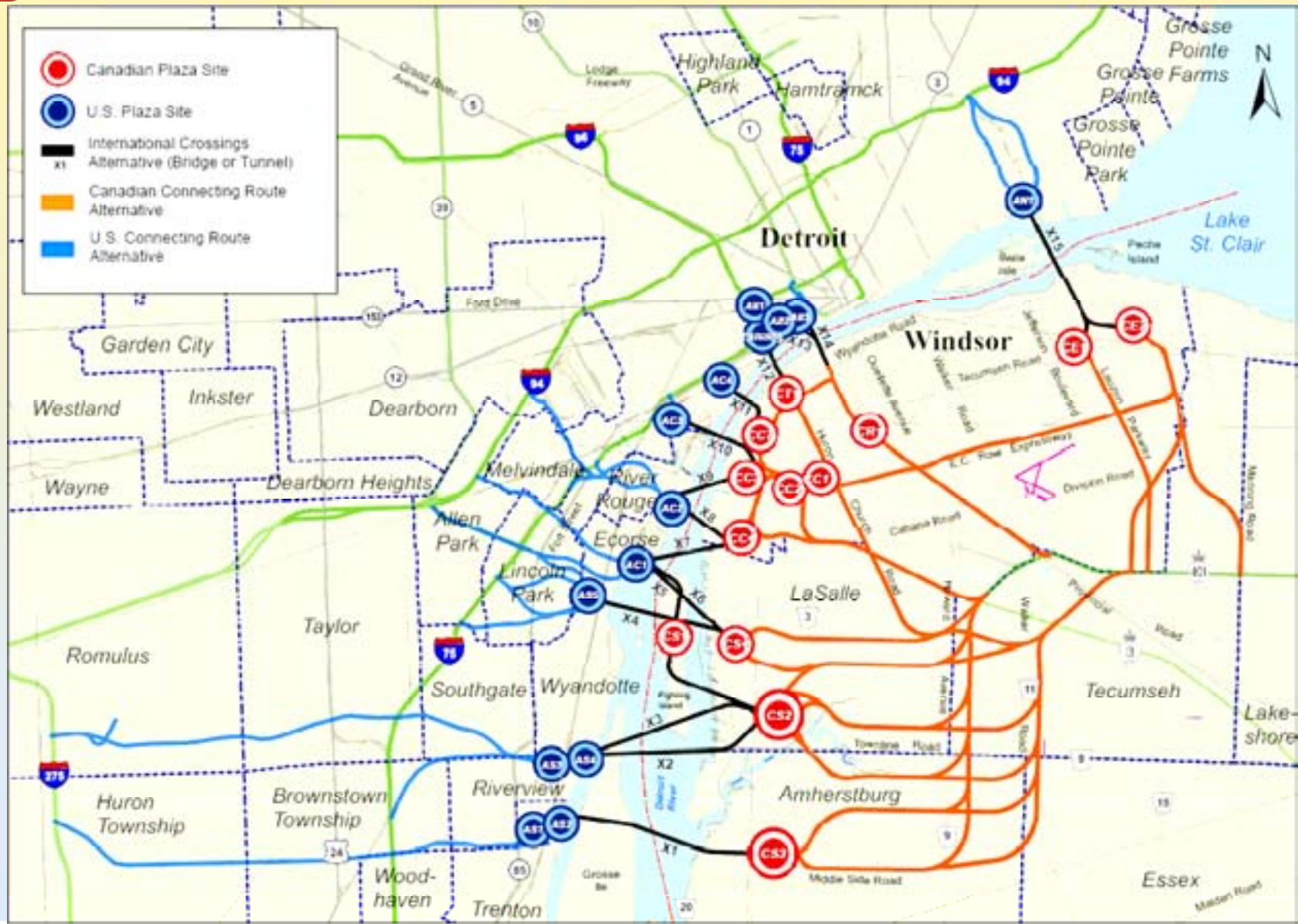
Considers both the level of importance of each environmental attribute (i.e. weight) and the magnitude of the impact or benefit (i.e. score). Generally, more weight is assigned to features that are felt to be more important in assessing impacts.

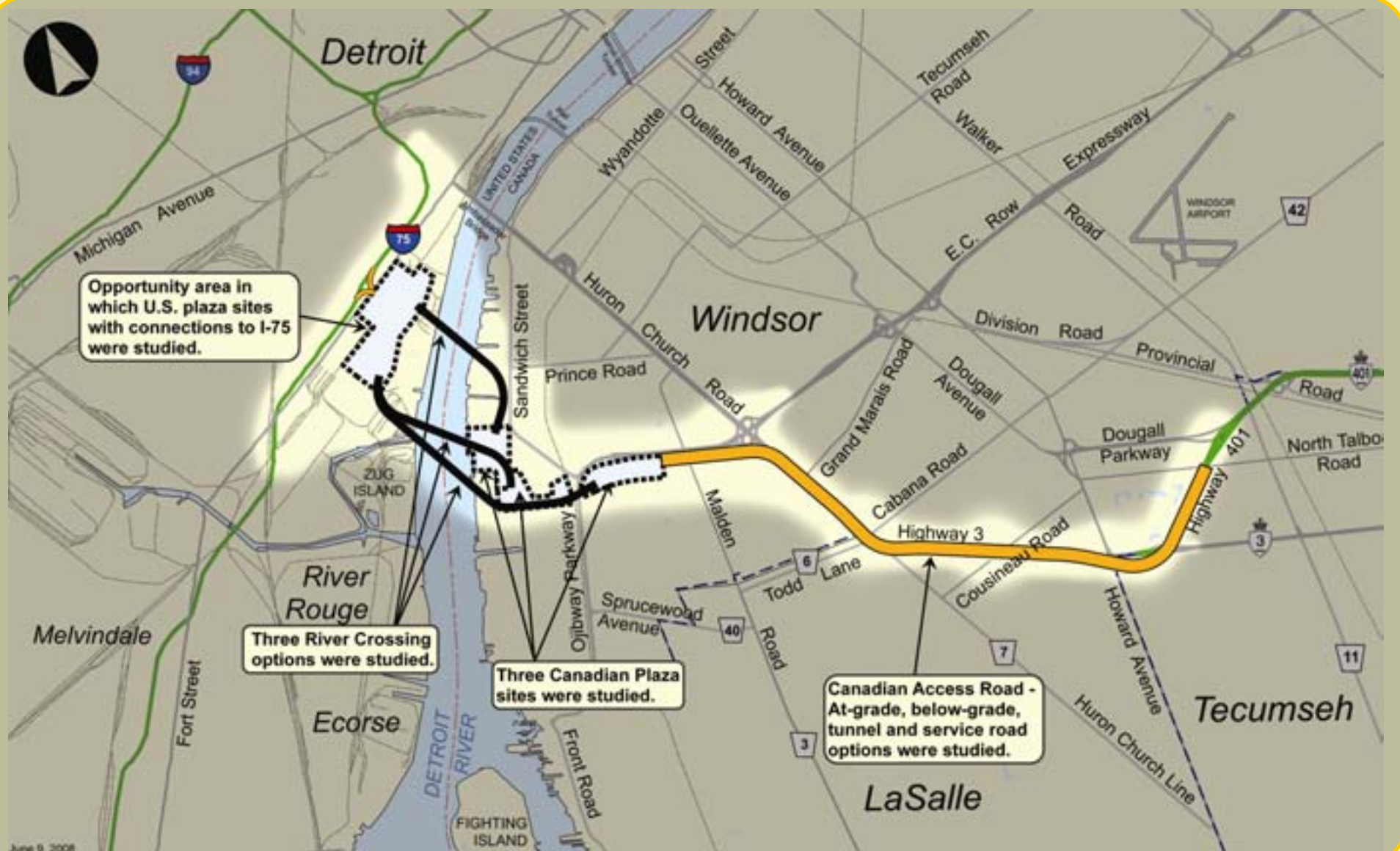
Weighting scenarios were developed based on feedback from the general public and other stakeholders. The results were presented in the *Draft Generation and Assessment of Illustrative Alternatives Report, November 2005*.

In evaluating alternatives using the Reasoned Argument or Arithmetic Method, the decision-making has:

- Incorporated input from municipalities, communities, stakeholders and government agencies, First Nations and the general public;
- Considered the context of the national and international significance of the Detroit River crossing;
- Been replicable and defensible;
- Used a common set of criteria in both countries for all alternatives;
- Been traceable and open; and
- Reflected the bi-national needs and requirements of the project.







The fifth round of Public Information Open House meetings were held August 14 and 15, 2007.
The public provided feedback on the analysis of Practical Alternatives and were shown the Parkway Alternative.

Frequently Provided Comments

- End to end tunnel would protect current community and neighbourhood characteristics
- Air quality should be improved over current conditions and kept to the highest standard possible
- Concerns about property value and view (from front yard) of the Parkway
- Lengthen the short tunnels
- Maximize tunnel use in residential areas to minimize visual impact, air and noise pollution
- Neighbourhoods must be protected from excess noise and pollution
- Parkway does a nice job of joining Windsor and LaSalle communities
- Land uses will be acquired during construction; hope that similar land uses return after construction is completed
- Preserve what are truly historical features
- Natural resources are the most vulnerable and most important
- Cost should not be a major factor or defining factor
- Cost of tunneling is cheaper than the projected cost of health care
- The most efficient use of tax dollars should be considered
- Concerned with traffic flow during construction



| Attendance: 1672 + | Comment sheets received: 207 |

Following the last round of PIOHs in August of 2007, the Parkway was refined to include:

- Additional Tunnel in the vicinity of Spring Garden
- Location and Length of Tunnel at Oliver Estates revised
- Overall length of tunnels increased to 1.86 km
- Other Tunnel lengths and locations refined
- Pedestrian and Cyclist Trails refined
- New Loop ramp at Todd Lane (EW-S)
- Howard Avenue Interchange modified to include connection to possible future Laurier Parkway Extension

The analysis of the access roads is summarized as follows:

<i>Changes to Air Quality</i>	All alternatives offer similar benefits to air quality by eliminating stop and go traffic and getting trucks off local streets.
<i>Protecting Community and Neighbourhood Characteristics</i>	The Windsor-Essex Parkway has higher property requirements but also provides a greater buffer between neighbourhoods and the roadway resulting in fewer residences being next to the roadway corridor. In addition, new connections between communities and new recreation and green space areas are possible. No noise impacts are expected with the Parkway and some areas will realize a reduction in noise levels compared to today's conditions.
<i>Maintain Consistency with Existing and Planned Land Use</i>	The Windsor-Essex Parkway creates more open space along the corridor, which provides buffer for adjacent land uses and new recreational opportunities.
<i>Protect Cultural Resources</i>	The Windsor-Essex Parkway does not impact any significant archaeological or built heritage features. The Windsor-Essex Parkway provides greater opportunities for new parks and recreation trails to link to existing parks and trails.
<i>Protecting the Natural Environment</i>	The Windsor-Essex Parkway avoids the core areas of important natural areas but impacts some local features. These impacts are reduced somewhat by the greater opportunities provided for the enhancement of natural features and the restoration of long-forgotten natural linkages.
<i>Improve Regional Mobility</i>	The Windsor-Essex Parkway will provide sufficient capacity on the freeway and service drives to meet future travel needs for international and local traffic. The freeway will eliminate stop and go traffic for much of the international traffic and help keep trucks off of local streets. The Windsor-Essex Parkway also has better service road operation and better access between service roads and the below-grade freeway compared to other alternatives.
<i>Cost and Constructability</i>	The Windsor-Essex Parkway is estimated to cost \$1.6 billion, which means the Windsor-Essex Parkway has a higher construction cost than the initial below-grade alternatives. It is almost \$1 billion more expensive than the lowest cost at-grade alternative but over \$2 billion less expensive than the end-to-end tunnel alternative.

The following summarizes the results of the evaluation of access road alternatives based on the seven factors.

Factor	Preferred Alternative
Air Quality	No Clear Preference
Community & Neighbourhood	Windsor-Essex Parkway
Land Use	Windsor-Essex Parkway
Cultural Resources	Windsor-Essex Parkway
Natural Environment	No Clear Preference
Regional Mobility	Windsor-Essex Parkway
Cost & Constructability	At-grade

The Windsor-Essex Parkway is preferred or comparable to other alternatives in 6 of the 7 factors. In the only factor area where Windsor-Essex Parkway was not preferred, the at-grade alternatives were identified as having lower costs and fewer constructability risks;

Overall, the study team concluded that the advantages of the Windsor-Essex Parkway over the other alternatives outweighed the higher costs and constructability risks;

The Windsor-Essex Parkway was therefore identified as the preferred access road alternative.

Parkway

THE WINDSOR-ESSEX

Parkway Connects Communities



The Parkway alternative was developed, based on refinements to the below-grade Practical Alternatives (Alternatives 1B and 2B), and the tunnel alternative (3) and reflects the study goals and the community input received to date. The Parkway subsequently underwent technical analysis to the same level of detail as the initial five Practical Alternatives. These studies combined with community input led to the development of The Windsor-Essex Parkway.

The Windsor-Essex Parkway is a below-grade access road, with separate service roads for local traffic, and extensive green space. It will allow communities on both sides of the corridor to reconnect and provides opportunities for new trails for pedestrians and cyclists and linkages for wildlife. The access road for international traffic would be below-grade from Howard Avenue to E.C. Row Expressway, with 11 tunnels located above it. The Windsor-Essex Parkway will address the future transportation and mobility needs of the region, improve traffic operations and safety, and protect people and communities.













Looking west at Oakwood Tunnel rooftop

Summary of Analysis – Access Road Alternatives

FACTOR/ MEASURE	ALTERNATIVE 1A		ALTERNATIVE 1B		ALTERNATIVE 2A		ALTERNATIVE 2B		ALTERNATIVE 3	PARKWAY		
	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)				
Changes to Air Quality												
Results of modeling to date (before mitigation)	<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies.Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.		<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies.Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.Depressed alternatives result in slightly lower PM_{2.5} concentrations in comparison to the at-grade alternatives.		<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies.Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.		<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies.Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.Depressed alternatives result in slightly lower PM_{2.5} concentrations in comparison to the at-grade alternatives.		<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies but NO_x concentrations are greater compared to non-tunnel alternatives over a broader area (greater dispersion from ventilation stacks)Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.Tunnel results in lower concentrations of PM_{2.5} in vicinity of the first 50m from the ROW compared to the other alternatives.	<ul style="list-style-type: none">Predicted concentrations of NO_x are lower in the future compared to today's values due to changes in fuels and vehicular technologies.Concentrations of Volatile Organic Compounds (VOC's) predicted to be well below provincial standards.Depressed alternatives result in slightly lower PM_{2.5} concentrations in comparison to the at-grade alternatives.		
Protection of Community and Neighbourhood Characteristics												
Potential Acquisitions												
Residences	• 180-230	• 160-210	• 180-230	• 160-210	• 190-230	• 170-220	• 180-230	• 170-220	• 140-180	• 309-333		
Businesses	• 31	• 45	• 31	• 45	• 26	• 40	• 26	• 40	• 43-45	• 48		
Community Features Potentially Displaced	• 3 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church	• 4 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (partial)	• 3 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church	• 4 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (partial)	• 3 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church (partial)	• 4 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (partial)	• 3 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church (partial)	• 4 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (partial)	• 4 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (partial)	• 5 – Montessori Preschool, Royal Canadian Legion, Heritage Park Alliance Church, Trillium Court Housing (entire property), St. Clair College Athletic Fields		
Noise Receptors with >5 dB increase (after mitigation)	• 1 (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)	• 1 (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)	• (additional investigations in Malden Road/ Spring Garden area are required)	• (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)	• 0 (additional investigations in Malden Road/ Spring Garden area are required)		
Effect on Access	<ul style="list-style-type: none">9 road closings20 local access connections to new transportation facilityNo access to the new corridor from Cabana Road/Todd Lane; no access to Howard Avenue from Highway 401 Eastbound.Full access to St. Clair College.		<ul style="list-style-type: none">13 road closings14-15 local access connections to new transportation facilityPartial access to/ from the new corridor from/to Cabana Road/Todd Lane.Full access to St. Clair CollegeNo direct access to Howard Avenue.		<ul style="list-style-type: none">15 road closings15 local access connections to new transportat'n facilityFull access to/ from the new corridor from/to Cabana Road/ Todd Lane; no direct access to St. Clair College or Howard Ave.		<ul style="list-style-type: none">15 road closings14 local access connections to new transportat'n facilityFull access to/ from the new corridor from/to Cabana Road/ Todd Lane; no direct access to St. Clair College or Howard Ave.		<ul style="list-style-type: none">14 road closings10 local access connections to new transportat'n facilityFull access to/ from the new corridor from/to Cabana Road/ Todd Lane; no direct access to St. Clair College or Howard Ave.		<ul style="list-style-type: none">9 road closings13 local access connections to new transportation facilityNo access to/ from Cabana Road/Todd Lane; No access to Howard Avenue from Highway 401 Eastbound.	<ul style="list-style-type: none">18 road closings17 local access connections to new transportation facilityNo access to/ from Cabana Road/Todd Lane; No access to Howard Avenue from Highway 401 Eastbound











Summary of Analysis – Access Road Alternatives

FACTOR/ MEASURE	ALTERNATIVE 1A		ALTERNATIVE 1B		ALTERNATIVE 2A		ALTERNATIVE 2B		ALTERNATIVE 3	PARKWAY
										
	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)		
Impact on Community Character/Cohesion	<ul style="list-style-type: none">Overall, similar impacts to community compared to other alternativesCommunities of Spring Garden, Bethlehem Street, Reddock Street and Talbot Road (between Cousineau Road and Howard Avenue) Montgomery-Chelsea Drive and Mero Avenue will experience change to community character and cohesionThe displacement of households within the neighbourhoods will result in a change in character within each communityReddock Street will experience a change in community character and cohesion due to the access road alignment encroaching into the communityThe Bethlehem community will experience a change in character and cohesion due to development of Bethlehem Street to accommodate local traffic traveling from Spring Garden to Huron Church Road		<ul style="list-style-type: none">Overall, similar impact to community compared to other alternativesCommunities of Spring Garden, Bethlehem Street, Reddock Street, Kendleton Court, and Talbot Road (between Cousineau Road and Howard Avenue) and Mero Avenue will experience change to community character and cohesionBelow grade alternative has lower aesthetic impacts than the at-grade optionsReddock Street will experience a change in community character and cohesion due to the access road alignment encroaching into the communityRemoves traffic from the viewshed of adjacent neighbourhoods		<ul style="list-style-type: none">Overall, similar impact to community compared to other alternativesCommunities of Spring Garden, Bethlehem Street, Reddock Street and Talbot Road (between Cousineau Road and Howard Avenue) and Mero Avenue will experience change to community character and cohesionOver half of the households on Reddock Street will be displacedThe residential in-fill area of Kendleton Court will be displaced with option 1; no households will be displaced in Kendleton Court with option 2Talbot Road community will experience a change in character and cohesion due to the displacement of one entire side of Talbot Road, with either option 1 or option 2		<ul style="list-style-type: none">Overall, similar impact to community compared to other alternativesCommunities of Spring Garden, Bethlehem Street, Reddock Street and Talbot Road (between Cousineau Road and Howard Avenue) and Mero Avenue will experience change to community character and cohesionAll Kendleton Court households will be displaced with alignment option 1; with alignment option 2 only one Kendleton Court household is displacedProvides for some aesthetic benefits to the community at large and to adjacent neighbourhoodsRemoves traffic from the viewshed of adjacent neighbourhoods		<ul style="list-style-type: none">Overall, similar impact to community compared to other alternativesImpacts to Spring Garden, Talbot Road, Bethlehem Street, Mero Avenue, and Montgomery-Chelsea Drive neighbourhoodsIn the Talbot Road community, the displacement of households is limited to the LaSalle side of Talbot Road; resulting in a change in community character and cohesion as approximately one half of the community is displacedTunnel alignment to Plaza A will result in a displacement of 32 out of 48 households on Bethlehem Street; which will result in a change in character and cohesionLowest aesthetic impact, but visual impact of ventilation buildings, which are not compatible with the surrounding landscape; residents will have the ventilation buildings and stacks as part of their permanent viewshed	<ul style="list-style-type: none">Impacts to Spring Garden, Talbot Road, Bethlehem Street, Reddock Street, Kendleton Court, Trillium Court neighbourhoodsTalbot Road (between Cousineau and Howard) community will experience a change in character and cohesion due to the displacement of all the households on both sides of the streetTrillium Court community will be entirely displaced, resulting in a change to community cohesion and characterIn the Kendleton Court community, the displacement of households is limited to one side of the streetParkway provides a greenspace buffer to adjacent neighbourhood communities, thus reducing the number of residents adjacent to the roadwayParkway provides connectivity between communities and community features that currently does not existGreenspace buffer between residents and freeway/service roads will result in fewer residents experiencing long term nuisance effects
Consistency with Existing & Planned Land Use										
Consistency	<ul style="list-style-type: none">Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans.		<ul style="list-style-type: none">Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans.		<ul style="list-style-type: none">Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans.		<ul style="list-style-type: none">Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans.		<ul style="list-style-type: none">[Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans.	<ul style="list-style-type: none">Alternative utilizes Huron Church Road/Highway 3 Corridor (major roadway, historical connection to border crossing);Proposed facility is consistent with local Official Plans including the Healthy Communities policies and objectivesParkway provides opportunities for additional parkland and recreational features
Total area of land use impacts	• 78 ha	• 74 ha	• 75 ha	• 78 ha	• 81 ha	• 78 ha	• 80 ha	• 85 ha	• 65 ha	• 95-99 ha
Contaminated Sites/Potentially impacted area of high potential for contamination	• 17/9 ha	• 17/3.6 ha	• 18/3.5 ha	• 13/3.6 ha	• 17/4 ha	• 17/4 ha	• 16/3.8 ha	• 16/4 ha	• 16/3 ha	• 20/3 ha

Summary of Analysis – Access Road Alternatives

FACTOR/ MEASURE	ALTERNATIVE 1A		ALTERNATIVE 1B		ALTERNATIVE 2A		ALTERNATIVE 2B		ALTERNATIVE 3	PARKWAY
	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)		
Protection of Cultural Resources										
Built Heritage Features Displaced	• 7 to 9 field identified built heritage features displaced		• 6 to 8 field identified built heritage features displaced		• 4 to 5 field identified built heritage features displaced		• 4 to 5 field identified built heritage features displaced		• 5 to 8 field identified built heritage features displaced	• 7 to 8 field identified built heritage features displaced
Disrupted	• 1 to 2 field identified built heritage features disrupted		• 2 field identified built heritage features disrupted		• 4 to 5 field identified built heritage features disrupted	• 5 to 6 field identified built heritage features disrupted	• 3 to 5 field identified built heritage features disrupted		• 2 to 3 field identified built heritage features disrupted	• 3 to 4 field identified built heritage features disrupted
Parks	• 1 Impacted – Property taking • 5 impacted – potential disruption to access	• 6 Impacted – Potential disruption to access	• 1 Impacted – Property taking • 5 impacted – potential disruption to access	• 6 Impacted – Potential disruption to access	• 1 Impacted – Property taking • 5 impacted – potential disruption to access	• 6 Impacted – Potential disruption to access	• 1 Impacted – Property taking • 5 impacted – potential disruption to access	• 6 Impacted – Potential disruption to access	• 1 Impacted – Property taking • 5 impacted – potential disruption to access	• 1 impacted-Property taking • 5 impacted – potential disruption to access • adds 240 acres of additional parkland and greenspace, and over 20 km of new recreational trails with the Windsor-Essex Parkway design
Archaeology Disturbance or destruction of known significant archaeological sites	• 1 to 2 small pre-contact habitation sites • 9 pre-contact findspots	• 1 to 2 small pre-contact habitation sites • 9 pre-contact findspots • e.g. no known sites of high to moderate significance impacted	• 1 to 2 small pre-contact habitation sites • 9 pre-contact findspots	• 1 to 2 small pre-contact habitation sites • 9 pre-contact findspots	• 2 to 3 small pre-contact habitation sites • 10 to 11 pre-contact findspots	• 2 to 3 small pre-contact habitation sites • 10 pre-contact findspots	• 2 to 3 small pre-contact habitation sites • 10 to 11 pre-contact findspots	• 2 to 3 small pre-contact habitation sites • 9 to 10 pre-contact findspots	• 1 to 3 small pre-contact habitation sites • 8 pre-contact findspots	• 3 to 4 small pre-contact habitation sites • 15 to 17 pre-contact findspots
Protection of Natural Environment										
Fish and Fish Habitat	• No critical fish habitat impacted by any access road alternatives									
Plant/Vegetation Species	• 0.44 ha to 1.43 ha of provincially rare vegetation impacted	• 0.50 ha to 1.53 ha of provincially rare vegetation impacted	• 0.43 ha to 1.46 ha of provincially rare vegetation impacted	• 0.54 ha to 1.46 ha of provincially rare vegetation impacted	• 1.19 ha to 2.22 ha of provincially rare vegetation impacted	• 1.18 ha to 2.22 ha of provincially rare vegetation impacted	• 0.82 ha to 1.86 ha of provincially rare vegetation impacted	• 0.82 ha to 1.86 ha of provincially rare vegetation impacted	• 0.50 ha to 1.48 ha of provincially rare vegetation impacted	• 1.47 ha to 2.54 ha of provincially rare vegetation impacted
Wildlife Species and Habitat	• 102 to 142 specimens/colonies of species at risk	• 92 to 134 specimens/colonies of species at risk	• 112 to 152 specimens/colonies of species at risk	• 103 to 152 specimens/colonies of species at risk	• 122 to 162 specimens/colonies of species at risk	• 116 to 155 specimens/colonies of species at risk	• 105 to 145 specimens/colonies of species at risk	• 92 to 131 specimens/colonies of species at risk	• 141 to 180 specimens/colonies of species at risk	• wider right of way/buffer areas provides greater opportunities for restoration and enhancement of natural features along the corridor
Improvements to Regional Mobility										
Highway Capacity	• Six lane freeway with controlled access and service roads provides sufficient capacity to meet future (2035) travel demand; Peak Hour LOS (2035) = C									

Summary of Analysis – Access Road Alternatives

FACTOR/ MEASURE	ALTERNATIVE 1A		ALTERNATIVE 1B		ALTERNATIVE 2A		ALTERNATIVE 2B		ALTERNATIVE 3	PARKWAY
										
	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)	Option 1 (Widen to North on Hwy 3)	Option 2 (Widen to South on Hwy 3)		
Continuous Capacity	<ul style="list-style-type: none">All alternatives provide comparable access between the service roads and the cross streets with slight differences;Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternative		<ul style="list-style-type: none">Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternative		<ul style="list-style-type: none">Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternative		<ul style="list-style-type: none">Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternative		<ul style="list-style-type: none">Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternativeThe positive effects of tunnels on safety include elimination of adverse weather conditions and increased driver attention and/or slower speeds due to the confined driving spaceElements of tunnel driving that negatively affect safety may include limited visibility due to tunnel walls and light changes at the portals; it is much more difficult to control events in a tunnel crash; motorists' escape is not simple, and it is harder for emergency response teams to reach the crash siteThe consequences of a crash in a tunnel are greatly increased over those on an open road, however, the frequency of catastrophic events is low, and the occurrence of general traffic crashes (on a tunneled freeway) is marginally less than on an open road	<ul style="list-style-type: none">Safety of controlled access freeway for access road is greatly increased compared to present arterial roadway with signalized intersections and other entrances/conflict pointsProvides increased local and regional mobility over the "do nothing" alternativeProvides substantial travel time savings for local traffic when compared to the "do nothing" alternativeProvides more favourable traffic operations on the service road than the other alternativesProvides higher degree of mobility between the service road and the new freeway when compared to the other alternatives.
Reasonable and Secure Options	<ul style="list-style-type: none">All access road alternatives provide freeway connection to a river crossing as well as connections to Huron Church Road at E.C. Row enabling choice between new and existing crossings									
Cost and Constructability										
Estimated (\$CAD) Construction Cost (North Talbot Road to Malden Road) 2011 dollars	\$750 M to \$920 M		\$1.19 B to \$1.36 B		\$620 M to \$790 M		\$1.03 B to \$1.20 B		\$3.6 B to \$3.78 B	\$1.5 B to \$1.6 B
Key Constructability Issues	<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossings0.3 km zone requiring soil stabilization techniques		<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossingsSoil stabilization techniques required over 2.5 km		<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossings0.3 km zone requiring soil stabilization techniques		<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossingsSoil stabilization techniques required over 2.5 km		<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossingsSoil stabilization required over 2.5 kmTesting, commissioning and maintenance of tunnel support systems (ventilation, lighting communications, etc.)	<ul style="list-style-type: none">Traffic management during constructionAvailability of resources and materialsUtility relocationsWatercourse crossingsSoil stabilization required to over 2.5 kmAdditional annual maintenance will be required for the Cahill and Lennon Drains

The results of the evaluation were verified using Arithmetic Weighting-Scoring. The scores representing the magnitude of impact were assigned by factor specialists. The weightings representing the relative importance of the factor areas were determined earlier in the study by (a) study team, (b) general public, and (c) Community Consultation Group.

Factor	Weight	1A		1B		2A		2B		3		Parkway	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Air	12.39	3	37.17	3	37.17	3	37.17	3	37.17	3	37.17	3	37.17
Community	15.93	1	15.93	1	15.93	1	15.93	1	15.93	1	15.93	1	15.93
Land Use	12.39	2	24.78	2	24.78	2	24.78	2	24.78	2	24.78	2	24.78
Cultural	12.39	3	37.17	3	37.17	3	37.17	3	37.17	3	37.17	3	37.17
Natural	15.93	3	47.79	3	47.79	3	47.79	3	47.79	3	47.79	3	47.79
Mobility	17.70	6	106.20	6	106.20	6	106.20	6	106.20	6	106.20	7	123.90
Cost/Constructibility	13.27	3	39.81	2	26.54	3	39.81	2	26.54	1	13.27	2	26.54
Total	100.00	21	308.85	20	295.58	21	308.85	20	295.58	19	282.31	21	313.28
Rank	Unweighted	1		4		1		4		6		1	
	Weighted		2		4		2		4		6		1

Factor	Weight	1A		1B		2A		2B		3		Parkway	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Air	17.32	3	51.96	3	51.96	3	51.96	3	51.96	3	51.96	3	51.96
Community	15.49	1	15.49	1	15.49	1	15.49	1	15.49	1	15.49	1	15.49
Land Use	12.69	2	25.38	2	25.38	2	25.38	2	25.38	2	25.38	2	25.38
Cultural	13.14	3	39.42	3	39.42	3	39.42	3	39.42	3	39.42	3	39.42
Natural	16.34	3	49.02	3	49.02	3	49.02	3	49.02	3	49.02	3	49.02
Mobility	15.28	6	91.68	6	91.68	6	91.68	6	91.68	6	91.68	7	106.96
Cost/Constructibility	9.54	3	28.62	2	19.08	3	28.62	2	19.08	1	9.54	2	19.08
Total	100.00	21	301.97	20	292.43	21	301.97	20	292.43	19	282.89	21	307.71
Rank	Unweighted	1		4		1		4		6		1	
	Weighted		2		4		2		4		6		1

Factor	Weight	1A		1B		2A		2B		3		Parkway	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Air	17.30	3	51.9	3	51.9	3	51.90	3	51.90	3	51.90	3	51.90
Community	13.88	1	13.88	1	13.88	1	13.88	1	13.88	1	13.88	1	13.88
Land Use	13.69	2	27.38	2	27.38	2	27.38	2	27.38	2	27.38	2	27.38
Cultural	13.12	3	39.36	3	39.36	3	39.36	3	39.36	3	39.36	3	39.36
Natural	17.11	3	51.33	3	51.33	3	51.33	3	51.33	3	51.33	3	51.33
Mobility	14.83	6	88.98	6	88.98	6	88.98	6	88.98	6	88.98	7	103.81
Cost/Constructibility	10.07	3	30.21	2	20.14	3	30.21	2	20.14	1	10.07	2	20.14
Total	100.00	21	303.04	20	292.97	21	303.04	20	292.97	19	282.90	21	307.80
Rank	Unweighted	1		4		1		4		6		1	
	Weighted		2		4		3		4		6		1

GreenLink

- Concept was presented by the City of Windsor as input to The Parkway
- The DRIC study team reviewed the materials provided by Windsor:
 - Same basic alignment as the Windsor-Essex Parkway but includes greater emphasis on tunnelling
 - Provides access to local road network at similar locations
 - Many features of GreenLink have been incorporated in the Windsor-Essex Parkway and are reflected in the analysis

Understanding GreenLink

- Knowledge of GreenLink helped the DRIC team to develop the Parkway
- The Parkway was developed from DRIC Practical Alternatives
 - Alternative 2B (below-grade freeway)
 - Alternative 3 (end-to-end tunnel option)
- The DRIC team analyzed the end-to-end tunnel and found that tunnels offer little improvement in air quality
 - Tunnels in GreenLink would not provide substantial improvement in air quality, in comparison to the Parkway

In October 2007, the City of Windsor produced a concept for the access road as input to the DRIC Study. The DRIC Study Team reviewed the information provided on the GreenLink Concept. There are many similarities between GreenLink and The Windsor-Essex Parkway.

Both Plans:

- Feature a six lane below-grade freeway with separate service roads for local traffic
- Provide tunnelled sections in key locations
- Include continuous trails that succeed in linking communities
- Have nearly identical property requirements with buffer areas between the roadway and the adjacent community
- Provide a considerable amount of greenspace
- Provide an opportunity to create a signature gateway welcoming travellers to Canada, Ontario and Windsor and Essex County

There are also many differences between GreenLink and The Windsor-Essex Parkway.

- GreenLink does not meet provincial standards including:
 - Substandard shoulder widths
 - Insufficient drainage system
- GreenLink cost estimate does not include all expenditures required including:
 - **Only** accounts for road work from Highway 3 to E.C. Row Expressway
 - Substandard shoulder widths
 - Does not account for engineering and contract administration
 - Insufficient drainage system (Designed for 20 year storm standard)
 - Cost does not include adjustments for inflation
- Adjusting GreenLink cost estimate to same basis used for other DRIC alternatives, for total length of project, and to 2011 dollars, total cost estimated increases to \$2.3 and \$2.5 billion, or nearly \$1 billion more than The Windsor-Essex Parkway, with no additional benefits.
- The GreenLink concept was considered in the development and refinements to the Parkway.

Summary of Analysis – Plaza and Crossing Alternatives

On the Canadian side, 7 possible Crossing-Plaza Combinations were identified. An evaluation using the seven factors was carried out to determine which crossing-plaza combination for each crossing corridor was to be carried forward.

Crossing A – Plaza A → Best Crossing A Alternative

Crossing B – Plaza A
Crossing B – Plaza B1 → Best Crossing B Alternative

Crossing C – Plaza A via Brighton Beach
Crossing C – Plaza A via Ojibway Parkway
Crossing C – Plaza B
Crossing C – Plaza C → Best Crossing C Alternative

The evaluation determined that:

- For Crossing B, Plaza B1 was preferred over Plaza A on the basis that Plaza B1:
 - has fewer residential displacements
 - represented less of a change to community character and land use
 - would have lower nuisance effects
 - has lower impacts to natural features
 - places the plaza closer to the border
- For Crossing C, Plaza B was preferred over other plaza alternatives on the basis that Plaza B:
 - has fewer residential displacements, nuisance effects, represented less of a change to community character and land use and has fewer impacts to natural features than the plaza A alternatives
 - avoids relocation of the Keith Transformer Station; Plaza C requires relocation of this feature, which introduces substantial cost and schedule risks for the crossing project

The Canadian Team selected three crossing-plaza alternatives to be carried forward in a collaborative analysis and evaluation with the U.S. Study. The results are summarized in the accompanying table.

The analysis of Canadian and U.S. impacts and benefits of the crossing and plaza alternatives has determined that Crossing B/Plaza B1:

- has the lowest impacts to community and neighbourhood features,
- provides the greatest benefits to regional mobility
- was found to have the least construction risk of the alternatives
- was preferred or comparable to the other alternatives in other factor areas

The Canadian study team has therefore identified **Crossing B/Plaza B1** as the preferred crossing/plaza alternative for the DRIC Study. This alternative offers the greatest advantages and has no disadvantages in comparison to the other alternatives.



The analysis of the plaza and crossings is summarized as follows:

Factors	Canadian Analysis	U.S. Analysis
Changes to Air Quality	All plaza and crossing alternatives increase concentrations of pollutants in the immediate area of the plaza, when compared to the no-build scenario. The greatest changes to air quality occur around the plaza areas as opposed to the crossings. Plazas B and B1 are located in industrial areas away from sensitive receptors. With Plaza A, impacts to adjacent residences may occur under certain conditions. All three crossing-plaza alternatives were found to have moderate impacts.	Air quality will improve even under no-build scenario. All of the new DRIC crossing/plaza alternatives will aid in improving air quality by spreading the automotive traffic in Southwest Detroit and reducing the number of heavy-duty diesel trucks within the neighborhoods.
	Conclusion: No crossing-plaza preference was determined on the basis of impacts to air quality	
Protection of Community and Neighborhood Characteristics	Crossing X-10A/Plaza A results in higher degree of change in neighbourhood character from residential with natural vacant space to industrial. Crossing X-11C/Plaza B would have a notable impact to community character in Sandwich Towne related to potential increases in traffic and nuisance impacts (noise, dust) and the relative proximity of the new crossing to Ambassador Bridge. Crossing B/Plaza B1 is not expected to have a substantial impact to the community and neighbourhood features.	Crossing X-11 would have a greater number of impacts to active residential and business units; albeit relatively few in comparison to the plaza and interchange.
	Conclusion: Crossing X-10B/Plaza B1 has lowest impacts to community and neighbourhood characteristics. Crossing X-10B/Plaza B1 is preferred.	
Maintain Consistency with Existing and Planned Land Use	Crossing X-10A/Plaza A has higher impacts to land use in comparison to the other alternatives. Existing land use in the Malden Planning District is primarily residential, integrated with natural features. The other crossing/plaza alternatives are located generally within industrial lands in the Windsor port area and cause less impact to land use.	With the No Build Alternative, trends indicate continued industrialization of the Delray area will occur at the cost of the residential area that now exists. If the DRIC crossing is built, positive land use changes are possible in the U.S. The vision is to create a better place to live, with a new crossing system as its neighbor. MDOT, in partnership with FHWA is exploring a number of concepts by which enhancements may be made to the Delray area if it becomes the "host community" for the DRIC project. These concepts are applicable with either an X-10 or X-11 Crossing.
	Conclusion: Crossing X10A-Plaza A is the least preferred alternative in this factor area.	
Protect Cultural Resources	The alternatives impact 6 to 7 archaeological sites generally considered of low/medium significance. The Crossing X-11C alternative was noted as having a higher impact to the cultural landscape of historic town of Sandwich. The alternatives have the same impact to Ojibway Park; a corner of the park (0.7 ha) is impacted near Ojibway Parkway/Broadway Street.	It was determined that no prehistoric archaeological resources are affected by any of the DRIC alternatives. Three aboveground (built) heritage features are in, or partially in, the footprint of all DRIC alternatives and will require removal, resulting in an adverse effect to be mitigated as will be stipulated in the U.S. Final Environmental Impact Statement. South Rademacher Playground, South Rademacher Community Recreation Center and the Post-Jefferson Playlot are each located in the plaza area of every DRIC alternative and would be removed (used) by the plaza.
	Conclusion: Crossing X-11C-Plaza B is the least preferred alternative in this factor area.	

Factors	Canadian Analysis	U.S. Analysis
Protect the Natural Environment	<p>All alternatives result in some loss of provincially rare specimens or colonies, impacts to ecological landscapes and impacts to terrestrial communities and ecosystems of high significance. The Crossing X-10A/Plaza A alternative has the greatest impact on provincially rare vegetation communities (2.98 ha (7.4 acres) impacted) and species at risk (232 specimens/colonies impacted). The Crossing X-10B/Plaza B1 alternative was considered to have slightly lower impacts to natural features than Crossing X-11C/Plaza B.</p> <p>Conclusion: Crossing X-10A-Plaza A is the least preferred alternative in this factor area.</p>	<p>Crossing X-11 would impact a total of 0.01 acre (0.004 ha) of low quality wetland at the edge of the Detroit River. Loss of this wetland will result in minimal impacts to wetland function and value. No natural features are impacted by Crossing X-10 alternatives.</p>
Improve Regional Mobility	<p>All three crossing alternatives are expected to work effectively under future (2035) peak travel demands and add additional border crossing and border processing capacity to the Detroit River border transportation network. The X-11 alternative could result in greater traffic volumes on Huron Church Road during peak travel periods to the point that intersections along Huron Church Road will remain congested as in the No Build condition, lowering the transportation level of service on this key roadway link in the border transportation network. By comparison, the X-10 crossing alternatives are more likely to result in improved transportation levels of service on Huron Church Road over the No Build condition as well as the X-11 Alternative, thereby providing greater benefits to regional and local mobility. Crossing X-10A/Plaza A was noted as having several security/monitoring concerns, including undesirable distance from Plaza A to the international border (2.5 km), no direct line of sight between the border and the plaza, and a 700 m section of at-grade roadway that is out of the direct line of sight from the plaza in the vacant portion of the Brighton Beach industrial park area.</p> <p>Conclusion: Crossing X-10B has greatest improvements to regional mobility.</p>	<p>There may be an increase in traffic due to additional development stimulated by the new border crossing. But, negative congestion effects are not expected either on major arteries or local neighborhood streets in the study area. Further analysis undertaken by the U.S. study team pertaining to travel time comparisons between Crossing X-11 and Crossing X-10 alternatives suggests the volume of traffic using the X-10 crossings could be as much as 50% more than the traffic using the X-11 crossing. This variance is reflective of differences in access and circulation between the U.S. plaza layouts serving crossings X-10 and X-11.</p>
Cost and Constructability	<p>Geotechnical investigations have confirmed that the proposed approach roadway to Crossing X-11C passes over the eastern end of the former solution mining well field and a subsurface anomaly that is suspected to be a brine-filled cavity, rubble zone and disturbed rock mass. Initial estimates suggest that the rock mass above this anomaly might experience subsidence ranging up to values on the order of 3m (10 feet). Even with a second bridge on the approach road spanning the area of concern, there remains some risk as to the acceptability of this solution and the continual operation of this crossing, even with this mitigation. The constructability and maintenance risks associated with the approach roadway to Crossing X-11C, are significant disadvantages of the Crossing X-11C Alternative. This long-span structure will also have its own impacts on the character of the nearby community, as well as noise and aesthetic impacts. In addition, having two long-span structures on the Crossing X-11C alignment increases the construction and maintenance costs of this alternative.</p> <p>Conclusion: Crossing X-10B/Plaza B1 is preferred over Crossing X-10A/Plaza A and Crossing X-11C/Plaza B based on the nature and severity of constructability issues associated with these alternatives.</p>	<p>The difference between Crossings X-10A and X-10B is in how each can be built. The X-10A bridge is the longest of the alternatives with a main span of 1300 metres (4,265 feet). Although suspension bridges with main spans exceeding that length do exist, this would become the longest bridge of its type in the Americas. Cost, risk to controlling cost, schedule duration, and risk to controlling the schedule were considered to be differentiating among the crossings. The estimated construction cost of the X-10A Crossing at \$920 million is significantly greater than the other suspension bridges at Crossings X-10B and X-11 (X-10B @ \$550 million and X-11 @ \$600 million). The construction duration of 62 months for Crossing X-10A is over one year more than the other alignments.</p>

Factor	Crossing Alternative (including plazas)		
	X-10A	X-10B	X-11C
Air Quality	No Preference	No Preference	No Preference
Community and Neighbourhood Characteristics		Preferred	Least Preferred
Existing and Planned Land Use	Least Preferred		
Cultural Resources			Least Preferred
Natural Environment	Least Preferred		
Regional Mobility		Preferred	
Constructability		Preferred	

Summary of Canadian Analysis – Plaza and Crossing

FACTOR/ MEASURE	Plaza A				Plaza B	Plaza B1	Plaza C
	From Crossing A	From Crossing B	From Crossing C via Ojibway Parkway	From Crossing C via Brighton Beach	From Crossing C	From Crossing B	From Crossing C
Changes to Air Quality							
Results of modeling to date (before mitigation)	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions; potential to influence air quality in Armada Street area and portion of Sandwich Towne	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions	• Slight increase in PM _{2.5} within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne
	• Slight increases in NO _x within 250 m of crossing and plaza under certain conditions	• Slight increases in NO _x within 250 m of crossing and plaza under certain conditions	• Slight increase in NO _x within 250m of crossing and plaza under certain conditions; potential to influence air quality in Armada Street area and portion of Sandwich Towne	• Slight increase in NO _x within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne	• Slight increase in NO _x within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne	• Slight increase in NO _x within 250m of crossing and plaza under certain conditions	• Slight increase in NO _x within 250m of crossing and plaza under certain conditions; potential to influence air quality in a portion of Sandwich Towne
Protection of Community and Neighbourhood Characteristics							
Potential Acquisitions							
Residences	• 62	• 65	• 64	• 66	• 38	• 36	• 35
Businesses	• 1	• 1	• 6	• 5	• 5	• 1	• 5
Community Features Potentially Displaced	• 1 - Erie Wildlife Rescue						
Noise Receptors with >5 dB increase (after mitigation)	• 1	• 2	• 3	• 3	• 0	• 0	• 0
Effect on Access	• 7 Crossings • 7 Road closings • 4 Local access connections • Matchette Road realignment and closures of the roads within the Brighton Beach area will result in minor out-of-way travel.	• 4 Crossings • 9 Road closings • 4 Local access connections • Matchette Road realignment and closures of the roads within the Brighton Beach area will result in minor out-of-way travel.	• 7 Crossings • 4 Road closings • 4 Local access connections • Matchette Road realignment will result in minor out-of-way travel.	• 7 Crossings • 3 Road closings • 4 Local access connections • Matchette Road realignment and closures of the roads within the Brighton Beach area will result in minor out-of-way travel.	• 7 Crossings • 16 Road closings • 5 Local access connections • Relocation of Broadway Street/ Sandwich Street connection and closure of Brighton Beach area roads will result in minor out-of-way travel.	• 4 Crossings • 12 Road closings • 4 Local access connections • Closure of Broadway Street/ Sandwich Street connection and closure of Brighton Beach area roads will result in minor out-of-way travel.	• 5 Crossings • 13 Road closings • 4 Local access connections • Closure of Broadway Street/ Sandwich Street connection and closure of Brighton Beach area roads will result in minor out-of-way travel.
Impact on Community Character/Cohesion	• Negative effect on community character for Armada Street neighbourhood due to proximity of new plaza	• Negative effect on community character for Armada Street neighbourhood due to proximity of new plaza	Negative effect on community character for Armada Street neighbourhood due to proximity of new plaza; negative effect on community character for Sandwich Towne due to proximity of new crossing		• Negative effect on community character for Sandwich Towne due to proximity of new crossing	• negative effect of community character for adjacent neighbourhood due to displacement of several homes to accommodate interchange connection at E.C. Row Expressway/Ojibway Parkway	• Negative effect on community character for Sandwich Town due to proximity of new crossing
Consistency with Existing & Planned Land Use							
Consistency	• Due to nature of plaza operations, proximity to residential areas on Armada/Malden/Matchette is less desirable. Plaza A alternatives are less consistent with existing land uses. Crossings are located in portland industrial areas are considered to be consistent with this land use.				• Being in proximity to industrial uses and away from residential areas is more desirable. Plaza B, B1 and C alternatives are more consistent with existing land uses. Crossings are located in portland industrial areas and are considered to be consistent with this land use.		
Total area of land use impacts	• 47 ha	• 47 ha	• 51 ha	• 57 ha	• 42 ha	• 50 ha	• 78 ha
Contaminated Sites/Potentially impacted area of high potential for contamination	• 4/1 ha	• 9/3 ha	• 15/8 ha	• 4/1 ha	• 18/16 ha	• 12/14 ha	• 18/22 ha

Summary of Canadian Analysis – Plaza and Crossing

FACTOR/ MEASURE	Plaza A				Plaza B	Plaza B1	Plaza C
	From Crossing A	From Crossing B	From Crossing C via Ojibway Parkway	From Crossing C via Brighton Beach	From Crossing C	From Crossing B	From Crossing C
Protection of Cultural Resources							
Built Heritage Features Displaced	• 1 field identified built heritage features displaced.	• 2 field identified built heritage features displaced.	• 1 field identified built heritage features displaced.	• 2 field identified built heritage features displaced.	• 3 field identified built heritage features displaced.	• 3 field identified built heritage features displaced.	• 2 field identified built heritage features displaced.
Disrupted	• 3 field identified built heritage features disrupted.	• 2 field identified built heritage features disrupted.	• 2 field identified built heritage features disrupted.	• 4 field identified built heritage features disrupted.	• 2 field identified built heritage features disrupted.	• 0 field identified built heritage features disrupted.	• 1 field identified built heritage features disrupted.
Parks	• Disrupts part of Ojibway Park (0.7 ha)						
Archaeology Disturbance or destruction of known significant archaeological sites	• 0 small pre-contact habitation sites • 6 pre-contact findspots.	• 0 small pre-contact habitation sites • 6 pre-contact findspots.	• 0 small pre-contact habitation sites • 5 pre-contact findspots	• 0 small pre-contact habitation sites • 6 pre-contact findspots.	• 3 small pre-contact habitation sites • 4 pre-contact findspots.	• 2 small pre-contact habitation sites • 4 pre-contact findspots.	• 1 small pre-contact habitation sites • 3 pre-contact findspots.
Protection of Natural Environment							
Fish and Fish Habitat	• No critical fish habitat impacted by any plaza or crossing alternatives						
Plant/Vegetation Species	• 2.98 ha of provincially rare vegetation impacted.	• 2.70 ha of provincially rare vegetation impacted.	• 2.70 ha of provincially rare vegetation impacted.	• 2.69 ha of provincially rare vegetation impacted.	• 2.02 ha of provincially rare vegetation impacted.	• 1.09 of provincially rare vegetation impacted.	• 0.98 ha of provincially rare vegetation impacted.
Wildlife Species and Habitat	• 232 specimens/ colonies of species at risk.	• 223 specimens/ colonies of species at risk.	• 186 specimens/ colonies of species at risk.	• 231 specimens/ colonies of species at risk.	• 195 specimens/ colonies of species at risk.	• 185 specimens/ colonies of species at risk.	• 153 specimens/ colonies of species at risk.
Improvements to Regional Mobility							
2035 Average Daily Car and Truck Volume	• Canadian plaza and crossing sized to accommodate average daily traffic of 39,000 vehicles (cars and trucks) in 2035						
Distance from plaza to international border	• 2.5 km	• 2.5 km	• 1.4 km	• 3.6 km	• 2.0 km	• 0.9 km	• 2.5 km
Canadian Plaza Operational Considerations	• good accessibility to/from local road network • distance from border to plaza > 1.5 km is less desirable; requires on-going security monitoring; 700 m section of at-grade roadway through vacant lands also a security/monitoring concern		• good accessibility to/from local road network • distance from border to plaza acceptable	• good accessibility to/from local road network • distance from border to plaza > 1.5 km is less desirable; requires on-going security monitoring;	• good accessibility to/from local road network • distance from border to plaza > 1.5 km is less desirable; requires on-going security monitoring;	• good accessibility to/from local road network • distance from border to plaza is acceptable	• good accessibility to/from local road network • distance from border to plaza > 1.5 km is less desirable; requires on-going security monitoring; 700 m section of at-grade roadway through vacant lands also a security/monitoring concern • operation and maintenance requirements for Crossing C alternatives are higher due to the need for the additional main-span structure over the brine well areas
Cost and Constructability							
Estimated (\$CAD) Construction Cost (s) suspension (cs) cable-stayed	\$830 M (s)	\$750 M (s) \$687 M (cs)	\$1055 M (cs) \$985 M (cs)	\$1049 M (s) \$979 M (cs)	\$1080 M (s) \$1010 M (cs)	\$707 M (s) \$643 M (cs)	\$1212 M (s)(Includes additional \$180 million to relocate Keith Transformer Station) \$1142 (cs)

Summary of Canadian Analysis – Plaza and Crossing

FACTOR/ MEASURE	Plaza A				Plaza B	Plaza B1	Plaza C
	From Crossing A	From Crossing B	From Crossing C via Ojibway Parkway	From Crossing C via Brighton Beach	From Crossing C	From Crossing B	From Crossing C
Key Constructability Issues	<ul style="list-style-type: none">Plaza and crossing avoid areas of known brine wells on Canadian side of Detroit River.The construction risk for completing Crossing A from Plaza A within the project timeframe is high due to the magnitude of required construction and the longer main-span.All plazas are of similar duration to construct.Crossing A requires the longest duration to construct (41-52% longer than Crossing C).	<ul style="list-style-type: none">Plaza avoids area of known brine wells. Crossing is outside of zone of influence associated with known brine wells on Canadian side of Detroit River.The construction risk for completing Crossing B from Plaza A within the project timeframe is moderate due to the magnitude of required construction.All plazas are of similar duration to construct.	<ul style="list-style-type: none">Plaza avoids area of known brine wells. Crossing traverses area of known brine wells on Canadian side of Detroit River. The approach passes directly through the zones of primary and secondary solution mining influence where there is potential to result in significant settlement of overlying bedrock. Approach roadway concept to include additional bridge to span entire zone of solution mining influence to lower risk of settlement impacts to new crossing. However, some risk associated with constructing crossing over this zone remains.The construction risk for completing Crossing C from Plaza A via Brighton Beach within the project timeframe is high due to the magnitude of required construction, utility relocations and the requirement for significant additional study to traverse the brine well area.	<ul style="list-style-type: none">The construction risk for completing Crossing C from Plaza B within the project timeframe is high due to the magnitude of required construction, the requirement for reconfiguration of Keith Transformer Station, other utility relocations, and the requirement for significant additional study to traverse the brine well area.Plaza avoids areas of known brine wells. Crossing traverses area of known brine wells on Canadian side of Detroit River. The approach passes directly through the zones of primary and secondary solution mining influence where there is potential to result in significant settlement of overlying bedrock. Approach roadway concept to include additional bridge to span entire zone of solution mining influence to lower risk of settlement impacts to new crossing. However, some risk associated with constructing crossing over this zone remains.All plazas are of similar duration to construct.Crossing C requires the shortest duration to construct.	<ul style="list-style-type: none">The construction risk for constructing Crossing B from Plaza B1 within the project timeframe is moderate due to the magnitude of required construction and utility relocations.Plaza avoids area of known brine wells. Crossing is outside of zone of influence associated with known brine wells on Canadian side of Detroit River.All plazas are of similar duration to construct.	<ul style="list-style-type: none">The construction risk for completing Crossing C from Plaza C within the project timeframe is very high due to the magnitude of required construction, the requirement for relocating the Keith Transformer Station, other utility relocations, and the requirement for significant additional study to traverse the brine well area.Portion of plaza is in proximity to known brine wells. Crossing traverses area of known brine wells on Canadian side of Detroit River. The approach passes directly through the zones of primary and secondary solution mining influence where there is potential to result in significant settlement of overlying bedrock. Approach roadway concept to include additional bridge to span entire zone of solution mining influence to lower risk of settlement impacts to new crossing. However, some risk associated with constructing crossing over this zone remains.All plazas are of similar duration to construct.Crossing C requires the shortest duration to construct. Plaza C requires complete relocation of Keith Transformer Station prior to beginning plaza construction which results in several years of delay in construction.	
	<ul style="list-style-type: none">Access to local residences/businesses to be maintained during constructionLocal access can be maintained for all plaza and crossing alternatives.						

Details of the U.S. Analysis of the Crossing, Plazas and Interchanges are available in the Draft Environmental Impact Statement (DEIS). For additional information, contact:

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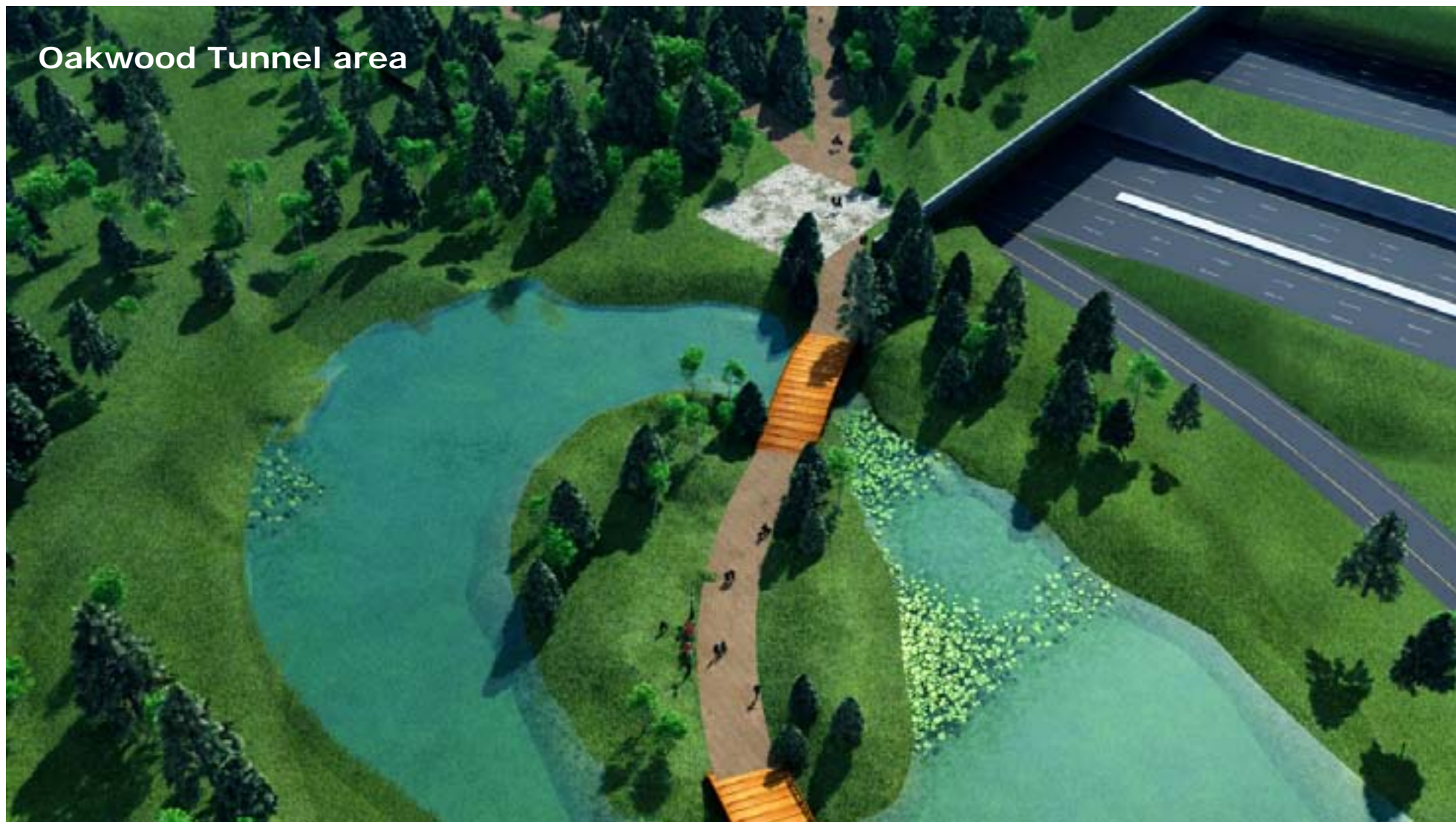
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Oakwood Tunnel area

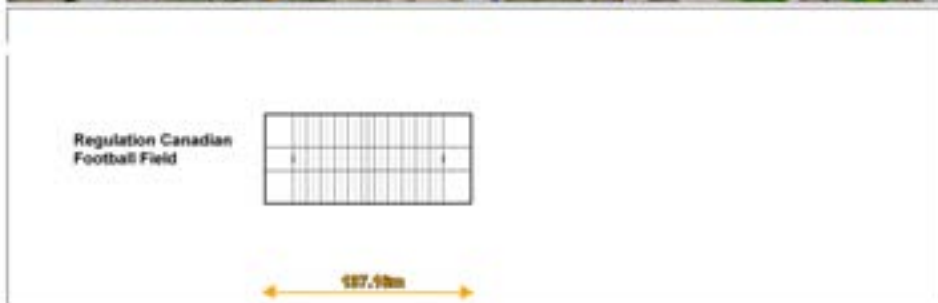
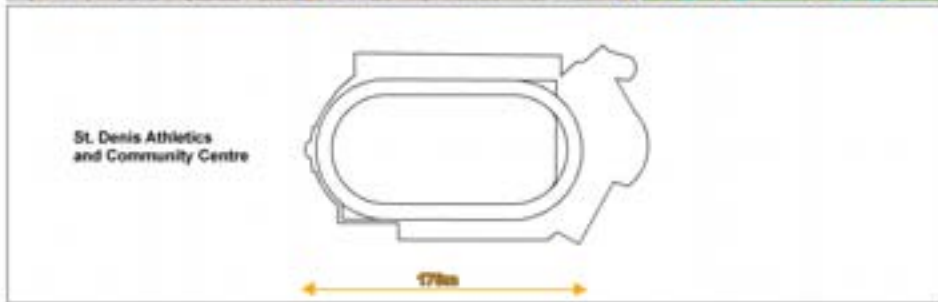


Looking north at Bethlehem/Labelle rooftop

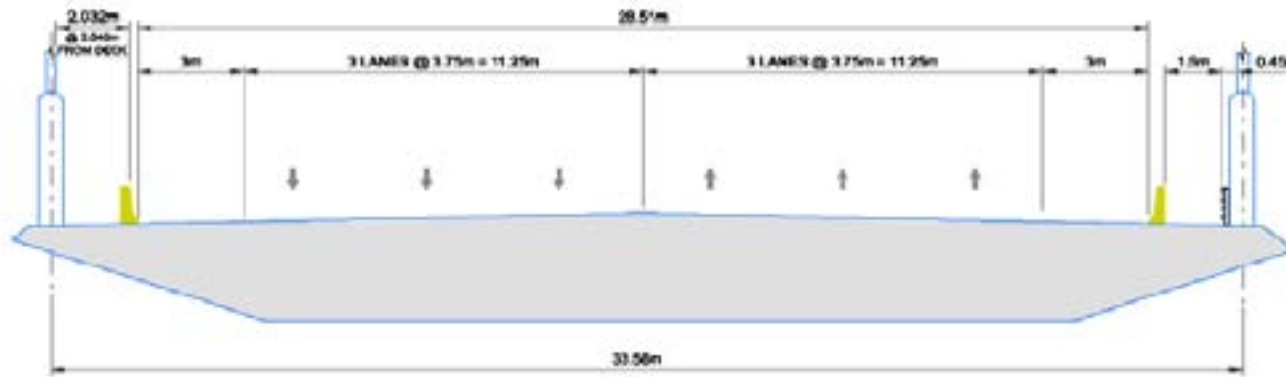


Looking east at Oakwood Tunnel





Typical Detroit River Crossing Cross Section



All alternatives feature 6 traffic lanes and a clear span of the Detroit River.

Next Steps

- Consultation with the public on Context Sensitive Solutions (CSS).
- Initiate concept design of preferred crossing.

The Canadian and U.S. Study Teams have completed a study of the types of bridges to be considered for the new Detroit River crossing. Two crossing options were identified for further study.

Cable Stayed



Suspension

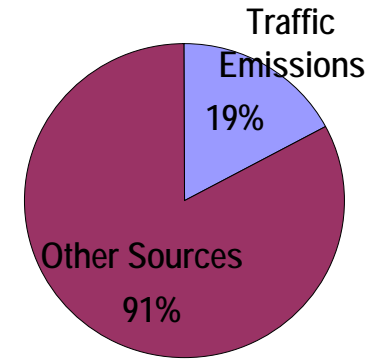






Summary of Assessment

- Local air quality is more strongly influenced by background sources and transboundary flow than by transportation sources.
- Concentrations of fine particulate are projected to be higher in the corridor than present due primarily to increased road dust as traffic increases. Particulate from vehicle tailpipes are predicted to decrease.
- Total concentrations of nitrogen oxides (NO_x) are predicted to decrease due to improvements in fuels and engine technologies.
- Below-grade alternatives result in slightly lower particulate and NO_x concentrations in comparison to at-grade alternatives.
- The air quality benefits of a below-grade roadway may be further enhanced through buffer zones, plantings and maintenance practices to reduce road dust.
- All plazas cause increases in the predicted maximum $\text{PM}_{2.5}$ and NO_x concentrations in the vicinity of the plaza. These increases are experienced up to 250 m (820 ft) away from the property boundaries of each plaza under certain conditions.
- Each of the three crossing alternatives results in increases in the predicted $\text{PM}_{2.5}$ and NO_x concentrations within 250 m (820 ft) of the crossings and the approach roadways between each plaza and bridge under certain conditions.



Traffic Emissions are mostly comprised of road dust, with a relatively small component (2%) of total particulate being attributed to tailpipe emissions.

Next Steps

- Model additional air pollutants and compare to MOE criteria and guidelines.
- Conduct more detailed analysis of the Technically and Environmentally Preferred Alternative.
- Assess potential construction impacts and recommend mitigation measures.

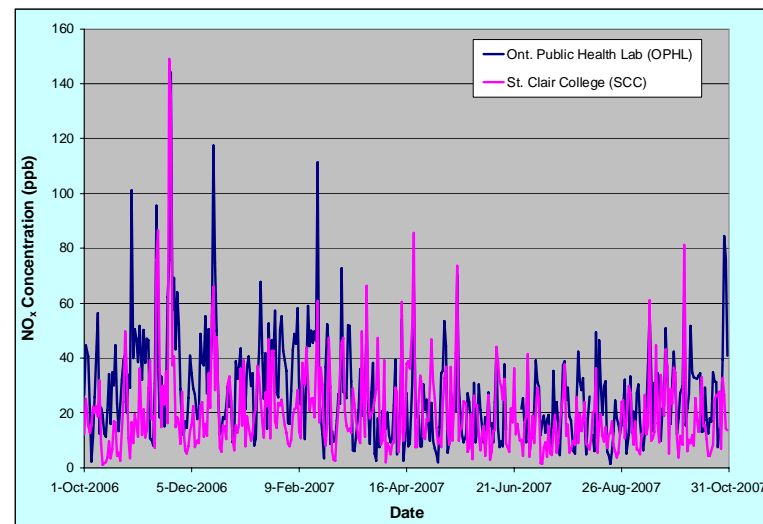
Ambient Air Monitoring – Results: October 2006 – October 2007



- Two ambient air monitoring stations installed in Huron Church Road/Highway 3 corridor
- Adjacent to Ontario Public Health Laboratory and across from entrance to St. Clair College
- Measuring fine particulate matter (i.e. $PM_{2.5}$), nitrogen oxides (NO_x), volatile organic compounds (VOCs) and weather
- Observations from these two monitoring stations were compared to data obtained from existing MOE monitoring stations located at College & South St. and University Avenue

NO_x Results

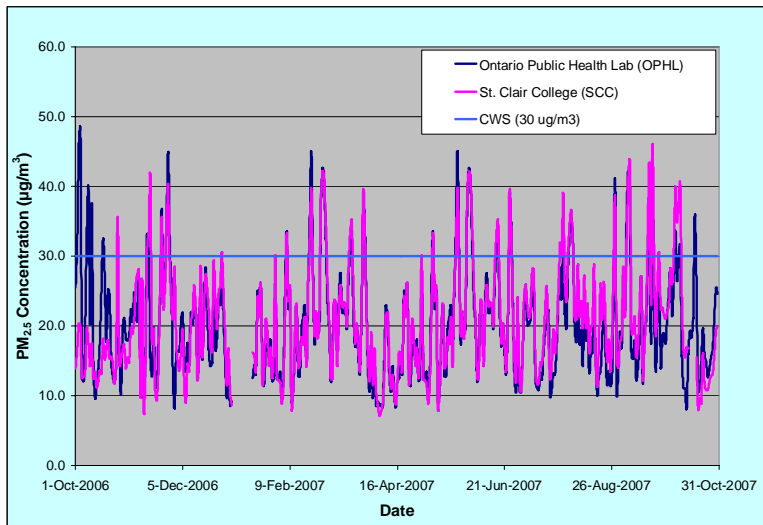
24-Hour Average Measured NO_x Concentrations ($\mu g/m^3$)
(from Observed Data at Monitoring Stations)



- Measured NO_x concentrations are within the expected range
- No observed exceedances of the 24-hour MOE Ambient Air Quality Criterion (AAQC) for NO_x ($200 \mu g/m^3$)
- Concentrations at both stations are slightly elevated in comparison to MOE monitoring stations, but remain well below the criteria
- Observed NO_x concentrations reflect local + transboundary sources, traffic patterns and meteorological conditions

PM_{2.5} Results

24-Hour Average Measured PM_{2.5} Concentrations (µg/m³)
(from Observed Data at Monitoring Stations)



- Measured PM_{2.5} concentrations are within the expected range
- Concentrations at both stations are slightly elevated in comparison to MOE monitoring stations.
- Several observed exceedances of 30 µg/m³ at both sites
- Concentrations are generally similar at both sites
- Observed PM concentrations reflect local + transboundary sources, traffic patterns and meteorological conditions

VOC Results

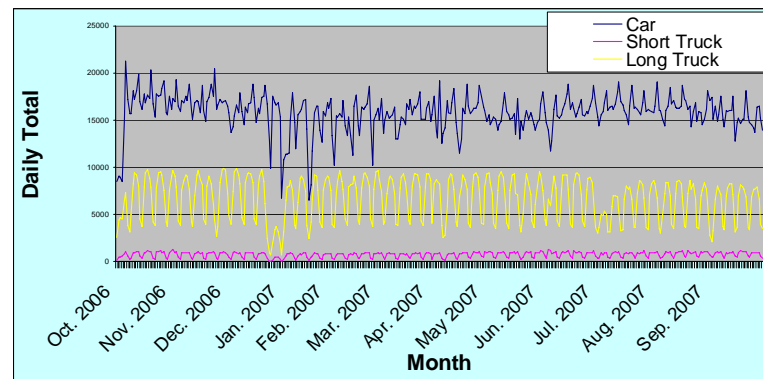
Daily Max/Min/Average VOC Concentrations (µg/m³)
(from Observed Data at Monitoring Stations)

Monitoring Station	Contaminant	Guideline Limit (µg/m ³)	Maximum Measured Concentration (µg/m ³)					Minimum Measured Concentration (µg/m ³)					Average Measured Concentration (µg/m ³)				
			Oct - Dec 2006 (avg)	Jan - Mar 2007 (avg)	Apr - Jun 2007 (avg)	Jul - Sep 2007 (avg)	Sampling Period (avg)	Oct - Dec 2006 (avg)	Jan - Mar 2007 (avg)	Apr - Jun 2007 (avg)	Jul - Sep 2007 (avg)	Sampling Period (avg)	Oct - Dec 2006 (avg)	Jan - Mar 2007 (avg)	Apr - Jun 2007 (avg)	Jul - Sep 2007 (avg)	Sampling Period (avg)
Ontario Public Health Laboratory	Acetone	9.6 ^a	1.2	2.7	4.6	2.2	4.6	0.1	0.1	0.1	0.2	0.1	0.6	0.4	0.9	1.2	0.8
	Benzene	0.7 ^a	1.0	1.8	2.0	2.2	2.2	0.4	0.3	0.3	0.3	0.3	0.6	0.6	0.7	0.8	0.7
	Acetaldehyde	500	2.4	1.2	3.2	0.7	2.4	0.6	0.6	0.2	0.3	0.2	1.5	0.8	0.6	0.4	0.8
	Formaldehyde	47	5.0	2.8	3.6	3.4	3.4	2.1	1.0	0.5	0.5	0.5	3.3	1.8	2.1	1.8	2.1
St. Clair College	Acetone	9.6 ^a	1.1	1.5	3.4	3.4	3.4	0.1	0.1	0.1	0.3	0.1	0.3	0.3	0.7	1.1	0.7
	Benzene	0.7 ^a	3.1	1.3	2.0	2.9	3.1	0.4	0.3	0.6	0.4	0.3	0.8	0.6	0.7	0.8	0.7
	Acetaldehyde	500	2.5	1.3	3.3	0.5	2.5	0.5	0.6	0.3	0.2	0.2	1.5	0.8	0.7	0.4	0.9
	Formaldehyde	47	5.7	3.2	3.4	3.4	3.7	2.5	0.9	0.3	0.3	0.3	3.3	1.7	2.3	1.9	2.2

Observed VOC concentrations are well below the relevant MOE standards and guidelines

Traffic Data

Daily Traffic Count Totals (Oct 2006 – Sept 2007)



Observed traffic patterns are cyclical on a weekly basis, but relatively constant

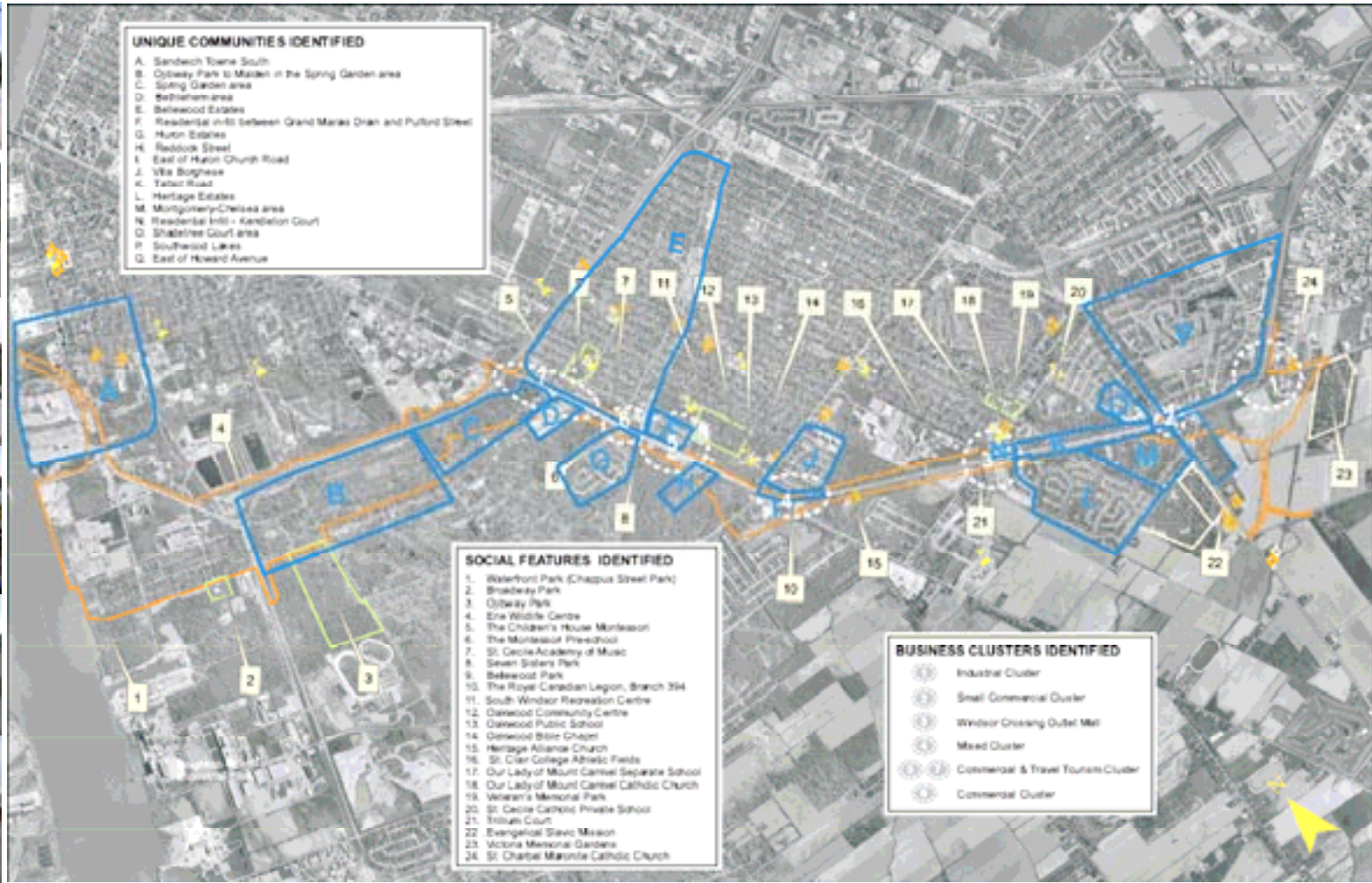
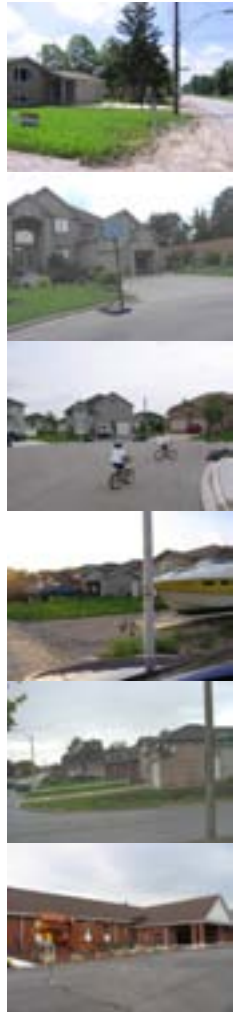
Summary of Assessment

- Potential changes to community cohesion and character for specific neighbourhood communities due to the displacement and disruption of residents and social features are similar for all alternatives.
- The Windsor-Essex Parkway is slightly preferred from a community impact standpoint as it provides benefits to the community that the others do not including a green space buffer between residents and the ROW, an opportunity for additional parkland and recreational features, and connectivity between communities and community features that currently does not exist.
- Business displacement losses will be offset by gains in other businesses, or the displaced businesses will relocate to other suitable areas.
- Plaza A has the greatest potential to impact community character and cohesion due to the changes to the existing park-like setting, greater displacements of residents, and proximity to the adjacent Armanda Street residential area.
- Crossing C has the greatest potential to impact community character due to its proximity to Sandwich Towne. The Plaza B1 and Crossing B alternative is considered to have the fewest overall impacts to the community, including the displacement of residents and businesses, in comparison to the other alternatives.
- Due to the current design of the plaza-crossing alternatives and the nature of the businesses disrupted, almost all businesses in the area will be able to operate in the same manner with no economic impact.
- The Windsor-Essex Parkway provides connectivity not previously enjoyed between neighbourhood communities on both sides of the right-of-way and adjacent to one another.

What's Next?

- Conduct impact analysis of the Technically and Environmentally Preferred Alternative.
- Assess potential construction impacts and recommend mitigation measures.
- Conduct agency and community stakeholder consultation.
- Investigate opportunities to enhance visibility and signage for businesses along the new access road alternative.

Protection of Community and Neighbourhood Characteristics



Summary of Assessment

- All alternatives use existing Huron Church Road/Highway 3 corridor – the historical connection to the border.
- Impacts to the various types of land uses along the corridor are considered to be similar for all alternatives. It is anticipated that the majority of land uses displaced can be re-established in other areas.
- All alternatives are considered consistent with existing municipal and provincial policies; the Windsor-Essex Parkway is more consistent with the City of Windsor and Town of LaSalle Official Plan policies.
- No known contaminated/disposal sites impacted by any of the access road alternatives. All alternatives have similar impacts to areas of high to moderate potential for contamination.

What's Next?

- Conduct impact analysis of the Technically and Environmentally Preferred Alternative.
- Monitor new development plans and changes to zoning within the Area of Continued Analysis (ACA).
- Conduct Context Sensitive Solutions workshops with the public to gather input into the design of the recreationways and trail systems proposed for the Windsor-Essex Parkway
- Assess potential construction impacts and recommend mitigation measures.

Land use documents consulted:



Summary of Assessment

- Potentially impacted features are without any recognized heritage status – all alternatives are considered to have a low impact.
- All access road alternatives impact six parks/recreation areas. Alternative 2A will disrupt access to the St. Clair College baseball and soccer fields. Other parks/recreation areas will experience minor disruptions.
- Little to no difference between access road alternatives in terms of impact to archaeological features. None of the alternatives impact either human remains or large pre-contact Aboriginal sites. All access road alternatives have low to medium impact to known archaeological sites.
- Plaza A will displace one field-identified feature, which represents a very minor impact.
- Plaza B, B1 and C will each displace three houses in the former Brighton Beach area; these features have no recognized heritage status. The impacts of Plazas B, B1 and C are considered to be minimal and mitigation of these features is probable.

What's Next?

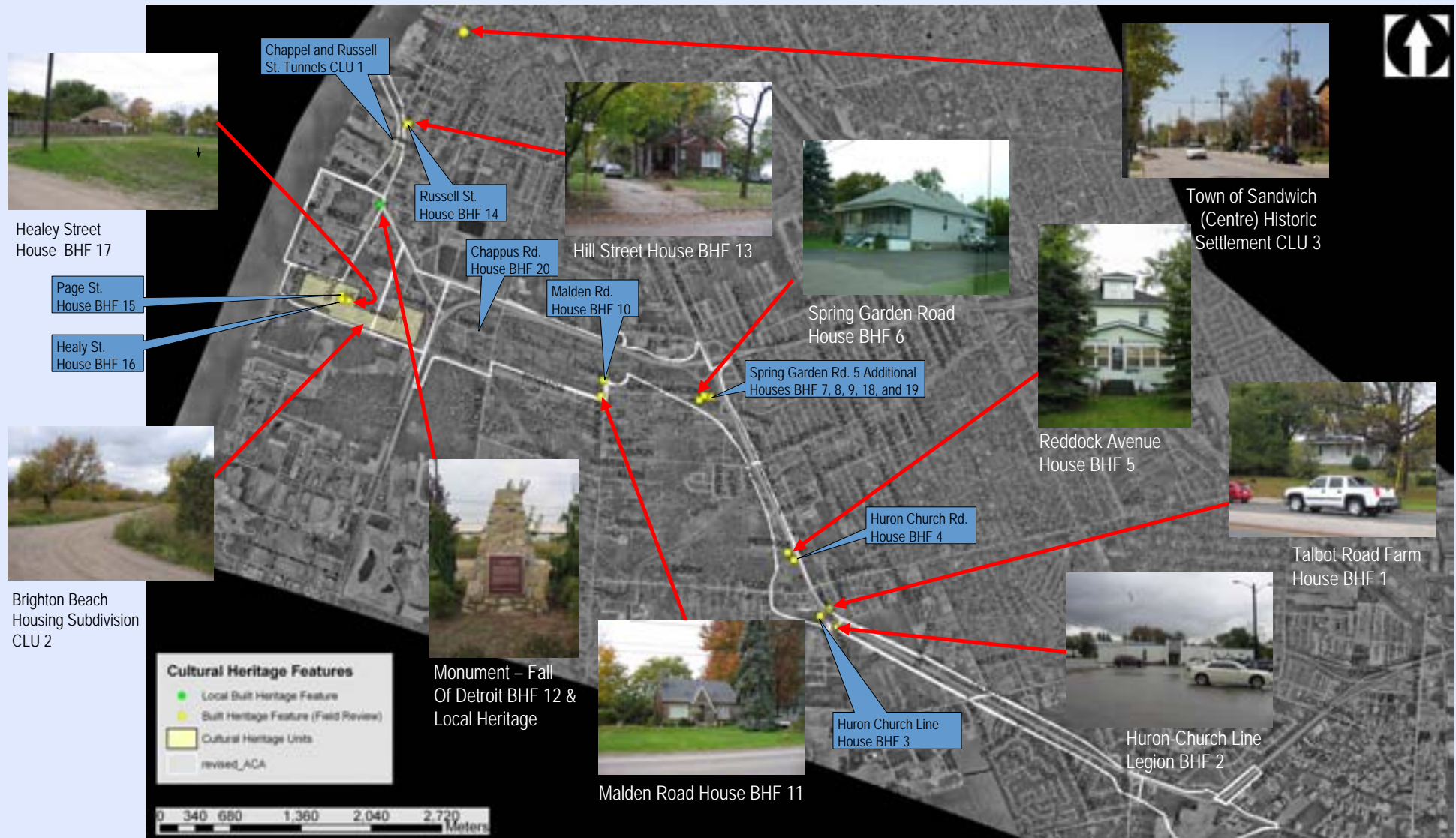
- Conduct impact analysis of the Technically and Environmentally Preferred Alternative on cultural and archaeological sites.
- Conduct an archaeological site-specific assessment (test unit excavation) on sites within the Technically and Environmentally Preferred Alternative
- Conduct Stage 2 and 3 Archaeological Assessments for the Technically and Environmentally Preferred Alternative as required.
- Assess potential construction impacts and recommend mitigation measures.



Protect Cultural Resources – Archaeological Features



Protect Cultural Resources – Built Heritage Features



Summary of Assessment

- There is no significant difference among the alternatives because footprint impacts are comparable.
- None of the access road alternatives directly impact any designated Areas of Natural and Scientific Interest (ANSI) including the Ojibway Prairie Complex.
- All access road alternatives (1A, 2B, 2A, 2B, 3 and the Windsor-Essex Parkway) encroach on the St. Clair College Prairie ESA.
- The Windsor-Essex Parkway provides greater opportunities for restoration, enhancement and ecological connections with the placement of the tunneled sections and adjacent landscaped areas.
- Plaza C, Crossing C is the most preferred combination as it avoids the natural heritage features in the Brighton Beach area north of Chappus Road.
- Plaza A, Crossing A is the least preferred as it will displace the natural features in the Brighton Beach area.
- Plaza B1 from Crossing C may disturb designated natural heritage features because of its close proximity to the Black Oak Woods ANSI/ESA. These impacts are avoidable through alternations to site design for Plaza B1.

Next Steps

- Conduct detailed in-season field investigations within the zone of influence of TEPA including species at risk surveys;
- Meet with regulatory agencies to discuss impacts and environmental protection measures;
- Perform site-specific impact assessment of TEPA including identifying impacts, mitigation measures, net environmental effects and cumulative effects; and,
- Identify environmental approval requirements and submit applications (i.e. Endangered Species Act, Fisheries Act, etc).



Vegetation Communities



Fish Habitat and Watercourses



Summary of Assessment

- All alternatives provide a significant improvement to regional mobility by getting long distance truck traffic off local streets and providing full freeway access to and from the border.
- There are no substantive differences in the safety performance between a tunnel and non-tunnel alternatives. Studies suggest that frequency of crashes in a tunnel may be less than a non-tunnel, but the consequences of crashes within a tunnel are generally more severe and challenging for emergency services.
- All alternatives provide a safety benefit compared to “do-nothing” by transferring long distance traffic from existing Huron Church Road to a controlled access freeway.
- The Parkway Alternative provides slight advantages over other alternatives in relation to both Highway Network Effectiveness and Continuous/Ongoing River Crossing Capacity. It provides slightly more favourable traffic operations on the service road than the other alternatives. It also provides a slightly higher degree of mobility between the service road and the new freeway when compared with the other alternatives.
- U.S. and Canadian border agencies have reviewed and tested functional layouts of the plaza alternatives to confirm their suitability under future traffic conditions. All plaza alternatives were found to be acceptable.
- The capacity of the new crossing will accommodate future travel demand, both in terms of meeting capacity and providing flexibility to stream traffic on the crossing to improve border processing (e.g. designated NEXUS/FAST lane).

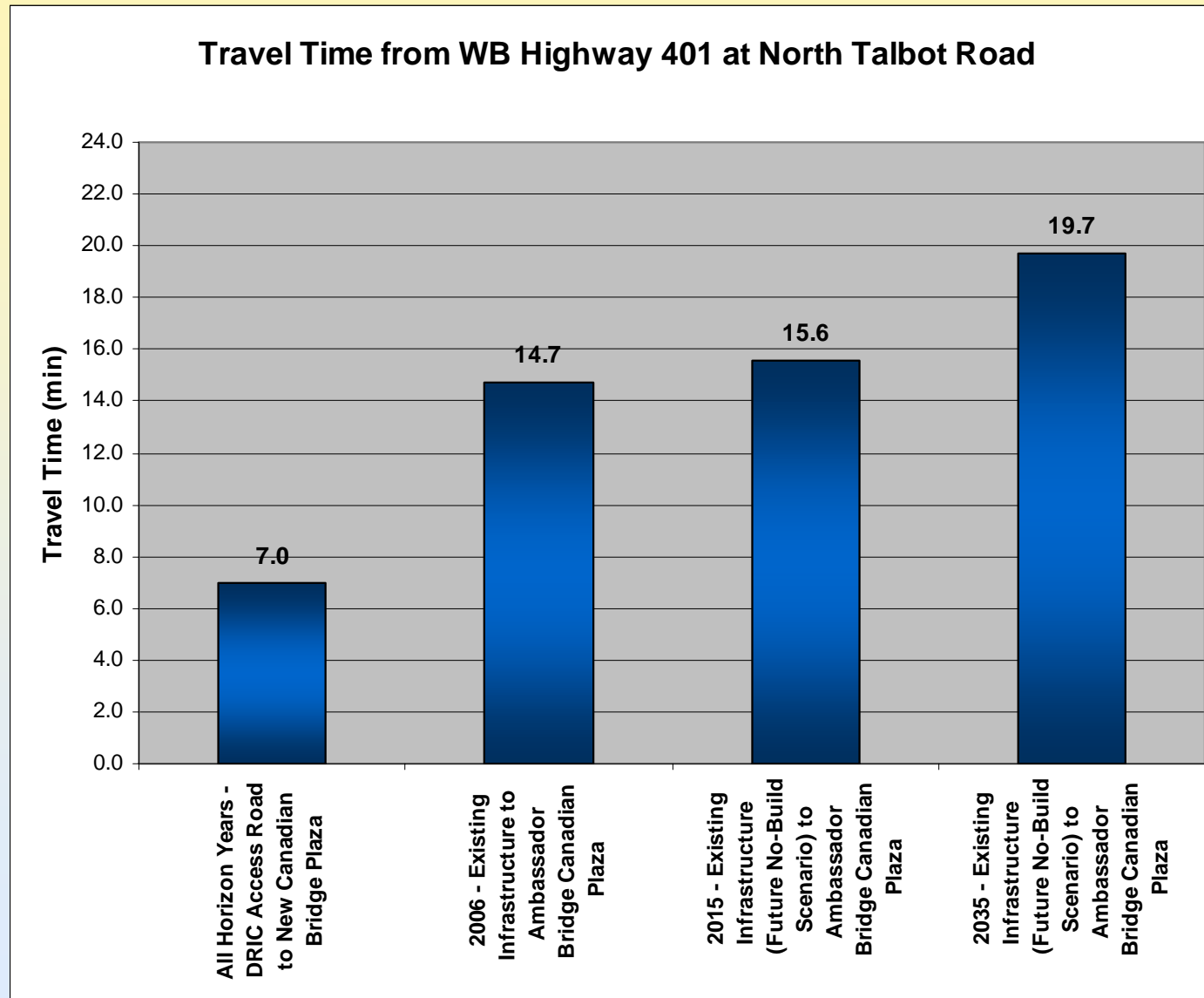


Example of Designated Lanes (i.e. NEXUS, FAST) at border crossing

What's Next?

- Conduct detailed analysis of the Technically and Environmentally Preferred Alternative.
- Assess refinements to alternatives with ongoing consultation with municipalities.

Estimated travel times from Highway 401 at North Talbot Road to Plaza B1 in base year (2006) and 2015 and 2035 horizon years.

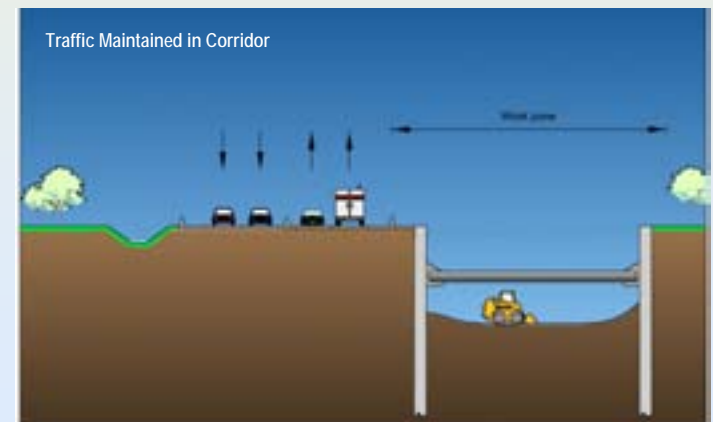


Summary of Assessment

- All access road alternatives are constructable. Traffic flow can be reasonably maintained in the Huron Church Road/Highway 3 corridor throughout the construction period.
- Construction is complicated by the high water table and relatively poor ground conditions, and those problems increase with the depth of construction.
- Cost estimate (\$CDN for year 2011) access road alternatives from Highway 401 to Malden Road is:
 - At-grade alternatives: \$620 M to \$920 M
 - Below-grade alternatives: \$1.0 B to \$1.4 B
 - Tunnel alternative: \$3.6 B to \$3.8 B
 - Windsor-Essex Parkway: \$1.5 B to \$1.6 B
- Complexity of construction, risks to schedule and overall project costs are greatest for a tunnelled option.

What's Next:

- Conduct detailed analysis of the Technically and Environmentally Preferred Alternative.
- Conduct preliminary design for Technically and Environmentally Preferred Alternative.
- Develop construction staging documentation.



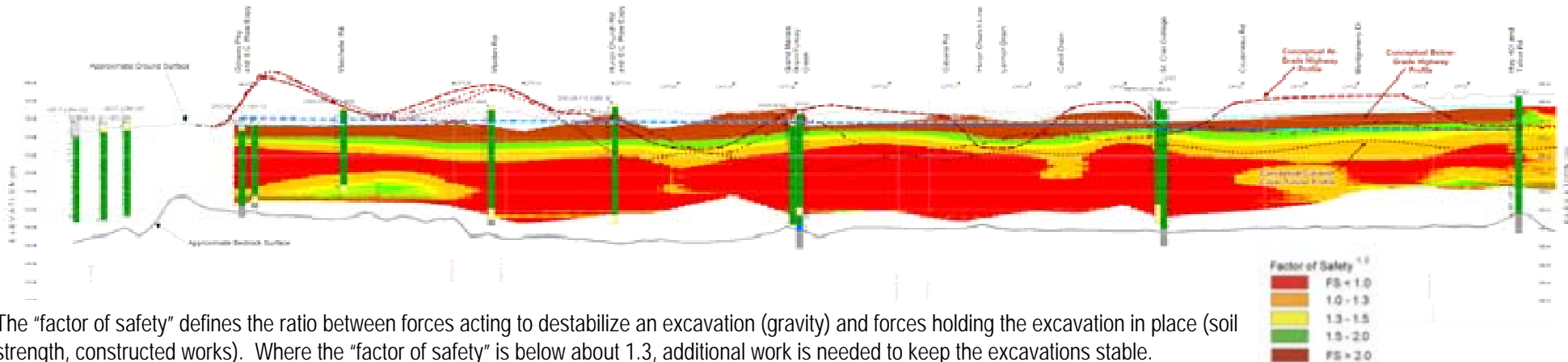
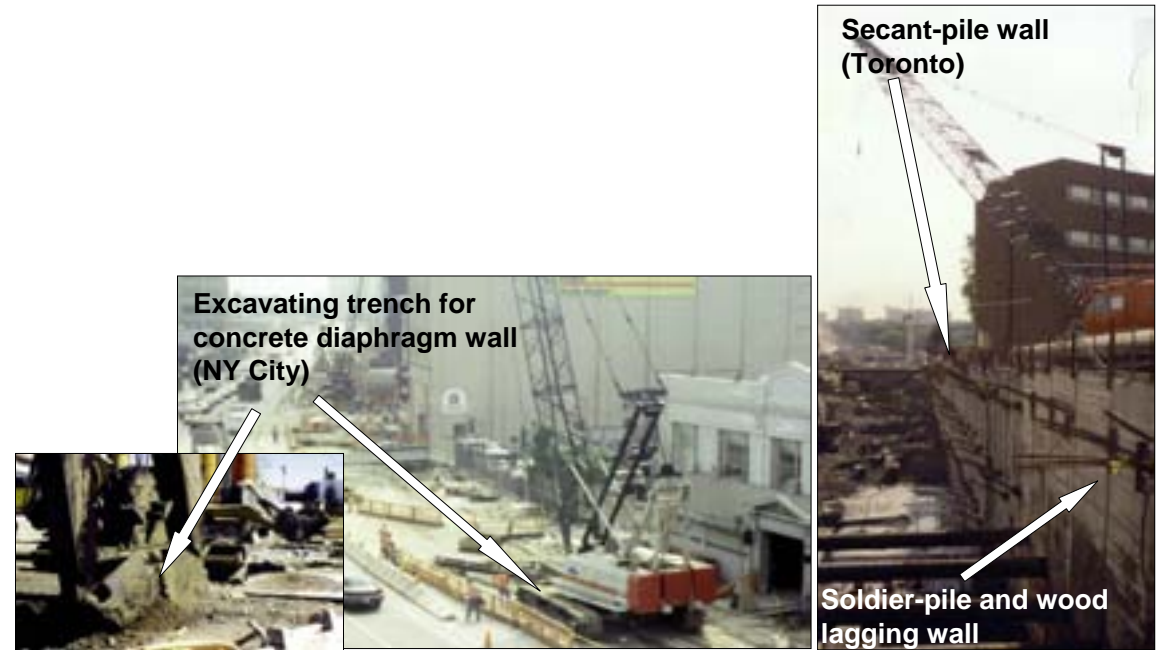
Underground Construction

The ground conditions influence constructability and cost because:

- The silt and clay soils have a strong “crust” in the top 5 to 10 m, below which they become much weaker
- Groundwater in the bedrock produces hydrogen sulphide gas when exposed to air

Construction methods suitable for constructing below-grade retaining walls:

- Conventional retaining walls (< 5 m)
- Soldier-piles and lagging (limited applications)
- Secant-pile or concrete diaphragm walls (deep excavations)



The “factor of safety” defines the ratio between forces acting to destabilize an excavation (gravity) and forces holding the excavation in place (soil strength, constructed works). Where the “factor of safety” is below about 1.3, additional work is needed to keep the excavations stable.

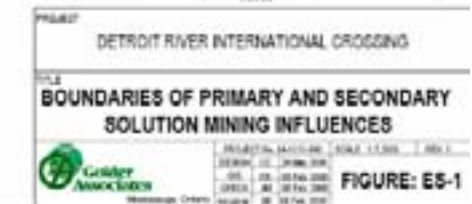


FIGURE: ES-1

As part of the completion of the Environmental Assessment studies, methods of mitigation (reducing) impacts during construction will be identified. The following identifies common mitigation measures implemented on roadway construction projects:

Factors	
Air Quality	<p>Dust and debris will be controlled through the use of standard techniques within the construction industry. These measures include:</p> <ul style="list-style-type: none"> • cover or wet down dry materials to prevent blowing dust and debris; • prevent dust from blowing across the site and from leaving the site, in particular frequently wet paved and unpaved temporary roads and excavated areas; • comply with Provincial ordinances and engineer's requirements regarding the minimization of dust and airborne pollution; • securely cover excavated materials being removed from the site and all fill materials being delivered to the site to prevent blowing from dust into the streets and haul routes;
Noise	<p>Contractors are expected to comply with all applicable requirements of the contract and local noise by-laws</p> <p>All equipment will be properly maintained to limit noise emissions, and operated with effective muffling devices that are in good working order</p>
Natural Environment	<p>Leave vegetation in right-of-way when possible to reduce loss of native vegetation</p> <p>Employ erosion and sedimentation controls that are MTO acceptable best practices</p>
Traffic and Pedestrian Safety	<p>Construction activities will be carried out in a manner as to ensure the least interference with pedestrians, cyclists and vehicular traffic and shall include fencing and lighting as required providing a safe environment</p> <p>Traffic management plans will be developed to maintain adequate traffic flow for all streets, driveways and property entrances</p>

The DRIC Study Team is interested in hearing your concerns and ideas for mitigating construction impacts on this project.

A collaborative, interdisciplinary approach to transportation planning that considers the greater context within which a transportation improvement project will exist. CSS involves all stakeholders in the development of a transportation facility that fits its physical setting and preserves the scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility.

CSS is a key component of the development of practical alternatives for DRIC. CSS workshops and activities held over the course of the study included:

- Inspection Plaza Location Development
- Access Road Refinement
- Context Sensitive Solutions Concept Preference
- Bus Tour of Bridges, Toledo, Ohio and Port Huron, Michigan
- Bus Tour of Freeway Types, Detroit, Michigan
- Access Road and Plaza CSS Themes
- Crossing Concepts and Preference Survey
- Crossing Concepts and Preference Survey



Context Sensitive Solutions Workshops are being arranged to provide interested persons with opportunities to help provide input into the look of the Windsor-Essex Parkway as well as study issues in greater detail with the DRIC Study Team. **More information will be available in the upcoming weeks.**

Owners may initiate the sale of their property on a willing buyers/willing seller basis. The Partnership members have considered purchase requests from owners of properties currently having direct access to existing Highway 3 (Talbot Road) or Huron Church Road between Highway 401 and E.C. Row Expressway. Each property has been considered on a case by case basis, based on qualifications determined by the Ministry of Transportation.

Once the project has received Environmental Assessment (EA) approval, the Partnership members will approach the remainder of impacted homeowners and business owners to acquire property in a mutually agreeable way.

After EA approval has been obtained, a representative will contact you if any part of your property is required. They will carry identification that you should insist on seeing. They will explain the procedures for the sale of your property.

Compensation is based on the appraised market value of your property. Market value is based on what a similar property might be expected to sell for on the open market by a willing seller to a willing buyer. A professional property appraiser will inspect each property individually and consider various factors that influence market value, including sales of similar properties which are adjusted to reflect the specific characteristics of your property. An allowance for moving costs and other eligible expenses will be paid.

For more information on a specific property, please go to the adjacent room where MTO property personnel are available to answer your property questions.

Owners wishing to sell their property may initiate a review to determine if their property qualifies for advance purchase by contacting the MTO, Windsor Border Initiatives Implementation Group

Phone: 519-973-7367 or 1-800-265-6072 ext.4800 or email: detroit.river@ontario.ca

- Complete analysis for the Technically and Environmentally Preferred Alternative
- Complete field work related to additional natural heritage, archaeological, cultural, social, and geotechnical studies
- Conduct a Context Sensitive Solutions workshop to gather public input into the design of the Windsor-Essex Parkway and plaza/crossing design
- Conduct meetings with key stakeholders and the public
- Complete Environmental Assessment document and submit to environmental agencies by end of 2008
- Next open houses late summer/early fall 2008

Stay involved!



Attend the workshops!

