




Detroit River
INTERNATIONAL CROSSING
S T U D Y

**DETROIT RIVER
INTERNATIONAL CROSSING STUDY**

Municipal Advisory Group Meeting

May 15, 2008

Canada   

Detroit River
INTERNATIONAL CROSSING
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The Border Transportation Partnership

Canada  **Federal Highway Administration**

 **Ontario**  **MDOT**
Michigan Department of Transportation

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To provide for the safe, efficient and secure movement of people and goods across the Canadian-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 order to meet the purpose, this study must address the following regional transportation and mobility needs:

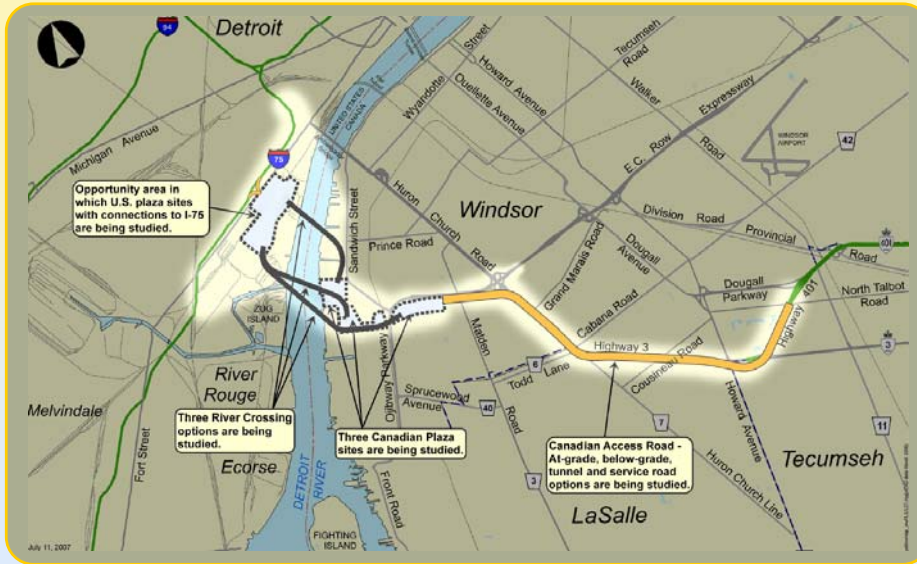
- Provide new border crossing capacity to meet increased long-term travel demand;
- Improve system connectivity to enhance the continuous flow of people and goods;
- Improve operations and processing capabilities at the border; and
- Provide reasonable and secure crossing options (i.e. network redundancy)

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*

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Crossing, Plaza & Access Road Alternatives



Practical Access Road Alternatives



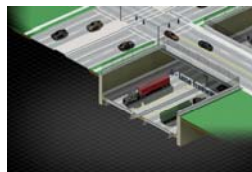
1a One-way service roads on either side of 6-lane freeway at grade:



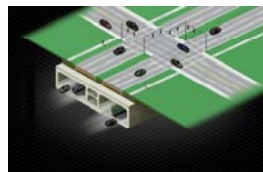
1b One-way service roads either side of 6-lane freeway below grade:



2a Six-lane freeway at-grade, parallel to Huron Church/Highway 3:



2b Six-lane freeway below grade, parallel to Huron Church/Highway 3:



3 Cut and cover tunnel below rebuilt Huron Church Road/Highway 3 Corridor:

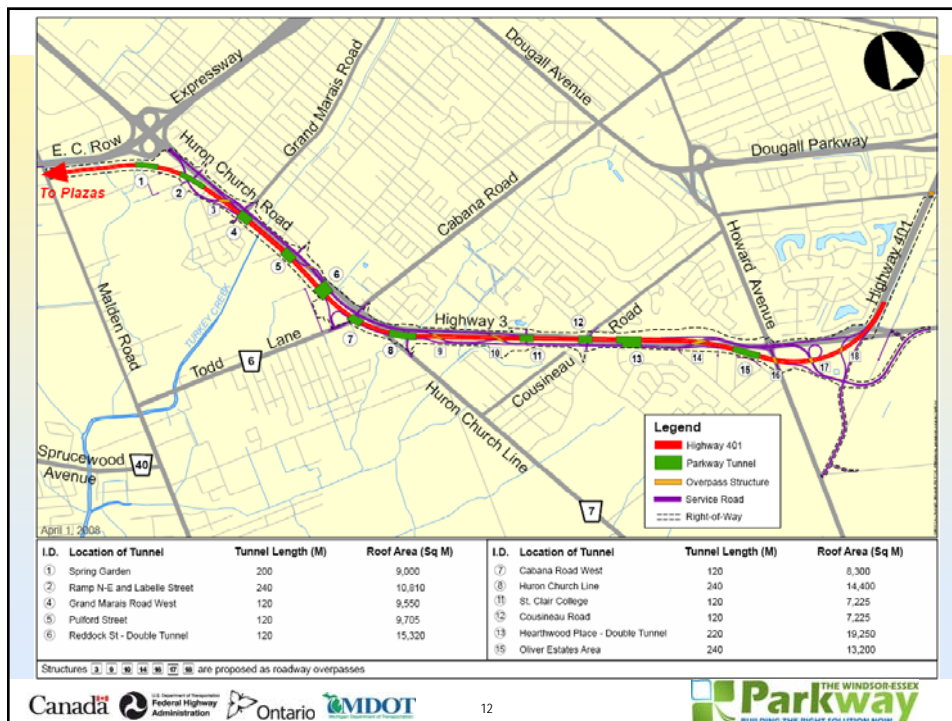
- The results of the analysis do not support further consideration of an at-grade roadway (Alternatives 1A and 2A)
 - Least costly solution and fewer constructability risks
 - Fewer benefits in terms of protecting community and neighbourhood characteristics
- The results of the analysis do not support further investigation of an end-to-end tunneled access road (Alternative 3)
 - No significant benefits to justify significant additional cost when compared to other alternatives
 - Other alternatives are available that offer similar benefits with less cost and less risks
- The Parkway alternative consisting of a below-grade access road with tunnel sections was developed based on refinements to the below grade and tunneled alternatives

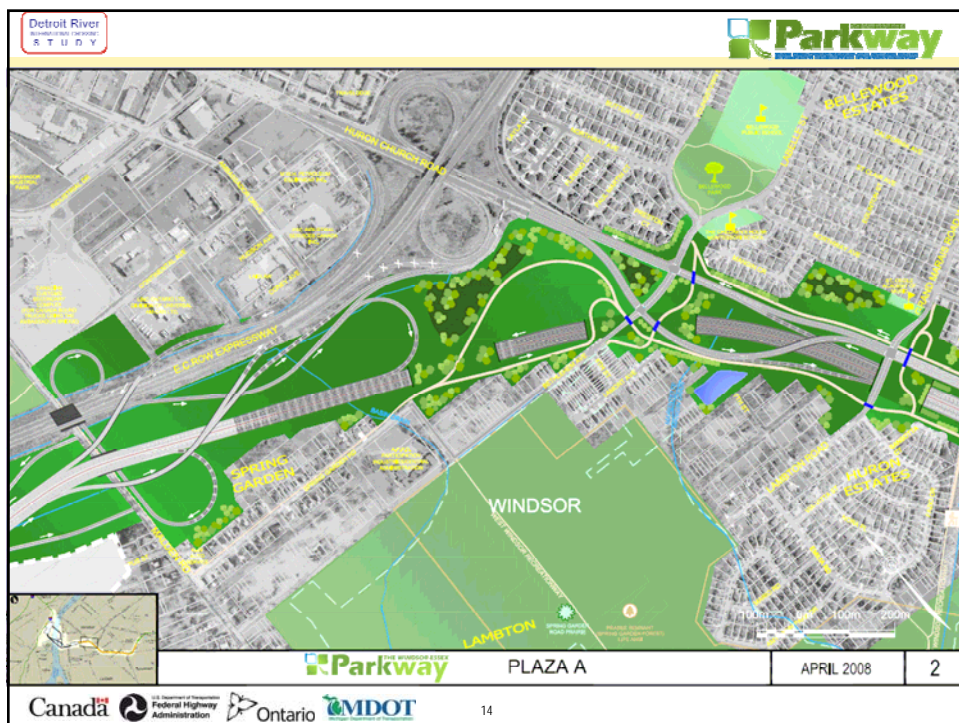
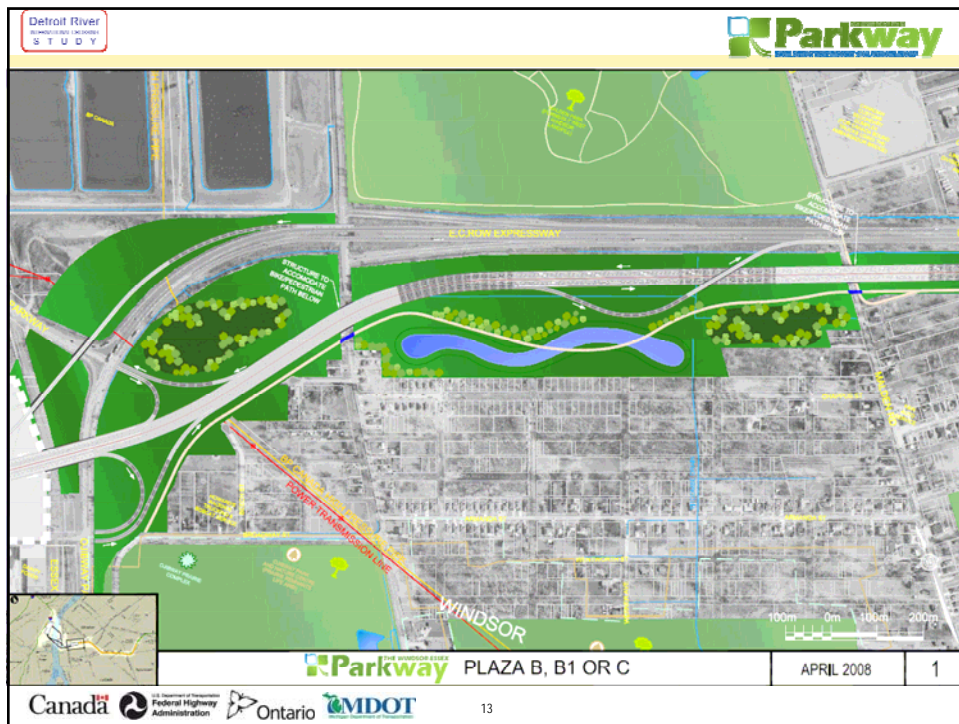
The Windsor-Essex Parkway:

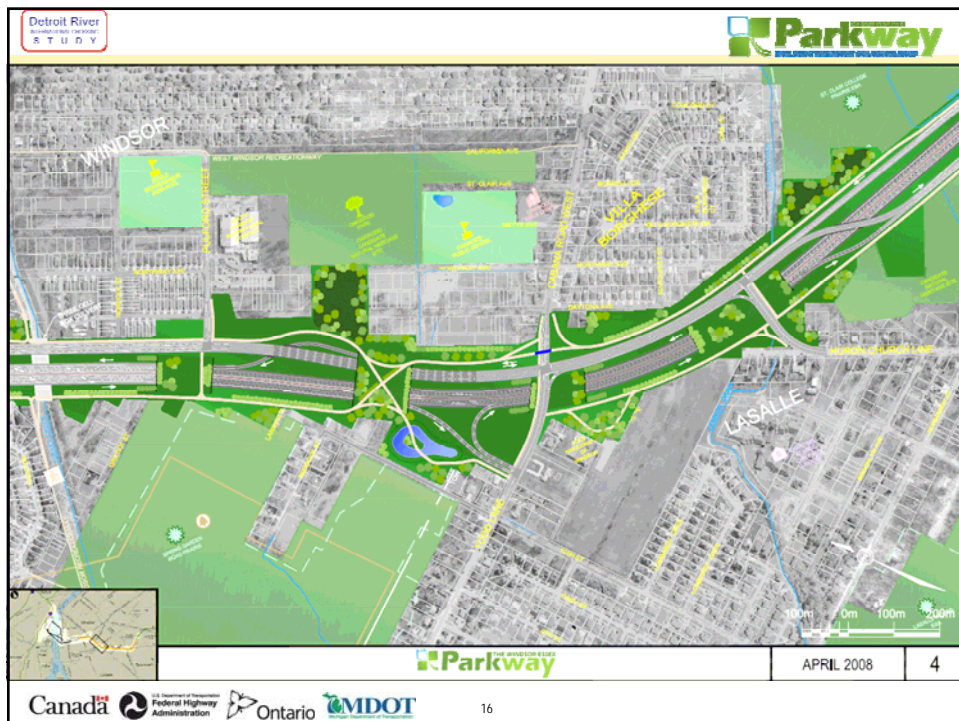
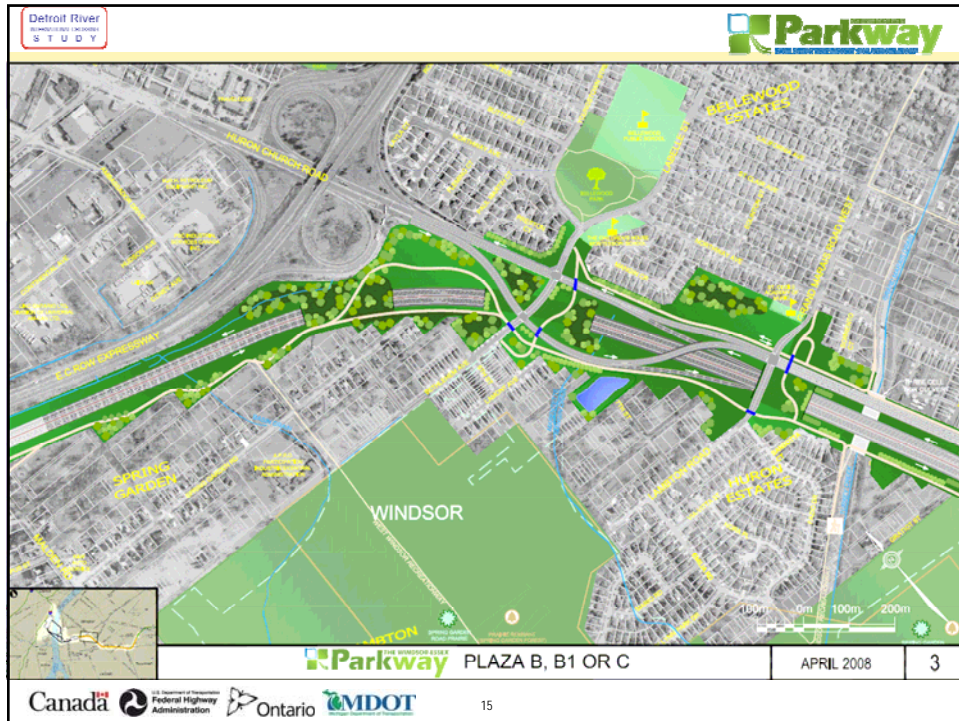
- A six-lane below-grade freeway
- Includes a four lane service road
- At least 240 acres of open space
- 11 tunnels
- Over 20 kms of new pedestrian and cyclists trails
- Built to provincial safety standards
- Accommodates a 100-year storm
- Accessible through 20 interchange ramps

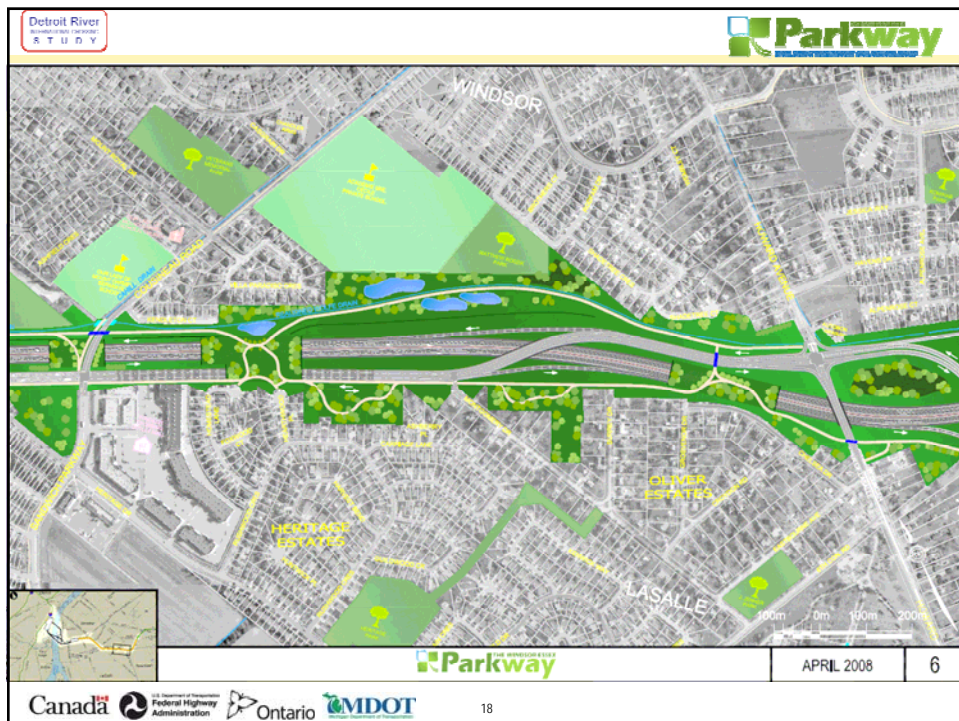
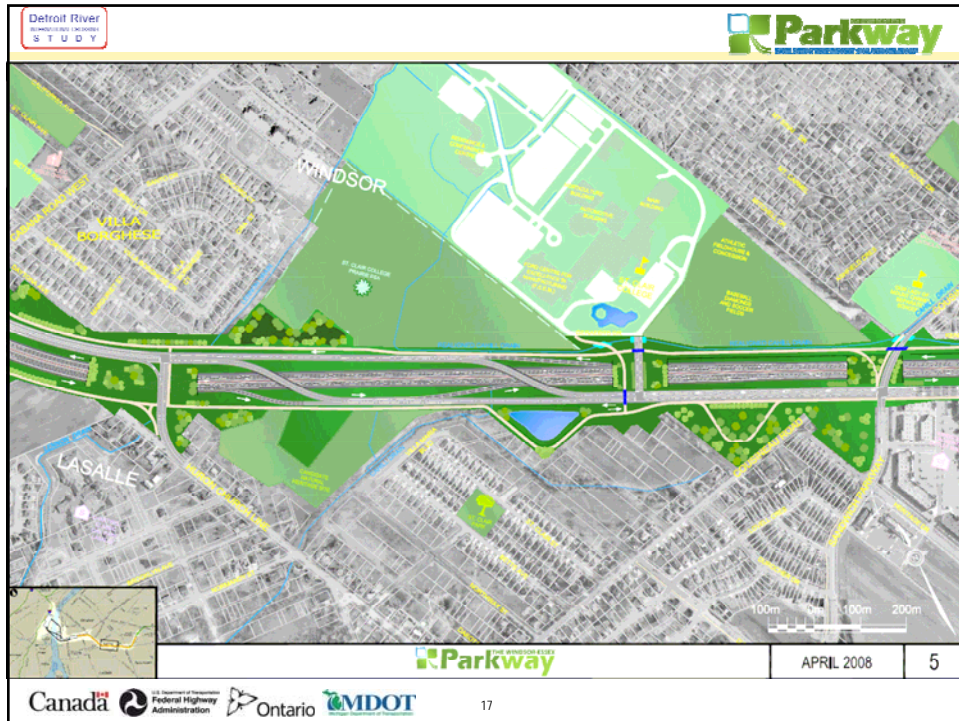


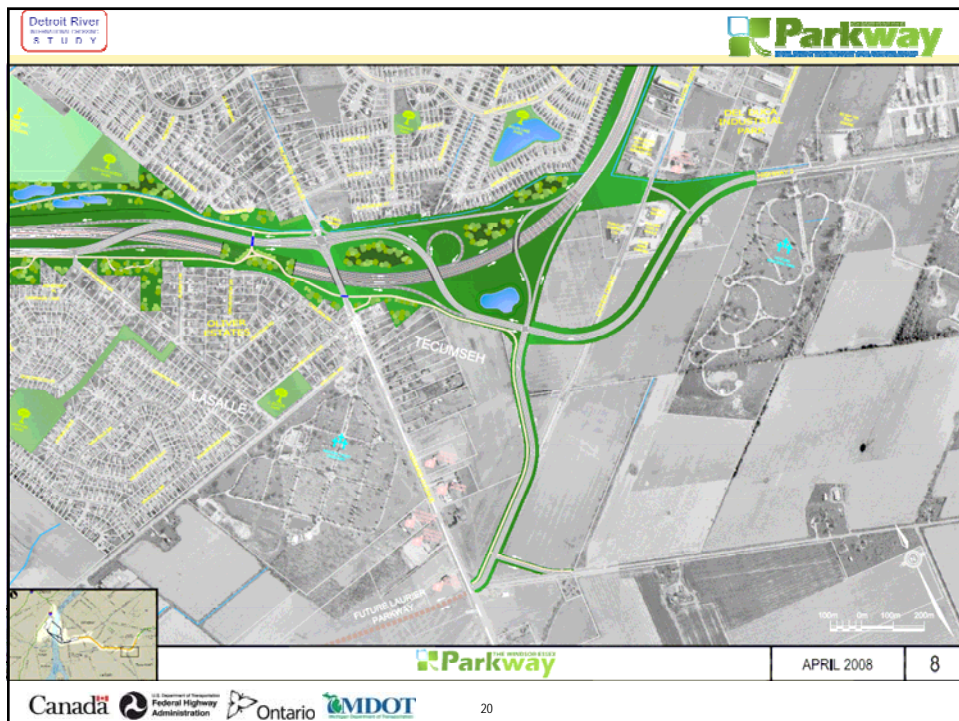
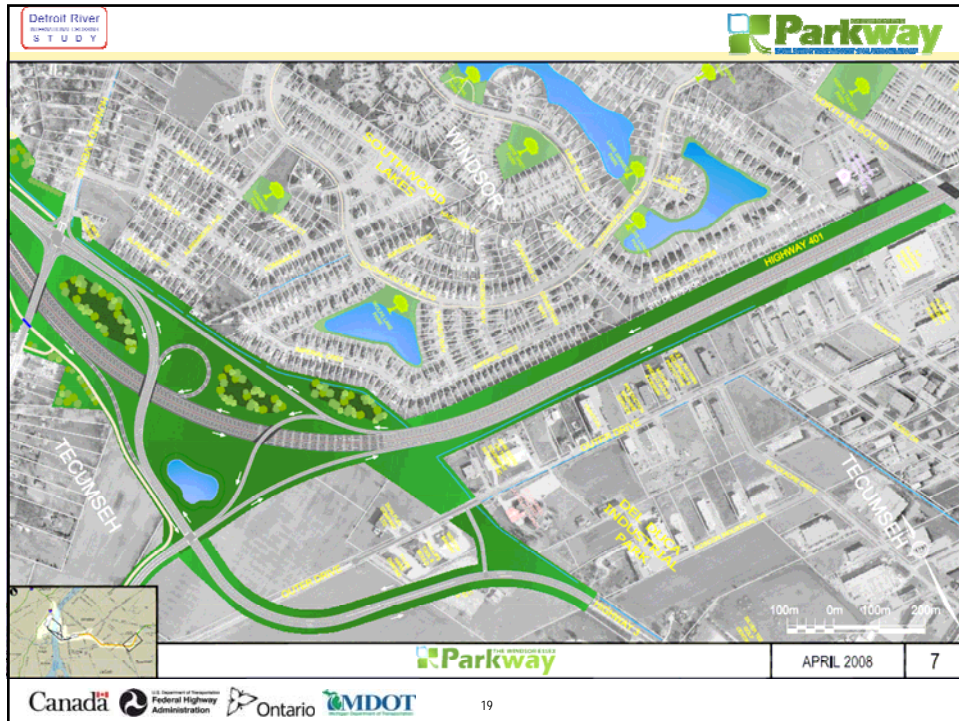
- Following the last round of PIOHs in August of 2007, the Parkway was refined to include:
 - Additional Tunnel in vicinity of Spring Garden
 - Location and Length of Tunnel at Oliver Estates revised
 - Overall length of tunnels increased to 1.86 km
 - Other Tunnel lengths and locations refined
 - Pedestrian and Cyclists Trails refined
 - New Loop ramp at Todd Lane (EW-S)
 - Howard Avenue Interchange modified to include connection to possible future Laurier Parkway Extension











Changes in Air Quality

- All alternatives provide a net benefit to local air quality by reducing tailpipe emissions and reducing traffic diversion to city streets
- No substantive difference in changes in air quality among all alternatives considered
- End-to-end tunnel with ventilation buildings can result in minor reductions in particulate concentrations within 50 to 100m of right-of-way when compared to other alternatives
- The Windsor-Essex Parkway has similar benefits to air quality as other below-grade alternatives

Protect Community & Neighbourhood Characteristics

All Alternatives:

- Reduce international traffic on local streets
- Have no predicted noise impacts
- Have impacts in the Spring Garden Road / Malden Road area
- Have similar effect to neighbourhoods/businesses/social features
- Affect the same neighbourhoods to varying degrees

Plaza A connection has greater impacts than Plaza B/C connections

Below-grade alternatives provide aesthetic benefits

Protect Community & Neighbourhood Characteristics

- The Windsor-Essex Parkway provides greater buffer between neighbourhoods and roadway and as such requires more property
 - New tunnel connections reduce the 'barrier effect' of the roadway
 - New recreational and greenspace areas are possible along the corridor
 - Buffering effect reduces exposure of residences adjacent to roadway



* **THE WINDSOR-ESSEX Parkway** preferred
BUILDING THE RIGHT SOLUTION NOW

Maintain Consistency with Existing & Planned Land Use

- Windsor-Essex Parkway design enables buffer areas and landscaping
- Recreational uses can be developed with the Windsor-Essex Parkway, consistent with Windsor and LaSalle planning policies promoting active and healthy communities
- Parkway converts taxable property uses to passive/recreational uses
- The Windsor-Essex Parkway is consistent with Provincial Planning Policies
- Plaza A connection has greater impacts than Plaza B/C connection

* **THE WINDSOR-ESSEX Parkway** preferred
BUILDING THE RIGHT SOLUTION NOW

Protect Cultural Resources

- No difference among alternatives in terms of built heritage and archaeological features impacted
- Windsor-Essex Parkway provides greater opportunities for new parks/recreation areas linked to existing parks/trails



Protect the Natural Environment

- No significant difference among alternatives
- The Windsor-Essex Parkway provides greater opportunities for restoration, enhancement and ecological connections
- Plaza A connection has greater impacts than Plaza B/C connection

Improve Regional Mobility

- All alternatives provide a high benefit to regional mobility
 - Add capacity
 - Separate international and local traffic
 - Get trucks off local streets
- The Windsor-Essex Parkway provides
 - Better access between freeway and service road
 - Better service road operation

*  preferred
BUILDING THE RIGHT SOLUTION NOW

Cost and Constructability

- The Windsor-Essex Parkway alternative (\$1.6 billion) is comparable in construction cost to other below-grade alternatives
- Cost estimates (\$CDN for year 2011, Highway 401 to Malden Road)
 - At-grade alternatives: \$620 million to \$920 million
 - Below-grade alternatives: \$1.0 billion to \$1.4 billion
 - Tunnel alternatives: \$3.6 billion to 3.8 billion
- The Windsor-Essex Parkway cost is higher than at-grade alternatives but much less than end-to-end tunnel

Summary of Assessment

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

- Overall: Advantages of Windsor-Essex Parkway outweigh higher costs and constructability concerns associated with this alternative


*  **Parkway** preferred
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- Pavement Engineering Planning Report
- Cultural Heritage Report
- Archaeological Heritage Report
- Constructability Report
- Storm Water Management Report
- Traffic Operations Report
- Natural Heritage Report
- Preliminary Foundation Investigation and Design Report
- Structural Planning Report
- Air Quality Impact Assessment Report
- Noise and Vibration Impact Assessment Report
- Social Impact Assessment Report
- Mobility and Access Technical Memo
- Existing and Future Land Use Assessment Report
- Waste and Contamination Report


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Status of U.S. Study

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Next Steps - Engineering

- Advanced Traffic Management Systems (ATMS)
- Bridge Engineering
- Drainage and Hydrology Engineering
- Electrical and Mechanical Engineering
- Highway Engineering: Preliminary design of the access road and service roads
- Surveying
- Traffic Engineering

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- Noise and Vibration
- Air Quality
- Archaeology
- Human Health Assessment
- Natural
- Social
- Economic
- Contaminated Soils

- Public Information Open House (PIOH)
- Coordination and meetings with U.S. Team
- Councils, MAG, CCG, property owners meetings, etc.
- Public Meetings/Workshops

- Ontario Environmental Assessment Report (OEAA)
- Canadian Environmental Assessment (CEAA) Screening Report
- Preliminary Design and Mitigation Report

- Complete evaluation of plaza-crossing alternatives with U.S. Team
- Preferred end-to-end solution anticipated Spring 2008
- Public Information Open Houses, Workshops
 - Dates to be determined
- Additional refinements possible following consultation
- Complete Environmental Assessment Documentation
 - Late Fall 2008

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DRIC Study – Canadian Team

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Project Web Site: www.partnershipborderstudy.com






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Other Business