Detroit River INTERNATIONAL CROSSING STUDY

DETROIT RIVER
INTERNATIONAL CROSSING STUDY

Update of Study Progress
Presentation to Tecumseh Council

August 28, 2007

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The Border Transportation Partnership

Canada

U.S. Department of Transportation
Federal Highway Administration

Ontario

MDOT
Michigan Department of Transportation

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Purpose of the DRIC Study

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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Environmental Assessment Key Study Activities

Environmental Assessment Key Study Activities

Identify Study Area Features, Opportunities & Constraints	✓
Develop Initial Set of Crossing Alternatives, Plaza Locations & Connecting Routes in Canada and the U.S.	✓
Define Area of Continued Analysis	✓
Present Specific Crossing, Plaza and Access Road Options	✓
Complete Social, Economic, Environmental and Engineering Assessments	
Identify Preferred Crossing Location, Plaza Locations & Connecting Routes in Canada and the U.S.	
Finalize Engineering and Mitigation Measures	
Document Study and Submit for Approvals	

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Crossing, Plaza & Route Alternatives

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Evaluation Factors

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

- **Changes to Air Quality**
- **Protection of Community and Neighbourhood Characteristics**
  - *includes assessment of residential and business property impacts, social features including schools, impacts to noise levels, access and community features*
- **Consistency with Existing & Planned Land Use**
- **Protection of Cultural Resources**
  - *includes parks, historic sites and areas of archaeological significance*
- **Protection of Natural Environment**
  - *includes plant and animal species and habitat features*
- **Improvements to Regional Mobility**
- **Cost and Constructability**

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Update on Analysis – Access Roads

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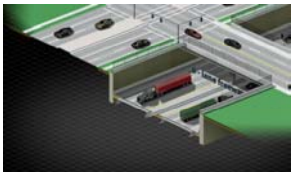
Access Road Alternatives

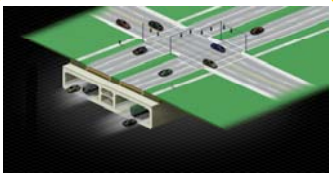
1A One-way service roads on either side of 6-lane freeway at grade.

1B One-way service roads either side of 6-lane freeway below-grade.

2A Six-lane freeway at grade, along side 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.

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Practical Alternatives

- All alternatives improve quality of life
- All alternatives take trucks off local streets
- All alternatives improve movement of traffic across the border

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Practical Alternatives Analysis

Changes to Air Quality

- Access road is one component of the air quality issue in Windsor
  - Local air quality is more strongly influenced by background sources and transboundary flow than by transportation sources
- Improvements to fuels and technologies will reduce pollutants from vehicle emissions in future
- All alternatives provide a benefit to air quality in the immediate area of the corridor compared to do-nothing
  - Elimination of stopping and start-up at traffic signals for international traffic
  - No notable effect beyond 100m of access road for $PM_{2.5}$
  - Little difference among alternatives at 100m from right-of-way

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Access Road Analysis

Noise Impact Assessment

- No substantial change in noise levels after mitigation with any alternatives
  - Malden Rd/Spring Garden area requires further study for mitigation

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Access Road Analysis

At-grade alternatives (Alternatives 1A and 2A) do not provide the best balance of advantages and disadvantages

- least costly solution and fewer constructability risks
- fewer benefits in terms of protecting community and neighbourhood characteristics

Assessment does not support further analysis at this time

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Access Road Analysis

End-to-end tunnel

- No advantages in terms of reducing impacts to properties, land use, natural features or cultural features
- Some advantages to air quality in the immediate corridor, but all alternatives provide same benefit to some degree
- Reductions in particulate concentrations offset by increases in gaseous pollutants
- Cost is 3 to 6 times higher

Assessment does not support further analysis at this time

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Parkway Option

- Addresses the future transportation and mobility needs of the region
- Responds to local concerns

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Parkway Option

View of Labelle Street looking east from EC Row Expressway

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Parkway Option

View of Grand Marais short tunnel looking southeast from pedestrian path

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Parkway Option

Aerial view of Oakwood short tunnel deck looking east

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Parkway Option

View of southbound Highway 401 towards Oakwood short tunnel

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Parkway Option

Aerial view of Huron Church Line short tunnel looking east

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Next Steps – Access Road

- Refine Parkway option and complete analysis
  - Work with municipal staff to finalize configuration of Highway 401/ Highway 3/Howard Avenue interchange
- Continue to consult with public
- Complete technical and environmental studies
- With our U.S. partners, present a single technically and environmentally preferred alternative
- Submit final study documents

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Update on Analysis – Canadian Plazas and Crossings

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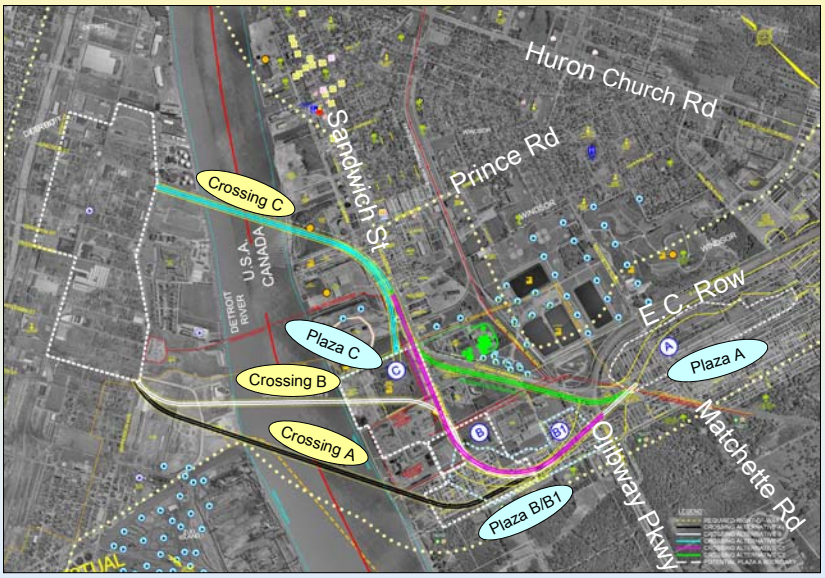
Plazas and Crossings – Findings to Date



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Plazas and Crossings – Findings to Date

- Analysis is still on-going
- Impacts associated with Plaza A and Crossing C are generally greater, given their proximity to residential areas
- The foundations investigations near the known brine well areas are nearing completion

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Practical Alternatives Analysis

- All plazas and crossings result in change in air quality up to 250m away
- Alternatives displace between 35 and 70 residences and up to 6 businesses
- With Crossing C, approximately 100 households with notable change in noise levels
  - Cost effectiveness of mitigation measures requires further review
- Crossing A (longest) carries the highest cost:
  - $770 mil to $920 mil (USD) vs. $430-$580
  - Crossing A avoids known brinewell area on Canadian side

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Next Steps – Plazas and Crossings

- Complete geotechnical investigations near brinewell areas
- Continue to consult with the public
- Complete the technical and environmental studies
- With our U.S. partners, present a single technically and environmentally preferred alternative
- Submit final study documents to approving agencies

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Property Acquisition

Property owners are seeking certainty about their future, but exact property requirements are not yet known

- Purchase requests are being considered for 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
- Contact Ministry of Transportation, Windsor Border Initiatives Implementation Group

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DRIC Study – Canadian Team

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