Detroit River INTERNATIONAL CROSSING STUDY

DETROIT RIVER INTERNATIONAL CROSSING STUDY

Presentation To

PARENTS' COUNCILS

April 10, 2006

Detroit River INTERNATIONAL CROSSING STUDY

The Border Transportation Partnership

Canada

U.S. Department of Transportation Federal Highway Administration

Ontario

MDOT Michigan Department of Transportation

Detroit River INTERNATIONAL CROSSING STUDY

Outline of Presentation

- Review of evaluation leading to the area of continued analysis
- Update on development of alternatives for:
  - River Crossing;
  - Inspection Plaza; and
  - Access Road.
- Next Steps

Detroit River INTERNATIONAL CROSSING STUDY

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.

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)

Given the importance of this trade corridor to the local, regional and national economies and recognizing the negative effects associated with poor traffic operations and congestion, the partnering governments must take all reasonable steps to reduce the likelihood of disruption to transportation service in this corridor.

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Key Milestones

Study Area Features, Opportunities & Constraints	April '05	Initial Public Outreach
Initial Set of Crossing Alternatives, Plaza Locations & Connecting Routes in Canada and the U.S.	June '05	PIOH1
Area of Continued Analysis	December '05	PIOH2
Specific Crossing, Plaza and Access Road Options	March '06	PIOH3
Results of Social, Economic, Environmental and Engineering Assessments	December '06	PIOH4
Preferred Crossing Location, Plaza Locations & Connecting Routes in Canada and the U.S.	Spring '07	PIOH5
Finalize Engineering and Mitigation Measures	Summer '07	PIOH6
Document Study and Submit for Approvals	End of '07	Public Review

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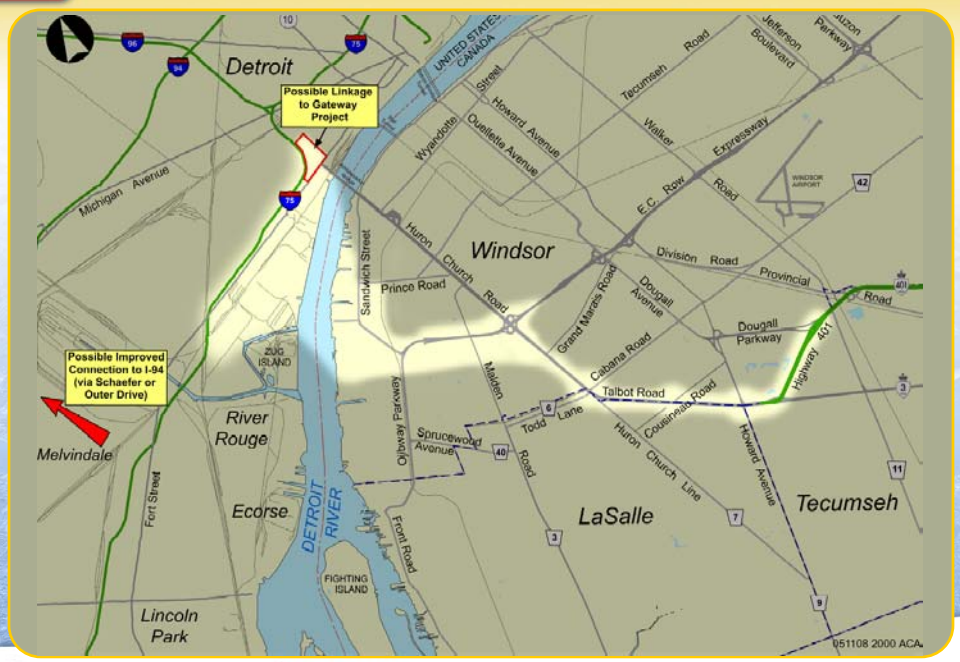
Area of Continued Analysis (ACA)



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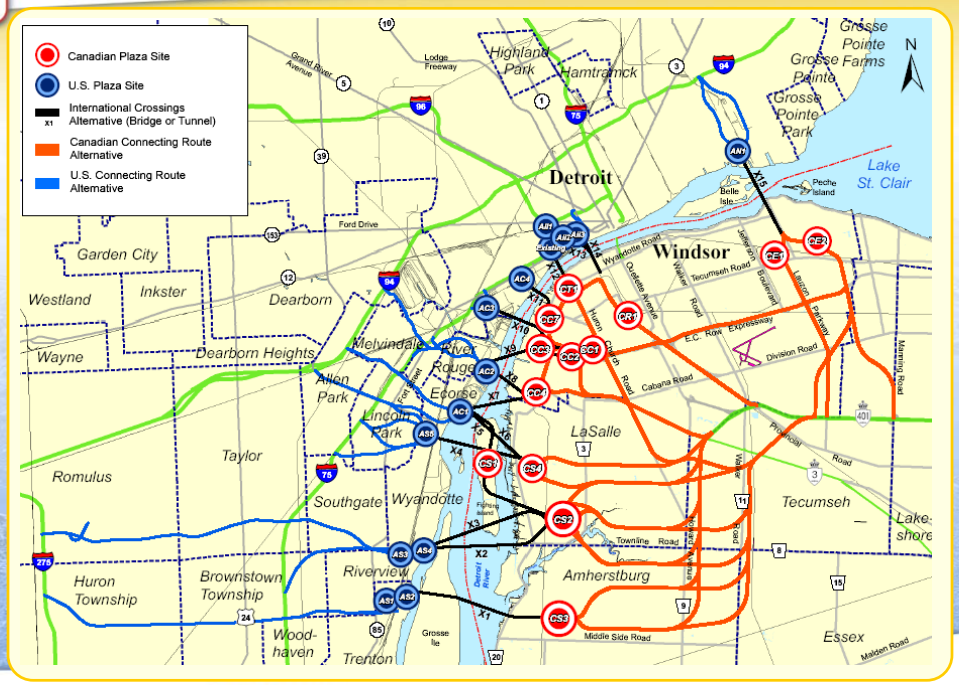
Illustrative Alternatives



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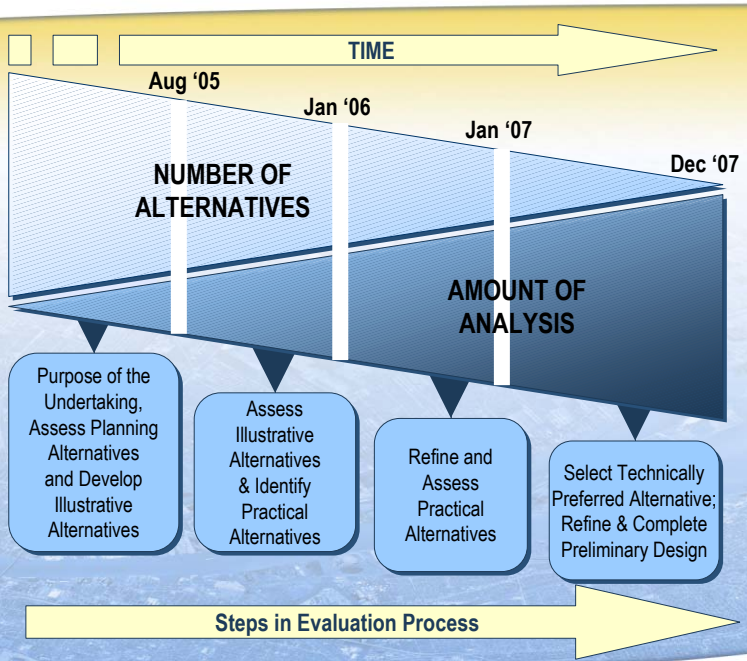
Evaluation Process

The underlying principle for the alternatives generation and evaluation process is to start with a broad perspective and become more focused/ detailed as the project progresses.



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Evaluation Factors

- Changes to Air Quality
- Protection of Community and Neighbourhood Characteristics (includes assessment of residential and business property impacts, 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)
- Improve Regional Mobility
- Minimize Cost (includes assessment of constructability issues).

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Factor Weighting Results

Factor	Project Team		Public		CCG	
	Rating	Weight (%)	Avg. Rating* (reflects 60 responses received)	Weight (%)	Avg. Rating (reflects 15 responses received)	Weight (%)
Changes in Air Quality	70	12.39	85	17.31	91	17.30
Protection of Community & Neighbourhood Characteristics	90	15.93	80	15.49	73	13.88
Maintain Consistency with Existing & Planned Land Use	70	12.39	62	12.89	72	13.69
Protection of Cultural Resources	70	12.39	66	13.14	69	13.12
Protection of Natural Environment	90	15.93	78	16.34	90	17.11
Improve Regional Mobility	100	17.70	76	15.28	78	14.83
Minimize Cost	75	13.27	47	9.54	53	10.07
		100		100		100

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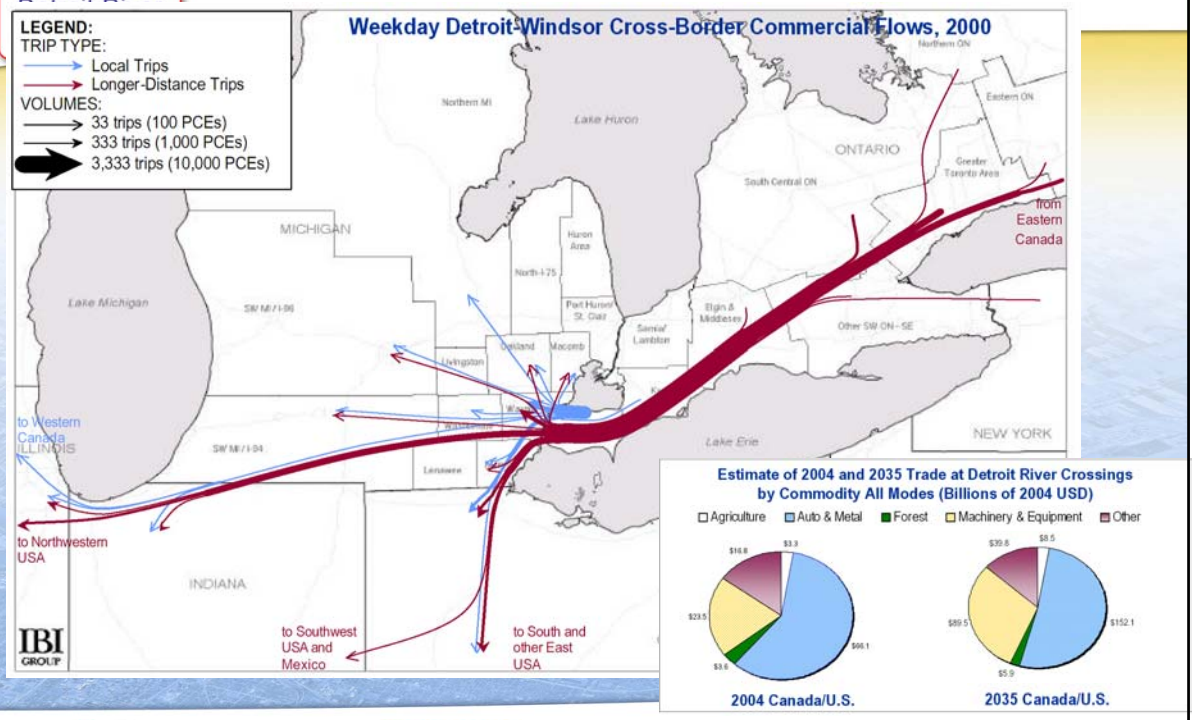
Mobility Needs - Passenger Traffic

Trip Type	Crossing					
	Ambassador Bridge		Detroit-Windsor Tunnel		Detroit River Crossings	
	Volume	%	Volume	%	Volume	%
LOCAL to LOCAL	13,450	71	15,000	88	28,450	79
LOCAL (Southeast Michigan) to/from LONG-DISTANCE (beyond Windsor-Essex)	1,850	10	900	5	2,700	8
LOCAL (Windsor-Essex) LONG-DISTANCE (beyond Southeast Michigan)	1,700	9	900	5	2,600	7
LONG-DISTANCE to LONG-DISTANCE	1,800	10	150	0.9	2,000	6
OTHER	70	0.4	50	0.3	120	0.3
TOTAL TRIPS	18,850	100	17,000	60	38,850	100



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Mobility Needs - Commercial Traffic

Trip Type	Crossing					
	Ambassador Bridge		Detroit-Windsor Tunnel		Detroit River Crossings	
	Volume	%	Volume	%	Volume	%
LOCAL to LOCAL	2,100	17	350	59	2,450	19
LOCAL (Southeast Michigan) to/from LONG-DISTANCE (beyond Windsor-Essex)	1,950	16	100	19	2,100	16
LOCAL (Windsor-Essex) to/from LONG-DISTANCE (beyond Southeast Michigan)	1,750	14	100	15	1,850	14
LONG-DISTANCE to LONG-DISTANCE	6,450	52	50	6	6,500	50
OTHER	130	1.0	5	0.8	130	1.0
TOTAL TRIPS	12,400	100	600	100	13,000	100

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Evaluation Results

- **South Alternatives**
  - Underutilized new crossing
  - Existing crossings and approach roads remain congested in the long-term
  - Impacts on U.S. side
- **Not a practical long-term solution**

Evaluation Results

- **East Alternatives**
  - Underutilized new crossing
  - Existing crossings and approach roads remain congested in the long-term
  - North of E.C. Row
    - Impacts to community cohesion and character
    - Inconsistency with existing/future land use
  - Impacts on U.S. side
- **Not a practical long-term solution**

Evaluation Results

- **Rail Corridor**
  - As a two-lane truckway to refurbished rail tunnels:
    - inadequate capacity to meet the long term needs of the region
  - As a freeway with a new downtown crossing:
    - unacceptably high impacts to central and southern Windsor
    - not consistent with the City's plans and land uses.
- **Not a practical long-term solution**

Evaluation Results

- **Twinned Ambassador Bridge**
  - Impacts on community cohesion and character (including historical/cultural features)
    - In the area of the Plaza
    - On Huron Church North of E.C. Row
  - Construction staging risks and complexities
  - Limited ability to provide continuous /ongoing river crossing capacity
- **Not a practical long-term solution**
- U.S. customs plaza of the Ambassador Bridge included in the area of continued analysis

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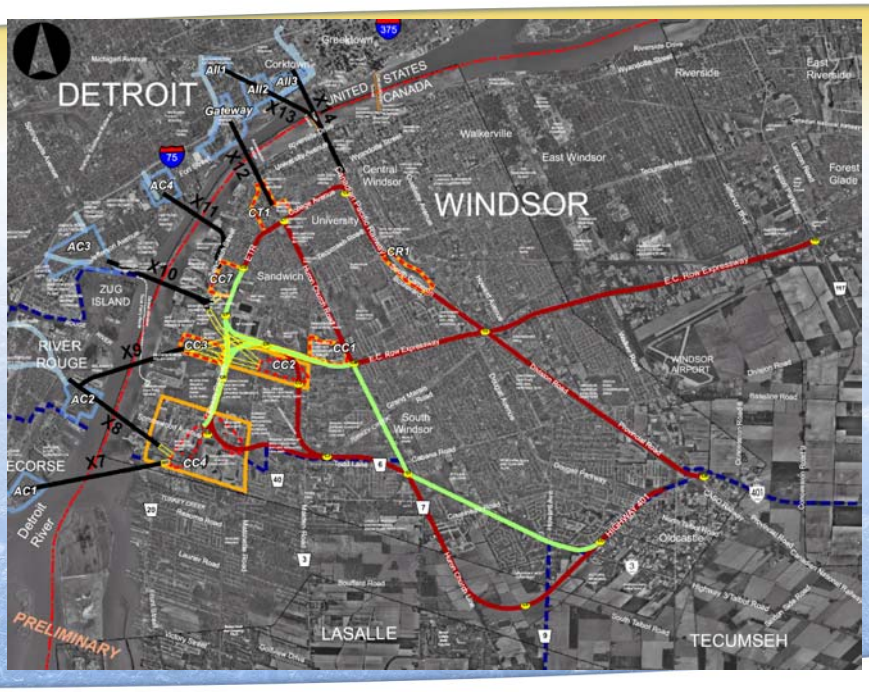
Evaluation Results



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Highway 3 By-Pass

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Highway 3 By-Pass Analysis

Factor	Highway 3 (Segment CC-CI)	Highway 3 Bypass (Segment CC-CE-CI)
Changes to Air Quality	No to Low impact on regional basis; 990+ households within 200 m (includes 90+ homes in planned developments)	No to Low impact on a regional basis; 915+ households within 200 m (includes 770+ homes in planned developments);
Community and Neighbourhood Impacts	**Displacements:** 95+ households 5+ Businesses **Disruption:** 990+ households within 200 m (includes 90+ homes in planned developments); 5 social features (e.g. schools, places of worship) **Community cohesion, character, function:** Currently significantly impacted due to high levels of existing traffic on Highway 3; impacts to a high number of residences **Overall high impact**	**Displacements:** 85+ households 5+ Businesses **Disruption:** 915+ households within 200 m (includes 770+ homes in planned developments); 7 social features (e.g. schools, places of worship) **Community cohesion, character, function:** Significant impact on current community and future community; existing community between Highway 3 and Huron Church Line would be 'encircled' two major roadways **Overall high impact**
Consistency with Land Use	Consistent as existing provincial highway and route to Ambassador Bridge; not consistent as freeway: Talbot Road runs along boundary of Windsor and LaSalle. Land use along this corridor includes institutional (St. Clair College), commercial and low density residential. Planned land use in LaSalle identifies Talbot Road corridor as transportation corridor; Windsor Gateway Study also identified Talbot Road as preferred route for access to new border crossing. **Overall moderate impact**	Not consistent with current/future residential community development: Significant urban planning implications for Town of LaSalle. Existing, planned and future urban development would need to be re-oriented with this option; a new roadway corridor by-passing Talbot Road would result in physical separation of Heritage Estates community from the rest of LaSalle. **Overall high impact**
Impacts to Cultural Resources	1 locally designated heritage site impacted **Overall, low impact**	No known significant archaeological sites impacted **Overall low impact; slightly preferred**

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Highway 3 By-Pass Analysis

Factor	Highway 3 (Segment CC-CI)	Highway 3 Bypass(Segment CC-CE-CI)
Natural Environment	Impacts to edges of sensitive natural areas, notably the St. Clair College Prairie ESA and the Lennon Drain crossing **Displacements:** ESA[2] = 1.66 ha CNHS[3] = 2.92 ha SSH[4] = 3.62 ha **Areas of impact are considered relatively minor; overall low impact**	No direct impacts to ESA or CNHS; low impacts to other features **Displacements:** PNHF = 0.85 ha **Overall low impact; slightly preferred**
Improve Regional Mobility	Provides new freeway route; can separate int'l traffic and provide choice for local traffic Travel distance = 6.4 km **Overall low benefit**	Provides new freeway route; can separate int'l traffic and provide choice for local traffic ; Talbot Road available for local use Travel distance = 8.2 km **Overall low benefit**
Minimize Cost	Construction cost = $396 M Traffic management and detours required on Talbot Road and at Highway 3 interchange; relocation of municipal infrastructure in LaSalle and Windsor. **Overall low impact**	Construction cost = $447 M Traffic management and detours required on Huron Church Line and at Highway 3 interchange; relocation of municipal infrastructure in LaSalle **Overall low impact**

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Summary of Assessment

- Both options provide similar benefits to regional mobility
- Both options have high impacts to community and neighbourhood features
- Highway 3 By-Pass option:
  - greater impacts to community characteristics
  - greater impacts to land use
  - slightly higher costs
  - slightly lower impacts to cultural and natural features

Highway 3 option is preferred

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Arithmetic Evaluation – Highway 3 By-Pass

Project Team Weighting	Weighting	CC-CI-CM-CN-CR		CC-CI-CJ-CO		CC-CI-CJ-CK-CR	
		Score	Weight x Score	Score	Weight x Score	Score	Weight x Score
Changes in Air Quality	12.39	3	37.17	3	37.17	3	37.17
Protect Community/ Neighborhood Characteristics	15.93	2	31.86	1	15.93	1	15.93
Maintain Consistency with Existing and Planned Land Use	12.39	2	24.78	1	12.39	1	12.39
Protect Cultural Resources	12.39	2	24.78	3	37.17	3	37.17
Protect the Natural Environment	15.93	2	31.86	1	15.93	1	15.93
Improve Regional Mobility	17.70	5	88.50	5	88.50	5	88.50
Minimize Cost	13.27	1	13.27	2	26.54	2	26.54
Total Weighted Score	100.00		252.22		233.63		233.63
Ranking			*1*		*2*		*2*
Public Weighting	**Weighting**	**CC-CI-CM-CN-CR**		**CC-CI-CJ-CO**		**CC-CI-CJ-CK-CR**	
		Score	Weight x Score	Score	Weight x Score	Score	Weight x Score
Changes in Air Quality	17.32	3	51.96	3	51.96	3	51.96
Protect Community/ Neighborhood Characteristics	15.49	2	30.98	1	15.49	1	15.49
Maintain Consistency with Existing and Planned Land Use	12.89	2	25.78	1	12.89	1	12.89
Protect Cultural Resources	13.14	2	26.28	3	39.42	3	39.42
Protect the Natural Environment	16.34	2	32.68	1	16.34	1	16.34
Improve Regional Mobility	15.28	5	76.40	5	76.40	5	76.40
Minimize Cost	9.54	1	9.54	2	19.08	2	19.08
Total Weighted Score	100.00		253.62		231.58		231.58
Ranking			*1*		*2*		*2*
CCG Weighting	**Weighting**	**CC-CI-CM-CN-CR**		**CC-CI-CJ-CO**		**CC-CI-CJ-CK-CR**	
		Score	Weight x Score	Score	Weight x Score	Score	Weight x Score
Changes in Air Quality	17.30	3	51.90	3	51.90	3	51.90
Protect Community/ Neighborhood Characteristics	13.88	2	27.76	1	13.88	1	13.88
Maintain Consistency with Existing and Planned Land Use	13.69	2	27.38	1	13.69	1	13.69
Protect Cultural Resources	13.12	2	26.24	3	39.36	3	39.36
Protect the Natural Environment	17.11	2	34.22	1	17.11	1	17.11
Improve Regional Mobility	14.83	5	74.15	5	74.15	5	74.15
Minimize Cost	10.07	1	10.07	2	20.14	2	20.14
Total Weighted Score	100.00		251.72		230.23		230.23
Ranking			*1*		*2*		*2*

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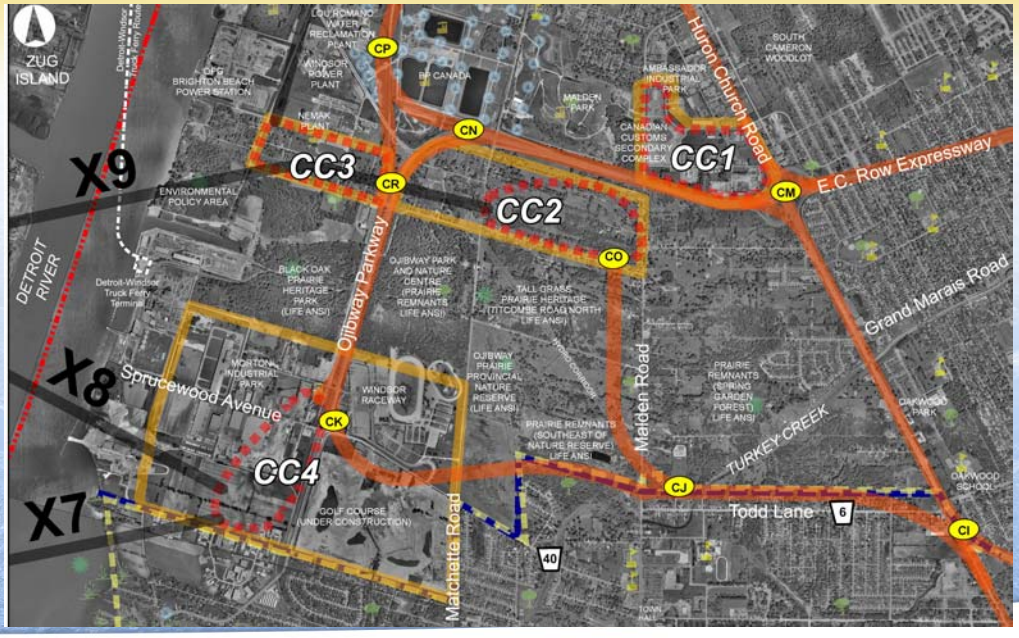

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Huron Church/Ojibway Options

Factor	Highway 3/Huron Church/EC Row (Segment CC-CI-CM-CN-CR)	Highway 3/Todd Lane/Malden Road/EC Row (Segment CC-CI-CJ-CO-CR)	Highway 3/Todd Lane/Ojibway Parkway (Segment CC-CI-CJ-CK-CR)
Changes to Air Quality	Overall no to low impact on a system-wide basis; 1370+ households within 200 m	Overall no to low impact on a system-wide basis; 1225+ households within 200 m	Overall no to low impact on a system-wide basis; 1165+ households within 200 m
Community and Neighbourhood Impacts	**Displacements:** 130+ households 35+ Businesses **Disruption:** 1370+ households within 200 m; 10 social features (e.g. schools, places of worship) **Cohesion and Character:** The Highway 3 segment is common to all three alternatives; This alternative largely follows the existing transportation corridor formed by Huron Church Road/EC Row Expressway/Ojibway Parkway; moderate impact on community cohesion and character. **Overall moderate impact**	**Displacements:** 115+ households 10- Businesses **Disruption:** 1225+ households within 200 m; 7 social features (e.g. schools, places of worship) **Cohesion and Character:** The Highway 3 segment is common to all three alternatives; a new transportation corridor paralleling Todd Lane/Malden Road would sever residential areas from adjacent natural areas and impact highly valued community natural areas/open space; significant impact on community cohesion and character. **Overall high impact**	**Displacements:** 120+ households 10+ Businesses **Disruption:** 1165+ households within 200 m; 7 social features (e.g. schools, places of worship) **Cohesion and Character:** The Highway 3 segment is common to all three alternatives; a new transportation corridor paralleling Todd Lane/Sprucewood Ave. would sever residential areas from adjacent natural areas and impact highly valued community natural areas/open space; significant impact on community cohesion and character. **Overall high impact**
Consistency with Land Use	Consistent as existing route to Ambassador Bridge; not consistent as freeway Option utilizes existing transportation corridors, reducing impacts to current and future land uses in this area of the City compared to the other options **Overall moderate impact**	Highway 3 section consistent as existing use to Ambassador Bridge, not consistent as freeway; New route through Spring Garden Planning Area not consistent with existing and planned land use; A new route is also not consistent with federal or provincial land use initiatives in this area to protect and perpetuate special and protected species and habitat in this area. **Overall high impact**	Highway 3 section consistent as existing use to Ambassador Bridge, not consistent as freeway; New route through Spring Garden Planning Area and Ojibway/Black Oak Natural Heritage Areas not consistent with existing and planned land use; A new route is also not consistent with federal or provincial initiatives in this area to protect and perpetuate special and protected species and habitat in this area. **Overall high impact**

Huron Church/Ojibway Options

Factor	Highway 3/Huron Church/EC Row (Segment CC-CI-CM-CN-CR)	Highway 3/Todd Lane/Malden Road/EC Row (Segment CC-CI-CJ-CO-CR)	Highway 3/Todd Lane/Ojibway Parkway (Segment CC-CI-CJ-CK-CR)
Impacts to Cultural Resources	1 locally designated Heritage site; 2 known significant archaeological sites impacted **Overall moderate impact**	1 locally designated Heritage site; no known significant archaeological sites impacted **Overall low impact**	1 locally designated Heritage site; 1 known significant archaeological site impacted **Overall low impact**
Natural Environment	**Displacements:** ANSI = 0.49 ha ESA = 2.54 ha CNHS = 10.10 ha SSH = 10.98 ha **Disruptions:** (i.e. within 500m of ROW) ANSI = 31.06 ha ESA = 52.48 ha CNHS = 214.76ha **Overall moderate impact to designated features**	**Displacements:** ANSI = 16.94 ha ESA = 23.68 ha CNHS = 28.5 ha SSH = 32.44 ha **Disruptions:** (i.e. within 500m of ROW) ANSI = 125.31 ha ESA = 151.72 ha CNHS = 184.63 ha **Overall high impact to designated features**	**Displacements:** ANSI = 23.14 ha ESA = 30.14 ha CNHS = 21.7 ha SSH = 35.43 ha **Disruptions:** (i.e. within 500m of ROW) ANSI = 198.41 ha ESA = 219.54 ha CNHS = 131.99 ha **Overall high impact to designated features**
Improve Regional Mobility	Provides new freeway route; can separate int'l traffic and provide choice for local traffic; Utilizes existing key links in local network for int'l traffic Travel distance = 12.5 km Considered overall low benefit to regional mobility as this is only the access road portion	Provides new freeway route; can separate int'l traffic and provide choice for local traffic; Huron Church Road available for local use Travel distance = 12.7 km Considered overall low benefit to regional mobility as this is only the access road portion; slightly preferred over HCR/EC Row option	Provides new freeway route; can separate int'l traffic and provide choice for local traffic Huron Church Road available for local use Travel distance = 12.2 km Considered overall low benefit to regional mobility as this is only the access road portion; slightly preferred over HCR/EC Row option
Cost	Construction Cost = $759 M Traffic staging required along complete length; existing interchanges on HCR/Talbot Rd at Highway 3 and E.C. Row will require reconfiguration; reconstruction of west end of EC Row assumed; detours at crossing roads/intersections may be required; relocation of utilities and municipal infrastructure required **Overall high impact**	Construction Cost = $651 M Traffic staging required along Talbot Road section; existing interchange on HCR/Talbot Rd at Highway 3 will require reconfiguration; reconstruction of portion of EC Row assumed; detours at crossing roads/intersections may be required; relocation of utilities and municipal infrastructure required **Overall moderate impact**	Construction Cost = $606 M Traffic staging required along Talbot Road section and Ojibway Parkway section; existing interchange on HCR/Talbot Rd at Highway 3 will require reconfiguration; detours at crossing roads/intersections may be required; relocation of utilities and municipal infrastructure required relocation of utilities and municipal infrastructure required **Overall moderate impact**

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Summary of Assessment

•All three options have high community impacts with similar direct/indirect impacts to residential areas

•Huron Church/EC Row option:
- •higher impacts to businesses
- •greater impacts to cultural features
- •slightly lower benefits to regional mobility
- •greater construction costs and more complex construction

- •lower impacts to community characteristics
- •lower impacts to land use
- •lower direct/indirect impacts to natural features west of Huron Church

Overall, the advantages of Huron Church/EC Row option were considered to be more significant than the disadvantages

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Project Team Weighting	Weighting	CC-CI Score	CC-CI Weight x Score	CC-CE-CI Score	CC-CE-CI Weight x Score
Changes in Air Quality	12.39	3	37.17	3	37.17
Protect Community/ Neighborhood Characteristics	15.93	1	15.93	1	15.93
Maintain Consistency with Existing and Planned Land Use	12.39	2	24.78	1	12.39
Protect Cultural Resources	12.39	3	37.17	3	37.17
Protect the Natural Environment	15.93	3	47.79	3	47.79
Improve Regional Mobility	17.70	5	88.50	5	88.50
Minimize Cost	13.27	3	39.81	3	39.81
Total Weighted Score	100.00		291.15		278.76
Ranking			*1*		*2*

Public Weighting	Weighting	CC-CI Score	CC-CI Weight x Score	CC-CE-CI Score	CC-CE-CI Weight x Score
Changes in Air Quality	17.32	3	51.96	3	51.96
Protect Community/ Neighborhood Characteristics	15.49	1	15.49	1	15.49
Maintain Consistency with Existing and Planned Land Use	12.89	2	25.78	1	12.89
Protect Cultural Resources	13.14	3	39.42	3	39.42
Protect the Natural Environment	16.34	3	49.02	3	49.02
Improve Regional Mobility	15.28	5	76.40	5	76.40
Minimize Cost	9.54	3	28.62	3	28.62
Total Weighted Score	100.00		286.69		273.80
Ranking			*1*		*2*

CCG Weighting	Weighting	CC-CI Score	CC-CI Weight x Score	CC-CE-CI Score	CC-CE-CI Weight x Score
Changes in Air Quality	17.30	3	51.90	3	51.90
Protect Community/ Neighborhood Characteristics	13.88	1	13.88	1	13.88
Maintain Consistency with Existing and Planned Land Use	13.69	2	27.38	1	13.69
Protect Cultural Resources	13.12	3	39.36	3	39.36
Protect the Natural Environment	17.11	3	51.33	3	51.33
Improve Regional Mobility	14.83	5	74.15	5	74.15
Minimize Cost	10.07	3	30.21	3	30.21
Total Weighted Score	100.00		288.21		274.52
Ranking			*1*		*2*

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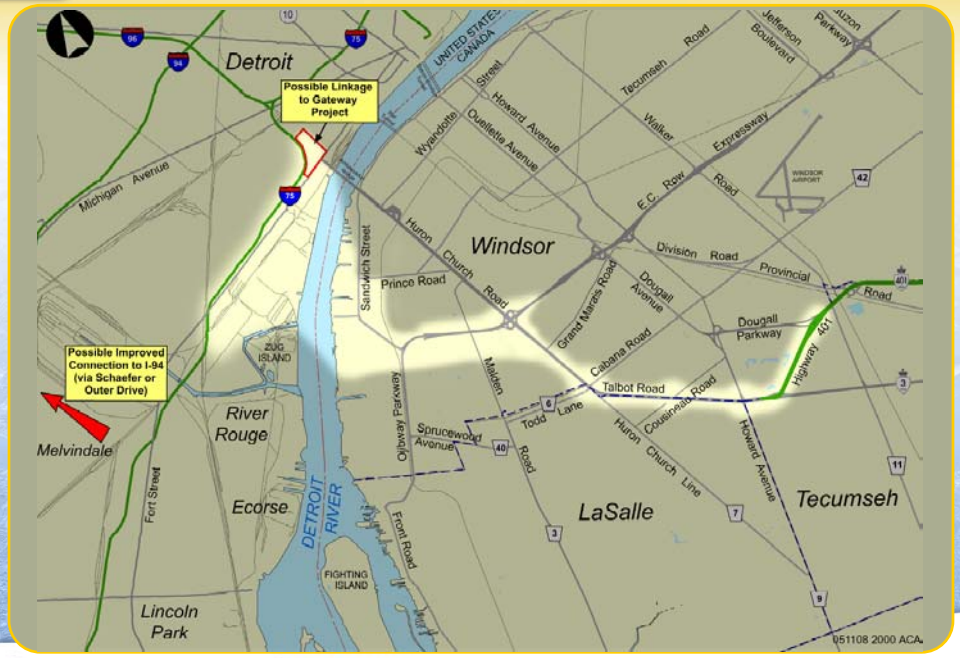
Area of Continued Analysis (ACA)



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Tunneling

Bored Tunnels

- The layer of soft ground available for boring is generally 25 m to 30 m, which is not thick enough for a 3-lane bored tunnel.
  - Bored Tunnel Requirements:
    - Ground to top of tunnel 15m
    - Tunnel 15 m
    - Bottom of tunnel to bedrock 5m
- The new freeway would have some sub-standard shoulder areas
- Access/egress by ramps would be difficult because of tunnel depth
  - Constructability concerns at tunnel portals
  - Risks with respect to dewatering and groundwater
  - Risks with respect to stability
- Conclusion: Bored tunnels are not considered practical

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Tunneling (Cont.)

Cut and Cover Tunnels

- Generally feasible at depths up to 15m. Special controls will be required at depths greater than 7m
- Risks with respect to dewatering and groundwater
- Complex construction staging may be required
- Conclusion: Tunneling using cut and cover techniques will be analyzed and evaluated.

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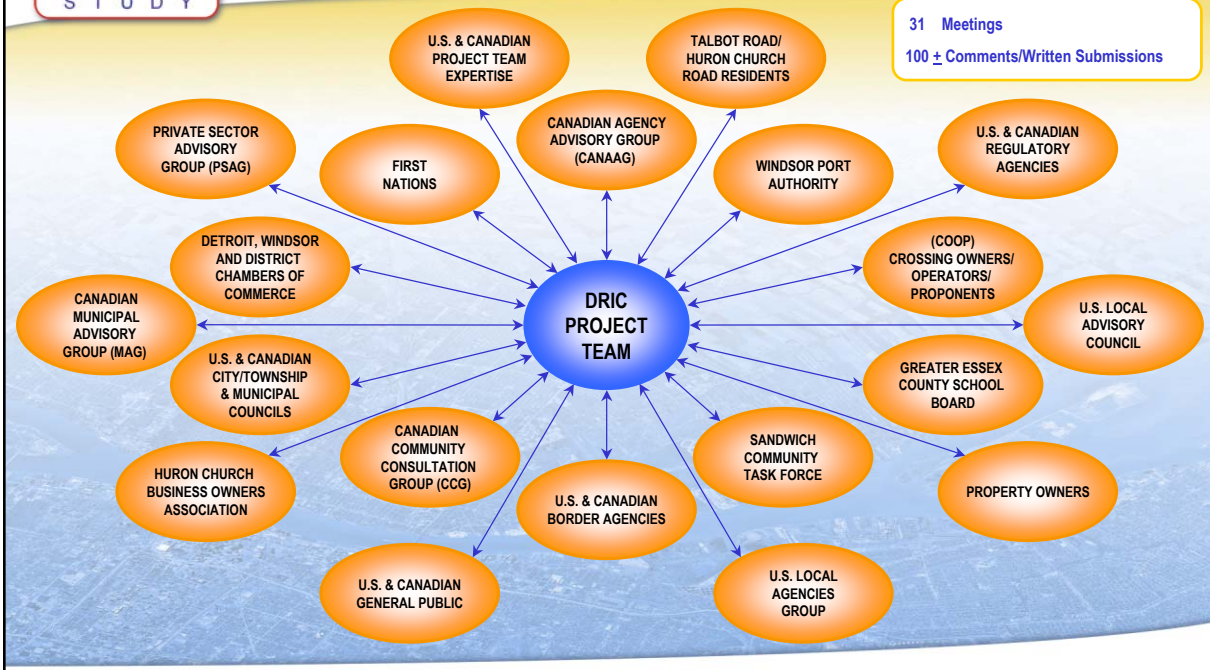
Consultation December 2005-February 2006

31 Meetings
100 ± Comments/Written Submissions



Consultation January 2005-Present

35 Public Information Open Houses & Workshops, Public Meetings, Community Consultation Group, and Community Group Meetings

27 Advisory Group Meetings

24 Other Study Area/Interest Group Meetings

8 Municipal Council Meetings

Community Objectives – Plaza and Crossing

Feedback was received through workshops, meetings and question and answer sessions with the public, businesses, agencies, interested individuals, as well as written submissions.

Inspection Plazas and River Crossings

- Concern with air and noise impacts; keep away from residential areas
- Concern with impacts to Sandwich community; keep plaza and crossing south of Prospect Avenue
- Keep away from natural features (Ojibway Prairie Area, Spring Garden ANSI, Black Oak Woods)
- Favourable plaza location is Brighton Beach industrial area
- Consider security/safety (spills) in the design of the plaza and crossing

Consultation, workshops and meetings will continue as the Project Team proceeds with the assessment of alternatives to incorporate refinements and design enhancement to reduce imports and increase benefits of the project.

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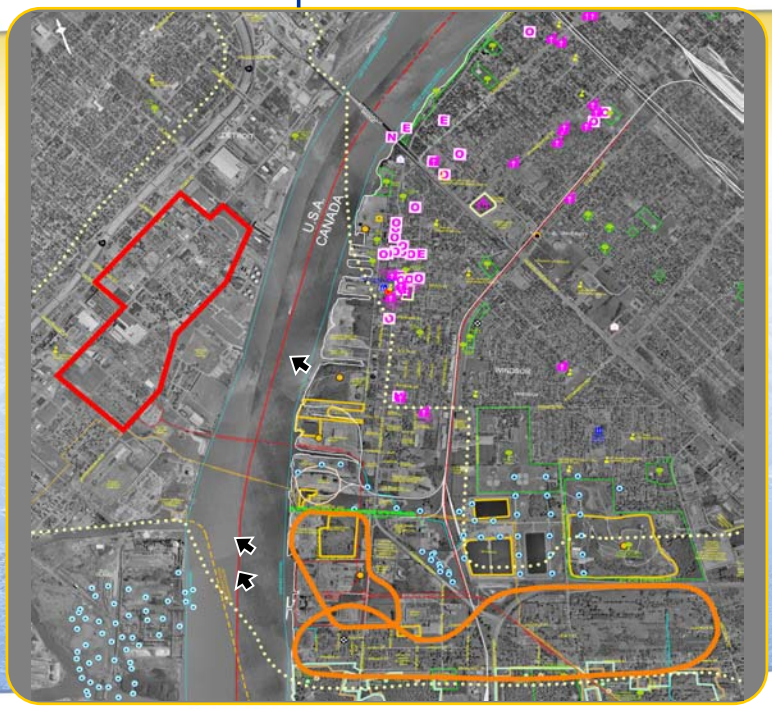
Development of Plaza and Crossing Options



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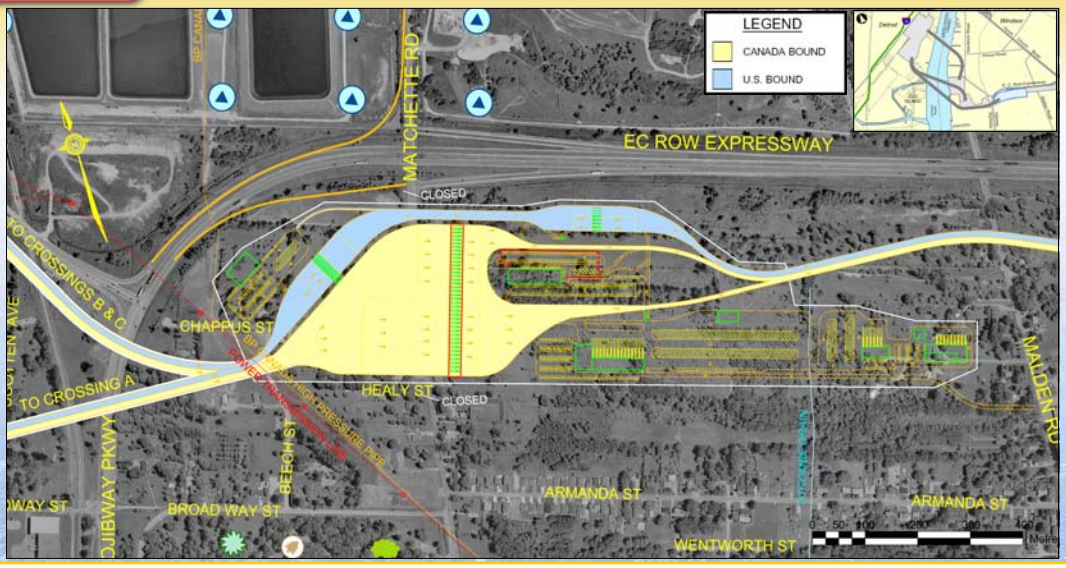
Inspection Plaza Alternative A



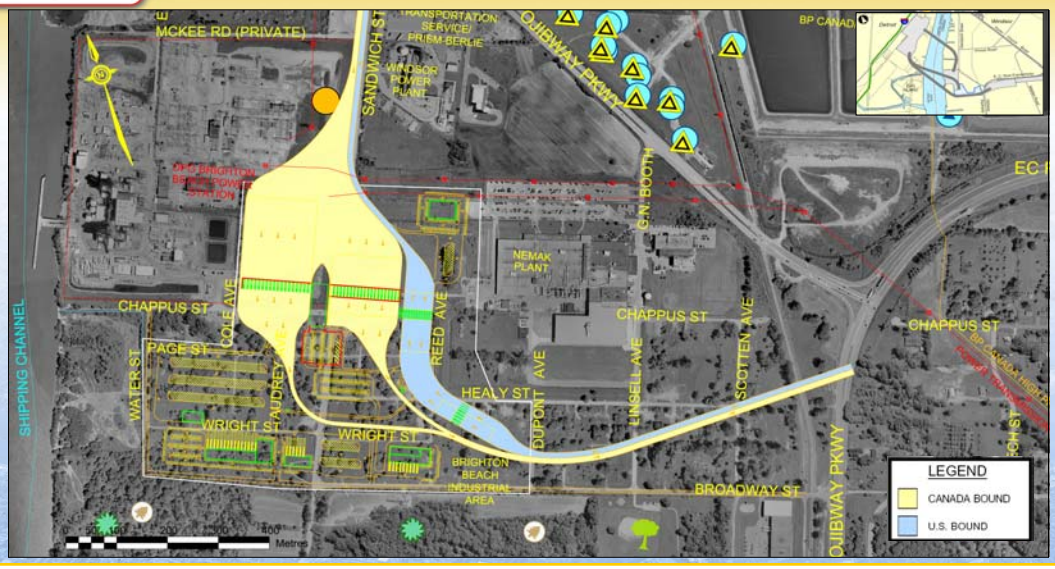
Area:	Approx. 35 ha (85 acres)	**Land Uses Directly Affected:**	Residential; Industrial; Commercial.
Primary Inspection Lanes:	20 Passenger; 19 Commercial.	**Displacements:**	66 Residential Existing; 19Residential Under Construction
Other Major Functions:	Secondary Inspection (Passenger/Commercial); Vehicle and Cargo Inspection System (VACIS); Agriculture Inspection; Toll Facilities.	**Utility Easements/ROWs:**	Power Transmission Line; BP Canada High Pressure Pipe
Can Connect with:	Crossings A, B & C	**Realignments/Closures:**	Chappus St.; Beech Street; Healy St.; Matchette Rd.

Detroit River INTERNATIONAL CROSSING STUDY

Inspection Plaza Alternative A

Detroit River INTERNATIONAL CROSSING STUDY

Inspection Plaza Alternative B



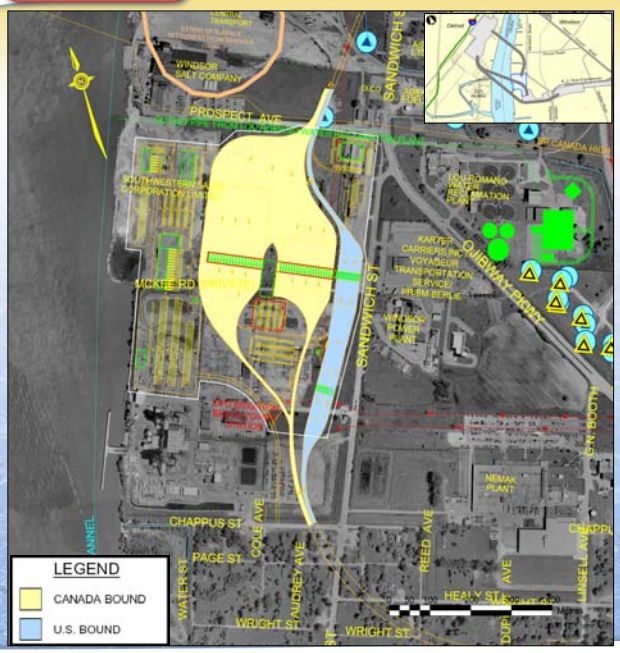
Area:	Approx. 35 ha (85 acres)	**Land Uses Directly Affected:**	Brighton Beach; OPG Parking; Transformer Station; Nemak; OjibwayNatural Area.
Primary Inspection Lanes:	20 Passenger; 19 Commercial.	**Displacements:**	12 Residential; 1 Manufacturing; 1 Utilities
Other Major Functions:	Secondary Inspection (Pass/Comm); Supplementary Inspection (VACIS); Agriculture Inspection; Toll Facilities.	**Existing Easements/ROWs:**	Power Transmission Line
Can Connect with:	Crossings B & C	**Realignments/Closures:**	Water St; Scott Ave; Cole Ave; Audrey Ave; Sandwich St; Chappus St.; Page St.; Wright St.; Broadway St.; Healy St.; Reed Ave.; Dupont St.

Detroit River INTERNATIONAL CROSSING STUDY

Inspection Plaza Alternative B

Detroit River INTERNATIONAL CROSSING STUDY

Inspection Plaza Alternative C



Area:	Approx. 35 ha (85 acres)
Primary Inspection Lanes:	20 Passenger; 19 Commercial.
Other Major Functions:	Secondary Inspection(Pass/Comm); Supplementary Vehicle Inspection (VACIS); Agriculture Inspection; Toll Facilities.
Land Uses Directly Affected:	Hydro One Transformer Station; Aggregate Operation; Windsor Salt; OPG Parking
Displacements:	Hydro One Transformer Station, Aggregate Operation; OPG Parking
Easements/ROWs Relocation:	Power Transmission Lines
Realignments/Closures:	Prospect Ave.; McKee St.; Euclid Ave.

Detroit River INTERNATIONAL CROSSING STUDY

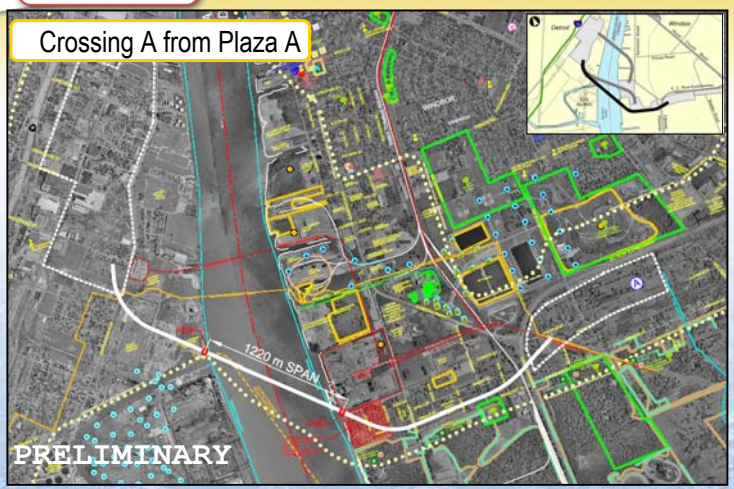
Inspection Plaza Alternative C

Canada | U.S. Department of Transportation Federal Highway Administration | Ontario | MDOT Michigan Department of Transportation

Detroit River INTERNATIONAL CROSSING STUDY

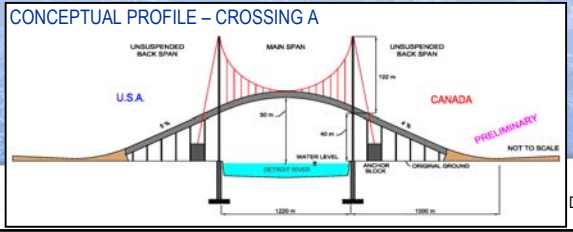
Crossing Alternative A

Crossing A from Plaza A



SUSPENSION BRIDGE

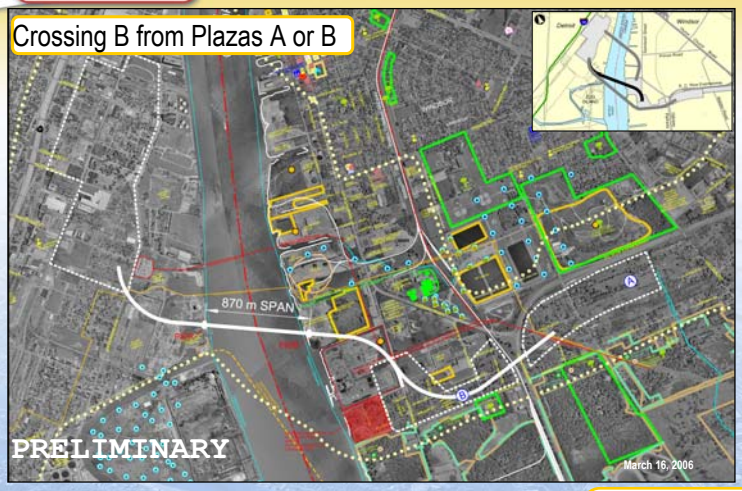
CONCEPTUAL PROFILE – CROSSING A

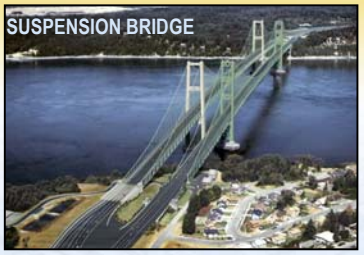


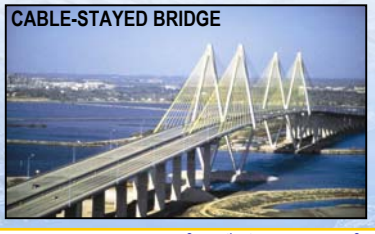
	Connecting to PLAZA A
Main Span Length:	1220 m
Number of Lanes:	6
Distance to Touchdown:	1000 m
Maximum Height over River:	50 m
Approx Height over River at Shoreline:	40 m
Approx. Height of Towers:	160 m
Distance from River to Plaza:	1740 m

Detroit River
INTERNATIONAL CROSSING
S T U D Y

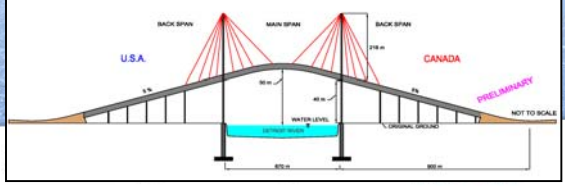
Crossing Alternative B







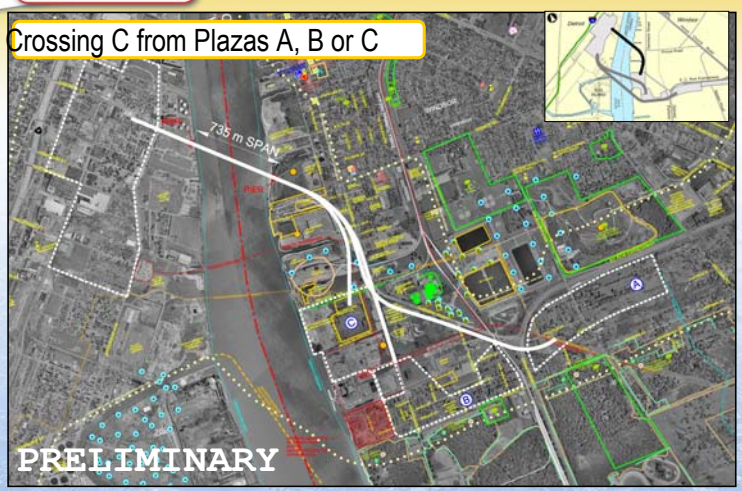
CONCEPTUAL PROFILE – CROSSING B AS CABLE-STAYED BRIDGE

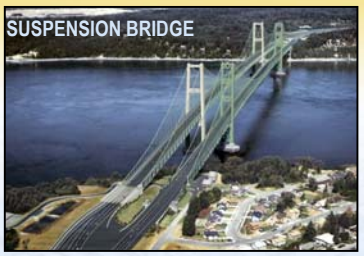


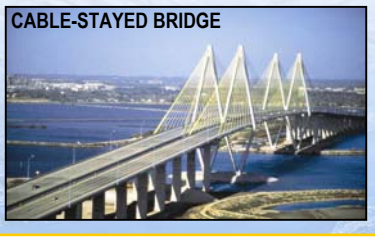
	Connecting to PLAZA A	Connecting to PLAZA B
Main Span Length:	870 m	870 m
Number of Lanes:	6	6
Distance to Touchdown:	1120 m	975 m
Maximum Height Over River:	50 m	50 m
Height over River at Shoreline:	40 m	40 m
Height of Towers:	125–260 m	125–260 m
Distance from River to Plaza :	2120 m	760 m

Detroit River
INTERNATIONAL CROSSING
S T U D Y

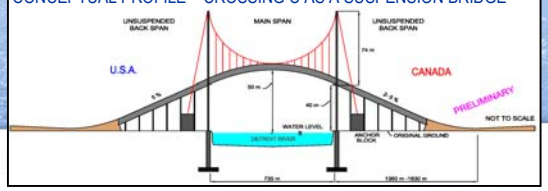
Crossing Alternative C







CONCEPTUAL PROFILE – CROSSING C AS A SUSPENSION BRIDGE



	Connecting to PLAZA A	Connecting to PLAZA B	Connecting to PLAZA C
Main Span Length:	735 m	735 m	735 m
Number of Lanes:	6	6	6
Distance to Touchdown:	1830 m	1920 m	1360 m
Maximum Height over River:	50 m	50 m	50 m
Height over River at Shoreline:	45 m (CAN)	45 m (CAN)	45 m (CAN)
Height of Towers:	115 – 225 m	115 – 225 m	115 – 225 m
Distance from River to Plaza:	2935 m	1955 m	1275 m

Detroit River INTERNATIONAL CROSSING STUDY

Community Objectives – Access Road

Feedback was received through workshops, meetings and question and answer sessions with the public, businesses, agencies, interested individuals, as well as written submissions

1. Minimize the direct and indirect impacts to properties;

   i.e. Property Takings; Air, Noise, Dust impacts on sensitive areas such as residences and schools

2. Separate international and local traffic;
3. Maintain the local and regional function of the Huron Church Rd./Highway 3 Corridor; and
4. Keep the existing traffic within the existing corridor during construction.

Consultation, workshops and meetings will continue as the Project Team proceeds with the assessment of alternatives to incorporate refinements and design enhancement to reduce imports and increase benefits of the project.

Detroit River INTERNATIONAL CROSSING STUDY

Access Route Alternatives

4 Basic Operational Concepts:

1. Separate freeway paralleled by one-way service roads; ✓
2. Separate freeway paralleled by existing Huron Church Road/Highway 3; ✓
3. Tunnel below a rebuilt Huron Church/Highway 3 Corridor; and ✓
4. Integrated freeway with interchanges. Service roads provided, as needed, to maintain local access. Not Carried Forward

Detroit River INTERNATIONAL CROSSING STUDY

Access Route Alternatives

1a

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

Detroit River INTERNATIONAL CROSSING STUDY

Access Route Alternatives

1b

One-way service roads either side of 6-lane freeway depressed.

Detroit River INTERNATIONAL CROSSING STUDY

Access Route Alternatives

2a

Six-lane freeway at grade, along side Huron Church/Highway 3.

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Access Route Alternatives

2b

Six-lane freeway depressed, parallel to Huron Church/Highway 3.

Detroit River INTERNATIONAL CROSSING STUDY

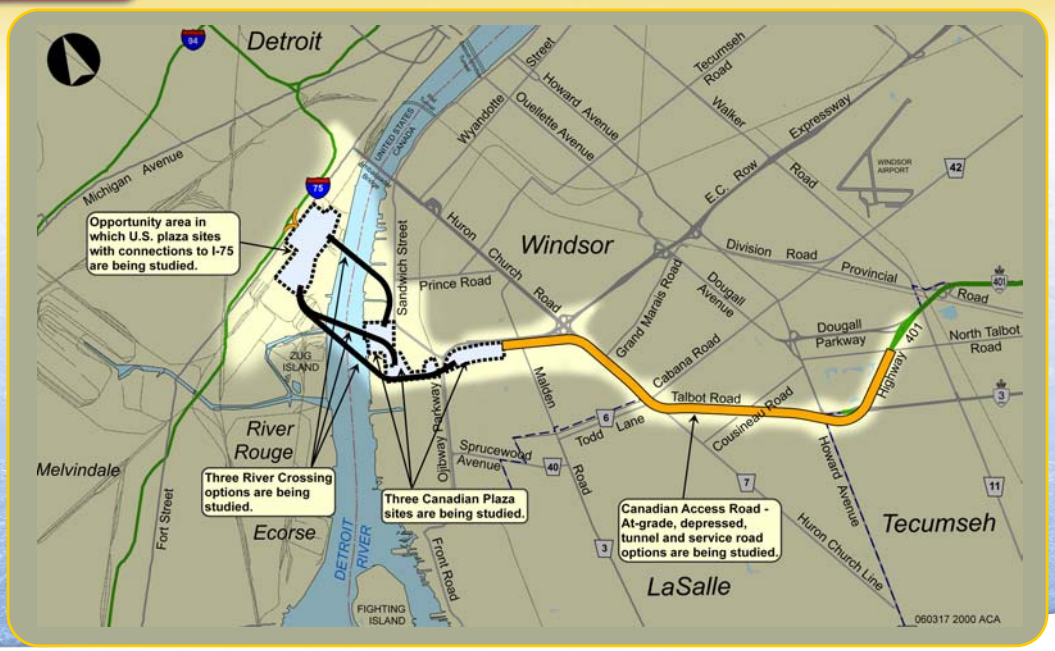
Access Route Alternatives

3

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

Detroit River INTERNATIONAL CROSSING STUDY

Crossing, Plaza & Route Alternatives



Public Information Open House Sessions:

Tuesday March 28, 2006
4:00 p.m. to 8:00 p.m.
Ciociaro Club

Thursday March 30, 2006
4:00 p.m. to 8:00 p.m.
Novelletto Rosati Complex

- Notices placed in local newspapers:

Tuesday March 14th	Wednesday March 15th	Saturday March 18th
Windsor Star*	Essex Free Press	Windsor Star
Amherstburg Echo	LaSalle Post	
Kingsville Reporter	Leamington Post	
Harrow News	Le Rempart	

- Notices sent to those on the project contact lists (1,200 ± individuals), as well as residents and businesses within 500m of the access road and plaza alternatives (7,500 ± addresses in the area of the ACA).
- Notices posted on electronic bulletin boards, in addition to public service announcements.
- Information is posted on the project website at www.partnershipborderstudy.com.
- Follow-up **workshops** scheduled as follows:

ACCESS ROADS
Tuesday April 11, 2006
6:30 p.m. to 9:00 p.m.
Ciociaro Club

PLAZAS AND CROSSINGS
Wednesday April 12, 2006
6:30 p.m. to 9:00 p.m.
Novelletto Rosati Complex

What's Next? – Additional Analysis

Acoustical and Vibration
Site Surveys
Consult with Agencies and Stakeholders
Conduct Practical Routes Noise Assessment
Develop Noise Mitigation Strategies

Air Quality
Consult with Agencies and Stakeholders
Conduct Practical Routes Air Quality Assessment
Present Results of Air Quality Assessment

Natural Heritage
Field Surveys – i.e. fisheries, migratory birds, and vegetation
Conduct Effects Assessment
Consult with Agencies and Stakeholders
Develop Mitigation Strategies

Social Impact
Individual Household Interviews
Consultation with Residential Community Associations/Groups

Detroit River INTERNATIONAL CROSSING STUDY

What's Next? – Additional Analysis

Archaeological

Prepare Stage One Documentary Survey
Consult with Agencies and Stakeholders
Conduct Stage Two Field Surveys at specific locations
Develop Mitigation Strategies

Built Heritage

Conduct Built Heritage Inventory
Consult with Agencies and Stakeholders
Develop Mitigation Strategies

Waste and Waste Management

Field Surveys – i.e. sites
Consult with Agencies and Stakeholders
Develop Waste Management Strategies

Economic Impact

Individual Business Interviews
Consultation with Business Associations/Groups

Detroit River INTERNATIONAL CROSSING STUDY

What's Next? – Additional Analysis

Technical Considerations

Conduct Geotechnical Surveys
Develop Preliminary Geometric Design
Develop Preliminary Construction Staging Plans
Develop Preliminary Cost Estimates
Consult with Municipalities, Agencies, and Stakeholders
Develop Geometric Design Mitigation Strategies

Detroit River INTERNATIONAL CROSSING STUDY

Evaluation Factors

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

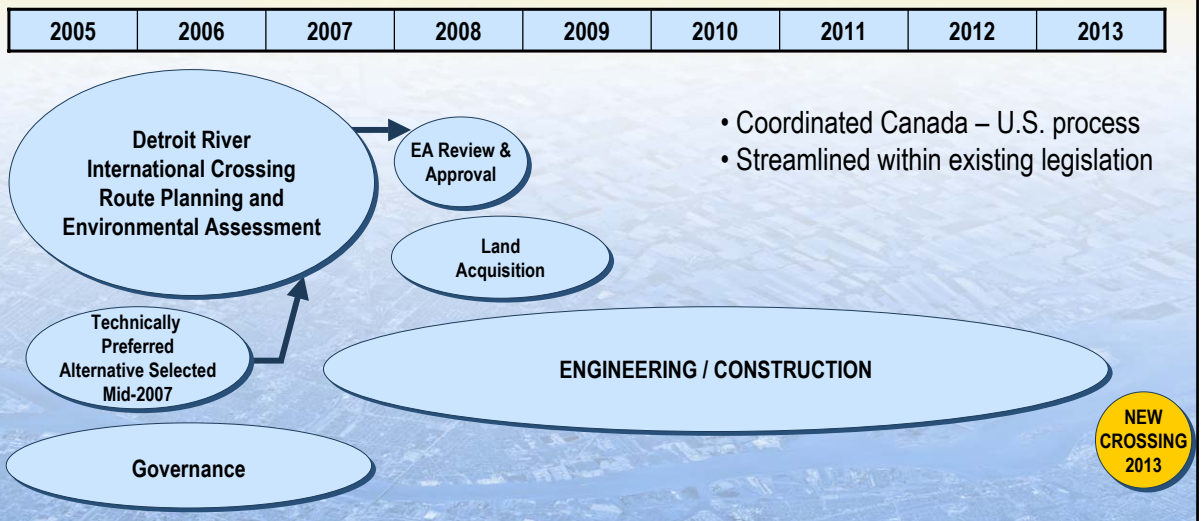
Factors	Performance Measures	
Changes to Air Quality	• Effect on concentration of particulate matter • Effect on concentration of gaseous pollutants	
Protect Community and Neighborhood Characteristics	• Displacement of Residences and Social Features • Direct Impacts on Existing Businesses • Disruption to Residents and Social Features • Noise and Vibration Impacts • Community and Neighbourhood Impacts	• Traffic Impacts • Municipal Impacts • Displacement of Businesses • Disruption of Businesses • Other Effects on Businesses
Maintain Consistency with Existing and Planned Land Use	• Impacts to Land Use (existing and planned) • Impacts to Development Plans • Impacts to Contaminated Sites/Disposal Sites	
Protect Cultural Resources	• Impacts to Built Heritage Features • Impacts to Cultural Landscape Units	• Impacts to Parklands • Impact to Archaeological Features
Protect the Natural Environment	• Impacts to Ecological Landscapes • Communities/Ecosystems • Population/Species	• Surface Water/Groundwater Recharge Areas • Other Natural Resources
Improve Regional Mobility	• Assessment of Highway Network Effectiveness • Assessment of Continuous/ongoing River Crossing Capacity • Operational Considerations of Crossing System (River Crossing and Plaza)	
Minimize Cost	• Primary Construction Cost	• Assessment of Constructability

Detroit River INTERNATIONAL CROSSING STUDY

Next Steps

Consultation with Municipalities, Agencies, First Nations Interest Groups and U.S. Project Team	**Ongoing**
Obtain Comments on Crossing, Plaza and Access Road Options	**March - April '06**
PIOH3 Meeting at Ciociaro Club	March 28
PIOH3 Meeting at Novelletto Rosati Complex	March 30
Workshop at Ciociaro Club *(Please Register to Attend)*	April 11
Workshop at Novelletto Rosati Complex *(Please Register to Attend)*	April 12
Assess Options	**Spring/Summer '06**
Meetings to be scheduled for May, June and August	
Other meetings upon request	
Present Results of Assessment	**Nov./Dec. '06**
PIOH 4 and Workshops	To be Scheduled
Present Selection of Technically and Environmentally Preferred Alternative	**Spring '07**
PIOH5 and Workshops	

DRIC Project Time Line



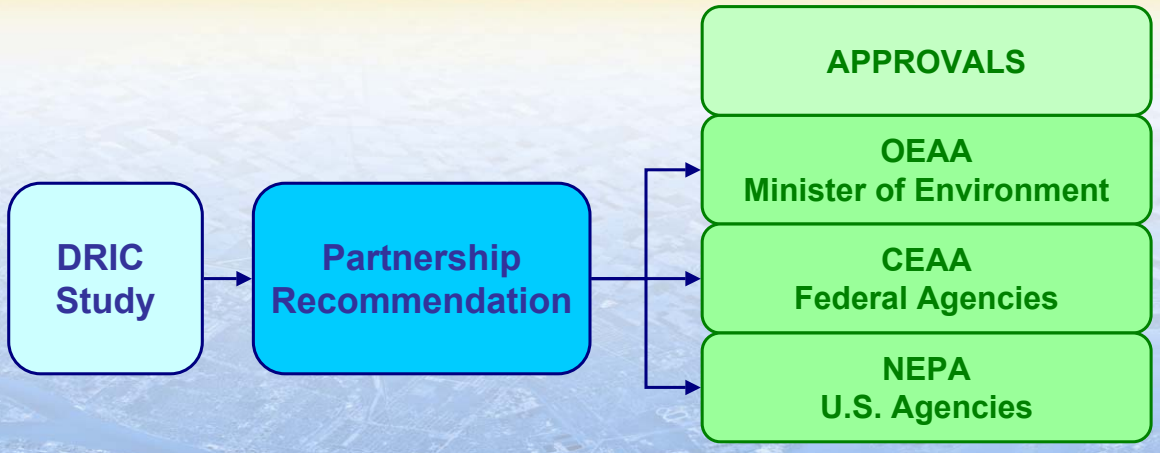
- Coordinated Canada – U.S. process
- Streamlined within existing legislation

Decisions

All decisions will be made based on the need to provide for the safe, efficient and secure movement of people and goods across the Canadian - U.S. Border, while maintaining acceptable local traffic movement and minimizing impacts to the affected communities.

Detroit River INTERNATIONAL CROSSING STUDY

Who Decides?



Detroit River INTERNATIONAL CROSSING STUDY

Next Meetings

Canadian Public Workshops – April 11th & 12th

U.S. LAC – April 26th

CCG – April 27th (Windsor Holiday Inn-Ballroom)

Detroit River INTERNATIONAL CROSSING STUDY

Canadian Project Team

Ministry of Transportation

Windsor Border Initiatives Implementation Group

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