# Canada-U.S.-Ontario-Michigan Border Transportation Partnership Planning / Need and Feasibility Study

# Welcome to the First Round of Public Information Open Houses November 12th to 14th, 2002

~Please Sign In~

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



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#### **Introduction to the Team Members**

#### Partnership

- Transport Canada
- United States Federal Highway
   Administration
- Ontario Ministry of Transportation
- Michigan Department of Transportation

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#### Consultant Team Members

- URS Cole Sherman
- URS Great Lakes
- Corradino Group
- IBI Group
- HBL Decision Economics
- AMEC
- Archaeological Services Inc.
- Sussex Circle









### Purpose of the Open House Today is:

 To provide information about the Planning/Need and Feasibility (P/NF) Study

 To answer any questions about the P/NF Study

 To obtain comments, which we will take under advisement







# Your input is important to this study. Please contact us:

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#### Fax:

(905) 882-4399

Via our web site at:

www.partnershipborderstudy.com

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#### **Toll Free:**

1-800-900-2649









# Purpose of the Planning/Need and Feasibility Study:

- To develop a long term transportation strategy that will ensure the safe and efficient movement of people, goods, and services across the United States and Canadian Border within the Southeast Michigan and Southwest Ontario region.
- To include improved connections to national, provincial, and regional transportation systems.







# Concurrent Federal/Provincial/State Initiatives

**Border Transportation Planning/Need** 30-year strategy **Feasibility Study End of 2003 CA / ONT Management Committee** 5-year Action Plan in Windsor area 60 days FHWA / MDOT **US** approaches to Ambassador **Bridge** ongoing Gateway Study **Detroit-Windsor Border Working Group** Co-ordination of transportation improvements and border processing (CA & US) ongoing Separate planning studies leading to infrastructure **MDOT / BWBA** and border processing improvements at CA and **Blue Water Bridge Plaza Improvements US** plazas Four Pillars (Secure flow of people, secure Manley-Ridge flow of goods, secure infrastructure, and information sharing) **Operational Improvements on Immediate improvements Huron Church (with Windsor) USACE / TC** Feasibility study of potential improvements to Great Lakes/St. Lawrence Seaway to be initiated **Great Lakes Navigation Review** in 2003



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# Border Transportation Planning/Need and Feasibility Study Goals

- Develop a 30-year transportation strategy to include:
  - An evaluation and analysis of Alternative(s)/Proposal(s)
  - Needs and justification for required environmental studies to comply with United States and Canadian Statutes
    - They are as follows:
      - Canadian Environmental Assessment Act (CEAA)
      - Ontario Environmental Assessment Act (OEAA)
      - National Environmental Policy Act (NEPA)
- Complete by the end of 2003

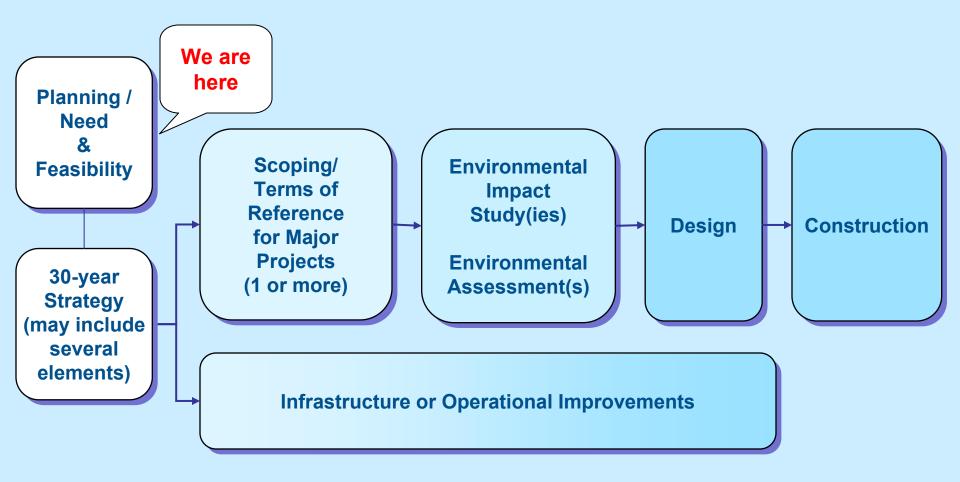








# This Study's Process for a 30-year Strategy





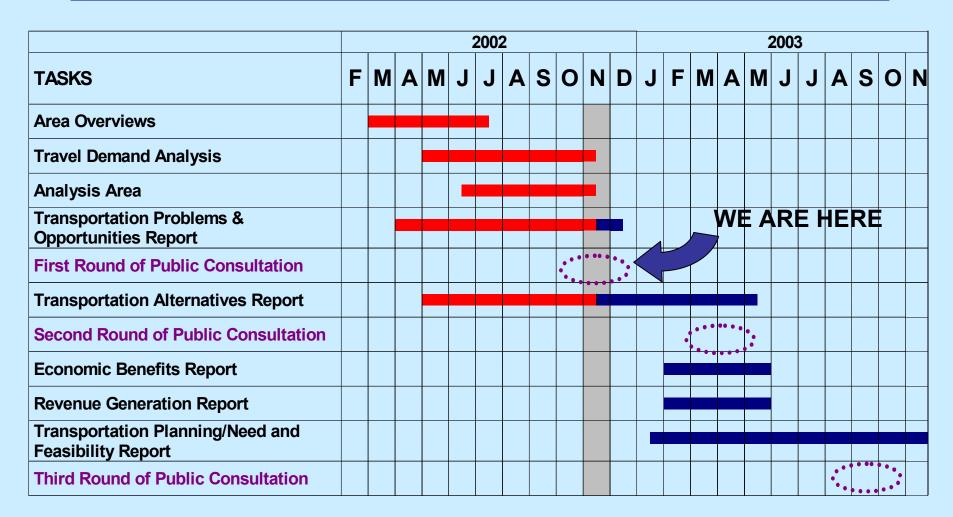
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# Planning/Need and Feasibility Study Work Program





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### **Study Outcomes to Date**

- Confirmed economic importance of international crossings
- Congestion is now a problem
- Faster border processing (NEXUS / FAST / additional staffing) and "gateway" initiatives can contribute to a short-term solution
- Additional cross-border capacity (crossing, connection roads, processing facilities) will be needed; some improvements needed within the next 5 - 10 years
- Several alternatives appear feasible (analysis and evaluation will be undertaken by this study)



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# **Study Progress**

- Completed Area Overviews
- Carried Out Traffic Studies (existing and future)
- Compiled Environmental Data
- Reviewed Current Proposals
- Generated Alternatives

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### **Completed Area Overview**

- Produced Strategic and Geographic Area Overview Working Paper
- Topics Addressed in this working paper include
  - Transportation Networks
    - Highway and Road Systems
    - Border Crossing Issues
    - Non-Roadway
  - Socioeconomic Overview
    - Economic Profile of the Areas Examined
    - Border Crossing Movements
    - Land Uses

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# **Economic Importance of Border Trade Value**



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#### **Carried Out Traffic Studies**

- Collected Traffic Data from Federal, Provincial, State and Municipal Transportation Agencies
- Developed Regional Transportation Model
- Produced Travel Demand Analysis Process Working Paper
- Determined Future Travel Projections for Passenger Vehicles and Trucks
- Determined Existing & Future Capacity Deficiencies for Existing Crossings

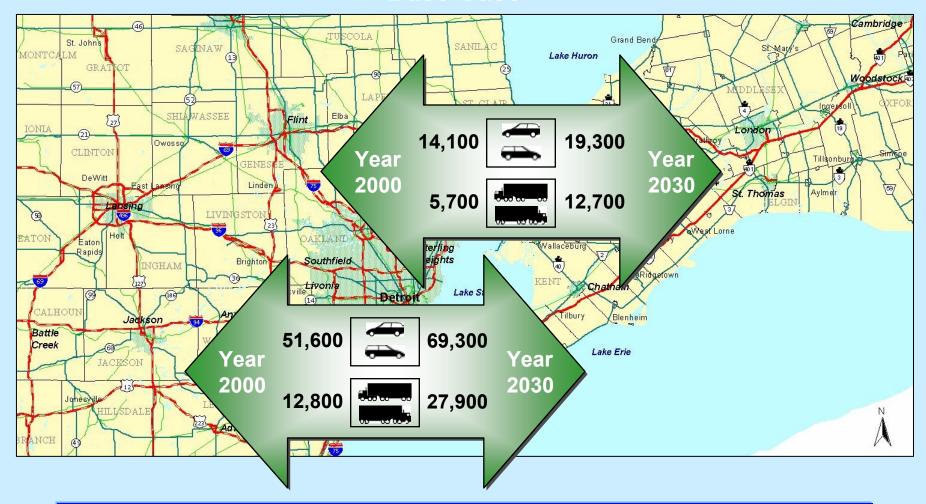








#### **Base Case**



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#### **Future Travel Demand**

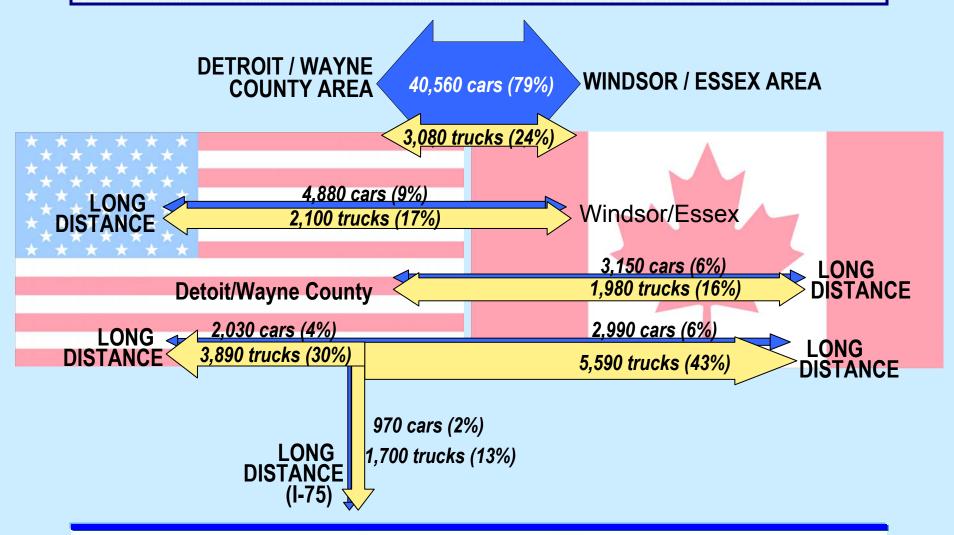
- Crossings Between Michigan & Ontario Expected to Grow by 53% by 2030
  - Truck Traffic will Grow by 119%
  - Passenger Vehicle Traffic will Grow by 35%
- Port Huron to/from Sarnia will Grow by 62% (12,200 vehicles)
- Detroit to/from Windsor will Grow by 51% (32,800 vehicles)







# Total Year 2000 Weekday Vehicle Border Crossings at Detroit-Windsor





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# **Breakdown of Year 2000 Weekday Vehicle Border Crossings at Detroit-Windsor**

 Two-thirds of the travel between the U.S. & Canada are short distance trips between the Detroit/Wayne County area and Windsor/Essex area.

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# **Existing Border Crossing Limitations**

- Each road-based border crossing includes the following components:
  - Interstate or local road connection
  - Border processing for U.S. & Canada
  - Bridge or Tunnel

- Each component has capacity limits
- Capacity restrictions exist at the Detroit-Windsor Tunnel and Ambassador Bridge







# **Existing Border Crossing Limitations Cont.**

#### **Base Case**

- Current capacity problems exist or will occur in the next five years at:
  - Detroit-Windsor Tunnel U.S. and Canadian processing and the U.S. and Canadian road connections
  - Ambassador Bridge U.S. and Canadian border processing and Huron Church Road
- Although, Blue Water Bridge has sufficient infrastructure capacity for the next 30 years, there continues to be a lack of Border Processing Capacity.



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## **Existing Border Road Crossing Limitations**

#### **Base Case**

Blue Water Bridge Corridor				
US Interstate I-69	US Border Blue Water Canadian Border Processing Bridge Processing Highway			
At or near capacity beyond 30 years	At or near capacity within 5 – 10 years	At or near capacity beyond 30 years	At or near capacity within 15 – 20 years	Current congestion; At or near capacity beyond 30 years

Detroit-Windsor Tunnel Corridor				
Downtown Detroit Road Connections to Tunnel Plaza	US Border Processing	Detroit-Windsor Tunnel	Canadian Border Processing	Downtown Windsor Road Connections to Tunnel Plaza
At or near capacity within 5 years	At or near capacity within 5 years	At or near capacity within 10 – 15 years	At or near capacity within 5 years	At or near capacity within 5 years

	Ambassador Bridge Corridor				
US Interstate Connections (with gateway)	US Border Processing	Ambassador Bridge	Canadian Border Processing	Huron Church Road	Highway 401 (6 lanes)
At or near capacity beyond 30 years	At or near capacity within 5 years	At or near capacity within 10 – 15 years	At or near capacity within 5 years	Current congestion; At or near capacity within 5 years	At or near capacity beyond 30 years

Rail and Ferry Existing rail and ferry crossings are operating below capacity



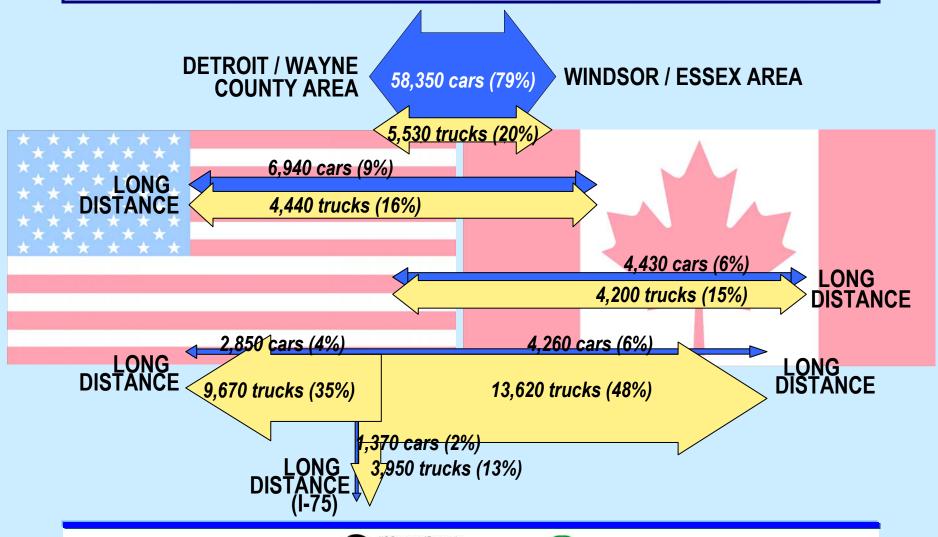
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# Total Year 2030 Weekday Vehicle Border Crossings at Detroit-Windsor





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# Total Year 2030 Weekday Vehicle Border Crossings at Detroit-Windsor

- Projected that truck traffic will grow by 118% between 2000 and 2030.
- We considered that some long distance traffic may divert to other crossings and other modes.

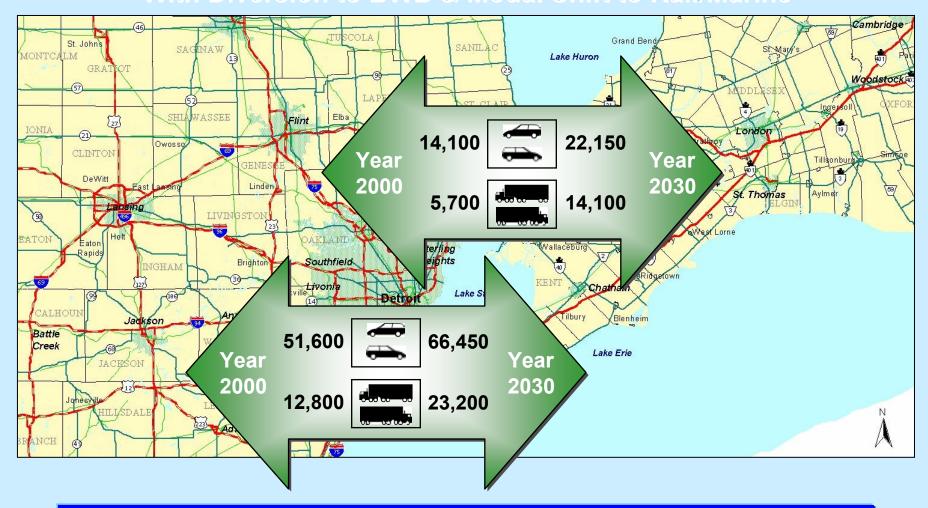
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#### With Diversion to BWB & Modal Shift to Rail/Marine



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- Future traffic projections considered the effects of some truck traffic diverting to the Blue Water Bridge and rail.
- Similarly, future projections considered effects of a shift in autos passing through Detroit-Windsor crossings to the Blue Water Bridge.

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- Traffic diversions to the Blue Water Bridge and mode shifts from truck to rail and marine accelerate U.S. and Canadian Border processing problems at the Blue Water Bridge by five years
- Capacity in U.S. border processing and Huron Church Road problems at the Ambassador Bridge are delayed by five years with the diversion to the Blue Water Bridge and shifts from trucks to rail and marine.

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### **Existing Border Crossing Limitations**

#### With Diversion to BWB & Modal Shift to Rail/Marine

Blue Water Bridge Corridor				
US Interstate I-69	US Border Processing	Highway 402		
At or near capacity beyond 30 years	At or near capacity within 5 years	At or near capacity beyond 30 years	At or near capacity within 10 – 15 years	Current congestion; At or near capacity beyond 30 years

Detroit-Windsor Tunnel Corridor				
Downtown Detroit Road Connections to Tunnel Plaza	US Border Processing	Detroit-Windsor Tunnel	Canadian Border Processing	Downtown Windsor Road Connections to Tunnel Plaza
At or near capacity within 5 years	At or near capacity within 5 years	At or near capacity within 10 – 15 years	At or near capacity within 5 years	At or near capacity within 5 years

Ambassador Bridge Corridor					
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At or near capacity beyond 30 years	At or near capacity within 5 - 10 years	At or near capacity within 15 – 20 years	At or near capacity within 5 years	Current congestion; At or near capacity within 5 - 10 years	At or near capacity beyond 30 years

Rail and Ferry

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Existing rail and ferry crossings are operating below capacity









#### **Issues Identified**

- Even with growth in rail/marine services and diversion of traffic to other border crossings, problems will continue because the Road-based Cross-Border Transportation Network (approaches, crossings and border processing) is not able to meet existing nor future demand at the Windsor/Detroit border crossings
- There continues to be a lack of Border Processing Capacity at the Blue Water Bridge

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#### **Problems**

- Existing and future capacity deficiencies for infrastructure (approaches & crossings) & border processing.
- Traffic diversions to the Blue Water Bridge, rail & marine do not provide longterm relief.
- Lack of adequate freeway connections to the border.







### **Opportunities**

- Improved international trade corridors
- Reduced congestion
- Economic growth support
- Improved options for technology to assist in processing
- Using other modes to delay and reduce capacity problems







### **Alternative Transportation Solutions**

- Increased Rail Service
- New and/or increased ferry service
- Travel Demand Management
- Improved Traffic Management (NEXUS, FAST, ITS)
  - Each contribute to network capacity and has a role to play in optimizing system performance
  - Can't resolve the stated problem on their own, however, will be carried forward and considered for inclusion in the long-term strategy









# **Alternative Transportation Solutions**

- New/improved arterial/highway alternatives including new/improved international crossing(s) alternatives possibly in combination with:
  - Increased ferry services\*
  - Increased freight rail services\*
  - Diversion of some traffic to Blue Water Bridge\*
  - Travel Demand Management/Traffic Management\*
    - \* These solutions contribute to network capacity and have a role to play in optimizing system performance but can not solve the stated problem on their own



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# Defined an Area to Focus Focus Analysis Area

- Enable connections to interstate & provincial highway network (Northern & Western limits)
- Allow for development of alternatives that will serve sufficient travel demand to solve the identified problem (Eastern & Southern limits)

Note: Separate studies will address border processing and plaza infrastructure limitations at the Blue Water Bridge



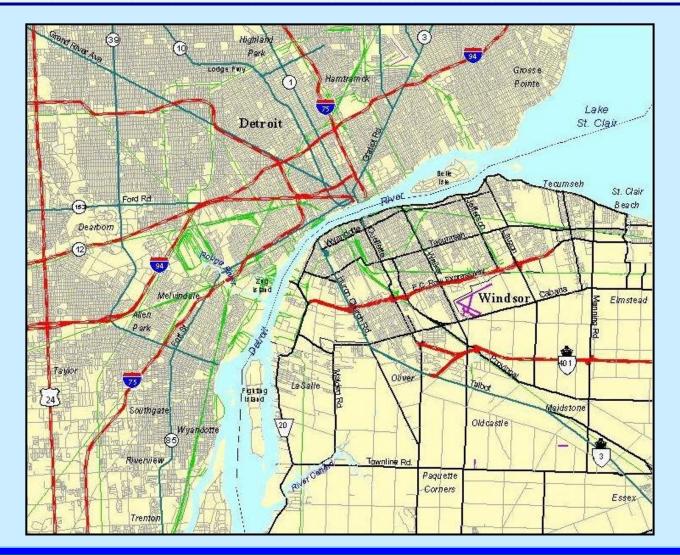
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# **Focused Analysis Area**



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### **Compiled Environmental Data**

- Collected Features Information from Federal, Provincial, State and Municipal Agencies.
- Developed Reference Maps for Focused Analysis Area
- Identified Key Features

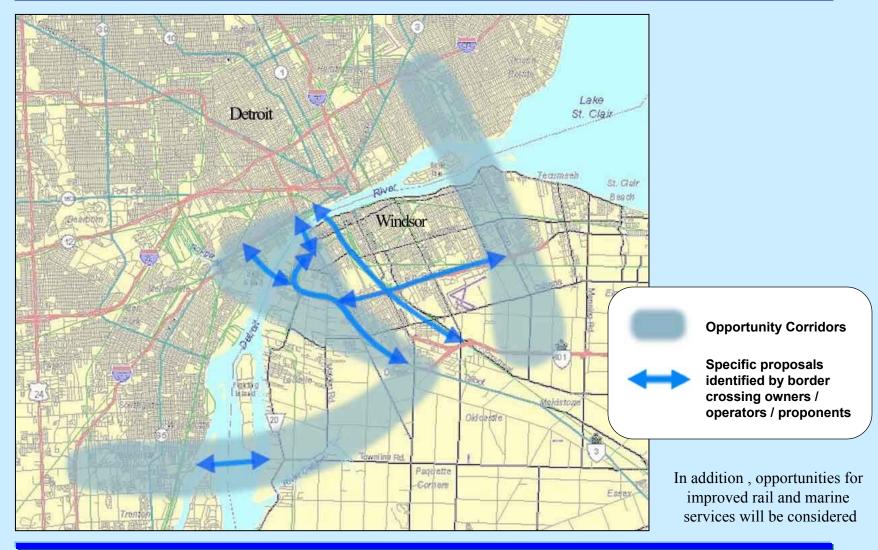
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# **Road-Based Opportunity Corridors**





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### **Reviewed Current Proposals**

#### Alternatives Include:

- Detroit River Tunnel Partnership (DRTP) for a new truck & renovated rail tunnel
- MI-Can proposal for a new bridge in Downriver Area
- New Crossing in the Wyandotte/LaSalle Corridor
- Ambassador Bridge Company Long-Term Proposal to Twin the Existing Bridge
- Detroit & Canada Tunnel Corporation Improvements
- Ambassador Bridge Company Mid-Term Proposal for a dedicated road to the existing bridge
- Expansion of E.C. Row Expressway
- The Planning/Need and Feasibility Study Project Team has met with and Reviewed Plans from Proponents for New Crossings



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### **Generated Corridor Alternatives**

- Reviewed Opportunities for Possible Locations
- Developed Additional Alternatives:
  - East Detroit East Windsor Crossing
  - Crossing Options in the Vicinity of the Downriver Area

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# Preliminary Factors for Evaluation for Proposed Alternatives

Factors	The Project Team will consider whether or not the proposed alternative(s) will:
Transportation Network Improvement	<ul> <li>Support local international traffic between Detroit &amp; Windsor</li> <li>Support long distance freight travel</li> <li>Divert international truck and/or vehicle congestion</li> <li>Support long distance passenger travel</li> <li>Include total capital cost with land acquisition</li> <li>Relieve traffic congestion</li> </ul>
Transportation Opportunities	Optimize the existing infrastructure
Governmental Land Use, Transportation Planning, and Tourism Objectives	<ul> <li>Support existing plans</li> <li>Support future plans</li> <li>Support the transportation system</li> <li>Maintain security and protect against system vulnerability</li> </ul>
Border Processing	<ul> <li>Meet the long term needs for commercial processing</li> <li>Meet the long term needs for passenger crossings</li> </ul>
Environmental Feasibility	<ul> <li>Impact natural features</li> <li>Impact socioeconomic features</li> <li>Impact cultural features</li> </ul>









# Your Input is critical to the evaluation of any proposed alternative(s)

 The project team will take all of your comments into consideration in evaluating the proposed alternative(s) throughout the process using the factors identified. This is why your comment is so important to the process and the development of this study.



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### **Next Steps**

- Analysis/evaluation of the proposed alternatives to select which should proceed through the EA/EIS processes
  - Will consider technical feasibility, environmental sensitivities and cost factors
  - Will incorporate public and stakeholder input
- Present results at the Second Round of Public Consultation (Spring 2003)







# Your Input is IMPORTANT to this Study!

Please leave us your comments or please contact us via:

Our Web Site: www.partnershipborderstudy.com

In Writing:

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