



---

# **NEW INTERNATIONAL TRADE CROSSING**

*[Also known as the Detroit River International Crossing (DRIC)]*

## **PRESIDENTIAL PERMIT APPLICATION**



**June 18, 2012**



---

## Table of Contents

<b>Section</b>	<b>Page</b>
<b>PROJECT SPONSOR</b> .....	<b>1</b>
<b>LEGAL AND STATUTORY AUTHORITY</b> .....	<b>1</b>
<b>OWNERSHIP</b> .....	<b>1</b>
<b>Experience</b> .....	<b>4</b>
<b>PROJECT NAME</b> .....	<b>5</b>
<b>DESCRIPTION OF FACILITY</b> .....	<b>6</b>
<b>Location</b> .....	<b>6</b>
<b>U.S. Interchange</b> .....	<b>6</b>
<b>U.S. Plaza</b> .....	<b>6</b>
<b>Bridge</b> .....	<b>7</b>
<b>Canadian Plaza</b> .....	<b>11</b>
<b>Canadian Access Road</b> .....	<b>12</b>
<b>ESTABLISHING THE NATIONAL INTEREST OF THE PROJECT</b> .....	<b>16</b>
<b>Economic Importance</b> .....	<b>16</b>
<b>Redundancy</b> .....	<b>18</b>
<b>Civil Defense and Homeland Security</b> .....	<b>19</b>
<b>SIMILAR FACILITIES</b> .....	<b>21</b>
<b>TRAFFIC INFORMATION</b> .....	<b>23</b>
<b>Passenger Car Traffic</b> .....	<b>24</b>
<b>Commercial Vehicle Traffic</b> .....	<b>24</b>
<b>Automobiles and Metals</b> .....	<b>25</b>
<b>Forest Goods</b> .....	<b>26</b>
<b>Agricultural Goods</b> .....	<b>27</b>
<b>Machinery and Equipment</b> .....	<b>28</b>
<b>Other Commodities</b> .....	<b>28</b>
<b>Commercial Vehicle Forecast</b> .....	<b>29</b>
<b>Other Commercial Forecasts</b> .....	<b>29</b>
<b>Trends</b> .....	<b>31</b>
<b>ESTIMATED IMPACTS OF THE PROPOSED NITC BRIDGE ON EXISTING BORDER CROSSINGS</b> .....	<b>31</b>
<b>Summary</b> .....	<b>31</b>
<b>Note on Cost Estimates</b> .....	<b>32</b>




---

<b>Note on Revenue Estimates .....</b>	<b>32</b>
<b>CONSTRUCTION PLAN .....</b>	<b>34</b>
<b>Federal Inspection Station Financing .....</b>	<b>34</b>
<b>Bridge Naming .....</b>	<b>34</b>
<b>Permitting .....</b>	<b>34</b>
<b>Presidential Permit .....</b>	<b>35</b>
<b>Coast Guard Permit.....</b>	<b>35</b>
<b>State Department Approval (Agreement with Canada).....</b>	<b>36</b>
<b>Other Permits .....</b>	<b>36</b>
<b>P3 Procurement Activities.....</b>	<b>37</b>
<b>Preliminary Scheduling and Phasing Plan .....</b>	<b>37</b>
<b>FINANCING .....</b>	<b>39</b>
<b>CANADIAN COORDINATION .....</b>	<b>40</b>
<b>Steering Committee .....</b>	<b>40</b>
<b>Working Group.....</b>	<b>41</b>
<b>Financing of Canadian Portion of Project.....</b>	<b>42</b>
<b>Known Views of Canadian Officials .....</b>	<b>42</b>
<b>Appendix A – DRIC (NITC) ROD</b>	
<b>Appendix B –GOVERNANCE AGREEMENT</b>	
<b>Appendix C – DRIC (NITC) STREAMLINING AGREEMENT</b>	
<b>Appendix D – BORDER PARTNERSHIP DOCUMENTS</b>	
<b>Appendix E – LETTER FROM AMBASSADOR WILSON</b>	
<b>Appendix F – LETTERS RELATED TO U.S. \$550 COMMITMENT</b>	



---

**New International Trade Crossing (NITC)**  
**(Formerly known as the Detroit River International Crossing (DRIC))**  
**U.S. Department of State**  
**Required Project Notification Information**  
**Presidential Permit Application**

---

**PROJECT SPONSOR:**

The State of Michigan  
P.O. Box 30013  
Lansing, Michigan 48909  
Attention: Michael Gadola, Legal Counsel to Governor Rick Synder  
Phone: (517) 241-5630

Pursuant to the Governance Agreement (attached as Appendix B to this application), the bridge will be constructed, operated and maintained by the Crossing Authority, a Canadian corporation that will be established in the future, through a Concessionaire under a Public-Private Partnership (P-3) Agreement. As noted below, Michigan will own the portion of the bridge in Michigan and Canada will own the portion of the bridge in Canada.

**LEGAL AND STATUTORY AUTHORITY:**

Legal and statutory authority for Michigan to proceed with this project is provided under the provisions of:

- Code of Federal Regulations (CFR), Titles 23, 48 and 49.
- Article V, Section 28 of the Michigan Constitution of 1963
- Article IX, Section 9 of the Michigan Constitution of 1963
- PA 51 of 1951 (as amended) (Michigan Compiled Laws (MCL) 247.668b)
- PA 286 of 1964 (as amended) (MCL 247.801 - 247.816)
- PA 380 of 1965 (as amended) (MCL 16.104, 16.450-16.452)
- PA 7 of 1967 (EX SESS) (as amended) (MCL 124.501 to 124.512).

**OWNERSHIP:**

The half of the Bridge in the United States of America will be owned by Michigan with the other half owned by Canada. Michigan shall grant a lease, license or other property interest in the Michigan crossing lands to the Crossing Authority, an entity to be established by Canada. The U.S. plaza (other than the Federal Inspection Station (FIS) portion of the plaza) will be owned by Michigan, but operated by the Concessionaire under the P-3 Agreement. The FIS portion of the plaza will either be owned by the General Services Administration (GSA) of the U.S. federal government or owned by Michigan, leased or licensed to Crossing Authority and leased or sub-leased by Crossing Authority to the GSA. (See page 34 for a discussion of possible options



related to the FIS financing). The third component of the project, the connection to the interstate system, will be owned by the Michigan as part of interstate highway system and as part of the Michigan trunk line system, and will be maintained by the Michigan Department of Transportation (MDOT) under the same standards and requirements applicable to those systems. The Federal Highway Administration (FHWA), exercising its traditional role, through MDOT, and the International Authority, established under the Governance Agreement, will provide oversight of the design, construction, and future operation and maintenance of the U.S. portion of the project. On the Canadian side of the border, the inspection plaza will be owned by Canada. The Windsor-Essex Parkway (WEP), the new connecting link to Highway 401, will be owned by the Ministry of Transportation for Ontario (MTO).

The Government of Canada and the State of Michigan intend to maintain public ownership of the bridge. The proposed governance structure includes the creation of separate International Authority by the State of Michigan, the Michigan Strategic Fund, and the Michigan Department of Transportation on the Michigan side and Canada and the Crossing Authority on the Canadian side. The bridge will be constructed, operated and maintained by the Concessionaire who will be selected in a competitive process and will contract with the Crossing Authority, with oversight and required approvals by the International Authority.

The Governance Agreement will, upon approval under this application:

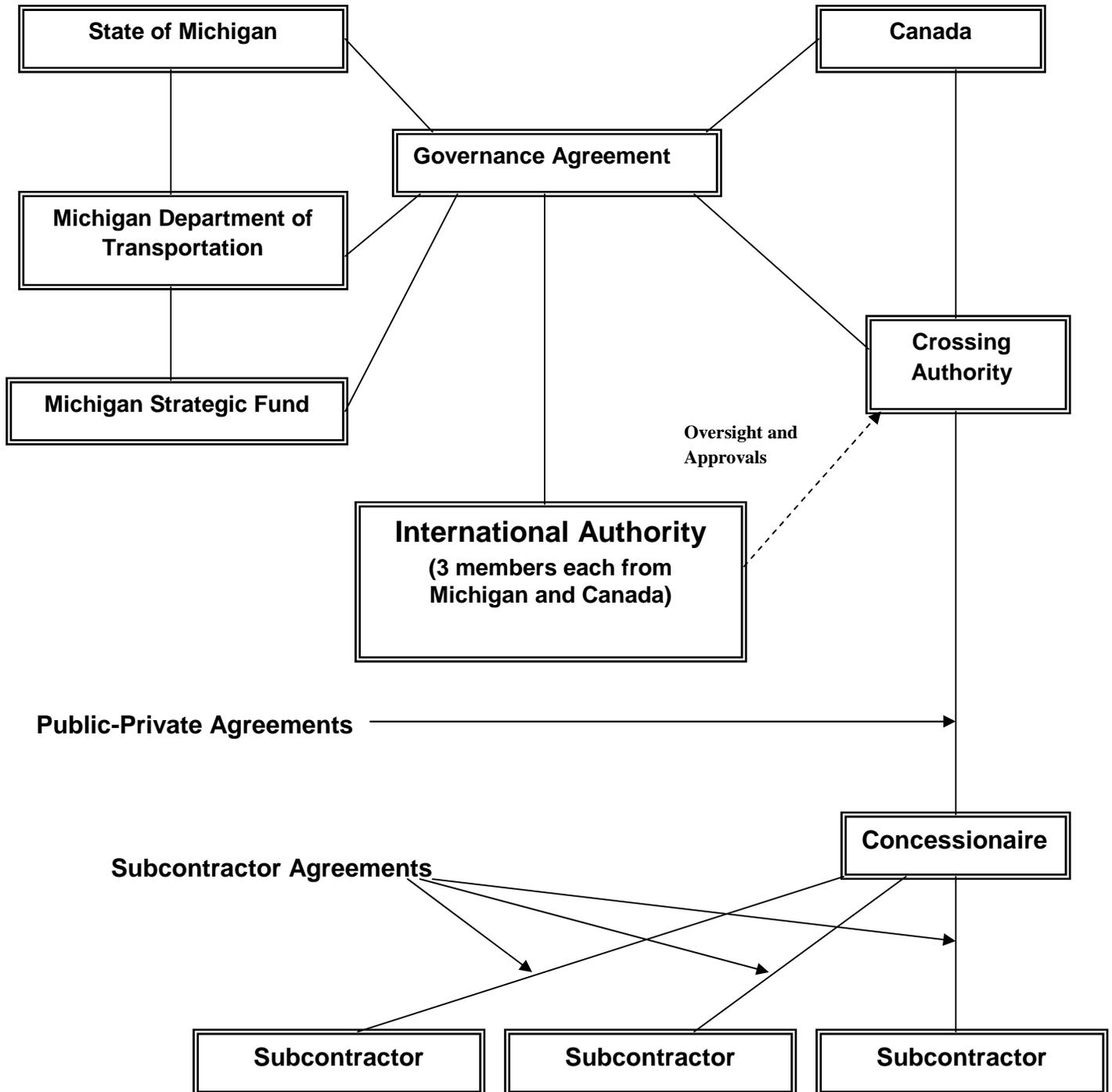
- Establish the framework for the design, construction, operation and maintenance of the NITC.
- Create a mechanism for oversight of the Crossing Authority's responsibilities for the design, construction, operation and maintenance of the NITC.
- Establish standards for the process of selecting the private Concessionaire and for the terms of the P-3 Agreement.
- Set parameters for the recoupment by Canada of the funds it has advanced for the NITC.
- Confirm the commitment to address Record of Decision (ROD) Green Sheet obligations (see Appendix A) and any other mitigations or enhancements agreed to by the owners.
- Limit the liability of the parties.
- Establish the framework for the equitable distribution of excess toll revenue following recoupment by Canada of the funds it has advanced.

**The Crossing Authority, an entity created by Canada, will be responsible for receiving the Canadian funds and for the construction and operation of the NITC, subject to oversight of the International Authority.** Under the Governance Agreement, the Crossing Authority will solicit and negotiate a Public-Private Partnership (P3) Agreement. The RFQ, RFP, fairness monitor and the form of the P-3 Agreement are subject to the approval of the International Authority. This public-private agreement, between the Crossing Authority and the private sector partner (Concessionaire), will outline the roles, responsibilities, policies, procedures, reporting requirements, operating standards, etc., of the Concessionaire, as well as the obligations of the owners.

The governance structure, as created under the Governance Agreement is represented in Illustration 1, and the financial structure for the NITC is shown in Illustration 2.

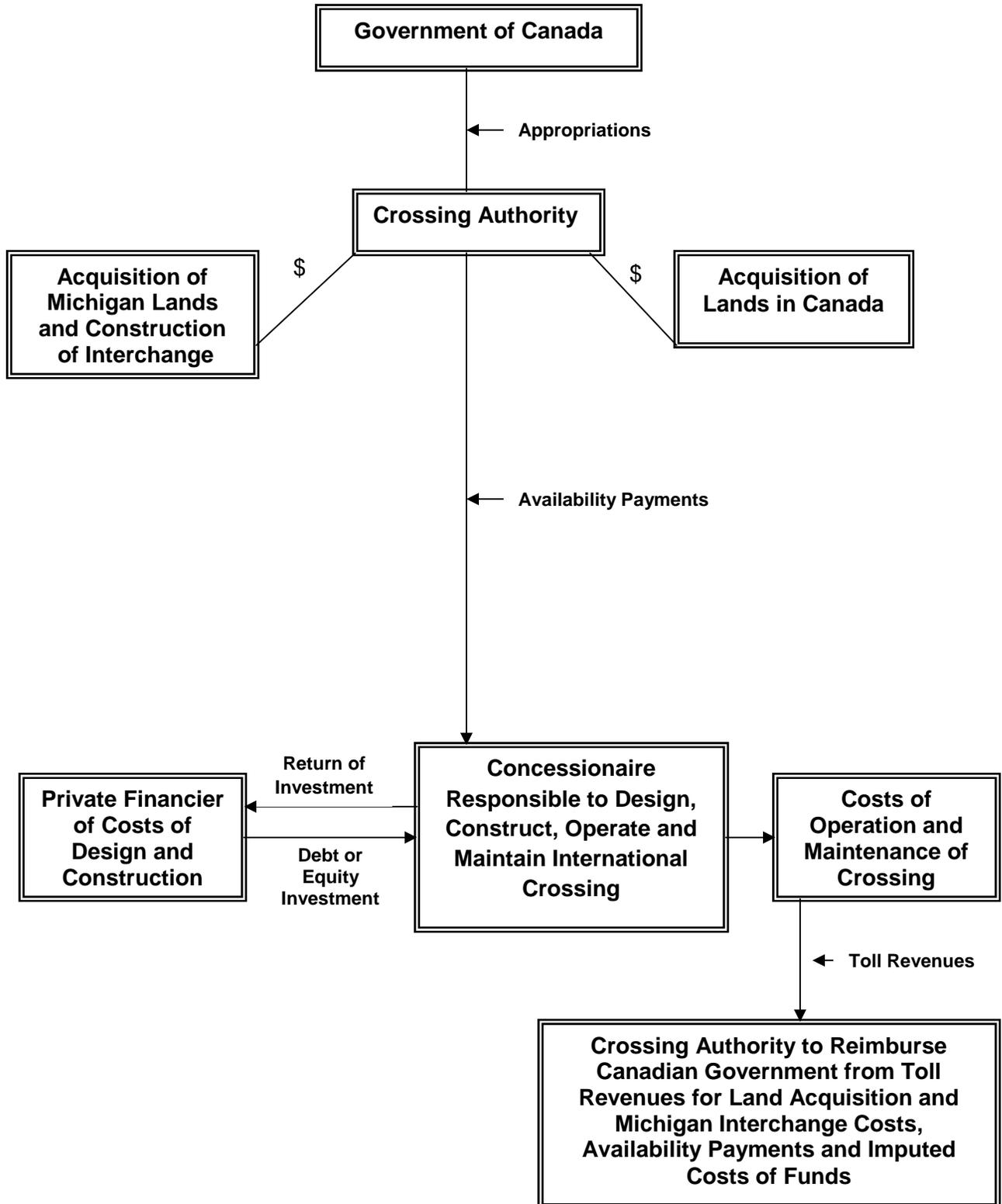


**Illustration 1**  
**Joint Partnership for New Bridge**





**Illustration 2  
Financial Structure**





---

After the expiration of the public-private agreement (40-50 years), operation and maintenance of the bridge will revert to the Crossing Authority with oversight by the International Authority. After a recoupment by Canada of all Canadian investment in the project, the Michigan Parties may, with appropriate authorization, but are not required to, exercise a right to assume joint control of and liability for the NITC, and receive an equal share of any excess toll revenues .

The Concessionaire will be responsible for the design, construction, and financing of the new bridge and associated plazas. In addition, the Concessionaire will be required to operate and maintain the bridge for a specified period of time, anticipated to be adequate to allow the private sector partner to recoup its financing expenses, including principle and interest and a return on its investment. During the life of the concession, the International Authority will exercise oversight of the Crossing Authority and the Concessionaire according to provisions of the Governance Agreement and the public-private agreement.

**Experience:**

Michigan, as the owner of two existing international border crossings, is no stranger to the responsibilities associated with operating and maintaining a facility of this nature. Michigan, through MDOT, has successfully managed the Blue Water Bridge in Port Huron for 73 years and the International Bridge in Sault Ste. Marie for 49 years. Michigan has a proven track record of cooperatively working with GSA and the various federal agencies charged with border protection and inspection to ensure the efficient operation of a border station. In addition, Michigan is also experienced in coordinating activities with our Canadian neighbors at the federal, provincial, and local level.

Additionally, Michigan, through MDOT, is no stranger to the complexities of constructing, operating, and maintaining large iconic bridges, having constructed the first Blue Water Bridge, an 871 foot long cantilever-truss bridge, in 1938; the Mackinac Bridge, a 5 mile long suspension bridge, in 1957; the International Bridge, a 2.8 mile long truss arch bridge, in 1962; and the second Blue Water Bridge, a 922 foot long tied arch bridge, in 1997.

Furthermore, Michigan successfully collaborated with FHWA, Customs and Border Protection (CBP), GSA, and five other federal agencies during the more than four year environmental clearance process while simultaneously coordinating with the team that was satisfying the Canadian environmental clearance process requirements (see Appendix C). Michigan remains in regular, close coordination with these agencies in order to ensure alignment of schedule and objectives.

**PROJECT NAME:**

Currently, the project is referred to as the New International Trade Crossing (NITC). During the environmental clearance process, this project was referred to as the Detroit River International Crossing (DRIC) and continues to be known by this title in Canada. A permanent name mutually agreeable to both Michigan and Canada that reflects either the long history of peaceful



relations between the two countries, the historic connections between Detroit and Windsor, or the commercial importance of the Detroit-Windsor border crossing area to the economic prosperity of the U.S. and Canada is expected to be selected.

## **DESCRIPTION of FACILITY:**

### **Location:**

The proposed project is a U.S./Canadian, I-75 to Highway 401, end to end connection consisting of five primary elements: a new Detroit River crossing (Bridge); the associated inspection areas on each side of the river for the respective border services agencies of the U.S and Canada (Plazas); and connecting links to I-75 in Detroit and Highway 401 in Windsor (connecting link [Canada] or Interchange [U.S.]). This project will connect Detroit, Wayne County, Michigan and Windsor, Essex County, Ontario, Canada. It is in Michigan's 13<sup>th</sup> Congressional District, the seat currently held by the Honorable Hansen H. Clarke. The site selected through the environmental clearance process is two miles southwest (downriver) of the Ambassador Bridge (see Figure 1), and less than a mile from the Port of Detroit and Wayne County, a river port. The Port of Windsor is also within one mile of the selected alternative. All reports documenting the analysis and selection of the U.S. and Canadian elements can be found at <http://www.partnershipborderstudy.com/reports.asp>.

A detailed description of all five elements of the crossing system follows:

### **The U.S. Interchange:**

Because of the close proximity of I-75, the plaza will be directly connected to the freeway via a "Y" - style interchange centered near Military Street. The ramps will be elevated over the Norfolk-Southern (NS)/CSX rail line, and will also be elevated as they cross Fort Street (M-85) (see Figure 2).

### **The U.S. Plaza:**

The bridge will connect to a plaza area that would cover approximately 170 acres, bounded by Jefferson, Post, and Campbell Streets, and the NS/CSX rail line. The plaza area will generally consist of the U.S. FIS and Crossing Authority facilities (e.g., maintenance, motor carrier inspection, etc.). For a conceptual layout of the plaza facilities, see Figure 2. Final design of the plaza is subject to discussions between GSA and the various border inspection agencies and will be subject to agency budgetary priorities. The portion of the plaza other than the FIS will be operated and maintained by the Crossing Authority through its Concessionaire. The FIS portion of the plaza will be operated by GSA and maintained, subject to an agreement between Crossing Authority and the GSA by Crossing Authority through its Concessionaire. While GSA will manage the FIS land and facilities, other federal agencies, primarily CBP and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA-APHIS), will operate the FIS.



---

GSA's plaza requirements consist of a minimum of 80 acres of building, inspection, and circulation space for the FIS, including:

- Approximately 50,000 square feet of inspection office buildings and 60,000 square feet of loading dock area to inspect and unload cargo.
- 20 inspection booths for cars and trucks (with additional space for flexibility), Space for two non-intrusive inspection buildings, and two mobile non-intrusive inspection storage buildings.
- Two non-intrusive inspection buildings.
- Five commercial secondary exit control booths.
- Four inspection booths for Canada bound cars and trucks.
- Provision for inspection of outbound vehicles in the inbound secondary inspection area.
- Space for a future self-contained outbound inspection area.
- Space for impounding vehicles, inspecting trucks, and for hazardous materials containment.
- A 19,000 square-foot facility for observation, inspection, and unloading of animals.
- Space for radiation detection portal monitors and license plate readers.
- Space for inspecting and processing pedestrians and other non-motorized visitors.
- Space for installation of new inspection technologies as they are developed.

The remainder of the plaza space will be managed by the Crossing Authority through its Concessionaire and will include:

- 10,000-square-foot administration building for bridge operations.
- 30,000-square-foot maintenance facility.
- 15,000-square-foot duty free building with 138 parking spaces.
- 10,000-square-foot brokers building.
- Space for the Michigan State Police, Motor Carrier Division.
- An area for a storm water retention basin.

The plaza footprint will also include a 100-foot-wide, landscaped buffer between the edge of plaza and the adjacent street or railroad line. Existing utilities that currently underlie the proposed plaza area will be allowed to relocate to this buffer area around the plaza as part of the project.

### **The Bridge:**

In general terms, the new NITC bridge will land in the Delray area of the City of Detroit and in the Brighton Beach area of Windsor, Ontario. The new bridge will be either a suspension or a cable stayed bridge (see Figure 3), with the final decision being made during the design phase of the project.



Figure 1  
New International Trade Crossing (NITC)

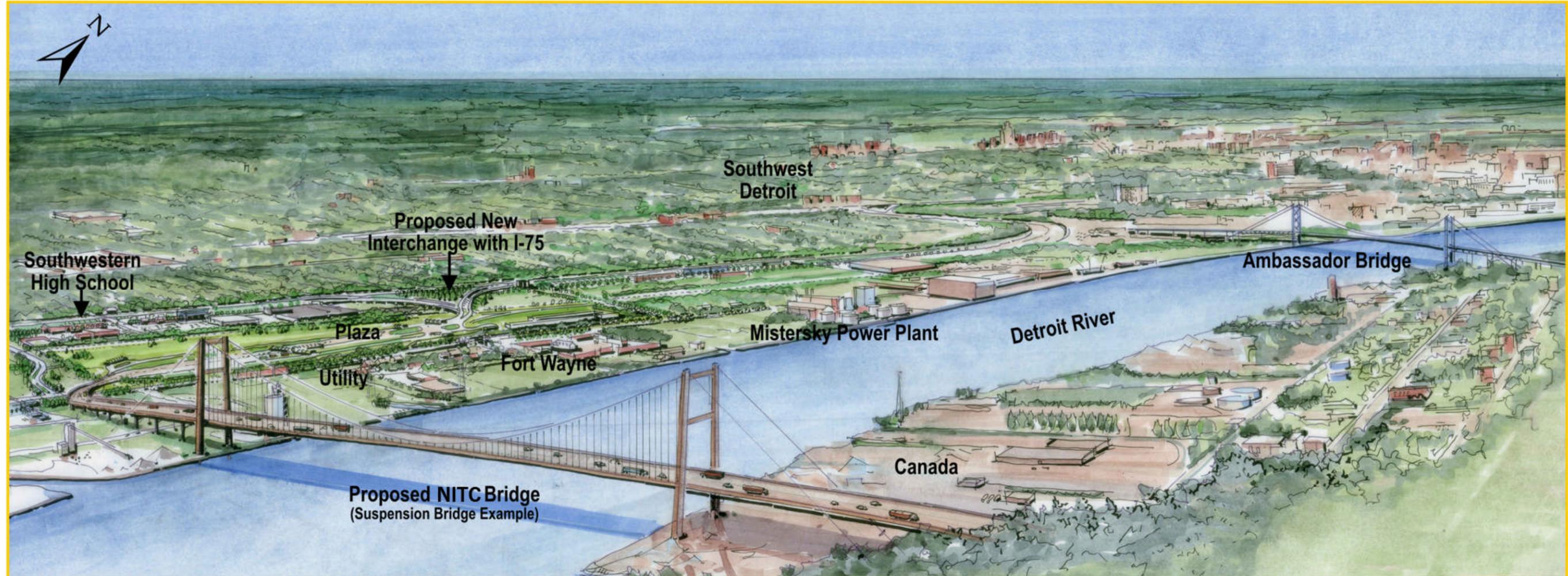
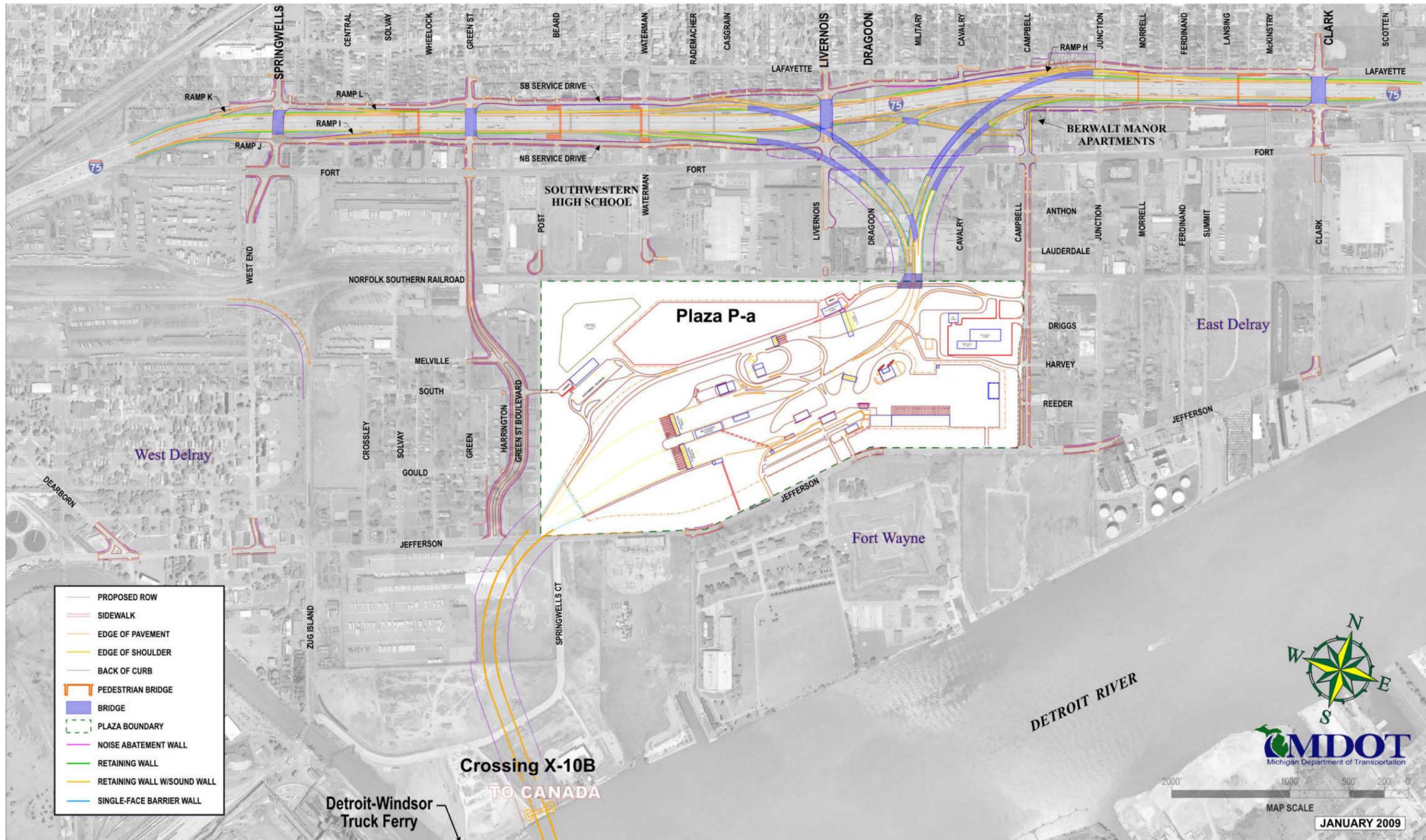


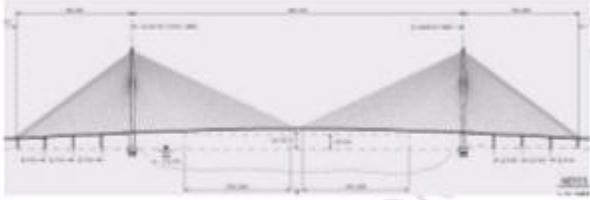
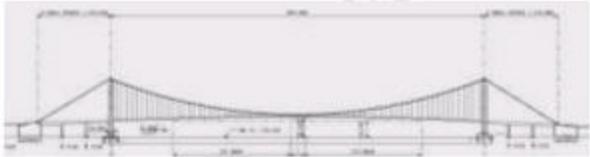


Figure 2  
Selected Alternative  
New International Trade Crossing



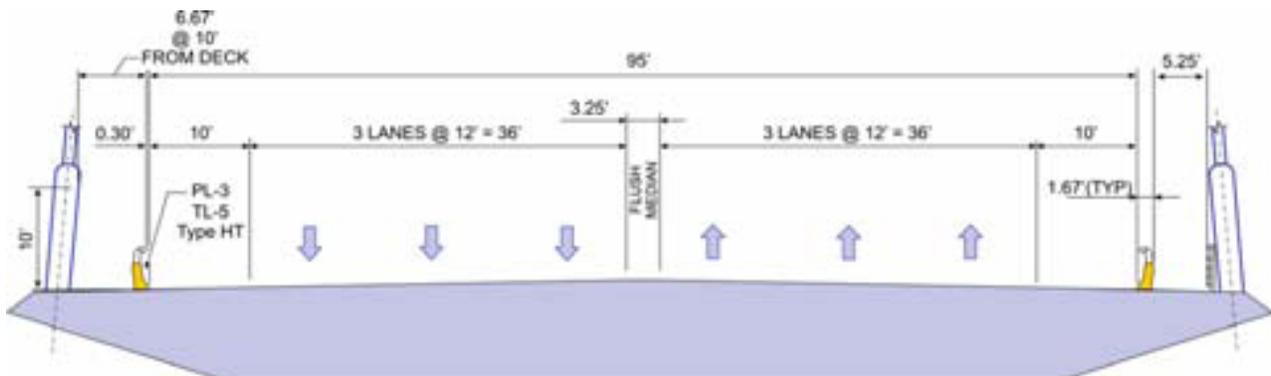


**Figure 3  
Final Bridge & Options  
New International Trade Crossing**

Final Bridge Options	Main Span Length (feet)
<b>Crossing Location: X-10B</b>	
	2,820
	2,850

Regardless of the type selected, the bridge will have a cross-section of six 12-foot-wide vehicle travel lanes (three in each direction), ten-foot-wide outside shoulders, a three-foot-wide flush median, and a five-foot-wide sidewalk on one side of the bridge (see Figure 4). If needed to accommodate future traffic conditions beyond the planning horizon (i.e., after 2035), the shoulders can be eliminated and the bridge converted to eight 11.5 foot-wide travel lanes while still retaining the sidewalk.

**Figure 4  
Cross Section**





---

On the U.S. side of the border, the bridge main tower or pylon, depending on bridge type, will be located onshore, between the LaFarge Cement facility and the McCoig Aggregate dock in the Delray area of Detroit. On the Canadian side of the river, the main tower (or pylon) will be located onshore, between McKee Street and Prospect Avenue in the Sandwich Towne area of Windsor.

Since there are no piers in the water, the proposed bridge will have no impact on the level or flow of the Detroit River. The project is being designed to direct all runoff water from the structure into onshore holding ponds at both plazas for transfer to the respective treatment plants in Detroit and Windsor. This will help to ensure that the new bridge has no appreciable impact on water quality.

### **The Canadian Plaza:**

The new international plaza on the Canadian side of the Detroit River crossing will be situated within the Brighton Beach industrial subdivision. The plaza will be bounded by the Detroit River, Chappus Road, Ojibway Parkway, and Broadway Street, (a conceptual layout of the plaza facilities is presented in Figure 5.)

Although the precise layout of the various facilities within the Canadian plaza may be modified during future design phases of the plaza as a result of continuing consultation with the Canadian Border Services Agency (CBSA), the type and function of the major facilities within the plaza will be similar to those on the U.S. side of the border. The final design of the plaza will incorporate a local access road along the edge of the plaza that will provide continuity for traffic between Sandwich Street and Broadway Street, as well as access for plaza employees. Local access will also be provided at the north end of the plaza from a realigned Sandwich Street to the Brighton Beach Power Station and Keith Transformer Station.

The major facilities that will be included; within the fully developed plaza include nine outbound toll booths, an outbound inspection area for occasional use, 29 inbound primary inspection lanes for inbound vehicles, and a secondary inspection area for inbound vehicles. Both the primary and secondary inbound inspection areas will be divided into passenger and commercial areas. Some primary inspection lanes may be flexible for use by both cars and trucks. In addition to providing general traffic lanes for both passenger and commercial vehicles, the plaza will include dedicated NEXUS and FAST lanes to improve border crossing processing capabilities.

The plaza will also contain a duty free shop for use by outbound vehicles, a maintenance building, a main building designated for employee use along with employee parking, and drainage facilities including, but not limited to, a storm water management/retention pond to treat runoff from the plaza. A local service road will also be provided within the plaza for internal use.



---

### **Canadian Access Road:**

On the Canadian side of the border, the closest link of the Canadian equivalent to the interstate freeway network, Highway 401, is approximately 12 km (7.2 miles) from the proposed plaza location. The Windsor-Essex Parkway (WEP) consists of a six-lane freeway portion connecting existing Highway 401 to the new inspection plaza, a four-lane service road connecting existing Highway 3 to existing Huron Church Road, and a multi-use recreational trail network. The features of each of these components are presented in this section.

In general, the freeway portion of the WEP will be a six-lane urban freeway with paved shoulders and a paved median with an Ontario tall wall concrete median barrier. From west to east, the WEP corridor generally follows existing E.C. Row Expressway from Ojibway Parkway easterly to Huron Church Road, and then follows Huron Church Road from E.C. Row Expressway southerly to Highway 3. The corridor then follows Highway 3 easterly to existing Highway 401 and finally follows existing Highway 401 to North Talbot Road (see Figure 6).

Although the freeway cross-section will incorporate open cut sections where feasible, retaining walls will be utilized in numerous locations to minimize property requirements and associated impacts throughout the corridor. Retaining walls will also be utilized in combination with open cut sections to reduce the depth of open cut.

There are 11 tunnels proposed as part of the WEP, ranging in length between 120 m and 240 m. These tunnels have been strategically located to maintain and enhance existing access along the corridor, as well as provide new connections for roads, trails, and wildlife linkages. In addition to providing local connections across the freeway portion of the WEP, landscaping/public space will be provided on top of the tunnels so as to lessen any “barrier effect” of the freeway for the neighborhoods on either side of the WEP.

Between Huron Church Road north of Bethlehem Avenue/Labelle Street and existing Highway 3 east of Outer Drive, the WEP includes a four-lane service road. The service road will provide local community connections and access to the freeway, and will replace the existing local function of the Highway 3/Huron Church Road corridor.

As mentioned above, a multi-use non-motorized trail network will also be incorporated into the WEP to provide safe and continuous recreational travel along the length of the corridor for cyclists and pedestrians. The approximately 20 km (12 miles) of new trail network will include eight grade separations, or pedestrian overpasses, at locations where the trail system crosses side roads or the proposed service road. The trail network provides for a continuous path between the existing trail at the Malden Road/E.C. Row Expressway underpass and the Howard Avenue diversion.

The proposed trail network concept also includes numerous alternate paths through the corridor with at-grade crossings of roadways, allowing access to the continuous trail network from several locations outside the WEP. Cyclists and pedestrians will be able to choose between the continuous trail with overpasses, or an alternate route with at-grade intersections. Grade-separated trail crossings of roadways will typically be achieved using conventional bridges and



---

approaches on earth embankments in such a way as to ensure grade separations are not seen as a “barrier” to potential users. Vertical grades on the trail throughout the network (including approaches to grade separations) will be limited to a maximum of five percent to ensure all grades are easily negotiated by cyclists and pedestrians. At-grade trail crossings of roadways will be designed in accordance with appropriate standards for pedestrian and cyclist crossings to ensure safe and efficient use of the trail network. The typical width of the multi-use trail is 4 m to allow for use by both pedestrians and cyclists.

In addition to the new freeway link and new trail network, the WEP will also create 300 acres of new green space that will help buffer adjacent neighborhoods from the freeway, provide new recreational opportunities, preserve and restore habitat for endangered species, and create or restore wildlife corridors and other ecological functions. This will result in a net gain in the extent of designated natural areas with important ecological functions in the Windsor-Essex area. The WEP will also remove 30 entrance culverts and make additional improvements, including storm water quality control within the highway corridor that will lead to overall enhancements to water quality and net benefits to fish and fish habitat for several water courses within the corridor.

Since the identification of the location of the Ontario access road, the receipt of Ontario *Environmental Assessment Act* approval and the receipt of *Canadian Environmental*

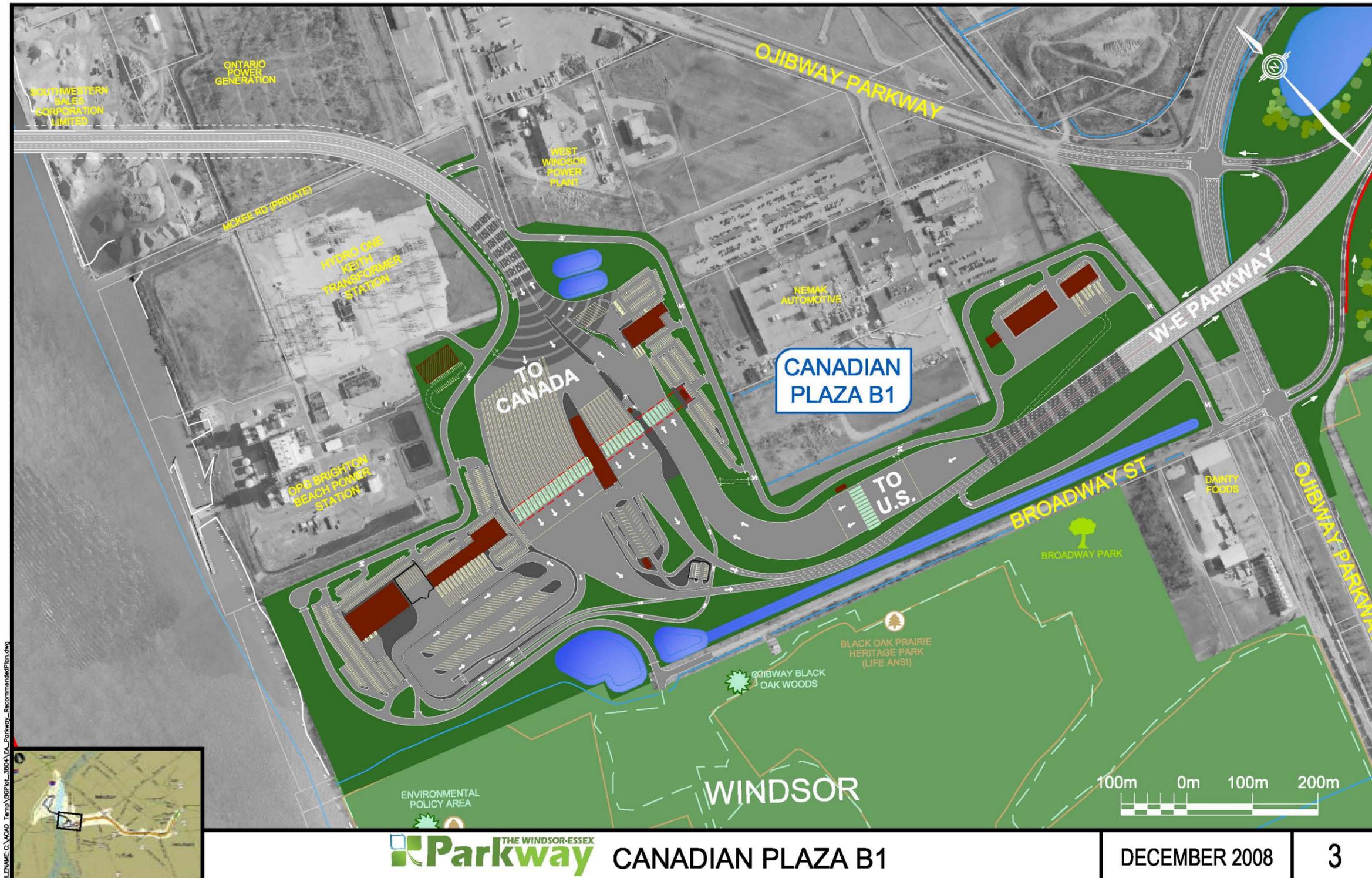
*Assessment Act* approval, work has been underway on the Windsor-Essex Parkway, including:

- Acquiring approximately 900 properties.
- Removing 350 buildings in the corridor.
- Partnering with local groups for community benefit, including salvaging more than;
- 250 tons of building materials and over 1500 plants and shrubs.
- Ecological restoration.
- Construction of two bridges and a two kilometer noise barrier; and
- Relocating utilities and raising two hydro towers.

Major construction commenced in late summer 2011 and the Windsor-Essex Parkway is expected to be open to traffic in fall 2014.



Figure 5  
Canadian Plaza Layout  
(From Appendix A of the Canadian EA)



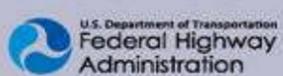
FILENAME: C:\ACAD\_Temp\BGP\EA\_Parkway\_RecommendedPlan.dwg



Figure 6  
Windsor–Essex Parkway



A BORDER TRANSPORTATION PARTNERSHIP





**ESTABLISHING THE NATIONAL INTEREST OF THE PROJECT:**

A new border crossing is needed to support the regional, state, provincial, and national economies of both countries while addressing the civil and national defense and homeland security needs of the busiest commercial corridor between the U.S. and Canada.

**Economic Importance:**

The U.S. and Canada have the largest bilateral trading partnership in the world, totaling over \$524 billion (U.S. dollars) in merchandise trade in 2010. Thirty-five states have Canada as their largest foreign trade-partner. Fifty-seven percent (\$297 billion) of the U.S.-Canada trade moves by truck. Approximately 30.8 percent of that truck transported trade (\$91.4 billion) between the U.S. and Canada passes through the Detroit River area and reaches markets across the nation (see Figure 7).

**Figure 7  
International Truck Flows through Michigan**



U.S./Canadian trade supports over eight million U.S. jobs; approximately 237,000 Michigan jobs; and one in three Canadian jobs. The Detroit- Windsor border is the busiest trade corridor on the U.S./Canada border and the second busiest trade corridor in North America. The U.S. does



almost as much business across the border in the Detroit-Windsor area as it does in total with Great Britain (\$100.5 billion) and more than it does with South Korea (\$89.4 billion).

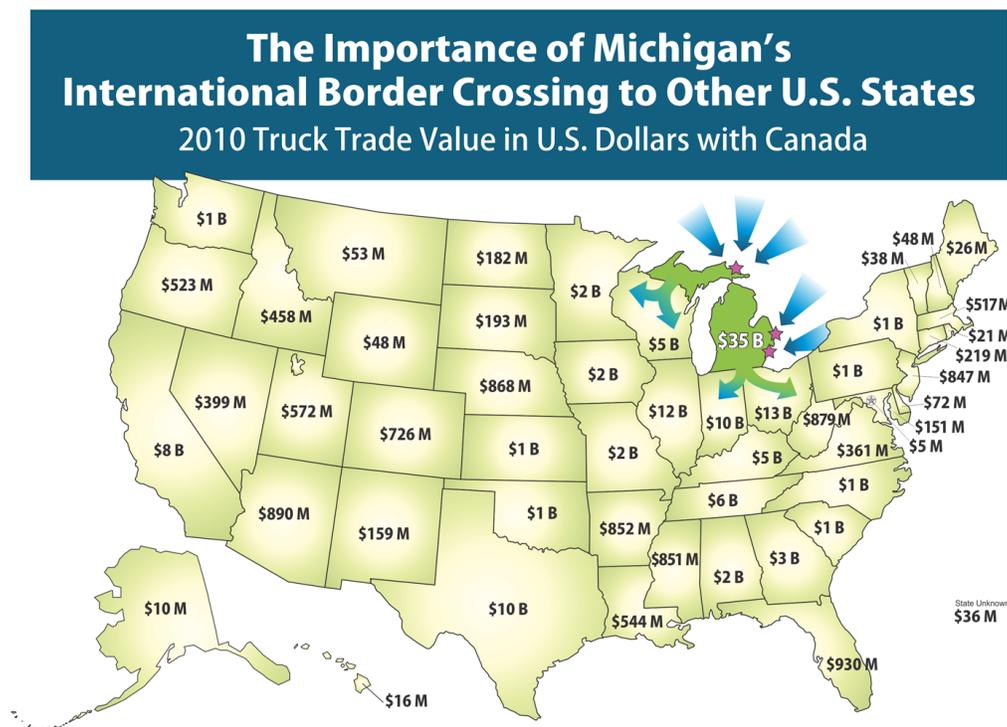
In 2010, more exports to Canada traveled through Detroit on a truck (\$55.1 billion) than total U.S. exports to all the OPEC nations (\$54.6 billion), the United Kingdom (\$49.1 billion) or Germany (\$48.6 billion).

International trade crossing our borders not only benefits the border regions, but benefits every U.S. state by providing improved trade connections with Canada and Mexico. Almost 61 percent of the incoming commercial trade crossing in the Detroit-Windsor region continues through to destinations in all 49 of the other states, with the largest recipients being Ohio, Illinois, Texas, Indiana and California. Similarly, 73 percent of the outgoing Ambassador Bridge commercial traffic originates in the other 49 states, with the largest exporters being Ohio, Indiana, Texas, Tennessee, and Illinois.

In addition to U.S./Canada trade, the Detroit/Windsor trade corridor also handles \$3.8 billion of U.S. merchandise trade with the rest of the world that was trans-shipped through Canada by truck in 2010.

Michigan is the single largest trading state with Canada, accounting for \$62.4 billion (12 percent of all U.S./Canada trade). However, Michigan border crossings also play a significant role in moving other state's trade goods across the U.S./Canadian border. The graphic shows the total amount of trade with Canada shipped through southeast Michigan by truck in 2010, for each state (see Figure 8).

Figure 8





---

**Redundancy:**

The existing Detroit-Windsor border crossings have finite capacity and aging infrastructure, which potentially undercuts our ability to compete in the global marketplace and hurts the economies of both Canada and the United States. Redundant crossings systems are essential to satisfying the project's purpose. The North American Free Trade Agreement (NAFTA), and similar pacts, will continue to have significant positive impacts on trade between the two nations. Over the past 33 years, U.S./Canada bilateral trade in goods and services has grown a total of 716 percent and has grown faster than the U.S. gross domestic product; i.e., at an average annual rate of approximately 6.7 percent per year. A report by Global Insight forecasts that bi-national commerce will grow 250 percent in the next 20 years. There is a need for a new border crossing to ensure there is no disruption to trade between the U.S. and Canada.

More than eight million passenger vehicles crossed the border at Detroit-Windsor crossings in 2010. This traffic is estimated to have generated \$252 million for local and regional economies on the U.S. side of the border and as much as \$415 million on the Canadian side of the border. Twenty-five percent of passenger vehicular traffic is also work-related with five to ten percent representing Detroit nurses that reside in Canada. It is extremely important for these nurses to be able to count on reliable, same-day travel, as well as providing dependable access to Tier 3 medical facilities in Detroit to the residents of Windsor. Having a choice in border crossing locations will provide this reliability.

The Ambassador Bridge (82 years old) and the Detroit-Windsor Tunnel (81 years old) are both serviceable but aging facilities that will need increasingly significant maintenance during the planning horizon to maintain their serviceability.

Equally as critical as the crossing structures themselves, are the border inspection areas and the access roads to the border crossing facilities. In the Detroit-Windsor Crossing area, the border processing facilities at both the Ambassador Bridge and the Detroit - Windsor Tunnel are inadequate to handle the volumes of traffic they are currently serving. In fact, on the Canadian side of the border, the Canadian Border Services Agency has been forced to accept off-site locations for secondary inspection of commercial vehicles. Both of those secondary inspection facilities are located over a mile away from the border crossing and can only be accessed via unsecured and frequently congested city streets. The inspection plazas on both sides of the border are virtually landlocked, and expansion of those facilities is unlikely.

Access roads are also a significant issue for both of the existing crossings. While access to the U.S. interstate system is less than a mile away from the Detroit - Windsor Tunnel, access to the Canadian equivalent is over six miles away through crowded city arterials. Since less than half of one percent of the international commercial traffic uses the tunnel, due in large part to physical limitations that prevent most modern trucks from using the facility. A similar condition also exists at the Ambassador Bridge, where international commercial traffic is required to negotiate eighteen traffic signals spread along six miles of congested urban arterial, bounded on both sides by commercial and residential developments, along with a public grade school and a university. In spite of recent reductions in overall traffic volumes, due in large part to the recent economic downturn, daily congestion and disruptions in the form of vehicular crashes,



---

breakdowns and similar incidents, continue to occur. In the era of just-in-time delivery, the logistics industry needs a travel network with predictable times and reasonably accessible alternative routings when traffic-disrupting incidents occur.

Commerce not only depends upon reliable transportation links but multiple links as well. Major disruptions at either the Ambassador Bridge or Detroit-Windsor Tunnel have significant economic effects. It is essential to have redundancy, made available by a new border crossing to move people and goods across the border in the Detroit River area.

**Civil and National Defense and Homeland Security:**

Homeland security involves protecting society against man-made threats and disasters. This involves keeping critical infrastructure in sound condition to protect people and property. It also involves mitigating impacts to individuals, communities, and the environment.

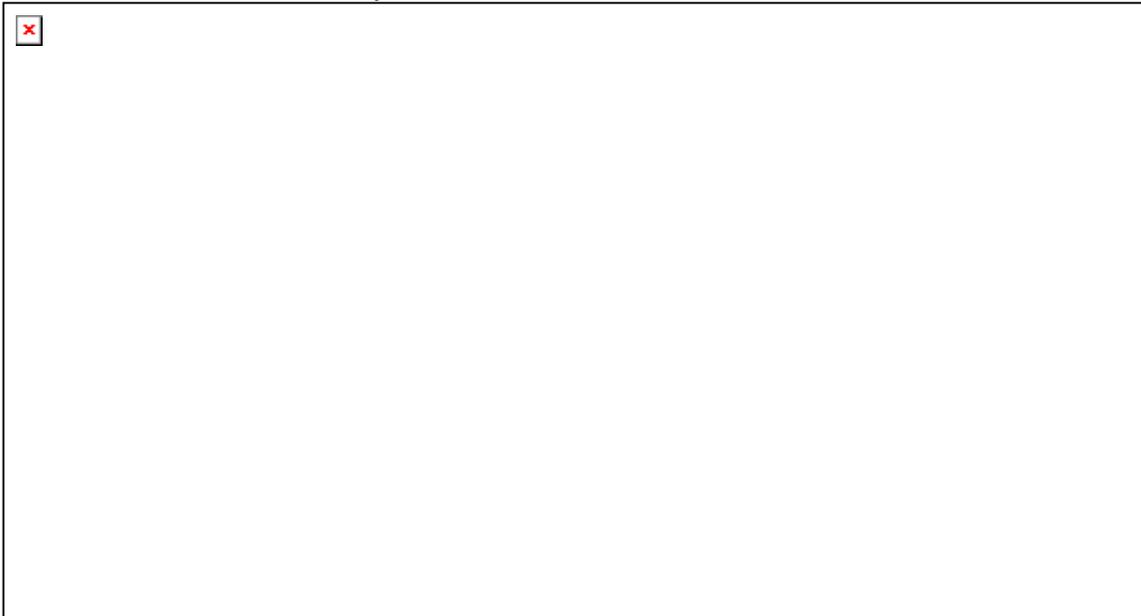
Emergency response to foreign military threats, natural disasters, communicable disease outbreaks, and environmental emergencies on the Great Lakes depends on critical links in the transportation system. These links are at the border itself and on the national highway systems connecting to it.

While long distance trucks, those with both an origin and destination outside the greater Detroit – Windsor region, have an option to use the Blue Water Bridge in Port Huron, without significant time or distance penalties, commercial traffic with an origin or destination in Windsor face a potential penalty of 240 miles or four hours of additional travel time whenever the border crossings or their approaches in the Detroit–Windsor corridor are congested or blocked by traffic incidents (see Figure 9).

The U.S. Congress recognized this dependence when enacting the National Highway System (NHS) Designation Act of 1995. The purpose of the Act is to support the needs of national and civil defense. The border crossing at the Detroit River was expressly recognized in 1995 in U.S. federal law when the Ambassador Bridge, a privately-owned facility, was designated to be on the NHS (note: Both the Blue Water Bridge in Port Huron and the International Bridge at Sault Ste. Marie are also part of the NHS).



**Figure 9**  
**Daily Traffic Flows across the Detroit River**



In addition to transporting personnel and equipment, the border-crossing system supports national security in two other ways:

- **Economic Security:**

The strategic importance of the border is a component of U.S. Homeland Security policies. Michigan links national security to economic security with a focus on maintaining the security of trade flows across the Michigan-Ontario border. A report by the Canadian Standing Senate Committee on National Security and Defense entitled “Defense of North America: A Canadian Responsibility, September 2002,” noted that the Canadian and U. S. economies have effectively merged, becoming “one huge economy.” The report links economics to military security, and calls for greater military collaboration and joint operations, citing the terrorist attack of September 11, 2001.

- **Military/Industrial Logistics:**

The border-crossing system supports military/defense industry logistics. There are almost 700 defense contractors in Michigan and 300 in Canada. They interact, as does the auto industry, through the Detroit-Windsor border. In 1956, the two nations signed a Defense Production Sharing Agreement that provides for Canadian contractors to compete on an equal footing with U.S. contractors in the U.S. market. As with civilian logistics, the increasing integration of military logistics and manufacturing supply chains in the two nations is made possible by an efficient border-crossing system.

Michigan will gain a new modern infrastructure asset to meet the needs of Michigan and U.S. trade with Canada and other countries for decades. NITC has been recognized by many groups as a significant economic catalyst that will drive innovation in our region, put approximately



10,000 Michigan residents to work, and add more than 30,000 associated jobs during construction, while retaining another 25,000 jobs in our state for the long term.

**SIMILAR FACILITIES:**

The proposed new crossing will be located on the Detroit River which is already host to four surface crossings (a twin-tube rail tunnel, a bridge, a highway tunnel, and a ferry) in addition to several international pipelines and electrical grid connections. The three facilities most similar to the proposed new border crossing are the Ambassador Bridge, the Detroit-Windsor Tunnel, and the Detroit-Windsor Truck Ferry (see Figure 10). Contact information for those three crossings follows.

The Ambassador Bridge is owned and operated by the Detroit International Bridge Company and the Canadian Transit Company. Contact information for the Ambassador Bridge is:

The Detroit International Bridge Company  
P.O. Box 32666  
Detroit, Michigan 48232  
Office: (877) 680-6446  
Fax: (586) 755-4899  
Dan Stamper, President  
Detroit International Bridge Company  
Canadian Transit Company

The Canadian Transit Company  
780 Huron Church Road,  
Suite 202  
Windsor, Ontario N9C 2K2  
(519) 977-0700  
Fax (519) 977-1262

The Detroit - Windsor Tunnel is owned by the Cities of Detroit, Michigan and Windsor, Ontario and operated by the Detroit Windsor Tunnel LLC and the Windsor Tunnel Commission.

Contact information for the Detroit - Windsor Tunnel is:

City of Detroit  
Coleman A. Young Municipal Center  
2 Woodward Avenue  
Detroit, Michigan 48226  
Office: (313) 224-3450  
Fax: (313) 224-1475  
TTY: 311 or (313) 224-INFO (4636)  
Email: [311@detroitmi.gov](mailto:311@detroitmi.gov)

City of Windsor  
350 City Hall Square West  
Windsor, Ontario  
Canada N9A 6S1  
Phone: 519-255-CITY (2489)  
Toll free: 1-877-RING311 (746-4311)  
TTY: 1-866-488-9311  
Email: [311@city.windsor.on.ca](mailto:311@city.windsor.on.ca)  
Fax: (519) 256-3311



---

Detroit Windsor Tunnel LLC  
100 East Jefferson  
Detroit, Michigan 48226  
Phone: (313) 567-4422 or  
(519) 258-7424  
Fax: (313) 567-2565

Windsor Tunnel Commission  
350 City Hall Square West,  
c/o City Administrator's Office  
Ontario N9A 6S1 Canada

Neal Belitsky, President/CEO  
Extension 204  
E-Mail Address:  
[nbelitsky@dwtunnel.com](mailto:nbelitsky@dwtunnel.com)

The Detroit-Windsor Truck Ferry is jointly owned and operated by the Detroit-Windsor Truck Ferry and CMT Canadian Marine Transport Ltd.

Contact information for the Detroit-Windsor Truck Ferry is:

Detroit-Windsor Truck Ferry, Inc.  
P.O. Box 09033  
Detroit, Michigan 48209  
Phone: (313) 842-2088  
Fax:(313) 842-2091

CMT Canadian Maritime Transport, Ltd.  
100 – 5550 Maplewood Drive  
Windsor, ON N9C 0B9  
Phone: (519) 972-8280  
Fax: (519) 972-0201

John T. Ward, President  
Detroit-Windsor Truck Ferry, Inc.  
CMT Canadian Maritime Transport, Ltd.  
E-Mail Address: [JohnWard@truckferry.com](mailto:JohnWard@truckferry.com)



Figure 10  
Existing Similar Border Crossings



### TRAFFIC INFORMATION:

Total traffic volumes crossing the Detroit River in 2010 were 10,844,048 vehicles. This is down from the peak year of 1999 when 22,048,681 vehicles crossed the Detroit River using the Ambassador Bridge and the Detroit-Windsor Tunnel. Forecasts for the Detroit River crossings, by the NITC study team, call for future annual traffic volumes to reach 26,800,000 by 2035, which will exceed the capacity of the existing crossings. Because the existing crossings are currently operating below their maximum capacity, the proposed NITC bridge, if constructed, is not expected to “induce” new traffic merely by its presence. Such a phenomenon is frequently observed in congested areas when new roads are constructed (or additional lanes are added to existing roads) and the additional demand that was being suppressed by the former congestion manifests itself.

Distribution of projected future traffic volumes was modeled using two techniques, a single logit model, which is highly sensitive to changes in travel times, and a nested logit model, which reduces the sensitivity to changes in travel times. The travel demand forecasting assumptions and procedures were reviewed by internationally recognized experts in the field and were found to be consistent with the recommended best practices for this type of analysis. (A copy of the forecast document, titled *2004 Travel Model Update Report*, published in September 2005 can be found at <http://www.partnershipborderstudy.com/>.)



---

### **Passenger Car Traffic:**

Passenger car traffic between Detroit and Windsor peaked in 1999 with a total of 18,261,677 crossings, or slightly over 50,000 trips per day. Since then, there has been a steady decline to the 8,045,195 crossings (22,041 trips per day) that occurred in 2010. The majority of the decline can be traced directly to the events of September 11, 2001, and the increased border security efforts and identification requirements that have been in place since that day. This pattern is not unique to the Detroit River crossings, or even to the Michigan-Ontario crossings, but is replicated at all land crossings on both the northern and southern borders. Hope that this trend might be turning the corner appeared in 2008 in the form of Western Hemisphere Travel Initiative (WHTI) compliant (also called “enhanced”) drivers’ licenses (enhanced driver’s licenses are attractive because they are less expensive than a passport and more convenient for those “spur of the moment” trips across the border). New York and Washington began issuing WHTI compliant drivers’ licenses in September 2008, and Michigan began issuing such licenses in May 2009. As the economy begins to turn around and as more people acquire those licenses (or other WHTI compliant documents), a gradual increase in cross border travel is expected to occur. So far in 2011 (through October), passenger car traffic is up 3.2 percent from the same period in 2010.

Passenger car traffic is first and foremost a function of population in the area being measured, and the relationship between where the population lives and the various destinations that population wishes to reach. In border communities, other factors often come into play; the currency exchange rates, the exotic appeal of visiting a foreign country, differences in social customs (like smoking prohibitions, minimum drinking ages, casinos, etc.), and the time and convenience of negotiating the border crossing itself.

The long-term forecasts by the Southeast Michigan Council of Governments (SEMCOG) for both the greater Detroit and greater Windsor areas are for both population and employment growth in the 0.5 percent to 1.0 percent per year range between now and 2035. The passenger car traffic forecast used in the DRIC (NITC) FEIS only projects a return to volumes similar to those observed in 1999 by 2035, and can therefore be considered a conservative forecast.

### **Commercial Vehicle Traffic:**

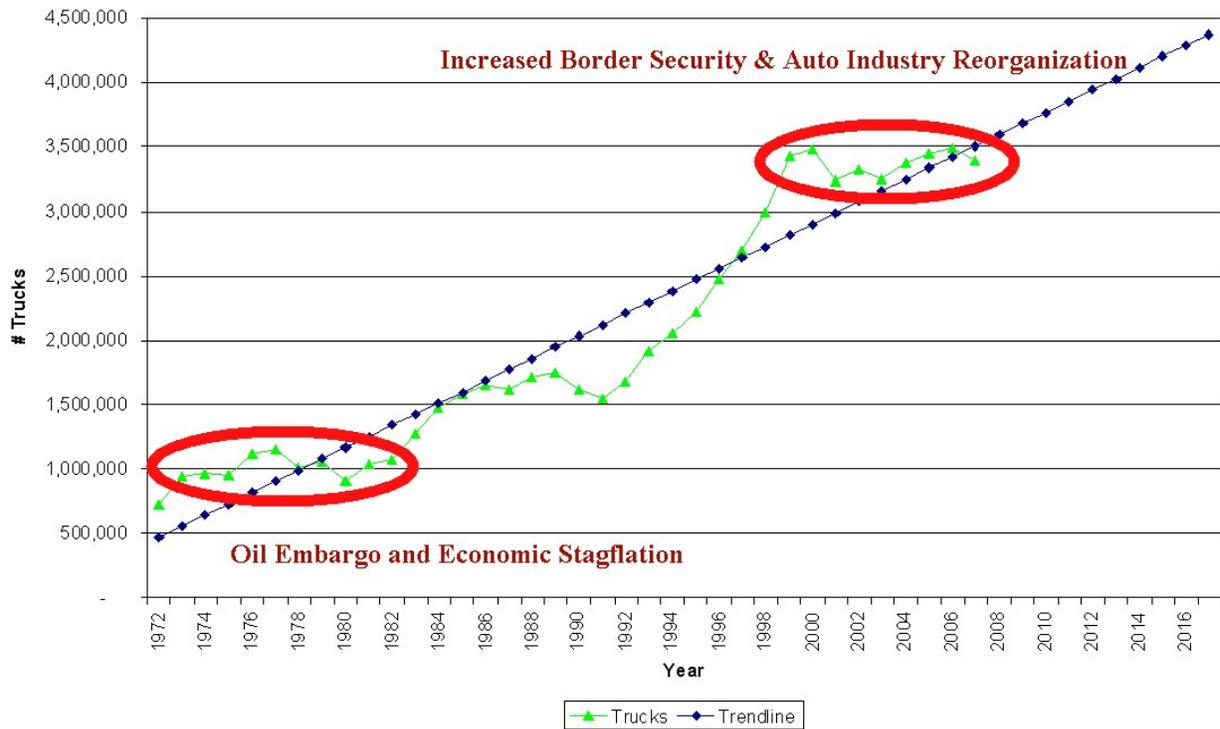
Unlike the passenger car traffic which has suffered declines at the Detroit-Windsor border crossing in every year since 1999, truck traffic peaked in 2000, declined in 2001, rose again in 2002, dropped in 2003, then rose from 2004 through 2006 to match the high volumes mark of 2000, and then declined through 2009 as major construction activities at the Ambassador Bridge and both state & national economic issues took their toll on truck crossing volumes in the Detroit-Windsor corridor (see Figure 11). While not shown on the chart, the 2010 and 2011 truck crossings were 2,683,047 and 2,614,988, respectively, compared to 2,294,239 in 2009.

The NITC project team identified the five major components of the commercial traffic that passes through the Detroit-Windsor border corridor (see Figures 12 and 13). The project team then looked at economic projections for those industries associated with the commodities identified in the database. A brief description of those trade components and the long-term industrial forecasts follows.



Figure 11

Ambassador Bridge  
Truck Traffic and Trends



**Automobiles and Metals:**

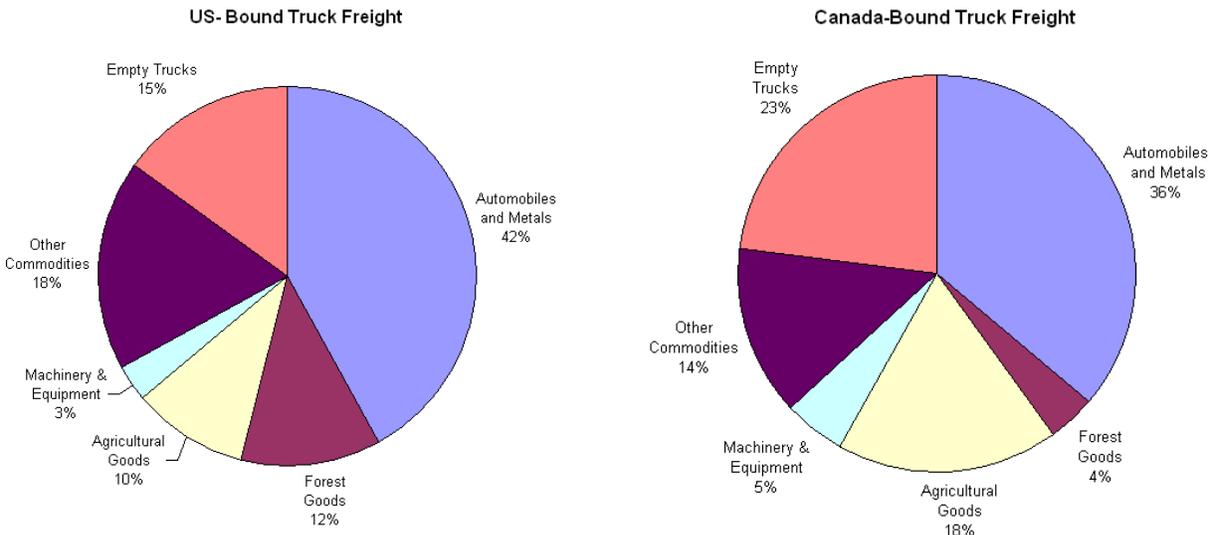
The majority of U.S./Canada trade (77 to 79 percent) in automobiles and metals is with Michigan and other Great Lakes states (Ohio, Indiana, Illinois, and Wisconsin). There is also increasing trade activity with the southern states, such that auto/metal commercial vehicle travel is likely to use the I-75 corridor in increasing volumes over time. Approximately 180 (7 percent) auto/metal Canada-bound trucks per day are actually domestic in-transit trips from Michigan and other Great Lakes states to New York State and the northeastern U.S.

The auto industry remains in transition, with southern U.S. states, Latin America, and Asia likely to play a more significant role in production and distribution within the North American automotive sector. Despite the ongoing uncertainty, the outlook for auto industry trade between Canada and the U.S. is for continued long-term growth, although at rates lower than historic levels given increased competition and globalization in the industry.

The combined automotive/metal sector is projected to increase at 3.5 percent (2005 to 2015), 2.5 percent (2016 to 2025), and 2.0 percent (2026 to 2035) annually for Canadian exports and 3.3 percent (2005 to 2015), 2.7 percent (2016 to 2025), and 2.1 percent (2026 to 2035) annually for Canadian imports in each decade, respectively.



**Figure 12**  
**Truck Freight Commodities in the Detroit-Windsor Trade Corridor**



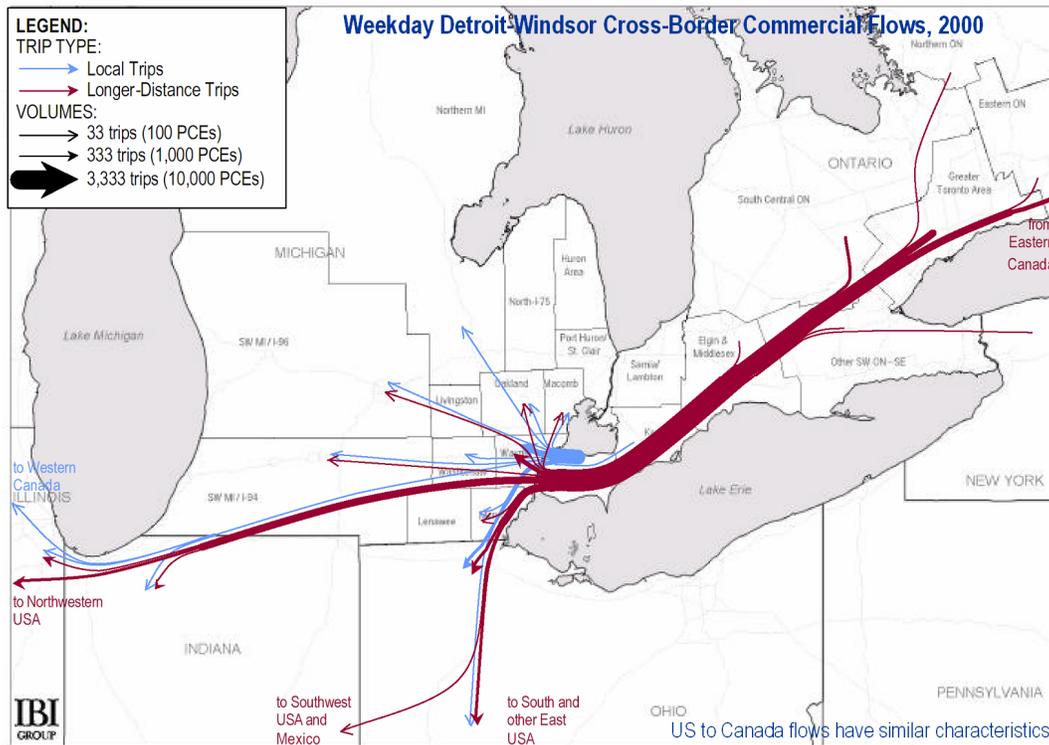
**Forest Goods:**

This sector consists of raw and semi-processed wood material, including pulp, scrap paper and paperboard, wood charcoal, and hardwood and softwood lumber. This sector has also experienced a recent downturn since 2000 following strong growth in the 1990s, transferring from an annual growth of 8.1 percent between 1992 and 2000 and declining by 3.0 percent since. Two-thirds of this trade passing through the Detroit-Windsor corridor is destined for Michigan and other Great Lakes states. More than a quarter of these trips are to/from the southern states, for which I-75 would likely be the route traveled.

Pulp and paper is dominated by the newspaper industry, and it tends to move in cycles with consumer spending, driven by advertising and changing in price and volume. Demand for pulp and paper has continued despite increases in electronic communications, particularly over the Internet. This is expected to change in light of the recent industry-wide consolidation and retrenchment. The other large component of forest products is lumber and related products. In the late 1990's, this component experienced considerable growth, although the growth was curtailed and resulted in declines in trade with the imposition of punitive duties that increased the price of Canadian softwood lumber by approximately 30 percent.



**Figure 13**  
**Commercial Traffic Flows**



This sector continues to be a sensitive issue in Canada-U.S. trade. Rising electricity prices, changes in the Canadian dollar, and high wood fiber costs in the northeast introduce additional challenges. Nevertheless, the prospects for growth appear good in the near term due to rising prices and continued demand. Government of Canada projections call for low to moderate growth and a narrowing of the trade gap, with Canadian exports growing at 1.3 percent (2005 to 2015), 1.0 percent (2016 to 2025), and 0.9 percent (2026 to 2035) annually in each decade and Canadian imports growing at 2.9 percent (2005 to 2015), 2.2 percent (2016 to 2025), and 1.8 percent (2026 to 2035). This growth represents the lowest among the five sectors analyzed.

**Agricultural Goods:**

This sector has not experienced the recent decline in trade of the previous commodities, showing moderate to strong annual growth of 5.9 percent over the past 13 years. The agricultural sector has been affected by ongoing trade disputes in beef, pork, and chicken, among other areas. However, up until the economic collapse that occurred in late 2008, strong economic activity and employment in the U.S. had steadily increased demand for prepared food and beverages.

Government of Canada projections of growth of Canadian imports is expected to slightly outpace exports at rates of 3.8 percent (2005 to 2015), 3.9 percent (2016 to 2025), and 2.8 percent (2026 to 2035).



---

to 2035) annual, relative to 2.3 percent (2005 to 2015), 3.0 percent (2016 to 2025), and 2.3 percent (2026 to 2035) in each of the three decades, respectively.

**Machinery & Equipment:**

Although the machinery/equipment category represents a large portion of the value of trade crossing at the Detroit River, the proportion of trucks is quite small due to the large value of goods carried per truck. A slightly higher proportion of these trips are to/from the I-94 corridor than the I-75 corridor in the U.S.

This group consists of such items as office machinery, aircraft and locomotive engines, electronics, and other household and industrial machines. After a steep climb in trade during the 1990s, recent trade has been depressed following the collapse of the high-tech sector in the early years of this decade and the recent economic malaise that followed the financial sector meltdown that occurred in late 2008. Total trade growth was 9.5 percent annually during the 1992 to 1999 period, but declined almost as dramatically by 5.1 percent annually between 1999 and 2004.

Machinery and equipment is projected to be the fastest growing sector, with the dominant direction of trade continuing to be from the U.S. to Canada. This growth is expected to be spurred by low interest rates and aging capital equipment and strong demand for IT products. This trade gap is projected to widen further given large growth in Canadian imports that are forecast, which the Government of Canada estimates at 6.2 percent (2005 to 2015), 4.7 percent (2016 to 2025), and 3.1 percent (2026 to 2035) annually in each decade. Canadian exports are expected to be almost as strong, growing at 4.6 percent (2005 to 2015), 3.3 percent (2016 to 2025), and 2.4 percent (2026 to 2035) annually. This growth is consistent with strong global demand for manufacturing inputs and robust commodity prices.

**Other Commodities:**

The “other commodities” category represents over 1,000 commercial vehicles per direction on a given weekday at the Detroit River crossings. These are slightly longer -distance on average, approximately 55 percent to/from Michigan and other Great Lakes states, and roughly one-quarter to/from the southern states, indicating a slightly higher likelihood of using I-75.

This sector consists of such items as chemicals and plastics, energy, minerals, textiles, and other consumer products not included in the previous sectors. While this sector has also undergone a decline since 2000, it has not been quite as significant as the other sectors analyzed. Previously, it has grown by 6.4 percent annually from 1992 to 2000. Government of Canada projections show strong growth of Canadian exports in the first decade (2005 to 2015), outpacing imports at 3.7 percent annually relative to 3.3 percent. However, the trade gap is expected to widen further due to annual growth of imports of 2.9 percent (2016 to 2025) and 2.3 percent (2026 to 2035), relative to 2.6 percent (2016 to 2025) and 2.0 percent (2026 to 2035) for exports.



### **Commercial Vehicle Forecast:**

In total, annual two-way commercial vehicle demand is projected (see Table 1) to increase from 3.53 million trucks per year in 2004 to 8.06 million trucks per year in 2035, representing a 128 percent total increase, or a 2.7 percent average annual increase. While Canada to the U.S. will remain the peak direction in terms of trade, the trade deficit is projected to decrease in the future with U.S. to Canada flows increasing at a faster rate, although remaining lower in absolute terms.

As indicated in several of the commodity descriptions above, international commercial traffic using the I-75 corridor is expected to increase over the forecast period due to the shifting of manufacturing capacity in the U.S. from the Great Lakes states to the southern states.

The narrowing of the trade gap results in a lower proportion of empty trucks for U.S. to Canada flows. Total commercial vehicle trips, including empty vehicles from Canada to U.S. are greater than U.S. to Canada given triangulation in commercial vehicle routing. Many vehicles enter the U.S. via the Ambassador Bridge but return to Canada via other crossings (e.g., the BWB in Port Huron, the International Bridge at Sault Ste. Marie, or the Peace Bridge in Buffalo, New York).

### **Other Commercial Traffic Forecasts:**

Several forecasts for commercial traffic in this corridor, covering the same time period (2004 through 2035), are available for comparative purposes (see Table 1).

Two of these forecasts were prepared for the Detroit International Bridge Company, owners of the existing Ambassador Bridge. One of these was used to support their application for the use of Private Activity Bonds (PAB's) to finance their "Enhancement Project," which is the construction of a replacement span for the Ambassador Bridge. This forecast called for commercial traffic through the Detroit - Windsor corridor to increase from 3,530,000 trucks in 2004 to 10,112,003 trucks in 2030, a 186 percent increase, averaging 4.13 percent per year. The second of these forecasts took the assumption that there would be little or no appreciable growth in commercial traffic in this corridor for the foreseeable future.

An independent forecast came from IHS Global Insights, an internationally respected private sector business forecasting firm. On June 9, 2008, at the Annual Northeast Association of State Transportation Officials (NASTO) Conference, Joseph Waldo, a Senior Consultant for IHS Global Options said, "Currently the number of trucks traveling through the Toronto-Detroit corridor is approximately 5 million annually. We at Global Insights have projected that to increase to 12 million by 2020."



**Table 1**

Comparison of Truck Forecasts in the Detroit Windsor Corridor					
Forecaster	2004 (actual)	2020 - DIBC 2020 – GI 2025 – DRIC 2025 – WSA	Total % Increase Ave % per year	2030 – DIBC 2035 – DRIC 2035 – WSA	Total % Increase Ave % per year
Historic Growth Rate (1972-2010)			200.3%*  2.94% per year		200.3%*  2.94% per year
DIBC PAB Application	3,531,185	8,055,284	128% 5.29%/year	10,112,003	186% 4.13%/year
Halcrow (DIBC)	3,531,185	3,560,000 (2020) 3,750,000 (2025)	0.8% (2020) 0.05%/year (16 years) 6.2% (2025) 0.29%/year (21 years)	3,910,000 (2030) 4,070,000 (2035)	10.7% (2030) 0.39%/year (26 years) 15.3% (2035) 0.46%/year (31 years)
Global Insight	3,531,185	8,220,017	132% 5.42%/year	N/A	
NITC	3,531,185	5,180,000	46.7% 2.42%/year	8,060,000	128% 2.7%/year
WSA	3,531,185	10,868,000	207% 6.09%/year	11,615,000	229% 4.19%/year

\* Total growth in truck traffic in the Detroit Windsor corridor between 1972 (912,240) and 2010 (2,739,504)

The IHS Global Insights forecast combines the Detroit/Windsor and Port Huron/Sarnia crossings when they say 5 million trucks (for 2007, trucks crossing at Port Huron = 1,613,997, trucks crossing at the Detroit-Windsor Tunnel = 111,082, and trucks crossing at the Ambassador Bridge = 3,398,745, for a total of 5,123,824 trucks). Subtracting the Port Huron portion (31.5 percent) from the projection, this leaves a projection of 8,220,017 trucks in the Detroit-Windsor corridor in 2020, for a total growth from 2004 of 133 percent or 5.42 percent per year.

There were also two NITC related traffic forecasts. The first of these were done in connection with the FEIS. The second forecast, an investment-grade, Traffic and Revenue Forecast was initiated at the request of the Michigan Legislature and was published by Wilbur Smith Associates (WSA) in the spring of 2010.



---

Based on these comparisons, the NITC project team is confident that the project projections are reasonable.

**Trends:**

Despite the fact that the NITC traffic forecast has been validated by internationally respected and independent reviewers, there are those who claim that the recent (10 year) period of little or no growth in the border crossing corridor is evidence that all of the traffic growth potential in the corridor has been exhausted.

As Figure 10 illustrates, multi-year flattening of the growth curve in this corridor are not uncommon, with the current plateau being the third to occur over the past 35 years. Of particular note is a similar 10 year flat growth period that occurred between 1973 and 1983. This demonstrates that the current 10 year plateau is not unique. (the third plateau, from 1986 to 1992 is connected to problems in the savings and loan industry in the late 1980s and the first Gulf War.)

**ESTIMATED IMPACTS OF THE PROPOSED NITC BRIDGE ON EXISTING BORDER CROSSINGS:**

Following are the estimated impacts of the proposed NITC bridge on existing crossings (see Table 2). One crossing that is not included in this assessment is the Detroit-Windsor Truck Ferry. It is impossible at this point in time to assess the impacts that the new bridge will have on the operations of the truck ferry. Currently, the truck ferry accommodates oversized loads and hazardous cargoes that are prohibited in both the Detroit-Windsor Tunnel and on the Ambassador Bridge. At the Blue Water Bridge hazardous cargoes are allowed but are limited to certain hours of the day and in some cases also require an escort. Preliminary engineering for both the NITC bridge and federal inspection plaza has proceeded under the assumption that there will not be any prohibited cargoes, although there may be restrictions as to when and how certain cargoes would be allowed to use the bridge. No conclusion can be reached regarding the economic viability of the Detroit-Windsor Truck Ferry until a decision is made whether the new NITC bridge will, or will not, carry hazardous materials. A final decision on this issue will involve input from Homeland Security.

**Summary:**

1. As identified in the FEIS, a NITC bridge would impact projected future traffic volumes, and, therefore, expected revenues at the three major existing border crossings in southeast Michigan.
2. Michigan does not currently have access to the detailed financial data necessary to definitively determine if the viability of either the Detroit-Windsor Tunnel or the Ambassador Bridge is threatened.
3. Based on Table 2 below, Michigan does not believe that the financial viability of any of the existing crossings is threatened by a NITC bridge.



**Note on Cost Estimates:**

Estimates of operations and maintenance costs cited in this assessment are for normal operations and maintenance and do not include the costs of large capital projects (like a plaza expansion) and capital maintenance projects (like bridge painting and roadway re-decking). In estimating the impacts of the proposed NITC bridge on the exiting crossings, we allowed both operation and maintenance costs to rise at five percent per year. As a point of reference, observed operation cost increases at the Blue Water, Mackinac, and International Bridges have been averaging three percent per year or less over the last 10 years. Observed increases in maintenance costs at those same facilities over the past 10 years have been averaging around 4.5 percent per year.

**Note on Revenue Estimates:**

Revenue estimates in this assessment rely solely on estimates of toll revenues based on projected traffic volumes and published toll schedules in November 2009. (Toll rates for traffic headed to Canada over the BWB were raised in January 2010, while toll rates at the Ambassador Bridge, the Detroit Windsor Tunnel and on traffic heading into the U.S. on BWB all rose prior to November 2009.)

The analysis also assumes that the proposed Canadian charged tolls for NITC bridge will be comparable tolls to those already in effect at the Ambassador Bridge and the Detroit-Windsor Tunnel. This analysis holds tolls constant over the 30-year forecast period in recognition of the fact that increased competition at Detroit-Windsor border crossings will make future toll increases much more difficult to impose. Revenue from leases, duty free stores, or other revenue sources associated with a particular crossing are not included in this assessment.

Future traffic projections were modeled in two ways, using a single logit model which is highly sensitive to changes in travel time, and a nested logit model which is less sensitive to changes in travel times additional details about these two modeling approaches can be found in the DRIC (NITC) FEIS.



**Table 2**

Facility	Forecasting Model		Estimated Current Revenues	Estimated Future Revenues	
				2008	2015
<b>Ambassador Bridge</b>	Single Logit	Revenue	\$67.42	\$41.03	\$65.96
		Costs	\$15.00	\$22.16	\$58.80
		<b>Net</b>	<b>\$52.42</b>	<b>\$18.87</b>	<b>\$7.16</b>
	Nested Logit	Revenue	\$67.42	\$84.10	\$121.91
		Costs	\$15.00	\$22.16	\$58.80
		<b>Net</b>	<b>\$52.42</b>	<b>\$61.94</b>	<b>\$63.11</b>
<b>Blue Water Bridge</b>	Single Logit	Revenue	\$29.08	\$41.07	\$63.66
		Costs	\$10.30	\$15.22	\$40.38
		<b>Net</b>	<b>\$18.78</b>	<b>\$26.85</b>	<b>\$23.28</b>
	Nested Logit	Revenue	\$29.08	\$33.53	\$52.44
		Costs	\$10.30	\$15.22	\$40.38
		<b>Net</b>	<b>\$18.78</b>	<b>\$18.31</b>	<b>\$12.06</b>
<b>Detroit Windsor Tunnel</b>	Single Logit	Revenue	\$17.62	\$25.08	\$29.01
		Costs	\$4.52	\$6.68	\$17.72
		<b>Net</b>	<b>\$13.10</b>	<b>\$18.40</b>	<b>\$11.29</b>
	Nested Logit	Revenue	\$17.62	\$22.64	\$25,12
		Costs	\$4.52	\$6.68	\$17.72
		<b>Net</b>	<b>\$13.10</b>	<b>\$15.96</b>	<b>\$7.40</b>



---

## **CONSTRUCTION PLAN:**

The NITC schedule, which was developed in coordination with the Canadian DRIC project team, calls for this bridge to be open to traffic within seven years of approval of the Presidential Permit to proceed. Both project teams recognize that this is an aggressive, but achievable schedule.

### **Federal Inspection Station (FIS) Financing:**

During the preparation of the FEIS, GSA staff indicated to the project team that their preference was for GSA to purchase and construct the FIS portion of the NITC plaza. However, due to both budgetary constraints and other priorities within GSA, the FIS for the NITC border crossing will likely be financed by a long-term, renewable capital lease, with Michigan retaining ownership of the plaza property, leasing or licensing the property to the Crossing Authority and Crossing Authority leasing or –sub-leasing the property to GSA. Under this arrangement, the entire plaza would initially be included in any the project undertaken by the Crossing Authority, with the Crossing Authority to be repaid with toll revenues and annual lease payments from GSA. GSA would retain supervisory control over all the facilities on the FIS portion of the plaza.

Nevertheless, GSA staff have indicated to the NITC project team that it is still their preference, if funding were available, to have outright ownership over both the land that the FIS sits upon as well as all the facilities on that land. Under this approach, either the GSA would acquire the land directly, or Michigan would need to acquire and assemble all Right of Way (ROW) associated with this project, clear the property of any existing structures, remediate for any environmental issues that may be present (i.e., soil contamination, etc.), get the city to vacate the streets and alleys within the plaza area, relocate any utilities underlying the site, and then, subject to required authorizations, sell the property to GSA at a price equal to the going rate in the Detroit area for “clean and green” vacant land. While GSA staff have indicated to Michigan that the purchase price is open to a certain degree of negotiation, it is apparent to the project team that a significant portion of these “land preparation” costs may not be covered by the final purchase price. This does not change the overall cost of the project.

Under the capital lease structure, it is anticipated Crossing Authority would recover all costs associated with the FIS over the span of a capital lease and/or its renewal. However, if GSA opts for purchase of the FIS, there may be repayments to the Crossing Authority that will need to be covered by the toll structure.

### **Bridge Naming:**

A bridge name has not been selected. Preliminary discussions between Michigan and Canadian officials regarding the selection of a bridge name have not advanced.

### **Permitting:**

There are two permits that have a high priority from a scheduling perspective, the Presidential Permit and the Coast Guard Permit. Other permits identified as necessary for the construction of



---

the project require an advanced level of design work to have been completed prior to the application being filed.

### **Presidential Permit:**

The construction and maintenance of facilities at the U.S. border and/or facilities connecting the U.S. with a foreign country require the issuance of a Presidential Permit in accordance with Executive Order 11423, as amended. The U.S. Department of State processes permit applications for a variety of border crossing facilities, including bridges. To issue a permit, the department must find that the border facility would serve the national interest. The department consults extensively with relevant federal, state, and local agencies, and invites public comment in arriving at this determination. The U.S. Department of State was a cooperating agency during the preparation of the DRIC (NITC) FEIS (see Appendix A), so an additional environmental impact statement is not expected to be required to support the issuance of the permit. This document represents a formal request from the State of Michigan for such a permit.

### **Coast Guard Permit**

The General Bridge Act of 1946, as amended, the Rivers and Harbors Act of 1899, as amended, and the Act of March 23, 1906, as amended, all require that the location and plans of bridges and causeways across the navigable waters of the U.S. be submitted to and approved by the Secretary of Transportation prior to construction. This authority was then delegated to the commandant of the U.S. Coast Guard by the Secretary of Transportation by Department of Transportation Order 1100.1 dated 31 March 1967 (49 CFR 1.46(c)). The International Bridge Act of 1972 (33 U.S.C. 535, 535c-535h), extends the Coast Guard jurisdiction to the construction, modification, operation, and maintenance of any bridge connecting the U.S. with a foreign country.

These Acts placed the navigable waters of the U.S. under the exclusive control of the U.S. Coast Guard to prevent any interference with their navigability by bridges or other obstructions, except by express permission of the U.S. Government. Under the previously mentioned Acts, the Coast Guard's mission is to administer the Bridge Administration Program. The Coast Guard approves the location and plans of bridges and causeways and imposes any necessary conditions relating to the construction, maintenance, and operation of these bridges in the interest of public navigation.

According to the instructions on the Coast Guard Web site, an application for a Coast Guard permit cannot be submitted until after a Presidential Permit has been issued. Like the State Department, the Coast Guard was a cooperating agency during the DRIC (NITC) FEIS, so an additional environmental impact statement is not expected to be necessary to support the issuance of the permit. Several discussions were held with the Coast Guard during the environmental study and the preparation of the Conceptual Engineering Report to ensure that the conceptual designs met Coast Guard requirements for both vertical and lateral clearances. Another product of those discussions is the fact that the NITC bridge will not have any piers in the water of the Detroit River. Since there are no piers in the water, the proposed bridge will have no impact on the level or flow of the Detroit River. The project is being designed to direct all runoff water from the structure into onshore holding ponds at both plazas for transfer to the



---

respective treatment plants in Detroit and Windsor. This will help to ensure that the new bridge has no appreciable impact on the river. The project team has a copy of the Coast Guard permit application and will have a completed draft ready to submit as soon as the Presidential Permit for the NITC has been issued. If necessary, the draft application will be updated to reflect issues that may arise during the Presidential Permit review process to ensure that the Coast Guard permit application is consistent with the terms of the Presidential Permit.

### **State Department Approval:**

Under the provisions of the International Bridge Act of 1972 (33 U.S.C. 535a), the State Department has the authority to review and approve/disapprove any agreements between a state, county, or municipality and the Government of Canada, a Canadian Province, or a subdivision or instrumentality of either, in the case of a bridge connecting the U.S. and Canada,

A request for this approval can either be submitted as part of the Presidential Permit application or it can be requested and issued separately. As noted above, the State Department was a cooperating agency during the DRIC (NITC) FEIS, so an additional environmental impact statement is not expected to be required to support this approval process. The final executed version of the agreement is attached as Appendix B to this agreement. This application is a formal request for State Department approval.

### **Other Permits:**

During the preparation of the DRIC (NITC) FEIS, the project team identified a number of permits that may be required for this project to be completed. Because this list was created when there were still several practical alternatives under study, the selected alternative may not require all of the permits listed. All of the permits listed below require the submission of advanced design plans as part of the permit application.

- Section 9 Rivers and Harbors Act of 1899 Permit
- Section 10 Rivers and Harbors Act of 1899 Permit
- Section 401 Water Quality Certification
- Section 402/Part 31 National Pollutant Discharge Elimination System Coverage
- Part 31 Floodplain Permit (combined with the Part 301 Permit)
- Section 404/Part 303 Permit
- Part 301 Inland Lakes and Streams Permit
- FAA Tall Structures Permit (if needed)
- Air Quality Permit (if needed)
- Possible Zoning Changes
- Building Permits
- Occupancy Permits/Commissioning
- Closure and Abandonment of existing city streets and alleys
- Closure and Abandonment of existing utility easements



---

### **P3 Procurement Activities:**

P3s are created when public sector agencies join with private sector entities, entering into a business relationship to share risk while pursuing a commonly shared goal linked to the objectives of the individual partners.

Upon receipt of the Presidential Permit, the Crossing Authority and an advisor on P3 issues will coordinate with the jointly created International Authority to draft a Request for Qualifications (RFQ) that contains provisions acceptable to both Michigan and Canada.

### **Preliminary Scheduling and Phasing Plan:**

As noted above, the proposed timeline for this project is acknowledged to be aggressive but achievable. The project team has prepared a Preliminary Project Phasing Plan, consistent with the schedule shown below, that meets the target goal of “open to traffic” within seven years of the approval of a Presidential Permit.

Meeting this schedule requires that ROW acquisition and design work on some elements of the project must be initiated before a P3 partner has been selected and put under contract.

A brief summary of the seven year schedule is as follows:

#### ***Year 1 :***

- Obtain ROD (Completed).
- Obtain Presidential Permit.
- Finalize agreement with Canada.
- Begin utility relocation design.
- Begin ROW acquisition for total takes of platted lots.
- Begin design survey.

#### ***Year 2 :***

- Complete Interchange design. Begin service drive, crossroad, and “Gateway Corridor” design.
- Complete critical utility design for the project and begin construction of the critical utility relocations for the plaza, main span, and the “Gateway Corridor.”
- Acquire ROW, initially focusing on parcels required for utility relocations, plaza buffer area, plaza, main span, and the “Gateway Corridor.”
- Begin advanced acquisition of long lead items for the main span. Begin bridge and approaches if ROW is acquired.



---

**Year 3:**

- Construct off-system traffic mitigation improvements, if required, for signed detours (Fort Street) or potential alternate routes (Lafayette Boulevard).
- Complete design for the service drives, crossroads, and “Gateway Corridor.”
- Begin utility relocations for the service drives and crossroads.
- Complete utility relocations required for the “Gateway Corridor” and miscellaneous roads.
- Construct north bound and south bound lanes of the “Gateway Corridor” improvements
- Begin construction of main span.

**Year 4:**

- Complete main span and plaza design.
- Complete all ROW acquisitions.
- Complete hazardous soil remediation.
- Substantially complete utility relocations for the service drives and crossroads.
- Begin service drive construction.
- Replace crossroad bridges and approaches at Green Street and Livernois Avenue.
- Continue main span and approaches.

**Year 5:**

- Continue additional segments of the service drives and construct ramps E, F, G, and H
- Remove crossroad bridges at Waterman, Dragoon, and Junction Streets
- Continue main span and approaches
- Begin construction of the toll and inspection plazas

**Year 6 :**

- Continue construction of service drives at Clark and Springwells Streets.
- Part width construct Springwells and Clark interchanges.
- Begin plaza interchange ramps.
- Continue main span.
- Continue the toll and inspection plazas.

**Year 7 :**

- Complete remaining segments of the service drives.
- Complete Springwells and Clark interchanges.
- Complete main span.
- Complete plaza.
- Complete interchange ramps.
- Construct local street improvements.
- New crossing open to traffic within seven years of approval to proceed.



## **FINANCING:**

The engineering consultants retained by Michigan and TC developed preliminary cost estimates for the development of all the project elements. The total cost for the project is estimated at \$2.15 billion in 2009, of which \$1.3 billion are related to assets on the U.S. side and \$0.85 billion on the Canadian side (see Figure 14).

As mentioned previously, the preferred financing mechanism for this project is a P3 Concession Agreement entered into by the Crossing Authority (with oversight by the International Authority) with the Concessionaire being responsible for arranging the financing for the bridge. The Canadian government has committed to an upfront additional investment of up to U.S. \$550 million to cover costs that would normally have been incurred by the State of Michigan for the U.S. portion of the project (see Appendix F). This includes the U.S. interchange and the U.S. Plaza (other than the FIS Plaza) (see Figure 14). Canada has also pledged to fund annual Availability Payments to the Concessionaire which will be used to operate and maintain the bridge and to repay the Concessionaire's financing costs and provide a return on its investment. Both Canada's additional equity investment and its Availability Payments will be recouped by future toll revenue.

On the Canadian side of the border, the new access road between the bridge plaza and Highway 401, called the WEP, will cost C\$1.4 billion. This P3 project between MTO and a concessionaire is jointly funded by Canada and the Province of Ontario.

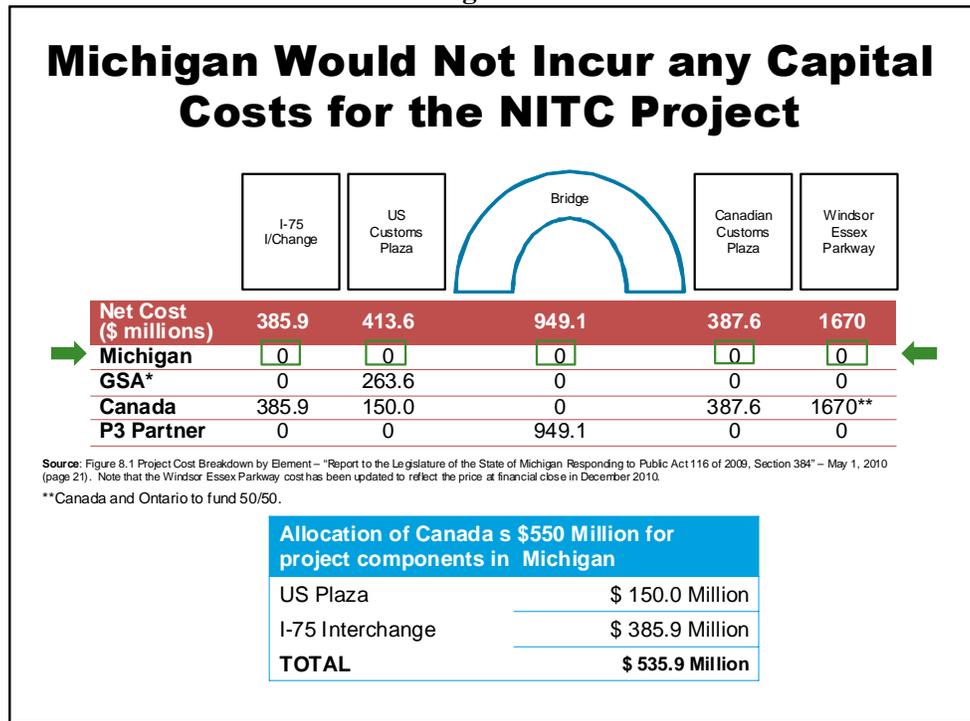
MDOT has already placed the NITC project into the SEMCOG Long-Range Plan, as required by FHWA regulations.

The Crossing Authority intends to engage in value engineering and invite the private sector to provide innovative ideas to reduce the cost of the project and provide further economies.

Finally, an agreement has been reached with FHWA to use the U.S. \$550 million Canadian investment in Michigan infrastructure toward the matching funds required for all federally funded projects across our state. This agreement will support critical projects and allow Michigan to leverage up to \$2.2 billion in federal transportation dollars (see Appendix F).



Figure 14



\* This amount may be funded by the GSA or by the Crossing Authority, or both, as described under Federal Inspection Station (FIS) on page 34.

**CANADIAN COORDINATION**

In 2000, FHWA, MDOT, TC, and MTO formed the Border Transportation Partnership (Partnership). The partners agreed to study the border crossing needs for the southeast Michigan/southwest Ontario border crossing area to address both the existing issues and any additional issues that could be anticipated in the next 30 years.

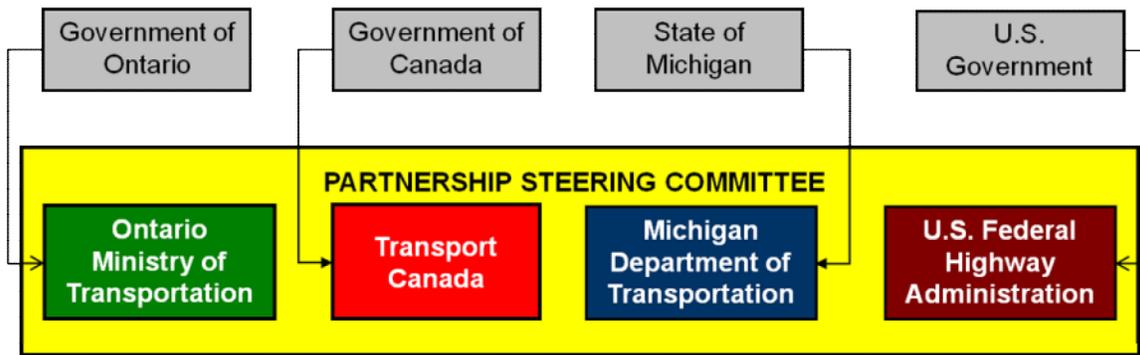
The Partnership played a coordinating role to ensure that the project continued to move forward at a similar pace on both sides of the border. The Partnership operated through two committees, the Steering Committee and the Working Group (see Appendix D for a copy of the partnership agreement).

**Steering Committee:**

Representatives from the four organizations that make up the Bi-National Partnership formed the Partnership Steering Committee (see Illustration 3). The role of the steering committee was to provide overall coordination of the environmental assessments and project delivery, to address policy issues, and adjudicate any conflicts between the U.S and Canadian construction schedules.



**Illustration 3  
Partnership Steering Committee**



**Working Group:**

The Working Group was made up of project managers and technical staff assigned to the project from the four partnering agencies and from the consulting teams working on the project. This group met periodically, as needed, to address day-to-day issues as they arose during the study processes. Any issues that could not be resolved by the Working Group were taken to the Steering Committee.

The events of September 11 added extra emphasis to the ongoing study as it highlighted security issues and their impacts on traffic flows, which had not previously been a significant problem. The resulting Planning/Needs and Feasibility Study, published in January, 2004, found that additional border capacity was needed to meet projected demand and additional redundancy was needed for economic security purposes in the Detroit/Windsor border crossing area.

Following the publication of the Planning Needs and Feasibility Study in 2004, the Partnership initiated the environmental studies necessary to comply with the National Environmental Policy Act (NEPA) in the U.S., the Ontario Environmental Assessment Act and the Canadian Environmental Assessment Act.

The FEIS for the U.S. portion of the NITC project was signed on November 21, 2008. The ROD was issued on January 14, 2009. The Environmental Assessment (EA) for the Canadian portion of the project was published in December 2008. In April 2009, the Ministry of the Environment (MOE) issued its review of the Canadian EA document, finding that the EA had been properly prepared and that adequate opportunities for participation and comment had been demonstrated. Final approval of the Canadian document was received in November 2009.

The Governance Agreement will replace the Partnership Agreement while continuing the spirit of cooperation and collaborative efforts of the Partnership that shepherded this project through



---

the environmental clearance processes on both sides of the border. A copy of the Governance Agreement can be found in Appendix B.

**Financing of the Canadian Portion of the Project:**

As noted earlier in this document, the preferred financing mechanism for the bridge is through a P3, with the private sector partner (concessionaire) being responsible for the design, construction, financing, and eventual operation of the bridge for a fixed time period. The length of the concession contract is expected to be adequate to allow the concessionaire to recoup the financing costs from availability payments, supplemented by lease payments from a duty free store on each plaza and by leases for broker's facilities on each plaza.

The Canadian toll and inspection plazas will be financed by the Canadian Government or the Concessionaire.

The 12 km access road connecting the plaza to Highway 401 also is under construction via a P3 arrangement between MTO and the access road Concessionaire. The concessionaire's costs for the access road will be repaid through shadow tolls on the access road.

**Known Views of Canadian Officials:**

*Federal Transportation Minister John Baird said Wednesday his government is committed to building a downriver bridge in Windsor and dismissed the Ambassador Bridge's twin span proposal.*

*"This bridge will be built," said Baird in a keynote address at the International Multimodal Conference at Caesars Windsor.*

*Baird said the federal government is "committed to move full speed ahead on getting a new Detroit-Windsor bridge built and will do everything we can to move forward quickly."*

**The Windsor Star May 7, 2009**

<http://www.windsorstar.com/Minister+links+bridge+jobs/1571386/story.html>

*Improved infrastructure must be a key part of this – having the capacity to separate the low risk from the high risk. Two principle projects will be integral to this. Canada and the U.S. are moving forward on the new Detroit Windsor crossing.*

*The Record-of-Decision made by the U.S. Government on January 14 regarding the location of the new bridge is a very positive development. On the Canadian side, we are making the parallel investments in the new access road to the Canadian end of the new bridge.*

*The new crossing will provide economic stimulus to communities on both sides of the border and indeed to both countries. As well, the construction of new roads, inspection plazas and the bridge will provide much-needed jobs in the region.*

**The Honorable Michael Wilson, Canadian Ambassador**



---

**Speaking to the Border Trade Alliance (BTA) International Conference and Congressional Briefing. Washington DC, April 20 & 21, 2009.**

<http://www.thebta.org/content/2009/04/29/canadian-ambassador-to-the-us-michael-wilson-addresses-bta-international-conference-2009/>

*I am writing to reaffirm the Government of Canada's offer to increase its financial participation in the Detroit River International Crossing project up to U.S. \$550 million as described in former Minister of Transport, Infrastructure and Communities, John Baird's April 29, 2010 letter.*

**The Honorable Chuck Strahl, P.C., M.P.  
March 25, 2011, letter to Governor Rick Snyder**

See also Appendix D for a copy of a May 28, 2009 letter from Ambassador Wilson to the Michigan Speaker of the House of Representatives, the Honorable Andy Dillon, and to the Michigan Senate Majority Leader, the Honorable Mike Bishop, regarding Canada's interest in the NITC Project.

*Last year I accompanied the former Minister of Transport, John Baird, when he appeared before the Senate Transportation Committee. At that time, Minister Baird stated: "Since Michigan will not be funding this project, Michigan taxpayers will bear no risks in this transaction." I am here to reiterate that this remains the position of the Government of Canada.*

**The Honorable Helena Borges, Associate Assistant Deputy Minister for Policy – Gateway and Infrastructure at Transport Canada.**

**In testimony to the Michigan Senate Economic Development Committee, June 15, 2011.**



# **Appendix A**

## **DRIC (NITC) ROD**



# **Appendix B**

## Governance Agreement



# **Appendix C**

## **DRIC (NITC) Streamlining Agreement**



# **Appendix D**

## **Border Partnership Documents**



# **Appendix E**

## **Letter from Ambassador Wilson**



# **Appendix F**

## Letters related to the C\$550 Million Commitment

20,156,222.3\060531-00070