# Windsor Border Initiatives Improving Canada's Premier Land Border Crossing

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#### ABSTRACT

The four international border crossings at Windsor-Detroit carry 35% of Canada-U.S. trade per year. More than 38,000 cars, buses, and trucks traverse the truck ferry, bridge, and tunnel crossings on average each day. This volume of traffic taxes the existing infrastructure and is only expected to grow, putting more strain on the out-of-date system.

The Government of Ontario partnered with the Governments of Canada, Michigan, the U.S., and local municipalities in Windsor-Essex to determine how to improve transportation infrastructure, where investments would make the most sense, and how to plan for long-term strategies for future growth.

This partnership translated into the *Let's Get Windsor-Essex Moving* strategy and the Detroit River International Crossing study. The former, a \$300 million joint investment by Ontario and Canada to address short- and medium-term issues in the network. The latter, a bi-national study of improvements to the international connection that would finally connect Highway 401 to the U.S. interstate system through an international border crossing.

Together, these two initiatives are managed by a team of provincial experts in engineering, transportation and environmental planning, traffic management, real estate, construction, policy and communications, falling under the umbrella of the Ontario Ministry of Transportation (MTO).

The team tasked with studying and implementing improvements, targeting investments where they were needed most was MTO's Windsor Border Initiatives Implementation Group. Their work included road-rail grade separations, infrastructure improvements at existing border crossings, and the use of Intelligent Transportation Systems in both permanent and temporary locations.

The work would require unique management and partnership structures with local and regional governments. Legal agreements regarding project management and continued dialogue with both elected and non-elected individuals carried the projects forward.

In addition, the team consulted with over 2,500 residents through more than 300 public meetings.

Both initiatives were closely watched by private industry as any improvements to the local network and access to international markets would have a great impact on getting goods to market.

As a result, the Windsor Border Initiatives Implementation Group has changed the way MTO does business. The team has led with innovation through resource planning, project management, construction, planning, and financing. For the first time, Ontario is using alternative financing to deliver a major highway infrastructure investment.

## Windsor Border Initiatives—Improving Canada's Premier Land Border Crossing

## 1. Introduction

Canada and the U.S. share the world's largest, most closely inter-connected trading relationship. The two countries are each other's largest trading partners, with almost \$1 billion worth of goods crossing the border every day. For Canada, the total annual trade with the U.S. was estimated to be valued at over \$326 billion in 2008<sup>1</sup>. For Ontario, the total trade was \$303 billion per year<sup>2</sup>. These figures underscore the enormous importance of Ontario's highways and international gateways to the provincial economy, and to the economies of both Canada and the U.S.

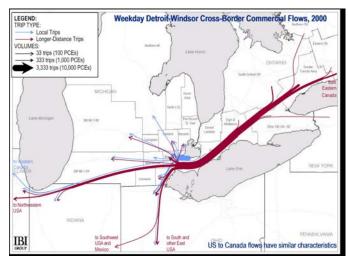


Figure I: Cross Border Commercial Flows, 2000

The volume of trade has increased substantially since the late 1980s when the Free Trade Agreement (1989), followed by the North American Free Trade Agreement (1994), came into effect. During this period, manufacturing plants, particularly in the automotive sector, further enhanced an integrated production platform and expanded the use of 'just-in-time' delivery of parts and materials. The combined effect has increased truck traffic between Canada and the U.S. and resulted in periods of serious congestion and delays at key border crossings. Border congestion results in reduced predictability in the movement of people and goods and adds costs, thereby reducing the competitiveness of North American producers. Therefore, improving border efficiency, without compromising border security, is a priority for both the governments of Canada and Ontario.

## Windsor-Essex Profile

Located in the County of Essex, the City of Windsor is Canada's southernmost city. Windsor lies across the Detroit River from Detroit, Michigan.

The Windsor-Essex region is a key manufacturing area within Canada and is located in close proximity to Detroit's manufacturing plants. Other industries in Windsor-Essex support the manufacturing of automobiles, solar and wind power generation, tool and die, mold making, food and beverage processing, plastics, pharmaceuticals, and machining. Salt extraction is another major industry in the Windsor area with mines south of Windsor and extraction areas out under Lake St. Clair. There are several major health care facilities in Windsor and Essex and a significant number of local health care workers also travel across the border to work in U.S. health institutions.

<sup>&</sup>lt;sup>1</sup> Ontario Ministry of Transportation, Pocket Guide to Transportation, 2009.

<sup>&</sup>lt;sup>2</sup> Ibid

In addition, Essex County is one of Canada's most agriculturally productive counties and enjoys a greater diversity of agricultural production than any other region in Ontario. Essex County accounts for over 80 per cent of greenhouse vegetable production in Ontario. Many of the agricultural products from the region are destined for both U.S. and Canadian markets.

#### Windsor-Essex and the economy

The Premier of Ontario has stated that improving Ontario's border infrastructure is a top economic priority with improvements to the Windsor gateway being the province's number one economic infrastructure priority.

The international border at the Detroit River in Windsor is the busiest corridor for trade between Canada and the U.S. In 2008, the Windsor-Detroit crossings handled \$102 billion in trade.<sup>3</sup> The crossings are essential to the local economy as approximately 50 per cent of cross-border truck traffic is local.

The Ambassador Bridge and Windsor-Detroit Tunnel are two of the busiest border crossings in North America by value of trade, with the bridge being the main crossing facility for commercial traffic. The two crossings carry more than eight million passenger vehicles and two million commercial vehicles annually, representing 40 per cent of surface trade between Canada and the U.S.<sup>4</sup>

Over the next 30 years, trade between Canada and the U.S. is projected to increase significantly. Cross-border truck traffic is expected to increase by 128 per cent while cross-border passenger vehicle traffic is expected to increase by 57 per cent.<sup>5</sup>

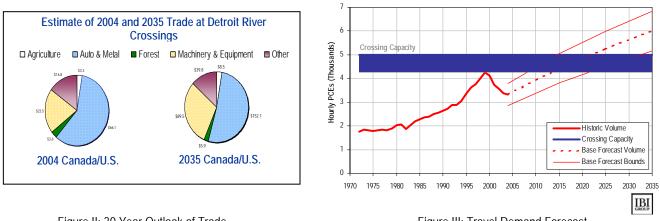


Figure II: 30 Year Outlook of Trade

Figure III: Travel Demand Forecast

The cost of these delays to businesses, local, and national economies has become significant. In 2004, the Ontario Chamber of Commerce estimated that border delays cost the provincial economy more than \$5 billion per year or an estimated \$843 million a year in lost production and output.<sup>6</sup>

Two vital but sometimes-competing interests cause the border delay:

- a) customs, immigration and security considerations make it necessary to screen all vehicles and individuals carefully;
- b) economic and social considerations make it necessary to move people and goods through the border as quickly and efficiently as possible.

<sup>&</sup>lt;sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Ibid

<sup>&</sup>lt;sup>5</sup> Travel Demand Forecasts Working Paper, IBI Group, 2005.

<sup>&</sup>lt;sup>6</sup> Cost of Border Delays to Ontario, Ontario Chamber of Commerce, May 2004.

To address the above challenges, two major study initiatives by Ontario and Canada were introduced in 2004:

- The Let's Get Windsor-Essex Moving strategy (LGWEM), aimed at addressing short- to medium-term issues and impacts of border traffic on the host community's traffic and infrastructure.
- The Detroit River International Crossing (DRIC) Environmental Assessment study, aimed at recommending a new end-to-end transportation solution connecting Highway 401 in Canada to the U.S. interstate system in Michigan.

The Detroit River International Crossing study Environmental Assessment Report was approved in 2009. It identified the route, the infrastructure, and the strategies to mitigate environmental impacts associated with connecting Highway 401 in Ontario with U.S. Interstate in Michigan, forming a new international gateway for the region. The Windsor-Essex Parkway, the Ontario access road segment of the new gateway, is now under pre-construction.

Windsor-Detroit is an incomplete gateway. There is no direct linkage from Highway 401 to Windsor's border crossings. International traffic must use local roads to access the border crossings. Slowdowns or stoppages cause international traffic to back up onto the surrounding local network.

Windsor, in addition to being the host community for an international gateway, also has local needs and requirements. The congestion caused by international traffic is a cause of frustration for Windsor-Essex residents and businesses. Regular traffic delays and queuing on Windsor streets result in economic costs for local industry and present safety and environmental concerns.

Unique challenges in the Windsor area that affect commercial and passenger traffic and the local economy include:

- high volumes of commercial and passenger border traffic that originate outside of the Windsor-Essex region travelling through the area to access the border
- large numbers of local residents that are employed across the border using local arterial roads to access border crossing points and require speedy border processing to reach job locations
- large volumes of international truck traffic that originates within the Windsor area use local arterial roads to access border crossing points
- a highly integrated economy between Windsor and Detroit, where unpredictable border crossing times impact local industries and recreational activities.

The border crossing delays within Windsor impact the City and its transportation network in a number of ways:

- increased safety concerns, including increased collision potential at intersections, entrances and queue ends
- lost economic opportunities
- increased air pollution due to truck idling and queuing
- reduced community and neighbourhood cohesion
- infiltration of cross-border traffic into local neighbourhoods
- reduced ability to meet incident/emergency response time goals
- increased vehicle operating costs and fuel consumption
- increased driver frustration.

As the crossings are vital to the local, regional and national economies on both sides of the border, it was vital that these concerns be addressed through improvements to the local transportation network. However, as a medium-sized municipality with a 2005 average annual capital budget of approximately \$70 million dollars<sup>7</sup>, Windsor was not in a position to fund or project manage the number and size of needed infrastructure projects estimated to be in the hundreds of millions of dollars. In addition, the goal was to proceed with this infrastructure initiative within an aggressive time-frame.

<sup>&</sup>lt;sup>7</sup> City of Windsor approved Capital Budget for 2005

#### 2. Approach

Increased traffic volumes and numerous delays in the late 1990s and early part of 2000 led to the commissioning of a cross border traffic survey study carried out by the Ontario Ministry of Transportation (MTO), Transport Canada (TC), Michigan Department of Transportation (MDOT) and the U.S. Federal Highway Administration (FHWA) to collect origin-destination patterns of cross-border trips.

This survey information supported the development of baseline information for the subsequent Planning Need and Feasibility (P/NF) Study. The cost of the traffic study was approximately \$450,000 and was shared equally among the four government agencies.

In fall 2000, MTO, TC, MDOT and the FHWA, held an initial meeting leading to the subsequent creation of the Canada-U.S.-Ontario-Michigan Border Transportation Partnership (the Partnership). The team adopted a partnership principles document, outlining Purpose and Objectives of the Border Transportation Partnership. The Partnership formed to improve the safe and efficient movement of people, goods and services across the U.S./Canadian border at the Detroit and St. Clair Rivers, including improved connections to national, provincial and regional transportation systems, such as I-75 and Highway 401.

The Prime Minister and Ontario Premier signed a Memorandum of Understanding (MOU) in September 2002 committing \$300 million over five years as part of a joint investment to upgrade existing infrastructure on the Ontario approaches to the Windsor-Detroit border crossings. This funding would lead to the *Let's Get Windsor-Essex Moving* strategy.

This MOU complemented the binational study process (Border Transportation Partnership) already underway to identify a long-term solution for the Windsor-Detroit Gateway. The P/NF commenced in 2002, and provided essential input to the Detroit River International Crossing study.

## a) What is the Let's Get Windsor-Essex Moving strategy?

Canada, Ontario, Windsor, and Essex County recognized that an integrated approach would best resolve bordercrossing deficiencies. In 2000, it was recognized that a long-term solution would take time to develop and implement. It was agreed that federal, provincial, and municipal governments needed to implement short- and medium-term measures to solve more immediate problems, relieve border congestion and improve traffic flows to existing crossings.

In March 2004, the Government of Canada, the Province of Ontario, and the City of Windsor, in consultation with the County of Essex, signed a Memorandum of Understanding for the *Let's Get Windsor-Essex Moving* strategy. The joint \$300 million strategy would be funded by Canada and Ontario, managed by Ontario, and would include 17 projects on local streets, highways, and at two border crossings.

The selected projects include the physical infrastructure as well as intelligent transportation systems improvements. The LGWEM strategy supports the Smart Border Action Plan and the goals of a secure flow of people, a secure flow of goods, secure infrastructure, coordination, and information sharing. The projects also support the goals of Canada's Border Infrastructure Fund which include:

- a reduction in congestion and improved movement of international traffic
- enhancement of system capacity
- coordination with adjacent U.S. border facility and road access network
- support of implementation of the Smart Border Action Plan
- enhancement of safety and security at border crossings
- financial participation of other public and private sector partners.



Figure IV: Let's Get Windsor-Essex Moving strategy projects

The projects included in the strategy are:

- 1. Pedestrian overpass of Huron Church Road at Girardot Road, a major pedestrian crossing just south of the Ambassador Bridge crossing.
- 2. Intersection improvements on Highway 3 at Walker Road and Outer Drive.
- 3. Intersection improvements on Huron Church Road at Industrial Drive.
- 4. Several intelligent transportation systems including:
  - a. CCTV Monitoring Cameras
  - b. Video Vehicle Detection System
- 5. Road-rail grade separation of Walker Road at the CP Rail line.
- 6. Improvements to Manning Road north of County Road 22 to the VIA Rail line.
- 7. Improvements to the Detroit-Windsor Truck Ferry infrastructure including improvements to Ferry Road, the truck plaza/parking area, and the docking facilities. Installation of way-finding signs to the Detroit-Windsor Truck Ferry on Highways 401 and 3, as well as E.C. Row Expressway and Huron Church Road.
- 8. Road-rail grade separation of Howard Avenue at the CP Rail line.
- 9. A master plan and environmental assessment study of improvements to the Canadian Plaza of the Windsor-Detroit Tunnel.
- 10. Widening of, and improvements to, Highway 401 from Manning Road to Highway 3.
- 11. a) CCTV monitoring cameras on Highway 401
  - b) Changeable Message Sign on Highway 401 east of Highbury Avenue
  - c) CCTV monitoring cameras at the Windsor-Detroit Tunnel approach
- 12. An environmental assessment and preliminary design study of improvements to Manning Road from Highway 3 north of Essex County Road 22.
- 13. A study of a potential Truck Marshalling Yard east of Windsor, ON.
- 14. The Action Plan for Intelligent Border Crossing (ITS initiatives).
- 15. Construction of improvements to County Road 22 east of County Road 19/Manning Road.
- 16. Environmental Assessment and Preliminary Design of improvements to Lauzon Parkway

All of the projects in the LGWEM strategy are aimed at improving the current conditions and making optimal use of existing infrastructure.

Since the strategy was announced in 2004, all but two projects are either under construction or complete.

#### b) What is the Detroit River International Crossing study?

The Detroit River International Crossing (DRIC) study was a bi-national transportation improvement study that was undertaken by the governments of Canada, the United States, Ontario, and Michigan, who formed the Canada-U.S.-Ontario-Michigan Border Transportation Partnership (the Partnership).

The Partnership consisted of a team of experts that aimed to address the issues of capacity, border processing, system connectivity, and redundancy at the Windsor-Detroit border through a comprehensive transportation environmental study. The study followed the requirements of the *Ontario Environmental Assessment Act* (OEAA), the *Canadian Environmental Assessment Act* (CEAA) and the U.S. *National Environmental Policy Act* (NEPA).

A Planning Need and Feasibility Study (P/NF) was commissioned by the Partnership in 2001 to develop a long-term strategy for the safe and efficient movement of people and goods between Southwestern Ontario and Southeastern Michigan.

The formal Environmental Assessment (EA) process for a new or expanded Detroit River International Crossing, on the strength of the findings and recommendations of the Planning Need and Feasibility Study, began in 2005. The study team generated and assessed 15 illustrative crossing alternatives with various corresponding plaza and access road alternatives within the Preliminary Analysis Area (PAA). Further evaluation and public comment led to a refined Area of Continued Analysis (ACA) in November 2005. Within the ACA, five practical access road alternatives (at-grade, below-grade and tunnelled), three practical plaza alternatives, and three practical crossing alternatives were generated, assessed and evaluated.

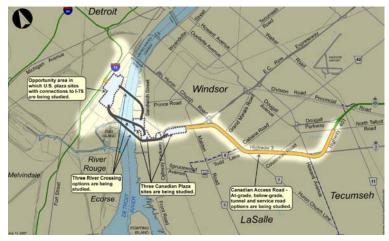


Figure V: Detroit River International Crossing study, Area of Continued Analysis, November 2005

The study team used seven key evaluation factors (Changes to Air Quality; Protection of Community and Neighbourhood Characteristics; Consistency with Existing and Planned Land Use; Protection of Cultural Resources; Protection of the Natural Environment; Improvements to Regional Mobility; and Cost and Constructability) to evaluate all of the alternatives developed during the study.

During the development of the alternatives for the access road, plaza and crossing location, the study team focused on utilizing the existing infrastructure to the maximum extent, seeking areas or land uses that were compatible with transportation corridors and facilities, or areas in transition to compatible land uses, thereby minimizing impacts to significant natural features and city centres.

Consultations from 2005 to 2007 led to a growing interest around a concept that combined tunnelled and belowgrade alternatives. During discussions with the City of Windsor, the vision of a more "green", parkway-like, alternative emerged. The concept would include a green corridor with tunnelled sections, a grade separated recreational trail system, and extensive urban design of the green areas.

Following technical studies and in response to comments and feedback, the study team developed a modified access road alternative based on the below-grade and tunnel alternatives. The Parkway alternative was presented for public consultation in August 2007. More analysis, evaluation and comment followed and in May 2008, the study team announced The Windsor-Essex Parkway as the Technically and Environmentally Preferred Alternative for the access road portion of the project as it was considered to provide the best balance of impacts and benefits.

World-class consultants used a variety of study techniques including hundreds of hours of field work, modelling, monitoring and sampling resulting in thousands of pages of reports which was rigorously analysed against the seven evaluation factors to determine the recommended plan that best met the goals of both the study team and the local community.

The study team finalized the EA in late 2008 and submitted the formal Environmental Assessment Report to the Ministry of the Environment in December 2008. Public and agency comments were accepted until the end of February 2009 and the MOE submitted their comments to the team in April 2009, to which the study team responded prior to the approval decision. The EA was approved in August 2009 (Ontario) and December 2009 (Canada).



Figure VI: Approved Plan including (L-R) U.S. Interstate Connection, U.S. Customs Plaza, Detroit River Bridge Crossing, Canadian Customs Plaza, Canadian Access Road connection to Highway 401

#### c) What is The Windsor-Essex Parkway?

After four years of study and over 300 public consultation sessions, the Recommended Plan for a new end-to-end transportation solution linking Highway 401 in Canada to the Interstate system in Michigan was submitted for approval in December 2008. This plan, approved by Ontario in August 2009 and Canada in December 2009 includes an access road, plaza and crossing location in Canada.

The access road portion in Canada is known as The Windsor-Essex Parkway and the delivery of the Parkway is being led by Ontario. Once completed, The Windsor-Essex Parkway will be the most significant single highway investment made in Ontario history. It is unparalleled in terms of the scale and uniqueness of its community enhancement features for any highway, anywhere in Ontario. It provides for the safe, efficient and timely movement of border-bound traffic and goods while directly addressing community concerns and goals.

The Windsor-Essex Parkway will reduce transportation related air quality impacts due to the wide right-of-way and the elimination of stop-and-go conditions caused by seven traffic signals within the Parkway corridor. The lowering of the highway, tunnelling, and elimination of stop-and-go conditions will reduce noise levels. The community will benefit from the 300 acres of greenspace, 20 kilometres of trails and connections across the corridor through tunnelled sections. Endangered species and natural habitat will be protected through restoration and enhancement measures and tunnels will provide movement across the corridor for species.

The Windsor-Essex Parkway is planned as a six-lane urban freeway with 11 tunnels, and service roads. It will finally connect Highway 401 to a new crossing, removing the existing traffic signals, allowing long-distance international traffic to travel unimpeded to a new inspection plaza and river crossing while improving community linkages and providing extensive new trails, green space and other recreational opportunities. The access road meets community and transportation needs in Windsor-Essex and the border gateway for the long-term.

The solution included input from experts, members of the community, special interest groups, and municipalities. Thanks to comprehensive study and input, the right solution is being implemented that will serve to protect the community, boost the economy, and allow for the efficient movement of traffic through one of Canada's most important international gateways.

#### 3. Windsor BIIG

Recognizing the importance of this gateway and the investments targeted for the area, the Ontario Ministry of Transportation brought together a team of experts in Planning, Environmental Study, Engineering, Property Acquisition, Policy, and Communications, to implement the projects outlined in the strategies. This team would become the Windsor Border Initiatives Implementation Group or Windsor BIIG.

The team is made up of approximately 40 people and managed by a Director with four Managers in the areas of planning, delivery, policy and communications. The team is located in Windsor, London, and Toronto and manages the day-to-day implementation.

A project of this size and scope requires interaction with many stakeholders (NGOs, community and neighbourhood groups, other international crossings, industry and labour groups, government agencies, and local municipalities) with many opportunities for complication and loss of focus.

The group has informed, advised, engaged and convinced many that the purpose and direction was sound. More than three hundred separate consultation sessions with thousands of people resulted in an unprecedented consultation effort allowing the team to share and refine analysis of options and related implications of preferred alternatives. The leadership team provided a clear vision and the guidance to avoid many (and potentially fatal) delays.

Ontario's efforts had the benefit of political champions in the Premier and senior Cabinet Ministers who provided the dedicated resources to get the job done and underscore the province's commitment to the task. The government, in collaboration with its jurisdictional partners also set a very ambitious timeline for results.

The Windsor BIIG team has had to excel at collaboration—it is imperative to success. The team has worked with dozens of stakeholder groups, partners (Transport Canada, the U.S. Federal Highway Administration and the Michigan Department of Transportation), other Ontario agencies (Environment, Natural Resources, Finance, Municipal Affairs, Infrastructure, Tourism, Infrastructure Ontario, Ontario Realty Corporation), first nation communities, local conservation authorities, railway companies, utility and telecommunications companies, local housing authorities and the Windsor-Essex municipalities. Windsor BIIG has struck unprecedented and complex agreements and protocols to leverage the resources of other government agencies and/or meet regulatory obligations.

Windsor BIIG was one of the first organizations to strike a collaboration with Infrastructure Ontario to identify a private sector partner to design, finance, build and maintain Ontario's Windsor-Essex Parkway together - the first highway project to be procured by way of an Alternative Finance Procurement model.

To achieve goals, a willingness to do things differently became part of team culture as well. From the outset, Windsor BIIG applied an innovative approach to reconciling numerous and complex regulatory requirements across jurisdictions. The team developed a highway design unlike anything ever done previously in Ontario – a truly unique solution for a unique setting. Complex field investigations regarding the bed rock under proposed bridge locations were completed using state-of-the-art tools and the team reached out and engaged experts to validate findings. Value-engineering practices were applied to ensure projects were cost effective garnering MTO coveted awards. And with interministerial partners, new methods are being developed for protecting the environment and species at risk.

Windsor BIIG successfully developed and delivered public information open houses adopting creative and effective ways to convey complex information to affected citizens, using print and other media in new ways (full page, visually impressive ads, home mailers, road-side signs) to get messages out in a crowded communications environment. The internet has been used creatively to post, share and communicate with stakeholders and citizens through the development and deployment of virtual reality or visualizations so visitors could better appreciate our objectives. Windsor BIIG revisited policies governing the acquisition of properties to facilitate the purchase of 900 parcels in a way that balanced the interests of the taxpayer and avoided costly and unproductive litigation. The team has even developed powerful new tools to the extensive amount of property related information we have assembled, captured digitally and married with GIS, opening opportunities for more effective and efficient highway design and property acquisition needs.

#### 5. Conclusion

Solving the transportation weaknesses at the Windsor-Detroit border addresses a range of impacts that affect many people directly and indirectly. The economic implications are significant. Hundreds of thousands of current Ontario jobs are tied to goods that need to be predictably shipped to our largest trading partner. Tens of thousands of jobs in the manufacturing sector rely on a bi-nationally integrated production platform that has components shipped across the border multiple times before going to market. Ontario's global competitiveness relies on the border being as seamless as possible.

Locally, North America's pre-eminent trade gateway does not enjoy a free-flow highway-to-highway connection afforded other major gateways. Over 9,000 trucks a day lumber through local municipal streets, with local traffic, through 17 traffic signals on the Canadian side of the border, in the Windsor-Essex region! This situation is not sustainable today, and based on anticipated future traffic growth, is certainly not sustainable in the future resulting in a poor quality of life for citizens of the Windsor-Essex region.

The sheer size of the project will provide a boost to the hard-hit regional economy.<sup>8</sup> The Windsor-Essex Parkway will generate an estimated 12,000 project related jobs. The majority of these jobs will be sourced from local firms and workforce. The proposed customs inspection plaza and new bridge will bring even more jobs, revitalizing the struggling region.

It's important to note, the environmental impacts of such a large project will be mitigated as well. In addition to the community friendly design of the project (hundreds of acres of green space, tunnel sections that reconnect communities, extensive landscaping, recreational trails, below-grade design placing international traffic out of direct line-of-sight) extensive and unprecedented efforts captured in the provincial environmental and endangered species act approvals are being diligently implemented by MTO.

Yet the Windsor committment is more than just a new access road and study of an end-to-end solution. For the past five years the team has been working with its federal and municipal partners to address local infrastructure issues in the existing network. This focus has been multi-modal and focuses on all aspects. Our federal partners have been looking at a rail study, improvements at the airport, and have worked with us to address impacts from U.S. Homeland Security measures.

In addition, we have looked at other ways to work with the local communities while we are implementing our projects. At the local and community level, for the first-time in Ontario transportation history, Ontario is supporting a grass roots initiative to salvage tons of material from homes slated for demolition, redirecting waste from local land-fills and providing a five-fold increase in revenue to a local housing community group.

Windsor BIIG is working with First Nation communities with the aim of involving them in efforts in regards to endangered species, either in the steps required to mitigate direct impacts to the species or in a longer term ways like stewardship. This includes working with the local conservation authority to explore how to ensure connections to local areas of interest through the greenspace being assembled. The recreational trail integrated into the project will be connected to local and regional trails.

Windsor BIIG's challenges are frequently unique and one of a kind. Often, we find ourselves in uncharted waters. In addition to the satisfaction of solving these complex challenges is the benefit the solutions have to other ministry initiatives. Lessons learned are shared with colleagues leading similarly complex projects saving them valuable time and energy. The analysis undertaken in the environmental area benefits other infrastructure projects and contribute to a broader understanding of how to mitigate adverse impacts. Communications, issues management and community outreach successes are instructive right across the spectrum of ministries who engage the public. Accomplishments in the salvage of materials from demolition may result in revision of provincial disposition of property requirements and can easily be adopted by others. The AFP process alone will make a significant contribution to Ontario's ability to delivery badly needed major transportation infrastructure in alternative ways.

A project of this scope, if approached traditionally, would have required a commitment of 10 years to complete the environmental assessment phase alone. There were experienced observers who believed the complexity of the task, reconciling the requirements of four jurisdictions across international boundaries to arrive a single transportation solution simply wouldn't come about. After four years, a 1,100 page Environmental Assessment Report was filed in Ontario and Canada for regulatory agencies to review and approve. It was supported by 63 technical reports for an additional 10,000 pages of detailed technical analysis. Shortly thereafter Ontario's first major transportation project permit request under a new Endangered Species Act detailing through hundreds of pages of analysis how impacts to eight species would be mitigated was filed with the Ministry of Natural Resources. After a thorough review by regulatory agencies, these historic submissions were approved.

<sup>&</sup>lt;sup>8</sup> Metropolitan Outlook, Conference Board of Canada, February 2011.

In late 2010, Ontario announced the selection of a proponent team to design, build, finance and maintain the \$1.4 billion Parkway. Initial work on the Parkway has already begun leading to full construction this summer.

Ontario is following through on its commitments to the bi-national partnership to bring about a new crossing in the Windsor-Detroit region. It has provided key leadership, positioning ourselves and our partners to make investments that will protect our collective regional economies. The leadership on the part of the Ministry of Transportation and the Windsor BIIG team was instrumental in successes to date and will be pivotal to future successes.

#### REFERENCES

Arcand, A. et al, "Metropolitan Outlook 2: Windsor", Conference Board of Canada, February 2011,

IBI Group Inc. "Travel Demand Forecasts Working Paper", *Detroit River International Crossing Environmental Assessment Report*, December 2008.

OCC Borders and Trade Development Committee, "Cost of Border Delays to Ontario", *Ontario Chamber of Commerce*, May 2004.

Ontario Ministry of Transportation, "Pocket Guide to Transportation", Government of Ontario, 2009.

Windsor, (City of), "Capital Budget, 2005", City of Windsor, 2005.