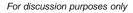
# **Gordie Howe International Bridge**



#### From Procurement to Construction Project Update and Technical Briefing September 28, 2018





## **Public-Private Partnership Model**



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## **The P3 Model**

- A long-term performance-based approach to procuring public infrastructure
- A co-operative venture between a public-sector entity and a privatesector partner
- Partnership built on expertise of each entity to best meet clearly defined public needs
- Partnership based on appropriate allocation of risk

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## **Features and Benefits of a P3**

- Operational Factors and Project Phases
- Consortium with Expertise
- Financing
- Outcome-based Contract
- Risk Transfer Efficiencies
- Whole Lifecycle Approach
- Pay for Progress/Milestones
- Value for Money

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## **Roles and Responsibilities**

#### WDBA's Role Bridging North America's Role Risk Distribution

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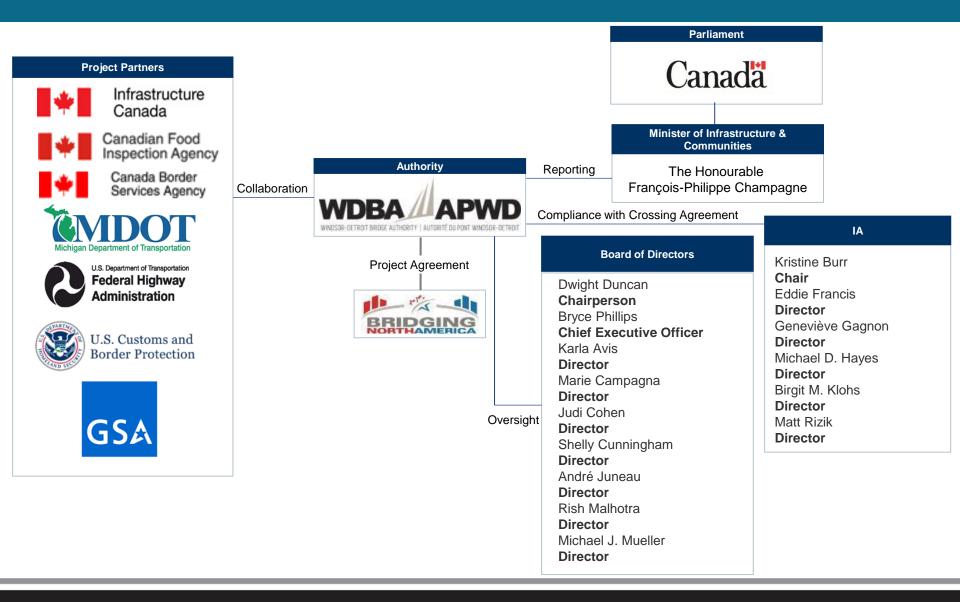


## WDBA's Role

- Public-sector partner, project authority and signatory to contract
- Procured the private-sector partner to deliver the Gordie Howe International Bridge project
- Directs all project activities
- Manages the Project Agreement
- Provides stringent oversight of Bridging North America's activities through inspections, compliance reviews and audits.
- Hires advisors (ex. Owner's Engineer)
- Flows funds
- Works closely and collaboratively with other involved government departments and agencies in both Canada and the US (INFC, MDOT, CBSA, CFIA, CBP, GSA, FHWA)
- Communicates project information to the public
- Sets tolls and transfers tolls to the Government of Canada

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## **WDBA's Organizational Structure**

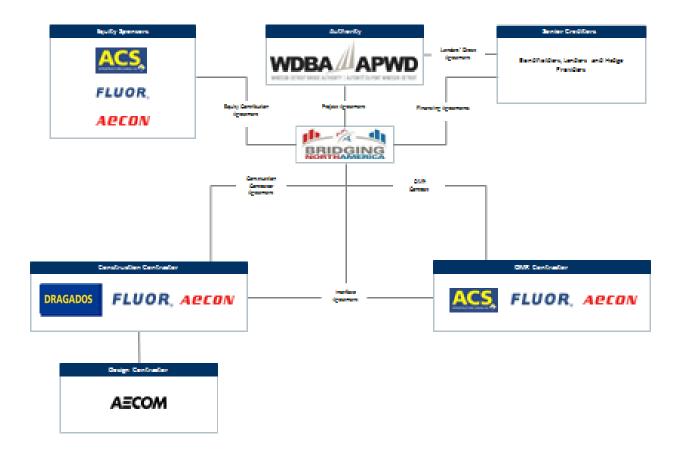


## **Bridging North America's Role**

Project Components	Design	Construction	Finance	Operations & Maintenance	Life Cycle, Maintenance Rehabilitation & Handover Requirements
Bridge	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Canadian POE (including Tolling Infrastructure)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
United States POE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Michigan Interchange	$\checkmark$	$\checkmark$	$\checkmark$	MDOT	MDOT

\*CBSA and CBP will operate the Canadian POE and United States POE, respectively and carry out customs inspections and other border-related functions. MDOT will assume responsibility for the I-75 interchange upon completion of construction.

#### **Bridging North America's Organizational Structure**



## **General Risk Distribution**

Risks and Liabilities	WDBA	BNA	Shared
Site availability (property, demolition, utility relocation)			Х
Design (as related to construction or operations)		Х	
Construction (issues such as cost overruns, delays, building material defects)		Х	
Availability (impact to services due to management issues or performance standards)		Х	
Demand (use of new facility)	Х		
Environmental (contaminated soil)			Х
Permits			Х

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## **Contract Details**

#### Contract Value Construction Schedule

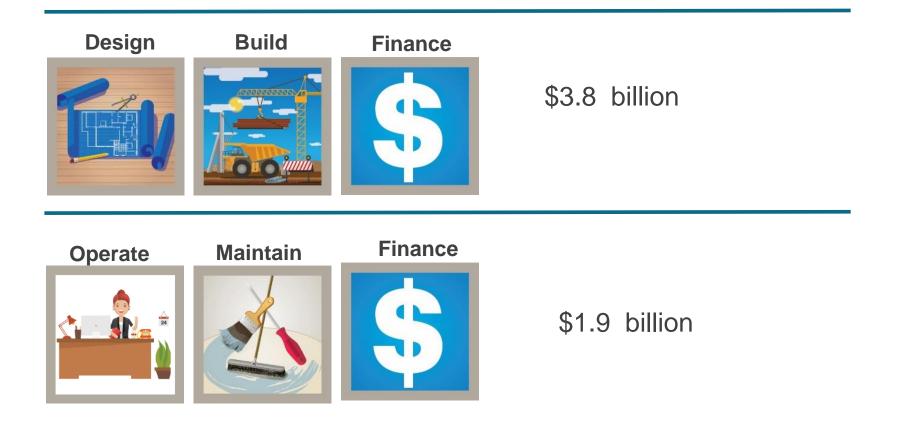
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## **Fixed Price Contract**

The fixed contract value for the Gordie Howe International Bridge project is \$5.7 billion (nominal)



## **Contract Value Details**

Length of contract:	36 years
Fixed-price cost:	WDBA will repay Bridging North America the value of the contract over the contract term
Risk:	Bridging North America assumes market risk (examples: interest, foreign exchange)
Source of funding:	Government of Canada

Highlights of procuring the project utilizing a P3 model:

- The agreement allowed for an optimal balance between quality and cost through an appropriate sharing of resources, risk and benefits
- Promoted innovation in design, construction and lifecycle

The value for money analysis demonstrated that the P3 model for this project results in a savings of approximately \$562.8 million or 10.7% as compared to delivery of the project using traditional procurement methods.

## **Payment Structure**

Highlights:

- WDBA will provide progress payments to Bridging North America during construction based on completion of works as identified in their schedule
  - Works will be verified by WDBA, an Independent Certifier, and a Lenders' Technical Advisor before payment is made
- WDBA will provide a holdback payment at substantial completion
- During the operations and maintenance phase, WDBA will provide monthly payments for a duration of 30 years.
  - These payments will be for operation and maintenance costs, lifecycle costs, and capital and financing costs.
  - Deductions to monthly payments will be applied for unavailability or non-compliance with minimum performance criteria

## **Construction Schedule**

	2018	2019	2020	2021	2022	2023	2024
Project Start-up							
Design							
Construction							
Turnover and Commissioning							

\* Estimated construction duration 74 months

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## **WDBA Control and Oversight Mechanisms**

- Bridging North America shall comply with all requirements set out in Quality Assurance and Quality Control Requirements
- Established Owner's Engineer
- Contracted an Independent Certifier
- Established reporting mechanisms

## **Possible Impacts to Cost or Schedule**

- Relief Event events or circumstances that could lead to an extension of the project timeline such as a general strike
- Compensation Event events or circumstances that could result in financial compensation such as unknown contaminated soil, hazardous materials or protected species at risk discovery
- Authority Changes WDBA may, at its own costs, requires amendments to the project agreement such as changes to technical specifications

## What we're building

The Bridge The Canadian POE The US POE The Michigan Interchange

- Warnes

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## **Project Components**



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## **BNA Management Approach**



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## **The Bridge**

- 6 lanes 3 in each direction
- 2.5 kilometres | 1.5 miles
- Clear span of 853 metres | 0.53 miles
- Multi-use path for pedestrians and cyclists 3.6 metres | 11.8 feet wide

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## **Canadian Port of Entry**



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## **US Port of Entry**

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## **The Michigan Interchange**



- 3 kilometres | 1.8 miles of I-75 and interchange ramps
- 4 new crossing road bridges
- 5 new pedestrian bridges
- 4 long connecting ramp bridges connecting to I-75 to the US plaza
- Key intersections will also be widened to allow transport trucks to make full uninterrupted turns
  - Local road improvements

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## **Project Features**

Building Elegance through Aesthetics Delivering Functionality through Design Focusing on the Community

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## **Building Elegance through Aesthetics – Project Goals**

The following project goals collectively define the desired outcome:

- An *impressive* and *inspiring* new gateway symbol for Canada and United States
- A distinctive design that demonstrates modern, friendly and state-of-the-art infrastructure and responds to its unique Windsor/Detroit context
- A bridge design that achieves a *high level of aesthetic quality*, at a distance and up close, by day and by night
- Port of Entry architecture and landscape design that showcases functionality, design excellence, sustainability and barrierfree accessibility.

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## **Aesthetics – Guiding Principle**

- The design shall provide a primary aesthetic framework of "contemporary minimalism" (simplicity, clean lines, good proportions, openness, transparency, lightness) with secondary layers of materiality, colour, texture and public art that respond to site specific context-related themes.
- Aesthetics have been considered for all aspects of the project.
  - Cable-Stayed Bridge
  - Port of Entry buildings
  - Pedestrian access
  - Canopies
  - Landscaping
  - Lighting



## **Building Functionality Through Design: Designing for Commercial Users**

- Advanced technology will be incorporated at the bridge and the POEs
- Hazardous materials will be accepted with safe and secure holding areas away from traffic for inspection
- Agri-Food considerations incorporated into design with FDA and Canadian Food Inspection Agency located within POEs



## **Benefits to Commercial Users**

- Flexibility to open additional electronic only lanes for commercial vehicles depending on traffic demand by using overhead dynamic signage on lanes to allow the lane to be designated
- Use of Gordie Howe International Bridge transponder will allow fleet vehicles to use the electronic only lanes (no need to stop) at rate of 400veh/hr
- Establishment of a fleet account that will consolidate payment for all the transactions in a given period
- Potential discount programs for fleets: by volume and time of day
- Fleet account can be managed through the website
- Transponder interoperability with ISO 6C; and TDM (also used for commercial applications)



## Tolling

- WDBA will set competitive tolls for all vehicle classes prior to the start of the operations and maintenance phase
- WDBA will undertake consultation with future users as part of the toll setting process
- As a not-for-profit Crown corporation, WDBA receives no revenue from tolls
- Toll revenue is provided to the Government of Canada

## Focusing on the Community: Community Benefits Plan



#### **GORDIE HOWE INTERNATIONAL BRIDGE**

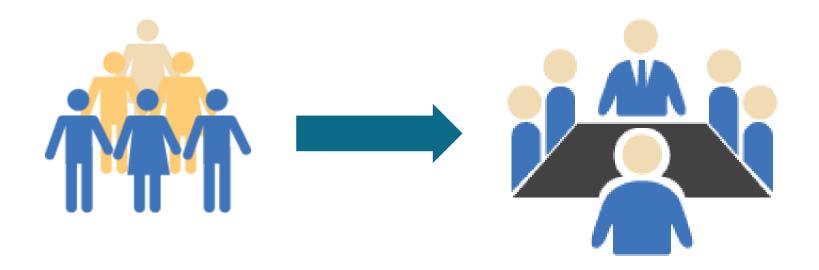
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## **Community Benefits Plan**

Extensive community consultation from 2015-2017 led to five regional priorities to be reflected within the Community Benefits Plan



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## **Community Benefits Plan**

The Community Benefits Plan for the Gordie Howe International Bridge project is comprised of two components:

Workforce Development and Participation Strategy

Develop and implement strategies to engage businesses and provide employment opportunities with a focus on (i) workforce, (ii) training and (iii) preapprenticeships/apprenticeships.

- Ensuring opportunities occur on both sides of the border
- How existing local resources will be leveraged to maximize the efforts for Windsorites and Detroiters

#### Neighbourhood Infrastructure Strategy

- a \$20 million community infrastructure investment for initiatives that are consistent with the Crossing Agreement and the key regional priorities identified through consultation
- Further consultation will be undertaken to select the initiatives that will be included in the Final Neighbourhood Infrastructure Strategy

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Canada

# Workforce Development & Participation Strategy

Comprised of three sections identifying how Bridging North America will:

- Achieve the goal that at least \$250 million of the total value of the work during the design-build phase in Canada will be performed by, contracted to, or supplied by workers or contractors located in the City of Windsor or within 100 kilometres of the City of Windsor
- 2. Engage and employ Canadian Indigenous Peoples and contract their businesses
- 3. Engage and employ Detroit residents and contract Detroit-based and Detroit-headquartered businesses.

In addition to the above, the Disadvantaged Business Enterprise goal established for this project is 2.15% of the cost of the construction and engineering work needed to complete the Michigan Interchange and the portion of the Bridge that is located in Michigan.

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## Neighbourhood Infrastructure Strategy

- This \$20 million community infrastructure investment focused on priorities identified through community benefit consultation that took place from 2015-2017 with communities, businesses and other stakeholders in Windsor, Ontario and Detroit, Michigan.
- The Neighbourhood Infrastructure Strategy will be comprised of initiatives that are consistent with the Crossing Agreement and the key regional priorities identified through consultation.
- Further consultation will be undertaken to select the initiatives that will be included in the Final Neighbourhood Infrastructure Strategy.

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## Finalizing the Community Benefits Plan

- In the six-months following financial close, Bridging North America will present initiatives that could be incorporated into the final plan for input.
- Many of the initiatives reflect the 230-plus suggestions provided by the communities during the past three years. Bridging North America has identified numerous options that range from truly innovative to simple solutions that recognize the uniqueness of Sandwich and Delray.

The final Community Benefits Plan will be presented to the public in early 2019. The final plan will reflect the efforts of Bridging North America, WDBA and the State of Michigan to provide a comprehensive strategy that reflects community priorities and leverages resources in both Windsor and Detroit to maximize the plan's strengths.

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## **Bridging North America's Vision for Community Benefits Vision**

- BNA is aware of the critical importance of providing positive, sustainable benefits to the host communities and the regions where the Gordie Howe International Bridge project will be located.
- BNA core value is to make a positive and lasting difference in the communities where we work.
- Our Team Members are known world-wide for their ability to connect people and economies with roads, bridges, tunnels and transit. We each bring a reputation for providing sustainable economic, social and environmental benefits to the communities where we work. Moreover, we have vast and relevant experience providing benefits on numerous P3 projects across North America and other areas of the globe.
- The vision is to deliver a series of initiatives, based on public input, that create measurable and positive results-based opportunities for the host communities.

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## **Bridging North America's Community Benefits Initiatives**

- Public input is important to the delivery of the Community Benefits Plan, BNA will be engaging with the community throughout the life of the project.
- The key initiatives of the plan include:
  - Establishing Community Partnerships
  - Working with the community to review safety and make connections
  - Focus efforts to lessen the effects of construction and operations
  - Promote economic benefits
  - Enhance aesthetics and landscaping



## Bridging North America's Approach to Workforce Development & Labour

- Construction and operation of the bridge will bring thousands of jobs to the region
- BNA anticipates the creation of 2,500 direct jobs during construction
- BNA is currently meeting with national and provincial labour associations to review workforce requirements during construction and operation phases

## **Features**

- Multi-use path on the bridge and through the POEs
- Green space within the two POEs equivalent to 225 football fields
- Sandwich Street improvements in Windsor
- Local roads improvements in Detroit
- Public Art
  - Three component of Public Art including dramatic lighting at night, artistic building facades and standalone First Nation piece on the Canadian Port of Entry.
- Peregrine Falcon box
- LEED Silver and Envision Silver ratings
- Green Roofs
- For additional information view subject videos on wdbridge.com

## Conclusion

- The Gordie Howe International Bridge project is one of the largest infrastructure projects in North America.
- The new border transportation system will address regional transportation needs: redundancy, capacity, system connectivity and improved border processing.
- Our comprehensive Community Benefits Plan that will have a positive impact on communities in Windsor and Detroit.
- The project includes features that will not only make it a crossing of choice for future users but also a new symbol for Windsor and Detroit who will be the proud hosts of this monumental piece of infrastructure.

## **Save The Date**



Senator David A. Croll Park 12:00-1:30 p.m. Ige Windsor, ON

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