

Plaza and Crossing Alternatives

In March 2006, the Detroit River International Crossing (DRIC) study team identified three inspection plazas and three river crossing locations to be carried forward for further analysis. Now, with the completion of thorough technical studies, combined with the results of community consultation, the Canadian study team has identified Plaza B1 and Crossing X10B as the technically and environmentally preferred locations.

Canadian Plaza B1

Plaza alternatives were developed considering the need to provide improved border processing facilities to meet future travel demand and security requirements at the border crossing. All plaza alternatives considered are much larger than the current plazas at the Ambassador Bridge and the Detroit-Windsor Tunnel. The new plaza will be designed to serve the future (2035) travel demands at the border crossing.

The new plaza was developed in consultation with Canada Border Services Agency and provides sufficient areas for primary inspection lane booths and on-site secondary inspection of people and goods. The plaza alternative also allows for dedicated NEXUS and FAST lanes and provides for a substantial improvement of border crossing processing capabilities.

Canada Border Services Agency has reviewed and tested functional layouts of the plaza alternatives to confirm the suitability under future traffic conditions.

Facts about Plaza B1

- ✓ Total plaza area is 132 acres (53 hectares)
- ✓ Total cost of plaza is estimated at \$200 million (2011 \$CDN)
- ✓ Total of 29 inbound inspection lanes
- ✓ Total of 103 secondary inspection parking spaces for commercial vehicles
- ✓ Nine toll collection lanes
- ✓ Five acres (two hectares) of stormwater management features to control quality of runoff water



Crossing B (X10B)

The new Detroit River crossing is being developed as a six-lane bridge providing three Canada-bound lanes and three U.S.-bound lanes. The capacity of the new crossing will accommodate future travel demand, both in terms of meeting capacity and providing flexibility to stream traffic on the crossing to improve border process (e.g. designated NEXUS/FAST lane).

Two options for the new crossing are being considered: a cable-stayed bridge and a suspension bridge. Once the partnership has determined the implementation details, a bridge type will be determined.

Facts about a Cable-Stayed Bridge

- ✓ Total length of crossing alignment (Canadian plaza to U.S. plaza) is 2.9 km
- ✓ Bridge span (distance between main pylons) is 840 m
- ✓ Bridge will clear span entire Detroit River (no piers in the water)
- ✓ Longest cable-stayed span in North America; 5th longest cable-stayed bridge in the world
- ✓ Clearance at shoreline is 40 m; Clearance at centre of channel is 47 m
- ✓ Height of main pylons is approximately 250 m, which is approximately 30 m higher than the Renaissance Centre in Detroit (220 m)
- ✓ Bridge deck is approximately 36 m wide and accommodates six lanes, a median, shoulders and a walkway on one side
- ✓ Main bridge consists of 135,000 tonnes of concrete, 24,000 tonnes of steel and 3,300 tonnes of cable.

Facts about a Suspension Bridge

- ✓ Total length of crossing alignment (Canadian plaza to U.S. plaza) is 2.9 km
- ✓ Bridge span (distance between main towers) is 855 m
- ✓ Bridge will clear span entire Detroit River (no piers in the water)
- ✓ 5th longest suspension bridge in North America; 20th longest suspension bridge in world
- ✓ Clearance at shoreline is 40 m; Clearance at centre of channel is 47 m
- ✓ Height of main towers is approximately 140 m, which is slightly higher than the Fisher Building in downtown Detroit (135 m).
- ✓ Bridge deck is approximately 36 m wide and accommodates six lanes, a median, shoulders and a walkway on one side
- ✓ Main bridge will consist of 400,000 tonnes of concrete, 22,000 tonnes of steel and 6,900 tonnes of cable.

