



Blue Water Bridge International Smart Freight Corridor Project

Michigan Department of Transportation

PROJECT PARTNERS

U.S. Customs & Border Protection
Michigan State Police – Commercial Carrier Division
Motor Carrier Advisory Committee
Council of the Great Lakes
Canada U.S. Transportation Border Working Group
Commercial Carriers
Local Truck Stops – Love’s, Pilot
Michigan Trucking Association

TPA-NA Border Wait Time
American Trucking Association
Canada Border Services Agency
Ontario Ministry of Transportation
Ontario Vehicle Innovation Network
Federal Bridge Corporation Limited
Ontario Trucking Association

Arcadis
AECOM
Integral Blue



PROJECT CHALLENGE

This project will apply data-centered technology to enable the unimpeded flow of information between shipping companies, vehicles, border agencies, and infrastructure operators, along a key international freight corridor. Trucks carrying freight across this border face lengthy delays in peak times leading to increased supply chain costs, while idling vehicles in the queue contribute to poor air quality. This project will mitigate these issues by providing predictable arrival and processing times and reduce traffic loads across the crossing.

IMPACT

The project is located in the City of Port Huron, in St. Clair County, Michigan. The immediate project impact on the Port Huron community is likely to improve health, the environment, and transportation access by proactively reducing wait times and congestion at the border. However, the project benefits go beyond the physical boundaries of Port Huron. Improved throughput at the BWB supports trade of American manufactured goods (especially motor vehicles and associated components), employment creation, and reduced cost of goods for consumers.

CURRENT STATE OF THE ISSUE

Hours-long queues result in inefficiencies and significant GHG and particulate emissions in the Port Huron area (55 ton/year of PM2.5). Also, operational delays carry a significant economic impact. Goods movement across the U.S.-Canada border was valued at \$398.2 billion in 2020, with \$71.5 billion passing through the Blue Water Bridge – the most of any other US-Canada land border.

POLICY QUESTIONS

1. How does the Smart Freight Corridor improve equity, quality of life and the environment for the local communities? 2. How reliable can travel times be for goods movement along the corridor? 3. To what extent can the Smart Freight Corridor reduce travel times for goods movement and make the border crossings more efficient?

STAGE 1 OUTCOMES

Increase predictability and reliability of freight travel/delivery times by supporting pre-clearance of freight shipments. This will also minimize border waiting times, queuing, and congestion; Create efficiencies and rationalize resource allocation for CBP and MDOT; Support timely response to disruptions/incidents on the BWB, at the Port Huron POE, or on the I-94/I-69 corridor.

STAGE 2 VISION

The proposed solution can be rapidly extended to eastbound traffic (i.e., from the United States to Canada), and to similar bridge-constrained border crossings (i.e. Detroit, MI; Sault Ste Marie, MI; International Falls, MN; Massena, NY), as well as to the busy truck crossings at Blaine, WA, and Sweetgrass, MT. This can spread congestion and emissions improvements quickly and efficiently.