

Niagara International Transportation Technology Coalition

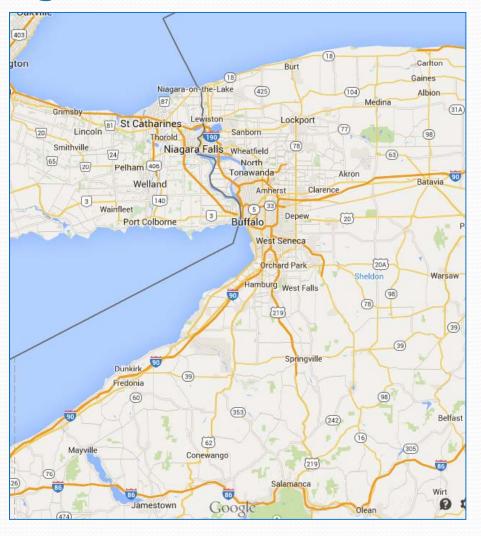
Regional Perspective on the Border

NITTEC Mission

To improve mobility, reliability and safety on the regional bi-national multimodal transportation network through information sharing and coordinated management of operations.



NITTEC Region-Southern Ontario/Western NY





NITTEC Coalition

- Established in 1995 with a Federal Mobility Grant
- Regional Collaboration and Leadership
 - Technology Deployment
 - Operations
 - Incident Management
 - Traveler & Traffic Information
- Multi-Agency Transportation Operations Coalition
 - 5 Policy Members, 9 General Members, 17 Affiliate Members
 - Transportation Agencies
 - Public Safety and Border Enforcement
 - Emergency Services and Recovery
 - Only Bi-national Coalition of its kind in U.S. / Canada



NITTEC Membership



General Members



Affiliate Members





NITTEC Leadership

- Board of Directors
 - Overall policy and governance
- Committees
 - Border Crossing
 - Construction Coordination
 - Strategic Planning
 - Traffic Operations Center
 - Technology and Systems
 - Incident Management
 - Western New York
 - Ontario
 - Regional Traffic Signals



Regional Operation Functions

- Multi-agency Collaboration
- Traveler Information
- Border Traffic Management
- Emergency Management
- Incident Management
- Construction Coordination
- Traffic and Congestion Management
- Weather System Monitoring
- Special Event Planning and Management
- Transportation System Monitoring
- Performance Measures Reporting





Regional Collaboration – Traffic Management

- Centralized 24/7
 operations and traffic
 management services for
 bi-national region
- Information Clearinghouse
- Standardized Operations
- Multi-Agency Event Planning and Operations
- Multi-Agency ITS Deployment
- Regional Messaging Standards
- Traffic Management Plans





Traffic Operation Center

- 2015 logged over 38,000 telephone contacts
- Handled over 9,000 incidents
- Activated over 10,000 messages on overhead signs
- Coordinated over 750 snow and ice call outs
- Provided border crossing delay information on 100 occasions

















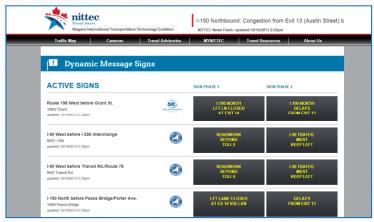
Traveler Information

- Dynamic Message Signs in US & CA
 - Incident Information
 - Travel Times
- NITTEC Website
- NITTEC App
- MYNITTEC Subscriber System
- Highway Advisory Radio
- 511
- 1-800 Bridge Conditions Phone Service
 - 1-800-715-6722



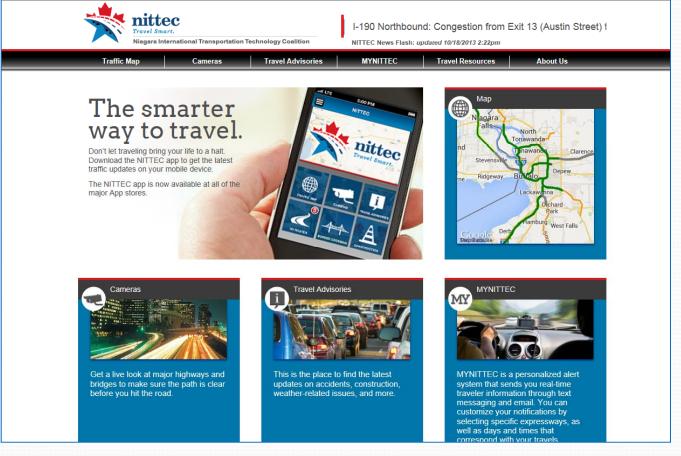








Traveler Information - NITTEC Website





Traveler Information - NITTEC Map Page





Traveler Information - NITTEC App





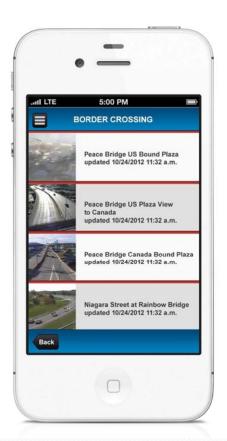




Traveler Information - NITTEC App



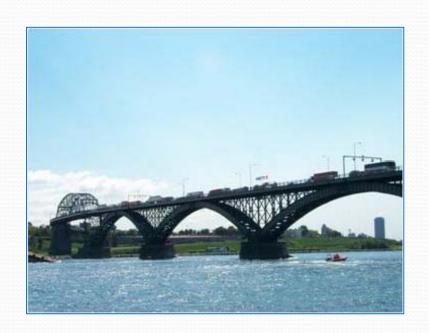






Border Crossing Collaboration

- Border Crossing Committee
- Participation by Transportation agencies, bridge operators and border enforcement agencies
- Border Crossing Traffic Management Plans
- Standardized border wait times
- Standardized DMS Messaging
- Joint Press Releases and public information campaigns





Coalition's Border Management Role

- Regional Collaboration and Leadership
 - ➤ Border Crossing Collaboration
 - ➤ Border Crossing Operations
 - Traffic and Incident Management
 - > Technology Deployment
 - Public Information and Education
 - > Traveler Information





Regional Cross Border Perspective

- Bi-national Gateway
 - Key economic port for Canada-US trade
 - World renowned destination for tourists
 - Key Component of Regional Transportation Network
- Single Border Crossing Concept
 - View border crossing as regional corridor
 - > Balancing traffic and capacity





Border Related Traffic and Incident Management

- Ontario and WNY Incident Management Committees
- Coordination with border enforcement, local police and public safety agencies
- Border Crossing Traffic Management Plans
- Staging areas and truck management
- Queue end management





Border Crossing Operations

- Coalition TMC acts as information clearinghouse for all border related traveler and traffic information
- Border enforcement resource management
- Event planning and review
- Construction planning





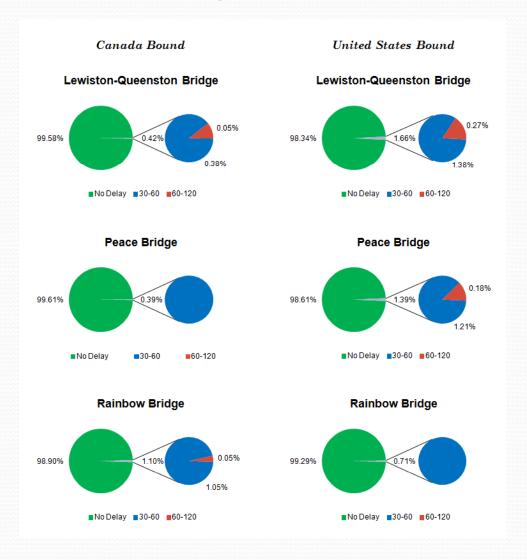
Technology Deployment

- TRANSMIT E-ZPass transponder based system deployed in US and Canada
- CCTV Coverage
- Detector based queue end warning systems
- Bluetooth reader technology for travel time



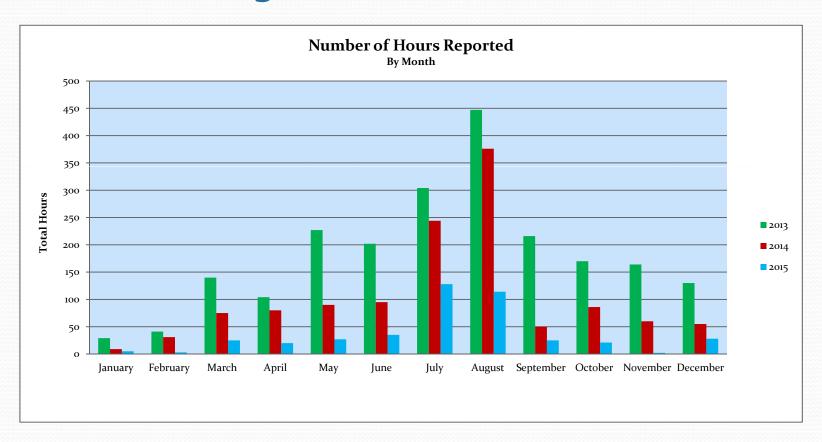


Border Crossing – 2015 Data



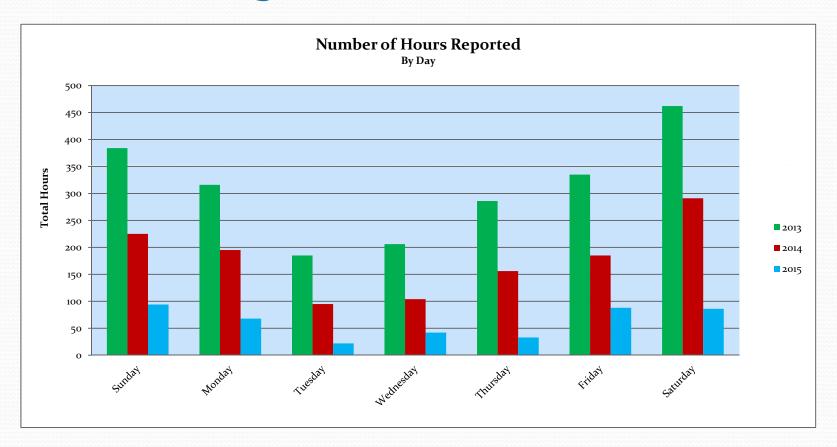


Border Crossing - Data



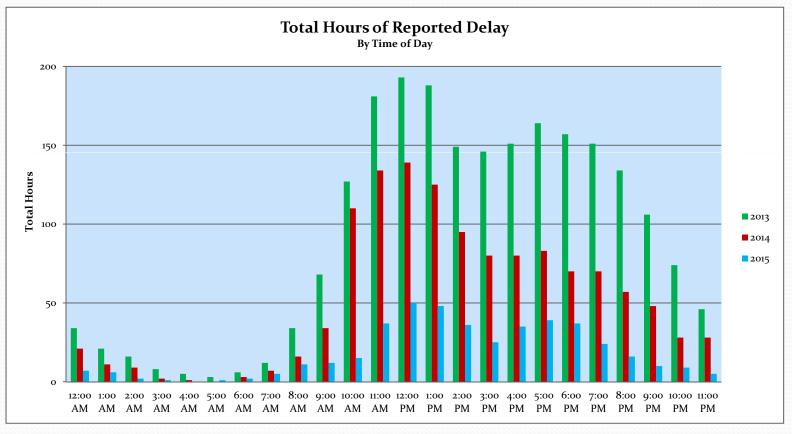


Border Crossing - Data



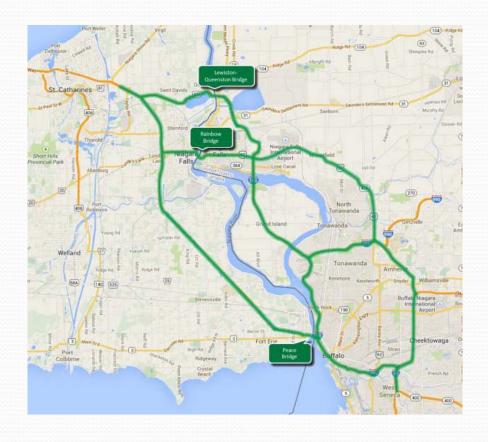


Border Crossing - Data





Integrated Corridor Management (ICM) Project





The Issue

- Corridor operates in a very constrained geography
- Implications of border on corridor traffic
- Weather and traffic management
- Multijurisdictional configuration of facilities and management interface
- Multimodal aspects of travel in the corridor
- Corridor as designated emergency evacuation route
- Continued economic and population growth
- Rapidly emerging technologies





I-190 Corridor (Why do we need ICM?)

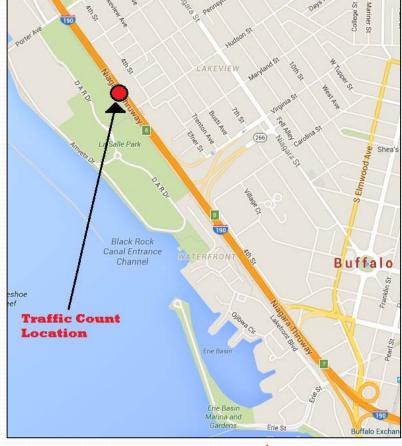
 Average Daily Volumes on I-190 in the Downtown Buffalo Area have shown significant increases during the last decade

Example illustrates count between Peace
Bridge and Niagara Street Exits –

Year: 2005 Volume: 73,150 Year: 2011 Volume: 89,973

That's a 23% increase in 6 years!

 CBD development continues to progress in recent years – Buffalo Harbor, Downtown Districts (Larkinville), Buffalo Niagara Medical Campus







Partnership Members

- Buffalo and Fort Erie Public Bridge Authority
- City of Buffalo
- Ministry of Transportation Ontario
- New York State Department of Transportation
- New York State Thruway Authority
- Niagara Frontier Transportation Authority
- Niagara International Transportation Technology Coalition
- Greater Buffalo Niagara Regional Transportation Council





Funding Agencies

- Federal Highway Administration (FHWA) through the Integrated Corridor Management Deployment Planning Grant program
- New York State Energy Research and Development Administration (NYSERDA) through Program Opportunity Notice No. 2881 Institutionalizing Integrated Solutions Supporting Accessible Multimodal Transportation Networks





Expected Results

- The objectives of the I-190 Integrated Corridor Management Project are to optimize traffic operations by identifying effective traffic management strategies to mitigate congestion and the associated environmental impacts.
- The project involves the development of a Data-driven Decision Support Tool for:
 - 1) Congestion management on critical transportation corridors in the Buffalo-Niagara Region that provide access to New York State's binational border crossings
 - 2) Development of Buffalo-Niagara Border Crossing Corridor Management Plan
 - 3) Build upon the ICM vision by focusing on recurring and non-recurring congestion, which affects commuters in the downtown Buffalo area, and the re-routing of traffic to other border crossings in the area due to issues at the Peace Bridge and on the I-190 corridor.





More Results

- The Decision Support Tool will help the BC Partnership understand the network-wide impacts of various strategies and develop plans corresponding to regional priorities, such as improving air quality and reducing delay.
- The Decision Support Tool will be a set of traffic simulation models developed using field data from a select number of known critical analysis periods.
- The Border Crossing Corridor Management Plan will include policies, procedures, and operational strategies that balance traffic loads among the regional border crossings and their access roads.
- The Plan will include softer strategies to reduce delay and manage demand through increased awareness of electronic pre-clearance programs, transit promotion, and long-term solutions focused on reducing regional border delay.
- The updated ICM will improve traffic management through the development of strategic diversion routes to the other border crossings in the region and travelers within the corridor of the downtown Buffalo area including daily trips to/from work, NFL and NHL sporting events and numerous special events.





Questions

Contact Information

Athena Hutchins, P.E. Executive Director ahutchins@nittec.org

716-847-2450

www.nittec.org - www.nittec.ca

