

**CROSS-BORDER  
INNOVATION CORRIDORS:  
How to support, strengthen  
and sustain cross-border  
innovation ecosystems**By Kathryn Friedman,  
Charles Conteh and Carol Phillips

Peace Arch, Surrey B.C.

**INTRODUCTION**

Canada and US stakeholders have mutual interest in supporting, strengthening and sustaining cross-border innovation ecosystems. This “binational advantage” (<https://www.cb institute.ca/may-2017-the-binational-advantage/>) provides countries with benefits from the economic growth, productivity and efficiency that arise when Canadian and American systems of the production, provision and distribution of goods and services are integrated between regions of geographic proximity.<sup>1</sup>

Integration, however, does not mean uniformity. Rather, it means strategically leveraging differences, or complementarities, to create joint economic gain. For example, Canadian and US differences in market size (the US market is larger and more innovative with a larger labour force) and composition (the Canadian market is younger, growing faster and is more technically trained) could be leveraged by companies to give them an edge in the global marketplace. A US company could access Canadian talent to innovate and ultimately strengthen its bottom line; a Canadian company could access a close, politically stable market flush with venture capital and filled with potential consumers or partners to help export products globally. Another example is long-term business cycles, which tend to be out of sync between Canada and the US. Companies on both sides of the border could take these cycles into account when planning strategically in the real-life battle for profits (think Pierre Wack of Royal Dutch Shell).

The point is this: Canada and the US are stronger together not despite their differences, but because of them (<https://www.cb institute.ca/may-2017-the-binational-advantage/>).

Given the importance of cross-border innovation ecosystems to both countries, the question is ‘how’? How can stakeholders in Canada and the US provide the enabling environment to support, strengthen and sustain cross-border economic innovation ecosystems? Given the complexity of actors involved (e.g., public sector actors at the federal, state-provincial and local scales; private sector companies and entrepreneurs; economic development officials, incubators, accelerators and business support organizations; research institutions; non-profits) in what is generally viewed as an organic process, what would it take?

**In an effort to answer these questions, the Brock University Niagara Community Observatory and the University at Buffalo, in conjunction with 11 partners and supporters,<sup>2</sup> held a Cross-Border Innovation Corridor Dialogue at Niagara College, Niagara-on-the-Lake, Ont., Canada on May 16, 2019.**

<sup>1</sup> Many thanks to Dr. Bill Anderson, Director, Cross-Border Institute, Assistant VP, Innovation in Cross-Border Strategies and Ontario Research Chair in Cross-Border Transportation Policy at the University of Windsor for his intellectual leadership in developing the ideas contained in this paragraph.

<sup>2</sup> The Dialogue was generously supported by the John R. Oishei Foundation; the US Mission to Canada (the US Embassy-Ottawa and the US Consul General-Toronto); the Canadian Consul General-New York; Peace Bridge Authority; Niagara Falls Bridge Commission; Council for the Great Lakes Region; Can-Am BTA; University of Toronto; University at Buffalo Office of the Vice Provost for International Education; and the Social Sciences and Research Council of Canada Borders in Globalization Program.

Invited guests included public, private, NGO and academic sector stakeholders from three cross-border regions: the Cascadia Innovation Corridor, the most developed of the three corridors represented at the Dialogue; the Detroit-Windsor Corridor; and the Buffalo-Niagara-Hamilton-Toronto Corridor. Additionally, two other panels provided insight into these questions. The first was a panel on global innovation ecosystems, which included an expert on Northern Ireland border challenges as these relate to innovation within the context of Brexit; an expert on innovation ecosystems in the context of the US-Mexico relationship; and an expert on global innovation ecosystem best practice. The second was a panel providing the perspective of local Canadian and US public officials and economic development professionals.

This policy brief summarizes the event’s conversation; synthesizes key insights; and offers recommendations to stakeholders in these regions who remain committed to forging ahead in the Canada-US cross-border innovation ecosystem space.

## CASCADIA INNOVATION CORRIDOR

The Cascadia Innovation Corridor (CIC) is an innovation ecosystem established by a Memorandum of Understanding among government, academic and business leaders in the Pacific Northwest in 2016. The vision of the CIC, which links Vancouver, Seattle and Portland, is to become one innovative economic zone that generates a shared sense of identity as its centerpiece by maximizing the Greater Pacific Northwest’s competitive advantages and enhancing its position as a global hub of innovation and commerce (<https://connectcascadia.com/>). The CIC focuses on four innovation sectors: life sciences, transformative technologies, retail innovation and sustainable agriculture. It also aims to develop world-class infrastructure, defined broadly as transportation, talent, higher education research and, of course, a state-of-the-art border that allows for the efficient movement of people and goods (<https://connectcascadia.com/wp-content/uploads/2019/03/20190328Cascadia-Innovation-Corridor-with-co-chairs-USCAN.pdf>).

Dialogue panelists pointed to several attributes integral to establishing, supporting, strengthening and sustaining the CIC. First, they noted that the CIC has significant public sector support, including state and provincial legislators, the Governor of Washington and the Premier of British Columbia. Second, the CIC benefits from strong business support.

# CASCADIA INNOVATION CORRIDOR

## 9.1 MILLION

Population of Lower Mainland BC/Seattle/Portland

**6%** of all US-Can trade flowed across this border in 2017

**#1 US EXPORT MACHINERY/ ELECTRICAL**  
to Canada in 2017 (24 per cent of all trade crossing here)

**#1 CA EXPORT WOOD AND WOOD PRODUCTS**  
to the US in 2017 (26 per cent of all trade crossing here)

### Peace Arch/ Douglas

(Personal vehicles only)

**4.67 Million**  
2018 PERSONAL VEHICLES

**4.67 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Pacific Highway

**3.6 Million**  
2018 PERSONAL VEHICLES

**4.4 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Lynden/ Aldergrove

**1.15 Million**  
2018 PERSONAL VEHICLES

**1.25 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Sumas/ Abbotsford

**1.85 Million**  
2018 PERSONAL VEHICLES

**2.1 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

\*Crossing data courtesy of Whatcom Council of Governments; trade numbers from Border Barometer 2018 [https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpr\\_publications](https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpr_publications)

Importantly, Microsoft served as the catalyst for establishing the CIC due to immigration challenges the company faced in getting talent across the border. These sectors not only support the CIC but represent a committed partnership that allows the CIC to continue to evolve.

Third, the CIC also hails from a region where Canada-US collaboration is firmly rooted. It benefits from the collaborative political culture embedded in the Pacific Northwest. Because of this shared value, it is more natural for stakeholders on each side of the border to work together when compared to other cross-border regions where collaboration across the border at the state-provincial or regional scale is more challenging. For example, the Pacific Northwest Economic Region (PNWER) is considered the gold-standard of Canada-US cross-border collaboration at the state-provincial level. In addition, the Pacific Northwest is home to the Border Policy Research Institute at Western Washington University and the International Mobility and Trade Corridor. All of these subnational entities have designated leadership whose “day job” is to push the cross-border agenda. This culture of collaboration translates into strong capacity for stakeholders to focus on supporting, strengthening and sustaining the innovation ecosystem that the CIC represents.

Challenges, however, exist. Although the partnership between the Fred Hutch Cancer Research Center in Seattle and the British Columbia Cancer Agency represents a significant example of formalized collaboration in the health and life sciences, their research encounters barriers to cross-border capital flows. Funding for collaborative research is separate, which is highly inefficient and at odds with creating a culture of cooperation. Additionally, talent mobility continues to be a challenge, given the current US federal approach to immigration policy. Last, but not least, the CIC has not given enough attention to where it wants to be “10 years out.” According to panelists, leadership needs to engage in long-term visioning and strategy to continue to develop.



Ambassador Bridge, Detroit-Windsor

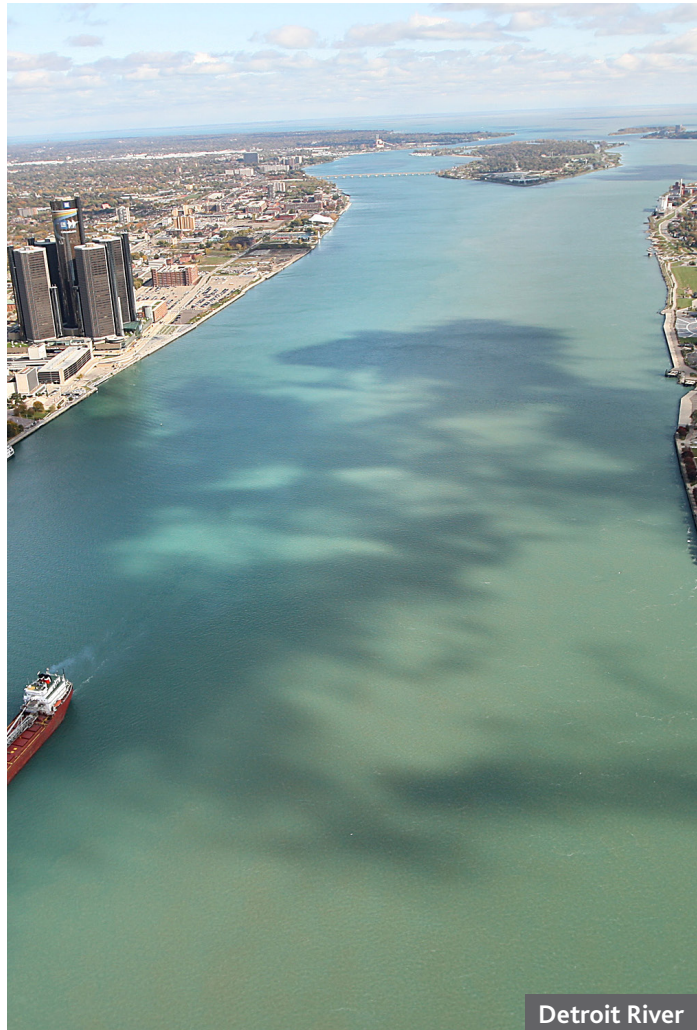
One word describes the nature of the cross-border innovation ecosystem encompassing the cities of Detroit, Mich. and Windsor, Ont.: autos. These cities are known as powerhouses in the North American automobile manufacturing space and, given complementary strengths in this sector, Detroit and Windsor play a significant role in the overall health of the economies of the United States and Canada.

According to panelists, cross-border innovation initiatives in Detroit-Windsor are less structured and currently less diversified when compared to the CIC. But stakeholders are on the move, anticipating that the automotive industry will over the next few decades become interdependent with innovation clusters in place in Waterloo (AI) and Toronto (entrepreneurship). This view was paradoxically spurred on by the bid of Detroit-Windsor submitted to Amazon when competing for its coveted HQ2. This joint proposal, which touted Detroit-Windsor’s binational assets and ability to attract talent from the United States and Canada, did not win. Nonetheless, the effort represented a reckoning of sorts for organizations and governments because stakeholders realized the potential of strengthening their cross-border innovation ecosystem.

Panelists pointed to the recently signed Memorandum of Understanding (MOU) between the State of Michigan and Province of Ontario in the auto sector as evidence of this momentum. Relatedly, there has been increased cross-border focus on new automotive technologies and how to use these technologies to improve the economy of the Detroit-Windsor region. Both Ontario and Michigan have introduced policies with regard to the testing of autonomous vehicles to help move the region toward IT and tech-related jobs. In addition to the cross-border integration that already exists in the auto sector (or, perhaps, because of these ties), this corridor has public and private sector entities on both sides of the border that are heavily invested in ensuring the border works efficiently and effectively with respect to trade.

Panelists also noted several challenges. They believed that state-provincial collaboration is critically important to supporting cross-border innovation ecosystems. However, apart from the MOU and policy alignment regarding autonomous vehicles, collaboration at this scale tends to be ad hoc. Additionally, as pointed out by one panelist, there is no singular “natural constituency” for building a cross-border innovation ecosystem. Although both Detroit and Windsor are in better economic condition compared to a decade ago,

there remain serious economically distressed areas in each city. Cross-border initiatives, understandably, fall by the wayside in such a context. Additionally, talent attraction, talent retention and labour mobility are challenges that undercut efforts to support a cross-border innovation ecosystem. Getting “good people” to work in a cross-border context is important to companies in the region, yet difficulties with obtaining the proper visas remain. Nonetheless, stakeholders in the Detroit-Windsor corridor are now looking to use Canada-US trade as an economic development strategy for boosting job growth and economic output and make this region more attractive for business investment.



Detroit River

# DETROIT-WINDSOR CORRIDOR

## 5.7 MILLION

**31%** of all US-Can truck and rail trade flowed across this border in 2017

**#1 US EXPORT AUTO**  
to Canada in 2017 (37 per cent of all trade crossing here)

**#1 CA EXPORT AUTO**  
to the US in 2017 (49 per cent of all trade crossing here)

**Ambassador Bridge**  
4.64 Million  
2018 PERSONAL VEHICLES  
7.24 Million  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

**Detroit-Windsor Tunnel**  
3.82 Million  
2018 PERSONAL VEHICLES  
3.87 Million  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

\*Crossing data by Public Border Operators Association, courtesy of Niagara Falls Bridge Commission; trade numbers from Border Barometer 2018  
[https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpri\\_publications](https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpri_publications)

## BUFFALO-NIAGARA-HAMILTON-TORONTO CORRIDOR

The Buffalo-Niagara-Hamilton-Toronto corridor is a significant region in the Canada-US relationship. It facilitates billions of dollars in annual trade between the United States and Canada and supports hundreds of jobs on both sides of the border. In addition to moving goods across the border in a seamless fashion, moving people across the border with minimal delays is important, as the region attracts a large number of tourists due to Niagara Falls. Panelists agreed that this cross-border region has the potential to serve as a cross-border innovation “gateway” for businesses looking for opportunities in either Canada or the United States. The 2018-2019 PARE 3.0 initiative of the Peace Bridge Authority, which is now testing facial recognition technology to strengthen the efficient and effective movement of goods across the border, is one significant piece supporting the broader cross-border innovation ecosystem. With continued engagement of stakeholders to work on and align policy and economic development programming and priorities, panelists suggested that this corridor is primed for growth in upcoming years.

According to panelists, to achieve the promise of the region, government officials at each level, alongside educational institutions and private sector organizations, have to step up to the plate. For example, panelists suggested that public sector officials at the state-provincial and regional scales and higher education leaders on both sides of the border meet frequently and in a structured setting to seriously drive the innovation agenda. Additionally, one panelist suggested that the

Canadian and US federal governments (and state and provincial governments, as appropriate) harmonize educational standards and establish reciprocity treaties with regard to educational qualifications in high tech sectors. In so doing, students could be trained to meet labour standards in both countries and hence provide businesses with access to a larger talent pool. Focus could also be on micro-credentials and professional CLEs. Moreover, panelists pointed to legal and regulatory barriers that impede the development of cross-border innovation ecosystems. These must be addressed. For example, one panelist noted that drinking-and-driving laws that currently bar entry into Canada should be revisited. It also was suggested that federal departments in both countries could “make better border crossers” that is, educate citizens about what it takes to cross the border effectively and efficiently (proper documentation). Labour mobility – again emphasizing the importance of talent in today’s economy – emerged as a challenge for stakeholders in this region. Panelists also suggested the need for educating officials in Ottawa and Washington, DC about the “on the ground” negative impact of policies.



Peace Bridge, Buffalo-Fort Erie

# BUFFALO- NIAGARA CORRIDOR

## 10 MILLION

Population of Western New York/Golden Horseshoe

**16%** of all US-Can trade flowed across this border in 2017

**#1 US EXPORT** MACHINERY/  
ELECTRICAL  
to Canada in 2017 (24 per cent of all trade crossing here)

**#1 CA EXPORT** TRANSPORTATION/  
AUTO  
to the US in 2017 (29 per cent of all trade crossing here)

### Peace Bridge

BUFFALO-FORT ERIE CROSSING

**4.1 Million**  
2018 PERSONAL VEHICLES

**5.27 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Rainbow Bridge

NIAGARA FALLS CROSSING

**2.5 Million**  
2018 PERSONAL VEHICLES

**2.59 Million**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Whirlpool Bridge (NEXUS Only)

NIAGARA FALLS CROSSING

**538,767**  
2018 PERSONAL VEHICLES

**538,767**  
2018 TOTAL CROSSINGS  
(passenger/truck/bus)

### Lewiston-Queenston

LEWISTON-QUEENSTON  
(NIAGARA-ON-THE-LAKE)

**2.6 Million**  
2018 PERSONAL VEHICLES

**3.39 Million**  
2018 TOTAL CROSSINGS

\*Crossing data by Public Border Operators Association, courtesy of Niagara Falls Bridge Commission; trade numbers from Border Barometer 2018  
[https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpri\\_publications](https://cedar.wvu.edu/cgi/viewcontent.cgi?article=1111&context=bpri_publications)

## KEY INSIGHTS & RECOMMENDATIONS

Canada-US stakeholders in Cascadia, Detroit-Windsor and Buffalo-Niagara-Hamilton-Toronto are committed to strengthening the cross-border innovation ecosystems in place. Stakeholders view these ecosystems as a way to increase economic opportunity beyond what the cities and surrounding regions could expect to achieve with the status quo “go-it-alone” approach. That being said, supporting, strengthening and sustaining these systems is not for the faint of heart. The inherent complexity and organic nature of innovation ecosystems is doubly compounded in the cross-border context, with stakeholders having to navigate at least two different governments, legal systems, social systems, media outlets and cultures. Nevertheless, Dialogue participants remain determined to forge ahead. They see this work as a win-win for creating strong and prosperous communities on both sides of the border.

Key insights emerged from the Dialogue, which were used to formulate the following recommendations:

1. Cross-border innovation ecosystems comprise Canadian and US research institutions, entrepreneurs, public sector actors and myriad economic development “support actors” (business organizations, accelerators, incubators, bridge authorities) each playing interdependent roles in a complex web of relationships. **Each sector from each side of the Canada-US border should be at the table. Strong participation and buy-in of these actors in each sector is a must.**
2. In terms of global best practice, panelists emphasized the importance of strong connections among the various actors with a stake in the innovation ecosystem. **“Connectedness”** is correlated with start-up success and overall ecosystem success. That is, innovation occurs through partnership. There is power in shared ideas and goals. Therefore, strong connections should be nurtured to build trust, share ideas and formulate goals. **In the cross-border context, these connections and relationships are particularly important at the state, provincial and regional levels, as evidenced by the culture of collaboration in which the CIC is embedded. Think subnational diplomacy at its best. Although government plays a role, importantly relationships and collaborative practices have to be developed by companies, entrepreneurs, foundations, local economic development officials and universities. Small victories matter. To strengthen cross-border connectedness, meetings between Canadian and US stakeholders at the state, provincial and regional levels should be facilitated and mediated to build connections, relationships and trust.**

3. Undoubtedly innovation is driven by entrepreneurs and the private sector, often-times in collaboration with research universities. That does not mean there is no role for the public sector. **At the federal level in both Canada and the United States, the single most important thing that governments in both countries could undertake is to continue to align regulatory policy (perhaps through the Regulatory Cooperation Council) and create a regulatory environment that nurtures cross-border innovation ecosystems – primarily in the areas of access to talent (labour mobility), educational standards and capital flows.** Additionally, independent research identified three innovation sectors (artificial intelligence, life sciences and advanced manufacturing) where policy alignment at the federal level could support innovation ecosystems. Last, but certainly not least, on a very practical level, **US Customs and Border Protection officials and Canadian Border Services Agency officials could launch programs to educate citizens in both countries about crossing the border.**

At the subnational level, **public sector actors at the state-provincial and local levels can support and strengthen innovation through economic development programming.** For example, states and provinces could establish a cross-border fund to provide access to capital for Canada-US collaborative startups; these entities, in collaboration with universities, could establish joint funding pools for academic researchers on both sides of the border to build collaborative projects. States and provinces could enact tax policy that favors investment in cross-border innovation.

**Additionally, with regard to the regulatory environment, state and provincial officials could align educational standards (in line with their federal counterparts) and professional credentialing to enhance access to talent. At the cross-border local scale, stakeholders could create a cross-border regional strategy based upon complementarities in labour markets and innovation sectors. Regional cross-border stakeholders also could create programs that connect and strengthen supply chains in innovation sectors.**

4. All stakeholders at the Dialogue agreed that making an **“inconsequential border,” through biometrics and technology such as PARE 3.0** and related policy would strengthen innovation ecosystems by strengthening the efficient flow of people and goods.

5. Capacity, i.e., monetary and staff resources to focus on cross-border issues is a must. Each panel referenced the challenges inherent in strengthening cross-border innovation and strongly believed that **having staff whose “day job” is attending to supporting and strengthening the cross-border innovation ecosystem is critical.**

All panelists agreed that small wins are important to continue to deepen Canada-US collaboration in the innovation space and create prosperity in communities on both sides of the border. Time will tell how each region fares over the next several years, but one thing is certain: these wins will only continue with deepened capacity, commitment, engagement and support.



Lewiston-Queenston Bridge

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**About Us:**

The Niagara Community Observatory is a public-policy think-tank at Brock University working in partnership with the Niagara community to foster, produce, and disseminate research on current and emerging local issues.

More information on our office, and an electronic copy of this report, can be found on our website [brocku.ca/nco](http://brocku.ca/nco)

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