Studies in CANADA-US RELATIONS



August 2012

Measuring the Costs of the Canada-US Border

by Alexander Moens and Nachum Gabler







Key findings

- After ten years of post-9/11 border innovations, the costs associated with border crossing have not significantly decreased while government spending on border security has markedly increased.
- In order to develop performance-based and cost-effective border management policies, an outline of costs associated with the border is required.
- After adding up the lowest values from the estimated ranges for all three types of costs (trade, tourism/travel, and government programs), we find an annual cost of C\$19.1 billion in 2010 or nearly 1.5% of Canada's GDP.
- Canadian and American governments should provide detailed descriptions of costs and expenditures for specific border programs and new security measures. Furthermore, these costs/expenditures must be linked to expected outcomes and timelines. "Costs and Results" based evaluations should be undertaken on a year-to-year basis, and subsequently made public.
- In December 2011, the governments of Canada and the United States issued a joint declaration called *Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness*. While the vision provides specific benchmarks and timelines for measuring progress, it does not tie these guidelines to government expenditures, or reductions in border crossing costs. Either we will continue with incremental and uncoordinated programs, creating some improvements but not lowering the overall cost of the border, or we will begin to create a new border regime.

Studies in Canada-US Relations

August 2012

Measuring the Costs of the Canada-US Border

by Alexander Moens and Nachum Gabler

Contents

```
Executive summary / 1
Introduction / 5
A brief history of border reforms / 7
      The Smart Border Action Plan / 7
      The Security and Prosperity Partnership / 8
Border costs to travel and tourism / 12
Border costs to trade and commerce / 15
Border costs to government and taxpayers / 19
The next steps: Beyond the border / 22
Conclusion / 24
Appendix A / 26
References / 30
About the authors / 40
Acknowledgments / 40
Publishing information / 41
Supporting the Fraser Institute / 42
Purpose, funding, & independence / 43
About the Fraser Institute / 44
Editorial Advisory Board / 45
```

Executive summary

A decade has passed since the United States suffered the most violent foreign attack ever carried out on American soil. The negative consequences from the terrorist attacks of 9/11 have led to a new "security-first" orientation within many branches of the US government. As a result, the Canada-US border experienced a variety of new security regulations which have made it more costly to trade and travel between the two countries. This so-called thickening of the border has damaged the economic relationship between Canada and the US. Though an assortment of policies, programs, and pieces of legislation have been introduced to alleviate border restrictions, progress has been modest. Meanwhile, the costs associated with border crossing have not significantly decreased while government spending on border security has markedly increased.

Despite the introduction of goal-oriented border security programs, the implementation and operational costs have largely been ignored. We argue that the border needs to be thought of in ways similar to other public programs; are the set goals achieved, and are they being achieved in the most efficient ways? Given the ongoing American concern about security we may face a situation in which border programs and costs increase, while slow-downs at the border persist. The border crossing efficiencies gained from new programs must exceed the costs for true progress to be made.

After 9/11, government policy makers tried to establish a "smart border." Numerous proposals for better security risk management have previously been outlined including the bilateral Smart Border Initiative of late 2001 and the trilateral (including Mexico) Security and Prosperity Partnership of 2005. These agreements have produced notable achievements like the establishment of the Integrated Border Enforcement Teams (IBETs) and reducing the NAFTA Country-of-Origin rules for consumer products.

However, the full potential of these agreements were never realized and no notable cost savings for border management were generated. Furthermore, these agreements established a variety of new, independently established, and mostly nationally operated programs in both Canada and the US. Paper work and administrative costs were added to the border crossing process but the goal of building a discernibly thinner border was not achieved. Meanwhile, the United States has remained very concerned about security threats emanating from Canada while the Canadian government has become increasingly worried about the growing costs at wait times and security programs, and the extent to which these inhibit bilateral trade.

In December 2011, the governments of Canada and the Unites States issued a joint declaration called *Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness.* While the vision provides specific benchmarks and timelines for measuring progress, it does not tie these guidelines to government expenditures or reductions in border crossing costs. The Canadian and American governments need to tie specific border infrastructure improvements and other expenditures to specific gains, as manifest in lower border crossing costs for Canadian and American businesses engaged in cross border trade, as well as individual travellers.

There is solid evidence that the additional administration costs attributable to border security and crossing wait times have inhibited bilateral trade. In order to develop performance-based and cost effective border management policies, an outline of costs associated with the border is required.

Broadly speaking, these costs include reduced tourist travel, depressed bilateral trade, and growing public sector expenditures. The cost to tourist travel has been manifest in a 53% decline in the number of overnight and same day trips by Americans to Canada, as the volume of trade declined from 43.9 million trips in 2000 to 20.5 million trips in 2009. The negative trend persisted into early 2011 with the total number of US visitors down by 5.1%, same day trips down by 6.5%, and overnight trips down by 4.2% compared to the first six months of 2010. At the same time American tourist receipts being spent in Canada have stagnated over the past decade, amounting to US\$7.03 billion in 2001 and US\$7.04 billion in 2010. Considering that the number of travellers has been nearly halved, it is possible that roughly US\$7 billion per year in potential tourist based receipts were lost for the Canadian economy. While macroeconomic factors in the US have also played a role in reducing tourist travel, the decline in travel has been quite stable since 2001 and it is, therefore, likely that border costs are an equally important factor.

The detrimental impact of border thickening on trade is evident despite the drop in aggregate trade owing to the 2008 economic downturn. By 2010, the share of Canadian exports destined for the United States had fallen to 74.9%, down from 86% in 2000 and the share of US bound merchandise exports as a component of Canada's aggregate economic output fell from 31% to 17.2% over the same period. Border thickening has unequivocally debilitated cross border business. To determine the magnitude of damage done to cross border business, several empirical estimates of border thickening related costs imposed on trade have been calculated. One estimate suggests that between late 2001 and mid-2005, the value of the shortfall in Canadian exports to the US equaled US\$176.08 billion. Similarly, the same analysis suggested that Canadian exports destined for the US had fallen below the long term average by a magnitude ranging from 8.6% to 25.8%, during the period following 9/11 and late 2007. Another recent estimate suggested the possibility of a Canadian trade shortfall of 6.8% and aggregate welfare loss

equivalent to 1.8% of Canada's GDP. A welfare loss equivalent to 1%–1.8% of Canada's GDP in 2010 would have entailed a nominal loss between C\$16.2 billion and C\$29.2 billion.

Finally, the federal government's efforts to reduce the negative economic effects linked to border thickening have cost the Canadian public billions of dollars. An array of trusted traveller and commercial shipper programs alongside a slew of high tech security initiatives have been implemented since 9/11; Canadian tax payers have footed the bill. Catchy (and costly) acronyms for programs, including IBETs, PIP, FAST, and EDLs are plentiful. Further aggravating matters, the United States has unilaterally implemented a variety of its own programs that have required some expenditure by Canadian taxpayers in order to meet compliance standards. Unfortunately, no publicly available data exists that allows for a systematic year-by-year tracking of the costs linked to border security programs. Though researchers can only find snap shots of program expenditures or components of overall program costs, our estimate of aggregate government expenditures in maintaining the border amounts to between C\$600 million and C\$1 billion annually.

After adding up the lowest values from the estimated ranges for all three types of costs (trade, tourism, and government programs), we find an annual cost of C\$19.1 billion. The lowest estimated value combining all three cost estimates is composed of one third of the potential revenue lost from Americans travelling to Canada (C\$2.3 billion), and the lowest trade cost estimate from the most reliable trade impact calculations (C\$16.2 billion) plus \$C0.6 billion in government expenditures. Canada's GDP in 2010 was approximately C\$1,574 billion. The overall cost of the border as estimated in this paper (C\$19.1 billion) is thus 1.47% of GDP for that year.

In recognition of the significant costs attributable to border thickening, the Canadian and American governments recommitted in December 2011 to tackling the challenge of balancing security and trade considerations that are fundamental for managing an effective and efficient border; a "smart" border. While the Canada-US border must continue to fulfill its traditional mandate of demarking sovereign jurisdiction, ways to achieve this goal at minimal administrative cost and hindrance to cross border business, must be found. The recent announcement of a new bridge to be built linking Ontario and Michigan should have a very positive impact on the future costs of crossing the border in this industrial hub.

The Beyond the Border Declaration is laudable in that it includes specific goals and timelines for a variety of new and improved measures as well as proposals for several pilot projects. The plan also promises to improve coordination, cooperation, and harmonization with the United States in several respects, such as the adoption of advanced radio frequency based identification technology and better aligning the Canadian supply chain security

program, Partners in Protection with the American equivalent, Customs-Trade Partnership Against Terrorism.

Overall, the 2011 Beyond the Border Declaration offers fairly specific goals and a realistic time frame (between one and three years) for most initiatives. However, there is room for improvement. This paper's main recommendation is that the Canadian and American governments should provide detailed descriptions of costs and expenditures for specific border programs and new security measures. Furthermore, these costs/expenditures must not only be linked to expected outcomes and timelines but must also be evaluated in terms of performance, namely, whether the expenditures made by the public sector are producing savings for individual travellers and traders. "Costs and Results" based evaluations should be undertaken on a year-to-year basis, and subsequently made public.

The Beyond the Border Declaration puts Canadians and Americans at a crossroads: either we will continue with incremental and uncoordinated programs as we have often done since 9/11 and thus possibly create some improvements but not lower the overall cost of the border or we will begin to create a new border regime. In order to do the latter we need to hold governments accountable in terms of costs and savings.

Introduction—9/11 and its consequences

A decade has passed since the United States suffered the most violent foreign attack ever carried out on American soil. The shock waves that spread forth after the terrorist attacks on September 11th, 2001 have reverberated across the American political and economic landscape and, indeed, far beyond. The negative consequences from 9/11 have become deeply entrenched and have led to a new "security-first" orientation that now permeates most branches of the US government, most notably the Department of Homeland Security. As can be discerned from the lengthy debates in the US House of Representatives and Senate concerning the Canada-US border and related security issues, America's political leaders have also become preoccupied with security first measures (Moens and Gabler, 2011).

One enduring consequence of 9/11 was the damage to the commercial interaction between Canada and the US which had been growing for well over a decade (Haggart, 2001a; Sydor, 2003; Beaulieu, 2007). Unfortunately, the economic relationship between the two countries has been seriously jeopardized.

Border thickening—the phenomenon whereby national borders become increasingly impermeable or costly for individual travellers and commercial shippers to cross due to enhanced security procedures—became readily apparent to businesses engaged in cross border commerce and to tourists travelling between Canada and the US following 9/11.1 Policy makers and assorted business and community stakeholders have spent considerable time and resources in their efforts to abate, or overcome, the border thickening problem. While a wide assortment of policies, programs, initiatives, and pieces of legislation have been implemented, the progress made thus far has been modest, as evidenced by both the Canadian and American governments' continual pursuit of an easier border crossing environment. Meanwhile, the costs of border crossing do not appear to have decreased. Various political initiatives have been made since late 2001 and these may have averted even larger and more disruptive unilateral US measures. Still, they do not appear to have delivered adequate savings or increased efficiencies. We provide evidence below that travel and tourism, as well as the volume of trade, have suffered from border thickening. Meanwhile, government spending on border

There is an abundance of literature documenting the border thickening phenomenon in the post-9/11 era along the Canada-US frontier, including studies from Goldfarb and Robson (2003), Taylor and Robideaux (2004), Kergin and Matthiesen (2008), Ackelson (2009), Grady (2009a, 2009b), Sands (2009), and Hart (2010).

security programs has increased. The key point is that new border security programs must not only be more goal-oriented, but that the implementation and operational cost must become a crucial factor in further developments regarding border management. The border needs to be thought of in ways similar to other public programs: are set goals achieved, and are they being achieved in the most efficient ways?

Given the ongoing American concern about security as well as the sheer bureaucratic momentum inherent in large organizations such as Public Safety Canada and the US Department of Homeland Security, we may face a situation in which border programs, both at the continental perimeter and at the shared land border, expand and increase in cost, while traffic slowdowns at the border persist. If the costs of new programs exceed the actual border crossing efficiencies gained, progress has not been made.

In December 2011, Prime Minister Stephen Harper and President Barack Obama issued a joint declaration called *Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness.* This declaration, which will be discussed in more detail later in this report, should be seen as a continuation of efforts that began immediately after 9/11. While the Beyond the Border vision (made public in early 2012) provides specific benchmarks and timelines for measuring progress, it does not tie these guidelines to government expenditures, or reductions in trade and border crossing costs. As in earlier initiatives, the costs are merely assumed to accrue as a result of new measures. Arguably, both the Canadian and American governments need to take the next step by tying specific border infrastructure improvements and expenditures to specific gains, as manifest in lower logistical and border crossing costs for businesses engaged in Canada-US trade as well as individual travellers and tourists.

A brief history of border reforms

Numerous proposals for better security risk management have previously been outlined and, after 9/11, government policy makers tried to establish a "smart border."

New programs were set up under the rubric of risk management including the trusted traveller and shipper programs, NEXUS and FAST; freight container inspection programs, such as the Secure Container Initiative; and law enforcement programs, like the Integrated Border Enforcement Teams. The Bush administration floated the concept of a North American continental security perimeter briefly in late 2001, but the Canadian government at the time did not engage this proposal (Whitaker, 2003).

The Smart Border Action Plan

The two governments commenced work on the *Action Plan for Creating a Secure and Smart Border*, which contained 30 working directives divided into four pillars, shortly after 9/11. The first and second pillars included items to secure the flow of people and goods, the third pillar consisted of a commitment to modernizing border infrastructure while the fourth called for the coordination and sharing of information in support of the first three objectives (Department of Homeland Security, 2001, 2002).

The risk management approach also encompassed the goal of facilitating the flow of North American bound cargo. The action plan required that Canadian and American authorities develop a common screening process for identifying cargo security risks before arrival in North America and adopt common security standards at foreign production and distribution facilities exporting goods to Canada and the United States. The plan also tasked authorities to work towards implementing a common process for clearing commercial cargo at the border and developing programs to expedite the flow of verifiable low risk goods by implementing procedures to clear goods away from the border whenever possible.

The Smart Border action plan increased the operational and administrative costs imposed on Canadian and American businesses engaged in cross border commerce. Whether these programs led to significant security improvements is difficult to determine. The US government notes that the number of individuals apprehended at the northern border declined from over 12,000 persons in 1997 to some 6,300 in 2009, but has not offered an explanation for this drop; whether it resulted from increased US border

staffing (up from less than 500 agents in 1997 to more than 2,000 in 2009) or from other causes is open to question (Haddal, 2010).

The Integrated Border Enforcement Teams (IBETs) is one example where cooperation to secure the border has resulted in greater operational effectiveness through increased information sharing and operational coordination (Security Intelligence Review Committee, 2006). The IBETs have brought together five separate law enforcement agencies from both Canada and the United States. They share information and resources and conduct binational patrols along the Canada-US frontier. However, the costs of IBETs—though small relative to several other programs—have not been linked to any offsetting savings, and appear to have simply been added to existing enforcement operations. IBETs are an excellent way for Canada and the United States to bi-nationalize specific enforcement operations, but both governments must demonstrate the operational success of these teams and where the savings in terms of pre-IBETs costs have accrued.

We were not been able to find measurable performance-based results for the various items in the Smart Border Action Plan. It is not clear whether costs have been an integral objective for making the border smarter. Similarly, the new measures did not include program costs as one of the key yardsticks for measuring the extent to which any particular program or initiative has been a success.

In sum, the Smart Border Action Plan generated a variety of new, independently established, and mostly nationally operated programs in both Canada and the US. It added paper work and administrative costs to cross border commerce but, as we will argue below, did not produce a discernibly thinner border. The United States has remained very concerned about security threats emanating from Canada while the Canadian government has became increasingly worried about the growing costs in wait times and security programs, and the extent to which these inhibit bilateral trade.

The Security and Prosperity Partnership

By 2004, the governments of Canada, the US, and Mexico were working towards a more comprehensive plan for strengthening continental security and trade. These negotiations eventually led to the Security and Prosperity

The five core Canadian and American law enforcement agencies participating in the IBETs initiative include the Canadian Border Services Agency, the US Customs and Border Protection, the US Coast Guard, the Royal Canadian Mounted Police, and the US Immigration and Customs Enforcement (Canada Border Services Agency, 2006a; RCMP, 2007, 2009). Various local and regional law enforcement organizations have also contributed to the efforts of the IBETs when their contributions have been warranted.

Partnership (SPP), introduced in March 2005 at a trilateral meeting of the North American heads of state in Waco, Texas (Villarreal and Lake, 2009; Government of Canada, 2009; Moens, 2011).

The SPP was a conceptual improvement over the 2001 Smart Border Action Plan as it recognized that both cost efficient security programs and regulatory harmonization are needed to reduce border thickening; the border being where regulatory differences are encountered and administered.

Though there were some notable achievements in reducing the NAFTA Country-of-Origin rules for consumer products³, the full potential of the 19 working groups in the SPP was never realized and it did not achieve notable cost savings for border management (Anderson and Sands, 2007; Moens and Cust, 2008; Moens, 2011). The substantial differences in conditions between the southern Mexico-US border and the northern Canada-US border curtailed the benefits that trilateral talks could achieve. While the SPP negotiations were in progress, the United States continued to add unilateral measures to the border including a new bio-inspection fee and the Western Hemisphere Travel Initiative (WHTI) which mandated that all travellers show a passport or enhanced driver's license to cross the border into the US.

The Department of Homeland Security's (DHS) approach to border management does not suggest that the United States believes the Canada-US border has become more secure or smart over the last decade. On the contrary, the testimony given by then US-Customs and Border Protection (US-CBP) Commissioner, Alan D. Bersin, to the US Senate Subcommittee on Immigration on May 17, 2011 gives the impression that thinning the border for the smooth flow of trade is not as important as adding additional layers of security (Department of Homeland Security, 2011a). It seems that a militaristic mentality is replacing the more conventional border protection perspective in some of the DHS operational changes at the border. The outlook and approach that characterize management of the southern US-Mexico border seems to have been transplanted to the northern frontier, even though the conditions are very different. Both the deployment of Predator 3 Unmanned Ariel Vehicles (UAVs) in the skies above the Pacific Northwest and the proposal to start erecting fences in certain areas along the border, resemble

3 Within the NAFTA framework, the purpose of Country-of-Origin labeling is to indicate where a product was manufactured or assembled. Furthermore, Country-of-Origin labeling is also used to determine the rate of duty applicable for an array of products, including goods manufactured both within and outside NAFTA signatory countries (the NAFTA bloc). If a final product combines components that were manufactured in multiple countries, or if the production process entailed piecemeal assembly in more than one country, the determination of country of origin can be fairly complex. As such, NAFTA requires that Canada, the US, and Mexico outline precise rules for defining and then identifying country of origin. With few exceptions, products manufactured abroad and then imported into North America must bare a country of origin marking.

southern strategies (United States Customs and Border Protection, 2010, 2011). How the DHS, in this frame of mind, proposes to effectively secure a 6,400km long border (approximately half of which is water), has not been explained.⁴

The view that Canada continues to pose a real threat to US security is a serious concern for many House Representatives and Senators from both political parties in the US Congress (Moens and Gabler, 2011). For example, in 2001 Democratic Senator Byron Dorgan suggested that,

We have a 4,000 mile border between the United States and Canada, with 128 ports of entry, and 100 of them are not staffed at night. At 10 o'clock at night, the security between the United States and Canada is an orange rubber cone, just a big old orange rubber cone. It cannot talk. It cannot walk. It cannot shoot. It cannot tell a terrorist from a tow truck. It is just a big fat dumb rubber cone sitting in the middle of the road (Thomas Archive, Dorgan, 2001).

Similarly, Republican Representative Tom Tancredo once remarked, "Osama bin Laden, could land in Ontario, claim he is Osama the tent maker... and walk unfettered probably into the United States" (Thomas Archive, Tancredo, 2001). That sentiment has not been challenged by the DHS and US-CBP Commissioner (Department of Homeland Security, 2011a). As such, the DHS will find a ready audience in Congress for its plans to fortify the northern border. Canadian politicians should find this situation alarming and respond by engaging their US counterparts in both the legislative and executive branches, and explain how Canada is dealing with potential security threats. A stronger shared vision concerning security threats and how to deal with them bilaterally, is needed at the political level between our two countries.

The combination of border thickening and seeming militarization of the border have engendered a third negative feature of the border; the desire to avoid discretionary leisure trips across the border. The inclination to avoid unnecessary border crossings could be dubbed "the chilling effect", and the result has been a marked decline in cross border travel between Canada and the US. As the numbers reveal below, American visits to Canada have dropped considerably in recent years while there has been little growth in Canadian crossings into the US (Industry Canada, 2008; Canada Tourism Commission, 2010; Statistics Canada, 2010a, 2010b, 2011a). The Western

The portion of the border that spans from the Atlantic Ocean to the Pacific is slightly longer than 6,400km. With the addition of the Alaska-Yukon/BC frontier, the total length of the Canada-US border is 8,891km.

Hemisphere Travel Initiative (WHTI) most likely played a role in this downturn in conjunction with the recent US recession and the rise in value of the Canadian dollar.

The chilling effect is exemplified by a reduction in discretionary cross border trips by leisure travellers and freight shippers whenever possible (Peter Andreas, 2003a, 2003b). The chilling effect of the border is not easy to measure, but there is reason to believe that the border crossing experience is perceived negatively and has become a deterrent for many Canadians travelling to the United States. One study found that post-9/11 security measures were responsible for a reduction in same day automobile trips by Canadian shoppers into the US (Ferris, 2009). The imposition in the fall of 2012 of a new border fee (US\$5.50) for land and sea crossings as well as new tax reporting regulations by the IRS for dual citizens may enhance the chill. Stringent identification requirements, long and unpredictable wait times as well as intimidating questions by border enforcement and customs agents have seemingly engendered an image of a border that is prohibitive and menacing and should only be crossed when absolutely necessary. North American tourists and commuters crossing the Canada-US frontier without prior enrolment in a trusted traveller program appear to be increasingly uncomfortable with the entire procedure.

Nobody has an absolute right to travel to another country; however, the experience of crossing the Canada-US border should not by itself act as a barrier. To reduce the chilling effect of border crossing, Canadian and American border officials should consider joint sensitivity training as well as a joint review of training procedures for US-Customs and Border Protection and Canada Border Services Agency personnel to determine how a more hospitable and welcoming approach to border administration and inspection can be ingrained.

It is clearly within the mandate of the Canadian and American governments to administer their own border regimes and to set criteria for admitting foreigners and maintaining security. At the same time, citizens of both countries have a right to demand an effective and efficient border management policy. Given the high level of compatibility between our two societies and the deep level of integration in many economic sectors, it is reasonable to demand that border security policies and practices not disrupt trade, investment, or travel. In order to develop and implement performance-based and cost effective border management policies, we need to outline the costs of administering the border. The following sections provide a descriptive outline of those costs.

Border costs to travel and tourism

According to Statistics Canada, the number of overnight trips by American residents visiting Canada has fallen by 23% over the past decade, shrinking from 15.2 million in 2000 to 11.7 million in 2009; the lowest number since 1985 (Statistics Canada, 2010b). The number of same day return trips has fallen from 28.8 million to 8.8 million, a decline of 69%. Taking same day return and overnight trips together, the total number of trips by American residents to Canada has fallen by 53%, down from 43.9 million in 2000 to 20.5 million in 2009.

The marked decline in overnight visits by American residents to Canada was mainly manifest in declining numbers of road vehicles crossing the land border (Statistics Canada, 2010b). Between 2000 and 2009, the number of overnight trips by US travellers entering Canada in automobiles fell from 9.4 million to slightly above 7 million. Moreover, the number of overnight trips by US residents entering Canada via commuter buses fell from 798,000 in 2000 to 291,000 by 2009 (Statistics Canada, 2010).

Unfortunately, the decline has not abated; the total number of trips by US residents to Canada was down by 9.2% in 2009 compared to 2008 and fell by another 1.5% in 2010. Day trips were down by 12.3% and 4.4% in 2009 and 2010 respectively. Overnight trips had fallen by 6.7% in 2009 but recovered slightly in 2010 by 0.7%. Unfortunately, the negative trend continued into the first quarter of 2011 with the total number of US visitors down by 5.1%, same day trips down by 6.5%, and overnight trips down by 4.2% compared to the first six months of 2010 (Statistics Canada, 2011a). The decline over the past decade in US residents travelling to Canada can be seen in figures 1 and 2.

Furthermore, the total value of tourist based receipts spent by Americans visiting Canada has stagnated. Total payments made by Americans to Canadians for travel and tourism barely fluctuated over the past decade, amounting to US\$7.03 billion in 2001 and US\$7.04 billion in 2010 (US Department of Commerce and US Bureau of Economic Analysis, 2011). Given that the number of travellers has been nearly cut in half, it is likely

It is important to recognize the negative impact on American tourist travel to Canada resulting from two economic variables, unrelated to tighter border security. The first variable is the rising value of the Canadian dollar relative to the American dollar, which tends to reduce the number of US tourists visiting Canada, by making travel more expensive. The second variable is the financial and economic crises in the US beginning in 2008, which likely reduced the amount of US tourists travelling abroad to most foreign destinations.

that approximately US\$7 billion per year in potential tourist based receipts were lost for the Canadian economy.

50 Total Number of travellers (millions) 40 Same Day Overnight 30 20 10 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Figure 1: US travellers visiting Canada by duration of stay 2000-2011 (in millions)

Source: Statistics Canada, 2010a, 2010b.

The segment of the US tourism industry catering to Canadians has not faired quite as badly. Canadian tourist travel to the US has remained fairly steady over the past decade, and saw modest growth in 2010. According to Statistics Canada, Canadian residents took 18 million overnight trips to the United States in 2010; the fourth highest annual number of trips on record. Similarly, the US Office of Travel and Tourism Industries reported that Canadians made 19.96 million trips to the US in 2010, an increase of 11% over the previous year. Furthermore, Canadians comprised the single largest group of internationals arriving in the US, making up one-third of all visitors to the United States in 2010. Canadians spent US\$20.8 billion while visiting in 2010, a 29% increase over the 2009 figure (US Department of Commerce and US Bureau of Economic Analysis, 2011). Over the past decade total payments made by Canadian travellers to Americans grew from US\$8.3 billion in 2001 to US\$20.8 billion in 2010 (US Department of Commerce and US Bureau of Economic Analysis, 2011).

The discrepancy between the number of American and Canadian shortterm visitors underscores two observations. First, the impact of border thickening and chilling is only a part of the story. Second, macroeconomic factors like the American recession that began in late 2008 and the rising value of the Canadian dollar since 2005 are important in explaining the continuing

40 Automobile All Other Modes

Bus

25

20

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Figure 2: US travellers visiting Canada by mode of travel 2000-2011 (in millions)

Source: Statistics Canada, 2010a, 2010b.

growth in Canadian travel and the drop in US travel. However, the decline in US travel goes back to 2001 and precedes both the economic downturn and the rise in the Canadian dollar, suggesting that more than macroeconomic factors are at play. The estimated loss of approximately US\$7 billion in annual tourist-based receipts cannot entirely be attributed to border measures; precisely how much was lost because of border thickening cannot be determined within the parameters of this study. Given that the decline as shown in figure 1 is quite stable from 2001 onward, it may well be that border costs are as important a factor as the economic causes.

Border costs to trade and commerce

Long queues and wait times associated with border thickening after September 11th have been responsible for additional costs to manufacturers, shippers, and truckers moving commercial merchandise across the Canada-US border. For example, delays at the border have increased the production costs of building a new vehicle in North America by C\$800 (Canadian Manufacturers and Exporters, 2005). Ford Motor Company recently reported that its trucks involved in cross-border transfers of parts wait one hour on average at the border, amounting to a cost of C\$200 per truck (Ibbitson, 2011). Using a Transport Canada estimate on wait times and related border thickening costs, one study estimated that the total costs incurred by the Canadian commercial-trucking industry attributable to heightened post-9/11 border security amounted to approximately 1% of total annual industry revenues (Goldfarb, 2007).

Wait times caused by security measures or lack of adequate infrastructure or insufficient border staffing have impacted the effectiveness of just-intime-delivery inventory systems. Despite the introduction of trusted shipper programs like FAST, PIP and C-TPAT, and the Secure Container Initiative (CSI), Canadian businesses have been forced to adopt costly alternative plans, such as extra warehousing capacity for storage of "just-in-case" inventory, to guard against the disruption of shipping schedules as a result of excessive wait times and delays at the border (Goldfarb, 2007a, 2007b; US Chamber of Commerce and Canadian Chamber of Commerce, 2008).

Several studies have tried to estimate the costs of border thickening by adding up administrative costs and costs attributable to wait times, on a sector by sector or industry by industry basis. The cost estimates typically fall between 1.5% and 3% of Canadian-American merchandise trade (Moens and Cust, 2008). The cost estimates for 2008 would then be between C\$9 billion and C\$18 billion in unrealized trade receipts. Assuming that border thickening related costs have not been substantially reduced as of 2011, the cost estimates would be between C\$6.8 and C\$14 billion in unrealized trade receipts (Moens and Cust, 2008; Industry Canada, 2011; authors' calculation).

There is an abundance of literature analyzing the impact of border thickening related costs to North American businesses and bilateral trade including surveys, case studies, and general commentaries. The theme evident in all of these contributions is that border thickening has resulted in higher operating costs for businesses engaged in cross border commerce and has had a negative impact on the aggregate level of Canada-US trade. Several empirical studies that analyzed aggregate trade flows between Canada and

the US were undertaken by Steven Globerman and Paul Storer (2006, 2008, 2009a, 2009b), Patrick Grady (2009a, 2009b), and Trien Ngyuen and Randall Wigle (2009, 2011). They all find significant shortfalls in trade attributable to higher border crossing costs.⁶

The two macroeconomic variables used by Globerman and Storer to explain annual variations in the nominal value of Canadian exports demanded in the US include (1) US nominal GDP and (2) the nominal Canada-US exchange rate. In order to isolate the impact of post-9/11 border thickening on intra-continental trade, Globerman and Storer specified a "dummy" variable⁷ for the third and fourth quarters of 2001 and annual "dummy" variables for each subsequent year thereafter, in order to capture the yearly variations in annual Canada-US trade attributable to post-9/11 border thickening. Globerman and Storer (2006, 2008) conducted their initial estimates using quarterly data on the value of nominal trade flows between 1995 and 2006. They subsequently extended their analysis through to 2008 (Globerman and Storer, 2009a, 2009b).

Globerman and Storer's results consistently demonstrate the depression of Canada-US trade flows in the aftermath of 9/11. The degree to which intra-continental trade declined as a result of border thickening depends on the particular trade flow being scrutinized; aggregate American exports to Canada had recovered by 2005 while Canadian exports to the US remained depressed throughout the period under investigation. Globerman and Storer calculated that between the fourth quarter of 2001 and the second quarter of 2005, the total value of the shortfall in Canadian exports to the US equaled US\$176.08 billion. As of 2008, Canadian exports to the United States continued to remain below the expected long term average that would otherwise have prevailed in the absence of structural changes attributable to post-9/11 security measures.

The decline in bilateral trade between Canada and the United States has been severe. Globerman and Storer calculated that Canadian exports destined for the US had fallen below the long term average by a magnitude

- Michael Burt (2009a, 2009b), in contrast, does not find any compelling or consistent evidence to support these findings. However, despite Burt's contention that Canada's US bound exports have not shown evidence of systematic weakness attributable to border thickening, he recognizes that businesses engaged in trade between Canada and the US have indeed incurred increasing operating costs associated with conducting business across the land border. Burt posits that businesses have invested significant resources in order to reduce the obstructions encumbering their operating logistics. Thus, businesses adapted to the new security environment and for that reason Canada's aggregate exports to the US have not been discernibly curtailed.
- A "dummy" variable is a statistical tool that indicates the presence or absence of some categorical effect that could potentially influence an empirical outcome by changing the value of the variable being analyzed.

ranging from 8.6% to 25.8%, throughout the period between the fourth quarter of 2001 and 2007. For American exports destined for Canada, the magnitude of annual shortfalls ranged between 3.9% and 22.8%, but the shortfall had largely vanished by 2005 as exports from the US to Canada recovered and tended towards the long term trajectory.

In line with the results reported by Globerman and Storer (2006, 2008, 2009a, 2009b), Grady (2009a, 2009b) finds that border thickening since 9/11 has adversely affected the flow of Canadian merchandise exports to the US. Grady's estimates reveal that Canadian exports to the US in 2007 were reduced by 12.5% (equivalent to US\$30.6 billion in 2007 real dollars) relative to the long term trend that could have otherwise persisted if it were not for the heightened security measures in effect at the Canada-US border. Similarly, Grady finds an 8% shortfall for Canadian tourist receipts and a 13% (equivalent to US\$3.1 billion in 2007 real dollars) shortfall in service exports to the US, relative to their respective long term averages.

One major difference between Globerman and Storer's analysis and that performed by Grady, is Grady's exclusive focus on US bound Canadian exports in both merchandise and service trade. Grady's rationale for excluding most Canadian bound US exports is that the impetus for border thickening has mainly resulted from restrictions, regulations, and obstacles on the American side of the border. As such, Grady suggests that there is less reason to believe US exports destined for Canada were obstructed by any initiatives introduced on the Canadian side of the shared border since 2001.

Another pair of studies authored by Nguyen and Wigle (2009, 2011), gauged the impact of heightened border security on the Canadian economy and traced the impact on subsequent intra-province trade, on a province by province and industry by industry basis. The authors treat the negative impact of post-9/11 border thickening as a real cost to exporters when engaging in bilateral trade, involving actual resource outlays on fuel, truck drivers, and inventory storage and not simply as a price wedge or external tax that drives up the cost of traded goods for importers.

Nguyen and Wigle (2009, 2011) experiment with two possible magnitudes for border delay costs in order to establish lower and upper bounds for the negative aggregate impact on trade flows between Canada and the US as well as the wider Canadian economy: (1) a 1% cost increase on both merchandise and service trade and (2) a 2% cost increase on merchandise trade and a 1% increase on service trade. Nguyen and Wigle assumed the magnitudes for possible trade costs based on the results of earlier research analyzing the negative impact on border crossing attributable to tougher security measures. In accordance with results from previous studies, the authors find evidence of significant shortfalls in Canadian trade flows owing to post-9/11 border thickening. A 1% delay cost results in a Canadian trade shortfall of 3.6% and an aggregate welfare loss equivalent to 1% of Canada's GDP. The

more distressed scenario of a 2% delay cost on merchandise trade and a 1% delay cost on service trade resulted in a total Canadian trade shortfall of 6.8% and aggregate welfare loss equivalent to 1.8% of Canada's GDP. A welfare loss equivalent to 1%–1.8% of Canada's GDP in 2010 would have entailed a nominal loss of roughly C\$16.2 billion to C\$29.2 billion.⁸ Even if the lower value was the more reliable estimate, it's clear that this is a sizeable loss for the Canadian economy.

The most recent annual report by Foreign Affairs and International Trade Canada on Canada's international trade performance and future trade prospects noted that while the value of Canadian exports to the US had increased in 2010 relative to 2009, the 2010 figure was lower than in any other year between 1999 and 2008 (Cameron, 2011). By 2010, the share of Canadian exports destined for the United States had fallen to 74.9%, down from 86% in 2000 (Industry Canada, 2011). Furthermore, the share of US bound merchandise exports as a component of Canada's aggregate economic output had fallen to 17.2% as of 2010, down from 31% in 2000 (Statistics Canada, 2011b and Industry Canada, 2011; authors' calculation).

Three factors contributed to this decade long decline in trade: (1) the rise in the value of the Canadian dollar from 63 cents US in the summer 1998 to US\$1.04 by the summer of 2011 (Federal Reserve System, 2011), (2) border thickening and the higher cost of securitized border crossings, which affects inter-firm trade, just-in-time production processes, and intra-firm manufacturing logistics and (3) the faltering US economy following the financial meltdown beginning in 2007/08. Given the narrowing margins for competitiveness in increasingly globalized manufacturing and services industries, border thickening constitutes a serious threat to long-term economic growth in Canada.

Authors' calculation based on Nguyen and Wigle's (2011) estimate and the nominal value of Canada's aggregate GDP in 2010, as reported by Statistics Canada (2011b).

Securitization entails the growing recognition and acceptance of a potential security threat and the meeting of that perceived threat by an assortment of emergency response measures and extraordinary law enforcement powers. Since September 11th both legitimate and perceived threats to American national interests have resulted in a tendency towards bolstering security by all means possible both within the US, and along its international borders with Canada and Mexico. For the Canada-US border, the securitization process has resulted in the introduction of an array of security enhancing measures and initiatives. For a detailed outlining of the securitization process taking place along the Canada-US border see Salter and Piche (2009).

Border costs to government and taxpayers

The costs attributed to post-9/11 security initiatives have not been limited to the private sector. The Department of Justice reported that the Canadian government had expended C\$9.5 billion on various security initiatives between 2002 and 2005, some of which included enhancing border security (Canada, Department of Justice, 2005). The Canadian government recently claimed that C\$10 billion has been spent on strengthening public safety in Canada since 9/11 (Government of Canada, 2011a). The centerpiece of post-9/11 security enhancing initiatives is Bill C-31, the Public Safety and Anti-Terrorism Act (PSAT), passed in 2001 (Canada, Department of Justice, 2005). The PSAT Act allotted C\$7.7 billion over a five year period between 2002 and 2007 to support the numerous programs that fall under its umbrella (Canada, Department of Justice, 2005, 2007; Defense Research and Development Canada, 2005).

There is no publicly available data that allows for a systematic yearby-year tracking of the costs linked to border security programs and other public security measures. Researchers can only find snap shots of program expenditures or components of overall program costs. We provide below an initial compilation of assorted costs and expenditures that could be discerned from various government and news sources. We also offer a cursory estimate of government expenditures in administering trusted traveller, cargo security, and law enforcement programs.

Integrated Border Enforcement Teams (IBET):

The IBETs program was allotted a total operating budget of C\$206.9 million between 2002 and 2010, with C\$30.4 million budgeted for the fiscal year 2009/10 (Canada Border Services Agency, 2009).

Air Marshals:

The RCMP billed Transportation Canada C\$40 million dollars annually between 2004 and 2006 for the operating costs associated with deploying Air Protective Officers (i.e., armed plain clothed RCMP officers who protect passenger airliners in transit) (McGregor, 2011).

NEXUS and FAST:

In fiscal year 2005/06 NEXUS AIR received a budget of C\$4.3 million (Canada Border Services Agency, 2006b). The main NEXUS Highway program was the

most expensive Trusted Traveller program to administer given its size, with a price tag of C\$52.8 million in 2006/07. The FAST program received a budget of C\$23.6 million for the same year (Canada Border Services Agency, 2008).

Partners In Protection (PIP):

PIP is a shared program between government and private industry to secure cargo. PIP cost estimates for fiscal year 2005/06 were C\$2.2 million and in the fiscal year 2006/07, cost estimates were C\$3.8 million (Canada Border Services Agency, 2006c).

Electronic Manifest Declaration (eManifest)

The cost of administering eManifest, an expedited customs declaration system, was C\$396 million between 2007 and 2011 (Canada Border Services Agency, 2011a).

Western Hemisphere Travel Initiative (WHTI):

The Canada Border Services Agency (CBSA) reported that the costs associated with administering the US WHTI amounted to C\$14.8 million between 2006/10 (Canada Border Services Agency, 2011b).

Enhanced Drivers Licenses (EDLs):

The CBSA received C\$6.8 million in 2009/10 to assist the provinces with the adoption of EDLs (Canada Border Services Agency, 2011).

Biometric technology:

The 2008 federal budget allotted C\$26 million over two years to initiate a program that would attach biometric data to newly issued visas for foreign nationals entering Canada (Canada, Department of Finance, 2008).

Unfortunately, annualized and systematically tracked data detailing the break-down of expenditures on border security related programs are not available. Most government sources lack transparency. For example, in 2008 the Canadian government reported allocating C\$188 million for border security, but did not provide any further breakdown of the component costs (Canada, Department of Finance, 2008; Canada Border Services Agency, 2008). A list of various border security programs that have been implemented over the previous decade, along with a brief description of each program, is provided in Appendix A.

Given all of the separate and incidental costs, we cannot precisely aggregate a total border security cost for any one year. However, an informal estimate of the total cost, tallying the above numbers and filling in the gaps with reasonable assumptions, would amount to between C\$600 million and C\$1 billion annually. Given overall US spending on border security, this

estimate appears reasonable; the Department of Homeland Security reported that appropriations for border protection increased from US\$1.271 billion in 2002 to US\$3.587 billion in 2010, but did not break down the allocation of funds between the northern and southern border (Haddal, 2010).

The three types of border costs calculated above—cost to travel and tourism, cost to trade, and cost to the taxpayer—are of course not identical in kind. Some of the costs are directly incurred by businesses or travellers and some are the costs of lost business. Others are estimates of extra costs to government programs as a result of a stricter border regime. All of these costs are estimates. When we add up the lowest values from the estimated ranges for all three types of costs, we find an annual cost of C\$19.1 billion. The lowest estimated value combining all three cost estimates is composed of one third of the potential revenue lost from Americans travelling to Canada (C\$2.3 billion), the lowest trade cost estimate from page 18 (C\$16.2 billion) plus \$C6 billion in government expenditures. Canada's GDP in 2010 was approximately C\$1,574 billion. The overall cost of the border as estimated in this paper (C\$19.1 billion) is thus equivalent to 1.47% of GDP. In our view, this is a significant allocation of wealth to enforcing a border between two rather similar countries and raises fundamental questions about how to achieve greater operational efficiencies.

The next step: Beyond the border

The 2011 Beyond the Border Declaration contains two components for improving the Canadian-American border crossing process. The first component is a Regulatory Cooperation Council which will work on eliminating redundancies in national regulatory policies. The proposals for improved cooperation are in select areas of agricultural, transportation, health, and environmental policy. The second component of the declaration pertains to bolstering continental perimeter security and improving the efficiency of border management.

The Beyond the Border Declaration effectively builds on the foundations laid in the Smart Border Action Plan and the Security and Prosperity Partnership, as discussed above. The proposal includes specific goals and timelines for a variety of new and improved measures as well as plans for several pilot projects. Each facet outlines specific final goals, timelines, and the initiation of pilot projects when advisable.

The two governments agreed on creating an "integrated, multi-modal customs, and transportation security regime" to strengthen the North American economic space. One key objective is that offshore cargo bound for either the US or Canada will be inspected and cleared once for both countries. Furthermore, the two countries will deepen cooperation on passenger pre-screening and so-called no-board lists for prospective visitors to either Canada or the US. Both countries agreed to update their technology to set up a complete entrance and exit regime. Canada agreed to update its baggage inspection technology and harmonize its screening capability with US standards. Similarly, Canada agreed to emulate US use of radio frequency identification technology so that vehicles crossing the land border can proceed faster. Land border crossing data will be shared and harmonized, though the final decision in individual cases will remain a sovereign national power. Canada also agreed to collect exit data on outbound international flights and work towards integrating this data into a security database. The various implements concerning foreigner entry and exit management include data sharing on individuals who have been denied visas and individuals who have been denied entry because of earlier criminal convictions.

Another improvement entailed in the Beyond the Border Declaration is a plan to harmonize the various trusted trader programs including the Canadian supply chain security program, Partners in Protection (PIP), and the American equivalent, Customs-Trade Partnership Against Terrorism (C-TPAT). Harmonizing these initiatives is long overdue and should produce savings by reducing duplicative administration costs. Furthermore, an

invigorated effort will be made to expand the NEXUS program for individual travellers and to improve supporting infrastructure so that NEXUS members can proceed through border crossings in a more timely fashion. A new initiative has been proposed to facilitate customs preclearance away from the border. Finally, the declaration contains specific plans to coordinate border infrastructure improvement projects and build joint border monitoring stations or terminals in several remote locations. One important proposal for improving border crossing infrastructure has been the construction of a new bridge in the Windsor-Detroit area. The frictionless flow of commercial traffic between Southern Ontario and Michigan is vital for an integrated and thriving North American automotive industry. Since September 11th, elongated wait times at border crossings in the Windsor-Detroit corridor have threatened the integrity of "just-in-time" manufacturing processes and have added extra production costs to automobile manufacturing, thereby hurting the competitiveness and profitability of the North American automotive industry. The Canadian governments' recent announcement of a C\$1 billion earmark for the building of a new bridge in the vicinity of Windsor-Detroit is a welcomed and commendable decision to invest in border crossing infrastructure that promises to improve the logistics of North American automobile manufacturing, and thereby strengthen economic prospects for both Canada and the US (Government of Canada, 2012).

Overall, the 2011 Beyond the Border Declaration offers fairly specific goals and a realistic time frame (between one and three years) for most initiatives. Furthermore, Canada and the US will publish a joint report in September 2012 that details the various fees and charges that must be paid to cross the border, which is commendable if it improves transparency.

Our main recommendation is that the Canadian and American governments should provide detailed descriptions of costs and expenditures for specific border programs and new security measures. Furthermore, these costs/expenditures must not only be linked to expected outcomes and timelines but must also be evaluated in terms of performance, namely, whether the expenditures made by the public sector are producing savings for individual travellers and traders. "Costs and Results" based evaluations should be undertaken on a year-to-year basis, and subsequently made public.

Conclusion

While the Harper government and Obama administration have been justified in pushing for more progress in harmonizing continental perimeter security and customs regulations as well as exploring regulatory harmonization, we argue that on the basis of the previous ten years of experience, progress can only be made when specific security and safety initiatives are linked to specific border management cost reductions and private sector savings. This is especially important given the American disposition to bolster security measures along the North American periphery, as well as at the shared Canada-US border. Savings for either travellers or tax payers may not be realized if the Beyond the Border Declaration does not produce a thinner border while government expenditures on new security programs continue to increase. As an illustration, the Beyond the Border framework makes it clear that the government of Canada will have to spend money on improved screening capabilities and RFI technology; but no cost estimates are provided nor are the benefits in time savings quantified.

Undoubtedly, the cost of implementing the Beyond the Border Declaration will be substantial. One account suggested that total new outlays would amount to C\$1 billion (Bronskill and Blanchfield, 2011). Canadians cannot dismiss the possibility that the perimeter security "suspenders" will simply be added to the security "belt" already girding the Canada-US border. (Sokolsky and Lagassé, 2006). It is important for the Canadian government to insist when possible in its negotiations with the United States that a new layer of security at the continental perimeter is matched by a savings in security costs at the shared land border. If new program costs and performance criteria are linked, the Beyond the Border Declaration offers a promising way for Canada and the United States to build a border that is safe yet still facilitates trade: the next generation border.

The Beyond the Border Declaration contains another feature that could help reduce the high costs to Canadian wealth (1.47% of GDP) of maintaining a securitized border. Continental perimeter security as well as harmonized border management programs could begin the merging of two functions into one. The two countries can begin to jointly introduce new rules and procedures for entry and exit screening of travellers and cargo and in so doing benefit from economies of scale. As Canada and the United States proceed to manage the border with greater unison, the Beyond the Border Declaration advances and they can more easily identify and eliminate redundancies.

Alongside a jointly managed continental security perimeter, the Beyond the Border Declaration advances the idea of harmonizing regulations

in the two economies. Again, this offers a potential for savings. As differences between the two markets recede, the need for non-security related customs inspection at the border also shrinks. After all, the border is a manifestation of difference between the two countries. As the differences are reduced, the border can be thinned. In principle, the 2011 plan is an attempt to reduce differences.

The two countries are trying to make progress in reducing excessive border costs by increasing their intelligence sharing and joint operations in areas of counter-terrorism, anti-drug and gun smuggling, and anti-human trafficking. As officials from the two countries cooperate in the field, they will become better aware of what information is being shared and where discrepancies can be further reduced. For example, the planned expansion of both the land and water versions of the Integrated Border Enforcement Teams is a laudable initiative to combat illegal smuggling of drugs and guns as well as countering terrorism. However, if the IBETs successfully reduce risk at the border, while other border personnel continue slowing down legitimate travellers regardless of risk, citizens from both countries will have gained little.

Harmonized entrance and exit procedures, affordable and easily accessible trusted traveller programs as well as integrated radio frequency identification and biometric data should reduce wait times and superfluous inspections at the border. With the help of new personal identification technology, the costs of border crossing can be lowered; not every vehicle would need to be stopped and not every person would need to be questioned. The chilling effect for legitimate travellers would be abated.

The Beyond the Border Declaration puts Canadians and Americans at a crossroads: either we will continue with incremental and uncoordinated programs as we have often done since 9/11 and thus possibly create some improvements but not lower the overall cost of the border or we will begin to create a new border regime. In order to do the latter we need to hold governments accountable in terms of costs and savings. The concepts are in place, the actual performance is the next step.

Appendix A

Year established Program, law, or initiative

1989 Project North Star

Project North Star, run by the US Border Patrol, gathers law enforcement experts from Canada and the north eastern US to exchange information on issues such as anti-terrorism, organized crime, money laundering, and drug and firearms trafficking.

1995 - 2001 Integrated Border Enforcement Teams

First envisioned in the mid-1990s and originally intended to deter cross border smuggling in the Pacific Northwest, the Integrated Border Enforcement Teams only received an official and expanded mandate along with designated public safety and anti-terrorism funding as part of the Smart Border Declaration framework.

November 2001 Customs-Trade Partnership against Terrorism (C-TPAT)

C-TPAT is a voluntary government-business initiative to build cooperative relationships that strengthen and improve overall international supply chain and US border security. C-TPAT is a worldwide supply chain security initiative.

July 2000–December 2001 Financial Transaction Reports Analysis Centre of Canada (FINTRAC)

FINTRAC gathers, analyzes, assesses, and discloses financial intelligence. Its mandate was expanded in December 2001 to provide the Canadian Security Intelligence Service (CSIS) with information on terrorist financing that threaten the security of Canada.

December 2001 Action Plan for Creating a Secure and Smart Border —Smart Border Accord

The Smart Border Declaration and its associated 30 point action plan enhance the security of our shared border while facilitating the legitimate flow of people and goods. The action plan has four pillars: the secure flow of people, the secure flow of goods, secure infrastructure, and information sharing and coordination in the enforcement of these objectives.

2001 Ad Hoc Cabinet Committee on Public Security and Anti-Terrorism

Ad Hoc Cabinet Committee on Public Security and Anti-Terrorism is a federal committee created to review policies, legislation, regulations, and programs across the public sector. Its objective is to bolster all aspects of Canada's approach to counter terrorist threats while safeguarding the public.

1995 – 2002 Partners in Protection (PIP) program

PIP enlists industry partners to share the responsibility of securing the supply chain. The importance of the PIP program increased in 2002 when a PIP membership became a prerequisite to participate in the Free and Secure Trade (FAST) program. On June 30, 2008, a strengthened PIP program was implemented.

2002 NEXUS

The NEXUS program allows pre-screened travellers expedited processing by American and Canadian officials at dedicated processing lanes at designated northern border ports of entry, at NEXUS kiosks at Canadian preclearance airports, and at marine reporting locations. Approved applicants are issued a photo-identification, proximity Radio Frequency Identification (RFID) card.

Canadian Passenger Accelerated Service System (CANPASS)

CANPASS are programs that expedite the border clearance process for frequent, lowrisk, pre-approved travellers into Canada. They are in place to streamline customs and immigration clearance for these pre-screened travellers.

January 2002 Container Security Initiative

The Container Security Initiative is a multinational program that protects the primary system of global trade—containerized shipping—from being exploited or disrupted by terrorists. This initiative enables NRAC to target and interdict potential terrorist threats before they reach Canadian shores.

December 2002 Free and Secure Trade (FAST)

FAST facilitates moving pre-approved eligible goods across the border and verifying trade compliance away from the border.

2002 Integrated National Security Enforcement Teams (INSETs)

INSETs gather information to prevent, detect, and prosecute criminal offences against national security. The mandate of these integrated units is to increase the capacity for the collection, sharing, and analysis of intelligence among partners with respect to targets that are a threat to national security. INSETs also create an enhanced enforcement capacity to bring such targets to justice.

October 2003 Anti-Terrorism Act – Bill C-36

The "omnibus" bill extended the powers of government and institutions within the Canadian security establishment to respond to the threat of terrorism.

December 2003 Public Safety Canada

Public Safety Canada is a government of Canada department responsible for protecting Canadians and helping to maintain a peaceful and safe society.

December 2003 Canada Border Services Agency

Canada Border Services Agency reports to the Minister of Public Safety to take over and integrate the frontline border management and enforcement activities that three organizations formerly performed.

January 2004 National Risk Assessment Centre

The National Risk Assessment Centre is one of the first points of contact and liaison for national and international partners involved in security, intelligence, and law enforcement.

April 2004 Advance Commercial Information (ACI) Program

The program requires that marine carriers electronically transmit marine cargo data to the CBSA 24 hours prior to loading cargo at a foreign port.

Customs Self Assessment Program (CSA)

The CSA program gives approved importers the benefits of a streamlined accounting and payment process for all imported goods.

Commercial Driver Registration Program (CDRP)

CDRP was designed to streamline the customs clearance process for commercial freight transporters coming into Canada from the United States.

March 2005–January 2009 Security and Prosperity Partnership

Security and Prosperity Partnership is a trilateral initiative by Canada, Mexico, and the United States to reduce regulatory differences and to find areas for security cooperation.

April 2005 Department of Public Safety and Emergency Preparedness Act

This act is official legislation mandating the creation of the Public Safety Canada. Initially founded in 2003, Public Safety Canada was legally sanctioned in 2005, with the passing of the Department of Public Safety and Emergency Preparedness Act.

November 2005 Secure Border Initiative (SBI)

SBI is a multi-year, multibillion-dollar program aimed at securing US borders and reducing illegal immigration. SBI has three main operating goals:

- Improve border security
- Increase interior enforcement of immigration and customs laws
- Implement Temporary Workers Programs (TWP)

2006 (since cancelled) SBInet Northern Border Project

January 2007 Western Hemisphere Travel Initiative (WHTI)

WHTI is a US law that requires all travellers, including US and Canadian citizens, to present a valid passport or other approved secure document when entering the US from within the western hemisphere.

2008 Enhanced Drivers License (EDL)

EDLs are available in the provinces of British Columbia, Ontario, Quebec, and Manitoba.

November 2008 Advance Passenger Information/Passenger Name Record (API/PNR) program

API/PNR data is used by the CBSA to identify persons who may be subject to closer questioning or examination on arrival in Canada because of their potential relationship to terrorism or terrorism-related crimes, or other serious crimes that are transnational in nature (e.g., smuggling of drugs or humans). API/PNR helps protect Canadians by enabling the Canada Border Services Agency (CBSA) to perform a risk assessment of travellers before they arrive in Canada.

November 2011 eManifest

eManifest will expand ACI requirements to all highway and rail commercial carriers, and will also require importers and freight forwarders to report electronically for all modes. eManifest is about getting the right information at the right time to enhance the ability of the Canada Border Services Agency (CBSA) to identify potential threats to Canada, while facilitating the movement of low-risk shipments across the border.

2011 Beyond the Border Action Plan

The Beyond the Border Action Plan encompasses two action plans designed to speed up legitimate trade and travel, improve security in North America, and align regulatory approaches between the two countries; (1) Action Plan on Perimeter Security and Economic Competitiveness and (2) Action Plan on Regulatory Cooperation that will help reduce barriers to trade and lower costs for consumers and businesses.

2011 Border Enforcement Security Task Force (BEST) Initiative

With BEST, Canadian border investigator and intelligence experts work with US teams to fight organized crime operating on both sides of the border.

References

Ackelson, Jason (2009). From Thin to Thick (and Back Again?): The Politics and Polices of the Contemporary US-Canada Border. *American Review of Canadian Studies* 39, 4 (December): 336–351.

Anderson, Greg, and Christopher Sands (2007). *Negotiating North America: The Security and Prosperity Partnership*. White paper. Hudson Institute (Fall). http://www.hudson.org/files/pdf_upload/HudsonNegotiatingNorthAmericaadvanceproof2.pdf>, as of July 23, 2012.

Andreas, Peter (2003a). *A Tale of Two Borders: The US-Mexico and US-Canada Lines After 9/11.* Working paper No. 77. The Centre for Comparative Immigration Studies, University of California at San Diego, (May). http://www.ccis-ucsd.org/PUBLICATIONS/wrkg77.pdf>, as of July 23, 2012.

Andreas, Peter (2003b). Border Security in the Age of Globalization. *Regional Review* 3: 3–7. http://www.brown.edu/Departments/Political_Science/documents/Border_Security_in_Age_of_Globalization.pdf, as July 23, 2012.

Andreas, Peter (2005). The Mexicanization of the Canada-US Border: Asymmetric Interdependence in a Changing Security Context. *International Journal* (Spring): 449–462. http://www.cerium.ca/IMG/pdf/ANDREAS_2005_The_mexicanization_of_the_US-Canada_border.pdf, as of July 23, 2012.

Alper, Donald J., and Bryant Hammond (2009). *Stakeholder Views on Improving Border Management*. Border Policy Research Institute. Western Washington University, Research Report No. 8 (December). http://www.wwu.edu/bpri/files/2009_Dec_Report_No_8_Stakeholder_Views.pdf>, as of July 23, 2012.

Beaulieu, Eugene (2007). Has North American Integration Resulted in Canada Becoming Too Dependent on the United States. *Policy Options* 28, 9 (October): 97–102. http://www.irpp.org/po/archive/oct07/beaulieu.pdf, as of July 23, 2012.

Burt, Michael (2009a). *Tighter Border Security and Its Effect on Canadian Exports*. International Trade and Investment Centre, The Conference Board of Canada (June). http://www.internationaltransportforum.org/2009/pdf/CDN_TighterBorder.pdf>, as of July 23, 2012.

Burt, Michael (2009b). Tighter Border Security and Its Effect on Canadian Exports. Canadian Public Policy 35, 2 (June): 149–169.

Cameron, Richard (2011). Canada's State of Trade: Trade and Investment *Update – 2011.* Department of Foreign Affairs and International Trade Canada. http://www.international.gc.ca/economist-economiste/assets/ pdfs/SoT_2011_e.pdf>, as of July 23, 2012.

Canada Border Services Agency (2006a). Canada-United States Integrated Border Enforcement Teams. CBSA. http://www.cbsa-asfc.gc.ca/security- securite/ibet-eipf-eng.html>, as of July 23, 2012.

Canada Border Services Agency (2006b). NEXUS Air Pilot Project Evaluation Study (March). CBSA. http://www.cbsa-asfc.gc.ca/agency- agence/reports-rapports/ae-ve/2006/nexus_air-eng.html>, as of July 23, 2012.

Canada Border Services Agency (2006c). *Partners in Protection (PIP)* Evaluation Study (October). CBSA. http://www.cbsa-asfc.gc.ca/agency- agence/reports-rapports/ae-ve/2006/pip-pep-eng.html>, as of July 23, 2012.

Canada Border Services Agency (2008). NEXUS Highway and FAST Programs (Trusted Travelers) Evaluation Study (May). CBSA. http://www.cbsa.gc.ca/ agency-agence/reports-rapports/ae-ve/2008/nf-ne-eng.html>, as of July 23, 2012.

Canada Border Services Agency (2009). Integrated Border Enforcement Teams (IBETs): Plans, Spending and Results 2008 – 2010. CBSA.

Canada Border Services Agency (2010). *Documents for Entry into the* United States: Tourism Toolkit, Fact Sheet. US Western Hemisphere Travel Initiative. CBSA. http://www.cbsa-asfc.gc.ca/whti-ivho/tourist-touriste- eng.html>, as of July 23, 2012.

Canada Border Services Agency (2011). Western Hemisphere Travel *Initiative (WHTI) Activities Evaluation Study* (March). CBSA. http:// www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/ae-ve/2011/whtiivho-eng.pdf>, as of July 23, 2012.

Canada, Department of Finance (2007). Budget 2007: A Stronger Safer Canada (March 19). Government of Canada. http://www.budget. gc.ca/2007/pdf/bp2007e.pdf>, as of July 23, 2012.

Canada, Department of Finance (2008). *Budget 2008: Responsible Leadership for Uncertain Times* (June 6). Government of Canada. http://www.budget.gc.ca/2008/pdf/plan-eng.pdf>, as of July 23, 2012.

Canada, Department of Finance (2011). *Budget 2011: The Next Phase of Canada's Economic Action Plan: A Low-Tax Plan for Jobs and Growth* (June 6). Government of Canada. http://www.budget.gc.ca/2011/plan/Budget2011-eng.pdf>, as of July 23, 2012.

Canada, Department of Justice (2005). Formative Evaluation of the Department of Justice Public Safety and Anti-Terrorism (PSAT) Initiative: Technical Report (March). Government of Canada. http://publications.gc.ca/collections/Collection/J2-304-2005E.pdf, as of August 9, 2012.

Canada, Department of Justice (2007). *Public Safety and Anti-Terrorism* (*PSAT*) *Initiative Summative Evaluation: Final Report* (June). Government of Canada. http://www.justice.gc.ca/eng/pi/eval/rep-rap/07/psat-spat/sum-som/sum.pdf, as of July 23, 2012.

Canadian Broadcast Corporation News (2001, September 19). *US Ambassador Calls for North American Perimeter*. CBC. http://www.cbc.ca/news/canada/story/2001/09/19/immigrat010919.html, as of July 23, 2012.

Canadian Tourism Commission (2010). *United States Leisure Tourism Market Profile* 2009 *Update*. http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/default/files/pdf/Research/Market-knowledge/Market-profile/US/US%20">http://en-corporate.canada.travel/sites/default/files/pdf/Research/Market-knowledge

DAMF Consultants Inc. and L-P Tardif Associates Inc. (2005). *The Cumulative Impact of US Import Compliance Programs at the Canada-US Land Border on the Canadian Trucking Industry: Final Report.* TP 14402E. Transport Canada (May 24). http://www.internationaltransportforum.org/2009/pdf/CDN_DAMFconsultants.pdf>, as of July 23, 2012.

Defense Research and Development Canada (2005, April 4). *Defense R&D Canada Celebrates Five Years*. News release.http://www.drdc-rddc.gc.ca/drdc/en/4705/nr-04042005/, as of August 9, 2012.

Defense Research and Development Canada (2007, June 15). *Government of Canada provides over \$48.8 Million for Counter-Terrorism Science and Technology Projects*. News release http://www.drdc-rddc.gc.ca/drdc/en/4746/nr-06152007/, as of August 9, 2012.

Federal Reserve System, Board of Governors (2011). Foreign Exchange *Rates H.10 – County Data: Historical Rates for the Canadian Dollar.* http://www.federalreserve.gov/Releases/H10/Hist/dat00_ca.htm, as of August 8, 2012.

Globerman, Steven, and Paul Storer (2006). The Impacts of 9/11 on Canada-US Trade. Border Policy Research Institute, Western Washington University. Research Report No. 1 (July). http://www.thetbwg.org/downloads/No_1_ Impacts_of_911_on_CanadaUS_Trade.pdf>, as July 23, 2012.

Globerman, Steven, and Paul Storer (2008). The Impacts of 9/11 on Canada-US Trade. University of Toronto Press.

Globerman, Steven, and Paul Storer (2009a). *The Impacts of 9/11 on* Canada-US Trade: An Update through 2008. Metropolitan Policy Program, Brookings Institution (July). http://www.brookings.edu/~/media/Files/rc/ papers/2009/0713_canada_globerman/0713_canada_globerman.pdf>, as of July 23, 2012.

Globerman, Steven, and Paul Storer (2009b). Border Security and Canadian Exports to the United States: Evidence and Policy Implications. Canadian Public Policy 35, 2 (June): 171–186. http://www.cbe.wwu.edu/CIB-New/ docs/BORDER%20SECURITY%20AND%20CANADIAN%20EXPORTS%20 TO%20THE%20UNITED%20STATES%20CPP.pdf>, as of July 23, 2012.

Goldfarb, Danielle (2007a). Reaching a Tipping Point? Effects of Post-9/11 Border Security on Canada's Trade and Investment (June). International Trade and Investment Centre, The Conference Board of Canada. http:// www.internationaltransportforum.org/2009/pdf/CDN_TippingPoint.pdf>, as of July 23, 2012.

Goldfarb, Danielle (2007b). *Is Just-In-Case, Replacing Just-In-Time? How Cross-Border Trading Behavior Has Changed Since 9/11.* Briefing (June). International Trade and Investment Centre, The Conference Board of Canada. http://www.internationaltransportforum.org/2009/pdf/CDN_ CrossBorderTrading.pdf>, as of July 23, 2012.

Goldfarb, Danielle, and William B.P. Robson (2003). Risky Business: US *Border Security and the Threat to Canadian Exports.* The Border Papers No. 177 (March). C.D. Howe Institute. http://www.cdhowe.org/pdf/ commentary_177.pdf>, as of July 23 2012.

Government of Canada (2009). *Security and Prosperity Partnership of North America: About SPP.* http://www.spp-psp.gc.ca/eic/site/spp-psp.nsf/eng/h_00003.html, as of July 23, 2012.

Government of Canada (2011a). Border Action Plan: A Declaration by the Prime Minister of Canada and the President of the United States of America. Government of Canada. http://actionplan.gc.ca/eng/feature.asp?pageId=352, as of August 9, 2012.

Government of Canada (2011b). *Border Action Plan: Critical Infrastructure and Cyber Security (April)*. Government of Canada. http://actionplan.gc.ca/eng/feature.asp?mode=preview&pageId=342#sect1, as of August 9, 2012.

Government of Canada (2011). *Border Action Plan: Canada-US Border Cooperation (February)*. Government of Canada. http://actionplan.gc.ca/eng/feature.asp?mode=preview&pageId=346, as of August 9, 2012.

Grady, Patrick (2009). *Were Canadian Exports to the U.S. Curtailed by the Post-9/11 Thickening of the U.S. Border?* Working Paper 2009-1. http://global-economics.ca/grady_border_post911.pdf>, as of August 9, 2012.

Grady, Patrick (2009). *A More Open and Secure Border for Trade, Investment, and People*. Paper No. 6. Canada-US Project, Norman Peterson School of International Affairs, Carleton University. http://global-economics.ca/6Grady.pdf, as of July 23, 2012.

Haddal, Chad C. (2010). *Border Security: The Role of the U.S. Border Patrol.* 7-5700; *RL*32562. Congressional Research Service. http://www.fas.org/sgp/crs/homesec/RL32562.pdf, as of July 23, 2012.

Haggart, Blayne (2001a). *Canada and the United States: Trade, Investment, Integration and the Future*. PRB-01-3E (April 2). Parliamentary Research Branch, Government of Canada. http://dsp-psd.communication.gc.ca/ Collection-R/LoPBdP/BP/prb013-e.htm>, as of July 23, 2012.

Haggart, Blayne (2001b). Fortress North America? What Perimeter Security Means for Canada: Seminar Report. PRB 01-25E, 2001 (December 18). Library of Parliament, Parliamentary Research Branch, Government of Canada. http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/PRB-e/PRB0125-e.pdf, as of August 8, 2012.

Hale, Geoffrey (2009). In Search of Effective Border Management. Working Paper No. 3 (February). Canadian International Council. http://www. opencanada.org/wp-content/uploads/2011/05/In-Search-of-Effective-Border-Management-Geoffrey-Hale.pdf>, as of July 23, 2012.

Hart, Michael (2010). A Matter of Trust: Expanding the Preclearance of Commerce Between Canada and the United States. The Border Papers No. 309 (September). C.D. Howe Institute. http://www.thetbwg.org/ downloads/expanding_preclerance_sept_2010.pdf>, as of July 23, 2012.

Industry Canada (2008). Evaluating Canada's Performance within the US Outbound Travel Market (February). http://www.ic.gc.ca/eic/site/dsib- tour.nsf/vwapj/qq00030_eng.pdf/\$file/qq00030_eng.pdf>.

Industry Canada (2011). Trade Data Online. <www.ic.gc.ca>, as of July 23, 2012.

Kergin, Michael, and Birgit Matthiesen (2008). A New Bridge for Old Allies. Border Issues Report (November). Canadian International Council. http:// www.thetbwg.org/downloads/A%20New%20Bridge%20for%20Old%20 Allies.pdf>, as of July 23, 2012.

Koring, Paul (2010, October 19). Among US Politicians, Claim that Terrorists Use Canada as Base Dies Hard. *Globe and Mail*. http://www. theglobeandmail.com/news/politics/among-us-politicians-claim-thatterrorists-use-canada-as-base-dies-hard/article1763054/>, as of July 23, 2012.

MacDonald, Ian (2011). Q & A with Brian Mulroney: Leveraging Canada-US Relations "to Get Big Things Done." *Policy Options* 32, 3 (March): 12–18. http://www.irpp.org/po/archive/mar11/mulroney.pdf, as of July 23, 2012.

Martin, Pierre (2006). The Mounting Costs of Securing the "Undefended" Border. *Policy Options* 27, 6 (July-August). http://www.irpp.org/po/ archive/jul06/martin.pdf>, as of July 23, 2012.

McGregor, Glen (2011, August 14). Canada's Air Marshals Cost \$40 Million a Year, Documents Show. Ottawa Citizen. http://www.ottawacitizen. com/news/Canada+marshals+cost+million+year/5254081/story. html?cid=megadrop_story>, as of July 23, 2012.

Moens, Alexander (2010). Skating on Thin Ice: Canadian-American Relations in 2010 and 2011. Fraser Institute. http://www.fraserinstitute. org/publicationdisplay.aspx?id=15952&terms=skating+on+thin+ice>, as of July 23, 2012.

Moens, Alexander (2011). "Lessons Learned" from the Security and Prosperity Partnership for Canada-US Relations. *American Review of Canadian Studies* 41, 1 (March): 53–64.

Moens, Alexander, and Michael Cust (2008). Saving the Security and Prosperity Partnership: The Case for a North American Standards and Regulatory Area (March). Fraser Institute. http://www.fraseramerica.org/commerce.web/product_files/North_American_Security_Prosperity_Partnership.pdf>, as of July 23, 2012.

Moens, Alexander, and Nachum Gabler (2011). *What Congress Thinks of Canada* (May). Fraser Institute. http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/whatcongressthinksofcanada.pdf, as of July 23, 2012.

Muller, Benjamin J. (2008). *Governing through Risk at the Canada-US Border*. Working Paper No. 2 (September). Border Policy Research Institute, Western Washington University. http://www.thetbwg.org/downloads/No_2_Governing_thru_Risk_Liberty_Security_Technology.pdf, as of July 23, 2012.

Nguyen, Trien T., and Randall M. Wigle (2009). Welfare Costs of Border Delays: Numerical Calculations from a Canadian Regional Trade Model. *Canadian Journal of Regional Science* 32, 2 (Summer): 203–222. http://www.cjrs-rcsr.org/archives/32-2/NGUYEN-final.pdf, as of July 23, 2012.

Nguyen, Trien, and Randall M. Wigle (2011). Border Delays Re-Emerging Priority: Within-Country Dimensions for Canada. *Canadian Public Policy* 37, 1 (March): 49–59. http://www.ghy.com/NguyenWigleCPP.pdf, as of July 23, 2012.

Ottawa Citizen (2005, December 20). US Senator Revives 9/11 Myth about Canada. Ottawa Citizen. http://www.canada.com/ottawacitizen/story. http://www.canada.com/ottawacitizen/story.

Representative Tom Tancredo (R-Colorado). Thomas Archive. 107th Congress (July 10, 2001).

Royal Canadian Mounted Police (2007). *Canada-United States IBET Threat Assessment 2007*. RCMP. http://www.rcmp-grc.gc.ca/ibet-eipf/reports-rapports/threat-menace-ass-eva-eng.htm, as of July 23, 2012.

Royal Canadian Mounted Police (2009). Integrated Border Enforcement *Teams (IBETs).* RCMP. http://www.rcmp-grc.gc.ca/ibet-eipf/index-eng. htm>, as of July 23, 2012.

Sands, Christopher (2009). Toward a New Frontier: Improving the US-Canadian Border. Metropolitan Policy Program, the Brookings Institution and the Canadian International Council. http://www.brookings.edu/~/ media/Files/rc/reports/2009/0713_canada_sands/0713_canada_report. pdf>, as of July 23, 2012.

Sokolsky, J., and P. Lagassé (2006). Suspenders and a Belt: Perimeter and Border Security in Canada-United States Relations. Canadian Foreign *Policy* 12: 15–29.

Statistics Canada (2010a). Human Resources Module of the Tourism Satellite Account, 2009. Catalogue No. 13-604-M (May). Income and Expenditure Technical Series. http://dsp-psd.pwgsc.gc.ca/collections/collection_2010/ statcan/13-604-M/13-604-m2010066-eng.pdf>, as of July 23, 2012.

Statistics Canada (2010b). International Travel 2009. Catalogue No. 66-201-X (December). International Travel Section. http://publications.gc.ca/ collection_2010/statcan/66-201-X/66-201-x2009000-eng.pdf>, as of July 23, 2012.

Statistics Canada (2011a). *National Tourism Indicators: Quarterly* Estimates First Quarter 2011. Catalogue No. 13-009-X (June). Canada Tourism Commission and Statistics Canada International Travel Section (June). http://www.statcan.gc.ca/pub/13-009-x/13-009-x2011001-eng. pdf>, as of July 23, 2012.

Statistics Canada (2011b). Gross Domestic Product, Expenditure-Based. CANSIM Table No. 380-0017, Catalogue No. 13-001-XIB. http://www40. statcan.gc.ca/l01/cst01/econ04-eng.htm>, as of July 23, 2012.

Sydor, Aaron (2003). NAFTA @ 10: A Preliminary Report. Catalogue No. E2-487/2003. Foreign Affairs and International Trade Canada, Ministry of Public Works and Government Services Canada. , as of July 23, 2012.

Sydor, Aaron (2008). An Index of Canada-US Economic Integration. APS No. 005 (June). Foreign Affairs and International Trade Canada. http:// publications.gc.ca/collections/collection_2009/maeci-dfait/FR4-14-5-2008E.pdf>, as of August 9, 2012.

Taylor, John C., and Douglas R. Robideaux (2004). Canada-US Border Cost Impacts and their Implications for Border Management Strategy. Horizons 6, 3. http://www.policyresearch.gc.ca/page.asp?pagenm=v6n3_art_10, as of January 22, 2008.

United States Chamber of Commerce and Canadian Chamber of Commerce (2008). *Finding the Balance: Reducing Border Costs While Strengthening Security* (February). http://www.chamber.ca/images/uploads/Reports/finding-the-balance.pdf>, as of July 23, 2012.

United States Customs and Border Protection (2010). *Unmanned Aircraft System MQ-9 Predator B.* http://www.cbp.gov/xp/cgov/border_security/air_marine/air/aviation_asset/predator_b.xml, as of June 2011.

United States Customs and Border Protection (2011). *CBP Expands Northern Border Unmanned Aircraft Systems Capabilities*. News release. http://www.cbp.gov/xp/cgov/newsroom/news_releases/national/01212011_7.xml, as of June 2011.

United States Department of Commerce and United States Bureau of Economic Analysis (2011). *United States Travel and Tourism Exports, Imports and Balance of Trade: 2010.* Office of Travel and Tourism Industries. http://tinet.ita.doc.gov/outreachpages/download_data_table/2010_International_Visitor_Spending.pdf, as of July 23, 2012.

United States Department of Commerce (2011). *Top 10 International Markets: 2010 Visitation and Spending*. Office of Travel and Tourism Industries. http://tinet.ita.doc.gov/pdf/2010-Top-10-Markets.pdf>, as of July 23, 2012.

United States Department of Homeland Security (2001, December 12). *Action Plan for Creating a Secure and Smart Border*. News release. http://www.dhs.gov/xnews/releases/press_release_0037.shtm, as of June 2011.

United States Department of Homeland Security (2002, January 7). *Specifics of Secure and Smart Border Action Plan.* News release. http://www.dhs.gov/xnews/releases/press_release_0036.shtm, as of June 2011.

United States Department of Homeland Security (2011a). *US-VISIT: What to Expect When Visiting the United States*. http://www.dhs.gov/files/programs/editorial_0525.shtm, as of June 2011.

United States Department of Homeland Security (2011b). Government Agencies Using US-VISIT. http://www.dhs.gov/files/programs/ gc_1214422497220.shtm>, as of June 2011.

United States Department of Homeland Security (2011c). US-VISIT at the Canada-US Border. http://www.dhs.gov/xlibrary/assets/usvisit/usvisit_ edu_us_canada_land_border_info_card_english.pdf>, as of June 2011.

United States Department of Homeland Security (2011a, May 17). Improving Security and Facilitating Commerce at America's Northern Border and Ports of Entry. Testimony of Alan Birsen, Commissioner, US Customs and Border Protection, before the Senate Judiciary Committee, Subcommittee on Immigration, Refugees and Border Security. News release. http://www.dhs.gov/ynews/testimony/ testimony_1305638642753.shtm>, as of July 23, 2012.

Villarreal, Angeles M., and Jennifer E. Lake (2009). Security and Prosperity Partnership of North America: An Overview and Selected Issues. Congressional Research Service, 7-5700 (May 27). http://www.fas.org/ sgp/crs/row/RS22701.pdf>, as of July 23, 2012.

Whitaker, Reg (2003). Keeping Up with the Neighbours? Canadian Responses to 9/11 in Historical and Comparative Context. Osgoode Hall Law Review 4, 2 & 3, (2003): 241–264. http://www.ohlj.ca/archive/ articles/41_23_whitaker.pdf>, as of July 23, 2012.

About the authors

Alexander Moens is a professor of Political Science at Simon Fraser University in Vancouver and Senior Fellow at the Fraser Institute, where he heads the Centre for Canadian-American Relations. He is also a Fellow in the Canadian Defence and Foreign Affairs Institute in Calgary.

Moens is the author of *The Foreign Policy of George W. Bush: Values, Strategy, Loyalty* (2004) and *Foreign Policy Under Carter* (1990) as well as editor or co-editor of books on NATO and Canada-US Relations, including *Disconcerted Europe: The Search for a New Security Architecture* (1994), *NATO and European Security: Alliance Politics from the Cold War's End to the Age of Terrorism* (2003), and *Immigration Policy and the Terrorist Threat in Canada and the United States* (2008).

Moens has published in various Canadian, American, and European journals and newspapers. Recently published papers on Canada-US relations including *Measuring Parliament's Attitude Towards Canada-US Cooperation* (2009), and *What Congress Thinks of Canada* (2011), both published by the Fraser Institute. Recent publications include "Afghanistan and the Revolution in Canadian Foreign Policy," *International Journal* (2008); "Lessons Learned from the Security and Prosperity Partnership for Canadian-American Relation," *American Review of Canadian Studies*, Vol. 41, No.1, March 2011; "Happy Handover: Thoughts on Sino-American Relations in America's Shadow," *International Journal*, Spring 2011, and "Obama's Foreign Policy: Change Without Conviction," in Nikolaos Tzifakis (ed.) *International Politics in Times of Change*, Springer-Verlag Publications, 2012. For more information see: www.alexandermoens.com.

Nachum Gabler is an economist in the Centre for Canadian-American Relations at the Fraser Institute. Mr. Gabler was the author of *Combatting the Contraband Tobacco Trade in Canada* and a coauthor of *What Congress Thinks of Canada*, both published by the Fraser Institute in 2011. He holds a BA (Hons.) from York University in economics and an MA from Boston University, also in economics.

Acknowledgments

The authors would like to thank Fred McMahon and the two external reviewers for their valuable comments and suggestions. We also want to thank the Fraser Institute's editorial and production team for their excellent work in helping us prepare this study.

Any errors, omissions, or mistakes remain the sole responsibility of the authors. As the authors have worked independently, the views and analysis expressed in this document are theirs and do not necessarily represent the views of the supporters, trustees, or other staff at the Fraser Institute.

Publishing information

Distribution

These publications are available from http://www.fraserinstitute.org in Portable Document Format (PDF) and can be read with Adobe Acrobat® 7 or Adobe Reader[®], versions 7 or later. Adobe Reader[®] X, the most recent version, is available free of charge from Adobe Systems Inc. at http://get.adobe.com/reader/>. Readers who have trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

Ordering publications

For information about ordering the printed publications of the Fraser Institute, please contact the publications coordinator:

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Copyright

Copyright ©2012 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

Date of issue

August 2012

ISSN

1918-5472 Studies in Canada-US Relations (online version)

Citation

Moens, Alexander, and Nachum Gabler (2012). Measuring the Costs of the Canada-US Border. Studies in Canada-US relations. Fraser Institute.

Editing, typesetting, and design

Emma Tarswell

Cover design

Bill Ray

Cover images

Border Patrol in Montana © US Department of Homeland Security Predatory Drone © US Air Force

Canadian Passport and Paper Money © Daniel Krylov (Bigstock)

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute Fourth Floor, 1770 Burrard Street
 Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 586
- e-mail: development@fraserinstitute.org

Lifetime patrons

For their long-standing and valuable support contributing to the success of the Fraser Institute, the following people have been recognized and inducted as Lifetime Patrons of the Fraser Institute.

Sonja Bata John Dobson Fred Mannix

Charles Barlow Art Grunder Con Riley

Ev Berg Raymond Heung Catherine Windels

Jim Chaplin Bill Korol

Serge Darkazanli Bill Mackness

Purpose, funding, & independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Trustees and its donors.

The opinions expressed by the authors are those of the individuals themselves, and do not necessarily reflect those of the Institute, its Board of Trustees, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.

About the Fraser Institute

Our vision is a free and prosperous world where individuals benefit from greater choice, competitive markets, and personal responsibility. Our mission is to measure, study, and communicate the impact of competitive markets and government interventions on the welfare of individuals. Founded in 1974, we are an independent Canadian research and educational organization with locations throughout North America and international partners in over 85 countries. Our work is financed by tax-deductible contributions from thousands of individuals, organizations, and foundations. In order to protect its independence, the Institute does not accept grants from government or contracts for research.

Nous envisageons un monde libre et prospère, où chaque personne bénéficie d'un plus grand choix, de marchés concurrentiels et de responsabilités individuelles. Notre mission consiste à mesurer, à étudier et à communiquer l'effet des marchés concurrentiels et des interventions gouvernementales sur le bienêtre des individus.

Peer review—validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by a minimum of one internal expert and two external experts. Reviewers are expected to have a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process.

Commentaries and conference papers are reviewed by internal experts. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

Editorial Advisory Board

Members

Prof. Armen Alchian Prof. Jack L. Granatstein

Prof. Terry L. Anderson Prof. Herbert G. Grubel

Prof. Robert Barro Prof. James Gwartney

Prof. Michael Bliss Prof. Ronald W. Jones

Prof. James M. Buchanan[†] Dr. Jerry Jordan

Prof. Ross McKitrick Prof. Jean-Pierre Centi

Prof. John Chant Prof. Michael Parkin

Prof. Bev Dahlby Prof. Friedrich Schneider

Prof. Erwin Diewert Prof. Lawrence B. Smith

Prof. Stephen Easton Mr. Vito Tanzi

Prof. J.C. Herbert Emery

Past members

Prof. Friedrich A. Hayek*+ Prof. George Stigler*†

Sir Alan Walters* Prof. H.G. Johnson*

Prof. F.G. Pennance* Prof. Edwin G. West*

^{*} deceased: † Nobel Laureate