MASTER OF PUBLIC POLICY
CAPSTONE PROJECT

Closing the Toll Booth

Submitted by:

Cee-Jay Jackson

Approved by Supervisor:

Dr. David Bercuson

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THE SCHOOL OF PUBLIC POLICY

UNIVERSITY OF CALGARY

Capstone Approval Page

The undersigned, being the Capstone Project Supervisor, declares that

Student Name: Cee-Jay Jackson

has successfully completed the Capstone Project within the

Capstone Course PPOL 623 A&B

DAVID BERCUSON

(Name of supervisor)

(Supervisor's signature)

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(Date)

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EXCECUTIVE SUMMARY

It is no secret that Canadians pay among the highest airfare rates in the world. As a result, there are an estimated 5 million people who cross the border each year to fly out of American airports because of their cheaper airfare. Canada's previous policy decisions regarding airports are now causing an estimated loss of $2.6 billion per year to the Canadian economy and has pushed more Canadian's to use US airports. Using a qualitative comparative analysis, this paper shows that Canada's airports are being poorly managed. The paper also highlights the lack of competition amongst Canadian airlines which has contributed to higher prices. These two factors are the major driving force for Canada's costly air travel. This paper recommends that the federal government sell Canada's largest airports either partially or in full and that the money be redirected to infrastructure spending. This paper also recommends that the federal government pursue the removal of outdated foreign ownership restrictions which have hindered airline competition within Canada.

1 Introduction

Canadians pay among the highest airfare rates in the world, why? The Economic Forum's Annual Travel and Tourism Competitiveness Report for 2015, ranks Canada 130th out of 137 nations based on a range of factors.[1] The main reasons for Canada's dismal ranking are a lack of regulation , "ground rents" the Regional Airport Authorities (RAA's) have to pay to the federal government as part of the Regional Airports Authorities Act (1989), and virtually no competition within the country.[2] These ground rents or leasing fees, are simply a fee that the federal government charges the RAA's for the use of the land, as it is still owned by the government. For example, from 1996 to 2009, the RAA for Pearson Airport in Toronto paid $1.7 billion in ground rent fees.[3] Canada is the only country that uses a privatized not-for-profit system to manage their airports. As a result, there are an estimated 5 million people who cross the border each year to fly out of American airports because of their cheaper airfares (known as cross border leakage).[4] This policy is causing an estimated economic loss to the Canadian economy of $2.6 billion per year.[5] The land use fees charged by the federal government have increased airfare costs to a point where Canadians would rather drive across the border to use US airports rather than spend their money in Canada. This is an important issue that should be addressed. The federal government is making air travel artificially expensive for Canadians which is

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[1] World Economic Forum, *Travel and Tourism Competitiveness Report 2015*, http://reports.weforum.org/travel-and tourism-competitiveness-report-2015/economies/#indexId=TTCI&economy=CAN

[2] Canli, *Regional Airports Authorities Act, RSA 200, c R-9*, accessed on November 13, 2016. http://canlii.ca/t/52gtt

[3] Kelly-Gagnon and Alexandre Moreau. "Canada's sky-high airport fees create turbulence for carriers." *The Globe and Mail*, June 6, 2016. Accessed November 13, 2016. http://www.theglobeandmail.com/report-on-business/rob-commentary/our-sky-high-airport-fees-create-turbulence-for-carriers/article30281027/

[4] Vijay Gill, "Driven Away: Why More Canadians are Choosing Cross Border Airports," *The Conference Board of Canada*, October 2012: 5, accessed November 13, 2016. http://www.cacairports.ca/sites/default/files/Driven%20Away%20-%20Why%20More%20Canadians%20are%20Choosing%20Border%20Airports%20-%20FINAL.pdf#overlay-context=content/submissions-papers

[5] Kelly-Gagnon and Alexandre Moreau. "Canada's sky-high airport fees create turbulence for carriers."

pushing them into the US market at a significant cost to the Canadian economy. Because of these fees and outdated policies, we also face a reduced amount of competition between national airlines within Canada which also contributes to Canada's sky-high prices.

What can or should the Canadian government do to solve this? Should the government follow its American counterparts and subsidize airports as a means to reduce costs, or should they take a more European approach and privatize the airports? This paper hopes to show that it is possible for both government and industry to benefit from changing the status quo to capture some of the lost economic value of the 5 million people crossing the border each year to use US airports. By using a qualitative comparative analysis of Canada, the United States, Europe, Australia and New Zealand, this paper will attempt to find Canada's best route for solving their unnecessarily high air travel prices. Some potential problems that may stem from this are in regard to Canada's size and sparse population. Using available data this paper will recommend an alternative approach to the current status quo which has caused Canadian flyers to pay sky-high costs for air travel.

In the first section of this paper we will give a historical background starting in the late 1970's to 2017 which will look at the management of Canada's airport industry and how it has changed over time. The second section of the paper will be an analysis of the current management of Canada's airports; an analysis of the regulation model in Australia; a look at US border airports that compete with Canadian airports; and finally, Canada's complete lack of a national Low-Cost Carrier. This paper will conclude with options and recommendations section.

2 Historical background: Airport Funding and Management (1970's-2017)

2.1 A Brief History: A Change of Management

By the 1970's almost all airports were owned and operated by the Government of Canada.[6] In 1979, the government launched a "Task Force on Airport Management" to "examine the feasibility of implementing a new management structure for Canada's principal airports" with the overall goal of improving "managerial effectiveness and efficiency" while giving more autonomy to local governments and "reducing system costs."[7] However, as can happen in government, the Task Forces' work was given little attention until finally in, 1984, when the new Mulroney government looked for ways to reduce the growing federal deficit.[8] By the mid-1980's there was a growing concern with how Canadian airports were being managed, partly due to the federal government's unwillingness to invest in Canada's airport infrastructure. Canada's airports were having considerable difficulties with congestion due to the lack of adequate infrastructure and investment towards new runways, terminals and air traffic control systems.[9] While the federal government was, in fact, subsidizing approximately $250 million a year towards airports, not including the cost of operations and air traffic control, this was nowhere near the amount

[6] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada: Limitations of the Not-for-Profit Governance Model." In *Aviation Infrastructure Performance: A Study in Comparative Political Economy*, edited by Clifford Winston, 136-155. Washington, D.C.: Brookings Institute Press, 2009.

[7] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel: Toll Booth or Spark Plug? Report on the Future Growth and Global Competitiveness of Canada's Airport." *Standing Senate Committee on Transport and Communications* (2012): 1-15.

[8] Ibid; Michael W. Tretheway and Robert Andriulaitis. "Airport Policy n Canada: Limitations of the Not-for-Profit Governance Model."

[9] Ibid.

required for upgrades.[10] Moreover, most of the revenues generated from the airport industry went towards paying down the federal deficit, not to the industry.[11]

By 1987, the Transport Minister finally released a policy proposal seeking to sell or transfer ownership of Canada's airports. The proposal noted however, that any airports not sold or transferred would be handled with a more "business-like approach," acknowledging that up until this time the airports were being mismanaged.[12]

In 1989 the federal government passed the *Regional Airports Authorities Act, 1989*, which would allow for the creation of Regional Airport Authorities (RAA).[13] The RAA's (also known as Local Airports Authorities) as defined under Sect. 22(2) are not-for-profit, and all their surpluses must go towards "promoting its purposes."[14] The "purposes" as defined under Sec. 21. (a and b) is "to manage and operate the airports for which it is responsible in a safe, secure and efficient manner" and "to advance economic and community development by means that include promoting and encouraging improved airline and transportation service and an expanded aviation industry for the general benefit of the public in its region."[15] These RAA's are wholly independent of the government. It should be noted that Canada is the only country to try a not-for-profit model of airport governance, arguably due to the thin track record of privatized airports during this period.[16] During this period many countries sought to devolve ownership of their airports. At this time, there was little evidence in support or against privatization or any

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[10] Ibid.
[11] Ibid.
[12] Dawson, Dennis and Stephen Greene. "The Future of Canadian Air Travel: Toll Booth or Spark Plug?"
[13] Canli. *Regional Airports Authorities Act, RSA 200, c R-9.* Accessed on November 13, 2016. http://canlii.ca/t/52gtt

[14] Ibid.
[15] Ibid.
[16] Dachis, Benjamin. "Full Throttle: Reforming Canada's Aviation Policy." *C.D. Howe Institute, Commentary No. 398* (2014): 1-24. Accessed February 10, 2017. DOI: 1703-0765; Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada: Limitations of the Not-for-Profit Governance Model."

other model of airport governance.

The government then passed the *Airport Transfers Act, 1992,* which allows for the actual transfer (not sale) of airports to RAA's.[17] It was at this time that the government authorized the transfer of the airports in Vancouver (YVR), Edmonton (YEG), Calgary (YYC) and Montréal (YUL) to not-for-profit RAA's.[18] As part of the transfer agreement, the RAA's were required to sign a long-term lease, meaning that the RAA's were to operate the airports but that the government still owned them.[19] These land lease agreements were signed for a 60-year period with the option for a 20-year extension. At the end of the lease period, however, the Airports are to be returned to the federal government, bringing them back to where they first started.[20] There is no evidence to suggest why the leases are so long.

As the Institute of Governance has rightly noted:

> By delegating the day-to-day management of Canada's major airports... the federal government evaded the impending financial burden it would otherwise have had to assume in order to modernize defective, obsolete and inadequate facilities.[21]

The RAA's are private companies, and therefore there is little regulation surrounding how they

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[17] Dawson, Dennis and Stephen Greene. "The Future of Canadian Air Travel: Toll Booth or Spark Plug?"

[18] Ibid; Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada: Limitations of the Not-for-Profit Governance Model."

[19] YYC. *City of Calgary, Calgary Airport Authority Land Use Agreement.* (1993): 1-136. http://www.yyc.com/Portals/0/BUSINESS%20AT%20YYC/Planning%20and%20Engineering/City_of_Calgary_Calgary_Airport_Authority_Land_Use_Agreement.pdf; Kelly-Gagnon, Michel and Alexandre Moreau. "Canada's sky-high airport fees create turbulence for carriers." *The Globe and Mail*, June 6, 2016. Accessed November 13, 2016. http://www.theglobeandmail.com/report-on-business/rob-commentary/our-sky-high-airport-fees-create-turbulence-for-carriers/article30281027/; Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel: Toll Booth or Spark Plug?"

[20] Benjamin Dachis. "Full Throttle: Reforming Canada's Aviation Policy."

[21] Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports: Issues and Recommendations." *Institute for Governance of Private and Public Organizations* (2014): 7-59. Accessed February 14, 2017. DOI: 978-2-924955-17-5.

are managed or operated. For example, the RAA's are required to produce fiscal updates at the end of each year and "respect Canada's international agreements."[22] There is no regulation on price-setting, public consultation, servicing contracts or business plans and the RAA's are free to do as they please, no different than any other private company except they are not-for-profit.

In 1994, the last policy development saw the creation of the National Airport System (NAS) (figure 1). The NAS stems from the National Airport Policy (NAP) which is made up of 26 airports (Canada has 570 certified airports), all managed by not-for-profit RAA's now called Canadian Airport Authorities (CAA's).[23] The CAA's are no different from the RAA's except for the fact that they are required to have at least two federal board members, a provincial, business, labour, and a consumer interests' member; the majority of members must come from local government.[24] As for the NAS itself, it now handles approximately 95% of all air passengers in Canada.[25] As a side note, while the federal government does not provide any direct funding to the CAA's, as part of the NAP, in 1995 it adopted the *Airport Capital Assistance Program* to help smaller airports "with safety related capital projects," who may not be able to afford upgrades otherwise.[26]

[22] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada: Limitations of the Not-for-Profit Governance Model."
[23] Transport Canada. "Transportation in Canada 2011 Comprehensive Review." (2012): 1-155. Accessed June 25, 2017. DOI: 1482-1311.

[24] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada."
[25] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[26] Transport Canada. "Transportation in Canada 2011 Comprehensive Review."; Dennis Dawson and Stephen Greene. "One Size Doesn't Fit All: The Future Growth and Competitiveness of Canadian Air Travel." *Standing Senate Committee on Transport and Communications* (2013): 1-16.

Figure 1: *List of Canada's NAS Airports*

National Airport System (NAS):

- Calgary
- Charlottetown
- Edmonton
- Fredericton
- Gander
- Halifax
- Iqaluit
- Kelowna
- London
- Moncton
- Montréal/Trudeau
- Montréal/Mirabel
- Ottawa
- Prince George
- Québec
- Regina
- Saint John
- Saskatoon
- St. John's
- Thunder Bay
- Toronto
- Vancouver
- Victoria
- Whitehorse
- Winnipeg
- Yellowknife

Source: Transport Canada. "Transportation in Canada 2014." (2015): 1-32. Accessed June 25, 2017. DOI: 1920-0846

2.2 Funding the New System: Turning a Profit from a Not-For-Profit

One From 1983 to 1992 Transport Canada invested 1.1 billion into the NAS.[27] From 1999 to 2003 the CAA's invested $6.6 billion and since the creation of the NAP and the CAA's, Canada's major airports have invested more than $14 billion in capital infrastructure projects.[28] The NAP and CAA's have accomplished the policy goals the government wanted to achieve while paying virtually nothing for it themselves which was the intended purpose. What is interesting, and also problematic, is how the CAA's have managed to do this given their restricted situation.

[27] Auditor General of Canada. "Transport Canada – Overseeing the National Airports System." *Office of the Auditor General of Canada* (2005). Accessed July 10, 2017. http://www.collectionscanada.gc.ca/webarchives/20061027042451/http://www.oag-bvg.gc.ca/domino/reports.nsf/html/20050202ce.html

[28] Ibid; Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."; Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports."

The NAP was designed to "leave the federal government no worse off" and "represents the taxpayers' fair return on their investment, as well as the ongoing business opportunity transferred to the airport authority."[29] What this meant was that the ground rent payments to the government were going to have to be substantial.[30] When the ground rents were first introduced, they were deemed overly complicated, unclear and far too much considering the lofty goals set for the airports.[31] In 2003 alone, Vancouver, Calgary, Toronto (YYZ) and Ottawa paid between 19-24 percent of their revenues in rental fees to the federal government, the NAS airports paid a total of $241 million in rental fees.[32] An Auditor General Report from 2005 found that by 2017 the CAA's would be paying a combined $1 billion in rent annually.[33] In response to the Auditor General's report and complaints from both the CAA's and the tourism industry, Transport Canada conceded that the ground rent was an "excessive [amount] compared with public utilities and... foreign airports that had been privatized." As such, in 2005 the then Transport Minister Jean Lapierre announced that the federal government would be reducing the rent fees by 60 percent or a combined $7.8 billion over the lifetime of the leases.[34] Even with this reduction, in 2009, the eight largest airports paid $268 million or 11% of revenues in ground rent.[35] In 2008, Calgary International Airport (YYC) paid $33 million in rent and from 1996 to 2009 Pearson Airport in Toronto had paid $1.7 billion in ground rent.[36]

One of the biggest issues with the rental fees is that they are not competitive, especially

[29] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada."; Dennis Dawson and Stephen Greene. "One Size Doesn't Fit All.
[30] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada."
[31] Benjamin Dachis. "Full Throttle: Reforming Canada's Aviation Policy."
[32] Auditor General of Canada. "Transport Canada – Overseeing the National Airports System."
[33] Ibid.
[34] Michael W. Tretheway and Robert Andriulaitis. "Airport Policy in Canada."
[35] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[36] Kelly-Gagnon, Michel and Alexandre Moreau. "Canada's sky-high airport fees create turbulence for carriers."

with US airports. US airports do not pay a ground rent, but they are also subsidized by the federal government. We shall touch on this more in the analysis section. Canada's airports do pay rental fees and do not receive funding from the federal government. The CAA's, unlike other private companies, cannot sell shares of equity and thus must find other means to raise capital[37] Moreover, for the CAA's to maintain their not-for-profit status, they must also spend all their revenues on maintaining and operating the airports, on top of paying ground rent fees and paying down debt. Therefore, a sizable amount of revenue comes from airport improvement fees (AIF), landing fees and debt financing which is thus spent on infrastructure.[38]

The change in management has met its intended purpose of dramatically updating Canada's once outdated airport facilities. In fact, as per the World Economic Forum's Annual Travel and Tourism Competitiveness Report for 2015, Canada was ranked 1st for airport infrastructure.[39] However, the change has also brought about unintended consequences. As the Auditor General in her report noted that "the [Transportation] Department has failed to assume a leadership role and to properly monitor the growing use of airport improvement fees, sole-source contracting at major airports, and activities of subsidiaries in order to ensure that the interests of the public are protected."[40] More recently the Senate Committee on Transportation also found cause for concern in their report, *Toll Booth or Spark Plug?*

> In short, air travel in Canada is not structured by the government to be an economic enabler; rather, it is treated as [a] source for public revenue. The result of this is that the Canadian air travel industry is not well positioned to compete in the future in an increasingly competitive global air travel market. Worse, Canada's air travel industry is already contributing far less than its potential to Canada's overall economic growth, with serious problems manifesting in the Canadian market place– leakage to U.S. border airports

[37] Benjamin Dachis. "Full Throttle: Reforming Canada's Aviation Policy."
[38] Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports."; Dawson, Dennis and Stephen Greene. "One Size Doesn't Fit All"
[39] World Economic Forum. *Travel and Tourism Competitiveness Report 2015.* http://reports.weforum.org/travel-and-tourism-competitiveness-report-2015/economies/#indexId=TTCI&economy=CAN
[40] Auditor General of Canada. "Transport Canada – Overseeing the National Airports System."

being a symptom.[41]

Transport Canada, as far back as 2011 has even acknowledged that an increasing number of Canadians are traveling to the US to take advantage of their lower costs of travel. As a result of all this, as per the World Economic Forum's Annual Travel and Tourism Competitiveness Report of 2015, Canada is ranked 130th out of 137 nations for price competitiveness when it comes to air travel.[42] As a result of these policies, there are now an estimated 5 million Canadians who cross the border each year to fly out of US airports, producing an estimated economic loss of $2.5 billion per year. Thus, while Canada has accomplished its goal of upgrading its airport infrastructure to be among the best in the world, it should now turn its focus on retaining Canadian flyers and creating a more competitive industry.

3 Paying Not to Own

3.1 Costs to Airports

In the previous section, we briefly went over what the ground rents are and how they were built into the land leasing agreements with the federal government. The first part to this analysis section will begin by expanding on the ground rents. We will examine how much the top four airports (Toronto, Vancouver, Calgary and Montreal) pay and how that effects how the airports are run and how this ultimately affects passengers and thus the economy as a whole. We will be looking at these specific airports as they make up roughly 75-80 percent of NAS revenues

[41] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[42] World Economic Forum. *Travel and Tourism Competitiveness Report 2015.* http://reports.weforum.org/travel-and-tourism-competitiveness-report-2015/economies/#indexId=TTCI&economy=CAN

in a given year.[43] Following that, we will examine the cost and financials of the airports to give us a better idea of how they are run from an economic stand point and what affects that may or may not have.

Prior to the 2005 change announced by Minister Lapierre, ground rents were collected on the basis of passenger traffic. The greater the amount of passenger traffic the greater the amount of revenue and thus a higher rent fee paid. There is little to no material that expands on how the previous system truly worked. We can only assume this is due to the complex way the rent fees were measured and collected. Post-2005, the government has sought to not only reduce the amount of rent fees paid but to also simplify the process. The rents are now based on progressive rates which ranges from 8-12 percent of "gross revenues."[44] For example, Toronto, Vancouver, Calgary and Montreal all pay 12 percent of their gross revenue to the government.[45] By 2012, the government had collected $2.4 billion from Toronto, $1.35 billion from Vancouver, $490 million from Calgary and $334 million from Montréal.[46] According to the federal government the change in the rent formula was a way to address concerns regarding both the "competitiveness and the financial viability" of Canadian airports.[47]

Where we begin to see problems with this policy is in the fact that the CAA's are not-for-profit. CAA's have to charge passengers and airlines as a means to garner enough revenue to pay

[43] Transport Canada. "Transportation in Canada: An Overview." (2010): 1-30. Accessed June 25, 2017. https://www.tc.gc.ca/media/documents/policy/overview2010.pdf ; Transport Canada. "Transportation in Canada 2011 Comprehensive Review." (2012): 1-155. Accessed June 25, 2017. DOI: 1482-1311; Transport Canada. "Transportation in Canada 2012: Overview Report." (2012): 1-30. Accessed June 25, 2017. DOI: 1920-0846; Transport Canada. "Transportation in Canada 2013: Overview Report." (2014): 1-40. Accessed June 25, 2017. DOI: 1920-0846

[44] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[45] Ibid.
[46] Dachis. "Full Throttle: Reforming Canada's Aviation Policy."
[47] Transport Canada. "Canada's New Rent Policy." June 1, 2005. Accessed July 5, 2017. DOI:0002-2853

for both ground rent and their operations.[48] Airlines are charged both a landing fee and for the use of the terminal to load and unload passengers which in turn is incorporated into the passenger's fare. However, now there are passengers being both charged by the airport and the airlines as a mean to pay for the ground rent. According to Professor Lazar of York University, in 2009 ground rents cost each passenger between $0.77 (Edmonton) and $4.63 (Toronto) per flight. This may not seem substantial but it is part of the problem - a problem which according to Canada's senate is causing a direct economic loss of $2 billion annually which is a loss of $74 million in taxes.[49]

It's worth noting that in the Senate Committee's second hearing on Canadian Airports that one individual stated, "most air carriers charge premiums on heavily travelled routes in order to subsidize service on less travelled routes."[50] This explains why it costs so much to travel and as a means to keep flights costs down in, for example, Canada's Northern or more remote regions. While, there may be some truth to this, there is extremely little evidence to suggest that this is, in fact, the case and there is even less evidence to demonstrate how much cost this would add to a regularly travelled route. If anything, the prices should be (and are) more to travel to Northern and remote regions because there is far less competition in these remote areas and those who need to access these areas have a more price inelastic demand than the average leisurely passenger.

3.2 Airport Mismanagement

As a means to increase revenue and pay for infrastructure projects Canada's airports have taken to charging flyers an airport improvement fee (AIF). In Calgary and Toronto, the AIF is

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[48] Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[49] Ibid.; Dawson, Dennis and Stephen Greene. "One Size Doesn't Fit All"
[50] Dawson and Stephen Greene. "The Future of Canadian Air Travel."

$30 per passenger, in Montreal it is now $25. The AIF has, in many cases become if not the main source of income, a close second. For example, in 2009 Winnipeg passengers were being charged a $20 AIF which brought in $29 million in revenue and made up 35.3 percent of Winnipeg's total revenues.[51] In Toronto, the AIF makes up 30 percent of total revenues (2016).[52] The AIF is 38 percent of Calgary's total revenue and in both cities, it is the largest source of revenue.[53] In 2009 alone, AIF collected by the NAS airports accounted for 28 percent of total revenues - a cost of $716.4 million to passengers.[54] By 2011 AIF accounted for 30% of revenues, costing passengers $857.7 million.[55] It is interesting to note though that operating costs in 2008 were $1.6 billion, in 2012 they were down to $1.1 billion.[56] At the same time, total revenues were $2.6 billion in 2009 and $2.9 billion in 2011.[57] There are two main causes for this, in 2009, capital expenditure projects were $1.2 billion, in 2011 capital expenditures were $600 million and in 2012 they were again $1.2 billion.[58] The infrastructure costs are beyond operating costs. As we've already noted the NAS airports have spent just over $14 billion since 2001. The other problem is that the NAS airports have taken on a large amount of debt. Toronto's (YYZ) Net Debt as of 2016 was $5.66 billion.[59] In 2009 the NAS airports paid $607 million in interest charges, by 2011 interest charges were costing $676 million.[60] Transport Canada no longer posts

[51] Roy and Nadeau. "The Governance of Canadian Airports."
[52] Greater Toronto Airports Authority. "Pearson Connects: Annual Report 2016." (2016):1-130. Accessed February, 25, 2017. https://www.torontopearson.com/AnnualReports/#

[53] Calgary Airport Authority. " The Future Has Arrived: 2016 Annual Report." (2016): 1-40. Accessed July 30, 2017. https://www.yyc.com/Portals/0/Publications/YYC%202016%20Annual%20Report.pdf

[54] Transport Canada. "Transportation in Canada: An Overview."
[55] Transport Canada. "Transportation in Canada 2012: Overview Report."

[56] Transport Canada. "Transportation in Canada 2013: Overview Report."
[57] Transport Canada. "Transportation in Canada: An Overview."; Transport Canada. "Transportation in Canada 2011 Comprehensive Review."; "Transportation in Canada 2012: Overview Report." (2012): 1-30. Accessed June 25, 2017.
[58] Ibid.
[59] Greater Toronto Airports Authority. "Pearson Connects: Annual Report 2016."
[60] Transport Canada. "Transportation in Canada 2011 Comprehensive Review."

the NAS financials. It appears as though the airports, since the development of the NAS have taken to pushing the burden of costs on to passengers while also taking on large amounts of debt to upgrade their facilities. The problem here is a compounded one, the airports did need upgrades, in fact their spending isn't far off of the airport authorities in New York and Seattle,[61] the issue is how Canada's federal government set up the not-for-profit airports, as we've noted in previous sections, unlike in the US, Canadian airports can't sell equity or issue bonds on the market to sell off their debt or raise capital. So, they take it directly from passengers as well as airlines (who in turn charge passengers). This is in keeping with the Canadian Senate's finding that show the airports recover their costs from users which directly affects their ability to be competitive.[62]

We've already discussed how Canada's airports were in need of upgrades and thus the reason for the creation of CAA's and the NAS but, as the Institute of Governance has noted, "some question the necessity for so many expansion projects."[63] One person to do so was the former federal Transportation Minister, Gordon Young, the man who over saw the transfer of airports in the 1990's. He now thinks they should never have done the transfers, specifically because of "expansion projects judged unnecessary (as in Ottawa) or too costly (such as in Toronto)."[64] The reference to Toronto is in regard to the new terminals built at Pearson International which saw costs balloon from $200 million in early 2000 to $572 million in 2006, while the size of the project actually decreased.[65] Toronto itself has also spent $4.4 billion in upgrades which has led to

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[61] Port of Seattle. "Comprehensive Annual Financial Report." (2013): 1-104. Accessed August 1, 2017. https://www.portseattle.org/About/Financial-Info/Documents/CAFR_2013.pdf; The Port Authority of NY & NJ. "Airport Traffic Report." (2015) 1-82. Accessed August 2, 2017. https://www.panynj.gov/airports/pdf-traffic/ATR_2015.pdf

[62] Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[63] Roy and Nadeau. "The Governance of Canadian Airports."
[64] Ibid.
[65] Ibid.

criticisms by the International Air Transportation Association, as Toronto has the highest landing fees in North America and is tied for the highest AIF in Canada.[66] Again, rightly or wrongly, they do this because it is one of their principal means to raise revenue.

Toronto is not the only one guilty of potentially over spending though. In 2007 Calgary announced its intentions to build a new runway and international terminal noting that by 2025 it would have an average of 400,000 aircraft movements, just under what YYZ had in 2016.[67] In 2007, the number of aircraft movements was 232,489.[68] In 2016 the number stands at 185,000.[69] While there are still more people using the airport, airplanes are simply capable of carrying more passengers.[70] The project was completed in 2016 and cost $2.6 billion, the terminal is "two million square feet, the equivalent of 34 football fields," doubling the size of the current terminal.[71] Likewise, YVR airport has announced as of 2017, that it will be doing upgrades worth an estimated $5.6 billion.[72] This isn't to say that these upgrades in Toronto, Calgary and Vancouver were not needed but such large dollar figures to raise questions regarding extravagance.

As was mentioned above, Toronto, as a means to pay for its expansive projects and large amount of debt has taken to charging airlines an extraordinary amount to land. In 2010 YYZ was charging $6,000 to land a Boeing 767 which is $3,000 more than LaGuardia Airport (LGA)

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[66] Ibid.
[67] Ibid; Greater Toronto Airports Authority. "Pearson Connects: Annual Report 2016."
[68] Roy and Nadeau. "The Governance of Canadian Airports."
[69] Calgary Airport Authority. "The Future Has Arrived: 2016 Annual Report."
[70] Roy and Nadeau. "The Governance of Canadian Airports."
[71] Stephenson, Amanda. "New $2 Billion Calgary Airport Terminal Ready for Takeoff." *Calgary Hearld,* October 6, 2016. Accessed August 1, 2017. http://calgaryherald.com/business/local-business/new-2-billion-calgary-airport-terminal-ready-for-takeoff

[72] Korstrom, Glen. "Vancouver Airport Reveals $5.6 Billion Expansion Plan." *Business Vancouver,* January 18, 2017. Accessed July 18, 2017. https://www.biv.com/article/2017/1/vancouver-airport-reveals-56-billion-expansion-pla/

which is the second highest in North America after Toronto.[73] By comparison, YYZ served 44.5 million passengers in 2015 while LGA served 28.4 million.[74] Even landing the smaller Airbus 320 would cost an airline $1,000 more to land at YYZ than the next highest competitor.[75] YYC is closer to both Los Angeles (LAX) and New York's John F. Kennedy International Airport (JFK) in terms of costs to land a Boeing 767, YYC and LAX are just under $2,000 while JFK is just over that dollar figure.[76] YYC served 15.7 million passengers in 2016 while JFK and LAX saw 56.8 million and 72.1 million passengers respectively.[77] From this point-of-view it makes sense that both YYC and LGA charge a higher landing fee as they both serve less passengers and thus less incoming aircraft. However, YYZ sees a number of passengers in-between JFK and LAX - two of the United States largest airports - yet YYZ charges roughly $4,000 more for landing an aircraft than either of its American counterparts. In fact, YYZ charges more than the three latter airports combined. As has already been mentioned, the cost imposed on the airlines will most certainly be pushed on to passengers.

In Canada, airports operate on a weight based landing fee, for example the Boeing 767-400 model (the one mentioned above) is roughly 204,120 kg.[78] Calgary and Vancouver charge a

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[73] Roy and Nadeau. "The Governance of Canadian Airports."

[74] Greater Toronto Airports Authority. "Pearson Connects: Annual Report 2016."; The Port Authority of NY & NJ. "Airport Traffic Report." (2015) 1-82. Accessed August 2, 2017. https://www.panynj.gov/airports/pdf-traffic/ATR_2015.pdf

[75] Roy and Nadeau. "The Governance of Canadian Airports."

[76] Ibid.

[77] Calgary Airport Authority. "The Future Has Arrived: 2016 Annual Report."; Department of Airports Los Angeles, California. "Comprehensive Annual Financial Report: Fiscal Years Ended June 30, 2015 and 2014." Accessed August 2, 2017. https://www.lawa.org/uploadedFiles/Investors/2015%20LAWA%20CAFR.pdf; The Port Authority of NY & NJ. "Airport Traffic Report."

[78] Queen, Hank. "Introducing the 767-400 Extended Range Airplane." *Boeing.* Accessed August 2. http://www.boeing.com/commercial/aeromagazine/aero_03/textonly/ps01txt.html

fee of on average $400 per plane which is close to what other North American Airports charge.[79] Montreal's average fee on the other hand is an average of $1000, well above the norm. Toronto's fee is $3,600 per plane on average. This shows that YYZ charges a large amount not just for large aircraft but all aircraft.[80] Simply put, as Professor Joseph I. Daniel from the University of Delaware notes, "Toronto is overbuilt, overpriced, and uses its existing capacity inefficiently." This can largely be blamed on poor management under the not-for-profit system.

This poor management could be in part due to the laws surrounding directors on the not-for-profit boards. There must be 9 or more board of directors on each CAA and they may serve only a maximum of two terms, each term being four years long.[81] Directors are also appointed to the board by nominating bodies or by the board itself, for example Calgary's Chamber of Commerce has nominated 8 of the 14 board members for YYC.[82] Other nominating bodies consist of the federal government and provincial governments to name a few (figure 2).

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[79] Daniel, Joseph I. "Congestion Pricing of Canadian Airports." *Canadian Journal of Economics,* February 2011: 1-35. Accessed May 8, 2017. DOI: 0008-4085.

[80] Ibid.
[81] Canli. *Regional Airports Authorities Act*
[82] Roy and Nadeau. "The Governance of Canadian Airports."

Figure 2: *Composition of Major Airport Authority Boards*

Composition of the boards of directors of the Montreal, Toronto, Ottawa, Vancouver and Calgary airports, according to the nominating bodies

NOMINATING BODY	MONTREAL	TORONTO	OTTAWA	VANCOUVER	CALGARY
Government of Canada	2	2	2	2	2
Provincial government	1	1	1	0	0
Regional and municipal authorities	5	5	3	3	4
Chambers of commerce	3	1[b]	2	1	8
Another non-governmental organization	0	0	2	1	0
A professional association	0	2	0	2	0
Air carriers' national association	2[a]	0	1[d]	0	0
President and chief executive officer	1	0	0	1	0
Governance committee of the board of directors	1	4[c]	3[d]	5	0

a These two members represent the principal carriers that do business with Montréal-Trudeau airport. Currently, they are former Air Canada executives.
b One of the members also represents a professional association (engineers).
c These directors represent the community and are chosen by a formal recruitment and selection process. They include individuals who have experience in tourism and aviation in particular.
d As of 2010, the air carriers association will no longer be among the nominating bodies. The board will appoint four directors.

Source: Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports: Issues and Recommendations." Institute for Governance of Private and Public Organizations (2014): 7-59. Accessed February 14, 2017. DOI: 978-2-924955-17-5.

There are potentially many problems with this. First, with such a high turnover rate of directors every 4 years it is hard to believe that there is much vision or a consistent vision surrounding the future of the airports, or costs for that matter. This could be one reason for the massive amount of continued spending and large amounts of debts collected by the major airports. Second, given that these directors are nominated by public officials in many cases, there is always the question of cronyism. The Institute of Governance even goes so far as to challenge the legitimacy of the board of directors at Montréal's main airport. Of the board's 14 directors, between 2001-2010, there have been no more than four directors who have experience in the fields of, aviation, air transport/shipping or tourism. Most of those appointed come from "organizations related to municipal and economic circles" and are expected to learn on the job.[83] Perhaps not the best business model.

Canadian airports also do a poor job of collecting revenue outside of boarding and landing planes, and passengers when compared to other airports.[84] This is in reference to non-aeronautical revenues, which are revenues collected from stores (concessions) that operate in the airports (i.e. Hudson News). In Canada, non-aeronautical revenues represent 31 percent of revenues for the top eight airports in Canada.[85] While airports in England, for example Heathrow and Stansted (London), earn non-aeronautical revenues of 43 percent. Similarly, Sydney International Airport in Australia earns 46 percent of its revenue from such sources. The case is the same across Australia, including its smaller airports with passenger usage similar to Edmonton. There was no information available for LGA and JFK, however LAX's non-aeronautical revenues were 51 percent of total revenues.[86] Toronto's non-aeronautical revenues make up only 29 percent of total revenues which is only slightly under the Canadian average of 31 percent, there is a large gap between Canada's busiest airports and major (and minor) foreign airports.[87]

[83] Ibid.
[84] Benjamin Dachis. "Full Throttle: Reforming Canada's Aviation Policy."
[85] Ibid.
[86] Ibid.
[87] Ibid.; Greater Toronto Airports Authority. "Pearson Connects: Annual Report 2016."

4 The Australian/New Zealand Model

This section will briefly look at Australia and New Zealand as a comparison to Canada. These two countries, similar to Canada, in the late 90's and early 2000's sought to move away from public ownership of airports. The airports are also a great distance from one and another much like the large population centres, similar to Canada. The Australian and NZ models can be called "mixed models."[88] The reason we've chosen to call them this is because their airports are not privatized or publicly owned, they are simply mixed. For example, one third of Brisbane's airport is owned by the state, where Wellington is partly owned and Christchurch is majority owned by local government, the rest is privately owned. Sydney is privately owned but not publicly listed, where Auckland is privately owned and publicly listed. Lastly, Melbourne is run by a consortium.[89] As a result of these "mixed models," the focus of each airport is different. As Peter Forsyth shows in his paper on AUS and NZ, the airports that are privately owned have a great focus on profits, and thus their prices, post-privatization, have increased.[90] In the case of the consortium airports he notes that while the focus is largely on profits, a varied ownership group has different priorities. Lastly, the airports with state ownership were often interested in "objectives other than profits," such as keeping airfare low or spending more on infrastructure.[91] This should hopefully pour some water on the idea that privatization is the only solution to Canadian airports. With that being said, the Institute of Governance shows in their paper, that there is little to no difference in efficiency between majority private or public ownership,

[88] Forsyth, Peter. "Airport Policy in Australia and New Zealand: Privatization, Light-Handed Regulation, and Performance." In *Aviation Infrastructure Performance: A Study in Comparative Political Economy*, edited by Clifford Winston, 136-155. Washington, D.C.: Brookings Institute Press, 2009.

[89] Ibid.
[90] Ibid.
[91] Ibid.

however they do show that airports, such as ones owned by both state and private shareholders (mixed), tend to be the worst run.[92]

AUS and NZ also differ from most of the world in their approach to regulations of airports. While both these countries originally took a direct approach trying to control prices they have since developed a form of "light-handed" regulation.[93] This new form is based on the performance of the airports and involves a "review-sanction" model.[94] The goal behind this is to prevent any one airport from becoming a monopoly power given that there are so few and relatively dispersed airports in the two countries. The system, as Forsyth shows, has been good for both economic efficiency and has been successful at keeping prices and costs relatively close.[95] Forsyth does note, however, that the AUS and NZ system could integrate regulations over excessive investments in new projects which has led to higher prices in those countries, not unlike Canada.

5 Analysis

5.1 Canada's American Airports

We've discussed how poor policy making and poor management of airports has arguably led to higher costs for both passengers and airlines. This section will go into further detail on how those higher costs are effectively pushing Canadian flyers south of the border.

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[92] Roy and Nadeau. "The Governance of Canadian Airports."
[93] Forsyth. "Airport Policy in Australia and New Zealand: Privatization, Light-Handed Regulation, and Performance."
[94] Ibid.
[95] Ibid.

A growing number of Canadian's seem to prefer travelling to one of the US's four main border airports, Buffalo, N.Y., Niagara Falls, N.Y., Plattsburgh N.Y., and Bellingham, Washington. It should come as no surprise that these four airports are located within a few hour's drive of Toronto, Vancouver and Montréal. With over 75 percent of Canadian's living within 90 minutes of the US border, there is a large market for American airports to pick from.[96] While there may be sparse competition amongst Canadian airports, there is rampant competition against the US airports. In 2011 there was a 15 percent increase in the amount of Canadians choosing to cross the border – a total of 4.8 million. It is now, in 2017, expected to be over 5 million.[97] In 2015, it was estimated that as many 3.4 million Canadians were using the four airports mentioned above.[98] The use of Buffalo's International airport by Canadians ranks in first place. In 2009 there were an estimated 1 million Canadians using the airport, by 2015 that number had increased to 1.9 million.[99] There are more Canadians who use American airports than there are total passengers at Ottawa's MacDonald – Cartier International in a given year.[100] This is a loss of roughly 64 full Boeing 747's a day that could be flying out of Canada.[101]

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[96] Dawson and Greene. "The Future of Canadian Air Travel."

[97] Jang, Brett. "An Ominous Flight Pattern: Canadians Opting for U.S. Airports." *The Globe and Mail*, November 26, 2010. Accessed May 4, 2017. https://www.theglobeandmail.com/report-on-business/an-ominous-flight-pattern-canadians-opting-for-us-airports/article1316044/?page=all

[98] Dennis and Greene. "One Size Doesn't Fit All."

[99] Buffalo Niagara International Airport. "Aviation Demand Forecasts." (2010): 1-33. Accessed July 17, 2017. http://www.buffaloairport.com/pdfs/masterplan/BNIA%20Chapter%203%20-%20forecasts%20FINAL.pdf; Jang. "An Ominous Flight Pattern."

[100] Statistics Canada. "Air Carrier Traffic at Canadian Airports." (2015): 1-31. Accessed August 2, 2017. http://www.statcan.gc.ca/pub/51-203-x/51-203-x2015000-eng.pdf

[101] Roy and Nadeau. "The Governance of Canadian Airports."

Figure 3: *Proximity of Canadian and US Airports*

Source: Dawson, Dennis and Stephen Greene. "The Future of Canadian Air Travel: Toll Booth or Spark Plug? Report on the Future Growth and Global Competitiveness of Canada's Airport." Standing Senate Committee on Transport and Communications (2012): 1-15.

Canadian's make up a total of 36 percent of Buffalo's passengers - no small number.[102] This is also a growing trend in Southern Alberta (affecting YYC) and Winnipeg, Manitoba, where residents are flocking to Montana and North Dakota to take advantage of cheaper flights. What's both highly amusing and a brilliant marketing strategy, Plattsburgh, in an attempt to target would-be users of Montréal's airport, has taken to setting up "bilingual signs to help lure Quebeckers away" from YUL.[103] It must be working, given that 85 percent of Plattsburgh's passengers are Canadian. In fact, on the Plattsburgh's Airport website, the subheading is "Montréal's U.S. Airport."[104] On average, these four American airports operations are roughly 229 percent lower, as they have less infrastructure costs (and debt), lower landing fees, and next

[102] Jang. "An Ominous Flight Pattern."
[103] Ibid.
[104] Plattsburgh International Airport. Website. Accessed August 2, 2017. http://flyplattsburgh.com

to no AIF's.[105] In fact, the Canadian Airports Council found that on average, Canadian's pay $428 more (per individual) for a roundtrip flight than their American counterparts. [106]

While this is all very interesting it now brings us to another overarching problem that allows American flights to be much cheaper than they are in Canada. That problem is Low Cost Carriers which simply do not exist in Canada. As Buffalo airport, in its annual report states, "low fares at BNIA began when Southwest Airlines started servicing in October of 2000. Since that time, other low fare carriers including JetBlue and AirTran began serving BNIA."[107] As an example, a flight from BNIA to New York via JetBlue, an LCC, could cost as little as $89.70 (U.S.).[108] BNIA only has a market of roughly 2.2 million people on its American side, but across the border is a Canadian market with roughly 8 million people to pull from.[109] So, while prices at YYZ continue to go up, BNIA is available to offer among the lowest fares in the US. There is around a $112 savings on a flight to Orlando, Florida, from BNIA over YYZ which is well worth the three hour drive for any family.[110]

What's interesting is BNIAs' self-awareness that their success is predicated off what we could call Canadian ineptitude:

> The most significant factor that draws Canadians across the border to use Buffalo-Niagara International is the price differential between air travel in the U.S. versus the cost of flying from airports in Canada. If prices were the same or higher in the U.S., the draw would be significantly reduced. At that point, convenience would dictate Canadian usage of BNIA.[111]

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[105] Dennis and Greene. "One Size Doesn't Fit All."
[106] Dennis Dawson and Stephen Greene. "The Future of Canadian Air Travel."
[107] Buffalo Niagara International Airport. "Aviation Demand Forecasts."
[108] Jang. "An Ominous Flight Pattern."
[109] Buffalo Niagara International Airport. "Aviation Demand Forecasts."
[110] Ibid.
[111] Ibid.

As well, they note that Hamilton's John C. Munro International Airport could be a secondary choice for Canadian's seeking to avoid travel out of YYZ.[112] However, even though Hamilton does have a smaller airport and is in between both Toronto and BNIA, a perfect position to take advantage of, it simply can't. The reason it can't is because Canada does not have an operating LCC, of which the US has many, whom all use BNIA, allowing them to offer flights at a steep discount.

5.2 Why Pay Less When you can Pay More: Canada's Missing LCC's

Last but certainly not least, this section will discuss the last piece surrounding Canada's sky-high prices for air travel. Simply put, Canada is the one of the only countries in the western world and the only country in the G7 to not offer an LCC to its flyers.[113] They have existed within the past 15 years, albeit they have all failed to take off.[114] As a result, the market is currently dominated by both Air Canada, with 50 percent of the total market and WestJet with 35 percent, by definition, a duopoly of sorts. The remaining 15 percent is primarily made up of small niche or charter air crafts (Figure 4).[115] As Professor Ambarish Chandra from the University of Toronto's Rotman School of Management has noted, there is simply not enough competition among Canada's air carriers to bring about reduced prices.[116]

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[112] Ibid.

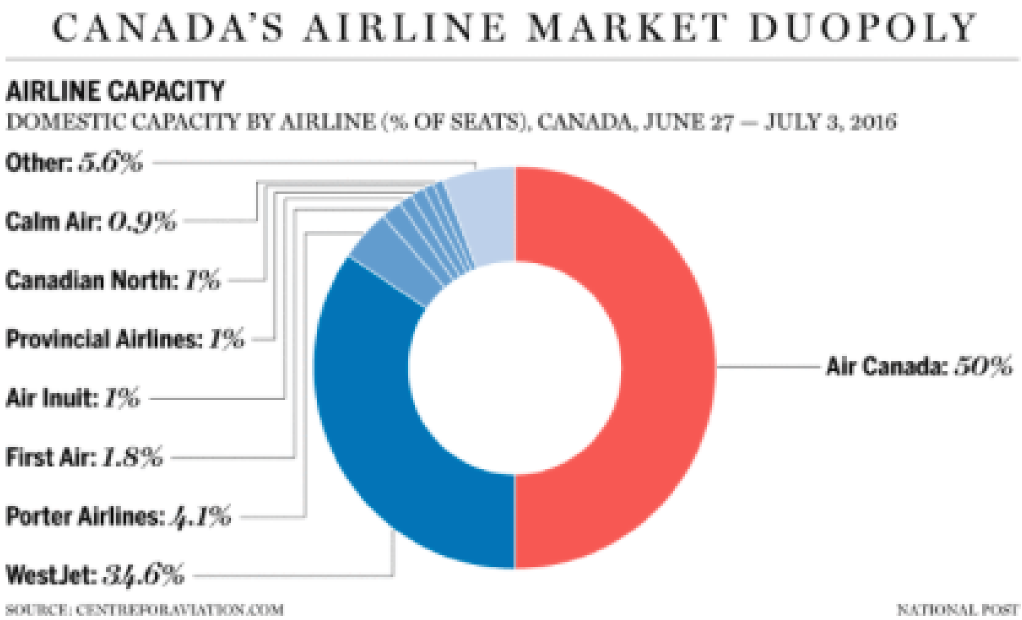
[113] Huka, Don. "Sky's the Limit for Ultra Low Cost Canada Airline." *BNN*, March 7, 2017. Accessed July 30, 2017. http://www.bnn.ca/sky-s-the-limit-for-ultra-low-cost-canada-airline-1.689782

[114] Transport Canada. "Transportation in Canada 2014." (2015): 1-32. Accessed June 25, 2017. DOI: 1920-0846

[115] Transport Canada. "Transportation in Canada 2015." (2016): 1-36. Accessed June 25, 2017. DOI: 1920-0846; Orwam, Kristine. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline." *Financial Post*, July 15, 2016. Accessed July 10, 2017. http://business.financialpost.com/transportation/why-an-ultra-low-cost-airline-cant-get-off-the-ground-in-canada/wcm/0e83346f-64fa-4518-b5bd-b19825346a08

[116] Dennis and Greene. "One Size Doesn't Fit All."

Figure 4: ***Canada's Airline Duopoly***



Source: Orwam, Kristine. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline." Financial Post, July 15, 2016. Accessed July 10, 2017. http://business.financialpost.com/transportation/why-an-ultra-low-cost-airline-cant-get-off-the-ground-in-canada/wcm/0e83346f-64fa-4518-b5bd-b19825346a08

Up until this point we have only in passing mentioned Low-Cost Carriers or LCC's, and it seems an opportune time to actually explain them in a little more depth before we continue. An LCC generally speaking seeks to keep their costs as low as possible. This is done by having a "homogenous fleet," a one size (or one type of plane) fits all approach and no first class; no "free on-board service," meaning you pay extra for checked bags and carry-ons as well as food and drink services.[117] Most importantly these LCC's tend to avoid what's known as 'hub' airports,

[117] Nucciarelli, A. and P.O. Achard. "New Frontiers for European Airport Management: Performance, Risks and Development Trends." (2009): 1-19. Accessed May 8, 2017. DOI: 978-1-60692-393-1; Malighetti, Stefano Paleari and Renato Redondi. "Pricing Strategies of Low-Cost Airlines: The Ryanair Case Study." *Journal of Air Transport Management* (2009):195-203. Accessed May 9, 2017. DOI: 10.1016; Orwam. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline."

meaning major airports and tend to use 'spoke' airports or secondary airports.[118] As a result of this unbundling of services or 'no frills' service, LCC's like Spirit Airlines in the US can charge an average fair of $66.96 (2015) on domestic flights while the average domestic airfare (economy class) in Canada is $282.80 (2015).[119] Breaking that down further, one seat/per mile flown is 9.5 cents for WestJet and 11.3 cents for Air Canada, while an LCC in the US is only six cents (these figures are excluding fuel).[120]

The Low Cost Carrier model was introduced by Southwest airlines in the early 1970's but only became wide spread at the beginning of the 1990's with the emergence of companies like Ryanair (1992) and EasyJet (1995) in Europe.[121] While regular air carriers use algorithms to engage in price discrimination to increase airfares and thus profitability, they do this by charging different fares based on class, limited discounts and overbooking.[122] LCC's use a dynamic model which means that all prices are the same for a given flights. As the flight time gets nearer, the prices dramatically increase.[123] Thus, as the study on Ryanair business model by Nucciarelli and Achard shows, "it is now common for people to buy air tickets to European destinations for less than 10.00 Euros (airport taxes excluded)."[124] Ryanair's prices on average, on bookings made less than 20 days from a flight, range from 50-75 Euros. While it is extraordinarily unlikely that $10.00 airfares will ever exist in Canada (or the US), it goes to show that the introduction of LCC's into a market can have a dramatic impact on the cost of air travel. In fact, as the study on

118 Malighetti and Redondi. "Pricing Strategies of Low-Cost Airlines: The Ryanair Case Study."
119 Orwam. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline."
120 Ibid.
121 Malighetti and Redondi. "Pricing Strategies of Low-Cost Airlines: The Ryanair Case Study."; Nucciarelli and Achard. "New Frontiers for European Airport Management."
122 Ibid.
123 Nucciarelli and Achard. "New Frontiers for European Airport Management."
124 Ibid.

Ryanair showed, typically in secondary airports, it played the "dominant role in the departure airport," the average airfare was much lower and more discounts were offered by other carriers. Ryanair and other LCC's have discovered that leisure travelers, primarily made up of middle class passengers, are price sensitive and much like those passengers in the areas of the GTA, Montreal and Vancouver are willing to travel to secondary airports to use LCC's.

It is the use of the secondary airports which is one of the reasons LCC's can operate at such low costs. A more important reason is the consumer's willingness to drive to these airports to save money. Secondary airports, like Buffalo, Plattsburgh and Seattle are all next to international Hubs such as the GTA, Vancouver and Montréal. This is not just a Canadian phenomenon. A recent study on airport competition in Norway shows that passengers are willing to drive up to seven hours to go to main airports in this case, not regional airports, to access lower airfare. They found this to be most evident among the leisure passengers.[125] This is also the case in both Germany and Spain where Ryanair operates in the secondary airports of Hahn and Gerona; Hahn is 130 km from Frankfurt's International Airport and Gerona is roughly 140 km from Barcelona's major airport.[126] An example of the price difference from the use of secondary airports would be Spirit Airlines, an LCC in the states which offers flights from

[125] Lian, Jon Inge and Joachim Rønnevik. "Airport Competition – Regional Airports Losing Ground to Main Airports." *Journal of Transport Geography* (2011): 85-92. Accessed July 10, 2017. DOI: 10.1016/j.jtrange0.2009.12.004

[126] Pels, Eric, Nenad Njegovan and Christiaan Behrens. "Low-Cost Airlines and Airport Competition." *Transportation Research* (2009): 335-344. Accessed July 8, 2017. DOI: 10.1016/j.tre.2008.09.005

Buffalo to Fort Lauderdale, Florida for $276.08 (US), while WestJet offers flights from Toronto to Miami, Florida for $661.24 - see figures 5 and 6 below other comparisons.[127]

<u>Figure 5: *Ticket Costs (1)*</u>

Total cost of a ticket departing from Montreal, Burlington and Plattsburgh

Longueuil to YUL, BTV, and PBG

FROM LONGUEUIL	TO YUL	TO BTV	TO PBG
Fare ($)	573,00	292,00	292,00
Distance (km)	26,00	152,00	100,00
Buffer time (mins.)	52,00	152,00	100,00
Airport arrival buffer time (mins.)	120,00	60,00	60,00
Border buffer time (mins.)		30,00	30,00
Time cost ($)	68,80	96,80	76,00
Taxi ($)	84,00		
Gas ($)		36,48	24,00
Toll ($)			
Parking ($/week)		84,00	
Total ($)	725,80	509,28	392,00
Total (family of four) ($)	2 513,60	1 482,08	1 344,00

Source: Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports: Issues and Recommendations." Institute for Governance of Private and Public Organizations (2014): 7-59. Accessed February 14, 2017. DOI: 978-2-924955-17-5.

[127] Keenan, Greg. "WestJet to Target Price-Sensitive Fliers with No-Frills Airline." *Globe and Mail*, April 20, 2017. Accessed June 10, 2017. https://www.theglobeandmail.com/report-on-business/westjet-looks-to-launch-new-no-frills-airline-later-this-year/article34757640/

Figure 6: *Ticket Costs (2)*

Total cost of a ticket departing from Toronto and from Buffalo

Mississauga City Centre and ST. Catherines City Centre to YYZ and BUF

FROM MISSISSAUGA	TO YYZ	TO BUF	FROM ST. CATHERINES	TO YYZ	TO BUF
Fare ($)	432,00	323,00	Fare ($)	432,00	323,00
Distance (km)	18,00	155,00	Distance (km)	108,00	66,00
Buffer time (mins.)	27,00	155,00	Buffer time (mins.)	108,00	66,00
Airport arrival buffer time (mins.)	120,00	60,00	Airport arrival buffer time (mins.)	120,00	60,00
Border buffer time (mins.)		45,00	Border buffer time (mins.)		45,00
Time cost ($)	58,80	104,00	Time cost ($)	91,20	68,40
Taxi ($)	40,00		Taxi ($)	100,00	
Gas ($)		37,20	Gas ($)		15,84
Toll ($)		6,00	Toll ($)		6,00
Parking ($/week)		50,00	Parking ($/week)		50,00
Total ($)	530,80	520,20	Total ($)	623,20	463,24
Total (family of four) ($)	1 885,60	1 593,20	Total (family of four) ($)	2 010,40	1 500,64

Source: Roy, Jacques and Michel Nadeau. "The Governance of Canadian Airports: Issues and Recommendations." Institute for Governance of Private and Public Organizations (2014): 7-59. Accessed February 14, 2017. DOI: 978-2-924955-17-5.

As we've seen simply the introduction of an LCC is enough to decrease prices across the board. This, to a limited extent was the case in Canada with the introduction of the short lived NewLeaf from mid 2016 to early 2017. NewLeaf wasn't an airline per se but a reseller of seats (what's known as wet-leasing)[128] to a small BC chartered service company called Flair Airlines.[129] NewLeaf began by offering "flights to 11 Canadian cities. After some financial

[128] Transport Canada. "Transportation in Canada 2013."

[129] Siekierska, Alicja. "Flair Airlines Acquires NewLeaf Assets, Wants to Become 'Canada's Newest National Airline." *Financial Post,* June 7, 2017. Accessed August 1, 2017. http://business.financialpost.com/transportation/flair-airlines-acquires-newleaf-assets-wants-to-become-canadas-newest-national-airline/wcm/42b7945e-4e92-41b1-8b03-4de4e6d48d0f

troubles Flair Airlines bought NewLeaf and it is unknown if they will continue offering a limited number of flights.[130] NewLeaf was primarily using the airports in Abbotsford, Edmonton, Winnipeg and Hamilton, where a round trip between Edmonton and Abbotsford was roughly $120, and one way flights for only $89.[131] As a result of this, WestJet announced "new direct flights between Hamilton and Edmonton, and Winnipeg and Kelowna."[132] More importantly WestJet announced it would releasing a new fleet of "ultra-low-cost carrier[s],"[133] there is no difference between an LCC and a ULLC, besides the spelling. In response to NewLeaf's entry into the market, WestJet's President had this to say, "[w]e believe the best way for us to compete effectively, to bring lower fares for the consumer, is to launch our own ultra-low-cost-carrier.[134] As we can see, while fees do play a large part in ticket prices, competition is also a driver of ticket prices. Canada is no different than the US, AUS or the EU in this case and the idea that lower cheaper fares are not attainable due to Canada's size and large population is a farce at best. As a final example on this, a European LCC, Primera, is now offering transatlantic flights between the US and the EU, one-way ticket prices range from $99 to $200 (US). (USA TODAY).[135] That is cheaper than the average flight within Canada.

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[130] Orwam, Kristine. "NewLeaf Drops More Routes, Down to Five Destinations for Summer Season." *Financial Post,* February 2, 2017. Accessed May 9, 2017. http://business.financialpost.com/transportation/newleaf-drops-more-routes-down-to-five-destinations-for-summer-season/wcm/03b0f3c1-3197-4d38-a7c5-b6a82764ca66

[131] CBC News. "WestJet to Launch 'Ultra-Low-Costs' No-Frills Carrier." *CBC,* April 20, 2017. Accessed July, 30 2017. http://www.cbc.ca/news/canada/calgary/west-jet-westjet-ultra-low-cost-carrier-airline-calgary-lower-fares-1.4077103

[132] Orwam. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline."

[133] CBC News. "WestJet to Launch 'Ultra-Low-Costs' No-Frills Carrier."

[134] Ibid.

[135] Mutzabaugh, Ben. "European Budget Airline Expands to U.S., Promises $99 One-Way Flights." *USA Today,* August 11, 2017. Accessed August 11, 2017. https://www.usatoday.com/story/travel/flights/todayinthesky/2017/08/11/99-flights-european-budget-airline-expands-u-s/547658001/

While the prospect of more competition within Canada is arguable, although at its highest level in decades, WestJet may not benefit from this as their pilots are seeking to unionize. This does not bode well for the plans or cost reductions that stem from LCC's.[136] With that being said, there are currently two potential LCC's looking to emerge into Canada's market - Canada Jetlines and Enerjet. We've touched on why there is a lack of competition in Canada - high airport fees - however this is not the complete picture. There are two other major factors that contribute to a lack of competition. One revolves around ownership. No Canadian airline can have more than 25 percent foreign ownership which is arguably a barrier to entry because of the extremely high costs of starting an airline business.[137] In the case of both Canada Jetlines and Enerjet, they had to seek government permission to allow for 49 percent foreign ownership to get the funding they needed, even then no one foreign owner can have more than 25 percent.[138] 49 percent foreign ownership is the standard in the EU and in AUS/NZ foreign ownership is permitted to be 100 percent.[139] The other problem is that any company seeking an airlines license must have $27 million in capital reserves as the Canadian Transport Agency demands there be

[136] Siekierska, Alicja. "WestJet's New Pilot Union May Present Challenges for the Airline's Expansion Plans." *Financial Post*, May 15, 2017. Accessed July 27, 2017. http://business.financialpost.com/transportation/westjets-new-pilot-union-may-present-challenges-for-the-airlines-expansion-plans/wcm/99a31d7e-42f5-45b4-91c9-ec0332d0fde4

[137] Ivison, John. "John Ivison: Ultra-Low Cost Airlines Impeded by Canada's Outdated Foreign Ownership Rules." *National Post,* June 1, 2016. Accessed July 18, 2017. http://nationalpost.com/opinion/john-ivison-ultra-low-cost-airlines-impeded-by-canadas-outdated-foreign-ownership-rules/wcm/a20c11a2-4ae8-40b9-97b5-0c32cf7812f7

[138] Ibid.; Orwam, Kristine. "The Race is on to Launch New Ultra-Low-Cost Airline after Canada Grants Foreign Ownership Exemptions." *Financial Post,* November 3, 2016. Accessed July 31, 2017. http://business.financialpost.com/transportation/the-race-is-on-to-launch-new-ultra-low-cost-airline-after-canada-grants-foreign-ownership-exemptions/wcm/9489dbfe-57e2-4cea-ae8a-979351425083

[139] Ivison. "John Ivison: Ultra-Low Cost Airlines Impeded by Canada's Outdated Foreign Ownership Rules."

enough funds "to cover 90 days of operations."[140] This on top of limited foreign ownership laws makes it unnecessarily difficult to get any would-be airlines off the ground.

7 Options and Recommendations

This section hopes to have shown that while airport fees do play a large role in the cost of airfare, not having enough or any competition as is the case in Canada, certainly compounds the problem.

7.1 Option #1: The Status Quo

The status quo is always readily available. Currently, aside from many academics and a host of news article, some of which can be found in this paper, the public at large don't seem to be protesting in the streets over the price of airline tickets. Still, the government can and should seek to provide a better option, that much is clear.

7.2 Option #2: The Status Quo: A Regulated Model

This option could be the easiest to implement and primarily seeks to curb over spending on the parts of Canadian Airports which in the long-run should bring prices i.e. landing fees down as it would discourage over spending in regard to capital investments and expansion projects. NAV Canada provides all airports with "air traffic control and related services," as part of this service NAV Canada charges the airports a fee which is similar everywhere.[141] However,

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[140] Orwam. "Why Canada is the Only Major Market in the World Without a Super-Cheap Airline."
[141] Dawson, Dennis and Stephen Greene. "The Future of Canadian Air Travel."

NAV Canada, like Canada's NAS airports are not-for-profit and as part of the *Civil Air Navigation Services Commercialization Act*, these "service charges may only be set at the level required to cover costs, including reasonable financial reserves."[142] The federal government could pass legislation that requires the airports to act in a similar manner, allowing them to only generate revenue for operations, safety upgrades and debt repayment. This could be a slow process as 30 percent of revenue still comes from AIF's so passengers would be still stuck with paying off the airports large amount of debt and may not see the benefits of this policy for years to come.

7.3 Option #3: The Australian/New Zealand Model

Canada could potentially be best served by following the Australian/New Zealand model which seems to have worked well for both of those two countries. Of course, this would involve selling the airports, either in part or in whole. This option seems to be one of the more popular options available and the federal government is currently looking at potentially selling Toronto which has been valued at an estimated $5 billion.[143] This would also serve the federal governments' objective of spending more on infrastructure projects, the sale of Canada's airports would certainly be a large, albeit one time, cash windfall.[144] This option would best benefit the federal government in the short term. Other notable positives would include the fact that as privatized airports there would be more options for adding revenue. As we addressed in the

[142] Ibid.
[143] Wingrove, Josh and Scott Deveau. "Toronto Airport Said Worth $3.7 billion in Possible Sale." *Bloomberg*, May 5, 2017, accessed June 10, 2017. https://www.bloomberg.com/news/articles/2017-05-05/toronto-airport-said-to-be-worth-3-7-billion-in-possible-sale
[144] Tomesco, Frederic. "SNC Targets Canadian Projects as Trudeau's Plan Gets Jump on Trump's." *Bloomberg*, August 8, 2017, accessed September 1, 2017. https://www.bloomberg.com/news/articles/2017-08-08/snc-targets-canada-projects-as-trudeau-plan-gets-jump-on-trump-s

management section the current system does not allow for the selling of equity or debt bonds as the airports are currently not-for-profit. This switch in management would potentially reduce or completely eliminate the need for an AIF.

The potential problem with the option is that as we've already addressed, for profit airports are for profit so there is no guarantee that prices would come down which means competition could still be restricted and Canadians would still seek out US airports and thus the continued loss of potential revenues for Canada's coffers. As well, as the report by the Institute of Governance shows, while mixed airports, airports with ownership by government and industry tend to be the worst managed due to ever conflicting interests. As part of the AUS/NZ model there would also have to be so called "light touch regulation," with the aspiration of preventing a monopolistic airport in any one region of the country. Again however, this still doesn't guarantee increased competition or decreased prices. Lastly, there is the question of whether this is even possible, the federal government has 60 year contracts with the current private not-for-profit boards, no one has even addressed whether the federal government could legally break these contracts or not.

7.4 Options #4: Addressing Issues Regarding Competition

There are those who might be asking why or does Canada really need its own national LCC when just south of the border there are plenty, could we simply not allow them to operate more freely within Canada? Even airlines like JetBlue has stated that they would be willingly to fly into Canada were airports more cost effective. While this may seem like a simply solution the fact of that matter is that Canada's semi open-skies policy with US air carriers prevents them from accessing more than one point within Canada.[145] By that of course we mean, an airline such as Delta for example can come from the US into, let's say, Toronto however after this point it can't go to another point within Canada, it has to go back to the US or somewhere else. Hypothetically, it could make cross border travel cheaper which surely would be a benefit to travellers but it doesn't solve the problem of flying in Canada which is far more expensive to begin with.

While competition within Canada is stifled by the costs to operate at some of Canada's busiest airports, it is still difficult for even an LCC to get off the ground because of foreign ownership laws which are well past their due date. Raising the foreign ownership cap to 49 percent should be the standard that doesn't involve government approval. Moreover, limiting an individual foreign owner to only 25 percent seems to lack any appropriate reasoning and again only serves in stifling investment into Canada's airline industry.

7.5 Recommendations: A Mixed Model; Options 4 & 5

Canada would be best served by adopting options both 4 and 5. While either option would be a good starting point, a combination of the two would best serve Canadian consumers, industry and the federal government. Consumers would be better served by a potential reduction in airline prices, thus reducing the incentive to use US border airports and making it cheaper to travel within Canada. Industry would be better served through new investment opportunities, whether it be purchasing a stake in Canadian airports or travelling within the country. The introduction of an LCC would also make better use of Canada's secondary airports in the major markets of both Vancouver and Toronto thus bringing back Canadian consumers and the

[145] Dachis, "Full Throttle: Reforming Canada's Aviation Policy."

estimated $2 billion a year to Canadian markets which would see an increase in jobs, revenue and taxes.

Lastly, the federal government would greatly benefit from these two options as changing the foreign ownership law would allow for greater foreign investment while still keeping Canadian companies in control. The partial or whole sale of some or all of Canada's major airports would be a large capital windfall for the federal government which would allow them to achieve their goals of greater investment into infrastructure projects across the country.

The federal government would also benefit from the expanded base of taxes collected by once would be users of US airports. As Ergete Ferede and Bev Dahlby show in their paper on the provincial collection of corporate income tax, by increasing costs, in this case to flyers, this reduces the base or the number of people willing to pay for this service.[146] Flyers, will choose to simply not travel or will go somewhere cheaper i.e. the US. What this means is, that by reducing the cost to fly, by both adding competition and reducing the cost to use airports in Canada, we will see a decrease in air fare which will lead to an increase in the base or number of people willing to travel from Canadian airports. This will have the benefit of giving airlines and airports in Canada more business which will then allow for a greater increase in tax revenue collected by the federal government.

[146] Ferede, Ergete and Bev Dahlby, "The Costliest Tax of All: Raising Revenue Through Corporate Tax Hikes Can be Counter-Productive for the Provinces." *The School of Public Policy: SPP Research Papers,* March 2016, accessed February 27, 2017.

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