

2009 Economic Impact Analysis of the St. John's International Airport



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Contents

Executive Su	ımmary	1
Backgrou	nd	1
Methodol	ogy	2
	sults	
Impacts fr	rom Capital Program – 1999-2010	3
	009 Comparison	
	ction	
1.1 Stud	y Objectives	5
1.2 Regi	onal Setting	5
1.2.1	Location and Population	
1.2.2	Labour Force by Industry	8
1.2.3	Growth Prospects.	
1.2.4	Economic Indicators	
1.3 St. Jo	ohn's International Airport	
1.3.1	Location	
1.3.2	Capital Expenditures	.12
1.3.3	Aircraft Movements	
1.3.4	Passenger Traffic	.14
1.3.5	Tenant Operations	.15
	nic Impact Results	.18
2.1 Meth	nodology	.18
2.1.1	Assumptions	
2.1.2	Leakages	.19
2.1.3	Direct impacts	.19
2.1.4	Indirect impacts	.19
2.1.5	Induced impacts	.20
2.2 Data	Sources	.21
	iled Results	
2.4 Econ	nomic Impacts for St. John's International Airport – 2009 Economic Footprint	
2.4.1	Employment - 2009	
2.4.2	GDP/Income - 2009	
2.4.3	Revenue – Provincial Governments - 2009	
2.4.4	Revenue – Federal Government - 2009	
2.4.5	Revenue – Municipal Governments - 2009	
2.5 Econ	nomic Impact Estimates for St. John's International Airport Authority - Capital Expenditures	
2.5.1	Employment – Capital Expenditures	
2.5.2	GDP/Income – Capital Expenditures	
2.5.3	Revenue – Provincial Governments – Capital Expenditures	
2.5.4	Revenue – Federal Government – Capital Expenditures	
2.5.5	Revenue – Municipal Governments – Capital Expenditures	
3.0 Conclus	sion	35

Tables and Figures

Figure 1: NL Employment by Industry (2009)	8
Figure 2: Index of Annual Seat Capacity for Atlantic Canada Airports (1999=100)	.11
Figure 3: St. John's International Airport Capital Expenditure	.13
Figure 4: St. John's International Airport Aircraft Movements	.14
Figure 5: St. John's International Airport Passenger Traffic	
Figure 6: St. John's International Airport 2009 Employment Footprint	.23
Figure 7: 2009 GDP/Income Impacts: St. John's International Airport Authority Operations by Region	.25
Figure 8: Provincial Government Revenue by Region of Economic Activity - St. John's International Airport	
Authority Operations and Tenants 2009	.26
Figure 9: Federal Government Revenue by Region of Economic Activity - St. John's International Airport	
Authority Operations and Tenants 2009	.28
Figure 10: Revenue - Municipal Governments: St. John's International Airport Authority Operations 2009 by	
Region	
Figure 11: Employment Impacts: St. John's International Airport Authority Capital Expenditures	
Figure 12: GDP/Income Impacts: St. John's International Airport Authority Capital Expenditures	
Figure 13: Revenue - Provincial Government: St. John's International Airport Authority Capital Expenditures	
Figure 14: Revenue - Federal Government: St. John's International Airport Authority Capital Expenditures	
Figure 15: Revenue - Municipal Governments: St. John's International Airport Authority Capital Expenditures	s 34
Table 1: Population of St. John's, St. John's CMA, Avalon Peninsula and NL	7
Table 2: Newfoundland's 10 Largest Municipalities	7
Table 3: Employment Growth Forecast for NL	
Table 4: Select Economic Indicators - St. John's CMA	
Table 5: Annual Seat Capacity at Atlantic Canada Airports (1999-2009)	.10
Table 6: Surrounding Municipalities	
Table 7: St. John's International Airport Capital Expenditures	
Table 8: St. John's International Airport Aircraft Movements	
Table 9: St. John's International Airport Passenger Traffic	
Table 10: St. John's International Airport Tenants	
Table 11: St. John's International Airport 2009 Employment Footprint	.22
Table 12: St. John's International Airport 2009 GDP/Income Footprint (\$'000's)	
Table 13: St. John's International Airport 2009 Provincial Government Revenue Footprint (\$'000's)	
Table 14: St. John's International Airport 2009 Federal Government Revenue Footprint (\$'000's)	
Table 15: St. John's International Airport 2009 Municipal Government Revenue Footprint (\$'000's)	
Table 16: Employment Impacts: St. John's International Airport Authority Capital Expenditures	
Table 17: GDP/Income Impacts (\$'000's) of St. John's International Airport Authority Capital Expenditures	.30
Table 18: Revenue - Provincial Governments (\$'000's): St. John's International Airport Authority Capital	
Expenditures	.31
Table 19: Revenue - Federal Governments (\$'000's): St. John's International Airport Authority Capital	
Expenditures	.32
Table 20: Revenue - Municipal Governments (\$'000's): St. John's International Airport Authority Capital	
Expenditures	
Table 21: Annual Employment - Selected Newfoundland and Labrador Companies	.35

1

Executive Summary

This report has been prepared by Strategic Concepts, Inc. (SCI) and Dr. Wade Locke on behalf of the St. John's International Airport Authority (SJIAA). The primary purpose of the study was to quantify the 2009 economic footprint generated from operating the St. John's International Airport (the Airport) on the economies of the Avalon Peninsula (the local impact area), Newfoundland and Labrador (NL or the province) and Canada (the country). This economic impact analysis incorporates five sets of data including:

- the SJIAA's 2009 operating expenditures and revenues;
- the SJIAA's capital investment program for the period 1999 to 2010;
- 2009 employment and expenditure data obtained from a survey of tenants operating at the Airport;
- 2009 non-resident tourism expenditures attributable to passengers accessing the Airport as derived from tourism statistics and historical air exit surveys; and,
- 2009 expenditures resulting from military personnel and aircraft movement at the Airport.

This report evaluates the economic impacts of the Airport and provides a quantitative measure of its growing contribution to the regional, provincial and national economies. For the purposes of this report, economic impacts refer to the effects of spending and employment associated with the Airport. A similar study was completed in 2008, utilizing 2007 data. A comparison of the previous and current impacts is also provided in this report.

Background

The SJIAA is a private, not-for-profit corporation that is responsible for the operations of the Airport pursuant to the provisions of a long-term ground lease with the Government of Canada. The corporate structure ensures that all excess revenues over expenses are retained and reinvested into the Airport's capital assets. The Airport is a major airport that enabled travel by air for approximately 1.25 million passengers in 2009.

The link between economic growth and passenger travel is clearly evident in the operations of the Airport. The Airport was buoyed by a strong provincial economy in 2009. In 2009, despite the impact of the most recent recession on air travel in general, the Airport experienced a 0.1% increase in travelers flying as opposed to an average 6% decline in passenger travel in the rest of Canada. The growth in passengers utilizing the Airport continued into 2010. Whereas most airports across the country were recovering from a loss of passengers in 2009 due to the recession, the SJIAA grew its passenger count by 8% over 2009 totals, a growth rate that was twice the national average. A final indicator of success for the airport is that the growth in seat capacity at St. John's has grown by 24% since 1999, while seat capacity at all other airports in the Atlantic Canadian region, with the exception of Charlottetown, have declined. In 2009, Charlottetown airport maintained its seat capacity at 1999 levels.

As well, in 2009, the SJIAA generated \$22.9 million in revenues and had expenditures totalling approximately \$21.8 million. Since 1999, the SJIAA has invested \$140 million on airport improvements.

Methodology

Key information was collected from the SJIAA, including relevant financial information and background statistical reports. Primary data was also collected from a variety of sources, including: SJIAA officials, Transport Canada officials, City of St. John's, tourism publications and an airport tenant survey of companies operating at the Airport.

In this report, the Airport's economic impact has been estimated using an Input-Output model. The economic impact model estimated the direct, indirect and induced economic impacts of the SJIAA operations on the Avalon Peninsula, the province of NL and Canada, taking into account a range of prevailing socio-economic factors. The outputs of the model include the following:

- employment generated by the commercial activity conducted by the Airport operator and its tenants, military traffic, non-resident passenger expenditures in the region and other NL firms supplying goods and services to the Airport;
- estimates for incremental increases in income/Gross Domestic Product (GDP); and
- provincial, federal and municipal treasury impacts.

Study Results

The results contained in this study have been summarized below in Table ES-1 and Table ES-2 according to employment, GDP/incomes and government revenues. Additional detailed analysis is provided in the body of the report.

During 2009, the operations of the Airport Authority, its tenants, associated military expenditures and non-resident tourism activity enabled by the Airport accounted for an estimated 7,700 person-years of employment and over \$400 million in GDP/Income throughout Canada. Of this total, approximately 6,000 person-years of employment and \$270 million in GDP/Income occurred within NL. The corresponding employment and GDP/Income within the local impact area (the Avalon Peninsula) was 5,550 person-years and \$250 million, respectively. Operations of the Airport Authority, its tenants and associated military expenditures also generated \$80 million in tax revenue to all levels of government in 2009 throughout Canada, \$55 million of which was received within NL. The tax revenue to all governments within the local impact area was approximately \$50 million.

Table ES-1summarizes the employment and income impacts found in the course of this study.

Table ES-1: SJIAA Employment and Income Analysis – Summary Findings

	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total		
Employment (Person-Years)							
Direct	4,079	0	4,079	0	4,079		
Indirect	680	194	874	740	1,615		
Induced	792	216	1,009	990	1,999		
Total	5,551	411	5,962	1,730	7,692		

	Income/GDP (M\$Cdn)						
Direct	\$149.8	\$0	\$149.8	\$0	\$149.8		
Indirect	\$33.6	\$10.8	\$44.4	\$56.1	\$100.5		
Induced	\$62.6	\$13.0	\$75.6	\$75.5	\$151.2		
Total	\$246.0	\$23.8	\$269.8	\$131.6	\$401.5		

Government revenues from operations at the St. John's International Airport are summarized in Table ES- 2.

Table ES- 2: SJIAA Government Revenue Analysis- Summary Findings

	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total			
Provincial Government Revenue (\$'000's)								
Direct	\$9,231	\$0	\$9,231	\$0	\$9,231			
Indirect	\$1,403	\$477	\$1,880	\$2,920	\$4,800			
Induced	\$8,801	\$1,093	\$9,893	\$6,178	\$16,071			
Total	\$19,435	\$1,570	\$21,004	\$9,097	\$30,102			
	F	ederal Governm	ent Revenue (\$'	000's)				
Direct	\$12,868	\$0	\$12,868	\$0	\$12,868			
Indirect	\$2,288	\$741	\$3,209	\$5,297	\$8,326			
Induced	\$14,246	\$1,720	\$15,967	\$11,272	\$27,239			
Total	\$29,402	\$2,462	\$31,864	\$16,569	\$48,433			
	Mı	unicipal Govern	ment Revenue (S	5'000's)				
Direct	\$1,714	\$0	\$1,714	\$0	\$1,714			
Indirect	\$409	\$100	\$509	\$712	\$1,221			
Induced	\$767	\$134	\$901	\$1,278	\$2,179			
Total	\$2,890	\$234	\$3,124	\$1,990	\$5,114			

Impacts from Capital Program - 1999-2010

Table ES- 3 below illustrates the economic impacts from the Airport Authority's capital investments from 1999-2010. As this table indicates, the impacts from the Authority's capital expenditures over the past 11 years have also been significant, having created 1,680 person-years of employment in NL and another 1,475 in the rest of Canada. This activity, in turn, generated over \$75 million in incomes to the NL economy and another \$110 million in the rest of Canada. The combined government revenues from this activity have totalled over \$30 million.

As well, there are 300 acres of land at the Airport that is available for development and the Authority is focused on creating a strategy to develop this land for local commercial activity. This initiative is consistent with the Authority's revenue diversity strategy and will result in expanded economic activity.

Table ES- 3: SJIAA Capital Program 1999-2010- Summary Findings

	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total		
Employment (Person-Years)							
Direct	0	0	0	0	0		
Indirect	1,079	303	1,382	820	2,202		
Induced	214	82	296	655	950		
Total	1,292	385	1,677	1,475	3,152		

		GDP/In	come (\$000)		
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$43,160	\$11,858	\$55,018	\$60,754	\$115,771
Induced	\$16,291	\$5,367	\$21,657	\$51,643	\$73,300
Total	\$59,450	\$17,225	\$76,675	\$112,396	\$189,071
		Provincial 1	Revenue (\$000)		
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$0	\$0	\$0	\$0	\$0
Induced	\$1,644	\$564	\$2,208	\$3,791	\$5,999
Total	\$2,143	\$605	\$2,749	\$4,569	\$7,318
-		Federal R	evenue (\$000)		
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$2,371	\$816	\$3,188	\$6,705	\$9,893
Induced	\$3,480	\$971	\$4,451	\$8,459	\$12,910
Total	\$5,851	\$1,788	\$7,638	\$15,164	\$22,803
-		Municipal 1	Revenue (\$000)		
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$145	\$78	\$223	\$637	\$861
Induced	\$211	\$58	\$269	\$962	\$1,231
Total	\$356	\$136	\$492	\$1,600	\$2,092

2007 - 2009 Comparison

Table ES- 4 below compares the employment and income impacts found in the course of this 2009 study to the previous 2007 study. Since the 2007 Study, total employment generated in NL as a result of the Airport's operation has increased by more than 11% and GDP/income has increased by nearly 8%.

Table ES- 4: SJIAA Employment and Income Analysis – Comparison of 2007-2009: Summary Findings

	Ava	Avalon Peninsula			Total NL			Total	
	2007	2009	%	2007	2009	%	2007	2009	%
	Employment (person-years)								
Total	5,215	5,551	6.4%	5,352	5,962	11.4%	6,986	7,692	10.1%
Income/GDP (M\$ Cdn)									
Total	\$242	\$246	1.7%	\$250.3	\$269.8	7.8%	\$373.6	\$401.5	7.5%

Table ES- 5 below compares the Government revenues from 2009 operations at the Airport to the previous 2007 study. Provincial government revenues have grown by more than 17%, while the contribution to the federal treasury has increased by almost 9% and municipal government revenues have grown by approximately 8%.

Avalon Peninsula Total NL **Total %** 2009 % 2007 2007 2007 2009 2009 Provincial Revenue (\$000`s) Total \$17,333 \$19,435 12.1% \$17,899 \$21,004 17.3% \$26,311 \$30,102 14.4% Federal Revenue (\$000`s) Total \$29,402 8.6% \$28,418 3.5% \$29,331 | \$31,864 \$44,766 \$48,433 8.2% Municipal Revenue (\$000`s) \$2,813 \$2,890 Total 2.7% \$2,895 \$3,124 7.9% \$4,846 \$5,114 5.5%

Table ES- 5: SJIAA Government Revenue Analysis – Comparison of 2007 – 2009: Summary Findings

1.0 Introduction

This report has been prepared by Strategic Concepts, Inc. (SCI) and Dr. Wade Locke on behalf of the St. John's International Airport Authority (SJIAA). The primary purpose of the study was to quantify the 2009 economic footprint generated from operating the St. John's International Airport (the Airport) and its capital expenditure program from 1999 to 2009 on the economies of the Avalon Peninsula, Newfoundland and Labrador (NL) and Canada.

1.1 Study Objectives

The separate and cumulative economic impacts associated with the operations of the Airport terminal in 2009, including the operations of the Airport's tenants, related military expenditures and associated tourism expenditures and the capital expenditures incurred by the SJIAA from 1999 to 2009 were analyzed from four perspectives:

- 1. A broad economy perspective, which considered direct, indirect and induced impacts on employment and GDP/Income on the Avalon Peninsula, NL and Canada.
- 2. A provincial treasury perspective, which measured direct, indirect and induced taxation impacts on the Governments of Newfoundland and Labrador and other provinces in Canada.
- 3. A federal treasury perspective, which measured direct, indirect and induced taxation impacts on the Government of Canada.
- 4. A municipal treasury perspective, which measured direct, indirect and induced taxation impacts on the Municipal governments on the Avalon Peninsula, the rest of NL and the rest of Canada.

1.2 Regional Setting

1.2.1 Location and Population

St. John's, the provincial capital, is located on the eastern tip of the Avalon Peninsula on the island of Newfoundland (see Illustration 1).

St. John's, as shown in Table 1, is the most populous metropolitan area in NL with a population of 100,646. With a population in excess of 180,000 in 2006 and 189,000 est. 2009, St. John's, after Halifax, is the second largest Census Metropolitan Area (CMA) in the Atlantic Provinces. The population of both the City of St. John's and St. John's CMA has increased modestly since the 2001 census, with an average annual population growth rate of

slightly less than 1%. Although this rate of growth could be considered low in isolation, it is significant when compared to the overall provincial population growth rate, which averaged - 0.3% annually between 2001 and 2006.

The St. John's CMA is the fastest growing metropolitan area in NL and includes the neighbouring city of Mount Pearl and eleven other towns, the largest of which are Conception Bay South and Paradise. The populations of NL's largest municipalities are listed in Table 2.

Corner Brook

St. John's

North

North

St. John's

Illustration 1: Map of Newfoundland

Table 1: Population of St. John's, St. John's CMA, Avalon Peninsula and NL

	1991	1996	2001	2006	Change 1991- 2006
St. John's	104,659	101,936	99,182	100,646	-3.8%
St. John's CMA	171,848	174,051	172,918	181,113	5.4%
Avalon Peninsula	253,203	251,523	242,875	248,418	-1.9%
NL	568,475	551,790	512,930	505,469	-11.1%

Source: Statistics Canada, 2006 Census

Table 2: Newfoundland's 10 Largest Municipalities

Newfoundland's 10 Largest Municipalities					
Municipality	2001	2006			
St. John's	99,182	100,646			
Mount Pearl	24,964	24,671			
Conception Bay South	19,772	21,966			
Corner Brook	20,103	20,083			
Grand Falls-Windsor	13,340	13,558			
Paradise	9,598	12,584			
Gander	9,651	9,951			
Happy Valley-Goose Bay	7,969	7,572			
Labrador City	7,744	7,240			
Stephenville	6,588	7,109			

Source: Statistics Canada, 2006 Census

1.2.2 Labour Force by Industry

With a long and prosperous history in the fishery, the last half of the 20th century has seen St. John's transformed into a modern export and service centre. More recently, NL's oil and gas and mining developments have led to an economic boom that has spurred population growth, commercial development and has resulted in the St. John's area now accounting for about half of the province's economic output. A summary of the NL labour force by industry is presented in Figure 1.

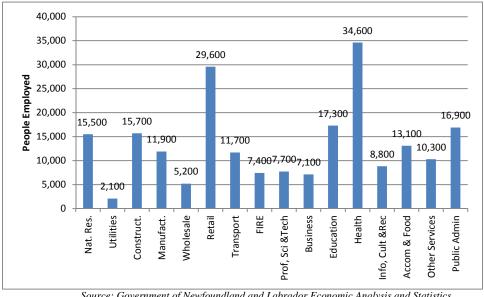


Figure 1: NL Employment by Industry (2009)

Source: Government of Newfoundland and Labrador Economic Analysis and Statistics

According to Statistics Canada, employment declined by 2.5% in NL during 2009. This was a direct result of the recession and lower levels of employment in the resource industries. Employment levels have since increased and are expected to continue increasing with the province's growth prospects.

1.2.3 Growth Prospects

One of the main factors contributing to NL's positive economic outlook is the high level of expenditure activity expected with the advancement of numerous resource projects. The Atlantic Provinces Economic Council (APEC) estimates that there is approximately \$35 billion of project activity either underway, nearing approval, under development or in the proposal stage in NL. In its Economy 2010 publication, the Government of Newfoundland and Labrador (GNL) identified almost \$21.0 billion worth of major capital projects. The largest projects identified by APEC and the provincial government are in the electricity, oil and gas and mining sectors. Some of the significant major projects that may commence in the foreseeable future and which will affect the economy of NL and thus the prospects for the Airport's continued growth include the following:

- Hydro Energy Nalcor Energy's Lower Churchill Project.
- Oil Projects ExxonMobil's Hebron and Hibernia South projects, Husky's White Rose Expansion.
- Oil and Gas potential developments in the Jeanne d' Arc Basin, Flemish Pass Basin, Orphan Basin, and Offshore Western Newfoundland.
- Mining IOC Mine expansion, Aurora Energy proposed Uranium mine and other mining prospects in Labrador.
- Heavy industry KNOC's Come by Chance Oil Refinery Expansion, Vale Inconickel processing facility at Long Harbour.

With the exception of the mining projects, the St. John's area and Avalon Peninsula will be the focal point for much of the activity related to these projects.

A summary of employment growth forecasts from selected major financial institutions and economic research groups is provided in Table 3.

Table 3: Employment Growth Forecast for NL

Agency	2010f	2011f
Atlantic Provinces Economic	n.a.	n.a.
Council		
CIBC World Markets	3.2	1.7
Scotiabank Group	3.2	1.4
TD Economics	3.2	0.9
BMO Nesbitt Burns	3.2	1.2
Conference Board of Canada	3.4	2.1
Royal Bank of Canada	2.6	1.6
Private Sector Average	3.1	1.5
Department of Finance	2.3	1.5

Source: Government of Newfoundland and Labrador Economic Analysis and Statistics

As Table 3 illustrates, employment growth for NL is expected to be significant over the next year, with various forecasters estimating an average total expected growth in employment of between 2.3% and 3.4% in 2010

1.2.4 Economic Indicators

By most indicators, the St. John's metro area is enjoying significant economic growth. Table 4 provides some selected economic indicators for 2007, 2009 and 2010f for the St. John's metro area.

Table 4: Select Economic Indicators - St. John's CMA

Indicator	2007	2009	2010f	% Change 07 - 09
Real GDP (2002\$M)	9,236	9,399	9,405	1.8
Personal income (\$M)	6,029	7,006	7,387	16.2
Retail trade (\$M)	2,744	3,122	3,322	13.7
Housing starts	1,480	1,480	1,750	0.0
Employment	94,500	99,200	101,700	5.0
Labour force	101,500	101,500	110,400	0.0
Unemployment rate	6.9%	8.3%	7.9%	20.3

Source: City of St. John's, "St. John's Statistical Profile"

1.3 St. John's International Airport

On April 28, 1941, the history of the airport building was set in stone as construction began on the first airport terminal in St. John's. This was something to celebrate in itself, as it made Newfoundland and Labrador more accessible and positioned the city as an legitimate international player in the worlds of business and tourism. From the day the Authority became privately managed in 1998, it has turned a non-profit government organization into a successful private, not-for-profit, business operation.

In 1999, the Airport underwent a massive re-development project which was completed in 2002. The redevelopment project helped to reposition the Airport as a global player, offering diverse services and bringing pride to the community. The re-development of the Airport has resulted in significant growth; growth that would not have been possible in the former terminal building. Since the new terminal building opened in 2002, passenger traffic traveling through the Airport has increased by 52%. As Table 5 and Figure 2 illustrate, the growth in seat capacity into St. John's International Airport has far exceeded that experienced in all other regional airports between 1999 and 2009. In fact, seat capacity at St. John's International Airport has grown by 24% from 1999 to 2009.

Table 5: Annual Seat Capacity at Atlantic Canada Airports (1999-2009, one-way)

	1999	2000	2001	2002	2003	2004
Fredericton	342,221	228,750	205,504	167,006	161,192	172,239
Halifax	2,525,767	2,503,418	2,294,091	1,830,846	2,163,687	2,286,066
Moncton	368,569	334,624	370,700	330,560	392,335	377,899
Gander	157,057	163,909	127,122	81,419	76,773	66,353
Saint John	331,535	226,397	210,506	171,232	152,277	138,733
Charlottetown	187,937	130,918	135,835	119,295	130,754	119,875
St. John's	640,252	725,743	839,991	741,621	760,295	845,795
	2005	2006	2007	2008	2009	
Fredericton	164,140	149,144	165,073	168,779	171,059	
		1 . , , 1	105,075	100,779	171,037	
Halifax	2,291,608	2,322,655	2,285,772	2,350,690	2,348,851	
Halifax Moncton	2,291,608 417,029	- ,	,	,	,	
		2,322,655	2,285,772	2,350,690	2,348,851	
Moncton	417,029	2,322,655 410,728	2,285,772 326,294	2,350,690 353,327	2,348,851 334,431	
Moncton Gander	417,029 67,930	2,322,655 410,728 53,951	2,285,772 326,294 46,827	2,350,690 353,327 63,757	2,348,851 334,431 60,561	

Data Source: OAG

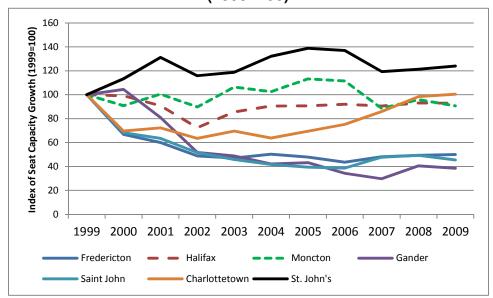


Figure 2: Index of Annual Seat Capacity for Atlantic Canada Airports (1999=100)

1.3.1 Location

The St. John's International Airport is the most easterly airport in North America (Latitude: 47 34'N, Longitude: 52 41'W) and located just less than 10 km from the downtown core of St. John's. It is the only airport on the Avalon Peninsula, which has a population of almost 250,000 or approximately 50% of the entire population of the province.

St. John's International Airport's primary market has a population of 181,113, representing approximately 35% of the population of the island of Newfoundland. Estimated driving times between St. John's and other municipalities within the Airport's primary market are summarized in Table 6.

Close to 80% of non-resident visitors enter the province via the St. John's International Airport. The Airport serves as a connecting point for both air travelers and those continuing their journey by road. The entrance to the Airport is approximately 1 km from the exit and entrance ramps to the highway that have recently been redeveloped to provide improved access to airport customers who reside outside of St. John's.

Municipality	Distance (km)	Estimated Driving Time			
St. John's (downtown)	10	15 minutes			
Mount Pearl	15	20 minutes			
Paradise	20	25 minutes			
Conception Bay South	28	30 minutes			
Clarenville	188	2 hours			
Marystown	306	3 hours 15 minutes			

Table 6: Surrounding Municipalities

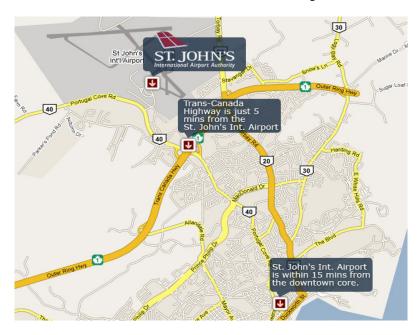


Illustration 2: St. John's International Airport Location

1.3.2 Capital Expenditures

Both the historical and future capital expenditures for the St. John's International Airport are summarized below in Table 7 and Figure 3. The re-development of the Airport Terminal Building was a significant undertaking. The project took three years to complete at a cost of \$50 million dollars. Since that time, the Airport has continued to invest in capital improvements, having spent another \$69 million on infrastructure, bringing total capital expenditures at the Airport since 1999 to over \$130 million with another \$10 million to be invested in 2010. This works out to an annual average investment in capital improvements to the airport of \$11.7 million. The past, current and future growth of the Airport could not have been supported without this undertaking. The economic impacts associated with these capital expenditures are summarized in Section 2.5.

Table 7: St. John's International Airport Capital Expenditure	es
---	----

Year	Capital Program	Estimated Capital
		Expenditure (\$'000's)
2010	General capital improvements	\$9,922
2009	General capital improvements	\$7,474
2008	Runway & Building Improvements	\$18,868
2007	Facility Improvements & Upgrades	\$12,000
2006	Central De-icing / Multi Purpose Facility	\$15,304
2005	General capital improvements	\$5,204
2004	General capital improvements	\$1,924
2003	General capital improvements	\$776
2002	Terminal Building Re-development	\$9,142
2001	Terminal Building Re-development	\$22,717
2000	Terminal Building Re-development	\$21,566
1999	Runway Re-construction	\$7,645
Total Capital	Expenditures 1999-2010	\$140,542

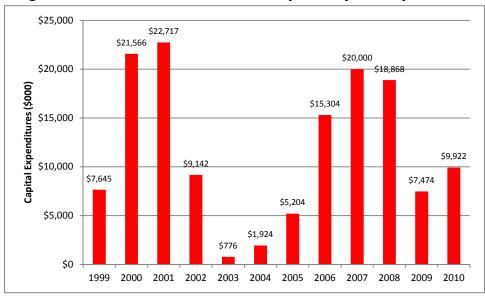


Figure 3: St. John's International Airport Capital Expenditure

1.3.3 Aircraft Movements

St. John's International Airport has the busiest airfield in Newfoundland and second busiest in Atlantic Canada. The Airport handled a total of 37,563 aircraft movements during 2009.

Table 8 and Figure 4 illustrate the volume of aircraft movements for the 1999-2009 period. Over the last ten years, the airport has averaged 43,074 aircraft movements per year.

Year	Aircraft Movements
1999	53,075
2000	44,347
2001	47,620
2002	43,850
2003	43,029
2004	43,335
2005	41,446
2006	41,454
2007	39,539
2008	38,558
2009	37,563

Table 8: St. John's International Airport Aircraft Movements

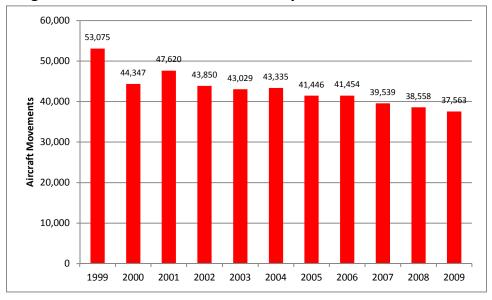


Figure 4: St. John's International Airport Aircraft Movements

1.3.4 Passenger Traffic

During 2009, as shown in Table 9 and Figure 5, approximately 1.25 million enplaning and deplaning passengers were served by the Airport. While passenger traffic has risen by almost 90% since 1998, representing an annual average of slightly more than 1 million passengers, the increase in passengers served in 2009 increased by only 0.1% over 2008. While the 2009 increase was modest, St. John's International Airport was only one of six airports in Canada that actually exhibited growth in passenger traffic in 2009. For the 32 largest airports in Canada, the total number of airline passengers fell by 6% in 2009 and Halifax, for example, experienced a fall of 4.3% in 2009 over 2008. In 2010, the majority of airports were in recovery mode and by the end fo the year most airports were back to their 2008 passenger counts (4.2% overall increase from 2009). In contrast, the number of passengers travelling through St. John's International Airport increased by 8% over 2009 totals. This rate of growth was twice the national average and represented real growth versus recovery.

Furthermore, the SJIAA is forecasting an annual growth of 3-5% in passengers utilizing the airport over the next 5 years. This will bring the passengers served annually by the airport to approximately 1.9 million by the year 2020.

While the number of passengers has increased, the total aircraft movements have decreased. This can be explained by the fact that aircraft movements include all types of aircraft: commercial, corporate jet, local general aviation, military, etc. However, the passenger traffic only includes those travelling on commercial aircraft. Therefore, the number of aircraft movements does not reflect the growth in the number of passengers travelling through the airport terminal building. Another explanation for the reduction in aircraft movements is that the airlines serving St. John's have changed their fleet, thereby increasing the number of passengers per flight.

Number of Passengers Year 1998 694,091 1999 802,261 852,044 2000 2001 921,615 2002 868,643 2003 949,879 1,083,213 2004 2005 1,175,172 2006 1,243,002 2007 1,185,302 1,222,964 2008 2009 1,223,944

Table 9: St. John's International Airport Passenger Traffic

1,400,000 1,222,964 1,243,002 1,223,944 1,175,172 1,185,302 1,200,000 1,083,213 949,879 1,000,000 921,615 **Number of Passengers** 852,044 868 643 802,261 800,000 694,091 600,000 400,000 200,000 0 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 1998 1999

Figure 5: St. John's International Airport Passenger Traffic

1.3.5 Tenant Operations

In addition to the impacts from the operations of the Airport, it is home to many tenants which leverage their proximity to the Airport and generate significant economic impacts from their businesses. Table 10 lists the tenants and licensed operators that are located at St. John's International Airport:

Table 10: St. John's International Airport Tenants

	1 ' C 1 ' L' C 1 ' T
Airlines	Air Canada/Air Canada Jazz
	WestJet
	Continental Airlines
	Provincial Airlines
	Air Saint-Pierre
	Air Transat
	SunWing
	Porter Airlines
	1 Old Annies
Fixed Based Operators (FBOs)	Irving Aviation
	Shell Aviation
	Woodward Avitat (Esso)
De-Icing Services	Inland Technologies Inc.
5	Aeromag
Ground Handling Services	Servisair
	Provincial Airlines
	Air Canada
Aviation-Related Land Tenants	Air Canada/Air Canada Cargo
	Provincial Airlines
	Cougar Helicopters
	PLH Aviation
	Aircraft Maintenance Services
	E.W. Harvey Co. Ltd.
	Kaman Enterprises
	Woodward's Oil
	Provincial Aerospace
	Servisair
	ProEx
Federal Government Agencies	Canadian Air Transport Security Authority (CATSA) –.
	Canadian Border Services Agency (CBSA)
	NAV Canada
	Canadian Coast Guard
	Department of National Defense
	Environment Canada
	Environment Canada
Land Tenants	SPCA
	RCMP
	E.W. Harvey Co. Ltd.
	Republic of Doyle
	Budget Rent-a-car
	Department of Works, Services & Transportation
	Department of works, services & Transportation
Rent-a-car Companies	Avis
_	Budget
	Enterprise
	Hertz
	National Tilden
	Dollar/Thrifty
	Donar Ininty

Retail Services	HDS Retail (Relay)
	The Heritage Shop
Cleaners	BP Cleaners
Building and Parking Lot Security	Canadian Corps Commissionaires Spectrum Security
Pre-Board Screening	Shannahan's Investigation and Security Ltd
Ground Transportation	City Wide Taxi Comfort Inn Shuttle Service
Cargo & Courier Services	Air Canada Cargo Cargojet Federal Express Midland Courier PAL Cargo Purolator Courier Westjet Cargo Pro-Ex Altimax Avalon Customs Brokers Information Communication Services
Food Services	Compass Group Canada/ Select Services
ATM Services	CIBC ATM Brinks Canada
Wireless Internet Service	Bell Aliant

2.0 Economic Impact Results

This section of the report provides a detailed overview of the findings, including the methodology employed and the data sources used.

2.1 Methodology

Data was collected from a variety of sources, including: SJIAA officials, Transport Canada officials, Statistics Canada, and an airport tenant survey of over 50 companies operating at or through the Airport.

For this analysis, St. John's International Airport's economic impact has been estimated using an Input-Output model. Input-Output (IO) models have become the de-facto standard to estimate regional and national economic impacts in both the United States and Canada. In Canada, Statistics Canada provides the data required to build input-output models. The impact model used for this study is built on data provided by Statistics Canada and the Canada Revenue Agency.

Box 1: Economic Impact Models - Terms and Definitions

Economic Impact Models Terms and Definitions

Direct impacts stem from the direct hire of persons and include employment and labour income impacts.

Indirect impacts result from the supply of goods and services and are measured on employment, labour income and profits.

Induced impacts refer to impacts from the expenditure of money in the economy by those employed directly and indirectly on the project. They are calculated using *income multipliers* and are based on the total direct and indirect impacts

Income multipliers measure the impact of an initial expenditure into an economy on incomes in the economy.

The size of the income multiplier is determined by three factors:

- 1) How much of the income that people receive actually gets spent.
- 2) How much of the income is allocated to government through taxation.
- How much of the income spent in the community is on imported goods and services.

The model used to estimate the indirect and induced economic benefits of St. John's International Airport is a Regional IO-Econometric model. This model has been used extensively across Canada over the last 25 years in well over 200 economic impact studies. The model has 117 industries and 469 commodities (goods and services). Two large-scale modules work in parallel to calculate indirect and induced impacts:

- a. An inter-provincial model which breaks down the impacts between all ten provinces and territories, taking into account inter-provincial flows of goods and services:
- b. A Census Division model which further breaks down the impacts on a county by county basis within each and every province. This model takes into account the inter-county trade of goods and services within the province.

2.1.1 Assumptions

Like all IO models, the main assumptions of this model are:

- ➤ No economies of scale resulting from the Airport's operations for which the economic impacts are calculated were included in the analysis.
- ➤ The provincial economy is able to fully meet the requirements of the Airport and its many operators. In other words, the Airport is fully integrated in the provincial economy and has no measurable impact on wage levels, productivity or consumer behavior.

➤ The technology used by industries in the St. John's area is similar to the technology used in the province as a whole. There is no particular reason to believe that this is not the case: local firms are unlikely to have production technologies that are materially different from elsewhere on the island.

2.1.2 Leakages

One of the most important notions to understand in regional economic impact assessments is that of leakages. Leakages are in essence the different ways by which money spent in the area will leave the local economy for other parts of the province, the country and the world.

Leakages are an important determinant of the actual economic benefits of a given expenditure. High leakages will result in relatively low impacts in a local economy and vice versa. For example, the economy of regions such as California is efficient at generating employment because of its ability to keep money spent in the region for a longer period of time. There are three main sources of leakages that reduce the amount of money available in the local economy: (1) imports of goods and services, (2) government taxes, and (3) savings and retained earnings.

The IO model used for this study takes into account these leakages, notably by using coefficients to estimate the portion of demand addressed to a given industry that will actually be produced locally.

2.1.3 Direct impacts

These are expenditures made directly by the Airport Authority, tenants, military and tourists. They also include people employed directly by entities considered in the analysis. For example, employees of the Airport Authority would be included in this category. This information is taken directly from the information provided by the Airport Authority, from tenant companies, etc.

2.1.4 Indirect impacts

Any expenditure made by a given industry can be divided into two main categories: wages and salaries and non-wage items (goods, services and indirect taxes). Indirect impacts result from inter-industry purchases of goods and services.

After-tax industry expenditures can be split between profits (in fact retained earnings) and other expenditures on goods and services. These expenditures will either be made locally (cleaning services for aircrafts, etc.) or will be purchased directly outside the local economy (aircraft parts, etc.). The local purchases that go directly to local producers of goods and services will remain within the local economy and will be re-spent on wages and salaries, taxes and other goods and services. For example, initial expenditures made by the Airport on security services will initially stay in the local economy.

Other local purchases will be made through retail stores. An example of such expenditures will be a local firm buying office supplies at a local stationary store. The stationary store will keep a portion of the sales (its gross profit margin) and will send the rest of the money outside the region to the manufacturers of the office supplies purchased by the local firm. The

stationary store will in turn spend its gross profit margin on items such as wages for employees, taxes, rent, etc.

The portion of the initial expenditures that stays in the local economy for the next round of expenditures is composed of the gross retail trade margins collected on sales in local stores plus the money given directly to local businesses providing services to Airport users such as the airlines.

The next round of expenditures will go through the same process for non-salary expenditures. This money will be re-spent as expenditures that will again be split into taxes, salaries and expenditures on goods and services other than salaries. This iterative process will continue until the leakages reduce the initial amount of money spent in the local economy to zero. The total amount of money by industry that was collected by local firms through all the rounds of expenditures represents the indirect sales. Indirect employment and Gross Domestic Product statistics are derived from the sales data.

2.1.5 Induced impacts

The sole source of money for induced impacts is household income. The most important source of household income is wages and salaries. The amount of wages paid by an industry (for example a new call center) is reduced by personal income tax collected at the source on behalf of senior levels of government. The resulting after-tax income is divided into two portions: the largest one is expenditures on goods and services with the rest going towards savings. Most consumer expenditures are made locally with the rest going towards purchases outside the region (shopping trips, tourism or Internet).

As was the case for indirect impacts generated by non-salary expenditures, only a small proportion of consumer expenditures stay in the local economy for a second round of expenditures: rent paid to landlords, retail trade margin and the local production of some goods and services purchased by households. After a few rounds of expenditures, the original amount of wages and salaries spent in the local economy will be reduced to zero by the combined effects of imports, taxes and savings.

The calculation of induced impacts must be completed in a very methodical way to ensure that the results are both accurate and fully compatible with the indirect impacts (same impact statistics with the same level of details, etc.). The following features of the model ensure that the estimation of induced impacts is as accurate as possible:

- 1) One of the econometric modules calculates income elasticities for the goods and services purchased by households for each and every year of the simulation.
- 2) The benefits for workers (pension contributions, etc.), also called supplementary labour income are excluded from household income. Although benefits such as pension plans will eventually be paid to workers, they cannot be collected and spent in the near future and therefore their inclusion would exaggerate consumer expenditures.

- 3) Several other measures are taken to reduce the amount of wages and salaries that will be spent in the economy (to generate induced impacts). To ensure that only net after-tax and after savings income is spent, the following steps are taken:
 - a. Personal income taxes are subtracted from the wages and salaries earned by workers. Wages paid to workers in each industry in the model are reduced by a specific amount based on real tax statistics for tax filers with revenues similar to the average salaries paid in that industry. This process takes into account the progressivity of the tax regime and ensures that after-tax revenues closely match the reality.
 - b. Several other deductions are made to household income including RRSP contributions.
 - c. A conservative Average Propensity to Consume (APC) is used to account for savings. For example, the APC used for Nova Scotia is about 94 %.

Effective provincial and federal tax rates are used to calculate direct, indirect and induced government tax revenues. These tax revenues include personal income tax, sales taxes as well as revenues generated by taxes on corporate profits. Effective tax rates are calculated by dividing federal and provincial tax revenues by the total income of tax filers and corporations.

2.2 Data Sources

The primary sources of information used in the economic impact analysis were the 2009 expenditures of the SJIAA and the results of a survey administered to tenant companies which operate at the Airport. The expenditures for the SJIAA were analyzed through the Company's 2009 cheque register and payroll records. The information gathered was reviewed and modified specifically for use in this analysis. The Airport's financial statements and corporate brochures were utilized in support of preparing operating and capital expenditure profiles and in obtaining a better understanding of SJIAA's operations. Parameter values used to determine the economic impact generated by military activity at the Airport were derived from expenditure data compiled by the SJIAA. This data covered military expenditures based on flights, crew sizes and expenditures on supplies, fuel, and accommodations. Publications available from the Department of Tourism, Culture and Recreation, including the <u>Detailed 2008 Travel/Tourism Indicators Report</u> and the 2009 Tourism Indicators, St. John's, Newfoundland and Labrador report published by the Department of Economic Development, Tourism & Culture City of St. John's, were used to develop expenditure profiles related to non-resident travellers accessing the Airport. Estimates for total non-resident tourism expenditures in the province were multiplied against Exit Survey estimates for travelers leaving the province through the Airport and expenditure profiles contained in Exit Surveys.

2.3 Detailed Results

The results of the economic impact analysis are presented throughout this section by employment, GDP/Income and Taxation. Cumulative totals for direct, indirect and induced economic impacts by geographical area and expenditure category are presented in Table 11 through Table 15. Cumulative economic impacts are illustrative of the SJIAA's total economic impact. Economic impacts associated with the SJIAA's ongoing capital expenditure program are contained in Table 16 through Table 20.

2.4 Economic Impacts for St. John's International Airport – 2009 Economic Footprint

2.4.1 Employment - 2009

Employment impacts that may be attributed to the Airport's existence are significant and substantial. As Table 11 and Figure 6 illustrate, during 2009 the Airport was responsible for approximately 7,700 person-years of employment in Canada of which 78% or 5,960 person-years of employment were located in Newfoundland and Labrador. Of the total employment in the province, 4,100 person-years were direct, a further 900 person-years were created by companies operating throughout the province that supply goods and services to the SJIAA, its tenants and other groups benefiting from the Airport and 1,000 person-years were created in the service sector.

As the data suggests, the vast majority of employment was generated on the Avalon Peninsula. The SJIAA itself generated more than 160 person-years of employment in the province, including 68 direct person-years of employment. Tenants in and around the Airport created a further 2,260 person-years of employment in the province, while military traffic generated 170 person-years of employment. Non-resident travellers through the Airport that spent money in the local economy accounted for an additional 3,290 person-years of employment.

Table 11: St. John's International Airport 2009 Employment Footprint (person-years)

Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total		
	St. John's Internation	nal Airport Au	thority – 2009	Operations			
Direct	68	0	68	0	68		
Indirect	31	14	45	55	100		
Induced	38	12	50	63	113		
Total	137	26	163	118	281		
	St. John's Internation	onal Airport –	2009 Tenants'	Operations			
Direct	1,439	0	1,439	0	1,439		
Indirect	200	90	290	138	428		
Induced	403	124	527	327	854		
Total	2,041	215	2,256	465	2,721		
	2009 Military Expenditures						
Direct	0	0	0	0	0		
Indirect	143	4	147	72	219		

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Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Induced	16	4	20	54	74
Total	160	7	167	126	293
	St. John's International A	irport Authori	ty – 2009 Capi	ital Expenditures	
Direct	0	0	0	0	0
Indirect	57	16	73	44	117
Induced	11	4	16	35	51
Total	69	20	89	78	168
	2009	9 Tourism Exp	enditures		
Direct	2,572	0	2,572	0	2,572
Indirect	249	70	319	431	750
Induced	324	72	396	512	908
Total	3,144	143	3,287	943	4,230
	2009 Fo	otprint – Com	bined Impact		
Direct	4,079	0	4,079	0	4,079
Indirect	680	194	874	740	1,615
Induced	792	216	1,009	990	1,999
Total	5,551	411	5,962	1,730	7,692

7,000 2009 Footprint NL = 5,962 PY 6,000 Person-Years of Employment 1,009 5,000 874 4,000 2009 Footprint ROC = 1,731 PY 3,000 2,572 2,000 990 1,000 1,439 740 68 NL Rest of Canada ■ 2009 Airport Direct ■ 2009 Tenants Direct ■ 2009 Military Direct ■ 2009 Capital Direct ■ 2009 Tourism Direct ■ Combined Indirect ■ Combined Induced

Figure 6: St. John's International Airport 2009 Employment Footprint

2.4.2 GDP/Income - 2009

Normally GDP is measured as a value of output produced. However, for this analysis, GDP and income effects are equivalent and are reported as income effects. Incomes are generated at the Airport through direct and spin-off employment and through incomes earned by companies that supply goods and services to the Airport, its tenants, associated military operations and tourism operators. Table 12 and Figure 7 illustrate the total level of GDP/Incomes that may be attributed to the Airport's existence.

In 2009, the Airport contributed to \$400 million in GDP/Incomes throughout Canada. The Newfoundland and Labrador economy received 67%, or more than \$270 million, in GDP/Incomes during this time period. The SJIAA and its tenants generated, respectively, \$20 million and \$131 million in GDP/Incomes to the Newfoundland and Labrador economy.

Table 12: St. John's International Airport 2009 GDP/Income Footprint (\$'000's)

Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total		
St. John's International Airport Authority – 2009 Operations							
Direct	\$13,324	\$0	\$13,324	\$0	\$13,324		
Indirect	\$1,787	\$794	\$2,582	\$4,733	\$7,315		
Induced	\$3,086	\$696	\$3,782	\$4,864	\$8,646		
Total	\$18,197	\$1,490	\$19,688	\$9,597	\$29,285		
	St. John's Internation	onal Airport – 2	2009 Tenants'	Operations			
Direct	\$74,608	\$0	\$74,608	\$0	\$74,608		
Indirect	\$11,253	\$5,335	\$16,587	\$11,824	\$28,411		
Induced	\$32,463	\$7,589	\$40,052	\$24,553	\$64,605		
Total	\$118,324	\$12,923	\$131,247	\$36,377	\$167,624		
	200	9 Military Exp	enditures				
Direct	\$0	\$0	\$0	\$0	\$0		
Indirect	\$3,842	\$193	\$4,035	\$7,228	\$11,263		
Induced	\$1,259	\$214	\$1,473	\$4,161	\$5,634		
Total	\$5,101	\$407	\$5,508	\$11,389	\$16,897		
	St. John's International A	irport Authori	ty – 2009 Cap	ital Expenditures			
Direct	\$0	\$0	\$0	\$0	\$0		
Indirect	\$2,295	\$631	\$2,926	\$3,231	\$6,157		
Induced	\$866	\$285	\$1,152	\$2,746	\$3,898		
Total	\$3,162	\$916	\$4,078	\$5,977	\$10,055		
	200	9 Tourism Exp	enditures				
Direct	\$61,854	\$0	\$61,854	\$0	\$61,854		
Indirect	\$14,413	\$3,872	\$18,285	\$29,085	\$47,370		
Induced	\$24,947	\$4,221	\$29,168	\$39,208	\$68,376		
Total	\$101,214	\$8,093	\$109,307	\$68,293	\$177,600		
		2009 Footpr	int				
Direct	\$149,785	\$0	\$149,785	\$0	\$149,785		
Indirect	\$33,590	\$10,825	\$44,415	\$56,100	\$100,516		
Induced	\$62,622	\$13,005	\$75,627	\$75,532	\$151,159		
Total	\$245,997	\$23,830	\$269,827	\$131,633	\$401,460		

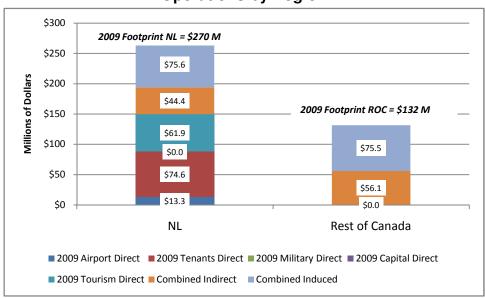


Figure 7: 2009 GDP/Income Impacts: St. John's International Airport Authority Operations by Region

2.4.3 Revenue – Provincial Governments - 2009

Provincial governments across the country received a total of \$30 million in taxation as a result of the operations of the Airport and its operations during 2009. The majority of this revenue –\$21 million – accrued to the Newfoundland and Labrador Treasury. Table 13 and Figure 8 illustrate how provincial revenues were derived by source of activity. In summary, the SJIAA generated \$1.6 million (including operations and capital expenditures) in provincial taxes while tenants at the Airport generated another \$11.8 million and tourism operators generated \$7.2 million in taxes for the provincial government. Taxes were generated primarily from personal and corporate income taxes, but the HST also added to provincial and federal treasury impacts.

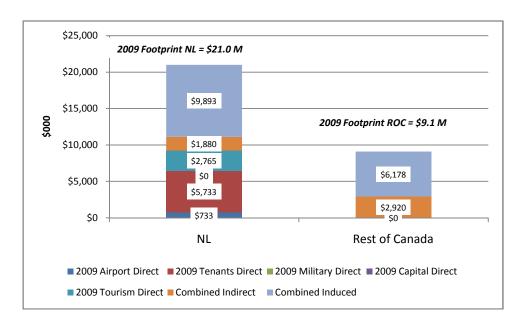
Table 13: St. John's International Airport 2009 Provincial Government Revenue Footprint (\$'000's)

Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total			
	St. John's International Airport Authority 2009							
Direct	\$733	\$0	\$733	\$0	\$733			
Indirect	\$80	\$36	\$116	\$274	\$391			
Induced	\$453	\$64	\$517	\$419	\$936			
Total	\$1,266	\$100	\$1,366	\$693	\$2,059			
	St. John's Internati	onal Airport – 2	2009 Tenants'	Operations				
Direct	\$5,733	\$0	\$5,733	\$0	\$5,733			
Indirect	\$511	\$250	\$761	\$674	\$1,435			
Induced	\$4,672	\$625	\$5,297	\$1,892	\$7,189			
Total	\$10,916	\$875	\$11,791	\$2,566	\$14,357			
	200	9 Military Exp	enditures					
Direct	\$0	\$0	\$0	\$0	\$0			
Indirect	\$153	\$8	\$160	\$397	\$558			
Induced	\$171	\$18	\$189	\$383	\$572			

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Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Total	\$324	\$25	\$349	\$780	\$1,129
	St. John's International A	Airport Author	ity – 2009 Cap	ital Expenditure	
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$87	\$30	\$117	\$202	\$319
Induced	\$114	\$32	\$146	\$243	\$389
Total	\$201	\$62	\$264	\$445	\$708
	200	9 Tourism Exp	enditures		
Direct	\$2,765	\$0	\$2,765	\$0	\$2,765
Indirect	\$572	\$154	\$725	\$1,372	\$2,097
Induced	\$3,390	\$354	\$3,744	\$3,241	\$6,986
Total	\$6,727	\$508	\$7,235	\$4,614	\$11,849
	2009 Fo	otprint – Com	bined Impact		
Direct	\$9,231	\$0	\$9,231	\$0	\$9,231
Indirect	\$1,403	\$477	\$1,880	\$2,920	\$4,800
Induced	\$8,801	\$1,093	\$9,893	\$6,178	\$16,071
Total	\$19,435	\$1,570	\$21,004	\$9,097	\$30,102

Figure 8: Provincial Government Revenue by Region of Economic Activity - St. John's International Airport Authority Operations and Tenants 2009



2.4.4 Revenue – Federal Government - 2009

The Federal Government is generally the largest recipient of taxes generated through all levels of economic activity in Canada. From economic activity generated by the Airport, the federal government received approximately \$50 million in taxes during 2009. The vast majority, more than 66% or \$30 million, of the taxes received by the federal government were generated in Newfoundland and Labrador. Table 14 and Figure 9 below illustrate how Federal revenues were derived by revenue source. As Table 14 illustrates, the Federal

Treasury received almost \$3.4 million in direct, indirect and induced taxes from expenditures made by the SJIAA and \$21.9 million from tenant company expenditures. Military activities accounted for another \$2.0 million in federal taxes, while tourism-related expenditures resulted almost \$20.0 million in taxes.

Table 14: St. John's International Airport 2009 Federal Government Revenue Footprint (\$'000's)

Employment	Avalon Peninsula	on Peninsula Rest of NL Total NL Rest of		Rest of Canada	Total			
	St. John's Internatio	nal Airport Au	thority – 200 9	Operations				
Direct	\$1,138	\$0	\$1,138	\$0	\$1,138			
Indirect	\$130	\$56	\$185	\$490	\$675			
Induced	\$733	\$101	\$833	\$762	\$1,595			
Total	\$2,000	\$156	\$2,157	\$1,252	\$3,408			
St. John's International Airport – 2009 Tenants' Operations								
Direct	\$7,454	\$0	\$7,454	\$0	\$7,454			
Indirect	\$822	\$388	\$1,209	\$1,220	\$2,430			
Induced	\$7,549	\$980	\$8,529	\$3,452	\$11,981			
Total	\$15,824	\$1,368	\$17,192	\$4,672	\$21,864			
	200	07 Military Op	erations					
Direct	\$0	\$0	\$0	\$0	\$0			
Indirect	\$240	\$12	\$252	\$727	\$978			
Induced	\$277	\$28	\$306	\$695	\$1,000			
Total	\$517	\$40	\$557	\$1,421	\$1,979			
	St. John's International A	irport Authori	ty – 2009 Cap	ital Expenditures				
Direct	\$0	\$0	\$0	\$0	\$0			
Indirect	\$126	\$43	\$170	\$357	\$526			
Induced	\$185	\$52	\$237	\$450	\$687			
Total	\$311	\$95	\$406	\$806	\$1,213			
	2009	9 Tourism Exp	enditures					
Direct	\$4,276	\$0	\$4,276	\$0	\$4,276			
Indirect	\$971	\$243	\$1,214	\$2,503	\$3,717			
Induced	\$5,502	\$560	\$6,062	\$5,915	\$11,977			
Total	\$10,749	\$803	\$11,552	\$8,418	\$19,970			
	2009 Footprint – Combined Impact							
Direct	\$12,868	\$0	\$12,868	\$0	\$12,868			
Indirect	\$2,288	\$741	\$3,029	\$5,297	\$8,326			
Induced	\$14,246	\$1,720	\$15,967	\$11,272	\$27,239			
Total	\$29,402	\$2,462	\$31,864	\$16,569	\$48,433			

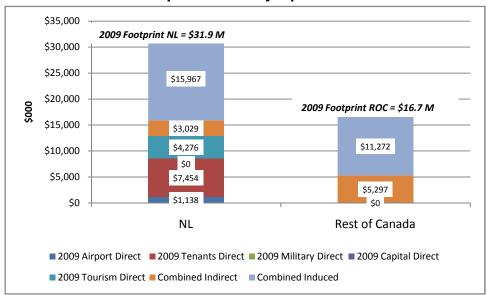


Figure 9: Federal Government Revenue by Region of Economic Activity - St. John's International Airport Authority Operations and Tenants 2009

2.4.5 Revenue – Municipal Governments - 2009

Municipal governments across the country received an estimated \$5.1 million in municipal revenues from taxes and permits in 2009 as a result of the expenditures and operations at the St. John's International Airport. Municipalities in Newfoundland and Labrador received approximately \$3.1 million or 61% of the total municipal taxes generated. Table 15 and Figure 10 below illustrate how municipal revenues were generated.

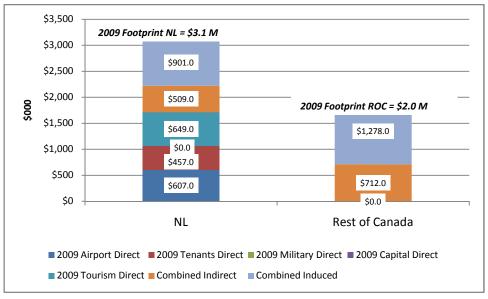
Table 15: St. John's International Airport 2009 Municipal Government Revenue Footprint (\$'000's)

Employment	Avalon Peninsula Rest of NL Total NL Rest of Canada								
St. John's International Airport Authority – 2009 Operations									
Direct	\$607	\$0	\$607	\$0	\$607				
Indirect	\$22	\$7	\$29	\$64	\$93				
Induced	\$36	\$7	\$44	\$86	\$130				
Total	\$665	\$14	\$680	\$150	\$830				
St. John's International Airport – 2009 Tenants' Operations									
Direct	\$457	\$0	\$457	\$0	\$457				
Indirect	\$134	\$50	\$184	\$139	\$322				
Induced	\$388	\$77	\$465	\$389	\$854				
Total	\$979	\$127	\$1,106	\$527	\$1,633				
	200	9 Military Exp	enditures						
Direct	\$0	\$0	\$0	\$0	\$0				
Indirect	\$44	\$2	\$45	\$85	\$130				
Induced	\$16	\$2	\$18	\$76	\$94				
Total	\$59	\$4	\$64	\$161	\$224				
	St. John's International A	Airport Authori	ty – 2009 Cap	ital Expenditures	•				
Direct	\$0	\$0	\$0	\$0	\$0				

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Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total			
Indirect	\$8	\$4	\$12	\$34	\$46			
Induced	\$11	\$3	\$14	\$51	\$65			
Total	\$19	\$7	\$26	\$85	\$111			
2009 Tourism Expenditures								
Direct	\$649	\$0	\$649	\$0	\$649			
Indirect	\$202	\$36	\$239	\$391	\$629			
Induced	\$316	\$44	\$360	\$676	\$1,036			
Total	\$1,167	\$81	\$1,248	\$1,067	\$2,315			
	2009 Footprint - Combined Impact							
Direct	\$1,714	\$0	\$1,714	\$0	\$1,717			
Indirect	\$409	\$100	\$509	\$712	\$1,221			
Induced	\$767	\$134	\$901	\$1,278	\$2,179			
Total	\$2,890	\$234	\$3,124	\$1,990	\$5,114			

Figure 10: Revenue - Municipal Governments: St. John's International Airport Authority Operations 2009 by Region



2.5 Economic Impact Estimates for St. John's International Airport Authority – Capital Expenditures

2.5.1 Employment – Capital Expenditures

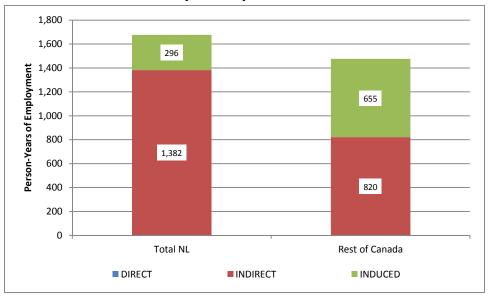
The SJIAA has been undertaking an extensive capital expenditure program since 1999. To date more than \$130 million has been invested into Airport infrastructure with an additional \$9.9 million budgeted for 2010. By the end of 2010, the capital expenditure program is expected to generate more than 3,150 person-years of employment across the country, including nearly 1,680 person-years of employment in Newfoundland and Labrador. On an average annual basis, this equates to 260 person-years of employment per year across Canada

between 1999 and 2010. The corresponding annual average for Newfoundland and Labrador is 140 person-years. Table 16 and Figure 11 show the composition of the employment related to capital expenditures.

Table 16: Employment Impacts: St. John's International Airport Authority
Capital Expenditures

Employment	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Direct	0	0	0	0	0
Indirect	1,079	303	1,382	820	2,202
Induced	214	82	296	655	950
Total	1,292	385	1,677	1,475	3,152

Figure 11: Employment Impacts: St. John's International Airport Authority
Capital Expenditures



2.5.2 GDP/Income – Capital Expenditures

The SJIAA capital expenditure program, as illustrated in Table 17 and Figure 12, produced an estimated GDP/Income of \$190 million across the country. In NL, GDP/Incomes rose by approximately \$75 million because of the capital expenditures during the 1999 to 2010 time frame.

Table 17: GDP/Income Impacts (\$'000's) of St. John's International Airport Authority Capital Expenditures

GDP/Income	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$43,160	\$11,858	\$55,018	\$60,754	\$115,771
Induced	\$16,291	\$5,367	\$21,657	\$51,643	\$73,300
Total	\$59,450	\$17,225	\$76,675	\$112,396	\$189,071

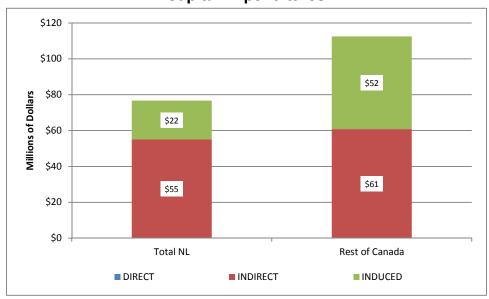


Figure 12: GDP/Income Impacts: St. John's International Airport Authority Capital Expenditures

2.5.3 Revenue – Provincial Governments – Capital Expenditures

The revenue flowing to provincial governments during the period 1999 to 2010 from the capital expenditure program of the SJIAA, as displayed in Table 18 and Figure 13, is estimated at \$13.3 million. Approximately 37% or \$5.0 million went to the Government of Newfoundland and Labrador.

Table 18: Revenue - Provincial Governments (\$'000's): St. John's International Airport Authority Capital Expenditures

Revenue	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$1,644	\$564	\$2,208	\$3,791	\$5,999
Induced	\$2,143	\$605	\$2,749	\$4,569	\$7,318
Total	\$3,787	\$1,170	\$4,957	\$8,360	\$13,317

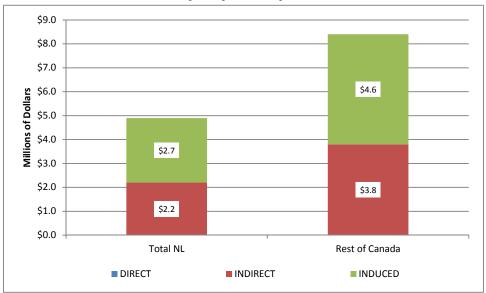


Figure 13: Revenue - Provincial Government: St. John's International Airport Authority Capital Expenditures

2.5.4 Revenue – Federal Government – Capital Expenditures

The capital expenditure program also generated nearly \$25 million in revenues for the Federal Government. Approximately 33% of the Federal Government revenues came from activities in Newfoundland and Labrador. Federal revenues by location are displayed in Table 19 and Figure 14.

Table 19: Revenue - Federal Governments (\$'000's): St. John's International Airport Authority Capital Expenditures

Revenue	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$2,371	\$816	\$3,188	\$6,705	\$9,893
Induced	\$3,480	\$971	\$4,451	\$8,459	\$12,910
Total	\$5,851	\$1,788	\$7,638	\$15,164	\$22,803

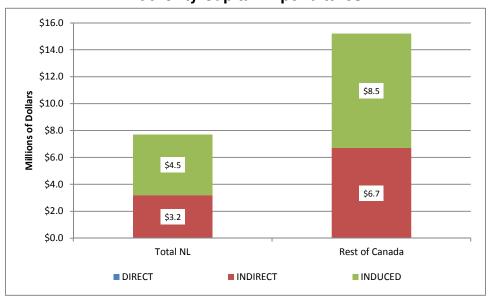


Figure 14: Revenue - Federal Government: St. John's International Airport Authority Capital Expenditures

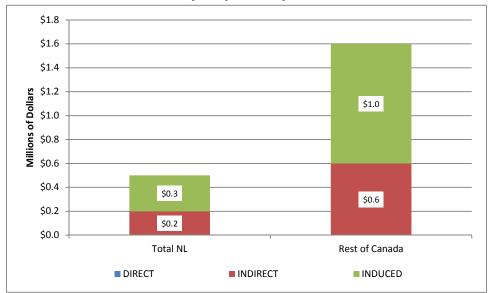
2.5.5 Revenue – Municipal Governments – Capital Expenditures

Table 20 and Figure 15 contain estimates for municipal revenues generated from SJIAA's capital expenditure program. In total, \$2.1 million in municipal taxes were generated across the country from the SJIAA's capital expenditure program. Municipalities in Newfoundland and Labrador received approximately \$500,000 from the capital expenditure program between 1999 and 2010.

Table 20: Revenue - Municipal Governments (\$'000's): St. John's International Airport Authority Capital Expenditures

Revenue	Avalon Peninsula	Rest of NL	Total NL	Rest of Canada	Total
Direct	\$0	\$0	\$0	\$0	\$0
Indirect	\$145	\$78	\$223	\$637	\$861
Induced	\$211	\$58	\$269	\$962	\$1,231
Total	\$356	\$136	\$492	\$1,600	\$2,092

Figure 15: Revenue - Municipal Governments: St. John's International Airport Authority Capital Expenditures



3.0 Conclusion

During 2009, the SJIAA generated \$22.9 million in revenues and had expenditures totaling approximately \$21.8 million. As well, by the end of 2010, the Authority has carried out a capital expenditure program of approximately \$140 million.

These expenditures have generated significant economic benefits for St. John's, the province and the country. Specifically, the 2009 operations of the Airport, its tenants, nonresident tourism expenditures and related military expenditures accounted for approximately 7,700 person-years of employment and over \$400 million in GDP/Income throughout Canada and approximately 5,960 person-years of employment and \$270 million in GDP/Income within Newfoundland and Labrador. The corresponding employment and GDP/Income within the local impact area (the Avalon Peninsula) was 5,550 person-years and \$245 million, respectively. Operations at the Airport, its tenants and associated military expenditures also generated almost \$80 million in tax revenue to all levels of government throughout Canada in 2009, \$60 million of which was received within Newfoundland and Labrador. The tax revenue to all governments within the local impact area was \$50 million.

When compared to the 2007 economic footprint, the 2009 impacts generated 11% more employment in NL and 8% more GDP/income. The impact on provincial government revenues increased by 17%, while the federal and municipal governments saw their revenues increase by 9% and 8%, respectively between 2007 and 2009.

Information gathered from publicly available sources demonstrates just how significant an employer the SJIAA and its tenants are compared to other large scale industrial employers. Increased economic activity through the continued industrialization of the province should result in increased economic activity generated by the Airport. Table 21 contains direct employment figures for selected companies operating in Newfoundland and Labrador. As the table indicates, on a comparative basis, the SJIAA and its tenants, directly employ an estimated 1,507 workers as compared to 896 workers at Hibernia and 450 workers at Voisey's Bay Nickel Company's mine and mill operations in Labrador.

Table 21: Annual Employment - Selected Newfoundland and Labrador Companies

								Voisey's
				Petro	Husky			Bay
	SJIAA			Canada	Energy	Corner	North	Nickel
Employment in	and			Terra	White	Brook	Atlantic	Company
NL	Tenants	IOC	Hibernia	Nova	Rose	P&P	Refining	Mine/Mill
Direct	1,507	1,819	896	732	1,130	1,300	550	450

Sources:

- SJIAA 2009 Economic Impact Analysis
- IOC www.ironore.ca, includes Quebec and Newfoundland and Labrador
- Canada-Newfoundland and Labrador Offshore Petroleum Board, www.cnlopb.nl.ca-Hibernia, Terra Nova, White Rose
- Corner Brook Pulp and Paper www.cbppl.com, includes plant and forestry workers
- Voisey's Bay Nickel Company <u>www.vbnc.com</u>
- North Atlantic Refining <u>www.northatlantic.ca</u>

It should be noted that employment numbers are sometimes difficult to report in terms of comparability due to the different means by which employment attributable to a project is defined. Notwithstanding the limitations in the availability and comparability of data, the SJIAA can fairly state that it is a significant source of employment in the province. As impressive as these economic impacts are, they do not really capture the true economic contribution of the Airport to the local and provincial economies. For instance, the benefits of local business being able to use the Airport to conduct business both across Canada and around the world could not be incorporated into this report, but are significant. In fact, it is reasonable to argue that without the well developed and efficient airport in St. John's, the transformation in economic activity now overtaking the province would not be possible.

For example, Eddington (2006, p.4) notes that:¹

Transport can have an impact on economic output (GDP) through two channels:

- (i) Firstly, transport can affect GDP through the number of inputs that are used, for example transport may increase employment either by allowing greater access to labour or stimulating the creation of new firms, which can increase the number of goods and services produced and lead to an increase in GDP.
- (ii) Secondly, transport can improve the efficiency with which firms use inputs, in other words transport can have an impact on productivity. For instance, a well functioning transport network can raise productivity by reducing journey times. Transport investment can impact on the drivers of productivity by encouraging private investment through raising its profitability; facilitating labour mobility and thereby increasing the returns to investment in skills; and enabling effective competition even when economic activity is geographically dispersed. Identifying the impact of transport on productivity is important because improving productivity is a key determinant of long-term growth and living standards.

While this study identified the economic impacts for the St. John's International Airport, the second type of efficiency impacts, while important, is very difficult to measure precisely. However, research on other airports indicated that for developing countries, aviation investment in developing regions increased GDP by between 0.2 and 0.4%. As a study example, the Vancouver International Airport increased Canada's long-term productivity by 0.04% [(IATA (2007).]² Even if the impact of St. John's International Airport were assumed to be no more than 1/20 of one percent of GDP as was the case for Vancouver International Airport, the additional impact of the Airport to Newfoundland and Labrador would be

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¹ Eddington, R., 2006, "The Eddington Transport Study – Main Report: Transport's Role in Sustaining the UK's Productivity and Competitiveness," Department for Transportation, Government of UK, www.dft.gov.uk/about/strategy/transportationstrategy/eddingtonstudy/

² International Air Transport Association Economics Briefing No 08, 2007, "Aviation Economic Benefits," http://www.iata.org/NR/rdonlyres/35FC46A4-20FB-4E10-9B0C-

approximately \$11 million per year. Alternatively, if the impact were equal to 1/5 of one percent, then the impact is equivalent to \$45 million per year. As this type of impact gets projected into the future, it puts in perspective the true impact of the Airport.

³ This is based on the provincial GDP estimate of \$22.9 billion provided in Budget 2010.