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THE EFFECT OF ELIMINATING ABORIGINAL ECONOMIC AND SOCIAL GAPS ON THE FISCAL POSITION

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Abstract

Investing in disadvantaged young people is one of the rare public policies with no equity-efficiency tradeoff. Building on the methodology developed for the Royal Commission on Aboriginal People (RCAP), we estimate the effect on tax revenues and government expenditures of eliminating the economic and social gaps between Aboriginal and non-Aboriginal Canadians. Five program areas are examined: family and child services, health, crime prevention and rehabilitation, social housing and transfer payments. In 2006, excess expenditure by all levels of the Canadian government on the five program areas under analysis was \$6.2 billion. If the Aboriginal/non-Aboriginal program expenditure gap is closed at a constant rate, the cumulative savings to all levels of Canadian government will be \$77 billion from 2006 to 2026. Additionally, if the educational attainment, employment rate and earnings of Aboriginal people were to match the 2001 levels observed among non-Aboriginal people, tax revenue in 2026 would be \$3.5 billion higher, and the cumulative increase over the 2006-2026 period would be about \$39 billion.

The Effect of Eliminating Aboriginal Economic and Social Gaps on the Fiscal Position¹

I. Introduction

Canada's Aboriginal population is in crisis. In 2007, the National Council of Welfare (2007:9) concluded that, "To date, no governmental response has made major inroads into the issues" faced by Aboriginal people. Improving the social and economic well-being of the Aboriginal population is not only a moral imperative; it is a sound investment which will pay substantial dividends in the coming decades. Aboriginal education must be a key component in any such effort.

In 2007, the CSLS published a report setting out the potential contribution of the Aboriginal population to Canadian labour force, output and productivity over the 2001-2017 period (Sharpe, Arsenault and Lapointe, 2007), much of it arising from increased educational attainment. The report was updated in 2009 (Sharpe, Arsenault, Lapointe and Cowan, 2009) using longer-term economic and population projections to 2026. In this article, we build on these findings by thoroughly quantifying the fiscal benefits associated with improved Aboriginal social and economic well-being.

The article is divided in three sections. The first section provides context for the article, reviewing basic data on Aboriginal Canadians as well as key results from Sharpe *et al* (2009). The second section first quantifies the surplus government expenditures on Aboriginal related to five specific program areas: child and family services; protection of persons and property; housing; transfer payments; and health care. These estimates are then adjusted for age, as well as projected into the future to 2026. Finally, estimates of forgone tax revenues are computed. The third and final section summarizes and concludes.

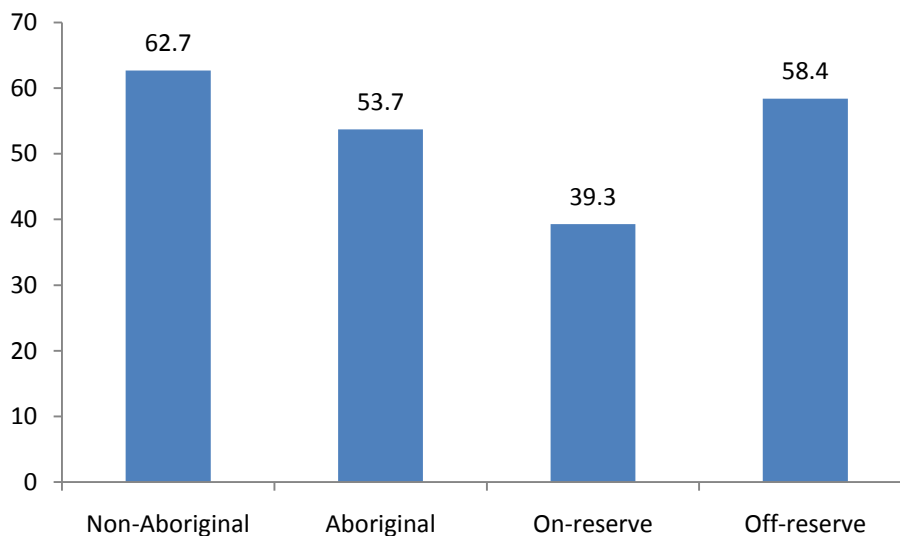
¹ The authors would like to thank Kathleen Keenan, Director General of the Education Branch at Indian and Northern Affairs Canada, for the support of this project. We would also like to thank Bert Waslander for useful comments and suggestions. Emails: andrew.sharpe@csls.ca, jf.arsenault@csls.ca, simon.lapointe@csls.ca, fraser.cowan@csls.ca.

II. Context

In 2006, the Aboriginal population of Canada reached 1.3 million people.² North-American Indian's represent the largest group (61 per cent) followed by the Métis (31 per cent) and the Inuit population (4 per cent). Canada's three major Aboriginal groups share important characteristics relative to the non-Aboriginal population, particularly low levels of education, a much younger demographic structure, and poor labour market outcomes.

Compared to non-Aboriginal Canadians, Aboriginal Canadians are significantly less likely to hold a job. In 2006, the Aboriginal employment rate was 53.7 per cent, nine percentage points lower than the non-Aboriginal population (Chart 1). The on-reserve Aboriginal population fared particularly poorly with an employment rate of 39.3 per cent. In other words, less than two in five of the Aboriginal Canadians who lived on reserve and were aged 15 and over had a job. Nonetheless, some progress has been made over the past ten years. Since 1996, the Aboriginal employment rate has risen 9.5 percentage points compared to non-Aboriginal employment rate growth of only 6 percentage points.

Chart 1: Employment Rate in Canada, 2006



An important portion of the employment rate gap can be attributed to lower educational attainment among the Aboriginal population than among the non-Aboriginal population. Aboriginal Canadians are less much less likely than non-Aboriginal people to either earn a high school diploma or a post secondary certificate. In 2006, 23 per cent of non-Aboriginal Canadians aged 15 and over had not yet completed high school. Among Aboriginal people, the high school non-completion rate was 44 per cent. Among North-American Indians, it stood at 48 per cent, or over twice the non-Aboriginal level. University completion rates are similarly bleak. In 2006, 8.6 per cent of Aboriginal people and 8.0 per cent of North American Indian 15 and over held a university degree. The non-Aboriginal rate was nearly three times higher at 24 per cent. Like the employment rate, however, progress has been made. In 2001, the high school non-

² For additional details on data sources used in this section, see Sharpe, Arsenault, Lapointe and Cowan (2009).

completion rate was 48 per cent for Aboriginal Canadians (four percentage points higher than in 2006) and the non-completion rate for North American Indians was 51 per cent (three percentage points higher than in 2006).

Finally, on average, Aboriginal people earn much less than non-Aboriginal people. In 2005 Aboriginal Canadians who worked full time, full-year earned on average \$37,416 per year. By comparison, non-Aboriginal Canadians who worked full-time, full-year in 2005 earned \$51,505. Non-Aboriginal workers who were employed part-time or part-year earned on average \$20,978, compared to an average of only \$14,438 for their Aboriginal counterparts.

While the Aboriginal population's below average labour force and educational outcomes lead to lower Canadian output and productivity today, they also highlight the fact that the Aboriginal population of Canada possesses substantial untapped potential. Indeed, because the Aboriginal population lags so far behind the non-Aboriginal population in terms of economic and social indicators, the marginal return on an investment in Aboriginal education is potentially higher than the marginal return associated with investment in more privileged groups.

Exhibit A: The Effects of Improving Aboriginal Educational and Labour Market Outcomes and Aboriginal Social Well-Being in Canada

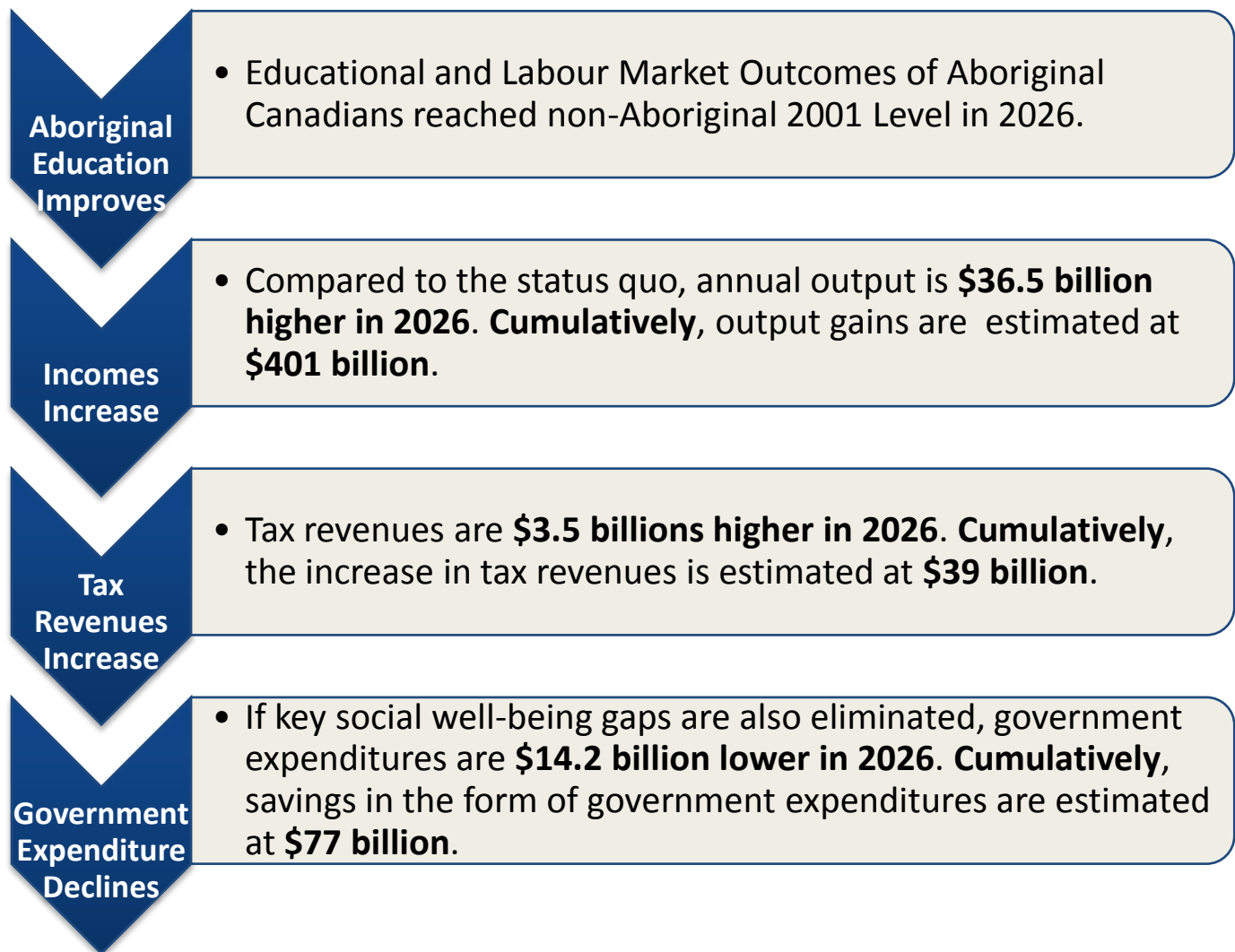


Exhibit A succinctly summarizes the key results of Sharpe *et al.* (2009).³ It shows the gains to the Canadian economy of improved educational and labour market outcomes in terms of income and tax revenues. It also provides an estimate of the magnitude of the costs in terms of government expenditures associated to the existence of a variety of social gaps between Aboriginal and non-Aboriginal Canadians. This article focuses on the latter two elements: the increase in tax revenues and the decreases in government expenditures.⁴

³ All CSLS estimates in this article are in 2006 dollars.

⁴ For more details on the methodology used to measure increases in Aboriginal income, see Sharpe *et al.* (2009).

III. The Fiscal Cost of the Aboriginal Population's Social and Economic Conditions

The 1996 Royal Commission on Aboriginal People's (RCAP) final report estimated that excess government expenditure related to the below-average economic and social conditions of Aboriginal Canadian was \$2.2 billion in fiscal year 1992-1993 (0.20 per cent of nominal GDP). In the fifteen years since the report's publication, gaps between Aboriginal and non-Aboriginal Canadians continue to persist in a litany of social and economic indicators. Given the demographic growth of the Canadian Aboriginal community and increases in federal, provincial and local governments' budgets, the total fiscal cost is much larger today.

Wherever possible, this article relied on the RCAP's methodology to estimate the fiscal cost of the Aboriginal Population sub-par social and economic conditions. It also follows the methodology developed by Bert Waslander to adjust for differences in age structure between the Aboriginal and non-Aboriginal population (Waslander, 1997). We find that age-adjusted excess government expenditure on Aboriginal people was \$6.2 billion in 2006-07 (0.44 per cent of nominal GDP), an increase of \$3.9 billion over Waslander's 1992-93 estimate.⁵ In other words, if the average Aboriginal Canadian benefited from the same social and economic conditions as those enjoyed by the average Canadian, the different government levels of Canada could allocate \$6.2 billion dollars towards other social programs, towards debt reduction or towards a reduction of the tax burden.

A. Methodology for Measuring Excess Government Expenditures

This section examines two broad categories of government spending on Aboriginal Canadians: general government expenditures and expenditures specifically targeting Aboriginal Canadians. The methodology developed for the RCAP uses three key variables to estimate the Aboriginal share of general government expenditure: government expenditure, Aboriginal population share (APS) and level of use (LOU). Government expenditure covers all levels of government plus the Quebec and Canada Pension Plans. The Aboriginal population share refers to the Aboriginal share of the population which uses a given service. The Aboriginal population share for child and family services, for example, includes only Aboriginal people living off-reserve age five to fourteen because provincially funded child and family service agencies are only responsible for children living off reserves. The federal government is responsible for the child and family on reserves and this expenditure falls under the second broad expenditure category to be discussed later. The level of use refers to the rate at which Aboriginal people use a given service relative to the rate at which the non-Aboriginal population uses the service. Methods used to calculate level of use data are discussed

⁵ About one-quarter of the increase (\$0.8 billion) is directly related to inflation, while two-thirds is related to Aboriginal population growth. The remaining 10 per cent difference is due to real increases in spending per capita for Aboriginal people.

later in the report. The three variables are combined using the following formula to calculate general expenditure on Aboriginal Canadians.⁶

$$\text{General Expenditure on Aboriginals} = \frac{\text{Government Expenditure} \times \text{APS} \times \text{LOU}}{1 - \text{APS} + \text{APS} \times \text{LOU}}$$

The second category of expenditure considered is expenditure intended specifically for Aboriginal people. This report follows the RCAP final report by referring to this type of expenditure as targeted expenditure. The vast majority of these expenditures are federal government programs for Aboriginal communities. The Aboriginal Horizontal Framework provides a detailed decomposition of federal government Aboriginal expenditure for fiscal year 2004-2005 (Treasury Board Secretariat, 2005). Targeted and general expenditures on aboriginal Canadians are added up to determine the per capita Aboriginal expenditure in the reference year. This estimate is then compared to per capita expenditure for all Canadians to measure “excess expenditure” on Aboriginal Canadians.

B. Program Areas

Five main program areas of expenditure are considered: child and family services; protection of persons and property; housing; transfer payments; and health care.⁷ The protection of persons and property, housing and health care program areas are identically defined as those used by the RCAP. While the child and family services category does not appear in the RCAP final report, there is a slightly broader category called social service. The fifth program area examined in the RCAP final report is transfer payments. The Statistics Canada publication upon which RCAP expenditure data are based does not include a category for transfer payments although there is a category called social services which appears to be equivalent. In the following sections, government expenditure associated with each program area will be discussed along with a detailed description of the methods and sources used to calculate each of them.

i. Child and Family Services

Child services refers to the investigation of child abuse and neglect, foster care programs, adoption programs and a number of other services which strive to minimize the damage caused by family breakdown. Aboriginal Canadians are significantly overrepresented in the ranks of children in government funded care. According to a Child Welfare League Report, between thirty and forty percent of the 76,000 Canadian children

⁶ This formula measures how much of the expenditure in a program area is used by Aboriginal people. The numerator accounts for the share of Aboriginal people in the client group and for how frequently they use a program relative to non-Aboriginal clients. The denominator adjusts for the fact that the level of use is based on a comparison between the Aboriginal and non-Aboriginal population rather than the Aboriginal population and the total Canadian population. The denominator increases – which reduces general expenditure on Aboriginal people – as the weight of the Aboriginal population and the level of use increase because a larger Aboriginal client population affects the Canadian average more than a smaller one.

⁷ Transfer payments include Old Age Security, Child Tax Benefits, GST/HST Credit, Employment Insurance Benefits, Canada and Quebec Pension Plans, Social Assistance and other similar programs.

in care are of Aboriginal identity (Farris-Manning and Zandstra, 2003). This is a startlingly high number considering Aboriginal people aged zero to fourteen make up only 6 percent of all Canadians in that age bracket. This figure roughly lines up with Assembly of First Nation Chief Pat Lafontaine's assertion that 27,000 Aboriginal children are in care (Blanchfield, 2007). In fact, it is possible he arrived at his number using the Child Welfare League's report. Unfortunately, there is no distinction between on-reserve and off-reserve cases so this report relies on former Indian Affairs Minister Jim Prentice who claimed that 9,000 of the 27,000 Aboriginal children in care were taken from reserves (Blanchfield, 2007). Using these figures, of the 67,000 of all children in care off-reserve, about 18,000, or 27 per cent, are of Aboriginal identity. This translates into a level of use of 6.4 (Summary Table 1).

Summary Table 1: Level of Use - Child and Family Services

Aboriginal persons in care (off reserve)	Non-Aboriginal persons in care	Aboriginal children (off reserve)	Non-Aboriginal children	APS	LOU
A	B	C	D	$E = C/(C+D)$	$F = (A)/(B*E)$
17,600	49,400	283,074	5,092,890	5.3	6.4

Source: Census 2006 Tabulations, Farris-Manning and Zandstra (2003), Blanchfield (2007).

In addition to the enormous social cost family breakdown has on Aboriginal families and communities, it also represents a substantial fiscal cost for Canadian governments. Unlike other expenditure categories analyzed in this report, Statistics Canada does not have expenditure data specific to child and family services. The most recent government report on child and family services is a 2004 report published by the Federal-Provincial Working Group on Child and Family Services. This report includes comparable provincial expenditure on child and family services for most provinces. For provinces where expenditure was unavailable, expenditure was estimated based on the number of children in each province. While at first glance other variables may constitute better proxies (such as the number of investigations or cases in place of total children), comparisons across provinces for these variables are not reliable due to significant differences in provincial agencies' terms of reference.

Summary Table 2: Excess Government Expenditure - Child and Family Services (2006*)

	Total General Expenditure on Child and Family Services (\$ millions)	Aboriginal Component of Total Expenditure (\$ millions)	Expenditure Specifically Targeting Aboriginal people (\$ millions)	Total Expenditure Aboriginal people (\$ millions)	Total Expenditure per Aboriginal	Per capita Expenditure	Per Capita Excess Expenditure	Excess Expenditure (\$ millions)
	A	B**	C	D = B+C	$E = D / \text{Total Aboriginal}$	$F = A / \text{Total Canadians}$	$G = (E-F)$	$H = G * \text{Total Aboriginal}$
Child and Family Services	4,521	1,188	385	1,573	1,199	139	1,060	1,390

Source: Statistics Canada (2008a), Treasury Board Secretariat (2005) and Federal-Provincial Working Group on Child and Family Services Information (2004). *General Expenditure data for this program area is available only for 2001. We assume no nominal increase in spending between 2001 and 2006. **Based on the APS and LOU from Summary Table 1.

According to the Federal-Provincial Working Group on Child and Family Services report, the total cost borne by provinces for child and family services was \$4.5 billion in 2001 in Canada (Summary Table 2). Given that Aboriginal children living off-reserve make up roughly 27 per cent of provincial child care cases, it is estimated that general expenditure on Aboriginal people for this program area is \$1.2 billion. In addition, according to the 2005 Aboriginal Horizontal Framework, the federal government contributed \$385 million dollars through INAC for child and family services specifically targeting Aboriginal communities, translating into total expenditures of roughly \$1.6 billion. Assuming no increase in expenditure between 2001 and 2006 - a conservative assumption - Canadian governments spent an estimated total of \$1,199 on child and family services for each Aboriginal Canadian in 2006, significantly more than the \$139 average per capita expenditure in Canada. If the level of Aboriginal per-capita expenditure had been at the national average, a total of \$1.4 billion would have been saved.

ii. Protection of Persons and Property

Protection of persons and property is a broad category encompassing national defense, policing, corrections and rehabilitation, courts of law, regulatory measures and other programs aimed at protecting persons and property. While the social and economic conditions of Aboriginal Canadians have no effect on a number of these expenditures, they surely lead to higher demand for corrections and rehabilitation, courts of law and policing (Sharpe, Arsenault and Lapointe, 2007). In fiscal year 2006-07, the federal government spent \$591 million on courts of law, \$2.3 billion on corrections and rehabilitation and \$3.8 billion on policing. Local governments spent \$289 million on courts of law and \$6.4 billion on policing.⁸

Unfortunately, Statistics Canada only provides a decomposition of protection of persons and property expenditure at the federal and local level making it difficult to discern how much provinces spend on these issues. A rough estimate was ascertained by assuming that the share of policing, courts of law and corrections and rehabilitation in provincial spending on protection of persons and property was identical to that of the federal government (excluding national defense). It was thus estimated that provincial governments spend roughly \$519 million on courts of law, \$3.3 billion on policing and \$2 billion on corrections and rehabilitation.

⁸ In 2005, consolidated government expenditures on protection of persons and property, excluding national defence, was roughly \$27 billion. Other than policing, courts of law and correctional and rehabilitation services, the only other categories are firefighting (\$3.1 billion from local government) regulatory measures (\$1.7 billion from local and federal governments) and other protection of persons and property services (2.8 billion from local and federal governments). These three categories sum up to roughly \$7.6 billion. If we add them to our estimates for total expenditures on policing, courts of law and correctional and rehabilitation services (\$19.3 billion), we obtain \$27 billion. As such, our estimates suggest that almost no provincial expenditures on firefighting, regulatory measures and other protection of persons and services.

Summary Table 3: Level of Use - Protection of Persons and Property

Sentenced to Federal or Provincial Custody- weighted by total Incarcerated (%)		Adult Population Share		Level of Use - Corrections	Level of Use - Police, Courts
Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal		
A	B	C	D	$E = (A/C)/(B/D)$	$F = E*0.45$
0.198	0.802	0.030	0.970	8.13	3.70

Source: Statistics Canada (2005), Statistics Canada (2008a).

For fiscal year 2003-04, Statistics Canada reported that Aboriginal Canadians made up approximately one fifth of Canadians sentenced to federal or provincial custody while only representing three per cent of Canada's adult population (Statistics Canada, 2004). This equates to a level of use eight times higher for Aboriginal people than non-Aboriginal people (Summary Table 3). Levels of use for courts of law and policing are more ambiguous. While higher incarceration rates probably correlate to higher court expenditure, the exact relationship is unclear considering the many functions of the court system other than criminal proceedings. Similarly, while a fall in Aboriginal crime rates would likely result in a lower need for policing, the magnitude of this effect is unclear. Lacking better information, the RCAP final report assumed the level of use for policing and courts of law was slightly less than half the level of use for corrections and rehabilitation. This report does the same.

Summary Table 4: Excess Government Expenditure - Courts of Law, Policing and Corrections and Rehabilitation (2006-07)

	Total General Expenditure on Courts, Policing and Corrections (\$ millions)	Aboriginal Component of Total General Expenditure (\$ millions)	Expenditure Specifically Targeting Aboriginal people (\$ millions)	Total Aboriginal Expenditure	Total Expenditure per Aboriginal	Per capita Expenditure	Per Capita Excess Expenditure	Excess Expenditure (\$ millions)
	A	B*	C	D = B+C	$E = D / \text{Total Aboriginal}$	$F = A / \text{Total Canadians}$	$G = E - F$	$H = G * \text{Total Aboriginal}$
Total	19,319	2,718	94	2,812	2,145	595	1,549	2,031
Total Local	6,710	706	706	706	538	207	332	435
Courts of law	289	39	0	39	30	9	21	27
Policing	6,420	667	0	667	509	198	311	408
Total Provincial	5,895	941	941	941	717	182	536	702
Courts of law	519	70	70	70	53	16	37	49
Corrections	2,066	527	527	527	402	64	338	443
Policing	3,310	344	344	344	262	102	160	210
Total Federal	6,714	1,071	94	1,165	889	207	682	894
Courts of law	591	80	80	80	61	18	42	56
Corrections	2,353	600	600	600	458	73	385	505
Policing	3,770	392	94	486	370	116	254	333

Source: Statistics Canada (2008a), Statistics Canada (2008b) and the Treasury Board Secretariat (2005). *Based on LOUs from Summary Table 3 and an APS of 0.030 for policing (population share of off-reserve Aboriginal Canadians) and 0.040 for courts of law and correction services (population share of all Aboriginal Canadians).

Given total government expenditure on this program area and Aboriginal levels of use, it was calculated that the Aboriginal share of government spending on courts of law, policing and corrections and rehabilitation was \$2.7 billion in 2006-07 (Summary Table 4). General government expenditures on courts of law and corrections and rehabilitation cover Aboriginal people living both on and off reserves, while policing services for Aboriginal reserves are provided by the federal First Nations Policing Program. In 2004-05, the federal government spent \$94 million on this program and a few smaller policing programs specifically targeting Aboriginal communities. In total, disparities in protection of persons and property between Aboriginal and non-Aboriginal people are estimated to have resulted in an excess cost of \$2.0 billion in 2006-07 for local, provincial and federal governments.

iii. Housing

Expenditure on housing includes all government programs aimed at providing affordable housing, with the exception of the rent supplement which is included under social assistance. Consolidated federal, provincial, territorial and local government general expenditure on housing in 2006-07 was \$4.4 billion. Additionally, in fiscal year 2004-05, INAC and CMHC allocated a combined \$248 million to on-reserve housing (Horizontal Aboriginal Framework, 2005). Information concerning the number or proportion of Aboriginal people using government subsidized housing is very scarce. Indeed, the RCAP was forced to rely on a single informal survey administered only in Saskatchewan, and the opinion of “someone familiar” with the government subsidized housing program in Manitoba (George and Kuhn, 1997). The estimates obtained from these two sources were extrapolated for all of Canada. Controlling for different variables related to costs (e.g. family size), a level of use of 1.5 was selected.

Summary Table 5: Excess Government Expenditure - Housing (2006-07)

	Total General Expenditure on Housing (\$ millions)	Aboriginal Component of Total General Expenditure (\$ millions)	Expenditure Specifically Targeting Aboriginal people (\$ millions)	Total Aboriginal Expenditure	Total Expenditure per Aboriginal	Per capita Expenditure	Per Capita Excess Expenditure	Excess Expenditure (\$ millions)
	A	B*	C	D = B+C	E = D / Total Aboriginal	F = A / Total Canadians	G = E-F	H= G * Total Aboriginal
Housing	4,435	199	248	448	341	137	205	268

Only includes targeted expenditure allocated directly for housing. Excludes targeted expenditure on community infrastructure.

Source: Statistics Canada (2008a), Statistics Canada (2008b) and the Treasury Board Secretariat (2005). *Based on a LOU of 1.5 obtained from George and Kuhn (1997) and an APS of 0.030 (population share of off-reserve Aboriginal Canadians).

Given that no new information has emerged since the RCAP on the proportion of Aboriginal Canadians using government-provided housing, we adopt the level of use of the RCAP. By applying this level of use and the share of Aboriginal people living off-reserve to total government expenditure on housing, general government expenditure on

housing for Aboriginal people living off reserve was estimated at \$199 million in 2006-07. Including the \$248 million in targeted expenditure, government housing expenditure per capita was \$205 higher for Aboriginal Canadians than for all Canadians. This translated into a total excess expenditure of \$268 million in 2006-07 (Summary Table 5).

iv. Transfer Payments

Consolidated federal, provincial, territorial and local government, plus the Canada and Quebec Pension Plan, expenditure on transfer payments to persons in 2006-07 was \$174 billion. Federal, provincial, territorial and local expenditure on social assistance – the key subgroup of transfer payments - in 2006-07 was \$75 billion. At the federal level, social assistance expenditure is decomposed into income maintenance (\$13 billion), social security⁹ (\$31 billion), family allowance¹⁰ (\$11 billion) and miscellaneous assistance (\$4 billion). Unfortunately, no decomposition of transfers is available at the provincial or local level in the public accounts. The distinction between federal and provincial and local expenditure is crucial because – for the most part - only Aboriginal people living off reserves are eligible for provincial social assistance (Aboriginal people on reserve receive welfare from the federal government) while all Aboriginal Canadians are eligible for federal social assistance programs such as Old-Age Security and the Child Tax Benefit. In the few cases where Aboriginal people living on reserves are eligible for provincial funding, the provincial government is reimbursed by INAC. In addition to the three levels of governments' general expenditure, the federal government spent \$657 million through INAC on income assistance specifically for on-reserves Aboriginal people.

Summary Table 6: Level of Use - Transfer Payments

Percentage of personal income from Government Transfers		Average Income		Per client transfer payment expenditure		Level of Use
Aboriginal people	Total Canadians	Aboriginal people	Total Canadians	Aboriginal people	Total Canadians	
A	B	C	D	E = A*C	F = B*D	G = E/F
18.1	11.1	26,291	35,934	4,759	3,989	1.19

Source: Statistics Canada (2008a), 2006 Census Tabulations.

The method used by the RCAP to calculate excess expenditure on transfer payments is somewhat ambiguous. First, there is no Statistics Canada expenditure category called transfer payments. Instead, transfer payments are included in the social services category. Second, no level of use or explanation of how a level of use was calculated is included in either the RCAP final report, or related documents such as Waslander (1997) and George and Kuhn (1997). Finally, although a level of use is specified for social assistance, the exact definition of what is included in social assistance is unclear. While expenditure on the Canada and Quebec Pension Plan is categorized as social assistance by Statistics Canada, it is not in the RCAP report. Given this lack of

⁹ Social Security includes Old Age Security and its subgroups (such as the Guaranteed Income Supplement)

¹⁰ Family allowance remains the Statistics Canada category although the family allowance was amalgamated into the Child Tax Benefit in 1993.

information, both excess expenditure for social assistance (not including pension plans) and excess expenditure for all transfer payments were calculated. In keeping with the final report, however, this report's final tally of excess expenditure includes all transfer payments. A social assistance level of use of 3.0 was taken from the RCAP report while the level of use for transfer payments of 1.19 was calculated using data from the 2006 Census and the 2006 Aboriginal People's Profile (Summary Table 6). To remain consistent with the methodology, this level of use corresponds only to those who are eligible to receive transfer payments (those aged 15 or over) even though many transfer programs are used by children. Transfer payment expenditure per Aboriginal and non-Aboriginal is summarized in Summary Table 7.

Summary Table 7: Excess Government Expenditure – Transfer Payments, 2006-07*

	Total General Expenditure (\$ millions)	Aboriginal Share of Total General Expenditure (\$ millions)	Expenditure Specifically Targeting Aboriginal people (\$ millions)	Total Aboriginal Expenditure (\$ millions)	Total Expenditure per Aboriginal	Per capita Expenditure	Excess Expenditure per Aboriginal person	Excess Expenditure (\$ millions)
	A	B**	C	D = B+C	E = D / Total Aboriginal	F = A / Total Canadians	G = E-F	H= G *Total Aboriginal
All Transfer Payments	173,812	6,523	0	6,523	4,975	5,357	-382	-501
Social Assistance (not including CPP or QPP)	77,779	8,449	657	9,105	6,944	2,397	4,547	5,962
Provincial	16,499	1,419	0	1,419	1,082	508	574	753
Local	3,831	330	0	330	251	118	133	175
Federal	57,449	6,700	657	7,356	5,610	1,771	3,840	5,035
Income maintenance	13,231	1,484	657	2,141	1,633	408	1,225	1,606
Other social assistance	46,500	5,216	0	5,216	3,978	1,433	2,545	3,337
Social security (OAS)	31,366	3,518	0	3,518	2,683	967	1,716	2,251
Family allowances	11,412	1,280	0	1,280	976	352	625	819
Miscellaneous	3,722	417	0	417	318	115	204	267

Source: Statistics Canada (2008a), Statistics Canada (2008b) and the Treasury Board Secretariat (2005). *Only the 'All Transfer Payments' category is used in the final estimates of this article. Estimates for social assistance are provided solely for the reader's own interest. **Based on the LOU from Summary Table 6 for 'All Transfer Payments' and a LOU of 3.0 for Social Assistance based on the RCAP report, as well as on an APS of 0.0316 (population share of Aboriginal Canadians within the 15 and over age group) for 'All Transfer Payments' and an APS of 0.030 for local and provincial social assistance (population share of off-reserve Aboriginal Canadians) and 0.040 for federal social assistance (population share of all Aboriginal Canadians).

Using the data outlined above and the RCAP methodology, it was calculated that Canadian governments spent \$500 million less on transfer payments (including social assistance) for Aboriginal people than they would on an equal sized group of average Canadians (Summary Table 7). While Aboriginal receive more per eligible person (aged 15 and over), their share of the population in that age group is much below that of other Canadians. Excess expenditure on Aboriginal for social assistance specifically was estimated at 5.9 billion. These seemingly contradictory findings are explained by the

large portion of transfer payments that target the elderly, and thus do not benefit the Aboriginal population as much as the rest of Canadians.

Given that the RCAP found a similar level of transfer payment expenditure for Aboriginal and non-Aboriginal people, while maintaining that Aboriginal people were three times more likely to use social assistance than non-Aboriginal people, there is clearly an implicit assumption that Aboriginal people are far less likely to be beneficiaries of other transfer payments such as employment insurance, social security and pension plan expenditure. The Aboriginal level for these programs and the excess Aboriginal expenditure for these programs, however, are never discussed in the RCAP final report.

v. Health care

Health care expenditure includes all government outlays made to ensure the availability of health services. Statistics Canada divides health care expenditure into four categories: hospital care (\$33 billion), medical care excluding hospitals (\$42 billion), preventive care (\$4 billion) and other health services (\$20 billion). In total, consolidated government health care expenditure was \$99 billion in 2006-07. Provincial governments are responsible for the insured health services of all Aboriginal people including those living on reserves except for the most remote Inuit and First-Nation communities. Conversely, public health services are the responsibility of the federal government for Aboriginal people living on reserves and the responsibility of provincial governments for everybody else. Unfortunately, Statistics Canada offers no clear distinction between insured hospital care and public health services. Additionally, there are provincial differences in the services included in their respective insured health care programs. For these reasons, a rather broad assumption is required. Because the Statistics Canada category “hospital care” closely resembles the type of services typically insured by provincial health care plans it is assumed that this category is analogous to insured medical and hospital care. Therefore, it is assumed that all Aboriginal Canadians make use of these services. On the other hand, it is assumed that only Aboriginal people living off reserves make use of other health services.

According to the RCAP final report, the level of use of both public health services and insured health services is the same for Aboriginal people and other Canadians. This level of use is adopted in this report with an important caveat. This level of use examines all Aboriginal people with respect to all non-Aboriginal Canadians. When specific age groups are compared, Aboriginal people invariably have higher levels of use (i.e. young Aboriginal use more health care services than young non-Aboriginal Canadians). The RCAP final report does not account for age differences and neither does this section of the report.

Summary Table 8: Excess Government Expenditure – Health care, 2006-07

	Total General Expenditure (\$millions)	Aboriginal Share of Total General Expenditure (\$ millions)*	Expenditure Specifically Targeting Aboriginal people (\$ millions)	Total Aboriginal Expenditure (\$millions)	Total Expenditure per Aboriginal	Per capita Expenditure	Excess Expenditure per Aboriginal person	Excess Expenditure (\$ millions)
	A	B*	C	D= B+C	E = D / Total Aboriginal	F = A / Total Canadians	G = E-F	H = G*Total Aboriginal
Total	106,920	3,614	1,839	5,453	4,159	3,295	863	1,132
Hospital care	36,229	1,464						
Medical care	44,080	1,341						
Preventive care	4,778	145						
Other health services	21,833	664						

Source: Statistics Canada (2008a), Statistics Canada (2008b) and the Treasury Board Secretariat (2005). *Based on a LOU of 1.0 from the RCAP report, and an APS of 0.030 (population share of off-reserve Aboriginal Canadians), except for hospital care which is based on an APS of 0.040 (population share of all Aboriginal Canadians).

Based on the assumptions, levels of use and expenditure data outlined above, the Aboriginal share of general government expenditure on health care was calculated as \$3.6 billion in 2006-07. Additionally, targeted expenditure on health care totaled \$1.8 billion (Treasury Board Secretariat, 2005). Health expenditure for each Aboriginal totaled \$3,954 compared to the \$3,055 governments spent on health care for the average Canadian. If per capita Aboriginal health expenditure had been at the national average, Canadian governments would have saved \$1.2 billion in 2006-07 (Summary Table 8).

C. Adjusting for Age

While both the first section of this report and the RCAP final report assume excess government expenditure on Aboriginal people can be attributed entirely to differences of in social and economic conditions, several other factors play a role. Crucially, differences in age structure between the Aboriginal and non-Aboriginal play a significant role. While the RCAP final report does not account for differences in age structure, the co-director of policy at RCAP, Bert Waslander, updated the RCAP findings to include age adjustment in an academic paper titled “Government Expenditures on Aboriginal People: The Costly Status Quo” and published in 1997 in the *Canadian Tax Journal*. In this paper, Waslander estimates an age factor for each program, which captures the magnitude of total expenditure increase or decrease which would occur if the total Canadian population shared the Aboriginal population’s age structure. Predictably, it was found that adjusting for age differences lowered the expenditure gap in program areas used disproportionately by the young (such as protection of persons and property) and increased the expenditure gap in program areas used disproportionately by the old (such as health care).¹¹ Waslander also excluded Non-Insured Health Benefits because

¹¹ In other words, the measured excess expenditure in protection of persons and property is partly due to the larger proportion of young people in the Aboriginal population, and the gap would be reduced if we took that fact into

they have no direct counterpart for non-Aboriginal Canadians.¹² Additionally, he included the Family Allowance and Old Age Security.

Where possible, the age factors were updated with equivalent methodology and more recent sources. Relative health care expenditure in eight age groups was used to calculate the age factor for health care (Health Canada, 2001). Using this information, it was calculated that if the Canadian population had the Aboriginal population's age structure, health expenditure would fall to 68 per cent of its current level (Appendix Table 1). In Waslander's paper the health care age factor was 0.65. Waslander calculated the housing age factor based on a Statistic Canada publication which reported that 50 per cent of housing subsidies go to those aged 55 and over. Using this information and 2006 Canadian and Aboriginal demographic data it was found the housing age factor is 0.82, and identical to that calculated by Waslander (Appendix Table 2).

Due to limited information, no age factor was calculated for social services in the Waslander paper. A factor of 1.67 was calculated for this report based on the proportion of Aboriginal children aged zero to fourteen relative to the proportion of all Canadian children in that age group (Appendix Table 3). As in Waslander's report, the protection of persons and property age factor was calculated based on the age of those who were admitted to federal or provincial custody. The Statistics Canada catalogue, "Adult Correctional Services in Canada" includes a decomposition of Canadians sentenced to federal and provincial custody by age group (Statistics Canada, 2005). From this data, an age factor of 1.04 was calculated (Appendix Table 4). Based on an earlier version of the same Statistics Canada publication, Waslander found that the level of use for protection of persons and property was 1.28 in fiscal year 1992-93.

Finally, the age factor for transfer payments was calculated by dividing transfer payment expenditure into three categories: those for the young (less than 18), those for the old (65 and older) and other transfer payments. Transfer payments for the young include the family allowance (which is now in the form of a tax credit), while transfer payments for the elderly include Old Age Security, the Canada Pension Plan and Veteran's Benefits. An age factor of 1.7 was calculated for transfer payments directed at young people, an age factor of .35 was calculated for transfer payments targeting seniors and an age factor of 1 was assigned to other transfers. The average of these age factors – weighted by expenditure – is 0.79 and is nearly identical to the age factor of 0.77 calculated by Waslander (Appendix Table 5).

account. The reverse is true for health care, where the failure to take into account the high proportion of Aboriginal young people leads to an underestimation of the expenditure gap.

¹² Non Insured Health Benefits is a federal program which provides health services to First-Nations and Inuits which are not insured elsewhere. The goal of this program is to raise the health of Aboriginal people to a level comparable with non-Aboriginal people.

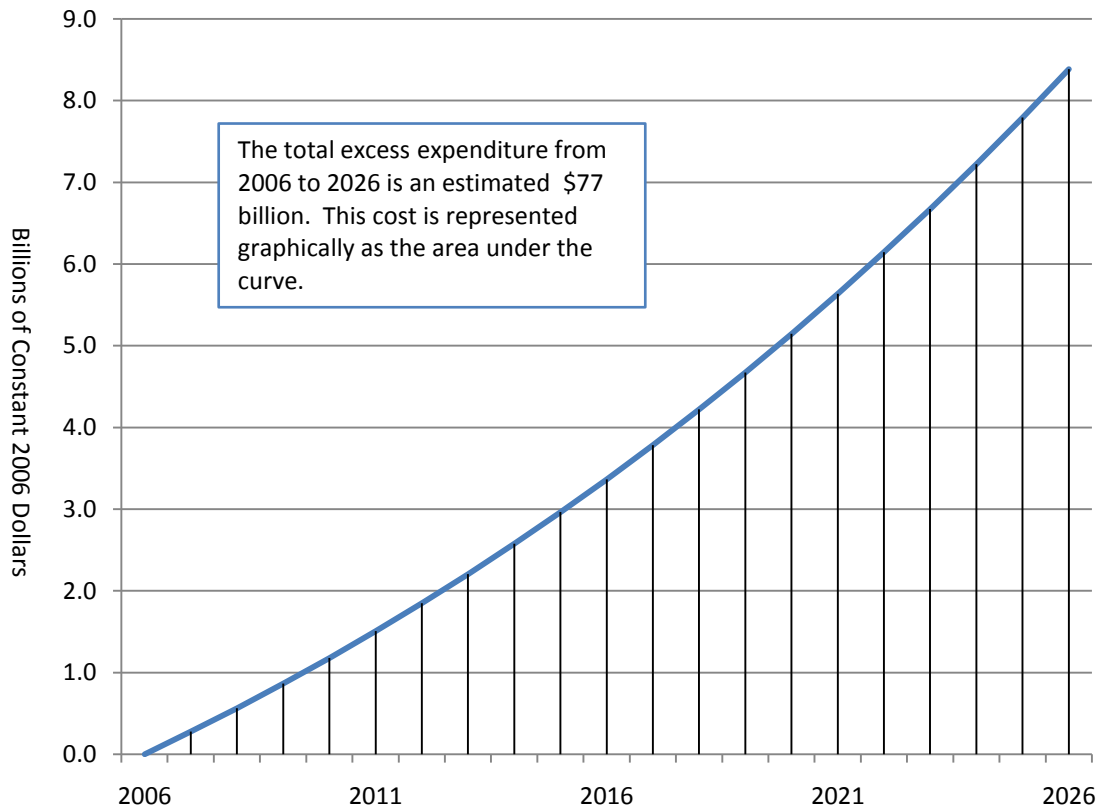
Summary Table 9: Excess Aboriginal Expenditure Including Adjustments using Waslander's Methodology, 2006-07

	Per Capita Expenditure – Total Population	Age Factor	Age Adjusted per Capita Expenditure – Total Population	Aboriginal Expenditure per Capita	Aboriginal Expenditure per Capita without NIHB	Age Adjusted Excess Expenditure without NIHB (\$ millions)	Non-Age Adjusted Excess Expenditure	Difference
	A	B	C = A*B	D	E	F = (E-C)*Total Aboriginal	G	H = F - G
Transfer Payments	5,357	0.79	4,221	4,975	4,975	988	-501	1,489
Health Care	3,295	0.68	2,250	4,159	3,550	1,706	1,132	573
Housing	137	0.82	112	341	341	300	268	32
Child and Family Services	139	1.69	235	1,199	1,199	1,265	1,390	-125
Protection of Persons and Property	595	1.04	618	2,145	2,145	2,002	2,032	-30
Total (\$ billion)						6,261	4,321	1,940

Source: Summary Table 2 to Summary Table 8 and Waslander (1997)

In total, adjusting for age increased total excess expenditure by about \$2.7 billion. Conversely, removing INAC's Non-Insured Health Benefits program reduced excess expenditure by approximately \$800 million (Summary Table 9). Therefore, the net effect of Waslander's methodological changes was an increase of \$1.9 billion in the expenditure gap due to social and economic conditions of Aboriginal Canadians. Although the per person expenditure gap decreased slightly in the program areas which target young people (child and family services and protections of persons and properties), it increased dramatically in program areas which target the elderly (health care and transfer payments). Because health care and transfer payments represent the bulk of spending and are used disproportionately by the elderly, it is no surprise that adjusting for age increased the expenditure gap.

While the precise magnitude of the relationship between education and social well being is unknown, there is clearly a very strong positive effect. Numerous studies have shown that rates of poverty, crime and ill-health decrease as education increases (Sharpe, Arsenault and Lapointe, 2007, pp. 27-31). Therefore, it can be inferred that if the educational attainment of Aboriginal people increases, the social well-being of one of Canada's most marginalized groups will improve dramatically. Because of the enormous fiscal costs associated with high rates of crime, poverty and poor health, the benefits of increased educational attainment among Aboriginal Canadians would extend beyond the Aboriginal community. Using the methodology developed by RCAP and Waslander, this report found that if the social well-being of Aboriginal Canadians had been at the average Canadian level in 2006-07, Canadian governments would have saved \$6.2 billion (adjusted for age). Given the rapid growth of the Aboriginal population relative to the Canadian population, the fiscal incentive to address the Aboriginal education gap will undoubtedly continue to grow.

Chart 2: Cumulative Excess Government Expenditure, 2006-2026

In fact, if the fiscal cost grows at the same rate as the Aboriginal population (which is expected to grow by 34 per cent from 2006 to 2026 (INAC and CMHC, 2007)) the fiscal cost will rise to \$8.4 billion in 2026 (in \$2006). Therefore, by investing in the Aboriginal population today, the Canadian government stands to save up to \$8.4 billion in 2026. Assuming that Aboriginal economic and social well-being improves at a constant rate between 2006 and 2026 and that the fiscal benefits follow a similar path, total cumulative government savings are estimated at \$77 billion (Chart 2).

D. Potential Increase in Tax Revenue

Should the educational attainment, employment income and employment rate gaps between the Aboriginal and non-Aboriginal populations close by 2026, Aboriginal people will not be the sole beneficiary of the economic windfall. All levels of Canadian government will incur a significant increase in tax revenue which can be used to reduce the overall tax burden, increase services or reduce public debt. Due to the complexity of Canada's tax system in general, and the Aboriginal population's unique tax status in particular, only a rough estimate of the potential increase in tax revenue is feasible.

In this section, we project that the Aboriginal population could contribute up to \$3.5 billion in additional tax revenue in 2006. This estimate represents tax revenue solely attributable to increases in the Aboriginal population's earnings caused by increased

educational attainment and improved labour market outcomes, and it does not include the increase in tax revenue that would occur simply due to population growth. It also fails to include additional increases in Aboriginal earnings that would occur if improvements in social conditions took place.¹³

To project the Aboriginal population's potential contribution to government revenue, we apply the government tax revenue share of GDP to earnings that would accrue to the Aboriginal population assuming improvements in educational attainment and labour market outcomes, which were calculated in Sharpe *et. al* (2009). This simple methodology is made slightly more complicated by adjustments made to take into account of exemptions for on-reserves transactions.¹⁴ Indeed, Registered Indians are exempt from income tax on all income earned on reserves, from sales tax on goods purchased on reserves or delivered to reserves by vendor and from property tax on property situated on reserves.¹⁵

Summary Table 10: Potential Increased Tax Revenue Attributable to Improved Aboriginal Education and Education-Specific Labour Market Outcomes

	Total Earnings (millions of 2006 \$)				Tax Revenue (millions of 2006 \$)		
	All Aboriginal	North American Indians	North American Indians Living on Reserves	Aboriginal people Living off Reserve	North American Indians on Reserve	Aboriginal people Living off Reserves	Total
	A	B	B/2=C	A-C=D	E = C * 0.073 / 2	F = D *	G = E+F
Status Quo	22,980	12,594	6,297	16,683	229	4,922	5,151
Best Case Scenario	41,222	26,797	13,398	27,823	486	8,209	8,696
Difference*	18,242	14,203	7,101	11,141	258	3,287	3,545

Source: Sharpe *et al.* (2009) and Cansim Table 385-0001

To account for these exemptions, the RCAP final report excluded all income and property tax revenue and half of sales tax revenue for Aboriginal people living on reserves. This article adopts the same methodology, but in addition excludes other taxes and non-tax related government revenues. The only channel through which on-reserve Aboriginal people are assumed to contribute to taxation is through the various sales tax. Based on the population share, it is assumed that North-American Indians living on reserve account for half of the North-American Indian population's increase in income

¹³ Canada's income tax system is progressive suggesting that a smaller portion of the Aboriginal population's income is paid in taxes because Aboriginal people tend to earn less than the non-Aboriginal population. This is not an issue in this scenario as it assumes that Aboriginal employment income will reach 2006 non-Aboriginal employment income levels by 2026.

¹⁴ This estimate is very conservative, as it applies only to increases in Aboriginal earnings, as opposed to increases in Aboriginal GDP estimated in the previous section. If we were to use GDP rather than earnings, the estimated increase in tax revenue would be roughly twice as large.

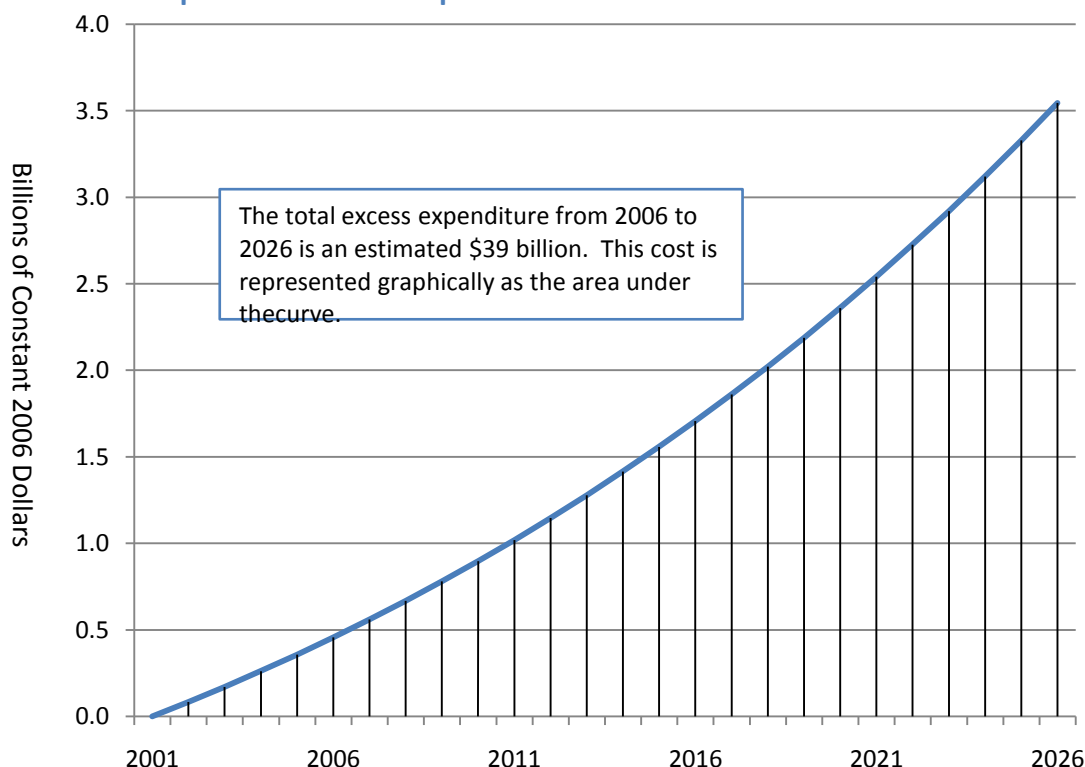
¹⁵ The Canada Revenue Agency has extensive information on the different tax exemptions available to Aboriginal Canadians (see <http://www.cra-arc.gc.ca/brgnls/ndns-eng.html>). In a nutshell, "As an Indian, you are subject to the same tax rules as other Canadian residents unless your income is eligible for the tax exemption under section 87 of the *Indian Act*. That exemption applies to the income of an Indian that is earned on a reserve or that is considered to be earned on a reserve, as well as to goods bought on, or delivered to, a reserve."

estimated in Sharpe *et. al* (2009). This is a reasonable estimate given that North-American Indians living on reserve make up slightly less than half of all North-American Indians, but have more potential to improve their economic situation due to their below average labour market outcomes and educational attainment.

In 2007, total Canadian nominal GDP was \$1,535 billion. In fiscal year 2007-08, consolidated government tax revenue was \$453 billion or 29.5 per cent of GDP. Consumption taxes in particular accounts for 7.3 per cent of GDP. It is assumed that government revenue's share of GDP remains at the 2007 levels up to 2026.

Summary Table 10 demonstrates by how much government revenue would increase above the base scenario should the best case scenario developed in Sharpe *et al.* (2009) materialize.¹⁶ Without any increases in educational attainment or education specific labour market outcomes, the Aboriginal population is expected to contribute about \$5.2 billion in tax revenue in 2026. Conversely, if the best case scenario materializes, the Aboriginal population would contribute about \$8.7 billion in tax revenue in 2026. In other words, education and labour market improvements have the potential to increase tax revenues by \$3.5 billion in 2026.

Chart 3: Cumulative Increased Tax Revenue Attributable to Increased Aboriginal Education and improved Education-Specific Labour Market Outcomes.



¹⁶ As was noted earlier, this scenario assumes that Aboriginal Canadians will reach the 2001 level of non-Aboriginal in terms of education, employment rates (at a given level of education) and earnings (at a given level of education). Sharpe *et.al* (2009) developed ten scenarios, each with different assumptions about which of the three variables improves (educational attainment, employment rate and earnings) or whether the improvement is partial (half of the 2001 gap) or complete (Aboriginal levels reaching 2001 non-Aboriginal levels in 2026).

The cumulative impact of improved Aboriginal education and education specific labour market outcomes from 2001 to 2026 on tax revenue is an estimated \$39 billion (Chart 3). Given the magnitude of the Aboriginal population potential contribution to public sector revenue, it is clear that in addition to providing a much needed boost to Aboriginal earnings, prioritizing Aboriginal education today will pay significant dividends for all levels of Canadian government in the future.

E. Total Cumulative Effect on Consolidated Governments Balance Sheet

Because increased tax revenue and decreased government spending both affect Canadian governments' balance sheets, they can be added up to produce a single estimate of the impact of increased Aboriginal education and social well-being on consolidated government's bottom line. This report estimates that in 2026 alone, the total benefit could be as high as \$11.9 billion (2006 dollars). By assuming the fiscal benefits of improved Aboriginal economic and social well-being will grow at a constant rate, its effect on consolidated government's fiscal balance can be estimated for each year during the 2006 to 2026 period. Summing each year's benefits yields the total cumulative effect from 2006 to 2026.

It is estimated that Canadian governments would gain approximately \$115 billion during the 2006-2026 period if all fiscal savings and additional tax revenues materialize. Of that sum, slightly less than \$40 billion is attributable to increased tax revenue and slightly more than \$75 billion is attributable to fiscal savings related to health care, social assistance, protection of persons and property, transfer payments and housing.

It must be emphasized that these estimates represent a best case scenario. Moreover, although indicators of social well-being are positively correlated with education, it is not reasonable to expect that all Aboriginal indicators of social well-being will increase to the average Canadian level if education is the only determinant to improve. A strategy encompassing other areas of intervention would be needed to realize the entirety of the benefits calculated in this article.

IV. Conclusion

This article estimates the effect of substandard Aboriginal social and economic well-being on public sector balance sheets. The key message, however, remains the same as that of earlier reports. Investing in Aboriginal education will not only benefit the Aboriginal population itself, but will also benefit Canadian government, and, by extension, the entire Canadian population.

Higher levels of educational attainment among Aboriginal people will have a positive effect on the public balance sheets due to lower social expenditure and higher tax revenue. It is calculated that the government would have saved \$6.2 billion in 2006 if Aboriginal Canadians had enjoyed the same levels of educational attainment and social conditions as non-Aboriginal people. If these figures increase at the same rate as total Aboriginal population growth, Canadian taxpayers could save up to \$8.4 billion in 2026. Additionally, a better educated Aboriginal labour force could contribute up to \$3.5 billion in additional tax revenue in 2026. The potential net savings for consolidated government balance sheets attributable to Aboriginal educational attainment and social well-being, therefore, is \$11.9 billion in 2026 alone. Over the 2006-2026 period, the cumulative effect on public sector balance sheets could be as high as \$115 billion.

References

- Blanchfield, Mike (2007), "AFN Threatens Human Rights Complaint over Child Care," CanWest News Service; Ottawa Citizen, February 7th, available online at <http://www.canada.com/cityguides/winnipeg/info/story.html?id=ebebd3a4-aec7-40c5-b1a5-e4f5531432b9&k=32139&p=1>
- Farris-Manning, Cheryl and Zandstra, Marietta (2003), "Children in Care in Canada: A summary of current issues and trends with recommendations for future research," March, available online at http://www.nationalchildrensalliance.com/nca/pubs/2003/Children_in_Care_March_2003.pdf
- Federal-Provincial Working Group on Child and Family Services Information (2004), "Child and Family Services Statistical Report," available online at <http://www.hrsdc.gc.ca/en/cs/sp/sdc/socpol/publications/statistics/2004-002599/page00.shtml>
- George, Peter and Peter Kuhn (1994), "The Size and Structure of Native-White Wage Differentials in Canada," *Canadian Journal of Economics*, Vol. XXVII no. I, pp. 21-42.
- Goss Gilroy Inc. (1997), "Federal, Territorial and Provincial Expenditures Relating to Aboriginal Peoples" in *For Seven Generations: An Information Legacy of the Royal Commission on Aboriginal Peoples*. Ottawa: Labraxus.
- Health Canada (2001), "Health Expenditures in Canada by Age and Sex, 1980-81 to 2000-01," Health Policy and Communications Branch, August, available online at http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/2001-exp-dep-1980/2001-exp-dep-1980-eng.pdf
- Indian and Northern Affairs (1996), "Royal Commission on Aboriginal People," available online at <http://www.ainc-inac.gc.ca/ap/pubs/sg/sg-eng.asp>.
- Indian and Northern Affairs Canada and Canadian Housing and Mortgage Corporation (2007), "Aboriginal Demography: Population, Household and Family Projections, 2001-2026," available online at <http://www.ainc-inac.ca/pr/ra/abdm/adm2026-eng.pdf>.
- Landry, Laura and Sinha, Maire. (2008), "Adult Correctional Services in Canada, 2005/2006," 85-002-XIE.
- National Council of Welfare, (2007). "First Nations, Métis and Inuit Children and Youth: Time to Act" available online at <http://www.ncwcnbes.net/documents/researchpublications/ResearchProjects/FirstNationsMétisInuitChildrenAndYouth/2007Report-TimeToAct/ReportENG.pdf>

Royal Commission on Aboriginal People (1994). *Provincial Government Expenditures Relating to Aboriginal Peoples: Clients and Relative Levels of Use*.

Sharpe, Andrew, Jean-Francois Arsenault and Simon Lapointe (2007) "The Potential Contribution of Aboriginal Canadians to Labour Force, Employment, Productivity and Output Growth in Canada, 2001-2017," CSLS Research Report No. 2007-6, November.

Sharpe, Andrew, Jean-Francois Arsenault, Simon Lapointe and Fraser Cowan (2009) "The Effect of Increasing Aboriginal Educational Attainment on the Labour Force, Output and the Fiscal Balance," CSLS Research Report No. 2009-3, May.

Statistics Canada (2005), "Adult Correctional Services in Canada: 2003/2004," December, Catalogue no. 85-211-XIE

Statistics Canada (2007), "Adult and youth correctional services: Key indicators," November, available online at <http://www.statcan.ca/Daily/English/071121/d071121b.htm>

Statistics Canada (2008a) "Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census," Catalogue no.97-558-XIE, January.

Statistics Canada (2008b), "Aboriginal Population Profile, 2006 Census," 92-594-XWE, available online at <http://www.statcan.ca/bsolc/english/bsolc?catno=92-594-XWE>

Statistics Canada (2008c), "Public Sector Statistics," 68-213-XWE, July, available online at <http://www.statcan.ca/bsolc/english/bsolc?catno=68-213-XIE>

Treasury Board Secretariat (2005), "Aboriginal Horizontal Framework," November, available online at http://www.tbs-sct.gc.ca/aaps-aapd/pdf/poverview_e.pdf

Waslander, Bert (1997) "Government Expenditures on Aboriginal People: The Costly Status Quo," *Canadian Tax Journal*, Vol. 45 no. 5, pp. 959-978.

Appendix 1: Levels of Use

Appendix Table 1: Age Factor – Health care

	Relative Health care expenditure per person - 2001	Aboriginal Population (%)	Total Canadian Population (%)		
	A	B	C	D = A*B	E = A*C
0-14	1	0.297	0.177	0.297	0.177
15-24	1.30	0.181	0.134	0.235	0.174
25-34	1.31	0.138	0.127	0.181	0.166
35-44	1.35	0.145	0.152	0.195	0.206
45-54	1.74	0.122	0.157	0.213	0.275
55-64	2.27	0.069	0.116	0.157	0.264
65-74	4.61	0.033	0.072	0.153	0.334
75-84	8.72	0.013	0.048	0.109	0.421
85+	18.88	0.003	0.016	0.048	0.311
Summation				1.588	2.327
Age Factor = [sum(D)/sum(E)]				0.683	

Source: Health Canada (2001)

Appendix Table 2: Age Factor - Housing

Age Group	Housing Expenditure (%)	Aboriginal Population (%)	Total Population (%)	Age Group Over (>1) or Under (<1) Represented	Spending Assuming Aboriginal Age Structure
	A	B	C	D = A/C	E = B*D
0-54	0.5	0.883	0.747	0.670	0.591
55+	0.5	0.117	0.253	1.973	0.231
Age Factor					0.823

Source: Waslander (1997)

Appendix Table 3: Age Factor - Child and Family Services

Age Group	Child and Family Services Expenditure (%)	Aboriginal Population (%)	Total Population (%)	Age Group Over (>1) or Under (<1) Represented	Spending Assuming Aboriginal Age Structure
	A	B	C	D = A/C	E = B*D
0-14	1	0.297	0.177	5.666	1.685
15+	0	0.703	0.823	0.000	0.000
Age Factor					1.685

Assumes all child and family services expenditure is directed towards children

Source: 2006 Census

Appendix Table 4: Age Factor - Protection of Persons and Property

Age Group	Percentage of Individuals Aged 15 and over Sentenced to Federal or Provincial Custody	Age Distribution of the Aboriginal Population (%)	Distribution of the Total Population (%)	Age Group Over (>1) or Under (<1) Represented	Spending Assuming Aboriginal Age Structure
	A	B	C	D = A/C	E = B*D
15-19	6.0	10.07	6.77	0.89	0.089
20-24	20.0	8.01	6.58	3.04	0.243
25-29	16.0	6.97	6.28	2.55	0.178
30-34	15.0	6.81	6.39	2.35	0.160
35-39	15.0	6.95	6.99	2.15	0.149
40-44	14.0	7.50	8.26	1.70	0.127
45-49	8.0	6.76	8.29	0.97	0.065
>50	7.0	17.19	32.79	0.21	0.037
SUM(E)	101.0	70.3	82.3		1.048
Age Factor = SUM(E)/SUM(A)					1.039

Source: Landry and Maire (2007)

Appendix Table 5: Age Factor - Transfer Payments

Percentage age 65 and over			Percentage below 18 years			Total Age Factor
Aboriginal	Total	Age Factor	Aboriginal	Total	Age Factor	
A	B	C = A/B	D	E	F = D/E	C and F weighted by expenditure
0.048	0.137	0.351	0.363	0.217	1.672	0.79

Source: 2006 Census, Statistics Canada (2008b)