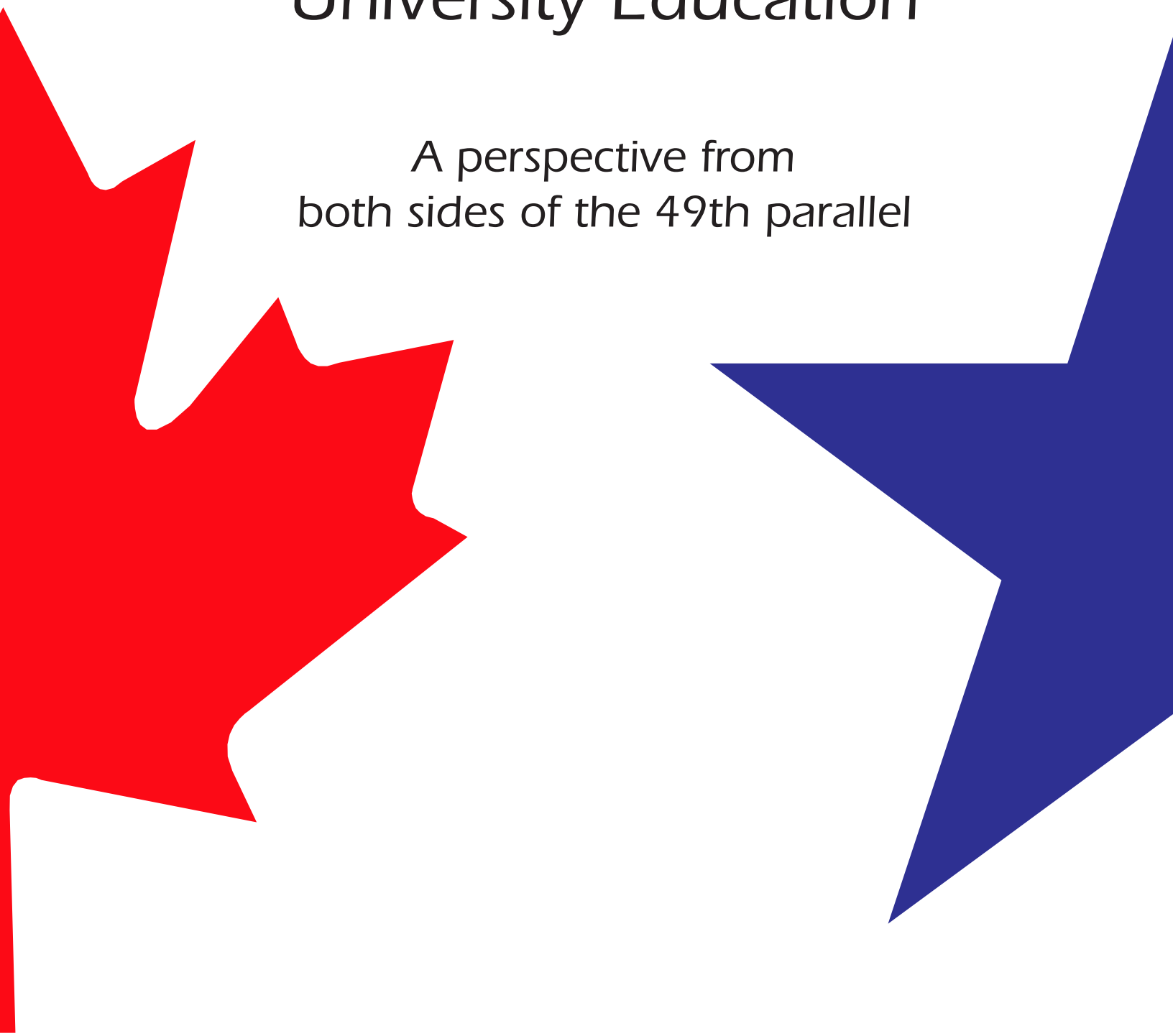
The Affordability of University Education

A perspective from both sides of the 49th parallel



Educational Policy Institute

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Suggested Citation:

Swail, Watson Scott (2004). The Affordability of University Education: A Perspective From Both Sides of the 49th Parallel. Washington, DC: Educational Policy Institute, Inc.

This report was electronically released on December 1, 2004

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ACKNOWLEDGEMENTS

The Educational Policy Institute wishes to thank the Canada Millennium Scholarship Foundation for supporting our work on this project. Specifically, we would like to thank Mr. Norman Riddell, the Executive Director of the Foundation, for establishing a large research presence in Canada and the United States.

A very special thank you to Sean Junor, the Senior Policy and Research Officer at the Canada Millennium Scholarship Foundation. Mr. Junor keenly provided support and review from start to finish, going through umpteen different versions and rewrites, as well as digging out difficult-to-get data from the Canadian provinces. His effort made this report a much better piece of research.

In addition, we would like to thank the dozens of researchers from federal, provincial, and state agencies, including Statistics Canada and the US Department of Education, for their help in collecting the data necessary to produce this report.

December 1, 2004

Watson Scott Swail, Ed.D.
President, Educational Policy Institute

EXECUTIVE SUMMARY

The Canada Millennium Scholarship Foundation commissioned this study in order to better understand the relative affordability of public university education in Canada and the United States. In the same way that one wouldn't measure access to university by examining simple enrolment numbers, affordability is more complex than an examination of university tuition fees. A good examination requires investigation into net cost — that is, how much of the listed tuition price students actually pay.

In an era where tuition fees continue to rise on both sides of the border, the actual cost to the individual is important to examine. This report attempts to go beyond the tuition sticker price and unpack the actual cost to students and families. Net cost is a good measure for affordable university education since it allows for tuition discounting. This allows for all non-repayable assistance (grant and scholarships), significant educational subsidies in both Canada and the United States, to be factored into the cost equation.

Also, it is important to examine how affordable university education is relative to family incomes. This measurement allows for a closer look at the amount of money families will have to come up, relative to incomes, to cover the cost of university education.

This study uses the American system as a benchmark, comparing the affordability of Canada's system to that of its closest and most similar neighbour. To compare Canadian and American prices, the study used the Organisation for Economic and Cooperative Development's (OECD) Purchasing Power Parity (PPP) Index. This measure enabled a fair comparison of the dollar value of education in both countries. To convert US funds into Canadian currency, we multiplied by 1.21.

POPULATION & WEALTH

Population. In 2001, Canada had a total resident population of 30,007,090; the province of Ontario covers over one-third of the total Canadian population, and together with Quebec, contains over 62 percent of all Canadians. The US population was counted at 282,124,631 in 2000. Young people aged 18 to 24—the university-age sector—represent 10 percent of Canada's total population (3 million youth), compared to 9 percent of the total US population (26 million youth).

Median family income. American families earn 27 percent more than Canadian families in Canadian funds after adjusting for purchasing power. American families earn $60,679 ($50,046 US) compared to a median family income in Canada of $47,945.

ACCESS TO UNIVERSITY EDUCATION

High school graduation and post-secondary participation. Some 85 percent of all youth in Canada and the US receive a high school diploma by the age of 24. Within a few years of high school graduation, approximately 57 percent of students in Canada and the US pursue some form of post-secondary education. Quebec has the highest PSE continuation rate among all 60 jurisdictions (70 percent), with North Dakota closely behind.

Public University FTEs.[1] Some 674,756 full-time equivalent (FTE) students attended university in Canada in 1999-2000. This figure represents 23 percent of all 18- to 24-year-old youth. Ontario and Quebec contribute almost two-thirds of all FTEs at the university level in Canada. Comparatively, almost 5 million FTEs attended public four-year colleges and universities in the US during the 2000-01 academic year, equivalent to 19 percent of all 18- to 24-year-olds in the US. However, when students from private four-year colleges and universities are added, the total comes to 7.9 million FTEs, or 29.4 percent of 18- to 24-year-olds.

COST OF UNIVERSITY EDUCATION

Tuition and fees. In 2000-01, the average tuition and fee charges for a basic arts programs at a Canadian university came to $3,403. Among Canadian provinces, Nova Scotia had the highest average tuition at $4,626 per year; Quebec's tuition was lowest at $1,843. In-state tuition and fee charges in the US averaged $4,251 ($3,506 US). Vermont's tuition was the highest ($8,650; $7,134 US), Utah the lowest ($2,721; $2,244 US).

Total cost of attendance. The total cost of attendance (COA) at a Canadian university in 2000-01 was $8,336. Nova Scotia had the priciest COA at $9,833 while British Columbia and Quebec had the lowest COAs in the nation ($6,181 and $7,081 respectively). In the US, the average COA was $10,494 ($8,655 US). The highest average COA could be found in Vermont ($15,563; $12,836 US). Oklahoma offered the least expensive education at $7,275 ($6,000 US).

[1] FTE (Full Time Equivalent) is a unit that includes full-time students (equivalent to 1.0 FTE) and part-time students (equivalent to 0.33 FTE). In Canada, part-time students are often multiplied by 0.35. However, we use the standard U.S. calculation for this report.

STUDENT ASSISTANCE FOR UNIVERSITY EDUCATION

Grant aid. Federal and provincial governments made over $644 million in grant aid available to Canadian university students in 2000-01, averaging $955 per university FTE student. In the US, the federal and state governments provided $7.7 billion in grant aid, averaging $1,562 ($1,288 US) to university students.

Institutional Aid. Canadian universities provided students with $551 million in institutional aid in 2000-01. The corresponding figure from the US is $3.6 billion ($3.0 billion US). When institutional aid is added into the calculation for total grant aid, the total grant aid available to Canadian university students rises to $1.2 billion, or $1,772 per FTE. In the US, the addition of institutional aid increases total grants available to four-year students to $11.3 billion ($9.3 billion US) for an average grant of $2,289 per FTE.

Student loans. During 2000-01, the Canada Student Loans Program (CSLP) lent $813 million to 176,612 university students, averaging $4,601 per borrower. Quebec, which opts out of the CSL program but still receives an alternative payment from the federal government, provided over $159 million in student loans in 2000-01. In the United States, 2.6 million students received over $19 billion ($15.5 billion US) in loans from the US Department of Education, averaging $7,248 ($5,978 US) per borrower.

Remission Assistance. Canadian university students received $198 million in provincial remission assistance, most of which is distributed in Ontario ($157 million). In 2000-2001, only three provinces did not offer remission assistance—Newfoundland & Labrador, Nova Scotia and New Brunswick. No US remission data are available.

Grants versus loans. In Canada, 44 percent of all grant and loan aid is provided in the form of grants, bursaries, or scholarships, compared to 36 percent in the US. Thus, repayable loans provide the majority of student aid in both countries.

Total aid. Total federal, provincial, and institutional aid in Canada was $4,017 per FTE in 2000-01. Provincially, these figures ranged from as low as $2,326 in Quebec to $6,671 in Newfoundland & Labrador. The US national average was $6,318 ($5,211 US) in 2000-01. Vermont had the highest total aid per FTE ($10,161), and Hawaii's aid was lowest ($1,369).

OTHER AID

Although they add considerably to the student aid pool, other significant sources of aid could not be included in this report because of limits on data resources.

Tax credits. Both Canada and the US increasingly use their tax systems to help alleviate post-secondary education expenses. In Canada, total tax (provincial and federal) expenditures for student aid reached $1.75 billion in 2001. To put this in perspective, the total amount of federal and provincial need-based aid (loans and grants) Canadian students received was $2.1 billion. The US began using its tax code for student aid in 1997, and disbursed approximately $4.9 billion US through its tax system in 2000-01. In addition, 529 plans, which allow for tax-free saving for higher education, have caught on fire in the US. However, we have no solid data on the volume of those savings.

Alternative loans / educational lines of credit. Many students and families are forced to find alternative ways to pay for post-secondary education. According to the 2001-2002 EKOS Student Income and Expenditure survey sponsored by the Canada Millennium Scholarship Foundation, between 10 and 20 percent of all Canadian university students finance part of their post-secondary education with private loans and other borrowing mechanisms. In 2002-2003, US, families (parents and students) borrowed $7.6 billion US through such methods.

INDICATORS OF UNIVERSITY AFFORDABILITY

Aid versus cost of attendance. Total aid to Canadian students covered 48 percent of the average cost of attendance at the university level. Newfoundland & Labrador covered the highest percentage of COA (91 percent), followed by British Columbia (73 percent). Manitoba, Quebec and Nova Scotia covered the lowest percentage of COA. Total aid covers 60 percent of average COA in the US. Oklahoma had the highest ratio of aid to COA at 96 percent, and Hawaii had the lowest (14 percent).

Net cost. Subtracting total average grant aid per FTE from average COA derives net cost. In 2000-01, the average net cost of attendance in Canada was $6,564 per student, compared with $8,205 ($6,767 US) in the US.

Out-of-pocket expense. Average out-of-pocket expense (average COA minus average total aid per FTE) in Canada was $4,319 in 2000-01, compared with $4,176 ($3,444 US) in the US. Nova Scotia had the highest out-of-pocket expense ($6,635) followed by Ontario. Newfoundland & Labrador had the lowest figure at $657. Hawaii had the highest average out-of-pocket expense in US at $8,678 ($7,157 US), and Oklahoma had the lowest out-of-pocket expense at $312 ($258 US).

Exhibit. Summary of costs of university education in Canada and the US, 2000

	Canada	US (PPP Adjusted)	% Difference
Tuition and Fees	3,403	4,251	24.9%
Cost of Attendance	8,336	10,494	25.9%
Net COA	6,564	8,205	25.0%
Out-of-Pocket	4,319	4,176	-3.3%

Median family income versus COA. In Canada, 17 percent of median family income was required to cover university COA in 2000-01, and 9 percent of median family income was required to cover out-of-pocket expenses. The US ratio of COA to median family income is almost identical to Canada's. However, the net COA share of median family income, at 7 percent, is lower than Canada's.

CONCLUSIONS

This report was written to answer two key questions: First, how does access to university education in Canada compare to access in the US? Second, how affordable is the Canadian university system compared to the American system? Canadians who assume that their university system is more affordable than the American system might find some of the results surprising.

Data in this report confirm that, although Canada and the US have strikingly similar high school graduation rates and post-secondary participation rates, the US clearly sends a greater percentage of students to university-level education than Canada does. In 2000-01, the ratio of university FTEs to 18- to 24-year-olds was 23 percent in Canada compared to 29 percent in the US.

Tuition, fees, and the total cost of attendance are considerably lower in Canada (about 25 percent lower after correcting for purchasing power). Even after dramatic increases in tuition and fee charges across Canada in the 1990s, tuition and fees at the university level are still quite low compared to those in the US.

However, American university students receive 30 percent more grant aid as Canadian students and they have access to significantly more loan aid. In total, Canadian students receive over $4,000 in aid per year compared to the $6,318 ($5,211 US) US students receive. Whereas total aid covers 48 percent of the bill in Canada, it covers 60 percent in the US. As a result, a the out-of-pocket expenses that a student and family must cover in Canada are 25 percent higher than those in the US, a difference of over $900 per year of study.

It is important to note that since more US students access student loans, a large portion of the cost of post-secondary education is simply deferred. The American system makes university education more affordable at the point of purchase. However, this study did not examine the long term impacts of such a policy decision.

Recent tuition and fee increases in Canada suggest the country is moving toward a high-cost system. On the other hand, the introduction of new programs such as the Canada Millennium Scholarship Foundation and the Canada Study Grants indicate movement toward a high-aid system. However, Canada still lags behind the US in aid, indicating that it

has a long way to go to before becoming a truly high-cost, high-aid system, which can provide more aid to students of high and moderate need, rather than a general subsidy to all students. Also, any shift to a high-cost system should be followed closely with a discussion on the type of aid that should be provided to students since there are real differences between non-repayable and repayable assistance. Canadians may prefer their emerging high-aid system be funded through non-repayable assistance (grants) rather than repayable assistance (loans).

We conclude with three main recommendations for governmental and non-governmental policy analysts and researchers to consider:

1. Further consider the policies of aid and costs at Canadian universities. Regardless of the budgetary pressure from healthcare, Canadians need to think creatively about long-term solutions to create an affordable system of university education.

2. Increased data and research capacity. Unlike in the US, where the federal Department of Education collects and provides data free of charge, Statistics Canada's data is sometimes costly. Statistics Canada's "user-pay" system reduces the ability of faculty members and research groups to conduct interesting and relevant research free of charge. More research is done in the United States, partly because data are made available for public use.

3. Educational quality. This study does not address educational quality in the US or in Canada. But quality is a serious question Canadians. While the Canadian system is still affordable, is it as good as it was 10 or 15 years ago? And, as good at what, or for whom? Policy makers need to give educational quality the attention it deserves.

We hope that future reports can provide a fuller analysis of PSE opportunity in Canada. In the meantime, the data from this study should act as a wake-up call for policy makers across Canada and the US. Considerable steps must be taken to make university education more affordable for all students and families, especially those who are historically underserved at that level. This can only happen through increased focus and dialogue among stakeholders at the institutional, provincial and federal levels.

INTRODUCTION

INTRODUCTION

This study was commissioned by the Canada Millennium Scholarship Foundation in order to better understand the relative affordability of public university education in Canada and the United States. The Canadian and American post-secondary education systems are more similar than different. Although some variances persist (for example, Quebec's CEGEP institutions, British Columbia and Alberta's degree granting universities, or large scale of private, not-for-profit, four-year institutions in the US[2]), the two countries in fact have much in common.

But do Canadian and Americans have the same access to public university education? And how affordable is the Canadian university system compared to the US system? Canada has always prided itself on the low cost of its university system, but the US is also known for higher levels of student aid. Considered together, whose system is really more affordable?

In an era where tuition fees continue to rise on both sides of the border, the actual cost to the individual is important to examine. This report attempts to go beyond the tuition sticker price and unpack the actual cost to students and families. Net cost is a good measure for affordable university education since it allows for tuition discounting. This allows for all non-repayable assistance (grant and scholarships), significant educational subsidies in both Canada and the United States, to be factored into the cost equation.

Also, it is important to examine how affordable public university education is relative to family incomes. This measurement allows for a closer look at the amount of money families will have to come up, relative to incomes, to cover the cost of university education.

This study uses the American system as a benchmark, comparing the affordability of Canada's system to that of its closest and most similar neighbour. To compare Canadian and American prices, the study used the Organisation for Economic and Cooperative Development's (OECD) Purchasing Power Parity (PPP) Index. This measure enabled a fair comparison of the dollar value of education in both countries. To convert US funds into Canadian currency, we multiplied by 1.212472.

The report is divided into six sections. Part I presents background data on population and wealth in both nations, using data from Statistics Canada, the US Department of Commerce's Bureau of Economic Analysis and the US Census Bureau. Part II focuses on access to post-secondary education by comparing high school graduation rates and rates of matriculation to post-secondary education. Part III presents data on student charges at universities in Canada and the US, and Part IV illustrates data from various federal and state student aid programs in Canada and the US. Part V brings all of these data together to create indicators of affordability in the two countries. Finally, Part VI discusses the meaning and implications of these data and recommends a policy direction.

Given that this study was contracted by a Canadian organization, please note that this report has been written from a Canadian perspective first, such that all US financial indicators have been translated to a comparative measure using the Purchasing Price Parity (PPP) index, described in more depth on page 3. Whenever appropriate, we also supply the actual US figure. As well, the appendices provide the necessary US data in both PPP and real values. Canadian figures are in true Ca-

[2] The U.S. is home to 1,699 such institutions in all, constituting almost three-quarters of all four-year institutions in the U.S. (NCES, 2002).

nadian currency for the academic year 2000-01.

The data for this report involve the 2000-01 academic year. However, we utilized 1999-00 US tuition, fee, and cost of attendance data since that was the latest data available at the time of analysis.

DATA LIMITATIONS

As with any large-scale comparative analysis, this project has data and analytical limitations. At the outset of this project, we were concerned about finding comparable variables in all 60 jurisdictions, and some of our concern was justified. Readers should keep the following in mind throughout the report.

Comparability between the US and Canada. The analysis of any data depends on data rigour and generalizability of that analysis. When data are brought in from multiple sources, analysts must be especially cognizant of differences in collection and data manipulation procedures. This project employed data from several agencies, addressing more than 60 discrete variables. Although we worked diligently to provide comparable data from different provinces and states, some issues could not be resolved. Throughout the report, we have noted when the data should be scrutinized especially closely.

Income Data. As economists surely understand, there are several ways to calculate "personal income" or "median family income." It was extremely difficult to find truly comparable measures that translate seamlessly on both sides of the border. While we are confident about our inter-provincial and inter-state income comparisons, international comparisons deserve caution. The differences between American and Canadian methods of constructing income variables are invisible to the reader and often to the researchers as well.

Access to university education. Data on university access in the US and Canada are based on comparisons of selected variables, not on preferred cohort indicators through longitudinal studies. Thus, access data in this publication serve as proxies rather than absolute indicators of access.

Territories not included. This report omits the Yukon, Northwest Territories, and Nunavut in Canada since these jurisdictions offer select university courses in partnership with southern Canadian universities, but do not have a single university. We similarly omitted Puerto Rico, Guam, and other territories under the protectorate of the United States. The aggregate national figures in both countries include values from these territories.

Institutional Quality. This report does not address the issue of institutional quality. While we can provide comparable data for many factors, there is no variable to control for institutional quality. For example, in free-market economies like Canada and the US, the perceived quality of a particular institution may put pressure on the price of its tuition. In the US, tuition and fees at Ivy League institutions, such as Harvard University are much higher due to perceived excellence. Because of these perceptions, people are willing to spend more. It is, however, extremely difficult to quantify the actual quality of services at each institution.

Tax Credits and Remission Programs. Many Canadian provinces use tax credits and loan remission programs. These measures provide an important resource for students and families in reducing the cost of post-secondary education. We have included data on remission programs from Canada, but

comparable US data are unavailable. We have included neither state nor provincial tax credits due to inconsistent data availability. Many Canadian provinces and the federal government do not report spending by type of education for grants and remission. The analysis herein utilized a proxy of provincial and federal expenditures on loans and remissions. These estimates were generating using Canada Millennium Scholarship Foundation institutional breakdowns in most provinces.

Sector-specific data. In some cases we were unable to disaggregate undergraduate and graduate education, two-year and four-year, and public and private institutions. When possible, we developed proxy measures to do this, but in other areas, we had to leave the data as they were.

TREATMENT OF FISCAL DATA

Comparing income and prices across borders is a complex business. This report relies on OECD's Purchasing Power Parity (PPP) rate for comparison. The PPP compares the purchasing power of one nation's currency to that of other nations:

Treatment	Canada	US
Face Value	1	1
Purchasing Price Parity (PPP) Index	1.21	1
Currency Exchange Rate	1.35	1

For this report, we multiplied US dollar amounts by 1.21 to determine the Canadian dollar equivalent. Amounts are in Canadian dollars, with US amounts in parentheses. More information on the purchasing power parity index may be found in Appendix D.

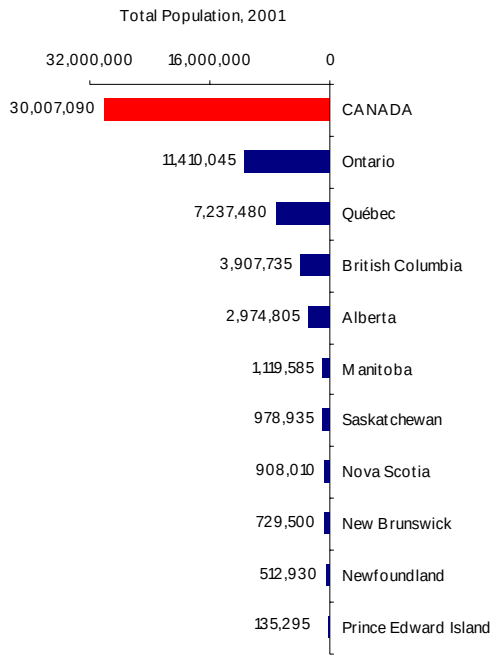
PART I. POPULATION AND WEALTH

POPULATION

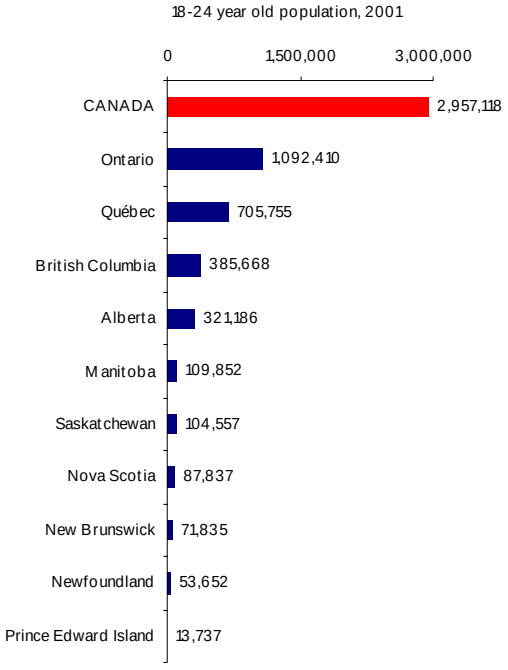
According to data from Canada's 2001 census, the total resident population of Canada was 30,007,090 (Exhibit 1). The province of Ontario makes up over one-third of the total Canadian population, and together with Quebec, represents 62 percent of all Canadians. The two most western provinces, British Columbia and Alberta, are the next most populous, followed by two other prairie provinces, Manitoba and Saskatchewan. The Atlantic Provinces round out the Canadian population.

In 2001, there were 3 million people 18- to 24-years of age (the typical age for attending university), representing 10 percent of Canada's total population. Among the Canadian provinces, Saskatchewan has the highest proportion of 18- to-24-year-olds (11 percent), compared to 6 percent at the low end in British Columbia.

Exhibit 1. Total population and 18- to 24-year-old population in Canada, 2001



SOURCE: Statistics Canada (CANSIM II, Table 051-0001)



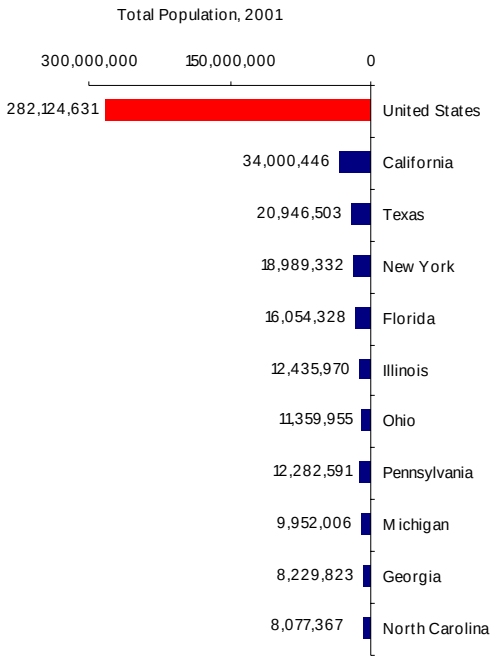
SOURCE: Statistics Canada

In the US, the latest US Census (2000) pegged the US population at 282,124,631. There were 26 million 18- to 24-year-olds in the US, representing 9 percent of the total population.

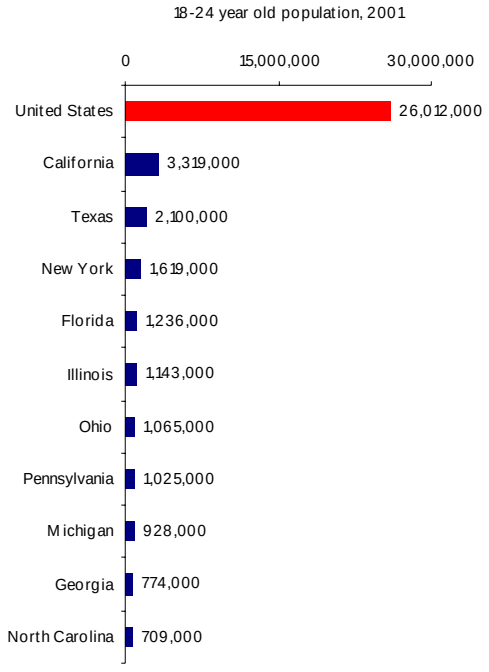
The states with the highest population, in order, include California, New York, Texas, Florida, and Illinois. Nine states contribute over half of the total US population. The largest state, California, with a population of 34 million, exceeds the total population of Canada. Ontario, about the size of Ohio, would be the seventh most populous state, and Quebec is about the size of Virginia, the twelfth most populous state in the US.

The 18- to 24-year-old population in the US mirrors the total population, with minor variances. California has over 3.3 million 18- to 24-year-olds, further stretching that state's ability to provide higher education. Massive growth in California and other perimeter states (e.g., Texas, Florida, and Washington) is causing what has become known as the Tidal Wave II, or the "tsunami" of eligible college and university students, especially among students of color. Complicating the issue of seat space in many states is the stagnant economy, which traditionally results in an increased demand for higher education through retraining.

Exhibit 2. Total population and 18- to 24-year-old population in the US, 2001 (Highest 10 States)



SOURCE: US Census Department.

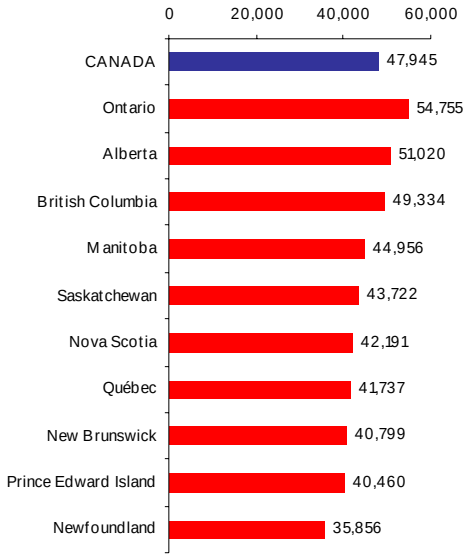


SOURCE: US Census Department

WEALTH

The US is the world's wealthiest nation. After controlling for purchasing power, US gross domestic product and aggregate personal income is 11 times that of Canada. US and Canadian domestic product and aggregate personal income are relatively equal in per capita terms, but a 21 percent purchasing power differential diminishes Canadian earnings quickly.

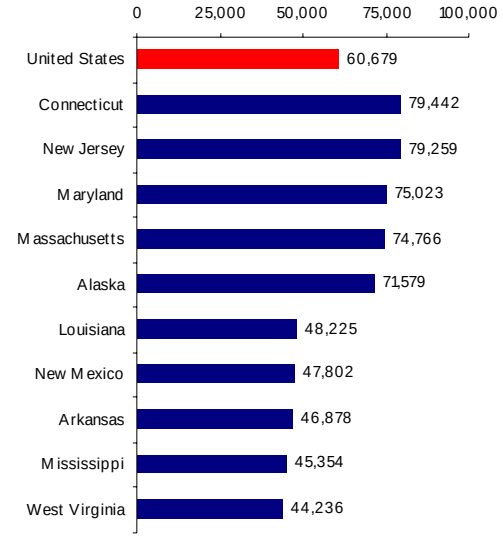
Exhibit 3. Canadian median family income, 2000



SOURCE: Statistics Canada, Beyond 20/20 Professional Browser, T601 Economic families. 2 persons or more

Of course, gross data indicators provide but gross comparisons. Personal-level data provide a more appropriate comparison (Exhibit 3 and Exhibit 4). In 2000, American families earned almost 27 percent more than Canadian families, with a median income of $60,679 ($50,046 US) compared to $47,945 among Canadian families. The same ratio exists on a per capita basis, where Americans earned $35,731 ($29,469 US) compared to $27,956 in Canada.

Exhibit 4. US median family income, 2000 (top 5 and bottom 5) (PPP Adjusted)



SOURCE: U.S. Census Department, P77 Median Family Income from Census 2000 Summary File 3 (SF 3).

Within Canada, Ontario remains the most affluent province for families and individuals. The median family income in Ontario, at $54,755, was almost $4,000 higher than its next-highest counterpart, Alberta ($51,020). The province of Newfoundland & Labrador had the lowest median family income, at $35,856.

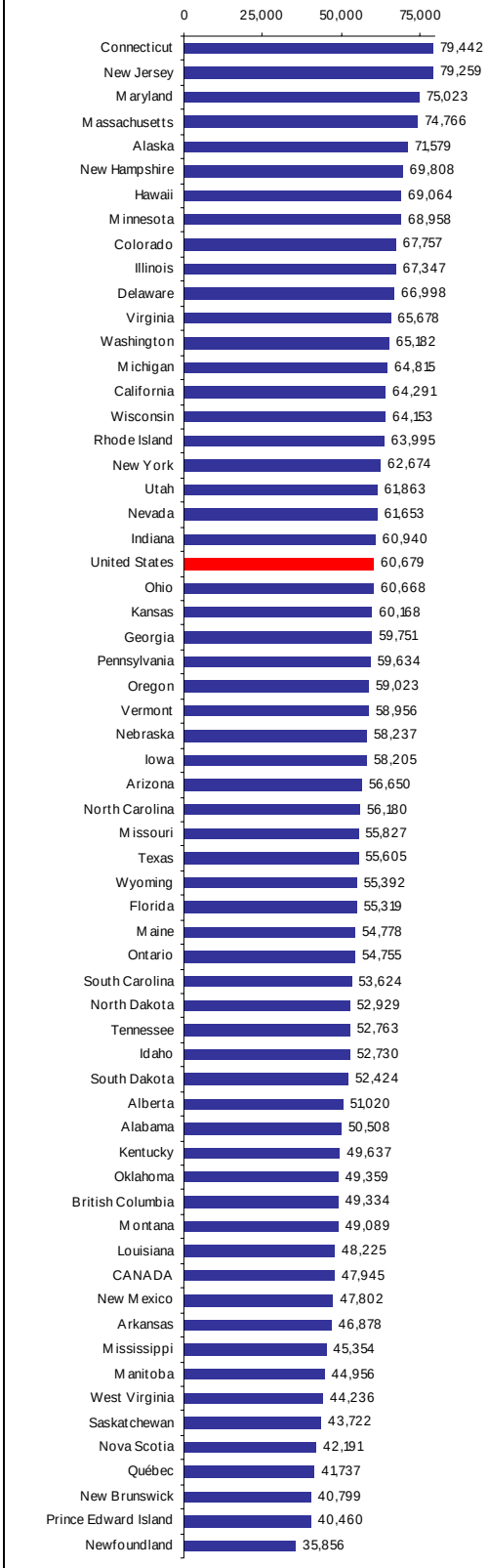
In the US, the Northeast corner of the country is the center of personal and corporate wealth. Connecticut, New Jersey, Maryland, and Massachusetts are the wealthiest states, on average, with median family income values between $71,000 and $79,000 ($59,000 US and $66,000 US respectively).

The richest Canadian province by median family income, Ontario ($54,755), would rank about 37th among all 60 jurisdictions covered in this report. Six provinces are poorer than the poorest US state, West Virginia, in terms of median family income. Per

capita personal income figures reveal similar patterns.

Even if currencies were taken at par, Ontario's median family income would rank 12th among the 60 jurisdictions; Alberta's families would rank 21st, and British Columbia 26th[th]. Newfoundland & Labrador would still rank last. At currency par, the US still shows itself as a much wealthier nation.

Exhibit 5. Median family income, 2000 (PPP Adjusted)

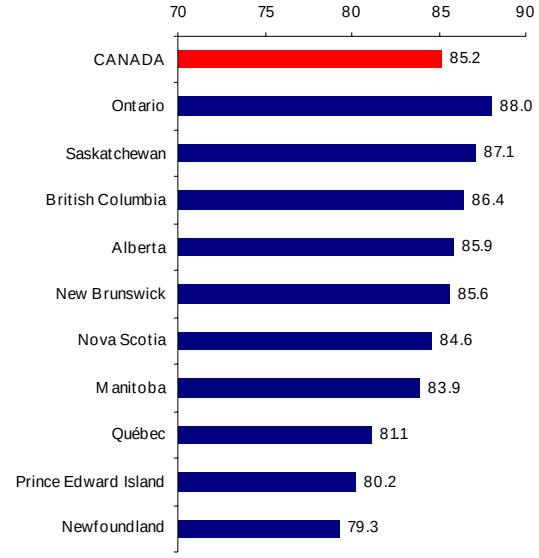


PART II. ACCESS TO UNIVERSITY EDUCATION

ACCESS TO UNIVERSITY EDUCATION

High School Graduation. Access to university education in any nation is predicated on the number of students who graduate from high school, a prerequisite for admission in almost all programs and institutions in industrialized nations. In Canada and the US, approximately 85 percent of all youth received a high school diploma by the age of 24.[3] Within Canada, the provincial graduation rates[4] hold to the national average across most provinces, with the exception of Newfoundland & Labrador, Prince Edward Island, and Quebec, where completion rates were approximately 80-81 percent.

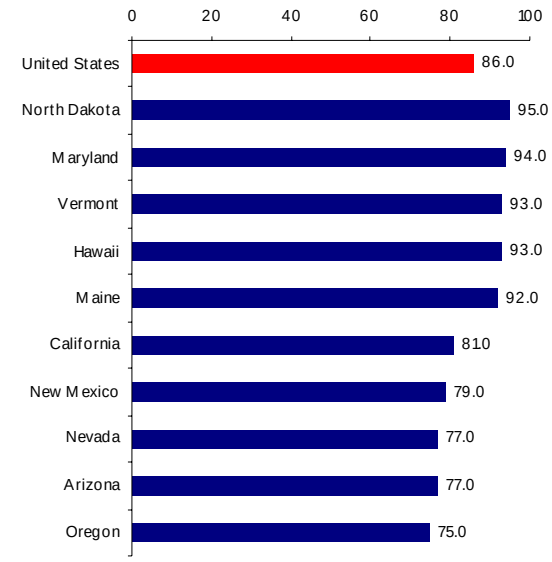
Exhibit 6. Canadian high school graduation rates, 2000



SOURCE: Statistics Canada, *After High School: The First Years*, Table 1, p. 7.

In the US, 19 states had high school graduation rates above 90 percent, the highest state being North Dakota (95 percent). Oregon, Arizona, Nevada, and New Mexico have graduation rates below that of Newfoundland & Labrador. Among all 60 states and provinces, Ontario had the 24th highest high school graduation rate, followed by Saskatchewan (29th) and British Columbia (33rd).

Exhibit 7. US high school graduation rates, 2000 (top and bottom 5 states)



SOURCE: Digest of Education Statistics 2001, Table 104.

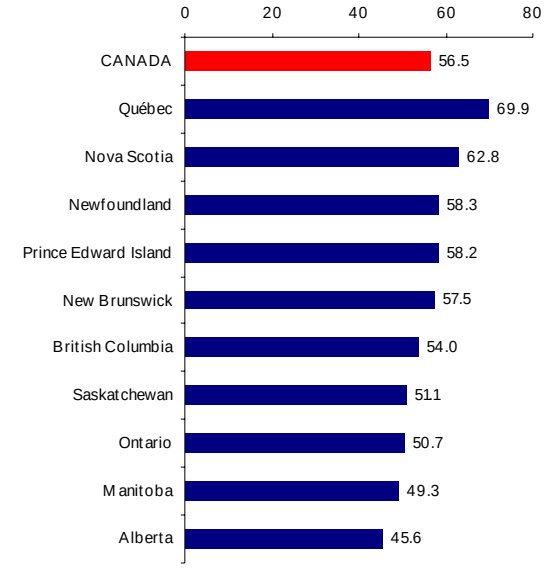
Post-Secondary Matriculation. Within a few years of high school graduation, approximately 57 percent of students in Canada and the US pursued some form of post-secondary education. PSE continuation rates vary dramatically by province and state. The highest PSE continuation rate among all 60 jurisdictions was found in the province of Quebec (70 percent), followed by North Dakota (69 percent), Massachusetts (69 percent) and Kansas (68 percent). The four Atlantic Provinces are the next

[3] Indicators in Canada and the U.S. are calculated in slightly different manners. In Canada, the rate is calculated for those aged 22 to 24 years of age; the U.S. calculation is based on those aged 18- to 24 years of age. This may have a negative impact on the U.S. rate. However, after comparing other completion indicators, we found that these figures are comparable.

[4] High school graduation includes traditional diploma, general education diploma (GED), and other equivalent forms of recognition.

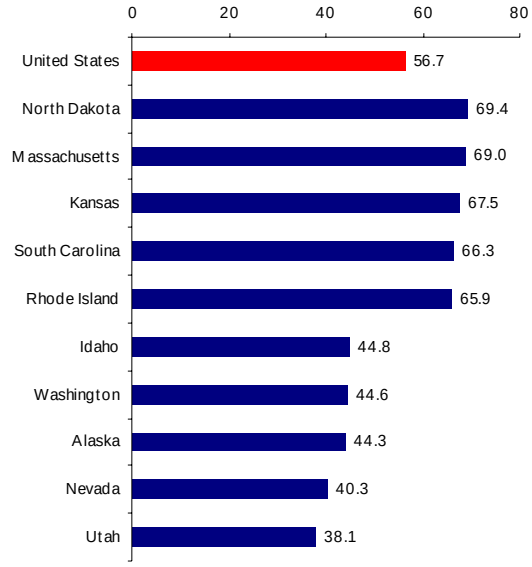
highest Canadian provinces on the list. Manitoba (49 percent) and Alberta (46 percent) had the lowest post-secondary continuation rates in Canada and would hold the 52nd and 54th spots among all 60 jurisdictions.

Exhibit 8. PSE continuation rates, Canada, 2000



SOURCE: Bowlby, Jeffrey W., and McMullen, Kathryn (2002). At a Crossroads: First Results for the 18 to 20-Year-old Cohort of the Youth in Transition Survey. Ottawa, ON: Statistics Canada, .p. 46, Table 4.2.

Exhibit 9. US PSE continuation rates, 2000 (top and bottom 5 states)



SOURCE: *Measuring Up 2000:* National Center for Higher Education Policy.

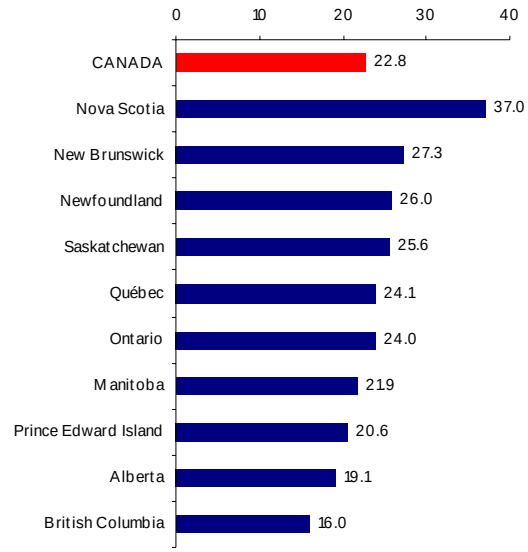
Post-Secondary Attendance. Some 674,756 full-time equivalent (FTE)[5] students attended university in Canada in 1999-2000. This figure represents 23 percent of all 18- to 24-year-old youth. Ontario and Quebec account for almost two-thirds of all FTEs at the university level in Canada. Nova Scotia had the highest percentage of 18- to 24-year-olds attending university (37 percent), while British Columbia had the lowest participation rate in Canada (16 percent).

Almost 5 million FTEs attended public four-year colleges and universities in the US during the 2000-01 academic year, representing 19 percent of all 18- to 24-year-olds in the US. However, most univer-

[5] Full-time equivalent (FTE) is a useful measure of the student population at a particular institution. It is calculated by counting each full-time student as 1 FTE, and each part-time student as 0.33 FTE. Thus, 1 full-time student and three part-time students would equal 2 FTEs. In the U.S., the federal Department of Education uses different formulas to calculate FTEs depending on the type of institution (public/private, profit/non-profit, two-year/four-year).

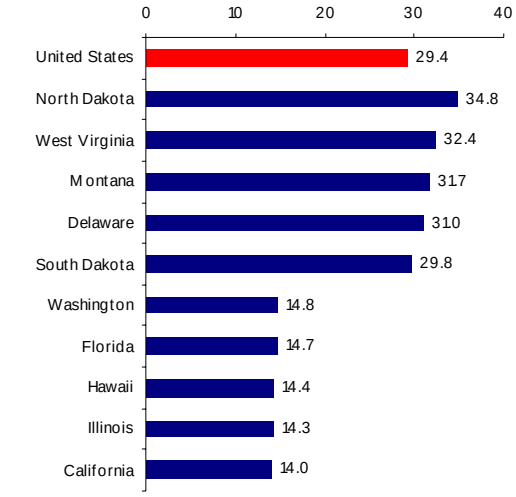
sity-level institutions in the US are private four-year colleges and universities. These institutions added 2.7 million students to the tally, bringing the total to 7.6 million FTEs and the participation rate to 29.4 percent. North Dakota ranks at the top of the participation list, while California, Illinois and Hawaii had the lowest rates in the US. The difference in overall FTE participation between Canada and the US is significant.

Exhibit 10. Canada university FTEs as percentage of 18- to 24-year-old population, 2000



SOURCE: FTE data courtesy of AUCC; population from Statistics Canada.

Exhibit 11. US university FTEs as percentage of 18- to 24-year-old population, 2000 (top and bottom 5 states)



SOURCE: NCES' Digest of Education Statistics 2001.
NOTE: Includes public AND private four-year students.

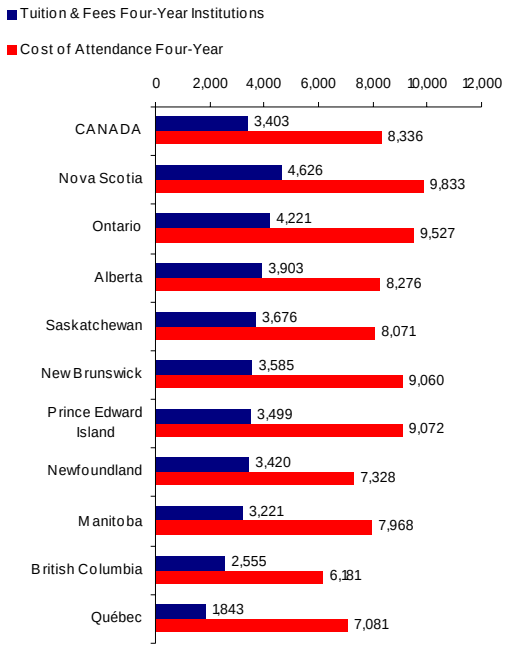
PART III. COST OF UNIVERSITY EDUCATION

COST OF UNIVERSITY EDUCATION

Tuition and Fee Charges. In 2000-01, Canadian university students in general arts programs each paid an average of $3,403 in tuition and fees. Students in departments such as engineering and architecture normally pay more than the arts average. Average tuition and fees were highest in Nova Scotia at $4,626 per year. Quebec's tuition and fees were lowest at $1,843.[6]

In-state tuition and fee charges[7] in the US averaged $4,251 ($3,506 US). The cost of public university education in the US varies widely by state, since states, like provinces, have ultimate authority over public education. In general, higher education is more expensive in the northeastern states and less expensive in the southwest. In 1999-00, Vermont had average public university tuition and fees of $8,650 ($7,134 US), while Utah had the lowest average tuition and fees in the nation. North Carolina is an example of a state that has worked to keep tuition fees at public institutions competitively affordable for in-state students. North Carolina charges hefty premiums to out-of-state students, but also has a cap on out-of-state students at any institution, including its flagship institution, the University of North Carolina-Chapel Hill, to about 19 percent.

Exhibit 12. Canadian university tuition and fees and total cost of attendance (COA), 2000-01

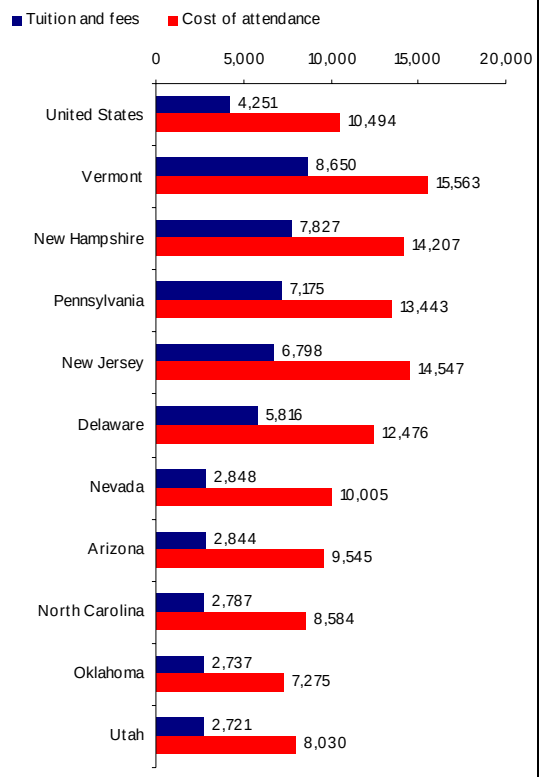


SOURCE: CMSF through Statistics Canada, Domestic Arts tuition and fee charges at Canada universities.

[6] For more information about historical trends in Canadian tuition and fees at the provincial level, see the Canada Millennium Scholarship Foundation's "The Price of Knowledge," available at http://www.millenniumscholarships.com/factbook/en/index.html.

[7] In the United States, tuition charges for in-state vs. out-of-state students are typically different. Some states charge 2-3 times the in-state tuition for students from another state. This does not apply to private institutions, who charge a tuition fee that applies to all students, rendering the in-state or out-of-state issue irrelevant.

Exhibit 13. US university tuition and fees and total cost of attendance (COA), 1999-00 (top and bottom 5 states) (PPP Adjusted)



SOURCE: NCES Digest of Education Statistics 2001, Table 317.

Cost of Attendance. Of course, tuition and fees make up only part of the cost of higher education. Room and board adds significantly to the total cost of attendance (COA). This is especially true in the US, where social norms suggest that youth who can afford the premium of going away to college should do so. Canadian students have historically tended to stay closer to home and attend local institutions. Although there are still costs associated with living at home, these are typically not as high as those associated with institutional room and board, which can be more than double the cost of tuition and fees. Other costs, such as transportation and books, can add several thousand dollars to total COA at some institutions and departments. Our analysis covers only tuition, general fees, and room and board. Other costs could not be included because of a lack of comparable data.

In 2000-01, room and board charges at Canadian universities averaged $4,933 and ranged from $3,600 to $5,600. Together with tuition and fee charges, the average cost of attendance (COA) at a Canadian university was $8,336. Consistent with its high tuition and fees, Nova Scotia had the priciest COA at $9,833, followed closely by Ontario ($9,527). British Columbia and Quebec had the lowest COAs in the nation ($6,181 and $7,081 respectively).

In the US, northeastern universities are extraordinarily expensive compared to those in the rest of the country. Although the area is best known for its Ivy League institutions, where COA can exceed $42,000 ($35,000 US), northeastern public institutions are also the most expensive in the nation. Room and board charges at US institutions averaged $6,243 ($5,149 US) and ranged from $4,200 to over $8,000. The average US COA in 1999-00 was $10,494 ($8,655 US). The most expensive state for COA was Vermont at $15,563 ($12,836 US). Oklahoma was the least expensive, with an annual COA of $7,275 ($6,000 US).

PART IV. STUDENT ASSISTANCE FOR UNIVERSITY STUDENTS

STUDENT ASSISTANCE FOR UNIVERSITY STUDENTS

This report considers three forms of public student assistance: grants, loans, and work-study programs. Most aid comes in the form of grants and loans, the latter of which grew precipitously during the 1990s in both Canada and the US.

Data regarding the various US programs are generally accurate, thanks to several governmental and non-governmental organizations that have consistently "counted" student aid for a number of years. The US Department of Education collects federal student aid data,[8] while the National Association of State Student Grant and Aid Programs (NASSGAP) collects state aid data.[9] In addition, the College Board[10] conducts annual national companion reports on student aid and post-secondary pricing.

Canadian data is neither as reliable nor as systematic as American data. Our analysis in this report is significantly hampered by our inability to collect student aid data from several of the provinces. These data gaps severely limit policy makers' ability to base their decisions on sound research and analysis. Until the federal government and provinces can work out a systematic process for counting student aid, this may be as good as it gets.

[8] The U.S. Department of Education provides annual reports on all of its major student aid programs, including Pell Grants, FFEL loans, and campus-based programs. Visit www.ed.gov/offices/OPE/Data to download reports.
[9] Visit NASSGAP's website (www.nassgap.org) to download its annual report, Annual NASSGAP Survey Report: State-Funded Scholarship/Grant Programs for Students to Attend Postsecondary Education Institutions.
[10] Download the companion reports "Trends in Student Aid" and "Trends in College Pricing" from www.collegeboard.org.

GRANT PROGRAMS

Canadian Grant Programs. The two major federal grant programs in Canada are relatively new. The Canada Study Grant (CSG) program began disbursing funds during the mid-1990s, while the Canada Millennium Scholarship Foundation began distributing bursaries during the 1999-2000 academic year.

In 2000-01, the Canada Study Grant program provided $41 million to 26,266 university students across Canada, resulting in an average grant of $1,578. The size of the grants varied only slightly from province to province due to standard regulations on the disbursement of funds. Ontario had the most recipients and the largest volume of grants.

Parliament established the Canada Millennium Scholarship Foundation to celebrate the new millennium by creating a $2.5 billion scholarship fund as a non-governmental, non-profit subsidiary over a 10-year period. This money must be spent by 2009. The Foundation instantly became the largest grant program in the nation. It is also the only truly national student aid program in that it enjoys the full participation of all provinces and territories. Exhibit 14 shows the Foundation's data for university students in the academic year 2000-01.

The $179 million distributed by the Foundation in 2000-01 was over four times the amount of money distributed by Canada Study Grants for the year. In addition, the average millennium bursary was twice as large ($3,177) as the average Canada Study Grant.

Exhibit 14. Canada Millennium Scholarship Foundation Bursary statistics for university students, 2000-01.

Jurisdiction	Total funds distributed	# of Bursaries	Average Bursary
CANADA	179,125,741	56,389	3,177
Newfoundland/Labrador	4,178,362	1,642	2,545
Prince Edward Island	1,083,656	381	2,844
Nova Scotia	7,173,023	2,304	3,113
New Brunswick	5,304,192	1,825	2,906
Quebec	47,248,248	13,546	3,488
Ontario	70,867,416	21,995	3,222
Manitoba	7,953,723	2,267	3,508
Saskatchewan	6,862,401	2,636	2,603
Alberta	14,363,003	5,634	2,549
British Columbia	14,091,719	4,159	3,388

SOURCE: Canada Millennium Scholarship Foundation program data (2003).

Exhibit 15. Provincial grant, scholarship, and remission aid to university students, 2000-01.

Jurisdiction	Grant Volume	Scholarship Volume	Remission Volume
CANADA	175,992,075	50,183,581	197,858,545
Newfoundland/Labrador	0	0	0
Prince Edward Island	0	0	859,254
Nova Scotia	0	0	0
New Brunswick	3,062,394	0	0
Quebec	108,900,000	0	1,152,000
Ontario	10,426,051	22,579,526	156,599,478
Manitoba	1,158,430	0	3,091,417
Saskatchewan	11,699,871	150,750	10,593,877
Alberta	8,142,000	18,065,354	17,710,000
British Columbia	32,603,329	9,387,950	7,852,520

SOURCE: Canada Millennium Scholarship Foundation program data (2003).

In addition to federal grant aid, most provinces operate their own grant programs. Quebec opts out of the Canada Study Grants program and receives an alternative payment to assist in funding their student aid system. In 2000-01, Quebec provided over $109 million in grant aid to university students, compared to British Columbia's $33 million (Exhibit 15). The provinces also made $50 million in scholarships available to Canadian university students. Four provinces provide scholarship aid: Alberta provided over $18 million, only slightly less than Ontario's total ($23 million).

Exhibit 15 also provides data on provincial remission programs, which together account for $198 million, or approximately 18 percent of all provincial aid. The vast majority of this aid, $157 million, was issued in Ontario. Although remission programs do not increase the value of a student's award, they do reduce the amount of repayable assistance (loan) that a student is responsible.

Comparatively, Canadian federal and provincial governments made $644 million in grant aid[11] available to university students in 2000-01, averaging $955 per university FTE student. New Brunswick had the highest

[11] Includes remission programs but not institutional aid.

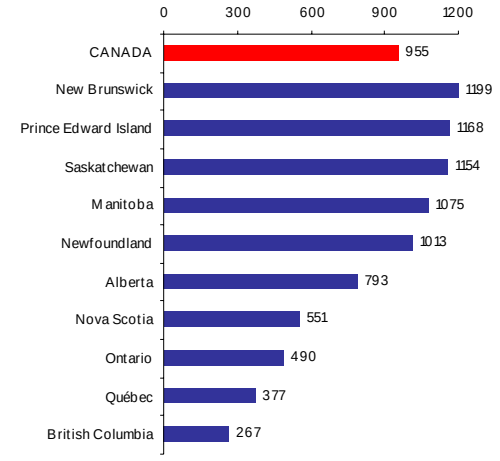
average amount ($1,199) and British Columbia had the lowest ($267).

US Grant Programs. In the US, federal and state sources provide a myriad of grant programs. The federal Pell Grant program, originated in 1972, constitutes the largest grant program in the country. Pell Grants are need-based grants for low-income undergraduate students. The program has become the US's premier mechanism for reducing the cost of post-secondary education for poor students. In 2000-01, the federal government distributed over $9.6 billion ($8 billion US) in Pell Grants to post-secondary students. Some $3.5 billion ($2.9 billion US) of this went to 1.4 million public university students, producing an average Pell Grant of $2,589 ($2,135 US). Although Pell Grants are still a mainstay of the student aid system in the US, they have lost considerable purchasing power due to large increases in tuition fees during the 1980s and 90s. New loan programs and increased loan amounts have largely filled the resulting aid gap.

Other federal need-based grant programs build on the Pell Grant foundation. The Supplementary Educational Opportunity Program (SEOG) provided $380 million to almost half a million public university students in 2000-01. The LEAP program (Leveraging Educational Assistance Program[12]) is a federal program that matches state funding. LEAP provided $45 million to states in 2001-02, leveraging $90 million in need-based aid at the state level. LEAP has been plagued by uneven funding for several years, and as such is not considered a primary program. Several other agencies also provide grants, but their programs tend to be small and whose data can be more difficult to collect. For instance, approximately $305 million ($252 million US) came from "other federal grant programs" in 2000-01, and over $2 billion ($1.6 billion US) of student aid was distributed to veterans. However, we are unable to break these figures down by state.

States play an important role in student assistance in the US. In 2000-01, states provided over $7.2 billion ($5.9 billion US) in aid to post-secondary students during 2000-01, mostly in the form of grants ($5.7 billion; $4.7 billion US). We estimate that approximately $2.5 billion of state grant aid and an additional $671 million in assorted state aid was made available to public four-year students in 2000-01.

Exhibit 16. Average Canadian federal and provincial grant aid per FTE, 2000

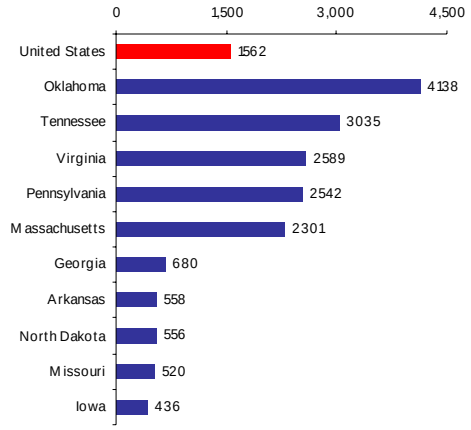


SOURCE: Calculation of data from various sources within this report.

In the US, $7.7 billion ($6.4 billion US) in federal and state grant aid was available to university students in 2000-01, averaging $1,562 ($1,288 US) per university FTE student. The US, therefore, provides almost 50 percent more grant aid per student as do Canadian governments.

[12] Prior to the 1998 reauthorization of the Higher Education Act of 1965, LEAP was known as the State Student Incentive Grant, or SSIG. Despite the name change, the program itself remained unchanged.

Exhibit 17. Average US federal and state grant aid per FTE, 2000 (top and bottom 5 states) (PPP Adjusted)



SOURCE: Calculation of data from various sources within this report.

INSTITUTIONAL AID

Most public universities provide some form of financial aid to students, typically in a form of a grant, scholarship, bursary, or, as we have seen in the US, tuition discounts. These funds generally come from endowments or special contributions from institutional contributors. Institutional aid does not include federal, provincial or state funds that the institution simply distributes.

Canadian universities provided students with $551 million in institutional aid in 2000-01. The corresponding figure from the US is $3.6 billion at public four-year institutions ($3.0 billion US).

When institutional aid is added into the calculation for total grant aid, the total grant aid available to Canadian university students is approximately $1.2 billion, or $1,772 per FTE. In the US, the addition of institutional aid pops the total grants available to four-year students to $11.3 billion ($9.3 billion US), for an average grant of $2,289 per FTE.

LOAN PROGRAMS

Canadian Loan Programs. The Canada Student Loan Program is the primary loan program in Canada. The federal government subsidizes the CSLP by paying loan interest during the course of study in a manner similar to that of the US Federal Family Education Loan Program (FFEL). The CSLP mainly targets full-time students, and has provided over $15 billion to Canadian students since its inception in 1964 (Junor and Usher, 2002, p. 105). Quebec, Nunavut, and the Northwest Territories opt out of the CSLP. Each jurisdiction receives an alternative payment and adds it into their overall student aid budgets. During 2000-01, 176,612 university students received $813 million in loans, averaging $4,601 per student. These figures dwarf those of the Millennium Scholarship and CSG grant programs.

Each province has its own loan program, although these programs differ greatly in size, scope, and purpose. Ontario has the largest loan program, providing $321 million in loan aid to university students in 2000-01. Quebec provided $171 million, Alberta $53 million, British Columbia $39 million and Saskatchewan and Newfoundland each provided $34 million in loan aid.

US Loan Programs. The US Department of Education provided almost $19 billion ($15.5 billion US) in federal loans to 2.6 million US public four-year students in 2000-01, averaging $7,248 ($5,978 US) per borrower. The Federal Family Educational Loan (FFEL) program is divided into three programs: the Subsidized Stafford program, the Unsubsidized Stafford program, and the PLUS (Parent Loans for Undergraduate Students). Almost half of all loan volume is subsidized. Forty percent of the FFEL loans are unsubsidized, and 11 percent are un-

subsidized loans to parents. During the 1990s, FFEL loan volume grew at aggressive rates. The FFEL program distributed over $46 billion ($38 billion US) to all post-secondary students in 2000-01, more than twice as much as in 1991-92. However, most of this growth took place in the unsubsidized programs. In 1991-92, 78 percent of all FFEL loans were subsidized. By 2000-01, only 48 percent of total FFEL volume was distributed through the subsidized FFEL programs.

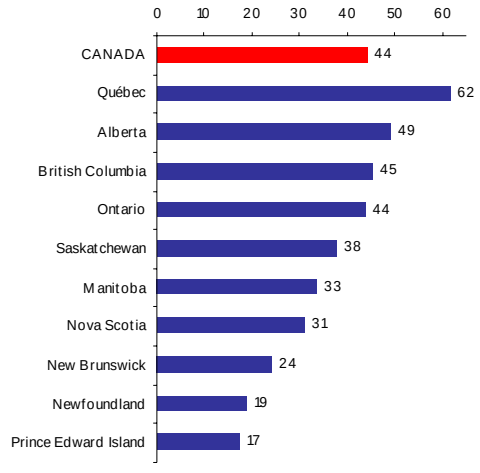
GRANTS VS. LOANS

In 2000-01, 44 percent of all Canadian student aid came in the form of grants, bursaries, or scholarships. Student loans made up the remainder. Quebec had the highest percentage (62 percent) of grants, followed by Alberta (49 percent) and British Columbia (45 percent). The Atlantic Provinces and Manitoba lack large grant programs; thus, grants make up a smaller percentage of total aid in these provinces.

Much is made in the US of the "grant/loan imbalance." This refers to the shift from a grant-based system to a loan-based system. In the 1970s, grants constituted almost 80 percent of total US student aid. This grants-based system was built on the Pell Grant program. The situation was reversed following the creation of an unsubsidized program in 1992. By the mid-1990s, 80 percent of all aid was in the form of loans. The rollicking economy of the late 1990s again stabilized this trend and allowed for a slight recovery for grants. Grants now make up 39 percent of total US aid to all post-secondary students (College Board, 2002, p. 12) and 36 percent of all federal, state, and institutional aid to university students.

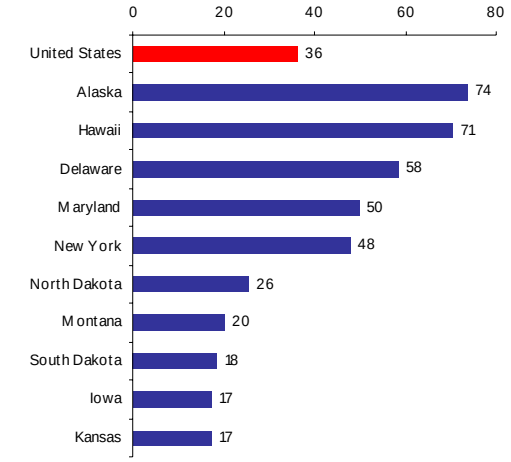
New York has the highest percentage of grants (50 percent), thanks mainly to its $770 million ($636 million US) Tuition Assistant Grant program. Illinois, Georgia and Florida also have high grant-to-loan ratios. At the lower end of the scale are New Hampshire, Delaware, and Montana.

Exhibit 18. Percent share of grants versus total grant and loan aid in Canada, 2000



SOURCE: Calculation of data from various sources within this report.

Exhibit 19. Percent share of grants versus total grant and loan aid in US, 2000 (top and bottom 5 states) (PPP Adjusted)



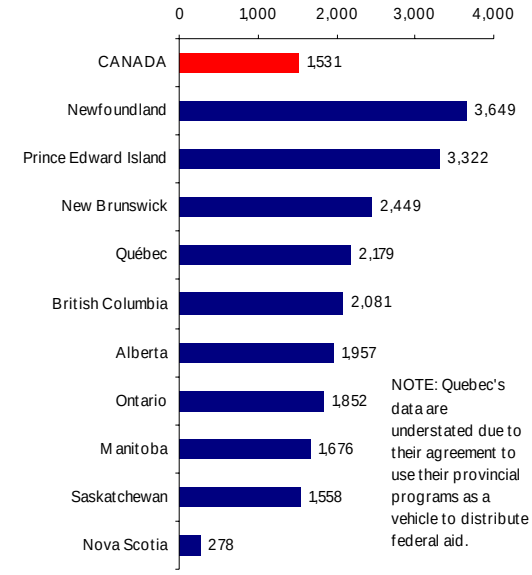
SOURCE: Calculation of data from various sources within this report.

In Canada, the same policy shift occurred (it just happened a little later). During the early 1990s, Canadian provinces shifted their student assistance programs from a grant-based to a loan-based system. The transformation of the system also resulted in the introduction of loan remission programs since students were receiving greater amounts of loans.

TOTAL AID

On an FTE basis, total federal aid in the US is considerably higher than Canadian aid. As can be seen in the following exhibits, Canadian federal aid averaged $1,531 per FTE in 2000, compared to $4,816 ($3,974 US). However, as illustrated, average aid per FTE varied greatly by province and state. Newfoundland & Labrador had the highest average federal aid per FTE at $3,643, followed by Prince Edward Island at $3,322. Nova Scotia had the lowest average federal aid per FTE ($278).

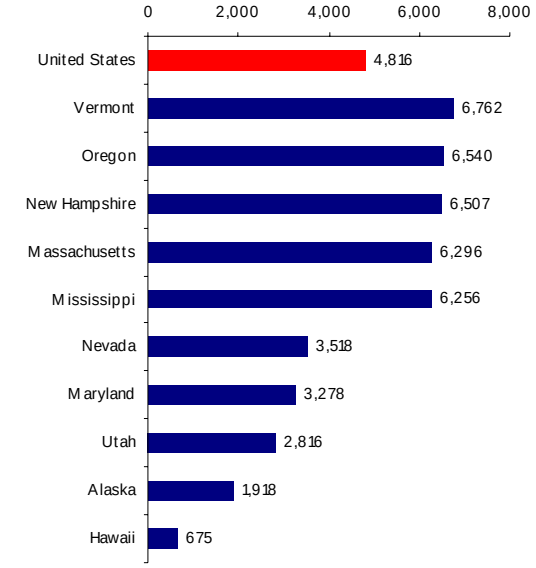
Exhibit 20. Canadian average federal aid per FTE, 2000



SOURCE: Calculation of data from various sources within this report.

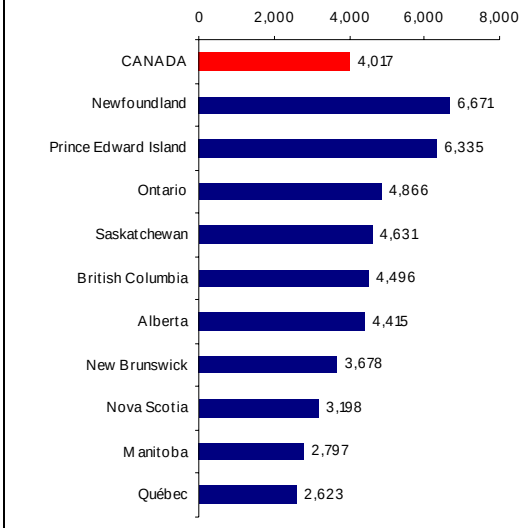
In the US, the average federal aid per FTE was $4,816 ($3,972 US). Vermont had an average federal aid per FTE of $6,762 ($5,577 US), followed closely by several other states, including North Dakota and Oregon. Hawaii is at the bottom end of the distribution at $675 ($557 US).

Exhibit 21. US average federal aid per FTE, 2000 (top and bottom 5 states) (PPP Adjusted)



SOURCE: Calculation of data from various sources within this report.

Exhibit 22. Canadian average federal, provincial, and institutional aid per FTE, 2000

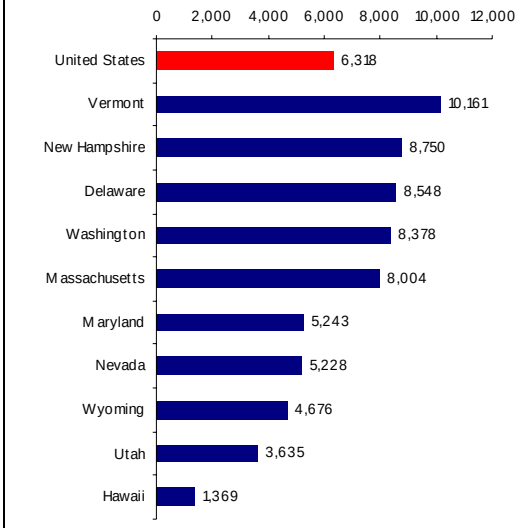


SOURCE: Calculation of data from various sources within this report.

When provincial, state, and institutional aid data are added to the analysis, the FTE averages increase significantly (Exhibit 22). In Canada, total aid averaged $4,017 per FTE, and ranged from as low as $2,326 in Quebec to $6,671 in Newfoundland & Labrador.

The US national average was $6,318 ($5,211 US) in 2000-01. Vermont had the highest total aid per FTE at $10,161, followed by New Hampshire ($8,750), Delaware ($8,548), and Washington ($8,378)—states with generally high tuition and fee charges. Hawaii is the lowest-aid state in the nation, with total aid per FTE of $1,369.

Exhibit 23. US average federal, state, and institutional aid per FTE, 2000 (top and bottom 5 states) (PPP Adjusted)



SOURCE: Calculation of data from various sources within this report.

OTHER SIGNIFICANT SOURCES OF AID

So far, we have compared provinces and states using similar data sources. But other significant sources of aid cannot be counted accurately at the state or provincial level, at least given current data resources. These sources add significantly to the total aid available to students and families, so they should be considered in this discussion.

Tax Credits. Both Canada and the US increasingly use their tax systems to help alleviate post-secondary education expenses. In 2000, the Canadian government committed over $1 billion in tax-related aid to students. Together with provincially-administered tax programs, total tax expenditures reached $1.75 billion in 2001 (Junor and Usher, 2002, p. 167). To put this in perspective, the total amount of federal and provincial need based aid to Canadian students was $2.1 billion. Tax expenditures have therefore become a significant source of cost relief to students and their families.

In 1997, the US Congress passed a tax law which provided over $4.9 billion US in tax relief in 2000-01 (College Board, 2002). Unlike Canadian tax programs, this benefit impacts only those who have tax liability, and therefore does not assist most low-income students. Individuals who save for future post-secondary costs can also benefit from one of 529 tax shelter plans. The use of these plans and of education IRAs is rising at a tremendous rate.

Critics of the use of the tax system as a student aid mechanism are quick to point out that credits and other tax benefits do not help students and families in the year that the higher education expenses are due and are generally not refundable.[13]

Alternative Loans. Many students and families are forced to find alternative ways to pay for post-secondary education. According to a 2002 survey sponsored by the Canada Millennium Scholarship Foundation, between 10 and 20 percent of all Canadian university and college students finance part of their post-secondary education with private loans and other borrowing mechanisms. More students than ever before are using credit cards to help with payments, with a median debt of $900 for Canadian students (Junor and Usher, 2002, p. 150). However, there is insufficient evidence to suggest that credit card use is a problem for students in either Canada or the US.

In the US, alternative loans, as they are commonly called, provide a secondary unsubsidized source of loan support. Such loans are available through banks or through several state providers. In 2000-01, these institutions loaned $4.1 billion US to students—a significant source of aid outside the traditional student aid system (College Board, 2002).

[13] If a taxpayer's tax liability reaches zero, this person normally has no use for any further tax credits or deductions. However, if a tax credit is "refundable," the taxpayer can receive the full amount of the credit, even if this means a negative amount of taxation (i.e., a cheque from the government). Canada allows students to carry over unused credits to future years. The U.S. system is strictly non-refundable.

PART V. INDICATORS OF UNIVERSITY AFFORDABILITY

INDICATORS OF UNIVERSITY AFFORDABILITY

So far this report has focused on the general costs and resources for education in Canada and the US. In this section, these data are combined to show the relative affordability of university-level education in both countries. We calculated two types of net cost of attendance by subtracting grant aid and total aid per FTE student from the average cost of attendance.

A few disclaimers are in order. First, the figures and statistics are composite averages which do not reflect the situation of individual students. The most accurate method of measuring affordability is through student-based analysis. Since much aid is provided through either merit- or need-based forms, some students and families must pay more for their education, while others pay significantly less. In the US, the National Center for Education Statistics, a division of the US Department of Education, conducts a student-based analysis every four years. The National Postsecondary Student Aid Study (NPSAS)[14] collects student-based data from institutions, student records, and student/parent income and tax information (through federal financial aid forms). These data provide an extraordinarily accurate foundation for analyzing university affordability and student debt. Canada has yet to undertake a study of this proportion or accuracy, so the empirical evidence of affordability is limited.

Second, we again caution that our cost of attendance (COA) variable does not include expenses such as travel and related subsistence costs not captured in room and board charges. Our COA figures are based on average costs of students who live on-campus. Costs are much lower for those who attend school locally.

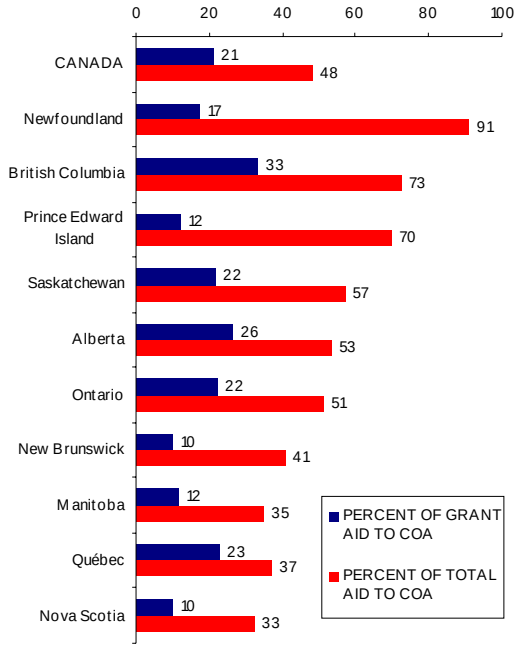
STUDENT AID VERSUS TOTAL COST OF ATTENDANCE (COA)

On average, total aid to students in Canada covered 48 percent of the average cost of attendance at the university level. Newfoundland & Labrador covered the highest percentage of COA (91 percent). Manitoba, Quebec, and Nova Scotia covered the smallest percentage of COA.

The picture changes slightly when we consider only total grant aid versus COA. Grant aid covers only 21 percent of average COA in Canada. The highest percentage of COA covered by grant aid is in British Columbia (33 percent) and Alberta (26 percent). Grant aid in Nova Scotia and New Brunswick covers only 10 percent of average COA.

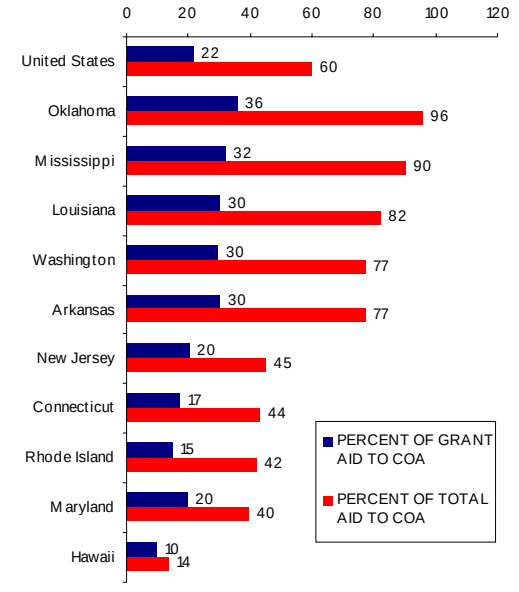
[14] The last NPSAS was conducted in the 1999-2000 academic year. The next iteration is due in 2004. Visit www.nces.ed.gov/surveys/npsas for analytical reports and other NPSAS information.

Exhibit 24. Canadian percentage of average grant aid and total aid per FTE as a percentage of average COA, 2000



SOURCE: Calculation of data from various sources within this report.

Exhibit 25. US percentage of average grant aid and total aid per FTE as a percentage of average COA, 2000 (top and bottom 5 states) (PPP Adjusted)



SOURCE: Calculation of data from various sources within this report.

In the US, total aid covered 60 percent of average COA. Oklahoma had the highest ratio of aid to COA at 96 percent. Hawaii sits at the bottom of the distribution.

Total average grant aid covers 22 percent of COA in the US, very similar to that in Canada. Alaska has the highest grant coverage of COA (45 percent). Other southern states, including Oklahoma and Mississippi, have high rates of grant coverage.

NET COST OF ATTENDANCE AND OUT-OF-POCKET EXPENSES

This report uses two measures of cost of attendance. The first we call "net cost," which is equal to average total cost minus average total grant aid. The second figure is "out-of-pocket" expenses, calculated by subtracting average total aid from average total cost of attendance. By including loans in the calculation, out-of-pocket expenses show how much money students and their families must come up with in order to attend university. These resources usually come in the form of parental savings, work-study and other employment (by students and parents), and/or private loans.

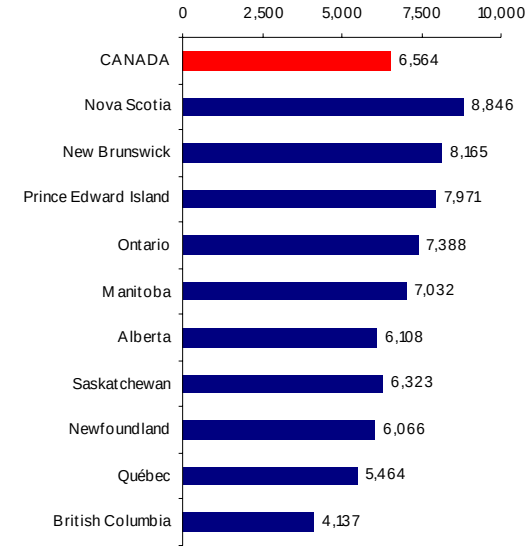
Net Cost of Attendance

Net cost is an important indicator of affordable university education. The actual cost (tuition minus grant assistance) of a student's education can have an impact on where to attend school and what to study.

The average net cost of attending university in Canada was $6,564 in 2000-01, compared to $8,205 ($6,767 US) in the US. Nova Scotia had the highest net COA at $8,846, followed by New Brunswick and P.E.I. British Columbia had the lowest net COA at $4,137. In the US, New Jersey re-

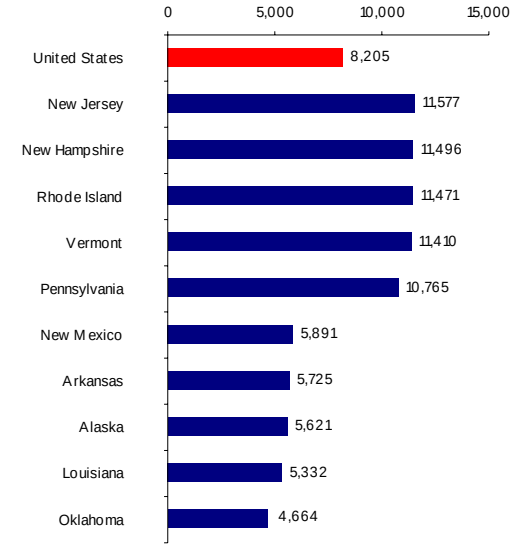
corded the highest average net COA at $11,577 ($9,548 US), followed by the other northeastern states, including New Hampshire, Rhode Island, and Vermont. The lowest net COA state was Oklahoma at $4,664 ($3,847 US).

Exhibit 26. Canadian net cost of attendance (COA minus grant aid), 2000



SOURCE: Calculation of data from various sources within this report.

Exhibit 27. US net cost of attendance (COA minus grant aid), 2000 (top and bottom 5 states) (PPP Adjusted)



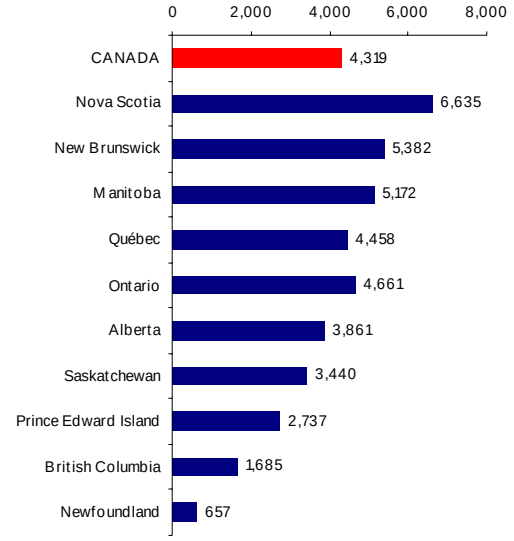
SOURCE: Calculation of data from various sources within this report.

Out-of-Pocket Expenses

In 2000-01, the average out-of-pocket expense (COA minus total aid) in Canada was $4,319, compared with $4,176 ($3,444 US) in the US. The highest out-of-pocket expense was in Nova Scotia at $6,635, while Newfoundland & Labrador had the lowest out-of-pocket expense at $657.

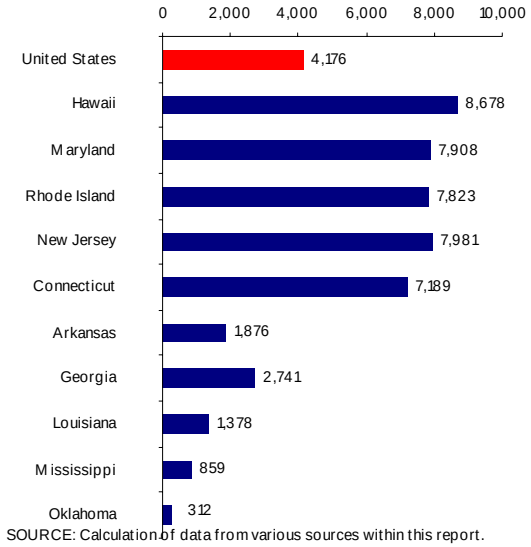
Hawaii had the highest average out-of-pocket expense in the US at $8,678 ($7,157 US). Oklahoma had the lowest out-of-pocket expense at $312 ($258 US).

Exhibit 28. Canadian out-of-pocket expenses (COA minus total aid), 2000



SOURCE: Calculation of data from various sources within this report.

Exhibit 29. US out-of-pocket expenses (COA minus total aid), 2000 (top and bottom 5 states) (PPP Adjusted)



SOURCE: Calculation of data from various sources within this report.

COST OF ATTENDANCE AND MEDIAN FAMILY INCOME

Comparing COA and net COA with the financial means of individuals and families provides yet another perspective on affordability. In Exhibit 30 and Exhibit 31, we compare three variations of cost to median family income (MFI) figures for the various provinces and states; COA vs. MFI, net COA (COA minus grants) vs. MFI, and out-of-pocket expenses (COA minus total aid) vs. MFI.

If we could freeze reality for a moment and suspend the student aid system, Canadian families would have had to spend 17 percent of their income (on average) to cover the average COA at a university. The Atlantic Provinces had the highest ratio, with COA requiring 20 to 23 percent of MFI. British Columbia ranked at the lower end of the scale, at 13 percent.

The US ratio of COA to MFI was almost identical to Canada's, with the state of Vermont at the high end (26 percent) and Utah at the low end (13 percent).

Grant aid does not always significantly reduce the net cost of university education, although grants make a bigger difference in the US thanks to additional sources of federal and state grant aid. In Canada, the ratio of net COA to MFI was 14 percent, only 3.5 percent less than the COA calculation. The Atlantic Provinces remain the least affordable areas to study in the country, with net COA equal to 20 to 23 percent of MFI. In this analysis, British Columbia ranks as the most affordable province for higher education, with net COA representing 8 percent of MFI.

The US ratio of net COA to median family income is identical to Canada's. In Vermont,

19 percent of median family income is required for one year of study, whereas in Alaska, the financial requirements are less than half as those in Vermont (8 percent).

It is only when all student aid (grants and loans) is considered that we find a reduction in out-of-pocket financial burdens for families in any of our jurisdictions. In Canada, 9 percent of MFI is required to cover out-of-pocket expenses. In other words, university students and their families, on average, must provide 9 percent of their family income to pay for total cost of attendance each year—after all aid is considered. We caution again that these are gross averages and do not provide specific information on individual students. Nova Scotians have the greatest out-of-pocket burden at 16 percent, whereas people in Newfoundland & Labrador only have to come up with 2 percent of MFI. In both Newfoundland & Labrador and P.E.I., loans play a significant role in reducing the burden.

This ratio is further reduced in the US, where only 7 percent of MFI is required to cover out-of-pocket expenses. Hawaii requires the largest out-of-pocket funding (13 percent), while Oklahoma's out-of-pocket expenses, on average, are almost negligible (0.6 percent). The larger reduction in the US is due primarily to the widespread availability of loans in tandem with the larger availability of grant aid.

Exhibit 30. Canadian COA, net COA, and out-of-pocket expenses as a share of median family income, 2000

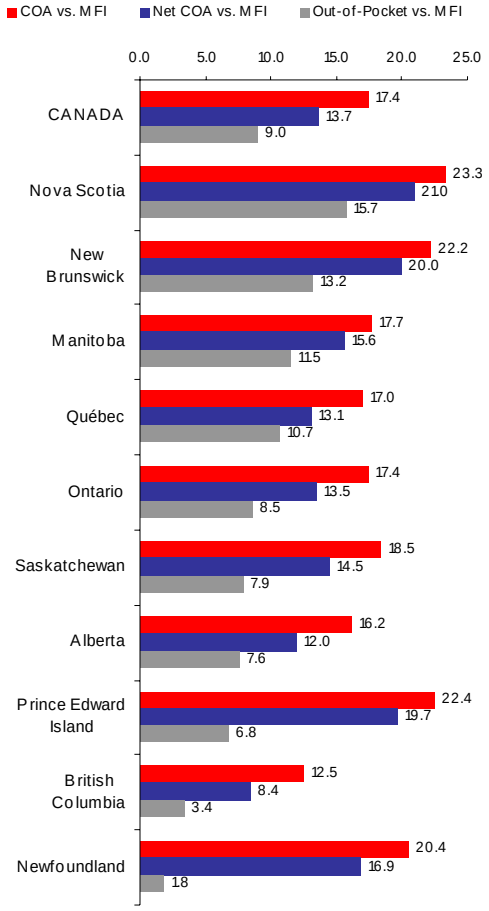
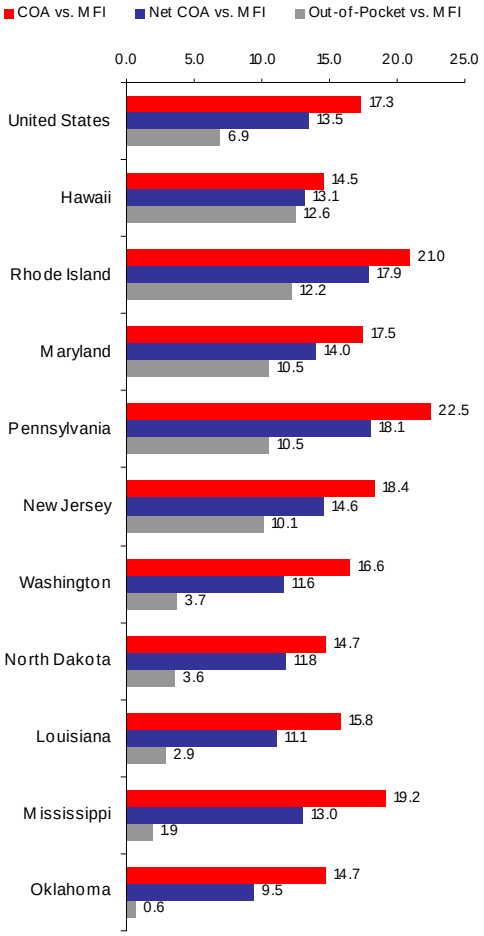


Exhibit 31. US COA, net COA, and out-of-pocket expenses as a share of median family income, 2000 (top and bottom 5 states) (PPP Adjusted)



PART VI. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS AND RECOMMENDATIONS

This study was commissioned to compare access to and affordability of university-level education by province and state. Although Canada and the US have strikingly similar high school graduation rates and post-secondary participation rates, the US clearly sends a greater percentage of students to university than Canada does.

Tuition, fees, and the total cost of attendance are considerably lower in Canada than in the US (about 25 percent lower after correcting for purchasing power). Even after dramatic increases in tuition and fee charges across Canada in the 1990s, tuition and fees at the university level are still quite a bargain compared to those in the US.

However, as stated earlier in this report, tuition, fees, and cost of attendance are only part of the affordability picture. Although these charges are much higher in the US, so is the amount of aid available to students. On average, public university students received 30 percent more grant aid in the US as students in Canada. Similarly, US students borrowed significantly more than Canadian students ($2,245 in Canada versus $3,944 in the US; a 76 percent difference). In other words, more loan aid is available to US students. While no one wishes to see students borrow too much, at least the mechanisms in the US offer students an opportunity to borrow enough.

The federal government plays a much more significant role in the US than it does in Canada. On average, the Canadian FTE student received $1,531 in federal aid in 2000-01. The US FTE received over twice that much—$4,816 ($3,972 US).

In terms of total aid, Canadian students received over $4,000 in aid per year compared to the $6,318 ($5,211 US) US students receive. Whereas total aid covers 48 percent of the bill in Canada, it covers 60 percent in the US.

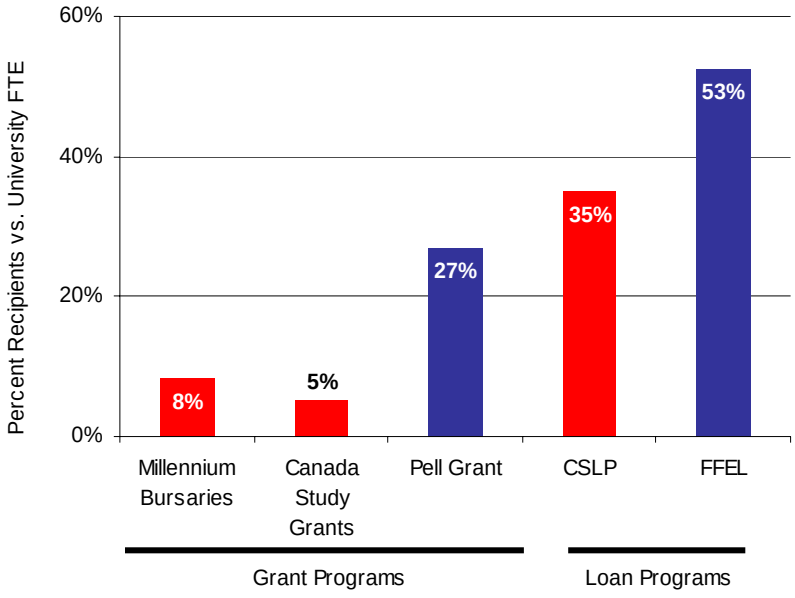
Canadians who assume that their university system is more affordable than the American system may be surprised to find out that the net cost (COA minus grants) of a university education in Canada is in striking distance of the US net cost. Even more shocking, the out-of-pocket expenses that a student and family must cover in Canada are higher than those in the US.

Exhibit 32. Summary of costs of university education in Canada and the US, 2000

	Canada	**US** (PPP Adjusted)	**% Difference**
Tuition and Fees	3,403	4,251	24.9%
Cost of Attendance	8,336	10,494	25.9%
Net COA	6,564	8,205	25.0%
Out-of-Pocket	4,319	4,176	-3.3%

One major difference between Canada and the US can be seen in the breadth of federal aid programs. The two main federal grant programs in Canada reach a small percentage of students compared to the Pell Grant in the US. While the Pell Grant reaches approximately 27 percent of university FTEs. The Foundation's funds and CSG funds are distributed to 8 and 5 percent[15] of FTEs, respectively. Federal government-sponsored loans are much more widely available in the US than in Canada, as evidenced by our calculation that 53 percent of university FTEs receive a FFEL loan in the States, compared to 35 percent of Canadian FTEs[16] that borrow through CSLP. Thus, not only does the US federal government provide more aid per FTE, but provides it to more FTEs in grant and loan programs.

Exhibit 33. Ratio of program recipients to FTE, by major aid program in Canada and the US, 2000



NOTE: Quebec FTE backed out of CSLP and CSG calculations since they do not participate.

Of course, these discussions are somewhat handicapped by the use of "average" rather than individual data. What our analysis doesn't illustrate is whether low-income students from other historically underrepresented groups are successfully completing high school and matriculating to university. Longitudinal and cross-sectional data from the US show large gaps in access by socio-economic grouping. Socio-economic status is more closely correlated with access in the US than any other factor, including race and ethnicity. We expect that socio-economic divisions in both nations and in all 60 jurisdictions remain a huge impediment to PSE access.

These data underscore a difference in policy between the US and Canada. Several US states operate on a high-tuition, high-aid model of funding, while Canada operates on a relatively low-cost, low-aid model. Public policy analysts argue the merits of either model, but the reality is that a high-tuition, high-aid model allows for a redistribution of funding that takes into consideration ability to pay. Under such a model, jurisdictional authorities can reduce subsidies to students and families who can afford to pay and redirect those funds to students who have greater financial need. The result is a more efficient system of funding that provides funding to those who truly need it. In a low-tuition, low-aid system, a general subsidy takes the place of targeted subsidies to needier students.

[15] Includes only university students accessing the Canada Study Grant in provinces participating in the Canada Student Loans Program.
[16] Includes only university students accessing the Canada Student Loans Program.

There is simply less flexibility for student aid under this type of system.

Recent cost increases in Canada suggest a move toward a high-cost system, while new programs such as the Canada Millennium Scholarship Foundation and the Canada Study Grants suggest a move toward a high-aid system. Still, the amount of aid available to Canadian students is not what it needs to be.

RECOMMENDATIONS

Based on our analysis, we conclude with three main recommendations for governmental and non-governmental policy analysts and researchers.

1. Further consider the policies of aid and costs at Canadian universities. First, policy thinkers need to re-examine the standard approaches to aid and costs at Canadian universities, especially since these are not insulated from other public policy issues. Health care is the dominant topic on the provincial and federal policy agendas, and the high cost of health care and care for the elderly will significantly cut into the discretionary spending that might have gone toward higher education. Higher education (and public education as a whole) traditionally loses in any competition against health care. As budgets get tighter with increasing health care costs, higher education faces significant challenges in Canada. This same scenario is playing out in the US, where there is even less reason for optimism. Almost every state is running a budget deficit, and the federal government has wavered on its commitment to student aid financing.

2. Increased data and research capacity. Canadian policy officials are severely hamstrung by the lack of data available to answer key policy questions. Thus, our second recommendation is that federal and provincial governments work together to develop an improved system of secondary and post-secondary data. While education falls under provincial jurisdiction in Canada, the need for a national database of key indicators of access and affordability outweighs the constitutional considerations. US data is much stronger and more reliable than Canadian post-secondary data. The US Department of Education collects data on many aspects of public and private education in the US, making information available to researchers and policymakers free of charge via the Web. The US government takes a similar approach to census data, labour data, and other indicators of economic and educational well-being. Even international agencies such as OECD and UNESCO provide unrestricted data access. Statistics Canada, on the other hand, charges substantial fees for its time-series data. This "user-pay" system potential reduces the number of faculty members and research groups able to conduct interesting and relevant research free-of-charge. More research is done in the United States, partly because data are made available for public use. From our perspective, lack of access to data severely limits research. This has a direct impact on Canada's ability to base its public policy based on sound research and analysis.

3. Educational quality. We also want to remind readers that this study does not deal with quality of education. It is possible that university education in Canada is significantly better than in the US, or the opposite could be true. Our discussion of affordability therefore tells us nothing about who gets better value for his or her money. During the 1990s, Canadian universities experienced large funding cuts (operating and capital) and those cuts impacted the level of service provided to students. These institutions cut faculty and staff, increased lecture sizes, limited their course schedules, and implemented other alterations that certainly lessened the quality of education. Similar trends occurred in the US, but these cuts appear to have been magnified in Canada. Quality is therefore a serious question for policy makers and for all Canadians. Higher education in Canada is less of a bargain than it used to be. But is it as good as it was? And for whom?

We hope that future reports can provide a more complete analysis of post-secondary opportunity in Canada, the US, and beyond. In the meantime, data from this study should act as a wake-up call for policy makers across both countries. Considerable steps must be made to make post-secondary education, especially university education, more affordable for students and families that need assistance.

Although the introduction of the Millennium Scholarships is worth celebrating, one must worry about what will happen after 2009 when the program sunsets. Will Parliament reaffirm its commitment to higher education? Will the economy of the time allow for it? In a nation that does not appear to be doing enough to make PSE affordable for all students, the possibility of losing a significant piece of the student aid puzzle should be particularly distressing to policy makers and the public.

Finally, the ultimate answer to these issues can only be found through increased dialogue among stakeholders at the institutional, provincial, state, and federal levels. We must acknowledge that the traditional jurisdictional battles regarding the "ownership" of public policy are hindering its development. It is our impression that Canada will not address the woes of PSE affordability until it achieves a new standard of policy debate and formulation.

APPENDIX

Appendix A. Data Tables

Appendix B. Major Program Definitions
Student Aid Programs in Canada
Student Aid Programs in the United States

Appendix C. Data Sources

Appendix D. Treatment of Fiscal Data
Purchasing Power Parity

APPENDIX A. DATA TABLES

		Per Capita Personal Income	Median Family Income	Personal Income (in billions)	Gross Domestic Product (in billions)	Total Resident Population
	CANADA	27,956	47,945	839	1,057	30,007,090
1	Newfoundland	20,938	35,856	11	14	512,930
2	Prince Edward Island	22,014	40,460	3	3	135,295
3	Nova Scotia	23,711	42,191	22	24	908,010
4	New Brunswick	23,136	40,799	17	20	729,500
5	Québec	26,045	41,737	188	223	7,237,480
6	Ontario	31,056	54,755	354	430	11,410,045
7	Manitoba	23,190	44,956	26	34	1,119,585
8	Saskatchewan	23,793	43,722	23	34	978,935
9	Alberta	28,223	51,020	84	143	2,974,805
10	British Columbia	28,325	49,334	111	128	3,907,735
	UNITED STATES	35,731	60,679	10,081	12,054	282,124,631
1	Alabama	28,519	50,508	127	145	4,451,493
2	Alaska	35,940	71,579	23	34	627,601
3	Arizona	30,297	56,650	156	190	5,165,274
4	Arkansas	26,668	46,878	71	82	2,678,030
5	California	38,979	64,291	1,325	1,630	34,000,446
6	Colorado	39,325	67,757	170	204	4,323,410
7	Connecticut	49,350	79,442	168	193	3,410,079
8	Delaware	37,601	66,998	30	44	786,234
9	Florida	33,664	55,319	540	572	16,054,328
10	Georgia	33,699	59,751	277	359	8,229,823
11	Hawaii	33,769	69,064	41	51	1,212,281
12	Idaho	28,768	52,730	37	45	1,299,258
13	Illinois	38,624	67,347	480	567	12,435,970
14	Indiana	32,655	60,940	199	233	6,089,950
15	Iowa	32,047	58,205	94	109	2,927,509
16	Kansas	33,191	60,168	89	103	2,691,750
17	Kentucky	29,202	49,637	118	144	4,047,424
18	Louisiana	27,996	48,225	125	167	4,469,970
19	Maine	30,772	54,778	39	44	1,276,961
20	Maryland	40,596	75,023	216	226	5,310,908
21	Massachusetts	45,715	74,766	291	345	6,357,072
22	Michigan	35,315	64,815	351	395	9,952,006
23	Minnesota	38,721	68,958	191	224	4,931,093
24	Mississippi	25,340	45,354	72	82	2,849,100
25	Missouri	32,986	55,827	185	217	5,603,553
26	Montana	27,302	49,089	25	26	903,157
27	Nebraska	33,501	58,237	57	68	1,712,577
28	Nevada	35,775	61,653	72	91	2,018,723
29	New Hampshire	40,217	69,808	50	58	1,239,881
30	New Jersey	45,005	79,259	379	440	8,429,007
31	New Mexico	26,591	47,802	48	66	1,821,282
32	New York	42,059	62,674	799	969	18,989,332
33	North Carolina	32,594	56,180	263	342	8,077,367
34	North Dakota	29,958	52,929	19	22	640,919
35	Ohio	33,921	60,668	385	452	11,359,955
36	Oklahoma	28,675	49,359	99	111	3,453,250
37	Oregon	33,537	59,023	115	144	3,429,293
38	Pennsylvania	35,773	59,634	439	490	12,282,591
39	Rhode Island	35,299	63,995	37	44	1,050,236
40	South Carolina	29,099	53,624	117	137	4,023,438
41	South Dakota	31,473	52,424	24	28	755,509
42	Tennessee	31,459	52,763	179	216	5,702,027
43	Texas	33,649	55,605	705	900	20,946,503
44	Utah	28,415	61,863	64	83	2,241,555
45	Vermont	32,552	58,956	20	22	609,709
46	Virginia	37,732	65,678	268	317	7,104,016
47	Washington	37,865	65,182	224	267	5,908,372
48	West Virginia	26,357	44,236	48	51	1,807,099
49	Wisconsin	34,071	64,153	183	210	5,372,243
50	Wyoming	33,187	55,392	16	23	494,001

** US Data has been adjusted using the OECD Purchasing Price Parity (PPP) Index. Canadian data is in Canadian dollars.*

		Per Capita Personal Income	Median Family Income	Personal Income (in billions)	Gross Domestic Product (in billions)	Total Resident Population
	CANADA	27,956	47,945	839	1,057	30,007,090
1	Newfoundland	20,938	35,856	11	14	512,930
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5	Québec	26,045	41,737	188	223	7,237,480
6	Ontario	31,056	54,755	354	430	11,410,045
7	Manitoba	23,190	44,956	26	34	1,119,585
8	Saskatchewan	23,793	43,722	23	34	978,935
9	Alberta	28,223	51,020	84	143	2,974,805
10	British Columbia	28,325	49,334	111	128	3,907,735
	UNITED STATES	29,469	50,046	8,314	9,942	282,124,631
1	Alabama	23,521	41,657	105	120	4,451,493
2	Alaska	29,642	59,036	19	28	627,601
3	Arizona	24,988	46,723	129	156	5,165,274
4	Arkansas	21,995	38,663	59	68	2,678,030
5	California	32,149	53,025	1,093	1,345	34,000,446
6	Colorado	32,434	55,883	140	168	4,323,410
7	Connecticut	40,702	65,521	139	159	3,410,079
8	Delaware	31,012	55,257	24	36	786,234
9	Florida	27,764	45,625	446	472	16,054,328
10	Georgia	27,794	49,280	229	296	8,229,823
11	Hawaii	27,851	56,961	34	42	1,212,281
12	Idaho	23,727	43,490	31	37	1,299,258
13	Illinois	31,856	55,545	396	467	12,435,970
14	Indiana	26,933	50,261	164	192	6,089,950
15	Iowa	26,431	48,005	77	90	2,927,509
16	Kansas	27,374	49,624	74	85	2,691,750
17	Kentucky	24,085	40,939	97	119	4,047,424
18	Louisiana	23,090	39,774	103	138	4,469,970
19	Maine	25,380	45,179	32	36	1,276,961
20	Maryland	33,482	61,876	178	186	5,310,908
21	Massachusetts	37,704	61,664	240	285	6,357,072
22	Michigan	29,127	53,457	290	325	9,952,006
23	Minnesota	31,935	56,874	157	185	4,931,093
24	Mississippi	20,900	37,406	60	67	2,849,100
25	Missouri	27,206	46,044	152	179	5,603,553
26	Montana	22,518	40,487	20	22	903,157
27	Nebraska	27,630	48,032	47	56	1,712,577
28	Nevada	29,506	50,849	60	75	2,018,723
29	New Hampshire	33,169	57,575	41	48	1,239,881
30	New Jersey	37,118	65,370	313	363	8,429,007
31	New Mexico	21,931	39,425	40	54	1,821,282
32	New York	34,689	51,691	659	799	18,989,332
33	North Carolina	26,882	46,335	217	282	8,077,367
34	North Dakota	24,708	43,654	16	18	640,919
35	Ohio	27,977	50,037	318	373	11,359,955
36	Oklahoma	23,650	40,709	82	92	3,453,250
37	Oregon	27,660	48,680	95	119	3,429,293
38	Pennsylvania	29,504	49,184	362	404	12,282,591
39	Rhode Island	29,113	52,781	31	36	1,050,236
40	South Carolina	24,000	44,227	97	113	4,023,438
41	South Dakota	25,958	43,237	20	23	755,509
42	Tennessee	25,946	43,517	148	178	5,702,027
43	Texas	27,752	45,861	581	742	20,946,503
44	Utah	23,436	51,022	53	69	2,241,555
45	Vermont	26,848	48,625	16	18	609,709
46	Virginia	31,120	54,169	221	261	7,104,016
47	Washington	31,230	53,760	185	220	5,908,372
48	West Virginia	21,738	36,484	39	42	1,807,099
49	Wisconsin	28,100	52,911	151	173	5,372,243
50	Wyoming	27,372	45,685	14	19	494,001

PART II. PARTICIPATION

		Total 18-24 Year Old Population	Number of High School Graduates	Ratio of HS Grads vs. 18-24 Year olds	High School Graduate Rate for 22-24 year old population	PSE Continuation Rate	FTE at Universities	FTE at Universities (including private US)	FTE as Percent of 18-24 Year Old Population	FTE PER 1,000 PERSONS
		2001	*1999*		*1995*	*1999*	*1999-00*	*1999-00*	*1999-00*	*1999-00*
	CANADA	2,957,118	316,810	11	85	57	674,756	674,756	23	22
1	Newfoundland	53,652	6,715	13	79	58	13,933	13,933	26	27
2	Prince Edward Island	13,737	1,643	12	80	58	2,823	2,823	21	21
3	Nova Scotia	87,837	10,161	12	85	63	32,512	32,512	37	36
4	New Brunswick	71,835	8,778	12	86	58	19,644	19,644	27	27
5	Québec	705755	82,200	12	81	70	169,751	169,751	24	23
6	Ontario	1,092,410	116,913	11	88	51	262,210	262,210	24	23
7	Manitoba	109,852	11,829	11	84	49	24,042	24,042	22	21
8	Saskatchewan	104,557	11,838	11	87	51	26,790	26,790	26	27
9	Alberta	321,186	27,386	9	86	46	61,335	61,335	19	21
10	British Columbia	385,668	39,331	10	86	54	61,892	61,892	16	16
	UNITED STATES	26,012,000	2,542,398	10	86	57	4,944,554	7,638,976	29	18
1	Alabama	440,000	39,377	9	84	58	106,355	129,050	24	24
2	Alaska	71,000	6,705	9	89	44	16,097	16,742	23	26
3	Arizona	460,000	36,310	8	77	50	86,582	125,862	19	17
4	Arkansas	251,000	27,335	11	85	53	57,367	68,021	23	21
5	California	3,319,000	321,371	10	81	48	464,658	710,854	14	14
6	Colorado	393,000	35,193	9	86	53	109,956	138,905	28	25
7	Connecticut	256,000	30,300	12	92	62	44,405	92,034	17	13
8	Delaware	69,000	6,669	10	90	60	21,406	27,645	31	27
9	Florida	1,236,000	104,555	8	84	58	182,007	285,407	15	11
10	Georgia	774,000	64,738	8	85	60	134,719	196,788	17	16
11	Hawaii	120,000	10,023	8	93	60	17,249	28,761	14	14
12	Idaho	144,000	16,200	11	86	45	33,696	36,405	23	26
13	Illinois	1,143,000	103,174	9	87	60	163,870	319,329	14	13
14	Indiana	576,000	58,173	10	89	60	153,878	214,379	27	25
15	Iowa	282,000	33,888	12	88	65	60,950	103,461	22	21
16	Kansas	271,000	29,082	11	92	68	72,499	87,223	27	27
17	Kentucky	405,000	36,620	9	85	59	86,156	111,163	21	21
18	Louisiana	481,000	38,022	8	82	59	127,210	153,354	26	28
19	Maine	111,000	13,581	12	92	54	24,137	36,807	22	19
20	Maryland	442,000	48,538	11	94	55	91,887	126,327	21	17
21	Massachusetts	513,000	50,000	10	91	69	78,702	274,195	15	12
22	Michigan	928,000	99,000	11	91	59	219,679	292,081	24	22
23	Minnesota	454,000	52,500	12	90	64	90,791	144,446	20	18
24	Mississippi	302,000	24,065	8	83	63	54,665	64,121	18	19
25	Missouri	520,000	52,569	10	90	53	97,598	180,523	19	17
26	Montana	89,000	10,757	12	91	54	28,219	31,618	32	31
27	Nebraska	170,000	19,763	12	91	59	44,213	62,155	26	26
28	Nevada	156,000	13,665	9	77	40	26,076	28,617	17	13
29	New Hampshire	98,000	11,725	12	89	59	20,932	42,413	21	17
30	New Jersey	673,000	69,994	10	92	64	109,907	159,886	16	13
31	New Mexico	176,000	18,445	10	79	59	40,454	47,131	23	22
32	New York	1,619,000	142,000	9	85	64	269,086	631,037	17	14
33	North Carolina	709,000	61,887	9	86	65	138,499	204,757	20	17
34	North Dakota	69,000	8,409	12	95	69	24,046	27,723	35	38
35	Ohio	1,065,000	111,000	10	90	56	217,850	322,877	20	19
36	Oklahoma	343,000	36,603	11	87	50	78,911	97,647	23	23
37	Oregon	312,000	29,800	10	75	51	57,903	81,183	19	17
38	Pennsylvania	1,025,000	114,790	11	88	62	208,225	404,416	20	17
39	Rhode Island	84,000	8,580	10	86	66	17,971	50,049	21	17
40	South Carolina	393,000	32,800	8	88	66	73,915	99,707	19	18
41	South Dakota	78,000	9,072	12	91	64	23,258	29,670	30	31
42	Tennessee	520,000	40,911	8	86	62	100,726	150,909	19	18
43	Texas	2,100,000	214,953	10	81	53	346,305	442,125	16	17
44	Utah	301,000	31,482	10	91	38	65,669	100,368	22	29
45	Vermont	53,000	6,348	12	93	45	13,767	27,302	26	23
46	Virginia	673,000	65,401	10	86	53	146,813	196,639	22	21
47	Washington	558,000	59,226	11	87	45	82,373	116,286	15	14
48	West Virginia	179,000	18,773	10	89	52	58,016	66,917	32	32
49	Wisconsin	508,000	59,099	12	91	57	128,938	173,094	25	24
50	Wyoming	54,000	6,420	12	88	52	9,368	9,368	17	19

		Tuition & Fees Four-Year Institutions/Universities	Room & Board	Cost of Attendance Four-Year Institutions/Universities
	CANADA	3,403	4,933	8,336
1	Newfoundland	3,420	3,908	7,328
2	Prince Edward Island	3,499	5,573	9,072
3	Nova Scotia	4,626	5,207	9,833
4	New Brunswick	3,585	5,475	9,060
5	Québec	1,843	5,239	7,081
6	Ontario	4,221	5,305	9,527
7	Manitoba	3,221	4,747	7,968
8	Saskatchewan	3,676	4,396	8,071
9	Alberta	3,903	4,373	8,276
10	British Columbia	2,555	3,626	6,181
	UNITED STATES	4,251	6,243	10,494
1	Alabama	3,622	5,275	8,897
2	Alaska	3,560	6,608	10,168
3	Arizona	2,844	6,700	9,545
4	Arkansas	3,645	4,587	8,231
5	California	3,105	8,525	11,630
6	Colorado	3,613	6,523	10,136
7	Connecticut	5,508	7,237	12,746
8	Delaware	5,816	6,660	12,476
9	Florida	2,867	6,764	9,632
10	Georgia	3,271	5,768	9,039
11	Hawaii	3,606	6,441	10,047
12	Idaho	3,185	5,015	8,200
13	Illinois	5,064	6,494	11,558
14	Indiana	4,589	6,604	11,194
15	Iowa	3,829	5,372	9,201
16	Kansas	3,197	4,866	8,063
17	Kentucky	3,514	4,878	8,392
18	Louisiana	3,362	4,281	7,643
19	Maine	5,164	6,186	11,350
20	Maryland	5,793	7,357	13,150
21	Massachusetts	4,854	6,308	11,162
22	Michigan	5,609	6,323	11,932
23	Minnesota	4,879	4,998	9,877
24	Mississippi	3,597	5,109	8,707
25	Missouri	4,702	5,242	9,943
26	Montana	3,730	5,494	9,223
27	Nebraska	3,755	5,138	8,893
28	Nevada	2,848	7,157	10,005
29	New Hampshire	7,827	6,380	14,207
30	New Jersey	6,798	7,749	14,547
31	New Mexico	3,184	5,406	8,590
32	New York	4,925	7,508	12,433
33	North Carolina	2,787	5,797	8,584
34	North Dakota	3,562	4,204	7,766
35	Ohio	5,747	6,922	12,669
36	Oklahoma	2,737	4,538	7,275
37	Oregon	4,426	6,968	11,394
38	Pennsylvania	7,175	6,267	13,443
39	Rhode Island	5,471	7,993	13,463
40	South Carolina	5,679	5,312	10,991
41	South Dakota	4,227	4,235	8,462
42	Tennessee	3,577	5,712	9,289
43	Texas	3,399	5,857	9,256
44	Utah	2,721	5,309	8,030
45	Vermont	8,650	6,914	15,563
46	Virginia	4,514	6,088	10,602
47	Washington	4,370	6,442	10,812
48	West Virginia	3,089	5,746	8,835
49	Wisconsin	4,139	4,815	8,954
50	Wyoming	3,122	5,386	8,508

** US Data has been adjusted using the OECD Purchasing Price Parity (PPP) Index. Canadian data is in Canadian dollars.*

		Tuition & Fees Four-Year Institutions/Universities	Room & Board	Cost of Attendance Four-Year Institutions/Universities
	CANADA	3,403	4,933	8,336
1	Newfoundland	3,420	3,908	7,328
2	Prince Edward Island	3,499	5,573	9,072
3	Nova Scotia	4,626	5,207	9,833
4	New Brunswick	3,585	5,475	9,060
5	Québec	1,843	5,239	7,081
6	Ontario	4,221	5,305	9,527
7	Manitoba	3,221	4,747	7,968
8	Saskatchewan	3,676	4,396	8,071
9	Alberta	3,903	4,373	8,276
10	British Columbia	2,555	3,626	6,181
	UNITED STATES	3,506	5,149	8,655
1	Alabama	2,987	4,351	7,338
2	Alaska	2,936	5,450	8,386
3	Arizona	2,346	5,526	7,872
4	Arkansas	3,006	3,783	6,789
5	California	2,561	7,031	9,592
6	Colorado	2,980	5,380	8,360
7	Connecticut	4,543	5,969	10,512
8	Delaware	4,797	5,493	10,290
9	Florida	2,365	5,579	7,944
10	Georgia	2,698	4,757	7,455
11	Hawaii	2,974	5,312	8,286
12	Idaho	2,627	4,136	6,763
13	Illinois	4,177	5,356	9,533
14	Indiana	3,785	5,447	9,232
15	Iowa	3,158	4,431	7,589
16	Kansas	2,637	4,013	6,650
17	Kentucky	2,898	4,023	6,921
18	Louisiana	2,773	3,531	6,304
19	Maine	4,259	5,102	9,361
20	Maryland	4,778	6,068	10,846
21	Massachusetts	4,003	5,203	9,206
22	Michigan	4,626	5,215	9,841
23	Minnesota	4,024	4,122	8,146
24	Mississippi	2,967	4,214	7,181
25	Missouri	3,878	4,323	8,201
26	Montana	3,076	4,531	7,607
27	Nebraska	3,097	4,238	7,335
28	Nevada	2,349	5,903	8,252
29	New Hampshire	6,455	5,262	11,717
30	New Jersey	5,607	6,391	11,998
31	New Mexico	2,626	4,459	7,085
32	New York	4,062	6,192	10,254
33	North Carolina	2,299	4,781	7,080
34	North Dakota	2,938	3,467	6,405
35	Ohio	4,740	5,709	10,449
36	Oklahoma	2,257	3,743	6,000
37	Oregon	3,650	5,747	9,397
38	Pennsylvania	5,918	5,169	11,087
39	Rhode Island	4,512	6,592	11,104
40	South Carolina	4,684	4,381	9,065
41	South Dakota	3,486	3,493	6,979
42	Tennessee	2,950	4,711	7,661
43	Texas	2,803	4,831	7,634
44	Utah	2,244	4,379	6,623
45	Vermont	7,134	5,702	12,836
46	Virginia	3,723	5,021	8,744
47	Washington	3,604	5,313	8,917
48	West Virginia	2,548	4,739	7,287
49	Wisconsin	3,414	3,971	7,385
50	Wyoming	2,575	4,442	7,017

		CSLP VOLUME	NUMBER OF CSLP LOANS	NUMBER OF CSLP BORROWERS	AVERAGE TOTAL CSLP FUNDS PER BORROWER	AVERAGE CSLP LOAN
	CANADA	812,583,582	N/A	176,612	4,601	N/A
1	Newfoundland	41,024,688	N/A	9,374	4,376	N/A
2	Prince Edward Island	8,922,600	N/A	2,059	4,333	N/A
3	Nova Scotia	58,988,939	N/A	11,336	5,204	N/A
4	New Brunswick	41,546,496	N/A	8,690	4,781	N/A
5	Québec	0	0	0	0	0
6	Ontario	393,354,971	N/A	85,420	4,605	N/A
7	Manitoba	28,468,422	N/A	6,778	4,200	N/A
8	Saskatchewan	42,762,269	N/A	9,365	4,566	N/A
9	Alberta	84,549,186	N/A	19,808	4,268	N/A
10	British Columbia	112,424,064	N/A	23,669	4,750	N/A

		Federal Loan Volume 4yr public	Loans 4yr public	Borrowers 4yr public	Average federal loan per borrower	Average federal loan
	UNITED STATES	18,858,461,600	4,125,463	2,601,964	7,248	4,571
1	Alabama	452,266,381	100,328	59,517	7,599	4,508
2	Alaska	24,862,945	5,807	3,338	7,448	4,282
3	Arizona	370,573,247	65,600	42,707	8,677	5,649
4	Arkansas	209,301,862	49,326	29,288	7,146	4,243
5	California	1,573,766,507	311,102	223,173	7,052	5,059
6	Colorado	415,897,566	82,952	54,249	7,666	5,014
7	Connecticut	141,625,474	30,895	21,821	6,490	4,584
8	Delaware	72,003,144	13,414	10,387	6,932	5,368
9	Florida	662,200,148	163,756	83,693	7,912	4,044
10	Georgia	493,810,795	113,828	70,421	7,012	4,338
11	Hawaii	3,206,597	374	347	9,241	8,574
12	Idaho	120,746,432	27,638	18,682	6,463	4,369
13	Illinois	557,113,720	125,876	82,447	6,757	4,426
14	Indiana	594,326,553	142,267	81,384	7,303	4,178
15	Iowa	297,239,372	67,499	41,983	7,080	4,404
16	Kansas	302,606,163	66,051	41,621	7,271	4,581
17	Kentucky	295,844,069	66,823	41,137	7,192	4,427
18	Louisiana	483,571,254	110,921	66,722	7,248	4,360
19	Maine	97,465,870	25,189	16,734	5,824	3,869
20	Maryland	223,775,760	56,083	39,696	5,637	3,990
21	Massachusetts	428,169,485	79,179	52,783	8,112	5,408
22	Michigan	868,945,270	187,205	114,288	7,603	4,642
23	Minnesota	325,469,359	75,958	50,086	6,498	4,285
24	Mississippi	254,751,117	62,104	35,618	7,152	4,102
25	Missouri	400,553,439	87,460	57,053	7,021	4,580
26	Montana	125,239,448	31,122	19,661	6,370	4,024
27	Nebraska	148,314,235	36,375	24,247	6,117	4,077
28	Nevada	77,379,019	15,837	9,480	8,162	4,886
29	New Hampshire	118,610,939	24,279	16,710	7,098	4,885
30	New Jersey	370,795,701	72,858	52,414	7,074	5,089
31	New Mexico	142,258,680	31,779	19,762	7,199	4,476
32	New York	921,442,022	201,633	130,602	7,055	4,570
33	North Carolina	494,087,149	111,470	69,856	7,073	4,432
34	North Dakota	95,493,608	26,001	17,017	5,612	3,673
35	Ohio	1,033,591,654	216,396	135,867	7,607	4,776
36	Oklahoma	328,893,703	73,685	42,553	7,729	4,464
37	Oregon	307,036,860	61,203	35,517	8,645	5,017
38	Pennsylvania	882,276,031	210,223	129,140	6,832	4,197
39	Rhode Island	61,059,632	12,407	9,795	6,234	4,921
40	South Carolina	351,576,306	72,725	43,058	8,165	4,834
41	South Dakota	111,476,545	27,212	17,291	6,447	4,097
42	Tennessee	376,090,998	84,498	50,819	7,401	4,451
43	Texas	1,355,431,805	287,973	170,378	7,955	4,707
44	Utah	114,089,703	26,585	19,131	5,964	4,292
45	Vermont	75,687,064	14,106	10,562	7,166	5,366
46	Virginia	613,217,140	124,133	80,339	7,633	4,940
47	Washington	399,938,229	80,014	49,100	8,145	4,998
48	West Virginia	207,978,422	49,115	31,650	6,571	4,235
49	Wisconsin	395,233,379	96,709	63,702	6,204	4,087
50	Wyoming	29,805,761	8,131	4,580	6,508	3,666

		CSLP VOLUME	NUMBER OF CSLP LOANS	NUMBER OF CSLP BORROWERS	AVERAGE TOTAL CSLP FUNDS PER BORROWER	AVERAGE CSLP LOAN
	CANADA	812,583,582	N/A	176,612	4,601	N/A
1	Newfoundland	41,024,688	N/A	9,374	4,376	N/A
2	Prince Edward Island	8,922,600	N/A	2,059	4,333	N/A
3	Nova Scotia	58,988,939	N/A	11,336	5,204	N/A
4	New Brunswick	41,546,496	N/A	8,690	4,781	N/A
5	Québec	0	0	0	0	0
6	Ontario	393,354,971	N/A	85,420	4,605	N/A
7	Manitoba	28,468,422	N/A	6,778	4,200	N/A
8	Saskatchewan	42,762,269	N/A	9,365	4,566	N/A
9	Alberta	84,549,186	N/A	19,808	4,268	N/A
10	British Columbia	112,424,064	N/A	23,669	4,750	N/A

		Federal Loan Volume 4yr public	Loans 4yr public	Borrowers 4yr public	Average federal loan per borrower	Average federal loan
	UNITED STATES	15,553,729,571	4,125,463	2,601,964	5,978	3,770
1	Alabama	373,011,815	100,328	59,517	6,267	3,718
2	Alaska	20,505,995	5,807	3,338	6,143	3,531
3	Arizona	305,634,478	65,600	42,707	7,157	4,659
4	Arkansas	172,624,079	49,326	29,288	5,894	3,500
5	California	1,297,981,732	311,102	223,173	5,816	4,172
6	Colorado	343,016,223	82,952	54,249	6,323	4,135
7	Connecticut	116,807,212	30,895	21,821	5,353	3,781
8	Delaware	59,385,408	13,414	10,387	5,717	4,427
9	Florida	546,157,064	163,756	83,693	6,526	3,335
10	Georgia	407,276,040	113,828	70,421	5,783	3,578
11	Hawaii	2,644,677	374	347	7,622	7,071
12	Idaho	99,586,986	27,638	18,682	5,331	3,603
13	Illinois	459,485,844	125,876	82,447	5,573	3,650
14	Indiana	490,177,549	142,267	81,384	6,023	3,445
15	Iowa	245,151,535	67,499	41,983	5,839	3,632
16	Kansas	249,577,857	66,051	41,621	5,996	3,779
17	Kentucky	244,000,743	66,823	41,137	5,931	3,651
18	Louisiana	398,830,863	110,921	66,722	5,978	3,596
19	Maine	80,386,079	25,189	16,734	4,804	3,191
20	Maryland	184,561,590	56,083	39,696	4,649	3,291
21	Massachusetts	353,137,627	79,179	52,783	6,690	4,460
22	Michigan	716,672,443	187,205	114,288	6,271	3,828
23	Minnesota	268,434,536	75,958	50,086	5,359	3,534
24	Mississippi	210,108,866	62,104	35,618	5,899	3,383
25	Missouri	330,360,981	87,460	57,053	5,790	3,777
26	Montana	103,292,652	31,122	19,661	5,254	3,319
27	Nebraska	122,323,843	36,375	24,247	5,045	3,363
28	Nevada	63,819,221	15,837	9,480	6,732	4,030
29	New Hampshire	97,825,714	24,279	16,710	5,854	4,029
30	New Jersey	305,817,950	72,858	52,414	5,835	4,197
31	New Mexico	117,329,456	31,779	19,762	5,937	3,692
32	New York	759,969,733	201,633	130,602	5,819	3,769
33	North Carolina	407,503,966	111,470	69,856	5,833	3,656
34	North Dakota	78,759,434	26,001	17,017	4,628	3,029
35	Ohio	852,466,411	216,396	135,867	6,274	3,939
36	Oklahoma	271,258,803	73,685	42,553	6,375	3,681
37	Oregon	253,232,124	61,203	35,517	7,130	4,138
38	Pennsylvania	727,667,139	210,223	129,140	5,635	3,461
39	Rhode Island	50,359,622	12,407	9,795	5,141	4,059
40	South Carolina	289,966,536	72,725	43,058	6,734	3,987
41	South Dakota	91,941,542	27,212	17,291	5,317	3,379
42	Tennessee	310,185,306	84,498	50,819	6,104	3,671
43	Texas	1,117,907,717	287,973	170,378	6,561	3,882
44	Utah	94,096,773	26,585	19,131	4,919	3,539
45	Vermont	62,423,762	14,106	10,562	5,910	4,425
46	Virginia	505,757,774	124,133	80,339	6,295	4,074
47	Washington	329,853,579	80,014	49,100	6,718	4,122
48	West Virginia	171,532,557	49,115	31,650	5,420	3,492
49	Wisconsin	325,973,201	96,709	63,702	5,117	3,371
50	Wyoming	24,582,639	8,131	4,580	5,367	3,023

PART IV. FEDERAL GRANTS — PPP ADJUSTED

		CMSF BURSARY VOLUME	NUMBER OF CMSF BURSARIES	AVG CMSF BURSARY AT UNIVERSITIES	CSG VOLUME	CSG RECIPIENTS	AVERAGE CSG GRANT
	CANADA	179,125,741	56,389	3,177	41,449,031	26,266	1,578
1	Newfoundland	4,178,362	1,642	2,545	1,077,088	734	1,467
2	Prince Edward Island	1,083,656	381	2,844	297,072	233	1,275
3	Nova Scotia	7,173,023	2,304	3,113	1,493,831	932	1,603
4	New Brunswick	5,304,192	1,825	2,906	1,257,117	952	1,321
5	Québec	47,248,248	13,546	3,488	0	0	0
6	Ontario	70,867,416	21,995	3,222	21,280,929	14,451	1,473
7	Manitoba	7,953,723	2,267	3,508	1,034,753	645	1,604
8	Saskatchewan	6,862,401	2,636	2,603	2,812,834	2,061	1,365
9	Alberta	14,363,003	5,634	2,549	3,864,536	2,971	1,301
10	British Columbia	14,091,719	4,159	3,388	8,330,871	5,014	1,662

		Pell Grant Volume at public 4-year institutions	Pell Grant Recipients at public 4-yr institutions	Average Pell Grant at public 4-year institutions	SEOG Volume	SEOG Recips	SEOG Average	Perkins Volume	Perkins Recips	Perkins Average
	UNITED STATES	3,465,546,974	1,338,524	2,589	380,774,208	374,371	1,017	644,801,167	304,483	2,118
1	Alabama	74,880,326	28,024	2,672	6,728,790	7,369	913	10,780,268	4,556	2,366
2	Alaska	4,243,509	1,910	2,222	932,095	1,381	675	0	0	0
3	Arizona	48,870,446	19,023	2,569	6,280,478	6,872	914	6,435,889	2,006	3,208
4	Arkansas	45,015,751	16,839	2,673	4,201,603	4,309	975	5,813,881	2,707	2,148
5	California	424,397,077	152,884	2,776	34,324,813	32,913	1,043	58,127,553	28,320	2,053
6	Colorado	54,163,093	22,193	2,441	6,909,072	5,192	1,331	14,856,370	6,579	2,258
7	Connecticut	10,244,918	4,359	2,350	2,625,410	1,419	1,850	4,291,702	2,107	2,037
8	Delaware	6,436,422	2,616	2,460	1,722,253	637	2,704	3,064,639	1,469	2,086
9	Florida	121,710,706	48,132	2,529	10,904,843	8,611	1,266	12,350,694	4,614	2,677
10	Georgia	84,389,869	34,301	2,460	6,267,715	7,155	876	7,333,416	3,084	2,378
11	Hawaii	3,111,067	1,127	2,760	1,436,893	1,230	1,168	2,611,174	704	3,709
12	Idaho	34,377,966	13,734	2,503	2,062,754	4,780	432	5,340,295	3,293	1,622
13	Illinois	100,859,140	39,004	2,586	11,123,764	9,538	1,166	17,428,106	8,024	2,172
14	Indiana	74,335,858	32,026	2,321	10,658,222	13,467	791	21,255,802	10,958	1,940
15	Iowa	25,666,529	10,768	2,384	2,742,633	2,260	1,214	10,057,715	5,445	1,847
16	Kansas	28,096,249	11,730	2,395	3,462,213	6,168	561	12,369,226	5,624	2,199
17	Kentucky	44,903,370	17,884	2,511	6,886,511	8,493	811	11,332,083	5,530	2,049
18	Louisiana	125,776,905	46,123	2,727	6,393,450	8,264	774	9,710,989	3,537	2,746
19	Maine	22,661,549	9,314	2,433	6,499,308	6,013	1,081	7,893,978	4,593	1,719
20	Maryland	52,512,756	21,727	2,417	7,276,589	6,366	1,143	10,677,129	3,940	2,710
21	Massachusetts	38,946,608	15,783	2,468	8,922,933	8,937	998	8,671,118	4,324	2,005
22	Michigan	102,192,438	41,461	2,465	17,850,623	14,163	1,260	42,641,033	21,743	1,961
23	Minnesota	44,756,604	19,113	2,342	9,068,324	6,748	1,344	16,271,619	6,671	2,439
24	Mississippi	60,122,216	21,251	2,829	6,238,548	6,743	925	13,078,265	4,346	3,009
25	Missouri	56,716,732	23,759	2,387	6,628,805	7,645	867	11,928,751	6,551	1,821
26	Montana	12,880,217	5,059	2,546	2,222,404	3,583	620	5,671,283	2,763	2,053
27	Nebraska	23,075,267	9,679	2,384	2,562,066	3,146	814	6,062,829	3,810	1,591
28	Nevada	10,512,869	4,265	2,465	1,225,659	587	2,088	1,404,283	448	3,135
29	New Hampshire	4,953,608	2,327	2,129	4,702,392	2,910	1,616	4,440,728	2,379	1,867
30	New Jersey	68,273,585	25,186	2,711	7,659,833	6,706	1,142	15,400,828	7,110	2,166
31	New Mexico	35,759,236	13,485	2,652	3,653,119	2,799	1,305	7,461,737	2,676	2,788
32	New York	359,648,901	133,345	2,697	24,235,898	26,736	906	32,783,240	17,851	1,836
33	North Carolina	80,679,722	30,540	2,642	11,790,193	8,893	1,326	14,743,155	6,566	2,245
34	North Dakota	18,483,858	7,576	2,440	2,718,146	2,694	1,009	6,242,127	3,293	1,896
35	Ohio	133,980,006	57,099	2,346	16,818,987	18,160	926	28,872,689	13,473	2,143
36	Oklahoma	51,316,721	20,306	2,527	4,157,590	4,611	902	7,816,534	3,137	2,492
37	Oregon	44,696,472	17,640	2,534	6,091,279	6,987	872	14,169,006	7,805	1,815
38	Pennsylvania	110,417,620	44,648	2,473	20,700,129	21,188	977	30,023,011	18,047	1,664
39	Rhode Island	10,182,584	4,123	2,470	2,626,405	2,187	1,201	2,684,702	1,393	1,927
40	South Carolina	44,546,911	16,857	2,643	5,756,891	5,918	973	8,471,007	4,004	2,116
41	South Dakota	20,122,035	8,384	2,400	2,391,915	3,384	707	6,324,934	3,995	1,583
42	Tennessee	68,241,857	26,692	2,557	6,840,509	7,225	947	12,580,859	5,363	2,346
43	Texas	260,488,631	100,437	2,594	21,288,666	18,587	1,145	26,702,605	9,451	2,825
44	Utah	51,148,252	21,661	2,361	4,096,719	4,376	936	11,038,147	3,399	3,247
45	Vermont	6,652,862	2,721	2,445	3,601,343	2,587	1,392	3,119,178	3,369	926
46	Virginia	65,518,515	25,770	2,542	8,701,990	6,272	1,387	12,762,774	4,958	2,574
47	Washington	48,652,884	18,695	2,602	8,270,514	8,752	945	18,162,954	8,328	2,181
48	West Virginia	53,958,396	22,695	2,378	3,856,345	3,745	1,030	8,050,579	3,872	2,079
49	Wisconsin	48,252,764	19,117	2,524	16,006,045	14,995	1,067	34,228,433	15,222	2,249
50	Wyoming	6,163,400	2,411	2,556	650,528	670	971	1,261,849	1,046	1,206

		CMSF BURSARY VOLUME	NUMBER OF CMSF BURSARIES	AVG CMSF BURSARY AT UNIVERSITIES	CSG VOLUME	CSG RECIPIENTS	AVERAGE CSG GRANT
	CANADA	179,125,741	56,389	3,177	41,449,031	26,266	1,578
1	Newfoundland	4,178,362	1,642	2,545	1,077,088	734	1,467
2	Prince Edward Island	1,083,656	381	2,844	297,072	233	1,275
3	Nova Scotia	7,173,023	2,304	3,113	1,493,831	932	1,603
4	New Brunswick	5,304,192	1,825	2,906	1,257,117	952	1,321
5	Québec	47,248,248	13,546	3,488	0	0	0
6	Ontario	70,867,416	21,995	3,222	21,280,929	14,451	1,473
7	Manitoba	7,953,723	2,267	3,508	1,034,753	645	1,604
8	Saskatchewan	6,862,401	2,636	2,603	2,812,834	2,061	1,365
9	Alberta	14,363,003	5,634	2,549	3,864,536	2,971	1,301
10	British Columbia	14,091,719	4,159	3,388	8,330,871	5,014	1,662

		Pell Grant Volume at public 4-year institutions	Pell Grant Recipients at public 4-yr institutions	Average Pell Grant at public 4-year institutions	SEOG Volume	SEOG Recips	SEOG Average	Perkins Volume	Perkins Recips	Perkins Average
	UNITED STATES	2,858,249,076	1,338,524	2,135	314,047,836	374,371	839	531,807,058	304,483	1,747
1	Alabama	61,758,396	28,024	2,204	5,549,646	7,369	753	8,891,148	4,556	1,952
2	Alaska	3,499,882	1,910	1,832	768,756	1,381	557	0	0	0
3	Arizona	40,306,453	19,023	2,119	5,179,895	6,872	754	5,308,072	2,006	2,646
4	Arkansas	37,127,250	16,839	2,205	3,465,320	4,309	804	4,795,064	2,707	1,771
5	California	350,026,291	152,884	2,289	28,309,778	32,913	860	47,941,357	28,320	1,693
6	Colorado	44,671,624	22,193	2,013	5,698,335	5,192	1,098	12,252,959	6,579	1,862
7	Connecticut	8,449,612	4,359	1,938	2,165,337	1,419	1,526	3,539,630	2,107	1,680
8	Delaware	5,308,512	2,616	2,029	1,420,448	637	2,230	2,527,596	1,469	1,721
9	Florida	100,382,282	48,132	2,086	8,993,893	8,611	1,044	10,186,375	4,614	2,208
10	Georgia	69,601,499	34,301	2,029	5,169,369	7,155	722	6,048,318	3,084	1,961
11	Hawaii	2,565,888	1,127	2,277	1,185,094	1,230	963	2,153,595	704	3,059
12	Idaho	28,353,616	13,734	2,064	1,701,280	4,780	356	4,404,469	3,293	1,338
13	Illinois	83,184,717	39,004	2,133	9,174,450	9,538	962	14,374,028	8,024	1,791
14	Indiana	61,309,340	32,026	1,914	8,790,489	13,467	653	17,530,963	10,958	1,600
15	Iowa	21,168,761	10,768	1,966	2,262,018	2,260	1,001	8,295,214	5,445	1,523
16	Kansas	23,172,699	11,730	1,976	2,855,499	6,168	463	10,201,659	5,624	1,814
17	Kentucky	37,034,563	17,884	2,071	5,679,728	8,493	669	9,346,264	5,530	1,690
18	Louisiana	103,735,925	46,123	2,249	5,273,070	8,264	638	8,009,248	3,537	2,264
19	Maine	18,690,369	9,314	2,007	5,360,378	6,013	891	6,510,648	4,593	1,418
20	Maryland	43,310,490	21,727	1,993	6,001,449	6,366	943	8,806,083	3,940	2,235
21	Massachusetts	32,121,656	15,783	2,035	7,359,290	8,937	823	7,151,603	4,324	1,654
22	Michigan	84,284,369	41,461	2,033	14,722,503	14,163	1,040	35,168,674	21,743	1,617
23	Minnesota	36,913,515	19,113	1,931	7,479,203	6,748	1,108	13,420,202	6,671	2,012
24	Mississippi	49,586,478	21,251	2,333	5,145,313	6,743	763	10,786,447	4,346	2,482
25	Missouri	46,777,766	23,759	1,969	5,467,182	7,645	715	9,838,372	6,551	1,502
26	Montana	10,623,104	5,059	2,100	1,832,953	3,583	512	4,677,455	2,763	1,693
27	Nebraska	19,031,588	9,679	1,966	2,113,093	3,146	672	5,000,387	3,810	1,312
28	Nevada	8,670,608	4,265	2,033	1,010,876	587	1,722	1,158,198	448	2,585
29	New Hampshire	4,085,544	2,327	1,756	3,878,351	2,910	1,333	3,662,541	2,379	1,540
30	New Jersey	56,309,412	25,186	2,236	6,317,534	6,706	942	12,702,007	7,110	1,786
31	New Mexico	29,492,835	13,485	2,187	3,012,951	2,799	1,076	6,154,152	2,676	2,300
32	New York	296,624,500	133,345	2,224	19,988,831	26,736	748	27,038,348	17,851	1,515
33	North Carolina	66,541,514	30,540	2,179	9,724,095	8,893	1,093	12,159,584	6,566	1,852
34	North Dakota	15,244,771	7,576	2,012	2,241,822	2,694	832	5,148,265	3,293	1,563
35	Ohio	110,501,526	57,099	1,935	13,871,650	18,160	764	23,813,077	13,473	1,767
36	Oklahoma	42,324,046	20,306	2,084	3,429,019	4,611	744	6,446,775	3,137	2,055
37	Oregon	36,863,921	17,640	2,090	5,023,851	6,987	719	11,686,048	7,805	1,497
38	Pennsylvania	91,068,181	44,648	2,040	17,072,666	21,188	806	24,761,818	18,047	1,372
39	Rhode Island	8,398,201	4,123	2,037	2,166,157	2,187	990	2,214,238	1,393	1,590
40	South Carolina	36,740,569	16,857	2,180	4,748,061	5,918	802	6,986,559	4,004	1,745
41	South Dakota	16,595,876	8,384	1,979	1,972,759	3,384	583	5,216,561	3,995	1,306
42	Tennessee	56,283,243	26,692	2,109	5,641,787	7,225	781	10,376,206	5,363	1,935
43	Texas	214,840,945	100,437	2,139	17,558,068	18,587	945	22,023,276	9,451	2,330
44	Utah	42,185,100	21,661	1,948	3,378,815	4,376	772	9,103,837	3,399	2,678
45	Vermont	5,487,023	2,721	2,017	2,970,248	2,587	1,148	2,572,577	3,369	764
46	Virginia	54,037,136	25,770	2,097	7,177,065	6,272	1,144	10,526,242	4,958	2,123
47	Washington	40,127,016	18,695	2,146	6,821,200	8,752	779	14,980,102	8,328	1,799
48	West Virginia	44,502,798	22,695	1,961	3,180,564	3,745	849	6,639,806	3,872	1,715
49	Wisconsin	39,797,013	19,117	2,082	13,201,167	14,995	880	28,230,287	15,222	1,855
50	Wyoming	5,083,334	2,411	2,108	536,530	670	801	1,040,724	1,046	995

		TOTAL FEDERAL AID
	CANADA	1,033,158,354
1	Newfoundland	46,280,138
2	Prince Edward Island	10,303,328
3	Nova Scotia	67,655,793
4	New Brunswick	48,107,805
5	Québec	47,248,248
6	Ontario	485,503,316
7	Manitoba	37,456,898
8	Saskatchewan	52,437,504
9	Alberta	102,776,725
10	British Columbia	134,846,654

		FWS Volume	FWS Recips	FWS Average	LEAP	TOTAL FEDERAL AID
	UNITED STATES	418,544,935	251,333	1,665	44,357,076	23,812,485,961
1	Alabama	9,763,222	5,843	1,671	748,095	555,167,083
2	Alaska	832,064	274	3,037	0	30,870,613
3	Arizona	5,434,390	2,442	2,225	841,456	438,435,905
4	Arkansas	5,688,303	3,575	1,591	236,432	270,257,833
5	California	46,568,910	22,057	2,111	7,822,869	2,145,007,728
6	Colorado	8,534,684	4,147	2,058	409,816	500,770,599
7	Connecticut	3,867,155	2,467	1,568	486,201	163,140,861
8	Delaware	880,125	738	1,193	99,423	84,206,007
9	Florida	10,726,231	5,431	1,975	1,593,188	819,485,811
10	Georgia	7,167,551	4,479	1,600	0	598,969,347
11	Hawaii	1,132,520	633	1,789	152,771	11,651,023
12	Idaho	2,421,153	1,752	1,382	124,885	165,073,485
13	Illinois	12,233,646	8,140	1,503	2,751,099	701,509,476
14	Indiana	9,569,337	5,049	1,895	619,573	710,765,345
15	Iowa	6,493,691	3,304	1,965	548,037	342,747,978
16	Kansas	5,488,059	2,974	1,845	413,453	352,435,363
17	Kentucky	7,814,306	5,320	1,469	626,848	367,407,187
18	Louisiana	9,653,650	6,776	1,425	531,063	635,637,310
19	Maine	6,471,967	3,676	1,761	133,372	141,126,045
20	Maryland	6,292,844	3,571	1,762	685,047	301,220,125
21	Massachusetts	9,618,011	6,221	1,546	1,200,347	495,528,502
22	Michigan	16,576,718	10,125	1,637	2,119,401	1,050,325,483
23	Minnesota	6,882,373	3,757	1,832	721,421	403,169,700
24	Mississippi	7,527,549	4,996	1,507	261,894	341,979,589
25	Missouri	7,100,557	4,255	1,669	997,864	483,926,149
26	Montana	3,247,931	2,090	1,554	103,060	149,364,344
27	Nebraska	3,083,271	1,954	1,578	364,954	183,462,623
28	Nevada	1,131,804	476	2,378	93,360	91,746,993
29	New Hampshire	3,365,654	2,573	1,308	129,735	136,203,055
30	New Jersey	8,975,860	5,883	1,526	1,344,631	472,450,439
31	New Mexico	7,853,512	3,269	2,402	189,146	197,175,430
32	New York	27,288,853	20,450	1,334	4,304,276	1,369,703,189
33	North Carolina	8,497,720	6,267	1,356	1,074,250	610,872,189
34	North Dakota	2,988,670	2,103	1,421	0	125,926,410
35	Ohio	17,530,628	10,358	1,692	1,960,567	1,232,754,532
36	Oklahoma	6,712,097	3,743	1,793	624,423	399,521,068
37	Oregon	6,046,369	4,051	1,493	653,522	378,693,508
38	Pennsylvania	22,838,190	15,955	1,431	1,640,475	1,067,895,457
39	Rhode Island	1,810,645	1,044	1,734	269,169	78,633,135
40	South Carolina	5,312,778	3,762	1,412	555,312	416,219,206
41	South Dakota	3,298,072	2,238	1,474	0	143,613,501
42	Tennessee	6,834,452	4,406	1,551	603,811	471,192,487
43	Texas	25,319,040	12,587	2,012	1,995,729	1,691,226,477
44	Utah	4,261,372	1,695	2,514	277,656	184,911,849
45	Vermont	3,899,478	2,686	1,452	127,310	93,087,234
46	Virginia	9,660,954	5,904	1,636	795,382	710,656,754
47	Washington	6,522,163	3,077	2,120	994,227	482,540,971
48	West Virginia	4,500,108	3,722	1,209	372,229	278,716,079
49	Wisconsin	12,033,410	8,406	1,432	1,062,125	506,816,157
50	Wyoming	792,888	632	1,255	0	38,674,426

		TOTAL FEDERAL AID
	CANADA	1,033,158,354
1	Newfoundland	46,280,138
2	Prince Edward Island	10,303,328
3	Nova Scotia	67,655,793
4	New Brunswick	48,107,805
5	Québec	47,248,248
6	Ontario	485,503,316
7	Manitoba	37,456,898
8	Saskatchewan	52,437,504
9	Alberta	102,776,725
10	British Columbia	134,846,654

		FWS Volume	FWS Recips	FWS Average	LEAP	TOTAL FEDERAL AID
	UNITED STATES	345,199,671	251,333	1,373	36,584,000	19,639,617,212
1	Alabama	8,052,328	5,843	1,378	617,000	457,880,333
2	Alaska	686,254	274	2,505	0	25,460,887
3	Arizona	4,482,075	2,442	1,835	694,000	361,604,973
4	Arkansas	4,691,492	3,575	1,312	195,000	222,898,205
5	California	38,408,235	22,057	1,741	6,452,000	1,769,119,393
6	Colorado	7,039,077	4,147	1,697	338,000	413,016,218
7	Connecticut	3,189,480	2,467	1,293	401,000	134,552,271
8	Delaware	725,893	738	984	82,000	69,449,857
9	Florida	8,846,580	5,431	1,629	1,314,000	675,880,194
10	Georgia	5,911,519	4,479	1,320	0	494,006,745
11	Hawaii	934,059	633	1,476	126,000	9,609,313
12	Idaho	1,996,873	1,752	1,140	103,000	136,146,224
13	Illinois	10,089,838	8,140	1,240	2,269,000	578,577,877
14	Indiana	7,892,419	5,049	1,563	511,000	586,211,760
15	Iowa	5,355,745	3,304	1,621	452,000	282,685,273
16	Kansas	4,526,339	2,974	1,522	341,000	290,675,053
17	Kentucky	6,444,937	5,320	1,211	517,000	303,023,235
18	Louisiana	7,961,957	6,776	1,175	438,000	524,249,063
19	Maine	5,337,828	3,676	1,452	110,000	116,395,302
20	Maryland	5,190,094	3,571	1,453	565,000	248,434,706
21	Massachusetts	7,932,563	6,221	1,275	990,000	408,692,739
22	Michigan	13,671,836	10,125	1,350	1,748,000	866,267,825
23	Minnesota	5,676,315	3,757	1,511	595,000	332,518,771
24	Mississippi	6,208,431	4,996	1,243	216,000	282,051,535
25	Missouri	5,856,265	4,255	1,376	823,000	399,123,566
26	Montana	2,678,768	2,090	1,282	85,000	123,189,932
27	Nebraska	2,542,963	1,954	1,301	301,000	151,312,874
28	Nevada	933,468	476	1,961	77,000	75,669,371
29	New Hampshire	2,775,861	2,573	1,079	107,000	112,335,011
30	New Jersey	7,402,942	5,883	1,258	1,109,000	389,658,845
31	New Mexico	6,477,273	3,269	1,981	156,000	162,622,667
32	New York	22,506,790	20,450	1,101	3,550,000	1,129,678,202
33	North Carolina	7,008,591	6,267	1,118	886,000	503,823,750
34	North Dakota	2,464,939	2,103	1,172	0	103,859,231
35	Ohio	14,458,584	10,358	1,396	1,617,000	1,016,728,248
36	Oklahoma	5,535,878	3,743	1,479	515,000	329,509,521
37	Oregon	4,986,811	4,051	1,231	539,000	312,331,755
38	Pennsylvania	18,836,056	15,955	1,181	1,353,000	880,758,860
39	Rhode Island	1,493,350	1,044	1,430	222,000	64,853,568
40	South Carolina	4,381,774	3,762	1,165	458,000	343,281,499
41	South Dakota	2,720,122	2,238	1,215	0	118,446,860
42	Tennessee	5,636,792	4,406	1,279	498,000	388,621,334
43	Texas	20,882,165	12,587	1,659	1,646,000	1,394,858,171
44	Utah	3,514,615	1,695	2,074	229,000	152,508,140
45	Vermont	3,216,139	2,686	1,197	105,000	76,774,749
46	Virginia	7,967,981	5,904	1,350	656,000	586,122,198
47	Washington	5,379,228	3,077	1,748	820,000	397,981,125
48	West Virginia	3,711,515	3,722	997	307,000	229,874,240
49	Wisconsin	9,924,691	8,406	1,181	876,000	418,002,359
50	Wyoming	653,943	632	1,035	0	31,897,170

		PROVINCIAL LOANS	PROVINCIAL GRANTS	PROVINCIAL SCHOLARSHIPS	PROVINCIAL REMISSION PROGRAMS	TOTAL PROVINCIAL AID	INSTITUTIONAL AID (University Only)
	CANADA	702,129,781	175,992,075	50,183,581	197,858,545	1,126,163,982	551,295,000
1	Newfoundland	34,339,800	0	0	0	34,339,800	12,329,000
2	Prince Edward Island	5,855,520	0	0	859,254	6,714,774	869,000
3	Nova Scotia	12,912,161	0	0	0	12,912,161	23,405,000
4	New Brunswick	13,106,010	3,062,394	0	0	16,168,404	7,972,000
5	Québec	170,785,563	147,470,737	0	1,152,000	319,408,300	78,616,000
6	Ontario	321,835,885	10,426,051	22,579,526	156,599,478	511,440,940	279,025,000
7	Manitoba	16,258,602	1,158,430	0	3,091,417	20,508,449	9,271,000
8	Saskatchewan	34,460,751	11,699,871	150,750	10,593,877	56,905,248	14,722,000
9	Alberta	53,257,131	8,142,000	18,065,354	17,710,000	97,174,485	70,823,000
10	British Columbia	39,318,358	32,603,329	9,387,950	7,852,520	89,162,157	54,263,000

	UNITED STATES	TOTAL STATE GRANT AID	OTHER STATE AID			TOTAL STATE AID	INSTITUTIONAL AID (Pub 4yr Only)
	United States	3,018,958,758	814,151,803			3,833,110,561	3,594,505,674
1	Alabama	6,873,272	5,867,084			12,740,356	84,472,848
2	Alaska	1,705,099	59,731,947			61,437,046	6,571,686
3	Arizona	2,415,275	466,013			2,881,289	101,246,329
4	Arkansas	25,323,063	707,896			26,030,959	68,285,682
5	California	272,973,852	8,193,188			281,167,040	341,246,518
6	Colorado	59,071,811	15,166,802			74,238,613	38,228,098
7	Connecticut	27,065,359	17,511,767			44,577,126	39,026,144
8	Delaware	145,438	931,814			1,077,252	97,691,068
9	Florida	273,175,476	11,483,632			284,659,109	134,088,418
10	Georgia	202,160,023	5,857,535			208,017,557	41,457,199
11	Hawaii	396,721	9,408,981			9,805,702	2,157,738
12	Idaho	1,169,825	1,772,257			2,942,082	21,190,482
13	Illinois	231,358,253	5,917,346			237,275,598	35,060,183
14	Indiana	71,548,754	7,147,085			78,695,839	109,068,145
15	Iowa	4,115,545	840,885			4,956,430	32,615,926
16	Kansas	6,826,468	1,627,017			8,453,484	27,158,371
17	Kentucky	46,073,414	5,116,262			51,189,677	87,811,523
18	Louisiana	91,304,301	9,176,924			100,481,225	60,900,533
19	Maine	9,498,796	1,661,378			11,160,174	14,831,458
20	Maryland	49,452,168	14,888,204			64,340,372	116,179,367
21	Massachusetts	75,885,076	9,208,191			85,093,267	49,311,903
22	Michigan	35,941,387	40,634,770			76,576,156	197,942,330
23	Minnesota	72,011,747	63,658,937			135,670,684	57,599,577
24	Mississippi	18,825,930	11,977,308			30,803,238	56,227,550
25	Missouri	24,373,653	4,350,679			28,724,332	137,665,860
26	Montana	3,417,602	2,993,424			6,411,025	12,430,834
27	Nebraska	2,385,994	5,861,960			8,247,954	52,610,187
28	Nevada	17,327,437	24,249,440			41,576,877	3,003,463
29	New Hampshire	829,185	266,831			1,096,016	45,848,164
30	New Jersey	150,337,401	56,917,215			207,254,617	41,919,079
31	New Mexico	44,190,108	19,044,521			63,234,630	6,352,787
32	New York	373,943,285	54,516,230			428,459,514	79,665,019
33	North Carolina	175,572,548	26,910,446			202,482,994	45,870,988
34	North Dakota	1,185,856	0			1,185,856	13,946,578
35	Ohio	123,692,012	7,507,107			131,199,119	234,660,786
36	Oklahoma	34,518,380	59,670,587			94,188,967	55,700,645
37	Oregon	18,248,459	19,937,955			38,186,415	27,804,224
38	Pennsylvania	186,766,523	34,965,909			221,732,432	203,097,824
39	Rhode Island	3,623,868	988,727			4,612,595	18,114,916
40	South Carolina	33,910,725	2,457,596			36,368,321	60,540,684
41	South Dakota	0	145,497			145,497	4,748,090
42	Tennessee	16,433,885	400,070			16,833,955	51,636,366
43	Texas	54,176,126	72,976,332			127,152,458	245,590,342
44	Utah	3,657,788	29,468,360			33,126,148	20,683,469
45	Vermont	6,549,961	218,332			6,768,293	40,028,570
46	Virginia	149,523,068	1,614,471			151,137,539	97,574,232
47	Washington	101,013,125	26,409,403			127,422,528	80,174,000
48	West Virginia	17,029,316	19,693,629			36,722,945	28,637,558
49	Wisconsin	57,142,540	2,939,731			60,082,272	160,703,840
50	Wyoming	0	0			0	5,128,091

PART IV. PROVINCIAL/STATE AID — NO ADJUSTMENT

		PROVINCIAL LOANS (university only)	PROVINCIAL NEED-BASED GRANTS	PROVINCIAL SCHOLARSHIPS	PROVINCIAL REMISSION PROGRAMS(UNIVERSITY ONLY)	TOTAL PROVIN-CIAL AID	INSTITUTIONAL AID (University Only)
	CANADA	702,129,781	175,992,075	50,183,581	197,858,545	1,126,163,982	551,295,000
1	Newfoundland	34,339,800	0	$0	0	34,339,800	12,329,000
2	Prince Edward Island	5,855,520	0	$0	$859,254	6,714,774	869,000
3	Nova Scotia	12,912,161	0	$0	0	12,912,161	23,405,000
4	New Brunswick	13,106,010	3,062,394	$0	0	16,168,404	7,972,000
5	Québec	170,785,563	147,470,737	$0	$1,152,000	319,408,300	78,616,000
6	Ontario	321,835,885	10,426,051	$22,579,526	$156,599,478	511,440,940	279,025,000
7	Manitoba	16,258,602	1,158,430	$0	$3,091,417	20,508,449	9,271,000
8	Saskatchewan	34,460,751	11,699,871	$150,750	$10,593,877	56,905,248	14,722,000
9	Alberta	53,257,131	8,142,000	$18,065,354	$17,710,000	97,174,485	70,823,000
10	British Columbia	39,318,358	32,603,329	$9,387,950	$7,852,520	89,162,157	54,263,000

		TOTAL STATE GRANT AID*	OTHER STATE AID*			TOTAL STATE AID	INSTITUTIONAL AID (Pub 4yr Only)
	UNITED STATES	2,489,920,393	671,480,911			3,161,401,303	2,964,609,223
1	Alabama	5,668,809	4,838,944			10,507,753	69,669,937
2	Alaska	1,406,300	49,264,599			50,670,899	5,420,072
3	Arizona	1,992,026	384,350			2,376,376	83,504,055
4	Arkansas	20,885,482	583,846			21,469,328	56,319,389
5	California	225,138,273	6,757,425			231,895,697	281,446,927
6	Colorado	48,720,145	12,508,991			61,229,136	31,529,056
7	Connecticut	22,322,461	14,443,028			36,765,489	32,187,254
8	Delaware	119,951	768,524			888,475	80,571,814
9	Florida	225,304,565	9,471,256			234,775,820	110,590,940
10	Georgia	166,733,766	4,831,068			171,564,834	34,192,294
11	Hawaii	327,200	7,760,164			8,087,364	1,779,619
12	Idaho	964,826	1,461,689			2,426,515	17,477,090
13	Illinois	190,815,336	4,880,398			195,695,734	28,916,283
14	Indiana	59,010,644	5,894,639			64,905,284	89,955,187
15	Iowa	3,394,342	693,529			4,087,872	26,900,354
16	Kansas	5,630,206	1,341,900			6,972,107	22,399,174
17	Kentucky	37,999,570	4,219,695			42,219,265	72,423,547
18	Louisiana	75,304,256	7,568,772			82,873,027	50,228,404
19	Maine	7,834,240	1,370,240			9,204,479	12,232,413
20	Maryland	40,786,235	12,279,215			53,065,449	95,820,247
21	Massachusetts	62,587,075	7,594,559			70,181,635	40,670,550
22	Michigan	29,643,065	33,513,986			63,157,051	163,255,176
23	Minnesota	59,392,503	52,503,429			111,895,932	47,505,903
24	Mississippi	15,526,899	9,878,421			25,405,319	46,374,308
25	Missouri	20,102,446	3,588,272			23,690,718	113,541,476
26	Montana	2,818,706	2,468,860			5,287,566	10,252,471
27	Nebraska	1,967,876	4,834,718			6,802,593	43,390,847
28	Nevada	14,291,000	20,000,000			34,291,000	2,477,140
29	New Hampshire	683,880	220,072			903,952	37,813,792
30	New Jersey	123,992,473	46,943,117			170,935,590	34,573,235
31	New Mexico	36,446,292	15,707,184			52,153,476	5,239,533
32	New York	308,413,955	44,962,877			353,376,832	65,704,626
33	North Carolina	144,805,445	22,194,695			167,000,140	37,832,616
34	North Dakota	978,048	0			978,048	11,502,598
35	Ohio	102,016,386	6,191,572			108,207,958	193,539,138
36	Oklahoma	28,469,424	49,213,992			77,683,416	45,939,737
37	Oregon	15,050,623	16,444,054			31,494,678	22,931,848
38	Pennsylvania	154,037,803	28,838,529			182,876,332	167,507,228
39	Rhode Island	2,988,826	815,464			3,804,290	14,940,482
40	South Carolina	27,968,254	2,026,930			29,995,184	49,931,614
41	South Dakota	-	120,000			120,000	3,916,041
42	Tennessee	13,554,033	329,962			13,883,995	42,587,677
43	Texas	44,682,373	60,188,055			104,870,428	202,553,413
44	Utah	3,016,802	24,304,364			27,321,166	17,058,925
45	Vermont	5,402,154	180,072			5,582,226	33,014,016
46	Virginia	123,320,842	1,331,553			124,652,395	80,475,452
47	Washington	83,311,718	21,781,454			105,093,172	66,124,414
48	West Virginia	14,045,121	16,242,543			30,287,664	23,619,150
49	Wisconsin	47,128,957	2,424,577			49,553,533	132,542,310
50	Wyoming	-	0			0	4,229,451

PART IV. TOTAL AID — PPP ADJUSTED

		TOTAL FED, PRO-V/STATE & INST. AID	TOTAL FED AND PROV/STATE GRANT AID	FED & PROV/STATE GRANT AID PER FTE	TOTAL GRANT AID	TOTAL LOAN AID	GRANT VS. LOAN AID	GRANT VS. TOTAL AID
	CANADA	2,710,617,336	644,608,973	955	1,195,903,973	1,514,713,363	44	44
1	Newfoundland	92,948,938	5,255,450	377	17,584,450	75,364,488	19	19
2	Prince Edward Island	17,887,102	2,239,982	793	3,108,982	14,778,120	17	17
3	Nova Scotia	103,972,954	8,666,854	267	32,071,854	71,901,100	31	31
4	New Brunswick	72,248,209	9,623,703	490	17,595,703	54,652,506	24	24
5	Québec	445,272,548	195,870,985	1,154	274,486,985	170,785,563	62	62
6	Ontario	1,275,969,256	281,753,400	1,075	560,778,400	715,190,856	44	44
7	Manitoba	67,236,347	13,238,323	551	22,509,323	44,727,024	33	33
8	Saskatchewan	124,064,752	32,119,732	1,199	46,841,732	77,223,020	38	38
9	Alberta	270,774,210	62,144,893	1,013	132,967,893	137,806,317	49	49
10	British Columbia	278,271,811	72,266,389	1,168	126,529,389	151,742,422	45	45

		TOTAL FED, PRO-V/STATE & INST. AID	TOTAL FED AND PROV/STATE GRANT AID	FED & PROV/STATE GRANT AID PER FTE	TOTAL GRANT AID	TOTAL LOAN AID	GRANT VS. LOAN AID	GRANT VS. TOTAL AID
	UNITED STATES	31,240,102,196	7,723,788,819	1,562	11,318,294,493	19,503,262,768	37	36
1	Alabama	652,380,287	95,097,568	894	179,570,416	463,046,649	28	28
2	Alaska	98,879,345	66,612,650	4,138	73,184,336	24,862,945	75	74
3	Arizona	542,563,522	58,873,668	680	160,119,996	377,009,135	30	30
4	Arkansas	364,574,474	75,484,746	1,316	143,770,428	215,115,743	40	39
5	California	2,767,421,286	747,711,799	1,609	1,088,958,317	1,631,894,060	40	39
6	Colorado	613,237,310	135,720,593	1,234	173,948,691	430,753,936	29	28
7	Connecticut	246,744,131	57,933,655	1,305	96,959,799	145,917,176	40	39
8	Delaware	182,974,327	9,335,350	436	107,026,418	75,067,784	59	58
9	Florida	1,238,233,337	418,867,846	2,301	552,956,265	674,550,842	45	45
10	Georgia	848,444,103	298,675,142	2,217	340,132,341	501,144,211	40	40
11	Hawaii	23,614,463	14,506,434	841	16,664,173	5,817,770	74	71
12	Idaho	189,206,049	39,507,686	1,172	60,698,169	126,086,727	32	32
13	Illinois	973,845,258	352,009,601	2,148	387,069,785	574,541,827	40	40
14	Indiana	898,529,330	164,309,492	1,068	273,377,638	615,582,355	31	30
15	Iowa	380,320,334	33,913,630	556	66,529,556	307,297,087	18	17
16	Kansas	388,047,219	40,425,399	558	67,583,770	314,975,389	18	17
17	Kentucky	506,408,387	103,606,406	1,203	191,417,929	307,176,152	38	38
18	Louisiana	797,019,069	233,182,642	1,833	294,083,176	493,282,243	37	37
19	Maine	167,117,677	40,454,403	1,676	55,285,861	105,359,848	34	33
20	Maryland	481,739,863	124,814,764	1,358	240,994,130	234,452,889	51	50
21	Massachusetts	629,933,672	134,163,155	1,705	183,475,058	436,840,603	30	29
22	Michigan	1,324,843,969	198,738,618	905	396,680,948	911,586,303	30	30
23	Minnesota	596,439,961	190,217,033	2,095	247,816,610	341,740,978	42	42
24	Mississippi	429,010,377	97,425,896	1,782	153,653,446	267,829,382	36	36
25	Missouri	650,316,341	93,067,734	954	230,733,594	412,482,190	36	35
26	Montana	168,206,203	21,616,706	766	34,047,540	130,910,732	21	20
27	Nebraska	244,320,764	34,250,241	775	86,860,428	154,377,064	36	36
28	Nevada	136,327,334	53,408,766	2,048	56,412,229	78,783,301	42	41
29	New Hampshire	183,147,236	10,881,750	520	56,729,914	123,051,668	32	31
30	New Jersey	721,624,135	284,532,666	2,589	326,451,746	386,196,529	46	45
31	New Mexico	266,762,847	102,836,130	2,542	109,188,917	149,720,417	42	41
32	New York	1,877,827,723	816,648,589	3,035	896,313,608	954,225,262	48	48
33	North Carolina	859,226,171	296,027,159	2,137	341,898,146	508,830,304	40	40
34	North Dakota	141,058,843	22,387,860	931	36,334,438	101,735,736	26	26
35	Ohio	1,598,614,437	283,958,679	1,303	518,619,465	1,062,464,343	33	32
36	Oklahoma	549,410,679	150,287,700	1,905	205,988,345	336,710,238	38	37
37	Oregon	444,684,146	89,627,688	1,548	117,431,912	321,205,866	27	26
38	Pennsylvania	1,492,725,713	354,490,656	1,702	557,588,480	912,299,042	38	37
39	Rhode Island	101,360,646	17,690,752	984	35,805,668	63,744,333	36	35
40	South Carolina	513,128,211	87,227,435	1,180	147,768,119	360,047,313	29	29
41	South Dakota	148,507,087	22,659,446	974	27,407,536	117,801,479	19	18
42	Tennessee	539,662,807	92,520,132	919	144,156,497	388,671,858	27	27
43	Texas	2,063,969,276	410,925,483	1,187	656,515,825	1,382,134,411	32	32
44	Utah	238,721,467	88,648,775	1,350	109,332,244	125,127,850	47	46
45	Vermont	139,884,096	17,149,806	1,246	57,178,377	78,806,241	42	41
46	Virginia	959,368,525	226,153,425	1,540	323,727,657	625,979,913	34	34
47	Washington	690,137,500	185,340,153	2,250	265,514,154	418,101,183	39	38
48	West Virginia	344,076,582	94,909,915	1,636	123,547,473	216,029,001	36	36
49	Wisconsin	727,602,268	125,403,207	973	286,107,046	429,461,812	40	39
50	Wyoming	43,802,517	6,813,928	727	11,942,019	31,067,610	28	27

		TOTAL FED, PRO-V/STATE & INST. AID	TOTAL FED AND PROV/STATE GRANT AID	FED & PROV/STATE GRANT AID PER FTE	TOTAL GRANT AID	TOTAL LOAN AID	GRANT VS. LOAN AID	GRANT VS. TOTAL AID
	CANADA	2,710,617,336	644,608,973	955	1,195,903,973	1,514,713,363	44	44
1	Newfoundland	92,948,938	5,255,450	377	17,584,450	75,364,488	19	19
2	Prince Edward Island	17,887,102	2,239,982	793	3,108,982	14,778,120	17	17
3	Nova Scotia	103,972,954	8,666,854	267	32,071,854	71,901,100	31	31
4	New Brunswick	72,248,209	9,623,703	490	17,595,703	54,652,506	24	24
5	Québec	445,272,548	195,870,985	1,154	274,486,985	170,785,563	62	62
6	Ontario	1,275,969,256	281,753,400	1,075	560,778,400	715,190,856	44	44
7	Manitoba	67,236,347	13,238,323	551	22,509,323	44,727,024	33	33
8	Saskatchewan	124,064,752	32,119,732	1,199	46,841,732	77,223,020	38	38
9	Alberta	270,774,210	62,144,893	1,013	132,967,893	137,806,317	49	49
10	British Columbia	278,271,811	72,266,389	1,168	126,529,389	151,742,422	45	45

		TOTAL FED, PRO-V/STATE & INST. AID	TOTAL FED AND PROV/STATE GRANT AID	FED & PROV/STATE GRANT AID PER FTE	TOTAL GRANT AID	TOTAL LOAN AID	GRANT VS. LOAN AID	GRANT VS. TOTAL AID
	UNITED STATES	25,765,627,739	6,370,282,216	1,288	9,334,891,439	16,085,536,629	37	36
1	Alabama	538,058,023	78,432,795	737	148,102,732	381,902,963	28	28
2	Alaska	81,551,858	54,939,537	3,413	60,359,609	20,505,995	75	74
3	Arizona	447,485,403	48,556,723	561	132,060,778	310,942,550	30	30
4	Arkansas	300,686,922	62,256,898	1,085	118,576,287	177,419,143	40	39
5	California	2,282,462,017	616,683,766	1,327	898,130,693	1,345,923,089	40	39
6	Colorado	505,774,410	111,937,095	1,018	143,466,151	355,269,182	29	28
7	Connecticut	203,505,014	47,781,438	1,076	79,968,692	120,346,842	40	39
8	Delaware	150,910,146	7,699,435	360	88,271,249	61,913,004	59	58
9	Florida	1,021,246,954	345,465,995	1,898	456,056,935	556,343,439	45	45
10	Georgia	699,763,873	246,335,702	1,829	280,527,996	413,324,358	40	40
11	Hawaii	19,476,296	11,964,346	694	13,743,965	4,798,272	74	71
12	Idaho	156,049,829	32,584,411	967	50,061,501	103,991,455	32	32
13	Illinois	803,189,894	290,323,901	1,772	319,240,184	473,859,872	40	40
14	Indiana	741,072,231	135,516,113	881	225,471,300	507,708,512	31	30
15	Iowa	313,673,498	27,970,650	459	54,871,004	253,446,749	18	17
16	Kansas	320,046,334	33,341,305	460	55,740,479	259,779,516	18	17
17	Kentucky	417,666,047	85,450,556	992	157,874,103	253,347,007	38	38
18	Louisiana	657,350,494	192,320,022	1,512	242,548,426	406,840,111	37	37
19	Maine	137,832,195	33,365,227	1,382	45,597,640	86,896,727	34	33
20	Maryland	397,320,402	102,942,388	1,120	198,762,635	193,367,673	51	50
21	Massachusetts	519,544,923	110,652,580	1,406	151,323,130	360,289,230	30	29
22	Michigan	1,092,680,053	163,911,924	746	327,167,100	751,841,117	30	30
23	Minnesota	491,920,606	156,883,650	1,728	204,389,553	281,854,738	42	42
24	Mississippi	353,831,162	80,353,110	1,470	126,727,418	220,895,313	36	36
25	Missouri	536,355,760	76,758,666	786	190,300,142	340,199,353	36	35
26	Montana	138,729,969	17,828,623	632	28,081,094	107,970,107	21	20
27	Nebraska	201,506,314	28,248,274	639	71,639,121	127,324,230	36	36
28	Nevada	112,437,511	44,049,484	1,689	46,526,624	64,977,419	42	41
29	New Hampshire	151,052,755	8,974,847	429	46,788,639	101,488,255	32	31
30	New Jersey	595,167,670	234,671,536	2,135	269,244,771	318,519,957	46	45
31	New Mexico	220,015,676	84,815,262	2,097	90,054,795	123,483,608	42	41
32	New York	1,548,759,660	673,540,163	2,503	739,244,789	787,008,081	48	48
33	North Carolina	708,656,506	244,151,749	1,763	281,984,365	419,663,550	40	40
34	North Dakota	116,339,877	18,464,641	768	29,967,239	83,907,699	26	26
35	Ohio	1,318,475,344	234,198,134	1,075	427,737,272	876,279,488	33	32
36	Oklahoma	453,132,674	123,951,481	1,571	169,891,218	277,705,578	38	37
37	Oregon	366,758,281	73,921,450	1,277	96,853,298	264,918,172	27	26
38	Pennsylvania	1,231,142,421	292,370,180	1,404	459,877,408	752,428,957	38	37
39	Rhode Island	83,598,340	14,590,648	812	29,531,130	52,573,860	36	35
40	South Carolina	423,208,297	71,941,814	973	121,873,428	296,953,095	29	29
41	South Dakota	122,482,901	18,688,635	804	22,604,676	97,158,103	19	18
42	Tennessee	445,093,006	76,307,025	758	118,894,702	320,561,512	27	27
43	Texas	1,702,282,012	338,915,441	979	541,468,854	1,139,930,993	32	32
44	Utah	196,888,230	73,114,080	1,113	90,173,005	103,200,610	47	46
45	Vermont	115,370,991	14,144,497	1,027	47,158,513	64,996,339	42	41
46	Virginia	791,250,045	186,522,596	1,270	266,998,048	516,284,016	34	34
47	Washington	569,198,711	152,861,388	1,856	218,985,802	344,833,681	39	38
48	West Virginia	283,781,054	78,278,026	1,349	101,897,176	178,172,363	36	36
49	Wisconsin	600,098,203	103,427,714	802	235,970,024	354,203,488	40	39
50	Wyoming	36,126,621	5,619,864	600	9,849,315	25,623,363	28	27

		AVERAGE FEDERAL AID PER FTE	AVERAGE TOTAL GRANT AID PER FTE	AVERAGE TOTAL LOAN AID PER FTE	AVERAGE FED, PROV/STATE, AND INST AID PER FTE
	CANADA	1,531	1,772	2,245	4,017
1	Newfoundland	3,322	1,262	5,409	6,671
2	Prince Edward Island	3,649	1,101	5,234	6,335
3	Nova Scotia	2,081	986	2,212	3,198
4	New Brunswick	2,449	896	2,782	3,678
5	Québec	278	1,617	1,006	2,623
6	Ontario	1,852	2,139	2,728	4,866
7	Manitoba	1,558	936	1,860	2,797
8	Saskatchewan	1,957	1,748	2,883	4,631
9	Alberta	1,676	2,168	2,247	4,415
10	British Columbia	2,179	2,044	2,452	4,496

		AVERAGE FEDERAL AID PER FTE	AVERAGE TOTAL GRANT AID PER FTE	AVERAGE TOTAL LOAN AID PER FTE	AVERAGE FED, PROV/STATE, AND INST AID PER FTE
	UNITED STATES	4,816	2,289	3,944	6,318
1	Alabama	5,220	1,688	4,354	6,134
2	Alaska	1,918	4,546	1,545	6,143
3	Arizona	5,064	1,849	4,354	6,266
4	Arkansas	4,711	2,506	3,750	6,355
5	California	4,616	2,344	3,512	5,956
6	Colorado	4,554	1,582	3,918	5,577
7	Connecticut	3,674	2,184	3,286	5,557
8	Delaware	3,934	5,000	3,507	8,548
9	Florida	4,502	3,038	3,706	6,803
10	Georgia	4,446	2,525	3,720	6,298
11	Hawaii	675	966	337	1,369
12	Idaho	4,899	1,801	3,742	5,615
13	Illinois	4,281	2,362	3,506	5,943
14	Indiana	4,619	1,777	4,000	5,839
15	Iowa	5,623	1,092	5,042	6,240
16	Kansas	4,861	932	4,345	5,352
17	Kentucky	4,264	2,222	3,565	5,878
18	Louisiana	4,997	2,312	3,878	6,265
19	Maine	5,847	2,291	4,365	6,924
20	Maryland	3,278	2,623	2,552	5,243
21	Massachusetts	6,296	2,331	5,551	8,004
22	Michigan	4,781	1,806	4,150	6,031
23	Minnesota	4,441	2,730	3,764	6,569
24	Mississippi	6,256	2,811	4,899	7,848
25	Missouri	4,958	2,364	4,226	6,663
26	Montana	5,293	1,207	4,639	5,961
27	Nebraska	4,150	1,965	3,492	5,526
28	Nevada	3,518	2,163	3,021	5,228
29	New Hampshire	6,507	2,710	5,879	8,750
30	New Jersey	4,299	2,970	3,514	6,566
31	New Mexico	4,874	2,699	3,701	6,594
32	New York	5,090	3,331	3,546	6,979
33	North Carolina	4,411	2,469	3,674	6,204
34	North Dakota	5,237	1,511	4,231	5,866
35	Ohio	5,659	2,381	4,877	7,338
36	Oklahoma	5,063	2,610	4,267	6,962
37	Oregon	6,540	2,028	5,547	7,680
38	Pennsylvania	5,129	2,678	4,381	7,169
39	Rhode Island	4,376	1,992	3,547	5,640
40	South Carolina	5,631	1,999	4,871	6,942
41	South Dakota	6,175	1,178	5,065	6,385
42	Tennessee	4,678	1,431	3,859	5,358
43	Texas	4,884	1,896	3,991	5,960
44	Utah	2,816	1,665	1,905	3,635
45	Vermont	6,762	4,153	5,724	10,161
46	Virginia	4,841	2,205	4,264	6,535
47	Washington	5,858	3,223	5,076	8,378
48	West Virginia	4,804	2,130	3,724	5,931
49	Wisconsin	3,931	2,219	3,331	5,643
50	Wyoming	4,128	1,275	3,316	4,676

		AVERAGE FEDERAL AID PER FTE	AVERAGE TOTAL GRANT AID PER FTE	AVERAGE TOTAL LOAN AID PER FTE	AVERAGE FED, PROV/STATE, AND INST AID PER FTE
	CANADA	1,531	1,772	2,245	4,017
1	Newfoundland	3,322	1,262	5,409	6,671
2	Prince Edward Island	3,649	1,101	5,234	6,335
3	Nova Scotia	2,081	986	2,212	3,198
4	New Brunswick	2,449	896	2,782	3,678
5	Québec	278	1,617	1,006	2,623
6	Ontario	1,852	2,139	2,728	4,866
7	Manitoba	1,558	936	1,860	2,797
8	Saskatchewan	1,957	1,748	2,883	4,631
9	Alberta	1,676	2,168	2,247	4,415
10	British Columbia	2,179	2,044	2,452	4,496

		AVERAGE FEDERAL AID PER FTE	AVERAGE TOTAL GRANT AID PER FTE	AVERAGE TOTAL LOAN AID PER FTE	AVERAGE FED, PROV/STATE, AND INST AID PER FTE
	UNITED STATES	3,972	1,888	3,253	5,211
1	Alabama	4,305	1,393	3,591	5,059
2	Alaska	1,582	3,750	1,274	5,066
3	Arizona	4,176	1,525	3,591	5,168
4	Arkansas	3,885	2,067	3,093	5,241
5	California	3,807	1,933	2,897	4,912
6	Colorado	3,756	1,305	3,231	4,600
7	Connecticut	3,030	1,801	2,710	4,583
8	Delaware	3,244	4,124	2,892	7,050
9	Florida	3,713	2,506	3,057	5,611
10	Georgia	3,667	2,082	3,068	5,194
11	Hawaii	557	797	278	1,129
12	Idaho	4,040	1,486	3,086	4,631
13	Illinois	3,531	1,948	2,892	4,901
14	Indiana	3,810	1,465	3,299	4,816
15	Iowa	4,638	900	4,158	5,146
16	Kansas	4,009	769	3,583	4,414
17	Kentucky	3,517	1,832	2,941	4,848
18	Louisiana	4,121	1,907	3,198	5,167
19	Maine	4,822	1,889	3,600	5,710
20	Maryland	2,704	2,163	2,104	4,324
21	Massachusetts	5,193	1,923	4,578	6,601
22	Michigan	3,943	1,489	3,422	4,974
23	Minnesota	3,662	2,251	3,104	5,418
24	Mississippi	5,160	2,318	4,041	6,473
25	Missouri	4,089	1,950	3,486	5,496
26	Montana	4,365	995	3,826	4,916
27	Nebraska	3,422	1,620	2,880	4,558
28	Nevada	2,902	1,784	2,492	4,312
29	New Hampshire	5,367	2,235	4,848	7,216
30	New Jersey	3,545	2,450	2,898	5,415
31	New Mexico	4,020	2,226	3,052	5,439
32	New York	4,198	2,747	2,925	5,756
33	North Carolina	3,638	2,036	3,030	5,117
34	North Dakota	4,319	1,246	3,489	4,838
35	Ohio	4,667	1,963	4,022	6,052
36	Oklahoma	4,176	2,153	3,519	5,742
37	Oregon	5,394	1,673	4,575	6,334
38	Pennsylvania	4,230	2,209	3,614	5,913
39	Rhode Island	3,609	1,643	2,925	4,652
40	South Carolina	4,644	1,649	4,017	5,726
41	South Dakota	5,093	972	4,177	5,266
42	Tennessee	3,858	1,180	3,183	4,419
43	Texas	4,028	1,564	3,292	4,916
44	Utah	2,322	1,373	1,572	2,998
45	Vermont	5,577	3,425	4,721	8,380
46	Virginia	3,992	1,819	3,517	5,390
47	Washington	4,831	2,658	4,186	6,910
48	West Virginia	3,962	1,756	3,071	4,891
49	Wisconsin	3,242	1,830	2,747	4,654
50	Wyoming	3,405	1,051	2,735	3,856

		NET COA (COA minus grants)	NET COA (C0A minus TOTAL AID)	PERCENT OF GRANT AID TO TF	PERCENT OF TOTAL AID TO TF	PERCENT OF GRANT AID TO COA	PERCENT OF TOTAL AID TO COA
	CANADA	6,564	4,319	52%	118%	21	48
1	Newfoundland	6,066	657	37%	195%	17	91
2	Prince Edward Island	7,971	2,737	31%	181%	12	70
3	Nova Scotia	8,846	6,635	21%	69%	10	33
4	New Brunswick	8,165	5,382	25%	103%	10	41
5	Québec	5,464	4,458	88%	142%	23	37
6	Ontario	7,388	4,661	51%	115%	22	51
7	Manitoba	7,032	5,172	29%	87%	12	35
8	Saskatchewan	6,323	3,440	48%	126%	22	57
9	Alberta	6,108	3,861	56%	113%	26	53
10	British Columbia	4,137	1,685	80%	176%	33	73

		NET COA (COA minus grants)	NET COA (C0A - TOTAL AID)	PERCENT OF GRANT AID TO TF	PERCENT OF TOTAL AID TO TF	PERCENT OF GRANT AID TO COA	PERCENT OF TOTAL AID TO COA
	UNITED STATES	8,205	4,176	54%	149%	22	60
1	Alabama	7,209	2,763	47%	169%	19	69
2	Alaska	5,621	4,025	128%	173%	45	60
3	Arizona	7,695	3,278	65%	220%	19	66
4	Arkansas	5,725	1,876	69%	174%	30	77
5	California	9,286	5,674	75%	192%	20	51
6	Colorado	8,554	4,559	44%	154%	16	55
7	Connecticut	10,562	7,189	40%	101%	17	44
8	Delaware	7,477	3,929	86%	147%	40	69
9	Florida	6,594	2,829	106%	237%	32	71
10	Georgia	6,514	2,741	77%	193%	28	70
11	Hawaii	9,080	8,678	27%	38%	10	14
12	Idaho	6,399	2,585	57%	176%	22	68
13	Illinois	9,196	5,616	47%	117%	20	51
14	Indiana	9,417	5,354	39%	127%	16	52
15	Iowa	8,110	2,962	29%	163%	12	68
16	Kansas	7,131	2,710	29%	167%	12	66
17	Kentucky	6,170	2,514	63%	167%	26	70
18	Louisiana	5,332	1,378	69%	186%	30	82
19	Maine	9,059	4,426	44%	134%	20	61
20	Maryland	10,528	7,908	45%	90%	20	40
21	Massachusetts	8,831	3,158	48%	165%	21	72
22	Michigan	10,126	5,901	32%	108%	15	51
23	Minnesota	7,147	3,307	56%	135%	28	67
24	Mississippi	5,896	859	78%	218%	32	90
25	Missouri	7,579	3,280	50%	142%	24	67
26	Montana	8,017	3,263	32%	160%	13	65
27	Nebraska	6,929	3,367	52%	147%	22	62
28	Nevada	7,842	4,777	76%	184%	22	52
29	New Hampshire	11,496	5,457	35%	112%	19	62
30	New Jersey	11,577	7,981	44%	97%	20	45
31	New Mexico	5,891	1,996	85%	207%	31	77
32	New York	9,102	5,454	68%	142%	27	56
33	North Carolina	6,116	2,380	89%	223%	29	72
34	North Dakota	6,255	1,900	42%	165%	19	76
35	Ohio	10,288	5,331	41%	128%	19	58
36	Oklahoma	4,664	312	95%	254%	36	96
37	Oregon	9,366	3,714	46%	174%	18	67
38	Pennsylvania	10,765	6,274	37%	100%	20	53
39	Rhode Island	11,471	7,823	36%	103%	15	42
40	South Carolina	8,992	4,049	35%	122%	18	63
41	South Dakota	7,283	2,077	28%	151%	14	75
42	Tennessee	7,858	3,931	40%	150%	15	58
43	Texas	7,360	3,296	56%	175%	20	64
44	Utah	6,365	4,395	61%	134%	21	45
45	Vermont	11,410	5,402	48%	117%	27	65
46	Virginia	8,397	4,067	49%	145%	21	62
47	Washington	7,588	2,433	74%	192%	30	77
48	West Virginia	6,706	2,905	69%	192%	24	67
49	Wisconsin	6,735	3,311	54%	136%	25	63
50	Wyoming	7,233	3,832	41%	150%	15	55

		NET COA (COA minus grants)	NET COA (C0A minus TOTAL AID)	PERCENT OF GRANT AID TO TF	PERCENT OF TOTAL AID TO TF	PERCENT OF GRANT AID TO COA	PERCENT OF TOTAL AID TO COA
	CANADA	6,564	4,319	52%	118%	21	48
1	Newfoundland	6,066	657	37%	195%	17	91
2	Prince Edward Island	7,971	2,737	31%	181%	12	70
3	Nova Scotia	8,846	6,635	21%	69%	10	33
4	New Brunswick	8,165	5,382	25%	103%	10	41
5	Québec	5,464	4,458	88%	142%	23	37
6	Ontario	7,388	4,661	51%	115%	22	51
7	Manitoba	7,032	5,172	29%	87%	12	35
8	Saskatchewan	6,323	3,440	48%	126%	22	57
9	Alberta	6,108	3,861	56%	113%	26	53
10	British Columbia	4,137	1,685	80%	176%	33	73

		NET COA (COA minus grants)	NET COA (C0A - TOTAL AID)	PERCENT OF GRANT AID TO TF	PERCENT OF TOTAL AID TO TF	PERCENT OF GRANT AID TO COA	PERCENT OF TOTAL AID TO COA
	UNITED STATES	6,767	3,444	54%	149%	22	60
1	Alabama	5,945	2,279	47%	169%	19	69
2	Alaska	4,636	3,320	128%	173%	45	60
3	Arizona	6,347	2,704	65%	220%	19	66
4	Arkansas	4,722	1,548	69%	174%	30	77
5	California	7,659	4,680	75%	192%	20	51
6	Colorado	7,055	3,760	44%	154%	16	55
7	Connecticut	8,711	5,929	40%	101%	17	44
8	Delaware	6,166	3,240	86%	147%	40	69
9	Florida	5,438	2,333	106%	237%	32	71
10	Georgia	5,373	2,261	77%	193%	28	70
11	Hawaii	7,489	7,157	27%	38%	10	14
12	Idaho	5,277	2,132	57%	176%	22	68
13	Illinois	7,585	4,632	47%	117%	20	51
14	Indiana	7,767	4,416	39%	127%	16	52
15	Iowa	6,689	2,443	29%	163%	12	68
16	Kansas	5,881	2,236	29%	167%	12	66
17	Kentucky	5,089	2,073	63%	167%	26	70
18	Louisiana	4,397	1,137	69%	186%	30	82
19	Maine	7,472	3,651	44%	134%	20	61
20	Maryland	8,683	6,522	45%	90%	20	40
21	Massachusetts	7,283	2,605	48%	165%	21	72
22	Michigan	8,352	4,867	32%	108%	15	51
23	Minnesota	5,895	2,728	56%	135%	28	67
24	Mississippi	4,863	708	78%	218%	32	90
25	Missouri	6,251	2,705	50%	142%	24	67
26	Montana	6,612	2,691	32%	160%	13	65
27	Nebraska	5,715	2,777	52%	147%	22	62
28	Nevada	6,468	3,940	76%	184%	22	52
29	New Hampshire	9,482	4,501	35%	112%	19	62
30	New Jersey	9,548	6,583	44%	97%	20	45
31	New Mexico	4,859	1,646	85%	207%	31	77
32	New York	7,507	4,498	68%	142%	27	56
33	North Carolina	5,044	1,963	89%	223%	29	72
34	North Dakota	5,159	1,567	42%	165%	19	76
35	Ohio	8,486	4,397	41%	128%	19	58
36	Oklahoma	3,847	258	95%	254%	36	96
37	Oregon	7,724	3,063	46%	174%	18	67
38	Pennsylvania	8,878	5,174	37%	100%	20	53
39	Rhode Island	9,461	6,452	36%	103%	15	42
40	South Carolina	7,416	3,339	35%	122%	18	63
41	South Dakota	6,007	1,713	28%	151%	14	75
42	Tennessee	6,481	3,242	40%	150%	15	58
43	Texas	6,070	2,718	56%	175%	20	64
44	Utah	5,250	3,625	61%	134%	21	45
45	Vermont	9,411	4,456	48%	117%	27	65
46	Virginia	6,925	3,354	49%	145%	21	62
47	Washington	6,259	2,007	74%	192%	30	77
48	West Virginia	5,531	2,396	69%	192%	24	67
49	Wisconsin	5,555	2,731	54%	136%	25	63
50	Wyoming	5,966	3,161	41%	150%	15	55

PART V. COA TO MEDIAN FAMILY INCOME

		PERCENT COA TO MEDIAN FAMILY INCOME (A)	PERCENT NET COA (minus grant aid) TO MEDIAN FAMILY INCOME (A)	PERCENT NET COA (minus Total Aid) TO MEDIAN FAMILY INCOME (A)	PERCENT OF TF TO MEDIAN FAMILY INCOME (A)
	CANADA	17	14	9	7
1	Newfoundland	20	17	2	10
2	Prince Edward Island	22	20	7	9
3	Nova Scotia	23	21	16	11
4	New Brunswick	22	20	13	9
5	Québec	17	13	11	4
6	Ontario	17	13	9	8
7	Manitoba	18	16	12	7
8	Saskatchewan	18	14	8	8
9	Alberta	16	12	8	8
10	British Columbia	13	8	3	5

		PERCENT COA TO MEDIAN FAMILY INCOME (A)	PERCENT NET COA (minus grant aid) TO MEDIAN FAMILY INCOME (A)	PERCENT NET COA TO MEDIAN FAMILY INCOME (A)	PERCENT OF TF TO MEDIAN FAMILY INCOME (A)
	UNITED STATES	17	14	7	7
1	Alabama	18	14	5	7
2	Alaska	14	8	6	5
3	Arizona	17	14	6	5
4	Arkansas	18	12	4	8
5	California	18	14	9	5
6	Colorado	15	13	7	5
7	Connecticut	16	13	9	7
8	Delaware	19	11	6	9
9	Florida	17	12	5	5
10	Georgia	15	11	5	5
11	Hawaii	15	13	13	5
12	Idaho	16	12	5	6
13	Illinois	17	14	8	8
14	Indiana	18	15	9	8
15	Iowa	16	14	5	7
16	Kansas	13	12	5	5
17	Kentucky	17	12	5	7
18	Louisiana	16	11	3	7
19	Maine	21	17	8	9
20	Maryland	18	14	11	8
21	Massachusetts	15	12	4	6
22	Michigan	18	16	9	9
23	Minnesota	14	10	5	7
24	Mississippi	19	13	2	8
25	Missouri	18	14	6	8
26	Montana	19	16	7	8
27	Nebraska	15	12	6	6
28	Nevada	16	13	8	5
29	New Hampshire	20	16	8	11
30	New Jersey	18	15	10	9
31	New Mexico	18	12	4	7
32	New York	20	15	9	8
33	North Carolina	15	11	4	5
34	North Dakota	15	12	4	7
35	Ohio	21	17	9	9
36	Oklahoma	15	9	1	6
37	Oregon	19	16	6	7
38	Pennsylvania	23	18	11	12
39	Rhode Island	21	18	12	9
40	South Carolina	20	17	8	11
41	South Dakota	16	14	4	8
42	Tennessee	18	15	7	7
43	Texas	17	13	6	6
44	Utah	13	10	7	4
45	Vermont	26	19	9	15
46	Virginia	16	13	6	7
47	Washington	17	12	4	7
48	West Virginia	20	15	7	7
49	Wisconsin	14	10	5	6
50	Wyoming	15	13	7	6

PART V. COA TO PER CAPITA PERSONAL INCOME

		PERCENT OF COA TO PER CAPITA PERSONAL INCOME (A)	PERCENT OF NET COA TO PER CAPITA PERSONAL INCOME (A)	PERCENT TF TO PER CAPITA PERSONAL INCOME (A)
	CANADA	30	15	12
1	Newfoundland	35	3	16
2	Prince Edward Island	41	12	16
3	Nova Scotia	41	28	20
4	New Brunswick	39	23	15
5	Québec	27	17	7
6	Ontario	31	15	14
7	Manitoba	34	22	14
8	Saskatchewan	34	14	15
9	Alberta	29	14	14
10	British Columbia	22	6	9

		PERCENT OF COA TO PER CAPITA PERSONAL INCOME (A)	PERCENT OF NET COA TO PER CAPITA PERSONAL INCOME (A)	PERCENT TF TO PER CAPITA PERSONAL INCOME (A)
	UNITED STATES	29	12	12
1	Alabama	31	10	13
2	Alaska	28	11	10
3	Arizona	32	11	9
4	Arkansas	31	7	14
5	California	30	15	8
6	Colorado	26	12	9
7	Connecticut	26	15	11
8	Delaware	33	10	15
9	Florida	29	8	9
10	Georgia	27	8	10
11	Hawaii	30	26	11
12	Idaho	29	9	11
13	Illinois	30	15	13
14	Indiana	34	16	14
15	Iowa	29	9	12
16	Kansas	24	8	10
17	Kentucky	29	9	12
18	Louisiana	27	5	12
19	Maine	37	14	17
20	Maryland	32	19	14
21	Massachusetts	24	7	11
22	Michigan	34	17	16
23	Minnesota	26	9	13
24	Mississippi	34	3	14
25	Missouri	30	10	14
26	Montana	34	12	14
27	Nebraska	27	10	11
28	Nevada	28	13	8
29	New Hampshire	35	14	19
30	New Jersey	32	18	15
31	New Mexico	32	8	12
32	New York	30	13	12
33	North Carolina	26	7	9
34	North Dakota	26	6	12
35	Ohio	37	16	17
36	Oklahoma	25	1	10
37	Oregon	34	11	13
38	Pennsylvania	38	18	20
39	Rhode Island	38	22	15
40	South Carolina	38	14	20
41	South Dakota	27	7	13
42	Tennessee	30	12	11
43	Texas	28	10	10
44	Utah	28	15	10
45	Vermont	48	17	27
46	Virginia	28	11	12
47	Washington	29	6	12
48	West Virginia	34	11	12
49	Wisconsin	26	10	12
50	Wyoming	26	12	9

APPENDIX B. MAJOR PROGRAM DEFINITIONS

Federal Student Aid Programs in Canada

Canada Student Loans Program (CSLP). The Canada Student Loans Program was created in 1964 under the Canada Student Loans Act. Since 2000, the federal government has distributed loans directly rather than through financial institutions. Most funds are targeted at full-time PSE students, but loans are also made available to part-time students. Quebec, Nunavut and the Northwest Territories do not participate in CSLP. Instead these jurisdictions receive alternative payments.

Canada Study Grants (CSG). Canada Study Grants are funded by the Government of Canada and administered through the provincial governments (with the exception of Quebec) on behalf of the Government of Canada. There are five categories of CSGs: full-time students with dependents, persons with disabilities, female doctoral students, part-time students with dependents, and high need part-time students. The amounts available vary by type of program and need.

Canada Millennium Scholarship Foundation (The Foundation). The Foundation is a private and autonomous organization established by an Act of Parliament in 1998 and granted an endowment of $2.5 billion. The Millennium Bursary Program accounts for some 95 percent of all bursaries from the Foundation, providing approximately $285 million to undergraduate students each year. The average millennium bursary is worth $3,000.

Federal Student Aid Programs in the United States

Pell Grants. In 1972, under the Nixon administration, Congress created the Basic Educational Opportunity Grants program (BEOG). In 1980, this program was renamed for former Rhode Island Senator Claiborne Pell. The Pell Grants were designed as vouchers, portable aid that students could take to any institution in the US. They are targeted toward students from low-income backgrounds; students receive grants on the basis of a needs assessment. In 2002-03, Pell Grant awards ranged from $400 to $4,000 US per year. Pell Grants are available to undergraduates at the college and university levels.

Campus-Based Programs. These three federal programs are called "campus-based" because institutional financial aid officials determine which students receive awards (and how much) through federal guidelines:

- **Supplemental Educational Opportunity Grants (SEOG).** This need-based program provides supplemental grants to very needy Pell Grant recipients. The minimum award is $100 US and the maximum is $4,000 US.

- **Perkins Loans.** These are low-interest loans for financially needy undergraduate students.

- **Federal Work-Study (FWS).** This program supports part-time jobs for undergraduate students during the academic year and summer months. Employers pay 25 percent of students' wages, and the federal program provides the rest.

Federal Family Education Loans (FFEL). The FFEL contains three separate loan programs: the Stafford Subsidized program, which pays interest during the course of study; the Stafford Unsubsidized program, which does not cover this interest; and the PLUS program (Parent Loans for Undergraduate Students), which offers loans to parents of dependent students. PLUS is an

unsubsidized program. All of these loan programs have lower interest rates than those available on the market. The funds are administered either directly through the government (the Direct Loan program) or through a number of guarantors—private and public agencies whose funds are guaranteed by the federal government.

Leveraging Educational Assistance Program (LEAP). Formerly known as the SSIG program (State Student Incentive Grant), this program provides federal funding to states, matching state funding for grant and work-study opportunities for undergraduate, graduate and professional students. Generally, this is a one-to-one matching program. However, states that receive more than $30 million US must match federal funds by a 3-1 ratio.

APPENDIX C. DATA SOURCES

SOURCES OF DATA	Canada	United States
Per Capita Personal Income	DERIVED VARIABLE: Derived by dividing total personal income by total population within each jurisdiction.	DERIVED VARIABLE: Derived by dividing total personal income by total population within each jurisdiction.
Median Family Income	Statistics Canada: After Tax Median Family Income derived from Beyond 20/20 Professional Browser, T601, Economic Families, 2 persons or more	US Census Bureau: P77 Median Family Income from Census 2000 Summary File 3 (SF 3) - Sample Data. (www.census.gov)
Personal Income	Statistics Canada: CANSIM II Data for the National figure; provincial totals derived by using percentage of provincial personal income from Table 407, ITC datasets, multiplied by national totals.	US Department of Commerce, Bureau of Economic Analysis (BEA), Regional Accounts Data, (http://www.bea.doc.gov/bea/regional/reis/)
Gross Domestic Product	Canada Taxpayers Federation (http://www.taxpayer.com/Facts/Provincial_Gross_Domestic_Product_1989_2000.pdf)	US Department of Commerce, Bureau of Economic Analysis (BEA), Regional Accounts Data, (http://www.bea.doc.gov/bea/regional/gsp/action.cfm)
Total Resident Population	Statistics Canada: CANSIM II, table 051-0001.	US Department of Commerce, Bureau of Economic Analysis (BEA), Regional Accounts Data, (http://www.bea.doc.gov/bea/regional/reis/)
Total 18- to 24-year-old Population	Statistics Canada: e-mail request; February 18, 2003)	US Census Bureau.
Number of High School Graduates	Statistics Canada: 1999 StatsCan Catalogue no. 81-229-XIB (www.statcan.ca)	US Department of Education, National Center for Education Statistics, Digest of Education Statistics 2001, Table 104, page 127.
Ratio of HS Grads vs. 18- to 24-year-olds	DERIVED VARIABLE: Derived by dividing the number of high school graduates by the total 18- to 24-year-old population in each jurisdiction	DERIVED VARIABLE: Derived by dividing the number of high school graduates by the total 18- to 24-year-old population in each jurisdiction
High School Graduate Rate	Statistics Canada: After High School, The First Years, Table 1, page 7	US Department of Education, National Center for Education Statistics, Digest of Education Statistics 2001, Table 104, page 127.
PSE Continuation Rate	Statistics Canada: Bowlby, Jeffrey W., and McMullen, Kathryn (2002). At a Crossroads: First Results for the 18- to 20-Year-old Cohort of the Youth in Transition Survey, p. 46, Table 4.2.	National Center for Public Policy in Higher Education, Measuring Up 2000. (www.highereducation.org)

FTE at 4-year public institutions	Association of University and Colleges Canada (www.aucc.ca)	US Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), ''Fall Enrollment'' surveys. Table 202 Digest of Education Statistics 2001, NCES.
FTE as Percentage of 18-24 Year Old Population	DERIVED VARIABLE: FTE at University divided by 18-24 Year Old Population	
University FTE per 1,000 Persons	DERIVED VARIABLE: University FTE divided by total population multiplied by 1,000.	
Tuition & Fees Four-Year Public Institutions	Canada Millennium Scholarship Foundation through Statistics Canada; Domestic Arts Tuition and Fee Charges at Canadian Universities	US Department of Education, National Center for Education Statistics, Digest of Education Statistics 2001, Table 317.
Room & Board	2000-01 Statistics Canada. Room and "Meal" data averaged across four-year institutions in each province where data were available. The figures are not enrolment weighted, and Newfoundland & Labrador and Nova Scotia figures based on one university in each province. "Canada" figure based on average of all universities across the country.	US Department of Education, National Center for Education Statistics, Digest of Education Statistics 2001, Table 317.
Cost of Attendance Four-Year Institutions	Canada Millennium Scholarship Foundation through Statistics Canada; Domestic Arts Tuition and Fee Charges at Canadian Universities	US Department of Education, National Center for Education Statistics, Digest of Education Statistics 2001, Table 317.
CSLP Volume University Only Full Time	Human Resources Development Canada (HRDC). A Statistical Profile of the Canada Student Loans Program (http://www.hrdc-drhc.gc.ca/student_loans/c/statistics/borrowers00.html)	N/A
Number of CSL Borrowers University Only FT	Human Resources Development Canada (HRDC). A Statistical Profile of the Canada Student Loans Program (http://www.hrdc-drhc.gc.ca/student_loans/c/statistics/borrowers00.html)	N/A
Average CSL Loan to University Students (Average per Borrower, not loan)	DERIVED VARIABLE: Derived by dividing the CSLP volume by number of CSLP borrowers.	N/A
Millennium Scholarship Bursary Volume	Canada Millennium Scholarship Foundation.	N/A
Number of Millennium Scholarship Bursaries	Canada Millennium Scholarship Foundation.	N/A
Average Millennium Scholarship Bursary	DERIVED VARIABLE: Derived by dividing the Millennium Scholarship Bursary Volume by number of Bursaries awarded.	N/A

CSG Volume	Canada Millennium Scholarship Foundation.	N/A
CSG Recipients	Canada Millennium Scholarship Foundation.	N/A
Average CSG Grant	DERIVED VARIABLE: Derived by dividing the CSG Volume by number of CSG recipients..	N/A
Provincial Loans	Canada Millennium Scholarship Foundation.	N/A
Provincial Need-Based Grants	Canada Millennium Scholarship Foundation.	N/A
Provincial Scholarships	Canada Millennium Scholarship Foundation.	
Provincial Remission Programs	Canada Millennium Scholarship Foundation.	
Institutional Aid	Canada Millennium Scholarship Foundation.	US Department of Education IPEDS Data.
FY2001 State Tax Appropriations	N/A	State Tax Info: Center for Higher Education, Illinois State University, Grapevine, updated January 7, 2002
Federal Loan Volume – Public Four-Year Institutions	N/A	US Department of Education Data. Includes FFEL and Direct Subsidized, Unsubsidized, and PLUS loans. Data AY00. Bachelor's Level and Higher only. Public institutions only. Analysis generated by Educational Policy Institute. Perkins Loans typically included under Campus Based Programs.
Number of Federal Loans – Public Four-Year Institutions	N/A	As Above.
Number of Federal Loan Borrowers – Unduplicated – Public Four-Year Institutions	N/A	As Above. Unduplicated figures from US Department of Education.
Average Federal Loan per Borrower – Public Four-year Institutions	N/A	DERIVED VARIABLE: Derived by divided loan volume by number of unduplicated borrowers.
Average Federal Loan – Public Four-year Institutions	N/A	DERIVED VARIABLE: Derived by divided loan volume by number of federal loans.
Pell Grant Volume at public 4-year institutions	N/A	US Department of Education, Pell Grant Office, November 7, 2002. Analysis by Educational Policy Institute.
Pell Grant Recipients at public 4-yr institutions	N/A	US Department of Education, Pell Grant Office, November 7, 2002. Analysis by Educational Policy Institute.

Average Pell Grant at public 4-year institutions	N/A	DERIVED VARIABLE: Derived by dividing Pell Grant volume by number of recipients.
SEOG (Supplemental Educational Opportunity Grants) Volume & Recipients	N/A	US Department of Education. Analysis by Educational Policy Institute.
SEOG Average	N/A	DERIVED VARIABLE: Derived by dividing SEOG volume with number of recipients.
Perkins Loan Volume & Recipients	N/A	US Department of Education. Analysis by Educational Policy Institute.
Perkins Average Loan per Borrower	N/A	DERIVED VARIABLE: Derived by dividing Perkins volume with number of recipients.
FWS (Federal Work Study) Volume & Recipients	N/A	US Department of Education. Analysis by Educational Policy Institute.
FWS Average	N/A	DERIVED VARIABLE: Derived by dividing FWS volume with number of recipients.
LEAP	N/A	NASSGAP 32nd Annual Survey, Table 4, p. 7. Due to the unavailability of disaggregated data and lack of credible proxy measure, data include ALL institutions, not just public institutions.
State Grant Aid	N/A	NASSGAP 32nd Annual Survey, Table 1, p. 1. NASSGAP data include the federal LEAP amounts. LEAP amount is subtracted from total state grant aid. A proxy measure was created to determine an approximation of public four-year institution (in-state) using Table 9 of the NASSGAP Survey (2000-01 data). For example, 54 percent of all state need-based grants, nationally, were given to students at public institutions (including two-year). Thus, we used .54 as the multiplier to get at an approximation of funds awarded to public four-year institutions. We did this for each state. There were no proxies available for Georgia and Arkansas, so we used the national average.
Other State Aid	N/A	NASSGAP 32nd Annual Survey, Table 3, p. 5.As with total state aid, we used the proxy measure to approximately public four-year institutions. Same method used for Georgia and Arkansas. South Dakota was used at 100 percent.
Total Provincial/State Aid	DERIVED VARIABLE: The sum of provincial loans, need-based aid, scholarships, and remission programs	DERIVED VARIABLE: The sum of total state aid and other state aid.
Institutional Aid	Canada Millennium Scholarship Foundation	Based on EPI calculation using IPEDS data.

Total Federal, Provincial/State, and Institutional Aid	DERIVED VARIABLE: Sum of total federal aid, total provincial/state aid, and institutional aid.	
Total Grant Aid	DERIVED VARIABLE: Sum of provincial need-based grants, scholarships, CSG, Millennium Bursaries, institutional aid, and remission programs.	DERIVED VARIABLE: Sum of Pell Grants, SEOG, LEAP, state grants, other state aid, and institutional aid. Other state aid was added because most of that aid is determined to be in grant/scholarship form, although a small portion could be loan.
Total Loan Aid	DERIVED VARIABLE: Sum of CSLP and provincial loans.	DERIVED VARIABLE: Sum of federal loan programs and Perkins program.
Grant versus Loan Aid	DERIVED VARIABLE: Total Grant Aid divided by sum of total grant aid plus total loan aid.	
Grant versus Total Aid	DERIVED VARIABLE: Total Grant Aid divided by sum of total federal, provincial/state, and institutional aid.	
Average Federal Aid per FTE	DERIVED VARIABLE: Total federal aid divided by FTE.	
Average Total Grant Aid per FTE	DERIVED VARIABLE: Total grant aid divided by FTE.	
Average Federal, Provincial/State, and Institutional Aid per FTE	DERIVED VARIABLE: Total federal, provincial/state, and institutional aid divided by FTE.	
Net Cost of Attendance (COA – Grant Aid)	DERIVED VARIABLE: Derived by subtracting total grant aid from Average COA.	
Net Cost of Attendance (COA – Total Aid)	DERIVED VARIABLE: Derived by subtracting total aid from Average COA.	
Percentage of Grant Aid to Tuition and Fee Charges	DERIVED VARIABLE: Derived by dividing average grant aid per FTE by average tuition and fee charge.	
Percentage of Total Aid to Tuition and Fee Charges	DERIVED VARIABLE: Derived by dividing average total aid per FTE by average tuition and fee charge.	
Percentage of Grant Aid to Cost of Attendance (COA) Charges	DERIVED VARIABLE: Derived by dividing average grant aid per FTE by average cost of attendance charge.	
Percentage of Total Aid to Cost of Attendance (COA) Charges	DERIVED VARIABLE: Derived by dividing average total aid per FTE by average cost of attendance charge.	
Percentage of Grant Aid to Cost of Attendance (COA) Charges	DERIVED VARIABLE: Derived by dividing average grant aid per FTE by average cost of attendance charge.	
Percentage of Cost of Attendance to Median Family Income	DERIVED VARIABLE: Derived by dividing COA by Median Family Income.	
Percentage of Net COA (grants only) to Median Family Income	DERIVED VARIABLE: Derived by dividing net COA (grants only) by Median Family Income.	
Percentage of Net COA (total aid) to Median Family Income	DERIVED VARIABLE: Derived by dividing net COA (total aid) by Median Family Income.	

Percentage of Tuition and Fees to Median Family Income	DERIVED VARIABLE: Derived by dividing average tuition and fee charge by Median Family Income.
Percentage of COA to Per Capita Personal Income	DERIVED VARIABLE: Derived by dividing COA by per capita personal income..
Percentage of Net COA (grants only) to Per Capita Personal Income	DERIVED VARIABLE: Derived by dividing net COA (total aid) by per capita personal income.
Percentage of Tuition and Fee Charges to Per Capita Personal Income	DERIVED VARIABLE: Derived by dividing average tuition and fee charge by per capita personal income.

APPENDIX D. TREATMENT OF FISCAL DATA

Comparing income and prices across borders is a complex concept. There are a number of ways of comparing data from either side of the Canada-US border. Some seem better suited for this study than others, and three were considered.

1. FACE VALUE. The first possibility is to leave fiscal data alone and compare Canadian and US prices at face value. In the mid-1970s, Canadian and US currencies were on par. But since 1976, the Canadian dollar has traded in deficit to US currency, today trading at approximately 77 cents to the US dollar.[17] For this reason, and since goods and services are in fact more expensive in Canada, a face value comparison is not appropriate.

2. CURRENCY EXCHANGE RATE. A second possible strategy would be to compare currencies at the market exchange rate. Under this process, $1 Cdn would be equal to $0.77 US, the current exchange rate.[18] Conversely, $1 US would be equivalent to $1.35 Cdn.

Using this method, we could assume that a US shopper spending $100 US could buy the same goods as a Canadian shopper spending $135 Cdn.[19] In fact, this would be true for a Canadian crossing the border; the Canadian would have to spend $135 Cdn to buy $100 US worth of goods. But purchasing the same goods in Canada would cost far less than $135 Cdn, so the exchange rate does not reflect the purchasing power of Canadian currency. This is because too many factors go into the calculation of currency exchange, including political decisions and stock market ebbs and flows.

3. PURCHASING POWER PARITY (PPP) RATE. Different currencies are able to purchase different amounts of goods and services in their respective economies. This "purchasing power" is similar to that used to calculate current price indexes in Canada and the US. The Purchasing Power Parity (PPP) rate allows us to compare the purchasing power of a nation's currency against that of other nations. The PPP is calculated by comparing the price of a group of selected products in Canada to that of the same group of products in the US. The difference between the two costs then is used to develop a PPP ratio.

The OECD calculates a PPP index ("Comparative Price Levels") to compare purchasing power across nations. After much discussion with officials at the US Bureau of Economic Analysis, the US Bureau of the Census, Statistics Canada, and economists in both countries, we believe this is the most fair and appropriate way to compare fiscal data between Canada and the US.

[17] The currency conversion was done on September 1, 2004.
[18] See above.
[19] This ratio changed greatly during the course of this study, reaching the current low of $1.35 from rates above $1.53 within a two-month period in early 2003.

Treatment	Canada	US
Face Value	1	1
Purchasing Price Parity (PPP) Index	1.21	1
Currency Exchange Rate	1.35	1

As the table shows, the PPP rate for the US and Canadian dollars is 1.21. An item that costs $1 US in the United States would cost $1.21 Cdn in Canada. This suggests that after the incomes of individuals and families in Canada and the US are controlled for purchasing power, Canadians can purchase about 18 percent less than their US counterparts. Using a currency exchange multiplier of 1.35 would overcorrect the actual purchasing power of Canadian currency. Appendix A contains data tables based on the currency exchange rate for the sake of comparison.

When we refer to US financial data in this report, we therefore provide two numbers. The first is the correct amount in Canadian funds using the PPP multiplier of 1.212472. The second is the actual US currency figure.

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