Office of the Superintendent of Financial Institutions Canada
Bureau du surintendant des institutions financières Canada
Office of the Chief Actuary
Bureau de l'actuaire en chef

ACTUARIAL REPORT

on the

CANADA STUDENT LOANS PROGRAM

as at 31 July 2006

Canada

Office of the Chief Actuary
Office of the Superintendent of Financial Institutions Canada
16th Floor, Kent Square Building
255 Albert Street
Ottawa, Ontario
K1A 0H2
Facsimile: **613-990-9900**
E-mail: **oca-bac@osfi-bsif.gc.ca**
Web site: **www.osfi-bsif.gc.ca**

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The Honourable Monte Solberg, P.C., M.P.
Minister of Human Resources and Social Development
Gatineau, Canada

The Honourable James M. Flaherty, P.C., M.P.
Minister of Finance
Ottawa, Canada

Dear Ministers:

Pursuant to a request from the Assistant Deputy Minister, Human Resources and Social Development, I am pleased to submit the sixth actuarial report as at 31 July 2006 on the Canada Student Loans Program established under the *Canada Student Loans Act* and the *Canada Student Financial Assistance Act*.

Yours sincerely,

Jean-Claude Ménard

Jean-Claude Ménard, F.S.A., F.C.I.A.
Chief Actuary

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I. Executive Summary

Effective 1 August 2000, the Government redesigned the delivery of the Canada Student Loans Program (CSLP) from one delivered by chartered banks to one directly financed by the Government. As part of this redesign, the Office of the Chief Actuary was given the mandate to conduct an actuarial review to provide a precise assessment of the current costs of the CSLP, a long-term (25 years) forecast of these costs, a portfolio projection, as well as a discussion of all the assumptions underlying the results of the review. The results are presented on a loan year basis from 1 August to 31 July.

A. Purpose of the Report

This is the sixth actuarial report on the CSLP established under the *Canada Student Loans Act* and the *Canada Student Financial Assistance Act*. It presents the results of an actuarial review of the CSLP as at 31 July 2006 and includes projections of future costs of the Program through loan year 2030-31. An actuarial review of the CSLP provides an evaluation of the Program's overall financial costs and increases the level of information provided to the Minister of Human Resources and Social Development, the Minister of Finance, Parliament and the public.

In accordance with accepted actuarial practice, the main purpose of this actuarial report is to show estimates of:

- projections of the number of students in the CSLP and amount of new loans issued;
- projections of the portfolio of loans in-study, loans in repayment and Program cost elements by type of financial arrangement or regime. Also included are projections of the provisions and allowances under the Direct Loan Regime in effect since August 2000; and
- projections of the net cost of the Direct Loan Regime as well as the remaining net cost for the pre-2000 regimes.

B. Scope of the Report

This valuation report is based on the Program provisions as described in Appendix 1. After a short discussion of the best-estimate assumptions in section A of the Main Report, section B presents projections of new loans issued, the number of students eligible to receive a loan and the average amount of new loans issued. Section C includes projections of the portfolio by type of regime. Section D contains projections for the operation of this Program, such as revenues and expenses for all three regimes. These are followed by a conclusion of the actuarial review and the actuarial opinion regarding this review.

The various appendices provide supplemental information on Program provisions, a description of data, assumptions and methods employed and the sensitivity tests conducted.

C. Main Findings

The results in this report present an overview of the Government's cost of being involved in the Direct Loan Regime of the CSLP. The following summarizes the main findings of the report. The results are presented on a loan year basis from 1 August to 31 July.

- Although the number of students enrolled full-time in a post-secondary institution decreases over the projection period, the number of students receiving a CSLP loan in a year increases from 346,000 in 2005-06 to 430,000 in 2030-31. This represents an increase in the loan uptake rate of students in post-secondary institutions from 41% to 60%.
- Following an amendment to the *Canada Student Financial Assistance Act* (CSFAA), the weekly loan limit was increased by $45 (from $165 to $210) in loan year 2005-06 and is assumed to remain at that level thereafter. This results in the following:
  - new loans issued in 2005-06 totalled $1.9 billion and have decreased slightly in loan year 2006-07 according to the most recent experience data. New loans issued are then projected to increase during the projection period and reach $2.9 billion in 2030-31; and
  - the percentage of students at the loan limit decreased from 50% in 2004-05 to 34% in 2005-06, but the proportion is projected to grow thereafter and reach 79% in 2030-31. In approximately ten years, the situation will recur where approximately half of all CSLP students will be at the loan limit. At that time, the loan limit may need to be revisited.
- The portfolio of student loans increases from $11.6 billion as at 31 July 2006 to $20.5 billion by the end of the projection period. The amount of Direct loans which were in default on 31 July 2006 is $853 million.
- According to the projections, the $15 billion limit on the aggregate amount of outstanding loans in section 13 of the CSFAA is expected to be reached in loan year 2012-13.
- The total net cost (expenses less revenues) of the Government's involvement in the CSLP is expected to grow from $788 million in 2005-06 to $1.3 billion in 2030-31. This represents an average annual increase in the cost to the Government of 2.1%.
- A new prospective methodology based on the loan status is introduced in this report to determine the allowance for bad debt – principal. This new methodology is a more flexible approach than the previously used retrospective approach because it considers not only the past experience of prior cohorts, but it also permits faster recognition of recent and expected experience for current and new cohorts of loans.
- The provision rates for bad debt (principal and interest) and debt reduction in repayment are now applied to net loans issued and remain unchanged from the previous report even though the long run future default and recovery rates have been reduced to 20% and 29% respectively.
- As a sensitivity test, the new limit of $210 is indexed annually to inflation. The results of the test are included in Appendix 4 and are summarized below:
  - an additional $77 million (4% increase) of new loans is issued in 2010-11 due to the indexation of the limit and an additional $1,417 million (49% increase) in 2030-31; and
  - the portfolio reaches $27.8 billion instead of the expected $20.5 billion in loan year 2030-31 and the total net cost for the Government's involvement in the CSLP increases by $375 million (28% increase) in loan year 2030-31.

II. Main Report

The Canada Student Loans Program has been in effect since 1964 and provides Canadians with financial assistance to pursue a post-secondary education. Historically, two successive acts were established to permit the Minister to provide loans to eligible students under the Program. The *Canada Student Loans Act* (CSLA) applies to loan years preceding August 1995. The *Canada Student Financial Assistance Act* (CSFAA) replaced the previous act for loan years after July 1995.

On 1 August 2000, the Government redesigned the delivery of the Program to disburse loans directly to students. The Office of the Chief Actuary was given the mandate to provide an assessment of the current costs of the CSLP, a long-term (25 years) forecast of these costs, a portfolio projection, as well as a discussion of all the assumptions underlying the results of the review. The results are presented on a loan year basis from 1 August to 31 July.

Section A of the report provides a discussion of assumptions that reflect our best judgement; these assumptions are referred to in this report as the "best-estimate" assumptions. They are determined by putting more emphasis on elements affecting the growth of new loans issued.

The projection of loans issued to eligible students for each loan year is presented in section B. This includes a projection of the student population (ages 18 to 34) in order to determine the future number of students enrolled in post-secondary education and eligible to qualify for a loan under the CSLP. A long-term demographic and economic context of the aging of the population and anticipated labour shortage serve as a basis for the examination of key factors that affect eligibility. Such factors include the evolution of the projected student population, the participation of youth in the labour force and the enrolment rate in post-secondary education.

The projection of the portfolio of loans for each regime (Guaranteed, Risk-Shared and Direct) is provided in section C and the forecast of the net cost of the CSLP is presented in section D. For the Government, there are higher public debt charges following the implementation of the new Direct Loan arrangement. The costs related to Direct loans include the interest subsidy on in-study loans, interest relief, provisions for debt reduction and bad debt (principal and interest), Canada Study Grants, Canada Access Grants, alternative payments, loans forgiven, recovery costs and administration expenses. The costs are reduced by an estimation of the net interest revenues coming from student interest payments, interest relief payments and interest accrued during the grace period and on impaired loans.

The actuarial estimates in this report are based on the current provisions of the Program as described in Appendix 1. The other appendices contain a more detailed description of the assumptions, the methodology and the sensitivity tests and results for changes in assumptions and projections, such as changes in the loan ceiling, interest rates and net default rates.

A. Best-estimate Assumptions

Several economic and demographic assumptions are needed to determine future long-term costs of the CSLP. The projections included in this report cover a period of 25 years and the assumptions are determined by putting as much emphasis on historical trends as on short-term experience. These assumptions reflect our best judgement and are referred to as the "best-estimate" assumptions. Some of the assumptions are based on those used by the Office of the Chief Actuary for the actuarial report on the Canada Pension Plan (CPP), adjusted to reflect loan year periods and current economic and demographic experience.

The assumptions were chosen to form a coherent whole, taking into account certain interrelationships among them. The following sections present the assumptions used as well as their future evolution.

1. Demographic Assumptions

The demographic projections start with the Canadian and Québec populations on 1 July 2003, to which future fertility, mortality and migration assumptions are applied. The population of Canada is adjusted to exclude the non-participating province of Québec and territories of the Northwest Territories and Nunavut. The CPP population projections are essential in determining the future number of students enrolled in and pursuing a post-secondary education.

2. Economic Assumptions

The main economic assumptions related to the CSLP are the evolution of the labour force, inflation, tuition fees, wage increases, as well as the cost of borrowing for both students and the Government.

a) Evolution of the Labour Force

The "baby-boom" generation has and continues to exert a major influence on various aspects of society. It represents the large cohort born between the mid-1940s and the mid-1960s. This generation has exerted the strongest single influence on Canadian demographics over the last several decades. The aging of this generation will have significant influences over the next 25 years, such as slowing down the natural population growth and changing the composition of the labour force.

The entry of the "baby-boom" generation into the labour market created an abundance of workers, thus increasing the unemployment rate and influencing the school-to-work transition over the last 20 years. In the 1990s, the poor labour market conditions meant that youths aged 15-24 were less likely to find work and thus, more likely to be in school than youths of previous decades.

During the last decade, poor labour market conditions have caused the school-to-work transition period to increase. Until recently, it was difficult for a great number of youths to find work. One of the key elements underlying the best-estimate economic assumptions relates to the expected labour shortage. This shortage will result from the aging of the population, the retirement of the "baby-boom" generation and the impact of these on the labour force growth and distribution.

Starting in 2011, a decline in the labour force growth rate for the population aged 18 to 34 will create more working opportunities and should reduce the school-to-work transition period for this group. The proportion of individuals aged 18 to 34 participating in the labour force is set to increase from 80.3% in loan year 2005-06 to 83.5% in 2030-31. This implies that youths will join the labour market sooner, thus reducing the proportion of the population inclined to remain within the educational system.

b) Inflation, Tuition Fees and Wage Increases

The desire of the Bank of Canada and the Federal Government to keep inflation between 1% and 3% suggests that the rate of inflation will remain low in the coming years. Hence, the annual inflation rate is assumed to be 1.7% in 2006-07 and 2.0% in 2007-08. Starting in 2008-09, the rate is uniformly increased to its ultimate level of 2.5% in 2012-13. This rate of inflation is maintained for the remainder of the projection period.

Student expenses are used in the need assessment process to determine the maximum loan amount that can be issued. These expenses include food, shelter, transportation and clothing, all of which tend to vary with consumer prices. As a result, the future anticipated rate of inflation is used to project these expenses.

Tuition fees are treated separately from other expenses since their evolution is, in part, a result of government policies. Based on stated intentions in provincial budgets and actual tuition increases as reported in news releases, the tuition increase is estimated at 3.3% in loan year 2006-07, 3.1% in loan years 2007-08 and 2008-09 and 3.2% in loan year 2009-10. In the past, government budgetary cost pressures caused tuition fees to rise more quickly than inflation. Similar budgetary pressures are expected in the future due to the aging of the population. Thus, tuition fees are indexed at the rate of inflation plus 3.0% for the long-term, in accordance with past experience.

Future student resources, including student earnings and parental contributions, are influenced by the increase of average annual earnings. The increase in average earnings is related to changes in the manpower supply in the labour force. Therefore, an increase in productivity and a decline in the labour force growth rate, especially after 2011-12, are assumed to force a relatively higher real wage growth. The real growth in average earnings is projected to increase gradually from 0.7% in 2006-07, reaching 1.2% by 2012-13. It is maintained at that level for the rest of the projection period.

c) Cost of Borrowing

Since August 2000, students are indebted to the Government and, as a result, the Government bears the interest risk associated with the cost of borrowing for the entire duration of the loans. In general, the loan's duration is a combination of three periods. First, a student is in school and receives an interest subsidy for an average of three years. Next, the student enters a grace period of six months during which interest accrues but no payment is required. Finally, the student enters a period of repayment for a maximum of nine and a half years. The historical 10-year Government of Canada bond yield, net of inflation, is used as a benchmark to calculate the real cost of borrowing for the Government. The real cost is estimated at 2.5% in loan year 2006-07 and decreases immediately to 2.3% in 2007-08. The rate then increases gradually, reaching 2.7% in 2014-15. The rate remains at this level for the remainder of the projection period. The Government cost of borrowing is the sum of the real government cost of borrowing and the rate of inflation as summarized in Table 1.

Table 1 Borrowing Costs

Loan Year	Inflation (%)	Real Government Cost of Borrowing (%)	Government Cost of Borrowing (%)	Prime Rate (%)	Student Cost of Borrowing (%)
	(1)	(2)	(1) + (2)	(3)	(3) + 250 bps
2006-07	1.7	2.5	4.1	6.0	8.5
2007-08	2.0	2.3	4.3	6.0	8.5
2008-09	2.1	2.4	4.4	5.9	8.4
2009-10	2.2	2.4	4.6	5.9	8.4
2010-11	2.3	2.5	4.7	5.8	8.3
2011-12	2.4	2.5	4.9	5.8	8.3
2012-13	2.5	2.6	5.0	5.7	8.2
2013-14	2.5	2.6	5.1	5.6	8.1
2014-15	2.5	2.7	5.2	5.5	8.0
2015-16+	2.5	2.7	5.2	5.5	8.0

The prime rate is set at 6.0% for 2006-07 and is projected to decrease gradually until it reaches its ultimate rate of 5.5% in 2014-15. The student cost of borrowing, used to calculate the interest revenues and the cost of interest relief, is the sum of the prime rate and a spread of 250 basis points. The student cost of borrowing is presented in the last column of Table 1.

3. Provision Assumptions

As of August 2000, the CSLP is directly delivered and financed by the Government. Three provisions are established to cover future costs: bad debt – principal, bad debt – interest and debt reduction in repayment (DRR).

In previous reports, a retrospective methodology was used to project the provision for bad debt – principal. The provision amount was determined by applying the provision rate of 14.6% to the value of loans issued. Under this approach, a retroactive adjustment to all loans issued since the beginning of the program was required whenever the provision rate was increased or decreased. For this report, the methodology is changed to a prospective approach that uses a snapshot of the portfolio at a particular point in time to determine the amount of the allowance at that time. Using this new methodology, the calculation of the allowance is separated into three components in accordance with the status of the loan; that is whether the loan is in-study, in repayment (according to the number of years since consolidation) or impaired (according to the number of years since default). The value of the allowance is projected into the future using assumed default and recovery rates. For each loan category, based on the length of time that the loan has been in that status, the appropriate rate and distribution is applied to determine the value of the allowance.

Since some loans are being prepaid, reduced by Canada Access Grants and forgiven before consolidation, the provision rate for bad debt – principal is now applied to the net loans issued and remains unchanged from the previous report at 14.6% even though the assumed future default and recovery rates have been reduced. The net loans issued are obtained by reducing loans issued by prepayments, Canada Access Grants and loans forgiven while in-study and during the six month grace period before consolidation. The level of the total allowance is determined at the end of the loan year. The total allowance calculated at the end of a year less the total allowance at the end of the previous year is charged as a provision for bad debt – principal and represents the required adjustment to the allowance.

The allowance for bad debt – interest is based on the account's recoverable status and its age since impairment or default. The interest accrued on impaired loans is considered a revenue until the loan reaches the "non-recoverable" status. To lessen the effect of changing this revenue to a loss, an allowance is created based on the outstanding interest at the end of each year. The percentage of the allowance changes according to the number of years since impairment and is based on a distribution of recovery. The total allowance calculated at the end of a year less the net total allowance at the end of the previous year is charged as a provision for bad debt – interest. The provision rates for the allowance for bad debt – interest are the same as in the last report and are shown in Table 2.

The DRR provision rate remains unchanged from previous reports at 0.7% and is assumed to remain constant in the future but is now applied to the net loans issued. Loan year 2006-07 is the first loan year in which a significant amount of DRR is projected to be issued to the Direct Loan Regime. The emergence of DRR expenses in the Direct Loan Regime will be closely monitored to determine if the provision rate remains appropriate.

Table 2 Provision and Allowance Assumptions

Type of Provision	Assumptions	
		(%)
On net loans issued		
Bad debt – principal		**14.6**
An experience adjustment to the allowance will be made each year.		
Debt reduction in repayment		0.7
Total		**15.3**
On outstanding interest on recoverable impaired loans	**Number of Years Since Impairment**	(%)
Allowance for bad debt – interest	Less than 1	20.0
	Between 1 and 2	40.8
	Between 2 and 3	56.0
	Between 3 and 4	70.4
	Between 4 and 5	80.0
	Between 5 and 6	85.6
	Between 6 and 7	88.8
	Between 7 and 8	91.2
	Between 8 and 9	93.6
	Between 9 and 10	95.2
	Between 10 and 11	96.0
	Between 11 and 12	96.8
	Between 12 and 13	97.6
	Between 13 and 14	98.4
	Between 14 and 15	99.2

Table 3 contains a summary of the best-estimate assumptions described previously.

Table 3 Best-estimate Assumptions

1. Total fertility rate for Canada	1.5 per woman in 2004 graded to 1.6 per woman in 2016
2. Mortality	1995-97 Life Tables for Canada with future improvements
3. Net migration rate	0.50% of the population to 2015 and 0.54% in 2020+
4. Youth participation rate (participating provinces/territory, ages 18-34)	80.3% (2005-06) ⋮ 83.5% (2030-31)
5. Real wage differential	0.7% (2006-07) 0.8% (2007-08) ⋮ 1.2% (2012-13+)
6. Inflation	1.7% (2006-07) 2.0% (2007-08) ⋮ 2.5% (2012-13+)
7. Tuition fee increases	3.3% (2006-07) 3.1% (2007-08) 3.1% (2008-09) 3.2% (2009-10) ⋮ CPI + 3.0% (2014-15+)
8. Government cost of borrowing	4.1% (2006-07) ⋮ 5.2% (2014-15+)
9. Student borrowing cost	8.5% (2006-07) ⋮ 8.0% (2014-15+)
10. Bad debt provision – principal	14.6% (2006-07+)
11. Allowance for bad debt – interest	20.0% (Interest on loans in default for less than a year) ⋮ 99.2% (Interest on loans in default for 14 to 15 years)
12. DRR provision	0.7% (2006-07+)

B. Projection of Total Loans Issued

The purpose of this section is to discuss the projection of the amount of total loans issued by the CSLP. First, the full-time enrolment in post-secondary institutions is projected. Next, the future number of students participating in the CSLP is determined using a projection of the distribution of assessed need for CSLP students. Finally, the previous elements are combined to project the amount of total loans issued.

1. Projection of Full-time Post-secondary Enrolment

The projection of full-time students in post-secondary institutions must be determined first, since the demand for the CSLP is linked to the number of students enrolled in post-secondary institutions. Demographics and post-secondary enrolment will have the largest impact on the progression of full-time students attending post-secondary institutions.

a) Demographic Projections

The population of Canada less Québec and the territories of the Northwest Territories and Nunavut in the age range 18-34 is used to project the number of students enrolled in post-secondary institutions. The projection of this population is a fairly good approximation since it originates from individuals born between 1970 and 2012, most of whom are already included in the population.

In the first 10 years of the projection, children of the "baby-boom" generation, called the "echo" generation, are expected to contribute to the increase in the population for ages 18-34. The "baby-boom" generation is more numerous and, consequently, had more children than the previous generation, notwithstanding a lower fertility rate. The population aged 18-34 is expected to increase from 5,751,000 to 6,100,000 by 2015-16. In the last 15 years of the projection, the population aged 18-34 decreases to 5,825,000. Overall, as Table 4 shows, an increase of 74,000 is expected in the population aged 18-34 over the 25-year projection period.

Table 4 Population and Post-secondary Enrolment

Loan Year	Population of Canada Less Québec, NWT and Nunavut (18-34) (Thousands)	Not Participating In Labour Force (18-34) (Thousands)	Students Enrolled Full-time (Thousands)	Increase (Thousands)	Growth Rate (%)
2005-06	5,751	1,135	853	-	-
2006-07	5,771	1,127	845	-7.3	-0.9
2007-08	5,810	1,113	836	-9.5	-1.1
2008-09	5,864	1,112	836	-0.2	0.0
2009-10	5,919	1,105	830	-5.1	-0.6
2010-11	5,964	1,088	819	-11.7	-1.4
2011-12	6,003	1,084	814	-4.9	-0.6
2012-13	6,038	1,082	811	-2.9	-0.4
2013-14	6,073	1,087	814	2.5	0.3
2014-15	6,097	1,088	814	0.3	0.0
2015-16	6,100	1,077	803	-11.4	-1.4
2016-17	6,094	1,062	790	-12.9	-1.6
2017-18	6,079	1,050	779	-11.1	-1.4
2018-19	6,058	1,040	770	-8.1	-1.0
2019-20	6,028	1,023	756	-14.4	-1.9
2020-21	5,998	1,005	739	-16.6	-2.2
2021-22	5,969	994	729	-10.4	-1.4
2022-23	5,949	987	723	-6.0	-0.8
2023-24	5,934	982	719	-4.2	-0.6
2024-25	5,912	976	715	-4.2	-0.6
2025-26	5,884	969	711	-3.8	-0.5
2026-27	5,860	965	710	-0.8	-0.1
2027-28	5,842	962	711	1.0	0.1
2028-29	5,832	961	713	1.9	0.3
2029-30	5,828	959	715	2.2	0.3
2030-31	5,825	959	718	3.1	0.4

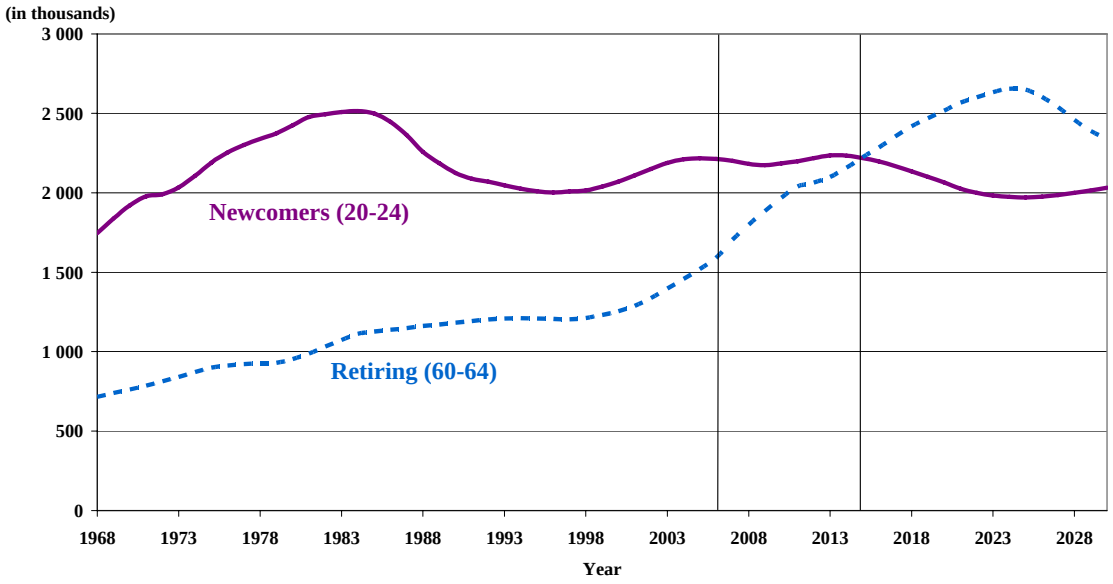
b) Post-secondary Enrolment

The number of students enrolled full-time in post-secondary institutions is closely linked to the evolution of the population aged 18-34 that is not participating in the labour force. Those individuals who are not participating in the labour force may be more inclined to pursue a post-secondary education. Thus, post-secondary enrolment is considered to be a subset of the population not participating in the labour force.

The aging and subsequent retirement of the "baby-boomers", along with a shortage of replacement workers caused by the low fertility rate, are expected to create strong pressure on the labour market. The generations following the "baby-boom" are smaller and thus have fewer labour force entrants to replace the retiring "baby-boomers". This will cause a labour shortage which will increase as more of the "baby-boomers" retire.

As shown in Chart 1, the number of persons retiring or in the age range 60-64 has been very low historically compared to the newcomers entering the labour force. This situation is expected to change radically over the next 10 to 25 years, creating an imbalance in the labour market. More specifically, in 2015, the number of persons retiring is expected to catch up with the number of newcomers, reaching 2,219,000 persons. By 2025, the number of persons retiring (2,648,000) will surpass the number of newcomers (1,970,000) by 34%. The labour market will have to adapt since it is accustomed to having at least two newcomers for each person retiring; this ratio will decrease significantly to less than one newcomer for each person retiring. As a result, the participation rates of the population aged 18-34 in the labour force are assumed to increase and the school-to-work transition period will be reduced due to favourable labour market conditions and the increased availability of work.

Chart 1 Evolution of Persons Retiring (60-64) and Newcomers (20-24)



In Table 4, the population not participating in the labour force is projected to decrease from 1,135,000 to 1,077,000 during the first ten years of the projection, which is a decrease of only 58,000. Over the last fifteen years of the projection, the population not participating in the labour force decreases by 118,000 to reach 959,000 in loan year 2030-31. This large decrease is caused by the anticipated labour shortage and the assumption that over the last fifteen years of the projection period, the labour force participation rates of the population 18-34 will increase due to favourable labour market conditions and increased availability of work. As participation in the labour force increases, the population not participating in the labour force will, in turn, decrease.

The evolution of the inactive population, those aged 18-34 not participating in the labour force, is a good indicator of the evolution of the population in post-secondary institutions. Enrolment in post-secondary institutions, as well as CSLP participation, varies between age groups. The age distribution of the CSLP shows that approximately 75% of students in the CSLP are in the age range 18-24. The CSLP age distribution was used to separate historical enrolment data into age ranges. A post-secondary participation factor was calculated as the ratio of the historical post-secondary enrolment to the inactive population for each age range. This post-secondary participation factor was then applied to the future inactive population in order to determine the future enrolment in post-secondary institutions.

In Table 4, the population aged 18-34 enrolled full-time in a post-secondary institution is projected to decrease by 50,000 (853,000 to 803,000) during the first ten years of the projection period. Over the last fifteen years of the projection period, the number of students enrolled full-time decreases more rapidly and reaches 718,000 in loan year 2030-31. This overall decrease of 85,000 students during the last fifteen years of the projection is a result of the decrease in the population aged 18-34 that is not participating in the labour force. The population aged 18-34 enrolled full-time is approximately 75% of the population not participating in the labour force each year in the projection period. Thus, the significant decrease in the population not participating in the labour force, which was discussed above, causes a decrease in the population enrolled in a post-secondary institution.

2. Number of Students in the Canada Student Loans Program

To project the number of students in the CSLP, it is necessary to determine the future distribution of student need, as well as the average student need. In the past, the Department of Human Resources and Social Development (HRSD) has provided the CSLP student need assessment data which was used to project the future distributions of student need. However, an update of the needs assessment file for loan year 2004-05 was not available, so the assumptions and methodology used to project future student need are unchanged from the previous report.

Not everyone enrolled in a post-secondary institution is eligible to participate in the CSLP. The need assessment process determines whether students are eligible for a loan, and if so, the amount they are eligible to receive. A student's need is defined as the excess of expenses over resources, if positive. The expenses assessed include tuition fees, books, shelter, food and transportation. The resources assessed include student earnings, assets and parental contributions.

Table 5 Average Student Need

Loan Year	Resources ($)	Tuition ($)	Other Expenses ($)	Total Expenses ($)	Average Student Need ($)	Average Student Need Increase ($)
	(1)	(2)	(3)	(2) + (3)	(2) + (3) – (1)	
2005-06	3,800	5,400	8,900	14,300	10,500	-
2006-07	4,000	5,600	9,100	14,700	10,700	200
2007-08	4,000	5,800	9,200	15,000	11,000	300
2008-09	4,100	5,900	9,400	15,300	11,200	200
2009-10	4,200	6,100	9,600	15,700	11,500	300
2010-11	4,400	6,300	9,800	16,100	11,700	200
2011-12	4,500	6,600	10,000	16,600	12,100	400
2012-13	4,700	6,900	10,200	17,100	12,400	300
2013-14	4,800	7,300	10,400	17,700	12,900	500
2014-15	5,000	7,600	10,700	18,300	13,300	400
2015-16	5,200	8,100	11,000	19,000	13,800	500
2016-17	5,400	8,500	11,200	19,700	14,300	500
2017-18	5,600	9,000	11,500	20,500	14,900	600
2018-19	5,800	9,500	11,800	21,200	15,400	500
2019-20	6,000	10,000	12,000	22,000	16,000	600
2020-21	6,300	10,500	12,300	22,900	16,600	600
2021-22	6,500	11,100	12,600	23,700	17,300	700
2022-23	6,700	11,700	12,900	24,700	17,900	600
2023-24	7,000	12,400	13,200	25,600	18,600	700
2024-25	7,200	13,100	13,600	26,600	19,400	800
2025-26	7,500	13,800	13,900	27,700	20,200	800
2026-27	7,800	14,500	14,200	28,800	21,000	800
2027-28	8,100	15,300	14,600	29,900	21,800	800
2028-29	8,400	16,200	14,900	31,100	22,700	900
2029-30	8,700	17,100	15,300	32,300	23,700	1,000
2030-31	9,000	18,000	15,600	33,700	24,700	1,000

Table 5 summarizes the three main elements of student need, as well as the average student need.

Average student need is increasing because expenses are rising faster than resources. Tuition fees are the primary source of increases in student need and are ultimately indexed at 3.0% above inflation. However, tuition has been, on average, 4.6% above inflation over the past ten years and 5.7% above inflation over the last fifteen years. Other expenses, which include books, shelter, food and transportation, are indexed at the rate of inflation. Resources are increased at a slower pace than tuition and are ultimately indexed at 1.2% above inflation. Table 5 shows average tuition fees rising from $5,400 in 2005-06 to $18,000 in 2030-31. In fact, tuition fees rise from 142% of a student's available resources in 2005-06 to 200% in 2030-31.

Analysis of the need assessment data provided by HRSD for loan years prior to 2004-05 has shown that the CSLP student need closely follows a normal distribution. A better fit is achieved by slightly modifying the normal curve. The modifications made to the normal curve are described in Appendix 3 of this report. Using the properties of a normal distribution and the 25 years of projected need increases, as shown in Table 5, need curves for the next 25 years were projected.

Chart 2 CSLP Student Projected Need Curves

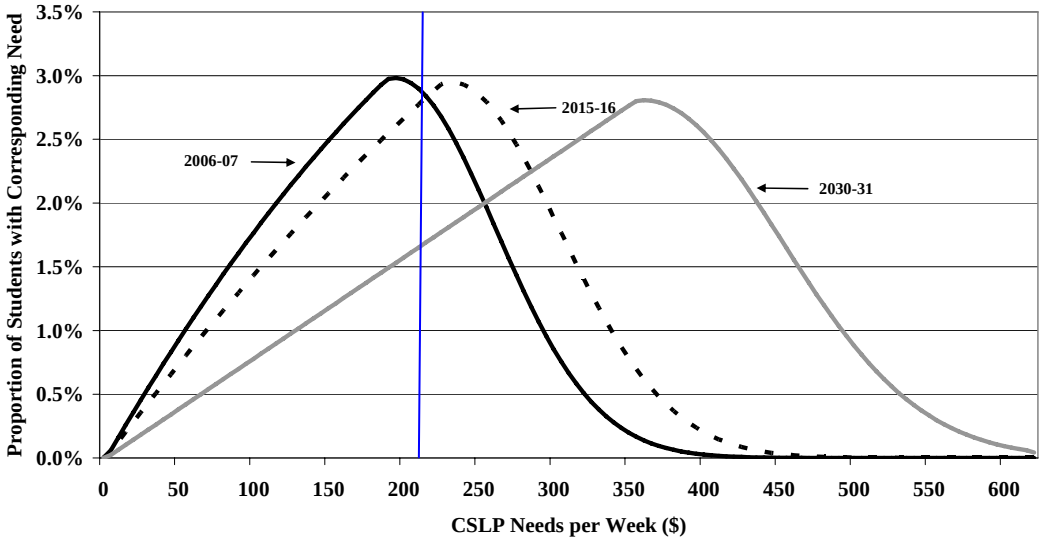


Chart 2 is a projection of the CSLP student need curves for three years during the twenty-five year projection period. The area under each successive need curve grows from year to year and represents the increased participation in the CSLP. The CSLP loan uptake rate is defined as the proportion of students enrolled full-time in a post-secondary institution who take a loan in the CSLP. The vertical line at $210 in Chart 2 represents the current loan limit. Any borrower whose need falls to the right of this line will receive a loan equal to the limit. Those whose need does not exceed the loan limit are eligible to receive a loan amount equal to their entire need. The effect that the constant loan limit has on new loans issued is apparent since the area under the curves and to the right of the vertical line is increasing through time.

During the projection period, the modified normal curves become flatter as students move further to the right of the curve due to increased need. Need will increase if expenses are increasing faster than resources, as is assumed. The need assessment data show that students with high need have a very low level of resources. Thus students to the right of the peak of the need curve have few resources and will see a large increase in their need. Those to the left of a peak will experience an increase in need less than the average since any increase in need should be partially offset by an increase in resources. It is anticipated that as student need increases, newly eligible participants will enter to the left of the peak. New participants will enter the CSLP because their previously negative need became positive or their need increased enough that it became worthwhile to take the loan. It is expected that as need increases, participants will move towards the right of the peak.

Table 6 shows the evolution of loan recipients over the 25-year projection period. An increase in the loan uptake rate is expected as tuition fees and other expenses grow at a faster rate than resources. This is the main cause of the increase in loans issued over the 25-year period.

The product of the number of students enrolled full-time and the CSLP loan uptake rate, resulting from each successive need curve, gives the number of students in the CSLP. Table 6 shows that the loan uptake rate is expected to increase from 40.6% to 59.8%, adding 84,000 students to the Program. Thus, the number of students in the Program is projected to increase from 346,000 in 2005-06 to 430,000 in 2030-31.

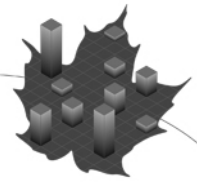
Table 6 Loan Recipients

Loan Year	Students Enrolled Full-time (Thousands)	Loan Uptake Rate (%)	Students in CSLP (Thousands)	Annual Increase in CSLP Students (Thousands)	Annual Increase in CSLP Students (%)
	(1)	(2)	(1) x (2)		
2005-06	853	40.6	346	-	0.0
2006-07	845	40.9	346	0	0.0
2007-08	836	41.1	343	-2	-0.6
2008-09	836	41.3	345	2	0.5
2009-10	830	41.6	345	0	-0.1
2010-11	819	42.2	346	0	0.1
2011-12	814	42.8	348	3	0.8
2012-13	811	43.5	353	4	1.3
2013-14	814	44.2	359	6	1.8
2014-15	814	45.0	367	7	2.0
2015-16	803	45.7	367	0	0.1
2016-17	790	46.5	367	1	0.2
2017-18	779	47.2	368	0	0.0
2018-19	770	48.1	371	3	0.9
2019-20	756	48.8	369	-2	-0.5
2020-21	739	49.7	367	-2	-0.5
2021-22	729	50.4	368	0	0.1
2022-23	723	51.4	371	4	1.0
2023-24	719	52.0	374	3	0.7
2024-25	715	53.0	379	5	1.2
2025-26	711	53.7	382	3	0.9
2026-27	710	54.7	388	6	1.6
2027-28	711	55.9	398	9	2.4
2028-29	713	57.2	408	11	2.7
2029-30	715	58.5	418	10	2.5
2030-31	718	59.8	430	11	2.7

3. New Loans Issued

This section focuses on the determination of the amount of new loans issued in each loan year. The two factors primarily responsible for the evolution of new loans issued are student need and the percentage of students reaching the loan limit.

Firstly, an increasing student need will put growing pressure on new loans issued as more students become eligible for, and take, a loan, while those who were previously eligible become eligible for a larger loan. Table 7 shows that the average student need increases from $10,456 in 2005-06 to $24,663 in 2030-31. Although the increasing student need causes more students to become eligible to receive a loan, loans to newly eligible individuals are smaller in size and, therefore, slow the growth of the average loan size. This indirectly contributes to moderating the



average loan growth over the 25-year period as an estimated 84,000 additional students will participate in the CSLP.

Secondly, a constant loan limit will restrict the growth of new loans issued. In loan year 2005-06, the loan limit was increased to $210 per week, but is assumed to remain constant thereafter. This initially resulted in a large decrease of the percentage of students at the limit since fewer students were eligible for a loan of that size. However, over time, as student need increases and the loan limit remains constant, the percentage of students at the loan limit will continue to grow.

In fact, Table 7 shows that the percentage of students at the loan limit is projected to increase from 34.0% in 2005-06 to 79.1% in 2030-31. These students are not eligible for a further increase in loan size despite increasing cost pressures. In approximately ten years, just over half of all CSLP students are projected to reach the loan limit, which was the situation when the decision was made to increase the loan limit to $210 per week. At that time, the loan limit may need to be revisited. This situation is graphically depicted in Chart 2 which shows that over the projection period, an increasing proportion of students have needs that equal or exceed the loan limit.

Table 7 Increase in New Loans Issued

Loan Year	Average Student Need ($)	Increase (%)	% of Students at Limit	New Loans Issued ($ million)	Increase (%)	Students in CSLP (Thousands)	Increase (%)	Average Loan Size ($)	Increase (%)
	(1)		(2)	(3)		(4)		(3) / (4)	
2005-06	10,456	0.0	34.0	1,936	-	346	-	5,598	-
2006-07	10,704	2.4	34.9	1,920	-0.8	346	0.0	5,555	-0.8
2007-08	10,968	2.5	36.2	1,930	0.5	343	-0.6	5,619	1.1
2008-09	11,211	2.2	37.5	1,955	1.3	345	0.5	5,660	0.7
2009-10	11,461	2.2	38.8	1,967	0.6	345	-0.1	5,700	0.7
2010-11	11,746	2.5	40.4	1,983	0.8	346	0.1	5,738	0.7
2011-12	12,070	2.8	42.4	2,019	1.8	348	0.8	5,795	1.0
2012-13	12,436	3.0	44.2	2,061	2.1	353	1.3	5,841	0.8
2013-14	12,851	3.3	46.5	2,121	2.9	359	1.8	5,903	1.1
2014-15	13,319	3.6	48.9	2,186	3.1	367	2.0	5,965	1.0
2015-16	13,809	3.7	51.3	2,212	1.2	367	0.1	6,030	1.1
2016-17	14,321	3.7	53.4	2,236	1.1	367	0.2	6,083	0.9
2017-18	14,857	3.7	55.5	2,257	1.0	368	0.0	6,140	0.9
2018-19	15,418	3.8	57.7	2,297	1.8	371	0.9	6,195	0.9
2019-20	16,006	3.8	59.8	2,308	0.5	369	-0.5	6,253	0.9
2020-21	16,621	3.8	61.7	2,313	0.3	367	-0.5	6,300	0.8
2021-22	17,265	3.9	63.9	2,337	1.0	368	0.1	6,356	0.9
2022-23	17,940	3.9	65.7	2,377	1.7	371	1.0	6,402	0.7
2023-24	18,648	3.9	67.6	2,413	1.5	374	0.7	6,451	0.8
2024-25	19,389	4.0	69.4	2,459	1.9	379	1.2	6,496	0.7
2025-26	20,167	4.0	71.2	2,499	1.6	382	0.9	6,543	0.7
2026-27	20,982	4.0	72.9	2,556	2.3	388	1.6	6,585	0.6
2027-28	21,837	4.1	74.5	2,634	3.0	398	2.4	6,625	0.6
2028-29	22,734	4.1	76.1	2,720	3.3	408	2.7	6,665	0.6
2029-30	23,675	4.1	77.6	2,803	3.1	418	2.5	6,702	0.5
2030-31	24,663	4.2	79.1	2,894	3.3	430	2.7	6,738	0.5

The actuarial model would have projected a slight increase in new loans issued for loan year 2006-07. This is due to increased student need and an increase in the proportion of students at the loan limit. The growth in loans issued is somewhat offset by a projected decrease in the number of students in the Program. In reality, the Monthly Financial Information Schedule (MFIS) reports that the amount of loans issued between August 2006 and February 2007 is 0.5% lower than loans issued for the same period of the previous loan year. Thus, the average loan size is slightly reduced in the actuarial model to reflect the experience available to date.

It is not yet obvious why the value of loans issued is decreasing for loan year 2006-07. MFIS provides information in aggregate regarding the value of loans issued, but neither the number of students taking those loans nor their loan size. It is possible that there was a larger decrease in the number of students in the Program than is projected in the model. Another possibility is that a greater proportion of students, on average, are not borrowing the full amount for which they have been approved. This situation will be investigated as detailed experience data becomes available.

Table 7 shows the annual increase in new loans issued over the 25-year projection period. Overall, the total new loans issued increase from $1,936 million in 2005-06 to $2,894 million in 2030-31, resulting in an average annual increase of 1.6%. This average annual increase can be attributed to two factors: a 0.9% average annual increase in the number of students in the CSLP and a 0.7% average annual increase in the average loan size. The average loan size is calculated as the ratio of new loans issued to the number of students in the CSLP. The growth rate of the average loan size is moderated due to the constant loan limit.

New loans issued are driven by an increased number of students becoming eligible for a loan as a result of accelerated student need. The average loan size is not greatly affected since the loan limit is capped over the 25-year period. Any significant increase in the limit would have a major impact on the long-term growth rate of new loans issued.

A sensitivity test demonstrating the effect of annually indexing the limit to the rate of inflation is included in Appendix 4. This scenario demonstrates that the growth rate of new loans issued is significantly higher when the loan limit is increased to better reflect the increasing student need.

C. Portfolio Projections

This section presents projections of the portfolio for all three regimes. The amounts for loans in-study represent loans issued to students still in the post-secondary educational system. Interest on loans in-study is fully subsidized by the Government for full-time students in the CSLP. The loans in repayment consist of loans consolidated by students with financial institutions (or the Government) which are still outstanding.

1. Guaranteed and Risk-Shared Portfolios

The Guaranteed and Risk-Shared regimes apply to loans issued before August 2000. Some loans in these regimes are still outstanding since there are still students under these regimes attending post-secondary institutions or in repayment status of their loans. Table 8 presents the projections of the loans, separately for the Guaranteed and Risk-Shared regimes, as well as the projection of Risk-Shared impaired loans bought back by the Government. The projection of Risk-Shared impaired loans is necessary to determine when the limit on the aggregate amount of outstanding loans, imposed by the *Canada Student Financial Assistance Act* (CSFAA), will be reached.

Table 8 shows that the Guaranteed Regime is gradually being phased out over the next twelve years, while loans in the Risk-Shared Regime will take an extra five years before being completely phased out.

As at July 2006, the total impaired loans coming from the Guaranteed and Risk-Shared regimes that are owned by the Government amount to approximately $1.1 billion (principal and interest) and are subject to possible future recoveries. The Guaranteed impaired loans are not included in the projection of the Guaranteed portfolio in Table 8. The Government sets up a separate allowance in the Public Accounts for those loan guarantees. This procedure is not shown in this report.

Table 8 Guaranteed and Risk-Shared Regimes Portfolios

As at 31 July	Guaranteed			Risk-Shared			
	Loans In-study	Loans in Repayment	Total	Loans In-study	Loans in Repayment	Impaired Loans (bought back)	Total
	($ million)			($ million)			
2006	24	193	217	248	2,994	240	3,483
2007	13	143	156	159	2,508	218	2,884
2008	-	109	109	90	2,045	188	2,324
2009	-	73	73	43	1,653	162	1,858
2010	-	49	49	6	1,259	141	1,406
2011	-	32	32	3	909	128	1,040
2012	-	23	23	1	617	115	733
2013	-	14	14	-	396	98	495
2014	-	9	9	-	247	80	327
2015	-	6	6	-	149	61	209
2016	-	4	4	-	87	43	130
2017	-	2	2	-	49	28	77
2018	-	1	1	-	26	17	43
2019	-	-	-	-	12	10	22
2020	-	-	-	-	5	6	10
2021	-	-	-	-	2	3	5
2022	-	-	-	-	1	1	3
2023	-	-	-	-	-	1	1
2024	-	-	-	-	-	-	-

2. Direct Loan Portfolio and Allowances

Under the Direct Loan Regime, according to the accounting recommendations under Section PS 3050 Loans Receivable of the Public Sector Accounting Handbook of the Canadian Institute of Chartered Accountants, a provision should be accounted for as a Program expense since the loans are provided by the Government instead of by financial institutions. The purpose of this provision is to cover all future net costs and risk of loss associated with loans. As a result, the provision avoids overstatement of Program revenues by immediately recognizing the risk of loss.

The projection of the Direct Loan portfolio includes the balance of outstanding loans, the projection of impaired loans for which students have stopped making payments, allowances for bad debt (principal and interest separately) to cover the future risk of default, net of recoveries, from loans disbursed and the allowance for DRR to cover the future cost of students benefiting from this program disposition.

The projection of the portfolio of the Direct Loan Regime is shown in Table 9. The projections use the consolidation, default and recovery distributions discussed in Appendix 3. The distributions of defaults and recoveries for the Direct Loan Regime are the same as in the previous report. The amount of defaulted loans was lower than expected for loan year 2005-06. The projections of the previous report were made using a gross default rate of 35.4%. Based on

recent experience, the gross default rate is reduced in the future to 20.0%. The projected recovery rate is lowered to 29% since it is expected that future defaulted loans will be more difficult to recover. Overall, the corresponding net default rate remains unchanged at 14.2% for the future.

Table 9 Direct Loan Portfolio and Allowances

As at 31 July	Loans In-study	Loans in Repayment	Impaired Loans	Total	Allowances for Bad Debt Principal	Allowances for Bad Debt Interest	DRR
	($ million)				($ million)		
2006	3,961	3,301	853	8,114	1,402	61	66
2007	4,235	4,162	1,018	9,415	1,659	108	73
2008	4,439	4,945	1,206	10,589	1,908	165	77
2009	4,600	5,647	1,396	11,643	2,143	229	80
2010	4,718	6,261	1,584	12,564	2,362	298	81
2011	4,814	6,832	1,762	13,408	2,562	369	81
2012	4,909	7,240	1,926	14,076	2,745	442	80
2013	5,006	7,566	2,074	14,646	2,913	515	78
2014	5,119	7,830	2,205	15,154	3,068	586	76
2015	5,248	8,050	2,320	15,618	3,212	653	74
2016	5,350	8,255	2,421	16,026	3,340	719	73
2017	5,436	8,431	2,516	16,383	3,455	784	71
2018	5,510	8,589	2,605	16,704	3,558	846	69
2019	5,596	8,732	2,688	17,016	3,653	906	67
2020	5,659	8,866	2,765	17,290	3,738	966	66
2021	5,706	8,983	2,835	17,523	3,813	1,021	64
2022	5,760	9,091	2,899	17,750	3,880	1,069	61
2023	5,832	9,181	2,957	17,971	3,944	1,112	60
2024	5,910	9,269	3,010	18,189	4,003	1,151	58
2025	6,001	9,366	3,059	18,426	4,060	1,185	57
2026	6,092	9,469	3,106	18,667	4,111	1,215	55
2027	6,203	9,579	3,151	18,934	4,161	1,242	55
2028	6,344	9,716	3,196	19,256	4,210	1,267	54
2029	6,511	9,877	3,243	19,631	4,258	1,290	54
2030	6,690	10,068	3,293	20,050	4,302	1,311	54
2031	6,886	10,286	3,347	20,520	4,339	1,332	55

As at 31 July 2006, the outstanding Direct Loan portfolio is $8.1 billion and is derived from new loans issued during loan years 2000-01 to 2005-06 ($9.8 billion), plus the interest accrued during the grace period for these six years, minus repayments and loans forgiven. The impaired loans are part of the assets and are included in the Direct Loan portfolio projection. The portfolio increases rapidly to reach $13.4 billion within the next five years. By the end of loan year 2030-31, the portfolio reaches $20.5 billion.

Compared to the evaluation as at 31 July 2005, the portfolio of loans in-study is basically unchanged. However, the portfolio in repayment is higher when compared to the previous report, while the portfolio of impaired loans is lower. The main cause for these differences is that fact that the gross default rate was reduced to 23.7% for loan year 2005-06 and then further reduced to 20% for future loan years. Experience has shown that the gross default rate is decreasing over time.

Thus, a lower gross default rate will significantly increase the portfolio of loans in repayment compared to the previous report because students will default less and remain in the repayment portfolio longer. This will result in fewer loans reaching the impaired status. Thus, the impaired loans portfolio will be lower than in previous reports.

Allowance for Bad Debt – Principal: Table 10 provides the details of the calculations for the projection of the impaired loans portfolio and the allowance for bad debt – principal under the Direct Loan Regime.

Table 10 Impaired Loans and Allowance for Bad Debt – Principal

	Impaired Loans Portfolio					Allowance for Bad Debt – Principal			
Loan Year	Balance 1 August	Impaired Loans	Collected & Forgiven Loans	Write-offs	Balance 31 July	Allowance 1 August	Write-offs	Allowance 31 July	Yearly Expense
			($ million)				($ million)		
	(1)	(2)	(3)	(4)	(1 + 2) – (3 + 4)	(1)	(2)	(3)	(1 + 2) – (3)
2005-06	677	267	91	0	853	1,141	0	1,402	247
2006-07	853	249	82	1	1,018	1,402	1	1,659	258
2007-08	1,018	279	81	10	1,206	1,659	10	1,908	259
2008-09	1,206	302	85	26	1,396	1,908	26	2,143	261
2009-10	1,396	320	89	44	1,584	2,143	44	2,362	262
2010-11	1,584	333	92	64	1,762	2,362	64	2,562	264
2011-12	1,762	344	95	85	1,926	2,562	85	2,745	268
2012-13	1,926	352	99	106	2,074	2,745	106	2,913	274
2013-14	2,074	360	102	127	2,205	2,913	127	3,068	282
2014-15	2,205	368	106	147	2,320	3,068	147	3,212	290
2015-16	2,320	376	110	165	2,421	3,212	165	3,340	293
2016-17	2,421	385	109	181	2,516	3,340	181	3,455	296
2017-18	2,516	394	109	196	2,605	3,455	196	3,558	299
2018-19	2,605	401	109	209	2,688	3,558	209	3,653	304
2019-20	2,688	407	111	220	2,765	3,653	220	3,738	305
2020-21	2,765	413	113	230	2,835	3,738	230	3,813	304
2021-22	2,835	418	115	239	2,899	3,813	239	3,880	306
2022-23	2,899	422	117	247	2,957	3,880	247	3,944	311
2023-24	2,957	426	119	255	3,010	3,944	255	4,003	314
2024-25	3,010	431	121	262	3,059	4,003	262	4,060	318
2025-26	3,059	437	122	268	3,106	4,060	268	4,111	320
2026-27	3,106	443	124	274	3,151	4,111	274	4,161	324
2027-28	3,151	450	126	279	3,196	4,161	279	4,210	328
2028-29	3,196	458	128	284	3,243	4,210	284	4,258	332
2029-30	3,243	468	130	288	3,293	4,258	288	4,302	332
2030-31	3,293	479	132	293	3,347	4,302	293	4,339	330

A new methodology, which is based on a prospective approach, has been developed to determine the allowance for bad debt – principal. The methodology was changed to a prospective approach that uses a snapshot of the portfolio at a particular point in time to determine the amount of the allowance at that time. This prospective approach determines the adjustment to the value of the allowance based on the future projected status of loans. In previous reports, a retrospective approach was used to determine the value of the allowance. As experience evolved, adjustments were made retroactively to all loans issued since the beginning of the program to reflect changes in the provision rate. The new prospective methodology is considered a more flexible approach to calculating the allowance. While considering the past experience of prior cohorts, this new

methodology will permit faster recognition of recent experience for current and new cohorts of loans.

The calculation of the allowance is now separated into three components according to the status of the loan; that is whether the loan is in-study, in repayment (according to the number of years since consolidation) or impaired (according to the number of years since default). Future assumed rates of default and recovery are applied to these portfolio amounts to determine the allowance that must be set aside to cover future write-offs.

First, an allowance on the balance of loans in-study is determined using the provision rate of 14.6%.

The balance of loans in-study is calculated at the end of each loan year as:

- the balance of loans in-study at the end of the previous year;
- plus loans issued during the year;
- less the sum of loans while in-study and during the six month grace period before consolidation that were prepaid, reduced by Canada Access Grants and loans forgiven; and
- less the value of loans consolidated during the year.

Second, an allowance on the balance of loans in repayment is determined using a rate corresponding to the proportion of projected defaulted loans that will not be recovered. Finally, an allowance is determined on the balance of defaulted loans that will not be recovered. The level of the total allowance is determined at the end of the year. The total allowance calculated at the end of a year less the total allowance at the end of the previous year is charged as a provision for bad debt – principal and represents the required adjustment to the allowance.

Based on trends in recent experience and judgment, assumptions for future default and recovery rates are both lower than in the previous report. However, the net default rate is unchanged from the previous report and will remain constant in each loan year. The assumption used for write-offs is unchanged from last report and consists of a 21-year distribution, starting in the fifth year following impairment.

The new methodology separates the allowance according to the loan's attained status and considers the fact that some loans have been or will be prepaid, reduced by a Canada Access Grant and loans forgiven while in-study and during the six month grace period before consolidation. Under the old methodology, the allowance as at 31 July 2006 would have been $1,438 million, which is 14.6% of all loans issued since August 2000. Using the new methodology, the allowance is reduced to $1,402 million, which is an adjustment of $36 million. This downward adjustment can be separated into two pieces:

- a reduction to the allowance of $76 million due to the exclusion of prepayments, Canada Access Grants and loans forgiven while in-study and during the six month grace period before consolidation; and
- an increase to the allowance of $40 million due to the change in methodology. The yearly expense should have been $283 million (14.6% of the $1,936 million of loans issued), but it is actually $247 million including the downward adjustment of $36 million due to the methodology change described above.

Thus, for loan year 2005-06, the yearly expense of $247 million corresponds to the difference between the new allowance of $1,402 million and the total allowance at the end of loan year 2004-05, which was established to be $1,155 million in the previous report.

In the Public Accounts, the Department of Human Resources and Social Development should include an adjustment of $36 million as at 31 July 2006 and charge 14.6 % on the monthly net loans issued up to 31 March 2007.

Allowance for Bad Debt – Interest: In accordance with the collection practice, interest accrues on impaired loans until the loans reach a "non-recoverable" status. A provision is set to cover the risk that such accrued interest will never be recovered. The assumption for the distribution of loans that reach a "non-recoverable" status is shown in Appendix 3, along with distributions for write-offs and recoveries. The assumption for write-offs is the same as for principal and the distribution for the recovery of interest is based on the distribution of the recovery of principal.

Table 11 Allowance for Bad Debt – Interest

Loan Year	Allowance 1 August	Write-Off	Allowance 31 July	Yearly Expense
	($ million)	($ million)	($ million)	($ million)
	(1)	(2)	(3)	(3) – (1 – 2)
2005-06	28	0	61	32
2006-07	61	0	108	47
2007-08	108	2	165	59
2008-09	165	5	229	69
2009-10	229	11	298	79
2010-11	298	18	369	90
2011-12	369	27	442	100
2012-13	442	37	515	110
2013-14	515	48	586	118
2014-15	586	59	653	126
2015-16	653	70	719	136
2016-17	719	82	784	146
2017-18	784	94	846	156
2018-19	846	106	906	167
2019-20	906	118	966	178
2020-21	966	130	1,021	185
2021-22	1,021	141	1,069	190
2022-23	1,069	151	1,112	195
2023-24	1,112	160	1,151	199
2024-25	1,151	168	1,185	202
2025-26	1,185	175	1,215	206
2026-27	1,215	182	1,242	209
2027-28	1,242	187	1,267	212
2028-29	1,267	192	1,290	215
2029-30	1,290	197	1,311	218
2030-31	1,311	201	1,332	222

The allowance for bad debt – interest on recoverable accounts is determined using the outstanding interest and a variable provision rate for each year since impairment. The provision rate is set at 20% for defaulted interest in the year of impairment and increases each year thereafter using the recovery distribution as shown in Appendix 3. Under this methodology, the increasing provision rate reflects the fact that the difficulty of recovering defaults increases as the time since impairment increases. The allowance on non-recoverable accounts is 100% and the

interest on these accounts is written off over a 21-year period, starting in the fifth year after the impairment occurs. The variation in allowance for a given year and the remaining allowance of the previous year is charged as part of the annual expense. In the Public Accounts, the Department of Human Resources and Social Development is using this methodology to calculate the allowance and annual expense as at 31 March of each year.

Allowance for Debt Reduction in Repayment: Table 12 provides the details of the calculation for the projection of the allowance for debt reduction in repayment (DRR) under the Direct Loan Regime.

Table 12 Allowance for Debt Reduction in Repayment

Loan Year	Allowance 1 August	Provision*	DRR Expenses	Allowance 31 July
	($ million)	($ million)	($ million)	($ million)
	(1)	(2)	(3)	(1) + (2) – (3)
2005-06	53	12	-	66
2006-07	66	12	5	73
2007-08	73	12	8	77
2008-09	77	12	10	80
2009-10	80	12	12	81
2010-11	81	13	12	81
2011-12	81	13	14	80
2012-13	80	13	15	78
2013-14	78	13	15	76
2014-15	76	14	16	74
2015-16	74	14	16	73
2016-17	73	14	16	71
2017-18	71	14	16	69
2018-19	69	15	16	67
2019-20	67	15	16	66
2020-21	66	15	17	64
2021-22	64	15	17	61
2022-23	61	15	17	60
2023-24	60	15	17	58
2024-25	58	16	17	57
2025-26	57	16	17	55
2026-27	55	16	17	55
2027-28	55	17	17	54
2028-29	54	17	17	54
2029-30	54	18	18	54
2030-31	54	18	18	55

* The provision for new loans issued accrues on a loan year basis (Public Accounts provision accrues on a fiscal year basis).

The provision rate for DRR remains unchanged at 0.7%. DRR expenses for the Guaranteed and Risk-Shared regimes decreased in loan year 2005-06 compared to loan year 2004-05. It is anticipated that DRR expenses for these regimes will continue to decrease as the regimes are phased-out. At the same time, DRR expenses made to Direct loan borrowers will increase through time. Loan year 2005-06 was the first year that a Direct loan borrower was eligible to apply for DRR. The amount of DRR expense under the Direct Loan Regime was $160,802 in loan year 2005-06. The first significant DRR cost is projected to be $5 million in 2006-07. If actual DRR costs are significantly different than projected, then the provision rate will likely have to be revisited. This situation will continue to be monitored and examined as more experience data becomes available for the next report.

As with the allowance for bad debt – principal, the provision rate of 0.7% should be applied to net, rather than total, loans issued. This change requires a downward adjustment of $3 million to the allowance as at 31 July 2006. In the Public Accounts, the Department of Human Resources and Social Development should include this adjustment of $3 million as at 31 July 2006 and charge 0.7% on the monthly net loans issued up to 31 March 2007.

For comparison purposes, Table 13 shows the Direct Loan portfolio in 2006 constant dollars. Starting in loan year 2015-16, the portfolio decreases since the assumed inflation rate is higher than the annual growth of the portfolio in Table 9.

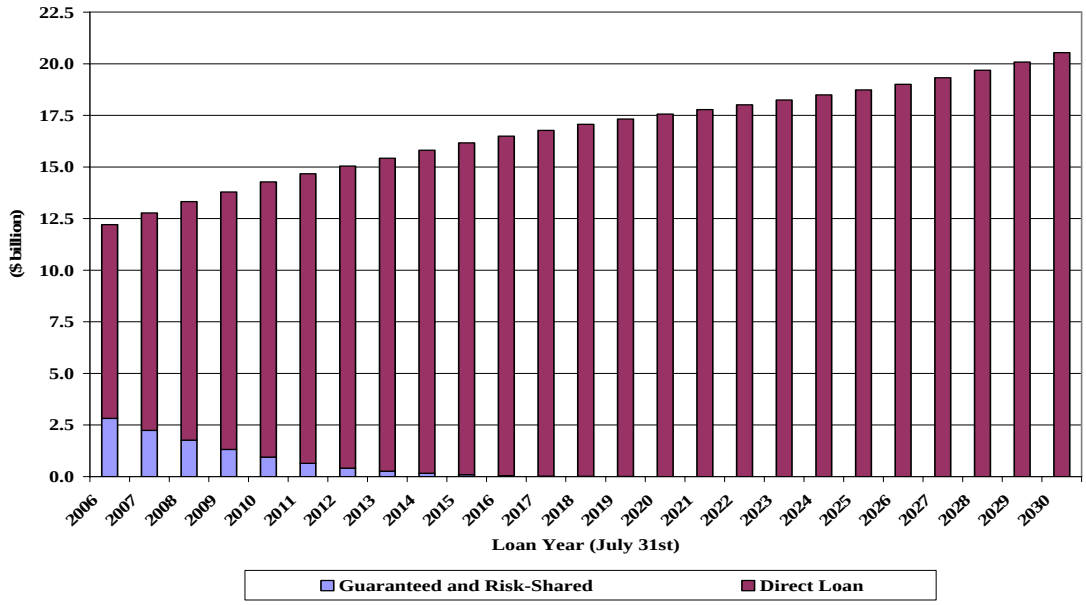
Table 13 Direct Loan Portfolio and Allowances (in millions of 2006 constant dollars)[1]

As at 31 July	Loans In-study	Loans in Repayment	Impaired Loans	Total	Allowances for		
					Bad Debt Principal	Bad Debt Interest	DRR
2006	3,961	3,301	853	8,114	1,402	61	66
2007	4,152	4,081	998	9,231	1,627	106	72
2008	4,267	4,753	1,159	10,178	1,834	159	74
2009	4,334	5,321	1,316	10,972	2,020	216	75
2010	4,355	5,779	1,462	11,596	2,180	275	74
2011	4,347	6,170	1,592	12,109	2,313	334	73
2012	4,334	6,391	1,701	12,426	2,423	390	70
2013	4,316	6,522	1,788	12,626	2,511	444	67
2014	4,305	6,586	1,854	12,745	2,580	493	64
2015	4,302	6,599	1,902	12,803	2,633	535	61
2016	4,270	6,589	1,932	12,792	2,666	574	58
2017	4,225	6,553	1,955	12,733	2,685	609	55
2018	4,170	6,500	1,971	12,641	2,692	640	52
2019	4,124	6,434	1,981	12,539	2,692	668	50
2020	4,060	6,361	1,984	12,405	2,682	693	47
2021	3,986	6,276	1,980	12,242	2,664	713	44
2022	3,918	6,185	1,972	12,075	2,640	727	42
2023	3,863	6,082	1,959	11,904	2,613	737	39
2024	3,811	5,979	1,941	11,731	2,582	742	37
2025	3,769	5,882	1,921	11,572	2,550	744	35
2026	3,726	5,790	1,899	11,415	2,514	743	34
2027	3,694	5,704	1,876	11,274	2,477	740	33
2028	3,678	5,633	1,853	11,164	2,441	735	31
2029	3,676	5,576	1,831	11,082	2,404	728	31
2030	3,677	5,534	1,810	11,022	2,365	721	30
2031	3,686	5,506	1,792	10,983	2,322	713	29

[1] For a given year, the value in 2006 constant dollars is equal to the corresponding value divided by the ratio of the cumulative index of the Consumer Price Index (CPI) of that given year to the cumulative index of the CPI for 2006.

Chart 3 shows a projection of the loan portfolio split between the Direct Loan, Guaranteed and Risk-Shared regimes. Guaranteed and Risk-Shared loans are phased-out over time.

Chart 3 Projection of the Loan Portfolios



3. Limit on Aggregate Amount of Outstanding Loans

The CSFAA imposes a limit on the aggregate amount of outstanding loans in the CSLP. The current limit, in section 13 of the CSFAA, is set at $15 billion and was increased from the previous $5 billion ceiling through an amendment to the CSFAA in 2000. The CSFAA applies to the Risk-Shared and Direct Loan regimes. The aggregate amount of outstanding loans is the principal portion of all loans disbursed and not yet repaid, which consists of the total principal amounts of loans in-study, loans in repayment and impaired loans. Table 14 presents the projections of the aggregate amount of outstanding Risk-Shared and Direct loans in the CSLP.

As at 31 July 2006, the aggregate amount of outstanding Risk-Shared and Direct loans is $11.6 billion. This projection shows that the $15 billion limit would be reached during loan year 2012-13. However, fluctuations throughout the year may cause the aggregate amount of loans to exceed the limit prior to loan year 2012-13.

Table 14 Aggregate Amount of Outstanding Risk-Shared and Direct Loans

As at 31 July	Total of Risk-Shared Loans	Total of Direct Loans	Total
	($ million)	($ million)	($ million)
2006	3,483	8,114	11,596
2007	2,884	9,415	12,300
2008	2,324	10,589	12,913
2009	1,858	11,643	13,501
2010	1,406	12,564	13,970
2011	1,040	13,408	14,448
2012	733	14,076	14,809
2013	495	14,646	15,141
2014	327	15,154	15,480
2015	209	15,618	15,827
2016	130	16,026	16,156
2017	77	16,383	16,460
2018	43	16,704	16,747
2019	22	17,016	17,038
2020	10	17,290	17,300
2021	5	17,523	17,528
2022	3	17,750	17,753
2023	1	17,971	17,972
2024	-	18,189	18,189
2025	-	18,426	18,426
2026	-	18,667	18,667
2027	-	18,934	18,934
2028	-	19,256	19,256
2029	-	19,631	19,631
2030	-	20,050	20,050
2031	-	20,520	20,520

D. Projection of the Net Cost of the Program

1. Student Related Expenses

The most important expense of the CSLP is the cost of supporting students during their study and repayment periods. This expense includes the interest subsidy, the expenses for interest relief and the provisions or expenses for DRR under the different regimes. The Canada Study Grants support students directly rather than assisting them in the form of loans. Following the amendment to the CSFAA, Canada Access Grants, as described in Appendix 1, are included in the cost of Canada Study Grants.

Table 15 Student Related Expenses

	Direct Loan			Risk-Shared and Guaranteed			Canada Study and Access Grants	Total
Loan Year	Interest Subsidy	Interest Relief	Provision* for DRR	Interest Subsidy	Interest Relief	DRR		
		($ million)			($ million)		($ million)	($ million)
2005-06	166.0	48.9	12.4	13.4	21.9	25.3	132.8	420.8
2006-07	175.6	70.0	12.3	9.5	11.5	16.7	132.9	428.4
2007-08	192.2	77.6	12.3	5.0	6.5	8.4	134.5	436.5
2008-09	204.1	82.9	12.4	2.2	4.5	3.9	136.8	446.8
2009-10	216.5	87.5	12.5	0.3	3.2	2.5	138.8	461.1
2010-11	228.1	91.1	12.6	0.2	1.9	1.6	141.0	476.4
2011-12	240.0	92.1	12.8	0.1	1.0	1.2	143.9	490.9
2012-13	252.2	92.6	13.1	-	0.5	0.9	147.1	506.4
2013-14	262.5	92.5	13.4	-	0.2	0.6	151.0	520.2
2014-15	271.8	91.8	13.9	-	0.1	0.4	155.1	533.2
2015-16	278.2	93.3	14.0	-	-	0.1	158.1	543.7
2016-17	282.7	94.4	14.1	-	-	-	161.1	552.4
2017-18	286.5	95.2	14.3	-	-	-	164.1	560.2
2018-19	291.0	95.8	14.5	-	-	-	167.7	569.1
2019-20	294.3	96.2	14.6	-	-	-	170.5	575.6
2020-21	296.7	96.5	14.6	-	-	-	173.2	581.0
2021-22	299.5	96.5	14.8	-	-	-	176.5	587.3
2022-23	303.3	96.3	15.0	-	-	-	180.4	595.0
2023-24	307.3	96.2	15.3	-	-	-	184.2	603.0
2024-25	312.0	96.2	15.6	-	-	-	188.4	612.2
2025-26	316.8	96.4	15.8	-	-	-	192.4	621.5
2026-27	322.6	97.8	16.2	-	-	-	197.1	633.7
2027-28	329.9	99.4	16.7	-	-	-	202.4	648.5
2028-29	338.6	101.4	17.3	-	-	-	208.1	665.3
2029-30	347.9	103.7	17.8	-	-	-	213.8	683.1
2030-31	358.1	106.3	18.4	-	-	-	219.8	702.5

* The provision for new loans issued accrues on a loan year basis (Public Accounts provision accrues on a fiscal year basis).

2. Program Risk Expenses

Another expense for the Government is the risk involved in disbursing loans to students. Specifically, the risk of loan default and the risk of loans being forgiven upon a student's death or disability are included in this section.

Table 16 Risks to the Government

	Direct Loan		Risk-Shared			Guaranteed		
	Provisions for Bad Debt		Risk	Put-back	Refunds	Claims for	Loans	
Loan Year	Principal	Interest	Premium	Fees	to FIs	Impaired Loans	Forgiven	Total
	($ million)			($ million)		($ million)	($ million)	($ million)
2005-06	247.3	32.5	5.8	1.8	3.4	11.7	14.7	317.1
2006-07	258.2	47.3	4.5	1.7	3.5	8.4	13.1	336.7
2007-08	258.6	59.1	3.4	1.6	3.0	6.6	13.9	346.2
2008-09	261.0	69.3	2.3	1.5	2.4	5.5	14.7	356.7
2009-10	262.0	79.4	1.9	1.3	2.0	2.8	15.2	364.6
2010-11	263.6	89.6	0.2	1.2	1.8	1.3	15.7	373.4
2011-12	268.3	99.7	0.1	1.0	1.7	0.5	16.0	387.2
2012-13	273.7	109.6	0.1	0.6	1.5	0.3	16.3	402.1
2013-14	281.6	118.5	-	0.4	1.4	0.2	16.7	418.7
2014-15	290.3	126.4	-	0.2	1.2	0.1	17.0	435.2
2015-16	293.3	136.3	-	0.1	0.9	-	17.3	448.1
2016-17	296.2	145.9	-	0.1	0.6	-	17.6	460.4
2017-18	298.8	155.8	-	-	0.4	-	17.9	473.0
2018-19	304.3	166.6	-	-	0.2	-	18.2	489.2
2019-20	304.6	177.6	-	-	0.1	-	18.5	500.8
2020-21	304.3	184.8	-	-	0.1	-	18.7	507.8
2021-22	306.4	190.0	-	-	-	-	18.9	515.4
2022-23	310.8	194.6	-	-	-	-	19.1	524.5
2023-24	313.8	198.6	-	-	-	-	19.4	531.7
2024-25	317.7	202.2	-	-	-	-	19.6	539.5
2025-26	319.5	205.5	-	-	-	-	19.9	545.0
2026-27	323.5	208.7	-	-	-	-	20.2	552.5
2027-28	328.5	211.9	-	-	-	-	20.5	560.9
2028-29	331.9	215.0	-	-	-	-	20.9	567.9
2029-30	332.4	218.2	-	-	-	-	21.4	572.0
2030-31	329.8	221.6	-	-	-	-	21.8	573.2

Under the Direct Loan Regime, the provisions for bad debt (principal and interest) represent the cost of the risk to the Government of being involved directly in the disbursement of loans to students.

Under the Risk-Shared Regime, the risk premium represents the amount paid to lending institutions by the Government based on the value of loans consolidated for repayment in a year. Also included are put-back fees and refunds to financial institutions for loans bought back by the Government.

For the Guaranteed Regime, impaired loans are included in claims paid as a statutory expense, since the Government bears the entire risk of impaired loans under this Regime. In the Public Accounts, Guaranteed loans are classified as assets for which provisions for loan guarantees and loans in default are set up.

Put-back fees exist only in the Risk-Shared arrangement as a way to transfer some of the risk back to the Government. According to the agreement, the Government is only obligated to buy back loans impaired for at least 12 months, up to a maximum of 3% of the total loans in repayment with the financial institution each year. Financial institutions decide whether to sell impaired loans, and if so, which ones to sell. The Government pays a put-back fee of five cents on the dollar for these loans.

The entire amount of recoveries on student loans bought back in the Risk-Shared Regime is considered a revenue in Table 18. According to the agreement, amounts recovered from income tax refunds are shared with the financial institutions. The participating financial institutions receive a refund of 75% of the amount recovered from income tax refunds in excess of the put-back fees.

Loans forgiven correspond to loans that are forgiven following death or permanent disability during the period of study or repayment. Loans forgiven in loan year 2005-06 include a retroactive amount to take into account the amendment to the *Canada Student Financial Assistance Act* (CSFAA) in June 2005.

3. Other Expenses

Alternative payments are made directly to Québec, the Northwest Territories and Nunavut, which do not participate in the CSLP. The participating provinces and territory are paid a fee to finance the administration of the CSLP.

The administration expenses include the fees paid to provinces, the recovery costs of impaired loans for the three regimes and general administration, which are the expenses incurred by the departments involved and fees paid to service providers.

Table 17 Summary of Expenses

Loan Year	Student Related Expenses	Risks to the Government	Alternative Payments*	Administration			Total Expenses
				Fees Paid to Provinces	Recovery Cost	General	
	($ million)	($ million)	($ million)		($ million)		($ million)
2005-06	420.8	317.1	161	13.2	12.2	125.1	1,049.7
2006-07	428.4	336.7	118	13.4	11.7	123.4	1,031.1
2007-08	436.5	346.2	100	13.7	11.6	123.5	1,031.2
2008-09	446.8	356.7	104	14.1	11.6	124.4	1,057.2
2009-10	461.1	364.6	108	14.6	11.5	128.4	1,087.9
2010-11	476.4	373.4	114	15.1	11.3	132.6	1,122.4
2011-12	490.9	387.2	114	15.6	11.3	137.3	1,156.6
2012-13	506.4	402.1	127	16.2	11.5	142.4	1,205.7
2013-14	520.2	419.0	134	16.8	11.7	147.7	1,249.3
2014-15	533.2	435.2	141	17.4	11.9	153.2	1,292.1
2015-16	543.7	448.1	148	18.1	12.2	158.9	1,329.0
2016-17	552.4	460.4	150	18.7	12.3	164.9	1,358.4
2017-18	560.2	473.0	151	19.4	12.3	171.0	1,386.9
2018-19	569.1	489.2	151	20.2	12.4	177.4	1,419.6
2019-20	575.6	500.8	152	20.9	12.7	184.0	1,445.6
2020-21	581.0	507.8	152	21.7	12.9	190.9	1,466.0
2021-22	587.3	515.4	152	22.5	13.1	198.0	1,488.4
2022-23	595.0	524.5	153	23.4	13.3	205.4	1,514.3
2023-24	603.0	531.7	154	24.2	13.5	213.0	1,539.1
2024-25	612.2	539.5	156	25.1	13.7	221.0	1,567.1
2025-26	621.5	545.0	159	26.1	13.9	229.2	1,594.2
2026-27	633.7	552.5	162	27.0	14.1	237.8	1,626.9
2027-28	648.5	560.9	166	28.0	14.3	246.7	1,664.1
2028-29	665.3	567.9	170	29.1	14.5	255.9	1,702.5
2029-30	683.1	572.0	175	30.2	14.8	265.4	1,739.9
2030-31	702.5	573.2	180	31.3	15.0	275.3	1,776.9

* The calculation of alternative payments is based on expenses and revenues for a given loan year and the payment is accounted for in the following loan year.

As shown in Table 17, total expenses associated with the Program increase from $1.0 billion in 2005-06 to $1.8 billion in 2030-31. On average, total expenses increase at a rate of 2.1% per year from 2005-06 to 2030-31.

4. Total Revenues

In Table 18, the revenues for the Direct Loan Regime come from the interest earned from student loans in repayment, which include interest accrued during the six-month grace period following the study end date, interest accrued on impaired loans and interest relief. This revenue is reduced by the Government's cost of borrowing to obtain the net interest revenue. The interest on impaired Direct loans is accrued until the status of the loans becomes "non-recoverable". The interest recovered on Direct loans is already considered in the above interest earned calculation and is not shown separately.

Under the Guaranteed and Risk-Shared regimes, there is no interest earned by the Government since students in good-standing pay interest directly to the financial institutions. The only source of revenue from these regimes comes from the recoveries of principal and interest from impaired loans owned by the Government.

On average, total revenues increase at a rate of 2.2% per year from 2005-06 to 2030-31, which is lower than the overall average annual increase of 4.2% from the previous report.

Table 18 Total Revenues

	Direct Loan			Risk-Shared	Guaranteed	
Loan Year	Student Interest Earned	Borrowing Cost	Net Interest Revenue	Principal and Interest from Recovery	Principal and Interest from Recovery	Total Revenues
	($ million)		($ million)	($ million)	($ million)	($ million)
2005-06	364.8	-172.8	192.0	13.9	56.1	262.0
2006-07	469.1	-212.3	256.8	12.9	48.8	318.6
2007-08	557.0	-262.0	295.0	11.6	41.6	348.2
2008-09	630.5	-306.7	323.9	10.2	34.7	368.8
2009-10	699.1	-352.6	346.5	9.1	26.3	382.0
2010-11	783.6	-398.7	384.9	8.2	16.2	409.2
2011-12	811.4	-438.9	372.5	7.4	10.2	390.1
2012-13	852.0	-476.4	375.7	6.5	6.9	389.1
2013-14	879.8	-506.2	373.6	5.6	4.7	383.8
2014-15	897.5	-530.1	367.4	4.5	3.2	375.1
2015-16	931.6	-550.5	381.1	3.4	2.2	386.7
2016-17	960.6	-567.4	393.3	2.4	1.5	397.2
2017-18	987.7	-583.6	404.2	1.7	0.9	406.7
2018-19	1,013.7	-599.1	414.6	1.1	0.7	416.4
2019-20	1,039.2	-614.2	425.0	0.7	0.5	426.1
2020-21	1,059.0	-628.4	430.6	0.4	0.3	431.3
2021-22	1,075.5	-642.2	433.3	0.2	0.2	433.7
2022-23	1,090.5	-655.0	435.5	0.1	-	435.7
2023-24	1,104.5	-667.6	436.9	0.1	-	436.9
2024-25	1,118.2	-680.7	437.5	-	-	437.5
2025-26	1,132.6	-694.1	438.4	-	-	438.5
2026-27	1,146.9	-708.1	438.8	-	-	438.8
2027-28	1,163.1	-723.6	439.4	-	-	439.4
2028-29	1,181.9	-740.6	441.3	-	-	441.3
2029-30	1,203.5	-759.4	444.1	-	-	444.1
2030-31	1,228.6	-780.0	448.6	-	-	448.6

5. Net Cost of the Program

Table 19 shows, in current dollars, total expenses, revenues and the net cost of the Program for the 25-year projection period, while Table 20 shows the same, but in 2006 constant dollars. The expenses and revenues shown correspond to values presented earlier in this report.

Table 19 Net Annual Cost of the Program

	All Regimes			Net Cost of the Program	
Loan Year	Total Expenses	Total Revenue	Total Net Cost of the Program	Direct Loan	Risk-Shared & Guaranteed
	($ million)		($ million)	($ million)	($ million)
2005-06	1,049.7	262.0	787.7	764.1	23.6
2006-07	1,031.1	318.6	712.6	710.0	2.6
2007-08	1,031.2	348.2	683.0	694.7	-11.6
2008-09	1,057.2	368.8	688.4	705.2	-16.7
2009-10	1,087.9	382.0	705.9	723.0	-17.1
2010-11	1,122.4	409.2	713.2	726.3	-13.0
2011-12	1,156.6	390.1	766.5	776.3	-9.8
2012-13	1,205.7	389.1	816.6	824.5	-7.9
2013-14	1,249.3	383.8	865.5	871.9	-6.4
2014-15	1,292.1	375.1	917.0	921.9	-4.9
2015-16	1,329.0	386.7	942.3	946.2	-3.9
2016-17	1,358.4	397.2	961.2	964.0	-2.8
2017-18	1,386.9	406.7	980.1	982.0	-1.9
2018-19	1,419.6	416.4	1,003.2	1,004.6	-1.4
2019-20	1,445.6	426.1	1,019.4	1,020.3	-0.9
2020-21	1,466.0	431.3	1,034.8	1,035.3	-0.6
2021-22	1,488.4	433.7	1,054.8	1,055.1	-0.3
2022-23	1,514.3	435.7	1,078.7	1,078.8	-0.1
2023-24	1,539.1	436.9	1,102.2	1,102.2	-
2024-25	1,567.1	437.5	1,129.5	1,129.6	-
2025-26	1,594.2	438.5	1,155.8	1,155.8	-
2026-27	1,626.9	438.8	1,188.1	1,188.1	-
2027-28	1,664.1	439.4	1,224.7	1,224.7	-
2028-29	1,702.5	441.3	1,261.2	1,261.2	-
2029-30	1,739.9	444.1	1,295.8	1,295.8	-
2030-31	1,776.9	448.6	1,328.3	1,328.3	-

As shown in Table 19, the initial net annual cost for the Direct Loan Regime is $764 million for loan year 2005-06 and reaches $1.3 billion in loan year 2030-31. This represents an annual average increase of 2.2% for the entire projection period. The total net cost of the Program, including all regimes, is projected to grow from $788 million in 2005-06 to $1.3 billion in 2030-31. This represents an average annual increase in the cost to the Government of 2.1%.

In 2006 constant dollars (Table 20), the cost of the Direct Loan Regime decreases by an average of 0.2% a year, from $764 million in loan year 2005-06 to $730 million in 2030-31.

Table 20 Net Annual Cost of the Program (in millions of 2006 constant dollars)[1]

	All Regimes			Net Cost of the Program	
Loan Year	Total Expenses	Total Revenue	Total Net Cost of the Program	Direct Loan	Risk-Shared & Guaranteed
2005-06	1,049.7	262.0	787.7	764.1	23.6
2006-07	1,010.9	312.3	698.6	696.1	2.5
2007-08	991.2	334.7	656.5	667.7	-11.2
2008-09	996.2	347.5	648.7	664.5	-15.8
2009-10	1,004.1	352.5	651.5	667.3	-15.8
2010-11	1,013.6	369.5	644.1	655.9	-11.8
2011-12	1,021.0	344.4	676.6	685.3	-8.7
2012-13	1,039.4	335.4	704.0	710.8	-6.8
2013-14	1,050.7	322.8	727.9	733.3	-5.4
2014-15	1,059.2	307.5	751.7	755.7	-4.0
2015-16	1,060.8	308.7	752.2	755.3	-3.1
2016-17	1,055.7	308.7	747.0	749.3	-2.2
2017-18	1,049.5	307.8	741.7	743.2	-1.4
2018-19	1,046.1	306.8	739.2	740.3	-1.0
2019-20	1,037.2	305.7	731.4	732.1	-0.7
2020-21	1,024.2	301.3	722.9	723.3	-0.4
2021-22	1,012.5	295.0	717.5	717.7	-0.2
2022-23	1,003.1	288.6	714.5	714.6	-0.1
2023-24	992.7	281.8	710.9	710.9	-
2024-25	984.2	274.8	709.4	709.4	-
2025-26	974.9	268.1	706.8	706.8	-
2026-27	968.7	261.3	707.5	707.5	-
2027-28	964.8	254.8	710.0	710.0	-
2028-29	961.1	249.1	712.0	712.0	-
2029-30	956.4	244.1	712.3	712.3	-
2030-31	976.8	246.6	730.2	730.2	-

[1] For a given year, the value in 2006 constant dollars is equal to the corresponding value divided by the ratio of the cumulative index of the Consumer Price Index (CPI) of that given year to the cumulative index of the CPI for 2006.

III. Conclusion

The Canada Student Loans Program promotes accessibility to post-secondary education for those with demonstrated financial need by providing loans and grants, thereby encouraging successful and timely completion of post-secondary education. The Government became involved in assisting students because post-secondary education is costly. The CSLP is meant to supplement resources available to students from their own earnings, their families and other student awards.

Effective 1 August 2000, the Government redesigned the delivery of the CSLP from a program delivered by financial institutions to one directly financed by the Government. As part of this redesign, the Office of the Chief Actuary was given a mandate to conduct an actuarial review to provide an assessment of the current costs of the CSLP, a long-term (25 years) forecast of these costs, a portfolio projection and a discussion of all the assumptions underlying the results of the review. In the delivery of a high quality CSLP actuarial report, it is of the utmost importance to challenge the administration on the quality of data and to gain access to such data.

The number of students receiving a CSLP loan in a year is expected to increase from 346,000 to 430,000 over the projection period. This represents an increase in the loan uptake of students in post-secondary institutions from 41% to 60%. Such an increase in participation in the Program is mainly a result of rising student need. This need is affected by the projection of tuition fees and other expenses, which increase at a faster rate than resources. Contrary to the past two decades, the number of students enrolled in post-secondary institutions is not a contributing factor to the increase in the cost of the Program, as fewer students are expected to enroll in post-secondary institutions over the projection period. Instead, it is rising student need that mostly contributes to increasing Program costs.

The growth rate of new loans issued is, on average, 1.6% per year; it comprises an annual average increase of 0.9% in the number of students participating in the CSLP and a 0.7% increase in the average loan size.

The amount of new loans issued increases from $1.9 billion in loan year 2005-06 to $2.9 billion in 2030-31.

The portfolio of student loans increases from $11.6 billion in 2005-06 to $20.5 billion by 2030-31.

The total net cost of the Government’s involvement in the CSLP, which is the difference between the expenses and the revenues, is expected to grow from $0.8 billion to $1.3 billion over the projection period. This represents an average annual increase in the cost to the Government of 2.1%.

The provision rates for bad debt (principal and interest) and debt reduction in repayment are unchanged from the previous report. However, a new prospective methodology has been introduced to increase the flexibility in setting the allowance in the future. This new methodology will permit faster recognition of recent experience for current and new cohorts of loans.

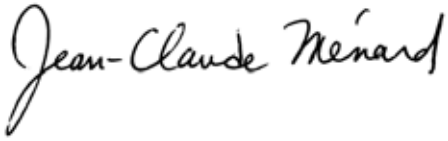
IV. Actuarial Opinion

In compliance with the standards of practice of the Canadian Institute of Actuaries, we are hereby giving the opinion that,

- the data on which this report is based are sufficient and reliable;
- the demographic and economic assumptions used are, in aggregate, appropriate; and
- the valuation conforms with the requirements of the Public Sector Accounting Handbook of the Canadian Institute of Chartered Accountants.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice.

Michel Millette, F.S.A., F.C.I.A.
Senior Actuary



Jean-Claude Ménard, F.S.A., F.C.I.A.
Chief Actuary

Ottawa, Canada
8 June 2007

V. APPENDICES

Appendix 1 – Summary of Program Provisions

The Canada Student Loans Program (CSLP) came into force on 28 July 1964 to provide Canadians equal opportunity to study beyond the secondary level and to encourage successful and timely completion of post-secondary education. The Government became involved in order to assist students because post-secondary education is costly. The CSLP is meant to supplement resources available to students from their own earnings, their families and other student awards.

Historically, two successive acts were established to assist qualifying students. The *Canada Student Loans Act* (CSLA) was established, applying to loan years preceding August 1995 and the *Canada Student Financial Assistance Act* (CSFAA) replaced the previous act for loan years after July 1995. Both acts permit the Minister of Human Resources and Social Development to provide loans to eligible students under the CSLP.

1. Eligibility Criteria

A student must be a Canadian citizen, within the meaning of the *Immigration Act* and must demonstrate the need for financial assistance to become eligible to receive a loan. A student must also fulfill a series of criteria (scholastic standard and financial) to be considered for a loan. Upon application each year to their province of residence, loans are available to full-time students regardless of age and, since 1983, to part-time students.

2. Partnerships

Since inception in 1964, the Minister has delegated powers, under both appropriate acts, to the participating provinces/territory to administer the CSLP. The participating provinces have their own student financial assistance programs that complement the CSLP. On behalf of the Government of Canada, the provinces and territory also determine whether the students need financial assistance and their eligibility for the CSLP. Provincial/territorial authorities calculate the costs and determine the need of the student based on the difference between costs and available resources. For each school year, the CSLP covers 60% of the assessed need with a maximum of $210 per week. The participating provinces complement the CSLP by providing 40% of the assessed need. The amount of money students may borrow depends on their individual circumstances.

Effective 1 August 2005, enhancements were made to the CSLP. The first enhancement is the inclusion of computers as an eligible expense. The second enhancement is a reduction in the required amount of parental contributions in order to extend eligibility to more students from middle-income families. In Budget 2006, the Government proposed a further reduction to the required amount of parental contributions.

The National Student Loans Service Centre (NSLSC) was established 1 March 2001 to assist students with questions related to the CSLP. Once students qualify for a loan, they obtain their loans from the Government of Canada. Service providers receive and process all the applicable loan documentation; i.e., from the disbursement to the consolidation and repayments of the loans. They also keep the students informed of all available options to assist in repaying the loan.

The type of financial arrangement has varied through time and legislation. The following describes these different arrangements and the risks associated with default.

- Guaranteed Loan Regime: The student loans provided by the lenders (financial institutions) prior to August 1995, under the *Canada Student Loans Act*, are fully guaranteed by the Government to the lenders. The Government reimburses the lenders for the outstanding principal, accrued interest and costs in the event of default or death of the student. Therefore, the Government bears all the risk involved with Guaranteed loans.
- Risk-Shared Loan Regime: For the period from August 1995 to July 2000, student loans continued to be disbursed, serviced and collected by financial institutions; however, the loans were no longer fully guaranteed by the Government. Instead, the *Canada Student Financial Assistance Act* permitted the Government to pay financial institutions a risk premium of five per cent of the value of loans that consolidated each loan year. Under this financial arrangement, the Government is not at risk except for the payment of the risk premium. Also, financial institutions can decide to sell a certain amount of impaired loans and the Government has to pay a put-back fee of five cents on the dollar for these loans. A part of the recoveries is shared with financial institutions.
- Direct Loan Regime: A new direct loan arrangement came into force, effective 1 August 2000, following the restructuring of the delivery of the Program and amendments made to the *Canada Student Financial Assistance Act* and Regulations. The Government issues loans directly to the student and, again, bears all the risk involved.

3. Loan Benefit

a) In-study Interest Subsidy

The CSLP provides an interest-free loan during the period that the student is studying full-time. The benefit is available to full-time students only and takes the form of an in-study interest subsidy. During this period, the Government pays interest (Government cost of borrowing) on the loan and no payment on the principal is required.

Part-time students are provided assistance in the form of a line of credit. Unlike full-time students, they must make interest payments while in school. If a student's income is below a certain level while in school, the student may qualify for interest relief.

b) Loan Consolidation

At graduation, or if the student does not return to school, all of the student's loans are consolidated or added together during the six-month grace period. During this period, interest accrues on the loan(s) but no payment is required; the student has to negotiate an agreement to set out the repayment terms. Once consolidation occurs, the student is considered a borrower in repayment. Since July 1995, the interest rate used to calculate the monthly payment is equal to the prime rate plus 250 basis points for the majority of students.

For loans issued prior to August 1993, no interest accrued during the grace period because the Government continued to pay interest on the loans during this period in the same manner as for the in-study period. For loans issued after July 1993, the student is liable for interest that accrues on loans during this grace period.

Each year, once students return to school, they must provide the financial institutions or the NSLSC with proof of enrolment for each study period in which they are enrolled, even if they are not applying for a new loan. This prevents automatic consolidation from occurring while the student is still in school and permits the student not to pay interest on their loan.

c) Repayment Assistance

The CSLP has measures in place to help students repay their loans - interest relief, extended interest relief and debt reduction in repayment (DRR).

In 1983, the Government introduced a maximum of 18 months of interest relief to assist students experiencing financial difficulty in repaying their loan. The Government assumes responsibility for making interest payments on the outstanding loan and no principal payments are required. In 1997, a measure extended the maximum interest relief that could be obtained from 18 to 30 months. At first, the interest relief had to be taken within the first five years after the completion of studies; then, in 1998, the five-year limit was removed, entitling anyone to receive interest relief at any time during the repayment period.

The Government also introduced a new extended interest relief measure for students who remain in financial difficulty after exhausting 30 months of interest relief. First, the repayment period is extended from 10 to 15 years to provide the student lower monthly payments. Second, if the student is still in financial difficulty, the interest relief period may be extended further to completely cover the first five years after leaving school. As much as 24 additional months may be awarded if the student is still within the first five-year period after leaving school, bringing the number of interest relief months up to a maximum of 54 months.

In determining eligibility for interest relief, a borrower's monthly family income must fall below an established income threshold in relation to the required monthly payment on the loan. In 2005, the Government increased the income thresholds by 5 per cent.

In 1998, the Government introduced a DRR measure to help students who remain in financial difficulty after all possible interest relief is exhausted. Initially, a 50% loan reduction in principal up to $10,000 was introduced. In 2003, the 50% loan reduction cap was removed, leaving the loan reduction up to $10,000 in place. Two new loan reductions up to $5,000 each were introduced for borrowers still experiencing financial hardship in repayment. In 2005, the second reduction was increased to $10,000 and the third reduction to $6,000. To determine whether the previous reduction has resulted in a manageable debt level, twelve months must elapse between each reduction. The table below briefly describes this assistance since its introduction.

Table 21 Debt Reduction in Repayment

Year	Maximum Reduction per 12-month Period*			Total Maximum Reduction
2005	**1st** - $10,000	**2nd** - $10,000	**3rd** - $6,000	$26,000
2003	**1st** - $10,000	**2nd** - $5,000	**3rd** - $5,000	$20,000
1998	50% of loan principal			$10,000

* Borrowers still experiencing financial hardship may be eligible for another reduction in 12 months.

d) Loan Forgiveness

The Minister has the authority, upon application and qualification, to forgive the loan in the event of a borrower's permanent disability or death while in school or during the repayment period. Eligibility was extended in June 2005 to include loan forgiveness in the event of a borrower's death during the period of repayment.

4. Canada Study Grants

Canada Study Grants were introduced as non-repayable grants administered since 1995 by the participating provinces on the Government's behalf. These grants are taxable and they assist students with permanent disabilities, high-need part-time students, women pursuing certain doctoral studies and students with dependants.

5. Canada Access Grants

Following an amendment to the CSFAA, Canada Access Grants are available starting in loan year 2005-06. They include:

- the Canada Access Grant for students from low-income families. This grant is available to dependent students whose family income falls within the range of entitlement to the National Child Benefit supplement (generally, those are families with incomes under $35,000). The grant covers half of tuition, up to the lesser of $3,000 or the student's assessed federal need for their first year of post-secondary education. It reduces the amount of federal student debt that would otherwise be incurred.
- the Canada Access Grant for students with permanent disabilities. This grant covers the lesser of $2,000 or the student's assessed federal need. The new grant replaces the existing grant for students with disabilities that is paid only to those who have financial need in excess of the weekly loan ceiling. The Canada Study Grant for students with disabilities that covers the cost of education-related services and equipment is still available.

Appendix 2 – Data

The input data required with respect to Direct loans were extracted from data files provided by Human Resources and Social Development (HRSD).

1. Direct Loans Issued

Table 22 presents the data extracted from an HRSD file on the number of students and amount of Direct loans issued for loan years 2000-01 to 2005-06 compared with HRSD publicized data. The data regarding loans issued were found to be complete.

Table 22 Direct Loans Issued and Number of Students

Loan Year	Amount of Loans Issued		Number of Students	
	HRSD File	HRSD Publication	HRSD File	HRSD Publication
	($ million)	($ million)		
2000-01	1,573	1,570	343,746	346,568
2001-02	1,507	1,512	328,653	331,541
2002-03	1,545	1,549	328,989	331,763
2003-04	1,643	1,648	340,201	342,982
2004-05	1,628	1,633	337,248	339,828
2005-06	1,948	1,936	345,025	345,784

2. Direct Loans Consolidated

Table 23 presents the number and amount of consolidated Direct loans extracted from HRSD data files. The amounts are compared with data from the Monthly Financial Information Schedule (MFIS). The consolidation date is not available in the data file. It is approximated from the last post-secondary end date. Therefore, the consolidated amounts may be overestimated, especially in the last two loan years, since some students that are still in school are assumed to have consolidated their loan.

Table 23 Direct Loans Consolidated

Loan Year	Amount of Loans Consolidated Including Six-month Interest in the Grace Period	
	HRSD File	MFIS
	($ million)	($ million)
2000-01	29.1	62.2
2001-02	708.3	772.2
2002-03	1,058.2	988.8
2003-04	1,285.1	1,151.3
2004-05	1,443.5	1,296.7
2005-06	1,682.0	1,346.4
All	6,206.2	5,617.6

3. Defaults and Recoveries for Direct Loans

Table 24 shows the data on defaults and recoveries (principal only) for Direct loans extracted from HRSD data files. The data regarding defaults and recoveries were found to be complete.

Table 24 Defaults and Recoveries for Direct Loans

Loan Year	Defaults	Recoveries
	($ million)	($ million)
2000-01	5.5	0.3
2001-02	8.9	0.7
2002-03	242.3	23.8
2003-04	253.2	48.8
2004-05	344.5	82.7
2005-06	266.8	85.5

4. Interest Relief

Table 25 compares amounts of interest relief payments for Direct loans, obtained from HRSD and the interest relief expense extracted from the HRSD data files. The interest relief file does not contain interest relief payment information; it has to be estimated using the interest rate, outstanding principal amounts and interest relief start and end dates.

Table 25 Interest Relief Payment Data for Direct Loans

Loan Year	Amounts Obtained from HRSD	Estimated from HRSD Files
	($ million)	($ million)
2000-01	0	0
2001-02	3.1	3.8
2002-03	13.4	14.4
2003-04	24.0	24.7
2004-05	33.7	38.9
2005-06	48.9	51.3

5. Debt Reduction in Repayment

Table 26 compares payment amounts of DRR, obtained from HRSD, with the DRR amounts extracted from HRSD data files.

Table 26 Debt Reduction in Repayment for Guaranteed and Risk-Shared Loans

Loan Year	Amounts Obtained from HRSD	Estimated from HRSD Files
	($ million)	($ million)
2001-02	5.3	5.7
2002-03	8.6	8.5
2003-04	12.1	12.1
2004-05	36.1	35.9
2005-06	25.5	25.5

Appendix 3 – Assumptions and Methodology

1. Growth of Total Loans Issued

The growth of total loans issued is related to the number of students participating in the CSLP, the evolution of need of those CSLP students and the loan limit. The evolution of the number of CSLP students and their need is discussed below.

a) Evolution of Number of CSLP Students

i) Demographic Evolution

The demographic evolution involves changes in the composition of the future population aged 18-34 for Canada, excluding the non-participating province of Québec and the territories of the Northwest Territories and Nunavut. Future fertility, mortality and migration assumptions are applied to this population. The fertility, mortality and migration assumptions are based on those used in the actuarial reports of the Canada Pension Plan and Old Age Security.

ii) Post-secondary Enrolment

The evolution of post-secondary enrolment shows a long-term decrease in post-secondary enrolment primarily caused by the labour shortage forecasted in Canada after the year 2015. It is anticipated that this labour shortage will be caused by the significant aging of the Canadian population and will considerably raise labour force participation rates in the age range 18-34. A higher expected labour force participation rate in the future implies that a smaller percentage of potential students will choose to attend a post-secondary institution on a full-time basis. The labour force non-participation rates associated with post-secondary enrolment are shown for years 2005-06, 2015-16 and 2030-31 in Table 27 below.

Table 27 Labour Force Non-participation Rates by CSLP Age Band

	Not in Labour Force		Change –	Not in Labour Force	Change –
Age Band	2005-06 (1)	2015-16 (2)	Not in Labour Force (2) / (1) - 1	2030-31 (3)	Not in Labour Force (3) / (1) - 1
	%	%	%	%	%
18-19	34.4	33.1	-3.9	29.3	-14.9
20-24	24.0	21.5	-10.5	20.9	-13.0
25-29	15.8	14.3	-9.5	13.2	-16.6
30-34	13.5	12.1	-10.1	11.2	-17.2
18-34	19.7	17.6	-10.6	16.5	-16.6

Table 27 shows a decrease in the inactive population, with an expected cumulative decrease of 10.6% over the next ten years and a larger decrease of 16.6% by 2030-31. This labour shortage will cause the expected decrease in the population not participating in the labour force from 2015-16 to 2030-31. This decrease is mainly concentrated in the older age ranges (25-34) since these individuals are more likely to choose being employed over attending school for a long period of time, given that suitable work is available to them. The younger age group is more likely than the older age group to attend college or university regardless of the situation in the labour force.

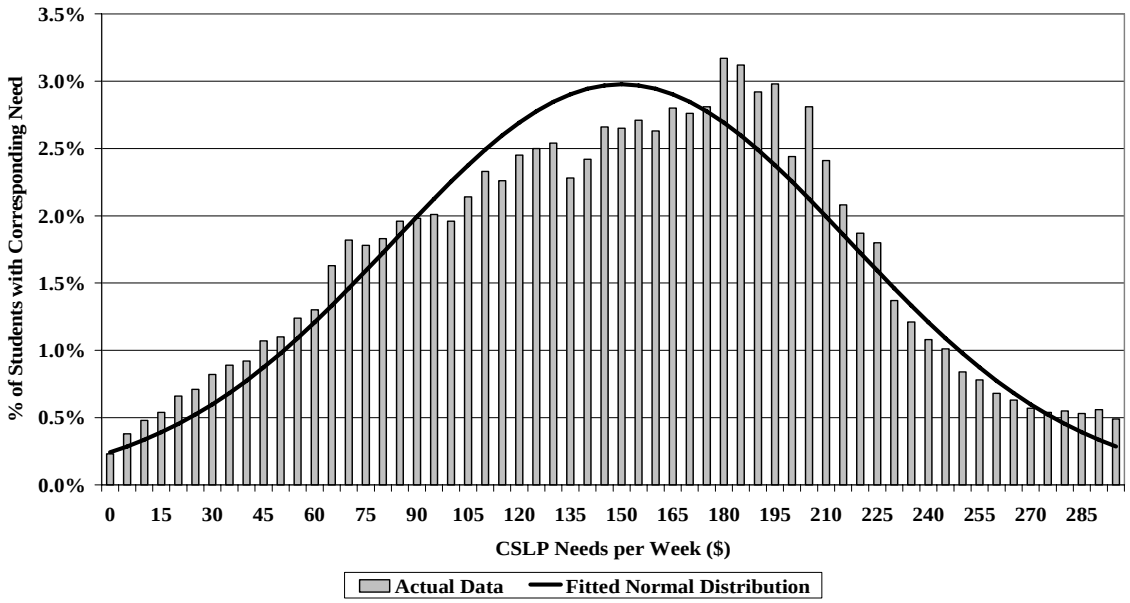
iii) Participation in the CSLP

HRSD has provided CSLP need assessment data for the previous loan years, up to and including 2003-04. The CSLP need per week was determined using the following calculation:

CSLP need per week = (assessed need / number of assessed weeks) x 60%.

The CSLP weekly need represents 60% of the assessed weekly need because the CSLP provides 60% of the total loan, while the participating province or territory of residence provides the remaining 40%. A histogram of the CSLP weekly need was created and very closely resembles a normal distribution. Chart 4 below shows the normal distribution fitted to the actual CSLP student weekly need data.

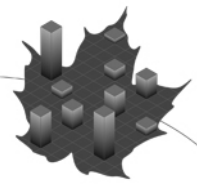
Chart 4 2003-04 Actual Need and Fitted Normal Distribution



The normal distribution provides a good fit, but was adjusted slightly in order to provide a better fit to the historical data. First, at $0 of need, there will be no loans issued and no loans will be issued for negative need. A second-degree polynomial replaced the normal distribution to the left of the peak to ensure the distribution complied with this logic. Second, the proportion of students at or above the loan limit is known for this historical data, so the entire curve was shifted slightly to the right to reflect the proper proportion. The new distribution created by making these small adjustments will be referred to as a modified normal distribution.

For each year in the projection period, the average need increase from the prior year was calculated using the projections for tuition fees, other expenses and resources. Students with low need may experience a small increase in their need since they have resources to offset the expense increase. Students with high need will experience a larger need increase because they do not have sufficient resources to offset an increase in expenses.

The projected average need increases are used to determine new parameters for the modified normal distribution in each of the projection years. Analysis of five years of need assessment data showed that the mean of the need curves increased at a slower rate than the projected average student need. Thus, the mean of the CSLP student need curve is assumed to be the



average of the prior year plus two-thirds of the projected average student need increase. After the new parameters are determined, the CSLP student need curves are projected for the 25-year period.

Since a shift in each modified normal distribution represents the increase in the proportion of students in the CSLP, an assumption was made regarding the growth of the curves. It is assumed that the intersection of subsequent curves will occur at the need corresponding to the average need of the prior year plus one-half of the projected average need increase during the current year. Having the intersection of curves occur slightly to the right of the average need makes sense because as need increases from year to year, students will move further to the right of the need curve. Using this assumption, each curve was adjusted, resulting in the area under successive curves exceeding 100%. The increased area under the curve represents an increase in participation in the CSLP. Beginning with the base need curve for 2005-06, the area under the curve is 100% and the loan uptake rate is 40.6%. The area under the need curve for 2006-07 is 100.8% due to an increase in the proportion of students in the CSLP. Thus, the loan uptake rate for 2006-07 is 40.9% (40.6% x 1.008). The product of the number of students enrolled full-time and the loan uptake rate gives the number of students in the CSLP.

b) Evolution of CSLP Student Need

As discussed in the Main Report, student need is defined as the excess of tuition and other expenses over student resources. These elements were also checked for consistency with the average values contained in the need assessment files. Table 5 shows the evolution of student need throughout the projection period.

i) Tuition

Tuition fees are, in part, determined by government policies. Thus, they are determined using provincial budgets stating the government's intentions, along with recent and historical experience for projecting short and long-term increases in tuition fees. The future evolution of tuition is shown both in Table 5 of the Main Report and Table 28 of this appendix.

To arrive at an estimate, the provinces' respective budgets stating their intentions, along with actual tuition increases as reported in news releases and by statistics sources, were used to project tuition increases for the next four years. Table 28 below illustrates these results.

Table 28 Short-term Increase of Tuition Expenses

			Results			
Province	**Weight**	**Budget/Experience**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
	%		%	%	%	%
Newfoundland	2.5	tuition freeze	0.0	0.0	0.0	0.0
Prince Edward Island	0.9	4.4% increase	4.4	4.4	4.4	4.4
Nova Scotia	6.3	3.9% increase	3.9	3.9	3.9	3.9
New Brunswick	4.5	4.5% increase	4.5	4.5	4.5	4.5
Ontario	49.4	4.9% increase followed by increases of 4.0% thereafter	4.9	4.0	4.0	4.0
Manitoba	2.5	0.1% increase	0.1	0.1	0.1	0.1
Saskatchewan	4.0	1.0% increase	1.0	1.0	1.0	1.0
Alberta	12.0	tuition freeze, followed by indexation to inflation	-0.1	2.0	2.1	2.2
British Columbia	18.0	2.2% increase, followed by indexation to inflation	2.2	2.0	2.1	2.2
Weighted Average			3.3	3.1	3.1	3.2

The long-term estimate of tuition is based on past increases in tuition relative to increases in the CPI. Over the last 30 years, tuition increases have been, on average, close to CPI plus 3.0%. In the past, government budgetary cost pressures caused tuition fees to rise more quickly than inflation. Since similar budgetary pressures are expected in the future due to the aging of the population, the 3.2% tuition increase for 2009-10 is graded to reach the CPI increase plus 3% by 2014-15.

The starting point for the 2005-06 tuition fees is calculated from a Statistics Canada Education Division survey on tuition fees, tabulated on a provincial basis. The average tuition was weighted by the total amount of loans issued in each participating province. This analysis resulted in an estimate of $5,401 for average tuition fees in 2005-06.

ii) Other Expenses

Other expenses are considered to be any student expense other than tuition fees. These expenses include books, shelter, food, clothing and transportation and are assessed by the participating provinces and territory.

Expenses are separated into two categories: books and living costs. Since the CSLP need assessment data for 2004-05 was unavailable for this report, the assumptions for student living arrangements and the percentage of maximum allowable expenses incurred by living arrangement were unchanged from the previous report. The table below uses these assumptions to calculate the annual living cost per student.

Table 29 Monthly Living Costs 2005-06

Living Arrangement	Weight in %	Maximum Monthly Living Costs ($)					Avg % Spent	Annual Living Costs ($)
		Shelter	Food[(1)]	Trans-portation	Miscel-laneous[(2)]	Total		
Single, living away from home	68.0	440	207	63	222	932	59.0	6,598
Single parent	7.5	707	207	63	222	1,198	95.0	13,662
Married student & spouse	8.5	879	379	127	422	1,808	70.0	15,183
Single, living at home	16.0	0	167	63	174	403	63.0	3,050
Weighted Average		**427**	**215**	**69**	**231**	**942**		**7,290**

(1) Purchased from stores.
(2) Personal and health care, clothing, household cleaning, communications.

Books and supplies are assumed to be roughly equal to 20% of tuition, which is $5,401 for 2005-06. The assumption of 20% is consistent with the ratio of books and supplies to tuition in the five years of need assessment data. The total expense attributable to books and supplies is $1,080 (20% x $5,401). In addition, effective 1 August 2005, the eligible expenses under books and supplies were extended to include an annual allowance of up to $500 for computers and computer-related costs. It is anticipated that all students will claim this computer allowance. Thus the total expense attributable to books and supplies is increased by $500 for a total of $1,580. The total amount of the CSLP student expenses (excluding tuition), indexed to future increases in the CPI, amounts to $8,870 ($7,290 + $1,580) for loan year 2005-06.

iii) Student Resources

Student resources include student earnings, parental contributions and other resources. Increased resources ultimately serve to reduce the maximum loan available to students through need analysis. Student need is developed in Table 5 of the Main Report.

The starting point for average resources in 2005-06 is calculated as a residual value. Since the average loan size approximately equals average expenses minus average resources, then average resources are roughly equal to average expenses minus average loan size with adjustments for unmet need. This results in an estimate of $3,815 for a student's average resources in 2005-06.

2. Consolidation

Under the Direct Loan Regime, net loans issued are assumed to consolidate according to the distribution of consolidation by year, shown in Table 30, over a period of fourteen years after a loan is issued. This distribution is built using the first six years of data for Direct Loan consolidations. A constant decreasing rate is applied for the years that follow.

Table 30 Distribution of Consolidation

Year After the Loan was Issued	% Consolidated
1st	2.4
2nd	48.8
3rd	15.7
4th	11.8
5th	6.6
6th	3.8
7th	2.9
8th	2.2
9th	1.7
10th	1.3
11th	1.0
12th	0.8
13th	0.6
14th	0.4

3. Interest Relief

Table 31 shows the base utilization rates of interest relief for the Direct Loan Regime for loan year 2005-06 and onwards. These rates are based on the non-adjusted rates for the Guaranteed and Risk-Shared regimes. The utilization rates in Table 31 are adjusted to take into account Direct Loan interest relief experience for the past five loan years.

For loan year 2005-06, the utilization rates are adjusted to 82% of the rates in Table 31. Based on experience in the Monthly Financial Information Schedule (MFIS), interest relief paid for loan year 2006-07 was almost $38 million at the end of February 2007. This is 44% higher than the amount paid for the same period in loan year 2005-06. Thus, the utilization rates are increased to 96% of the rates in Table 31 for loan year 2006-07 to account for this large increase in interest relief. The utilization rates are then uniformly increased to reach 100% of the rates in Table 31 by loan year 2010-11.

Since the loan limit is frozen in the future, it is anticipated that interest relief uptake will decrease as the average earnings of borrowers increase over time. In order to reflect this anticipated decrease in uptake, the interest relief utilization rates will be adjusted by a decreasing factor for 15 years beginning in loan year 2011-12. Compared to the results if the utilization rates were unchanged, this will result in a decrease in the amount of interest relief issued, fewer borrowers exhausting interest relief and fewer borrowers eligible for the DRR program.

Table 31 Utilization Rates for Interest Relief for the Direct Loan Regime

Years Since Consolidation	First Year in IR	Second Year in IR	Third Year in IR	Fourth Year in IR	Fifth Year in IR
0 – 1	40.15%	21.51%	12.49%	6.13%	2.14%
1 – 2	4.16%	1.58%	0.76%	0.21%	0.03%
2 – 3	2.57%	1.04%	0.48%	0.15%	0.02%
3 – 4	1.53%	0.58%	0.26%	0.06%	
4 – 5	0.56%	0.20%	0.07%	0.01%	
5 – 6	0.37%	0.11%	0.04%		
6 – 7	0.07%	0.01%	0.00%		
7 – 8	0.05%	0.01%			
8 – 9	0.03%				
9 – 10	0.01%				

4. Debt Reduction in Repayment

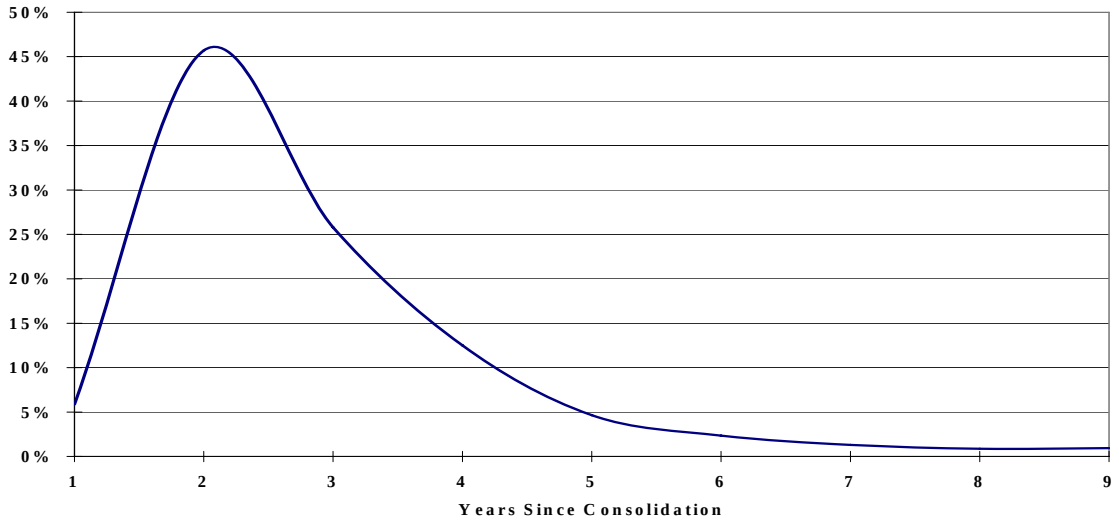
Debt reduction in repayment (DRR) is taken once all possible interest relief is exhausted by the student borrower. This is a relatively new program and there is limited experience from it. Moreover, DRR was enhanced through both the 2003 and 2004 Federal Budgets. Thus, starting in loan year 2005-06, the DRR measure consists of three reductions: $10,000, $10,000 and $6,000.

The assumptions regarding the proportion of loans going on DRR and the average amount of debt relief have been updated from the last report due to the availability of more experience data. The assumption for the proportion of loans going on DRR, after exhausting interest relief, is 45%, 7% and 3%, respectively for each of the three DRR reductions. The average amount of debt relief is set at 50%, 8% and 2%, respectively for the three reductions.

5. Default Rate

To determine the initial default distribution, the amounts of impaired loans from the Guaranteed Regime were analyzed by consolidation year. Consolidation loan years 1992-93 to 1995-96 were considered for the analysis. The average distribution is shown in Chart 5. According to this distribution, approximately 77% of defaulted loans occurred in the first three years following consolidation.

Chart 5 Default Distribution



In the Actuarial Report as at 31 July 2005, it was shown that the gross default rate of 35.4% set in the previous report was appropriate based on experience. However, for loan year 2005-06, the amount of defaulted loans expected in the previous report using the default distribution shown in Chart 5 and the default rate of 35.4% is higher than the actual experience. As shown in Table 32, to match the defaulted loans of loan year 2005-06 ($267 million), the gross default rate needed, in conjunction with the assumed default distribution, is 23.7%. Overall, to match the total defaulted loans for the last six years ($1,121 million), the gross default rate needed is approximately 34.5%.

Table 32 Direct Loan Regime – Projected and Actual Defaulted Amounts

Gross Default Rate	Loan Year 2005-06		Total 2000-01 to 2005-06	
	Projected ($ million)	Actual ($ million)	Projected ($ million)	Actual ($ million)
35.4%	399		1,151	
23.7%	267	267		1,121
34.5%			1,121	

Based on the trend of the recent experience and judgement, a gross default rate of 20.0% is assumed for loan year 2006-07 and thereafter.

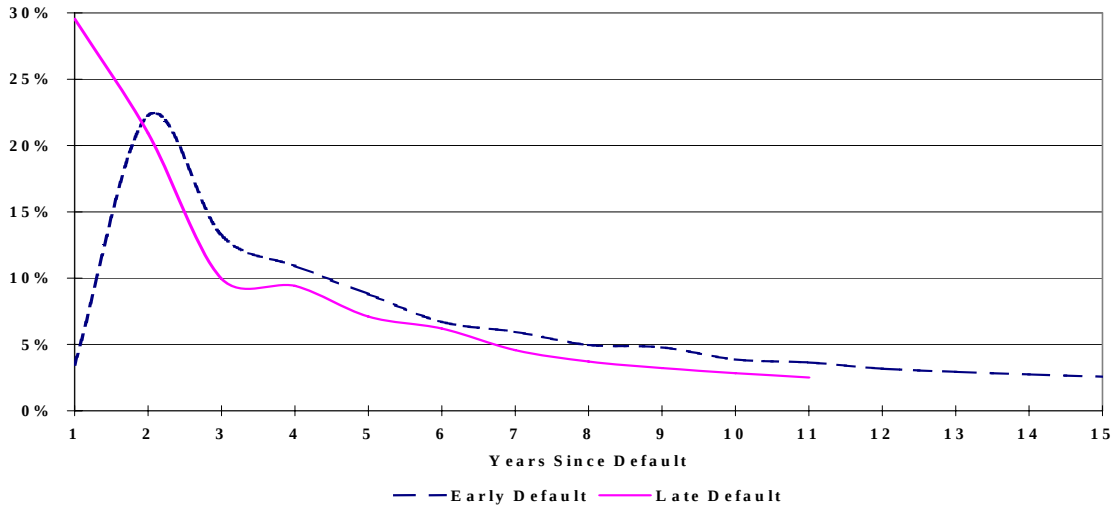
6. Recovery Rate

The recovery amounts for loans in the Guaranteed Regime were analyzed by consolidation year and by year since default. The empirical data were fit to a Weibull distribution. The flexible shape of this distribution makes it an appropriate fit for modelling the recovery process.

To fit the empirical data to a Weibull distribution, the parameters of the distribution were estimated by minimizing the sum of squares of the errors with the curve. Once these parameters were found for all years of default, recoveries were extrapolated by adjusting the tail of the Weibull distribution to the empirical data. The recovery period was limited to 15 years as a realistic time frame in which loans can still be recovered.

Separate distribution curves were obtained for the first four years of default occurrence since consolidation; a fifth curve is used as the ultimate distribution to extrapolate data in future years (Chart 6). The distribution curves are used to extrapolate recoveries for Direct loans.

Chart 6 Recovery Distribution Depending on Date of Default



In the Actuarial Report as at 31 July 2005, the assumed recovery rate for Direct loans was set at 60%. Using the actual default amount distributed by consolidation year and default year, the recovery distribution shown in Chart 6 and a recovery rate of 60%, the resulting projected amount of recoveries is $98 million for loan year 2005-06, which is approximately 15% higher than the actual amount of $86 million. The recovery rate needed to match the actual recoveries in loan year 2005-06 is approximately 52%. Since it is assumed that the default rate will decrease over time, resulting in lower projected default amounts, it is also assumed that it will be more difficult to recover these defaulted loans, resulting in a lower recovery rate than the 60% rate established in the previous report. The assumed recovery rate is 29% for loan year 2006-07 and thereafter.

The resulting net default rate (gross default rate x (1 – recovery rate) = 20% x (1 – 29%)) is unchanged at 14.2% and remains constant in the future.

7. Bad Debt Provision – Principal

According to the accounting recommendations under Section PS 3050 Loans Receivable of the Public Sector Accounting Handbook of the Canadian Institute of Chartered Accountants, a provision should be determined using the best-estimate available in light of past experience, current conditions and future expectations. As described previously, the net default rate is set at 14.2% and an upward adjustment for interest accrued during the grace period is applied.

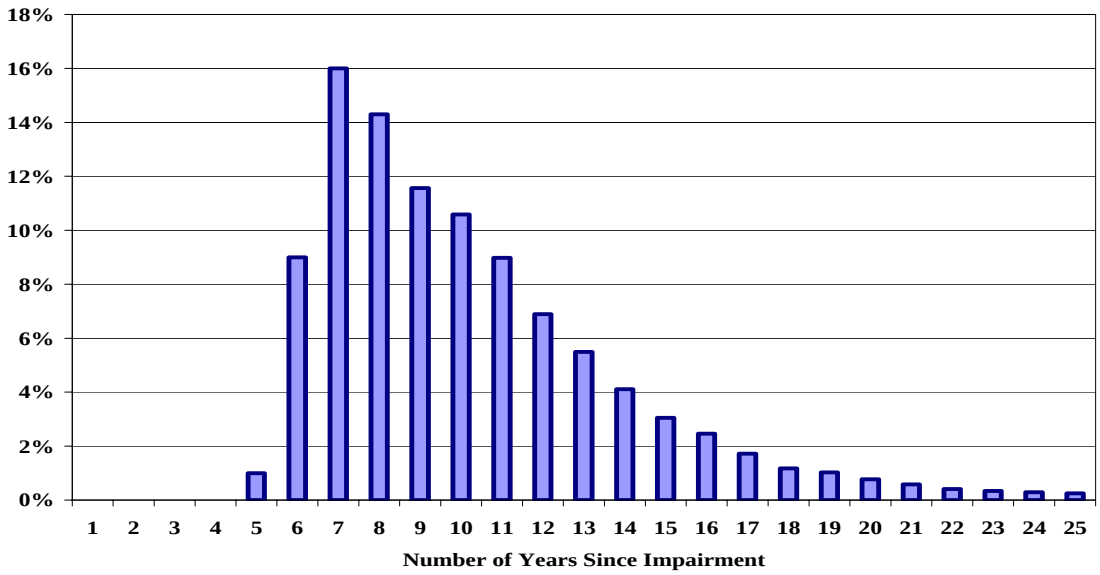
Table 33 Provision Rate – Bad Debt – Principal

Net Default Rate		14.2%
Adjustment: Interest accrued on loans during grace period	+0.4%	
Bad Debt Provision – Principal: Applied to net loans issued		14.6%

From an accounting perspective, the provision rate for bad debt – principal is now applied to the net loans issued and remains unchanged from the previous report at 14.6% even though the assumed future default and recovery rates have been reduced. The net loans issued are obtained by reducing loans issued by prepayments, Canada Access Grants and loans forgiven while in-study and during the six month grace period. The level of the total allowance is determined at the end of the loan year.

The calculation of the allowance is now separated into three components according to the status of the loan; that is whether the loan is in-study, in repayment (according to the number of years since consolidation) or impaired (according to the number of years since default). Future assumed rates of default and recovery are applied to these portfolio amounts to determine the allowance that must be put aside to pay future write-offs. The assumption used for write-offs is a 21-year distribution, starting in the fifth year following impairment. The write-off distribution, which is unchanged from the previous report, is presented in Chart 7.

Chart 7 Write-off Distribution



8. Bad Debt Provision – Interest

The methodology for the calculation of the bad debt provision – interest takes into account the number of years since impairment. Interest on impaired loans is accrued until the loan reaches the "non-recoverable" status. A loan reaches this status when the collectibility of either principal or interest is not reasonably assured. A loan is transferred to "non-recoverable" status according to a 15-year distribution (shown in Table 34) and is then written off according to the write-off distribution used for the principal portion.

Since the interest on impaired loans is accounted for as revenue, an allowance is established to cover the risk that such accrued interest will never be recovered. The methodology involves the calculation of:

- the accrued interest in each year on impaired loans at the student cost of borrowing rates,
- the projected outstanding interest at the end of each year, using non-recoverable and recovery distributions, as presented below, and
- the projected allowance at the end of each year by adding, per year since impairment, the product of recoverable outstanding interest accounts and the corresponding provision rate; then 100% of outstanding non-recoverable accounts is added.

The expense for a year is equal to the variation between the total allowance (on recoverable and non-recoverable accounts) at the end of the year and the remaining allowance of the previous year.

Table 34 presents, according to the number of years since impairment, the non-recoverable status and recovery distributions for interest on impaired loans, as well as the provision and recovery rates.

Table 34 Provision Rates - Bad Debt – Interest

Number of Years Since Impairment	Distribution (%)		Provision Rate (%)	Recovery Rate (%)
	Non-recoverable Status	Recovery		
Less than 1	4	26	20.0	80.0
Between 1 and 2	4	19	40.8	59.2
Between 2 and 3	12	18	56.0	44.0
Between 3 and 4	12	12	70.4	29.6
Between 4 and 5	12	7	80.0	20.0
Between 5 and 6	11	4	85.6	14.4
Between 6 and 7	11	3	88.8	11.2
Between 7 and 8	10	3	91.2	8.8
Between 8 and 9	8	2	93.6	6.4
Between 9 and 10	5	1	95.2	4.8
Between 10 and 11	4	1	96.0	4.0
Between 11 and 12	3	1	96.8	3.2
Between 12 and 13	2	1	97.6	2.4
Between 13 and 14	1	1	98.4	1.6
Between 14 and 15	1	1	99.2	0.8

The recovery distribution is based on the distribution of the recovery of principal. The provision rate for interest on loans in default less than one year is set at 20% and the corresponding recovery rate is set at 80%. The following recovery rates are obtained by taking the product of 80% and the sum of future recovery percentages of the distribution. Provision rates are the difference between 100% and the recovery rate. For example, the calculation of the rates for the period "between 5 and 6" years is:

Recovery rate = 80% * (4% + 3% + 3% + 2% + 1% + 1% + 1% + 1% + 1% + 1%)
= 80% * 18%
= 14.4%
Provision rate = 100% - 14.4% = 85.6%

Using this methodology, approximately 42% of all projected accrued interest on impaired loans will be recovered, which is close to the Guaranteed Loans' experience over the last 15 years.

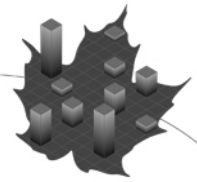
9. Other Assumptions

a) Prepayments and Accelerated Payments for Direct Loans

The payments of principal received from students were analysed using the Designation Monthly data files for loan years 2004-05 and 2005-06. The analysis revealed that some payments are received while the student is in school or during the grace period (prepayments) and some payments are received in excess of the scheduled payments during the repayment period (accelerated payments).

i) Prepayments

Prepayments correspond to the payments applied to principal during the period of study and during the six-month grace period after the period of study end date. The amount of prepayments for loan year 2005-06 is approximately $158 million. The proportion of prepayments received during the period of study represents 25% of total prepayments. Since the major proportion of prepayments (75%) is made during the six-month grace period, the assumption is established in relation to the consolidation amount. The assumption is set at



approximately 12% of consolidations for loan year 2005-06 and at approximately 11% for the following consolidation years, based on the last two years of prepayments.

ii) Accelerated Payments

Accelerated payments correspond to the payments received during the repayment period that exceed the scheduled payment based on a 114-month (9.5 years) repayment period. Based on the information from the Designation Monthly data files, it is assumed that students pay, on average, additional payments that correspond to 48% (for payments received in loan year 2004-05) and 54% (for payments received in loan year 2005-06) of scheduled payments, calculated using the standard 114-month repayment period. The assumption used is a distribution of accelerated payment rates according to the number of years since consolidation. This distribution is presented in Table 35.

Table 35 Accelerated Payment Rates

Years Since Consolidation	Rate
Same year as consolidation	62%
1-2	42%
2-3	53%
3-4	50%
4-5	53%
5-6	34%
6-7	22%
7-8 and after	14%

As mentioned in the previous report, a Guideline on amortization periods for consolidating loans with Service Providers has been implemented. It provides direction on the maximum period over which full-time consolidating loans are to be amortized, taking into consideration the total dollar value of all student loans at the time of consolidation. Starting early in loan year 2005-06, the scheduled payments for newly consolidated loans are calculated using a repayment period that varies according to the outstanding loan amount. Since experience available under this new practice is not sufficient, the assumption for accelerated payments is still set according to a standard 114-month repayment period.

b) Alternative Payments

Alternative payments are projected by multiplying the net cost of the Program by the ratio of the population aged 18-24 residing in the non-participating province and territories to the population aged 18-24 residing in the participating provinces and territory.

For the calculation of alternative payments, the expenses are: interest subsidies, interest relief expenses for Risk-Shared and Guaranteed regimes, loans forgiven, recovery costs, service providers' costs, Canada Study Grants, Canada Access Grants, claims, risk premiums, put-backs, refunds to financial institutions, Direct loans' borrowing costs for loans in repayment or on interest relief (i.e. in good-standing) and default amounts for the Direct Loan Regime. The revenues are: student interest payments and principal and interest from recoveries. The cost of alternative payments was $161 million for loan year 2005-06 based on expenses and revenues of loan year 2004-05 and $118 million for loan year 2006-07 based on expenses and revenues of loan year 2005-06.

c) Recovery Costs

The recovery costs have been projected using a percentage of the recoveries. The assumption used for recovery costs is 6.5% of total recoveries. This rate is assumed to be constant in the

future. For future reports, more detailed information regarding the cost of recovery and whether the recovery was successful or unsuccessful would be quite helpful in setting the assumption.

d) Administration Costs

HRSD provided estimates of the administration costs to support the CSLP for three fiscal years. The costs have been converted to a loan year basis and the extrapolation of future years was done using wage increases. Administration costs include expenses for service providers and are shown below in Table 36.

Table 36 Administration Costs

Loan Year	Administration Costs
	($ million)
2005-06	125.1
2006-07	123.4
2007+	Increase with wages

e) Administration Fees Paid to Provinces

For loan year 2005-06, the administration fees paid to the participating provinces and territory was $13.2 million. The increase in wages is used to project this expense.

f) Canada Study Grants and Canada Access Grants

For loan year 2005-06, the actual cost of the Canada Study Grants was $73.5 million, while the actual cost of Canada Access Grants was $59.3 million for a total of $132.8 million. For future years, the cost of Canada Study Grants is projected to increase with inflation, while the cost of Canada Access Grants is projected to increase with total loans disbursed.

g) Loans Forgiven

In the long term, rates of loans forgiven correspond to 0.13% of loans in-study, 0.11% of loans in repayment and 0.06% of loans in default.

Appendix 4 – Sensitivity Tests

An actuarial examination of the CSLP involves the projection of its income and expenditures over a long period of time. The information presented in section A of the Main Report has been derived using "best-estimate" assumptions regarding demographic and economic trends. Sensitivity tests are performed using assumptions for which changes within a reasonable range have the most significant impact on the long-term financial results.

Both the length of the projection period and the number of assumptions required ensure that actual future experience will not develop precisely in accordance with the best-estimate assumptions. Sensitivity tests have been performed, consisting of projections of CSLP financial results using alternative assumptions.

For each sensitivity test, key assumptions were changed individually, with the other assumptions being maintained at their best-estimate levels. Two tests were performed with respect to each of the assumptions tested, except for the loan limit and student interest rate spread where only one test was performed. The alternative assumptions selected are intended to represent the limits of potential long-term experience. However, it is possible that actual experience could lie outside these limits.

Each of these tests was then categorized as either a "low-cost" scenario or "high-cost" scenario. In the "low-cost" scenarios, the alternative assumptions have the effect of reducing the annual cost of the Program. Conversely, in the "high-cost" scenarios, the assumptions would increase the Program cost.

Table 37 below summarizes the alternative assumptions that were used in the sensitivity tests and is followed by a brief discussion of each assumption.

Table 37 Long-term Sensitivity Test Assumptions

	Assumption	Low-cost	Best-estimate	High-cost
1.	Loan Limit	--	$210	Indexed to inflation for 2007-08 and thereafter
2.	Wage Increases	0.7%	1.2%	1.7%
3.	Inflation	1.5%	2.5%	3.5%
4.	Labour Force Participation Rates – 2030-31 Canada less Québec, Northwest Territories and Nunavut (ages 18-34)	90.6%	83.5%	80.7%
5.	Tuition Cost	CPI	CPI + 3.0%	CPI + 6.0%
6.	Rate of Borrowing:			
	Government cost of borrowing	3.2%	5.2%	7.2%
	Student cost of borrowing	6.0%	8.0%	10.0%
7.	Interest Relief Utilization	70%	100%	130%
8.	Net Defaults	8.0%	14.2%	17.2%
9.	Student Interest Rate Spread	--	250 bps	100 bps

1. Loan Limit

This scenario assumes that the loan limit of $210 per week and thereafter is indexed annually to inflation, thereby showing the effect of many small increases to the limit. Contrary to the best-estimate scenario, the proportion of students at the loan limit will decrease in this scenario. However, the amount of total loans issued will increase gradually from 1.0% over total loans issued under the frozen limit in 2007-08 to 49% at the end of the projection period.

Chart 8 New Loans Issued

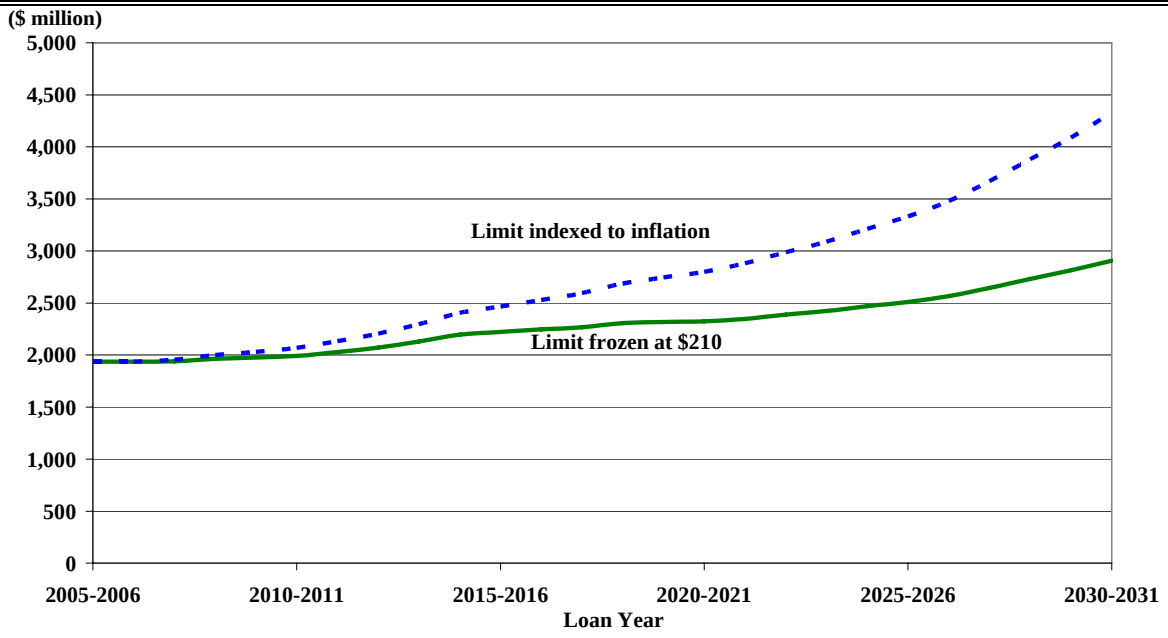


Chart 8 and Table 38 show the impact of gradually increasing the loan limit on loans issued compared to keeping the limit frozen.

Table 38 Impact of Loan Limit on Loans Issued

Loan Year	Increased to $210 in 2005-06			Indexed to Inflation Starting in 2007-08				
						Loans Issued		
	Limit	% of Students at the Limit	Loans Issued Total	Limit	% of Students at the Limit	Total	Increase Over Frozen	
	($)		($ million)	($)		($ million)	($ million)	(%)
2005-06	210	34.0	1,936	210	34.0	1,936	-	-
2006-07	210	34.9	1,920	210	34.9	1,920	-	-
2007-08	210	36.2	1,930	214	34.2	1,947	17	1
2010-11	210	40.4	1,983	228	31.5	2,060	77	4
2015-16	210	51.3	2,212	258	29.5	2,456	244	11
2020-21	210	61.7	2,313	292	29.1	2,787	474	20
2025-26	210	71.2	2,499	330	30.3	3,317	818	33
2030-31	210	79.1	2,894	374	33.7	4,311	1,417	49

2. Wage Increases

Wage increases affect the CSLP by increasing the resources of a student determined in the need assessment process. This, in turn, reduces the need of a student, which can reduce a student's loan availability. However, there is also an increase in the administration expenses because these are linked to salary increases.

The real-wage differential is assumed to increase uniformly from its initial to its ultimate level. An ultimate real-wage differential of 1.2% has been assumed in years 2012-13 and thereafter for the best-estimate projections. Combined with the best-estimate inflation assumption of 2.5%, it results in assumed nominal annual increases in wages of 3.7% in 2012-13 and thereafter.

For the low-cost scenario, the assumed real-wage differential is reduced by 0.5%. This results in an ultimate level of 0.7% in 2012-13.

For the high-cost scenario, the assumed real-wage differential is increased by 0.5%. This results in an ultimate level of 1.7% in 2012-13. This sensitivity test has little impact on the net cost of the Program. For an increase of 0.5% in wages, the portfolio decreases but the administration cost increases.

3. Inflation

An ultimate annual rate of inflation of 2.5% has been assumed for the best-estimate projections. The rate of inflation is assumed to be 1.7% in 2006-07 and 2.0% in 2007-08. The inflation rate is then assumed to increase uniformly and reach its ultimate level of 2.5% in 2012-13. The inflation rate affects the growth of a student's expenses, the growth of Program expenditures and, indirectly, the resources. It also indirectly affects the Government's cost of borrowing, as well as the repayment rate charged to the student.

For the low-cost scenario, the annual rate of inflation is assumed to decrease by 1.0%. This reduces the long-term rate of inflation to 1.5% in 2012-13. This level of inflation is comparable to that of the 1960s and 1990s.

For the high-cost scenario, the annual rate of inflation is assumed to increase by 1.0%. This increases the long-term rate of inflation to 3.5% in 2012-13. This level of inflation is comparable to long-term historical averages.

4. Labour Force Participation Rates

Labour force participation rates are used to determine the population enrolled full-time in post-secondary institutions. A higher participation rate means that fewer people will be available to attend post-secondary institutions, therefore decreasing enrolment. Similarly, a lower participation rate increases enrolment. During the next six years, it is assumed that the overall labour force participation rate will remain relatively stable for youths (ages 18 to 34), averaging 80.0%. For 2012 to 2030, it is assumed that participation rates will increase overall to 83.5% to compensate for the labour shortage.

For the low-cost scenario, participation rates are assumed to reach their highest historical level of 90.6% by 2030-31. In this scenario, a higher increase in the participation rates is used compared to the base scenario because the labour shortage is more pronounced.

For the high-cost scenario, participation rates are assumed to reach only 80.7% by 2030-31. In this scenario, a lower increase in the participation rates is used compared to the base scenario because the labour shortage is not as severe.

5. Tuition Cost

The long-term estimate of tuition increases is based on past tuition increases relative to the CPI. Over the last 31 years, yearly tuition increases have, on average, corresponded to increases in the CPI plus approximately 3.0%. Since budgetary pressures are anticipated in the future, given the aging of the population, CPI plus 3.0% was used as the ultimate growth rate.

For the low-cost scenario, the ultimate tuition increase is expected to correspond only to increases in the CPI. This result is more in line with increases of other goods and services. This also means that the Government's funding for education will be more in line with inflation.

For the high-cost scenario, the ultimate tuition increase is expected to correspond to increases in the CPI plus 6.0%. The anticipated budgetary pressures due to the aging of the population could reduce funding in key areas such as post-secondary education.

6. Rate of Borrowing

Changes in the real rate of borrowing involve fluctuations in the interest rate not caused by inflation. This rate is related to the Government cost of borrowing, which has an impact on the cost of the interest subsidy for students in school and the cost of providing interest relief for students in need. In addition to the effect on the Government cost of borrowing, this assumption also affects the student real rate of borrowing. This rate has been historically very volatile. As a result, greater emphasis should be placed on assessing the sensitivity of this assumption. The low-cost scenario reduces the rate by 2.0% and the high-cost scenario increases it by 2.0%. Each of these scenarios is plausible based on the volatility of past experience.

7. Interest Relief Utilization

In 1998, the interest relief program was extended from a maximum of 30 months to a maximum of 54 months. As a result, experience based on the use of this extended benefit is limited. Greater emphasis should be placed on assessing the sensitivity of the interest relief utilization rate based on this limited experience.

The low-cost scenario reduces the utilization rate of interest relief by 30%.

The high-cost scenario increases the utilization rate of interest relief by 30%. Better communication to students could increase awareness of the existence of this relatively new extended benefit, which would increase the utilization rate of interest relief.

8. Net Defaults

The net default rate of student loans is a major component of the Government's cost of being involved in the Program. The net default rate on loans consolidated is 14.2%, which corresponds to a gross default rate of 20.0% and a recovery rate of 29.0%. This rate is closely linked with the employment environment for new graduates since that environment affects the ability of students to repay their loans.

In the low-cost scenario, the recovery rate is increased back up to 60%, while the gross default rate remains unchanged at 20.0%. This results in a net default rate of 8.0% and a provision rate of 8.4%. The best estimate recovery rate was reduced in this report due to the reduction in the gross default rate and the fact that it may be more difficult to recover these loans. If the recovery rate is maintained at 60%, despite a lower gross default rate, it would indicate that the Program is being run very efficiently.

In the high-cost scenario, the gross default rate is set at 34.5% in all loan years, while the recovery rate is set at 50% in all loan years. This results in a net default rate of 17.2% and a provision rate of 17.6%. A gross default rate of 34.5% corresponds to the annual default rate that will match to total defaulted loans for the last six years ($1,121 million). This scenario assumes that the gross default rate will return to a level higher than the most recent experience with a recovery rate lower than recent experience would indicate. This situation could be experienced in an economic downturn with a high unemployment rate for new graduates.

9. Student Interest Rate Spread

This scenario assumes that the student interest rate spread of 250 basis points is reduced to 100 bps beginning in loan year 2007-08. Overall, this scenario results in a small reduction in the portfolio size at the end of the projection period, but a large increase in the net cost of the Program. By decreasing the student interest rate spread, total revenues decrease significantly due to the reduction in student interest earned. There is a small decrease in total expenses, but not enough to offset the revenue loss. Thus, the net effect is a 15.5% increase in the net cost of the Program. With a smaller spread, students are paying less interest, so more of their payments are used to reduce the loan principal. Thus, the portfolio of loans in repayment is smaller, leading to a smaller total portfolio.

Table 39 below summarizes the results of each of the sensitivity tests.

Table 39 Sensitivity Tests Results for Loan Year 2030-31

Assumptions	Scenario	Loans Issued	Increase	Average Growth Rate	Portfolio July	Increase	Net Cost	Increase
		($ million)	%	%	($ million)	%	($ million)	%
Base scenario	Best-estimate	2,894	-	2.2	20,520	-	1,328	-
Sensitivity tests								
1 – Index the limit to inflation beginning in 2007-08	High-cost	4,331	48.9	3.7	27,755	35.3	1,703	28.2
2 - Wage differential -0.5%	Low-cost	2,926	1.1	2.2	20,666	0.7	1,310	-1.4
2 - Wage differential +0.5%	High-cost	2,796	-3.4	2.0	19,993	-2.6	1,344	1.2
3 - Inflation -1%	Low-cost	2,677	-7.5	1.9	19,252	-6.2	1,077	-18.9
3 - Inflation +1%	High-cost	3,185	10.0	2.6	22,611	10.2	1,658	24.8
4 - High labour force participation	Low-cost	1,834	-36.6	0.5	14,839	-27.7	1,047	-21.2
4 - Low labour force participation	High-cost	3,340	15.4	2.8	23,532	14.7	1,448	9.0
5 - Tuition: CPI	Low-cost	2,215	-23.5	1.1	16,450	-19.7	1,149	-13.5
5 - Tuition: CPI +6%	High-cost	3,457	19.4	2.9	23,763	15.8	1,478	11.3
6 - Interest rate -2%	Low-cost	2,894	-	2.2	20,018	-2.4	1,087	-18.1
6 - Interest rate +2%	High-cost	2,894	-	2.2	20,974	2.2	1,571	18.3
7 - Interest relief utilization 70%	Low-cost	2,894	-	2.2	19,942	-2.8	1,292	-2.8
7 - Interest relief utilization 130%	High-cost	2,894	-	2.2	21,096	2.8	1,362	2.5
8 - Net default rate 8.0%	Low-cost	2,894	-	2.2	19,783	-3.6	1,043	-21.5
8 - Net default rate 17.2%	High-cost	2,894	-	2.2	20,693	0.8	1,452	9.3
9 - Student Interest Rate Spread +100 bps	High-cost	2,894	-	2.2	20,142	-1.8	1,534	15.5

Appendix 5 – Acknowledgements

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Annie St-Jacques
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Monique Denner
Witold Redel