



Office of the Superintendent of
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ACTUARIAL REPORT

on the
**CANADA
STUDENT
LOANS
PROGRAM**

as at 31 July 2010

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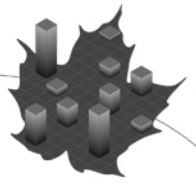
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30 June 2011

The Honourable Diane Finley, P.C., M.P.
Minister of Human Resources and Skills Development Canada
House of Commons
Ottawa, Canada
K1A 0G5

Dear Minister:

In accordance with section 19.1 of the *Canada Student Financial Assistance Act*, which provides that a report shall be prepared on financial assistance provided under this Act, I am pleased to submit the Actuarial Report on the Canada Student Loans Program, prepared as at 31 July 2010.

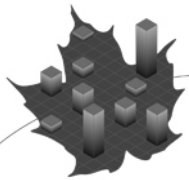
Yours sincerely,

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

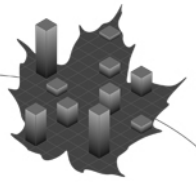


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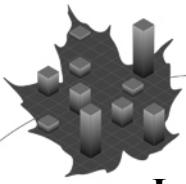
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I. Executive Summary

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

In accordance with section 19.1 of the *Canada Student Financial Assistance Act*, which provides that the Chief Actuary of the Office of the Superintendent of Financial Institutions shall prepare a report on the financial assistance provided under this Act no later than three years apart, a third statutory actuarial report on the CSLP has been prepared as at 31 July 2010. The report includes projections of future costs of the Program through loan year 2034-35. The purpose of the actuarial review of the CSLP is to provide an evaluation of the Program's overall financial costs and increases the level of information provided to the Minister of Human Resources and Skills Development Canada, Parliament and the public.

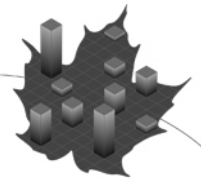
In accordance with accepted actuarial practice, this actuarial report shows estimates of:

- 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.

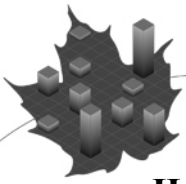
The various appendices provide supplemental information on Program provisions, a description of data, assumptions and methods employed and the sensitivity tests conducted.



C. Main Findings

The following summarizes the main findings of this actuarial report. The results are presented on a loan year basis from 1 August to 31 July.

- A new Canada Student Grants Program (CSGP) was introduced in loan year 2009-10. The amount of grants disbursed under CSGP represents around \$593 million in 2009-10 and is projected to increase from \$614 million in 2010-11 to \$798 million in 2034-35.
- Although the expected labour force shortage will cause a decrease in the number of students enrolled full-time in a post-secondary institution over the projection period, the increasing student need will increase the number of students receiving a CSLP loan from 405,000 in 2009-10 to 581,000 in 2034-35. This represents an increase in the loan uptake rate of students in post-secondary institutions from 33% to 58%.
- The amount of new loans issued in 2009-10 totalled \$2,086 million and is projected to increase to \$2,232 million in loan year 2010-11. The increase of \$146 million is the combination of opposing effects of the economic downturn, which temporarily decreased the participation of youth in the labour market, and the introduction of the new CSGP. The amount of new loans issued is projected to increase throughout the projection period to reach \$4,025 million in 2034-35.
- The direct loan portfolio increases from \$12.3 billion as at 31 July 2010 to \$24.9 billion by the end of the projection period. The amount of direct loans in default as at 31 July 2010 is \$1.6 billion and is projected to reach \$3.0 billion in 2034-35.
- According to the projections, the \$15 billion limit on the aggregate amount of outstanding loans in section 13 of the CSFAA will be reached in January 2013.
- The Repayment Assistance Plan (RAP) was introduced in loan year 2009-10. It replaces the Interest Relief (IR) and Debt Reduction in Repayment (DRR) measures. An allowance for RAP was established in the previous report and the provision rate set at 1.8% remains unchanged in this report.
- The total net cost (expenses less revenues) of the Government's involvement in the CSLP is expected to grow from \$1.3 billion in 2009-10 to \$2.2 billion in 2034-35. This represents an average annual increase in the cost to the Government of 2.2%.
- The assumptions for the future default rate and for the future recovery rate remain unchanged to 16% and 26% respectively. As a result, the provision rate for bad debt – principal remains unchanged at 12.4%. The report accounts for the impact of the economic downturn on loans in repayment by assuming an increase in the default rate in loan years 2010-11 to 2014-15.
- The provision rates for bad debt – interest are slightly adjusted, generally downward, compared to the previous report to reflect recent experience.
- As a sensitivity test, the loan limit of \$210 is indexed annually to inflation. The test results are included in Appendix 4. The impact on new loans issued is an increase of \$17 million (0.7% increase) in 2011-12 and an increase of \$2.2 billion (55% increase) in 2034-35.



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 the actuary's best judgement; these assumptions are referred to in this report as the "best-estimate" assumptions. They are determined by putting emphasis on elements affecting the growth of new loans issued.

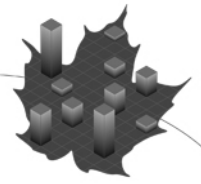
The projection of loans issued to eligible students for each loan year is presented in section B. This includes a projection of the student population (ages 18 to 34) in order to determine the future number of students enrolled in post-secondary education and thus eligible to qualify for a loan under the CSLP. A long-term demographic and economic context of the aging of the population and the 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 enrollment rate in post-secondary institutions.

The projection of the loan portfolio 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 direct loan arrangement. The costs related to direct loans include the interest subsidy on in-study loans, interest relief from the Repayment Assistance Plan (RAP), provisions for RAP (principal) and bad debt (principal and interest), the Canada Student Grants Program (CSGP), alternative payments, loan forgiveness and administration expenses. The costs are reduced by an estimate of the net interest revenues coming from student interest payments, RAP interest payments and the net interest accrued during the grace period and on defaulted 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 detailed descriptions of the assumptions, methodology and sensitivity tests conducted, as well as the results of the sensitivity tests which examine the impact of changes in assumptions such as 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 the actuary's best judgement and are referred to as "best-estimate" assumptions. Some of the assumptions are based on the most recent 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 2009, 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.

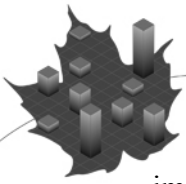
The entry of the “baby-boom” generation into the labour market created an abundance of workers, thus increasing the unemployment rate and influencing the transition from school to work during the last 20 years. In the 1990s, poor labour market conditions meant that youths aged 15-24 were less likely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

During the last two decades, poor labour market conditions increased the school-to-work transition period. 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.

However, the recent economic downturn, as evidenced by the increasing unemployment rate and contraction of the economy, had an impact on the labour market. The youth unemployment rate (ages 15-24) increased by more than 40% from loan year 2007-08 to 2009-10. This may have influenced students to pursue a post-secondary education rather than enter the labour force.

In general, youth labour force participation decreased during the economic downturn. Based on the first few months of loan year 2010-11, it is assumed that the youth labour force participation rates will continue to decrease in 2010-11 before reverting back to the CPP assumptions in 2015-16.

Starting in 2011, a decline in the labour force growth rate for the entire population will create more working opportunities for those aged 18-34 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 77.0% in loan year 2009-10 to 82.4% in 2034-35. 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

Price increases, as measured by changes in the Consumer Price Index, tend to fluctuate from year to year. In 2006, the Bank of Canada and the Government renewed their commitment to keep inflation between 1% and 3% until the end of 2011. It is assumed that this commitment will be renewed for another five years following 2011. Therefore, a price increase rate of 2.0% is assumed for loan years 2010-11 to 2016-17. Beginning in 2017-18, the rate is assumed to uniformly increase until it reaches an ultimate rate of 2.3% in 2019-20.

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 to be 3.7% in loan year 2010-11 and 3.9% in the next three loan years. 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 labour market supply. 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 wage growth is projected to increase gradually from 0.2% in 2010-11, reaching 1.3% by 2019-20. 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 of Canada 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 which normally lasts 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. In recent months, federal bond yields have been increasing and this trend is expected to continue in the future. Thus, the Government cost of borrowing is estimated to be 3.2% in loan year 2010-11 and is anticipated to gradually increase to an ultimate rate of 4.8% by loan year 2019-20. 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 pts
2010-2011	2.0	1.2	3.2	3.0	5.5
2011-2012	2.0	1.9	3.9	3.2	5.7
2012-2013	2.0	2.5	4.5	3.6	6.1
2013-2014	2.0	2.5	4.5	3.7	6.2
2014-2015	2.0	2.5	4.5	3.8	6.3
2015-2016	2.0	2.5	4.5	4.0	6.5
2016-2017	2.0	2.5	4.5	4.3	6.8
2017-2018	2.1	2.6	4.7	4.7	7.2
2018-2019	2.2	2.5	4.7	4.8	7.3
2019-2020+	2.3	2.5	4.8	5.1	7.6

The average prime rate for loan year 2010-11 is set at 3.0%, and is expected to increase to 3.2% in loan year 2011-12 based on the expected gradual recovery of the economy. The prime rate is expected to continue increasing gradually to an ultimate rate of 5.1% in loan year 2019-20. The student cost of borrowing, used to calculate interest revenue, is the sum of the prime rate and a spread of 250 basis points. Given the recent increase in the prime rate, the student cost of borrowing is 5.5% in loan year 2010-11 and is anticipated to increase to an ultimate rate of 7.6% by loan year 2019-20. The student cost of borrowing can be found in the last column of Table 1.

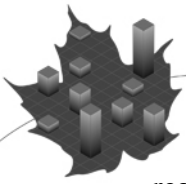
3. Provision Assumptions

Since August 2000, the CSLP is delivered and financed directly by the Government. Three allowances were established to cover future costs: bad debt – principal, bad debt – interest and Debt Reduction in Repayment (DRR). Interest Relief (IR) and DRR measures were replaced by the Repayment Assistance Plan (RAP) effective August 2009 and a RAP – Principal allowance was created.

The allowance for bad debt – principal is based on 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. The calculation of the allowance is 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 in default (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 are applied to determine the value of the allowance.

The provision rate for bad debt – principal is applied to the net loans issued which are obtained by reducing loans issued by prepayments and loans forgiven while in-study and during the grace period. The provision rate remains unchanged at 12.4%, as set in the previous report. The level of the total allowance is determined at the end of the loan year. The annual expense for bad debt – principal is equal to the difference between the total allowance at the end of a year and the total allowance at the end of the previous year net of write-offs that have occurred during the year.

The allowance for bad debt – interest is based on the account's recoverable status and its age since default. The interest accrued on defaulted loans is considered a revenue until the loan



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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 default. The annual expense for bad debt – interest is equal to the difference between the total allowance at the end of a year and the total allowance at the end of the previous year net of write-offs that have occurred during the year.

The provision rates for bad debt – interest are slightly modified from the previous report according to recent experience. The projected rates take into account that a large portion of interest is transferred to the “non-recoverable” status starting in the sixth year following default because there is a six-year limitation period (statute of limitations). The set of provision rates used to determine the allowance on recoverable accounts as at 31 July 2010 is shown in Table 2. These rates are also used to determine the allowance on recoverable accounts as at 31 March 2011 for the purpose of the Public Accounts. The provision rate for the allowance on non-recoverable accounts is 100%.

The RAP consists of two stages to help student borrowers fully repay their student loan within fifteen years (or ten years for borrowers with permanent disabilities). Stage 1 is applicable for up to five years over a ten-year period. The Government will cover the monthly interest amount owing that the borrower’s affordable payment does not cover. Stage 2 begins once the borrower completes Stage 1, or has been in repayment for ten years following the end of the study period. The Government continues to cover the interest, as in Stage 1, and begins to cover a portion of the student loan principal amount (i.e. the difference between the required and affordable payments).

Consequently, the RAP – principal provision covers future costs related to Stage 2 of the RAP in which the principal balance of the loan is gradually paid off, in part or entirely, by the Government. The RAP – principal provision rate, applicable to net loans issued, was set at a rate of 1.8% in the previous report and remains unchanged.

As RAP is a new program introduced in 2009, it has limited experience. The related projection of costs and underlying assumptions will be revised as more experience emerges and the provision rate will be updated accordingly. As for the former Interest Relief measure, a modest provision for the RAP (Stages 1 and 2) – interest is determined by HRSDC for accounting purposes to take into account the timing of the interest accrued.

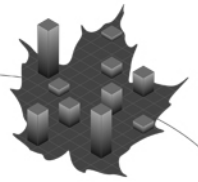
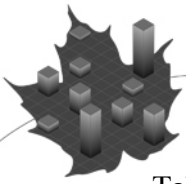


Table 2 Provision and Allowance Assumptions

Type of Provision	Assumptions	
		(%)
On net loans issued		
Bad debt – principal		12.4
Repayment Assistance Plan		<u>1.8</u>
Total		14.2
	Year Since	
	Default	(%)
Allowance for bad debt – interest	1 st	32.5
	2 nd	44.7
	3 rd	55.3
	4 th	65.0
	5 th	75.9
	6 th	68.1
	7 th	68.4
	8 th	68.8
	9 th	69.6
	10 th	70.8



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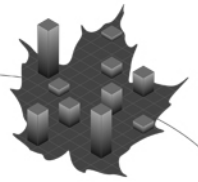
CANADA STUDENT LOANS PROGRAM

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

Table 3 Best-estimate Assumptions

1. Total fertility rate for Canada	1.65 per woman
2. Mortality	Canadian Human Mortality Database
3. Net migration rate	0.53% of the population up to 2018, increasing to 0.58% in 2023
4. Youth participation rate (participating provinces/territory, ages 18-34)	77.2% (2010-11)
	77.5% (2011-12)
	78.2% (2012-13)
	⋮
	82.4% (2034-35)
5. Real wage increase	0.2% (2010-11)
	0.5% (2011-12)
	⋮
	1.3% (2019-20+)
6. Inflation	2.0% (2010-11)
	2.0% (2011-12)
	⋮
	2.3% (2019-20+)
7. Tuition fee increases	3.7% (2010-11)
	3.9% (2011-12)
	3.9% (2012-13)
	3.9% (2013-14)
	⋮
	CPI + 3.0% (2019-20+)
8. Government cost of borrowing	3.2% (2010-11)
	⋮
	4.8% (2019-20+)
9. Student borrowing cost	5.5% (2010-11)
	⋮
	7.6% (2019-20+)
10. Provision rate for bad debt – principal	12.4% (2010-11+)
11. Provision rate for RAP – principal	1.8% (2010-11+)
12. Provision rates for bad debt – interest	32.5% (Interest on loans in default for less than a year)
	⋮
	68.1% (Interest on loans in default for 5 to 6 years)
	⋮
	100.0% (Interest on loans in default for 14 to 15 years)



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 enrollment 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 Enrollment

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 enrollment will have the largest impact on the progression of full-time students attending post-secondary institutions.

a) Demographic Projections

Demographic projections are updated based on the population projected in the 25th Actuarial Report on the Canada Pension Plan as at 31 December 2009. The population of Canada less Québec, 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 1974 and 2013, most of whom are already included in the population.

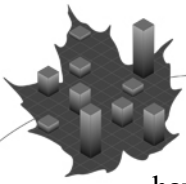
In the first six years of the projection, children of the “baby-boom” generation, called the “echo” generation, are expected to contribute to the increase in the population for ages 18-34. The “baby-boom” generation is more numerous and, consequently, had more children than the previous generation, notwithstanding a lower fertility rate. The population aged 18-34 is expected to increase from 6,084,000 in 2009-10 to 6,344,000 by 2015-16. In the last nineteen years of the projection, the population aged 18-34 decreases to 6,257,000. Overall, as Table 4 shows, a small increase of 173,000 is expected in the population aged 18-34 over the 25-year projection period.

b) Post-secondary Enrollment

The number of students enrolled full-time in post-secondary institutions is based on 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 enrollment is assumed to evolve in conjunction with the population not participating in the labour force.

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 pressures 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 number of newcomers entering the labour force. This situation is expected to change radically over the next five 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 2,272,000 persons. By 2025, the number of persons retiring (2,711,000) will surpass the number of newcomers (2,026,000) by 34%. The labour market will



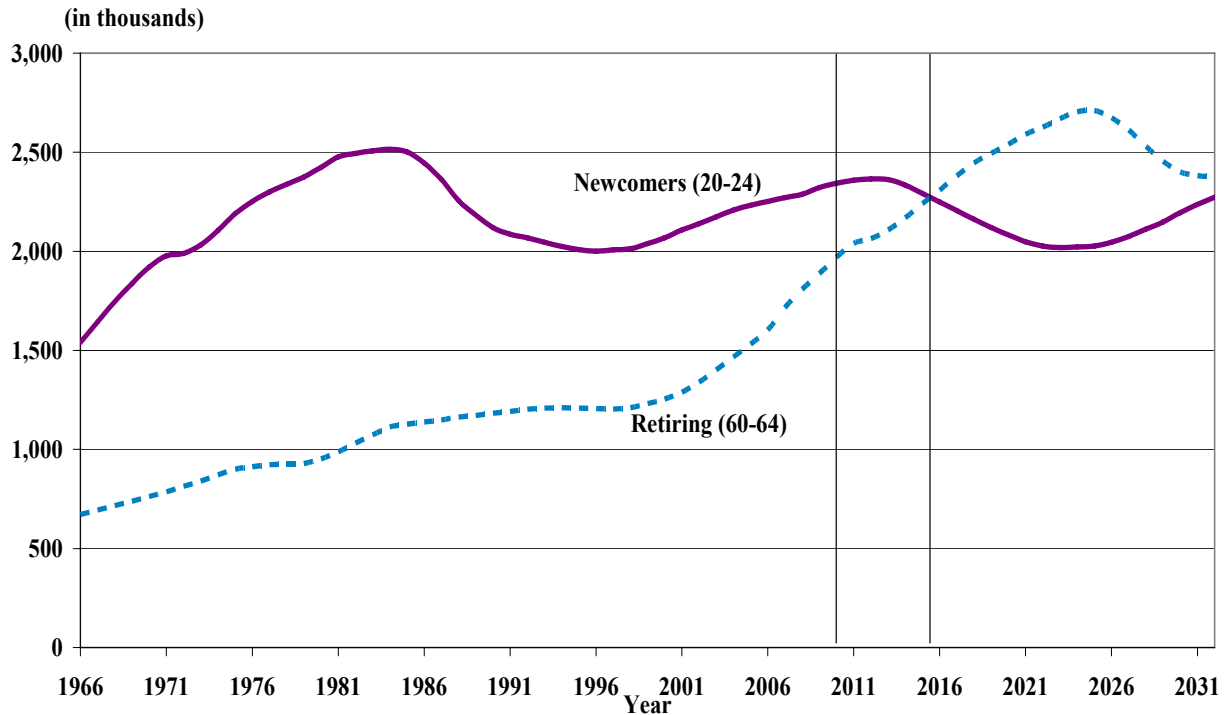
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have to adapt since it is accustomed to having at least two newcomers for each person retiring; this ratio will decrease significantly to less than one newcomer for each person retiring. As a result, the participation rates of the population aged 18-34 in the labour force are assumed to increase once the economy has recovered 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)



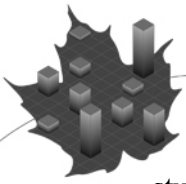
In Table 4, the population (18-34) not participating in the labour force is projected to increase from 1,397,000 to 1,406,000 during the first year of the projection, which is an increase of 9,000. This is due to an increase in the youth unemployment rate and a corresponding decrease in labour force participation rates. Over the twenty-five year projection period, the population not participating in the labour force decreases by 296,000 to reach 1,101,000 in loan year 2034-35. This large decrease is caused by the anticipated labour shortage and the assumption that over the projection period, the labour force participation rates of the population 18-34 will increase due to economic recovery, 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.

**Table 4 Population and Post-secondary Enrollment**

Loan Year	Population of Canada Less Québec, Nunavut, and NWT (18-34) (Thousands)	Participation Rate (18-34) (%)	Not Participating in Labour Force (18-34) (Thousands)	Students Enrolled Full-time (Thousands)	Increase (Thousands)	Growth Rate (%)
	(1)	(2)	(1) x (1 - (2))			
2009-2010	6,084	77.0	1,397	1,229	-	-
2010-2011	6,152	77.2	1,406	1,258	29.1	2.4
2011-2012	6,210	77.5	1,400	1,247	-11.2	-0.9
2012-2013	6,261	78.2	1,367	1,204	-42.4	-3.4
2013-2014	6,307	78.8	1,339	1,164	-40.3	-3.3
2014-2015	6,336	79.4	1,305	1,122	-41.9	-3.6
2015-2016	6,344	80.1	1,260	1,070	-52.5	-4.7
2016-2017	6,336	80.5	1,234	1,043	-27.0	-2.5
2017-2018	6,318	80.8	1,212	1,019	-24.0	-2.3
2018-2019	6,293	81.0	1,193	1,000	-18.8	-1.8
2019-2020	6,255	81.3	1,167	976	-23.9	-2.4
2020-2021	6,212	81.6	1,140	954	-22.3	-2.3
2021-2022	6,173	81.9	1,120	938	-15.3	-1.6
2022-2023	6,142	82.0	1,106	930	-8.2	-0.9
2023-2024	6,112	82.1	1,092	925	-5.4	-0.6
2024-2025	6,077	82.2	1,079	922	-2.9	-0.3
2025-2026	6,041	82.3	1,067	921	-0.5	-0.1
2026-2027	6,021	82.4	1,060	924	2.5	0.3
2027-2028	6,014	82.5	1,055	929	4.9	0.5
2028-2029	6,022	82.5	1,055	938	9.7	1.0
2029-2030	6,041	82.5	1,057	949	10.6	1.1
2030-2031	6,064	82.5	1,059	957	7.5	0.8
2031-2032	6,096	82.5	1,067	969	12.2	1.3
2032-2033	6,142	82.5	1,078	980	10.9	1.1
2033-2034	6,197	82.4	1,089	991	11.1	1.1
2034-2035	6,257	82.4	1,101	1,002	11.2	1.1

The evolution of the inactive population (i.e. those aged 18-34 not participating in the labour force) is used as an indicator of the evolution of the population in post-secondary institutions. In this report, the inactive population in September was used rather than the annual average as it more accurately seizes the group of people under study. This change in methodology as well as the use of the updated CPP25 population explains the increase in the inactive population compared to the previous report. Enrollment in post-secondary institutions, as well as CSLP participation, varies between age groups. For projection purposes, enrollment is separated into age groups. Statistics Canada provided the data on enrollment by age group (i.e. 2008-09 for university and 2006-07 for college). The combination of updated data and new methodology produces higher enrollment throughout the projection period than in the last report. Indeed, the post-secondary participation factor, now calculated as the ratio of the historical post-secondary enrollment to the inactive population in September for each age range, is applied to the future inactive population in order to determine future enrollment in post-secondary institutions.

In Table 4, the population aged 18-34 enrolled full-time in a post-secondary institution is projected to increase by 29,000 (1,229,000 to 1,258,000) during the first year of the projection period due in part to the recent economic downturn that resulted in youths returning to their



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studies rather than entering the labour market. Afterward, the number of students enrolled full-time decreases for 15 years due to a decrease in the population aged 18-34 that is not participating in the labour force.

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. 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. Future distributions of student need are projected using the CSLP need assessment data provided by Human Resources and Skills Development Canada (HRSDC).

For projection purposes, students' needs are modelled using the need assessment data file for loan year 2008-2009. Students are first separated into three groups based on their living arrangement and a distinct need curve is then developed for each group. The results are aggregated using a weighted average based on loans issued.

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)	
2009-2010	4,400	6,300	9,800	16,100	11,700	-
2010-2011	4,400	6,500	9,900	16,400	12,000	300
2011-2012	4,500	6,800	10,100	16,800	12,300	300
2012-2013	4,600	7,000	10,300	17,300	12,700	400
2013-2014	4,800	7,300	10,500	17,800	13,000	300
2014-2015	4,900	7,600	10,700	18,300	13,400	400
2015-2016	5,000	8,000	10,900	18,900	13,800	400
2016-2017	5,200	8,300	11,100	19,400	14,300	500
2017-2018	5,300	8,700	11,300	20,100	14,700	400
2018-2019	5,500	9,200	11,600	20,700	15,200	500
2019-2020	5,700	9,700	11,800	21,500	15,800	600
2020-2021	5,900	10,200	12,100	22,300	16,400	600
2021-2022	6,100	10,700	12,400	23,100	17,000	600
2022-2023	6,300	11,300	12,700	23,900	17,600	600
2023-2024	6,600	11,900	13,000	24,800	18,300	700
2024-2025	6,800	12,500	13,300	25,800	18,900	600
2025-2026	7,100	13,200	13,600	26,700	19,700	800
2026-2027	7,300	13,900	13,900	27,700	20,400	700
2027-2028	7,600	14,600	14,200	28,800	21,200	800
2028-2029	7,900	15,400	14,500	29,900	22,000	800
2029-2030	8,100	16,200	14,900	31,000	22,900	900
2030-2031	8,400	17,000	15,200	32,200	23,800	900
2031-2032	8,700	17,900	15,600	33,500	24,800	1,000
2032-2033	9,000	18,900	15,900	34,800	25,800	1,000
2033-2034	9,400	19,900	16,300	36,200	26,800	1,000
2034-2035	9,700	20,900	16,600	37,600	27,900	1,100

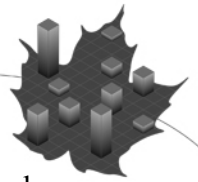


Table 5 summarizes the three main elements of student need, as well as the average student need. In the previous report, the average resources and expenses of all post-secondary students were shown while in this report, the average resources and expenses specific to the students receiving a loan are considered.

Tuition fees are the primary source of increases in student need and are ultimately indexed at 3.0% above inflation. Tuition has been, on average, 2.6% above inflation over the last ten years and 3.9% 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 1.3% above inflation.

Table 5 shows average tuition fees rising from \$6,300 in 2009-10 to \$20,900 in 2034-35. In fact, tuition fees rise from 143% of a student’s available resources in 2009-10 to 215% in 2034-35.

Chart 2 CSLP Student Projected Need Curve for Single Dependent and Single Independent Living at Home

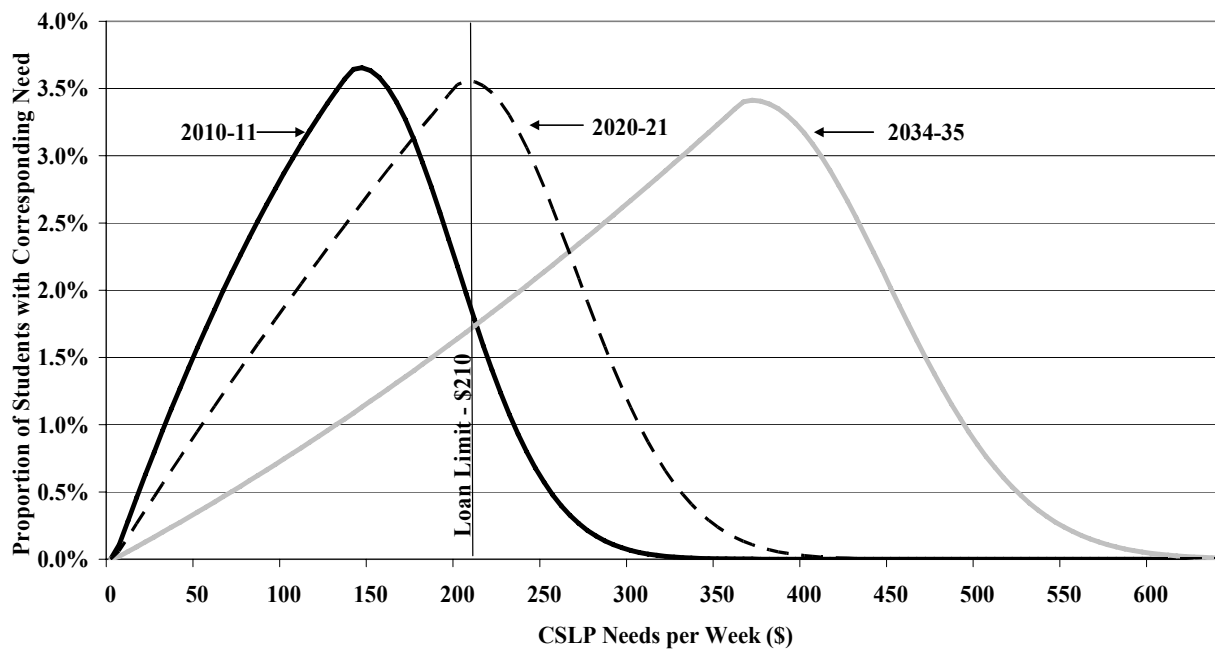
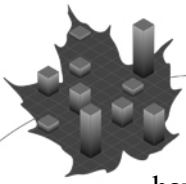


Chart 2 is a projection of the CSLP student need curves for the group of single dependent and single independent students, living at home, for three years during the twenty-five year projection period. The area under each successive need curve grows from year to year and represents the increased participation 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 modelled need 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



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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 33% in 2009-10 to 58% in 2034-35, adding 176,000 students to the Program. Thus, the number of students, full-time and part-time combined, in the Program is projected to increase from 405,000 in 2009-10 to 581,000 in 2034-35. The number of students in the CSLP shown in Table 6 represents those who receive a Canada Student Loan in each loan year excluding the small proportion of students who only receive a Grant under the Canada Student Grants Program (CSGP). As such, some students may receive a grant higher than their assessed need, which reduces their loan to zero, therefore reducing the projected number of students receiving a loan.

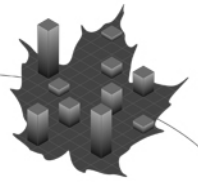
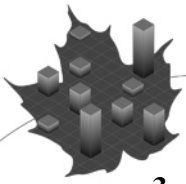


Table 6 Loan Recipients

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)		
2009-2010	1,229	33.0	405	-	-
2010-2011	1,258	34.1	429	24	6.0
2011-2012	1,247	34.8	433	4	1.0
2012-2013	1,204	35.5	428	-5	-1.3
2013-2014	1,164	36.2	422	-6	-1.5
2014-2015	1,122	37.1	416	-6	-1.4
2015-2016	1,070	37.8	405	-11	-2.7
2016-2017	1,043	38.7	403	-1	-0.4
2017-2018	1,019	39.5	402	-1	-0.2
2018-2019	1,000	40.4	404	2	0.5
2019-2020	976	41.3	403	-1	-0.3
2020-2021	954	42.2	403	0	-0.1
2021-2022	938	43.1	404	1	0.4
2022-2023	930	44.0	410	5	1.4
2023-2024	925	44.9	415	5	1.3
2024-2025	922	45.9	423	8	1.9
2025-2026	921	46.9	432	9	2.1
2026-2027	924	48.0	444	12	2.7
2027-2028	929	49.0	455	12	2.7
2028-2029	938	50.2	471	16	3.4
2029-2030	949	51.2	486	15	3.3
2030-2031	957	52.5	502	15	3.2
2031-2032	969	53.7	520	19	3.7
2032-2033	980	55.1	540	20	3.8
2033-2034	991	56.4	559	19	3.6
2034-2035	1,002	58.0	581	22	3.9



3. New Loans Issued

This section focuses on the determination of the amount of new loans issued in each loan year. The three factors primarily responsible for the evolution of new loans issued are student need, the amount of grants disbursed under the CSGP 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 \$11,698 in 2009-10 to \$27,884 in 2034-35. Although 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 projection period.

Secondly, the new CSGP introduced in loan year 2009-10 alleviates the financial need of many students thus reducing the amount of loans issued in the Program for the remainder of the projection period. The amount of grants disbursed is projected to grow from \$593 million in 2009-10 to \$798 million in 2034-35 (see Table 15). As the percentage of students at the loan limit increases, the impact of the new grants on loans issued is projected to diminish over time since a greater proportion of students receiving grants will be above the loan limit due to increasing need; therefore, students will be more inclined to take the full loan amount for which they are eligible. In fact, in 2009-10, loans issued were reduced by \$185 million due to the new CSGP. This is expected to decrease to \$79 million in 2034-35. The CSGP is described in Appendix 1. The monthly grant payments for students from low- and middle-income families are set in the *Canada Student Financial Assistance Regulations* and are assumed to remain constant for the entire projection period. A sensitivity test that indexes the grant amount to inflation is presented in Appendix 4.

Thirdly, a constant loan limit will restrict the growth of new loans issued. In loan year 2009-10, the introduction of the CSGP initially decreased the percentage of students at the limit. 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.

The percentage of students at the loan limit reached 50% in 2004-05 but decreased to 34% in 2005-06 due to an increase in the loan limit from \$165 to \$210. In 2009-10, the percentage of students at the loan limit is 27.1% and Table 7 shows that this percentage is projected to increase to 85.4% in 2034-35. These students are not eligible for a further increase in loan size despite increasing cost pressures. 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.

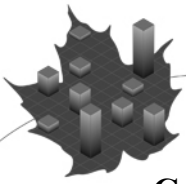
**Table 7 Increase in New Loans Issued**

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)	
2009-2010	11,698	-	27.1	2,086	-	405	-	5,151	-
2010-2011	11,953	2.2	28.5	2,232	7.0	429	6.0	5,200	1.0
2011-2012	12,311	3.0	30.6	2,310	3.5	433	1.0	5,330	2.5
2012-2013	12,667	2.9	33.0	2,338	1.2	428	-1.3	5,463	2.5
2013-2014	13,027	2.8	35.4	2,351	0.6	422	-1.5	5,575	2.1
2014-2015	13,410	2.9	37.6	2,358	0.3	416	-1.4	5,671	1.7
2015-2016	13,818	3.0	40.1	2,335	-1.0	405	-2.7	5,773	1.8
2016-2017	14,255	3.2	42.4	2,362	1.1	403	-0.4	5,860	1.5
2017-2018	14,722	3.3	44.9	2,395	1.4	402	-0.2	5,955	1.6
2018-2019	15,228	3.4	47.5	2,441	1.9	404	0.5	6,042	1.5
2019-2020	15,778	3.6	50.3	2,471	1.2	403	-0.3	6,134	1.5
2020-2021	16,356	3.7	52.8	2,500	1.2	403	-0.1	6,209	1.2
2021-2022	16,961	3.7	55.5	2,540	1.6	404	0.4	6,285	1.2
2022-2023	17,592	3.7	58.0	2,602	2.4	410	1.4	6,352	1.1
2023-2024	18,252	3.8	60.6	2,664	2.4	415	1.3	6,420	1.1
2024-2025	18,942	3.8	63.0	2,738	2.8	423	1.9	6,476	0.9
2025-2026	19,664	3.8	65.5	2,822	3.1	432	2.1	6,535	0.9
2026-2027	20,420	3.8	67.8	2,922	3.6	444	2.7	6,589	0.8
2027-2028	21,210	3.9	70.2	3,024	3.5	455	2.7	6,641	0.8
2028-2029	22,037	3.9	72.4	3,148	4.1	471	3.4	6,686	0.7
2029-2030	22,902	3.9	74.7	3,274	4.0	486	3.3	6,732	0.7
2030-2031	23,809	4.0	76.9	3,399	3.8	502	3.2	6,774	0.6
2031-2032	24,758	4.0	79.1	3,547	4.4	520	3.7	6,816	0.6
2032-2033	25,752	4.0	81.2	3,701	4.3	540	3.8	6,853	0.5
2033-2034	26,793	4.0	83.4	3,854	4.1	559	3.6	6,892	0.6
2034-2035	27,884	4.1	85.4	4,025	4.4	581	3.9	6,924	0.5

Table 7 shows the annual increase in new loans issued over the 25-year projection period. Overall, the total new loans issued increase from \$2,086 million in 2009-10 to \$4,025 million in 2034-35, resulting in an average annual increase of 2.7%. This average annual increase can be attributed to two factors: an average annual increase in the number of students in the CSLP of 1.5% and an average annual increase in the average loan size of 1.2%. 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 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 repaying their loans. Table 8 presents the projections of the loans, separately for the guaranteed and risk-shared regimes, as well as the projection of defaulted risk-shared loans bought back by the Government (principal only). The guaranteed and risk-shared regimes are gradually being phased out. Portfolio balances for these two regimes as at 31 July 2010 are higher than expected and, as a result, the phasing out of these regimes is slowed down, especially for the risk-shared regime.

As at July 2010, the sum of all loans in default coming from the guaranteed and risk-shared regimes that are owned by the Government amount to approximately \$640 million (principal and interest) and are subject to possible future recoveries. The guaranteed loans in default 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, as well as for risk-shared defaulted loans bought back by the Government. This provision calculation is not included in this report.

**Table 8** Guaranteed and Risk-Shared Regimes Portfolios

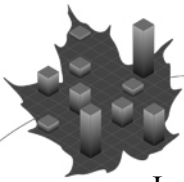
As at July 31	Guaranteed			Risk-Shared			
	Loans In-study (with financial institutions)	Loans in Repayment (\$ million)	Total	Loans In-study (with financial institutions)	Loans in Repayment (\$ million)	Defaulted Loans (bought back by the Government)	Total
2010	5	40	45	58	1,869	152	2,079
2011	3	28	30	42	1,645	150	1,837
2012	1	19	20	28	1,391	146	1,565
2013	-	13	13	17	1,182	141	1,340
2014	-	8	8	9	961	135	1,105
2015	-	6	6	4	736	122	862
2016	-	4	4	2	598	110	709
2017	-	3	3	-	445	99	545
2018	-	2	2	-	316	86	402
2019	-	1	1	-	231	69	301
2020	-	1	1	-	164	55	219
2021	-	-	-	-	114	43	158
2022	-	-	-	-	81	34	115
2023	-	-	-	-	51	24	76
2024	-	-	-	-	29	17	47
2025	-	-	-	-	15	12	27
2026	-	-	-	-	7	8	15
2027	-	-	-	-	3	6	8
2028	-	-	-	-	1	4	5
2029	-	-	-	-	1	2	3
2030	-	-	-	-	1	1	2
2031	-	-	-	-	1	1	1
2032	-	-	-	-	-	-	-

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 and not 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 loans in default for which students have stopped making payments, allowances for bad debt (principal and interest separately) to cover the risk of future default, net of recoveries, from loans disbursed and the allowance for RAP (Principal) to cover the future cost of students benefiting from this program disposition.

The projection of the direct loan portfolio 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 based on direct loans experience. The future default and recovery rates remain the same as the previous report at 16.0% and 26.0% respectively. Overall, the corresponding future net default rate is 11.8%.



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In the short-term, the default rate is temporarily adjusted to take into account the recent economic downturn. It is anticipated that some of the borrowers will experience hardship in making their monthly student loan payments and may either default or apply for RAP. Based on the recent experience, it appears that the proportion of borrowers experiencing financial hardship as a consequence of the economic situation and defaulting is higher than anticipated.

Thus, adjustments are made to consider the current economic situation based on the employment rate variations experienced since fall 2008, in accordance with the distributions of borrowers in repayment. The adjustments also take into account that the employment rate recovery is slower than expected for the age groups between 25-34 where borrowers in repayment are more heavily weighted. For loan year 2010-11, the default rate is adjusted upward at 18.3% and is gradually brought back to 16.0% in 2015-16.

Table 9 Direct Loan Portfolio and Allowances

As at July 31	Loans In-study	Loans in Repayment	Defaulted Loans	Total	Allowance for		
					Bad Debt Principal	Bad Debt Interest	Repayment Assistance Plan – Principal
(\$ million)					(\$ million)		
2010	4,991	5,706	1,609	12,306	2,297	209	252
2011	5,320	6,109	1,821	13,250	2,566	256	284
2012	5,610	6,494	1,778	13,882	2,576	218	316
2013	5,788	6,915	1,886	14,590	2,723	236	346
2014	5,870	7,345	1,978	15,194	2,838	252	374
2015	5,854	7,777	2,052	15,682	2,924	269	399
2016	5,803	8,153	2,108	16,064	2,993	286	420
2017	5,797	8,439	2,161	16,397	3,053	306	439
2018	5,823	8,673	2,208	16,704	3,106	324	456
2019	5,903	8,841	2,250	16,994	3,156	339	470
2020	5,979	8,994	2,284	17,257	3,201	351	483
2021	6,051	9,130	2,314	17,495	3,242	361	496
2022	6,134	9,246	2,342	17,722	3,282	369	507
2023	6,243	9,352	2,368	17,964	3,325	376	519
2024	6,367	9,466	2,394	18,227	3,370	381	531
2025	6,512	9,593	2,421	18,527	3,421	386	543
2026	6,679	9,746	2,451	18,876	3,478	390	556
2027	6,876	9,927	2,486	19,288	3,545	395	570
2028	7,092	10,140	2,526	19,757	3,620	400	585
2029	7,341	10,386	2,572	20,299	3,706	406	601
2030	7,611	10,668	2,625	20,904	3,804	413	619
2031	7,894	10,985	2,687	21,566	3,912	420	639
2032	8,208	11,335	2,757	22,300	4,033	429	662
2033	8,546	11,722	2,835	23,103	4,166	438	686
2034	8,897	12,145	2,923	23,965	4,311	449	713
2035	9,275	12,602	3,020	24,897	4,468	462	742

As at 31 July 2010, the outstanding direct loan portfolio is \$12.3 billion and is retrospectively derived from new loans issued during loan years 2000-01 to 2009-10 (\$17.9 billion), plus the interest accrued during the grace period for these ten years, minus repayments, loans forgiven, and debt reduction in repayment. The defaulted loans are part of the assets and are included in



the direct loan portfolio projection. The portfolio increases rapidly to reach \$15.7 billion within the next five years. By the end of loan year 2034-35, the portfolio reaches \$24.9 billion.

Compared to the evaluation as at 31 July 2009, the total projected portfolio of direct loans has increased by 16% as at 31 July 2034. The increase is mainly attributable to the cumulative impact of an increase in the number of students receiving a loan, resulting in higher total projected loans issued over the projection period.

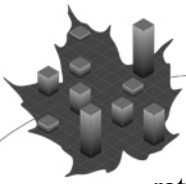
Allowance for Bad Debt – Principal: Table 10 provides the details of the calculations for the projection of the defaulted loans portfolio and the allowance for bad debt – principal under the direct loan regime.

Table 10 Defaulted Loans and Allowance for Bad Debt – Principal

Loan Year	Defaulted Loans Portfolio					Allowance for Bad Debt – Principal			
	Balance 1 August	Defaulted Loans	Collected 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)	(3) - (1 - 2)
2009-2010	1,406	284	81	-	1,609	2,019	-	2,297	278
2010-2011	1,609	295	83	-	1,821	2,297	-	2,566	269
2011-2012	1,821	305	84	264	1,778	2,566	264	2,576	274
2012-2013	1,778	317	86	123	1,886	2,576	123	2,723	271
2013-2014	1,886	328	88	149	1,978	2,723	149	2,838	264
2014-2015	1,978	334	91	169	2,052	2,838	169	2,924	256
2015-2016	2,052	333	93	185	2,108	2,924	185	2,993	253
2016-2017	2,108	341	91	197	2,161	2,993	197	3,053	257
2017-2018	2,161	343	89	207	2,208	3,053	207	3,106	261
2018-2019	2,208	345	87	217	2,250	3,106	217	3,156	267
2019-2020	2,250	347	87	225	2,284	3,156	225	3,201	270
2020-2021	2,284	350	88	232	2,314	3,201	232	3,242	273
2021-2022	2,314	354	89	237	2,342	3,242	237	3,282	278
2022-2023	2,342	358	90	242	2,368	3,282	242	3,325	285
2023-2024	2,368	363	91	246	2,394	3,325	246	3,370	292
2024-2025	2,394	369	92	249	2,421	3,370	249	3,421	300
2025-2026	2,421	376	93	252	2,451	3,421	252	3,478	310
2026-2027	2,451	384	95	255	2,486	3,478	255	3,545	321
2027-2028	2,486	393	96	257	2,526	3,545	257	3,620	332
2028-2029	2,526	404	98	260	2,572	3,620	260	3,706	346
2029-2030	2,572	416	100	263	2,625	3,706	263	3,804	360
2030-2031	2,625	430	103	266	2,687	3,804	266	3,912	374
2031-2032	2,687	446	106	270	2,757	3,912	270	4,033	391
2032-2033	2,757	462	109	275	2,835	4,033	275	4,166	408
2033-2034	2,835	480	112	280	2,923	4,166	280	4,311	425
2034-2035	2,923	499	116	286	3,020	4,311	286	4,468	444

In order to determine the amount of the allowance at a particular point in time, a prospective methodology is used from a snapshot of the portfolio at that time. This approach determines the value of the allowance based on the status of loans. This method considers the past experience of prior cohorts and permits faster recognition of new trends for current and new cohorts of loans.

The calculation of the allowance is 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 in default (according to the number of years since default). Future assumed



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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 a provision rate of 12.4% which corresponds to a net default rate of 11.8% and an additional upward adjustment of 0.6% for interest accrued during the grace period. An upward adjustment is required because the provision rate is applied to loans issued rather than loans consolidated. The difference between loans at consolidation and loans at issuance is the interest accrued during the grace period which is capitalised into loans at consolidation.

The 12.4% provision rate is applied to the balance of loans in-study, which is calculated at the end of each loan year as:

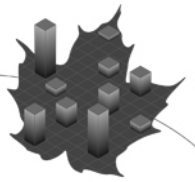
- the balance of loans in-study at the end of the previous year;
- plus loans issued during the year;
- less the sum of prepaid loans (i.e. paid while in-study or during the six month grace period before consolidation), and loans forgiven while in-study or during the grace period;
- less the value of loans consolidated during the year;
- as well, any loan adjustment due to a re-evaluation must be considered.

Second, an allowance on the balance of loans in repayment is determined by first projecting defaults according to the number of years since consolidation and then applying the recovery rate assumption. The future recovery rate is set at 26.0%; hence, it is assumed that 74.0% (1 – 26.0%) of the projected defaulted loans will not be recovered. Finally, an allowance is determined on the balance of loans in default that will not be recovered. The level of the total allowance is determined at the end of the year. The expense for bad debt –principal is equal to the difference between the total allowance at the end of a year and the previous year's allowance net of write-offs that have occurred during the year.

Future default and recovery rates are unchanged from the previous report at 16% and 26%, respectively. To take into consideration the economic downturn, the default rate is increased to 18.3% for loan year 2010-11 and gradually returns to the best-estimate long term assumption of 16% in 2015-16. The write-offs are projected using a 15-year distribution starting in the sixth year following default. A large portion of write-offs occur in the first three years of the distribution to take into account the six-year limitation period and the transfer of defaulted loans to the non-recoverable status. The first significant amount of write-offs is expected to occur in 2011-12 and includes a retroactive amount for the past years. As shown in Table 10, it corresponds to \$264 million and includes non-recoverable loans that are expected to have reached the statute of limitations at the end of calendar year 2011. Hence, to take into account the administrative write-off process, a lag of a number of months is expected between the time when the loan is recognized as non-recoverable and has exceeded the limitation period, and the time it is actually written-off.

For loan year 2009-10, the yearly expense of \$278 million corresponds to the difference between the new allowance of \$2,297 million and the total allowance at the end of loan year 2008-09 which was established to be \$2,019 million in the previous report.

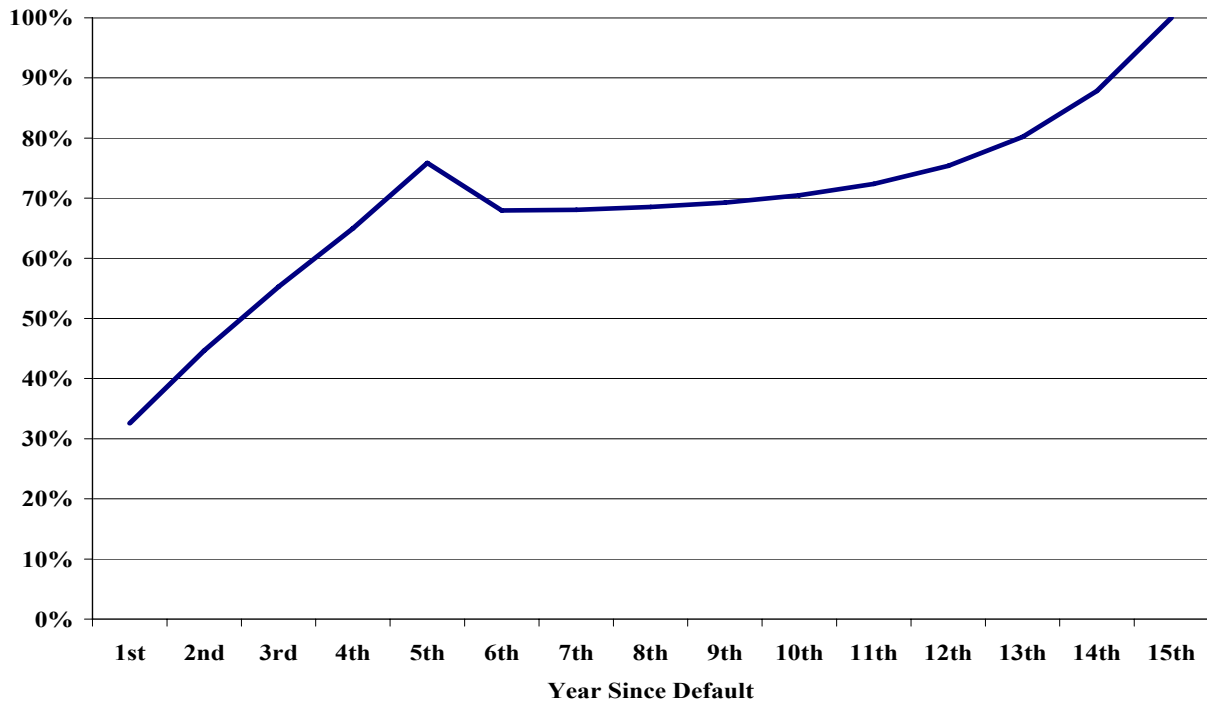
In the Public Accounts, Human Resources and Skills Development Canada should show an allowance as at 31 March 2011 corresponding to the allowance of \$2,297 million as at

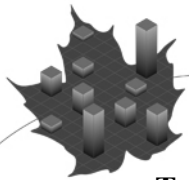


31 July 2010, increased by 12.4% of the monthly net loans issued, reduced by write-offs, if any, for the months from August 2010 to March 2011.

Allowance for Bad Debt – Interest: In accordance with the collection practice, interest accrues on defaulted 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 provision methodology is the same as in the previous report. Provision rates are slightly modified to take into account the recent experience. Chart 3 represents the set of provision rates according to the year since default. The methodology and provision rates are provided in Appendix 3.

Chart 3 Provision Rates for Allowance for Bad Debt – Interest





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Table 11 Interest on Defaulted Loans and Allowance for Bad Debt – Interest

Loan Year	Interest on Defaulted Loans						Allowance for Bad Debt – Interest			
	Interest						Allowance August 1	Write Off	Allowance July 31	Yearly expense
	Balance August 1	Transferred in Default	Interest Accrued	Interest Collected	Write Off	Balance July 31				
	(\$ million)						(\$ million)			
	(1)	(2)	(3)	(4)	(5)	(1+2+3) - (4+5)	(1)	(2)	(3)	(3) - (1-2)
2009-2010	250	11	63	45	-	278	174	-	209	35
2010-2011	278	14	84	47	-	329	209	-	256	47
2011-2012	329	14	93	50	91	295	256	91	218	52
2012-2013	295	16	104	54	41	319	218	41	236	60
2013-2014	319	17	111	58	48	342	236	48	252	64
2014-2015	342	18	117	62	51	364	252	51	269	67
2015-2016	364	18	124	66	54	387	269	54	286	72
2016-2017	387	19	133	70	57	412	286	57	306	77
2017-2018	412	19	136	73	61	434	306	61	324	78
2018-2019	434	20	138	75	65	452	324	65	339	80
2019-2020	452	20	140	76	69	467	339	69	351	81
2020-2021	467	20	142	78	72	479	351	72	361	82
2021-2022	479	20	143	79	75	488	361	75	369	83
2022-2023	488	20	145	80	78	496	369	78	376	84
2023-2024	496	21	146	81	80	503	376	80	381	85
2024-2025	503	21	148	82	81	509	381	81	386	86
2025-2026	509	21	150	83	82	515	386	82	390	87
2026-2027	515	22	152	84	83	522	390	83	395	88
2027-2028	522	22	154	85	84	529	395	84	400	89
2028-2029	529	23	157	87	85	537	400	85	406	91
2029-2030	537	24	160	89	86	547	406	86	413	92
2030-2031	547	24	164	91	87	557	413	87	420	94
2031-2032	557	25	168	93	88	569	420	88	429	97
2032-2033	569	26	173	96	90	583	429	90	438	99
2033-2034	583	27	178	98	91	599	438	91	449	102
2034-2035	599	28	184	102	93	616	449	93	462	106

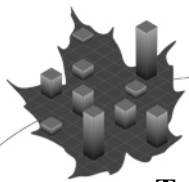
The projection of the balance of interest on defaulted loans is presented for the first time in Table 11. When the loan is transferred to the Government after nine months without a payment, it comes with an interest portion, representing generally around nine months, or a little more, of interest accrued on the principal transferred. Table 11 shows that the interest returned to the Government along the defaulted principal portion of the loans is \$11 million for loan year 2009-10. Then, the interest is accruing on the portion of the defaulted loans portfolio that is considered recoverable. This represents an amount of \$63 million in loan year 2009-10. When some payments are recovered by the Canada Revenue Agency from borrowers in default, payments are first applied to interest. As such, an amount of \$45 million has been recovered in loan year 2009-10. Finally, the interest amounts are written-off after the loan has exceeded the limitation period. As for the principal, the projection of interest write-offs also takes into account the administrative process which generates a lag of a number of months. As shown in Table 11, the balance of interest in default was \$250 million at the beginning of loan year 2009-10 and increased to \$278 million as at 31 July 2010. The balance of interests in default is projected to increase to \$616 million by the end of the projection period.



The allowance for bad debt – interest on recoverable accounts is determined using the outstanding interest and a variable provision rate for each year since default. The provision rate is set at 32.5% for interest defaults occurring in the first year and increases for the four years following the default. There is a step down in the sixth year, based on the experience of defaulted loans transferred to the “non-recoverable” status, followed by an increase each year thereafter. Under this methodology, the increasing provision rate reflects the fact that the difficulty of recovering defaults increases as the time since default increases. The allowance on non-recoverable accounts is 100% and the interest on these accounts is written off over a 15-year period, starting in the sixth year after the default occurs. The annual expense is equal to the difference between the allowance at the end of a given year and the allowance of the previous year net of write-offs during the year. In the Public Accounts, Human Resources and Skills Development Canada is using this methodology to calculate the allowance and annual expense as at 31 March of each year. The allowance as at 31 March 2011 is determined using the provision rates shown in Table 2 and is around \$243 million.

For loan year 2009-2010, the yearly expense of \$35 million corresponds to the difference between the allowance of \$209 million as at 31 July 2010 and the total allowance at the end of loan year 2008-09 which was established to be \$174 million in the previous report. Write-offs of interest are postponed until loan year 2011-12 which is the first year a significant amount of write-offs is expected.

Allowance for Repayment Assistance Plan - Principal: Table 12 provides the details of the calculation for the projection of the allowance for the Repayment Assistance Plan (RAP) under the direct loan regime.



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Table 12 Allowance for Repayment Assistance Plan – Principal

Loan Year	Allowance 1 August	RAP Expenses	Allowance 31 July	Yearly Expense
	(\$ million)	(\$ million)	(\$ million)	(\$ million)
	(1)	(2)	(3)	(3) - (1-2)
2009-2010	223	4	252	33
2010-2011	252	4	284	36
2011-2012	284	5	316	37
2012-2013	316	7	346	37
2013-2014	346	10	374	37
2014-2015	374	12	399	37
2015-2016	399	15	420	37
2016-2017	420	18	439	37
2017-2018	439	21	456	38
2018-2019	456	24	470	39
2019-2020	470	26	483	39
2020-2021	483	27	496	40
2021-2022	496	29	507	40
2022-2023	507	30	519	41
2023-2024	519	30	531	42
2024-2025	531	31	543	44
2025-2026	543	32	556	45
2026-2027	556	33	570	47
2027-2028	570	33	585	48
2028-2029	585	34	601	50
2029-2030	601	34	619	52
2030-2031	619	34	639	54
2031-2032	639	34	662	57
2032-2033	662	35	686	59
2033-2034	686	35	713	62
2034-2035	713	35	742	64

Effective August 2009, RAP replaced the Interest Relief (IR) and Debt Reduction in Repayment (DRR) measures. For RAP (Stages 1 and 2) – Interest, a provision is determined by HRSDC for accounting purposes to take into account the timing of the interest accrued. Table 12 shows the projection of the allowance for the principal portion of the required payment paid by the Government under Stage 2 (including RAP for borrowers with permanent disabilities).

Compared to the former DRR measure, it is expected that the utilization of the RAP will be higher in the long term. However, the Government's RAP expense for those using the plan is initially lower considering that borrowers are required to make affordable payments above a certain income threshold. In fact, principal reductions are done on a monthly basis under RAP as opposed to three possible larger principal reductions, each at 12-month intervals under the former DRR measure. Overall, this increases the projected expenses for a given consolidation cohort. The provision rate for RAP – Principal was set at 1.8% in the previous report and remains unchanged. Being a new program, there is limited experience data on the utilization of RAP. Consequently, the provision rate will be revised in the coming years according to experience.

As for the allowance for bad debt – principal, the provision rate of 1.8% is applied to net loans issued. The allowance at the beginning of loan year 2009-10 was calculated to be \$223 million in the previous report and, as shown in Table 12, the allowance at the end of loan year 2009-10 is \$252 million. The annual expense is \$33 million and corresponds to the difference between the



allowance at the end of a year and the allowance of the previous year net of RAP expenses that have occurred during the year. The RAP expense of \$4 million in loan year 2009-10 includes some DRR amounts approved before August 2009.

In the Public Accounts, Human Resources and Skills Development Canada should show an allowance as at 31 March 2011 corresponding to the allowance of \$252 million as at 31 July 2010, increased by 1.8% of the monthly net loans issued minus RAP expenses for the months from August 2010 to March 2011.

For comparison purposes, Table 13 shows the direct loan portfolio in 2010 constant dollars. Starting in loan year 2016-17, the portfolio decreases since the assumed inflation rate is higher than the annual growth of the portfolio in Table 9.

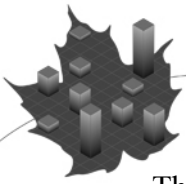
Table 13 Direct Loan Portfolio and Allowances (in millions of 2010 constant dollars)¹

As at 31 July	Loans In-study	Loans in Repayment	Defaulted Loans	Total	Allowance for		
					Bad Debt Principal	Bad Debt Interest	RAP – principal
2010	4,991	5,706	1,609	12,306	2,297	209	252
2011	5,216	5,989	1,785	12,990	2,516	251	279
2012	5,392	6,242	1,709	13,343	2,476	209	304
2013	5,454	6,517	1,777	13,748	2,566	222	326
2014	5,418	6,779	1,826	14,023	2,619	233	345
2015	5,286	7,023	1,853	14,162	2,641	243	360
2016	5,123	7,197	1,861	14,181	2,642	253	371
2017	4,997	7,275	1,863	14,135	2,632	264	378
2018	4,902	7,302	1,859	14,063	2,615	273	384
2019	4,853	7,269	1,850	13,972	2,595	279	387
2020	4,800	7,221	1,834	13,855	2,570	282	388
2021	4,745	7,158	1,814	13,717	2,542	283	389
2022	4,697	7,079	1,793	13,569	2,513	283	389
2023	4,668	6,993	1,771	13,432	2,486	281	388
2024	4,649	6,912	1,748	13,310	2,461	278	388
2025	4,644	6,841	1,727	13,211	2,439	275	388
2026	4,651	6,787	1,707	13,145	2,422	272	387
2027	4,676	6,751	1,691	13,117	2,411	269	388
2028	4,710	6,734	1,677	13,121	2,404	266	388
2029	4,761	6,736	1,668	13,165	2,404	263	390
2030	4,820	6,757	1,663	13,240	2,409	261	392
2031	4,883	6,794	1,662	13,339	2,420	260	395
2032	4,958	6,847	1,665	13,470	2,436	259	400
2033	5,041	6,914	1,673	13,628	2,457	259	405
2034	5,125	6,996	1,684	13,805	2,483	259	411
2035	5,217	7,089	1,699	14,005	2,513	260	417

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.

¹ For a given year, the value in 2010 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 2010.



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The aggregate amount of outstanding loans is the principal portion of all student loans disbursed and not yet repaid, which consists of the total principal amount of loans in study, loans in repayment, and defaulted loans. Furthermore, as set out in the *Canada Student Financial Assistance Regulations (CSFAR)*, as amended in August 2010, for purposes of calculating the aggregate amount of outstanding student loans, only direct loans issued by the Government of Canada since 2000 are considered. (Prior to 2000, student loans were issued by private financial institutions on behalf of the Government of Canada.) Table 14 presents the projection of the aggregate amount of outstanding loans.

In comparison with Table 9, which shows the projection of the direct loan portfolio at the end of loan years, Table 14 presents the estimated peak of the portfolio during the loan year. Monthly fluctuations throughout the year cause the aggregate amount of loans to be lower both at the beginning and the end of the loan year, with a peak in the middle of the loan year corresponding to a gap of around 3% compared to the aggregate amount at the end of the loan year. Table 9 shows that, as at 31 July 2010, the aggregate amount of outstanding direct loans was \$12.3 billion. Table 14 shows that the highest aggregate amount of outstanding direct loans during loan year 2009-10 was \$12.6 billion, which occurred in January 2010. The projection shows that the \$15 billion limit will be reached during loan year 2012-13, more specifically in January 2013.

Table 14 Aggregate Amount of Outstanding Direct Loans

Loan Year	Estimated Peak During the Loan Year
	(\$ billion)
2009-2010	12.6
2010-2011	13.6
2011-2012	14.4
2012-2013	15.0
2013-2014	15.6
2014-2015	16.2
2015-2016	16.5
2016-2017	16.9
2017-2018	17.2
2018-2019	17.5
2019-2020	17.8
2020-2021	18.0
2021-2022	18.3
2022-2023	18.5
2023-2024	18.8
2024-2025	19.1
2025-2026	19.5
2026-2027	19.9
2027-2028	20.4
2028-2029	20.9
2029-2030	21.6
2030-2031	22.2
2031-2032	23.0
2032-2033	23.8
2033-2034	24.7
2034-2035	25.7



D. Projection of the Net Cost of the Program

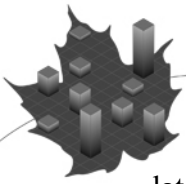
1. Student Related Expenses

The primary expense of the CSLP is the cost of supporting students during their study and repayment periods. This expense includes the interest subsidy, which corresponds to the cost of borrowing incurred by the Government while borrowers are in school, the interest portion of the Repayment Assistance Plan (RAP) and the provision or expenses for RAP – principal under the different regimes. RAP – Interest expenses of loan year 2009-10 include some amounts of interest relief approved before August 2009. The Canada Student Grants Program (CSGP), which was implemented in August 2009, provides non-repayable assistance to targeted groups of students, including students from low- and middle-income families, students with permanent disabilities, and students with children under the age of 12.

Table 15 Student Related Expenses

Loan Year	Direct Loan			Risk-Shared and Guaranteed		Canada Student Grants Program	Total
	Interest Subsidy	RAP – Interest	Provision RAP – Principal	Interest Subsidy	RAP (Principal and Interest)		
	(\$ million)			(\$ million)		(\$ million)	(\$ million)
2009-2010	178.6	68.7	33.5	1.2	8.3	593	883.4
2010-2011	186.6	82.7	36.0	0.9	6.8	614	926.5
2011-2012	239.5	91.7	37.1	0.7	4.7	606	980.2
2012-2013	285.0	104.5	37.3	0.5	3.5	588	1,018.7
2013-2014	292.6	113.7	37.3	0.3	2.5	579	1,025.6
2014-2015	293.6	122.2	37.2	0.1	1.8	571	1,026.1
2015-2016	291.6	131.0	36.7	-	1.2	556	1,016.3
2016-2017	290.9	140.4	37.2	-	0.9	554	1,023.1
2017-2018	292.0	143.1	37.8	-	0.6	552	1,026.0
2018-2019	295.3	144.7	38.7	-	0.4	555	1,034.1
2019-2020	299.1	146.0	39.2	-	0.2	553	1,037.9
2020-2021	302.8	147.2	39.6	-	0.1	553	1,042.8
2021-2022	306.9	148.5	40.3	-	-	555	1,050.8
2022-2023	312.1	149.8	41.3	-	-	563	1,066.0
2023-2024	318.2	151.4	42.3	-	-	570	1,082.1
2024-2025	325.4	153.2	43.5	-	-	581	1,102.9
2025-2026	333.6	155.2	44.9	-	-	593	1,126.9
2026-2027	343.2	157.6	46.5	-	-	609	1,156.7
2027-2028	353.9	160.4	48.2	-	-	626	1,188.1
2028-2029	366.1	163.6	50.2	-	-	647	1,226.9
2029-2030	379.5	167.3	52.3	-	-	668	1,267.2
2030-2031	393.7	171.5	54.3	-	-	689	1,308.8
2031-2032	409.2	176.2	56.7	-	-	715	1,357.0
2032-2033	425.9	181.3	59.1	-	-	742	1,408.2
2033-2034	443.4	187.0	61.6	-	-	768	1,460.2
2034-2035	462.2	193.9	64.3	-	-	798	1,518.8

As described in Appendix 1, the CSGP includes seven permanent grants as well as a temporary transition grant to take into account that some students were already receiving grants from the former Canada Millennium Scholarship Foundation (CMSF). In loan year 2009-10, a total of \$593 million was disbursed under the CSGP including \$52 million of transition grants. CSGP expenses were underestimated in the last report since the projection was based on data that were



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later found to be incomplete. Grants from the CSGP and the transition grants are projected separately. Grants disbursed under the CSGP are assumed to vary according to the variations in the projections of the number of students in the CSLP. For loan year 2010-11, the increase includes a small upward adjustment based on the experience of the first few months. The transition grants were put in place to ensure that former CMSF Millennium Bursary recipients are not adversely affected by the dissolution of the CMSF. Students could be eligible for the transition grant for up to three additional years under certain criteria. As such, transition grants are expected to be disbursed until 2011-12. The total amount of grants is projected to increase to \$798 million at the end of the projection period. Monthly grant amounts are set in the *Canada Student Financial Assistance Regulations* and are assumed to remain constant for the entire projection period for the purpose of this evaluation.

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

Loan Year	Direct Loan		Risk-Shared		Guaranteed	Loans Forgiven	Total
	Provision for Bad Debt		Risk Premium	Put-Backs & Refunds to FIs	Claims for Defaulted Loans		
	Principal	Interest			Loans		
	(\$ million)		(\$ million)		(\$ million)	(\$million)	(\$ million)
2009-2010	278.2	35.0	0.6	3.3	4.8	10.3	332.2
2010-2011	268.9	46.8	0.4	2.5	3.1	8.4	330.1
2011-2012	273.7	52.5	0.3	2.1	2.2	8.6	339.4
2012-2013	270.6	59.8	0.3	2.2	1.6	8.8	343.3
2013-2014	263.6	64.0	0.2	2.2	1.1	9.1	340.3
2014-2015	255.9	67.3	0.1	2.2	0.6	9.4	335.4
2015-2016	252.7	71.6	0.1	2.0	0.3	9.7	336.2
2016-2017	256.8	76.7	-	1.8	0.1	9.9	345.3
2017-2018	261.0	78.3	-	1.5	0.1	10.1	350.9
2018-2019	266.8	79.7	-	1.2	-	10.2	358.0
2019-2020	270.0	81.0	-	1.0	-	10.4	362.3
2020-2021	273.1	82.1	-	0.8	-	10.5	366.4
2021-2022	277.6	83.1	-	0.6	-	10.6	371.9
2022-2023	284.7	84.0	-	0.4	-	10.7	379.9
2023-2024	291.7	84.9	-	0.3	-	10.8	387.8
2024-2025	300.0	85.8	-	0.2	-	11.0	397.0
2025-2026	309.5	86.8	-	0.1	-	11.1	407.6
2026-2027	320.9	88.0	-	0.1	-	11.3	420.2
2027-2028	332.3	89.2	-	-	-	11.5	433.1
2028-2029	346.3	90.7	-	-	-	11.8	448.8
2029-2030	360.3	92.5	-	-	-	12.1	464.9
2030-2031	374.1	94.5	-	-	-	12.4	481.0
2031-2032	390.7	96.8	-	-	-	12.8	500.3
2032-2033	407.7	99.4	-	-	-	13.3	520.4
2033-2034	424.6	102.4	-	-	-	13.7	540.7
2034-2035	443.6	105.6	-	-	-	14.2	563.4



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.

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 in default 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 defaulted 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 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.

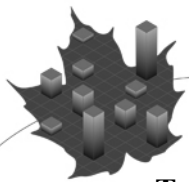
For the guaranteed regime, defaulted loans are included in claims paid as a statutory expense since the Government bears the entire risk of defaulted loans under this regime. In the Public Accounts, guaranteed loans are classified as assets for which provisions for loan guarantees and loans in default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

Loans forgiven correspond to loans that are forgiven (principal only) following the death or permanent disability of a borrower during the period of study, repayment, or even after the loan has been transferred to default status. The projected loans forgiven are lower than the previous report due to the more stringent criteria for permanent disability. As of August 2009, loans forgiven for disability are limited to borrowers who, due to their severe permanent disability, are unable to pay their loans and will never be able to repay them. Borrowers with a permanent disability who do not qualify for loans forgiveness could be eligible for the RAP for Borrowers with Permanent Disabilities (RAP-PD). Future experience will be examined to determine if stricter criteria introduced in August 2009 give the anticipated results on disability loan forgiveness and to determine to what extent it has an impact on the utilization of RAP-PD.

3. Other Expenses

Alternative payments are made directly to Québec, the Northwest Territories and Nunavut, which do not participate in the CSLP. The large increase in loan year 2010-11 is mainly attributable to the CSGP.

The administration expenses include the fees paid to participating provinces and territory to finance the administration of the CSLP, the recovery costs of defaulted loans for the three regimes and general administration, which are the expenses incurred by the departments involved and fees paid to service providers. The Canada Revenue Agency (CRA) is responsible for all collection activities on defaulted loans and a cost is included in the projected General Administration fees for this purpose.



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Table 17 Summary of Expenses

Loan Year	Student Related Expenses	Risks to the Government	Alternative Payments ¹	Administration		Total Expenses
				Fees Paid to Provinces	General	
	(\$ million)	(\$ million)	(\$ million)	(\$ million)		(\$ million)
2009-2010	883.4	332.2	126.0	18.3	116.1	1,476.0
2010-2011	926.5	330.1	278.8	18.7	119.4	1,673.5
2011-2012	980.2	339.4	282.8	19.2	122.4	1,744.0
2012-2013	1,018.7	343.3	308.1	19.7	125.7	1,815.5
2013-2014	1,025.6	340.3	325.9	20.2	129.2	1,841.2
2014-2015	1,026.1	335.4	327.1	20.8	132.9	1,842.2
2015-2016	1,016.3	336.2	322.3	21.4	136.8	1,833.1
2016-2017	1,023.1	345.3	311.4	22.1	141.1	1,843.0
2017-2018	1,026.0	350.9	302.9	22.8	145.7	1,848.2
2018-2019	1,034.1	358.0	298.4	23.6	150.8	1,864.8
2019-2020	1,037.9	362.3	296.2	24.5	156.2	1,877.1
2020-2021	1,042.8	366.4	292.9	25.3	161.9	1,889.4
2021-2022	1,050.8	371.9	291.5	26.3	167.8	1,908.3
2022-2023	1,066.0	379.9	290.8	27.2	173.9	1,937.8
2023-2024	1,082.1	387.8	292.4	28.2	180.2	1,970.7
2024-2025	1,102.9	397.0	296.3	29.2	186.7	2,012.1
2025-2026	1,126.9	407.6	303.9	30.3	193.5	2,062.1
2026-2027	1,156.7	420.2	314.5	31.4	200.5	2,123.3
2027-2028	1,188.1	433.1	327.0	32.5	207.8	2,188.5
2028-2029	1,226.9	448.8	341.0	33.7	215.3	2,265.7
2029-2030	1,267.2	464.9	357.9	34.9	223.2	2,348.1
2030-2031	1,308.8	481.0	374.4	36.2	231.3	2,431.7
2031-2032	1,357.0	500.3	390.5	37.5	239.7	2,524.9
2032-2033	1,408.2	520.4	406.1	38.9	248.4	2,621.9
2033-2034	1,460.2	540.7	419.2	40.3	257.4	2,717.7
2034-2035	1,518.8	563.4	431.5	41.8	266.7	2,822.2

As shown in Table 17, total expenses associated with the Program increase from \$1.5 billion in 2009-10 to \$2.8 billion in 2034-35. On average, total expenses increase at a rate of 2.6% per year from 2009-10 to 2034-35.

4. Total Revenue

In Table 18, the revenue for the direct loan regime comes from the interest earned from student loans in repayment, which include interest accrued during the six-month grace period following the study end date, the interest accrued on defaulted loans and the interest portion of RAP. This interest earned is net of interest on loans forgiven. The revenue is reduced by the Government's cost of borrowing for loans in repayment or in default to obtain the net interest revenue. The interest on defaulted 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 financial institutions. The only source of

¹ 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.

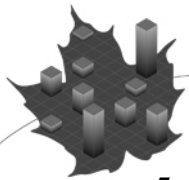


revenue from these regimes is from recoveries of principal and interest from defaulted loans owned by the Government.

On average, total revenue increases at a rate of 4.8% per year from 2009-10 to 2034-35.

Table 18 Total Revenue

Loan Year	Direct Loan			Risk-Shared	Guaranteed	Total Revenue
	Student Interest Earned	Borrowing Cost	Net Interest Revenue	Principal and Interest from Recovery	Principal and Interest from Recovery	
	(\$ million)		(\$ million)	(\$ million)	(\$ million)	(\$ million)
2009-2010	364.4	-222.0	142.4	11.2	25.4	179.0
2010-2011	460.5	-225.3	235.2	9.4	15.6	260.1
2011-2012	516.6	-291.3	225.4	8.8	10.1	244.2
2012-2013	595.1	-354.5	240.6	8.3	6.8	255.7
2013-2014	652.9	-378.0	274.9	8.0	4.8	287.7
2014-2015	708.5	-398.7	309.9	7.4	3.4	320.7
2015-2016	760.7	-417.7	343.0	7.0	2.4	352.5
2016-2017	820.9	-433.0	387.8	6.6	1.7	396.1
2017-2018	841.4	-445.5	396.0	6.1	1.2	403.2
2018-2019	857.0	-454.9	402.1	5.4	0.9	408.4
2019-2020	872.2	-462.6	409.5	4.5	0.6	414.7
2020-2021	885.8	-469.5	416.3	3.7	0.4	420.4
2021-2022	898.1	-475.5	422.6	2.9	0.3	425.7
2022-2023	909.3	-480.9	428.4	2.2	0.2	430.8
2023-2024	920.8	-486.4	434.4	1.6	0.1	436.2
2024-2025	933.2	-492.5	440.8	1.2	0.1	442.0
2025-2026	947.5	-499.6	447.9	0.8	-	448.8
2026-2027	964.4	-508.1	456.2	0.5	-	456.8
2027-2028	984.2	-518.2	466.0	0.3	-	466.3
2028-2029	1,007.0	-529.8	477.2	0.2	-	477.3
2029-2030	1,033.2	-543.2	490.0	0.1	-	490.1
2030-2031	1,062.7	-558.4	504.3	-	-	504.3
2031-2032	1,095.3	-575.4	519.9	-	-	519.9
2032-2033	1,131.5	-594.1	537.3	-	-	537.3
2033-2034	1,171.1	-614.8	556.3	-	-	556.3
2034-2035	1,214.1	-637.3	576.8	-	-	576.8



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5. Net Cost of the Program

Table 19 shows, in current dollars, total expenses, revenue and the net cost of the Program for the 25-year projection period, while Table 20 shows the same, but in 2010 constant dollars. The expenses and revenue shown correspond to values presented earlier in this report.

Table 19 Net Annual Cost of the Program

Loan Year	All Regimes			Net Cost of the Program	
	Total Expenses	Total Revenue	Total Net Cost of the Program	Direct Loan	Risk-Shared & Guaranteed
	(\$ million)		(\$ million)	(\$ million)	(\$ million)
2009-2010	1,476.0	179.0	1,297.0	1,313.6	-16.6
2010-2011	1,673.5	260.1	1,413.4	1,423.2	-9.8
2011-2012	1,744.0	244.2	1,499.8	1,507.4	-7.6
2012-2013	1,815.5	255.7	1,559.8	1,565.8	-6.1
2013-2014	1,841.2	287.7	1,553.5	1,559.3	-5.8
2014-2015	1,842.2	320.7	1,521.5	1,527.0	-5.5
2015-2016	1,833.1	352.5	1,480.6	1,486.0	-5.4
2016-2017	1,843.0	396.1	1,446.8	1,452.0	-5.2
2017-2018	1,848.2	403.2	1,445.0	1,449.9	-4.9
2018-2019	1,864.8	408.4	1,456.4	1,460.8	-4.5
2019-2020	1,877.1	414.7	1,462.4	1,466.3	-3.8
2020-2021	1,889.4	420.4	1,469.1	1,472.2	-3.1
2021-2022	1,908.3	425.7	1,482.6	1,485.0	-2.5
2022-2023	1,937.8	430.8	1,507.0	1,508.9	-1.9
2023-2024	1,970.7	436.2	1,534.5	1,536.0	-1.4
2024-2025	2,012.1	442.0	1,570.1	1,571.2	-1.0
2025-2026	2,062.1	448.8	1,613.4	1,614.1	-0.7
2026-2027	2,123.3	456.8	1,666.6	1,667.0	-0.5
2027-2028	2,188.5	466.3	1,722.1	1,722.4	-0.3
2028-2029	2,265.7	477.3	1,788.4	1,788.6	-0.2
2029-2030	2,348.1	490.1	1,858.0	1,858.0	-0.1
2030-2031	2,431.7	504.3	1,927.4	1,927.4	-
2031-2032	2,524.9	519.9	2,005.0	2,005.0	-
2032-2033	2,621.9	537.3	2,084.5	2,084.5	-
2033-2034	2,717.7	556.3	2,161.4	2,161.4	-
2034-2035	2,822.2	576.8	2,245.4	2,245.4	-

As shown in Table 19, the initial net annual cost for the direct loan regime is \$1.3 billion for loan year 2009-10 and reaches \$2.2 billion in loan year 2034-35. This represents an annual average increase of 2.2% for the entire projection period. Compared to the previous actuarial report, the net cost of the Program increased by 19% at the end of the projection period and this is due, in part, to the increase in the projected CSGP expenses combined with the increase in total projected loans issued and the resulting impact on the expenses.

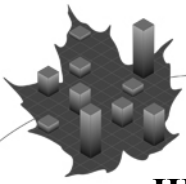


In 2010 constant dollars (Table 20), the cost of the direct loan regime is \$1.3 billion both at the beginning and the end of the projection period.

Table 20 Net Annual Cost of the Program (in millions of 2010 constant dollars)¹

Loan Year	All Regimes			Net Cost of the Program	
	Total Expenses	Total Revenue	Total Net Cost of the Program	Direct Loan	Risk-Shared & Guaranteed
	(\$ million)		(\$ million)	(\$ million)	(\$ million)
2009-2010	1,476.0	179.0	1,297.0	1,313.6	-16.6
2010-2011	1,640.7	255.0	1,385.7	1,395.3	-9.6
2011-2012	1,676.3	234.7	1,441.6	1,448.9	-7.3
2012-2013	1,710.8	240.9	1,469.8	1,475.5	-5.7
2013-2014	1,699.3	265.5	1,433.8	1,439.1	-5.3
2014-2015	1,663.6	289.6	1,374.1	1,379.0	-4.9
2015-2016	1,618.2	311.2	1,307.0	1,311.8	-4.8
2016-2017	1,588.8	341.5	1,247.3	1,251.8	-4.5
2017-2018	1,556.0	339.5	1,216.5	1,220.6	-4.1
2018-2019	1,533.1	335.8	1,197.4	1,201.0	-3.7
2019-2020	1,507.1	333.0	1,174.1	1,177.2	-3.1
2020-2021	1,481.4	329.6	1,151.8	1,154.3	-2.5
2021-2022	1,461.1	326.0	1,135.2	1,137.1	-1.9
2022-2023	1,448.9	322.1	1,126.8	1,128.3	-1.4
2023-2024	1,439.0	318.5	1,120.5	1,121.6	-1.0
2024-2025	1,434.9	315.2	1,119.6	1,120.4	-0.7
2025-2026	1,436.0	312.5	1,123.5	1,124.0	-0.5
2026-2027	1,444.0	310.6	1,133.4	1,133.7	-0.3
2027-2028	1,453.4	309.7	1,143.7	1,143.9	-0.2
2028-2029	1,469.5	309.6	1,159.9	1,160.0	-0.1
2029-2030	1,487.2	310.4	1,176.7	1,176.8	-0.1
2030-2031	1,504.1	311.9	1,192.1	1,192.1	-
2031-2032	1,525.1	314.1	1,211.0	1,211.0	-
2032-2033	1,546.5	316.9	1,229.6	1,229.6	-
2033-2034	1,565.5	320.4	1,245.1	1,245.1	-
2034-2035	1,587.6	324.5	1,263.1	1,263.1	-

¹ For a given year, the value in 2010 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 2010.



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. In accordance with the section 19.1 of the *Canada Student Financial Assistance Act*, the Office of the Chief Actuary conducts an actuarial review on financial assistance provided under this Act.

The number of students enrolled full-time in a post-secondary institution is projected to decrease by 227,000, from 1,229,000 to 1,002,000 over the projected period, while the number of students receiving a CSLP loan is expected to increase by 176,000, from 405,000 to 581,000. The loan uptake of students in post-secondary institutions is projected to increase from 33% to 58% over the projection period. Such an increase in participation in the Program is mainly a result of rising student need. This need is affected by the evolution of tuition fees and other expenses, which increase at a faster rate than resources.

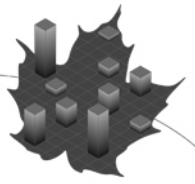
The amount of new loans issued is expected to increase from \$2,086 million in 2009-10 to \$2,232 million in 2010-11. Thereafter, the amount of new loans issued increases to reach \$4,025 million in 2034-35.

The direct loan portfolio increases from \$12.3 billion in 2009-10 to \$24.9 billion by 2034-35. According to the projections, the \$15 billion limit on the aggregate amount of direct outstanding loans is expected to be reached in January 2013.

The total net cost of the Government's involvement in the CSLP, which is the difference between expenses and revenue, is expected to grow from \$1.3 billion in 2009-10 to \$2.2 billion at the end of the projection period.

The future default rate corresponds to 16% and is adjusted upward in the short term as a consequence of the decreasing employment rates for age groups corresponding to borrowers in repayment as a result of the economic situation. The future recovery rate corresponds to 26%. The resulting provision rate for bad debt – principal, applied to net loans issued, remains unchanged from the last report and corresponds to 12.4%.

The provision rates for bad debt – interest, applied to the balance of recoverable interest according to the year since default, are slightly adjusted to reflect the recent experience. The provision rate for Repayment Assistance Plan (RAP) – principal was newly established in the last report and remains unchanged at 1.8%. The RAP was implemented in August 2009 and replaces the Interest Relief and Debt Reduction in Repayment (DRR) measures.



IV. Actuarial Opinion

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

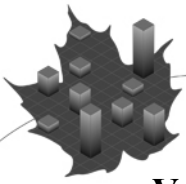
- the data on which this report is based are sufficient and reliable;
- the demographic and economic assumptions used are, in aggregate, appropriate; and
- the valuation conforms with the requirements of the Public Sector Accounting Handbook of the Canadian Institute of Chartered Accountants.

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
30 June 2011



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 Skills Development Canada to provide loans to eligible students under the CSLP.

1. Eligibility Criteria

In order to be eligible for a student loan, a student must be a Canadian citizen within the meaning of the *Immigration Act* and must demonstrate the need for financial assistance. 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, loans are also available to part-time students.

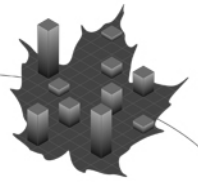
2. Partnerships

Since the Program's 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 determine whether the students require financial assistance and their eligibility for the CSLP. Provincial/territorial authorities calculate the costs and determine the financial need of the student based on the difference between costs and available resources. In general, for each school year, the CSLP covers around 60% of the assessed need up to a maximum of \$210 per week. The participating provinces complement the CSLP by providing the remaining 40% of the assessed need up to the province's weekly loan limit. The amount of money students may borrow depends on their individual circumstances.

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. The NSLSC receives and processes all the applicable loan documentation; i.e., from the disbursement to the consolidation and repayments of the loans. It also keeps 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 who bears the risk associated with default.

- **Guaranteed Loan Regime:** Student loans provided by 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 borrower. 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. The financial institutions can also decide to sell a certain amount of defaulted 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:** The 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 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.

For part-time students, interest accrues on loan while they are in study; however, payments (both principal and interest) are deferrable until six months following the completion of their studies.

Since June 2008, members of the Reserve Force who interrupt their program of study to serve on a designated operation are considered full-time students until the last day of the month in which their service ends and, as such, benefit from an extended in-study interest-free period.

b) Loan Consolidation

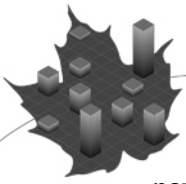
At graduation, or if the student does not return to school, all of the student's loans are consolidated or added together during the six-month grace period. During this period, interest accrues on the loan(s) but no payment is required; the student must negotiate an agreement to set out the repayment 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, interest did not accrue 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 the grace period.

Students must provide their financial institution or the NSLSC with proof of enrollment 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 prevents interest accruing on the loan.

c) Repayment Assistance

In 1983, the Government introduced a repayment assistance measure in the form of an Interest Relief to assist students experiencing financial difficulty repaying their loan. The Government assumes the responsibility for making interest payments on the outstanding loan and no principal



payments are required. This measure has been improved over time and from 1998 to 2009, a borrower in financial difficulty could be awarded a total of 30 months of Interest Relief during the repayment period, with an additional 24 months if the borrower was still within the first five-year period after leaving school. In determining eligibility for Interest Relief, a borrower's monthly family income had to 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 percent.

In 1998, the Government introduced the Debt Reduction in Repayment (DRR) measure to help students who remain in financial difficulty after all possible Interest Relief measures are exhausted. From 2005 to 2009, the principal loan reductions corresponded to two reductions of up to \$10,000 each and a third reduction of up to \$6,000. To determine whether the previous reduction has resulted in a manageable debt level, twelve months must elapse between each reduction.

Starting with the 2009-10 loan year, the Repayment Assistance Plan (RAP) replaces the Interest Relief and DRR measures. RAP is designed to make it easier for borrowers to manage their debt by calculating affordable payments (\$0 for those under the established minimum income threshold, or from 1% to 20% of family income for those above the established minimum income threshold) based on family income and family size. Borrowers are deemed eligible for RAP for a six month period if their affordable payment is less than their required monthly payment. RAP is composed of two stages to help student borrowers fully repay their loan within 15 years of leaving school or completing their studies (or 10 years for borrowers with a permanent disability).

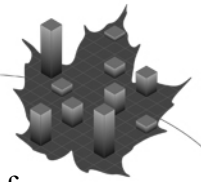
Under Stage 1, the required monthly payment is determined by amortizing a borrower's outstanding principal amount over a period that ends 120 months after they ceased to be a student. The borrower's monthly affordable payment, if any, goes directly towards the loan principal, while the Government covers the interest amount not covered by the affordable payment. The principal portion of the loan not covered by the affordable payment is deferred similar to the former Interest Relief measure. Stage 1 can last for a maximum of five years in cumulative six-month periods.

Stage 2 is available to borrowers who continue experiencing financial difficulty after Stage 1 has been exhausted or those whose loan has been in repayment for more than 10 years. Under Stage 2, the required payment is calculated by reamortizing the outstanding principal between the date of the beginning of Stage 2 and the date corresponding to 15 years after the borrower left school (10 years for borrowers with a permanent disability). The Government covers both the required principal amount and the interest amount not covered by the borrower's affordable payment such that the student loan has been repaid in full within 15 years (10 years for borrowers with a permanent disability) of the borrower leaving school.

Borrowers with a permanent disability who are not eligible for loan forgiveness have access to RAP (RAP – PD). Additional expenses related to costs that permanently disabled borrowers face are taken into account in the income calculation and the borrower proceeds directly to Stage 2 of RAP.

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. Effective 1 August 2009, in order for a borrower's loan to be forgiven due to a permanent



disability, the Minister must be satisfied that the borrower's condition respects the definition of "severe permanent disability", is unable to repay the student loan and will never be able to repay it.

4. Canada Student Grants Program (CSGP)

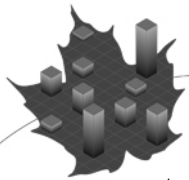
Canada Study Grants were introduced in 1995 as non-repayable grants administered by the participating provinces on the Government's behalf. These grants were taxable and assisted students with permanent disabilities, high-need part-time students, women pursuing certain doctoral studies and students with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

Canada Access Grants were then introduced in the 2005-06 loan year and include grants for students from low-income families as well as grants for students with permanent disabilities.

The CSGP, which was implemented in August 2009, provides non-repayable assistance to targeted groups of students, including students from low- and middle-income families, students with permanent disabilities, and students with children under the age of 12. This program includes seven permanent grants as well as a temporary transition grant for former Canada Millennium Scholarship Foundation (CMSF) bursary recipients. The Canada Student Grants include:

- A grant of \$250 per month of study for full-time university undergraduate or college students from low-income families. Note: to be eligible, a student's academic program must be at least two years (minimum of 60 weeks) in duration.
- A grant of \$100 per month of study for full-time university undergraduate or college students from middle-income families. Note: to be eligible, a student's academic program must be at least two years (minimum of 60 weeks) in duration.
- A grant of \$2,000 per school year for students with permanent disabilities.
- A grant of up to \$8,000 per school year to help cover exceptional education-related costs associated with a student's permanent disability.
- A grant of \$200 per month of full-time study, per dependant child under the age of 12.
- A grant of \$1,200 per year for part-time students from low-income families.
- A grant for part-time students with dependants of \$40 per week of study for students with one or two children under 12 years of age and \$60 per week of study for students with three or more children under 12 years of age.

The grant amounts are stated in the *Canada Student Financial Assistance Regulations*. The low- and middle-income thresholds are based on family size and province of residence and are set out in Table 1 and Table 2 of Schedule 3 of the Regulations.



Appendix 2 – Data

The input data required with respect to direct loans were extracted from data files provided by Human Resources and Skills Development Canada (HRSDC).

1. Direct Loans Issued

Table 21 presents the data extracted from HRSDC files on the number of students and amount of direct loans issued for loan years 2000-01 to 2009-10 compared with HRSDC publicized data. The data regarding loans issued were found to be complete.

Table 21 Direct Loans Issued and Number of Students

Loan Year	Amount of Loans Issued		Number of Students	
	HRSDC File	HRSDC Publication	HRSDC File	HRSDC Publication
	(\$ million)	(\$ million)		
2000-2001	1,573	1,570	343,746	346,568
2001-2002	1,507	1,512	328,653	331,541
2002-2003	1,545	1,549	328,989	331,763
2003-2004	1,643	1,648	340,200	342,982
2004-2005	1,629	1,633	337,247	339,828
2005-2006	1,938	1,939	343,634	345,765
2006-2007	1,935	1,931	344,422	345,124
2007-2008	2,006	2,015	352,208	354,144
2008-2009	2,068	2,081	365,103	366,788
2009-2010	2,077	2,094	400,901	405,000

According to the Monthly Financial Information Schedule (MFIS), the total amount of loans issued in 2009-10 was \$2,086 million, which is slightly higher than the value calculated using the data file. The MFIS value is used as the starting point for projections in this report.

2. Direct Loans Consolidated

Table 22 presents the number and amount of consolidated direct loans extracted from HRSDC data files. The amounts are compared with data from MFIS. For some cases, the consolidation date is not available in the data file and is approximated from the last post-secondary end date.

Table 22 Direct Loans Consolidated

Loan Year	Amount of Loans Consolidated (Including Six-month Interest in the Grace Period)	
	HRSDC File	MFIS
	(\$ million)	(\$ million)
2000-2001	45.5	62.2
2001-2002	614.0	772.2
2002-2003	927.3	988.8
2003-2004	1,142.7	1,151.4
2004-2005	1,333.3	1,296.7
2005-2006	1,377.9	1,346.4
2006-2007	1,575.9	1,519.3
2007-2008	1,705.8	1,619.3
2008-2009	1,767.4	1,624.0
2009-2010	1,855.3	1,654.0

For loan years 2002-03 to 2007-08, there is a difference of 1% to 6% between the consolidation amounts estimated from the HRSDC file and the actual amounts shown in MFIS. For the two most recent loans years, the difference is higher since some students who are assumed to have



consolidated their loan are, in fact, still in school or will return to school. Amounts from MFIS are used for modeling purposes.

3. Defaults and Recoveries for Direct Loans

Table 23 shows the data on defaults and recoveries (principal only) for direct loans extracted from HRSDC data files. Default amounts are reduced by loans recalled and rehabilitated.

Table 23 Defaults and Recoveries for Direct Loans

Loan Year	Defaults (\$ million)	Recoveries (\$ million)
2000-2001	5.3	0.3
2001-2002	4.9	0.7
2002-2003	226.2	23.8
2003-2004	250.4	48.8
2004-2005	343.2	83.0
2005-2006	255.5	85.6
2006-2007	243.2	83.7
2007-2008	287.4	91.8
2008-2009	292.6	85.4
2009-2010	284.3	81.1

4. Repayment Assistance Plan (RAP)

RAP was implemented in August 2009. Detailed data files by applicant are available for the last four months of the loan year, for April to July 2010; however, they do not contain RAP payment information (the portion of payments covered by the program). Data are expected to improve as the experience of the Plan progresses. Table 24 shows monthly payment amounts for direct loans for RAP – Stage 1, Stage 2, and PD, separated by principal and interest, as it appears in MFIS.

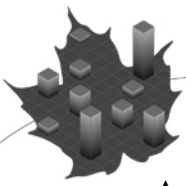
Table 24 Repayment Assistance Plan

Loan Year 2009-2010	Principal			Interest			
	Stage 2	PD	Total	Stage 1	Stage 2	PD	Total
	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)
August	1.32	-	1.32	5.36	0.00	-	5.36
September	0.53	-	0.53	5.11	0.01	-	5.12
October	0.13	-	0.13	5.18	0.04	-	5.22
November	0.19	-	0.19	5.05	0.05	-	5.10
December	0.34	-	0.34	6.05	0.06	-	6.10
January	0.17	-	0.17	6.02	0.07	-	6.09
February	0.22	-	0.22	5.37	0.10	-	5.47
March	-0.30 ¹	0.62 ¹	0.32	6.17	-0.14 ¹	0.41 ¹	6.44
April	0.17	0.16	0.33	6.20	0.08	0.08	6.36
May	0.13	0.18	0.30	5.27	0.07	0.06	5.40
June	0.17	0.14	0.31	5.86	0.08	0.09	6.03
July	0.20	0.06	0.27	5.86	0.10	0.06	6.02
Total	3.26²	1.16	4.42	67.50³	0.52	0.70	68.71

¹ An adjustment was made in March 2010 because RAP – PD was previously included with RAP Stage 2 amounts.

² Includes \$2.3 million of DRR payments approved before August 2009.

³ Includes \$15.8 million of interest relief payments approved before August 2009.



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 most recent actuarial report of the Canada Pension Plan.

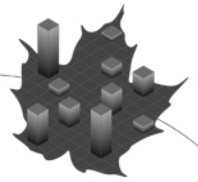
ii) Post-secondary Enrollment

The evolution of post-secondary enrollment shows a long-term decrease in post-secondary enrollment 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 potential students will have a propensity to go on to the labour market rather than attending a post-secondary institution on a full-time basis. The September labour force non-participation rates associated with post-secondary enrollment are shown for years 2009-10, 2016-17 and 2034-35 in Table 25 below. In this report, the inactive population in September was used rather than the annual average as it more accurately seizes the group of people under study.

Table 25 September Labour Force Non-participation Rates by CSLP Age Band

Age Band	Not in Labour Force		Change - Not in Labour Force (2) / (1) -1	Not in Labour Force 2034-35 (3)	Change - Not in Labour Force (3) / (1) -1
	2009-10 (1)	2016-17 (2)			
	%	%	%	%	%
18-21	37.3	29.1	-22.0	27.2	-27.0
22-24	28.6	26.8	-6.1	21.7	-24.2
25-29	16.4	14.4	-12.1	12.5	-24.1
30-34	14.1	14.1	0.3	12.7	-9.7
18-34	23.0	19.5	-15.1	17.6	-23.3

Table 25 shows a decrease in the inactive population, with an expected cumulative decrease of 15.1% over the next seven years mainly due to labour force non-participation rates reverting to pre-economic downturn level. Table 25 shows a larger decrease of 23.3% by 2034-35. The labour shortage will cause the expected decrease in the population not participating in the labour force from 2016-17 to 2034-35. The decrease is mainly for individuals above age 22 since they are more likely to choose being employed over attending school for a long period of time if 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

HRSDC has provided CSLP need assessment data for previous loan years, up to and including 2008-09. The CSLP need per week was determined using the following calculation:

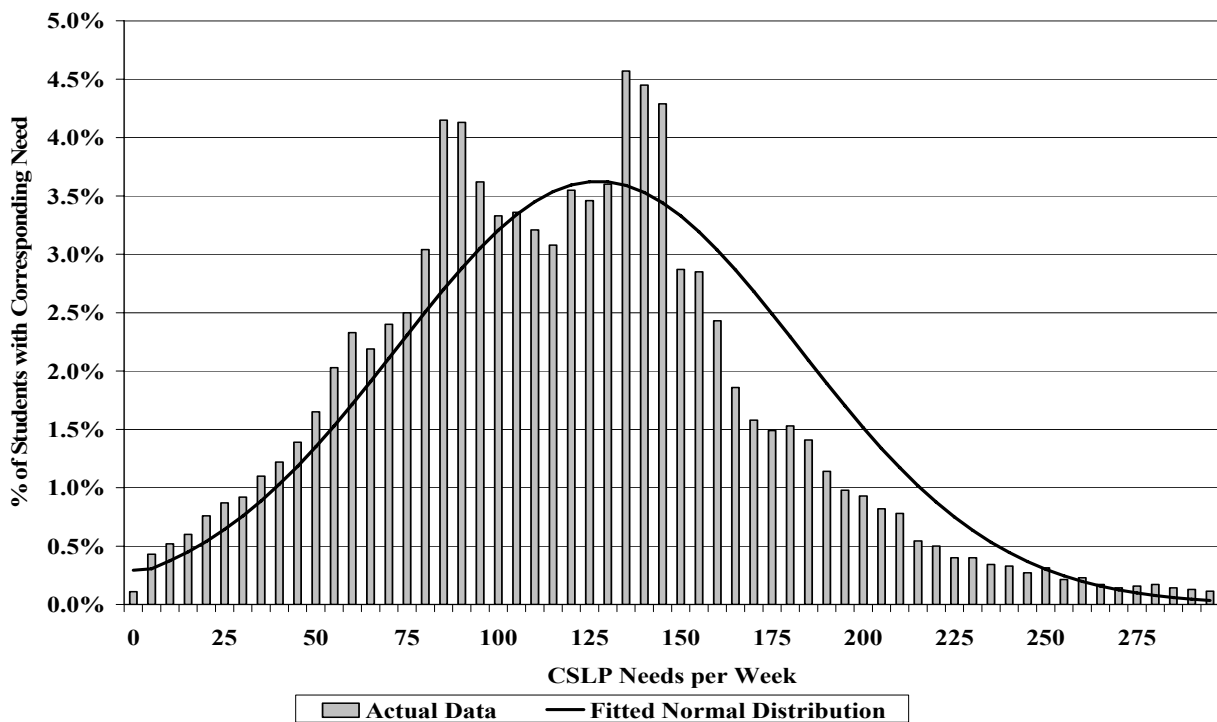
$$\text{CSLP need per week} = (\text{assessed need} / \text{number of assessed weeks}) \times 60\%.$$

The CSLP weekly need represents 60% of the assessed weekly need because the CSLP generally 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 for three distinct groups, based on student living arrangements. The three groups are as follows:

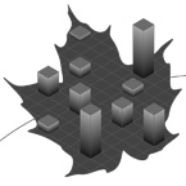
- Single dependent and single independent living at home
- Single dependent living away from home
- Married/common law, single independent and single parent living away from home

The histogram of weekly need resembles a normal distribution for each of the three groups. For illustration purposes, Chart 4 below shows the normal distribution fitted to the actual CSLP student weekly need data for the first group: single dependent and single independent living at home.

Chart 4 Actual Need and Fitted Normal Distribution 2008-09 for Single Dependent and Single Independent Living at Home



The need distribution is derived using an adjusted statistical normal distribution in order to provide a better fit to 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,



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as at 31 July 2010

the proportion of students at or above the loan limit is known for this historical data, so the entire curve was slightly shifted to reflect the proper proportion of students at loan limit. The new distribution created by making these small adjustments is used for projection purposes and is referred to as the modified normal curve.

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 curve in each of the projection years. After the new parameters are determined, the CSLP student need curves are projected for the 25-year period.

The area for each successive curve increases compared to the previous one since the curve parameters evolve as the need increases even though the initial point remains fixed. Indeed, since the curve moves to the right while remaining anchored to its initial point, the area under the curve increases. The increased area represents an increase in participation in the CSLP. Beginning with the base need curve for 2009-10, the area under the curve is 100% and the loan uptake rate is 33%. The area under the need curve for loan year 2010-11 is 103.3% due to an increase in the proportion of students in the CSLP for that loan year. Thus, the loan uptake rate for 2010-11 is 34% ($33\% \times 1.033$). The product of the number of students enrolled full-time and the loan uptake rate equals 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 of the Main Report 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 short-term increase of tuition is shown in Table 26.

**Table 26 Short-term Increase of Tuition Expenses**

Province	Weight	Budget/Experience	Results			
			2010-11	2011-12	2012-13	2013-14
	%		%	%	%	
Newfoundland	1.8	tuition freeze	0.0	0.0	0.0	0.0
Prince Edward Island	0.8	2.1% increase, 2.0% thereafter	2.1	2.0	2.0	2.0
Nova Scotia	5.4	-3.6%, 3.0% increase thereafter	-3.6	3.0	3.0	3.0
New Brunswick	3.7	tuition freeze	0.0	0.0	0.0	0.0
Ontario	59.3	5.1% increase, 5.0% thereafter	5.1	5.0	5.0	5.0
Manitoba	1.8	6.3% increase, 5.0% thereafter	6.3	5.0	5.0	5.0
Saskatchewan	2.5	5.2% increase, 5.0% thereafter	5.2	5.0	5.0	5.0
Alberta	9.3	2.9% increase, 3.0% thereafter	2.9	3.0	3.0	3.0
British Columbia	15.6	2.0% increases	2.0	2.0	2.0	2.0
Weighted Average			3.7	3.9	3.9	3.9

The long-term estimate of tuition is based on past increases in tuition relative to increases in 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 3.9% tuition increase for 2013-14 is graded to reach the CPI increase plus 3% by 2019-20.

The starting point for the 2008-09 tuition fees is calculated from the need assessment data file and represent the average tuitions fees for students who received a loan. Tuition fees were calculated for the three student groups based on their living arrangements and weighted by the total amount of loans issued for each group. This analysis resulted in an estimate of \$6,075 for average tuition fees in 2008-09. The estimated average 2009-10 tuition fees is \$6,282 using the same relative annual increase observed in 2008-09.

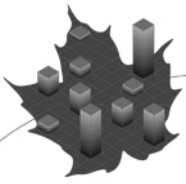
ii) Other Expenses

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. In previous reports, these expenses were obtained from an average for all students; however, for this report, the average only includes the students who received a loan. The expenses included in the CSLP need assessment data file are normalized to get expenses on an annual basis. For 2008-09, the new methodology results in an estimated average for other expenses of \$9,657. In loan year 2009-10, the average other expenses are estimated at \$9,781.

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 summarized in Table 5 of the Main Report.

The starting point for average resources in 2008-09 is calculated from the need assessment data file and represent the average resources for students who received a loan. This represents a change in methodology compared to the previous report where the resources were calculated as a residual value from the average expenses less the average loan size with an adjustment for unmet need for all full-time students. For 2008-09, the new methodology results in an estimated student average resources of \$4,278. The average student resources

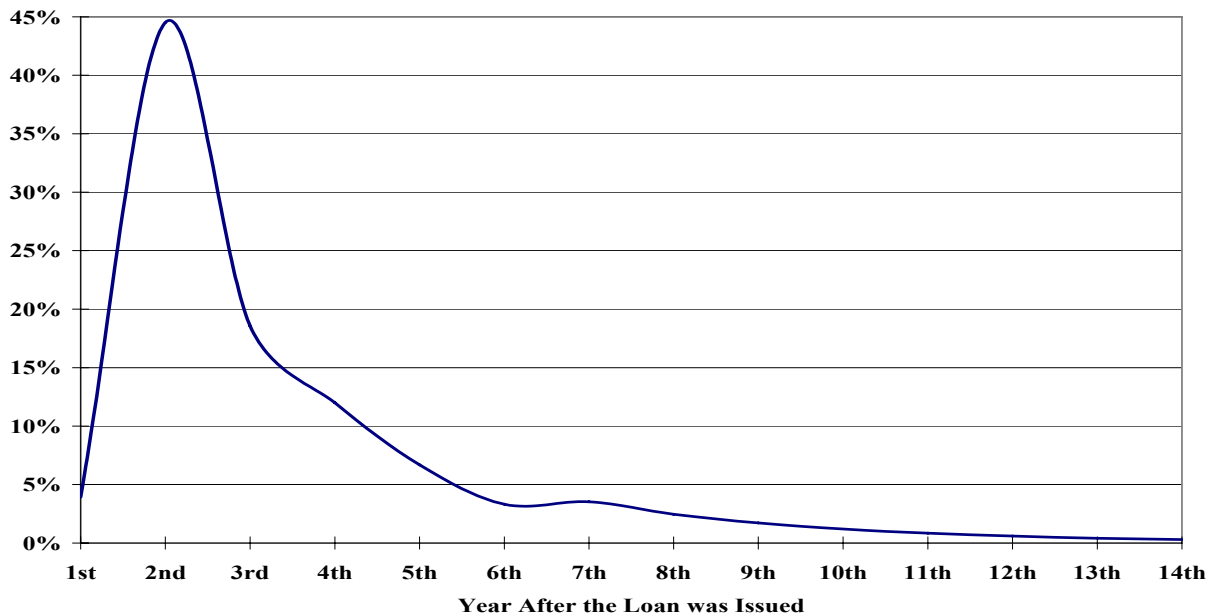


are estimated at \$4,365 for the 2009-10 loan year based on the resources increase assumption.

2. Consolidation

Under the direct loan regime, loans are assumed to consolidate according to the distribution of consolidation by year shown in Chart 5 over a period of fourteen years after a loan is issued. This distribution is built using the first ten years of data for direct loan consolidations. A constant decreasing rate is applied for the years that follow. The distribution is slightly modified in the short term to take into account the impact of the recent economic downturn on consolidations since some students chose to either stay in or return to school.

Chart 5 Distribution of Consolidation



3. Repayment Assistance Plan (Stage 1)

Effective August 2009, the Repayment Assistance Plan (RAP) replaces the Interest Relief and Debt Reduction in Repayment measures. RAP consists of two stages that are described in Appendix 1. Borrowers can be enrolled in Stage 1 for up to five years over a ten-year period. Borrowers who qualify will make an affordable payment (or no payment) toward their loan principal. The Government will cover the interest amount not covered by the borrower’s affordable payment.

Table 27 shows the base utilization rates of RAP (Stage 1) for the direct loan regime for loan year 2010-11 and onwards. These rates are based on the Interest Relief experience of direct loans as well as the small amount of data available for RAP. These rates incorporate the average time spent on RAP Stage 1 in a loan year.

Since the loan limit is frozen in the future, it is anticipated that RAP Stage 1 utilization will decrease as the average earnings of borrowers increase over time. In order to reflect this anticipated decrease in utilization, RAP Stage 1 utilization rates are adjusted downward beginning in 2012-13. Compared to the results if utilization rates remained unchanged, this will



result in a decrease in the amount of RAP Stage 1 (interest) issued, fewer borrowers exhausting RAP Stage 1 and subsequently, fewer borrowers becoming eligible for RAP Stage 2.

In the short-term, the impact of the economic downturn on RAP is considered by temporarily increasing RAP (Stage 1) payments.

Table 27 RAP Stage 1 Utilization Rates for the Direct Loan Regime (%)

Years Since Consolidation	First Year	Second Year	Third Year	Fourth Year	Fifth Year	Sixth Year	Seventh Year
0 – 1	21.88	19.82	12.52	10.03	7.59	3.76	2.51
1 – 2	2.48	1.71	1.01	0.70	0.40	0.39	
2 – 3	0.78	0.56	0.30	0.12	0.09		
3 – 4	0.38	0.26	0.12	0.04	0.03		
4 – 5	0.19	0.13	0.05	0.01	0.01		
5 – 6	0.09	0.07	0.02	0.01	0.01		
6 – 7	0.04	0.03	0.01	0.01			
7 – 8	0.01	0.01	0.01				

4. Repayment Assistance Plan (Stage 2)

RAP Stage 2 is available for borrowers who continue to experience financial difficulty. It starts once the borrower completes Stage 1 or has been in repayment for 10 years after they leave school or complete their studies. The Government will continue to cover the interest and begin to cover a portion of the principal (i.e. the difference between the affordable payment and required payment), on a monthly basis. The balance of the loan should be gradually paid off such that the student loan debt has been repaid in full within 15 years of the borrower leaving school (or 10 years for borrowers with a permanent disability).

There is very limited experience for RAP. Based on past DRR experience and preliminary data for the first few months of RAP, assumptions have been made for RAP Stage 1 exhaustion, eligibility for RAP Stage 2, the proportion of eligible borrowers with an affordable payment and the affordable payment as a percentage of the required payment. A set of rates consisting of the reduction of the total amount of loans exhausting Stage 1 has been determined for each exhaustion cohort. The assumptions will be refined as experience emerges.

A provision for RAP – principal is established to cover risk of loss associated with the utilization of this measure. The provision recognizes that part of the loan principal will not be repaid by the students. The provision rate is set at 1.8% of net loans issued based on the projected principal amount borne by the Government under RAP.

5. Default Rate

The default distribution is based on direct loans experience. The average distribution is shown in Chart 6. According to this distribution, approximately 80% of defaulted loans occurred in the first three years following consolidation.

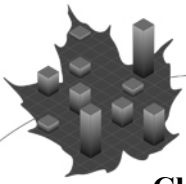
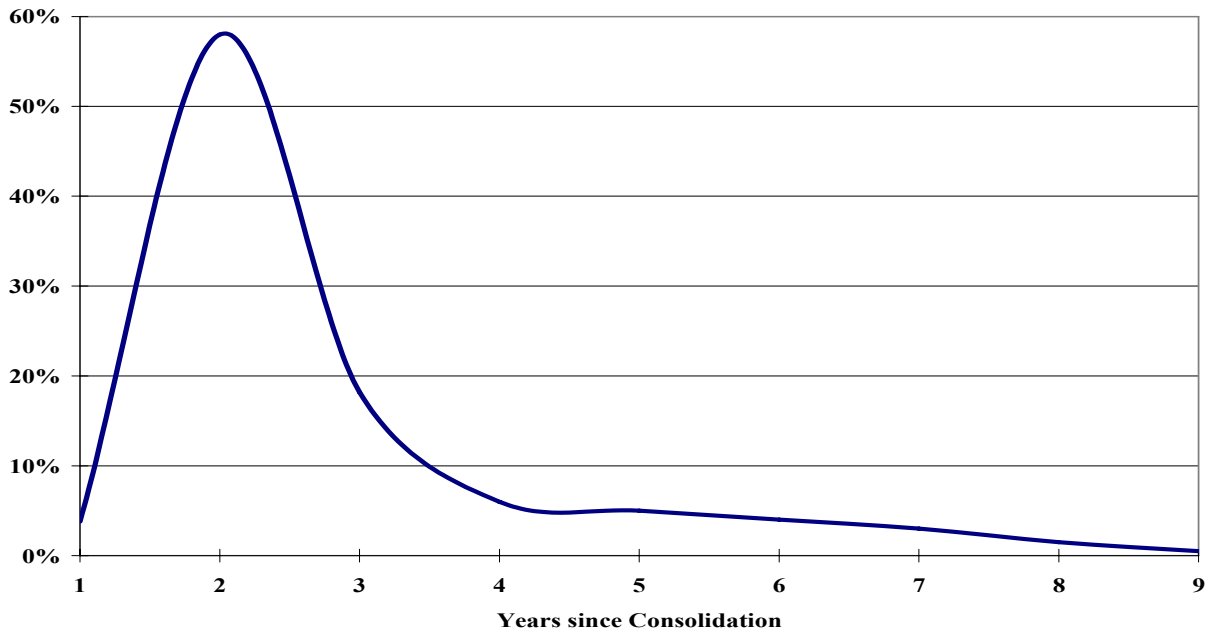


Chart 6 Default Distribution



The long-term assumption for the future default rate is 16%. This rate implicitly recognizes that the RAP, which helps borrowers experiencing financial hardship repay their loans, should have a positive impact on default rates. Future experience should be monitored closely to evaluate if the expected impact of RAP on default is realized. For a given consolidation cohort, the default rate of 16% represents the proportion of the total amount of loans expected to default in the future (spread over nine years after consolidation, as per Chart 6). A portion of these defaulted loans will then be recovered by the Government. To reflect the impact of the economic downturn on defaulted loans, the default rate is increased to 18.3% in loan year 2010-11, remaining higher than the best-estimate long-term assumption for four additional years, and returns to 16% in 2015-16. These increases are based on the employment rate decrease experienced since fall 2008 and on an expected employment rate recovery thereafter.

6. Recovery Rate

The assumed recovery distribution (Chart 7) is also based on direct loans experience. Five separate distribution curves were developed to extrapolate data in future years. Chart 7 shows the extreme curves. The dotted curve represents the distribution of recoveries used to extrapolate recovery amounts for defaults that occur in the first year after consolidation (early defaults). The solid curve represents the distribution of recoveries used to extrapolate recovery amounts for defaults that occur in the fifth year after consolidation and thereafter (late defaults). In the first three years after default, the recovery distribution for late defaults (solid curve) for the borrowers who have already been in the repayment period for more than four years and have reimbursed part of the loan before defaulting is higher than the recovery distribution for early defaults (dotted curve) for the borrowers who have made no or very few payments on their loan before defaulting.

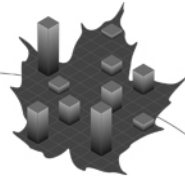
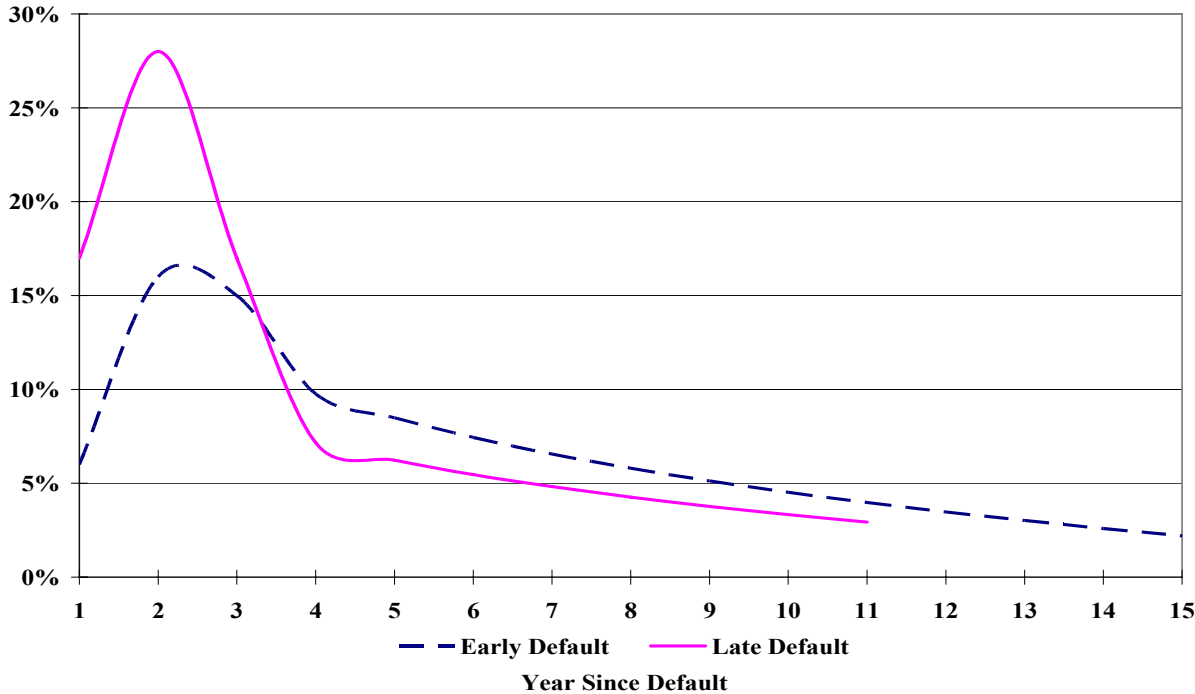


Chart 7 Recovery Distributions Depending on Date of Default



The assumed recovery rate is 26% and remains constant over the long-term. Recent experience shows that this rate is also consistent for the short-term.

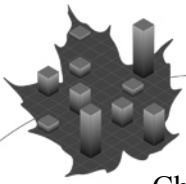
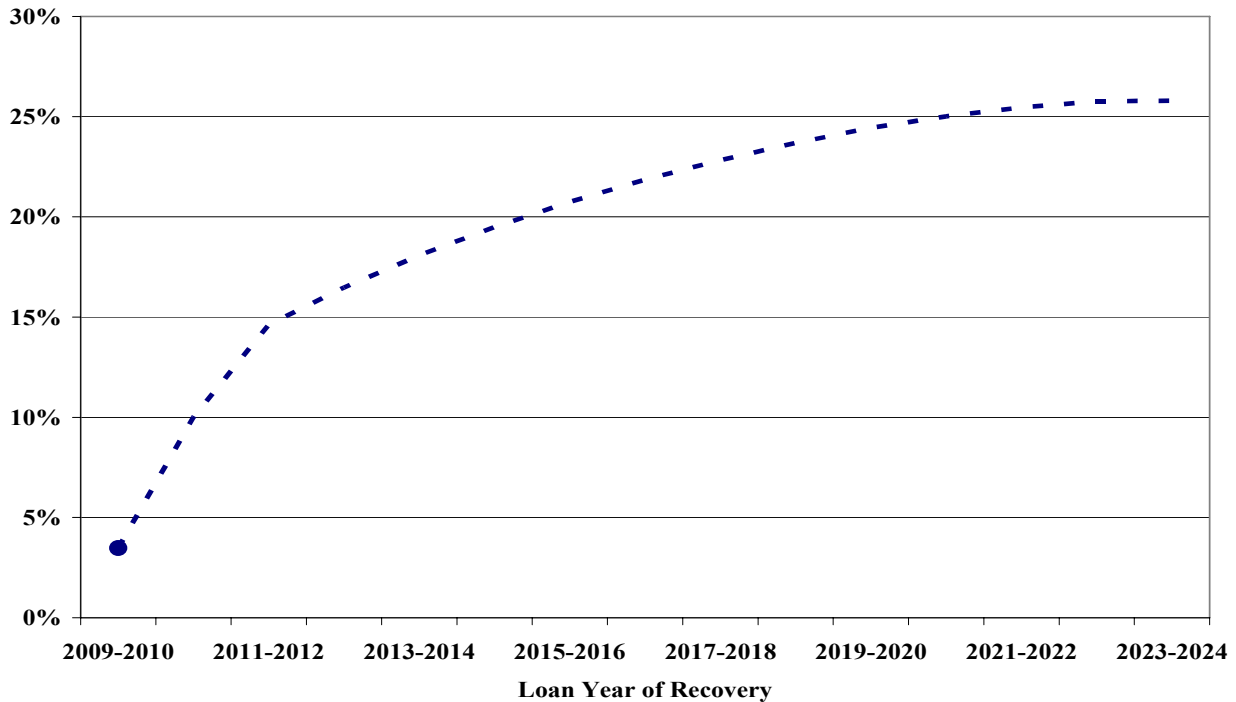


Chart 8 shows the projected cumulative proportion of recoveries for default cohort 2009-10 using the default amount in loan year 2009-10, the recovery distributions shown in Chart 7 and the assumed recovery rate of 26%. The first point of the curve represents the actual proportion of recoveries in loan years 2009-10 on loans that reached default status in the same loan year.

Chart 8 Projected Cumulative Proportions of Recoveries for 2009-10 Default Cohort



The resulting long-term future net default rate is 11.8%. It corresponds to:

$$\text{Default rate} \times (1 - \text{Recovery rate}) = 16\% \times (1 - 26\%)$$

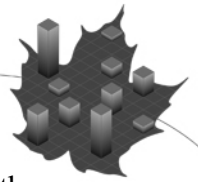
7. Bad Debt Provision – Principal

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 11.8% and an upward adjustment of 0.6% for interest accrued during the grace period is applied.

Table 28 Provision Rate for Bad Debt – Principal

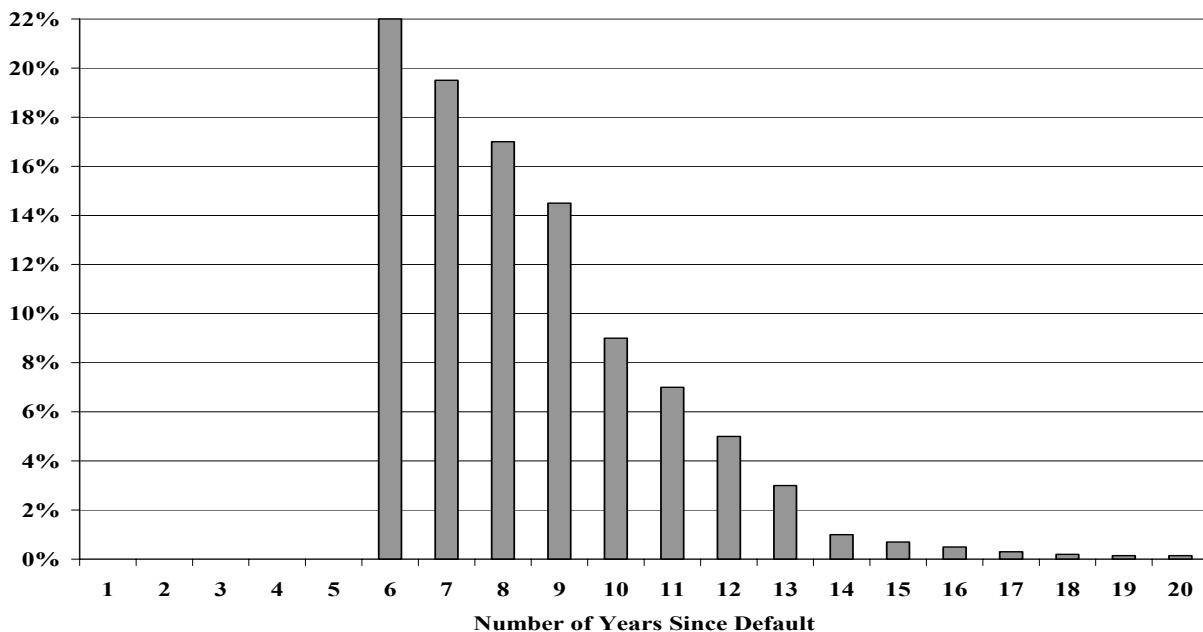
Net Default Rate	11.8%
Adjustment: Interest accrued on loans during grace period	+0.6%
Bad Debt Provision – Principal: Applied to net loans issued	12.4%

From an accounting perspective, the provision rate for bad debt – principal is applied to the net loans issued. Net loans issued are obtained by reducing loans issued by prepayments and loans forgiven while in-study and during the six month grace period. As well, any loan adjustment due to a re-evaluation is also considered. The level of the total allowance is determined at the end of the loan year.



The calculation of the allowance is 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 defaulted (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. For a given loan year, the amount of loans to be written-off is determined using an assumption regarding the time the loan is recognized as non-recoverable and has exceeded the limitation period, which consists of a 15-year distribution starting in the sixth year following default. The six year delay takes into account the limitation period as stated in Section 16.1 of the *Canada Student Financial Assistance Act*. To take the administrative process into account, an additional lag of a number of months is applied to determine the time of the write-off. The first significant write-offs of the direct loan regime have been postponed until loan year 2011-12. The non-recoverable and limitation period exceeded distribution is presented in Chart 9.

Chart 9 Non-Recoverable and Limitation Period Exceeded Distribution

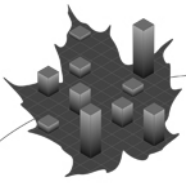


8. Bad Debt Provision – Interest

The methodology for the calculation of the provision for bad debt – interest takes into account the number of years since default. Interest on defaulted loans is accrued until the loan reaches the “non-recoverable” status. A loan reaches this status when the collection of either principal or interest is not reasonably assured. For the purpose of the projections, a loan is transferred to “non-recoverable” status according to a 15-year distribution and is then written off according to a write-off distribution, which is based on the non-recoverable and limitation period exceeded distribution used for the principal portion, but with higher rates for the first years and lower rates for the last years of the distribution.

Since the interest on defaulted 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 defaulted loans at the student cost of borrowing rates,



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- the projected outstanding interest at the end of each year, using non-recoverable and recovery rates, based on direct loans experience and applied to outstanding interest at the beginning of the year,
- the projected allowance at the end of each year by adding, per year since default, 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 difference between the total allowance (on recoverable and non-recoverable accounts) at the end of the year and the allowance of the previous year net of write-offs that have occurred during the year.

A set of provision rates that vary according to the number of years since default was established. The rates are shown in Table 29 and are slightly modified from the last report to consider recent experience in interest recoveries.

Table 29 Provision Rates for Bad Debt – Interest

Year Since Default	Provision Rates (%)
1 st	32.5
2 nd	44.7
3 rd	55.3
4 th	65.0
5 th	75.9
6 th	68.1
7 th	68.4
8 th	68.8
9 th	69.6
10 th	70.8
11 th	72.7
12 th	75.7
13 th	80.4
14 th	88.0
15 th	100.0

9. Other Assumptions

a) Prepayments and Accelerated Payments for Direct Loans

The analysis of principal payments received from students revealed that some payments are received while the student is still 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 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 2009-10 is approximately \$226 million. The proportion of prepayments received during the period of study represents less than 30% of total prepayments. Since the majority of prepayments are made during the six-month grace period, the assumption is established in relation to the consolidation amount. The prepayment assumption (including prepayments received during the period of study and during the six-month grace period) is set at approximately 14% of consolidations for loan year 2009-10 and thereafter.



ii) Accelerated Payments

Accelerated payments correspond to payments received during the repayment period that exceed the scheduled payment based on a 114-month (9.5 years) repayment period. The assumption used is a distribution of accelerated payment rates that vary according to the number of years since consolidation and is based on information from the Designation Monthly data files. The distribution is presented in Table 30 and represents the proportion by which the scheduled payments are increased. This assumption is the same as the previous report.

Table 30 Accelerated Payment Rates

Years Since Consolidation	Rate
Same year as consolidation	162%
1-2	84%
2-3	52%
3-4	49%
4-5	39%
5-6	20%
6-7	10%
7-8 and after	5%

An HRSDC Guideline on amortization periods for consolidating loans was implemented in loan year 2005-06. It provides direction on the maximum period over which consolidating loans are to be amortized by taking into consideration the outstanding loan amount. For projections purposes, the normal principal payments received from students are calculated based on a standard 114-month repayment period. However, the assumption for accelerated payments considers this Guideline implicitly.

The total accelerated payments for loan year 2009-10 were lower than anticipated mainly due to the economic downturn. A downward adjustment is also used for loan year 2010-11.

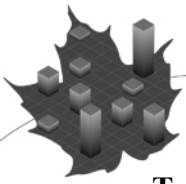
b) Alternative Payments

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 included are: interest subsidies, RAP – interest expenses for risk-shared and guaranteed regimes, loans forgiven, recovery costs, service providers' costs, Canada Student Grants, claims, RAP – Stage 2 payments, risk premiums, put-backs, refunds to financial institutions, direct loans' borrowing costs for loans in good standing and default amounts for the direct loan regime. The revenues include: student interest payments and principal and interest from recoveries. The cost of alternative payments is \$126 million for loan year 2009-10 based on expenses and revenue of loan year 2008-09 and \$279 million for loan year 2010-11 based on expenses and revenue of loan year 2009-10.

c) Administration Costs

HRSDC 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 as well as Canada Revenue Agency (CRA) collection resources and are shown in Table 31.



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Table 31 Administration Costs

Loan Year	Administration Costs
	(\$ million)
2009-10	116.1
2010-11	119.4
2011-12	122.4
2012+	Increases with wages

d) Administration Fees Paid to Provinces

For loan year 2009-10, the administration fees paid to the participating provinces and territory was \$18.3 million. The increase in wages is used to project this expense.

e) Canada Student Grants Program

For loan year 2009-10, the actual cost of Canada Student Grants Program (CSGP) was \$593 million, including an amount of \$52 million for temporary transition grants. The total amount of grants disbursed under the CSGP is projected to increase with the number of students over the projection period while the transition grants are projected to decrease in the first two years of the projection and ending by 2012-13.

f) Loans Forgiven

In the long term, rates of loans forgiven correspond to 0.024% of loans in study and 0.1% of loans in repayment, including loans forgiven after being transferred to default status. The large decrease for the long-term assumptions from the previous report is attributed to the stricter criteria related to severe permanent disability.



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, grants 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, excluding the test on real wage increases, was 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.

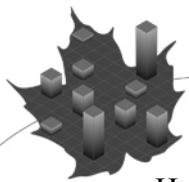
Table 32 below summarizes the alternative assumptions that were used in the sensitivity tests and is followed by a brief discussion of each assumption.

Table 32 Long-term Sensitivity Test Assumptions

Assumption	Low-cost	Best-estimate	High-cost
1. Loan Limit	-	\$210	Indexed to inflation for 2011-12 and thereafter
2. Loan Limit and Grants	-	Not indexed	Indexed to inflation for 2011-12 and thereafter
3. Real Wage Increases	0.8%	1.3%	1.8%
4. Inflation	1.3%	2.3%	3.3%
5. Labour Force Participation Rates – 2034-35 Canada less Québec, Northwest Territories and Nunavut (ages 18-34)	89.3%	82.4%	78.9%
6. Tuition Cost	CPI	CPI + 3.0%	CPI + 6.0%
7. Rate of Borrowing:			
Government cost of borrowing	2.8%	4.8%	6.8%
Student cost of borrowing	5.6%	7.6%	9.6%
8. RAP Stage 1 Utilization	70%	100%	130%
9. Net Defaults	7.0%	11.8%	16.1%
10. Student Interest Rate Spread	-	250 bps	100 bps

1. Indexation of the 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 annual increases to the limit. Contrary to the best-estimate scenario, the proportion of students at the loan limit will decrease in this scenario.



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However, the amount of total loans issued will increase gradually from 1% over total loans issued under the frozen limit in 2011-12 to 55% at the end of the projection period.

Table 33 shows the impact of gradually increasing the limit on loans issued compared to keeping the limit frozen at \$210 per week.

Table 33 Impact of Loan Limit on Loans Issued

Loan Year	No Change to Loan Limit			Indexed to Inflation Starting in 2011-12				
	Limit	% of Students at the Limit	Loans Issued Total	Limit	% of Students at the Limit	Loans Issued		
						Total	Increase over Frozen	
	(\$)		(\$ millions)	(\$)		(\$ millions)	(\$ millions)	(%)
2009-2010	210	27.1	2,086	210	27.1	2,086	-	-
2010-2011	210	28.5	2,232	210	28.4	2,232	-	-
2011-2012	210	30.6	2,310	214	29.4	2,327	17	1
2014-2015	210	37.6	2,358	227	32.4	2,449	91	4
2019-2020	210	50.3	2,471	252	37.6	2,758	286	12
2024-2025	210	63.0	2,738	283	42.5	3,363	625	23
2029-2030	210	74.7	3,274	317	48.8	4,489	1,215	37
2034-2035	210	85.4	4,025	355	57.3	6,237	2,212	55

2. Indexation of Loan Limit and Grants

This scenario assumes that the amount of grants will be indexed annually to inflation. It is assumed that the indexation of grants would be accompanied by an indexation of the loan limit. Therefore, this scenario shows the cumulative effect of annual indexation of loan limit and grants on loans issued. The indexation of grants will lessen the effect of the loan limit indexation, thereby reducing total loans issued compared to the first sensitivity test. Table 34 and Chart 10 show the impact of gradually increasing both the limit on loans issued and the grant amounts disbursed compared to keeping the limit and the grant amounts frozen.

Table 34 Impact of Indexation of Loan Limit and Grants on Loans Issued

Loan Year	Limit frozen at \$210			Limit and Grants Indexed to Inflation Starting in 2011-12					
	% of Students at the Limit	Loans Issued Total	Grants Total	Limit	% of Students at the Limit	Loans Issued Total	Increase over frozen	Grants Total	Increase over frozen
		(\$ millions)		(\$)		(\$ millions)	(%)	(\$ millions)	(%)
2009-2010	27.1	2,086	593	210	27.1	2,086	-	593	-
2010-2011	28.5	2,232	614	210	28.3	2,232	-	614	-
2011-2012	30.6	2,310	606	214	29.2	2,323	1	618	2
2014-2015	37.6	2,358	571	227	32.0	2,435	3	618	8
2019-2020	50.3	2,471	553	252	36.6	2,728	10	665	20
2024-2025	63.0	2,738	581	283	40.8	3,316	21	782	35
2029-2030	74.7	3,274	668	317	46.3	4,421	35	1,008	51
2034-2035	85.4	4,025	798	355	53.8	6,142	53	1,350	69

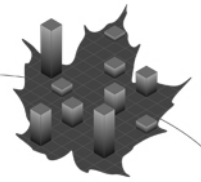
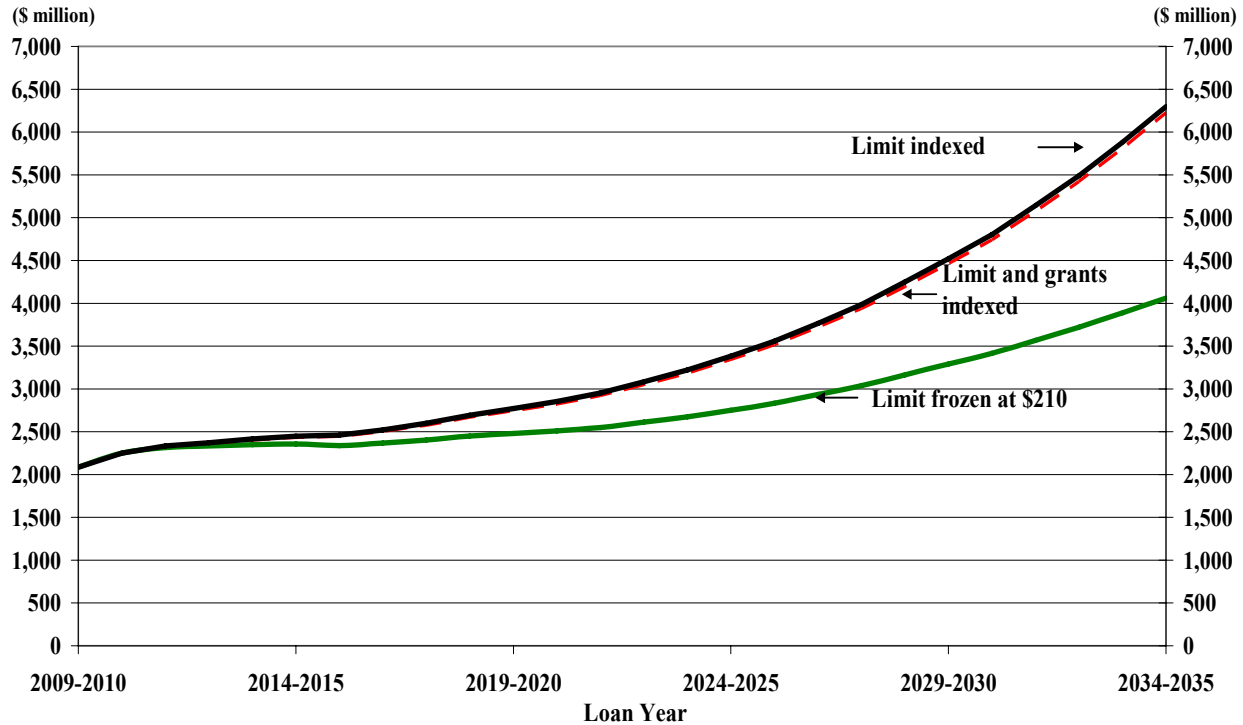


Chart 10 New Loans Issued with Indexation of Loan Limit and Grants



3. Real Wage Increases

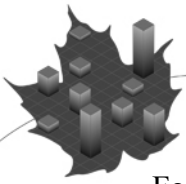
Wage increases affect the CSLP by increasing the resources of a student as determined in the need assessment process. This, in turn, reduces the need of a student, which can reduce a student’s access to a loan. However, administration expenses will also increase since these are linked to salary increases.

The real-wage is assumed to increase uniformly from its initial to ultimate level. An ultimate real-wage increase of 1.3% has been assumed in years 2019-20 and thereafter for the best-estimate projections. Combined with the best-estimate inflation assumption of 2.3%, it results in an ultimate assumed nominal annual increase in wages of 3.6%.

The scenarios represent a variation of the assumed real-wage of 0.5%. For an assumed real-wage reduction of 0.5% and an increase of 0.5%, the ultimate real-wage increase in 2019-2020 is 0.8% and 1.8%, respectively. These sensitivity tests have a small impact on the amount of loans being issued and a negligible impact on the net cost of the Program since the total portfolio and the administration costs vary in opposite directions when applying a wage variation of 0.5%.

4. Inflation

An ultimate annual rate of inflation of 2.3% has been assumed for the best-estimate projections. The rate of inflation is assumed to be 1.0% for loan year 2009-10 before increasing to 2.0% in 2010-11. The rate is then held constant for the following six years. The inflation rate is then assumed to increase uniformly and reach its ultimate level of 2.3% in 2019-20. The inflation rate affects the growth of a student’s expenses, the growth of Program expenditures and, indirectly, student 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 1.3% in 2019-20. 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 3.3% in 2019-20. This level of inflation is comparable to long-term historical averages.

5. 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 enrollment. Similarly, a lower participation rate increases enrollment. For 2009-10 to 2034-35, it is assumed that participation rates will increase overall to 82.4% to compensate for the labour shortage.

For the low-cost scenario, participation rates are assumed to reach their highest historical level of 89.3% by 2034-35. 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 78.9% by 2034-35. 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.

6. Tuition Cost

The long-term estimate of tuition increases is based on past tuition increases relative to the CPI. Over the last 34 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.

7. Rate of Borrowing

The rate of borrowing has an impact on the cost of the interest subsidy for students in school, the cost of providing RAP (interest portion) to students in need and the Government cost of borrowing. This assumption also affects the student rate of borrowing. The rate of borrowing has historically been 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.



8. Repayment Assistance Plan Utilization (RAP) (Stage 1)

RAP is a new plan implemented in August 2009 to replace Interest Relief and DRR measures. In the future, the utilization of RAP Stage 1 could vary according to the current economic situation and students' awareness regarding the existence of this repayment assistance. The low-cost scenario reduces the utilization rates of RAP Stage 1 by 30% while the high-cost scenario increases them by 30%.

9. Net Defaults

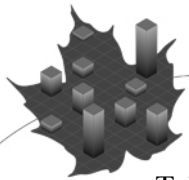
The net default rate of student loans is a major component of the Government's cost of being involved in the Program. The assumed future net default rate on consolidated loans is 11.8% which corresponds to a default rate of 16.0% and a recovery rate of 26.0%. This rate is closely linked with the employment environment for new graduates as it affects the ability of students to repay their loans.

In the low-cost scenario, the future default rate is reduced by seven percentage points, to 9%, while the future recovery rate is reduced by four percentage points to 22%. This results in a net default rate of 7.0% and a provision rate of 7.6%.

In the high-cost scenario, the future default rate is increased by seven percentage points, to 23% and the future recovery rate is increased by four percentage points, to 30%. This results in a net default rate of 16.1% and a provision rate of 16.7%. Both of these tests only affect the provision rate for bad debt – principal. The provision rates for bad debt – interest are unchanged.

10. 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 2011-12. 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 an 11% increase in the net cost of the Program at the end of the projection period.



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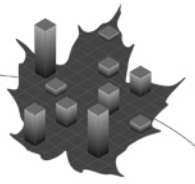
as at 31 July 2010

Table 35 below summarizes the results of each of the sensitivity tests.

Table 35 Sensitivity Test Results for Loan Year 2034-35

Assumptions	Scenario	Loans			Average	Portfolio		Net	
		Issued	Increase		Growth	July	Increase	Cost	Increase
		(\$ million)	(%)		(%)	(\$ million)	(%)	(\$ million)	(%)
<u>Base Scenario</u>	Best-estimate	4,025	-		2.7	24,897	-	2,245	-
<u>Sensitivity tests</u>									
1 - Index the limit to inflation	High-cost	6,237	55.0		4.5	35,155	41	2,729	22
2 - Index Loan Limit and Grants to inflation	High-cost	6,142	52.6		4.4	34,627	39	3,397	51
3a - Real Wage -0.5%	Neutral cost ¹	4,105	2.0		2.7	25,256	1	2,251	-
3b - Real Wage +0.5%	Neutral cost ¹	3,886	-3.5		2.5	24,168	-3	2,227	-1
4a - Inflation -1%	Low-cost	3,516	-12.6		2.1	22,046	-11	1,862	-17
4b - Inflation +1%	High-cost	4,545	12.9		3.2	27,654	11	2,629	17
5a - High labour force participation	Low-cost	2,766	-31.3		1.1	18,897	-24	1,660	-26
5b - Low labour force participation	High-cost	4,822	19.8		3.4	29,601	19	2,624	17
6a - Tuition: CPI	Low-cost	2,885	-28.3		1.3	19,193	-23	1,760	-22
6b - Tuition: CPI + 6%	High-cost	5,432	35.0		3.9	31,471	26	2,863	27
7a - Interest rate -2%	Low-cost	4,025	-		2.7	24,388	-2	2,051	-9
7b - Interest rate +2%	High-cost	4,025	-		2.7	25,368	2	2,434	8
8a - RAP Stage 1 utilization rates 70%	Low-cost	4,025	-		2.7	24,200	-3	2,198	-2
8b - RAP Stage 1 utilization rates 130%	High-cost	4,025	-		2.7	25,395	2	2,290	2
9a - Net default rate 8.0%	Low-cost	4,025	-		2.7	24,396	-2	2,004	-11
9b - Net default rate 17.2%	High-cost	4,025	-		2.7	25,230	1	2,463	10
10 - Student Interest Rate Spread +100 bps	High-cost	4,025	-		2.7	24,361	-2	2,486	11

1 Changing the ultimate real-wage increase assumption by 0.5% has a small impact on the amount of loans being issued and a negligible impact on the net cost of the Program since the total portfolio and the administration costs vary in opposite directions when applying a wage variation.



Appendix 5 – Acknowledgements

We would like to thank the staff of the Canada Student Loans Directorate of Human Resources and Skills Development Canada who provided the relevant data used in this report. Without their useful assistance, we would not have been able to produce this report.

The following people assisted in the preparation of this report:

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