Office of the Superintendent of Financial Institutions Canada
Bureau du surintendant des institutions financières Canada

Office of the Chief Actuary
Bureau de l´actuaire en chef

Actuarial Report CSLP

CANADA STUDENT LOANS PROGRAM
as at 31 July 2019

Canada

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Mr. Atiq Rahman
Director General, Canada Student Loans Program
Employment and Social Development Canada
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Gatineau, QC
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Dear Mr. Rahman:

As per the business plan for 2020-2021 to 2022-2023, I am pleased to submit the Actuarial Report on the Canada Student Loans Program, prepared as at 31 July 2019. This report is prepared for the CSLP to support internal accounting requirements as well as your partners' needs between statutory reports.

Yours sincerely,

ABillig

Assia Billig, FCIA, FSA, PhD
Chief Actuary
Office of the Chief Actuary

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1 Purpose and 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 of the program.

Section 19.1 of the *Canada Student Financial Assistance Act* defines the mandate given to the Chief Actuary; it states 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. Such an actuarial report was prepared as at 31 July 2017 and tabled before Parliament on 18 July 2018. The next triennial statutory report will be prepared as at 31 July 2020 and is scheduled to be tabled before Parliament in 2021.

This actuarial report, prepared as at 31 July 2019, is provided to support Employment and Social Development Canada's accounting requirements and its partners, the Office of the Auditor General, the Treasury Board Secretariat, and the Department of Finance. The report includes a forecast of the Program's costs and revenues for 25 years (through the 2043-2044 loan year), and shows estimates of:

- the number of students receiving a loan under the CSLP and the amount of new loans issued;
- the portfolio of loans in-study, loans in repayment and loans in default;
- the allowances under the direct loan regime in effect since August 2000; and
- the revenues, the expenses and the net resulting cost by type of regime.

Main Findings

New Loans Issued

- $3,575M disbursed in 2018-2019
- $3,484M expected in 2019-2020

Grants

- $1,614M disbursed in 2018-2019
- $1,635M expected in 2019-2020

Direct Loan Portfolio

- $20.5B as at 31 July 2019
- $39B expected by 2043-2044
- $34B limit projected to be reached in 2032-2033

Program's Net Cost

- $2.7B in 2018-2019
- $4.7B expected in 2043-2044
- Grants represent 60% of net cost in 2018-2019

Defaults (Bad Debt)

- Long-term net default rate is 8.0%
- $2,731M in allowance for bad debt – principal as at 31 July 2019
- $245M in allowance for bad debt – interest as at 31 July 2019

RAP (Repayment Assistance Plan)

- $1,594M in allowance for RAP – principal as at 31 July 2019

COVID-19 Pandemic

This report incorporates estimates of the impact of the COVID-19 pandemic. The situation remains fluid and will likely continue to evolve for some time. The estimates of the impacts are based on the information known at the time the report was prepared. However, the final impacts of this health and economic crisis will likely generate some differences in the future. Several measures were introduced by the Government within the CSLP to alleviate the impact of the pandemic on students and borrowers. These measures and their impacts on the results of this report, as well as the impacts of the current economic slowdown are summarized below.

Measures	Impacts
From 30 March to 30 September 2020: • Suspension of repayments • Cessation of interest accrual For loan year 2020-2021: • Doubling of the grants • Removal of the fixed student and spousal contributions • Increase of the maximum weekly loan amount	As a result of the measures: • Higher enrolment • Higher number of students in CSLP • Higher amount of loans disbursed • Higher number of grants recipients • Higher amount of grants disbursed • Change in repayments timing As a result of the economic situation: • Lower interest rates • Higher defaults • Higher RAP utilization

This valuation report is based on the Program provisions as described in Appendix A.

After a short discussion of recent program changes in section 2.1 of the Main Report, section 2.2 presents the best-estimate assumptions while section 2.3 presents projections of new loans issued. Section 2.4 includes projections of the portfolio by type of regime, section 2.5 contains projections for the Program's operating costs for all three regimes and section 2.6 introduces alternative scenarios. A conclusion of the actuarial review ensues, followed by the actuarial opinion.

The various appendices provide supplemental information on Program provisions, data used, assumptions and methodologies as well as concessionary terms.

2 Main Report

The Canada Student Loans Program (CSLP) has been in effect since 1964; it provides Canadians with financial assistance to pursue a post-secondary education. 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, and a portfolio projection. The results are presented on a loan year basis from 1 August to 31 July.

The government has been incurring higher public debt charges since the implementation of the direct loan arrangement. The costs related to direct loans include:

- The interest subsidy on in-study loans and loans in the 6-month non-repayment period
- The interest relief from the Repayment Assistance Plan (RAP)
- The provisions for RAP (principal) and bad debt (principal and interest)
- The Canada Student Grants (CSG)
- The alternative payments
- The loan forgiveness expenses
- The administrative expenses

These costs are reduced by an estimate of the net interest revenues from:

- The student interest payments
- The RAP interest payments
- The interest accrued during the six-month non-repayment period (up to 31 October 2019)
- The interest accrued on defaulted loans

2.1 Recent Program Changes

Over the last few years, several changes were made to the Canada Student Loans Program. This section summarizes recent changes that were implemented in loan year ending 31 July 2019 or will be implemented in future years.

Budget 2017 introduced several modifications. The following modifications, effective in loan year 2018-2019, are considered in the projections of this report:

- Part-time students' eligibility for loans and grants is expanded by replacing low- and middle-income cut-offs with the same single progressive thresholds used for the Canada Student Grant for Full-Time students (CSG-FT).
- Students with dependent children's eligibility for CSG is expanded by replacing low- and middle-income cut-offs with the same single progressive thresholds used for the CSG-FT.

Budget 2017 introduced the following three-year pilot project starting in loan year 2018-2019; this change is included in the projections of this report:

- Adults returning to school full-time, who have been out of secondary school for at least 10 years, will receive a top-up grant funding of $1,600 per school year. The pilot project also allows all students who experience a decline in family income to be reassessed for CSGs based on their reduced current year's income while in school as opposed to their prior year's income.

Budget 2019 introduced the following eight modifications to the Canada Student Loans Program; these changes are considered in the projections of this report:

- Effective on 1 November 2019, the floating interest rate is lowered to prime, from its previous rate of prime plus 2.5 percentage points. The floating interest rate is the rate chosen by 99% of Canada Student Loans borrowers.
- Effective on 1 November 2019, the fixed interest rate is lowered to prime (at the time of consolidation) plus 2.0 percentage points, from its previous rate of prime plus 5.0 percentage points.
- Effective on 1 November 2019, student loans no longer accumulate interest during the six-month non-repayment period after a student loan borrower leaves school.
- Effective on 1 August 2019, the cap on the Canada Student Grant for Services and Equipment for Students with Permanent Disabilities is increased from $8,000 to $20,000 per year.
- Effective on 1 August 2019, the eligibility for the Severe Permanent Disability Benefit is expanded to allow more student borrowers with severe permanent disabilities to qualify for loan forgiveness.
- Currently, borrowers who have been out of study for five years and have used the Repayment Assistance Plan for Students with Permanent Disabilities (RAP-PD) cannot receive further loans and grants until their outstanding loans are fully paid. Starting in loan year 2020-2021, this restriction will be removed.
- Effective on 1 January 2020, the eligibility for loan rehabilitation for borrowers in default is enhanced. This change allows financially vulnerable borrowers in default to access supports such as the Repayment Assistance Plan and begin making affordable payments on their outstanding debt again.
- Starting in 2020-2021, interest-free and payment-free leave, for a maximum of 18 months, will be implemented for borrowers taking temporary leave from their studies for medical or parental reasons, including mental health leave. This measure has not yet received regulatory approval.

Budget 2019 also announced increased compensation to provinces and territories - partners in the Canada Student Loans Program - by $20.0 million over five years, starting in 2019-2020, with $4.0 million per year ongoing. This increased funding compensates provinces and territories for their costs stemming from Budget 2019's proposed changes to improve the accessibility of student financial assistance.

Due to the COVID-19 pandemic, Budget 2020 was not released as scheduled. Instead, the government introduced support measures for different segments of the population. Four of these measures affect the Canada Student Loans Program and are considered in the projections of this report.

On 18 March 2020, the Government announced that:

- From 30 March 2020 to 30 September 2020, loans repayments will be suspended and interest will cease to accumulate.

On 22 April 2020, the Government announced the following three temporary measures that will be effective for loan year 2020-2021 in response to the COVID-19 pandemic:

- The maximum amount for the following Canada Student Grants will be doubled:
    - The grant for full-time students (CSG-FT) will increase from a maximum of $3,000 to a maximum of $6,000 for a typical 8-month study period.
    - The grant for part-time students (CSG-PT) will increase from a maximum of $1,800 to a maximum of $3,600.
    - The grant for students with permanent disabilities (CSG-PD), for full-time students with dependents (CSG-FTDEP) and for part-time students with dependents (CSG-PTDEP) will pay twice the amount normally payable.
- No fixed student contribution or spousal contribution will be considered in the need assessment.
- The weekly maximum loan limit will increase from $210 to $350.

2.2 Best-Estimate Assumptions

Several economic and demographic assumptions are needed to determine the 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 judgment and are referred to as "best-estimate" assumptions. Some of these assumptions are based on the most recent actuarial reports prepared by the Office of the Chief Actuary, adjusted to reflect loan year periods. The assumptions were chosen to be internally consistent.

2.2.1 Assumptions related to Total Loans Issued Projection

Several assumptions are needed to determine the total amount of loans issued. Tables 1 and 2 summarize the main assumptions used. Other economic assumptions used can be found in Table 3.

Table 1 presents the demographic and labour force assumptions while Table 2 presents the real wages and tuition fee increases assumptions. Assumptions shown in Table 1 and real wage increases shown in Table 2 are based on the 30th Actuarial Report on the Canada Pension Plan as at 31 December 2018.

Table 1 Demographic and Labour Force Assumptions

1	Total fertility rate for Canada (ultimate)	1.62 per woman (for 2027+)	
2	Mortality	Statistics Canada Life Tables with assumed future improvements	
3	Net migration rate for Canada (ultimate)	0.62% of population (for 2021+)	
4	Youth labour force participation rate (participating provinces/territory, ages 15-29)(1)	70.3%	(2019-2020)
		70.5%	(2020-2021)
		70.7%	(2021-2022)
		•	
		•	
		•	
		72.5%	(2043-2044)

Table 2 Real Wage and Tuition Increases Assumptions

5	Real wage increases(1)	0.4%	(2019-2020)
		0.6%	(2020-2021)
		0.7%	(2021-2022)
		•	
		•	
		•	
		1.0%	(2025-2026+)
6	Tuition fee increases	-5.8%(2)	(2019-2020)
		1.6%	(2020-2021)
		2.9%	(2021-2022)
		•	
		•	
		•	
		Consumer Price Index + 1.75%	(2025-2026+)

(1) The COVID-19 pandemic will have an impact on certain assumptions developed for the purpose of the 30th CPP Actuarial Report. However, measures put in place by the Government may lessen the value of the impact. At this point, the assumptions for the 30th CPP Actuarial Report were not revised.

(2) The Ontario government announced in the *2019 Ontario Budget Protecting What Matters Most* that tuition rates would be lowered by 10 per cent starting in the 2019-2020 school year and would remain frozen for the 2020-2021 school year.

2.2.2 Cost of Borrowing

Table 3 presents the interest rates and inflation assumptions used to calculate the cost of borrowing for the Government and for borrowers. The inflation assumption is also used in the projection of total loans issued.

Table 3 Borrowing Cost

Loan Year	Inflation	Government's Real Cost of Borrowing	Government's Cost of Borrowing	Prime Rate	Student's Cost of Borrowing(1)
	(%)	(%)	(%)	(%)	(%)
	(1)	(2)	(1) + (2)	(3)	(4)
2019-2020	1.5	-0.3	1.2	3.4	4.0
2020-2021	1.5	-0.5	1.0	3.0	3.0
2021-2022	2.0	-0.8	1.2	3.2	3.2
2022-2023	2.0	-0.6	1.4	3.3	3.3
2023-2024	2.0	-0.3	1.7	3.5	3.5
2024-2025	2.0	0.1	2.1	3.7	3.7
2025-2026	2.0	0.4	2.4	3.9	3.9
2026-2027	2.0	0.6	2.6	4.0	4.0
2027-2028	2.0	0.8	2.8	4.1	4.1
2028-2029	2.0	1.0	3.0	4.1	4.1
2029-2030	2.0	1.2	3.2	4.2	4.2
2030-2031	2.0	1.4	3.4	4.3	4.3
2031-2032	2.0	1.6	3.6	4.4	4.4
2032-2033	2.0	1.8	3.8	4.5	4.5
2033-2034	2.0	1.9	3.9	4.5	4.5
2034-2035	2.0	2.0	4.0	4.6	4.6
2035-2036+	2.0	2.1	4.1	4.7	4.7

(1) Starting 1 November 2019, the floating interest rate is reduced from prime rate plus 2.5 percentage points to prime rate. Therefore, loan year 2019-2020 has a blended student's cost of borrowing corresponding to three months (from 1 August 2019 to 31 October 2019) at prime plus 2.5 percentage points and nine months (from 1 November 2019 to 31 July 2020) at prime.

The average prime rate for the 2019-2020 loan year is 3.4%. It is obtained by adding the government's cost of borrowing and an interest rate spread. The short term government's cost of borrowing is normally based on the most recent Department of Finance Private Sector Survey. As of the writing of this report, the most recent such survey was the one published in September 2019, which did not reflect the recent interest rate changes that took place in response to the COVID-19 pandemic. As a result, the government's cost of borrowing was determined by the Office of the Chief Actuary and is expected to increase to reach an ultimate rate of 4.1% in 2035-2036. The assumption on the interest rate spread is developed based on the analysis of historical data and the expected short term trajectory of interest rates. The spread is expected to decrease gradually from 2.2% in 2019-2020 to an ultimate value of 0.6% in 2033-2034, resulting in an ultimate prime rate of 4.7% in 2035-2036.

2.2.3 Assumptions related to Allowances

Since August 2000, the CSLP has been delivered and financed directly by the Government. Three allowances exist to cover future costs: bad debt – principal, bad debt – interest and Repayment Assistance Plan (RAP) – principal. The RAP came into effect in August 2009, replacing the former Debt Reduction in Repayment (DRR) and Interest Relief (IR) measures.

A summary of the assumptions used to determine the allowances is provided below. Additional details can be found in Appendix C.

Long-Term Defaulted Principal Assumptions

Several assumptions are used to determine the expected future amount of defaulted principal that will not be recovered. The assumptions are reviewed each year based on new experience available.

Recent experience before the impact of COVID-19 shows higher recoveries, recalls and rehabilitations than expected but also higher gross defaults. As such, the short-term gross default rate was increased to be in line with recent experience. The long-term gross default rate remains at 14.5% as in the previous report. The long-term default rate, net of recoveries, is assumed to decrease from 8.2% of consolidations in the previous report to 8.0%[1] in this report. The following ultimate assumptions are used:

- The long-term gross default rate assumption is 14.5% of future consolidations.
- The recalls and rehabilitations represent 11.9% of gross defaults in the long term, which decreases the default rate to 12.8% [(14.5% x (1 – 11.9%)].
- The long-term recovery rate is 32.8% of gross defaults (before recalls and rehabilitations).
- The resulting long-term net default rate is 8.0% [14.5% x (1 – 11.9% – 32.8%)].

Interest Recovery Assumption

The interest recovery assumption is used to project the future expected non-recoverable interest. It is determined by a distribution that varies according to the time elapsed since the interest defaulted. The recovery rates are based on historical observations. Overall, the recovery rate for future accrued default interest is 58.0%.

Repayment Assistance Plan (RAP) Assumptions

Several assumptions are used to determine the dollar amount of loans that will ultimately be repaid by the government through the RAP rather than by borrowers. A table of RAP utilization rates is developed for RAP-Stage 1, RAP-Stage 2 and RAP-PD respectively. More details on these tables can de found in Appendix C.

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1 8.0% corresponds to the net default rate for future consolidation cohorts. Defaults and recoveries are adjusted in the short-term to reflect the impact of the COVID-19 pandemic.

2.3 Projection of Total Loans Issued

The purpose of this section is to discuss the projection of the total amount of loans issued by the CSLP. The first step is to project full-time enrolment in post-secondary institutions. Then, the future number of students participating in the CSLP is determined using a projection of the loan uptake rate. Finally, the average assessed need of a CSLP student is projected net of grants and capped according to the loan limit. The total amount of loans issued is calculated by multiplying the average assessed net need by the number of students in the CSLP.

COVID-19 Pandemic

As mentioned in section 2.1, in response to the COVID-19 pandemic, the Government introduced temporary measures to the CSLP for loan year 2020-2021 in order to allow more students to qualify for financial support and to provide greater amounts. These measures, along with the economic slowdown resulting from the COVID-19 pandemic and the uncertainty related to the learning environment in September 2020, impact the projections of enrolment and loans issued in various ways and to different degrees.

The COVID-19 pandemic will likely continue to evolve for some time. The impacts on the results are based on the information known at the time the report was prepared; the final impacts will likely generate some differences.

2.3.1 Projection of Full-time Post-secondary Enrolment

The first step is to determine the projected number of full-time students in post-secondary institutions using demographic projections.

Demographic Projections

Demographic projections are based on the population projected in the 30th Actuarial Report on the Canada Pension Plan as at 31 December 2018. The population of Canada less Quebec, Northwest Territories, Nunavut, and non-permanent residents (the “population”) is used to project the number of students enrolled in post-secondary institutions.

As shown in Table 4, the population aged 15-29 is expected to decrease from 5,034,000 in 2018-2019 to 4,975,000 in 2019-2020. It is expected to continue to decrease over the following two years, bringing it to 4,949,000 in 2021-2022. After that, it is expected to increase for the remainder of the projection period to reach 5,797,000 in 2043-2044. Over the 25-year projection, the population aged 15-29 is expected to increase by 763,000.

Post-secondary Enrolment

Projections of the post-secondary enrolment are based on enrolment data from Statistics Canada’s Labour Force Survey up to January 2020.

The number of students enrolled full-time in post-secondary institutions is based on both the evolution of the population in labour force (individuals who are employed or looking for employment) and the population not in labour force. The enrolment rate also varies according to the student’s age group, gender and type of educational institution (college or university). Overall, the aggregate enrolment rate for students aged 15 to 29 is expected to remain between 21% and 23% over the next 25 years.

Table 4 shows the evolution of the number of students enrolled full-time in a post-secondary institution (age group 15-29 and total). Students aged 15-29 are used for illustrative purposes as they represent more than 85% of the total post-secondary enrolment and better demonstrate the movement of this population across time.

Table 4 Population and Post-secondary Enrolment of Participating Provinces[1]

Loan Year	Population of Canada Less Quebec, Nunavut, and NWT (15-29)[2]	Students Enrolled Full-Time (15-29)[3]	All Students Enrolled Full-Time (Total)[3]	Increase	Increase
	(thousands)	(thousands)	(thousands)	(thousands)	(%)
2018-2019	5,034	1,072	1,216		
2019-2020	4,975	1,075	1,242	26	2.2
2020-2021	4,958	1,119	1,277[4]	35	2.8
2021-2022	4,949	1,110	1,267[4]	-10	-0.8
2022-2023	4,957	1,105	1,262	-5	-0.4
2023-2024	4,978	1,118	1,275	13	1.0
2024-2025	5,001	1,121	1,278	3	0.2
2025-2026	5,023	1,123	1,279	1	0.1
2026-2027	5,045	1,128	1,284	5	0.4
2027-2028	5,080	1,138	1,293	9	0.7
2028-2029	5,116	1,148	1,302	9	0.7
2029-2030	5,148	1,156	1,310	8	0.6
2030-2031	5,177	1,164	1,318	8	0.6
2031-2032	5,216	1,171	1,325	7	0.6
2032-2033	5,260	1,177	1,331	6	0.4
2033-2034	5,305	1,181	1,335	4	0.3
2034-2035	5,347	1,184	1,338	3	0.3
2035-2036	5,397	1,189	1,344	6	0.4
2036-2037	5,448	1,199	1,354	10	0.8
2037-2038	5,495	1,208	1,365	11	0.8
2038-2039	5,537	1,218	1,376	11	0.8
2039-2040	5,582	1,230	1,389	13	0.9
2040-2041	5,631	1,243	1,403	14	1.0
2041-2042	5,687	1,257	1,419	16	1.1
2042-2043	5,742	1,272	1,435	16	1.2
2043-2044	5,797	1,286	1,451	16	1.1

(1) Full-time enrolment in post-secondary institutions in Canada, excluding Quebec, Nunavut, NWT.
(2) Excluding non-permanent residents.
(3) Excluding international students.
(4) Slightly higher than it would have been without the impact of the COVID-19 pandemic.

The future number of students enrolled full-time in a post-secondary institution is determined by multiplying projected enrolment rates for each future year by its corresponding population. For loan years 2020-2021 and 2021-2022, this number was slightly adjusted upwards compared to the estimates without the impact of the COVID-19 pandemic. It has been observed in the past that as the number of jobs available decreases, students tend to stay in school longer and others tend to return to school. In this situation, this increase is expected to be mitigated by the learning conditions, which may force institutions to offer classes online rather than in person and may curb the interest of many to attend. As shown in Table 4, the number of enrolled students is expected to increase from its current level of 1,216,000 to 1,451,000 at the end of the projection period.

2.3.2 Student Need

Not every student 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. The need is defined as the excess of expenses over resources, if positive. The expenses assessed include tuition and compulsory fees, books and supplies, a living allowance as well as return transportation, child care and a few other allowable expenses depending on the student's situation. The resources include student contributions and, when applicable, parental or spousal contributions. Starting in the 2017-2018 loan year, students' pre-study and in-study incomes, as well as all financial assets, were replaced by a fixed student contribution amount up to $3,000 per academic year. Students with disabilities, students with dependent children, Indigenous students, and current and former crown wards are exempt from the fixed student contribution. For loan year 2020-2021, the fixed student and spousal contributions are not required; this measure was put in place by the Government as a response to the COVID-19 pandemic.

The loan issued by the federal government under the CSLP covers 60% of the assessed need, up to a maximum of $210 per week. For loan year 2020-2021, the maximum amount is increased to $350 per week to help alleviate the effects of the COVID-19 pandemic. Sometimes, a student's need is completely fulfilled by a grant and no loan is issued. The initial average student need is based on expenses and resources found in the CSLP need assessment data for loan year 2017-2018 provided by ESDC. Future distributions of student need are obtained by projecting each student's expenses and resources over the next 25 years using economic assumptions. A single progressive threshold was introduced in the 2017-2018 loan year to determine eligibility for the CSG-FT (CSG for full-time students). This change increases the average grant and the number of grant recipients, while it decreases the average student net need. The same progressive threshold was introduced in loan year 2018-2019 for those receiving the CSG-PT (CSG for part-time students), the CSG-FTDEP (CSG full-time for those with dependents) and the CSG-PTDEP (CSG for part-time students with dependents). For loan year 2020-2021, all grants except the one for service and equipment are doubled to help mitigate the effects of the COVID-19 pandemic.

For projection purposes, students are separated into three groups based on the type of educational institution they attend (college, university or private). The results are aggregated using a weighted average based on the number of students.

Table 5 summarizes the three main elements of the student need, as well as the average student need, the average grant for the net need calculation and the CSLP average student net need (net of grant). All students who receive a loan are included in the calculations.

Table 5 Student Need(1)

Loan Year	Resources	Tuition	Other Expenses	Total Expenses	Average Student Need	Average Grant for Net Need Calculation (2)	CSLP Average Student Net Need (3)	CSLP Average Student Net Need Increase
	($)	($)	($)	($)	($)	($)	($)	($)
	(A)	(B)	(C)	(D) = (B) + (C)	(E) = (D) - (A)	(F)	(G) = (E) × 60% - (F)	
2018-2019	2,800	8,700	12,300	21,000	18,200	2,400	8,500	
2019-2020	2,800	8,300	12,400	20,700	17,900	2,400	8,300	-200(4)
2020-2021	1,200(5)	8,400	12,600	21,000	19,800	4,600(6)	7,300	-1,000
2021-2022	2,900	8,700	12,900	21,600	18,700	2,200(7)	9,000	1,700
2022-2023	2,900	9,000	13,100	22,100	19,200	2,200	9,300	300
2023-2024	2,900	9,300	13,400	22,700	19,800	2,200	9,700	400
2024-2025	3,000	9,600	13,700	23,300	20,300	2,200	10,000	300
2025-2026	3,000	9,900	13,900	23,800	20,800	2,200	10,300	300
2026-2027	3,100	10,300	14,200	24,500	21,400	2,100	10,700	400
2027-2028	3,100	10,700	14,500	25,200	22,100	2,100	11,200	500
2028-2029	3,200	11,100	14,800	25,900	22,700	2,100	11,500	300
2029-2030	3,200	11,600	15,100	26,700	23,500	2,100	12,000	500
2030-2031	3,300	12,000	15,400	27,400	24,100	2,100	12,400	400
2031-2032	3,300	12,500	15,700	28,200	24,900	2,100	12,800	400
2032-2033	3,400	12,900	16,000	28,900	25,500	2,100	13,200	400
2033-2034	3,400	13,400	16,300	29,700	26,300	2,000	13,800	600
2034-2035	3,500	14,000	16,700	30,700	27,200	2,000	14,300	500
2035-2036	3,600	14,500	17,000	31,500	27,900	2,000	14,700	400
2036-2037	3,600	15,000	17,300	32,300	28,700	2,000	15,200	500
2037-2038	3,700	15,600	17,700	33,300	29,600	2,000	15,800	600
2038-2039	3,800	16,200	18,000	34,200	30,400	2,000	16,200	400
2039-2040	3,800	16,800	18,400	35,200	31,400	2,000	16,800	600
2040-2041	3,900	17,500	18,800	36,300	32,400	1,900	17,500	700
2041-2042	4,000	18,200	19,100	37,300	33,300	1,900	18,100	600
2042-2043	4,000	18,900	19,500	38,400	34,400	1,900	18,700	600
2043-2044	4,100	19,600	19,900	39,500	35,400	1,900	19,300	600

(1) Some numbers do not reconcile properly due to rounding.
(2) This average grant is strictly used for the purpose of calculating the net need. It is derived from the need assessment data and includes some students with a grant of zero. The real average grant (paid to grant recipients only) in loan year 2018-2019 is $2,988.
(3) The loan amount paid by the federal Government represents 60% of the assessed need reduced by grants.
(4) The reduction in expected average student net need is due to the planned 10% reduction of Ontario tuition fees for the 2019-2020 school year (announced in the 2019 Ontario Budget).
(5) The large decrease in resources is due to one of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the removal of the student and spousal fixed contributions. Parental contributions, which make up the largest portion of resources for 2020-2021, will also likely be affected by the pandemic. However, measures put in place by the Government are expected to mitigate the impact.
(6) The large increase in average grant is due to one of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the doubling of the CSG-FT, CSG-PD, CSG-FTDEP and CSG-PTDEP.
(7) The large decrease in average grant is mainly due to grants returning to their pre 2020-2021 level; a smaller proportion of the decrease is attributable to the expiration of the three year pilot project providing a top-up grant as described in section 2.1.

2.3.3 Number of Students in the Canada Student Loans Program (CSLP)

The projected number of students in the CSLP is based on the expected future enrolment, as well as the future loan uptake rate. 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 pace than resources. This is mainly due to the minimum and maximum amounts of the fixed student contribution ($1,500 and $3,000) being kept constant over the entire projection period.

The product of the number of students enrolled full-time and the CSLP loan uptake rate gives the number of students in the CSLP. Table 6 shows that the loan uptake rate is expected to increase from 51.4% in 2018-2019 to 53.9% in 2043-2044, adding 157,000 students to the Program (from 625,000 students in 2018-2019 to 782,000 in 2043-2044). The number of students in the CSLP shown in Table 6 does not include the small number of students who only receive a CSG since their entire need is covered by the grant (no loans are issued to them). According to the ESDC data file, the total number of students who received a grant in the 2018-2019 loan year is 532,000. The majority of grant recipients (91%) received both a loan and a grant.

Table 6 Loan Recipients

Loan Year	Students Enrolled Full-Time	Loan Uptake Rate	Students in CSLP[1]	Annual Increase in CSLP Students	Annual Increase in CSLP Students
	(Thousands)	(%)	(Thousands)	(Thousands)	(%)
	(1)	(2)	(1) x (2)		
2018-2019	1,216	51.4	625		
2019-2020	1,242	49.8	618	-7	-1.1
2020-2021	1,277	54.5[2]	696	77	12.5
2021-2022	1,267	50.8	644	-52	-7.5
2022-2023	1,262	50.9	642	-2	-0.3
2023-2024	1,275	50.9	649	7	1.1
2024-2025	1,278	51.1	653	3	0.5
2025-2026	1,279	51.2	655	3	0.4
2026-2027	1,284	51.4	660	5	0.7
2027-2028	1,293	51.5	666	6	1.0
2028-2029	1,302	51.6	672	6	1.0
2029-2030	1,310	51.8	678	6	0.8
2030-2031	1,318	51.9	684	6	0.9
2031-2032	1,325	52.1	690	6	0.8
2032-2033	1,331	52.2	695	5	0.7
2033-2034	1,335	52.4	699	4	0.6
2034-2035	1,338	52.5	703	4	0.6
2035-2036	1,344	52.7	708	5	0.7
2036-2037	1,354	52.8	715	8	1.1
2037-2038	1,365	53.0	723	8	1.1
2038-2039	1,376	53.1	731	8	1.1
2039-2040	1,389	53.3	740	9	1.2
2040-2041	1,403	53.4	750	10	1.3
2041-2042	1,419	53.6	760	10	1.4
2042-2043	1,435	53.7	771	11	1.4
2043-2044	1,451	53.9	782	11	1.4

(1) *Students in CSLP* includes full-time and part-time students who receive a loan only or a loan and a grant. Those receiving a grant only are not included in the numbers shown in the table.
(2) The higher loan uptake rate is due to the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic.

2.3.4 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 CSG disbursed, and the percentage of students reaching the loan limit.

Impact of Student Need on Loans Issued

An increasing student need puts growing pressure on new loans issued since more students become eligible for a loan and previously eligible students qualify for a larger loan. Table 7 shows that the average student need is projected to increase from $18,200 in 2018-2019 to $35,400 in 2043-2044.

Impact of Grants on Loans Issued

The CSGs introduced in loan year 2009-2010 alleviate the financial needs of many students, thus reducing the amount of loans issued by the Program. In loan year 2017-2018, the eligibility for CSG-FT (CSG full-time) was expanded as the former low- and middle-income cut-offs were replaced by a single progressive threshold based on income and family size. In loan year 2018-2019, the same progressive threshold was implemented for CSG-PT (CSG part-time), CSG-FTDEP (CSG for full-time students with dependents) and CSG-PTDEP (CSG for part-time students with dependents). For loan year 2020-2021, all grants except the one for service and equipment are doubled to help mitigate the effects of the COVID-19 pandemic.

The amount of grants disbursed is expected to increase from $1,614 million in 2018-2019 to $1,635 million in 2019-2020. Ultimately, the amount of grants disbursed is projected to be $1,829 million in 2043-2044. Table 15 shows the amount of grants and Appendix A contains a description of the CSGs.

Impact of Loan Limit on Loans Issued

A constant loan limit (currently $210 per week) restricts the growth of new loans issued. Over time, more students reach the loan limit without their needs being completely fulfilled. For loan year 2020-2021, a measure in response to COVID-19 was introduced by the government to temporarily increase the weekly loan limit to $350.

As shown in Table 7, the percentage of students at the loan limit in loan year 2018-2019 is 43.5%; it is projected to decrease to 42.7% in 2019-2020 and to a low of 15.0% in 2020-2021 (due to the increased grants and the weekly loan increase from $210 to $350). The percentage of students at the loan limit is then projected to start increasing until it reaches its ultimate value of 89.2% in 2043-2044. This large increase can be attributed not only to the $210 loan limit per week, but also to the fact that resources considered in the need assessment process increase at a slower pace than the students’ costs. This is a result of the maximum annual amount of $3,000 imposed on the students’ contribution, which ranges from $1,500 to $3,000.

Table 7 Increase in New Loans Issued

Loan Year	Average Student Need	Increase	% of Students at Limit[(1)]	New Loans Issued	Increase	Students in CSLP	Increase	Average Loan Size	Increase
	($)	(%)		($ million)	(%)	(Thousands)	(%)	($)	(%)
	(1)		(2)	(3)		(4)		(3) / (4)	
2018-2019	18,200		43.5	3,575		625		5,719	
2019-2020	17,900	-1.6[(2)]	42.7	3,484	-2.6	618	-1.1	5,637	-1.4
2020-2021	19,800	10.6[(3)]	15.0[(4)]	4,600	32.0[(5)]	696	12.5	6,614	17.3
2021-2022	18,700	-5.6	47.8	3,804	-17.3	644	-7.5	5,911	-10.6
2022-2023	19,200	2.7	50.2	3,855	1.3	642	-0.3	6,006	1.6
2023-2024	19,800	3.1	52.6	3,961	2.8	649	1.1	6,102	1.6
2024-2025	20,300	2.5	54.7	4,040	2.0	653	0.5	6,191	1.5
2025-2026	20,800	2.5	57.2	4,113	1.8	655	0.4	6,278	1.4
2026-2027	21,400	2.9	59.7	4,199	2.1	660	0.7	6,364	1.4
2027-2028	22,100	3.3	62.3	4,293	2.2	666	1.0	6,445	1.3
2028-2029	22,700	2.7	64.8	4,386	2.2	672	1.0	6,521	1.2
2029-2030	23,500	3.5	67.5	4,469	1.9	678	0.8	6,591	1.1
2030-2031	24,100	2.6	70.0	4,551	1.8	684	0.9	6,654	1.0
2031-2032	24,900	3.3	72.6	4,629	1.7	690	0.8	6,711	0.9
2032-2033	25,500	2.4	75.1	4,697	1.5	695	0.7	6,761	0.7
2033-2034	26,300	3.1	76.8	4,756	1.3	699	0.6	6,806	0.7
2034-2035	27,200	3.4	78.5	4,812	1.2	703	0.6	6,847	0.6
2035-2036	27,900	2.6	79.9	4,872	1.2	708	0.7	6,884	0.5
2036-2037	28,700	2.9	81.3	4,948	1.6	715	1.1	6,919	0.5
2037-2038	29,600	3.1	82.7	5,023	1.5	723	1.1	6,950	0.5
2038-2039	30,400	2.7	83.8	5,101	1.5	731	1.1	6,978	0.4
2039-2040	31,400	3.3	84.9	5,182	1.6	740	1.2	7,004	0.4
2040-2041	32,400	3.2	86.0	5,267	1.7	750	1.3	7,027	0.3
2041-2042	33,300	2.8	87.2	5,357	1.7	760	1.4	7,048	0.3
2042-2043	34,400	3.3	88.3	5,447	1.7	771	1.4	7,066	0.3
2043-2044	35,400	2.9	89.2	5,534	1.6	782	1.4	7,081	0.2

(1) The Percentage of Students at Limit represents the number of students with a weekly need of $210 or more (except for loan year 2020-2021 where it represents a weekly need of $350 or more) divided by the total number of students receiving a loan (students only receiving a grant are excluded from both the numerator and the denominator).
(2) The reduction in expected average student need is due to the planned 10% reduction of Ontario tuition fees for the 2019-2020 school year (announced in the 2019 Ontario Budget).
(3) The large increase in expected average student need is due to one of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the removal of the student and spousal fixed contributions.
(4) The large decrease in the % of Students at Limit is due to two of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the doubling of grants and the increase in the weekly maximum loan amount from $210 to $350.
(5) The large increase in new loans issued is due to one of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the increase in the weekly maximum loan amount from $210 to $350.

Table 7 shows the annual increase in new loans issued over the 25-year projection period. Overall, the total new loans issued is expected to increase from $3,575 million in 2018-2019 to $3,484 million in 2019-2020. In 2043-2044, projected new loans issued total $5,534 million, which corresponds to an average annual increase of 1.8%. This average annual increase can be attributed to two factors: an average annual increase in the number of students in the CSLP of 0.9% and an average annual increase in the average loan size of 0.9% over the 25-year projection period. The average loan size is calculated as the ratio of new loans issued over the number of students in the CSLP. The growth rate of the average loan size is moderated due to the constant loan limit.

2.4 Portfolio Projections

This section presents projections of the portfolio for all three regimes described in Appendix A, as well as projections of the three allowances under the direct loan regime. The amounts for loans in-study represent loans issued to students who are still in the post-secondary educational system. Interest on loans in-study is fully subsidized by the Government for students in the CSLP. Loans in repayment consist of outstanding loans consolidated by students with financial institutions (or the Government).

2.4.1 Guaranteed and Risk-Shared Regimes

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 projection of risk-shared impaired loans purchased by the Government is necessary to determine when the limit on the aggregate amount of outstanding loans prescribed through the *Canada Student Financial Assistance Regulations* will be reached, as presented in Table 14. The guaranteed and risk-shared regimes are gradually being phased out.

At the end of the 2018-2019 loan year, the sum of all loans in default coming from the guaranteed and risk-shared regimes that are owned by the Government amounts to approximately $180 million (principal and interest) but is 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. Expenses related to Guaranteed and Risk-Shared Loans are presented in Table 15 and Table 16.

Table 8 Guaranteed and Risk-Shared Regimes Portfolio

As at July 31	Guaranteed: Loans In-Study (with financial institutions)	Guaranteed: Loans in Repayment (with financial institutions)	Guaranteed: Total	Risk-Shared: Loans In-Study (with financial institutions)	Risk-Shared: Loans in Repayment (with financial institutions)	Risk-Shared: Defaulted Loans (bought back by the Government)	Risk-Shared: Total
	($ million)			($ million)			
2019	0	1	2	1	762	39	802
2020	0	1	1	1	697	33	731
2021	-	1	1	0	604	31	635
2022	-	0	0	0	479	29	508
2023	-	0	0	0	355	26	382
2024	-	0	0	0	246	24	270
2025	-	-	-	-	158	21	179
2026	-	-	-	-	101	19	120
2027	-	-	-	-	65	16	81
2028	-	-	-	-	42	13	55
2029	-	-	-	-	27	10	37
2030	-	-	-	-	17	5	22
2031	-	-	-	-	11	1	12
2032	-	-	-	-	7	0	7
2033	-	-	-	-	0	0	0
2034	-	-	-	-	-	-	-

2.4.2 Direct Loan Regime

The projection of the direct loan portfolio includes the balance of outstanding loans (in-study and in repayment separately) and the balance of loans in default. There are two allowances for bad debt (principal and interest) to cover the risk of future default, net of recoveries, and an allowance for the RAP (principal) to cover the future cost of students benefiting from this program. The projection of the direct loan portfolio and allowances is shown in Table 9.

Table 9 Direct Loan Portfolio and Allowances

As at July 31	Loans In-Study	Principal only: Loans in Repayment	Principal only: Defaulted Loans	Total	Allowance for: Bad Debt Principal	Allowance for: Bad Debt Interest	RAP – Principal
		($ million)				($ million)	
2019	7,919	10,379	2,191(1)	20,489	2,731	245	1,594
2020	8,175	11,652	2,239	22,066	2,829	239	1,675
2021	9,386	12,215	2,506(2)	24,107	2,990	220	1,762
2022	9,644	12,722	2,575	24,941	3,087	211	1,807
2023	9,985	13,053	2,647	25,686	3,187	206	1,852
2024	10,377	13,349	2,720	26,446	3,294	208	1,900
2025	10,735	13,668	2,790	27,193	3,402	214	1,950
2026	11,059	13,998	2,865	27,922	3,511	227	2,005
2027	11,334	14,360	2,917	28,610	3,581	237	2,059
2028	11,599	14,721	2,953	29,273	3,643	243	2,112
2029	11,869	15,072	3,019	29,961	3,729	254	2,164
2030	12,113	15,402	3,091	30,606	3,818	265	2,216
2031	12,350	15,705	3,170	31,225	3,911	278	2,267
2032	12,579	16,098	3,249	31,926	4,002	291	2,320
2033	12,794	16,481	3,323	32,599	4,087	304	2,371
2034	12,991	16,843	3,390	33,225	4,163	315	2,419
2035	13,174	17,188	3,461	33,824	4,241	327	2,466
2036	13,355	17,510	3,525	34,390	4,311	339	2,511
2037	13,548	17,817	3,584	34,948	4,377	349	2,555
2038	13,747	18,117	3,645	35,509	4,447	358	2,599
2039	13,952	18,413	3,708	36,073	4,518	366	2,641
2040	14,165	18,707	3,768	36,640	4,589	373	2,684
2041	14,387	19,001	3,823	37,211	4,655	380	2,727
2042	14,619	19,300	3,882	37,801	4,726	386	2,770
2043	14,858	19,603	3,950	38,411	4,807	395	2,813
2044	15,098	19,913	4,017	39,028	4,888	403	2,857

(1) Outstanding balance of defaulted loans based on the Departmental Account Receivable System (DARS) data file. There is a difference between the outstanding balance determined using the DARS data file and the outstanding balance shown in the "Detailed Age Analysis by Account Status" provided by ESDC. At the end of March 2020, this difference is about $6 million (0.3%).

(2) Due to the six-month pause measure, loans that would have normally defaulted between April and July 2020 (loan year 2019-2020) are actually transferred in default in the following loan year. This results in a significant increase to the default portfolio in the loan year 2020-2021.

The outstanding direct loans portfolio is projected to increase rapidly from $20.5 billion as at 31 July 2019 to $26.4 billion five years later. By the end of the 2043-2044 loan year, the portfolio is projected to reach $39 billion.

As at 31 July 2019, the outstanding direct loan portfolio is $20.5 billion and is retrospectively derived from the experience[1] during loan years 2000-2001 to 2018-2019 as follow:

New loans issued	$42.9 billion
Plus the interest accrued during the non-repayment period[2]	$ 1.3 billion
Minus repayments[3]	$21.8 billion
Minus loans forgiven and debt reductions in repayment[4]	$ 0.7 billion
Minus defaulted loans written-off	$ 1.2 billion
	$20.5 billion

COVID-19 Pandemic

The COVID-19 pandemic resulted in a significant increase in the unemployment rate. At the date this report was written, there was still uncertainty as to how the economy would recover from the current health and economic crisis. For student loan borrowers in repayment, it is assumed that the economic slowdown will translate in higher RAP utilization and short-term defaults. However, temporary measures put in place by the Government, such as the Canada Emergency Response Benefit, the Canada Emergency Student Benefit and the Canada Emergency Wage Subsidy, are expected to mitigate the impacts of the pandemic on the CSLP. For student loan borrowers, the Government also suspended repayments and ceased the accrual of interest on student loans from 30 March to 30 September 2020.

The net impacts on the RAP and default assumptions due to the COVID-19 pandemic are as follow:

- RAP utilization rates are assumed to increase by 11% in loan year 2020-2021, gradually reverting back to their original level in 2024-2025. This assumption was determined by reference to the change in the unemployment level.
- During the six-month repayment pause, no loans will be transferred into default. Consequently, those who would have normally defaulted for reasons other than COVID-19 are expected to default in 2020-2021 rather than 2019-2020. This results in lower gross defaults in 2019-2020 and higher gross defaults in 2020-2021. In addition, the gross default assumption is increased by 5% in loan year 2020-2021 to reflect higher risk of default resulting from the crisis.
- The Government will not actively pursue recoveries during the 6-month pause. It is assumed that recoveries that would have normally been received between 30 March and 30 September 2020 will not be recouped in future years.

The above-mentioned impacts on loans repayments are based on the information known at the time the report was prepared but the final impacts will likely generate some differences in the future.

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1 According to the Monthly Financial Information Schedule and the Departmental Account Receivable System.
2 Effective on 1 November 2019, student loans no longer accumulate interest during the six-month non-repayment period after a student loan borrower leaves school.
3 Either prepayments while in-study, normal and accelerated payments while in repayment, affordable payments while in RAP, or recoveries while in default.
4 Under the former Debt Reduction in Repayment (DRR) or the Repayment Assistance Plan (RAP) measures.

The remainder of subsection 2.4.2 provides detailed information on the three allowances.

Allowance for Bad Debt – Principal

Table 10 provides the calculation details 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

	Defaulted Loans Portfolio (Principal only) ($ million)					Allowance for Bad Debt – Principal ($ million)			
Loan Year	Balance 1 August	Defaulted Loans[1]	Collected Loans	Write-offs	Balance 31 July	Allowance 1 August	Write-offs	Allowance 31 July	Yearly Expense
	(1)	(2)	(3)	(4)	(1+2) - (3+4)	(1)	(2)	(3)	(3) - (1 - 2)
2018-2019	2,148	283	115	126	2,191	2,472	126	2,731	385
2019-2020	2,191	252[2]	66	138	2,239	2,731	138	2,829	236
2020-2021	2,239	507[3]	90	150	2,506	2,829	150	2,990	311
2021-2022	2,506	354	123	162	2,575	2,990	162	3,087	258
2022-2023	2,575	361	126	163	2,647	3,087	163	3,187	262
2023-2024	2,647	363	128	162	2,720	3,187	162	3,294	269
2024-2025	2,720	368	131	167	2,790	3,294	167	3,402	275
2025-2026	2,790	378	133	170	2,865	3,402	170	3,511	280
2026-2027	2,865	391	135	204	2,917	3,511	204	3,581	274
2027-2028	2,917	404	138	230	2,953	3,581	230	3,643	292
2028-2029	2,953	418	140	211	3,019	3,643	211	3,729	298
2029-2030	3,019	430	143	215	3,091	3,729	215	3,818	304
2030-2031	3,091	442	146	216	3,170	3,818	216	3,911	309
2031-2032	3,170	453	150	223	3,249	3,911	223	4,002	315
2032-2033	3,249	463	153	234	3,323	4,002	234	4,087	319
2033-2034	3,323	472	157	248	3,390	4,087	248	4,163	323
2034-2035	3,390	481	161	249	3,461	4,163	249	4,241	327
2035-2036	3,461	489	164	261	3,525	4,241	261	4,311	331
2036-2037	3,525	497	168	270	3,584	4,311	270	4,377	336
2037-2038	3,584	504	171	272	3,645	4,377	272	4,447	341
2038-2039	3,645	512	174	275	3,708	4,447	275	4,518	347
2039-2040	3,708	520	178	282	3,768	4,518	282	4,589	352
2040-2041	3,768	528	181	292	3,823	4,589	292	4,655	358
2041-2042	3,823	536	184	293	3,882	4,655	293	4,726	364
2042-2043	3,882	544	187	290	3,950	4,726	290	4,807	370
2043-2044	3,950	553	190	295	4,017	4,807	295	4,888	376

(1) This amount is net of rehabilitations, recalls and other adjustments that occurred during the year.
(2) Due to the six-month pause measure, there are no defaults between 1 April 2020 and 31 July 2020 (the last two months of the pause, August and September 2020, are in the loan year 2020-2021).
(3) Due to the six-month pause measure, loans that would have normally defaulted between April and July 2020 (loan year 2019-2020) are actually transferred in default in the following loan year.

The balance of loans in default (principal only) was $2,191 million as at 31 July 2019. The defaulted loans portfolio is projected to reach $4,017 million by the end of the projection period.

As shown in Table 10, an amount of $126 million was written-off in 2018-2019. The amount of write-offs in 2019-2020 is $138 million and includes all the non-recoverable loans that were identified and approved for write-off by ESDC and CRA between July 2018 and June 2019. These write-offs were approved on 13 March 2020, via Royal Assent of Bill C-10 (Appropriation Act No. 4, 2019-2020). The decision to write off particular loans is part of a multi-step process inevitably resulting in some volatility in the actual amount written off from year to year.

The allowance for bad debt – principal covers the risk of future defaults, net of recoveries. It is estimated at $2,731 million as at 31 July 2019, which is higher than the $2,596 million projected in the previous report. It was adjusted to reflect an increase in short-term gross defaults, as seen in the most recent year, and the short-term impact on the economy due to COVID-19. For the 2018-2019 loan year, the yearly expense for the allowance for bad debt – principal is $385 million and corresponds to the difference between the new allowance of $2,731 million and the total allowance of $2,472 million at the beginning of the loan year, net of the loans written-off, which totalled $126 million in the 2018-2019 loan year [$385M = $2,731M - ($2,472M - $126M)].

For the **Public Accounts**, the allowance as at 31 March 2020 is determined using the outstanding balance of portfolios and the corresponding provision rates for the 2019-2020 loan year according to the status of the loans as follows:

- 6.8% of the outstanding balance of loans in-study, which is $8,631 million as at 31 March 2020;
- 4.6% of the outstanding balance of loans in repayment, which is $11,123 million as at 31 March 2020; and
- 77.5% of the outstanding balance of loans in default, which is $2,233 million as at 31 March 2020.

The resulting allowance as at 31 March 2020 is $2,829 million. The allowance can be determined at any month end through the loan year by using the outstanding balance of loans at that time and the above-mentioned provision rates.

The long-term provision rates used in this report can be found in Appendix C.

Allowance for Bad Debt – Interest

In accordance with the collection practice, interest accrues on defaulted loans until they reach a “non-recoverable” status. A provision is set to cover the risk that such accrued interest will never be recovered. The methodology used is the same as in the previous report. Provision rates are modified to take into account recent experience. The allowance for bad debt – interest is determined using the outstanding interest and a variable provision rate for each year since default. The provision rates are presented in Appendix C (Table 30).

The projection of the balance of interest on defaulted loans is presented in Table 11.

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

	Interest on Defaulted Loans						Allowance for Bad Debt – Interest			
Loan Year	Balance August 1	Interest Transferred in Default(1)	Interest Accrued	Interest Collected	Write-offs	Balance July 31	Allowance August 1	Write-offs	Allowance July 31	Yearly expense
	($ million)						($ million)			
	(1)	(2)	(3)	(4)	(5)	(1+2+3) - (4+5)	(1)	(2)	(3)	(3) - (1-2)
2018-2019	334	12	126	74	36	362	231	36	245	50
2019-2020	362	11	73(2)	42	41	363	245	41	239	35
2020-2021	363	14	52(3)	51	46	332	239	46	220	27
2021-2022	332	11	75	60	42	315	220	42	211	33
2022-2023	315	11	80	59	40	307	211	40	206	36
2023-2024	307	12	87	59	38	309	206	38	208	40
2024-2025	309	13	94	60	38	317	208	38	214	44
2025-2026	317	14	102	63	36	333	214	36	227	50
2026-2027	333	15	105	65	42	347	227	42	237	51
2027-2028	347	15	110	67	46	358	237	46	243	53
2028-2029	358	16	112	70	44	373	243	44	254	54
2029-2030	373	17	118	72	46	390	254	46	265	57
2030-2031	390	18	124	76	47	409	265	47	278	60
2031-2032	409	19	130	79	50	429	278	50	291	63
2032-2033	429	19	137	83	53	449	291	53	304	66
2033-2034	449	20	140	86	57	465	304	57	315	68
2034-2035	465	21	146	90	58	484	315	58	327	70
2035-2036	484	22	152	94	61	502	327	61	339	73
2036-2037	502	22	155	97	64	518	339	64	349	74
2037-2038	518	22	158	100	66	531	349	66	358	75
2038-2039	531	23	160	102	68	544	358	68	366	76
2039-2040	544	23	163	105	70	554	366	70	373	77
2040-2041	554	23	165	107	72	564	373	72	380	78
2041-2042	564	24	168	109	73	574	380	73	386	79
2042-2043	574	24	170	111	72	586	386	72	395	80
2043-2044	586	24	173	113	74	597	395	74	403	82

(1) This amount is net of rehabilitations, recalls and other adjustments that occurred during the year.
(2) Due to the six-month pause measure, there is no interest accrual between 30 March 2020 and 31 July 2020.
(3) Due to the six-month pause measure, there is no interest accrual between 1 August 2020 and 30 September 2020. Additionally, interest rates (as seen in table 3) are projected to be lower in the short-term due to the COVID-19 pandemic.

When a loan is transferred to the Government after nine months without a payment, it comes with an interest portion that generally represents slightly more than nine months of interest accrued on the defaulted principal transferred. Table 11 shows that $12 million of interest was returned to the Government in the 2018-2019 loan year, along with the newly defaulted principal portion of the loans. An additional amount of $126 million in interest was accrued during the 2018-2019 loan year on the principal balance of the recoverable defaulted loans portfolio at the beginning of the loan year.

Once loans are in default, CRA collects money for their repayment on behalf of the CSLP. These collections are first applied to the interest portion of defaulted loans. As such, an amount of $74 million was recovered in the 2018-2019 loan year.

Finally, when a loan meets certain criteria and has exceeded the six-year limitation period, the interest amounts are also considered for write-off. In the 2018-2019 loan year, $36 million in interest was written off. As shown in Table 11, the balance of interest in default was $334 million at the beginning of the 2018-2019 loan year and it increased to $362 million as at 31 July 2019. The balance of interest in default is projected to increase to $597 million by the end of the projection period.

The allowance for bad debt – interest is estimated at $245 million as at 31 July 2019, which is lower than the $255 million projected in the previous report. This change is due to a slight increase in expected recoveries. For the 2018-2019 loan year, the yearly expense of $50 million corresponds to the difference between the allowance of $245 million as at 31 July 2019 and the allowance of $231 million at the beginning of the loan year, net of interest written off during the 2018-2019 loan year, which totalled $36 million [$50M = $245M – ($231M – $36M)].

For the **Public Accounts**, the allowance as at 31 March 2020 is determined using the outstanding balance of accrued interest on defaulted loans according to the year since default and the corresponding provision rates shown in Appendix C (Table 30). The resulting allowance as at 31 March 2020 is $238 million.

Allowance for the Repayment Assistance Plan – Principal

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

Table 12 Allowance for Repayment Assistance Plan – Principal

Loan Year	Allowance 1 August ($ million) (1)	RAP Expenses ($ million) (2)	Allowance 31 July ($ million) (3)	Yearly Expense ($ million) (3) - (1-2)
2018-2019	1,469	105	1,594	229
2019-2020	1,594	103	1,675	184
2020-2021	1,675	153(1)	1,762	241
2021-2022	1,762	153	1,807	198
2022-2023	1,807	155	1,852	200
2023-2024	1,852	157	1,900	205
2024-2025	1,900	159	1,950	209
2025-2026	1,950	164	2,005	219
2026-2027	2,005	169	2,059	223
2027-2028	2,059	173	2,112	226
2028-2029	2,112	176	2,164	228
2029-2030	2,164	179	2,216	231
2030-2031	2,216	183	2,267	234
2031-2032	2,267	187	2,320	240
2032-2033	2,320	193	2,371	243
2033-2034	2,371	198	2,419	246
2034-2035	2,419	202	2,466	249
2035-2036	2,466	206	2,511	251
2036-2037	2,511	211	2,555	255
2037-2038	2,555	215	2,599	259
2038-2039	2,599	220	2,641	263
2039-2040	2,641	225	2,684	267
2040-2041	2,684	229	2,727	272
2041-2042	2,727	233	2,770	276
2042-2043	2,770	237	2,813	281
2043-2044	2,813	241	2,857	285

(1) A higher RAP utilisation is expected due to the financial hardship caused by the COVID-19 pandemic and the resulting economic downturn.

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

As with the allowance for bad debt – principal, the methodology used to determine the provision rate for the RAP – principal is based on a snapshot of the portfolio at a given time and takes into account the status of the loans along with the corresponding level of risk for each status. Two of the RAP provision rates have been revised upward compared with the previous report.

As shown in Table 12, the allowance for the RAP – principal is estimated at $1,594 million as at 31 July 2019, which is higher than the $1,561 million projected in the previous report. This increase is due to updated assumptions and the short-term impact on the economy due to COVID-19. For the 2018-2019 loan year, the yearly expense for the RAP – principal allowance is $229 million; it corresponds to the difference between the new allowance of $1,594 million and the allowance of $1,469 million at the beginning of the loan year, net of the portion of loans paid by the Government under the RAP-Stage 2 and RAP-PD, which totalled $105 million in the 2018-2019 loan year [$229M = $1,594M – ($1,469M – $105M)].

For the **Public Accounts**, the allowance as at 31 March 2020 is determined using the outstanding portfolio balances with their corresponding provision rates:

- 5.3% on the balance of loans in-study, which is $8,631 million as at 31 March 2020;
- 1.4% on the balance of loans in repayment (reduced by loans in the RAP – all stages), which is $7,442 million as at 31 March 2020; and
- 27.8% on the balance of loans in the RAP (all stages), which is $3,681 million as at 31 March 2020.

The resulting allowance as at 31 March 2020 is $1,585 million. Compared with loans in-study, the portfolio of loans in repayment includes cohorts of loans for which partial reimbursements have already occurred, as well as some defaults and utilization of the RAP, resulting in a lower risk for the remaining loans and consequently a lower required provision rate. The highest risk for the RAP comes from the portfolio of loans already in the RAP (Stages 1, 2 and PD). As the RAP is still relatively new, provision rates may require further adjustments in the future as experience emerges.

For comparison purposes, Table 13 shows the direct loan portfolio and allowances in 2019 constant dollars.

Table 13 Direct Loan Portfolio and Allowances (in millions of 2019 constant dollars)(1)

As at July 31	Loans In-study	Principal only: Loans in Repayment	Principal only: Defaulted Loans	Total	Bad Debt Principal	Allowance for: Bad Debt Interest	RAP – Principal
		($ million)				($ million)	
2019	7,919	10,379	2,191	20,489	2,731	245	1,594
2020	8,058	11,485	2,207	21,750	2,789	235	1,651
2021	9,115	11,862	2,433	23,410	2,904	213	1,711
2022	9,186	12,118	2,453	23,758	2,941	201	1,721
2023	9,333	12,202	2,475	24,010	2,979	193	1,731
2024	9,522	12,249	2,496	24,267	3,023	190	1,743
2025	9,673	12,316	2,514	24,502	3,065	193	1,757
2026	9,788	12,390	2,536	24,714	3,108	201	1,774
2027	9,857	12,489	2,537	24,883	3,115	206	1,790
2028	9,915	12,584	2,524	25,024	3,114	208	1,805
2029	9,976	12,668	2,538	25,181	3,135	213	1,818
2030	10,012	12,731	2,555	25,298	3,156	219	1,831
2031	10,043	12,770	2,577	25,390	3,180	226	1,844
2032	10,065	12,880	2,599	25,545	3,202	233	1,856
2033	10,076	12,979	2,617	25,672	3,219	239	1,867
2034	10,072	13,059	2,629	25,760	3,227	244	1,875
2035	10,058	13,123	2,643	25,824	3,238	250	1,882
2036	10,043	13,167	2,651	25,861	3,242	255	1,888
2037	10,037	13,199	2,655	25,891	3,243	259	1,893
2038	10,036	13,226	2,661	25,923	3,246	261	1,897
2039	10,039	13,249	2,668	25,956	3,251	264	1,901
2040	10,048	13,269	2,673	25,990	3,255	265	1,904
2041	10,062	13,289	2,674	26,026	3,256	265	1,907
2042	10,083	13,312	2,678	26,073	3,260	266	1,910
2043	10,109	13,337	2,687	26,133	3,270	268	1,914
2044	10,135	13,366	2,696	26,197	3,281	270	1,918

(1) For a given year, the value in 2019 constant dollars is equal to the corresponding value divided by the cumulative index of the Consumer Price Index (CPI) for that year.

2.4.3 Limit on the Aggregate Amount of Outstanding Loans

The *Canada Student Financial Assistance Regulations* (CSFAR) imposes a limit on the aggregate amount of outstanding loans in the CSLP. The limit was increased from $24 billion to $34 billion in June 2019. Table 14 presents the projection of the aggregate amount of outstanding loans. The aggregate amount of outstanding direct loans includes the principal portion of all direct loans disbursed and not yet repaid, which consists of the total principal amount of loans in study, loans in repayment and loans in default. The aggregate amount of outstanding risk-shared loans includes the principal portion of risk-shared student loans bought back by the Government from financial institutions. Collection activities are performed on these risk-shared loans by the Government.

In comparison with Table 8 and Table 9, which show the projection of the 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 at the end of the loan year. The peak occurs in the middle of the loan year and is 3% to 5% higher than the aggregate amount at the end of the loan year. Table 9 shows an aggregate amount of outstanding direct loans of $20.5 billion as at 31 July 2019. Table 14 shows that the aggregate amount of outstanding direct loans reached $21.3 billion in January 2019 and $22.3 billion in January 2020.

The projection shows that the $34 billion limit is expected to be reached during the 2032-2033 loan year if the Program's provisions don't change and assumptions materialize.

Table 14 Aggregate Amount of Outstanding Student Loans

	Estimated Peak During the Loan Year (January)		
Loan Year	Direct Loans	Risk-Shared Loans	Total
	($ million)	($ million)	($ million)
2018-2019	21,339	41	21,380
2019-2020	22,293	35	22,328
2020-2021	24,838	32	24,870
2021-2022	25,993	30	26,023
2022-2023	26,800	27	26,827
2023-2024	27,589	25	27,614
2024-2025	28,374	22	28,396
2025-2026	29,140	20	29,160
2026-2027	29,897	17	29,914
2027-2028	30,620	14	30,634
2028-2029	31,320	11	31,331
2029-2030	32,018	7	32,025
2030-2031	32,681	3	32,684
2031-2032	33,373	1	33,373
2032-2033	34,090	0	34,090
2033-2034	34,768	0	34,768
2034-2035	35,402	0	35,402
2035-2036	36,012	-	36,012
2036-2037	36,607	-	36,607
2037-2038	37,195	-	37,195
2038-2039	37,787	-	37,787
2039-2040	38,385	-	38,385
2040-2041	38,991	-	38,991
2041-2042	39,604	-	39,604
2042-2043	40,235	-	40,235
2043-2044	40,883	-	40,883

2.5 Projection of the Net Cost of the Program

2.5.1 Student Related Expenses

The primary expense of the CSLP is the cost of supporting students during their study and repayment periods. This expense, presented in Table 15, includes the following:

- Interest subsidy, which corresponds to the cost of borrowing incurred by the Government while borrowers are in school or in the six-month non-repayment period between the end of study and the consolidation;
- Interest portion of the Repayment Assistance Plan (RAP) paid by the Government;
- Provision or expenses for the RAP – principal under the different regimes; and
- CSG.

Table 15 Student Related Expenses

	Direct Loan			Risk-Shared and Guaranteed Loans			
Loan Year	Interest Subsidy	RAP – Interest	Provision RAP – Principal	Interest Subsidy	RAP – Interest and Principal	Canada Student Grants	Total
		($ million)			($ million)	($ million)	($ million)
2018-2019	164.8	250.5	229.0	0.0	4.2	1,614.1	2,262.6
2019-2020	105.4	124.1	184.2	0.0	3.0	1,635.4	2,052.1
2020-2021	98.2(1)	121.8	240.6	0.0	4.4	3,521.4(2)	3,986.4
2021-2022	123.2	152.9	198.2	-	3.2	1,562.7(3)	2,040.2
2022-2023	148.2	158.2	200.1	-	2.5	1,568.7	2,077.7
2023-2024	186.7	168.9	205.0	-	1.9	1,586.1	2,148.6
2024-2025	238.7	181.0	208.8	-	1.3	1,590.1	2,219.8
2025-2026	281.1	195.6	218.7	-	0.8	1,592.7	2,289.0
2026-2027	312.6	206.0	222.6	-	0.5	1,600.4	2,342.1
2027-2028	344.6	216.8	226.4	-	0.3	1,611.7	2,399.9
2028-2029	377.8	222.5	227.6	-	0.2	1,624.6	2,452.7
2029-2030	411.6	233.8	231.0	-	0.1	1,635.3	2,511.9
2030-2031	446.0	245.4	234.5	-	0.1	1,646.2	2,572.2
2031-2032	481.1	257.2	239.7	-	0.0	1,656.3	2,634.2
2032-2033	516.7	269.0	243.4	-	0.0	1,665.1	2,694.1
2033-2034	538.7	274.7	246.0	-	-	1,670.9	2,730.2
2034-2035	560.4	286.3	248.7	-	-	1,677.1	2,772.6
2035-2036	582.3	297.9	251.3	-	-	1,684.9	2,816.4
2036-2037	590.6	303.0	254.8	-	-	1,699.5	2,847.9
2037-2038	599.3	308.0	258.8	-	-	1,713.6	2,879.7
2038-2039	608.2	312.9	263.0	-	-	1,728.8	2,913.0
2039-2040	617.5	317.7	267.4	-	-	1,745.8	2,948.4
2040-2041	627.1	322.6	271.7	-	-	1,764.2	2,985.7
2041-2042	637.1	327.6	276.2	-	-	1,784.9	3,025.9
2042-2043	647.5	332.7	280.8	-	-	1,806.3	3,067.4
2043-2044	658.0	337.9	285.3	-	-	1,829.0	3,110.2

(1) The reduction is due to the decrease in the Government cost of borrowing as seen in Table 3.
(2) The large increase in grants disbursed is due to one of the measures put in place for loan year 2020-2021 in response to the COVID-19 pandemic, namely: the doubling of the CSG-FT, CSG-PT, CSG-PD, CSG-FTDEP and CSG-PTDEP.
(3) The three-year pilot project that provides a top-up grant to adult learners ended in 2020-2021.

In the 2018-2019 loan year, a total of $1,614 million of CSGs were disbursed. It is projected to increase to $1,635 million in 2019-2020. The total amount of grants is then projected to reach $1,829 million by 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, except for loan year 2020-2021, where a measure was put in place in response to the COVID-19 pandemic to double the maximum amount of grants issued.

2.5.2 Program Risk Expenses

Another expense for the Government corresponds to the risk that loans will never be repaid. This includes the risk of loan default and the risk of loans being forgiven upon a student's death or severe permanent disability. Loans forgiven for family physicians and nurses practicing in under-served rural or remote communities are also included in Table 16 below.

Table 16 Risks to the Government

	Direct Loan		Risk-Shared	Guaranteed		
	Provision for Bad Debt		Risk Premium, Put-Backs &	Claims for	Loans	
Loan Year	Principal	Interest	Refunds to FIs	Defaulted Loans	Forgiven	Total
	($ million)		($ million)	($ million)	($ million)	($ million)
2018-2019	385.3	50.1	0.8	0.4	45.5	482.1
2019-2020	236.0	34.9	0.4	0.1	46.5	317.9
2020-2021	311.0	26.8	0.4	0.1	48.3	386.6
2021-2022	258.4	33.4	0.4	0.1	49.5	341.7
2022-2023	262.4	35.8	0.3	0.0	48.9	347.4
2023-2024	269.5	39.7	0.3	0.0	50.2	359.7
2024-2025	274.8	43.9	0.2	-	51.0	369.9
2025-2026	279.8	49.5	0.2	-	51.8	381.3
2026-2027	273.7	51.3	0.1	-	52.7	377.8
2027-2028	291.7	52.8	0.1	-	53.6	398.2
2028-2029	298.0	54.2	0.0	-	54.6	406.9
2029-2030	303.6	57.1	-	-	55.6	416.3
2030-2031	309.3	60.1	-	-	56.4	425.8
2031-2032	314.6	63.2	-	-	57.2	435.0
2032-2033	319.3	66.2	-	-	58.3	443.7
2033-2034	323.3	67.7	-	-	59.3	450.2
2034-2035	327.1	70.4	-	-	60.2	457.7
2035-2036	331.2	73.2	-	-	61.2	465.5
2036-2037	336.4	74.3	-	-	62.1	472.8
2037-2038	341.5	75.3	-	-	62.9	479.7
2038-2039	346.7	76.3	-	-	63.8	486.8
2039-2040	352.2	77.4	-	-	64.6	494.3
2040-2041	358.1	78.5	-	-	65.5	502.0
2041-2042	364.1	79.4	-	-	66.3	509.9
2042-2043	370.2	80.5	-	-	67.2	517.9
2043-2044	376.2	81.8	-	-	68.1	526.1

Under the direct loan regime, the provisions for bad debt (principal and interest) represent the cost of the default risk assumed by the Government in directly disbursing 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 obligated to buy back loans in default for at least 12 months and 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 as 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 severe permanent disability of a borrower during the period of study, repayment, or even after the loan has been transferred to default status. 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 loan forgiveness could be eligible for the RAP for Borrowers with Permanent Disabilities (RAP-PD). Loans forgiven also include the projection of forgiveness of a portion of loans for family physicians and nurses who practice in under-served rural or remote communities. This measure was implemented on 1 January 2013. In this report, the projected number of family physicians and nurses, hence the projection of forgiveness for these borrowers, have been revised downward to reflect the latest experience.

2.5.3 Other Expenses

Alternative payments are made directly to Quebec, the Northwest Territories, and Nunavut, as they do not participate in the CSLP. 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. The alternative payments for loan year 2021-2022 are significantly higher compared to the prior year mostly due to the doubling of grants as the results of COVID-19 measures implemented to help CSLP students.

The administrative expenses include fees paid to the participating provinces and to the Yukon Territory as well as general administrative fees. Fees are paid to the participating provinces and to the Yukon Territory to administer certain aspects of the CSLP. Budget 2019 announced increased compensation to participating provinces and territory by $4.0 million per year, starting in 2019-2020, to compensate for the partner’s costs stemming from Budget 2019’s proposed changes. The general administrative fees represent the expenses incurred by the departments involved and fees paid to the National Student Loans Service Centre (NSLSC), which is responsible for the administration of student loans and grants. The NSLSC is run by a private entity contracted by the Government. All collection activities on defaulted loans are fulfilled by CRA and a cost is included in the projected general administrative fees for this purpose.

As shown in Table 17, total expenses associated with the Program increase from $3.4 billion in 2018-2019 to $4.9 billion in 2043-2044. On average, total expenses are projected to increase at an annual rate of 1.5%.

Table 17 Summary of Expenses

Loan Year	Student Related Expenses	Risks to the Government	Alternative Payments(1)	Administrative Expenses: Fees Paid to Provinces	Administrative Expenses: General	Total Expenses
	($ million)	($ million)	($ million)	($ million)		($ million)
2018-2019	2,262.6	482.1	456.7	27.8	124.3	3,353.5
2019-2020	2,052.1	317.9	492.3	32.3	138.9	3,033.6
2020-2021	3,986.4	386.6	533.0	32.9	140.8	5,079.8
2021-2022	2,040.2	341.7	1,090.6(2)	33.7	143.5	3,649.8
2022-2023	2,077.7	347.4	529.4	34.5	147.5	3,136.6
2023-2024	2,148.6	359.7	540.7	35.4	151.8	3,236.1
2024-2025	2,219.8	369.9	563.7	36.5	156.3	3,346.2
2025-2026	2,289.0	381.3	597.0	37.6	161.0	3,465.8
2026-2027	2,342.1	377.8	627.1	38.7	165.9	3,551.6
2027-2028	2,399.9	398.2	655.5	39.9	170.9	3,664.3
2028-2029	2,452.7	406.9	686.5	41.1	176.0	3,763.2
2029-2030	2,511.9	416.3	721.7	42.3	181.3	3,873.6
2030-2031	2,572.2	425.8	754.1	43.6	186.8	3,982.5
2031-2032	2,634.2	435.0	786.1	44.9	192.5	4,092.7
2032-2033	2,694.1	443.7	817.2	46.3	198.3	4,199.6
2033-2034	2,730.2	450.2	845.3	47.7	204.3	4,277.6
2034-2035	2,772.6	457.7	865.0	49.1	210.4	4,354.8
2035-2036	2,816.4	465.5	877.7	50.6	216.8	4,427.1
2036-2037	2,847.9	472.8	889.7	52.1	223.3	4,485.8
2037-2038	2,879.7	479.7	891.9	53.7	230.1	4,535.1
2038-2039	2,913.0	486.8	895.6	55.3	237.0	4,587.7
2039-2040	2,948.4	494.3	896.9	57.0	244.2	4,640.8
2040-2041	2,985.7	502.0	897.8	58.7	251.6	4,695.8
2041-2042	3,025.9	509.9	899.1	60.5	259.2	4,754.5
2042-2043	3,067.4	517.9	901.4	62.3	267.0	4,816.0
2043-2044	3,110.2	526.1	906.5	64.2	275.1	4,882.0

(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.
(2) Based on expenses and revenues from the loan year 2020-2021, which includes COVID-19 temporary measures.

2.5.4 Total Revenue

Interest revenues from the direct loan regime (shown in Table 18) include:

- Interest earned from student loans in repayment;
- Interest accrued on defaulted loans; and
- Interest portion of the RAP.

These interest revenues are net of interest on loans forgiven. They are also reduced by the Government's cost of borrowing for loans in repayment and in default (only for the interest accrued expected to be recovered). The difference results in net interest revenues. It is worth noting that the interest on defaulted direct loans is accrued until the status of the loans becomes "non-recoverable".

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

Total revenues are expected to decrease significantly in 2019-2020 and 2020-2021 following the reduction of student interest rate and the elimination of the interest during the non-repayment period, both effective as of 1 November 2019. Total revenues are projected to decrease at an average rate of 4.5% per year over the remaining 25 years of the projection.

Table 18 Total Revenues

	Direct Loan			Risk-Shared	Guaranteed	
Loan Year	Interest Revenues	Borrowing Cost	Net Interest Revenues	Principal and Interest from Recovery	Principal and Interest from Recovery	Total Revenues
	($ million)		($ million)	($ million)	($ million)	($ million)
2018-2019	872.7	-217.0	655.7	3.7	5.8	665.2
2019-2020	488.1	-144.6	343.5	2.1	3.1	348.7
2020-2021	348.4	-129.2	219.2	1.9	3.1	224.2
2021-2022	473.3	-163.9	309.4	1.4	1.6	312.4
2022-2023	502.4	-196.9	305.5	1.3	1.2	307.9
2023-2024	545.3	-244.7	300.6	1.2	0.4	302.2
2024-2025	589.9	-309.3	280.6	1.1	0.3	282.0
2025-2026	637.4	-362.1	275.3	1.0	0.0	276.3
2026-2027	668.9	-401.5	267.4	0.4	0.0	267.9
2027-2028	702.5	-443.0	259.5	0.4	-	259.9
2028-2029	719.1	-486.2	232.9	0.0	-	232.9
2029-2030	754.4	-530.2	224.1	0.0	-	224.1
2030-2031	788.5	-575.1	213.5	0.0	-	213.5
2031-2032	821.5	-623.9	197.6	-	-	197.6
2032-2033	860.9	-674.7	186.2	-	-	186.2
2033-2034	880.6	-708.1	172.4	-	-	172.4
2034-2035	918.9	-741.5	177.4	-	-	177.4
2035-2036	950.3	-774.8	175.5	-	-	175.5
2036-2037	969.2	-788.7	180.4	-	-	180.4
2037-2038	987.1	-802.2	184.9	-	-	184.9
2038-2039	1,004.6	-815.5	189.2	-	-	189.2
2039-2040	1,021.8	-828.6	193.2	-	-	193.2
2040-2041	1,038.3	-841.7	196.6	-	-	196.6
2041-2042	1,055.5	-854.8	200.6	-	-	200.6
2042-2043	1,072.4	-868.2	204.2	-	-	204.2
2043-2044	1,089.7	-882.0	207.8	-	-	207.8

2.5.5 Net Cost of the Program

Table 19 shows projected total expenses, total revenues, and the total net cost of the Program in current dollars for the 25-year projection period, while Table 20 shows the same information expressed in 2019 constant dollars. The expenses and revenues shown correspond to values presented earlier in this report.

Table 19 Net Annual Cost of the Program

	All Regimes				Net Cost of the Program	
Loan Year	Total Expenses	Total Revenues	Total Net Cost of the Program	Changes	Direct Loan	Risk-Shared & Guaranteed
	($ million)		($ million)	(%)	($ million)	
2018-2019	3,353.5	665.2	2,688.3		2,691.8	-3.4
2019-2020	3,033.6	348.7	2,684.8	-0.1%	2,685.9	-1.0
2020-2021	5,079.8	224.2	4,855.6	80.9%	4,855.1	0.5
2021-2022	3,649.8	312.4	3,337.4	-31.3%	3,336.3	1.1
2022-2023	3,136.6	307.9	2,828.7	-15.2%	2,828.0	0.7
2023-2024	3,236.1	302.2	2,933.9	3.7%	2,933.1	0.8
2024-2025	3,346.2	282.0	3,064.3	4.4%	3,063.9	0.3
2025-2026	3,465.8	276.3	3,189.6	4.1%	3,189.4	0.2
2026-2027	3,551.6	267.9	3,283.7	3.0%	3,283.5	0.3
2027-2028	3,664.3	259.9	3,404.4	3.7%	3,404.3	0.1
2028-2029	3,763.2	232.9	3,530.3	3.7%	3,530.1	0.3
2029-2030	3,873.6	224.1	3,649.4	3.4%	3,649.3	0.2
2030-2031	3,982.5	213.5	3,769.1	3.3%	3,769.0	0.1
2031-2032	4,092.7	197.6	3,895.1	3.3%	3,895.1	0.0
2032-2033	4,199.6	186.2	4,013.4	3.0%	4,013.4	0.0
2033-2034	4,277.6	172.4	4,105.2	2.3%	4,105.2	0.0
2034-2035	4,354.8	177.4	4,177.4	1.8%	4,177.4	-
2035-2036	4,427.1	175.5	4,251.6	1.8%	4,251.6	-
2036-2037	4,485.8	180.4	4,305.4	1.3%	4,305.4	-
2037-2038	4,535.1	184.9	4,350.2	1.0%	4,350.2	-
2038-2039	4,587.7	189.2	4,398.5	1.1%	4,398.5	-
2039-2040	4,640.8	193.2	4,447.6	1.1%	4,447.6	-
2040-2041	4,695.8	196.6	4,499.2	1.2%	4,499.2	-
2041-2042	4,754.5	200.6	4,553.9	1.2%	4,553.9	-
2042-2043	4,816.0	204.2	4,611.8	1.3%	4,611.8	-
2043-2044	4,882.0	207.8	4,674.3	1.4%	4,674.3	-

As shown in Table 19, the initial net annual cost for the direct loan regime is $2.7 billion for the 2018-2019 loan year and is projected to increase to $4.7 billion in the 2043-2044 loan year. This represents an annual average increase of 2.2% over the entire projection period. The increase in total expenses in 2020-2021 is mainly due to the Government's measures in response to COVID-19.

It is important to specify that this net cost includes the amount of CSG disbursed. The amount of grants disbursed is $1,614 million in 2018-2019, representing 60% of the net cost in 2018-2019. Moreover, the net cost also includes yearly expenses to account for provisions that recognize in advance the risk of future losses associated with student loans.

In 2019 constant dollars (Table 20), the cost of the direct loan regime increases on average by 0.61% per year, from $2.7 billion at the beginning of the projection period to $3.1 billion at the end of it.

Table 20 Net Annual Cost of the Program (in millions of 2019 constant dollars)[(1)]

	All Regimes			Net Cost of the Program	
Loan Year	Total Expenses	Total Revenues	Total Net Cost of the Program	Direct Loan	Risk-Shared & Guaranteed
	($ million)		($ million)	($ million)	
2018-2019	3,353.5	665.2	2,688.3	2,691.8	-3.4
2019-2020	2,990.1	343.7	2,646.4	2,647.4	-1.0
2020-2021	4,932.8	217.7	4,715.1	4,714.6	0.5
2021-2022	3,476.6	297.6	3,179.0	3,178.0	1.0
2022-2023	2,932.0	287.9	2,644.1	2,643.5	0.7
2023-2024	2,969.4	277.3	2,692.1	2,691.4	0.7
2024-2025	3,015.2	254.1	2,761.1	2,760.8	0.3
2025-2026	3,067.6	244.5	2,823.1	2,823.0	0.1
2026-2027	3,088.9	233.0	2,855.9	2,855.7	0.2
2027-2028	3,132.4	222.2	2,910.3	2,910.2	0.1
2028-2029	3,162.9	195.7	2,967.2	2,967.0	0.2
2029-2030	3,201.8	185.3	3,016.6	3,016.4	0.1
2030-2031	3,238.4	173.6	3,064.8	3,064.7	0.1
2031-2032	3,274.7	158.1	3,116.6	3,116.6	0.0
2032-2033	3,307.3	146.6	3,160.7	3,160.7	0.0
2033-2034	3,316.5	133.7	3,182.8	3,182.8	0.0
2034-2035	3,324.8	135.4	3,189.3	3,189.3	0.0
2035-2036	3,329.1	132.0	3,197.2	3,197.2	-
2036-2037	3,323.3	133.7	3,189.6	3,189.6	-
2037-2038	3,310.8	135.0	3,175.8	3,175.8	-
2038-2039	3,301.0	136.1	3,164.9	3,164.9	-
2039-2040	3,291.8	137.0	3,154.8	3,154.8	-
2040-2041	3,284.2	137.5	3,146.8	3,146.8	-
2041-2042	3,279.4	138.4	3,141.1	3,141.1	-
2042-2043	3,276.6	138.9	3,137.7	3,137.7	-
2043-2044	3,277.0	139.5	3,137.5	3,137.5	-

(1) For a given year, the value in 2019 constant dollars is equal to the corresponding value divided by the cumulative index of the Consumer Price Index (CPI) for that year.

2.6 Uncertainty of Results

The impact of the COVID-19 pandemic on the Canadian economy and hence on the CSLP remains uncertain as of the writing of this report. One point of contention where many diverging opinions exist is post-secondary enrolment in September 2020. In the past, as recessions caused youth unemployment to increase, post-secondary enrolment also showed increases. However, the current crisis is different and measures were put in place by the Government to mitigate the economic impact of the pandemic. There is also uncertainty with regards to the type of learning environment (online, on campus or a mixed approach) post-secondary institutions will offer at the start of the 2020-2021 school year. Some students might not favour online classes.

Borrowers already out of school may also be impacted; the economic slowdown resulting from the pandemic may decrease their capacity to reimburse their loans. The extent of the current health and economic crisis, both in depth and in length, is difficult to predict.

The above-mentioned factors have been considered in the base scenario; best-estimate assumptions were chosen based on the information known at the time the report was prepared. However, the final impacts will generate some differences with results presented in the main report.

This section aims to present two alternative outcomes and their effects on the CSLP based on how the COVID-19 pandemic could evolve.

2.6.1 Base Case Scenarios

The Base Case Scenario reflects our best estimate assumptions given current information available. The results are presented in Table 21.

Table 21 Base Case Scenario

Loan Year	Students Enrolled Full-time	Students in CSLP	New Loans Issued	Total Expenses	Total Revenues	Total Net Cost of the Program
	(Thousands)	(Thousands)	($ million)	($ million)	($ million)	($ million)
2018-2019	1,216	625	3,575	3,353.5	665.2	2,688.3
2019-2020	1,242	618	3,484	3,033.6	348.7	2,684.8
2020-2021	1,277	696	4,600	5,079.8	224.2	4,855.6
2021-2022	1,267	644	3,804	3,649.8	312.4	3,337.4
2022-2023	1,262	642	3,855	3,136.6	307.9	2,828.7
2023-2024	1,275	649	3,961	3,236.1	302.2	2,933.9
2024-2025	1,278	653	4,040	3,346.2	282.0	3,064.3
2025-2026	1,279	655	4,113	3,465.8	276.3	3,189.6
2026-2027	1,284	660	4,199	3,551.6	267.9	3,283.7
2027-2028	1,293	666	4,293	3,664.3	259.9	3,404.4
2028-2029	1,302	672	4,386	3,763.2	232.9	3,530.3
2029-2030	1,310	678	4,469	3,873.6	224.1	3,649.4
2030-2031	1,318	684	4,551	3,982.5	213.5	3,769.1
2031-2032	1,325	690	4,629	4,092.7	197.6	3,895.1
2032-2033	1,331	695	4,697	4,199.6	186.2	4,013.4
2033-2034	1,335	699	4,756	4,277.6	172.4	4,105.2
2034-2035	1,338	703	4,812	4,354.8	177.4	4,177.4
2035-2036	1,344	708	4,872	4,427.1	175.5	4,251.6
2036-2037	1,354	715	4,948	4,485.8	180.4	4,305.4
2037-2038	1,365	723	5,023	4,535.1	184.9	4,350.2
2038-2039	1,376	731	5,101	4,587.7	189.2	4,398.5
2039-2040	1,389	740	5,182	4,640.8	193.2	4,447.6
2040-2041	1,403	750	5,267	4,695.8	196.6	4,499.2
2041-2042	1,419	760	5,357	4,754.5	200.6	4,553.9
2042-2043	1,435	771	5,447	4,816.0	204.2	4,611.8
2043-2044	1,451	782	5,534	4,882.0	207.8	4,674.3

2.6.2 Low Cost Scenario

This alternative scenario shows the impact of a 10% decrease in enrolment from the base scenario for loan year 2020-2021 only. The enrolment level is back to the best-estimate assumption the following year. Such a decrease could be driven by concerns over the prevailing learning environment in September 2020. The impact on post-secondary enrolment and new loans issued are presented in Table 22, while the impact on the total net cost of the program is presented in Table 23.

Table 22 Low Cost Scenario - Impact on Enrolment and New Loans Issued

	Low Cost Scenario			Difference with the Base Case Scenario		
Loan Year	Students Enrolled Full-time (Thousands)	Students in CSLP (Thousands)	New Loans Issued ($ million)	Students Enrolled Full-time (Thousands)	Students in CSLP (Thousands)	New Loans Issued ($ million)
2018-2019	1,216	625	3,575	0	0	0
2019-2020	1,242	618	3,484	0	0	0
2020-2021	1,149	626	4,143	-128	-70	-457
2021-2022	1,267	644	3,804	0	0	0
2022-2023	1,262	642	3,855	0	0	0
2023-2024	1,275	649	3,961	0	0	0
2024-2025	1,278	653	4,040	0	0	0
2025-2026	1,279	655	4,113	0	0	0
2026-2027	1,284	660	4,199	0	0	0
2027-2028	1,293	666	4,293	0	0	0
2028-2029	1,302	672	4,386	0	0	0
2029-2030	1,310	678	4,469	0	0	0
2030-2031	1,318	684	4,551	0	0	0
2031-2032	1,325	690	4,629	0	0	0
2032-2033	1,331	695	4,697	0	0	0
2033-2034	1,335	699	4,756	0	0	0
2034-2035	1,338	703	4,812	0	0	0
2035-2036	1,344	708	4,872	0	0	0
2036-2037	1,354	715	4,948	0	0	0
2037-2038	1,365	723	5,023	0	0	0
2038-2039	1,376	731	5,101	0	0	0
2039-2040	1,389	740	5,182	0	0	0
2040-2041	1,403	750	5,267	0	0	0
2041-2042	1,419	760	5,357	0	0	0
2042-2043	1,435	771	5,447	0	0	0
2043-2044	1,451	782	5,534	0	0	0

Table 23 Low Cost Scenario - Impact on Total Net Cost of the Program

	Low Cost Scenario			Difference with the Base Case Scenario(1)		
Loan Year	Total Expenses	Total Revenues	Total Net Cost of the Program	Total Expenses(2)	Total Revenues	Total Net Cost of the Program
	($ million)	($ million)	($ million)	($ million)	($ million)	($ million)
2018-2019	3,353.6	665.2	2,688.4	0.0	0.0	0.0
2019-2020	3,033.6	348.7	2,684.9	0.0	0.0	0.0
2020-2021	4,674.4	224.0	4,450.4	-405.3	-0.2	-405.2
2021-2022	3,553.5	310.1	3,243.4	-96.3	-2.4	-94.0
2022-2023	3,129.4	304.2	2,825.2	-7.3	-3.8	-3.5
2023-2024	3,227.2	298.1	2,929.1	-8.9	-4.1	-4.8
2024-2025	3,337.9	278.2	3,059.8	-8.3	-3.8	-4.5
2025-2026	3,460.1	272.8	3,187.3	-5.7	-3.5	-2.2
2026-2027	3,544.5	264.8	3,279.7	-7.1	-3.1	-4.1
2027-2028	3,657.2	257.2	3,399.9	-7.2	-2.6	-4.5
2028-2029	3,758.0	230.8	3,527.1	-5.3	-2.1	-3.2
2029-2030	3,869.5	222.4	3,647.1	-4.1	-1.7	-2.3
2030-2031	3,979.3	212.0	3,767.2	-3.3	-1.4	-1.8
2031-2032	4,090.1	196.7	3,893.4	-2.6	-0.9	-1.7
2032-2033	4,197.6	185.5	4,012.1	-2.1	-0.7	-1.3
2033-2034	4,276.0	171.9	4,104.1	-1.7	-0.6	-1.1
2034-2035	4,353.4	176.9	4,176.5	-1.4	-0.5	-0.9
2035-2036	4,426.0	175.1	4,250.8	-1.1	-0.4	-0.7
2036-2037	4,485.1	180.1	4,305.0	-0.8	-0.3	-0.4
2037-2038	4,534.6	184.7	4,349.9	-0.5	-0.3	-0.2
2038-2039	4,587.4	189.0	4,398.4	-0.3	-0.2	-0.1
2039-2040	4,640.6	193.0	4,447.5	-0.2	-0.2	-0.1
2040-2041	4,695.7	196.4	4,499.2	-0.1	-0.1	0.0
2041-2042	4,754.4	200.5	4,553.9	-0.1	-0.1	0.0
2042-2043	4,815.9	204.1	4,611.8	-0.1	-0.1	0.0
2043-2044	4,882.0	207.7	4,674.3	-0.1	-0.1	0.0

(1) There are some differences with the base scenario over the whole projection period because loans issued in 2020-2021 consolidate over a 15-year period and then enter repayment where they can remain for up to 15 years after consolidation.
(2) In 2020-2021, more than 80% of the decrease in expenses is attributable to grants.

2.6.3 High Cost Scenario

This scenario presents a labour market disruption that is more pronounced and more persistent, leading to a longer recovery. It assumes higher short-term levels of enrolment and it negatively impacts the default rate and the RAP utilization over the next few years. The impact on enrolment and new loans issued are presented in Table 24, while the impact on the total net cost of the program is presented in Table 25.

Table 24 High Cost Scenario - Impact on Enrolment and New Loans Issued

	High Cost Scenario			Difference with the Base Case Scenario		
Loan Year	Students Enrolled Full-time (Thousands)	Students in CSLP (Thousands)	New Loans Issued ($ million)	Students Enrolled Full-time (Thousands)	Students in CSLP (Thousands)	New Loans Issued ($ million)
2018-2019	1,216	625	3,575	0	0	0
2019-2020	1,242	618	3,484	0	0	0
2020-2021	1,339	729	4,822	62	34	222
2021-2022	1,330	675	3,990	62	32	186
2022-2023	1,325	674	4,051	63	32	196
2023-2024	1,320	672	4,102	45	23	141
2024-2025	1,303	666	4,122	26	13	82
2025-2026	1,279	655	4,113	0	0	0
2026-2027	1,284	660	4,199	0	0	0
2027-2028	1,293	666	4,293	0	0	0
2028-2029	1,302	672	4,386	0	0	0
2029-2030	1,310	678	4,469	0	0	0
2030-2031	1,318	684	4,551	0	0	0
2031-2032	1,325	690	4,629	0	0	0
2032-2033	1,331	695	4,697	0	0	0
2033-2034	1,335	699	4,756	0	0	0
2034-2035	1,338	703	4,812	0	0	0
2035-2036	1,344	708	4,872	0	0	0
2036-2037	1,354	715	4,948	0	0	0
2037-2038	1,365	723	5,023	0	0	0
2038-2039	1,376	731	5,101	0	0	0
2039-2040	1,389	740	5,182	0	0	0
2040-2041	1,403	750	5,267	0	0	0
2041-2042	1,419	760	5,357	0	0	0
2042-2043	1,435	771	5,447	0	0	0
2043-2044	1,451	782	5,534	0	0	0

Table 25 High Cost Scenario - Impact on Total Net Cost of the Program

	High Cost Scenario			Difference with the Base Case Scenario[1]		
Loan Year	Total Expenses ($ million)	Total Revenues ($ million)	Total Net Cost of the Program ($ million)	Total Expenses[2] ($ million)	Total Revenues ($ million)	Total Net Cost of the Program ($ million)
2018-2019	3,353.5	665.2	2,688.3	0.0	0.0	0.0
2019-2020	3,086.9	348.7	2,738.2	53.4	0.0	53.4
2020-2021	5,284.2	225.0	5,059.2	204.4	0.8	203.6
2021-2022	3,773.9	316.2	3,457.7	124.1	3.8	120.3
2022-2023	3,238.9	313.8	2,925.1	102.2	5.9	96.4
2023-2024	3,322.0	309.7	3,012.3	85.9	7.5	78.4
2024-2025	3,409.0	290.1	3,118.9	62.8	8.2	54.6
2025-2026	3,488.7	284.4	3,204.4	22.9	8.1	14.8
2026-2027	3,562.4	274.9	3,287.5	10.8	7.0	3.8
2027-2028	3,672.9	266.1	3,406.8	8.6	6.2	2.4
2028-2029	3,772.9	237.8	3,535.1	9.6	4.9	4.7
2029-2030	3,882.2	228.2	3,654.0	8.7	4.1	4.5
2030-2031	3,991.1	216.9	3,774.2	8.5	3.4	5.1
2031-2032	4,099.6	200.3	3,899.3	6.9	2.7	4.2
2032-2033	4,204.9	188.3	4,016.7	5.3	2.1	3.3
2033-2034	4,281.8	174.0	4,107.8	4.1	1.6	2.6
2034-2035	4,358.1	178.7	4,179.4	3.3	1.3	2.0
2035-2036	4,429.6	176.5	4,253.1	2.5	1.0	1.5
2036-2037	4,487.7	181.3	4,306.4	1.9	0.9	1.0
2037-2038	4,536.4	185.7	4,350.8	1.4	0.7	0.6
2038-2039	4,588.6	189.8	4,398.8	0.9	0.6	0.3
2039-2040	4,641.3	193.7	4,447.6	0.5	0.5	0.0
2040-2041	4,696.0	196.9	4,499.1	0.2	0.4	-0.1
2041-2042	4,754.6	200.9	4,553.6	0.0	0.3	-0.3
2042-2043	4,816.0	204.4	4,611.6	0.0	0.2	-0.2
2043-2044	4,882.0	208.0	4,674.0	0.0	0.2	-0.2

(1) There are some differences with the base scenario over the whole projection period because loans issued in 2020-2021 consolidate over a 15-year period and then enter repayment where they can remain for up to 15 years after consolidation.
(2) In 2020-2021, more than 80% of the increase in expenses is attributable to grants.

3 Conclusion

The Canada Student Loans Program (CSLP) promotes accessibility to post-secondary education for those who demonstrate financial need by providing grants and loans, thereby encouraging successful and timely completion of post-secondary education. In accordance with section 19.1 of the *Canada Student Financial Assistance Act* (CSFAA), 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. The most recent statutory Actuarial Report on the CSLP was prepared as at 31 July 2017. The present report as at 31 July 2019 is prepared mainly to support ESDC's accounting requirements and partners' needs.

During the 2018-2019 loan year, 625,000 students received a loan for a total amount of new loans issued of $3,575 million. The amount of new loans issued is projected to decrease to $3,484 million in 2019-2020. The amount of loans issued is projected to reach $5,534 million in 2043-2044.

During the 2018-2019 loan year, 532,000 students received a Canada Student Grant (CSG) for a total of $1,614 million. Total CSGs are expected to increase to $1,829 million in 2043-2044.

The direct loan portfolio is projected to increase from $20.5 billion as at 31 July 2019 to $39 billion in 25 years. According to the projections, the aggregate amount of outstanding student loans is expected to exceed the $34 billion limit in 2032-2033. The total net cost of the Government's involvement in the CSLP, which is the difference between expenses and revenues, is expected to grow from $2.7 billion in 2018-2019 to $4.7 billion by the end of the projection period.

Allowances for the **Public Accounts** as at **31 March 2020**:

Bad Debt – Principal:	$2,829 million
Bad Debt – Interest:	$ 238 million
RAP – Principal:	$1,585 million

COVID-19 Pandemic

Covid-19 is a very fluid situation that will likely continue to evolve for some time. The estimates of the pandemic's impacts presented in this report are based on the information known at the time the report was prepared. However, the final impacts of this health and economic crisis will likely generate some differences in the future. Several measures were introduced by the Government within the CSLP to alleviate the impact of the pandemic on students and borrowers. These measures and their impact on the results of this report, as well as the impact of the current economic slowdown, are summarized below.

Measures	Impacts
From 30 March to 30 September 2020: • Suspension of repayments • Cessation of interest accrual For loan year 2020-2021: • Doubling of the grants • Removal of the fixed student and spousal contributions • Increase of the maximum weekly loan amount	As a result of the measures: • Higher enrolment • Higher number of students in CSLP • Higher amount of loans disbursed • Higher number of grants recipients • Higher amount of grants disbursed • Change in repayments timing As a result of the economic situation: • Lower interest rates • Higher defaults • Higher RAP utilization

4 Actuarial Opinion

In our opinion, considering that this Actuarial Report on the Canada Student Loans Program was prepared pursuant to the Canada Student Financial Assistance Act:

- the data on which this report is based are sufficient and reliable for the purposes of this report;
- the assumptions used are, individually and in aggregate, reasonable and appropriate for the purposes of this report; and
- the methods employed are appropriate for the purposes of this report.

This report has been prepared, and our opinion given, in accordance with accepted actuarial practice in Canada, in particular, the General Standards of the Standards of Practice of the Canadian Institute of Actuaries.

As of the date of the signing of this report, we have not learned of any events, other than those already accounted for in this report, that would have a material impact on the results presented in this report as at 31 July 2019.

Assia Billig, FCIA, FSA
Chief Actuary

Annie St-Jacques, FCIA, FSA

Thierry Truong, FCIA, FSA

Ottawa, Canada
7 July 2020

Appendix A — 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 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) applied to loan years preceding August 1995 while the subsequent *Canada Student Financial Assistance Act* (CSFAA) applies to loan years starting after July 1995.

A.1 Eligibility Criteria

In order to be eligible for a student loan, a student must be a Canadian citizen, permanent resident, protected person within the meaning of the Immigration and Refugee Protection Act or a person registered as an Indian under the Indian Act, and must demonstrate the need for financial assistance, which is determined by the Need Assessment Process under the CSLP. The assessed need is the difference between the student's costs and the student's resources. A student must also fulfill a series of criteria (scholastic standard and financial) to be considered for a loan. Each year, upon application with 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.

A multi-year student financial assistance agreement was implemented in all jurisdictions starting in the 2013-2014 loan year. It is referred to as the Master Student Financial Assistance Agreement (MSFAA) and replaces the former single-year student loan agreement. By signing an MSFAA, a borrower agrees to repayment terms that will apply to their loans when they leave their studies.

Since the 2016-2017 loan year, the value of student-owned vehicles has been eliminated from the student's total resources in the need assessment process in all jurisdictions to better reflect the needs of students who commute or work while studying.

Starting in the 2017-2018 loan year, the student's resources definition was modified to consider only the student contribution as well as the parental or spousal contribution, if applicable. The student contribution is comprised of the fixed student contribution, merit-based scholarships, need-based bursaries, and targeted resources.

The fixed student contribution depends on the borrower's previous year's gross annual family income, family size and the number of weeks of study. Students with gross family income from the previous year equal to or below a low-income threshold will contribute up to $1,500 per academic year. Students with gross family income from the previous year above a low-income threshold will contribute $1,500 plus an additional 15% of income above the threshold up to a maximum total contribution of $3,000 per academic year. The low-income thresholds vary depending on the student's family size. The previous year's gross family income is defined by the applicable CSLP student category. For independent students and single parent, family income is comprised of the student's income only. For dependent students, family income is comprised of the student's parental income only. In the case of a married or common-law student, family income is comprised of the student's and the spouse's or partner's income. Indigenous learners, students with permanent disabilities, students with dependants, and current or former Crown wards, are exempted from the fixed student contribution.

The expected contribution from merit-based scholarships and need-based bursaries is equivalent to the combined assessed actual amount less an exemption of $1,800 per loan year.

Targeted resources are those provided to help with specific educational costs and may include funds received from municipal, provincial, or federal governments (e.g. training allowances from the skills portion of Employment Insurance benefits), or from the private sector (e.g. room and board provided by an employer while a full-time student). They are assessed at 100%.

Parents of single dependent students are expected to contribute to their children's education. The amount of parental contribution depends on family income and size, but do not depend on the living situation of the student.

The spouses and partners of married or common-law students are expected to make a spousal contribution equal to 10% of their gross family income exceeding the low-income thresholds. Spouses and partners at or below the low-income threshold, as well as those who are themselves full-time students, are not expected to make any spousal contribution.

For loan year 2020-2021, students are not required to make their fixed contribution; no spousal contribution is required either. This measure was introduced by the Government in response to the COVID-19 pandemic.

Partnerships

Since the Program's inception in 1964, the Minister entered into an agreement with the participating provinces/territory regarding their powers, duties and functions related to the administration of the Program. 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 students require financial assistance as well as their eligibility for the CSLP. Provincial/territorial authorities determine the students' required financial needs based on the difference between their expected expenses 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. For loan year 2020-2021, this maximum is increased to $350 per week to help alleviate the effects of the COVID-19 pandemic. The participating provinces and territory complement the CSLP by providing additional financial assistance up to established maximum amounts. The amount of money students may borrow depends on their individual circumstances.

The National Student Loans Service Centre (NSLSC) was established on 1 March 2001 and is responsible for the administration of student loans and grants. The NSLSC processes all applicable documentation from loans' disbursement to their consolidation and repayment for the federal portion of the loans, as well as for the provincial portion of integrated loans. It keeps students informed of all available options to assist in repaying their loans. The NSLSC is run by a private entity contracted by the government.

The type of financial arrangement has changed through time and legislation. The following describes the different arrangements and explains who bears the risk associated with default.

- Guaranteed Loan Regime: Student loans provided by lenders (financial institutions) under the Canada Student Loans Act prior to August 1995 were fully guaranteed by the Government to the lenders. The Government reimbursed lenders for the outstanding principal, accrued interest, and costs in the event of default or death of the borrower. Therefore, the Government bore all the risk involved with guaranteed loans.

- Risk-Shared Loan Regime: Between August 1995 and 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 in each loan year. Under this financial arrangement, the Government was not at risk except for the payment of the risk premium. Financial institutions could also decide to sell a certain amount of defaulted loans and the Government had to pay a put-back fee of five cents on the dollar for these loans. Finally, the agreement provided that part of the recoveries be 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 the amendments made to the Canada Student Financial Assistance Act and Regulations. Under this regime, the Government issues loans directly to students and bears all the risk involved.

The Government of Canada currently has integration agreements in place with five provinces: Ontario (August 2001), Saskatchewan (August 2001), Newfoundland and Labrador (April 2004), New Brunswick (May 2005), and British Columbia (August 2011). Students in integrated provinces benefit from having one single loan administered through the NSLSC instead of managing two separate loans (federal and provincial).

A.2 Loan Benefit

A.2.1 In-study Interest Subsidy

The CSLP provides an interest-free loan during the borrower's study period and during the six-month non-repayment period. The benefit takes the form of an in-study interest subsidy. During this period, the Government pays interest (Government's cost of borrowing) on the loan and no payment on the principal is required. Because this interest-free period ends at consolidation and the remaining loan's lifetime is repaid with interest, Canada Student Loans are currently not considered as having significant concessionary terms according to the Directive on Accounting Standards (GC 3050 Loans Receivable). This could change in the future if the repayment terms and conditions for student loans changed. Appendix D presents more details.

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.

As of 1 January 2012, part-time students do not accrue interest on their loans while they are studying. This change occurred to align part-time and full-time loans.

A.2.2 Loan Consolidation

During the first six months following the end of the study period (six-month non-repayment period), all loans previously received by a student are added together and consolidated. No payment is required and, effective on 1 November 2019, student loans no longer accrue interest during this period. With the implementation of the MSFAA, the *Canada Student Financial Assistance Regulations* were amended to remove the regulatory requirement that borrowers sign a consolidation agreement. Repayment terms are part of the MSFAA and a repayment letter is sent to borrowers upon leaving their studies. The letter provides information on their CSL balance, repayment options and available repayment assistance measures. Starting on 1 November 2019, the floating interest rate is lowered to prime, from its previous rate of prime plus 2.5 percentage points. This is the rate chosen by approximately 99 per cent of Canada Student Loans borrowers. At the same time, the fixed interest rate is lowered to prime (at the time of consolidation) plus 2.0 percentage points, from its previous rate of prime plus 5.0 percentage points.

Students must provide their financial institution or the NSLSC with a proof of enrolment for each study period in which they are enrolled even if they are not applying for a new loan. This prevents an automatic consolidation from occurring while they are still in school and it prevents interest from accruing on the loan.

Budget 2019 also proposed more flexibility for borrowers who take a temporary leave from their studies for medical or parental reasons, including mental health leaves. Borrowers will be eligible for an interest-free and payment-free leave for a maximum of 18 months. This change is expected to be implemented in 2020-2021.

On 18 March 2020, the Government announced that due to the COVID-19 pandemic, loan repayments would be suspended and interest would cease to accumulate between 30 March 2020 and 30 September 2020.

A.2.3 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 assumed the responsibility for making interest payments on the outstanding loan and no principal payments were required. This measure was improved over time. Between 1998 and 2009, a borrower in financial difficulty could be awarded a total of 30 months of Interest Relief during the repayment period. If the borrower was still within five years from the end of studies when the 30 months ended, he could be awarded an additional 24 months of Interest Relief. In determining eligibility for Interest Relief, a borrower's monthly family income had to fall below an established income threshold in relation to the loan's required monthly payment.

In 1998, the Government introduced the Debt Reduction in Repayment (DRR) measure to help students who remained in financial difficulty after all possible Interest Relief measures had been exhausted. Between 2005 and 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 had resulted in a manageable debt level, twelve months had to have elapsed between each reduction.

Starting in loan year 2009-2010, the Repayment Assistance Plan (RAP) replaced the Interest Relief and DRR measures. The 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. Therefore, the affordable payment formula ensures no borrower pays more than 20% of their gross income towards their student loan debt. Borrowers are deemed eligible for the RAP for a six-month period if their affordable payment is less than their required monthly payment. The RAP is composed of two stages to help borrowers fully repay their loan within a maximum of 15 years of leaving school (or 10 years for borrowers with a permanent disability).

At the beginning of loan year 2016-2017, the RAP income thresholds were increased to ensure that students would not be required to repay their student loan until they earned at least $25,000 per year ($25,000 being the threshold for a single student with no dependents, which scales up based on family size).

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 leaving school. The borrower's monthly affordable payment, if any, goes directly towards the loan principal first, and then the interest, while the Government covers any interest amount not covered by the affordable payment. The principal portion of the loan not covered by the affordable payment is deferred. Stage 1 can last for a maximum of five years in cumulative six-month periods.

Stage 2 is available to borrowers who continue to experience financial difficulty after Stage 1 has been exhausted and to those whose loan has been in repayment for more than 10 years. Under Stage 2, the required payment is calculated by amortizing the outstanding principal between the start date 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 is repaid in full within 15 years (10 years for borrowers with a permanent disability) of the borrower leaving school.

Budget 2019 proposed to expand the eligibility for loan rehabilitation after a borrower defaults on their student loan. This change is effective on 1 January 2020. Financially vulnerable borrowers in default could access support such as the Repayment Assistance Plan and begin making affordable payments on their outstanding debt again.

Borrowers with a permanent disability who are not eligible for the Severe Permanent Disability Benefit have access to the RAP-PD. Additional expenses related to costs faced by permanently disabled borrowers are taken into account in the income calculation when they apply for RAP-PD. Similar to all borrowers in RAP Stage 2, additional student loans or grants are not available under RAP-PD until existing loans are paid in full. However, interest-free status may be available for existing loans if the borrower returns to school.

Budget 2019 proposed to remove the existing restriction that states that borrowers with a permanent disability are no longer eligible for additional loans and grants if they have been out of study for five years and have used the Repayment Assistance Plan. This modification will take effect in the 2020-2021 loan year.

A.2.4 Loan Forgiveness

The Minister has the authority, upon application and qualification, to forgive a loan in the event of a borrower's severe 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.

Effective 1 January 2013, a portion of student loans allocated to family physicians (including residents in family medicine programs), nurses and nurse practitioners who work during a year in an under-served rural or remote community can be forgiven for that year. Qualifying family physicians are eligible for up to $8,000 of loan forgiveness per year to a maximum of $40,000 over five years. Qualifying nurses are eligible for up to $4,000 (of loan forgiveness) per year to a maximum of $20,000 over five years. Qualifying participants who started their current employment in under-served communities on or after 1 July 2011, and who complete a year of work (starting on or after 1 April 2012), are eligible for loan forgiveness.

Budget 2019 proposed to expand the eligibility for the Severe Permanent Disability Benefit making it possible for more student borrowers with severe permanent disabilities to qualify for loan forgiveness. This modification takes effect in the 2019-2020 loan year.

A.3 Canada Student Grants

Canada Study Grants were introduced in 1995 as non-repayable grants administered by the participating provinces on behalf of the Federal Government. 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 2005-2006 loan year and included grants for students from low-income families as well as grants for students with permanent disabilities.

The Canada Student Grants (CSGs), implemented in August 2009, provide 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. These grants are not taxable.

As of the 2018-2019 loan year, the CSGs include:

- CSG-FT: a grant of up to $375 per month of study for full-time university undergraduate or college students who fall below the maximum threshold based on family size and income. To be eligible, a student's academic program must be at least two years (60 weeks) in duration.
- CSG-PD: a grant of $2,000 per school year for students with permanent disabilities.
- CSG-PDSE: a grant of up to $8,000 ($20,000 starting on 1 August 2019) per school year to help cover exceptional education-related costs associated with a student's permanent disability.
- CSG-FTDEP: a grant of up to $200 per month of full-time study based on family size and income, for every dependent child under the age of 12.

- **CSG-PT**: a grant of up to $1,800 per school year for part-time students who fall below the maximum threshold based on family size and income.
- **CSG-PTDEP**: a grant of up to $40 per week of study for part-time students with one or two children under 12 years of age and up to $60 per week of study for students with three or more children under 12 years of age, up to a maximum of $1,920 per year. The exact amount payable for each week depends on family size and income.

Grants' amounts are stated in the *Canada Student Financial Assistance Regulations*. The thresholds and phase-out rates for CSG-FT, CSG-FTDEP, CSG-PT and CSG-PTDEP are based on family size and income and are set out in Schedule 4 of the Regulations.

Starting in the 2018-2019 loan year, a three-year pilot project provides an additional $200 per month, or $1,600 per standard 8-month academic year, in grants to eligible adult learners returning to school full-time after 10 years have passed since leaving secondary school. This pilot project also makes it easier for students to qualify for grants.

In response to the COVID-19 pandemic, the Government announced on 22 April 2020, that the maximum amount for the following grants would be doubled for loan year 2020-2021: CSG-FT, CSG-PD, CSG-FTDEP, CSG-PT and CSG-PTDEP.

Appendix B — Data

The input data required with respect to direct loans were extracted from data files provided by Employment and Social Development Canada (ESDC).

B.1 Direct Loans Issued

Table 26 presents a comparison of the data extracted from ESDC's files on the amount of direct loans issued and the number of students for loan years 2000-2001 to 2018-2019 with ESDC's aggregate data. These data were found to be complete.

Table 26 Direct Loans Issued and Number of Students

	Amount of Loans Issued		Number of Students	
Loan Year	ESDC File	ESDC Aggregate Data	ESDC File	ESDC Aggregate Data
	($ million)			
2000-2001	1,573	1,570	343,746	346,568
2001-2002	1,507	1,512	328,671	331,541
2002-2003	1,549	1,549	331,042	331,763
2003-2004	1,648	1,648	342,264	342,982
2004-2005	1,633	1,633	339,204	339,828
2005-2006	1,936	1,939	345,549	345,765
2006-2007	1,916	1,931	344,214	345,124
2007-2008	2,004	2,015	353,548	354,144
2008-2009	2,071	2,081	366,145	366,788
2009-2010	2,088	2,088	403,566	404,432
2010-2011	2,225	2,226	427,054	428,549
2011-2012	2,412	2,412	450,246	450,314
2012-2013	2,583	2,583	477,394	477,487
2013-2014	2,721	2,721	497,636	497,725
2014-2015	2,723	2,723	495,297	495,318
2015-2016	2,722	2,722	496,998	497,042
2016-2017	2,627	2,627	497,045	497,064
2017-2018	3,352	3,352	592,091	592,091
2018-2019	3,575	3,575	625,135	625,135

According to the Monthly Financial Information Schedule (MFIS), the total amount of loans issued in 2018-2019 rounded to the million was $3,575, which is identical to the value calculated using the data file.

B.2 Direct Loans Consolidated

Table 27 presents the amount of consolidated direct loans, the amounts that were reversed due to students returning to school and the accrued interest during the six-month non-repayment period according to the MFIS. These data closely match consolidations from individual data for the most recent years. It was observed that reversals (students returning to school) generally occur in the same loan year as consolidation or the year after.

Table 27 Direct Loans Consolidated

Loan Year	Consolidations	Amounts from the MFIS: Reversal	Amounts from the MFIS: Interest Accrued	Total Amount Consolidated[1]
		($ million)		
	(1)	(2)	(3)	(1) - (2) + (3)
2000-2001	65.7	4.1	0.7	62.2
2001-2002	901.0	154.9	26.0	772.2
2002-2003	1,211.9	262.7	39.6	988.8
2003-2004	1,434.3	326.6	43.7	1,151.4
2004-2005	1,632.6	388.4	52.6	1,296.7
2005-2006	1,720.0	435.4	61.8	1,346.4
2006-2007	1,936.3	499.8	82.7	1,519.3
2007-2008	2,100.8	571.8	90.4	1,619.3
2008-2009	2,187.5	638.2	74.8	1,624.0
2009-2010	2,302.3	703.3	54.9	1,654.0
2010-2011	2,464.8	762.0	65.3	1,768.1
2011-2012	2,580.8	799.9	72.1	1,852.9
2012-2013	2,684.9	801.3	75.0	1,958.6
2013-2014	2,797.6	788.3	78.8	2,088.2
2014-2015	2,909.9	797.6	82.0	2,194.3
2015-2016	3,034.1	852.6	81.7	2,263.2
2016-2017	3,082.9	904.2	83.6	2,262.2
2017-2018	3,072.5	963.8	88.3	2,197.0
2018-2019	3,396.2	965.9	110.0	2,540.3

(1) The net consolidated amount represents the total consolidation for the year less all reversals regardless of the original consolidation year.

B.3 Defaults and Recoveries for Direct Loans

Table 28 shows the main items of the defaulted loans portfolio (principal only). This information is extracted from ESDC's data files.

- Defaults: amount of loans transferred to the Government in each loan year after nine months without a payment;
- Account adjustments: loans recalled and financial adjustments made by ESDC;
- Rehabilitations: amount of loans rehabilitated under certain criteria;
- Recoveries: payments recovered by the CRA from borrowers in default;
- Write-offs: amounts approved for write-off when a loan meets certain criteria and has exceeded the limitation period.

Adjustments, rehabilitations, recoveries and write-offs shown in Table 28 represent the amounts recorded in each loan year, regardless of the time of default. For example, in the 2018-2019 loan year, there were $114.5 million in recoveries. This amount includes recoveries for loans that could have been transferred in default in any loan year between 2000-2001 and now.

Table 28 shows that the balance of the portfolio in default is $2,191.0 million as at 31 July 2019 based on the information extracted from the data file. There is a difference between the balance determined in the DARS data file received and the balance shown in the "Detailed Age Analysis by Account Status" table provided by ESDC. As at 31 March 2020, this difference is about $6.2 million ($2,238.9 million in DARS and $2,232.7 million in the "Detailed Age Analysis" table), which represents 0.3%.

Table 28 Direct Loans Default Portfolio – Principal

Loan Year	Defaults	Account Adjustments	Rehabilitated	Net Defaults	Recoveries	Write-Offs	Balance
		($ million)			($ million)		($ million)
	(1)	(2)	(3)	(4)=(1)-(2)-(3)	(5)	(6)	(7) = Previous year's balance + (4)-(5)-(6)
2000-2001	5.3	-	-	5.3	0.3	-	5.0
2001-2002	5.0	-	0.1	4.9	0.7	-	9.1
2002-2003	244.3	0.6	17.5	226.2	23.8	-	211.6
2003-2004	265.9	12.4	3.1	250.4	48.8	-	413.1
2004-2005	364.4	19.0	2.2	343.2	83.0	-	673.3
2005-2006	275.6	12.3	7.8	255.5	85.6	-	843.2
2006-2007	257.7	8.7	5.8	243.2	83.7	0.2	1,002.5
2007-2008	303.4	11.1	5.0	287.4	91.8	0.3	1,197.8
2008-2009	308.3	8.7	7.0	292.6	85.4	-	1,404.9
2009-2010	301.2	6.1	10.9	284.3	81.1	-	1,608.2
2010-2011	335.2	6.4	18.0	310.8	92.8	-	1,826.2
2011-2012	382.8	6.9	34.9	341.0	99.3	220.9	1,847.0
2012-2013	353.4	5.9	31.4	316.1	105.0	167.6	1,890.5
2013-2014	372.9	12.5	39.0	321.3	113.0	-	2,098.8
2014-2015	357.6	6.3	39.3	312.0	120.2	218.0	2,072.6
2015-2016	346.0	2.0	40.9	303.1	118.5	131.7	2,125.9
2016-2017	350.4	2.6	73.8	274.1	114.8	136.1	2,149.1
2017-2018	340.6	-0.9	73.6	267.9	113.7	155.1	2,148.3
2018-2019	353.1	2.1	67.7	283.3	114.5	126.1	2,191.0

B.4 Repayment Assistance Plan

The Repayment Assistance Plan (RAP) was implemented in August 2009. Detailed data files by applicant are available. The data files received were found to be complete and have been used to update the assumptions for the utilization rates (both entrance and continuation) for each stage. Table 29 presents the RAP expenses split by stage as found in the MFIS as well as the totals calculated from the data files. Those expenses correspond to the portion of the monthly payments covered by the Government for all borrowers in the RAP.

Table 29 Repayment Assistance Plan

Principal Payments

Loan Year	MFIS Stage 2	MFIS PD	MFIS Total	Data Files Total
	($ million)			($ million)
2009-2010	3.3[(1)]	1.2	4.4[(1)]	2.8
2010-2011	2.9	6.1	8.9	10.2
2011-2012	6.3	11.7	18.1	17.1
2012-2013	11.1	12.9	24.0	24.3
2013-2014	16.7	15.5	32.2	32.7
2014-2015	25.5	20.2	45.7	44.1
2015-2016	33.8	23.4	57.2	56.2
2016-2017	45.8	28.9	74.7	73.3
2017-2018	59.0	31.4	90.4	90.0
2018-2019	70.1	34.5	104.5	103.9

Interest Payments

Loan Year	MFIS Stage 1	MFIS Stage 2	MFIS PD	MFIS Total	Data Files Total
	($ million)				($ million)
2009-2010	67.5	0.5[(2)]	0.7	68.7[(2)]	73.7
2010-2011	82.7	1.8	3.0	87.5	87.6
2011-2012	94.1	3.9	5.8	103.8	101.9
2012-2013	106.1	6.5	6.1	118.7	119.3
2013-2014	119.2	9.3	6.8	135.3	139.1
2014-2015	131.3	12.9	8.5	152.7	153.9
2015-2016	137.8	15.4	9.3	162.5	164.0
2016-2017	154.3	19.2	11.1	184.7	182.3
2017-2018	182.2	27.0	13.6	222.8	219.4
2018-2019	199.3	34.6	16.6	250.5	245.3

(1) Includes $2.3 million of DRR payments approved before August 2009.
(2) Includes $15.8 million of interest relief payments approved before August 2009.

Appendix C — Allowances Assumptions and Methodology

This section provides a summary of the assumptions and methodology used to determine the three allowances (Bad Debt – Principal, Bad Debt – Interest and RAP – Principal).

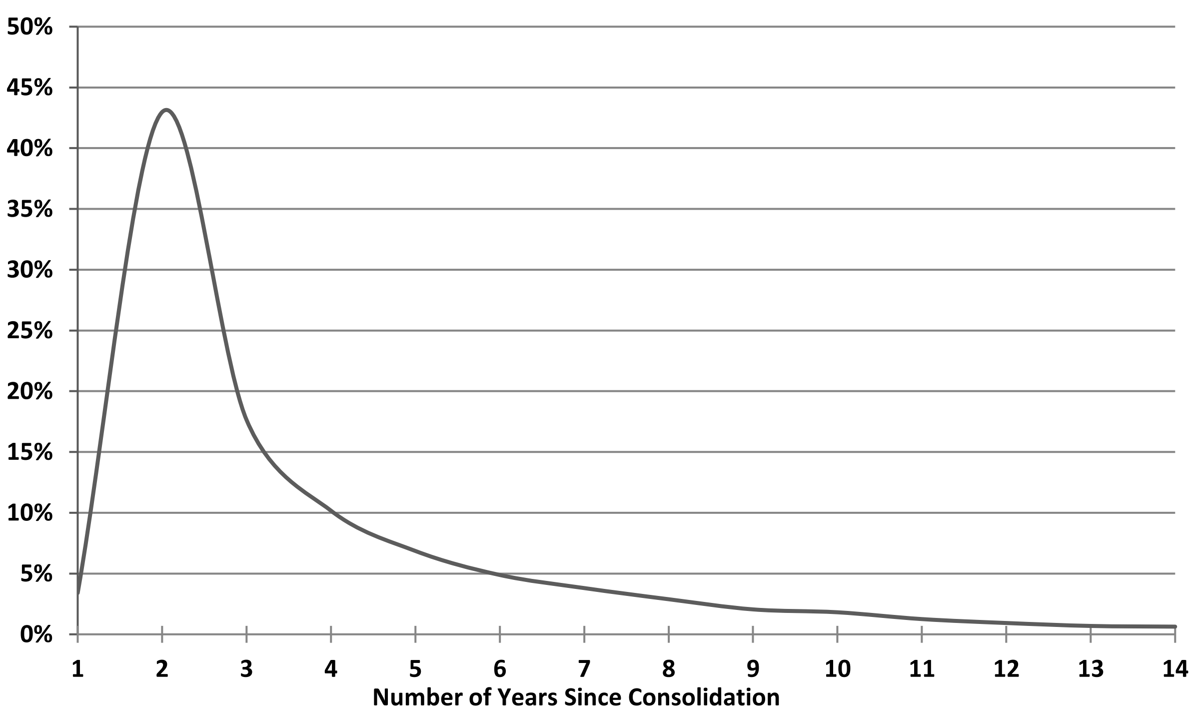
C.1 Allowance for Bad Debt – Principal

The calculation of the allowance for bad debt – principal is based on a number of assumptions, namely the gross default rate, the loans rehabilitations and recalls, the loans recoveries, and the prepayments. These assumptions are based on historical observations and the actuary's best estimates.

Gross Default Rate

A default rate is determined for each consolidation cohort. All future consolidation cohorts are assumed to have the same long-term gross default rate of 14.5% introduced in section 2.2 of the main report. This rate represents the proportion of loans consolidated in a year that are expected to default at some point before they are completely repaid. As shown in Chart 1, the largest proportion of loans goes into default within three years of consolidation. As mentioned in the main report, defaults have been increased in the short-term to reflect the impact of the COVID-19 pandemic.

Chart 1 Default Distribution



Recalls and Rehabilitations Rate

For different reasons, loans can be mistakenly transferred in default. When they are brought back in good standing, the transaction is referred to as a recall. In addition, borrowers who find themselves legitimately in default have the ability to bring their loans back in good standing by performing what is called a rehabilitation. Prior to March 2011, borrowers had to pay all outstanding interest and the equivalent of six monthly payments to rehabilitate their loan. In March 2011, the number of required monthly payments was reduced to two. This change in rehabilitation criteria is part of the measures or incentives that were taken to encourage loan rehabilitation. This is further strengthened since January 2020, when borrowers also have the option to meet the rehabilitation criteria by making two monthly payments and capitalizing the remaining interest on their loan.

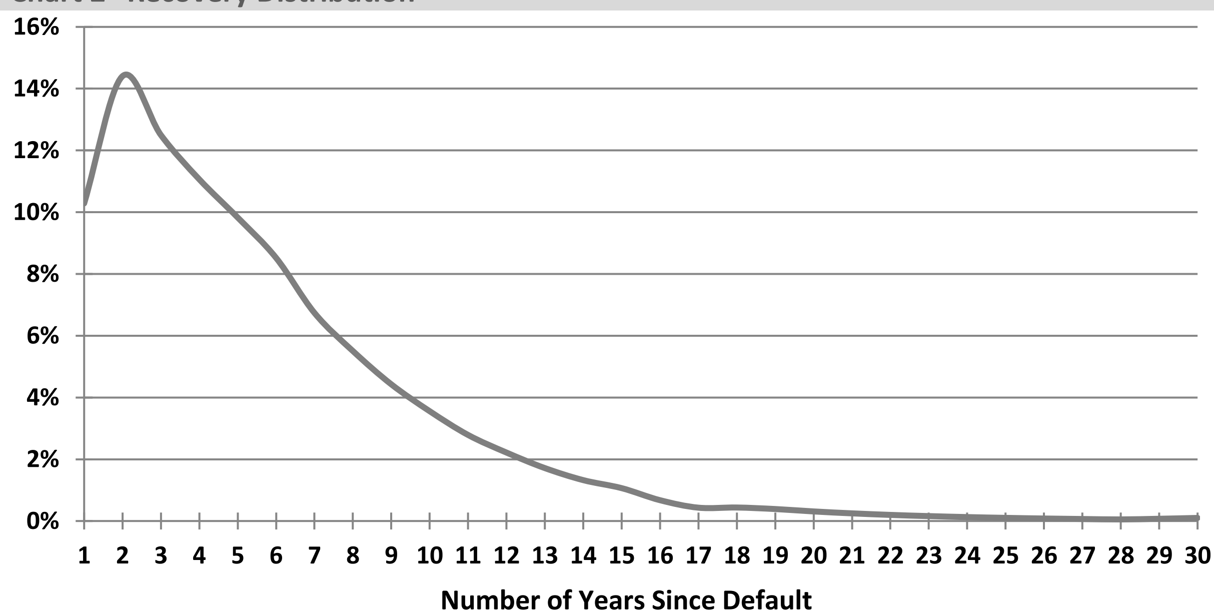
Another incentive for borrowers to rehabilitate their loans came with the introduction of the RAP in loan year 2009-2010, since to be eligible for the RAP, borrowers first needed to have a loan in good standing. Finally, ESDC has recently been working closely with CRA to promote rehabilitation to borrowers in default. All of these actions have contributed to an increase in loan rehabilitations.

As introduced in section 2.2 of the main report, the long-term recalls and rehabilitations rate were increased from 11.3% of gross defaults in the previous report to 11.9%.

Recovery Rate

Recoveries represent monies the CSLP is able to recuperate after loans have defaulted. CRA is responsible for collecting this money on behalf of the CSLP. Recoveries are analysed based on the default year after consolidation. As introduced in section 2.2, the long-term recovery rate for a default cohort is assumed to be 32.8%. Chart 2 shows the recovery distribution once a loan is transferred in default. Most recoveries are received in the first five years after default. As stated in the main report, recoveries for loan year 2019-2020 and 2020-2021 are reduced in the short-term to reflect the impact of the COVID-19 measures.

Chart 2 Recovery Distribution



Net Default Rate

The net default rate represents the proportion of consolidated loans that will eventually be written off for each future consolidation cohort. The long-term net default rate corresponds to:

Gross Default Rate x (1 – Recalls and Rehabilitation Rate – Recovery Rate) =
14.5% x (1 – 11.9% – 32.8%) = 8.0%

Bad Debt Provision - Principal

The allowance for bad debt – principal is based on a prospective approach that uses a snapshot of the portfolio at a specific 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).

- *Allowance for loans in study*

This allowance corresponds to the net default rate adjusted to account for prepayments (payments received from students prior to consolidation). Based on experience, prepayments amount to approximately 15.0%. This results in a provision rate for loans in study for the 2019-2020 loan year of:

[(Net Default Rate) x (1 – Prepayments)] = [(8.0%) x (1 – 15.0%)] = 6.8%

The long term provision rate for loans in-study (calculated with ultimate assumptions) is also equal to 6.8%.

- *Allowance for loans in repayment*

This allowance is determined using projected future defaults according to the number of years since consolidation. The recovery rate assumption is then applied to determine the portion of projected defaulted loans that will not be recovered. This result corresponds to the allowance on the balance of loans in repayment. As mentioned previously, the long-term recovery rate for each gross default cohort is expected to be 32.8%; hence, it is assumed that 67.2% (1 – 32.8%) of the projected gross defaulted loans will not be recovered. This results in a provision rate on outstanding loans in repayment of 4.6% for the 2019-2020 loan year and 4.0% in the long-term. The spread between the current and long-term assumption is mostly due to the six-month repayment pause measure, which delayed a significant part of expected defaults in loan year 2019-2020 to the loan year 2020-2021, and the expected increase in defaults in the short-term due to the economic slowdown. The provision rate of 4.0% for loans in repayment is lower than the provision rate of 6.8% for loans in-study since the portfolio in repayment includes cohorts of loans for which some defaults and partial reimbursements have already occurred, resulting in a lower inherent risk of loss for the remaining loans.

- *Allowance for loans in default*

The last allowance component is the one on the balance of loans in default that will not be recovered. For loan year 2019-2020, this resulting provision rate corresponds to 77.5%, while the long-term rate is 76.2%. This rate is higher than the non-recovery rate of 67.2% (1 – 32.8%) since the portfolio in default includes cohorts of loans that have been transferred in default for a certain number of years and for which some recoveries have already occurred. Thus, the remaining loans have aged and have an increased risk of loss.

The provision rates used for the projected allowance as at 31 July 2020 shown in this report are:

- 6.8% for loans in-study;
- 4.6% for loans in repayment;
- 77.5% for loans in default

The ultimate provision rates used in this report are:

- 6.8% for loans in-study;
- 4.0% for loans in repayment;
- 76.2% for loans in default

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.

C.2 Allowance for Bad Debt - 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 projection purposes, a loan becomes “non-recoverable” according to a 30-year distribution and is then gradually written off.

The interest accrued on defaulted loans is considered a revenue until the loan reaches the “non-recoverable” status. To lessen the effect of changing this revenue to a loss, an allowance is created based on the outstanding interest at the end of each year. The methodology involves the calculation of:

- Accrued interest on defaulted loans in each loan year
- Projected outstanding interest at the end of each loan year based on non-recoverable and recovery rates, applied to outstanding interest at the beginning of the year
- Projected allowance at the end of each year (obtained by adding the products of outstanding interest accounts with the corresponding provision rate for each year since default.)

The annual expense for bad debt – interest in a year is equal to the difference between the total allowance (on recoverable and non-recoverable accounts) 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. A set of provision rates that vary according to the number of years since default was established for the projection. The provision rate is 29.5% of interest accrued in the first year after loans are transferred into default. It increases in each of the five subsequent years before decreasing in the seventh and eighth years (when a large portion of interest is transferred to the “non-recoverable” status because of the six-year limitation period – statute of limitations). After that, the provision rates increase each year to reach 100% in the 20th year. This reflects the increasing difficulty of recovering defaults as time passes. Table 30 shows the provision rates for bad-debt –

interest, which remain constant throughout the projection period.

Table 30 Provision Rates for Bad Debt – Interest(1)

Year Since Default	Provision Rates (%)
1st	29.5
2nd	38.8
3rd	47.7
4th	57.7
5th	68.2
6th	78.2
7th	77.8
8th	68.9
9th	71.4
10th	73.0
11th	74.8
12th	76.4
13th	78.0
14th	80.2
15th	83.4
16th	87.6
17th	91.6
18th	95.2
19th	98.2
20th+	100.0

(1) As required by ESDC's Chief Financial Officer Branch, provision rates shown in Table 30 are now applied on total interest. Provision rates presented in previous reports were applied on recoverable interest only (and a rate of 100% was applied on non-recoverable interest).

C.3 Allowance for the Repayment Assistance Plan (RAP)

As explained in Appendix A, the two stages of RAP are aimed to help student borrowers, who apply and meet the eligibility criteria, to fully repay their student loan within fifteen years (or ten years for borrowers with permanent disabilities). During Stage 1, the Government covers the monthly interest amount owed that the borrower's affordable payment does not cover. Stage 2 begins once the borrower has completed five years in 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, but also begins to cover a portion of the student loan's principal amount (i.e. the difference between the required and affordable payment). Borrowers with a permanent disability can elect to apply for either RAP Stage 2 or RAP-PD, on approval of their RAP-PD application.

The methodology used to calculate the allowance for the RAP consists of evaluating the dollar proportion of consolidated loans expected to enter each stage, and then remain there, during each year after consolidation. The assumptions are based on the analysis of the historical data available for each cohort of consolidation.

As mentioned in the main report, RAP expenses for all stages are expected to increase as a result of the COVID-19 pandemic.

RAP – Stage 1

Table 31 shows the long-term utilization rate assumptions used for RAP–Stage 1. These rates are applied to the consolidated loans amounts for cohorts 2019-2020 onwards. Many borrowers complete their RAP–Stage 1 over a period longer than five years, hence the utilization rates do not always include the same borrowers from year to year, and some borrowers may be in the program for only part of a year. The model takes all of this into account by incorporating the average time spent in RAP–Stage 1 in a loan year.

The first year in RAP–Stage 1 (first row of Table 31) generally consists of a partial loan year since most borrowers do not enter the RAP on August 1st. However, if borrowers remain in the RAP for a greater amount of time in the second year, then the utilization rate can be higher than the preceding year.

Table 31 RAP-Stage 1 Utilization Rates

RAP1 Loan Year	Start Year after Consolidation 1	2	3	4	5	6	7
1	27.0%	2.8%	0.8%	0.4%	0.2%	0.1%	0.1%
2	30.1%	2.3%	0.7%	0.4%	0.2%	0.1%	0.1%
3	19.8%	1.5%	0.4%	0.2%	0.1%	0.1%	0.0%
4	15.1%	1.1%	0.3%	0.2%	0.1%	0.1%	0.0%
5	12.0%	0.8%	0.3%	0.1%	0.1%	0.0%	0.0%
6	6.4%	0.4%	0.1%	0.1%	0.0%	0.0%	
7	1.7%	0.2%	0.1%	0.0%	0.0%		
8	0.9%	0.1%	0.0%	0.0%			
9	0.5%	0.1%	0.0%				
10	0.3%	0.0%					
11	0.1%						

RAP –Stage 2

The methodology used to calculate the amount of dollars in RAP–Stage 2 assumes that as borrowers become eligible for RAP–Stage 2 (five years after entering RAP–Stage 1), they immediately enter RAP–Stage 2. This means that a borrower could enter RAP–Stage 2 from the 6th year after consolidation until the 11th year after consolidation.

Table 32 shows the resulting long-term utilization rate assumptions used for RAP–Stage 2.

Table 32 RAP-Stage 2 Utilization Rates

RAP2 Loan Year	Start Year after Consolidation 6	7	8	9	10	11
6	3.4%	1.0%	0.3%	0.2%	0.2%	0.2%
7	5.1%	1.1%	0.4%	0.2%	0.2%	0.2%
8	3.9%	0.8%	0.3%	0.1%	0.1%	0.1%
9	3.0%	0.6%	0.2%	0.1%	0.1%	0.0%
10	2.3%	0.4%	0.1%	0.1%	0.0%	0.0%
11	1.7%	0.3%	0.1%	0.0%	0.0%	
12	1.2%	0.2%	0.1%	0.0%		
13	0.8%	0.1%	0.0%			
14	0.5%	0.0%				
15	0.2%					

RAP –PD

RAP–PD is available for borrowers with a permanent disability. A borrower who had a RAP–PD application approved is eligible to start in the RAP–PD as soon as his loan consolidates and can remain in the plan for a period of 9.5 years, when the loan is expected to have been repaid in full.

Table 33 shows the long-term utilization rate assumptions used for RAP–PD.

Table 33 RAP-PD Utilization Rates

RAP-PD Loan Year	Start Year after Consolidation 1	2	3	4	5	6	7
1	2.05%	0.17%	0.06%	0.03%	0.02%	0.02%	0.01%
2	2.24%	0.14%	0.06%	0.04%	0.03%	0.02%	0.01%
3	1.42%	0.09%	0.04%	0.02%	0.02%	0.01%	0.01%
4	1.03%	0.06%	0.03%	0.02%	0.01%	0.01%	0.00%
5	0.75%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%
6	0.55%	0.03%	0.01%	0.01%	0.00%	0.00%	
7	0.40%	0.02%	0.01%	0.00%	0.00%		
8	0.26%	0.01%	0.00%	0.00%			
9	0.15%	0.01%	0.00%				
10	0.06%	0.00%					
11	0.00%						

Provisions for RAP–Principal (Stage 2 and PD)

The RAP – principal provision covers future costs related to RAP-Stage 2 and RAP-PD, which corresponds to the portion of the loan principal paid off by the Government.

As with the provision for bad debt – principal, the methodology to determine the provision rates and allowance for the RAP – 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 (excluding loans in the RAP) or in the RAP (considering the current stage). The provision rates are based on current and long-term RAP utilization rates at each stage. Three distinct provision rates, depending on the status of the loan at a given time, will be used to determine the required allowance

The 2019-2020 provision rates used for the results of this report are:

- 5.3% for loans in-study
- 1.4% for loans in repayment (net of loans in the RAP), and
- 27.8% for loans in the RAP (all stages combined).

The ultimate provision rates used in this report are:

- 5.2% for loans in-study
- 1.3% for loans in repayment (net of loans in the RAP), and
- 27.2% for loans in the RAP (all stages combined).

The lowest provision rate is for the portfolio of loans in repayment. This portfolio includes cohorts of loans for which partial reimbursements have already occurred, as well as some defaults and utilization of the RAP, resulting in a lower risk for the remaining loans, and consequently a lower required provision rate than the one for loans in study.

The highest provision rate is for the portfolio of loans already in the RAP. Having already entered the program by meeting the eligibility criteria, there is a greater chance that these loans will remain eligible and consequently remain in the program.

The annual expense for the RAP – principal provision 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 the current year's expenses.

The RAP is a program that was introduced in 2009 and thus, has limited experience. Since students using RAP – Stage 2 repay their loan over a period of 15 years after consolidation, it takes 15 years for a cohort to fully develop its experience. Hence, the first cohort to have full experience will be the 2009 consolidation cohort when it reaches year 2024. The related projection of costs and underlying assumptions will be revised in the future as experience emerges, and the provision rates will be updated accordingly. As with the former Interest Relief measure, a modest provision for the RAP – interest is determined by ESDC for accounting purposes to take into account the timing of the interest accrued.

Appendix D — Concessionary Terms

Section PS3050 (Loans Receivable) of the Public Sector Accounting Standards of the Chartered Professional Accountants Canada states that loans with significant concessionary terms should be accounted for based on the substance of the transaction. The Directive on Accounting Standards (GC 3050 Loans Receivable) in effect at the valuation date specifies that only loans with a concessionary portion greater than 25 per cent of the face value of the loan shall be considered as having significant concessionary terms.

The following items were used to calculate the concessionary terms on new loans issued:

- Discount rate of 0.86%, which is the yield equivalent to a zero-coupon yield curve (determined by reference to market yields as at 31 March 2020 on Government of Canada Bonds and treasury bills) applied to expected cash flows. The higher the discount rate, the more likely it is to have significant concessionary terms;
- Student interest rates presented in Table 3 during the repayment period. Interests start to accrue 6 months after the end of the study period. The student interest rate is higher than the discount rate and is expected to remain higher in the future. The lower the student interest rate, the more likely it is to have significant concessionary terms; and
- Expected repayment cash flows based on historical experience and expected long-term assumptions.

As mentioned in Appendix A of this report, Canada Student Loans are currently not considered as having significant concessionary terms according to the Directive on Accounting Standards.

Appendix E — Acknowledgements

We would like to thank the staff of the Canada Student Loans Directorate of Employment and Social 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.

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