

Office of the Chief Actuary

Bureau du surintendant des institutions financières Canada

Bureau de l'actuaire en chef

# Actuarial Report CSFA

CANADA STUDENT FINANCIAL **ASSISTANCE PROGRAM** as at 31 July 2022



# Office of the Chief Actuary

Office of the Superintendent of Financial Institutions Canada 12<sup>th</sup> Floor, Kent Square Building 255 Albert Street Ottawa, Ontario K1A 0H2

E-mail: oca-bac@osfi-bsif.gc.ca Web site: www.osfi-bsif.gc.ca

© His Majesty the King in Right of Canada, 2023 Cat. No. IN3-16/27E-PDF ISSN 2564-1026

### 23 June 2023

Jonathan Wallace
Director General, Canada Student Financial Assistance Program
Employment and Social Development Canada
200 Montcalm Street
Montcalm Building, Tower 2 - 1st Floor
Gatineau, QC
K1A 0J9

Dear Jonathan Wallace:

As per the business plan for 2023-2024 to 2025-2026, I am pleased to submit the Actuarial Report on the Canada Student Financial Assistance Program, prepared as at 31 July 2022. This report is prepared for the CSFA Program to support internal accounting requirements as well as your partners' needs between statutory reports.

Yours sincerely,

Laurence Frappier, FCIA, FSA

June P.

Managing Director

Office of the Chief Actuary

# **TABLE OF CONTENTS**

				Page
1	High	olights o	of the report	1
2	Intro	oductio	n	2
	2.1	Purpo	se	2
	2.2	Scope	2	2
	2.3	Recer	nt Program Changes	3
3			mptions	
4				
	Δ 1	Total	New Grants and Loans	6
	1	4.1.1	Population	
		4.1.2	Post-Secondary Enrolment	
		4.1.3	Students Receiving a Loan or a Grant	
		4.1.4	Average Loan Size	
	4.2	Portfo	olios	12
		4.2.1	Direct Loan Regime	
		4.2.2	Defaulted Loans Portfolio – Principal	14
		4.2.3	Defaulted Loans Portfolio – Interest	15
		4.2.4	Guaranteed and Risk-Shared Regimes	16
		4.2.5	Limit on the Aggregate Amount of Outstanding Loans	16
	4.3	Allow	ances	17
		4.3.1	Allowance for the Repayment Assistance Plan	18
		4.3.2	Allowance for Bad Debt – Principal	19
		4.3.3	Allowance for Bad Debt – Interest	20
	4.4	Total	Expenses	21
		4.4.1	Student Related Expenses	22
		4.4.2	Government Liabilities on Outstanding Loans	23
		4.4.3	Other Expenses	23
	4.5	Total	Revenues	24
	4.6	Total	Net Cost	25
5	Actu	ıarial O	pinion	26
			Summary of Program Provisions	
Ар	pend	ix B —	Data	34
Ар	pend	ix C —	Assumptions and Methodology	38
Ар	pend	ix D —	New Loans and Grants by Institution Type	57
Ар	pend	ix E —	Concessionary Terms	
Ар	pend	ix F —	Acknowledgements	61

## INDEX OF TABLES AND CHARTS

Table T	Demographic Assumptions	5
Table 2	Economic Assumptions	5
Table 3	Prepayments and Net Default Rate Assumptions	5
Table 4	Provision Rates	
Table 5	New Grants Issued	. 7
Table 6	New Loans Issued	. 8
Table 7	Population and Post-secondary Enrolment of Participating Provinces	9
Table 8	Loan and/or Grant Recipients	10
Table 9	Student Need (in dollars)	11
	Average Loan Size	
Table 11	Direct Loan Portfolio (in millions of dollars)	13
	Defaulted Loans (in millions of dollars)	
Table 13	Interest on Defaulted Loans (in millions of dollars)	15
Table 14	Guaranteed and Risk-Shared Regimes Portfolio (in millions of dollars)	16
Table 15	Estimated Peak of Aggregate Amount of Outstanding Loans (in millions of dollars)	17
Table 16	Allowance for Repayment Assistance Plan – Principal (in millions of dollars)	18
Table 17	Allowance for Bad Debt – Principal (in millions of dollars)	19
Table 18	Allowance for Bad Debt – Interest (in millions of dollars)	20
Table 19	Summary of Expenses (in millions of dollars)	21
Table 20	Student Related Expenses (in millions of dollars)	22
Table 21	Government Liabilities on Outstanding Loans (in millions of dollars)	23
	Total Revenues (in millions of dollars)	
Table 23	Net Annual Cost of the Program (in millions of dollars)	25
Table 24	Direct Loans Issued (in millions of dollars) and Number of Students	34
Table 25	Direct Loans Consolidated (in millions of dollars)	35
Table 26	Direct Loans Default Portfolio - Principal (in millions of dollars)	36
Table 27	Repayment Assistance Plan - Principal Payments (in millions of dollars)	36
Table 28	Repayment Assistance Plan - Interest Payments (in millions of dollars)	37
	Demographic Assumptions	
	Labour Force Assumptions (in percentage)	
Table 31	Full-time Post-Secondary Enrolment Rate by Labour Force Status (in percentage)	40
	Inflation Assumption (in percentage)	
Table 33	Real Wage Increase Assumption (in percentage)	41
	Borrowing Cost (in percentage)	
Table 35	Short-term Increase of Tuition Expenses (in percentage)	42
	Tuition Increase Assumption (in percentage)	
	Adjustments to Normal Payments	
Table 38	Administrative Expense (in millions of dollars)	47
	RAP-Stage 1 Utilization Rates	
	RAP-Stage 2 Utilization Rates	
Table 41	RAP-D Utilization Rates	50
Table 42	Other RAP Assumptions	50

Table 43	3 Short-Term Adjustments to the Default Assumptions	54
Table 44	Provision Rates for Bad Debt – Interest <sup>(1)</sup>	56
Table 45	Number of Students Receiving a Grant by Institution Type (in thousands)	57
Table 46	Grants Disbursed by Institution Type (in millions of dollars)	58
Table 47	7 Number of Students Receiving a Loan by Institution Type (in thousands)	58
Table 48	B Loans Issued by Institution Type (in millions of dollars)	59
Chart 1	Formula for Grants Issued	6
	Formula for Loans Issued	
Chart 3	Evolution of CSFA Loans Issued Through the Program	38
Chart 4	Distribution of Consolidation Amounts over 15 Years	41
Chart 5	Normal Payments over 16 Years	45
	Write-Off Distribution over 30 Years	
	Default Distribution over 14 Years	
Chart 8	Recalls and Rehabilitations Distribution over 14 Years	53
Chart 9	Recovery Distribution over 30 Years	54

# 1 Highlights of the report

Main	Main Findings Canada Student Financial Assistance Program				
		Current Report	Previous Report		
Grants Issued	Disbursement in 2022-2023	\$3,408M	\$3,386M		
Grants issued	End of the Projection Period <sup>1</sup>	\$1,793M	\$1,972M		
Loans Issued	Disbursement in 2022-2023	\$3,015M	\$2,872M		
Louis issued	End of the Projection Period	\$5,478M	\$5,600M		
	Balance as at 31 July 2023	\$23.2B	\$22.5B		
Direct Loan Portfolio	Balance as at the End of the Projection Period	\$37.1B	\$39.0B		
	Loan Year in Which the Limit of \$34B is Expected to be Reached	2034-2035	2035-2036		
Repayment Assistance Plan	Allowance – Principal as at 31 July 2023	\$2,075M	\$2,334M		
Defaults (Bad Debt)	Long-term Net Default Rate Allowance – Principal as at 31 July 2023 Allowance – Interest as at 31 July 2023	6.9% \$2,659M \$129M	8.1% \$3,074M \$171M		
Net Cost	In 2022-2023 End of the Projection Period Proportion of Grants in 2022-2023	\$4.8B \$5.1B 70%	\$5.6B \$4.8B 60%		
Allowances for Public Accounts	RAP – Principal Default – Principal Default – Interest	31 March 2023 \$2,007M \$2,652M \$139M	31 March 2022 \$1,768M \$3,037M \$209M		

Glossary	
Allowance	The amount that is set aside in the expectation of a cost that will be incurred at a future date. In this report, there is an allowance to cover the future cost of students benefiting from the RAP, and two allowances (principal and interest) to cover the risk of future default. Each allowance is determined as at 31 July.
Allowance for Public Accounts	Allowance based on the program's conditions as at 31 March.
Provision rates	Allowance divided by the related outstanding portfolio.

 $<sup>^{1}</sup>$  The end of the projection period for the current report is the loan year 2046-2047 and the loan year 2045-2046 for the previous report.

#### Introduction 2

Since 1 August 2000, the Canada Student Financial Assistance Program (CSFA Program) is directly financed by the Government and the Office of the Chief Actuary has the mandate to conduct an actuarial review of the program.

#### 2.1 **Purpose**

Section 19.1 of the Canada Student Financial Assistance Act defines the mandate given to the Chief Actuary, that is, to 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 2020 and tabled before Parliament on 7 December 2021. The next triennial statutory report will be prepared as at 31 July 2023 and is scheduled to be tabled before Parliament in 2024.

This actuarial report, prepared as at 31 July 2022, is provided to support Employment and Social Development Canada (ESDC) accounting and policy analysis requirements. It also supports ESDC's partners, the Office of the Auditor General, the Treasury Board Secretariat and the Department of Finance.

#### 2.2 Scope

The report includes a forecast of the CSFA Program's costs and revenues for 25 years (through the loan year 2046-2047), and shows estimates of:

- the number of students receiving grants or loans under the CSFA Program;
- the amount of new grants or 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.

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

Appendices B and C provide information on data, assumptions and methodologies. Appendix D illustrates the new loans and grants issued by institution type and Appendix E offers information on concessionary terms.

#### 2.3 **Recent Program Changes**

This section summarizes recent changes that were implemented in the loan year ending 31 July 2022 or will be implemented in future years. Unless stated otherwise, these measures have been reflected in the projections presented in this report.

Permanent Changes				
Implementation Date	Implementation Date Description			
1 August 2021	Flexibility to use current year's income instead of previous year's income to determine eligibility for Canada Student Grants (part of a three-year pilot project introduced in 2018-2019 made permanent).	Budget 2021 / Approved		
1 August 2022	Expand access to supports for students and borrowers with persistent or prolonged disabilities that are not necessarily permanent.	Budget 2021 / Approved		
1 November 2022	Increase accessibility to the RAP by increasing RAP income thresholds and reducing the maximum affordable payment.	Budget 2021 / Approved		
1 April 2023	Permanently eliminating interest on Canada Student Loans.	2022 Fall Economic Statement / Approved		
2023-2024 (expected)	Increase by 50% the maximum amount of loans that can be forgiven for doctors and qualifying nurses working in underserved rural or remote communities.	Budget 2022 / Pending Regulatory Approval		
2024-2025 (expected)	Expand the reach of the Canada Student Loan forgiveness for doctors and qualifying nurses to more rural communities.	Budget 2023 / Pending Regulatory Approval		
To be determined	Expand the list of professionals eligible for loan forgiveness while working in under-served rural or remote communities.	Budget 2022 / Not considered in this report as details are not finalized		

Temporary Changes				
Start/End Date	Description	Source		
1 April 2021 to 31 March 2022	Waiver of interest accrual on student loans.	Bill C-14 / Approved		
1 August 2021 to 31 July 2023	Double the amount for the following Canada Student Grants (CSGs):  - grant for full-time students (CSG-FT)  - grant for part-time students (CSG-PT)  - grant for students with permanent disabilities (CSG-PD)  - grant for full-time students with dependants (CSG-FTDEP)  - grant for part-time students with dependants (CSG-PTDEP)  Extend the top-up grant of \$200 per month for eligible adult learners returning to school full-time after being out of secondary school for at least 10 years (extension of the three-year pilot project introduced in the loan year 2018-2019).	Budget 2021 / Approved		
1 April 2022 to 31 March 2023	Extend the waiver of interest accrual on student loans.	Budget 2021 / Approved		
1 August 2023 to 31 July 2024 (expected)	40% increase (compared with the loan year 2019-2020) to the amount for the following CSGs: - grant for full-time students (CSG-FT) - grant for part-time students (CSG-PT) - grant for students with disabilities (CSG-D) - grant for full-time students with dependants (CSG-FTDEP) - grant for part-time students with dependants (CSG-PTDEP) Increase the weekly student loan limit, from \$210 to \$300.  Waiving the requirement for mature students, aged 22 years or older, to undergo credit screening in order to qualify for federal student grants and loans for the first time.	Budget 2023 / Pending Regulatory Approval		

#### 3 **Main Assumptions**

Several assumptions are needed to determine the future long-term costs of the CSFA Program. All assumptions used in this report are best-estimate assumptions and do not include any margin for adverse deviations. Assumptions used in the previous report were revised to incorporate new experience.

Table 1, Table 2 and Table 3 show a summary of the main assumptions used in this report for the loan year following the report's valuation date and the last loan year of the projection period, compared with those used in the previous report. A complete description of the assumptions is provided in Appendix C.

Table 1 Demographic Assumptions						
Current Report Previous Report						
	2022-2023	2046-2047	2021-2022	2045-2046		
Base Population	CPP31st	CPP31st	CPP30th	CPP30th		
Enrolment Rate (15 to 64)	6.6%	6.9%	6.8%	6.9%		
Loan Uptake Rate	43.7%	50.0%	42.3%	52.2%		

Table 2 Economic Assumptions						
	Current Report		Previous Report			
	2022-2023 2046-2047		2021-2022	2045-2046		
Inflation	5.6%	2.0%	4.6%	2.0%		
Real Wage Increase	-1.1%	0.9%	0.7%	1.0%		
Cost of Borrowing (Government)	3.0%	3.7%	2.1%	3.7%		
Cost of Borrowing (Students)	0.0%	0.0%	0.0%	4.3%		
Tuition Increase	3.5%	3.8%	1.9%	3.8%		

Table 3 Prepayments and Net Default Rate Assumptions						
Current Report Previous Report						
	2022-2023 2046-2047		2021-2022	2045-2046		
Prepayments	12.5%	15.0%	15.0%	17.5%		
Net Default Rate <sup>(1)</sup>	6.7%	6.9%	7.9%	8.1%		

<sup>(1)</sup> Expected net default rate for all future loan years for the consolidation cohort year shown in the table.

Table 4 shows a summary of the provision rates as at July 31st of the year following the report's valuation date and the ultimate provision rates used in this report compared with those used in the previous report. A complete description of the provision rates is provided in Appendix C. Also, the provision rates as at 31 July 2023 are used to determine the allowance for Public Accounts, as shown in section 4.3.

	Current R	eport	Previous F	Previous Report		
	As at 31 July 2023	Ultimate	As at 31 July 2022	Ultimate		
RAP - Principal						
In-Study	6.9%	6.7%	7.2%	7.2%		
In Repayment (net of RAP)	1.9%	2.3%	1.8%	2.0%		
In RAP (all stages combined)	36.2%	29.5%	45.3% <sup>(1)</sup>	32.5%		
Bad Debt – Principal						
n-Study	5.9%	5.9%	6.7%	6.7%		
n Repayment	3.5%	4.2%	4.8%	4.7%		
In Default	69.5%	68.4%	77.0%	78.1%		
Bad Debt – Interest						
In Default	60.3%	N/A	72.3%	70.1%		

<sup>(1)</sup> The higher allowance rate was mostly due to the lower number of RAP users in the loan year and was expected to be temporary.

#### 4 **Projections**

This section presents projections of the various CSFA Program's components required to determine the forecasts of the total net cost. First, the total amount of new loans and grants issued are projected. Then, the portfolios for the three types of regimes (guaranteed, risk-shared and direct loan regimes) are projected and the sub-portfolios for the direct loan regime are used to determine the projection of allowances under the same regime. Finally, total expenses and total revenues are projected separately to determine the resulting total net costs. All steps involved in these forecasts are shown in this section.

#### 4.1 **Total New Grants and Loans**

The projection of the total amount of new grants issued under the CSFA Program depends on many factors as illustrated by the following formula:

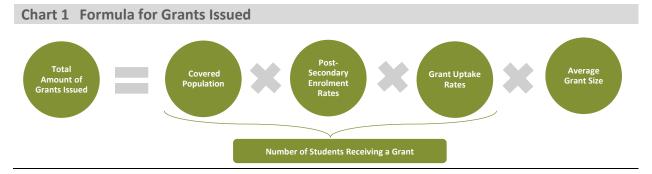


Table 5 presents the projection of new grants issued. This projection of the amount of new grants issued, along with the associated projection of students, is broken down by institution type in Appendix D.

Table 5 New G	rants Issued					
Loan Year	Covered Population (15 to 64) (thousands) (1)	Enrolment Rates (%) (2)	Grant Uptake Rate (%) (3)	Students in CSFA Receiving a Grant (thousands) (4) = (1) * (2) * (3)	Average Grant (\$) (5)	New Grants Issued (\$ millions) (4) * (5)
2021-2022	18,621	6.8	42.7	544	5,985	3,256
2022-2023 2023-2024 2024-2025 2025-2026	18,796 18,981 19,141 19,274	6.6 6.7 6.8 6.9	44.4 44.6 45.0 45.0	549 567 587 601	6,202 4,194 2,995 3,002	3,408 2,377 1,758 1,805
2026-2027	19,379	6.9	44.6	601	3,006	1,806
2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036	19,480 19,565 19,644 19,731 19,834 19,957 20,079 20,195	7.0 7.0 7.0 7.0 7.0 7.0 6.9 6.9 6.8	44.2 43.8 43.4 43.0 42.6 42.1 41.6 41.1 40.5	601 600 597 595 591 586 578 571	3,010 3,019 3,025 3,033 3,044 3,058 3,079 3,101	1,809 1,810 1,807 1,803 1,798 1,791 1,781 1,769
2036-2037	20,303 20,405	6.8	39.9	554	3,125 3,153	1,756 1,747
2037-2038 2038-2039 2039-2040 2040-2041 2041-2042	20,545 20,700 20,863 21,027 21,195	6.8 6.8 6.8 6.8 6.7	39.4 39.0 38.6 38.2 37.8	550 547 545 543 540	3,174 3,186 3,197 3,210 3,223	1,744 1,743 1,742 1,741 1,741
2042-2043 2043-2044 2044-2045 2045-2046 2046-2047	21,369 21,545 21,715 21,876 22,026	6.7 6.8 6.8 6.8 6.9	37.4 37.0 36.6 36.3 35.9	539 540 541 543 546	3,239 3,251 3,262 3,272 3,282	1,746 1,755 1,766 1,778 1,793

The average grant amount is higher over the first three loan years due to the temporary increase in the maximum amount of grants. The number of borrowers receiving a grant is expected to decrease slightly over the projection period as less students become eligible, as described in Appendix C.

The following formula is used for the projection of the total amount of new loans issued under the CSFA Program:

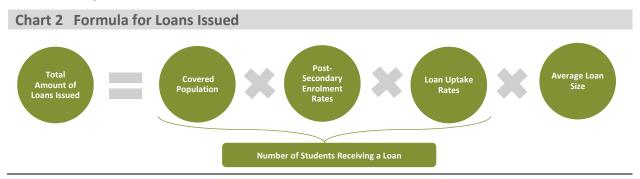


Table 6 presents the projection of new loans issued. This projection of the amount of new loans issued, along with the associated projection of students, is broken down by institution type in Appendix D.

Table 6 Nev	w Loans Issued					
Loan Year	Covered Population (15 to 64) (thousands)	Enrolment Rates (%)	Loan Uptake Rate (%)	Students in CSFA Receiving a Loan (thousands)	Average Loan (\$)	New Loans Issued (\$ millions)
	(1)	(2)	(3)	(4) = (1) * (2) * (3)	(5)	(4) * (5)
2021-2022	18,621	6.8	43.8	558	5,266	2,940
2022-2023 2023-2024	18,796 18,981	6.6 6.7	43.7 46.8	541 595	5,576 7,289	3,015 4,334
2024-2025	19,141	6.8	50.0	652	6,312	4,119
2025-2026	19,274	6.9	50.3	671	6,419	4,308
2026-2027	19,379	6.9	50.2	675	6,517	4,403
2027-2028	19,480	7.0	50.1	681	6,610	4,501
2028-2029	19,565	7.0	50.0	686	6,679	4,579
2029-2030	19,644	7.0	50.0	689	6,741	4,643
2030-2031	19,731	7.0	50.0	691	6,798	4,700
2031-2032	19,834	7.0	50.0	694	6,850	4,751
2032-2033	19,957	7.0	50.0	695	6,894	4,794
2033-2034	20,079	6.9	50.0	696	6,933	4,824
2034-2035	20,195	6.9	50.1	695	6,969	4,847
2035-2036	20,303	6.8	50.1	695	7,002	4,864
2036-2037	20,405	6.8	50.1	696	7,032	4,891
2037-2038	20,545	6.8	50.1	699	7,059	4,932
2038-2039	20,700	6.8	50.1	702	7,083	4,976
2039-2040	20,863	6.8	50.1	707	7,105	5,020
2040-2041	21,027	6.8	50.1	711	7,124	5,065
2041-2042	21,195	6.7	50.1	715	7,142	5,110
2042-2043	21,369	6.7	50.1	722	7,157	5,169
2043-2044	21,545	6.8	50.1	730	7,170	5,236
2044-2045	21,715	6.8	50.1	740	7,181	5,311
2045-2046	21,876	6.8	50.1	750	7,191	5,391
2046-2047	22,026	6.9	50.0	761	7,200	5,478

Overall, the total new loans issued is expected to increase from \$2,940 million in 2021-2022 to \$3,015 million in 2022-2023. In 2046-2047, projected new loans issued total \$5,478 million, which corresponds to an average annual increase of  $2.5\%^1$ . This average annual increase can be attributed to two factors: an average annual increase in the number of students in the program of 1.2% and an average annual increase in the average loan size of 1.3% over the projection period.

#### 4.1.1 Population

Any eligible student enrolled in a designated post-secondary institution (excluding students from Quebec, Nunavut and the Northwest Territories) can apply for a loan under the CSFA program. Students aged 15-29 represent the largest segment of the student population and are used for illustrative purposes thereafter. As shown in Table 7, the population aged 15-29 is expected to increase from 5,012,000 in 2021-2022 to 5,934,000 in 2046-2047, or 0.7% per year.

The average annual increase in new loans issued post temporary measures, that is, from the loan year 2024-2025 to the loan year 2046-2047, is 1.3%.

#### 4.1.2 **Post-Secondary Enrolment**

Table 7 shows the evolution of the number of eligible students (age group 15-29, age group 30-64 and total) enrolled full-time in a post-secondary institution for the covered population

Table 7 Pop	ulation and Pos	t-secondary Enr	olment of Partici	pating Provinces		
La con Marco	Covered Population (15-29)	Covered Population (30-64)	Students Enrolled Full- Time (15-29)	Students Enrolled Full- Time (30-64)	Students Enrolled Full- Time (Total)	Increase
Loan Year	(thousands)	(thousands)	(thousands)	(thousands)	(thousands)	(%)
2021-2022	5,012	13,608	1,129	146	1,275	N/A
2022-2023	5,030	13,766	1,077	159	1,237	-3.0
2023-2024	5,102	13,879	1,116	154	1,270	2.7
2024-2025	5,160	13,981	1,152	153	1,305	2.7
2025-2026	5,202	14,072	1,184	152	1,336	2.4
2026-2027	5,228	14,151	1,195	151	1,347	0.8
2027-2028	5,262	14,218	1,210	151	1,360	1.0
2028-2029	5,296	14,268	1,220	150	1,370	0.7
2029-2030	5,327	14,317	1,227	150	1,377	0.5
2030-2031	5,354	14,376	1,232	150	1,382	0.4
2031-2032	5,387	14,448	1,236	150	1,387	0.3
2032-2033	5,422	14,535	1,239	151	1,390	0.2
2033-2034	5,455	14,624	1,239	151	1,390	0.0
2034-2035	5,477	14,718	1,238	152	1,389	-0.1
2035-2036	5,492	14,811	1,236	152	1,388	-0.1
2036-2037	5,498	14,907	1,236	153	1,389	0.1
2037-2038	5,523	15,022	1,241	154	1,396	0.4
2038-2039	5,550	15,150	1,247	156	1,403	0.5
2039-2040	5,583	15,280	1,254	157	1,411	0.6
2040-2041	5,621	15,406	1,261	158	1,419	0.6
2041-2042	5,669	15,526	1,268	160	1,428	0.6
2042-2043	5,719	15,650	1,280	161	1,442	0.9
2043-2044	5,772	15,773	1,295	163	1,458	1.1
2044-2045	5,828	15,888	1,313	164	1,477	1.3
2045-2046	5,882	15,994	1,332	166	1,498	1.4
2046-2047	5,934	16,092	1,354	167	1,521	1.5

The total number of enrolled students is expected to increase from its current level of 1,275,000 to 1,521,000 at the end of the projection period. Students aged 15-29 represent more than 85% of the total post-secondary enrolment. Overall, the aggregate enrolment rate for students aged 15-29 is expected to remain between 21% and 23% over the next 25 years.

#### 4.1.3 Students Receiving a Loan or a Grant

Enrolled students must apply to receive a loan or a grant. The ratio of loan or grant recipients to enrolled students is called the uptake rate. Table 8 shows the increasing uptake rate, from 52.5% in 2021-2022 to 54.0% in 2046-2047. This, combined with the increase in students enrolled in post-secondary education, results in 151,000 more students in the program over the projection (from 670,000 students in 2021-2022 to 821,000 in 2046-2047).

The number of students in the CSFA receiving a loan is 558,000 for the loan year 2021-2022.

Table 8 Loan	and/or Grant Recipie	nts				
Loan Year	Students Enrolled Full-Time (thousands)	Uptake Rate (%)	Students in CSFA Receiving a Loan and/or a Grant (thousands)	Increase (%)	Students in CSFA Receiving a Loan (thousands)	Students in CSFA Receiving a Grant (thousands)
2021-2022	1,275	52.5	670	N/A	558	544
2022-2023	1,237	54.2	670	0.0	541	549
2023-2024	1,270	54.0	685	2.3	595	567 <sup>(1)</sup>
2024-2025	1,305	53.9	703	2.6	652	587 <sup>(1)</sup>
2025-2026	1,336	54.1	723	2.9	671	601
2026-2027	1,347	54.0	728	0.7	675	601
2027-2028	1,360	53.9	734	0.8	681	601
2028-2029	1,370	53.9	739	0.7	686	600
2029-2030	1,377	53.9	742	0.5	689	597
2030-2031	1,382	53.9	745	0.4	691	595
2031-2032	1,387	53.9	748	0.3	694	591
2032-2033	1,390	53.9	749	0.2	695	586
2033-2034	1,390	53.9	750	0.1	696	578
2034-2035	1,389	53.9	750	0.0	695	571
2035-2036	1,388	54.0	749	-0.1	695	562
2036-2037	1,389	54.0	750	0.1	696	554
2037-2038	1,396	54.0	753	0.5	699	550
2038-2039	1,403	54.0	757	0.5	702	547
2039-2040	1,411	54.0	762	0.6	707	545
2040-2041	1,419	54.0	766	0.6	711	543
2041-2042	1,428	54.0	771	0.6	715	540
2042-2043	1,442	54.0	779	0.9	722	539
2043-2044	1,458	54.0	787	1.1	730	540
2044-2045	1,477	54.0	797	1.3	740	541
2045-2046	1,498	54.0	808	1.4	750	543
2046-2047	1,521	54.0	821	1.5	761	546

<sup>(1)</sup> The increase is mainly due to an expected shift in enrolments, from private colleges to public colleges, where students have a higher grant uptake rate (see Appendix D).

## 4.1.4 Average Loan Size

The amount of student loan depends on the expected need of the student. Table 9 summarizes the main elements of the student need calculation. All students who receive a loan or a grant are included. The student need in Table 9 is then determined as a percentage of the student need less admissible grants.

Table 9 Stu	udent Need (	in dollars)					
Loan Year	Resources (1)	Tuition (2)	Other Expenses (3)	Total Expenses (4) = (2) + (3)	Average Student Need (5) = (4) – (1)	Average Grant for Net Need Calculation (6)	CSFA Average Student Net Need (7) = (5) * 60% - (6)
2021-2022	3,000	8,900	13,600	22,600	19,500	4,900	6,800
	· ·	,	•	•	,	•	,
2022-2023	3,100	9,300	14,400	23,700	20,600	4,800	7,500
2023-2024 2024-2025	3,200 3,300	9,500 10,000	14,700 15,100	24,200 25,100	21,100 21,800	3,300 2,300	9,400 10,800
2024-2025	3,300	10,500	15,400	25,100	22,600	2,300	11,200
2025-2020	3,400	11,000	15,700	26,700	23,400	2,300	11,700
2027-2028	3,500	11,600	16,000	27,600	24,200	2,300	12,200
2028-2029	3,600	12,000	16,300	28,400	24,800	2,200	12,600
2029-2030	3,600	12,500	16,700	29,100	25,500	2,200	13,100
2030-2031	3,700	13,000	17,000	30,100	26,300	2,200	13,500
2031-2032	3,800	13,500	17,300	30,900	26,900	2,200	14,000
2032-2033	3,900	14,000	17,700	31,700	27,800	2,200	14,500
2033-2034	4,000	14,500	18,000	32,600	28,600	2,200	15,000
2034-2035	4,100	15,100	18,400	33,600	29,500	2,100	15,500
2035-2036	4,200	15,700	18,900	34,400	30,300	2,100	16,000
2036-2037	4,300	16,200	19,300	35,500	31,200	2,100	16,500
2037-2038	4,400	16,900	19,600	36,500	32,100	2,100	17,200
2038-2039	4,600	17,600	20,000	37,700	33,000	2,100	17,700
2039-2040	4,700	18,200	20,500	38,700	34,000	2,100	18,400
2040-2041	4,800	19,000	20,800	39,800	35,000	2,000	18,900
2041-2042	5,000	19,700	21,300	41,000	36,000	2,000	19,500
2042-2043	5,100	20,500	21,700	42,200	37,100	2,000	20,200
2043-2044	5,200	21,200	22,200	43,400	38,200	2,000	20,900
2044-2045	5,400	22,000	22,500	44,700	39,200	2,000	21,500
2045-2046	5,600	23,000	23,000	46,000	40,400	2,000	22,200
2046-2047	5,700	23,800	23,500	47,400	41,600	2,000	23,000

The average grant for the need calculation 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 the loan year 2021-2022 is \$5,985. The average grant for the first three loan years is higher due to the temporary increase in grants.

As shown in Table 10, the average loan size is calculated as the ratio of new loans issued over the number of students receiving a loan under the CSFA Program. The growth rate of the average loan size is moderated due to the fixed weekly student loan limit of \$210, with the only exception being the loan year 2023-2024 where the limit is \$300.

Over time, more students reach the loan limit without their needs being completely fulfilled. This is shown in Table 10, where the percentage of students at the loan limit is projected to increase from 57.6% in 2024-2025 to 92.4% in 2046-2047.

Table 10 Averag	e Loan Size					
	New Loans Issued	Increase	Students in CSFA Receiving a Loan	Average Loan Size	Increase	% of Students at Limit
	(\$ million)	(%)	(thousands)	(\$)	(%)	(%)
Loan Year	(1)	(70)	(2)	(1) / (2)	(70)	(70)
2021-2022	2,940	N/A	558	5,266	N/A	37.3
2022-2023	3,015	2.5	541	5,576	5.9	40.8
2022-2023	4,334	43.8	595	7,289	30.7	29.8
2023-2024	4,119	-5.0	652	6,312	-13.4	57.6
2024-2023	4,308	-3.0 4.6	671		1.7	60.2
	,			6,419		63.1
2026-2027	4,403	2.2	675	6,517	1.5	
2027-2028	4,501	2.2	681	6,610	1.4	65.8
2028-2029	4,579	1.7	686	6,679	1.0	68.3
2029-2030	4,643	1.4	689	6,741	0.9	70.7
2030-2031	4,700	1.2	691	6,798	0.8	73.0
2031-2032	4,751	1.1	694	6,850	0.8	75.6
2032-2033	4,794	0.9	695	6,894	0.6	77.9
2033-2034	4,824	0.6	696	6,933	0.6	79.7
2034-2035	4,847	0.5	695	6,969	0.5	81.2
2035-2036	4,864	0.4	695	7,002	0.5	82.5
2036-2037	4,891	0.6	696	7,032	0.4	83.8
2037-2038	4,932	0.8	699	7,059	0.4	85.0
2038-2039	4,976	0.9	702	7,083	0.3	86.1
2039-2040	5,020	0.9	707	7,105	0.3	87.2
2040-2041	5,065	0.9	711	7,124	0.3	88.2
2041-2042	5,110	0.9	715	7,142	0.2	89.2
2042-2043	5,169	1.2	722	7,157	0.2	90.1
2043-2044	5,236	1.3	730	7,170	0.2	90.9
2044-2045	5,311	1.4	740	7,181	0.2	91.5
2045-2046	5,391	1.5	750	7,191	0.1	92.0
2046-2047	5,478	1.6	761	7,200	0.1	92.4

The average loan amount is lower over the first two loan years due to the temporary doubling of the grants. The average loan for the loan year 2023-2024 is higher than the previous and following loan years, despite the temporary increase of grants. This is due to the temporary increase to the weekly student loan limit (\$210 to \$300). The percentage of students at the limit of 29.8% for the loan year 2023-2024 is also based on a maximum weekly student loan of \$300 instead of the standard \$210.

#### 4.2 Portfolios

This section presents projections of the portfolio for all three regimes described in Appendix A (guaranteed, risk-shared and direct loan regimes). The amounts for loans in-study represent loans issued to students who are still in the post-secondary educational system. Loans in repayment consist of outstanding loans that have already consolidated and were not returned to the Government (defaulted loans).

### 4.2.1 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. The projection of the direct loan portfolio (principal only) is shown in Table 11.

Table 11	Direct Loan	Portfolio (ir	n millions	of dollars
----------	-------------	---------------	------------	------------

As at July 31	Loans In-Study	Loans in Repayment	Defaulted Loans	Total
2022	8,121	12,718	2,434	23,273
2023	7,621	13,080	2,522	23,223
2024	9,200	12,545	2,588	24,333
2025	9,972	12,644	2,609	25,225
2026	10,658	12,855	2,638	26,151
2027	11,215	13,092	2,678	26,985
2028	11,662	13,457	2,734	27,853
2029	12,036	13,857	2,798	28,691
2030	12,349	14,269	2,862	29,480
2031	12,615	14,673	2,940	30,228
2032	12,841	15,063	3,030	30,934
2033	13,032	15,424	3,121	31,577
2034	13,189	15,751	3,210	32,150
2035	13,315	16,044	3,297	32,656
2036	13,417	16,299	3,378	33,094
2037	13,509	16,518	3,451	33,478
2038	13,605	16,721	3,518	33,844
2039	13,710	16,905	3,582	34,197
2040	13,821	17,073	3,641	34,535
2041	13,936	17,233	3,695	34,864
2042	14,055	17,387	3,748	35,190
2043	14,188	17,539	3,799	35,526
2044	14,340	17,695	3,848	35,883
2045	14,511	17,861	3,897	36,269
2046	14,700	18,041	3,943	36,684
2047	14,907	18,236	3,990	37,133

The outstanding direct loans in the in-study portfolio is projected to decrease to \$7.6 billion as at 31 July 2023 due to lower loans issued (which is the result of the temporary increased grants). The outstanding direct loans portfolio is projected to increase from \$23.3 billion as at 31 July 2022 to \$27.0 billion five years later. By the end of the 2046-2047 loan year, the portfolio is projected to reach \$37.1 billion.

The outstanding direct loan portfolio as at 31 July 2022 is retrospectively derived from the experience<sup>1</sup> during loan years 2000-2001 to 2021-2022 as follows<sup>2</sup>:

New loans issued	\$53.3 billion
Plus the interest accrued during the non-repayment period <sup>3</sup>	\$ 1.4 billion
Minus repayments <sup>4</sup>	\$28.6 billion
Minus loans forgiven and debt reductions in repayment <sup>5</sup>	\$ 1.2 billion
Minus defaulted loans written off	\$ 1.6 billion
	\$23.3 billion

<sup>&</sup>lt;sup>1</sup> According to the Monthly Financial Information Schedule, the Department Account Receivable System (DARS) and the Public Sector Collection Database.

<sup>&</sup>lt;sup>2</sup> Components may not sum to totals due to rounding.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Either prepayments while in-study, normal payments while in repayment, affordable payments while in RAP, or recoveries while in default.

<sup>&</sup>lt;sup>5</sup> Under the former Debt Reduction in Repayment (DRR) or the Repayment Assistance Plan (RAP) measures.

## 4.2.2 Defaulted Loans Portfolio – Principal

Table 12 provides the calculation details for the projection of the defaulted loans portfolio (principal only) under the direct loan regime.

		New Defaulted			
	Balance 1 August	Loans	Collected Loans	Write-offs	Balance 31 July
Loan Year	(1)	(2)	(3)	(4)	(1+2) - (3+4)
2021-2022	2,283 <sup>(1)</sup>	390	105	134	2,434
2022-2023	2,434	379	111	180	2,522
2023-2024	2,522	381	134	181	2,588
2024-2025	2,588	343	146	177	2,609
2025-2026	2,609	353	152	171	2,638
2026-2027	2,638	364	158	166	2,678
2027-2028	2,678	376	161	159	2,734
2028-2029	2,734	398	166	168	2,798
2029-2030	2,798	418	170	184	2,862
2030-2031	2,862	437	173	186	2,940
2031-2032	2,940	451	178	183	3,030
2032-2033	3,030	464	184	189	3,121
2033-2034	3,121	475	188	197	3,210
2034-2035	3,210	484	194	204	3,297
2035-2036	3,297	492	198	214	3,378
2036-2037	3,378	500	203	224	3,451
2037-2038	3,451	507	208	233	3,518
2038-2039	3,518	513	212	237	3,582
2039-2040	3,582	518	215	244	3,641
2040-2041	3,641	523	219	250	3,695
2041-2042	3,695	527	222	253	3,748
2042-2043	3,748	532	225	257	3,799
2043-2044	3,799	537	228	259	3,848
2044-2045	3,848	541	231	262	3,897
2045-2046	3,897	547	233	268	3,943
2046-2047	3,943	553	236	269	3,990

<sup>(1)</sup> This value is revised from the previous report (\$2,288 million).

Collected loans (principal recoveries) are expected to increase starting in 2023-2024 following the removal of interest accrual since a higher share of total recoveries will be applied to outstanding principal instead of outstanding interest.

The balance of loans in default (principal only) was \$2,434 million as at 31 July 2022. The defaulted loans portfolio is projected to reach \$3,990 million by the end of the projection period.

As shown in Table 12, an amount of \$134 million was written off in 2021-2022. The corresponding amount in 2022-2023 is \$180 million and includes all the non-recoverable loans that were identified and approved for write-off by ESDC and CRA between July 2021 and June 2022. These write-offs were approved on 30 March 2023, via Royal Assent of Bill C-43 (Appropriation Act No. 5, 2022-2023). The decision to write off particular loans is part of a multistep process inevitably resulting in some volatility in the actual amount written off from year to year.

#### 4.2.3 Defaulted Loans Portfolio – Interest

The projection of the balance of interest on defaulted loans is presented in Table 13.

Table 13 Int	erest on Defaulted	Loans (in million	s of dollars)			
	Balance 1 August	Interest Transferred in Default	Interest Accrued	Interest Collected	Write-offs	Dalamaa lulu 21
Loan Year	(1)	(2)	(3)	(4)	(5)	Balance July 31 (1+2+3) - (4+5)
2021-2022	338 <sup>(1)</sup>	0	8	31	35	280
2022-2023	280	-2	0	24	41	213
2023-2024	213	-1	0	23	29	159
2024-2025	159	-1	0	14	24	120
2025-2026	120	0	0	10	18	92
2026-2027	92	0	0	7	13	71
2027-2028	71	0	0	5	8	57
2028-2029	57	0	0	4	6	47
2029-2030	47	0	0	4	5	39
2030-2031	39	0	0	3	4	32
2031-2032	32	0	0	2	3	27
2032-2033	27	0	0	2	3	23
2033-2034	23	0	0	1	2	19
2034-2035	19	0	0	1	2	16
2035-2036	16	0	0	1	2	13
2036-2037	13	0	0	1	2	10
2037-2038	10	0	0	1	2	7
2038-2039	7	0	0	0	2	5
2039-2040	5	0	0	0	1	4
2040-2041	4	0	0	0	1	2
2041-2042	2	0	0	0	1	1
2042-2043	1	0	0	0	0	1
2043-2044	1	0	0	0	0	1
2044-2045	1	0	0	0	0	0
2045-2046	0	0	0	0	0	0
2046-2047	0	0	0	0	0	0

<sup>(1)</sup> This value is revised from the previous report (\$337 million).

Interest accrual on student loans was temporarily waved in loan years 2021-2022 and 2022-2023 (up to March 31, 2023). Moreover, the 2022 Fall Economic Statement permanently eliminated interest on Canada Student Loans. However, interest is still accruing in some special cases for certain borrowers in defaults that have a court judgement. The interest transferred in defaults can be negative due to expected rehabilitations, recalls and other adjustments that occur during the year.

Table 13 shows that the net interest returned to the Government in the loan year 2021-2022 was nil (i.e., the value transferred with newly defaulted principal was offset by rehabilitations). An additional amount of \$8 million in interest was accrued during the loan year 2021-2022 on the principal balance of the recoverable defaulted loans portfolio at the beginning of the loan year.

In the loan year 2021-2022, \$35 million in interest was written off. As shown in Table 13, the balance of interest in default was \$338 million at the beginning of the loan year 2021-2022 and it decreased to \$280 million as at 31 July 2022. The balance of interest in default is projected to be fully eliminated by the end of the projection period as interest no longer accrues on loans.

## 4.2.4 Guaranteed and Risk-Shared Regimes

Table 14 presents the projections of the guaranteed and risk-shared loans owned by financial institutions and by the Government, as well as the loans returned to the Government because of default (principal only). The guaranteed and risk-shared regimes are gradually being phased out.

Table 14	Guaranteed and	Risk-Shared Regime	s Portfolio (in milli	ons of dollars)	
	Loans in Stud	y or Repayment	Loans ir	n Default	
As at July 31	(with financial institutions) Guaranteed and Risk-Shared	(bought back by the Government) Guaranteed and Risk-Shared <sup>(1)</sup>	(Returned to th	ne Government) Risk-Shared	Total
2022	14 <sup>(2)</sup>	1.4	45	21	104
2022	= :	14		31	
2023	10	10	39	27	86
2024	7	6	34	24	71
2025	3	3	29	21	56
2026	0	0	24	18	42
2027	0	0	20	14	34
2028	0	0	15	11	26
2029	0	0	11	8	19
2030	0	-	8	5	13
2031	0	-	4	3	7
2032	0	-	-	0	0
2033	0	-	-	0	0
2034	0	_	_	_	0

<sup>(1)</sup> Most guaranteed and risk-shared loans were bought back by the Government from financial institutions in order to phase out these old regimes.

At the end of the 2021-2022 loan year, the sum of all loans coming from the guaranteed and risk-shared regimes that are owned by the Government amounts to approximately \$147¹ million.

## 4.2.5 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 program. The current limit of \$34 billion was last increased in June 2019.

Table 15 presents the projection of the aggregate amount of outstanding loans. It is the sum of:

- Total principal amount of direct loans in study, in repayment and in default;
- Total principal amount of defaulted risk-shared loans returned<sup>2</sup> to the Government from financial institutions.

In comparison with Table 11, which show the projection of the loan portfolio at the end of loan years, Table 15 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

2035 2036

<sup>(2)</sup> The amount as at 31 July 2021 shown in the previous report (\$732 million) included a contingent amount that was written off by financial institutions when the Government bought back the loans.

<sup>&</sup>lt;sup>1</sup> This is equal to the \$90 million principal held by the Government (\$14 million bought back plus \$45 million and \$31 million returned to the Government from Table 14) plus an additional \$57 million of outstanding interest.

<sup>&</sup>lt;sup>2</sup> Loans purchased under an agreement made pursuant to the *Canada Student Financial Assistance Act* are considered. Good-standing loans purchased by the Government and shown in Table 14 are excluded.

CSFA

beginning and at the end of the loan year. The peak usually occurs in the middle of the loan year (January) and is 1% to 4% higher than the aggregate amount at the end of the loan year.

Table 11 shows an aggregate amount of outstanding direct loans of \$23.3 billion as at 31 July 2022. Table 15 shows that the aggregate amount of outstanding direct loans reached \$24.0 billion in October 2021 (loan year 2021-2022) and \$24.4 billion in December 2022 (loan year 2022-2023).

The projection shows that the \$34 billion limit is expected to be reached during the loan year 2034-2035 if the program's provisions do not change and assumptions materialize. The limit is reached one year earlier than estimated in the previous report.

Loan Year	Direct Loans	Risk-Shared Loans	Total
2021-2022	24,041	32	24,073
2022-2023	24,379	29	24,408
2023-2024	25,496	25	25,521
2024-2025	26,335	22	26,357
2025-2026	27,294	19	27,313
2026-2027	28,201	16	28,217
2027-2028	29,087	13	29,100
2028-2029	29,977	10	29,987
2029-2030	30,826	7	30,833
2030-2031	31,620	4	31,624
2031-2032	32,365	1	32,366
2032-2033	33,059	0	33,059
2033-2034	33,684	0	33,684
2034-2035	34,236	-	34,236
2035-2036	34,721	-	34,721
2036-2037	35,147	-	35,147
2037-2038	35,542	-	35,542
2038-2039	35,919	-	35,919
2039-2040	36,284	-	36,284
2040-2041	36,637	-	36,637
2041-2042	36,981	-	36,981
2042-2043	37,335	-	37,335
2043-2044	37,707	-	37,707
2044-2045	38,106	-	38,106
2045-2046	38,537	-	38,537
2046-2047	39,000	-	39,000

#### 4.3 Allowances

This section presents projections of the three allowances under the direct loan regime described in Appendix A. There is an allowance for the RAP (principal) to cover the future cost of students benefiting from this program, and two allowances for bad debt (principal and interest) to cover the risk of future default.

The provision rates used to determine the 2022-2023 allowance and the ultimate provision rates are presented in Appendix C. The portfolios to which those provision rates apply are presented in Table 11.

The Government sets up a separate allowance in the Public Accounts for Guaranteed and Risk-Shared Loans. This allowance calculation is not included in this report. Expenses related to those loans are presented in Table 20 and Table 21.

## 4.3.1 Allowance for the Repayment Assistance Plan

Table 16 provides the calculation details for the projection of the allowance for the Repayment Assistance Plan (RAP) – principal under the direct loan regime<sup>1</sup>.

Table 16 Allowance for Repayment Assistance Plan – Principal (in millions of dollars)

Loan Year	Allowance 1 August (1)	RAP Expenses (2)	Allowance 31 July (3)	Yearly Expense (3) - (1-2)	
2021-2022	2,125	156	2,448 <sup>(1)</sup>	479	
2022-2023	2,448	172	2,075	-201	
2023-2024	2,075	194	2,178	297	
2024-2025	2,178	201	2,258	281	
2025-2026	2,258	208	2,341	291	
2026-2027	2,341	212	2,427	298	
2027-2028	2,427	220	2,510	303	
2028-2029	2,510	227	2,591	308	
2029-2030	2,591	231	2,672	312	
2030-2031	2,672	237	2,750	315	
2031-2032	2,750	245	2,825	320	
2032-2033	2,825	252	2,894	321	
2033-2034	2,894	260	2,957	323	
2034-2035	2,957	267	3,012	322	
2035-2036	3,012	273	3,058	319	
2036-2037	3,058	278	3,099	319	
2037-2038	3,099	286	3,142	329	
2038-2039	3,142	294	3,181	333	
2039-2040	3,181	301	3,216	336	
2040-2041	3,216	307	3,249	340	
2041-2042	3,249	311	3,280	342	
2042-2043	3,280	316	3,311	347	
2043-2044	3,311	319	3,342	350	
2044-2045	3,342	323	3,375	356	
2045-2046	3,375	326	3,411	362	
2046-2047	3,411	329	3,449	367	

<sup>(1)</sup> Calculated using the allowance rates (as at 31 July 2022) from the previous report but updated with the actual outstanding balances.

The allowance for the RAP – principal is estimated at \$2,448 million as at 31 July 2022, which is higher than the \$2,323 million projected in the previous report. For the loan year 2021-2022, the yearly expense for the allowance for RAP – principal allowance is \$479 million, which reflects the revision, that was done in the previous report, to the estimated cost of the RAP threshold changes and the new expanded disability definition. The allowance is lower as at 31 July 2023 mainly due to the partial recognition of the recent lower RAP utilization experience.

<sup>&</sup>lt;sup>1</sup> The RAP – interest allowance is determined by ESDC and does not figure in this report.

## Allowance for Public Accounts (RAP – Principal)

Provision rates used to determine the allowance for Public Accounts were based on the program's conditions as of 31 March 2023.

- 6.9% of the outstanding balance of loans in-study, which is \$8,198 million as at 31 March 2023;
- 1.9% of the outstanding balance of loans in repayment (reduced by loans in the RAP all stages), which is \$9,850 million as at 31 March 2023;
- 36.2% of the outstanding balance of loans in the RAP (all stages), which is \$3,465 million as at 31 March 2023.
- Total allowance RAP principal as at 31 March 2023: \$2,007 million.

## 4.3.2 Allowance for Bad Debt – Principal

Table 17 provides the calculation details for the projection of the allowance for bad debt – principal under the direct loan regime.

Table 17 Allowa	nce for Bad Debt – Principal	(in millions of dolla	rs)	
	Allowance 1 August	Write-offs	Allowance 31 July	Yearly Expense
Loan Year	(1)	(2)	(3)	(3) - (1 - 2)
2021-2022	3,001	134	3,035 <sup>(1)</sup>	168
2022-2023	3,035	180	2,659	-196
2023-2024	2,659	181	2,734	256
2024-2025	2,734	177	2,799	242
2025-2026	2,799	171	2,880	252
2026-2027	2,880	166	2,971	257
2027-2028	2,971	159	3,076	264
2028-2029	3,076	168	3,178	270
2029-2030	3,178	184	3,267	273
2030-2031	3,267	186	3,358	277
2031-2032	3,358	183	3,455	280
2032-2033	3,455	189	3,548	282
2033-2034	3,548	197	3,636	285
2034-2035	3,636	204	3,717	285
2035-2036	3,717	214	3,790	287
2036-2037	3,790	224	3,855	289
2037-2038	3,855	233	3,913	291
2038-2039	3,913	237	3,969	293
2039-2040	3,969	244	4,021	296
2040-2041	4,021	250	4,069	298
2041-2042	4,069	253	4,118	302
2042-2043	4,118	257	4,166	305
2043-2044	4,166	259	4,215	308
2044-2045	4,215	262	4,266	313
2045-2046	4,266	268	4,316	318
2046-2047	4,316	269	4,369	322

<sup>(1)</sup> Calculated using the allowance rates (as at 31 July 2022) from the previous report but updated with the actual outstanding balances.

The allowance for bad debt – principal is estimated at \$3,035 million as at 31 July 2022, which is higher than the \$3,018 million projected in the previous report. For the loan year 2021-2022, the yearly expense for the allowance for bad debt – principal is \$168 million. The allowance is lower starting 31 July 2023 mainly due to the revision of some assumptions. Expected rehabilitations and recalls are increased to reflect recent experience. Expected recoveries are increased due to the elimination of the interest accrual (i.e., recoveries will be fully attributable to the outstanding

principal balance instead of having a share applied to the outstanding interest balance).

## Allowance for Public Accounts (Bad Debt – Principal)

Provision rates used to determine the allowance for Public Accounts were based on the program's conditions as of 31 March 2023.

- 5.9% of the outstanding balance of loans in-study, which is \$8,198 million as at 31 March 2023;
- 3.5% of the outstanding balance of loans in repayment, which is \$13,315 million as at 31 March 2023; and
- 69.5% of the outstanding balance of loans in default, which is \$2,449 million as at 31 March 2023.
- Total allowance bad debt principal as at 31 March 2023: \$2,652 million.

#### 4.3.3 Allowance for Bad Debt – Interest

The projection of the allowance for bad debt – interest under the direct loan regime is presented in Table 18.

	Allowance 1 August	Write-offs	Allowance July 31	Yearly expense
Loan Year	(1)	(2)	(3)	(3) - (1-2)
2021-2022	224	35	201 <sup>(1)</sup>	12
2022-2023	201	41	129	-32
2023-2024	129	29	99	0
2024-2025	99	24	75	0
2025-2026	75	18	57	0
2026-2027	57	13	44	0
2027-2028	44	8	36	0
2028-2029	36	6	30	0
2029-2030	30	5	25	0
2030-2031	25	4	21	0
2031-2032	21	3	19	0
2032-2033	19	3	16	0
2033-2034	16	2	13	0
2034-2035	13	2	11	0
2035-2036	11	2	10	0
2036-2037	10	2	8	0
2037-2038	8	2	6	0
2038-2039	6	2	4	0
2039-2040	4	1	3	0
2040-2041	3	1	2	0
2041-2042	2	1	1	0
2042-2043	1	0	1	0
2043-2044	1	0	0	0
2044-2045	0	0	0	0
2045-2046	0	0	0	0
2046-2047	0	0	0	0

<sup>(1)</sup> Calculated using the allowance rate (as at 31 July 2022) from the previous report but updated with the actual outstanding balance.

The allowance for bad debt – interest is estimated at \$201 million as at 31 July 2022, which is higher than the \$195 million projected in the previous report. For the loan year 2021-2022, the yearly expense for the allowance for bad debt – interest is \$12 million. There are no more yearly expenses after the permanent removal of the interest accrual. However, there is an allowance for the current outstanding interest balance, which is projected to be gradually written-off over the next years.

The provision rates used to determine the allowances for Public Accounts were based on the conditions of the program as of 31 March 2023. The resulting allowance for Public Accounts as at 31 March 2023 corresponds to \$139 million.

## 4.4 Total Expenses

As shown in Table 19, and notwithstanding impacts from temporary measures, total expenses associated with the program increase from \$4.0 billion in 2025-2026<sup>1</sup> to \$5.1 billion in 2046-2047. On average, total expenses are projected to increase at an annual rate of 1.1%.

Table 19 Sui	mmary of Expenses (	in millions of dolla	rs)			
		Government		Administrativ	e Expenses	
Loan Year	Student Related Expenses	Liabilities on Outstanding Loans	Alternative Payments	Fees Paid to Provinces	General	Total
2021-2022	4,211.0	220.8	927.4	34.8	107.4	5,501.4
2022-2023 2023-2024 2024-2025	3,875.0 3,326.1 2,736.8	-191.2 300.8 300.1	999.2 1,147.9 886.1	36.2 37.0 38.0	119.1 118.1 118.9	4,838.3 4,929.9 4,079.9
2025-2026	2,820.3	311.8	742.0	39.1	120.1	4,033.4
2026-2027	2,876.5	318.2	772.9	40.3	121.9	4,129.9
2027-2028 2028-2029	2,936.9 2,995.7	328.1 335.7	799.8 830.1	41.5 42.8	125.6 129.4	4,231.9 4,333.6
2029-2030 2030-2031	3,049.6 3,101.8	342.2 347.6	862.4 895.0	44.1 45.4	133.3 137.3	4,431.5 4,527.1
2031-2032	3,152.1	352.5	926.4	46.8	141.4	4,619.2
2032-2033 2033-2034 2034-2035 2035-2036 2036-2037	3,199.6 3,240.4 3,246.5 3,245.5 3,250.1	356.4 359.5 361.9 363.8 366.3	952.3 974.3 991.9 994.7 992.7	48.2 49.7 51.2 52.7 54.3	145.7 150.1 154.6 159.3 164.1	4,702.3 4,773.9 4,806.1 4,816.0 4,827.5
2037-2038 2038-2039 2039-2040 2040-2041 2041-2042	3,270.0 3,284.0 3,298.3 3,312.6 3,327.1	369.5 372.9 376.3 379.7 383.1	989.2 989.3 991.3 993.3 990.5	55.9 57.6 59.4 61.1 63.0	169.1 174.2 179.4 184.8 190.4	4,853.7 4,877.9 4,904.7 4,931.6 4,954.1
2042-2043 2043-2044 2044-2045 2045-2046 2046-2047	3,347.8 3,372.9 3,402.1 3,434.4 3,470.6	387.4 392.1 397.3 403.0 408.1	986.3 983.9 980.6 974.7 965.6	64.9 66.9 68.9 71.0 73.1	196.2 202.1 208.2 214.5 221.0	4,982.5 5,017.8 5,057.1 5,097.6 5,138.3

The larger student related expenses over the first three loan years and the larger alternative payments over the first four loan years are mainly due to the temporary increase of the grants. The reduction in Government liabilities in the loan year 2022-2023 is mostly due to the immediate recognition of the impact of removing interest accrual on all future years for all outstanding student loans.

<sup>&</sup>lt;sup>1</sup> First loan year not impacted by temporary measures.

#### 4.4.1 **Student Related Expenses**

The primary expense of the CSFA Program is the cost of supporting students during their study and repayment periods. The student related expenses are presented in Table 20.

					Risk-Shared and Guaranteed		
		Direct Loa	n		Loans		
Loan Year	Interest Subsidy - Before Consolidation	Interest Subsidy - After Consolidation	RAP – Interest	Provision RAP – Principal	RAP – Interest and Principal	Canada Student Grants	Total
2021-2022	193.8	280.8	0.1	478.6	1.5	3,256.2	4,211.0
2022-2023	252.1	415.1	0.0	-200.9	0.8	3,407.8	3,875.0
2023-2024	265.2	386.7	0.0	296.4	0.8	2,376.9	3,326.1
2024-2025	303.7	394.1	0.0	280.1	0.8	1,758.1	2,736.8
2025-2026	325.4	398.2	0.0	291.4	0.7	1,804.7	2,820.3
2026-2027	355.3	418.0	0.0	297.2	0.0	1,806.1	2,876.5
2027-2028	382.8	442.2	0.0	303.2	0.0	1,808.7	2,936.9
2028-2029	408.4	469.3	0.0	308.1	0.0	1,810.0	2,995.7
2029-2030	432.5	497.9	0.0	312.0	0.0	1,807.2	3,049.6
2030-2031	455.6	527.6	0.0	315.6	0.0	1,803.0	3,101.8
2031-2032	477.8	558.0	0.0	318.8	0.0	1,797.5	3,152.1
2032-2033	499.0	588.3	0.0	321.5	0.0	1,790.8	3,199.6
2033-2034	519.3	618.1	0.0	322.1	0.0	1,780.8	3,240.4
2034-2035	524.6	630.5	0.0	322.3	0.0	1,769.1	3,246.5
2035-2036	528.8	641.5	0.0	319.1	0.0	1,756.1	3,245.5
2036-2037	532.5	651.2	0.0	319.0	0.0	1,747.4	3,250.1
2037-2038	536.3	660.1	0.0	329.3	0.0	1,744.3	3,270.0
2038-2039	540.3	668.3	0.0	332.8	0.0	1,742.6	3,284.0
2039-2040	544.7	675.7	0.0	336.1	0.0	1,741.8	3,298.3
2040-2041	549.2	682.7	0.0	339.4	0.0	1,741.4	3,312.6
2041-2042	553.9	689.3	0.0	342.5	0.0	1,741.4	3,327.1
2042-2043	559.0	695.9	0.0	346.4	0.0	1,746.5	3,347.8
2043-2044	564.9	702.4	0.0	350.9	0.0	1,754.7	3,372.9
2044-2045	571.5	709.1	0.0	356.0	0.0	1,765.5	3,402.1
2045-2046	578.8	716.2	0.0	361.5	0.0	1,778.0	3,434.4
2046-2047	586.8	723.8	0.0	367.4	0.0	1,792.6	3,470.6

Starting on 1 April 2023, there is permanently no interest accrual on student loans. This results in higher interest subsidies after the loans consolidate. The negative value of \$200.9 million for the RAP provision mainly stems from the immediate recognition of the expected reduction in the RAP utilization for all future years on all outstanding loans. Assumptions for the RAP are provided in Appendix C.

Interest subsidies are still projected for the Risk-Shared and Guaranteed loans for the first 4 years of the projection. However, those results were removed from Table 20 since they are negligible (they round to \$0.0M).

In the loan year 2021-2022, a total of \$3,256 million of Canada Student Grants were disbursed. Those grants are projected to increase slightly in 2022-2023 (due to the change in the definition of disability), to decrease in 2023-2024 (due to the change in the temporary grant increase from an additional 100% to 40%, compared with the loan year 2019-2020) and to decrease again in 2024-2025 (due to the removal of the temporary grant increase).

## 4.4.2 Government Liabilities on Outstanding Loans

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 and permanent disability. Loans forgiven for family physicians and qualifying nurses practicing in under-served rural or remote communities are also included in Table 21 below.

	_					
Table 21	Government	Liabilities on	Outstanding I	Loans (in	millions of dolla	rc)

	Direct Loan		Risk-Shared	Guaranteed		
			Risk Premium,			
	Provision for	Bad Debt	Put-Backs &	Claims for	Loans	
Loan Year	Principal	Interest	Refunds to FIs	Defaulted Loans	Forgiven	Total
2021-2022	167.5	12.4	0.2	-0.2	40.9	220.8
2022-2023	-196.3	-31.7	0.0	0.0	36.7	-191.2
2023-2024	255.3	0.0	0.0	0.0	45.5	300.8
2024-2025	241.8	0.0	0.0	0.0	58.3	300.1
2025-2026	252.5	0.0	0.0	0.0	59.3	311.8
2026-2027	257.0	0.0	0.0	0.0	61.3	318.2
2027-2028	263.8	0.0	0.0	-	64.2	328.1
2028-2029	269.3	0.0	0.0	-	66.4	335.7
2029-2030	273.5	0.0	0.0	-	68.7	342.2
2030-2031	276.9	0.0	0.0	-	70.7	347.6
2031-2032	279.9	0.0	0.0	-	72.5	352.5
2032-2033	282.4	0.0	-	-	74.0	356.4
2033-2034	284.2	0.0	-	-	75.3	359.5
2034-2035	285.6	0.0	-	-	76.3	361.9
2035-2036	286.6	0.0	-	-	77.2	363.8
2036-2037	288.2	0.0	-	-	78.1	366.3
2037-2038	290.6	0.0	-	-	78.9	369.5
2038-2039	293.2	0.0	-	-	79.7	372.9
2039-2040	295.8	0.0	-	-	80.5	376.3
2040-2041	298.4	0.0	-	-	81.3	379.7
2041-2042	301.1	0.0	-	-	82.0	383.1
2042-2043	304.5	0.0	-	-	82.8	387.4
2043-2044	308.5	0.0	-	-	83.6	392.1
2044-2045	312.9	0.0	-	-	84.4	397.3
2045-2046	317.7	0.0	-	-	85.3	403.0
2046-2047	322.0	0.0	-	-	86.1	408.1

The increase in loans forgiven is due to the upcoming increase in the maximum amount of forgivable loans by 50% in the loans forgiveness program for doctors and qualifying nurses a well as the expected expansion of the program to more rural communities.

The reductions in the provision for bad debt in the loan year 2022-2023 are mostly due to the full recognition of the impact of removing interest accrual on student loans going forward.

### 4.4.3 Other Expenses

Other expenses are composed of alternative payments and administrative expenses (fees paid to participating province and general expenses) and are presented in Table 19. Alternative

payments are made directly to Quebec, the Northwest Territories and Nunavut, as they do not participate in the CSFA Program. 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 short-term projection of the administrative fees was provided by ESDC. All collection activities on defaulted loans are fulfilled by CRA and a cost is included in the projected general administrative fees for this purpose.

#### 4.5 Total Revenues

With the permanent elimination of interest accrual, revenues for the direct loan regime have nearly been reduced to zero. Only a small share of loans in default still accrues interest. It is expected that these loans will also be reduced to zero in the short-term future.

Under the guaranteed and risk-shared regimes, revenues come from recoveries of principal and interest from defaulted loans owned by the Government.

As shown in Table 22, total revenues are projected to decrease to \$0.

Table 22 Total Por	venues (in millions of o	dollars)		
Table 22 Total Nev				
	Direct Loan	Risk-Shared	Guaranteed	
		Principal and Interest from	Principal and Interest from	
Loan Year	Interest Revenues			Total Revenues
		Recovery	Recovery	
2021-2022	9.9	1.8	2.5	14.1
2022-2023	0.0	1.8	2.9	4.7
2023-2024	0.0	1.6	2.5	4.1
2024-2025	0.0	1.5	2.2	3.7
2025-2026	0.0	1.4	1.9	3.2
2026-2027	0.0	1.2	1.6	2.8
2027-2028	0.0	1.0	1.3	2.3
2028-2029	0.0	0.7	1.0	1.8
2029-2030	0.0	0.5	0.8	1.3
2030-2031	0.0	0.4	0.5	0.9
2031-2032	0.0	0.2	0.5	0.8
2032-2033	0.0	0.0	-	0.0
2033-2034	0.0	0.0	-	0.0
2034-2035	0.0	-	-	0.0
2035-2036	0.0	-	-	0.0
2036-2037	0.0	-	-	0.0
2037-2038	0.0	-	-	0.0
2038-2039	0.0	-	-	0.0
2039-2040	0.0	-	-	0.0
2040-2041	0.0	-	-	0.0
2041-2042	0.0	-	-	0.0
2042-2043	0.0	-	-	0.0
2043-2044	0.0	-	-	0.0
2044-2045	0.0	-	-	0.0
2045-2046	0.0	-	-	0.0
2046-2047	0.0	-	-	0.0

#### 4.6 Total Net Cost

Table 23 shows projected total expenses, total revenues and the total net cost of the program for all three regimes for the projection period. The expenses and revenues shown correspond to values presented earlier in this report.

Table 23	<b>Net Annual</b>	Cost of the	Program (in	millions of	f dollars)
I able 23	INCL Alliluai	COSt OI tile	r i Ogiaili (ii	1 111111110113 01	i uullai <i>si</i>

Loan Year 2021-2022	Total Expenses 5,501.4	Total Revenues 14.1	Total Net Cost 5,487.3	Changes N/A.	Direct Loan	Risk-Shared & Guaranteed -2.1
2022-2023	4,838.3	4.7	4,833.6	-11.9%	4,837.3	-3.8
2023-2024	4,929.9	4.1	4,925.8	1.9%	4,929.0	-3.2
2024-2025	4,079.9	3.7	4,076.2	-17.2%	4,079.0	-2.8
2025-2026	4,033.4	3.2	4,030.2	-1.1%	4,032.7	-2.5
2026-2027	4,129.9	2.8	4,127.2	2.4%	4,129.9	-2.7
2027-2028	4,231.9	2.3	4,229.6	2.5%	4,231.9	-2.3
2028-2029	4,333.6	1.8	4,331.9	2.4%	4,333.6	-1.8
2029-2030	4,431.5	1.3	4,430.1	2.3%	4,431.4	-1.3
2030-2031	4,527.1	0.9	4,526.3	2.2%	4,527.1	-0.9
2031-2032	4,619.2	0.8	4,618.4	2.0%	4,619.2	-0.8
2032-2033	4,702.3	0.0	4,702.3	1.8%	4,702.3	0.0
2033-2034	4,773.9	0.0	4,773.9	1.5%	4,773.9	0.0
2034-2035	4,806.1	0.0	4,806.1	0.7%	4,806.1	0.0
2035-2036	4,816.0	0.0	4,816.0	0.2%	4,816.0	0.0
2036-2037	4,827.5	0.0	4,827.5	0.2%	4,827.5	0.0
2037-2038	4,853.7	0.0	4,853.7	0.5%	4,853.7	-
2038-2039	4,877.9	0.0	4,877.9	0.5%	4,877.9	-
2039-2040	4,904.7	0.0	4,904.7	0.5%	4,904.7	-
2040-2041	4,931.6	0.0	4,931.6	0.5%	4,931.6	-
2041-2042	4,954.1	0.0	4,954.1	0.5%	4,954.1	-
2042-2043	4,982.5	0.0	4,982.5	0.6%	4,982.5	-
2043-2044	5,017.8	0.0	5,017.8	0.7%	5,017.8	-
2044-2045	5,057.1	0.0	5,057.1	0.8%	5,057.1	-
2045-2046	5,097.6	0.0	5,097.6	0.8%	5,097.6	-
2046-2047	5,138.3	0.0	5,138.3	0.8%	5,138.3	-

As shown in Table 23, the initial net annual cost for the direct loan regime is \$5.5 billion for the loan year 2021-2022. The net cost is projected to increase between the loan year 2025-2026<sup>1</sup> and the loan year 2046-2047 from \$4.0 billion to \$5.1 billion, representing an annual average increase of 1.1%.

The net costs shown in Table 23 include the amount of grants disbursed, representing 59% of the net cost for the loan year 2021-2022. Moreover, the net costs also include yearly expenses to account for provisions that recognize in advance the risk of future losses associated with student loans.

<sup>&</sup>lt;sup>1</sup> First loan year not impacted by temporary measures.

## 5 Actuarial Opinion

In our opinion, considering that this Actuarial Report on the Canada Student Financial Assistance 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.

Subsequent events occurred after the valuation date. They consist of upcoming temporary and permanent changes to the program proposed in the Fall Economic Statement and in Budget 2023, as described in Section 2.3. In order to provide projections based on up-to-date information, these changes were considered in our report.

Laurence Frappier, FCIA, FSA

Managing Director

Mathieu Désy, FCIA, FSA

Thierry Truong, FCIA, FSA

Ottawa, Canada 23 June 2023

# Appendix A — Summary of Program Provisions

The Canada Student Financial Assistance Program (CSFA Program) 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 CSFA Program 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 applied to loan years preceding August 1995 while the subsequent Canada Student Financial Assistance Act applies to loan years starting after July 1995.

The population covered by the CSFA Program is the Canadian population excluding nonpermanent residents as well as the non-participating province and territories of Québec, Northwest Territories and Nunavut.

#### A.1 **Eligibility Criteria**

In order to be eligible for financial assistance, 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 program. 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 financial assistance. Each year, upon application with their province of residence, financial assistance is available to full-time students regardless of age, and since 1983, financial assistance is also available to part-time students.

A multi-year student financial assistance agreement was implemented in all jurisdictions starting in the loan year 2013-2014. 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.

Starting in the loan year 2017-2018, 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 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

# Actuarial Report CANADA STUDENT FINANCIAL ASSISTANCE PROGRAM as at 31 July 2022

income is comprised of the student's and the spouse's or partner's income. Indigenous learners, students with a disability recognized by the CSFA Program, 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.

### **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 CSFA Program. On behalf of the Government of Canada, the provinces and territory determine whether students require financial assistance as well as their eligibility for the CSFA Program. 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 CSFA Program covers around 60% of the assessed need up to the sum of the maximum grant (for eligible students) and a maximum of \$210 per week in student loans. Budget 2023 proposed a temporary increase to the maximum for the loan year 2023-2024, increasing it to \$300 per week. The participating provinces and territory complement the CSFA Program 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.

- CSFA
- 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 six provinces: Ontario (August 2001), Saskatchewan (August 2001), Newfoundland and Labrador (April 2004), New Brunswick (May 2005), British Columbia (August 2011) and Manitoba (July 2022). 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 **Canada Student Grants**

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 a disability recognized by the CSFA Program and students with children under the age of 12. These grants are not taxable.

### The CSGs include:

- CSG-FT: a grant of up to \$375 per month of study for full-time university undergraduate or college students with a family income that falls below the maximum threshold (which scales up based on family size). To be eligible, a student's academic program must be at least two years (60 weeks) in duration.
- CSG-D: a grant of \$2,000 per school year for students with a disability recognized by the CSFA Program.
- CSG-DSE: a grant of up to \$20,000 per school year to help cover exceptional educationrelated costs associated with a student's disability recognized by the CSFA Program.
- 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 with a family income that falls below the maximum threshold (which scales up based on family size).
- 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 loan year 2018-2019, 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. Budget 2021 proposed to extend the top-up grant for two additional loan years, up to July 2023, and to make permanent the CSG assessment flexibility that was introduced with the pilot project (i.e., flexibility to use current year's income instead of previous year's income to determine eligibility for CSGs).

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 the loan year 2020-2021: CSG-FT, CSG-PD<sup>1</sup>, CSG-FTDEP, CSG-PT and CSG-PTDEP. Budget 2021 extended the doubling of the grants for loan years 2021-2022 and 2022-2023.

Budget 2023 proposed to increase by 40% (compared with the loan year 2019-2020) the maximum amount for the following grants for the loan year 2023-2024: CSG-FT, CSG-D, CSG-FTDEP, CSG-PT and CSG-PTDEP.

### A.3 Loan Benefit

### A.3.1 In-study Interest Subsidy

The CSFA Program provides an interest-free loan during the borrower's study period and during the six-month non-repayment period for both full-time and part-time students. 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.

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.

### A.3.2 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. With the implementation of the MSFAA, the *Canada Student Financial Assistance Regulations* were amended to remove the regulatory requirement that borrowers

<sup>&</sup>lt;sup>1</sup> Grant for students with a permanent disability, which was changed to the CSG-D starting with the loan year 2022-2023.

<sup>30 |</sup> Appendix A – Summary of Program Provisions

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 loans balance, repayment options and available repayment assistance measures.

In general, the student's monthly payment is calculated based on a standard 114-month repayment period. However, loans with an outstanding balance smaller than \$7,000 are amortized over a shorter period of time as per ESDC's guidelines.

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.

Budget 2019 announced more flexibility for borrowers who take a temporary leave from their studies for medical or parental reasons, including mental health leaves. Borrowers are eligible for an interest-free and payment-free leave for a maximum period of 18 months. This change was implemented on 1 October 2020.

### A.3.3 In Repayment Interest Subsidy

Bill C-14 waived the interest accrual on student loans for fiscal year 2021-2022 and Budget 2021 extended this waiver for one more year, up to 31 March 2023.

The interest accrual is permanently eliminated starting on 1 April 2023.

### A.3.4 **Repayment Assistance**

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 10% 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 10% 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 disability).

At the beginning of the 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 dependants, which scales up based on family size). It was further increased in the loan year 2022-2023 to \$40,000 while thresholds for borrowers from larger households were modified to match the Canada Student Grants thresholds. All thresholds also now increase with inflation, every year, on August  $1^{st}$ .

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

<sup>&</sup>lt;sup>1</sup> Decreased in the loan year 2022-2023 from 20%.

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 disability recognized by the CSFA Program). 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 disability recognized by the CSFA Program) 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 RAP and begin making affordable payments on their outstanding debt again.

Borrowers with a disability recognized by the CSFA Program who are not eligible for the Severe Permanent Disability Benefit have access to the RAP-D¹. Additional expenses related to costs faced by borrowers with a disability recognized by the CSFA Program are taken into account in the income calculation when they apply for RAP-D. Similar to all borrowers in RAP Stage 2, additional student loans or grants are not available under RAP-D until existing loans are paid in full.

### A.3.5 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), registered nurses, registered practical nurses, licensed practical nurses, registered psychiatric nurses and nurse practitioners (together referred to as "qualifying nurses" throughout the report) 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 2022 proposed to increase by 50% the maximum amount of doctors and qualifying nurses forgivable loans under the loan forgiveness program starting with loan year 2023-2024. Budget 2022 also proposed to expand the current list of eligible professionals under the loans

<sup>&</sup>lt;sup>1</sup> Before Budget 2021, only those with a permanent disability were eligible for RAP – Permanent Disability (RAP-PD).

forgiveness program.

Budget 2023 proposed to expand the reach of the Canada Student Loan forgiveness for doctors and qualifying nurses to more rural communities.

Budget 2023 also announced the Government's intent to expand the list of eligible occupations.

# Actuarial Report CANADA STUDENT FINANCIAL ASSISTANCE PROGRAM as at 31 July 2022

## 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 24 presents information extracted from ESDC's data files on the amount of direct loans issued and the number of students for loan years 2000-2001 to 2021-2022. According to the Monthly Financial Information Schedule (MFIS), the total amount of loans issued in 2021-2022 rounded to the million was \$2,940, which is identical to the value calculated using the data file. These data were found to be complete.

Table 24 Dire	ct Loans Issued (in millions of d	ollars) and Number of Students
Loan Year	Amount of Loans Issued	Number of Students
2000-2001	1,573	343,746
2001-2002	1,507	328,671
2002-2003	1,549	331,042
2003-2004	1,648	342,264
2004-2005	1,633	339,204
2005-2006	1,936	345,549
2006-2007	1,916	344,214
2007-2008	2,004	353,548
2008-2009	2,071	366,145
2009-2010	2,088	403,566
2010-2011	2,225	427,054
2011-2012	2,412	450,246
2012-2013	2,583	477,394
2013-2014	2,721	497,636
2014-2015	2,723	495,297
2015-2016	2,722	496,998
2016-2017	2,627	497,045
2017-2018	3,352	592,091
2018-2019	3,575	625,135
2019-2020	3,449	607,861
2020-2021	3,969	576,463
2021-2022	2,940	558,356

#### **B.2 Direct Loans Consolidated**

Table 25 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.

		 as at 31 July 2022

Table 25 Dire	Table 25 Direct Loans Consolidated (in millions of dollars)					
	Consolidations	Reversal <sup>(1)</sup>	Interest Accrued	Total Amount Consolidated		
	(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	966.0	110.0	2,540.2		
2019-2020	3,723.7	983.5	85.7	2,825.9		
2020-2021	3,905.9	1,326.6	0.0	2,579.3		
2021-2022	4,491.4	1,130.9	0.0	3,360.5		

<sup>(1)</sup> Includes all reversals regardless of the original consolidation year.

#### **B.3** Defaults and Recoveries for Direct Loans

Table 26 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 six-year limitation period.

Adjustments, rehabilitations, recoveries and write-offs shown in Table 26 represent the amounts recorded in each loan year, regardless of the time of default. For example, in the loan year 2021-2022, there were \$105.4 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 26 shows that the balance of the portfolio in default is \$2,439.7 million as at 31 July 2022 based on the information extracted from the data file. There is a non-material difference between the balance determined in the DARS/PSCD data file received and the balance provided by ESDC of \$2,283 million as at 31 July 2021 and \$2,434 million as at 31 July 2022.

Table 26 Di	Table 26 Direct Loans Default Portfolio - Principal (in millions of dollars)						
		Account					
Loan Year	Defaults	Adjustments	Rehabilitated	Net Defaults	Recoveries	Write-Offs	Balance
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
2019-2020	306.3	1.9	65.9	238.5	78.3	138.2	2,213.0
2020-2021	350.3	3.7	69.8	276.8	55.6	146.1	2,288.0
2021-2022	487.6	15.7	81.1	390.8	105.4	133.7	2,439.7

### **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 27 and Table 28 present 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 27	Repayment Assistance Pla	an - Principal	Payments	(in millions of dolla	rs)
----------	--------------------------	----------------	----------	-----------------------	-----

		MFIS		Data Files
Loan Year	Stage 2	PD	Total	Total
2009-2010	3.3	1.2	4.4	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
2019-2020	56.6	25.6	82.2	81.6
2020-2021	99.6	47.5	147.1	146.4
2021-2022	105.9	49.8	155.7	156.2

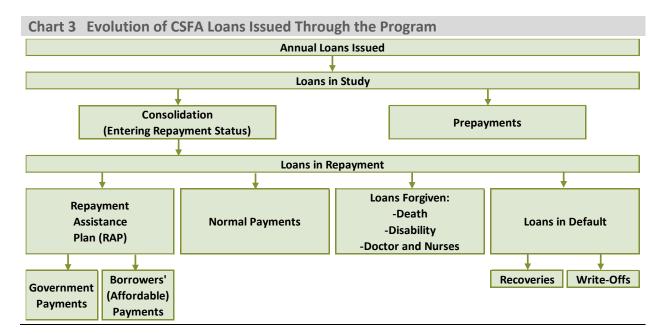
Table 28 Repayment Assistance Plan - Interest Payments (in millions of dollars)

		Data Files			
Loan Year	Stage 1	Stage 2	PD	Total	Total
2009-2010	67.5	0.5	0.7	68.7	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
2019-2020	96.8	18.9	8.6	124.3	125.3
2020-2021	40.2	6.6	3.6	50.4	51.5
2021-2022	0.1	0.0	0.0	0.2	0.0

# Appendix C — Assumptions and Methodology

Several economic and demographic assumptions are needed to determine the future long-term costs of the CSFA Program. The assumptions are determined by considering historical experience, recent trends and forward looking expectations. These assumptions reflect the actuary's best judgment and are referred to as "best-estimate" assumptions.

Chart 3 shows the typical evolution of CSFA loans starting from the moment they are issued. Multiple underlying assumptions and methodologies are needed to determine the expected path of a loan issued through the Program. Those assumptions and methodologies are described in this Appendix.



### **C.1** Demographic

#### C.1.1 **Covered Population Projections**

Demographic projections are based on the population projected in the 31st Actuarial Report on the Canada Pension Plan as at 31 December 2021. More specifically, it starts with the Canadian and Québec populations on 1 July 2021, to which future fertility, mortality and migration assumptions, as shown in Table 29, are applied. The Canadian population is adjusted to exclude the non-participating province of Québec as well as the Northwest Territories, Nunavut, and non-permanent residents. The CPP population projections are essential in determining the future number of students expected to pursue a post-secondary education.

Table 29 Demographic Assumptions	
Total fertility rate for Canada (ultimate)	1.54 per woman (for 2029+)
Mortality	Statistics Canada Life Tables with CPP 31st assumed future improvements
Net migration rate for Canada (ultimate)	0.64% of population (for 2031+)

# CSFA

### C.1.2**Post-secondary Enrolment**

Projections of post-secondary enrolment are based on enrolment data from Statistics Canada's Labour Force Survey up to April 2023. The enrolment rates for students enrolled full-time in post-secondary institutions vary according to the following:

Δ	sge Group
•	15 to 19
•	20 to 24
•	25 to 29
•	30 and over

# Gender Male Female

# **Labour Force Status**

- In labour force (individuals who are employed or looking for employment)
- · Out of labour force

## **Educational** Institution

- University
- Public college
- Private college

Table 30 presents the youth labour force participation rate for participating provinces/territory for ages 15-29, based on the population projected in the 31st Actuarial Report on the Canada Pension Plan as at 31 December 2021.

Table 30 Labour Force Assumptions (in percentage)				
Loan Year	Participation Rate			
2020-2021	66.5			
2021-2022	68.9			
2022-2023	68.9			
2023-2024	68.9			
2024-2025	69.0			
•	•			
2046-2047	71.6			

For each sub-group, historical enrolment data and recent enrolment trends are analyzed. From these, expected future enrolment rates are determined. The future enrolment rates are then multiplied with the corresponding population subset (in or not in the labour force) to determine the expected number of students enrolled full-time. Since international students are not eligible to participate in the CSFA Program, they are excluded from the enrolment numbers.

Table 31 presents full-time post-secondary enrolment rates by age group, separated according to their labour force status, for loan years 2021-2022, 2031-2032 and 2046-2047. In 2021-2022, 50% of students aged 15-29 who were enrolled full-time in post-secondary institutions were also participating in the labour force. The projected number of part-time students is assumed to stay equal to the last known loan year and represents about 1% of total students taking a loan in the CSFA program.

Table 31 Full-time Post-Secondary Enrolment Rate by Labour Force Status (in percentage)						
				Change in		Change in
		2021-2022	2031-2032	Enrolment	2046-2047	Enrolment
		(1)	(2)	(2)/(1)-1	(3)	(3)/(1)-1
	15-19	20.2	21.9	8.2	21.9	8.1
	20-24	27.5	26.0	-5.8	25.9	-6.1
In Labour Force	25-29	5.4	4.8	-10.9	4.8	-11.0
III Labour Force	30-64	0.7	0.8	2.8	0.8	2.9
	15-29	16.2	16.2	-0.2	16.3	0.8
	15-64	4.5	4.5	0.4	4.5	1.0
	15-19	22.9	26.0	13.9	26.0	13.9
	20-24	70.5	74.1	5.1	74.1	5.1
Not In Labour Force	25-29	25.0	25.0	0.0	25.0	0.2
NOT III LADOUI POICE	30-64	2.4	2.4	-0.4	2.4	-0.8
	15-29	36.5	39.4	7.9	39.2	7.2
	15-64	10.1	11.9	17.7	11.7	15.5
	15-19	21.6	24.0	11.0	23.9	10.7
	20-24	39.0	37.8	-3.0	37.3	-4.3
Tatal Fanalas ant Over Benedation	25-29	8.7	7.5	-13.9	7.3	-16.7
Total Enrolment Over Population	30-64	1.1	1.0	-3.2	1.0	-3.7
	15-29	22.5	23.0	1.9	22.8	1.3
	15-64	6.8	7.0	2.1	6.9	0.8

Over the projection period, the enrolment rate for students not in the labour force is expected to increase while the enrolment rate for students in the labour force is expected to remain nearly the same.

### C.1.3 **Loan Uptake Rate and Grant Uptake Rate**

The projection of the loan uptake rates is based on the historical number of students receiving a loan under the CSFA Program according to the educational institution attended:

### **Educational Institution**

- University
- Public college
- Private college

A trend is defined for each group based on historical data, current socio-economic conditions and the future expected mix of the student population.

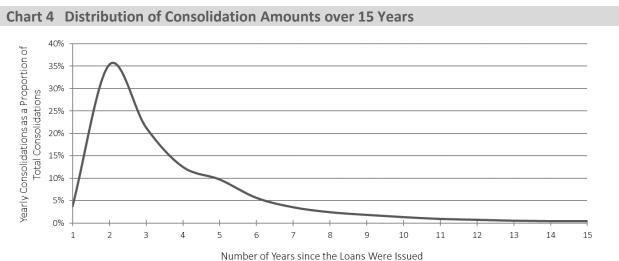
The product of the number of students enrolled full-time and the CSFA Program loan uptake rate gives the number of students receiving a loan under the CSFA Program.

The same methodology is used for both the grant uptake rate and the loan and/or grant uptake rate.

#### C.1.4 Consolidation

Under the direct loan regime, loans are assumed to consolidate according to the distribution of consolidation by year shown in Chart 4 over a period of fifteen years after a loan is issued. This distribution is built using the experience of direct loan consolidations. The assumption remains fairly similar to the assumption from the report as at 31 July 2021.

Each year, some borrowers having previously consolidated their student loans choose to return to school. For projection purposes, the consolidated loan amounts in each future loan year are calculated net of loans for borrowers who returned to school. Hence, the students only consolidate once for modeling purposes.



#### **C.2 Economic**

#### C.2.1 Inflation

Table 32 presents the inflation assumption. The ultimate inflation assumption is consistent with the assumption used in the 31st Actuarial Report on the Canada Pension Plan as at 31 December 2021.

Table 32 Inflation Assumption (in percentage)					
Loan Year	Inflation				
2022-2023	5.6				
2023-2024	2.4				
2024-2025	2.2				
2025-2026	2.1				
2026-2027+	2.0				

### C.2.2 **Real Wage Increase**

Table 33 presents the real wage increase assumption. The ultimate real wage increase is based on the 31st Actuarial Report on the Canada Pension Plan as at 31 December 2021.

Table 33 Real Wage Increase Assumption (in percentage)				
Loan Year	Real wage increases			
2022-2023	-1.06			
2023-2024	0.19			
2024-2025	0.55			
2025-2026	0.80			
2026-2027+	0.90			

### C.2.3 Cost of Borrowing

Table 34 presents the interest rates assumptions used to calculate the cost of borrowing for the Government and for borrowers.

Table 34 Borrowing Cost (in percentage)						
	Government's Cost	Government's Real Cost of		Student's Cost of		
Loan Year	of Borrowing	Borrowing <sup>(1,2)</sup>	Prime Rate <sup>(3)</sup>	Borrowing		
2022-2023	3.0	-2.6	6.2	0.0		
2023-2024	2.8	0.4	6.5	0.0		
2024-2025	2.9	0.7	6.5	0.0		
2025-2026	2.9	0.8	5.8	0.0		
2026-2027	3.0	1.0	4.9	0.0		
2027-2028	3.1	1.1	4.5	0.0		
2028-2029	3.2	1.2	4.4	0.0		
2029-2030	3.3	1.3	4.4	0.0		
2030-2031	3.4	1.4	4.5	0.0		
2031-2032	3.5	1.5	4.5	0.0		
2032-2033	3.6	1.6	4.5	0.0		
2033-2034+	3.7	1.7	4.6	0.0		

<sup>(1)</sup> Since the normal repayment period lasts nine and a half years for the majority of loans issued, the historical 10-year Government of Canada bond yield, net of inflation, is used as a benchmark to calculate the real cost of borrowing for the Government.

The government's cost of borrowing is expected to decrease in the loan year 2023-2024 before gradually increasing up to an ultimate rate of 3.7% in the loan year 2033-2034.

The student's cost of borrowing is 0% due to the temporary pause on interest accrual (ending 31 March 2023) and the permanent elimination of interest accrual (starting 1 April 2023).

### C.2.4 Tuition Increase

Tuition fees are, in part, determined by government policies. Thus, they are projected using provincial and/or university budgets, along with recent and historical experience of tuition fee increases. The short-term projected increases in tuition fees are shown in Table 35.

Province	Weight	2021-2022 <sup>(1)</sup>	2022-2023 <sup>(1)</sup>	2023-2024(2)	2024-2025(2)	2025-2026 <sup>(2)</sup>
Newfoundland	1.3	-1.7	12.4	19.9	19.9	19.9
Prince Edward Island	0.4	1.0	1.9	1.5	1.3	1.2
Nova Scotia	4.6	3.3	3.2	3.0	3.0	3.0
New Brunswick	2.9	3.3	3.6	2.3	2.1	2.0
Ontario	51.2	-1.1	0.9	0.0	4.1	4.0
Manitoba	1.9	3.3	3.7	2.8	2.8	2.8
Saskatchewan	2.9	2.7	4.7	2.9	2.7	2.6
Alberta	21.8	7.7	9.7	5.5	2.0	2.0
British Columbia	13.0	2.4	2.0	2.0	2.0	2.0
Weighted Average		1.8	3.5	2.1	3.4	3.4

<sup>(1)</sup> Increases based on Canadian undergraduate tuition published by Statistics Canada (table 37-10-0045-01).

Long-term estimates of tuition are based on past increases in tuition relative to increases in inflation. Loan years 2019-2020 to 2022-2023 represent outlier points in terms of tuition increase due to the 10% decrease in tuition during the first year and to the tuition freeze in the following years, both enacted by the Ontario Government. Therefore, they are excluded in the

<sup>(2)</sup> Equals to the Government's cost of borrowing minus inflation.

<sup>(3)</sup> Average expected interest rate declared by Canadian financial institutions.

<sup>(2)</sup> Increases based on provincial and/or university budgets, historical experience or expected future increases.

calculations of historical average increases. Over the 10-year period ending in 2018-2019, tuition increases have been, on average, close to inflation plus 1.75%. Therefore, the ultimate tuition increase is 3.75%.

However, the tuition increases in loan years 2021-2022 and 2022-2023 were lower than the inflation for the same periods. To remain consistent with historical average increases, it is assumed that there will be a catch-up in the near future. Therefore, an adjustment of 1.6% per year is made to the projected tuition increase starting from loan years 2024-2025 to 2027-2028 (as shown in Table 36 below). Afterwards, the tuition increase is equal to the ultimate assumption of inflation plus 1.75%.

Table 36 Tuition Increase Assumption (in percentage)				
Loan Year Tuition fee increases				
2021-2022	1.80			
2022-2023	3.50			
2023-2024	2.10			
2024-2025	5.00			
2025-2026	5.00			
2026-2027	5.35			
2027-2028	5.35			
2028-2029+	Inflation + 1.75%			

The starting point for the 2020-2021 tuition fees is calculated from the need assessment data file and represents the average tuition fees for students who received a loan or a grant. Tuition fees were calculated for each of the three student groups (university, public college and private college) and a weighted average was determined based on the number of students in each group. This calculation resulted in a tuition fee estimate of \$8,700 for the loan year 2020-2021. The estimated weighted average tuition fees (including compulsory fees) for 2021-2022 is \$8,900 (resulting in an increase of 2.3% from 2020-2021).

#### **C.3** Loan Size

#### C.3.1 **Student Needs**

The projection of the average loan issued is based on the projection of the student net need, capped at the maximum weekly student loan limit. Student net need increases are calculated separately for each group (university, public college and private college students) over the projection period.

# Determining the student net need

### Student Need (excess of expenses over resources):

- Expenses: tuition and compulsory fees, books and supplies, living allowance, return transportation, child care and a few other allowable expenses depending on the student's situation.
- Resources: student contributions<sup>1</sup> and, when applicable, parental or spousal contributions.
- Projected to increase using economic assumptions.

### **Grants reduction:**

- Grants reduce the student need, resulting in the student net need.
- Grants may fulfill the entire student need, in which case no loan is issued.
- Different grants are available (details can be found in Appendix A).
- Grants other than those for disability are projected using inflation indexed thresholds and expected gross annual family income.

ESDC provided CSFA Program need assessment data for the loan year 2020-2021. The CSFA Program generally aims to provide 60% of the total assessed need, while the participating province or territory of residence aims to provide the remaining 40%.

### **C.3.2** Other Student Expenses

Other expenses are considered to be any student expense other than tuition fees and are projected to increase with inflation. These expenses include books, shelter, food, clothing and transportation and are assessed by the participating provinces and territory. The average expense is calculated from the need assessment data file and represents the average expenses for students who receive a loan or a grant (the projection is made individually by university, public college and private college). The estimated average for other expenses is \$12,900 for the loan year 2020-2021; it increases to \$13,600 in the loan year 2021-2022 based on an increase of 5.4%<sup>2</sup>.

### C.3.3 Student Resources

The starting point for average resources in 2020-2021 is calculated from the need assessment data file and represents the average resources for students who received a loan or a grant. The salary portion of average resources is then projected using the wage increase assumption, while the standard of living used to determine the parental contribution is projected using the inflation assumption (the projection is made individually by university, public college and private college). The estimated student average resources is \$1,500 for 2020-2021, which includes the temporary removal of the fixed student contribution and of the spousal contribution for that year. This amount increases to \$3,000 in the loan year 2021-2022.

### C.4 Grants

For the loan year 2021-2022, the actual cost of Canada Student Grants (CSGs) was \$3,256 million. The total amount of grants disbursed under the CSG is projected to decrease

<sup>&</sup>lt;sup>1</sup> A portion of the student's contributions comes from the fixed student contribution set at a maximum of \$3,000 per loan year.

<sup>&</sup>lt;sup>2</sup> Slightly different than the inflation assumption for the loan year 2021-2022 due to a change in the weights for university, public college and private college.

CSFA

over the projection period as fewer borrowers become eligible for the CSG-FT due to the family income (inflation plus real wage) increasing at a faster pace than the grant thresholds (inflation).

For loan years 2020-2021 to 2023-2024, grants are higher due to the temporary doubling of grants (COVID-19 pandemic measures) followed by a 40% increase (compared with the loan year 2019-2020) in grants. Maximum monthly grant amounts, as set out by the program, are assumed to remain constant for the remaining projection period for the purpose of this valuation.

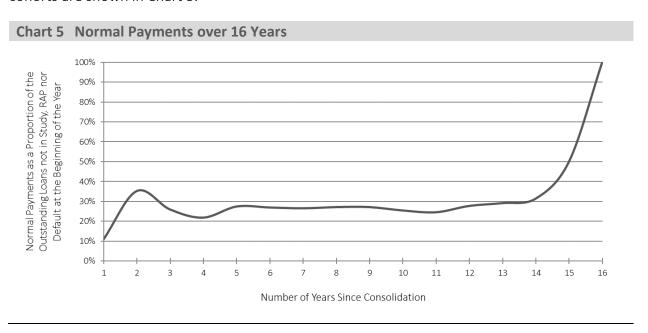
### **C.5 Repayment for Direct Loans**

### C.5.1 **Prepayments**

Prepayments correspond to payments applied to principal during the period of study and during the six-month non-repayment period after the period of study end date. The amount of prepayments for 2021-2022 was \$463 million. Around 30% of this amount is received during the period of study and the remaining 70% is received during the non-repayment period. Over the long-term, it is assumed that around 15.0% of loans issued are prepaid. This assumption is based on recent historical experience.

### C.5.2 **Normal Payments**

Normal payments are made by borrowers that are not in study, RAP nor default. These payments include both the minimum payments (as set out by the repayment agreement) and any additional voluntary payments. The projected normal payments that apply to each consolidation cohorts are shown in Chart 5.



The normal payments for each consolidation cohorts for the next four loan years are expected to be lower than historical experience. As such, they are adjusted by the factors shown in Table 37. The repayment experience is expected to revert to its pre-pandemic level.

Table 37 Adjustments to Normal Payments					
Loan Year	Multiplicative Adjustments				
2022-2023	80%				
2023-2024	85%				
2024-2025	90%				
2025-2026	95%				
2026-2027+	100%				

### C.5.3 **Loans Forgiven**

There are two categories of loans forgiven: those forgiven for severe permanent disability and death, and those forgiven for family physicians and qualifying nurses who work in an under-served rural or remote community.

Starting with the loan year 2022-2023, loans forgiven for severe permanent disability and death correspond to 0.027% of loans in study and 0.107% of loans in repayment. The long-term rate of loans forgiven while in repayment was decreased to reflect recent loans forgiven while in default. In the future, they are expected to directly be forgiven while in repayment instead of defaulting first. In 2021-2022, \$4.2 million of loans were forgiven while in default.

Family doctors and family medicine residents are eligible for forgiveness of \$8,000 per year to a maximum of \$40,000 over five years while qualifying nurses may be eligible for forgiveness of \$4,000 per year to a maximum of \$20,000 over five years. Moreover, Budget 2022 increased the maximum amount of doctors and qualifying nurses forgivable loans by 50% while Budget 2023 proposed to expand the reach of the Canada Student Loan Forgiveness for doctors and qualifying nurses to more rural communities. The amount forgiven is projected based on the expected new number of doctors and qualifying nurses who received student loans during their studies and are expected to work in an under-served rural or remote community after graduation.

### **C.6 Administrative Expenses**

ESDC provided estimates of the administrative expenses to support the CSFA Program for the short-term. The costs have been converted to a loan year basis and the extrapolation of future years was done using wage increases (inflation plus real wage). Administrative expenses include ESDC salary and non-salary resources related to the program as well as expenses for service providers and collection costs.

The general administrative fees represent the expenses incurred by the departments involved and fees paid to the National Student Loans Service Centre (NSLSC).

Table 38 Administrative Expense (in millions of dollars)				
Loan Year	Administrative Expenses			
2021-2022	107.4			
2022-2023	119.1			
2023-2024	118.1			
2024-2025	118.9			
2025-2026	120.1			
2026-2027	121.9			
2027-2028+	Increases with wages			

#### C.6.1 **Administrative Fees Paid to Provinces**

The administrative expenses include fees paid to the participating provinces and to the Yukon Territory. These fees are paid to administer certain aspects of the CSFA Program. For the loan year 2021-2022, the administrative fees paid to the participating provinces and territory were \$34.8 million. Future years were projected using wage increases.

#### C.6.2 Alternative Payments

Alternative payments are made directly to the province and territories that do not participate in the CSFA Program, namely Québec, the Northwest Territories, and Nunavut. These payments are projected by multiplying the net cost of the program by the ratio of the population aged 18-24 residing in the non-participating province and territories to the population aged 18-24 residing in the participating provinces and territory.

The expenses included in the calculation are: interest subsidies, RAP – interest expenses for risk-shared and guaranteed regimes, loans forgiven, service providers' costs, CSG, claims, RAP-Stage 2 payments, risk premiums, put-backs, refunds to financial institutions, direct loans' borrowing costs for loans in good standing and default amounts for the direct loan regime.

The revenues include: student interest payments, and principal and interest from recoveries. The cost of alternative payments is \$927.4 million for 2021-2022 based on expenses and revenue of 2020-2021 and \$999.2 million for 2022-2023 based on expenses and revenue of 2021-2022, both including temporary COVID-19 measures.

#### **C.7** Allowance

Three allowances are projected in this report. There is an allowance for the RAP (principal) to cover the future cost of students benefiting from this program, and two allowances for bad debt (principal and interest) to cover the future cost of students defaulting on their loan. This section provides details related to the assumptions and methodologies used to determine those allowances.

### C.7.1 Repayment Assistance Plan (RAP)

The methodology used to calculate the RAP allowance is based on the following components:

- a) The share of loans (as a percentage of the initial consolidation cohort) using the RAP at least once<sup>1</sup> (based on historical experience);
- b) The share of loans in the RAP that will remain in the RAP after each loan year, as not all RAP borrowers end up using the 15-year maximum (based on historical experience);
- c) An adjustment for the expected change in future experience due to family income increasing at a rate equal to real wage plus inflation and RAP thresholds increasing at a rate equal to inflation (based on an estimate using economic data);
- d) An adjustment for the expected impact for the following recent or upcoming changes that are not already reflected in the historical data (based on an estimate using economic data):
  - o Impact of the RAP threshold changes in the loan year 2022-2023;
  - o Impact of the change in the disability definition in the loan year 2022-2023.
- e) The required payments for loans in the RAP for each loan year (based on the RAP formula, including the removal of interest accrual); and
- f) The share of the required payment paid by the Government (based on historical experience).

Sections C.7.1.1, C.7.1.2 and C.7.1.3 provide information on the resulting loan balances in RAP. Section C.7.1.4 provides additional information on the other RAP assumptions.

Tables 39, 40 and 41 show the result of steps (a) to (d) as a percentage of the initial consolidation amount (utilization rates).

### C.7.1.1 RAP – Stage 1

Table 39 shows the long-term utilization rate<sup>2</sup> assumptions used for RAP—Stage 1. 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 plan 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 (the first diagonal row of Table 39) generally consists of a partial loan year since most borrowers do not enter the RAP on August 1<sup>st</sup>. 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. The utilization rate is based on the consolidation amounts and is applied by cohort.

<sup>&</sup>lt;sup>1</sup> For consolidation cohorts that already have data, starting from the latest known.

<sup>&</sup>lt;sup>2</sup> The long-term utilization rate represents the rates for a consolidation cohort once the short-term adjustments no longer apply (i.e., 2025-2026 and after).

<sup>48 |</sup> Appendix C – Assumptions and Methodology

Loan				Start Year af	ter Consolidation	on		
Year	1	2	3	4	5	6	7	8
1	24.8%							
2	30.0%	4.5%						
3	19.7%	3.4%	0.9%					
4	15.0%	2.4%	0.8%	0.4%				
5	12.1%	1.8%	0.5%	0.4%	0.2%			
6	6.7%	1.5%	0.4%	0.3%	0.2%	0.1%		
7	1.7%	0.6%	0.3%	0.2%	0.1%	0.1%	0.1%	
8	0.9%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
9	0.6%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
10	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

### C.7.1.2 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 6<sup>th</sup> year after consolidation until the 11<sup>th</sup> year after consolidation.

Table 40 shows the resulting long-term utilization rate assumptions used for RAP-Stage 2.

Table 40 RAP-Stage 2 Utilization Rates						
		Start Year after Consolidation				
Loan Year	6	7	8	9	10	11
6	2.4%					
7	3.7%	1.3%				
8	2.9%	1.3%	0.4%			
9	2.2%	1.0%	0.5%	0.2%		
10	1.7%	0.7%	0.3%	0.3%	0.2%	
11	1.3%	0.5%	0.2%	0.2%	0.2%	0.3%
12	0.9%	0.4%	0.2%	0.1%	0.1%	0.2%
13	0.6%	0.3%	0.1%	0.1%	0.1%	0.1%
14	0.3%	0.1%	0.1%	0.0%	0.0%	0.1%
15	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%

### C.7.1.3 RAP - D

RAP-D is available to borrowers with a disability recognized by the CSFA Program. A borrower who had a RAP-D application approved is eligible to start in the RAP-D 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 41 shows the long-term utilization rate assumptions used for RAP-D.

Table 41 RAP-D Utilization Rates							
			Start Year after Consolidation				
Loan Year	1	2	3	4	5	6	7
1	2.83%					-	
2	3.21%	0.36%					
3	2.01%	0.27%	0.08%				
4	1.44%	0.18%	0.08%	0.05%			
5	1.02%	0.12%	0.05%	0.05%	0.03%		
6	0.76%	0.08%	0.03%	0.03%	0.04%	0.03%	
7	0.53%	0.06%	0.02%	0.02%	0.02%	0.04%	0.02%
8	0.37%	0.04%	0.02%	0.01%	0.02%	0.02%	0.03%
9	0.20%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%
10	0.08%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%

### C.7.1.4**Other RAP Assumptions**

Table 42 provides information on the additional assumptions used to calculate the RAP allowance.

Table 42 Oth	Table 42 Other RAP Assumptions							
Loan Year	Multiplicative Adjustments due to Family Income Growing at a Faster Pace than Thresholds	Mult Adjustm	rt-Term iplicative nents to the Loans in RAP		ual Impact o eshold Char		Governme the Require	
	RAP-1, RAP-2 and RAP-D	RAP-1	RAP-2 and RAP-D	RAP-1	RAP-2	RAP-D	RAP-2	RAP-D
2022-2023 2023-2024 2024-2025	99.6% per loan year, up to a maximum of 94.0%	91% 94% 97%	97.5% 98.4% 99.2%	102.4% 110.0% 114.0%	101.6% 104.7% 107.1%	102.2% 105.6% 105.6%	93.0% 97.6% 97.6%	92.9% 98.0% 98.0%
2025-2026+	after 15 years	100%	100.0%	114.0%	109.4%	105.6%	97.6%	98.0%

The values presented in the Table 39, Table 40 and Table 41 already include the long-term adjustments for the "Family Income Growing at a Faster Pace than Thresholds" and for the "Gradual Impact of the Threshold Change".

#### Provisions for RAP-Principal (Stage 2 and D) C.7.1.5

The RAP – principal provision covers future costs related to RAP-Stage 2 and RAP-D, 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 provision rates used for the projected allowance as at 31 July 2023 shown in this report are:

- 6.9% for loans in-study;
- 1.9% for loans in repayment (net of loans in the RAP); and
- 36.2% for loans in the RAP (all stages combined).

The ultimate provision rates used in this report are:

- 6.7% for loans in-study;
- 2.3% for loans in repayment (net of loans in the RAP); and
- 29.5% 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 plan by meeting the eligibility criteria, there is a greater chance that these loans will remain eligible and consequently, remain in the plan.

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 RAP expenses (as shown in Table 16).

The RAP is a plan 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.

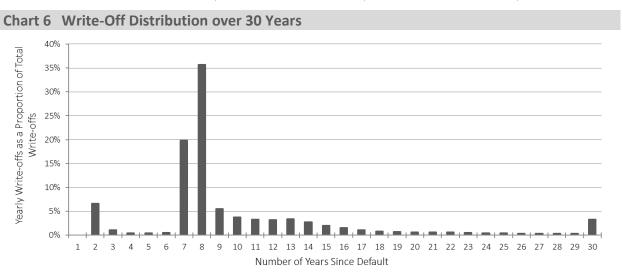
### C.7.2 **Net Default Rate**

Several assumptions are used to determine the expected future amount of defaulted principal that will not be recovered, namely the gross default rate, the loans rehabilitations and recalls, the loans recoveries and the prepayments. These assumptions are revised each year and are based on historical observations and the actuary's best estimates.

The net default rate is used to derive the allowances for bad debt – principal and for bad debt – interest shown in sections C.7.3 and C.7.4. It 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:

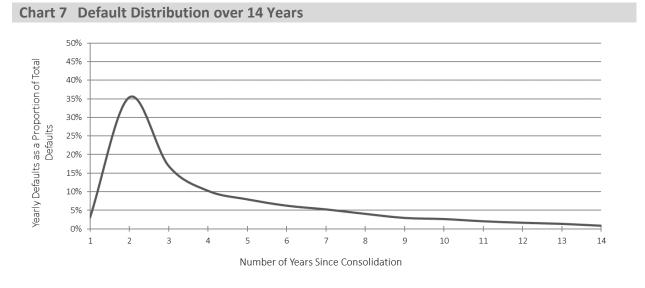
Gross Default Rate x (1 – Recalls and Rehabilitation Rate – Recovery Rate) =  $15.25\% \times (1 - 16.5\% - 38.0\%) = 6.9\%$ 

The amount of loans to be written-off<sup>1</sup> each year is determined using the assumed distribution presented in Chart 6, which was updated from the last report based on recent experience data.



### C.7.2.1 Gross Default Rate

A default rate is determined for each consolidation cohort. This rate represents the proportion of loans consolidated in a year that are expected to default at some point before they are completely repaid. Consolidation cohorts 2027-2028 and onwards are assumed to have the same ultimate gross default rate of 15.25% (based on historical experience and unchanged from the previous report). The short-term gross default rates (up to the loan year 2026-2027) are adjusted to reflect recent experience (Section C.7.2.4). As shown in Chart 7, the largest proportion of loans goes into default within three years of consolidation.



<sup>&</sup>lt;sup>1</sup> Includes write-offs of defaulted loans that exceed the six-year limitation period as stated in section 16.1 of the Canada Student Financial Assistance Act, as well as small balances of defaulted loans.

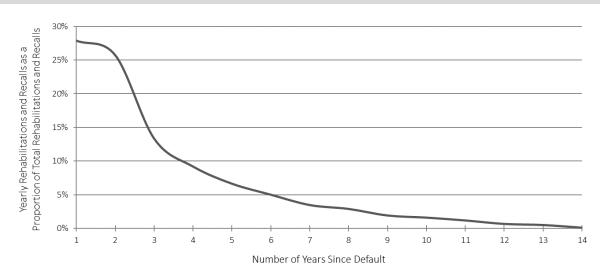
#### **Recalls and Rehabilitations Rate** C.7.2.2

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 can bring their loans back in good standing by performing what is called a rehabilitation. Prior to January 2020, borrowers had to pay all outstanding interest and the equivalent of two monthly payments to rehabilitate their loan. Since January 2020, 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 the loan year 2009-2010, since to be eligible for the RAP, borrowers first needed to have a loan in good standing.

Consolidation cohorts 2030-2031 and onwards are assumed to have the same ultimate recalls/rehabilitations rate of 16.5% (based on historical experience and increased from 14.0% in the previous report). The short-term recalls/rehabilitations rates (up to the loan year 2029-2030) are adjusted to reflect recent experience (Section C.7.2.4).

Chart 8 shows the long-term recalls and rehabilitations distribution once a loan is transferred in default.

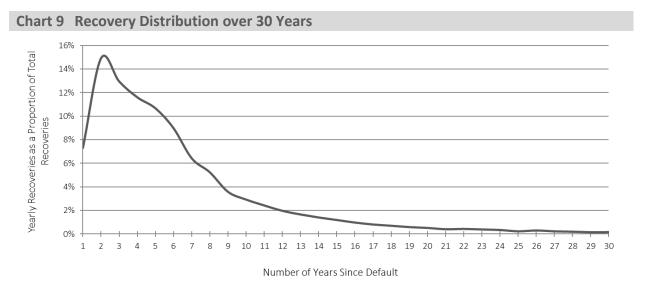


**Chart 8 Recalls and Rehabilitations Distribution over 14 Years** 

### C.7.2.3 **Recovery Rate**

Recoveries represent monies the program is able to recuperate after loans have defaulted. CRA is responsible for collecting this money on behalf of the program. Recoveries are analysed based on the default year after consolidation. The long-term recovery rate for a default cohort is assumed to be 38.0% (32.8% in the previous report). This increase in the recovery assumption is mainly due to the expected impact of the permanent elimination of interest accrual, where recoveries would now apply to principal only instead of principal or interest. The recovery rate for the loan year 2022-2023 is adjusted to reflect partially known experience (Section C.7.2.4).

Chart 9 shows the recovery distribution once a loan is transferred in default.



### C.7.2.4**Short-Term Adjustments to the Default Assumptions**

Table 43 provides the short-term adjustments that were made to the default assumptions. Current defaults, as well as rehabilitations and recalls, are higher than the ultimate assumption. Recoveries were slightly adjusted downward for the loan year 2022-2023.

Table 43 Short-Term Adjustments to the Default Assumptions							
Loan Year	Multiplicative Adjustments to All Gross Defaults during the Loan Year	Multiplicative Adjustments to All Rehabilitation and Recalls during the Loan Year	Multiplicative Adjustments to All Recoveries during the Loan Year				
2022-2023	112.2%	136.8%	95.0%				
2023-2024	110.0%	132.2%	100.0%				
2024-2025	107.5%	127.6%	100.0%				
2025-2026	105.0%	123.0%	100.0%				
2026-2027	102.5%	118.4%	100.0%				
2027-2028	100.0%	113.8%	100.0%				
2028-2029	100.0%	109.2%	100.0%				
2029-2030	100.0%	104.6%	100.0%				
2030-2031+	100.0%	100.0%	100.0%				

#### C.7.3**Bad Debt - 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).

The provision rates used for the projected allowance as at 31 July 2023 shown in this report are:

- 5.9% for loans in-study;
- 3.5% for loans in repayment; and
- 69.5% for loans in default.

The ultimate provision rates used in this report are:

- 5.9% for loans in-study;
- 4.2% for loans in repayment; and
- 68 4% for loans in default

The level of the total allowance is determined at the end of the loan year. The annual expense 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.

### Allowance for loans in study C.7.3.1

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 long-term provision rate for loans in study of:

$$[(Net Default Rate) \times (1 - Prepayments)] = [(6.9\%) \times (1 - 15.0\%)] = 5.9\%$$

### C.7.3.2 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 38.0%; hence, it is assumed that 62.0% (1-38.0%) of the projected gross defaulted loans will not be recovered.

The provision rate on outstanding loans in repayment is 4.2% in the long-term. This provision rate of 4.2% for loans in repayment is lower than the provision rate of 5.9% 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.

#### C.7.3.3 Allowance for loans in default

The last component of the allowance for bad debt – principal is the balance of loans in default that will not be recovered. It is determined by applying rehabilitation, recall and recovery assumptions to loans that have already transferred in default. Those assumptions are lower than for other portfolios 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 rehabilitations, recalls and recoveries have already occurred. Thus, the remaining loans have aged and have an increased risk of loss.

The long-term provision rate is equal to 68.4%.

### C.7.4 Bad Debt - Interest

The methodology for the calculation of the provision for bad debt – interest is as follows:

- Starting point includes all active borrowers in default as at 31 July 2022;
- The historical experience is used to calculate, for each year, the probabilities of:
  - o Rehabilitating the loan;
  - o Having a non-CRA recovery and the amount of the recovery;
  - o Having a CRA recovery and the amount of the recovery;
  - o Writing off the loan (assumed to be 100% for the 30<sup>th</sup> year).
- Expected experience is generated for each individual borrower and for all future loan years (capped at 30 years after a borrower transferred in default) using the previously calculated probabilities; and
- The allowance rate at any given date is equal to the sum of future write-offs (after the given date) divided by the expected outstanding interest balance (at the given date).

Provision rates can be estimated for each year since default, as shown in Table 44. The provision rate is 24.4% of interest accrued in the first year after loans are transferred into default. It increases in each of the six subsequent years before remaining at around 60% for the years after (a significant amount is written off when the six-year limitation period after the consolidation is reached). The aggregate allowance is equal to 60.3% of the outstanding default interest portfolio as at 31 July 2023.

Table 44 Provision Rates for Bad Debt – Interest <sup>(1)</sup>					
	Provision Rates (%) - Loan				
Year Since Default	Year 2022-2023 <sup>(2)</sup>				
1st	24.4				
2nd	31.2				
3rd	38.9				
4th	49.1				
5th	62.5				
6th	73.0				
7th	74.6				
8th	60.0				
9th	57.5				
10th	57.1				
11th	60.2				
12th	59.8				
13th	59.6				
14th	59.3				
15th	60.6				
16th	60.3				
17th	60.1				
18th	61.5				
19th	58.9				
20th	63.8				

<sup>(1)</sup> Provision rates for bad debt – interest are applied on total interest.

The annual expense 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.

<sup>(2)</sup> Same as the provision rates for Public Accounts as at 31 March 2023.

# **Appendix D** — New Loans and Grants by Institution Type

The next four tables present the number of recipients as well as the amounts issued by institution type for both loans and grants.

Table 45 Number of Students Receiving a Grant by Institution Type (in thousands)				
Loan Year	University	Public College	Private College	Total
2021-2022	303	165	76	544
2022-2023	294	175	81	549
2023-2024	301	197	68	567
2024-2025	304	226	57	587
2025-2026	306	236	60	601
2026-2027	307	234	59	601
2027-2028	309	233	59	601
2028-2029	308	233	59	600
2029-2030	307	232	58	597
2030-2031	306	231	58	595
2031-2032	304	230	57	591
2032-2033	301	228	57	586
2033-2034	297	225	56	578
2034-2035	293	222	56	571
2035-2036	289	218	55	562
2036-2037	285	215	55	554
2037-2038	283	213	54	550
2038-2039	281	212	54	547
2039-2040	280	212	53	545
2040-2041	279	211	53	543
2041-2042	277	211	52	540
2042-2043	277	211	52	539
2043-2044	277	211	52	540
2044-2045	278	212	51	541
2045-2046	279	213	51	543
2046-2047	281	214	51	546

Table 46 Grants Disbursed by Institution Type (in millions of dollars)				
Loan Year	University	Public College	Private College	Total
2021-2022	1,725	990	541	3,256
2022-2023	1,730	1,084	593	3,408
2023-2024	1,220	823	334	2,377
2024-2025	883	675	200	1,758
2025-2026	891	704	209	1,805
2026-2027	897	701	208	1,806
2027-2028	903	698	208	1,809
2028-2029	904	699	208	1,810
2029-2030	902	698	208	1,807
2030-2031	900	696	207	1,803
2031-2032	896	695	207	1,798
2032-2033	892	693	206	1,791
2033-2034	886	690	206	1,781
2034-2035	879	686	204	1,769
2035-2036	871	682	203	1,756
2036-2037	866	679	202	1,747
2037-2038	864	678	202	1,744
2038-2039	862	678	202	1,743
2039-2040	861	678	202	1,742
2040-2041	860	679	203	1,741
2041-2042	859	679	203	1,741
2042-2043	861	682	204	1,746
2043-2044	865	685	205	1,755
2044-2045	871	689	206	1,766
2045-2046	878	693	207	1,778
2046-2047	886	698	209	1,793

Table 47 Number of Students Receiving a Loan by Institution Type (in thousands)				
Loan Year	University	Public College	Private College	Total
2021-2022	314	143	101	558
2022-2023	301	135	104	541
2023-2024	332	174	89	595
2024-2025	362	218	72	652
2025-2026	367	228	75	671
2026-2027	372	228	75	675
2027-2028	377	229	76	681
2028-2029	380	230	76	686
2029-2030	381	231	76	689
2030-2031	383	232	77	691
2031-2032	384	233	77	694
2032-2033	385	233	77	695
2033-2034	385	234	77	696
2034-2035	385	234	77	695
2035-2036	384	234	77	695
2036-2037	384	234	77	696
2037-2038	386	235	78	699
2038-2039	388	236	78	702
2039-2040	390	238	79	707
2040-2041	392	240	79	711
2041-2042	394	241	80	715
2042-2043	398	244	80	722
2043-2044	403	246	81	730
2044-2045	408	249	82	740
2045-2046	414	252	83	750
2046-2047	421	256	84	761

Table 48 Loans Iss	Table 48 Loans Issued by Institution Type (in millions of dollars)			
Loan Year	University	Public College	Private College	Total
2021-2022	1,535	625	780	2,940
2022-2023	1,553	618	844	3,015
2023-2024	2,310	1,044	980	4,334
2024-2025	2,282	1,220	617	4,119
2025-2026	2,354	1,302	652	4,308
2026-2027	2,421	1,325	657	4,403
2027-2028	2,490	1,349	662	4,501
2028-2029	2,536	1,374	669	4,579
2029-2030	2,574	1,396	674	4,643
2030-2031	2,607	1,416	678	4,700
2031-2032	2,634	1,435	682	4,751
2032-2033	2,655	1,452	686	4,794
2033-2034	2,668	1,467	688	4,824
2034-2035	2,677	1,480	690	4,847
2035-2036	2,682	1,491	691	4,864
2036-2037	2,693	1,505	693	4,891
2037-2038	2,712	1,523	697	4,932
2038-2039	2,732	1,541	702	4,976
2039-2040	2,753	1,560	707	5,020
2040-2041	2,773	1,579	713	5,065
2041-2042	2,793	1,597	719	5,110
2042-2043	2,824	1,618	727	5,169
2043-2044	2,860	1,640	735	5,236
2044-2045	2,902	1,664	744	5,311
2045-2046	2,948	1,688	754	5,391
2046-2047	2,999	1,714	765	5,478

## Appendix E — 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 (such as a low interest rate or none at all) should be accounted for based on the substance of the transaction. These standards apply when the loan can be considered more in the nature of a grant. 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 3.01%, which is the yield equivalent to a zero-coupon yield curve (determined by reference to market yields as at 31 March 2023 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 rate of 0%; and
- Expected repayment cash flows based on historical experience and expected long-term assumptions.

As mentioned in Appendix A of this report, loans under the CSFA Program are currently not considered as having significant concessionary terms according to the Directive on Accounting Standards.

Three alternate scenarios were tested:

- Doubling the discount rate would result in a concessionary term.
- Increasing the in-study period to 10 years (from the current average of three years) would result in a concessionary term.
- Having students fully repay their loans immediately after consolidation would not result in a concessionary term.

# Appendix F — Acknowledgements

We would like to thank the staff of the Canada Student Financial Assistance Program 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.

The following people assisted in the preparation of this report:

Ali Jazzar Alice Chiu, ACIA, ASA Assia Billig, FCIA, FSA Ayoub Ezzahouri Jeffrey Muller, FCIA, FSA Julie Fortier Luc Leger, ACIA, ASA Marie-Pier Bernier, FCIA, FSA Pascale Jomphe, ACIA, ASA Patrick Dontigny, ASA