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

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

Actuarial Report 2023

Employment Insurance Premium Rate

Canada

Office of the Chief Actuary
Office of the Superintendent of Financial Institutions Canada
12th Floor, Kent Square Building
255 Albert Street
Ottawa, Ontario
K1A 0H2

E-mail: **oca-bac@osfi-bsif.gc.ca**

An electronic version of this report is available on the following Web sites:
www.osfi-bsif.gc.ca
https://www.canada.ca/en/employment-social-development/corporate/portfolio/ei-commission.html

Cat. No. CC536-3E-PDF
ISSN 2291-7950

22 August 2022

Commissioners of the Canada Employment Insurance Commission

Dear Commissioners,

Pursuant to section 66.3 of the *Employment Insurance Act*, I am pleased to submit the 2023 report, which provides actuarial forecasts and estimates for the purposes of sections 4, 66 and 69 of the *Employment Insurance Act*.

The estimates presented in this report are based on the Employment Insurance provisions and proposed program changes as of 22 July 2022.

Yours sincerely,

Mathieu Désy, FCIA, FSA
Senior Actuary, Employment Insurance Premium Rate-Setting
Office of the Chief Actuary
Office of the Superintendent of Financial Institutions Canada

Table of Contents

List of Tables

1 Executive Summary

1.1 Main Findings

Main Findings 2023 Employment Insurance Premium Rate Actuarial Report	2023	2022
Maximum Insurable Earnings (MIE)	**$61,500**	$60,300
7-year Forecast Break-Even Rate[1]	**1.74%**	1.81%
Québec Parental Insurance Plan (QPIP) Reduction	**0.36%**	0.38%
Qualified Wage-Loss Plans: EI savings	**$1,345 million**	$1,209 million[2]
Qualified Wage-Loss Plans: Employer Premium Reductions	Category 1: **0.25%** Category 2: **0.39%** Category 3: **0.39%** Category 4: **0.42%**	Category 1: 0.23% Category 2: 0.36% Category 3: 0.36% Category 4: 0.39%
The Government froze the EI premium rate for 2021 and 2022 at the 2020 premium rate level of 1.58%. Moreover, the Employment Insurance (EI) premium rate is limited to an annual increase or decrease of 0.05%, as per the EI Act. Therefore, in accordance with this Act, the 2023 EI premium rate would be 1.63%[3]. *Employers pay premiums at the rate of 1.4 times those of employees, prior to any premium reduction granted to employers who sponsor a qualified wage-loss plan. The reduced employer multipliers are shown below.*		
Employer Multiplier: Outside Québec *Based on a premium rate of 1.63% in 2023 and 1.58% in 2022*	Category 1: **1.249** Category 2: **1.160** Category 3: **1.163** Category 4: **1.140**	Category 1: 1.257 Category 2: 1.172 Category 3: 1.172 Category 4: 1.151
Employer Multiplier: Québec *Based on a premium rate of 1.27% in 2023 and 1.20% in 2022*	Category 1: **1.206** Category 2: **1.092** Category 3: **1.096** Category 4: **1.066**	Category 1: 1.211 Category 2: 1.100 Category 3: 1.100 Category 4: 1.072

The estimates in this report are based on the EI provisions as of 22 July 2022, on the information provided on or before 22 July 2022 by the Minister of Employment and Social Development (ESD) and the Minister of Finance, and on the methodology and assumptions developed by the Actuary.

[1] This is the rate that would generate sufficient premium revenue during the next 7-year period to pay for the expected expenditures over that same period and to eliminate the projected deficit/surplus that has accumulated in the EI Operating Account as of 31 December of the preceding year. The methodology is explained in Section 3.

[2] Revised from $1,159 million in the previous report as it is based on updated earnings data.

[3] The Commission is responsible for setting the premium rate. It may set a premium rate that is different than the one shown in this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

Accordingly, a premium rate corresponding to the 7-year forecast break-even rate (1.74%) from 2023 to 2029 would balance out the EI Operating Account at the end of 2029[1].

Table 1 below shows the status of the EI Operating Account for 2021, as well as its projected evolution for 2022 and 2023. This is based on a premium rate freeze for 2022 at the same level as 2020 (i.e. 1.58%) and on the application of the 0.05% limit to the annual premium rate change for 2023 (i.e. 1.63%).

Table 1 Summary of the EI Operating Account ($ million)

Calendar Year	Premium Rate (%)	Premium Revenue	Expenditures	Annual Surplus (Deficit)	Cumulative Surplus (Deficit) 31 December
2021	1.58%				(25,865)
2022	1.58%	26,102	27,492	(1,390)	(27,255)
2023	1.63%	27,780	25,738	2,042	(25,213)

It is important to note that the figures related to future expenditures and earnings base included in this report are projections, and eventual differences between future experience and these projections will be analyzed and considered in subsequent reports.

1.2 Purpose of the Report

This Actuarial Report prepared by the Actuary, Employment Insurance Premium Rate-Setting, is the tenth report to be presented to the Canada Employment Insurance Commission (Commission) in compliance with section 66.3 of the *Employment Insurance Act* (“EI Act”).

The Actuary is a Fellow of the Canadian Institute of Actuaries who is an employee of the Office of the Superintendent of Financial Institutions and who is engaged by the Commission to perform duties under section 66.3 of the EI Act. Pursuant to this section, the Actuary shall prepare actuarial forecasts and estimates for the purposes of calculating the maximum insurable earnings (MIE) under section 4 of the EI Act, the employment insurance (EI) premium rate under section 66 of the EI Act, and the premium reductions under section 69 of the EI Act for employers who sponsor qualified wage-loss plans, and for employees and employers of a province that has established a provincial plan. The actuary shall also, on or before 22 August of each year, provide the Commission with a report that sets out:

- the forecast premium rate for the following year and a detailed analysis in support of the forecast;
- the calculations performed for the purposes of sections 4 and 69 of the EI Act;
- the information provided under section 66.1 of the EI Act; and
- the source of the data, the actuarial and economic assumptions and the actuarial methodology used.

The purpose of this report is to provide the Commission with all the information prescribed under section 66.3 of the EI Act. The Commission shall, on or before 14 September, make

[1] Shown in Table 9 of the main report for information purposes.

available to the public this report along with the summary of this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

1.3 Scope of the Report

Recent program changes and announcements are summarized in Section 2.

The methodology used in determining the 7-year forecast break-even rate, including the premium rate reduction for employees and employers of a province that has established a provincial plan such as Québec, and the reduction in employer premiums due to qualified wage-loss plans, is summarized in Section 3.

Section 4 provides an overview of the key assumptions used in projecting insurable earnings and EI expenditures, while Section 5 presents the main results, including the calculation of the 2023 EI 7-year forecast break-even rate and the projection of the EI Operating Account. Sensitivity tests on the main assumptions are outlined in Section 6.

A reconciliation between the 2022 and 2023 EI 7-year forecast break-even rates is presented in Section 7.

Concluding remarks and the actuarial opinion are presented in Section 8 and Section 9, respectively. The various appendices provide supplemental information on the EI program and on the data, assumptions and methodology employed. Detailed information on the calculation of the maximum insurable earnings (MIE) is presented in Appendix C.

1.4 Sensitivity of the 7-Year Forecast Break-Even Rate

Two of the most relevant assumptions used to determine the 7-year forecast break-even rate are the unemployment rate, which is provided by the Minister of Finance, and the recipiency rate, which is projected by the Actuary.

Section 6 presents the sensitivity tests. They can be summarized as follows:

- a variation in the average unemployment rate of 0.5% over the period 2023-2029 would result in an increase/decrease of about 0.07% in the 2023 EI 7-year forecast break-even rate;
- a variation in the average recipiency rate of 5% over the period 2023-2029 would result in an increase/decrease between 0.04% and 0.05% in the 2023 EI 7-year forecast break-even rate; and
- a variation in the premium rate of 0.01% of insurable earnings would result in a $1,471 million increase/decrease in the cumulative balance of the EI Operating Account at the end of the 7-year forecast period.

1.5 Conclusion

The main results of this report are as follows:

- The 2023 MIE is **$61,500**, based on the methodology detailed in the EI Act and the relevant economic data.
- The 7-year forecast break-even rate for 2023 is **1.74%** of insurable earnings.
- The 2023 QPIP reduction is **0.36%**.
- The 2023 premium reduction for employers who sponsor qualified wage-loss plans is estimated at $**1,345 million**.

A reconciliation of the 7-year forecast break-even rate, from 1.81% in the 2022 Actuarial Report to 1.74% in the current report, is shown in Section 7. The decrease between the rate of 1.81% and 1.74% is mainly attributable to revisions to the cost of the temporary measures as well as to reductions in projected regular benefits due to lower expected unemployment rates in this report.

The Government announced, as part of Budget 2022, that the two-year EI premium freeze at the 2020 premium rate level of 1.58% will end in 2023. Moreover, the EI premium rate is limited to an annual increase or decrease of 0.05%, as per the EI Act. Consequently, the 2023 premium rate would be equal to:

- 1.63%[1] of insurable earnings for residents of all provinces except Québec; and
- 1.27% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.36%.

[1] The Commission is responsible for setting the premium rate. It may set a premium rate that is different than the one shown in this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

2 Recent Program Changes and Announcements

2.1 Premium Freeze

Budget 2022 announced that the two-year freeze to the EI premium rate will end in 2023.

2.2 Temporary Measures to Facilitate Access to EI

The temporary measures announced in Budget 2021 to facilitate access to EI in response to the COVID-19 pandemic are summarized below. These measures are in effect from 26 September 2021 until 24 September 2022. Other measures temporarily impacting EI claims are presented in Appendix D.

- A uniform entrance requirement of 420 insurable hours for eligibility to EI regular and special benefits.
- A common entrance requirement of $2,500 in earnings for fishers to qualify for fishing benefits.
- A reduced entrance requirement of $5,289 in earnings to access special benefits for self-employed workers who have opted in to the EI program.
- Ensuring that all insurable hours and employment count towards a claimant's eligibility, as long as the last job separation is found to be valid.
- Allowance for claimants to start receiving EI benefits sooner by simplifying rules around the treatment of severance, vacation pay, and other monies paid on separation.

2.3 Work-Sharing

Several temporary special Work-Sharing measures were introduced to support employers and workers affected by COVID-19. Changes include extending the duration of Work-Sharing agreements, waiving the mandatory cooling off period, expanding eligibility criteria and streamlining the application process. The temporary measures were initially in place from 15 March 2020 to 14 March 2021 and they were extended until 24 September 2022 in Budget 2021.

2.4 Seasonal Claimants

Budget 2018 first introduced a seasonal claimants' pilot project to provide up to five additional weeks (to a maximum of 45 weeks) of EI regular benefits to eligible seasonal claimants in 13 targeted EI economic regions. The additional five weeks of benefits were originally available for claims established between 5 August 2018 and 30 May 2020. The period for the pilot project was then extended to include eligible claims established between 30 May 2020 and 25 September 2021. Subsequently, the temporary support for seasonal claimants was extended by one year through legislation in Budget 2021, to ensure continued support during the pandemic. Budget 2022 extended these rules until October 2023.

2.5 Sickness Benefits

Budget 2021 announced the enhancement of sickness benefits from 15 to 26 weeks. This extension will take effect by the end of 2022.

2.6 Training Benefit

Employment and Social Development Canada indicated that the implementation of the new EI Training Support Benefit (part of the Canada Training Benefit) originally announced in Budget 2019 and proposed to be launched in late 2020 would be delayed. The benefit components are:

- The EI Training Support Benefit, designed to help workers cover their living expenses when they require time off work to pursue training, and
- The EI Premium Rebate for Small Businesses, designed to help offset the upward pressure on EI premiums resulting from the introduction of the new EI Training Support Benefit.

2.7 Other

Budget 2022 announced the following changes:

- Amendments to Part II of the EI Act to broaden client and program eligibility and the types of interventions funded under Labour Market Development Agreements with provinces and territories.
- Establishment of the EI Board of Appeal, originally announced in 2019, to replace the current EI appeals process under the Social Security Tribunal General Division.

3 Methodology

In accordance with subsection 66(1) of the EI Act, the Commission shall set the premium rate each year in order to generate just enough premium revenue during the next seven years to ensure that at the end of this seven-year period, the total of the amounts credited to the EI Operating Account after 31 December 2008 is equal to the total of the amounts charged to that Account after that date. This calculated premium rate is referred to as the 7-year forecast break-even rate.

Based on relevant assumptions, the 2023 EI 7-year forecast break-even rate is the premium rate that is expected to generate sufficient premium revenue to ensure that at the end of 2029, the EI Operating Account balance is $0. It is therefore based on:

- the projected balance of the EI Operating Account as of 31 December 2022; and
- the projection over a period of seven years of:
  - the earnings base;
  - the EI expenditures;
  - the amount of premium reductions granted to employers who sponsor a qualified wage-loss plan; and
  - the amount of premium reductions granted to employees and employers of a province that has established a provincial plan.

The projected rebate amounts for small businesses related to the new EI Training Support Benefit expected to be launched in 2023 are also considered.

The earnings base represents the total insurable earnings on which salaried employees and their employers pay EI premiums, and the earnings on which self-employed individuals that opted into the EI program pay EI premiums. Prior to an adjustment to reflect employee premium refunds, the employer portion of the earnings base is equal to 1.4 times the employee portion of the earnings base.

For purposes of determining the 7-year forecast break-even rate, the earnings base and EI expenditures are projected over a seven-year period.

The base year for the earnings base is 2020, which is the most recent year for which fully assessed T4 slips (Statement of Remuneration Paid) data are available. However, for certain assumptions, the 2021 partially assessed information is used. Complete data for 2021 will not become available until January 2023.

EI benefits are projected from actual 2021 benefits paid (base year) but adjusted based on the first six months of known data for 2022 and realigned in year 2023 to the expected experience as if projected from actual benefits paid in 2019[1].

The earnings base and EI expenditures are projected from the base year using:

---

[1] Year 2019 is the last year of EI Part I benefits paid before the pandemic.

- Data and assumptions provided by the Minister of Employment and Social Development (ESD), including prescribed information as set out in section 66.1 of the EI Act (presented in Table 26, Appendix D);
- Assumptions and forecasts provided by the Minister of Finance in accordance with section 66.2 of the EI Act (presented in Table 27, Appendix D);
- Additional data provided by Service Canada, Employment and Social Development Canada (ESDC) and the Canada Revenue Agency (CRA); and
- Methodology and other assumptions developed by the Actuary.

In accordance with section 69 of the EI Act and related regulations, premium reductions are granted to employers who sponsor a qualified wage-loss plan as well as to employees residing in a province that has established a provincial plan and their employers. In addition, Budget 2019 proposed a Small Business Premium Rebate (related to the new EI Training Support Benefit and expected to be launched in 2023). The expected amounts of these premium reductions and rebate over the next seven years are included in the EI expenditures for purposes of determining the 7-year forecast break-even rate.

EI premiums paid by the employer are equal to the employer multiplier times the premiums deducted by the employer on behalf of its employees. Generally, the employer multiplier is equal to 1.4. However, pursuant to subsection 69(1) of the EI Act, the employer premiums can be reduced through a lower employer multiplier when its employees are covered under one of four types of qualified wage-loss plans which reduce EI special benefits otherwise payable. The 2023 premium reductions for those employers are determined in accordance with subsection 69(1) of the EI Act and related regulations. They are based on the methodology and assumptions developed by the Actuary.

Québec is currently the only province that has established a provincial plan through the Québec Parental Insurance Plan (QPIP) which has been providing maternity and parental benefits to Québec residents since 1 January 2006. In accordance with subsection 69(2) of the EI Act and related regulations, a mechanism to reduce EI premiums paid by Québec residents and their employers was introduced. The 2023 reduction for Québec residents and their employers is determined in accordance with legislation and based on a methodology and on assumptions developed by the Actuary. The reduction is granted through a reduced premium rate. For 2023, this reduction is referred to as the 2023 QPIP reduction.

More information on the methodology used for calculating the 7-year forecast break-even rate and the premium reductions for 2023 is provided in Appendix B.

4 Assumptions

This section provides a brief overview of the main assumptions used in projecting the variables included in the calculation of the 7-year forecast break-even rate. The section is broken down into two subsections: assumptions related to the projected earnings base and assumptions related to the projected expenditures. More detailed information and supporting data are provided in Appendix D.

4.1 Earnings Base

The earnings base is detailed in the denominator of the formula for the 7-year forecast break-even rate and the QPIP reduction developed in Appendix B. The earnings base is comprised of:

- the total insurable earnings on which employers pay EI premiums prior to any adjustment for wage-loss plans or provincial plans;
- the total insurable earnings on which employees pay EI premiums adjusted to reflect employee premium refunds; and
- the earnings on which self-employed individuals that opted into the EI program pay EI premiums.

The main assumptions used in determining the earnings base are presented in Table 2 below.

Table 2 Assumptions for Earnings Base

	2021	2022	2023	2024	2025	2026	2027	2028	2029
Increase in Maximum Insurable Earnings	3.87%	7.10%	1.99%	5.85%	3.53%	2.82%	2.89%	2.95%	2.72%
Increase in Number of Earners	5.68%	1.87%	0.45%	0.21%	0.33%	0.20%	0.03%	0.36%	0.56%
Increase in Average Employment Income*	2.90%	6.29%	3.39%	2.67%	2.91%	2.86%	2.77%	2.82%	2.82%
Increase in Total Employment Income	8.74%	8.28%	3.85%	2.89%	3.25%	3.06%	2.80%	3.19%	3.39%
Increase in Total Insurable Earnings	9.25%	9.08%	3.00%	4.68%	3.59%	3.04%	2.87%	3.25%	3.34%
Net Transfer of Insurable Earnings to Québec Reflecting the Province of Residence	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Adjustment Due to Employee Premium Refunds (% of Total Insurable Earnings)	2.42%	2.42%	2.42%	2.42%	2.42%	2.42%	2.42%	2.42%	2.42%
Increase in Covered Self-Employed Earnings:									
Total	44%	17%	7%	7%	7%	7%	6%	6%	6%
Out-of-Québec Residents	45%	17%	8%	7%	7%	7%	7%	7%	6%
Québec Residents	40%	15%	6%	5%	5%	5%	5%	5%	5%

* Provided by the Minister of Finance.

4.1.1 Maximum Insurable Earnings

The MIE represents the income level up to which EI premiums are paid and up to which EI benefits are calculated and is a key element in determining the earnings base. Section 4 of the EI Act provides details on how to determine the yearly MIE. In accordance with this section, the MIE increases annually based on increases in the average weekly earnings, as reported by Statistics Canada.

The 2023 MIE is equal to $61,500, which represents a 2.0% increase from the 2022 MIE of $60,300. The projected MIE for years 2024 to 2029 are calculated based on estimates of the average weekly earnings provided by the Minister of Finance. Detailed explanations and calculations of the 2023 MIE are provided in Appendix C.

4.1.2 Number of Earners

The number of earners and their distribution across income ranges is used to determine the earnings base of salaried employees. The projected number of employees per year, which is based on an average of the number of employees per month, is provided by the Minister of Finance. The total number of earners for a year is higher than the number of employees provided given that the number of earners includes all individuals who had earnings at any time during the year rather than an average per month.

The preliminary number of earners for the year 2021 is set such that the resulting insurable earnings are in line with the expected assessed premiums for 2021, which are derived from the 2021 year-to-date assessed premiums and the 2021 increase in average employment income provided by the Minister of Finance. The projected number of earners from 2022 to 2029 is derived from a regression analysis based on the historical number of earners[1] and number of employees[2].

The number of earners is expected to increase by 5.68% in 2021 and by 1.87% in 2022. The average annual increase for the following seven years is 0.30%. The projected distribution of earners as a percentage of average employment income is based on the 2020 distribution.

4.1.3 Average and Total Employment Income

The increase in average employment income, combined with the increase in the number of earners, is used to determine the increase in total employment income. The 2020 distribution of the total employment income across income ranges is used to determine the future distribution of total employment income.

The increase in average employment income is provided by the Minister of Finance and is expected to be 2.90% and 6.29% in 2021 and 2022 respectively. The average annual increase for the following seven years is 2.89%.

Based on these increases in average employment income and the expected variations in the total number of earners, the total employment income is expected to increase by 8.74% in 2021 and by 8.28% in 2022. Those variations are due to the economic recovery from the COVID-19 pandemic. The average annual increase for the following seven years is 3.20%.

[1] The number of earners is derived from the T4 data provided by CRA.
[2] The number of employees is based on the latest Statistics Canada Labour Force Survey.

4.1.4 Total Insurable Earnings

The total insurable earnings of salaried employees are equal to the total employment income, up to the annual MIE, earned by a person employed in insured employment. They are used to determine the earnings base for salaried employees[1].

The earnings base for salaried employees is equal to 2.4 times the total insurable earnings since employee premiums are based on their total insurable earnings and employer premiums are generally equal to 1.4 times the employee premiums, for a combined total of 2.4.

Historical information regarding total insurable earnings is derived from aggregate assessed premiums gathered from T4 slips (provided by CRA) of all salaried employees. For employees with multiple employments in the year, this information is based on the combined total EI premiums. This means that, although insurable earnings of each employment are capped at the MIE, the combined total insurable earnings can exceed the MIE. The adjustment to insurable earnings and the earnings base reflecting multiple employments is captured in the employee premium refund section below.

The expected total employment income capped at the annual MIE for 2021 to 2029 is derived from:

- the 2020 distribution of the total employment income;
- the 2020 distribution of the total number of earners as a percentage of average employment income; and
- the expected increases in these variables.

Based on this methodology, the total insurable earnings, before any adjustment for premium refunds, are expected to increase by 9.25% in 2021 and by 9.08% in 2022. The average annual increase for the following seven years is 3.40%. For 2021, the resulting insurable earnings reflect the year-to-date assessed premiums and related total expected assessed premiums for 2021. The significant increases in 2021 and 2022, are attributable to the economic recovery from the COVID-19 pandemic.

4.1.5 Split of Total Insurable Earnings Due to Provincial Plan

For the purposes of determining the reduction that applies to residents of a province with a provincial plan, the earnings base for salaried employees must be split between residents of provinces with and without a provincial plan. The only province that currently has a provincial plan is Québec. Therefore, the earnings base for salaried employees must be split based on the province of residence (between out-of-Québec residents and Québec residents).

The information used to derive historical insurable earnings provided by CRA is on a T4 basis and is therefore based on the province of employment. The historical distribution of insurable earnings on a T4 basis shows that the proportion of insurable earnings that relates to employment in Québec generally decreased until 2015; between 2015 and 2020, a slight increase was observed. Based on the historical pattern, it is expected that the proportion of

[1] Prior to any adjustments for employee premium refunds, see subsection 4.1.6.

insurable earnings that relates to employment in Québec will reach 22.7% in 2021, and will slightly decrease over the 7-year projection period, but will remain close to 22.5%.

The information on historical assessed premiums provided by CRA includes adjustment payments made between the Government of Canada and the Government of Québec each year to reflect the province of residence rather than the province of employment of each employee. These adjustment payments are the object of an administrative agreement between both parties and can be used as a basis to adjust the distribution of insurable earnings to reflect the province of residence.

The methodology used in adjusting the distribution of insurable earnings based on aggregated adjustment payments was validated against administrative data. The administrative data were provided by CRA and are part of the annual exchange of information between the Government of Canada and the Government of Québec.

Based on information provided by CRA, the net annual transfer of insurable earnings on a T4 basis to reflect the actual province of residence was on average 0.25% of total insurable earnings for the last three years of available data (2018 to 2020) with the transfer of insurable earnings on a T4 basis going to Québec from the rest of Canada. It is assumed to remain at 0.25% of total insurable earnings until 2029.

4.1.6 Employee Premium Refunds

In general, salaried employees contribute EI premiums on their total insurable earnings in a given tax year up to the annual MIE. However, when filing their tax returns, some employees may exceed the maximum contribution and receive a refund of all or a portion of the EI premiums paid in the year (e.g., employees with multiple employers in the same year and employees with insurable earnings below $2,000). The insurable earnings that are subject to any subsequent premium refund must be excluded from the earnings base.

Given that the data used for projection purposes (T4 slips) include insurable earnings for which premiums may later be refunded, an adjustment must be made to reduce the earnings base. It is important to note that the employer does not receive a refund. Thus, only the employee’s portion of the total earnings base is adjusted, which is reflected in the formulas presented in Appendix B.

The historical data provided by CRA show that the total insurable earnings subject to a subsequent employee refund as a percentage of total insurable earnings is relatively stable. Based on the average for the last five years of available data (2016 to 2020) this percentage is assumed to be 2.42% from 2021 to 2029.

4.1.7 Self-Employed Earnings

Since 31 January 2010, self-employed workers may voluntarily opt into the EI program to receive EI special benefits for those who are sick, pregnant or caring for a newborn or adopted child and for those caring for a critically ill or injured family member (family caregiver benefit) or at end-of-life (compassionate care benefit). Although self-employed residents of Québec can access maternity and parental benefits through their provincial plan, they may voluntarily opt into the EI program to access other special benefits. As such, the earnings base used in calculating the forecast break-even rate must consider the covered earnings of self-employed individuals who opt into the EI program.

Self-employed individuals who participate in the EI program contribute premiums based on their self-employed earnings, up to the annual MIE, at the employee rate that corresponds to their province of residence, and there are no employer premium contributions. Therefore, as with the insurable earnings of salaried employees, self-employed covered earnings must be split between out-of-Québec residents and Québec residents.

The increase in self-employed earnings reflects the expected increase in the number of participants and in the average earnings of self-employed individuals.

The projected number of participants is based on historical enrolment information, adjusted to reflect expected future changes in enrolment. The increase in average earnings is assumed to be the same as the one for salaried employees.

Based on this methodology, the covered earnings of all self-employed individuals are expected to increase on average by 7% per year from 2023 to 2029. It is worth noting that 2021 and 2022 show respective increases of 44% and 17% in total covered self-employment earnings. This can most likely be attributed to the COVID-19 pandemic.

4.2 Expenditures

EI Part I benefits are projected from actual 2021 benefits paid (base year) but adjusted based on the first six months of known data for 2022 and realigned in year 2023 to the expected experience as if projected from actual benefits paid in 2019[1].

Table 3 presents a summary of the key expenditure assumptions used in this report, followed by a short description for each of them. A detailed description of the methodology used to project all benefits is available in Appendix D.

Table 3 Assumptions for Expenditures

	2021	2022	2023	2024	2025	2026	2027	2028	2029
Increase in Labour Force*	2.4%	1.7%	0.9%	0.7%	0.6%	0.6%	0.4%	0.7%	0.8%
Unemployment Rate*	7.4%	5.4%	5.6%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%
Increase in Average Weekly Earnings*	3.0%	5.6%	3.8%	2.9%	2.9%	2.8%	2.8%	2.8%	2.8%
Increase in Average Weekly Benefits	1.9%	9.0%	3.9%	4.6%	3.3%	2.8%	2.9%	2.9%	2.8%
Potential Claimants (as a % of Unemployed)	63.4%	49.8%	52.0%	54.5%	56.0%	55.5%	55.0%	55.0%	55.0%
Recipiency Rate (as a % of Potential Claimants)	95.3%	87.5%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Number of weeks	52.2	52.0	52.0	52.4	52.2	52.2	52.2	52.0	52.2
Percentage of Benefit Weeks for Claimants with Insurable Earnings above the MIE	37.9%	44.3%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%

* Provided by the Minister of Finance.

[1] Year 2019 is the last year of EI Part I benefits paid before the pandemic.

4.2.1 Labour Force

The labour force affects most of Part I benefits directly by increasing/decreasing the number of potential claimants. The labour force population is expected to increase from 20.4 million in 2021 to 20.7 million in 2022. The average labour force population between 2023 and 2029 is 21.3 million. This assumption is provided by the Minister of Finance.

4.2.2 Unemployment Rate

The unemployment rate affects regular EI benefits directly by also increasing/decreasing the number of potential claimants. The average unemployment rate was 7.4% in 2021 and is expected to decrease to 5.4% in 2022. The unemployment rate is then expected to increase over the following years to reach an ultimate value of 5.7% in 2024. This assumption is provided by the Minister of Finance.

4.2.3 Average Weekly Earnings

The growth in average weekly earnings on a calendar year basis is used, in conjunction with the increase in the MIE, to project the average weekly benefits. The expected growth in average weekly earnings is 5.6% in 2022 and it decreases to 3.8% in 2023. The average annual growth for years 2024 to 2029 is 2.9%. This assumption is provided by the Minister of Finance.

4.2.4 Average Weekly Benefits

The average weekly benefits growth affects EI expenditures directly through a corresponding increase/decrease in Part I expenditures. The average weekly benefits are equal to the benefit payments divided by the number of benefit weeks paid for Part I benefits.

The annual average weekly benefits growth rates are forecasted at 9.0% for 2022 and 3.9% for 2023. The average annual increase for years 2024 to 2029 is 3.2%. The growth rates are generally the same for all benefit types but were impacted differently by the COVID-19 pandemic. As such, the assumed average weekly benefit growths for 2022 and 2023 for regular, maternity and parental, sickness, caregiving benefits and fishing benefits were adjusted to reflect each benefits' individual growth rate.

4.2.5 Potential Claimants

The EI Program is designed to provide temporary income support to eligible insured persons who have lost their jobs through no fault of their own, such as due to a shortage of work, or as a result of seasonal or mass lay-offs and are available for work. The potential claimants represent the number of individuals or the percentage of unemployed individuals that meet the basic coverage criteria of the EI program. The number of potential claimants as a percentage of unemployed decreased from 70.8% in 2020 to 63.4% in 2021. Based on the experience of the first six months of 2022, it is expected to decrease further to 49.8% in 2022. Afterwards, it is expected to gradually increase to 56.0% between 2023 and 2025, before decreasing over subsequent years to reach an ultimate value of 55.0% in 2027. Appendix D presents additional information on the potential claimants' calculation.

4.2.6 Recipiency Rate

The recipiency rate represents the proportion of potential claimants in a given period who are receiving EI regular benefits. It is directly linked to the target population of the EI program (i.e., potential claimants) and does not consider individuals outside the target population of the EI program, such as the long-term unemployed and those who did not contribute to the program in the previous year. The recipiency rate is normally lower than 100% for multiple reasons, including that some potential claimants have not accumulated the required number of insurable hours, while other potential claimants do not apply for benefits, are serving the one-week waiting period, or have exhausted the number of weeks they were entitled to receive and remain unemployed.

The recipiency rate without emergency or temporary measures was estimated to be 43.5% in 2020 and 95.3% in 2021. People having benefited from measures are not considered in the recipiency rate since they were accounted for separately as recipients of these measures. Based on the experience of the first six months of 2022, the recipiency rate is assumed to decrease to 87.5% for the whole year 2022. From 2023 onwards, the recipiency rate is set at 75.0%.

4.2.7 Number of Weeks

EI expenditures are reported in the EI Operating Account on an accrual basis, that is, they are recorded in the period for which they should have been paid, regardless of the delay in processing the payment. Furthermore, EI benefits are paid on a weekly basis, but only weekdays that belong to a particular period are reported in that period.

The number of weeks affects Part I expenditures as benefits are payable for every weekday of the year, regardless of holidays. The number of workdays in a year ranges from 260 days to 262 days. Therefore, an adjustment is included to reflect the number of days benefits are paid in any year. The number of weeks for years 2021 to 2029 ranges between 52.0 and 52.4.

4.2.8 Percentage of Benefit Weeks for Claimants with Earnings above MIE

From analyses of administrative data provided by ESDC, 37.9% of benefit weeks for claims that accrued in 2021 were based on insurable earnings above the MIE compared to 41.8% in 2020. Based on partial data for 2022, the proportion of benefit weeks for claimants with insurable earnings above the MIE is assumed to increase to 44.3% in 2022. The lower percentage of claims above the MIE from 2020 to 2022 (compared to an average of 47.2% for 2017 to 2019) is mostly due to the COVID-19 pandemic that caused greater unemployment for lower income Canadians. As the economy recovers, the share of claimants with earnings above the MIE is expected to increase again and reach an ultimate value of 47.2% in 2023.

4.2.9 Other Expenditures

Additional information used to project expenditures such as pilot projects and temporary measures, the cost of new program changes, administration costs and employment benefits and support measures (EI Part II benefits) are provided by ESDC.

5 Results

5.1 Overview

This report provides actuarial forecasts and estimates for the purposes of sections 4, 66 and 69 of the EI Act. It has been prepared based on EI provisions as of 22 July 2022, on the information provided by the Ministers of ESD and Finance, and on the methodology and non-prescribed assumptions developed by the Actuary.

The key findings are as follows:

- The 2023 MIE is equal to $61,500, an increase of 2.0% from the 2022 MIE of $60,300.
- The 2023 EI 7-year forecast break-even rate is 1.74% of insurable earnings for residents of all provinces except Québec. The 2022 EI 7-year forecast break-even rate was 1.81% in the previous actuarial report. The decrease between the rate of 1.81% and 1.74% is mainly attributable to revisions to the cost of the temporary measures as well as to reductions in projected regular benefits due to lower expected unemployment rates.
- The 2023 premium reduction for residents of Québec due to its provincial plan is 0.36%.
- The 2023 premium reduction for employers who sponsor qualified wage-loss plans is estimated at $1,345 million. This translates in premium reductions for employers who sponsor a qualified wage-loss plan corresponding to about 0.25%, 0.39%, 0.39% and 0.42% of insurable earnings for categories 1 through 4 respectively[1].
- The total earnings base is expected to grow each year from $1,677 billion in 2021 to $2,310 billion in 2029.
- Total expenditures are expected to decrease from $48 billion in 2021 to $27 billion in 2022 and to $26 billion in 2023 due to the temporary measures being gradually phased out. Total annual expenditures are then expected to increase from $28 billion in 2024 to $32 billion in 2029.
- The EI Operating Account shows a cumulative deficit of $25.9 billion as of 31 December 2021. The projected cumulative deficit as of 31 December 2022 is $27.3 billion.

The Government announced, as part of Budget 2022, that the two-year EI premium freeze at the 2020 premium rate level will end in 2023. Moreover, the EI premium rate is limited to an annual increase or decrease of 0.05%, as per the EI Act. Consequently, the 2023 premium rate would be equal to:

- 1.63%[2] of insurable earnings for residents of all provinces except Québec; and
- 1.27% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.36%.

[1] The corresponding unrounded premium reductions are presented in Table 13.

[2] The Commission is responsible for setting the premium rate. It may set a premium rate that is different than the one shown in this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

5.2 Earnings Base

EI premiums, prior to any adjustment for wage-loss plans, are determined by the product of the premium rate and the earnings base. The national earnings base is required to determine the 7-year forecast break-even rate while the earnings base of provinces not offering a provincial plan is required to determine the reduction due to those plans. Since Québec is the only province offering a provincial plan, the earnings base is split between Québec and out-of-Québec residents.

Based on the methodology and assumptions presented in Section 4, Table 4 shows the earnings base for Québec and out-of-Québec residents as well as the total number of earners.

Table 4 Earnings Base and Number of Earners

	Earnings Base ($ million)			Number of Earners
Calendar Year	Out-of-Québec	Québec	Total	(thousands)
2020	1,186,229	349,799	1,536,029	19,600
2021	1,291,565	385,097	1,676,662	20,713
2022	1,409,189	419,689	1,828,877	21,101
2023	1,451,913	431,920	1,883,833	21,195
2024	1,520,215	451,725	1,971,940	21,241
2025	1,575,406	467,326	2,042,733	21,310
2026	1,623,735	481,113	2,104,848	21,352
2027	1,670,739	494,475	2,165,214	21,359
2028	1,725,804	509,900	2,235,704	21,436
2029	1,783,932	526,472	2,310,404	21,555

These results are used in the calculation of the 2023 EI 7-year forecast break-even rate and the 2023 QPIP reduction. A detailed explanation of the methodology and assumptions used to derive the results is available in Appendix D.

5.3 Expenditures

This section examines the expenditures side of the 7-year forecast break-even rate. EI expenditures include Part I (income benefits), Part II (Employment Benefits and Support Measures (EBSM)), administration costs, benefit repayments and bad debts. EI benefits may also include temporary spending initiatives, such as pilot projects and special measures announced by the Government of Canada. A detailed explanation of the methodology and assumptions used to derive the results is available in Appendix D.

For the purposes of the 7-year forecast break-even rate calculation, penalties and interest on overdue accounts receivable are included on the expenditures side of the equation.

Table 5 shows the breakdown of the 2021 EI expenditures, as well as a projection up to 2029.

Table 5 Expenditures ($ million)

Calendar Year	Part I*	Part II	Admin. Costs	Benefit Repayments	Bad Debt	Penalties	Interest	Total
2021	43,751	2,490	2,525	(428)	43	(7)	(17)	48,355
2022	22,773	2,552	2,575	(380)	58	(73)	(12)	27,492
2023	21,790	2,107	2,186	(337)	78	(70)	(15)	25,738
2024	23,943	2,107	1,942	(370)	83	(77)	(16)	27,613
2025	25,084	2,107	1,899	(391)	87	(80)	(16)	28,691
2026	25,838	2,107	1,893	(402)	90	(83)	(16)	29,426
2027	26,706	2,107	1,892	(416)	93	(86)	(17)	30,278
2028	27,510	2,107	1,892	(428)	96	(88)	(17)	31,070
2029	28,583	2,107	1,892	(445)	99	(92)	(18)	32,126

* Includes temporary measures between 2020 and 2023 aimed at reducing the impact of the COVID-19 pandemic.

Table 6 shows the breakdown of Part I EI expenditures.

Table 6 Part I Expenditures ($ million)

					Special Benefits					
Calendar Year	Regular	Fishing	Work-Sharing	Training Benefit*	MP	Sickness**	Compas-sionate	Family Caregiver Benefit	Sub-Total	Total
2021	35,283	368	115	-	5,057	2,737	60	130	7,985	43,751
2022	15,009	392	53	-	5,121	2,042	50	107	7,319	22,773
2023	13,122	399	27	22	5,163	2,887	60	110	8,220	21,790
2024	14,408	421	16	285	5,406	3,228	64	116	8,813	23,943
2025	15,215	433	17	294	5,585	3,355	66	120	9,125	25,084
2026	15,643	445	17	296	5,761	3,483	68	123	9,436	25,838
2027	16,186	458	18	296	5,937	3,614	70	127	9,747	26,706
2028	16,656	469	19	296	6,117	3,749	72	131	10,069	27,510
2029	17,303	484	19	296	6,356	3,914	75	136	10,481	28,583

* In Budget 2019, the Government of Canada announced a new EI Training Support Benefit. It is expected to be launched in 2023.

** The estimated cost of the extension of the maximum number of weeks from 15 to 26 for EI Sickness benefits is included in the projection. This change is expected to be implemented towards the end of 2022.

5.4 Premium Reductions and Rebate

The employer premiums can be reduced through a lower employer multiplier when its employees are covered under a qualified wage-loss plan that reduces EI special benefits otherwise payable, provided that at least 5/12 of the reduction is passed on to employees. Premiums paid by employees and their employers can also be reduced when employees are covered under a plan established under provincial law that reduces EI maternity and parental benefits otherwise payable. An agreement must be in place between the Government of Canada and the province to establish a system for reducing premiums paid by residents of that province and their employers.

Budget 2019 announced an EI Small Business Premium Rebate to offset the upward pressure on EI premiums resulting from the EI Training Support Benefit (originally expected to be launched in late 2020, but now postponed to 2023). This rebate is proposed to be available to any business that pays employer EI premiums equal to or less than $20,000 for the 2023 calendar year. Using forecasted calendar year expenditures received from the Minister of ESD, the cost of the EI Training Support Benefit in 2023 (including the administration costs related to this benefit) is expected to represent 2 cents (1.51 cents unrounded, or 0.0151%). This cost is included in the 7-year forecast break-even rate of 1.74%. The details of the rebate were not confirmed at the time the report was produced and will still need to be approved through legislation.

Table 7 shows the projection of the expected premium reductions and rebate up to 2029 taken into account in the determination of the 7-year forecast break-even rate. Temporary and permanent measures recently announced are considered in the projection of the premium reductions for qualified wage-loss plans and provincial plans.

Table 7 Premium Reductions and Rebate ($ million)

Calendar Year	Qualified Wage-Loss Plans	Provincial Plans	SBPR*
2023	1,345	1,555	26
2024	1,370	1,626	27
2025	1,588	1,682	28
2026	1,697	1,732	29
2027	1,941	1,780	29
2028	2,049	1,836	29
2029	2,131	1,895	29

* Small Business Premium Rebate; the details of the rebate were not confirmed at the time the report was produced and will still need to be approved through legislation. The projected amounts of the rebate were provided by the Minister of ESD.

5.5 7-Year Forecast Break-Even Rate

The 7-year forecast break-even rate is the rate that, based on relevant assumptions, is expected to generate sufficient premium revenue during the next seven years to ensure that, at the end of that seven-year period, the amounts credited and charged to the EI Operating Account (EIOA) after 31 December 2008 are equal.

This rate is expected to generate sufficient premium revenue during the 2023-2029 period to pay for the expected EI expenditures over that same period and to eliminate the projected deficit that has accumulated in the EI Operating Account as of 31 December 2022.

The expected amounts of the premium reductions over the next seven years for qualified wage-loss plans (WLP) and for provincial plans (PP), as well as the Small Business Premium Rebate related to the EI Training Support Benefit expected to launch in 2023 are included in the EI expenditures for purposes of determining the 7-year forecast break-even rate. This ensures that in the absence of wage-loss plans, provincial plans and Small Business Premium Rebate, a premium rate set at the 7-year forecast break-even rate would generate enough revenues to cover all EI expenses for employees of every employer residing in any province.

Table 8 shows the projection of the variables used to determine the 7-year forecast break-even rate. The annual expected pay-as-you-go rates (PayGo) are the rates required to cover the expected expenditures of that year. The 7-year forecast break-even rate is higher than the average PayGo rates since the projected deficit as at 31 December 2022 is considered.

Table 8 Calculation of the 7-Year Forecast Break-Even Rate ($ million)

	Expenditures Covered by the 7-Year Forecast Break-Even Rate							
Calendar Year	EI Expenditures	Reduction for WLP	Reduction for PP	SBPR*	Total Expenditures Before Reductions and Rebate	Surplus (Deficit) in the EIOA as at 31 December 2022	Earnings Base	Annual PayGo Rate / 7-Year Forecast Break-Even Rate (%)
2023	25,738	1,345	1,555	26	28,665		1,883,833	1.52%
2024	27,613	1,370	1,626	27	30,637		1,971,940	1.55%
2025	28,691	1,588	1,682	28	31,989		2,042,733	1.57%
2026	29,426	1,697	1,732	29	32,884		2,104,848	1.56%
2027	30,278	1,941	1,780	29	34,029		2,165,214	1.57%
2028	31,070	2,049	1,836	29	34,984		2,235,704	1.56%
2029	32,126	2,131	1,895	29	36,182		2,310,404	1.57%
2023-29	204,943	12,122	12,107	198	229,369	(27,255)	14,714,675	1.74%**

* Small Business Premium Rebate (related to the EI Training Support Benefit announced in Budget 2019 and proposed to be launched in 2023).

** The deficit in the EIOA as at 31 December 2022 is used in the calculation of the 7-year forecast break-even rate: (229,369 + 27,255) / 14,714,675 = 1.74%.

Table 9 shows the projection of revenues, EI expenditures, and the account balance using the 7-year forecast break-even rate and the premium reductions.

Table 9 Projection of the EI Operating Account using the 7-year forecast break-even rate ($ million)

		Revenues								
Calendar Year	Premium Rate (%)	Gross Premiums after Refunds	Reduction for WLP	Reduction for Provincial Plans	SBPR*	Other Adj.**	Net Premiums	Expenditures	Annual Surplus (Deficit)	Cumulative Surplus (Deficit) 31 December
2021	1.58%	26,491	(1,135)	(1,540)	-	(71)	23,744	48,355	(24,611)	(25,865)
2022	1.58%	28,896	(1,209)	(1,595)	-	10	26,102	27,492	(1,390)	(27,255)
2023	1.74%	32,779	(1,345)	(1,555)	(26)	-	29,852	25,738	4,114	(23,141)
2024	1.74%	34,312	(1,370)	(1,626)	(27)	-	31,288	27,613	3,675	(19,466)
2025	1.74%	35,544	(1,588)	(1,682)	(28)	-	32,245	28,691	3,554	(15,912)
2026	1.74%	36,624	(1,697)	(1,732)	(29)	-	33,167	29,426	3,740	(12,171)
2027	1.74%	37,675	(1,941)	(1,780)	(29)	-	33,924	30,278	3,646	(8,525)
2028	1.74%	38,901	(2,049)	(1,836)	(29)	-	34,988	31,070	3,918	(4,608)
2029	1.74%	40,201	(2,131)	(1,895)	(29)	-	36,145	32,126	4,019	(589)

* Small Business Premium Rebate.

** Adjustments for the timing of premium assessment.

The 2023 EI 7-year forecast break-even rate is 1.74%. This rate would balance out the EI Operating Account at the end of 2029. The cumulative balance in the EI Operating Account at the end of 2029 is not exactly $0 since the 7-year forecast break-even rate is rounded to the nearest cent.

5.6 2023 Premium Rate

The Government announced, as part of Budget 2022, that the two-year EI premium freeze at the 2020 premium rate level will end in 2023. Moreover, the EI premium rate is limited to an annual increase or decrease of 0.05%, as per the EI Act.

Consequently, the premium rate applicable to residents of all provinces except Québec for 2023 would be 1.63%[1]. The premium rate applicable to residents of Québec would be 1.27% (1.63% minus 0.36%).

Table 10 shows the projection of revenues and the corresponding account balances for 2022 and 2023 based on a premium rate of 1.58% for 2021 and 2022 and on a premium rate of 1.63% for 2023. Expenditures and premium reductions are the same as the ones shown in Table 9. For years after 2023, a premium rate would be recalculated each year based on the 7-year forecast break-even rate methodology considering the existing economic environment and revised assumptions at that time. The expected deficit at the end of calendar year 2023 corresponds to $25 billion.

Table 10 Projection of the EI Operating Account using a Premium Rate of 1.63% in 2023 ($ million)

		Revenues								
Calendar Year	Premium Rate (%)	Gross Premiums after Refunds	Reduction for WLP	Reduction for Provincial Plans	SBPR*	Other Adj.**	Net Premiums	Expenditures	Annual Surplus (Deficit)	Cumulative Surplus (Deficit) 31 December
2021	1.58%	26,491	(1,135)	(1,540)	-	(71)	23,744	48,355	(24,611)	(25,865)
2022	1.58%	28,896	(1,209)	(1,595)	-	10	26,102	27,492	(1,390)	(27,255)
2023	1.63%	30,706	(1,345)	(1,555)	(26)	-	27,780	25,738	2,042	(25,213)

* Small Business Premium Rebate.
** Adjustments for the timing of premium assessment.

5.7 Québec Parental Insurance Plan (QPIP) Reduction for 2023

EI maternity and parental (MP) benefits included in Part I special benefits, as well as direct EI administrative costs incurred to provide MP benefits (variable administrative costs (VAC)), are required to determine the QPIP reduction. VAC represent the direct operating costs incurred by the EI program associated with the administration of EI MP benefits outside Québec. They are determined each year by ESDC in accordance with the agreement between Canada and Québec, which stipulates a minimum VAC amount.

EI MP benefits are projected from the base year 2021 but adjusted to align with the expected experience as if projected from actual benefits paid in 2019 and reflect the impacts of program changes and special measures. The projected EI MP expenditures used to determine the 2023 QPIP reduction are shown in Table 11. They include the cost estimates provided by ESDC for temporary measures.

[1] The Commission is responsible for setting the premium rate. It may set a premium rate that is different than the one shown in this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

Table 11 MP Expenditures ($ million)	Actual	Forecast	
	2021	2022	2023
EI MP Benefits	5,057	5,121	5,163
Variable Administration Costs	24	24	24
MP Expenditures	5,081	5,145	5,187

The QPIP reduction is equal to the ratio of EI MP expenditures (EI MP benefits and VAC) to the earnings base of residents of all provinces without a provincial plan, that is, residents of all provinces except Québec. It is the premium reduction for Québec residents as it relates to the savings to the EI Program resulting from the QPIP.

Table 12 shows the estimates of the variables that are required in the calculation of the 2023 QPIP reduction, as well as the resulting 2023 QPIP reduction.

Table 12 Calculation of the QPIP Reduction ($ million)	2023 Forecast
MP Expenditures	5,187
MP Earnings Base (Out-of-Québec residents)	1,451,913
Unrounded QPIP Reduction	0.3573%
QPIP Reduction	0.36%

5.8 Qualified Wage-Loss Plan Reductions for 2023

Based on the methodology developed in Appendix B and on the 2023 projected insurable earnings of employees covered by a qualified wage-loss plan, the 2023 estimated reduction in employer premiums due to qualified wage-loss plans is $1,345 million, compared to $1,209 million for 2022.

EI premiums paid by the employer are equal to the employer multiplier times the premiums deducted by the employer on behalf of its employees. Generally, the employer multiplier is equal to 1.4. However, the employer premiums can be reduced through a lower employer multiplier when its employees are covered under one of four types of qualified wage-loss plans.

Table 13 shows the main results. A detailed explanation of the data and methodology used to derive the results is available in Appendix E.

Table 13 Reduction in Employer Premiums Due to Qualified Wage-Loss Plans

Wage-Loss Plan Category	Unrounded Rate of Reduction	Rounded Rate of Reduction	Employer Multiplier (Out-of-Québec)*	Employer Multiplier (Québec)*	2023 Estimated Insurable Earnings ($ million)	2023 Estimated Premium Reduction ($ million)
Category 1	0.2458%	0.25%	1.249	1.206	64,102	158
Category 2	0.3913%	0.39%	1.160	1.092	30,127	118
Category 3	0.3866%	0.39%	1.163	1.096	242,634	938
Category 4	0.4238%	0.42%	1.140	1.066	31,058	132
Total	N/A	N/A	N/A	N/A	367,921	1,345

* The Employer Multipliers shown are based on a 2023 premium rate of 1.63% (1.27% for Quebec residents).

6 Uncertainty of Results

The 7-year forecast break-even rate and the subsequent impact on the EI Operating Account (EIOA) depends on different demographic and economic factors. As actual experience over the next seven years will likely deviate from the assumptions presented throughout this report, this section presents individual tests and alternative scenarios for illustration purposes.

6.1 Individual Tests

The individual tests illustrate the sensitivity of the 7-year forecast break-even rate to changes in the unemployment rate and the recipiency rate assumptions. Afterwards, the effect of a variation in the premium rate on the EIOA is examined.

6.1.1 Unemployment Rate

The unemployment rate is closely related to the state of the economy and the supply of labour. The following table shows that a variation in the average unemployment rate of 0.5% over the period 2023-2029 would result in an increase/decrease of about 0.07% in the 2023 EI 7-year forecast break-even rate (assuming all other assumptions remain constant).

Table 14 Sensitivity of the 7-Year Forecast Break-Even Rate to the Unemployment Rate (UR)

Variation in Average UR (2023-2029)	Average UR (2023-2029)	Resulting 7-Year Forecast Break-Even Rate
(1.0%)	4.7%	1.61%
(0.5%)	5.2%	1.67%
Base	5.7%	1.74%
0.5%	6.2%	1.81%
1.0%	6.7%	1.88%

6.1.2 Recipiency Rate

The volatility shown by the recipiency rate in the past can be attributed to several factors, such as the decision of those eligible for EI to apply (or not) for the benefit. The following table shows that a variation in the average recipiency rate of 5% over the period 2023-2029 would result in an increase/decrease between 0.04% and 0.05% in the 2023 EI 7-year forecast break-even rate (assuming all other assumptions remain constant).

Table 15 Sensitivity of the 7-Year Forecast Break-Even Rate to the Recipiency Rate (RR)

Variation in Average RR (2023-2029)	Average RR (2023-2029)	Resulting 7-Year Forecast Break-Even Rate
(10.0%)	65.0%	1.65%
(5.0%)	70.0%	1.70%
Base	75.0%	1.74%
5.0%	80.0%	1.79%
10.0%	85.0%	1.84%

6.1.3 Premium Rate

As shown in the following table, a variation in the premium rate of one-hundredth percentage point (0.01% of insurable earnings) from the 7-year forecast break-even rate would result in a $1,471 million increase/decrease in the cumulative balance of the EIOA at the end of the 7-year forecast period.

Table 16 Sensitivity of the EIOA Balance to the 7-Year Forecast Break-Even Rate

Variation in EI 7-Year Forecast Break-Even Rate	Resulting EI 7-Year Forecast Break-Even Rate	Cumulative EIOA Balance as at 31 Dec. 2029 ($ million)	Variation in EIOA Cumulative Balance as at 31 Dec. 2029 ($ million)
(0.05%)	1.69%	(7,946)	(7,357)
(0.01%)	1.73%	(2,060)	(1,471)
Base	1.74%	(589)	-
0.01%	1.75%	883	1,471
0.05%	1.79%	6,769	7,357

6.2 Scenarios

The uncertainties related to the evolution of the COVID-19 pandemic as well as the geopolitical situation, for example, conflict in Ukraine, may affect the Canadian economy. The situation remains fluid and will likely continue to evolve for some time. The future impacts on the assumptions used to determine the EI 7-year forecast break-even rate are uncertain. This uncertainty is highlighted through the development of alternative scenarios by changing a small number of assumptions. This exercise is not meant to create probable scenarios, but rather to demonstrate some possible impacts from different economic environments relative to the base scenario. Therefore, these scenarios might not be considered as internally consistent and are presented strictly for illustration purposes.

This section shows the impact on the 7-year forecast break-even rate of a combination of changes to various assumptions. For comparison purposes, Table 17 below presents the key assumptions that vary in the low-cost, high-cost and short-term shock scenarios.

Table 17 Assumptions for Base Scenario

Calendar Year	Labour Force Increase	Unemployment Rate	Increase in Average Employment Income	Recipiency Rate
2023	0.9%	5.6%	3.4%	75.0%
2024	0.7%	5.7%	2.7%	75.0%
2025	0.6%	5.7%	2.9%	75.0%
2026	0.6%	5.7%	2.9%	75.0%
2027	0.4%	5.7%	2.8%	75.0%
2028	0.7%	5.7%	2.8%	75.0%
2029	0.8%	5.7%	2.8%	75.0%

6.2.1 Low-Cost Scenario

Under this scenario, each of the assumptions shown in Table 17 is changed to create downward pressure on the 7-year forecast break-even rate.

Table 18 Alternate Assumptions for the Low-Cost Scenario

Calendar Year	Labour Force Increase	Unemployment Rate	Increase in Average Employment Income	Recipiency Rate
2023	8.7%	4.1%	3.9%	72.0%
2024	0.7%	4.2%	3.2%	72.0%
2025	0.7%	4.2%	3.4%	72.0%
2026	0.6%	4.2%	3.4%	72.0%
2027	0.5%	4.2%	3.3%	72.0%
2028	0.7%	4.2%	3.3%	72.0%
2029	0.8%	4.2%	3.3%	72.0%

The results of this scenario on the 2023 7-year forecast break-even rate are illustrated in Table 19. The 7-year forecast break-even rate calculated for 2023 would decrease from 1.74% in the base scenario to 1.47%.

Table 19 Impact of the Low-Cost Scenario on the 7-Year Forecast Break-Even Rate ($ billion)

Calendar Year	7-Year Break-Even Rate (%)	Net Premiums	Expenditures	Annual Surplus / Deficit on EIOA	Cumulative Surplus / Deficit on EIOA (31 Dec.)
2022					(27.3)
2023	1.47%	27.2	23.4	3.8	(23.5)
2024	1.47%	28.6	25.1	3.5	(20.0)
2025	1.47%	29.6	26.1	3.5	(16.4)
2026	1.47%	30.7	26.9	3.7	(12.7)
2027	1.47%	31.5	27.8	3.6	(9.0)
2028	1.47%	32.6	28.7	4.0	(5.1)
2029	1.47%	33.9	29.8	4.1	(0.9)

6.2.2 High-Cost Scenario

Under this scenario, each of the assumptions shown in Table 17 are changed to create upward pressure on the 7-year forecast break-even rate.

Table 20 Alternate Assumptions for the High-Cost Scenario

Calendar Year	Labour Force Increase	Unemployment Rate	Increase in Average Employment Income	Recipiency Rate
2023	(6.8%)	7.1%	2.9%	78.0%
2024	0.6%	7.2%	2.2%	78.0%
2025	0.6%	7.2%	2.4%	78.0%
2026	0.5%	7.2%	2.4%	78.0%
2027	0.4%	7.2%	2.3%	78.0%
2028	0.6%	7.2%	2.3%	78.0%
2029	0.8%	7.2%	2.3%	78.0%

The results of this scenario on the 2023 7-year forecast break-even rate are illustrated in Table 21. The 7-year forecast break-even rate calculated for 2023 would increase from 1.74% in the base scenario to 2.04% in this scenario.

Table 21 Impact of the High-Cost Scenario on the 7-Year Forecast Break-Even Rate ($ billion)

Calendar Year	7-Year Break-Even Rate (%)	Net Premiums	Expenditures	Annual Surplus / Deficit on EIOA	Cumulative Surplus / Deficit on EIOA (31 Dec.)
2022					(27.3)
2023	2.04%	32.2	27.8	4.4	(22.8)
2024	2.04%	33.6	29.8	3.8	(19.1)
2025	2.04%	34.4	30.9	3.5	(15.5)
2026	2.04%	35.2	31.5	3.7	(11.8)
2027	2.04%	35.9	32.3	3.6	(8.2)
2028	2.04%	36.8	33.0	3.8	(4.3)
2029	2.04%	37.8	34.0	3.9	(0.5)

6.2.3 Short-Term Shock Scenario

Under this scenario, each of the assumptions shown in Table 17 are changed to create significant pressure over a short-term period on the 2023 7-year forecast break-even rate. These alternative assumptions have the same variations, on average over the 7-year projection period, as the assumptions presented in the high-cost scenario above. The difference between both scenarios is the amplitude of the variations over the short-term. As shown in Table 22, the alternative assumptions are assumed to gradually return to the base scenario.

Table 22 Alternate Assumptions for Shock Scenario

Calendar Year	Labour Force Increase	Unemployment Rate	Increase in Average Employment Income	Recipiency Rate
2023	(6.8%)	9.5%	1.9%	80.0%
2024	0.6%	8.5%	1.7%	80.0%
2025	0.6%	7.5%	2.4%	79.0%
2026	0.5%	7.0%	2.4%	78.0%
2027	0.4%	6.5%	2.8%	77.0%
2028	0.6%	6.0%	2.8%	76.0%
2029	0.8%	5.7%	2.8%	75.0%

The results of this scenario on the 2023 7-year forecast break-even rate are illustrated in Table 23. The 7-year forecast break-even rate calculated for 2023 would increase from 1.74% in the base scenario to 2.04% in this scenario.

Table 23 Impact of the Shock Scenario on the 7-Year Forecast Break-Even Rate ($ billion)

Calendar Year	7-Year Break-Even Rate (%)	Net Premiums	Expenditures	Annual Surplus / Deficit on EIOA	Cumulative Surplus / Deficit on EIOA (31 Dec.)
2022					(27.3)
2023	2.04%	31.2	33.3	(2.0)	(29.3)
2024	2.04%	32.8	33.1	(0.3)	(29.6)
2025	2.04%	34.0	31.7	2.3	(27.4)
2026	2.04%	35.0	30.9	4.1	(23.3)
2027	2.04%	36.0	30.1	6.0	(17.3)
2028	2.04%	37.3	29.4	8.0	(9.3)
2029	2.04%	38.7	29.4	9.3	0.0

7 Reconciliation of Changes in the 7-Year Forecast Break-Even Rate

The main elements of change in the 7-year forecast break-even rate since the 2022 Actuarial Report are presented in Table 24.

Table 24 Reconciliation of Changes in the 7-Year Forecast Break-Even Rate

	7-Year Forecast Break-Even Rate (%)
2022 Actuarial Report - After Rounding	1.81
2022 Actuarial Report - Before Rounding	1.8109
Lower than Projected EI Operating Account as at 31 December 2021	0.0186
Change in Unemployment Rate Assumptions	(0.0261)
Changes in Economics - Earnings Base	(0.0070)
Changes in Economics - Expenditures	0.0048
Updated Cost for Program Changes	(0.0504)
Change in 7-year period (2022-2028 to 2023-2029)	(0.0075)
2023 Actuarial Report - Before Rounding	1.7433
2023 Actuarial Report - After Rounding	1.74

The actual 2021 expenditures were higher than projected in the 2022 Actuarial Report. This resulted in an increase in the cumulative deficit of the EI Operating Account, i.e., $25,865 million compared to the projected deficit of $23,231 million. This increased the 7-year forecast break-even rate by almost 2 cents.

As shown in the sensitivity test section, the unemployment rate assumption has a significant impact on the 7-year forecast break-even rate. In comparison with the 2022 Actuarial Report, the unemployment rate assumption was revised downward, from 5.8% to 5.6% on average for the 2022-2028 period. This decreased the 7-year forecast break-even rate by almost 3 cents.

The higher projected earnings base, driven by an expected increase in number of earners but slightly offset by lower projected average insurable earnings than estimated in the 2022 Actuarial Report, decreased the 7-year forecast break-even rate. This decrease in the rate is partially offset by an increase in projected expenditures.

Additionally, revisions to the expenditures estimates for program changes (i.e., Pilot Projects/Special Temporary Measures and Permanent Measures) decreased the 7-year forecast break-even rate by almost 5 cents.

Overall, the 7-year forecast break-even rate decreased from 1.81% in 2022 to 1.74% in 2023.

8 Conclusion

This report was prepared by the Actuary in accordance with the relevant legislation and provides to the Commission the forecasts and estimates for the purposes of sections 4 (MIE), 66 (EI premium rate) and 69 (employers who sponsor qualified wage-loss plans and premium reductions for Québec residents and their employers) of the EI Act.

In accordance with the methodology detailed in the EI Act and the relevant economic data, the 2023 MIE is **$61,500**. In addition, the 2023 estimated employer premium reduction due to qualified wage-loss plans is **$1,345 million**, and the 2023 QPIP reduction is **0.36%**.

Based on the assumptions of the relevant economic and demographic variables provided by the Minister of Finance, on the expenditure estimates provided by the Minister of ESD, and on the methodology and other assumptions developed by the Actuary, the 7-year forecast break-even rate that would generate sufficient premium revenue to cover the expected cost of the EI program for the period 2023-2029 and eliminate the projected $27.3 billion cumulative deficit in the EI Operating Account as of 31 December 2022, is **1.74%** of insurable earnings.

A reconciliation of the 7-year forecast break-even rate, from 1.81% in the 2022 Actuarial Report to 1.74% in the current report, is shown in Section 7. The decrease between the rate of 1.81% and 1.74% is mainly attributable to revisions to the cost estimates of the temporary measures as well as to reductions in projected regular benefits due to lower expected unemployment rates.

The Government announced, as part of Budget 2022, that the two-year EI premium freeze at the 2020 premium rate level will end in 2023. Moreover, the EI premium rate is limited to an annual increase or decrease of 0.05%, as per the EI Act. Consequently, the 2023 premium rate would be equal to:

- 1.63%[1] of insurable earnings for residents of all provinces except Québec; and
- 1.27% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.36%.

[1] The Commission is responsible for setting the premium rate. It may set a premium rate that is different than the one shown in this report. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

9 Actuarial Opinion

In our opinion, considering that this report was prepared pursuant to the *Employment Insurance Act*:

- the data on which this report is based are sufficient and reliable for the purposes of this report;
- the assumptions are appropriate for the purposes of this report; and
- the methods employed are appropriate for the purposes of this report.

Based on the results of this valuation, we hereby certify that the 7-year forecast break-even rate required to generate sufficient premium revenue to cover the expected cost of the EI program over the period 2023-2029 and eliminate the projected cumulative deficit in the EI Operating Account as of 31 December 2022, is 1.74% of insurable earnings.

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

The estimates presented in this report are based on prescribed information provided by the Minister of Employment and Social Development and the Minister of Finance.

As of the date of the signing of this report, we have not learned of any subsequent events that would have a material impact on the 2023 7-year forecast break-even rate presented in this report.

Mathieu Desy, FCIA, FSA
Senior Actuary, Employment Insurance Premium Rate-Setting

Marie-Pier Bernier, FCIA, FSA

Thierry Truong, FCIA, FSA

Ottawa, Canada
22 August 2022

Appendix A Summary of EI Legislation

The Unemployment Insurance program was first implemented in 1940, with the last major reform occurring in 1996. At that time, the name of the program was changed from “Unemployment Insurance” to “Employment Insurance” to reflect the program’s primary objective of promoting employment in the labour force and to better emphasize that individuals’ access to the program is linked to significant workforce attachment.

The EI program provides temporary income support to individuals who have lost their employment through no fault of their own or are unable to work due to specific life circumstances. This Appendix provides a brief overview of the EI program.

Temporary measures, as well as future permanent changes not yet in effect are not shown in this Appendix; they are summarized in Section 2 and considered in the results presented in this report. It is important to note that the temporary measures currently in place take precedence over some of the normal program provisions described below. More specifically, measures to facilitate access to EI benefits are in place for claims established between 27 September 2020 and 24 September 2022 (see Section 2 and Appendix D for the most current measures).

A.1 EI Part I Benefits

Although access and entitlement to benefits vary depending on each benefit type, the calculation of weekly benefit rates is the same for most benefit types. Weekly benefits are generally equal to 55% of the claimants’ average weekly insurable earnings, during their variable best weeks over the qualifying period (generally 52 weeks), up to a maximum amount. The number of best weeks taken into account is determined by the regional unemployment rate and varies from 14 to 22 insurable earnings weeks. The maximum amount payable is determined by the maximum insurable earnings (MIE).

The EI family supplement provides additional benefits to low-income families with children. The family supplement rate is based on the net family income up to a maximum of $25,921 per year and the number of children in the family and their ages. The family supplement may increase benefits up to 80% of average weekly insurable earnings.

Benefits are not paid until claimants have served a waiting period of one week of unemployment.

To stay connected to the labour market and earn some additional income, EI claimants can work while they are on claim. This measure is available to those collecting regular, fishing, maternity, parental, sickness, compassionate care, or family caregiver benefits. Claimants can keep 50 cents of their EI benefits for every dollar they earn, up to a maximum of 90 per cent of the weekly insurable earnings used to calculate their EI benefit amount.

A.1.1 Regular Benefits

EI regular benefits are provided to eligible insured persons who have lost their jobs through no fault of their own (for example, due to a shortage of work, seasonal or mass lay-offs) and are available for and able to work but can’t find a job.

To qualify for regular benefits, individuals must have been without work and without pay for at least seven consecutive days. Claimants must have worked at least the minimum required hours of insurable employment, between 420 and 700 hours, as determined by the regional unemployment rate, in the last 52-week qualifying period or since their last claim, whichever is shorter. The number of insurable hours required to qualify is increased in cases of violations regarding prior EI claims. Claimants must also be available and actively looking for work in order to maintain eligibility.

The maximum number of regular benefit weeks varies from 14 to 45 weeks, depending on the number of insurable hours accumulated in the qualifying period and the regional unemployment rate. In certain circumstances, the maximum duration of benefits can be extended through temporary special measures.

A.1.2 Fishing Benefits

EI provides fishing benefits to qualifying self-employed fishers who are actively seeking work. Unlike regular EI benefits, eligibility for EI fishing benefits is determined by the claimant's insurable fishing earnings accumulated during the qualifying period, not the number of hours worked. A self-employed person engaged in fishing who has earned a minimum of between $2,500 and $4,200 (depending on the regional unemployment rate) during the maximum 31-week qualifying period is eligible to receive up to 26 weeks of EI fishing benefits.

A.1.3 Work-Sharing Benefits

To avoid lay-offs due to a temporary reduction in the normal level of business activity that is beyond the control of the employer, employers and employees can enter into a Work-Sharing agreement with the Canada Employment Insurance Commission (Commission) through Service Canada to provide EI benefits to eligible workers willing to work a temporarily reduced work week. This enables employers to retain staff and adjust their work activity during temporary work shortages, as well as avoid the expenses of hiring and training new staff once business levels return to normal. Employees are able to retain their skills and jobs while receiving EI benefits for the days that they do not work.

Work-Sharing agreements have a minimum duration of 6 weeks and a maximum of 26 weeks, with a possible extension of up to 12 weeks for a maximum duration of 38 weeks. From time to time, the maximum duration of Work-Sharing agreements may be extended through temporary special measures.

A.1.4 Special Benefits

To qualify for special benefits, the claimant's normal weekly earnings must be reduced by over 40%. In addition, special benefits require a minimum of 600 hours of insurable employment in the 52-week qualifying period. Special benefits include:

- Maternity benefits, for people who are away from work because they are pregnant or have recently given birth. These benefits can be paid for a maximum of 15 weeks. They can start as early as 12 weeks before the expected date of birth and can end as late as 17 weeks after the actual date of birth.

- Parental benefits, for a parent to take care of their newborn or newly adopted child. Parents may share the available weeks of parental benefits. There are two options available:
  - *Standard parental benefits* can be paid for a maximum of 40 weeks at 55% of the claimant's average weekly insurable earnings (up to a maximum) and must be claimed within a 52-week period (12 months) after the week the child was born or placed for the purpose of adoption. As no parent can access more than 35 weeks, sharing parental benefits is required to access the additional weeks.
  - *Extended parental benefits* can be paid for a maximum of 69 weeks at 33% of the claimant's average weekly insurable earnings (up to a maximum) and must be claimed within a 78-week period (18 months) after the week the child was born or placed for the purpose of adoption. As no parent can access more than 61 weeks, sharing parental benefits is required to access the additional weeks.
- Sickness benefits, for people who are unable to work due to illness, injury or quarantine. These benefits can be paid for a maximum of 15 weeks.
- Compassionate care benefits, for people who take a temporary leave from work to provide end-of-life care or support for a family member who has a significant risk of death in the next 6 months. These benefits can be paid for a maximum of 26 weeks, which can be shared among eligible family caregivers.
- Family Caregiver Benefit for Children, for family members who must be away from work to care for or support a critically ill or injured child. This benefit can be paid for a maximum of 35 weeks, which can be shared among eligible family caregivers.
- Family Caregiver Benefit for Adults, for family members who must be away from work to care for or support a critically ill or injured adult. This benefit can be paid for a maximum of 15 weeks, which can be shared among eligible family caregivers.

Since 2006, the Province of Québec has been responsible for providing maternity and parental benefits to residents of Québec through the Québec Parental Insurance Plan (QPIP). All other types of EI benefits remain available to residents of Québec.

Self-employed fishers can qualify for special benefits with fishing earnings of $3,760 during the 31-week qualifying period.

Self-employed Canadians voluntarily enter into an agreement with the Commission through Service Canada to contribute EI premiums and access EI special benefits. They must be registered for at least one year prior to claiming benefits and their self-employment earnings must meet the minimum self-employment eligibility threshold in the year preceding the claim.

Self-employed residents of Québec entering into an agreement with the Commission cannot access EI maternity and parental benefits, as maternity and parental (including adoption) benefits are already payable through QPIP, but can access sickness, compassionate care, and family caregiver benefits.

A.2 EI Part II Benefits

Part II of the EI Act includes Employment Benefits and Support Measures (EBSM), which are labour market programs and services established to help Canadians find and keep employment and to develop a labour force that meets the current and emerging needs of employers. These programs are delivered mostly by provincial and territorial governments through Labour Market Development Agreements (LMDAs).

A.3 Financing

The EI program is financed by contributions from employees and employers, via premiums paid on insurable earnings up to the MIE. Employee premiums apply to insurable earnings, up to the MIE. However, the EI program has specific provisions for contributors who are unlikely to qualify for benefits, e.g., employees with insured earnings of less than $2,000 are entitled to a refund of their EI premiums when they file an income tax return.

In addition, in accordance with subsection 69(2) of the EI Act and related regulations, a mechanism to reduce EI premiums paid by Québec residents and their employers was introduced. The reduced premium rate reflects the savings to the EI program due to the existence of the QPIP.

Since 31 January 2010, self-employed individuals may voluntarily opt into the EI program to receive EI special benefits. Self-employed individuals pay the same EI premium rate as salaried employees but are not required to pay the employer portion of premiums, as they do not have access to EI regular benefits.

Employers pay premiums at the rate of 1.4 times those of employees. Employers bear a higher overall share of program costs based on the principle that they have more control over layoffs. However, in accordance with subsection 69(1) of the EI Act, employers who sponsor a qualified wage-loss plan which reduces the EI special benefits otherwise payable receive a premium reduction if they meet the requirements set out by the Commission. In such cases, the employer pays premiums at a rate that is lower than 1.4 times those of employees, and a portion of those savings must be returned to their employees.

A.4 Premium Rate

In accordance with subsection 66(1) of the EI Act, the Commission shall set the premium rate for each year in order to generate just enough premium revenue to ensure that, at the end of the seven-year period that commences at the beginning of that year, the total of the amounts credited to the EI Operating Account after 31 December 2008 is equal to the total of the amounts charged to that Account after that date. This calculated premium rate is referred to as the 7-year forecast break-even rate.

Legislative Framework

The EI Act includes the following dates by which various responsibilities related to the setting of the EI premium rate must be met.

22 July

The Minister of Employment and Social Development (ESD) shall provide the information prescribed in subsection 66.1(1) of the EI Act.

The Minister of Finance shall provide the information prescribed in subsection 66.2(1) of the EI Act.

22 August

In accordance with section 66.3 of the EI Act, the Actuary shall prepare actuarial forecasts and estimates for the purposes of sections 4, 66 and 69 of the EI Act, and shall provide the Commission with a report that sets out:

- the forecast premium rate for the following year and a detailed analysis in support of the forecast;
- the calculations performed under sections 4 and 69 of the EI Act;
- the information provided under section 66.1 of the EI Act; and
- the source of the data, the actuarial and economic assumptions and the actuarial methodology used.

31 August

The Commission shall provide the Ministers of ESD and Finance with the report referred to in section 66.3 and a summary of that report.

14 September

The Commission shall set the premium rate for the following year and make available to the public the report referred to in section 66.3 of the EI Act and a summary of that report. After the premium rate is set and the report and its summary are made available to the public, the Minister of ESD shall cause them to be laid before each House of Parliament on any of the next 10 days during which that House is sitting.

30 September

The Governor in Council may set a premium rate that is different from the one set by the Commission, based on the joint recommendation of the Ministers of ESD and Finance, if it is considered to be in the public interest.

Appendix B Premium Calculation Methodology

B.1 Premium Rate

Based on relevant assumptions and prior to any limit to the annual change in the premium rate, the 7-year forecast break-even rate for 2023 is the premium rate that is expected to generate sufficient premium revenue to ensure that at the end of 2029 the amounts credited and charged to the EI Operating Account after 31 December 2008 are equal. It is therefore based on the projected balance of the EI Operating Account as of 31 December 2022 and the projection over a period of seven years (2023-2029) of both the earnings base and EI expenditures.

The earnings base represents the total insurable earnings on which salaried employees and their employers pay EI premiums, and the earnings on which self-employed individuals that opted into the EI program pay EI premiums. The employer portion of the earnings base for salaried employees is equal to 1.4 times the employee portion of the earnings base for salaried employees, prior to the adjustment to reflect employee premium refunds.

In accordance with section 69 of the EI Act and related regulations, premium reductions are granted to employers who sponsor a qualified wage-loss plan as well as to employees residing in a province that has established a provincial plan and their employers. The expected costs of these premium reductions over the next seven years are included in the EI expenditures for purposes of determining the 7-year forecast break-even rate. More information on these premium reductions as well as the methodology used for calculating the applicable reductions for 2023 are provided in subsections B.2 (wage-loss) and B.3 (provincial plan).

For purposes of determining the 7-year forecast break-even rate, the earnings base and EI expenditures are projected over a seven-year period using the expected growth rates in the relevant economic and demographic variables applied to the base year, i.e., the last year for which complete data are available. The base year for the earnings base is 2020, which is the most recent year for which fully assessed T4 data are available. However, for certain assumptions, the 2021 partially assessed information is used. Complete data for 2021 will not become available until January 2023. EI benefits are projected from actual 2021 benefits paid (base year) but adjusted based on the first six months of known data for 2022 and realigned in year 2023 to the expected experience as if projected from actual benefits paid in 2019[1].

The earnings base and EI expenditures are projected from the base year using:

- Data and assumptions provided by the Minister of ESD, including prescribed information as set out in section 66.1 of the EI Act;
- Assumptions and forecasts provided by the Minister of Finance in accordance with section 66.2 of the EI Act;
- Additional data provided by Service Canada, ESDC, and the Canada Revenue Agency (CRA); and
- Methodology and other assumptions developed by the Actuary.

[1] Year 2019 is the last year of EI Part I benefits paid before the pandemic.

The 7-year forecast break-even rate is calculated such that the sum of expected revenues from insurable and self-employed covered earnings over the next seven years and the EI Operating Account balance as of 31 December 2022 are equal to the expected EI expenditures over the same period. For this purpose, the expected EI expenditures include the expected amount of premium reductions granted to employers who sponsor a qualified wage-loss plan as well as to employees residing in a province that has established a provincial plan and their employers.

The expected EI expenditures are comprised of:

- Direct program expenditures, including:
    - EI Part I benefits, net of benefit repayments that apply in certain situations (e.g., if a claimant's income for a tax year exceeds 1.25 times the annual MIE, the claimant may be required to repay a portion of benefits received);
    - EI Part II benefits, that is, employment benefits and support measures;
    - Additional benefits paid through various pilot projects and special measures;
    - Administration costs; and
    - Other costs such as bad debt expense, net of penalties and interests recovered from claimants.
- Premium reductions granted to employers who sponsor qualified wage-loss plans;
- Premium reductions granted to employees residing in a province that has established a provincial plan and to their employers; and
- Premium rebate granted to small businesses related to the new EI Training Support Benefit expected to be launched in calendar year 2023. The details of the rebate still need to be confirmed through legislation.

The expected revenues are comprised of:

- Employer premiums paid on behalf of salaried employees over the next seven years prior to premium reductions and rebate;
- Employee premiums over the next seven years for earnings included in insured employment of salaried employees, net of refunds that apply in certain situations (e.g., insurable earnings below $2,000, over contributions due to multiple employments in the year) and prior to premium reductions for provincial plans; and
- Employee premiums over the next seven years for self-employed individuals who voluntarily opted into the EI program prior to premium reductions for provincial plans.

Depending on the projected cumulative balance in the EI Operating Account as at 31 December 2022, the 7-year forecast break-even rate could either increase or decrease. For 2023, given that the projected EI Operating Account as of 31 December 2022 is projected to be in deficit, the amortization of the projected EI Operating account balance increases the 7-year forecast break-even rate.

The formula for calculating the 7-year forecast break-even rate is developed as follows:

EI Expenditures (over the next 7 years) = Revenues (over the next 7 years) + EIOA as at 31 December 2022

$$\text{Direct Program Expenditures} + R_{WLP} + R_{PP} + R_{SBPR} = \underbrace{1.4 \times \text{Rate} \times \text{TIE}}_{\substack{\text{Employer premiums paid on behalf of}\\ \text{salaried employees, prior to reductions}\\ \text{for wage-loss plans, provincial plans and}\\ \text{the Small Business Premium Rebate}}} + \underbrace{\text{Rate} \times \text{TIE} \times (1 - \text{PR\%})}_{\substack{\text{Salaried employee premiums}\\ \text{net of employee refunds}\\ \text{prior to reductions for}\\ \text{provincial plans}}} + \underbrace{\text{Rate} \times \text{TSEE}}_{\substack{\text{Employee premiums}\\ \text{for self-employed}\\ \text{prior to reductions for}\\ \text{provincial plans}}} + \text{EIOA}$$

$$\textbf{7-year forecast break-even rate} = \frac{\text{Direct Program Expenditures} + R_{WLP} + R_{PP} + R_{SBPR} - \text{EIOA}}{\underbrace{1.4 \times \text{TIE} + \text{TIE} \times (1 - \text{PR\%}) + \text{TSEE}}_{\substack{\text{Earnings base for residents of all}\\ \text{provinces over the next 7 years}}}}$$

Where:

R_{WLP} = amount of reduction in employer premiums due to qualified wage-loss plans over the next 7 years;
R_{PP} = amount of reduction in employee and employer premiums due to provincial plans over the next 7 years;
R_{SBPR} = small business premium rebate to offset costs of the new EI training support benefit proposed in Budget 2019 and expected to launch in 2023;
EIOA = EI Operating Account as of 31 December 2022 (surplus/(deficit));
TIE = total insurable earnings over the next 7 years for salaried employees prior to adjustments for employee premium refunds;
PR% = average adjustment over the next 7 years to reflect employee premium refunds (as a percentage of TIE);
TSEE = total self-employed earnings over the next 7 years for individuals who opt into the EI program.

A description of the assumptions used in projecting the variables included in the above formulas is provided in Section 4 of the main report, with additional supporting information provided in Appendix D.

B.2 Reduction in Employer Premiums Due to Qualified Wage-Loss Plans

Generally, EI premiums paid by the employer are equal to 1.4 times the premiums deducted by the employer on behalf of the employee, referred to as the employer multiplier. However, pursuant to subsection 69(1) of the EI Act, the employer premiums can be reduced through a lower employer multiplier when its employees are covered under a qualified wage-loss plan which reduces EI special benefits otherwise payable, provided that at least 5/12 of the reduction is passed on to the employees.

In accordance with sections 63, 64, 65 and 66 of the *Employment Insurance Regulations* ("EI Regulations"), there are four distinct categories of qualified wage-loss plans, and a separate rate of reduction, expressed as a percentage of insurable earnings, is calculated annually for each category. These rates of reduction are then converted into reduced employer multipliers for each category and applicable premium rate. The principle in determining the rates of reduction is that the EI program is paying lower sickness benefits due to the presence of qualified wage-loss plans, and that these savings to the EI program should be passed on to the employers who sponsor these plans and their employees. For administrative simplicity, the full premium reduction is provided to the employer who is then responsible for returning the employees' portion of the reduction to them.

As discussed in the previous subsection, the projection over seven years of the reduction in employer premiums due to qualified wage-loss plans is taken into account in the determination of the 7-year forecast break-even rate. For this purpose, it is viewed as a cost to the EI program and included in the numerator of the 7-year forecast break-even rate calculation. However, the cost to the EI program of granting premium reductions to employers with qualified wage-loss plans is offset by the savings to the EI program generated by lower EI sickness benefits due to the existence of qualified wage-loss plans. In addition to determining the 7-year forecast break-even rate, one of the purposes of this report is to determine the reduction in employer premiums due to qualified wage-loss plans that will apply for 2023. The remainder of this subsection provides summarized information on this.

The methodology to calculate the rates of reduction applicable for 2023 is prescribed in section 62 of the EI Regulations. Pursuant to this section, the employer's premium rate shall be reduced by the percentage by which the first payer cost ratio in respect of all insured persons exceeds the experience cost ratio in respect of insured persons covered by a qualified wage-loss plan of that employer's category. The formula used in determining the rate of reduction of each category is provided below:

Rate of reduction(x) = First Payer Cost ratio – Experience Cost ratio(x)

Where: x = Category of wage-loss plan (1 to 4).

First-Payer Cost (FPC) ratio

The FPC ratio, which is identical for all insured persons and categories, represents the average estimated job-attached[1] EI sickness benefits that would have been paid if benefits payable under a group sickness or disability wage-loss indemnity plan or paid sick leave plan were disregarded for purposes of determining benefits otherwise payable to persons under the EI Act. It is expressed as a percentage of average insurable earnings for all insured persons. The FPC for each year is determined by multiplying the hypothetical number of first payer job-attached EI sickness benefit weeks by the average weekly sickness benefits that would apply in such circumstance.

For the purposes of calculating the 2023 rates of reduction, the FPC ratio is equal to the average of the FPC for the years 2019 to 2021, divided by the average insurable earnings of all insured persons for the years 2019 to 2021. The formula used in determining the FPC ratio is provided

1 A sickness claim is considered job-attached if the interruption of earnings with the employer was by reason of illness, injury or quarantine.

below:

$$\text{FPC ratio} = \frac{\text{FPC (2021)} + \text{FPC (2020)} + \text{FPC (2019)}}{\text{TIE (2021)} + \text{TIE (2020)} + \text{TIE (2019)}}$$

Where: TIE = total insurable earnings for all salaried employees prior to adjustments for employee premium refunds.

Experience Cost (EC) ratio

The EC ratio is different for each category and reflects the actual average job-attached EI sickness benefits paid for each category. It is expressed as a percentage of average insurable earnings for the insured persons in that category.

The EC for each year and category, as well as the allocation of insurable earnings amongst categories are based on an analysis of administrative data provided by Service Canada and ESDC.

Similarly to the calculation of the FPC ratio, for the purposes of calculating the 2023 rates of reduction, the EC ratio of each category is based on the years 2019 to 2021. The formula used in determining the EC ratio of each category is provided below:

$$\text{EC ratio (x)} = \frac{\text{EC(x) (2021)} + \text{EC(x) (2020)} + \text{EC(x) (2019)}}{\text{TIE(x) (2021)} + \text{TIE(x) (2020)} + \text{TIE(x) (2019)}}$$

Where: x = Category of wage-loss plan (1 to 4);
TIE(x) = total insurable earnings for salaried employees of the category x, prior to adjustments for employee premium refunds.

Rates of Reduction and Amount of Premium Reduction

The resulting uniform FPC ratio applicable to all categories and the EC ratio of each category are used to determine the 2023 rates of reduction per category. The 2023 estimated insurable earnings per category are then used to estimate the 2023 employer premium reduction due to qualified wage-loss plans. The estimated employer premium reductions due to qualified wage-loss plans for years 2024 to 2029 reflect temporary measures and the enhancement of sickness benefits from 15 to 26 weeks starting by the end of 2022.

Additional supporting information on the calculation of the 2023 employer premium reduction due to qualified wage-loss plans and of each separate component is provided in Appendix E.

B.3 Reduction in Premiums Due to Provincial Plan

In accordance with subsection 69(2) of the EI Act and related regulations, premiums paid by employees and their employers can be reduced when employees are covered under a plan established under provincial law which reduces EI maternity and parental benefits otherwise payable, provided that an agreement has been entered into between the Government of Canada and the province to establish a system for reducing premiums paid by residents of that province and their employers.

As discussed in the previous subsection, the projection over seven years of the reduction in premiums due to the presence of provincial plans is taken into account in the determination of the 7-year forecast break-even rate. For this purpose, it is viewed as a cost to the EI program and included in the numerator of the 7-year forecast break-even rate calculation. However, the cost to the EI program of granting these premium reductions is offset by the savings to the EI program generated by lower EI MP benefits due to the existence of provincial plans. In addition to determining the 7-year forecast break-even rate, one of the purposes of this report is to determine the reduction in premiums due to provincial plans that will apply for 2023. The remainder of this subsection provides more information on this.

Since 1 January 2006, the province of Québec has been responsible for providing maternity and parental benefits to the residents of Québec through the Québec Parental Insurance Plan (QPIP). Pursuant to subsection 69(2) of the EI Act and related regulations, a mechanism to reduce EI premiums paid by Québec residents and their employers was introduced. The reduced premium rate reflects the savings to the EI program due to the existence of the QPIP. To date, the QPIP is the only provincial plan established in Canada.

Pursuant to the agreement signed between the Government of Canada and the Government of Québec and in accordance with Part III.1 of EI Regulations, the 2023 premium reduction for the MP provincial plan in the province of Québec, also referred to as the QPIP reduction, is equal to the ratio of the 2023 EI MP expenditures, including EI MP benefits and the variable administrative costs related to administering EI MP benefits, to the 2023 earnings base of residents outside the province of Québec. Accordingly, the formula for the QPIP reduction is as follows:

$$\text{2023 QPIP Reduction} = \frac{\text{2023 EI MP Expenditures}}{\underbrace{1.4 \times TIE_{(2023\ OQ)} + TIE_{(2023\ OQ)} \times (1 - PR\%) + TSEE_{(2023\ OQ)}}_{\text{2023 earnings base for out-of-Québec residents}}}$$

Where:

$TIE_{(2023\ OQ)}$ = 2023 total insurable earnings for out-of-Québec resident salaried employees, prior to adjustments for employee premium refunds;

PR% = adjustment to reflect 2023 employee premium refunds (as a percentage of TIE);

$TSEE_{(2023\ OQ)}$ = 2023 total self-employed earnings for out-of-Québec residents who opted into the EI program.

Appendix C Maximum Insurable Earnings (MIE)

Section 4 of the *Employment Insurance Act* ("EI Act") provides details on how to determine the yearly MIE, the income level up to which EI premiums are paid and up to which EI benefits are calculated.

Based on the EI Act, the annual MIE is set at $39,000, beginning in 1996, until this threshold is surpassed by 52 times the product obtained by multiplying:

(a) the average for the 12-month period ending on April 30 in the preceding year of the Average Weekly Earnings (AWE), according to the latest revision of Statistics Canada[1], for each month in that period

by

(b) the ratio that the average for the 12-month period ending on April 30 in that preceding year of the AWE for each month in that 12-month period bears to the average for the 12-month period ending twelve months prior to April 30 of that preceding year of the AWE for each month in that 12-month period ending twelve months prior to April 30 of that preceding year.

In the year in which the threshold is surpassed, the MIE is equal to the amount calculated as described above and is rounded down to the nearest multiple of $100.

For subsequent years, the MIE before rounding is equal to the previous year's MIE before rounding, multiplied by the average of the AWE for each month for the twelve-month period ending on April 30 of the previous year divided by the average of the AWE for each month for the twelve-month period ending on April 30 in the year prior to the previous year. This unrounded MIE is then rounded down to the nearest multiple of $100.

In accordance with the EI Act, the first time the $39,000 threshold was exceeded was for 2007. The revised unrounded MIE for 2007 is $40,072.92[2].

The unrounded MIE for 2023 is equal to the unrounded MIE from 2007 ($40,072.92) multiplied by the average of the AWE for each month for the twelve month period ending 30 April 2022 ($1,141.7358) divided by the average of the AWE for each month for the twelve month period ending 30 April 2006 ($743.5792).

$$MIE_{2023} = MIE_{2007} \times \frac{AWE_{2022}}{AWE_{2006}}$$

$$= \$40{,}072.92 \times \frac{\$1{,}141.7358}{\$743.5792} = \$61{,}530.35$$

Rounded down to the nearest multiple of $100, the MIE is **$61,500** for 2023. This is an increase of $1,200 or 2.0% from the 2022 MIE of $60,300.

[1] The AWE series has been revised by Statistics Canada since the 2022 Actuarial Report.

[2] $52 \times \mathrm{AWE}_{2006} \times \frac{\mathrm{AWE}_{2006}}{\mathrm{AWE}_{2005}} = 52 \times \$743.5792 \times \frac{\$743.5792}{\$717.4750}$

Table 25 Maximum Insurable Earnings ($)

Year	12-Month AWE Average as of 30 April	Revised Unrounded MIE	Applicable MIE	% Change in Applicable MIE
2005	717.4750	39,000.00	39,000	-
2006	743.5792	39,000.00	39,000	-
2007	764.8708	40,072.92	40,000	2.6%
2008	796.5883	41,220.37	41,100	2.8%
2009	814.8108	42,929.69	42,300	2.9%
2010	830.0800	43,911.73	43,200	2.1%
2011	862.2858	44,734.62	44,200	2.3%
2012	878.4533	46,470.25	45,900	3.8%
2013	901.4042	47,341.55	47,400	3.3%
2014	919.1942	48,578.42	48,600	2.5%
2015	943.4942	49,537.15	49,500	1.9%
2016	952.9875	50,846.73	50,800	2.6%
2017	961.5100	51,358.34	51,300	1.0%
2018	985.4775	51,817.64	51,700	0.8%
2019	1,007.0267	53,109.29	53,100	2.7%
2020	1,045.0333	54,270.62	54,200	2.1%
2021	1,119.1958	56,318.87	56,300	3.9%
2022	1,141.7358	60,315.63	60,300	7.1%
2023	N/A	61,530.35	61,500	2.0%

MIE for years prior to 2023 are not revised and are based on the legislation that applied at the time they were determined. However, the 2023 MIE reflects retroactive adjustments to the calculation in accordance with current legislation.

2023 Minimum Self-Employed Earnings (MSEE)

To qualify for EI special benefits, self-employed individuals who opted in the EI program need to earn at least the MSEE during the calendar year before the year they submit a claim. For claims filed in 2022, in accordance with subsection 11.1 of the EI Regulations, the unrounded MSEE of 2022 was $8,092.14 of self-employed earnings in 2021. It is adjusted annually on a compound basis by the same ratio used for the indexation of the MIE (see previous section), rounded down to the nearest dollar.

$$MSEE_{2023} = MSEE_{2022} \times \frac{AWE_{2022}}{AWE_{2021}} = \$8{,}092.14 \times \frac{\$1{,}141.7358}{\$1{,}119.1958} = \$8{,}255.11$$

The MSEE for claims filed in 2023 is therefore set at $8,255 of self-employed earnings in 2022. However, special temporary measures were put in place by the Government to decrease the amount of self-employed earnings required to make a claim. For claims established between 3 January 2021 and 25 September 2021, the threshold is lowered to $5,000; then for claims established between 26 September 2021 and 24 September 2022, it is lowered to $5,289.

Appendix D Data, Methodology and Assumptions

This appendix describes the data, methodology and assumptions that underlie the projections of the earnings base and expenditures included in this report. Although the assumptions have been developed using the most up-to-date available information, the resulting estimates should be interpreted with caution. These estimates are projections, and eventual differences between future experience and these projections will be analyzed and taken into account in subsequent reports.

D.1 Prescribed Data

D.1.1 Minister of Employment and Social Development

Under subsection 66.1(1) of the *Employment Insurance Act* ("EI Act"), the Minister of Employment and Social Development (ESD) shall provide the Actuary, on or before 22 July of each year, with:

- the forecast change in payments to be made under paragraphs 77(1) (a), (b) or (c) of the EI Act during each of the following seven years if any changes to the payments to be made are announced;
- the forecast administration costs to be paid under paragraphs 77(1) (d), (d.1) and (g) of the EI Act during each of the following seven years, including any forecast change in those costs resulting from any change to the payments to be made under paragraphs 77(1) (a), (b) or (c) of the EI Act; and
- the total amounts charged to the EI Operating Account as of the last day of the most recent month for which that total is known.

For the purposes of determining the 2023 EI 7-year forecast break-even rate under section 66 of the EI Act, the Minister of ESD has provided the Actuary with the following information:

Table 26 Prescribed Information Provided by the Minister of ESD ($ million)

	Actual	Forecast							
Part I	2021	2022	2023	2024	2025	2026	2027	2028	2029
Pilot Projects/Special Temporary Measures									
Support for Eligible Seasonal Claimants in Targeted Regions	12.8	66.9	107.4	43.3	-	-	-	-	-
Extending Max Duration of Work-Sharing Agreements	8.0	-	-	-	-	-	-	-	-
Work-Sharing Program - COVID-19	106.9	51.7	11.3	-	-	-	-	-	-
EI Transition Benefits									
Regular Benefits									
13.1% UR, 300 Hours Credit & Max 50 weeks	10,487.6	1,123.2	-	-	-	-	-	-	-
Minimum Benefit Rate of $500	3,641.0	456.5	-	-	-	-	-	-	-
Special Benefits									
13.1% UR & 480 Hours Credit*	730.0	165.4	-	-	-	-	-	-	-
Minimum Benefit Rate of $500	587.7	142.8	-	-	-	-	-	-	-
Fishing Benefits									
$2,500 Entrance Requirement	0.4	0.0	-	-	-	-	-	-	-
Enhanced Access - Prior Years Earnings	99.4	0.5	-	-	-	-	-	-	-
Minimum Benefit Rate of $500	10.3	1.6	-	-	-	-	-	-	-
Waiving of Waiting Period									
Regular Benefits	274.2	-	-	-	-	-	-	-	-
Special Benefits	118.2	-	-	-	-	-	-	-	-
Fishing Benefits	5.5	-	-	-	-	-	-	-	-
Minimum Benefit Rate of $300									
Regular Benefits	33.2	65.4	0.3	-	-	-	-	-	-
Special Benefits	5.4	20.5	0.1	-	-	-	-	-	-
Fishing Benefits	0.1	0.2	0.0	-	-	-	-	-	-
EI Simplification									
Regular Benefits - Flat 420-hour Entrance Requirement & Minimum 14 Weeks Benefits	51.8	528.0	119.1	0.2	-	-	-	-	-
Regular Benefits - Simplified Rules on Separation	81.7	835.4	195.6	0.4	-	-	-	-	-
Special Benefits - Flat 420-hour Entrance Requirement**	22.5	211.0	47.4	0.1	-	-	-	-	-
Fishing Benefits - $2,500 Entrance Requirement	0.1	0.4	0.1	0.0	-	-	-	-	-
Sub-Total	16,276.8	3,669.5	481.4	43.9	-	-	-	-	-
Recent Proposed and Permanent Changes									
Extending Maximum EI Sickness Weeks from 15 to 26	-	79.8	580.8	794.6	841.4	890.4	942.0	996.6	1,054.4
EI Canada Training Benefit									
Training Support Benefit	-	-	21.6	285.0	294.0	296.3	296.3	296.3	296.3
Small Business Premium Rebate	-	-	26.4	27.3	28.2	28.9	29.0	29.0	29.0
Sub-Total	-	79.8	628.8	1,106.9	1,163.6	1,215.6	1,267.3	1,321.9	1,379.7
Total	16,276.8	3,749.3	1,110.2	1,150.8	1,163.6	1,215.6	1,267.3	1,321.9	1,379.7

* Rather than receiving a credit of hours, self-employed individuals can qualify with a lower earnings threshold of $5,000.
** Rather than receiving a credit of hours, self-employed individuals can qualify with a lower earnings threshold of $5,289.

Table 26 Prescribed Information Provided by the Minister of ESD ($ million)

	Actual	Forecast							
Part II	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Employment Benefits and Support Measures***	2,530.9	2,532.0	2,107.0	2,107.0	2,107.0	2,107.0	2,107.0	2,107.0	2,107.0
Administration Costs****	2,639.6	2,569.2	2,042.0	1,909.1	1,896.0	1,891.6	1,891.6	1,891.6	1,891.6

*** Includes additional LMDA investment announced in Budget 2017.

**** Includes administration costs for the new EI Training Support Benefit proposed in Budget 2019 and expected to launch in 2022.

In addition, the Minister of ESD provided an EI Operating Account summary that shows a preliminary cumulative deficit of $25.0 billion as of 31 March 2022, the most recent month for which that total is known.

Additional information with regards to the pilot projects, special measures and new permanent changes shown in Table 26 can be found below.

Pilot Projects and Special Temporary Measures

Budget 2018 first introduced a seasonal claimants' pilot project to provide up to five additional weeks (to a maximum of 45 weeks) of EI regular benefits to eligible seasonal claimants in 13 targeted EI economic regions. The additional five weeks of benefits were originally available for claims established between 5 August 2018 and 30 May 2020. The period for the pilot project was then extended to include eligible claims established between 30 May 2020 and 25 September 2021. Subsequently, the temporary support for seasonal claimants was extended by one year through legislation in Budget 2021, to ensure continued support during the pandemic. Budget 2022 extended these rules until October 2023.

Budget 2016 extended the maximum duration of Work-Sharing agreements that began or ended between 1 April 2016 and 31 March 2017, from 38 weeks to 76 weeks. The Softwood Lumber Action Plan announced in June 2017 extended the maximum duration of Work-Sharing agreements beginning between 30 July 2017 and 28 March 2020 to support workers affected by the downturn in the Forestry sector. In June 2018, the Government of Canada also announced the extension to the maximum duration of Work-Sharing agreements from 19 August 2018 to 27 March 2021 to support workers who may be affected by the U.S. tariffs imposed on Canadian steel and aluminium shipments.

In March 2020, as part of the Government of Canada's COVID-19 Economic Response Plan, the Government announced temporary changes to the Work-Sharing program. These changes included extending the duration of Work-Sharing agreements, waiving the mandatory cooling off period, expanding eligibility criteria, and streamlining the application process. The temporary measures were in place from 15 March 2020 to 14 March 2021. Budget 2021 announced an extension to these temporary measures until 24 September 2022.

Transition Measures to Facilitate Access to EI

Due to the COVID-19 pandemic, several interim orders were enacted over a short period of time with the aim of facilitating access to EI. Below is a summary of the provisions impacting eligible EI claims established between 27 September 2020 and 25 September 2021:

- A minimum unemployment rate of 13.1% used for all EI regions, which results in a uniform entrance requirement of 420 hours for eligibility to EI regular benefits (before application of hours credits).
- A one-time credit of 300 insurable hours, which combined with the minimum unemployment rate of 13.1%, results in benefit eligibility with 120 hours of work for EI regular benefits.
- A one-time credit of 480 insurable hours resulting in benefit eligibility with 120 hours of work for EI special benefits.
- A minimum weekly benefit rate of $500 for EI regular benefits, fishing benefits and special benefits ($300 for extended parental benefits).
- A maximum of 50 weeks of EI regular benefits.
- A common entrance requirement of $2,500 in earnings for fishers to qualify for fishing or special benefits.
- The allowance for fishers to have their fishing benefits calculated using their actual fishing earnings for their current claim, or their fishing earnings from their claim for the same season from one of the two previous years, whichever is higher. This measure was extended to 18 December 2021.

Also, temporary measures were announced in Budget 2021 to facilitate access to EI in response to the COVID-19 pandemic and are summarized below. These measures are in effect from 26 September 2021 until 24 September 2022.

- A uniform entrance requirement of 420 insurable hours for eligibility to EI regular and special benefits.
- A common entrance requirement of $2,500 in earnings for fishers to qualify for fishing benefits.
- A reduced entrance requirement of $5,289 in earnings to access special benefits for self-employed workers who have opted in to the EI program.
- Ensuring that all insurable hours and employment count towards a claimant’s eligibility, as long as the last job separation is found to be valid.
- Allowance for claimants to start receiving EI benefits sooner by simplifying rules around the treatment of severance, vacation pay, and other monies paid on separation.

Finally, to facilitate access to EI, the one-week waiting period was waived for the following:

- All EI claims established between 27 September 2020 and 25 October 2020.
- New EI sickness claims established on or after 27 September 2020 for a period of one year to encourage compliance with public health measures.
- All EI claims established between 31 January 2021 and 25 September 2021.

Self-employed workers who have opted in to the EI program to access special benefits also benefited from a transition measure. For claims established between 3 January 2021 and 25 September 2021, they are able to use a 2020 earnings threshold of $5,000 compared to the previous threshold of $7,555.

On 30 July 2021, the Government announced a minimum benefit rate of $300 per week for EI claims established between 26 September 2021 and 20 November 2021 in order to ensure that EI claimants receive a treatment similar to Canada Recovery Benefit claimants.

Recent Proposed and Permanent Changes

Budget 2022 announced the following changes:

- Amendments to Part II of the EI Act to broaden client and program eligibility and the types of interventions funded under Labour Market Development Agreements with provinces and territories.
- Establishment of the EI Board of Appeal, originally announced in 2019, to replace the current EI appeals process under the Social Security Tribunal General Division.

Budget 2021 announced the enhancement of sickness benefits from 15 to 26 weeks. This extension will take effect by the end of 2022.

Budget 2019 announced a new EI Training Support Benefit to help workers cover their living expenses when they require time off work to pursue training. The benefit will provide eligible claimants with up to four weeks of income support in a four-year period at 55 per cent of their average weekly insurable earnings. It was originally expected to launch in late 2020, but ESDC has indicated that it would be delayed to 2023. In addition, the Government announced an EI Premium Rebate for Small Businesses to help offset the upward pressure on EI premiums resulting from the introduction of the new EI Training Support Benefit. This rebate would be available to employers who pay employer EI premiums equal to or less than $20,000 starting in 2023.

Part II

Budget 2017 announced additional funding under the LMDAs over six years starting in 2017-2018 to provide more opportunities to Canadians to upgrade their skills, gain experience or get help to start their own business.

D.1.2 Minister of Finance

Under subsection 66.2(1) of the EI Act, the Minister of Finance shall provide the Actuary, on or before 22 July of each year, with the following:

- the most current forecast values of the economic variables relevant to the determination of the 7-year forecast break-even rate for the following seven years;
- the forecast amounts to be credited and charged to the EI Operating Account for the current year and an estimate of the total amounts credited to the Account as at 31 December of the previous year.

Accordingly, for the purposes of determining the 2023 EI 7-year forecast break-even rate under section 66 of the EI Act, the Minister of Finance has provided the Actuary with the following information:

Table 27 Prescribed Information Provided by the Minister of Finance (thousands)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Population (15+)	31,326	31,764	32,205	32,634	33,064	33,483	33,899	34,311	34,717
Labour Force	20,387	20,729	20,925	21,065	21,196	21,314	21,407	21,547	21,720
Employment	18,872	19,615	19,757	19,868	19,997	20,104	20,179	20,314	20,479
Employees	16,203	16,942	17,022	17,063	17,132	17,186	17,213	17,302	17,426
Self-Employed	2,669	2,673	2,734	2,804	2,864	2,919	2,966	3,012	3,052
Unemployed	1,515	1,114	1,169	1,197	1,199	1,210	1,228	1,233	1,242
Unemployment Rate	7.4%	5.4%	5.6%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%
Average Weekly Earnings ($)	1,131	1,194	1,239	1,275	1,312	1,350	1,388	1,427	1,467
Average Employment Income Growth	2.9%	6.3%	3.4%	2.7%	2.9%	2.9%	2.8%	2.8%	2.8%

D.2 Earnings Base

The earnings base represents the total insurable earnings on which salaried employees and their employers pay EI premiums, and the earnings on which self-employed individuals that opted into the EI program pay EI premiums. The earnings base is comprised of:

- the total insurable earnings on which employers pay EI premiums prior to any adjustment for qualified wage-loss plans or the small business premium rebate;
- the total insurable earnings on which employees pay EI premiums, adjusted to reflect employee premium refunds; and
- the earnings on which self-employed individuals that opted into the EI program pay EI premiums.

Section 4 of the report presents an overview of the assumptions used in determining the earnings base. The following subsections provide additional information and data in support of the development of these assumptions.

D.2.1 Number of Earners

In order to calculate the earnings base, an assumption is required for the number of earners, as well as the split of these earners between those who have earnings below and above the maximum insurable earnings (MIE).

The annual statistic on the number of employees provided by the Minister of Finance represents an average of the number of individuals who work for a public or private sector employer in a month. The number of earners provided by CRA is always greater than the average monthly number of employees since it represents a count of all individuals who received one or more T4 slips in the year and had employment income and/or insurable earnings during the year. This is mainly due to the fact that the number of earners includes all individuals who had earnings at any time during the year, whereas the number of employees only indicates a monthly average.

A historical comparison of the number of employees and the number of earners is presented in Table 28. The preliminary number of earners for 2021 is set such that the resulting insurable earnings are in line with the expected assessed premiums for 2021, which are derived from the 2021 year-to-date assessed premiums and the 2021 increase in average employment income provided by the Minister of Finance.

Table 28 Historical Comparison of the Number of Employees and Number of Earners (thousands)

Year	Number of Employees	Increase in Number of Employees	Number of Earners (CRA T4 Data)	Increase in Number of Earners	Difference in Annual Increases (%)
2015	15,189		18,851		
2016	15,314	0.83%	18,874	0.12%	(0.71%)
2017	15,613	1.95%	19,219	1.83%	(0.12%)
2018	15,743	0.83%	19,620	2.09%	1.26%
2019	16,115	2.36%	19,944	1.65%	(0.71%)
2020	15,233	(5.47%)	19,600	(1.73%)	3.75%
2021	16,203	6.37%	20,713	5.68%	(0.69%)

The projected number of earners is obtained by a regression based on a correlated historical relationship from 1991 to 2020 between the number of earners and the number of employees.

Table 29 shows projected number of employees as provided by the Minister of Finance as well as the projected number of earners for the years 2022 to 2029.

Table 29 Projected Number of Earners (thousands)

Year	Projected Number of Employees	Increase in Number of Employees	Projected Number of Earners	Increase in Number of Earners
2022	16,942		21,101	
2023	17,022	0.47%	21,195	0.45%
2024	17,063	0.24%	21,241	0.21%
2025	17,132	0.41%	21,310	0.33%
2026	17,186	0.31%	21,352	0.20%
2027	17,213	0.16%	21,359	0.03%
2028	17,302	0.52%	21,436	0.36%
2029	17,426	0.72%	21,555	0.56%

As shown in Table 30, based on information with regards to the historical number of earners across income ranges, the distribution of earners by level of average employment income is fairly stable from year to year.

Table 30 Historical Distribution of Earners by Level of Average Employment Income

		Range as a % of Average Employment Income					
Year	Average Employment Income ($)	0 - 25%	25 - 50%	50 - 75%	75 - 100%	100 - 125%	> 125%
2015	47,223	22.0%	14.7%	13.3%	12.4%	9.9%	27.8%
2016	46,872	21.4%	14.6%	13.2%	12.4%	10.0%	28.4%
2017	48,200	21.6%	14.5%	13.3%	12.4%	9.9%	28.2%
2018	49,709	20.9%	14.4%	13.8%	12.7%	10.2%	28.0%
2019	51,082	20.8%	14.4%	13.8%	12.8%	10.2%	27.9%
2020	51,422	23.1%	13.8%	12.3%	12.0%	10.1%	28.7%

The 2020 distribution of the number of earners by level of average employment income is used to determine the proportion of earners with employment income below and above the MIE for years 2021 to 2029.

Table 31 shows the resulting split of the number of earners between those with employment income below the MIE and those with employment income above the MIE. Actual data is also shown for years 2015 to 2020.

Table 31 Number of Earners Below and Above the MIE

				Thousands		
Year	MIE ($)	MIE as a Proportion of Average Employment Income	Proportion of Earners Below MIE	Total Number of Earners	Number of Earners Below MIE	Number of Earners Above MIE
2015	49,500	1.0482	64.5%	18,851	12,168	6,683
2016	50,800	1.0838	65.3%	18,874	12,327	6,547
2017	51,300	1.0643	64.7%	19,219	12,425	6,794
2018	51,700	1.0400	63.8%	19,620	12,513	7,107
2019	53,100	1.0395	63.7%	19,944	12,697	7,247
2020	54,200	1.0540	63.7%	19,600	12,478	7,121
2021	56,300	1.0640	64.0%	20,713	13,254	7,459
2022	60,300	1.0722	64.3%	21,101	13,578	7,524
2023	61,500	1.0577	63.7%	21,195	13,503	7,692
2024	65,100	1.0905	65.2%	21,241	13,839	7,402
2025	67,400	1.0970	65.4%	21,310	13,945	7,365
2026	69,300	1.0966	65.4%	21,352	13,968	7,384
2027	71,300	1.0978	65.5%	21,359	13,985	7,374
2028	73,400	1.0992	65.5%	21,436	14,048	7,388
2029	75,400	1.0982	65.5%	21,555	14,117	7,438

D.2.2 Average and Total Employment Income

The projected increase in average employment income, provided by the Minister of Finance, combined with the increase in the projected number of earners, are used to determine the total employment income for years 2021 to 2029. Table 32 shows the derivation of the projected total employment income for years 2021 to 2029, as well as actual data provided by CRA for years 2015 to 2020.

Table 32 Projected Total Employment Income

Year	Number of Earners from CRA T4 Data (thousands)	Increase in Number of Earners	Average Employment Income from CRA T4 Data ($)	Increase in Average Employment Income	Increase in Total Employment Income	Total Employment Income ($ thousand)
2015	18,851		47,223			890,187,256
2016	18,874	0.12%	46,872	(0.74%)	(0.62%)	884,643,535
2017	19,219	1.83%	48,200	2.83%	4.71%	926,339,401
2018	19,620	2.09%	49,709	3.13%	5.28%	975,279,385
2019	19,944	1.65%	51,082	2.76%	4.46%	1,018,784,902
2020	19,600	(1.73%)	51,422	0.67%	(1.07%)	1,007,872,380
2021	N/A	5.68%	N/A	2.90%	8.74%	1,095,965,164
2022	N/A	1.87%	N/A	6.29%	8.28%	1,186,763,030
2023	N/A	0.45%	N/A	3.39%	3.85%	1,232,448,914
2024	N/A	0.21%	N/A	2.67%	2.89%	1,268,086,831
2025	N/A	0.33%	N/A	2.91%	3.25%	1,309,254,357
2026	N/A	0.20%	N/A	2.86%	3.06%	1,349,363,896
2027	N/A	0.03%	N/A	2.77%	2.80%	1,387,195,361
2028	N/A	0.36%	N/A	2.82%	3.19%	1,431,381,809
2029	N/A	0.56%	N/A	2.82%	3.39%	1,479,908,227

As shown in Table 33, the historical distribution of total employment income as a percentage of average employment income is usually stable from year to year.

Table 33 Historical Distribution of Employment Income as a % of Average Employment Income

Year	Average Employment Income ($)	Range as a % of Average Employment Income					
		0 - 25%	25 - 50%	50 - 75%	75 - 100%	100 - 125%	> 125%
2015	47,223	2.3%	5.4%	8.3%	10.8%	11.1%	62.1%
2016	46,872	2.3%	5.4%	8.2%	10.8%	11.2%	62.1%
2017	48,200	2.3%	5.4%	8.3%	10.8%	11.1%	62.0%
2018	49,709	2.3%	5.4%	8.6%	11.0%	11.4%	61.3%
2019	51,082	2.3%	5.4%	8.6%	11.2%	11.4%	61.2%
2020	51,422	2.5%	5.1%	7.7%	10.4%	11.3%	63.0%

The 2020 distribution of total employment income as a percentage of average employment income is used to determine the proportion of employment income that relates to earners with employment income below and above the MIE for years 2021 to 2029. Table 34 shows the total employment income split between earners with employment income below the MIE and earners with employment income above the MIE for years 2021 to 2029. Actual data is also shown for years 2015 to 2020.

Table 34 Distribution of Employment Income for Earners Below and Above the MIE

				($ thousand)		
Year	MIE ($)	MIE as a Proportion of Average Employment Income	Proportion of Employment Income for Earners Below MIE	Total Employment Income	Total Employment Income for Earners Below MIE	Total Employment Income for Earners Above MIE
2015	49,500	1.0482	29.1%	890,187,256	259,085,340	631,101,916
2016	50,800	1.0838	30.6%	884,643,535	271,084,982	613,558,553
2017	51,300	1.0643	29.8%	926,339,401	275,896,851	650,442,550
2018	51,700	1.0400	29.2%	975,279,385	285,255,566	690,023,819
2019	53,100	1.0395	29.3%	1,018,784,902	298,240,070	720,544,832
2020	54,200	1.0540	28.3%	1,007,872,380	285,174,882	722,697,498
2021	56,300	1.0640	28.6%	1,095,965,164	313,965,780	781,999,383
2022	60,300	1.0722	29.0%	1,186,763,030	344,532,427	842,230,603
2023	61,500	1.0577	28.3%	1,232,448,914	349,352,760	883,096,155
2024	65,100	1.0905	29.9%	1,268,086,831	379,105,965	888,980,866
2025	67,400	1.0970	30.2%	1,309,254,357	395,490,524	913,763,832
2026	69,300	1.0966	30.2%	1,349,363,896	407,309,453	942,054,444
2027	71,300	1.0978	30.2%	1,387,195,361	419,548,880	967,646,481
2028	73,400	1.0992	30.3%	1,431,381,809	433,839,835	997,541,974
2029	75,400	1.0982	30.3%	1,479,908,227	447,860,946	1,032,047,282

D.2.3 Total Insurable Earnings

Total insurable earnings for salaried employees are equal to total employment income, up to the annual MIE, earned by a person employed in insured employment. They are used to determine the earnings base for salaried employees. Prior to any adjustments for employee premium refunds, the earnings base for salaried employees is equal to 2.4 times the total insurable earnings.

Historical information regarding total insurable earnings is derived from aggregate assessed EI premiums gathered from T4 slips of all salaried employees and is provided by CRA. Insurable earnings can be calculated by dividing gross EI premium revenues by 2.4 times the weighted-average premium rate. Gross EI premium revenues are derived by adding the following components to the net EI assessed premiums:

- Unadjusted employee premium refunds (multiple employments, insurable earnings below $2,000 and net adjustments for Québec residents working outside of Québec and vice-versa);
- Overage (correction to EI premiums due to employer-related administrative errors);
- Employer premium reductions for qualified wage-loss plans;

- Net adjustment payments between the Government of Canada and the Government of Québec for Québec residents working outside of Québec and vice-versa; and
- Other accounting adjustments.

Gross EI premium revenues represent employee EI premiums deducted at source and the corresponding employer premium before adjusting for qualified wage-loss plans, and reflect the employee's province of work. Therefore, the annual weighted-average premium rates are calculated from the split of insurable earnings between Québec and out-of-Québec as reflected in the T4 data provided by CRA (i.e., on a province of employment basis, not province of residence). The derivation of insurable earnings for years 2015 to 2020 from the CRA statement of premium revenue is shown in Table 35. Net premiums assessed for 2015 and 2016 shown in the table are prior to the reduction in premiums due to the small business job credit.

Table 35 Derived Insurable Earnings from Assessed Premiums ($ million)

	2015	2016	2017	2018	2019	2020
Net Premiums Assessed	23,459.0	23,915.1	21,196.7	22,645.6	23,069.0	21,909.4
Unadjusted Employee Premium Refunds	254.0	241.1	242.6	266.5	266.1	219.6
Overage	3.1	2.7	3.2	2.9	2.7	2.5
Wage-Loss Premium Reduction	837.4	871.2	922.2	953.1	992.3	1,023.0
Net Adjustment Payments (QPIP)	6.3	7.3	6.6	5.6	6.1	7.3
Other Accounting Adjustments	5.0	21.7	7.3	6.3	2.5	1.4
Gross EI Premium Revenues	24,564.7	25,059.2	22,378.6	23,880.0	24,338.7	23,163.1
Distribution of Insurable Earnings (Province of Employment):						
Out-of-Québec	78.4%	78.2%	78.1%	78.0%	77.8%	77.5%
Québec	21.6%	21.8%	21.9%	22.0%	22.2%	22.5%
EI Premium Rate:						
Out-of-Québec	1.88%	1.88%	1.63%	1.66%	1.62%	1.58%
Québec	1.54%	1.52%	1.27%	1.30%	1.25%	1.20%
Weighted Average Premium Rate	1.81%	1.80%	1.55%	1.58%	1.54%	1.49%
Total Insurable Earnings	566,606	579,630	601,138	629,386	659,464	645,838

For employees with multiple employments in a year, the information is based on the combined total EI premiums. This means that although insurable earnings of each employment are capped at the MIE, the combined total insurable earnings can exceed the MIE. The adjustment to insurable earnings and the earnings base to reflect multiple employments is captured in the employee premium refund section.

The 2020 distributions of total number of earners and total employment income as a percentage of average employment income are used to calculate insurable earnings for years 2021 to 2029. Total employment income capped at the MIE is derived from these distributions. The resulting capped employment income is adjusted for consistency with total insurable earnings, which takes into account multiple employments as well as excluded employments. The adjustment varies based on expected changes in the unemployment rate; for 2021, the adjustment is expected to be 96.1%. It is expected to reach its ultimate value of 96.4% in year 2022.

Table 36 shows details of the projected total insurable earnings calculations for years 2021 to 2029, as well as actual data for years 2015 to 2020. The resulting insurable earnings for 2021 reflect the year-to-date assessed premiums and related total expected assessed premiums for the year.

Table 36 Projected Total Insurable Earnings

Year	MIE ($)	Total Employment Income for Earners Below MIE ($ thousand)	Number of Earners Above MIE (thousands)	Total Employment Income for Earners Above MIE, Capped at MIE ($ thousand)	Total Employment Income, Capped at MIE ($ thousand)	Total Insurable Earnings ($ thousand)	Increase in Total Insurable Earnings
2015	49,500	259,085,340	6,683	330,817,311	589,902,651	566,606,136	
2016	50,800	271,084,982	6,547	332,577,288	603,662,269	579,630,252	2.30%
2017	51,300	275,896,851	6,794	348,518,759	624,415,610	601,138,318	3.71%
2018	51,700	285,255,566	7,107	367,436,863	652,692,429	629,385,708	4.70%
2019	53,100	298,240,070	7,247	384,804,549	683,044,619	659,463,657	4.78%
2020	54,200	285,174,882	7,121	385,979,175	671,154,057	645,837,591	-2.07%
2021	56,300	313,965,780	7,459	419,951,483	733,917,263	705,578,845	9.25%
2022	60,300	344,532,427	7,524	453,668,958	798,201,385	769,622,573	9.08%
2023	61,500	349,352,760	7,692	473,074,721	822,427,480	792,740,357	3.00%
2024	65,100	379,105,965	7,402	481,901,484	861,007,448	829,813,204	4.68%
2025	67,400	395,490,524	7,365	496,389,826	891,880,351	859,596,806	3.59%
2026	69,300	407,309,453	7,384	511,682,874	918,992,326	885,727,405	3.04%
2027	71,300	419,548,880	7,374	525,790,897	945,339,777	911,121,152	2.87%
2028	73,400	433,839,835	7,388	542,267,841	976,107,676	940,775,341	3.25%
2029	75,400	447,860,946	7,438	560,852,816	1,008,713,762	972,201,178	3.34%

D.2.4 Split of Total Insurable Earnings Due to Provincial Plan

On 1 March 2005, an agreement was reached between the Government of Canada and the Government of Québec, which gave the Government of Québec the means to set up, starting 1 January 2006, the Québec Parental Insurance Plan (QPIP). Under the QPIP, Québec is responsible for maternity and parental (MP) benefits claimed by residents of Québec. The final agreement between the Governments of Canada and Québec includes a financial mechanism whereby the Government of Canada reduces EI premiums paid by Québec residents and their employers so that the Government of Québec can collect premiums for its own program. The premium reduction reflects the savings to the EI Account realized as a result of Québec's program, including MP benefits that are no longer paid under EI and administrative savings.

Given that eligibility for the QPIP is based on the province of residence, for the purposes of calculating the QPIP reduction, insurable earnings must be split between Québec and all other provinces based on the province of residence. The information regarding historical insurable earnings provided by CRA (T4 basis) is based on the province of employment. Therefore, an adjustment is required to transfer insurable earnings from Québec to out-of-Québec and vice-versa to reflect the province of residence.

Split Based on Province of Employment (T4)

Premiums are remitted by employers and employees based on province of employment, i.e., on a T4 basis. The information regarding historical insurable earnings provided by CRA is also on a T4 basis and is therefore based on the province of employment. The historical distribution of insurable earnings on a T4 basis shows that the proportion of insurable earnings that relates to employment in Québec generally decreased until 2015; between 2015 and 2021, a slight increase was observed. Based on the historical pattern, it is expected that the proportion of insurable earnings that relates to employment in Québec will slightly decrease starting in 2022 and over the 7-year projection period but will remain close to 22.5%. This is highlighted in Table 37.

Table 37 Split of Insurable Earnings Between Québec and Out-of-Québec, Based on Province of Employment (T4 data)

Year	Proportion of Insurable Earnings for Employment in Québec	Proportion of Insurable Earnings for Employment Out-of-Québec
2015	21.64%	78.36%
2016	21.84%	78.16%
2017	21.91%	78.09%
2018	21.97%	78.03%
2019	22.22%	77.78%
2020	22.53%	77.47%
2021	22.72%	77.28%
2022	22.70%	77.30%
2023	22.68%	77.32%
2024	22.66%	77.34%
2025	22.63%	77.37%
2026	22.61%	77.39%
2027	22.59%	77.41%
2028	22.56%	77.44%
2029	22.54%	77.46%

The proportions shown in the table above are used to split the insurable earnings between Québec and out-of-Québec based on province of employment. Adjustments to these proportions are required to reflect the province of residence.

Split Based on Province of Residence (T1)

The premiums are remitted based on the province of employment, in accordance with the Canada-Québec Agreement and for the purpose of facilitating inter-provincial mobility. However, when a worker’s premium, as well as the related employer’s premium is collected under the EI MP or the QPIP, and the person for whom the premium is collected is not covered by the regime to which they have contributed because of their province of residence, adjustment payments between the Government of Canada and the Government of Québec are made as long as this person is covered under the other regime. These adjustment payments are based on information included in individual tax returns and reflect the province of residence as of 31 December.

The information on historical assessed premiums provided by CRA includes the annual adjustment payments between the Government of Canada and the Government of Québec. A split between the employee adjustment payments and the employer adjustment payments, and a split between the transfer from the Government of Canada to the Government of Québec and vice-versa is provided. Table 38 shows the detailed adjustment payments between both parties for calendar years 2015 to 2020. The adjustment payments for calendar year 2020 are preliminary.

Table 38 Historical Adjustment Payments Between the Government of Canada and the Government of Québec to Reflect Province of Residence ($ thousand)

	2015	2016	2017	2018	2019	2020
Adjustment Payments from Government of Canada to Government of Québec (i.e. for Québec residents working outside of Québec):						
Employee Portion	12,241	13,145	13,652	14,238	15,164	15,025
Employer Portion	15,920	17,283	17,884	18,620	19,949	19,919
Total	28,161	30,428	31,537	32,858	35,112	34,944
Adjustment Payments from Government of Québec to Government of Canada (for non-Québec residents working in Québec):						
Employee Portion	13,285	13,562	14,782	16,078	16,681	15,476
Employer Portion	8,581	9,528	10,196	11,179	12,292	12,211
Total	21,866	23,090	24,978	27,257	28,972	27,688
Net Adjustment Payment from Government of Canada to Government of Québec:						
Employee Portion	(1,044)	(417)	(1,130)	(1,840)	(1,517)	(451)
Employer Portion	7,339	7,755	7,688	7,441	7,657	7,708
Total	6,295	7,338	6,558	5,601	6,140	7,256

The rules on how these adjustment payments are calculated are established in Division 4 of the *Employment Insurance Regulations* and Division 5 of *An Act Respecting Parental Insurance* (QPIP). Under these rules, the employer adjustment payment for each T4 slip of a given employee is generally equal to that employee's insurable earnings times the QPIP reduction times the employer's multiplier. Therefore, by using the aggregate employer adjustment payments provided by CRA and an average employer multiplier, it is possible to calculate the insurable earnings of Québec residents working outside of Québec and vice-versa. Given that a similar exercise is not possible using the employee adjustment payments due to different rules that apply to various individual situations, the employer adjustment payments are used to calculate the transfer of insurable earnings on a province of employment basis from Québec to out-of-Québec and vice-versa to reflect the province of residence.

Based on information provided by CRA, insurable earnings for employees who reside in Québec and work outside of Québec correspond to 0.63% of total insurable earnings on average for the last three years of available data (2018 to 2020). Insurable earnings for employees who reside outside of Québec and work in Québec correspond to 0.38% of total insurable earnings for the same period. The resulting net effect is that, from the split based on province of employment, an average net transfer of 0.25% of total insurable earnings from out-of-Québec to Québec occurs to reflect the province of residence. This is outlined in Table 39.

Table 39 Adjustment to Insurable Earnings Split to Reflect Province of Residence ($ thousand)

	2015	2016	2017	2018	2019	2020
Total Insurable Earnings ($)	566,606,136	579,630,252	601,138,318	629,385,708	659,463,657	645,837,591
QPIP Reduction	0.34%	0.36%	0.36%	0.36%	0.37%	0.38%
Average Employer Multiplier:						
Out-of-Québec Employers	1.32	1.32	1.30	1.30	1.30	1.29
Québec Employers	1.31	1.31	1.29	1.30	1.30	1.29
Employer Adjustment Payments:						
From Government of Canada to Government of Québec	15,920	17,283	17,884	18,620	19,949	19,919
From Government of Québec to Government of Canada	8,581	9,528	10,196	11,179	12,292	12,211
Estimated Transfer of Insurable Earnings to Reflect Province of Residence (Employer Adjustment Payments / (QPIP reduction x Average Employer Multiplier))						
From Government of Canada to Government of Québec ($)	3,550,507	3,644,693	3,820,121	3,970,754	4,147,444	4,060,847
From Government of Québec to Government of Canada ($)	1,928,919	2,025,281	2,193,687	2,395,209	2,556,477	2,482,817
Net Transfer (from Canada to Québec) ($)	1,621,588	1,619,412	1,626,434	1,575,544	1,590,967	1,578,030
Estimated Transfer of Insurable Earnings to Reflect Province of Residence as a % of Total Insurable Earnings						
From Government of Canada to Government of Québec	0.63%	0.63%	0.64%	0.63%	0.63%	0.63%
From Government of Québec to Government of Canada	0.34%	0.35%	0.36%	0.38%	0.39%	0.38%
Net From Government of Canada to Government of Québec	0.29%	0.28%	0.27%	0.25%	0.24%	0.24%

The information included in the administrative files that are exchanged between CRA and Revenu Québec was used to validate the methodology developed to estimate the transfer of insurable earnings using aggregate data. This file includes information on all tax filers who are Québec residents and work outside of Québec and vice-versa. The actual insurable earnings of Québec residents working outside of Québec (roughly 118,000 people in 2020) and of non-Québec residents working in Québec (roughly 94,000 people in 2020) were close to the ones calculated on an aggregate basis.

It is assumed that the net transfer of insurable earnings on a T4 basis to reflect actual province of residence for years 2021 to 2029 will be equal to the average transfer for years 2018 to 2020, that is 0.25%. The resulting insurable earnings on a province of residence basis are outlined in Table 40.

Table 40 Split of Salaried Insurable Earnings Based on Province of Residence

	Proportion of Insurable Earnings - Province of Work (T4 Basis)			Proportion of Insurable Earnings - Province of Residence		Total Insurable Earnings - Province of Residence ($ thousand)		
Year	Out-of-Québec	Québec	Net Transfer to Québec	Out-of-Québec	Québec	Canada	Out-of-Québec	Québec
2020	77.47%	22.53%	0.24%	77.23%	22.77%	645,837,591	498,752,352	147,085,240
2021	77.28%	22.72%	0.25%	77.03%	22.97%	705,578,845	543,507,384	162,071,461
2022	77.30%	22.70%	0.25%	77.05%	22.95%	769,622,573	592,994,193	176,628,381
2023	77.32%	22.68%	0.25%	77.07%	22.93%	792,740,357	610,964,993	181,775,364
2024	77.34%	22.66%	0.25%	77.09%	22.91%	829,813,204	639,702,999	190,110,205
2025	77.37%	22.63%	0.25%	77.12%	22.88%	859,596,806	662,921,057	196,675,749
2026	77.39%	22.61%	0.25%	77.14%	22.86%	885,727,405	683,250,120	202,477,285
2027	77.41%	22.59%	0.25%	77.16%	22.84%	911,121,152	703,021,081	208,100,071
2028	77.44%	22.56%	0.25%	77.19%	22.81%	940,775,341	726,184,485	214,590,855
2029	77.46%	22.54%	0.25%	77.21%	22.79%	972,201,178	750,636,530	221,564,648

D.2.5 Employee Premium Refunds

In general, salaried employees contribute EI premiums on their total insurable earnings in a given tax year up to the annual MIE limit. However, when filing their tax returns, employees will receive a refund if they have exceeded the maximum contribution due to multiple employments in the same year or if their insurable earnings were below $2,000. The insurable earnings that are subject to any subsequent premium refund must be excluded from the earnings base. The data from T4 slips that are used for projection purposes include insurable earnings for which premiums may later be refunded. Therefore, an adjustment must be made to reduce the earnings base. In addition, since the employer does not receive a refund, only the employee's portion of the total earnings base is adjusted.

The annual employee refunds provided by CRA reflect the net impact of total EI premiums paid and the employee adjustment payments between the Government of Canada and the Government of Québec to account for employees who reside in Québec and work outside of Québec and vice-versa.

For example, the information provided for a resident outside of Québec who is working in Québec for the same employer throughout the year will include a refund equal to the difference between the premium paid to the QPIP and the premium owed for EI MP coverage. However, the total insurable earnings should not be adjusted to reflect this refund.

Another example is the case of a Québec resident who is working outside of Québec and who has exceeded the maximum EI contribution due to multiple employments in the year. In this case, the refund provided by CRA is net of the QPIP premium payable. The insurable earnings base should be adjusted for the refund related to the EI premium overpayment rather than the EI premium overpayment minus the QPIP premium payable.

The refunds provided by CRA must therefore be adjusted to reflect only refunds that relate to multiple employment and insurable earnings below $2,000. They should be decreased by any refund that relates to QPIP premiums paid by out-of-Québec residents who worked in Québec and increased by any QPIP premiums payable by Québec residents who had multiple employments and worked outside of Québec. Given that the latter is not as common, the adjusted premium refunds will be lower than the refunds provided by CRA.

The adjusted premium refunds are estimated such that the net assessed premiums shown in Table 35 remain unchanged after taking into account the split of insurable earnings based on province of residence. In the reconciliation of the net assessed premiums using the province of residence (Table 41), the net adjustment payments (QPIP) shown in Table 35 are re-allocated between two items: the gross premium revenues and the premium refunds. Consequently, Table 41 shows net adjustment payments (QPIP) of $0.

The portion of net adjustment payments that is re-allocated to gross premium revenues is calculated by taking the difference between gross premiums calculated using the weighted-average premium rate on a province of residence basis and gross premiums calculated using the weighted-average premium rate on a province of employment basis. Given that the proportion of Québec insurable earnings is higher under the province of residence basis and that Québec residents have a lower premium rate, the gross premium revenues on a province of residence basis are lower than those on a province of employment basis.

The portion of net adjustment payments that has not been allocated to the change in gross premium revenues to reflect the province of residence is allocated to premium refunds. The resulting adjusted premium refunds relate only to multiple employment and insurable earnings below $2,000 and do not reflect any other adjustments due to the province of employment being different than the province of residence.

Table 41 shows the reconciliation of net premiums and the inherent calculation of adjusted premium refunds for years 2015 to 2020. By comparing this table to Table 35 for year 2020, it can be seen that adjustment payments of $7.3 million are reflected in Table 41 through gross premiums that are $14.1 million lower ($23,163.1 – $23,149.0) and in Table 42 through premium refunds that are $6.8 million lower ($219.6 – $212.8), with no resulting effect on the total net premium.

Table 41 Calculation of the Adjusted Premium Refunds ($ million)

	2015	2016	2017	2018	2019	2020
Total Insurable Earnings	566,606	579,630	601,138	629,386	659,464	645,838
Split of Insurable Earnings (Province of Residence):						
Outside Québec	78.1%	77.9%	77.8%	77.8%	77.5%	77.2%
Québec	21.9%	22.1%	22.2%	22.2%	22.5%	22.8%
EI Premium Rate:						
Outside Québec	1.88%	1.88%	1.63%	1.66%	1.62%	1.58%
Québec	1.54%	1.52%	1.27%	1.30%	1.25%	1.20%
Weighted Average Premium Rate	1.81%	1.80%	1.55%	1.58%	1.54%	1.49%
Gross Premium Revenues	24,551.3	25,045.1	22,364.5	23,866.4	24,324.7	23,149.0
Adjusted Premium Refunds	246.9	234.4	235.2	258.5	258.2	212.8
Overage	3.1	2.7	3.2	2.9	2.7	2.5
Wage-Loss Premium Reduction	837.4	871.2	922.2	953.1	992.3	1,023.0
Net Adjustment Payments (QPIP)	-	-	-	-	-	-
Other Accounting Adjustments	5.0	21.7	7.3	6.3	2.5	1.4
Net Premium Assessed	23,459.0	23,915.1	21,196.7	22,645.6	23,069.0	21,909.4

The adjusted premium refunds divided by the average premium rate are used to estimate the total insurable earnings subject to a subsequent employee refund. The calculations are based on historical data provided by CRA. Table 42 shows that the total insurable earnings subject to a subsequent employee refund as a percentage of total insurable earnings averages 2.42% from 2016 to 2020. It is assumed to remain constant at 2.42% until 2029.

Table 42 Total Insurable Earnings Subject to a Subsequent Premium Refund ($ million)

	2015	2016	2017	2018	2019	2020
Total Insurable Earnings (TIE)	566,606	579,630	601,138	629,386	659,464	645,838
Adjusted Premium Refunds	246.9	234.4	235.2	258.5	258.2	212.8
Average Premium Rate	1.81%	1.80%	1.55%	1.58%	1.54%	1.49%
TIE Subject to Refund	13,674	13,022	15,172	16,363	16,799	14,247
TIE Subject to Refund (% of TIE)	2.41%	2.25%	2.52%	2.60%	2.55%	2.21%

D.2.6 Self-Employed Earnings

Pursuant to the *Fairness for the Self-Employed Act*, starting 31 January 2010, self-employed persons can enter into a voluntary agreement with the Canada Employment Insurance Commission (Commission) through Service Canada to participate in the EI program, contribute EI premiums at the employee rate and have access to special benefits. Self-employed residents of Québec will continue to receive maternity and parental benefits through the QPIP, however they are able to access sickness, compassionate care, and Family Caregiver Benefits through the EI program. As such, the earnings base used in calculating the 7-year forecast break-even rate must take into account the covered earnings of self-employed individuals who opt into the EI program.

Participants in the self-employed EI program contribute premiums on their covered earnings, (i.e., their self-employed earnings up to the annual MIE), at the employee rate corresponding to their province of residence, and there are no employer premium contributions. Therefore, as with salaried employees' insurable earnings, self-employed covered earnings must be split between residents of Québec's covered earnings and residents out-of-Québec's covered earnings.

The expected increase in self-employed covered earnings reflects the expected increase in the number of participants, and the expected increase in average earnings of self-employed individuals.

Projected Number of Participants

ESDC tracks the number of weekly self-employed enrolments by province for the EI program and was able to provide enrolment data for each week up to June 2022. The enrolment data also includes adjustments for individuals who have opted out of the program in each week. Table 43 shows the evolution of the number of participants starting with the cumulative number as at 31 December 2010, with a split between Québec and out-of-Québec residents.

The higher than usual increase in the number of participants in 2020 is most likely due to the COVID-19 pandemic. The assumption to complete year 2022 is based on the last 3-year average (2019-2021) of weekly enrolments for the last six months of each year. Between 2023 and 2029, the number of participants is expected to grow based on the average weekly enrolments over the last three years preceding the pandemic (2017-2019). The number of enrolments is projected independently for Québec and out-of-Québec residents and reflects the slower pace of enrolment of Québec residents.

Using cumulative enrolments up to June 2022 and projected enrolments, Table 43 shows the historical and projected number of self-employed participants from 2010 to 2029.

Table 43 Projected Self-Employed EI Participants

Cumulative Participants as of the last week of:	Out-of-Québec Residents	Québec Residents	Total
2010	4,443	1,367	5,810
2011	7,114	2,482	9,596
2012	9,059	3,092	12,151
2013	10,574	3,358	13,932
2014	11,893	3,482	15,375
2015	13,422	3,656	17,078
2016	14,997	3,824	18,821
2017	16,708	3,978	20,686
2018	18,483	4,198	22,681
2019	20,322	4,429	24,751
2020	33,059	7,892	40,951
2021	37,734	8,701	46,435
2022	41,482	9,428	50,910
2023	43,257	9,630	52,887
2024	45,032	9,832	54,863
2025	46,807	10,033	56,840
2026	48,582	10,235	58,817
2027	50,357	10,437	60,793
2028	52,166	10,642	62,808
2029	53,941	10,844	64,785

Increase in Average Earnings

Historical data on the evolution of average earnings of self-employed individuals who opted into the EI program compared to average earnings of all self-employed individuals or of salaried employees are either not available or incomplete. As such, it is assumed that the average earnings of self-employed individuals who have opted into the EI program will increase at the same pace as the average earnings of salaried employees from 2022 to 2029.

The most recent year for which complete data is available with regards to self-employed EI premiums and inherent covered earnings is tax year 2020. The projected increase in average employment earnings, combined with the increase in the number of self-employed participants are used to determine the self-employed covered earnings for years 2022 to 2029. It is important to note that regardless of the timing of enrolment during the year, premiums are paid on total covered earnings in that year. Table 44 shows the projected self-employed covered earnings for Québec residents and out-of-Québec residents for years 2021 to 2029.

Table 44 Projected Covered Earnings for Self-Employed EI Participants ($ thousand)

	Out-of-Québec Residents				Québec Residents				Canada
Year	Increase in Average Earnings	Increase in Number of Participants	Increase in Covered Earnings	Total Covered Earnings	Increase in Average Earnings	Increase in Number of Participants	Increase in Covered Earnings	Total Covered Earnings	Total Covered Earnings
2021				326,263				54,904	381,167
2022	6.29%	9.9%	16.9%	381,241	6.29%	8.4%	15.2%	63,237	444,478
2023	3.39%	4.3%	7.8%	411,022	3.39%	2.1%	5.6%	66,778	477,800
2024	2.67%	4.1%	6.9%	439,317	2.67%	2.1%	4.8%	69,997	509,314
2025	2.91%	3.9%	7.0%	469,927	2.91%	2.1%	5.0%	73,513	543,439
2026	2.86%	3.8%	6.8%	501,710	2.86%	2.0%	4.9%	77,137	578,847
2027	2.77%	3.7%	6.5%	534,439	2.77%	2.0%	4.8%	80,835	615,274
2028	2.82%	3.6%	6.5%	569,236	2.82%	2.0%	4.8%	84,749	653,984
2029	2.82%	3.4%	6.3%	605,183	2.82%	1.9%	4.8%	88,787	693,970

D.3 Expenditures

EI expenditures include Part I and Part II (Employment Benefits and Support Measures) benefit payments, administration costs and doubtful debts. EI benefits also include temporary spending initiatives, such as pilot projects or special measures announced by the Government of Canada.

EI benefits paid under Part I of the EI Act include:

- Regular benefits, which provide temporary income support for unemployed persons;
- Fishing benefits, for self-employed fishers;
- Work-Sharing benefits, for workers willing to work a temporarily reduced work week to avoid lay-offs;
- Special benefits, for those who are sick (sickness benefits), pregnant or caring for a newborn or adopted child (maternity and parental benefits), for those caring for a seriously ill family member at end-of-life (compassionate care benefits), or for those providing care or support to a critically ill or injured family member (Family Caregiver benefits); and
- Training Support Benefit (proposed in Budget 2019 and expected to be launched in 2023).

To project EI expenditures, in addition to demographic and economic forecasts, a number of assumptions are required, namely average weekly benefits, number of potential claimants and recipiency rate. Those three assumptions are discussed below, and formulas for the projection of regular, fishing, Work-Sharing and special benefits are explained. Details on benefit repayments, Part II benefits, administration costs, bad debt expenses, penalties and interest on overdue accounts receivable are also included in this section.

D.3.1 Average Weekly Benefits

The average weekly benefits (AWB) are equal to benefit payments divided by the number of benefit weeks paid for Part I benefits.

Weekly benefits are generally equal to 55% of the claimant's variable best weeks over the qualifying period (generally 52 weeks). The number of best weeks taken into account is determined by the regional unemployment rate and varies between 14 and 22 insurable earnings weeks.

The maximum amount payable is determined by the MIE. For 2023, the maximum weekly benefit is 55% of the $61,500 annual MIE divided by 52, or $650.

The AWB are determined by the sum of the change in the MIE and in the average weekly earnings, weighted by the proportion of benefit weeks for claimants with insurable earnings above and below the annual MIE and by the prior year AWB for claimants with insurable earnings above and below the annual MIE.

$$AWB_T = AWB_{above(T-1)} \times (\%_{above(T)}) \times \frac{MIE_T}{MIE_{T-1}} + AWB_{below(T-1)} \times (\%_{below(T)}) \times \frac{AWE_T}{AWE_{T-1}}$$

$$AWB_{growth} = AWB_T / AWB_{T-1} - 1$$

Where: AWB = average weekly benefits;
AWB_{above} = AWB for claimants with insurable earnings above the MIE;
AWB_{below} = AWB for claimants with insurable earnings below the MIE;
MIE = maximum insurable earnings;
AWE = average weekly earnings;
$\%_{above}$ = percentage of benefit weeks for claimants with earnings above the MIE; and
$\%_{below}$ = percentage of benefit weeks for claimants with earnings below the MIE.

The percentage of benefit weeks for claimants with insurable earnings above the annual MIE is based on an analysis of administrative data provided by ESDC.

The proportion of benefit weeks for claimants with earnings above the MIE was on average 47.2% between 2017 and 2019. The proportion decreased to 41.8% in 2020 and 37.9% in 2021, both due to the high proportion of lower-wage earners having lost their employment during the forced shutdown of the economy caused by the COVID-19 pandemic. Based on partial data, this proportion is expected to increase to 44.3% in 2022. It is then assumed to increase in 2023 to its ultimate value of 47.2%.

Table 45 Percentage of Benefit Weeks for Claimants with IE above the MIE

Year	% Above MIE
2014	44.6%
2015	47.2%
2016	48.0%
2017	46.5%
2018	47.0%
2019	48.0%
2020	41.8%
2021	37.9%
2022	44.3%
2023-2029	47.2%

The 2021 AWB for claimants with insurable earnings above and below the MIE was $595 and $409 respectively; the latter represents an estimated value without the minimum benefit rate of $500.

Based on the growth in average weekly earnings and the MIE and on the proportion of benefit weeks for claimants with earnings above the MIE, the annual average weekly benefits growth rates are forecasted at 9.0% and 3.9% for 2022 and 2023 respectively. The average annual increase for years 2024 to 2029 is 3.2%. These AWB growth rates generally apply to all benefit types for 2023 onwards.

Table 46 Average Weekly Benefits Growth Factors

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Average Weekly Earnings ($)	1,131	1,194	1,239	1,275	1,312	1,350	1,388	1,427	1,467
% Change	3.0%	5.6%	3.8%	2.9%	2.9%	2.8%	2.8%	2.8%	2.8%
MIE ($)	56,300	60,300	61,500	65,100	67,400	69,300	71,300	73,400	75,400
% Change	3.9%	7.1%	2.0%	5.9%	3.5%	2.8%	2.9%	2.9%	2.7%
Proportion Above MIE	37.9%	44.3%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%
Proportion Below MIE	62.1%	55.7%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%
AWB Growth	1.9%	9.0%	3.9%	4.6%	3.3%	2.8%	2.9%	2.9%	2.8%

D.3.2 Potential Claimants

The EI Program is designed to provide temporary income support to eligible insured persons who have lost their jobs through no fault of their own, such as due to a shortage of work, or as a result of seasonal or mass lay-offs and are available for work.

Hence, to receive EI regular benefits, an individual needs to:

- be insured, that is, have paid EI premiums in the qualifying period, usually the 52 weeks preceding the claim for benefits;
- have lost their employment;
- have had a valid job separation; and
- be available for work.

The number of potential claimants is therefore estimated as the sum of:

- The number of unemployed individuals provided by the Minister of Finance from which is subtracted:
  - The number of unemployed individuals without insurable earnings (IE) in the last 52 weeks, that is, self-employed, unpaid family workers and individuals who have not worked in the last 52 weeks;
  - The number of unemployed individuals with an invalid job separation[1];
- The average number of EI regular beneficiaries currently employed, that is, individuals receiving regular benefits, but excluded from the unemployed statistics (beneficiaries Working While on Claim). These individuals need to be added since they are not accounted for in the definition of the unemployed.

The following table shows the development of the historical number of potential claimants.

Table 47 Historical Number of Potential Claimants (thousands)

Calendar Year	Number of Unemployed (U)	No Insurable Earnings in Last 52 Weeks		Invalid Job Separation		Working Beneficiaries		Potential Claimants	
		Number	As a % of U	Number	As a % of U	Number	As a % of U	Number	As a % of U
2011	1,403	547	39.0%	179	12.7%	96	6.9%	774	55.2%
2012	1,375	535	38.9%	188	13.7%	92	6.7%	743	54.1%
2013	1,347	516	38.3%	201	14.9%	85	6.3%	716	53.2%
2014	1,320	506	38.3%	197	14.9%	83	6.3%	701	53.1%
2015	1,327	488	36.8%	164	12.4%	86	6.5%	760	57.3%
2016	1,359	506	37.2%	162	11.9%	88	6.5%	779	57.3%
2017	1,249	503	40.2%	150	12.0%	88	7.1%	685	54.8%
2018	1,164	463	39.8%	183	15.8%	77	6.6%	594	51.1%
2019	1,154	429	37.2%	163	14.2%	74	6.4%	636	55.1%
2020	1,897	481	25.4%	158	8.3%	85	4.5%	1,344	70.8%
2021	1,520	698	46.0%	110	7.2%	252	16.6%	963	63.4%

The number of unemployed individuals is provided by the Minister of Finance. Assumptions for

[1] The number of unemployed individuals with an invalid job separation is obtained by multiplying the number of unemployed individuals by the percentage of unemployed with an invalid job separation. For years 2019 and before, this percentage is determined using the EI Monitoring and Assessment report, which is based on Statistics Canada's EI Coverage Survey. Starting from year 2020, this percentage is determined using Statistics Canada Table 14-10-0125-01 (*Reason for leaving job during previous year, monthly, unadjusted for seasonality*). Invalid job separations include: voluntarily leaving employment without just cause or to go to school; being dismissed for misconduct; or being unemployed because of a direct participation in a labour dispute.

the evolution of the number of unemployed individuals without insurable earnings in the last 52 weeks, the number of unemployed individuals with an invalid job separation and the number of working beneficiaries as a percentage of the number of unemployed are made as follows:

- The percentage of unemployed without insurable earnings in the last 52 weeks averaged 38.2% for the 10-year period ending in 2019. This percentage decreased significantly in 2020 due to the forced shutdown of the economy caused by the COVID-19 pandemic. Compared to other years, more employees with insurable earnings in the last 52 weeks lost their job, putting downward pressure on the percentage of unemployed without insurable earnings in the last 52 weeks. This translated into an increase in the number of individuals without insurable earnings in the last 52 weeks between 2019 and 2021 from 429,000 to 698,000. Based on the experience observed for the first six months of 2022, the proportion of individuals with no insurable earnings in the last 52 weeks is expected to equal 46.0% in 2022. It is subsequently assumed to decrease to 38.0% of unemployed over the next three years and to remain constant at that level for the following years.
- The percentage of unemployed individuals with an invalid job separation is highly behaviour driven and fluctuates with the economic situation. A proportion of 8.3% was observed in 2020; it is expected to decrease to 7.2% in 2021, before increasing to an ultimate value of 13.5% in 2027. The large decrease observed in 2020 and 2021 is attributable to the forced shutdown of the economy caused by the COVID-19 pandemic. Based on data published by Statistics Canada for 2021, a smaller proportion of people left their jobs for reason such as going to school, being dissatisfied, or retiring when compared to other years. This created downward pressure on the percentage of unemployed individuals with an invalid job separation.
- The ratio of working beneficiaries to unemployed is normally relatively stable and can be projected using an average of the last few years. However, given the COVID-19 pandemic, the ratio decreased in 2020 and increased significantly in 2021. Based on the first few months of available information for 2022, it is estimated that the ratio of working beneficiaries to unemployed will decrease in 2022 to a proportion of 7.0%. It will then decrease to an ultimate value of 6.5% in 2023.

The resulting projected proportion and number of potential claimants are presented in Table 48. The number of potential claimants as a percentage of unemployed is expected to increase from 49.8% in 2022 to 56.0% in 2025, before starting to decrease to reach its ultimate value of 55.0% in 2027.

Table 48 Projected Number of Potential Claimants

Calendar Year	Number of Unemployed (U) (thousands)	No Insurable Earnings in Last 52 Weeks As a % of U	Invalid Job Separation As a % of U	Working Beneficiaries As a % of U	Potential Claimants As a % of U	Potential Claimants Number (thousands)
2022	1,113	46.0%	11.2%	7.0%	49.8%	554
2023	1,168	43.0%	11.5%	6.5%	52.0%	608
2024	1,197	40.0%	12.0%	6.5%	54.5%	652
2025	1,199	38.0%	12.5%	6.5%	56.0%	672
2026	1,210	38.0%	13.0%	6.5%	55.5%	671
2027	1,228	38.0%	13.5%	6.5%	55.0%	675
2028	1,233	38.0%	13.5%	6.5%	55.0%	678
2029	1,242	38.0%	13.5%	6.5%	55.0%	683

D.3.3 Recipiency Rate (Share of Potential Claimants Receiving Benefits)

Beneficiaries, as reported by Statistics Canada, refers to the number of active regular claimants in a given month who received EI regular benefits during the reference week of the labour force survey, usually the week containing the 15th day of the month. The recipiency rate represents the proportion of potential claimants in a given period who are receiving EI regular benefits and ignores individuals outside the target population of the EI program, such as the long-term unemployed and those who did not contribute to the program in the previous year. The recipiency rate is thus directly linked to the target population of the EI program (i.e., potential claimants).

The recipiency rate is normally lower than 100% for multiple reasons including:

- Some potential claimants have not accumulated the required number of insurable hours, which varies between 420 and 700 hours (without temporary measures) depending on the economic region in which they reside;
- Some potential claimants do not apply for benefits; and
- Some potential claimants are waiting to receive their benefits or have received benefits in the past but have exhausted the number of weeks they were entitled to receive regular benefits and remain unemployed.

For the purposes of forecasting regular benefit payments, historical recipiency rates shown in the following table are calculated based on the number of beneficiaries as reported by Statistics Canada and the number of potential claimants as discussed in the previous section.

Table 49 Historical Recipiency Rate

Calendar Year	Number of Potential Claimants (thousands)	Regular Beneficiaries (thousands)	Recipiency Rate*
2011	774	608	78.5%
2012	743	555	74.8%
2013	716	523	73.1%
2014	701	508	72.5%
2015	760	535	70.3%
2016	779	564	72.4%
2017	685	533	77.8%
2018	594	464	78.0%
2019	636	452	71.1%
2020	1,344	649	48.3%
2021	963	1,328	137.9%

* Actual recipiency rate including extra beneficiaries due to temporary measures.

Between 2011 and 2019, the recipiency rate varied between 70% and 78% depending on temporary measures put in place. In 2020, it decreased significantly to 48.3% due to a large proportion of people having received a benefit through emergency measures. In 2021, it increased to 137.9%[1]. A factor that could explain the recipiency rate being exceptionally above 100% for 2021 is the 28-week extension of the qualifying period for those who had claimed the EI ERB or the CERB, allowing them to receive a benefit without necessarily having received earnings in the last 52 weeks.

The preliminary projected recipiency rate estimate[2] for 2022 is 87.5% and it is assumed to decrease to an ultimate value of 75.0% in 2023. The data reporting on the EI program either identifies these individuals as ineligible for benefits or as eligible for a shorter period of time; consequently, the number of beneficiaries ends up higher than the number of eligible claimants.

D.3.4 Number of Weeks

EI expenditures are reported in the EI Operating Account on an accrual basis, that is, they are recorded in the period for which they should have been paid, without regards to the delay in processing the payment. For example, if a claimant is eligible to receive benefits starting the first week of December 2021, but receives his first benefit payment only in February 2022, the portion of the benefits that relates to December will be recorded in the EI Operating Account for the year 2021.

Furthermore, EI benefits are paid on a weekly basis, but only weekdays that belong to a particular period are reported in that period. For example, if December 31st is a Thursday, then for every benefit week that should have been paid for the week of December 31st, four days will be reported in the current calendar year, and one will be reported in the following calendar year.

[1] The estimated recipiency rates for 2020 and 2021 decrease to 43.5% and 95.3% respectively when emergency or temporary measures are excluded.

[2] The projected recipiency rates, for 2022 and after, excludes extra beneficiaries due to the temporary measures. People having benefited from these measures are not considered in the projected recipiency rate since they were accounted for separately as recipients of these measures (provided by ESDC).

The number of weeks affects Part I expenditures as benefits are payable for every weekday of the year, regardless of holidays. The number of workdays in a year ranges from 260 days to 262 days, resulting in a number of weeks ranging from 52.0 to 52.4 as shown in the following table.

Table 50 Number of Weeks

Calendar Year	2021	2022	2023	2024	2025	2026	2027	2028	2029
Number of Weeks	52.2	52.0	52.0	52.4	52.2	52.2	52.2	52.0	52.2

D.3.5 Regular Benefits

EI regular benefits provide temporary income support to eligible insured persons who have lost their jobs through no fault of their own, such as due to shortage of work, or seasonal or mass lay-offs, and are available to work.

Regular benefit payments are equal to the average weekly benefits multiplied by the number of weeks paid, as determined by the number of potential claimants multiplied by the recipiency rate and by the number of weeks in the year.

$$\text{Regular Benefits} = \underbrace{PC \times RR \times W}_{\text{Number of weeks paid}} \times \underbrace{AWB}_{\text{Average weekly benefits}}$$

Where: PC = number of potential claimants;
RR = recipiency rate;
W = number of weeks in the year; and
AWB = average weekly benefits.

For projection purposes, the above formula is modified such that the increase in each variable is applied to the previous year's EI regular benefits paid. As the actual regular benefit expenditures in the base year include expenditures attributed to a pilot project, it is first subtracted before the growth factors are applied.

The base year on which the projected growth factors are applied is 2021. Regular benefits are therefore projected as follows, starting from the base year.

$$\text{Regular Benefits}_T = \underbrace{\frac{PC_T}{PC_{T-1}}}_{\text{Yearly growth in potential claimants}} \times \underbrace{\frac{W_T}{W_{T-1}} \times \frac{AWB_T}{AWB_{T-1}}}_{\text{Yearly growth in annual average benefits}} \times \underbrace{\frac{RR_T}{RR_{T-1}}}_{\text{Yearly growth in the ratio of potential claimants receiving benefits}} \times \text{Regular Benefits}_{T-1}$$

Where: PC = number of potential claimants;
W = number of weeks in a year;
AWB = average weekly benefits; and
RR = recipiency rate.

The 2022 experience is adjusted based on known data up to June 2022 while the year 2023 is adjusted as to match the expected benefits projected from year 2019, the latest year of known actual regular EI income benefits not affected by the COVID-19 pandemic. The following adjustments were done:

- Average Weekly Benefits: +0.11% in 2022 and +0.95% in 2023
- Number of Weeks: +8.00% in 2023

The pilot project and special measures are then added to the base regular benefits projection as shown in Table 51.

Table 51 Regular Benefits ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Regular Benefits (Base)	20,701	11,934	12,700	14,364	15,215	15,643	16,186	16,656	17,303
Pilot Projects/Special Temporary Measures									
Support for Eligible Seasonal Claimants in Targeted Regions	13	67	107	43	-	-	-	-	-
EI Transition Benefits									
13.1% UR, 300 Hours Credit & Max 50 weeks	10,488	1,123	-	-	-	-	-	-	-
Minimum Benefit Rate of $500	3,641	456	-	-	-	-	-	-	-
Waiving of Waiting Period	274	-	-	-	-	-	-	-	-
Minimum Benefit Rate of $300	33	65	0	-	-	-	-	-	-
EI Simplification									
Flat 420-hour Entrance Requirement & Minimum 14 Weeks Benefits	52	528	119	0	-	-	-	-	-
Simplified Rules on Separation	82	835	196	0	-	-	-	-	-
Total Regular Benefits	35,283	15,009	13,122	14,408	15,215	15,643	16,186	16,656	17,303

D.3.6 Fishing Benefits

As with regular benefits, fishing benefits are equal to the number of benefit weeks multiplied by the average weekly benefits. Fishing benefits can be projected from the base year (2021) using the expected change in the number of benefit weeks and average weekly benefits.

$$FB_T = \underbrace{(W_T/W_{T-1}) \times (AWB_T/AWB_{T-1})}_{\text{Yearly increase in average benefits}} \times \underbrace{FB_{T-1}}_{\text{Prior year's benefits}}$$

Where: FB = fishing benefits;
W = number of weeks in the year; and
AWB = average weekly benefits.

The 2022 experience is adjusted based on known data up to June 2022 while the year 2023 is adjusted as to match the expected benefits projected from year 2019, the latest year of known actual fishing benefits not affected by the COVID-19 pandemic. The following adjustments were done:

- Average Weekly Benefits: -1.94% in 2022 and -1.23% in 2023
- Number of Weeks: +45.00% in 2022

The base fishing benefits projection is shown in the following table. The projected benefits for the temporary measures are provided by the Minister of ESD.

Table 52 Fishing Benefits ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Fishing Benefits (Base)	252	389	399	421	433	445	458	469	484
Temporary Measures									
EI Transition Benefits									
$2,500 Entrance Requirement	0	0	-	-	-	-	-	-	-
Enhanced Access - Prior Years Earnings	99	0	-	-	-	-	-	-	-
Minimum Benefit Rate of $500	10	2	-	-	-	-	-	-	-
Waiving of Waiting Period	6	-	-	-	-	-	-	-	-
Minimum Benefit Rate of $300	0	0	0	-	-	-	-	-	-
EI Simplification: $2,500 Entrance Requirement	0	0	0	0	-	-	-	-	-
Total Fishing Benefits	368	392	399	421	433	445	458	469	484

D.3.7 Work-Sharing Benefits

To avoid temporary lay-offs due to a reduction in the normal level of business activity caused by factors that are beyond the control of the employer, employers and employees can enter into a Work-Sharing agreement with the Commission through Service Canada to provide EI income benefits to eligible workers willing to work a temporarily reduced work week. This enables employers to retain staff and adjust their work activity during temporary work shortages, as well as avoid the expenses of hiring and training new staff once business levels return to normal. Employees are able to retain their skills and jobs while receiving EI benefits for the days that they do not work.

Due to the Work-sharing benefits in 2021 being fully attributed to measures, the “Work-Sharing Benefits (Base)”, as seen in Table 53, is set to $0 M. As such, expenditures cannot be projected from 2021 and are instead projected from year 2019.

$$WSB_T = \underbrace{(EE_T/EE_{T-1})}_{\text{Change in the number of employees}} \times \underbrace{(W_T/W_{T-1}) \times (AWB_T/AWB_{T-1})}_{\text{Yearly increase in average benefits}} \times \underbrace{WSB_{T-1}}_{\text{Prior year's benefits}}$$

Where: WSB = Work-Sharing benefits;
EE = employees;
W = number of weeks in a year; and
AWB = average weekly benefits.

Table 53 shows the actual 2021 Work-Sharing benefits as well as the projection until 2029. The projected cost estimates for temporary measures shown in Table 53 are provided by the Minister of ESD.

Table 53 Work-Sharing Benefits ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Work-Sharing Benefits (Base)*	0	1	16	16	17	17	18	19	19
Extending Max Duration of Work-Sharing Agreements**	8	-	-	-	-	-	-	-	-
Work-Sharing Program in response to the Covid-19 Pandemic***	107	52	11	-	-	-	-	-	-
Total Work-Sharing Benefits	115	53	27	16	17	17	18	19	19

* Work-Sharing benefits paid in 2021 and most of 2022 were attributed to the measures.

** The maximum duration of Work-Sharing agreements was extended for agreements beginning between 30 July 2017 and 28 March 2020 to support workers affected by the downturn in the Forestry sector as well as for agreements beginning between 19 August 2018 and 27 March 2021 to support workers who may be affected by the U.S. tariffs imposed on Canadian steel and aluminium shipments.

*** Changes to the Work-Sharing Program put in place in response to the COVID-19 pandemic include: extending the duration of Work-Sharing agreements, waiving the mandatory cooling off period, expanding eligibility criteria, and streamlining the application process. The temporary special Work-Sharing measures are in place until 24 September 2022.

D.3.8 Special Benefits

Special benefits include MP benefits, for those who are pregnant or caring for a newborn or adopted child, sickness benefits for those who are unable to work due to sickness, injury or quarantine, compassionate care benefits for those who take a temporary leave from work to provide care or support to a family member who is gravely ill and at risk of dying within 26 weeks, and benefits for those who take leave from work to provide care or support to a critically ill or injured family member (Family Caregiver benefits for children or adults).

Salaried

Each special benefit for salaried employees is forecasted from the base year 2021 using the expected change in the number of employees and in the average weekly benefits.

$$SB_T = \underbrace{(EE_T/EE_{T-1})}_{\text{Change in the number of employees}} \times \underbrace{(W_T/W_{T-1}) \times (AWB_T/AWB_{T-1})}_{\text{Yearly increase in average benefits}} \times \underbrace{SB_{T-1}}_{\text{Prior year's benefits}}$$

Where: SB = special benefits;
EE = employees;
W = number of weeks in a year; and
AWB = average weekly benefits.

The 2022 experience is adjusted based on known data up to June 2022 while the year 2023 is adjusted as to match the expected benefits projected from year 2019, the latest year of known actual Special benefits not affected by the COVID-19 pandemic. The following adjustments were made:

	Average Weekly Benefits		Number of Weeks	
Benefit Type	2022	2023	2022	2023
Maternity and Parental	(2.63%)	(2.33%)	-	7%
Sickness	(3.50%)	(1.11%)	(20%)	20%
Compassionate	(3.98%)	(3.12%)	(15%)	25%
Family Caregiver Adult	(3.20%)	(1.00%)	(15%)	-
Family Caregiver Children	(2.90%)	(1.14%)	(15%)	10%

For projection purposes, expenditures attributed to recent measures and changes to the program are excluded from the base year before growth factors are applied. Expenditures attributed to recent program changes are subsequently added separately to obtain the total special benefits.

Self-employed

Starting 31 January 2010, self-employed persons can enter into a voluntary agreement with the Commission through Service Canada to participate in the EI program.

Self-employed benefits are forecasted to increase in line with covered earnings, that is, in line with the self-employed covered population and related insured earnings growth. Projections consider that self-employed persons must wait 12 months after registration to claim EI special benefits.

It is expected that in 2023, self-employed participants enrolling in the EI Program will receive $20.1 million in MP benefits, $2.0 million in sickness benefits, $44 thousand in compassionate care benefits and $60 thousand in Family Caregiver benefits.

Table 54 Special Benefits

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Salaried Employees ($ million)									
MP Benefits	4,225	4,672	5,098	5,384	5,562	5,737	5,911	6,089	6,327
Sickness Benefits	2,119	1,858	2,302	2,431	2,512	2,591	2,669	2,750	2,857
Compassionate Care Benefits	51	48	60	63	66	68	70	72	75
Family Caregiver Benefit	109	102	110	116	120	123	127	131	136
Sub-total	6,505	6,680	7,569	7,994	8,258	8,518	8,776	9,042	9,394
Self-Employed ($ thousand)									
MP Benefits	14,764	17,727	20,094	21,596	22,968	24,476	26,029	27,556	29,383
Sickness Benefits	1,449	1,740	1,972	2,120	2,254	2,402	2,555	2,705	2,884
Compassionate Care Benefits	32	39	44	48	51	54	57	61	65
Family Caregiver Benefit	44	53	60	65	69	73	78	83	88
Sub-total	16,290	19,559	22,170	23,828	25,341	27,006	28,719	30,403	32,420
Recent Permanent Changes ($ million)									
Extending Maximum EI Sickness Weeks from 15 to 26	-	80	581	795	841	890	942	997	1,054
Recent Temporary Changes ($ million)									
EI Transition Benefits: 13.1% UR & 480 Hours Credit*	730	165	-	-	-	-	-	-	-
EI Transition Benefits: Minimum Benefit Rate of $500	588	143	-	-	-	-	-	-	-
Waiving of Waiting Period	118	-	-	-	-	-	-	-	-
Minimum Benefit Rate of $300	5	20	0	-	-	-	-	-	-
EI Simplification: Flat 420-hour Entrance Requirement	23	211	47	0	-	-	-	-	-
Total ($ million)									
MP Benefits	5,057	5,121	5,163	5,406	5,585	5,761	5,937	6,117	6,356
Sickness Benefits	2,737	2,042	2,887	3,228	3,355	3,483	3,614	3,749	3,914
Compassionate Care Benefits	60	50	60	64	66	68	70	72	75
Family Caregiver Benefit	130	107	110	116	120	123	127	131	136
Total Special Benefits	7,985	7,319	8,220	8,813	9,125	9,436	9,747	10,069	10,481

* ESDC provided total estimates for all special benefits. They were split by type of benefits based on 2021 actual expenses and an analysis of individual claims data.

D.3.9 Benefit Repayments

If a claimant's income for a tax year exceeds 1.25 times the annual MIE, the claimant may be required to repay a portion of EI regular or fishing benefits received. Benefit repayments, as reported in the EI Operating Account, include an estimate for the current tax year, based on regular and fishing benefit payments, and a reconciliation between actual and estimated benefit repayments for the previous tax year.

The current year forecast for 2022 is based on data provided by ESDC and is projected for 2023 and after based on the expected increase/decrease in regular and fishing benefits. The estimate for the forecast 2022 prior year actual is based on the first 6 months of benefit repayments provided by ESDC and the historical average completion ratio after 6 months.

The ratio of repayments to benefit payments is expected to be lower in 2021, as a lower share of beneficiaries will exceed 1.25 times the annual MIE during the COVID-19 pandemic. Starting in 2022, the repayment experience is expected to revert back to normal.

Table 55 EI Benefit Repayments ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Current Year Forecast	437	393	345	378	399	410	424	436	453
Prior Year									
Actual	258	433	393	345	378	399	410	424	436
Forecast	(265)	(437)	(393)	(345)	(378)	(399)	(410)	(424)	(436)
Sub-Total (Adjustment for prior year)	(7)	(4)	-	-	-	-	-	-	-
Refunds	(2)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Total	428	380	337	370	391	402	416	428	445

D.3.10 EI Part II Benefits

The programs delivered under Part II of the EI Act are called Employment Benefits and Support Measures (EBSM). The expected annual estimates for EBSM are provided by ESDC on a fiscal year basis.

Amounts presented in Table 56 include a remaining additional LMDA expense of $0.85 billion for calendar years 2021 and 2022 (based on an original five-year expense of $1.8 billion that started in 2018, as announced in Budget 2017).

Table 56 Employment Benefits and Support Measures ($ million)

	Actual	Forecast							
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
EBSM (Fiscal Year)	2,531	2,532	2,107	2,107	2,107	2,107	2,107	2,107	2,107
	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
EBSM (Calendar Year)	2,490	2,552	2,107	2,107	2,107	2,107	2,107	2,107	2,107

D.3.11 Administration Costs

As with Part II benefits, the expected annual estimates for EI administration costs are provided by ESDC on a fiscal year basis. The calendar year costs shown in Table 57 are based on 25% of the current fiscal year and 75% of the next fiscal year.

Table 57 Administration Costs ($ million)

	Actual	Forecast							
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Administration Costs (Fiscal Year)*	2,640	2,569	2,042	1,909	1,896	1,892	1,892	1,892	1,892
	Actual	Forecast							
	2021	2022**	2023**	2024	2025	2026	2027	2028	2029
Administration Costs (Calendar Year)*	2,525	2,575	2,186	1,942	1,899	1,893	1,892	1,892	1,892

* Administration costs related to the new EI Training Support Benefit proposed in Budget 2019 and expected to launch in 2023 are included.

** Calendar year slightly different than the calculated value using 75%/25% of fiscal years due to a timing in the administration cost for the new EI Training Support Benefit of $15.85 million in fiscal year 2022-2023 being fully accounted for in calendar year 2023.

As mentioned previously, the calculation of the reduction related to the EI program's savings due to the Québec Parental Insurance Plan includes variable administrative costs (VAC). The VAC represent direct operating costs incurred by the EI program associated with the administration of MP benefits outside Québec.

These costs represent the savings to the EI program if it ceased to provide EI MP benefits. The responsibility of determining the VAC each year lies with ESDC. It should be noted that under the Canada-Québec Final Agreement, the Government of Canada provided assurance that the VAC multiplied by the ratio of the insurable earnings in Québec to the insurable earnings outside Québec would not be less than $5 million. The 2022 to 2029 VAC are projected from actual costs incurred in 2021 as a constant percentage of MP benefits. When applicable, VAC are increased to reflect the minimum under the Canada-Québec Final Agreement.

Table 58 Variable Administrative Costs ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Variable Administration Costs	24.0	24.3	24.5	25.6	26.5	27.3	28.2	29.0	30.1

D.3.12 Bad Debt

Bad debt expenses relate to overpayments and penalties owed and are equal to the amount written off during the year and the change in the annual allowance for doubtful debts. The allowance is calculated on the outstanding balance in the accounts at the end of the fiscal year and is based on the collection policy, the age of the accounts and the amounts written off.

The calendar year bad debt expense included in the closing balance of the EI Operating Account as of 31 December 2021 was equal to 25% of the 2020-2021 expense and 75% of the 2021-2022 expense.

The allowance for doubtful accounts is projected based on historical experience as well as projected Part I benefits. The write-offs projection starting in 2022-2023 is based on the 2019-2020 experience.

The bad debt expense for a given year corresponds to the difference between the allowance calculated for the year and the net allowance of the previous year (i.e., allowance at the end of the previous year reduced by the write-offs that occurred during the year).

Table 59 Bad Debt Expense ($ million)

	Actual	Forecast							
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Allowance for Doubtful Accounts (Current Year)	495	491	487	491	497	505	515	526	539
Net Allowance (Prior Year)									
Allowance for Doubtful Accounts (Prior Year)	529	495	491	487	491	497	505	515	526
Write-Offs	(30)	(82)	(82)	(81)	(81)	(83)	(84)	(85)	(87)
Total	499	413	410	407	409	415	421	429	439
Bad Debt Expense (Fiscal Year)	(4)	78	78	84	88	91	93	96	100
	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Bad Debt Expense (Calendar Year)	43	58	78	83	87	90	93	96	99

D.3.13 Penalties

The Commission may impose a penalty on a claimant, any person acting on behalf of a claimant or an employer under sections 38 and 39 of the EI Act should it become aware that they knowingly provided false or misleading information.

Penalties are correlated with benefit overpayments and are forecasted from year 2019, the latest year before the impact of the COVID-19 pandemic, using the expected annual change in Part I benefits.

Table 60 Penalties ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Penalties	7	73	70	77	80	83	86	88	92

D.3.14 Interest

Interest is charged on outstanding EI debts caused through misrepresentation. This includes overpayments and penalties. As per the *Interest and Administrative Charges Regulations*, the rate of interest charged to EI claimants, employers or third parties on outstanding debts is equal to 3% above the average Bank of Canada discount rate (overnight rate plus 0.25%) from the previous month[1].

The overnight rate increased throughout 2022, from 0.25% in February 2022 to its current value of 2.50% in July 2022. The corresponding discount rate (Bank Rate) starting in July 2022 is 2.75% (2.50% + 0.25%). The 3-month T-Bill forecast from the June 2022 Department of Finance private sector survey was considered in determining the projection of the overnight rate from 2022 (August to December) to 2025. Starting in 2025, the overnight rate is expected to stabilize at 2.25% with a corresponding discount rate of 2.50%. Hence, the projected rate of interest charged on overdue accounts is equal to 5.50% (2.50% + 3.00%) from 2025 to 2029.

As the interest earned is correlated with the amount of outstanding benefit overpayments, it is forecasted using the expected annual change in Part I benefits and the 12-month average of the interest rate. Expected interest for 2022 is based on interest in 2021, increased for changes in Part I benefits and average interest rate from 2021 to 2022.

Table 61 Interest on Overdue Accounts Receivable ($ million)

	Actual	Forecast							
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Average Interest Rate	3.50%	4.75%	6.13%	5.75%	5.50%	5.50%	5.50%	5.50%	5.50%
Interest	17	12	15	16	16	16	17	17	18

1 Interest rates can be found at http://www.tpsgc-pwgsc.gc.ca/recgen/txt/tipp-ppir-eng.html

Appendix E Reduction in Employer Premiums Due to Qualified Wage-Loss Plans

This appendix describes the data, methodology and assumptions that underlie the calculation of the 2023 reduction in employer premiums due to qualified wage-loss plans included in this report. Data and assumptions were updated to reflect the most recent experience, but the methodology used is the same as in the previous actuarial report.

E.1 Background and Legislation on the Premium Reduction Program

Under subsection 69(1) of the *Employment Insurance Act* ("EI Act"), the Commission shall, with the approval of the Governor in Council, make regulations to provide a system for reducing employer premiums when employees are covered by a qualified wage-loss plan which reduces EI special benefits otherwise payable, provided that at least 5/12 of the reduction is passed on to employees.

Under subsection 69(3) of the EI Act, the Commission makes regulations for the operation of a premium reduction system, including the method for determining the amount of reduction, the use of actuarial calculations and estimates, and the specific details related to the administration of the program such as minimum qualification criteria and other registration conditions.

The Premium Reduction Program (PRP) was introduced in 1971 at the same time that sickness benefits were introduced to the Unemployment Insurance Program. At the time, many workers were already covered against loss of wages due to illness through employer sponsored plans. It was recognized that the introduction of EI sickness benefits could cause a duplication of costs to both employers and employees. As stated in the *1970 White Paper on Unemployment Insurance*, cost concerns and a desire to recognize the role of existing wage-loss plans contributed to the decision to supplement rather than pre-empt those plans. With the exception of benefits paid from registered Supplemental Unemployment Benefit (SUB[1]) plans, it was therefore decided that benefits payable from employer sponsored wage-loss plans would be deducted from EI sickness benefits. In other words, the EI program would adopt a second payer position relative to employer sponsored wage-loss plans that are not registered SUB plans. This implies that employees who become ill and who are not covered by a registered SUB plan first make use of their employer's plan and only make use of EI sickness benefits if they have no employer plan, or if they have exhausted the benefits from their employer's plan.

Employers who have a wage-loss plan that meets specific qualification requirements may apply for a reduction of EI premiums under the PRP. In addition to meeting the qualification requirements, participation in the PRP is conditional upon the employer passing on at least 5/12 of the premium reduction to the employees. For administrative simplicity, the full premium reduction is provided to the employer who is then responsible for returning the employees'

[1] A SUB is a supplemental payment to an employee who is receiving EI benefits during a period of unemployment due to temporary stoppage of work, training, illness, injury or quarantine. These payments are made according to the terms of a SUB plan financed by the employer. Payments from a registered SUB plan that meets the requirements of section 37 of the Employment Insurance Regulations are not deducted from the employee's EI benefits.

portion of the reduction to them through cash or fringe benefits.

In accordance with sections 63, 64, 65 and 66 of the *Employment Insurance Regulations* ("EI Regulations"), there are four categories of qualified wage-loss plans, which correspond to the main types of wage-loss plans offered to workers. A summary of each category is shown below:

Category 1:	*Cumulative paid sick leave plans that allow for a minimum monthly accumulation of at least one day and for a maximum accumulation of at least 75 days.*
Category 2:	*Enhanced cumulative paid sick leave plans that allow for a minimum monthly accumulation of at least one day and two thirds and for a maximum accumulation of at least 125 days.*
Category 3:	*Weekly indemnity plans with a maximum benefit period of at least 15 weeks.*
Category 4:	*Special weekly indemnity plans provided by certain public and parapublic employers of a province with a maximum benefit period of at least 52 weeks.*

For each category, a rate of reduction, expressed as a percentage of insurable earnings, is calculated annually. These rates of reduction are then converted into reduced employer multipliers for each category and applicable premium rate.

The principle in determining the rates of reduction is that the EI program is paying lower sickness benefits due to the presence of qualified wage-loss plans, and that these savings to the EI program should be passed on to the employers who sponsor these plans and their employees. As it would not be practical to do this on an individual employer basis nor even possible to make the calculation for new employers or small firms, the rates of reduction compensate employers (and their employees) for the average rate of EI benefit savings that are generated by qualified plans in each category. Given that EI sickness benefits paid to employees who are covered by a qualified wage-loss plan depend on the category, the savings generated, and therefore the rates of reduction, vary by category.

The methodology to calculate the rates of reduction is prescribed in section 62 of the EI Regulations. Pursuant to this section, the employer's premium shall be reduced by the percentage by which the first payer cost ratio in respect of all insured persons exceeds the experience cost ratio in respect of insured persons covered by a qualified wage-loss plan of that employer's category.

Both the first payer cost ratio and the experience cost ratio are based on averages from the three years ending with the second year preceding the year for which the calculation is made. Accordingly, for 2023, the years 2019, 2020 and 2021 are used to calculate the first payer cost ratio and the experience cost ratio. The detailed formula for calculating the rates of reduction is presented in Appendix B of this report.

More information on the first payer cost ratio and the experience cost ratio is presented in the following subsections, as well as the resulting rates of reduction, reduced employer multipliers and estimated amount of premium reduction for 2023.

E.2 First Payer Cost Ratio

The first payer cost ratio represents the average hypothetical job-attached[1] EI sickness benefits that would have been paid if benefits payable under a group sickness or disability wage-loss indemnity plan or paid sick leave plan were disregarded for purposes of determining benefits otherwise payable to persons under the EI Act. It is expressed as a percentage of average insurable earnings for all insured persons. This produces a uniform first payer cost ratio reflecting the national average usage for all EI contributors and is consistent with the fact that EI contributors are charged a uniform premium rate in accordance with the pooling of risk principle.

For the purposes of calculating the 2023 rates of reduction, the first payer cost ratio is equal to the average of the first payer cost for years 2019 to 2021, divided by the average insurable earnings of all insured persons for years 2019 to 2021.

The first payer cost for each year is determined by multiplying the hypothetical number of first payer job-attached EI sickness benefit weeks (namely, those that would have been paid if benefits under a group sickness or disability wage-loss indemnity plan or paid sick leave plan were disregarded for EI benefit purposes) by the average weekly sickness benefits that would apply in such circumstances.

The first payer cost was not revised for previously calculated years (i.e. 2019 and 2020). More information on the 2019 and 2020 first payer cost can be found in previous Actuarial Reports.

E.2.1 First Payer Job-Attached EI Sickness Benefit Weeks

The hypothetical number of first payer job-attached EI sickness benefit weeks is equal to the product of the hypothetical number of first payer job-attached EI sickness claims and the average duration in weeks of these claims. The hypothetical number of first payer job-attached EI sickness claims is based on the number of individuals with insurable earnings and on an assumed job-attached EI sickness usage rate. This assumed job-attached EI sickness usage rate depends on a number of factors such as the probability of being sick for more than one week (EI sickness incidence rate), the probability of being eligible and applying for EI benefits and the probability of being job-attached at the time of illness.

Employer and employee-wide data on sickness incidences and their duration are not readily available. The most exhaustive and complete data that are available is through the combination of the EI administrative data file and the Canada Revenue Agency T4 data file. The EI sickness incidence rate is therefore estimated based on an analysis of administrative EI and T4 data. Given that the EI claims data are incomplete for employees covered by a qualified wage-loss plan (i.e., only residual claims are paid from the EI program), the EI sickness usage rate of individuals that are not covered by a qualified wage-loss plan was used as a basis for developing the overall EI sickness incidence rate of the entire insured population.

This overall EI sickness incidence rate is adjusted to reflect the estimated impact on incidence

[1] A sickness claim is considered job-attached if the interruption of earnings with the employer was by reason of illness, injury or quarantine.

rates of different age, sector of employment and salary profiles between individuals with and without a qualified wage-loss plan. The job-attached EI sickness usage rate differs by sector of employment and depending on whether or not an individual is covered by a qualified wage-loss plan due to different EI eligibility/benefit application rates and varying degrees of job attachment. Individuals who are covered by a qualified wage-loss plan have more stable full-time employment and are more likely to meet the EI eligibility requirements and be job-attached at the time of the illness. Furthermore, they are more likely to apply for EI benefits given that under the hypothetical first payer scenario, employers sponsoring a qualified wage-loss plan are assumed to adopt a second payer position rather than eliminating sickness coverage altogether.

Based on quantitative and qualitative analysis, assumptions were developed to estimate the job-attached EI sickness usage rate of all insured persons under a hypothetical first payer scenario and the resulting hypothetical number of first payer EI sickness claims. The hypothetical number of first payer job-attached EI sickness benefit weeks is calculated by multiplying the hypothetical number of first payer EI sickness claims by the estimated average duration in weeks. To obtain the average duration of claims, the wage-loss status of individuals was taken into account. This is because employees with a wage-loss plan tend to have stronger labour force attachment and that individuals with strong labour force attachment have slightly longer claim durations based on administrative claims data.

The 2021 hypothetical number of first payer job-attached EI sickness claims is 827,322 and the assumed average duration of these claims is 8.2 weeks. The resulting hypothetical number of first payer job-attached EI sickness benefit weeks for 2021 is 6,785,302.

The hypothetical number of first payer job-attached EI sickness benefit weeks for 2019 and 2020 is 6,195,852 and 4,992,379 respectively. More information is provided in previous Actuarial Reports.

E.2.2 Average Weekly Sickness Benefits

The average weekly benefits can be calculated by multiplying the following elements:

- Benefit rate (i.e., 55%);
- Weekly insurable earnings of all EI contributors; and
- Ratio of insurable earnings used to calculate the benefits of claimants to the insurable earnings of all EI contributors (“Ratio”). This Ratio captures the effect of the formula used to determine EI weekly benefits and any structural differences between insurable earnings of contributors and claimants.

The average weekly sickness benefits of individuals that are not covered by a qualified wage-loss plan were analysed and broken down into these separate elements. It was observed that the Ratio for individuals with a strong labour force attachment is significantly lower than the Ratio for all individuals. In addition, the Ratio for individuals with insurable earnings at the maximum insurable earnings is close to 1. Based on this analysis, an assumption was developed for the Ratio that would be applicable under a hypothetical first payer scenario. This Ratio was then applied to the benefit rate and weekly insurable earnings to derive the average weekly sickness benefits under a hypothetical first payer scenario.

The resulting average weekly sickness benefits under a hypothetical first payer scenario is $534.16 for 2021. The average weekly sickness benefits under a hypothetical first payer scenario for 2019 and 2020 are $454.02 and $478.55 respectively, as calculated in previous Actuarial Reports.

E.2.3 Resulting First Payer Cost and First Payer Cost Ratio

Based on the foregoing, the first payer cost ratio used for the calculation of the 2023 rates of reduction is 0.4389%. Table 62 shows more details on how this first payer cost ratio is determined.

Table 62 First Payer Cost Ratio for Calculating 2023 Rates of Reduction

	2019*	2020*	2021	Average for 2023 Rates of Reduction
First Payer EI Sickness Benefit Weeks (A)	6,195,852	4,992,379	6,785,302	N/A
First Payer Average EI Sickness Benefits (B) ($)	454.02	478.55	534.16	N/A
First Payer Cost (A x B) ($ million)	2,813	2,389	3,624	2,942
Total Insurable Earnings (TIE) ($ million)	660,523	645,338	705,406	670,423
First Payer Cost Ratio (% of TIE)	0.4259%	0.3702%	0.5138%	0.4389%

* More information on the 2019 and 2020 numbers can be found in previous Actuarial Reports.

E.3 Experience Cost Ratio

Under certain circumstances, EI sickness benefits are paid to individuals covered by a qualified wage-loss plan. The costs to the EI program of these benefits are deducted from the premium reduction granted through the experience cost ratio, which is subtracted from the first payer cost ratio for purposes of calculating the rates of reduction.

The experience cost ratio, which is different for each category, reflects the actual average job-attached EI sickness benefits paid for each category. It is expressed as a percentage of average insurable earnings for the insured persons in that category. In accordance with the EI Regulations, EI sickness benefits paid to individuals who were not job-attached at the time of the claim are not included in the experience cost ratio.

The allocations of annual job-attached EI sickness benefits paid and of insurable earnings among each category are based on an analysis of administrative data and reports provided by Service Canada and ESDC. For 2019, 2020 and 2021, the total cost of job-attached EI sickness benefits for each category is shown in Table 63, and the insurable earnings for each category are shown in Table 64; the amounts shown for 2021 are based on available data.

Table 63 Job-Attached EI Sickness Benefits per Category of Wage-Loss Plan ($)

	2019	2020	2021	Average for 2023 Rates of Reduction
Category 1	101,420,377	75,684,132	127,531,131	101,545,213
Category 2	12,847,740	8,497,202	15,254,977	12,199,973
Category 3	105,041,667	82,884,473	130,653,354	106,193,165
Category 4	3,485,271	2,405,472	5,332,821	3,741,188
Total	222,795,054	169,471,279	278,772,283	223,679,539

Table 64 Allocation of Insurable Earnings for Employers With a Qualified Wage-Loss Plan ($ million)

	2019	2020	2021	Average for 2023 Rates of Reduction
Category 1	51,191	49,497	57,081	52,590
Category 2	25,496	24,587	26,812	25,632
Category 3	200,205	193,537	215,976	203,239
Category 4	23,779	23,297	27,658	24,911
Total	300,670	290,918	327,527	306,372

The experience cost ratio used in the calculation of the 2023 rates of reduction for each category is shown in Table 65.

Table 65 Experience Cost Ratio per Category

	Average EI Sickness Costs ($) (A)	Average Insurable Earnings ($ million) (B)	Experience Cost Ratio (A/B)
Category 1	101,545,213	52,590	0.1931%
Category 2	12,199,973	25,632	0.0476%
Category 3	106,193,165	203,239	0.0523%
Category 4	3,741,188	24,911	0.0150%

E.4 Rates of Reduction

Pursuant to section 62 of the EI Regulations and section 68 of the EI Act, the employer's premium shall be reduced by the percentage by which the first payer cost ratio in respect of all insured persons exceeds the experience cost ratio in respect of insured persons covered by a qualified wage-loss plan of that employer's category. The premium reduction is therefore granted by reducing the employer multiple below 1.4 to a value rounded to 3 decimals.

Table 66 shows the 2023 rates of reduction for each category of qualified wage-loss plan, along with the corresponding reduced employer multiplier for out-of-Québec and Québec employers. The employer multipliers presented in the table are calculated with a premium rate of 1.63% for residents of all provinces except Québec. The corresponding premium rate that would apply to residents of Québec is 1.27%. Pursuant to section 62 of the EI Regulations and section 68 of the EI Act, the employer multiplier is calculated from the unrounded rates of reduction and the rounded rates of reduction are shown for illustration purposes only.

Table 66 2023 Rates of Reduction

	First Payer Cost Ratio	Experience Cost Ratio	Unrounded Rate of Reduction	Rounded Rate of Reduction	Employer Multiplier (Out-of-Québec)	Employer Multiplier (Québec)
Category 1	0.4389%	0.1931%	0.2458%	0.25%	1.249	1.206
Category 2	0.4389%	0.0476%	0.3913%	0.39%	1.160	1.092
Category 3	0.4389%	0.0523%	0.3866%	0.39%	1.163	1.096
Category 4	0.4389%	0.0150%	0.4238%	0.42%	1.140	1.066

The Commission will notify each registered employer of the applicable 2023 rate of reduction and employer multiplier. Pro-rated rates apply for plans that do not qualify for a reduction for the full twelve months in the calendar year. In addition, adjusted rates may apply for employers who deduct QPIP premiums for a portion but not all of their employees.

E.5 Amount of Premium Reduction

Table 67 shows the estimated amount of premium reduction to be granted in 2023. The estimates are based on the historical distribution of insurable earnings by category, which was derived from Canada Revenue Agency T4 data.

Table 67 2023 Estimated Amount of Premium Reduction

	Estimated Number of Qualified Employers	2023 Insurable Earnings ($ million)	Rates of Reduction	Premium Reduction ($ million)
Category 1	2,300	64,102	0.2458%	158
Category 2	600	30,127	0.3913%	118
Category 3	23,900	242,634	0.3866%	938
Category 4	200	31,058	0.4238%	132
Total	27,000	367,921	N/A	1,345

Appendix F Acknowledgements

We would like to thank the staff at Employment and Social Development Canada, Canada Revenue Agency, Finance Canada and Service 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:

Yu Cheng, ASA
Alice Chiu, ACIA, ASA
Pascale Jomphe, ACIA, ASA
Luc Léger, ACIA, ASA
Kelly Moore