Office of the Superintendent of Financial Institutions Canada
Office of the Chief Actuary

Bureau du surintendant des institutions financières Canada
Bureau de l´actuaire en chef

Actuarial Report 2021

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
Facsimile: **613-990-9900**
E-mail: **oca-bac@osfi-bsif.gc.ca**

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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 2021 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 as of 22 July 2020. They also take into account additional information received from Employment and Social Development Canada on 6 August 2020 (announced by the Government on 20 August 2020). This information includes upcoming temporary measures aimed at facilitating access to Employment Insurance, as well as a confirmation of a premium rate freeze in 2021. However, the estimates were not revised for the additional 4-week extension of the Canada Emergency Response Benefit (including the EI Emergency Response Benefit) newly announced on 20 August 2020.

Yours sincerely,

Annie St-Jacques, FCIA, FSA
Senior Actuary, Employment Insurance Premium Rate-Setting
Office of the Chief Actuary
Office of the Superintendent of Financial Institutions Canada

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1 Executive Summary

1.1 Purpose of the Report

This Actuarial Report prepared by the Actuary, Employment Insurance Premium Rate-Setting, is the eighth report to be presented to the Canada Employment Insurance Commission (Commission) in accordance with the *Employment Insurance Act* ("EI Act").

Pursuant to section 66.3 of the EI Act, the purpose of this report is to provide the Commission with 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 report also provides a detailed analysis in support of the forecasts, including data sources, methodology and assumptions.

The Commission shall, on or before 14 September, make available to the public this report along with the summary of this report.

COVID-19 Pandemic

Starting mid-March, the COVID-19 pandemic resulted in a health and economic crisis that created an unprecedented shock to the Canadian labour market. As part of the Government of Canada's COVID-19 Economic Response Plan, the Government announced new emergency response benefits, the Canada Emergency Response Benefit (CERB) and the EI Emergency Response Benefit (EI ERB), and temporary changes to the Work-Sharing program. Furthermore, on 6 August 2020, Employment and Social Development Canada (ESDC) provided additional information to be taken into account when determining the forecast break-even rate for 2021. This information, announced by the Government on 20 August 2020, included a number of temporary measures aimed at facilitating access to EI as the EI ERB and the CERB are being wound down, as well as an EI premium freeze for 2021. This report takes all of the above into consideration. However, the estimates were not revised for the additional 4-week extension of the CERB (including the EI ERB) newly announced on 20 August 2020.

1.2 Overview of 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. Subsection 66(7) of the EI Act states that the premium rate may not be increased or decreased by more than 0.05% (five cents) from one year to the next.

For 2021, the Government has already confirmed that the premium rate would not be allowed to increase and would remain frozen at the 2020 premium rate level of 1.58%. This report will nevertheless show how the 7-year forecast break-even rate is determined in order for the projected balance in the EI Operating Account as at 31 December 2027 to be $0. This rate is expected to generate sufficient premium revenue during the 2021-2027 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 2020.

The 7-year forecast break-even rate is calculated each year based on a seven-year projection of the insurable earnings, the EI expenditures, and the amount of premium reductions granted to employers who sponsor a qualified wage-loss plan as well as to employees and employers of a province that has established a provincial plan. The proposed Small Business Premium Rebate (related to the new EI Training Support Benefit, originally expected to be launched in late 2020, but now delayed to December 2021) is also considered. All projections are based on a methodology developed by the Actuary using prescribed information and assumptions provided by the Ministers of ESD and Finance, as well as non-prescribed assumptions determined by the Actuary.

In addition to the calculation of the 7-year forecast break-even rate, this report sets out the premium reductions that will apply in 2021 for employers who sponsor a qualified wage-loss plan, and for employees and employers of a province that has established a provincial plan.

Generally, EI premiums paid by the employer are equal to 1.4 times the premiums deducted by the employer on behalf of its employees, 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 one of four types of qualified wage-loss plans which reduce EI special benefits otherwise payable.

Québec is currently the only province that has established a provincial plan through the Québec Parental Insurance Plan (QPIP) which has been providing maternity, parental and adoption (MPA) 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 2021 reduction for Québec residents and their employers is determined in accordance with legislation. The reduction is granted through a reduced premium rate, referred to as the 2021 QPIP reduction.

1.3 Main Findings

The following estimates are based on the EI provisions as of 22 July 2020, on the information provided on or before 22 July 2020 by the Minister of ESD and the Minister of Finance, and on the methodology and assumptions developed by the Actuary. They also incorporate additional information and upcoming temporary measures provided by ESDC on 6 August 2020 as a result of the exceptional circumstances created by the COVID-19 pandemic.

In 2021, insured employees and their employers will pay EI premiums on their earnings up to the 2021 MIE of **$56,300**, an increase of $2,100, or 3.9%, from the 2020 MIE of $54,200.

The 2021 EI 7-year forecast break-even rate, which is the rate needed to generate just enough premium revenue such that the projected EI Operating Account balances out as of 31 December 2027, is **1.93%**. This represents a significant increase from the 2020 break-even rate of 1.58% and is the result of the situation created by the COVID-19 pandemic. Based on estimates received from ESDC, the largest part of this increase (0.29%) can be attributed to the

EI ERB[1]. Another portion of the increase (0.06%) can be attributed to the upcoming temporary measures recently announced by the Government to help people transition from the CERB and the EI ERB to EI.

The 2021 QPIP reduction is **0.40%** and represents the estimated savings to the EI program due to the existence of the Québec Parental Insurance Plan, which provides MPA benefits to residents of Québec.

The 2021 estimated cost savings to the EI program that are generated by employer sponsored qualified wage-loss plans are $1,055 million. This translates in premium reductions for employers who sponsor a qualified wage-loss plan corresponding to about 0.23%, 0.37%, 0.37% and 0.40% of insurable earnings for categories 1 through 4 respectively.

Premium Freeze in 2021

The Government confirmed that it will freeze the EI premium rate for 2021 at the 2020 premium rate. Consequently, the premium rate applicable to residents of all provinces except Québec will be 1.58%. The premium rate applicable to residents of Québec will be 1.18% (1.58% - 0.40%).

With the exception of employers who sponsor a qualified wage-loss plan, employers will pay 1.4 times the employees' premiums. For employers who sponsor a qualified wage-loss plan, based on a premium rate of 1.58%, employer multipliers for out-of-Québec employers will be reduced from 1.4 to 1.257, 1.166, 1.166 and 1.144 for categories 1 through 4 respectively (1.209, 1.086, 1.086 and 1.057 for Québec employers based on a premium rate of 1.18%).

Table 1 shows the status of the EI Operating Account for 2019, as well as its projected evolution for 2020 and 2021. This is based on a premium rate freeze for 2021 at the same level as 2020 (i.e. 1.58%). The expected deficit at the end of calendar year 2020 corresponds to $35.8 billion and is mainly attributable to the EI ERB[1] introduced by the Government at the beginning of the COVID-19 pandemic. The expected deficit at the end of calendar year 2021 corresponds to $44.2 billion. A premium rate corresponding to the 7-year forecast break-even rate (1.93%) from 2021 to 2027 would balance out the EI Operating Account at the end of 2027[2].

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

Calendar Year	Premium Rate	Premium Revenue	Expenditures	Annual Surplus (Deficit)	Cumulative Surplus (Deficit) 31 December
2019					5,174
2020	1.58%	20,909	61,872	(40,963)	(35,789)
2021	1.58%	22,573	30,990	(8,417)	(44,206)

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 taken into account in subsequent reports.

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit and a significant increase in the premium rate.

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

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.

With all other assumptions remaining constant:

- a variation in the average unemployment rate of 0.5% over the period 2021-2027 would result in an increase/decrease of about 0.07% in the 2021 EI 7-year forecast break-even rate;
- a variation in the average recipiency rate of 5% over the period 2021-2027 would result in an increase/decrease of about 0.06% in the 2021 EI 7-year forecast break-even rate; and
- a variation in the premium rate of 0.01% of insurable earnings from the 7-year forecast break-even rate would result in a $1,253 million increase/decrease in the cumulative balance of the EI Operating Account at the end of the 7-year forecast period.

1.5 Conclusion

This report was prepared by the Actuary in accordance with the relevant legislation.

The main results are as follows:

- The 2021 MIE is **$56,300**, based on the methodology detailed in the EI Act and the relevant economic data.
- The 7-year forecast break-even rate for 2021 is **1.93%** of insurable earnings.
- The 2021 QPIP reduction is **0.40%** .
- The 2021 premium reduction for employers who sponsor qualified wage-loss plans is estimated at $1,055 million.

A reconciliation of the 7-year forecast break-even rate, from 1.58% in the 2020 Actuarial Report to 1.93% in the current report, is shown in Section 7. The increase is mainly attributable to the EI Emergency Response Benefit[1] introduced in response to COVID-19 and the upcoming temporary measures recently announced by the Government aimed at facilitating access to EI.

The Government confirmed that it will freeze the EI premium rate for 2021 at the 2020 premium rate. Consequently, the 2021 premium rate will be equal to:

- **1.58% of insurable earnings for residents of all provinces except Québec; and**
- **1.18% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.40%.**

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit and a significant increase in the premium rate.

2 Introduction

2.1 Purpose of the Report

This Actuarial Report prepared by the Actuary, Employment Insurance Premium Rate-Setting is the eighth one to be presented to the Canada Employment Insurance Commission (Commission) in compliance with section 66.3 of the 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 sections 4, 66 and 69 of the EI Act, and shall, 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 will make available to the public this report along with its summary. More information on the rate setting process along with the inherent deadlines can be found in Appendix A.

2.2 Changes Announced in 2020

1) As part of the Government of Canada's COVID-19 Economic Response Plan, the Government announced the following new emergency response benefits and temporary changes to the Work-Sharing program:

    - The Canada Emergency Response Benefit (CERB) and the EI Emergency Response Benefit (EI ERB) support eligible workers by providing $500 a week for up to 24 weeks for the period between 15 March 2020 and 3 October 2020. The CERB expenses are being charged to the Consolidated Revenue Fund while the EI ERB expenses are being charged to the EI Operating Account. As a result of the implementation of the EI ERB:
        - New EI regular and sickness benefit claims during this period are processed as claims for the EI ERB. Claims established prior to 15 March 2020, continue to be processed under the traditional EI rules.
        - EI special benefits, excluding EI sickness benefits, continue unchanged.
    - Several temporary special Work-Sharing measures were introduced to support employers and workers affected by COVID-19. Changes include extending the maximum duration of agreements, waiving the mandatory waiting period, expanding eligibility criteria and streamlining the application process from 30 days to 10 days. The temporary measures are in place from 15 March 2020 to 14 March 2021.

2) EI regulations were amended to extend the period of eligibility under the seasonal claimant pilot project announced in Budget 2018. This measure provides up to five additional 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 has been extended to include eligible claims established between 30 May 2020 and 30 October 2021.

3) ESDC 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 by at least 1 year. The benefit components delayed 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.

4) On 6 August 2020, ESDC confirmed the introduction of a number of transition measures for a period of one year to facilitate access to EI. This report takes into account the estimated costs received for the following measures:

   - A minimum unemployment rate of 13.1% to be used for all EI regions beginning 9 August 2020 (announced by the Government on 10 August 2020). This will result in a uniform entrance requirement of 420 hours for eligibility to EI regular benefits (before application of hours credits) and a minimum entitlement to 26 weeks of EI regular benefits.
   - A credit of 300 insurable hours and a minimum weekly benefit rate of $400 for EI regular benefits, including work-sharing benefits (announced by the Government on 20 August 2020).
   - A credit of 480 insurable hours and a minimum weekly benefit rate of $400 ($240 for extended parental benefits) for EI special benefits (announced by the Government on 20 August 2020).

5) On 6 August 2020, ESDC confirmed that the Government will freeze the EI premium rate for 2021 at the 2020 premium rate.

2.3 Scope of the Report

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 2021 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 2020 and 2021 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.

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. The 2020 Actuarial Report calculated the 2020 7-year forecast break-even rate at 1.58%. Subsection 66(7) of the EI Act states that the premium rate may not be increased or decreased by more than 0.05% (five cents) from one year to the next.

For 2021, the Government has already confirmed that the premium rate would not be allowed to increase and would remain frozen at the 2020 premium rate level of 1.58%. This report will nevertheless show how the 7-year forecast break-even rate is determined in order for the projected balance in the EI Operating Account as at 31 December 2027 to be $0.

Based on relevant assumptions, the 2021 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 2027, 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 2020 and the projection over a period of seven years of the earnings base, the EI expenditures as well as the amount of premium reductions granted to employers who sponsor a qualified wage-loss plan and 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 December 2021 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 2018, which is the most recent year for which fully assessed T4 slips (Statement of Remuneration Paid) data are available. However, for certain assumptions, the 2019 partially assessed information is used. Complete data for 2019 will not become available until January 2021. The base year for EI benefits is calendar year 2019.

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

- 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 19, Appendix D);
- Assumptions and forecasts provided by the Minister of Finance in accordance with section 66.2 of the EI Act (presented in Table 20, 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, originally expected to be launched in late 2020, but now delayed to December 2021). 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.

Generally, EI premiums paid by the employer are equal to 1.4 times the premiums deducted by the employer on behalf of its employees, 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 one of four types of qualified wage-loss plans which reduce EI special benefits otherwise payable. The 2021 premium reductions for those employers are determined in accordance with subsection 69(1) of the EI Act and related regulations, and 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, parental and adoption (MPA) 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 2021 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 2021, this reduction is referred to as the 2021 QPIP reduction.

More information on the methodology used for calculating the 7-year forecast break-even rate and the premium reductions for 2021 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. More detailed information and supporting data are provided in Appendix D. The section is broken down into two subsections: assumptions related to the projected earnings base and assumptions related to the projected expenditures.

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

	2019	2020	2021	2022	2023	2024	2025	2026	2027
Increase in Maximum Insurable Earnings	2.71%	2.07%	3.87%	1.60%	2.10%	2.57%	2.34%	2.28%	2.23%
Increase in Number of Earners	2.10%	(6.79%)	3.82%	2.05%	1.70%	1.53%	1.18%	1.07%	1.08%
Increase in Average Employment Income*	2.76%	1.37%	2.58%	2.95%	2.55%	2.07%	2.26%	2.22%	2.49%
Increase in Total Employment Income	4.91%	(5.51%)	6.51%	5.05%	4.29%	3.63%	3.46%	3.32%	3.59%
Increase in Total Insurable Earnings	4.95%	(6.20%)	7.82%	4.61%	4.04%	3.91%	3.51%	3.35%	3.45%
Net Transfer of Insurable Earnings to Québec Reflecting the Province of Residence	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%
Adjustment Due to Employee Premium Refunds (% of Total Insurable Earnings)	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%	2.47%
Increase in Covered Self-Employed Earnings:									
Total	12%	40%	9%	9%	8%	7%	7%	7%	7%
Out-of-Québec Residents	13%	39%	9%	9%	8%	8%	7%	7%	7%
Québec Residents	8%	51%	6%	6%	6%	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 2021 MIE is equal to $56,300, which represents a 3.9% increase to the 2020 MIE of $54,200. The projected MIE for years 2022 to 2027 are calculated based on estimates of the average weekly earnings provided by the Minister of Finance. Detailed explanations and calculations of the 2021 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 2019 is set such that the resulting insurable earnings are in line with the expected assessed premiums for 2019, which are derived from the 2019 year-to-date assessed premiums and the 2019 increase in average employment income provided by the Minister of Finance. The projected number of earners from 2020 to 2027 is derived from a regression analysis based on the number of earners[1] and the number of employees[2].

The number of earners is expected to increase by 2.10% in 2019 and decrease by 6.79% in 2020. The average annual increase for the following seven years, from 2021 to 2027, is 1.77%. Given the historical year-to-year stability of the distribution of earners across income ranges, the projected distribution of earners as a percentage of average employment income is based on the 2018[3] 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 2018[3] 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 2.76% and 1.37% in 2019 and 2020 respectively. The average annual increase for the following seven years, from 2021 to 2027, is 2.45%. Based on these increases in average employment income and the expected increases in the total number of earners, the total employment income is expected to increase by 4.91% in 2019 and decrease by 5.51% in 2020. The average annual increase for the following seven years, from 2021 to 2027, is 4.27%.

[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.
[3] The 2020 distribution may be affected by the COVID-19 pandemic; it will be analyzed when the data becomes available.

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. Prior to any adjustments for employee premium refunds, the earnings base for salaried employees is equal to 2.4 times the total insurable earnings (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 of all salaried employees, and is provided by CRA. 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 2019 to 2027 is derived from the 2018[1] distribution of the total employment income and 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 4.95% in 2019 and decrease by 6.20% in 2020. The average annual increase for the following seven years, from 2021 to 2027, is 4.38%. For 2019, the resulting insurable earnings reflect the year-to-date assessed premiums and related total expected assessed premiums for 2019.

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 2019, 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 remain relatively stable at 22.2% in 2019 and 2020, and will slightly decrease over the 7-year projection period, but will remain close to 22%.

The information on historical assessed premiums provided by CRA includes adjustment

[1] The 2020 distribution may be affected by the COVID-19 pandemic; it will be analyzed when the data becomes available.

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 actual province of residence was on average 0.28% of total insurable earnings for the last five years of available data, 2014 to 2018, with the transfer of insurable earnings on a T4 basis going to Québec from the rest of Canada. It is assumed to remain at 0.28% of total insurable earnings until 2027.

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, 2014 to 2018, this percentage is assumed to be 2.47% from 2019 to 2027.

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 are able to access MPA 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 take into account 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 increase in average earnings as the salaried employees.

Based on this methodology, the covered earnings of all self-employed individuals are expected to increase on average by 8% per year from 2021 to 2027. It is worth noting that 2020 shows an increase of 40% in total covered self-employment earnings. This can most likely be attributed to the COVID-19 pandemic, as more self-employed people seeked some form of sickness coverage. This assumption will be adjusted as experience data fully becomes available.

4.2 Expenditures

EI Part I benefits are projected from actual 2019 benefits paid using several economic and demographic assumptions.

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

	2019	2020	2021	2022	2023	2024	2025	2026	2027
Increase in Labour Force*	1.9%	(2.1%)	1.4%	0.7%	1.0%	1.2%	1.2%	1.2%	1.2%
Unemployment Rate*	5.7%	9.8%	7.8%	6.7%	6.2%	5.9%	5.9%	5.9%	5.8%
Increase in Average Weekly Earnings*	2.7%	2.8%	1.7%	2.7%	2.4%	2.2%	2.2%	2.2%	2.3%
Increase in Average Weekly Benefits	1.7%	2.1%	3.0%	2.1%	2.2%	2.4%	2.3%	2.2%	2.3%
Potential Claimants (as a % of Unemployed)	54.1%	65.5%	57.5%	56.5%	56.5%	55.5%	55.5%	55.5%	55.5%
Recipiency Rate (as a % of Potential Claimants)	72.9%	45.0%	70.0%	72.5%	75.0%	75.0%	75.0%	75.0%	75.0%
Number of weeks	52.2	52.4	52.2	52.0	52.0	52.4	52.2	52.2	52.2
Percentage of Benefit Weeks for Claimants with Insurable Earnings above the MIE	47.9%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%

* Provided by the Minister of Finance.

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 decrease from 20.2 million in 2019 to 19.8 million in 2020. This decrease can be attributed to the forced shutdown of the economy created by the COVID-19 pandemic that saw many people temporarily leave the labour force. In 2021, the labour force is expected to start increasing again to reach 21.4 million in 2027. The average annual increase between 2019 and 2027 is 0.7%. 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 5.7% in 2019, and is expected to increase to 9.8% in 2020 before decreasing over the following four years to reach 5.9% in 2024. It is then expected to remain at that level until it reaches its ultimate value of 5.8% in 2027. The large increase in 2020 is attributable to the health and economic crisis resulting from the COVID-19 pandemic. 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 2.8% in 2020 and decreases to 1.7% in 2021. The average annual growth for years 2022 to 2027 is 2.3%. 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 2.1% for 2020 and 3.0% for 2021. The average annual increase for years 2022 to 2027 is 2.3%. The growth rates are generally the same for all benefit types. However, after further analysis of claims data for the first six months of 2020, the assumed average weekly benefit growth for 2020 for sickness and Work-Sharing benefits was adjusted.

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 increased from 51.0% in 2018 to 54.1% in 2019. Based on the experience of the first six months of 2020, it is expected to increase to 65.5% in 2020 before starting to decrease to reach its ultimate value of 55.5% in 2024. The large increase in 2020 is attributable to the forced shutdown of the economy created by the COVID-19 pandemic. Compared to other years, a larger proportion of employees lost their job through no fault of their own and remained available for work, putting upward pressure on the potential claimants' rate.

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 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 actual recipiency rate was 78.8% in 2018 and decreased to 72.9% in 2019 due to the termination of some temporary measures. Based on the experience of the first six months of 2020, it is assumed to decrease to 45.0% for the whole year 2020. The recipiency rate is set at 70.0% for 2021, 72.5% for 2022 and 75.0% from 2023 onwards. The low recipiency rate for 2020 and 2021 is attributable to the EI ERB put in place by the Government for claims starting 15 March 2020, as well as to the transition measures aimed at facilitating access to EI as the EI ERB and the CERB are being wound down. The majority of people who would have normally received regular EI benefits and been counted as regular EI recipients are receiving the special measure benefits instead, and are accounted for elsewhere as recipients of that measure.

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 2019 to 2027 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, 47.9% of benefit weeks for claims that accrued in 2019 were based on insurable earnings above the MIE compared to 47.0% in 2018. Based on partial data for 2020, the proportion of benefit weeks for claimants with insurable earnings above the MIE is assumed to decrease slightly in 2020 to 47.2% and to remain constant thereafter.

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.

The EI ERB put in place by the Government to support workers affected by the COVID-19 pandemic, as well as the temporary measures introduced to facilitate access to EI make up a large proportion of the expenditures. As per the cost estimates provided by ESDC, an EI ERB expenditure of $36.2 billion was added in 2020, while transition measures expenditures of $968 million and $5.1 billion were added in 2020 and 2021 respectively.

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 2020, on the information provided on or before 22 July 2020 by the Ministers of ESD and Finance, and on the methodology and non-prescribed assumptions developed by the Actuary. Additional information and upcoming temporary measures provided by ESDC on 6 August 2020 were also considered.

The key findings are as follows:

- The 2021 MIE is equal to $56,300, which represents a 3.9% increase to the 2020 MIE of $54,200.
- The 2021 EI 7-year forecast break-even rate is 1.93% of insurable earnings for residents of all provinces except Québec. This represents a significant increase from the 2020 break-even rate of 1.58% and is the result of the situation created by the COVID-19 pandemic. Based on estimates received from ESDC, the largest part of this increase (0.29%) can be attributed to the EI ERB[1]. Another portion of the increase (0.06%) can be attributed to the upcoming temporary measures recently announced by the Government to help people transition from the CERB and the EI ERB to EI.
- The 2021 premium reduction for residents of Québec due to its provincial plan is 0.40%.
- The 2021 premium reduction for employers who sponsor qualified wage-loss plans is estimated at $1,055 million. This translates in premium reductions for employers who sponsor a qualified wage-loss plan corresponding to about 0.23%, 0.37%, 0.37% and 0.40% of insurable earnings for categories 1 through 4 respectively.
- The total earnings base is expected to grow each year from $1,569 billion in 2019 to $1,986 billion in 2027, with the exception of 2020, where a decrease is expected due to the COVID-19 pandemic.
- Total expenditures are expected to increase from $21 billion in 2019 to $62 billion in 2020. This large increase is mainly due to the estimated cost of the EI ERB[1] provided by ESDC. They are then expected to decrease considerably in 2021, while remaining high at $31 billion, due to the temporary measures to help people transition from the CERB and the EI ERB to EI. They are expected to continue to decrease over the following two years, before resuming a more normal upward progression until they reach the expected level of $27 billion in 2027.
- The EI Operating Account is expected to have a cumulative deficit of $35.8 billion as of 31 December 2020, which is mainly attributable to the EI ERB[1] introduced by the Government at the beginning of the COVID-19 pandemic.

The Government confirmed that it will freeze the EI premium rate for 2021 at the 2020 premium rate. Consequently, the 2021 premium rate will be equal to:

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit and a significant increase in the premium rate.

- 1.58% of insurable earnings for residents of all provinces except Québec; and
- 1.18% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.40%.

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)
2018	1,162,494	332,042	1,494,536	19,620
2019	1,216,023	353,142	1,569,165	20,032
2020	1,141,581	330,372	1,471,952	18,672
2021	1,231,817	355,257	1,587,073	19,386
2022	1,289,553	370,621	1,660,174	19,783
2023	1,342,691	384,556	1,727,247	20,118
2024	1,396,240	398,505	1,794,745	20,426
2025	1,446,322	411,363	1,857,685	20,666
2026	1,495,791	424,196	1,919,987	20,888
2027	1,548,627	437,647	1,986,275	21,113

These results are used in the calculation of the 2021 EI 7-year forecast break-even rate and the 2021 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. More specifically, in 2020, EI benefits include the EI ERB put in place to support workers affected by the COVID-19 pandemic. 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 2019 EI expenditures, as well as a projection up to 2027.

Table 5 Expenditures ($ million)

Calendar Year	Part I*	Part II	EI - ERB	Admin. Costs	Benefit Repayments	Bad Debt	Penalties	Interest	Total
2019	17,208	2,464	-	1,890	(289)	74	(55)	(22)	21,269
2020	21,041	2,899	36,200	1,944	(276)	158	(72)	(22)	61,872
2021	27,127	2,529	-	1,860	(464)	57	(93)	(27)	30,990
2022	22,575	2,532	-	1,796	(357)	33	(77)	(23)	26,478
2023	21,472	2,107	-	1,789	(328)	59	(74)	(23)	25,002
2024	21,534	2,107	-	1,784	(321)	76	(74)	(24)	25,081
2025	22,145	2,107	-	1,783	(330)	83	(76)	(27)	25,685
2026	22,901	2,107	-	1,783	(342)	86	(79)	(30)	26,426
2027	23,568	2,107	-	1,783	(351)	88	(81)	(33)	27,080

* Includes temporary measures aimed at facilitating access to EI benefits between 2020 and 2023.

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
2019	10,715	340	13	-	4,139	1,864	49	88	6,140	17,208
2020	14,619	348	117	-	4,313	1,509	48	87	5,956	21,041
2021	19,485	357	47	22	4,954	2,095	59	108	7,216	27,127
2022	14,989	363	17	285	4,771	1,998	54	98	6,921	22,575
2023	13,762	371	18	294	4,852	2,023	54	97	7,026	21,472
2024	13,466	383	19	296	5,088	2,122	56	102	7,369	21,534
2025	13,827	391	20	296	5,257	2,191	58	106	7,611	22,145
2026	14,305	399	20	296	5,443	2,267	60	109	7,879	22,901
2027	14,683	408	21	296	5,637	2,347	62	113	8,159	23,568

* Regular and special benefits include the temporary measures aimed at facilitating access to EI benefits between 2020 and 2023.

** In Budget 2019, the Government of Canada announced a new EI Training Support Benefit. It is expected to be launched in December 2021; this benefit will provide up to 4 weeks of EI benefits to workers who take time off to pursue training.

*** EI Maternity and Parental benefits; EI parental benefits are offered to parents who are caring for a newborn or newly adopted child or children. The new Parental Sharing Benefit implemented in March 2019 is included in the projection.

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 which reduces EI special benefits otherwise payable, provided that at least 5/12 of the reduction is passed on to the employees. Premiums paid by employees and their employers can also be reduced when employees are covered under a plan established under provincial law which reduces EI maternity and parental (MP) 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 December 2021). This rebate is proposed to be available to any business that pays employer EI premiums equal to or less than $20,000 for the 2021 calendar year. Using forecasted calendar expenditures received from the Minister of ESD, the cost of the EI Training Support Benefit in 2021 (including the administration costs related to this benefit) is expected to represent 2 cents (1.77 cents unrounded, or 0.0177%). This cost is included in the 7-year forecast break-even rate of 1.93%. 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 2027 taken into account in the determination of the 7-year forecast break-even rate.

Table 7 Premium Reductions and Rebate ($ million)

Calendar Year	Qualified Wage-Loss Plans	Provincial Plans	SBPR*
2021	1,055	1,421	26
2022	1,114	1,371	27
2023	1,157	1,384	28
2024	1,202	1,474	29
2025	1,252	1,481	29
2026	1,294	1,570	29
2027	1,338	1,619	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.

For 2021, the Government has already confirmed that the premium rate would not be allowed to increase and would remain frozen at the 2020 premium rate level of 1.58%. For information purposes, this report shows how the 7-year forecast break-even rate is determined in order for the projected balance in the EI Operating Account as at 31 December 2027 to be $0. This rate is expected to generate sufficient premium revenue during the 2021-2027 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 2020.

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 December 2021 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 2020 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 2020	Earnings Base	Annual PayGo Rate / 7-Year Forecast Break-Even Rate
2021	30,990	1,055	1,421	26	33,493		1,587,073	2.11%
2022	26,478	1,114	1,371	27	28,990		1,660,174	1.75%
2023	25,002	1,157	1,384	28	27,571		1,727,247	1.60%
2024	25,081	1,202	1,474	29	27,787		1,794,745	1.55%
2025	25,685	1,252	1,481	29	28,446		1,857,685	1.53%
2026	26,426	1,294	1,570	29	29,318		1,919,987	1.53%
2027	27,080	1,338	1,619	29	30,067		1,986,275	1.51%
2021-27	**186,742**	**8,412**	**10,321**	**198**	**205,673**	**(35,789)**	**12,533,186**	**1.93%****

* Small Business Premium Rebate (related to the EI Training Support Benefit announced in Budget 2019 and proposed to be launched in December 2021).

** The deficit in the EIOA as at 31 December 2020 is used in the calculation of the 7-year forecast break-even rate: (205,673 + 35,789) / 12,533,186 = 1.93%.

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
2019	1.62%	25,420	(1,004)	(1,307)	-	58	23,169	21,269	1,900	5,174
2020	1.58%	23,257	(1,007)	(1,255)	-	(86)	20,909	61,872	(40,963)	(35,789)
2021	1.93%	30,631	(1,055)	(1,421)	(26)	-	28,128	30,990	(2,862)	(38,651)
2022	1.93%	32,041	(1,114)	(1,371)	(27)	-	29,529	26,478	3,051	(35,600)
2023	1.93%	33,336	(1,157)	(1,384)	(28)	-	30,766	25,002	5,764	(29,835)
2024	1.93%	34,639	(1,202)	(1,474)	(29)	-	31,933	25,081	6,852	(22,984)
2025	1.93%	35,853	(1,252)	(1,481)	(29)	-	33,092	25,685	7,407	(15,577)
2026	1.93%	37,056	(1,294)	(1,570)	(29)	-	34,164	26,426	7,737	(7,839)
2027	1.93%	38,335	(1,338)	(1,619)	(29)	-	35,349	27,080	8,268	429

* Small Business Premium Rebate.

** Adjustments for the timing of premium assessment.

The 2021 EI 7-year forecast break-even rate is 1.93%. This rate would balance out the EI Operating Account at the end of 2027. The cumulative balance in the EI Operating Account at the end of 2027 is not exactly $0 since the 7-year forecast break-even rate is rounded to the nearest cent.

5.6 2021 Premium Freeze

On 6 August 2020, the Government confirmed that it will freeze the EI premium rate for 2021 at the 2020 premium rate. Consequently, the premium rate applicable to residents of all provinces except Québec will be 1.58%. The premium rate applicable to residents of Québec will be 1.18% (1.58% - 0.40%).

Table 10 shows the projection of revenues and the corresponding account balances for 2020 and 2021 based on a premium rate of 1.58%. Expenditures and premium reductions are the same as the ones shown in Table 9. For years after 2021, 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 2020 corresponds to $35.8 billion and is mainly attributable to the EI ERB[1] introduced by the Government at the beginning of the COVID-19 pandemic.

Table 10 Projection of the EI Operating Account using a Premium Rate of 1.58% ($ 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
2019	1.62%	25,420	(1,004)	(1,307)	-	58	23,169	21,269	1,900	5,174
2020	1.58%	23,257	(1,007)	(1,255)	-	(86)	20,909	61,872	(40,963)	(35,789)
2021	1.58%	25,076	(1,055)	(1,421)	(26)	-	22,573	30,990	(8,417)	(44,206)

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

5.7 Québec Parental Insurance Plan (QPIP) Reduction for 2021

EI MP benefits included in Part I special benefits, as well as direct EI administrative costs incurred to provide MP benefits (variable administration costs (VAC)), are required to determine the QPIP reduction. The 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 (2019) and reflect the impacts of any program changes and special measures. The projected EI MP expenditures used to determine the 2021 QPIP reduction are shown in Table 11. They include the cost estimates provided by ESDC for the new Parental Sharing Benefits implemented in March 2019 and the temporary measures recently announced by the Government aimed at facilitating access to EI benefits.

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit.

Table 11 MP Expenditures ($ million)

	Actual	Forecast	
	2019	2020	2021
EI MP Benefits	4,139	4,313	4,954
Variable Administration Costs	17	17	17
MP Expenditures	4,156	4,330	4,971

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 2021 QPIP reduction, as well as the resulting 2021 QPIP reduction.

Table 12 Calculation of the QPIP Reduction ($ million)

	2021 Forecast
MP Expenditures	4,971
MP Earnings Base (Out-of-Québec residents)	1,231,817
Unrounded QPIP Reduction	0.4035%
QPIP Reduction	0.40%

5.8 Qualified Wage-Loss Plan Reductions for 2021

Based on the methodology developed in Appendix B and on the 2021 projected insurable earnings of employees covered by a qualified wage-loss plan, the 2021 estimated reduction in employer premiums due to qualified wage-loss plans is $1,055 million, compared to $1,007 million for 2020.

Table 13 shows the main results. A detailed explanation of the data and methodology used to derive the results are 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)*	2021 Estimated Insurable Earnings ($ million)	2021 Estimated Premium Reduction ($ million)
Category 1	0.2254%	0.23%	1.257	1.209	51,771	117
Category 2	0.3704%	0.37%	1.166	1.086	25,785	96
Category 3	0.3683%	0.37%	1.166	1.086	202,476	746
Category 4	0.4048%	0.40%	1.144	1.057	24,049	97
Total	N/A	N/A	N/A	N/A	304,081	1,055

* The Employer Multipliers shown are based on the frozen 2021 premium rate of 1.58% (1.18% 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. The age distribution of the Canadian population has changed considerably over the last decades; the average age has been increasing as the baby boom cohorts have continued to age, the fertility rate has remained low and longevity has been increasing. Larger numbers of young people have chosen to pursue higher levels of education, delaying their full-time entry into the workforce. These changes have had a direct impact on the labour force. Countering these effects have been factors such as younger cohorts' greater attachment to the labour force due to their higher level of education and older workers delaying their retirement due to their expected increase in longevity.

Economic cycles have also had an impact on the labour force and the unemployment rate. In times of recession, jobs were lost and workers found themselves involuntarily unemployed, while in times of growth, more workers were needed and wages tended to increase as companies competed for qualified labour. The current health and economic crisis resulting from the COVID-19 pandemic created an unprecedented shock to the Canadian labour market. The situation remains fluid and will likely continue to evolve for some time. The final impacts on the assumptions used in this report are still unknown.

The objective of this section is to 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 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 2021-2027 would result in an increase/decrease of about 0.07% in the 2021 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 (2021-2027)	Average UR (2021-2027)	Resulting 7-Year Forecast Break-Even Rate
(1.0%)	5.3%	1.79%
(0.5%)	5.8%	1.86%
Base	**6.3%**	**1.93%**
0.5%	6.8%	2.00%
1.0%	7.3%	2.07%

6.2 Recipiency Rate

The volatility shown by the recipiency rate in the past can be attributed to a number of 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 2021-2027 would result in an increase/decrease of about 0.06% in the 2021 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 (2021-2027)	Average RR (2021-2027)	Resulting 7-Year Forecast Break-Even Rate
(10.0%)	63.9%	1.81%
(5.0%)	68.9%	1.87%
Base	**73.9%**	**1.93%**
5.0%	78.9%	1.98%
10.0%	83.9%	2.04%

6.3 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 $1,253 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. 2027 ($ million)	Variation in EIOA Cumulative Balance as at 31 Dec. 2027 ($ million)
(0.05%)	1.88%	(5,838)	(6,267)
(0.01%)	1.92%	(824)	(1,253)
Base	**1.93%**	**429**	-
0.01%	1.94%	1,682	1,253
0.05%	1.98%	6,695	6,267

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 2020 Actuarial Report are presented in Table 17.

Table 17 Reconciliation of Changes in the 7-Year Forecast Break-Even Rate

	7-Year Forecast Break-Even Rate (%)
2020 Actuarial Report - After Rounding	1.58
2020 Actuarial Report - Before Rounding	1.5764
Higher than Projected EI Operating Account as at 31 December 2019	(0.0086)
Change in Unemployment Rate assumptions over 7-year period	0.1398
Changes in Economics - Earnings Base	0.0053
Changes in Economics - Expenditures	(0.1235)
EI - Emergency Response Benefit	0.2888
Temporary Measures - Transition from CERB/EI ERB	0.0611
Change in 7-year period (2020-2026 to 2021-2027)	(0.0129)
2021 Actuarial Report - Before Rounding	1.9265
2021 Actuarial Report - After Rounding	1.93

The 2019 experience was better than anticipated overall as revenues were slightly higher than projected in the 2020 Actuarial Report while expenditures were lower than expected. The net effect is an increase in the Cumulative Surplus of the EI Operating Account as at 31 December 2019 of $1,053 million, i.e. $5,174 million compared to $4,121 million projected in the 2020 Actuarial Report. This lowered the 7-year forecast break-even rate.

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 2020 Actuarial Report, the unemployment rate assumption was revised upward, from around 5.8% to 6.9% on average for the 2020-2026 period. The increase of the expected unemployment rate in the short term is due to the health and economic crisis resulting from the COVID-19 pandemic. This increased the 7-year forecast break-even rate.

Although the unemployment rate reached a record high in May 2020 and is expected to remain higher than the previous report's projection for the next few years, the total amount of normal EI benefit expenditures for the projection period is similar to the previous report since unemployed Canadians were covered by the emergency response benefits (CERB and EI ERB[1]) put in place as part of the Government of Canada's COVID-19 Economic Response Plan. In the above table, this is reflected in the item "Changes in Economics – Expenditures". The estimated cost of the EI ERB significantly increased the 7-year forecast break-even rate, accounting for more than 80% of the total increase.

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit and a significant increase in the premium rate.

The Government has confirmed the introduction of temporary transition measures aimed at facilitating access to EI. These measures include the application of a minimum unemployment rate[1] and a minimum weekly benefit rate, as well as a credit of insurable hours for regular and special EI benefits. These measures increased the 7-year forecast break-even rate.

Overall, the 7-year forecast break-even rate increased from 1.58% in 2020 to 1.93% in 2021. However, as already mentioned, the Government confirmed that it will freeze the EI premium rate at 1.58% in 2021.

[1] The application of a minimum unemployment rate results in a lower number of required insurable hours to qualify for regular benefits, as well as more weeks of regular benefits entitlement.

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 2021 MIE is **$56,300**. In addition, the 2021 estimated employer premium reduction due to qualified wage-loss plans is $1,055 million, and the 2021 QPIP reduction is **0.40%**.

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 2021-2027 and eliminate the projected $35.8 billion cumulative deficit in the EI Operating Account as of 31 December 2020, is **1.93%** of insurable earnings. The increase between the 2020 and 2021 forecast break-even rate (1.58% to 1.93%) is the result of the situation created by the COVID-19 pandemic. Based on estimates received from ESDC, the largest part of this increase (0.29%) can be attributed to the EI ERB[1]. Another portion of the increase (0.06%) can be attributed to the upcoming temporary measures recently announced by the Government to help people transition from the CERB and the EI ERB to EI.

However, the Government already confirmed that it will freeze the EI premium rate for 2021 at the 2020 premium rate. Consequently, the 2021 premium rate will be equal to:

- 1.58% of insurable earnings for residents of all provinces except Québec; and
- 1.18% of insurable earnings for residents of Québec, after taking into account the QPIP reduction of 0.40%.

[1] Had the EI ERB not been put in place, a large number of people would have received EI regular and sickness benefits instead, still causing a large deficit and a significant increase in the premium rate.

9 Actuarial Opinion

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

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

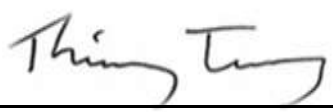
Based on the results of this valuation, we hereby certify that the 7-year forecast break-even rate required to generate sufficient premium revenue to cover the expected cost of the EI program over the period 2021-2027 and eliminate the projected cumulative deficit in the EI Operating Account as of 31 December 2020, is 1.93% of insurable earnings.

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

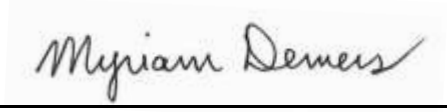
The estimates presented in this report are based on the Employment Insurance provisions as of 22 July 2020. They also take into account additional information received from Employment and Social Development Canada on 6 August 2020, including upcoming temporary measures. However, the estimates were not revised after the Government announcement on 20 August 2020 stating that the CERB (including the EI ERB) would be extended by an additional four weeks, providing a maximum of 28 weeks, rather than 24 weeks.

As of the date of the signing of this report, we have not learned of any other events, subsequent to 22 July 2020, that would have a material impact on the 2021 7-year forecast break-even rate presented in this report.

Annie St-Jacques, FCIA, FSA
Senior Actuary, Employment Insurance Premium Rate-Setting



Thierry Truong, FCIA, FSA



Myriam Demers, ACIA, ASA

Ottawa, Canada
21 August 2020

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.

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' 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 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. The number of insurable hours required to qualify is increased in cases of violations regarding prior EI claims. Claimants must also be 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. From time to time, 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 at least 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 mothers who give 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, parental and adoption (MPA) 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 MP 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 EI Part VIII.4 – EI ERB

Part VIII.4 of the EI Act introduces the EI ERB, which provides a benefit of $500 per week to eligible insured persons who are unable to work for reasons related to COVID-19.

To qualify for the benefit, individuals must reside in Canada, be at least 15 years of age, have insurable earnings of at least $5,000 in 2019 or in the 52 weeks preceding the day on which they make the claim, have ceased to work for at least seven consecutive days within the two-week period in respect of which they claim the benefit and have no income from employment or self-employment in respect of the consecutive days on which they ceased working.

The maximum number of benefit weeks payable for claims made for any two-week period between 15 March 2020 and 3 October 2020 is 24[1]. No claim can be made after 2 December 2020.

A.4 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.5 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.

[1] On 20 August 2020, the Government announced a 4-week extension, bringing the maximum number of weeks to 28. The estimates shown in the report were not revised following this announcement.

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 2021 is the premium rate that is expected to generate sufficient premium revenue to ensure that at the end of 2027 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 2020 and the projection over a period of seven years (2021-2027) 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 2021 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 2018, which is the most recent year for which fully assessed T4 data are available. However, for certain assumptions, the 2019 partially assessed information is used. Complete data for 2019 will not become available until January 2021. The base year for EI benefits is calendar year 2019.

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.

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 2020 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. In 2020, this includes the new Part VIII.4 (EI ERB) benefit;
  - 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 launch in late 2020 and later postponed to December 2021. 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 2020, the 7-year forecast break-even rate could either increase or decrease. For 2021, given that the projected EI Operating Account as of 31 December 2020 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 2020

Direct Program Expenditures + R_{WLP} + R_{PP} + R_{SBPR} = 1.4 x Rate x TIE + Rate x TIE x (1 – PR%) + Rate x TSEE + EIOA

- 1.4 x Rate x TIE: Employer premiums paid on behalf of salaried employees, prior to reductions for wage-loss plans, provincial plans and the Small Business Premium Rebate
- Rate x TIE x (1 – PR%): Salaried employee premiums net of employee refunds prior to reductions for provincial plans
- Rate x TSEE: Employee premiums for self-employed prior to reductions for provincial plans

$$\text{7-year forecast break-even rate} = \frac{\text{Direct Program Expenditures} + R_{WLP} + R_{PP} + R_{SBPR} - \text{EIOA}}{\underbrace{1.4 \times \text{TIE} + \text{TIE} \times (1 - \text{PR\%}) + \text{TSEE}}}$$

Earnings base for residents of all 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 December 2021;
EIOA = EI Operating Account as of 31 December 2020 (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 2021. The remainder of this subsection provides summarized information on this.

The methodology to calculate the rates of reduction applicable for 2021 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 2021 rates of reduction, the FPC ratio is equal to the average of the FPC for the years 2017 to 2019, divided by the average insurable earnings of all insured persons for the years 2017 to 2019. The formula used in determining the FPC ratio is provided below:

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

$$\text{FPC ratio} = \frac{\text{FPC (2019)} + \text{FPC (2018)} + \text{FPC (2017)}}{\text{TIE (2019)} + \text{TIE (2018)} + \text{TIE (2017)}}$$

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 2021 rates of reduction, the EC ratio of each category is based on the years 2017 to 2019. The formula used in determining the EC ratio of each category is provided below:

$$\text{EC ratio (x)} = \frac{\text{EC(x) (2019)} + \text{EC(x) (2018)} + \text{EC(x) (2017)}}{\text{TIE(x) (2019)} + \text{TIE(x) (2018)} + \text{TIE(x) (2017)}}$$

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 2021 rates of reduction per category. The 2021 estimated insurable earnings per category are then used to estimate the 2021 employer premium reduction due to qualified wage-loss plans.

The estimated employer premium reduction due to qualified wage-loss plans for years 2022 to 2027 are projected assuming that the 2019 FPC and EC ratios remain constant throughout the projection (with an adjustment in 2020 due to COVID-19).

Additional supporting information on the calculation of the 2021 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 (MP) 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 2021. The remainder of this subsection provides more information on this.

Since 1 January 2006, the province of Québec has been responsible for providing maternity, parental and adoption (MPA) 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 2021 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 2021 EI MP expenditures, including EI MP benefits and the variable administrative costs related to administering EI MP benefits, to the 2021 earnings base of residents outside the province of Québec. Accordingly, the formula for the QPIP reduction is as follows:

$$\text{2021 QPIP Reduction} = \frac{\text{2021 EI MP Expenditures}}{\underbrace{1.4 \times TIE_{(2021\ OQ)} + TIE_{(2021\ OQ)} \times (1 - PR\%) + TSEE_{(2021\ OQ)}}_{\text{2021 earnings base for out-of-Québec residents}}}$$

Where:

$TIE_{(2021\ OQ)}$ = 2021 total insurable earnings for out-of-Québec resident salaried employees, prior to adjustments for employee premium refunds;

$PR\%$ = adjustment to reflect 2021 employee premium refunds (as a percentage of TIE);

$TSEE_{(2021\ OQ)}$ = 2021 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 2021 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 2020 ($1,045.3308) divided by the average of the AWE for each month for the twelve month period ending 30 April 2006 ($743.5792).

$$MIE_{2021} = MIE_{2007} \times \frac{AWE_{2020}}{AWE_{2006}}$$

$$= \$40,072.92 \times \frac{\$1,045.3308}{\$743.5792} = \$56,334.90$$

1 The AWE series has been revised by Statistics Canada since the 2020 Actuarial Report.

2 $52 \times AWE2006 \times \frac{AWE2006}{AWE2005} = 52 \times \$743.5792 \times \frac{\$743.5792}{\$717.4750}$

Rounded down to the nearest multiple of $100, the MIE is **$56,300** for 2021. This is an increase of $2,100 or 3.9% from the 2020 MIE of $54,200.

Table 18 Maximum Insurable Earnings ($)

Year	12-Month AWE Average as of 30 April	Revised Unrounded MIE	Applicable MIE	% change in Applicable MIE
2005	717.4750	37,256.86	39,000	-
2006	743.5792	38,374.17	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	901.3908	47,341.55	47,400	3.3%
2014	919.2325	48,577.70	48,600	2.5%
2015	943.4517	49,539.22	49,500	1.9%
2016	952.8042	50,844.44	50,800	2.6%
2017	961.3083	51,348.46	51,300	1.0%
2018	985.3458	51,806.77	51,700	0.8%
2019	1,007.1592	53,102.19	53,100	2.7%
2020	1,045.3308	54,277.76	54,200	2.1%
2021	N/A	56,334.90	56,300	3.9%

The MIE for years prior to 2021 are not revised and are based on the legislation that applied at the time they were determined. However, the 2021 MIE reflects retroactive adjustments to the calculation in accordance with current legislation.

2021 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 2020, in accordance with subsection 11.1 of the EI Regulations, the unrounded MSEE of 2020 was $1,007.1592 of self-employed earnings in 2019. 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.

$$MSEE_{2021} = MSEE_{2020} \times \frac{AWE_{2020}}{AWE_{2019}} = \$7{,}279.91 \times \frac{\$1{,}045.3308}{\$1{,}007.1592} = \$7{,}555.82$$

The MSEE for claims filed in 2021 is therefore set at $7,555 of self-employed earnings in 2020.

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.

Given the exceptional circusmtances created by the COVID-19 pandemic, the Minister of ESD provided additional information on 6 August 2020.

For the purposes of determining the 2021 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 19 Prescribed Information Provided by the Minister of ESD ($ millions)

	Actual	Forecast							
Part I	2019	2020	2021	2022	2023	2024	2025	2026	2027
Pilot Projects/Special Measures									
Pilot Project - Support for eligible seasonal claimants in targeted regions	68.4	83.6	80.2	51.9	9.6	-	-	-	-
Extending the Maximum Duration of Work-Sharing Agreements	0.3	11.5	2.9	-	-	-	-	-	-
Work-Sharing Program - COVID-19	-	7.5	2.5	-	-	-	-	-	-
Regular Benefits - 13.1% UR for all regions	-	181.4	943.9	296.2	2.5	-	-	-	-
Regular Benefits - 300 Insurable Hours Credit	-	527.4	2,194.0	556.9	4.7	-	-	-	-
Regular Benefits - Minimum benefit rate of $400	-	94.8	699.2	134.0	0.1	-	-	-	-
Special Benefits - 13.1% UR for all regions	-	7.7	58.8	11.4	0.0	-	-	-	-
Special Benefits - 480 Insurable Hours Credit	-	118.4	917.2	211.3	0.1	-	-	-	-
Special Benefits - Minimum benefit rate of $400	-	38.0	280.3	53.7	0.0	-	-	-	-
Sub-Total	68.7	1,070.3	5,178.9	1,315.4	17.1	-	-	-	-
Recent Proposed and Permanent Changes									
Parental Sharing Benefits	223.1	277.1	288.6	300.5	312.9	325.8	339.2	353.2	367.8
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	223.1	277.1	336.6	612.8	635.1	651.0	664.5	678.5	693.1
Part VIII.4									
Emergency Response Benefit - EI Portion	-	36,200.0	-	-	-	-	-	-	-
Total	291.8	37,547.4	5,515.5	1,928.2	652.2	651.0	664.5	678.5	693.1

	Actual	Forecast							
Part II	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Employment Benefits and Support Measures*	2,476.2	2,449.3	2,530.9	2,532.0	2,107.0	2,107.0	2,107.0	2,107.0	2,107.0
Administration Costs**	1,909.0	1,971.1	1,806.6	1,792.2	1,787.6	1,782.8	1,782.8	1,782.8	1,782.8

* Includes additional LMDA investment announced in Budget 2017, LMDA funding to support unemployed workers in seasonal industries announced in Budget 2018, and LMDA funding to support unemployed workers in steel and aluminium industries announced in June 2018.

** Includes administration costs related to the new EI Training Support Benefit proposed in Budget 2019 and expected to launch in late 2021.

In addition, the Minister of ESD provided an EI Operating Account summary that shows a preliminary cumulative surplus of $3.9 billion as of 31 March 2020, 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 19 can be found below.

Pilot Projects and Special Measures

In August 2018, the Government of Canada announced, that as part of a Budget 2018 commitment, it would invest $189 million to implement a new pilot project to provide up to five additional weeks of EI regular benefits to eligible seasonal claimants in 13 targeted EI economic regions. The additional five weeks of benefits are available for claims established between

5 August 2018 and 30 May 2020. In June 2020, the EI regulations were amended to extend the period of eligibility to October 2021. The revised projected cost for this pilot project provided by the Minister of ESD totals $294 million.

Budget 2016 extended the maximum duration of Work-Sharing agreements that began or ended between 1 April 2106 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 5 August 2018 to 27 March 2021 to support workers who may be affected by the recent 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 new emergency response benefits and temporary changes to the Work-Sharing program as follows:

- The Canada Emergency Response Benefit (CERB) and EI Emergency Response Benefit (EI ERB) were implemented to support eligible workers by providing $500 a week for up to 24 weeks for the period between 15 March 2020 and 3 October 2020. As a result of the implementation of the EI ERB, new EI regular and sickness benefit claims during this period were processed as claims for the EI ERB. Claims established prior to 15 March 2020 continued to be processed under the traditional EI rules. EI special benefits, excluding EI sickness benefits, continued unchanged.
- Several temporary special Work-Sharing measures, such as extending the maximum duration of agreements, waiving the mandatory waiting period, expanding the eligibility criteria and streamlining the application process from 30 days to 10 days, were implemented. The temporary measures are in place between 15 March 2020 and 14 March 2021.

On 6 August 2020, ESDC confirmed that the Government would be introducing a number of transition measures for a period of one year to facilitate access to EI. These measures include the application of a minimum unemployment rate, insurable hours credits and minimum weekly benefit rates for EI regular and special benefits. Specifically, they include the following:

- A minimum unemployment rate of 13.1% will be used for all EI regions beginning 9 August 2020 (announced by the Government on 10 August 2020). Accordingly, there will be a uniform entrance requirement of 420 hours for EI regular benefits (before application of the hours credit) and a minimum entitlement to 26 weeks of EI regular benefits.
- For EI regular benefits, including Work-Sharing benefits, EI claimants will receive a credit of 300 insurable hours and the minimum weekly benefit rate will be $400 as announced by the Government on 20 August 2020.
- For EI special benefits, EI claimants will receive a credit of 480 insurable hours and the minimum weekly benefit rate will be $400 ($240 for extended parental benefits) as announced by the Government on 20 August 2020.

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.

Further amendments to the LMDAs were announced as part of a broader Budget 2018 commitment to support workers in seasonal industries and additional amendments were announced in June 2018 to support workers directly and indirectly affected by trade disputes in the steel and aluminium industries.

Recent Proposed and Permanent Changes

Budget 2018 introduced a new EI Parental Sharing Benefit. This benefit became permanent in March 2019, three months earlier than originally planned. The measure provides parents with an additional 5 weeks of standard parental benefits or 8 weeks of extended parental benefits for new parents who agree to share parental benefits. This new benefit is available to eligible two-parent families, including adoptive and same-sex couples.

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 by at least one year. 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 2021.

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 2021 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 20 Prescribed Information Provided by the Minister of Finance (thousands)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Population (15+)	30,739	31,165	31,537	31,918	32,296	32,671	33,043	33,408	33,772
Labour Force	20,195	19,773	20,052	20,192	20,403	20,653	20,902	21,146	21,390
Employment	19,050	17,844	18,489	18,839	19,142	19,435	19,674	19,904	20,143
Employees	16,148	15,043	15,660	16,006	16,299	16,569	16,786	16,988	17,194
Self-Employed	2,902	2,801	2,830	2,833	2,843	2,865	2,888	2,916	2,948
Unemployed	1,145	1,929	1,563	1,354	1,261	1,219	1,228	1,242	1,247
Unemployment Rate	5.7%	9.8%	7.8%	6.7%	6.2%	5.9%	5.9%	5.9%	5.8%
Average Weekly Earnings ($)	1,028	1,057	1,075	1,104	1,131	1,156	1,182	1,208	1,236
Average Employment Income Growth	2.8%	1.4%	2.6%	2.9%	2.6%	2.1%	2.3%	2.2%	2.5%

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 21. The preliminary number of earners for the year 2019 is set such that the resulting

insurable earnings are in line with the expected assessed premiums for 2019, which are derived from the 2019 year-to-date assessed premiums and the 2019 increase in average employment income provided by the Minister of Finance.

Table 21 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 (%)
2013	14,955		18,424		
2014	15,072	0.78%	18,645	1.20%	0.41%
2015	15,189	0.78%	18,851	1.11%	0.33%
2016	15,314	0.83%	18,874	0.12%	(0.71%)
2017	15,613	1.95%	19,219	1.83%	(0.12%)
2018	15,794	1.16%	19,620	2.09%	0.93%
2019	16,148	2.24%	20,032	2.10%	(0.14%)

The projected number of earners is obtained by a regression based on a correlated historical relationship from 1989 to 2018 between the number of earners and the number of employees.

Table 22 shows projected number of employees as provided by the Minister of Finance as well as the projected number of earners for the years 2020 to 2027.

Table 22 Projected Number of Earners (thousands)

Year	Projected Number of Employees	Increase in Number of Employees	Projected Number of Earners	Increase in Number of Earners
2020	15,043		18,672	
2021	15,660	4.10%	19,386	3.82%
2022	16,006	2.21%	19,783	2.05%
2023	16,299	1.83%	20,118	1.70%
2024	16,569	1.66%	20,426	1.53%
2025	16,786	1.30%	20,666	1.18%
2026	16,988	1.21%	20,888	1.07%
2027	17,194	1.21%	21,113	1.08%

As shown in Table 23, 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 23 Historical Distribution of Earners by Level 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%
2013	45,227	21.9%	14.7%	13.0%	12.4%	9.9%	28.2%
2014	46,415	21.8%	14.7%	13.1%	12.4%	9.9%	28.1%
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%

The 2018[1] 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 2019 to 2027.

Table 24 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 the years 2013 to 2018.

Table 24 Number of Earners Below and Above the MIE

Year	MIE ($)	MIE as a Proportion of Average Employment Income	Proportion of Earners Below MIE	Thousands		
				Total Number of Earners	Number of Earners Below MIE	Number of Earners Above MIE
2013	47,400	1.0480	64.1%	18,424	11,803	6,621
2014	48,600	1.0471	64.2%	18,645	11,962	6,683
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	1.0396	63.8%	20,032	12,773	7,258
2020	54,200	1.0467	64.1%	18,672	11,969	6,703
2021	56,300	1.0599	64.7%	19,386	12,536	6,850
2022	57,200	1.0460	64.1%	19,783	12,674	7,108
2023	58,400	1.0413	63.9%	20,118	12,846	7,273
2024	59,900	1.0464	64.1%	20,426	13,091	7,335
2025	61,300	1.0472	64.1%	20,666	13,252	7,414
2026	62,700	1.0478	64.2%	20,888	13,400	7,487
2027	64,100	1.0452	64.0%	21,113	13,519	7,594

[1] The 2020 distribution may be affected by the COVID-19 pandemic; it will be analyzed when the data becomes available.

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 2019 to 2027. Table 25 shows the derivation of the projected total employment income for years 2019 to 2027, as well as actual data provided by CRA for years 2013 to 2018.

Table 25 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 ($)	Increase in Average Employment Income	Increase in Total Employment Income	Total Employment Income ($ thousands)
2013	18,424		45,227			833,270,357
2014	18,645	1.20%	46,415	2.63%	3.85%	865,389,791
2015	18,851	1.11%	47,223	1.74%	2.87%	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	N/A	2.10%	N/A	2.76%	4.91%	1,023,211,640
2020	N/A	(6.79%)	N/A	1.37%	(5.51%)	966,855,060
2021	N/A	3.82%	N/A	2.58%	6.51%	1,029,774,171
2022	N/A	2.05%	N/A	2.95%	5.05%	1,081,819,243
2023	N/A	1.70%	N/A	2.55%	4.29%	1,128,263,669
2024	N/A	1.53%	N/A	2.07%	3.63%	1,169,223,134
2025	N/A	1.18%	N/A	2.26%	3.46%	1,209,730,943
2026	N/A	1.07%	N/A	2.22%	3.32%	1,249,898,682
2027	N/A	1.08%	N/A	2.49%	3.59%	1,294,788,017

As shown in Table 26, the historical distribution of total employment income as a percentage of average employment income is relatively stable from year to year.

Table 26 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%
2013	45,227	2.4%	5.4%	8.1%	10.8%	11.1%	62.3%
2014	46,415	2.4%	5.4%	8.2%	10.8%	11.1%	62.2%
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%

The 2018[1] 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 2019 to 2027. Table 27 shows the total employment income split between earners with employment income below the MIE and earners with employment income above the MIE for years 2019 to 2027. Actual data is also shown for years 2013 to 2018.

Table 27 Distribution of Employment Income for Earners Below and Above the MIE

Year	MIE ($)	MIE as a Proportion of Average Employment Income	Proportion of Employment Income for Earners Below MIE	($ thousands) Total Employment Income	Total Employment Income for Earners Below MIE	Total Employment Income for Earners Above MIE
2013	47,400	1.0480	28.9%	833,270,357	240,789,645	592,480,712
2014	48,600	1.0471	28.9%	865,389,791	250,470,009	614,919,782
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	1.0396	29.3%	1,023,211,640	299,294,009	723,917,630
2020	54,200	1.0467	29.6%	966,855,060	286,144,101	680,710,958
2021	56,300	1.0599	30.2%	1,029,774,171	310,930,778	718,843,393
2022	57,200	1.0460	29.6%	1,081,819,243	319,789,127	762,030,116
2023	58,400	1.0413	29.3%	1,128,263,669	330,996,273	797,267,396
2024	59,900	1.0464	29.6%	1,169,223,134	345,874,337	823,348,797
2025	61,300	1.0472	29.6%	1,209,730,943	358,307,195	851,423,748
2026	62,700	1.0478	29.6%	1,249,898,682	370,569,094	879,329,588
2027	64,100	1.0452	29.5%	1,294,788,017	382,259,940	912,528,077

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

[1] The 2020 distribution may be affected by the COVID-19 pandemic; it will be analyzed when the data becomes available.

$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 2013 to 2018 from the CRA statement of premium revenue is shown in Table 28. Net premiums assessed shown in the table are prior to the reduction in premiums due to the hiring credit for small businesses and small business job credit.

Table 28 Derived Insurable Earnings from Assessed Premiums ($ millions)

	2013	2014	2015	2016	2017	2018
Net Premiums Assessed	21,881.2	22,838.3	23,459.0	23,915.1	21,196.7	22,648.4
Unadjusted Employee Premium Refunds	253.8	266.0	254.0	241.1	242.6	262.5
Overage	3.1	3.0	3.1	2.7	3.2	2.9
Wage-Loss Premium Reduction	909.0	854.0	837.4	871.2	922.2	953.2
Net Adjustment Payments (QPIP)	8.4	7.4	6.3	7.3	6.6	5.6
Other Accounting Adjustments	8.8	5.7	5.0	21.7	7.3	6.3
Gross EI Premium Revenues	23,064.4	23,974.3	24,564.7	25,059.2	22,378.6	23,878.9
Distribution of Insurable Earnings (Province of Employment):						
Out-of-Québec	78.0%	78.2%	78.4%	78.2%	78.1%	78.0%
Québec	22.0%	21.8%	21.6%	21.8%	21.9%	22.0%
EI Premium Rate:						
Out-of-Québec	1.88%	1.88%	1.88%	1.88%	1.63%	1.66%
Québec	1.52%	1.53%	1.54%	1.52%	1.27%	1.30%
Weighted Average Premium Rate	1.80%	1.80%	1.81%	1.80%	1.55%	1.58%
Total Insurable Earnings	533,682	553,812	566,606	579,630	601,138	629,357

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 2018[1] 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 2019 to 2027. 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 years 2019 to 2021, the adjustment is expected to be 96.5%, 95.4% and 95.9% respectively. It is expected to reach its ultimate value of 96.2% in year 2022. Table 29 shows details of the projected total insurable earnings calculations for years 2019 to 2027, as well as actual data for years 2013 to 2018. The resulting insurable earnings for 2019 reflect the year-to-date assessed premiums and related total expected assessed premiums for the year.

Table 29 Projected Total Insurable Earnings

Year	MIE ($)	Total Employment Income for Earners Below MIE ($ thousands)	Number of Earners Above MIE (thousands)	Total Employment Income for Earners Above MIE, Capped at MIE ($ thousands)	Total Employment Income, Capped at MIE ($ thousands)	Total Insurable Earnings ($ thousands)	Increase in Total Insurable Earnings
2013	47,400	240,789,645	6,621	313,835,684	554,625,329	533,682,404	
2014	48,600	250,470,009	6,683	324,804,152	575,274,161	553,811,508	3.77%
2015	49,500	259,085,340	6,683	330,817,311	589,902,651	566,606,136	2.31%
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	629,356,781	4.69%
2019	53,100	299,294,009	7,258	385,410,782	684,704,791	660,523,390	4.95%
2020	54,200	286,144,101	6,703	363,290,883	649,434,984	619,560,975	(6.20%)
2021	56,300	310,930,778	6,850	385,644,396	696,575,174	668,015,592	7.82%
2022	57,200	319,789,127	7,108	406,591,879	726,381,006	698,778,528	4.61%
2023	58,400	330,996,273	7,273	424,724,974	755,721,247	727,003,839	4.04%
2024	59,900	345,874,337	7,335	439,373,897	785,248,235	755,408,802	3.91%
2025	61,300	358,307,195	7,414	454,472,398	812,779,594	781,893,969	3.51%
2026	62,700	370,569,094	7,487	469,461,947	840,031,041	808,109,861	3.35%
2027	64,100	382,259,940	7,594	486,765,912	869,025,852	836,002,870	3.45%

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 MPA 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

[1] The 2020 distribution may be affected by the COVID-19 pandemic; it will be analyzed when the data becomes available.

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 2019, 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 remain relatively stable at 22.2% in 2019 and 2020, and will slightly decrease over the 7-year projection period, but will remain close to 22%. This is highlighted in Table 30.

Table 30 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
2013	22.02%	77.98%
2014	21.79%	78.21%
2015	21.64%	78.36%
2016	21.84%	78.16%
2017	21.91%	78.09%
2018	21.97%	78.03%
2019	22.23%	77.77%
2020	22.17%	77.83%
2021	22.11%	77.89%
2022	22.05%	77.95%
2023	21.99%	78.01%
2024	21.93%	78.07%
2025	21.87%	78.13%
2026	21.82%	78.18%
2027	21.76%	78.24%

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 31 shows the detailed adjustment payments between both parties for calendar years 2013 to 2018. The adjustment payments for calendar years 2017 and 2018 are preliminary.

Table 31 Historical Adjustment Payments Between the Government of Canada and the Government of Québec to Reflect Province of Residence ($ thousands)

	2013	2014	2015	2016	2017	2018
Adjustment Payments from Government of Canada to Government of Québec (i.e. for Québec residents working outside of Québec):						
Employee Portion	12,060	12,155	12,241	13,145	13,652	13,807
Employer Portion	15,738	15,894	15,920	17,283	17,884	18,212
Total	27,799	28,049	28,161	30,428	31,537	32,019
Adjustment Payments from Government of Québec to Government of Canada (for non-Québec residents working in Québec):						
Employee Portion	11,607	12,451	13,285	13,562	14,782	15,596
Employer Portion	7,744	8,234	8,581	9,528	10,196	10,844
Total	19,351	20,685	21,866	23,090	24,978	26,440
Net Adjustment Payment from Government of Canada to Government of Québec:						
Employee Portion	454	(296)	(1,044)	(417)	(1,130)	(1,789)
Employer Portion	7,994	7,660	7,339	7,755	7,688	7,368
Total	8,448	7,364	6,295	7,338	6,558	5,579

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 five years of available data, 2014 to 2018. Insurable earnings for employees who reside outside of Québec and work in Québec correspond to 0.35% 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 0.28% of total insurable earnings from out-of-Québec to Québec occurs to reflect the province of residence. This is outlined in Table 32.

Table 32 Adjustment to Insurable Earnings Split to Reflect Province of Residence ($ thousands)

	2013	2014	2015	2016	2017	2018
Total Insurable Earnings ($)	533,682,404	553,811,508	566,606,136	579,630,252	601,138,318	629,356,781
QPIP Reduction	0.36%	0.35%	0.34%	0.36%	0.36%	0.36%
Average Employer Multiplier:						
Out-of-Québec Employers	1.30	1.31	1.32	1.32	1.30	1.30
Québec Employers	1.29	1.31	1.31	1.31	1.29	1.30
Employer Adjustment Payments:						
From Government of Canada to Government of Québec	15,738	15,894	15,920	17,283	17,884	18,212
From Government of Québec to Government of Canada	7,744	8,234	8,581	9,528	10,196	10,844
Estimated Transfer of Insurable Earnings to Reflect Province of Residence (Employer Adjustment Payments / (QPIP reduction x Average Employer Multiplier))						
From Government of Canada to Government of Québec ($)	3,365,149	3,460,215	3,550,507	3,644,693	3,820,121	3,885,976
From Government of Québec to Government of Canada ($)	1,663,509	1,802,579	1,928,919	2,025,281	2,193,687	2,321,926
Net Transfer (from Canada to Québec) ($)	1,701,640	1,657,636	1,621,588	1,619,412	1,626,434	1,564,050
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%	0.62%	0.63%	0.63%	0.64%	0.62%
From Government of Québec to Government of Canada	0.31%	0.33%	0.34%	0.35%	0.36%	0.37%
Net From Government of Canada to Government of Québec	0.32%	0.30%	0.29%	0.28%	0.27%	0.25%

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 taxfilers who are Québec residents and work outside of Québec and vice-versa. The actual insurable earnings of Québec residents working outside of Québec (roughly 123,000 people in 2018) and of non-Québec residents working in Québec (roughly 93,000 people in 2018) 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 2019 to 2027 will be equal to the average transfer for years 2014 to 2018, that is 0.28%. The resulting insurable earnings on a province of residence basis are outlined in Table 33.

Table 33 Split of Salaried Insurable Earnings Based on Province of Residence

	Proportion of Insurable Earnings - Province of Work (T4 Basis)		Net	Proportion of Insurable Earnings - Province of Residence		Total Insurable Earnings - Province of Residence ($ thousands)		
Year	Out-of-Québec	Québec	Transfer to Québec	Out-of-Québec	Québec	Canada	Out-of-Québec	Québec
2018	78.03%	21.97%	0.25%	77.78%	22.22%	629,356,781	489,523,046	139,833,735
2019	77.77%	22.23%	0.28%	77.49%	22.51%	660,523,390	511,860,752	148,662,637
2020	77.83%	22.17%	0.28%	77.55%	22.45%	619,560,975	480,489,401	139,071,574
2021	77.89%	22.11%	0.28%	77.61%	22.39%	668,015,592	518,468,319	149,547,273
2022	77.95%	22.05%	0.28%	77.67%	22.33%	698,778,528	542,763,687	156,014,841
2023	78.01%	21.99%	0.28%	77.73%	22.27%	727,003,839	565,123,394	161,880,446
2024	78.07%	21.93%	0.28%	77.79%	22.21%	755,408,802	587,656,727	167,752,075
2025	78.13%	21.87%	0.28%	77.85%	22.15%	781,893,969	608,729,524	173,164,445
2026	78.18%	21.82%	0.28%	77.90%	22.10%	808,109,861	629,543,492	178,566,370
2027	78.24%	21.76%	0.28%	77.96%	22.04%	836,002,870	651,774,641	184,228,228

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 28 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 34), the net adjustment payments (QPIP) shown in Table 28 are re-allocated between two items: the gross premium revenues and the premium refunds. Consequently, Table 34 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 34 shows the reconciliation of net premiums and the inherent calculation of adjusted premium refunds for years 2013 to 2018. By comparing this table to Table 28 for year 2018, it can be seen that adjustment payments of $5.6 million are reflected in Table 34 through gross premiums that are $13.6 million lower ($23,878.9 – $23,865.3) and in Table 35 through premium refunds that are $8.0 million lower ($262.5 – $254.5), with no resulting effect on the total net premium.

Table 34 Calculation of the Adjusted Premium Refunds ($ millions)

	2013	2014	2015	2016	2017	2018
Total Insurable Earnings	533,682	553,812	566,606	579,630	601,138	629,357
Split of Insurable Earnings (Province of Residence):						
Outside Québec	77.7%	77.9%	78.1%	77.9%	77.8%	77.8%
Québec	22.3%	22.1%	21.9%	22.1%	22.2%	22.2%
EI Premium Rate:						
Outside Québec	1.88%	1.88%	1.88%	1.88%	1.63%	1.66%
Québec	1.52%	1.53%	1.54%	1.52%	1.27%	1.30%
Weighted Average Premium Rate	1.80%	1.80%	1.81%	1.80%	1.55%	1.58%
Gross Premium Revenues	23,049.6	23,960.3	24,551.3	25,045.1	22,364.5	23,865.3
Adjusted Premium Refunds	247.5	259.4	246.9	234.4	235.2	254.5
Overage	3.1	3.0	3.1	2.7	3.2	2.9
Wage-Loss Premium Reduction	909.0	854.0	837.4	871.2	922.2	953.2
Net Adjustment Payments (QPIP)	-	-	-	-	-	-
Other Accounting Adjustments	8.8	5.7	5.0	21.7	7.3	6.3
Net Premium Assessed	21,881.2	22,838.3	23,459.0	23,915.1	21,196.7	22,648.4

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 35 shows that the total insurable earnings subject to a subsequent employee refund as a percentage of total insurable earnings averages 2.47% from 2014 to 2018. It is assumed to remain constant at 2.47% until 2027.

Table 35 Total Insurable Earnings Subject to a Subsequent Premium Refund ($ millions)

	2013	2014	2015	2016	2017	2018
Total Insurable Earnings (TIE)	533,682	553,812	566,606	579,630	601,138	629,357
Adjusted Premium Refunds	248	259	247	234	235	255
Average Premium Rate	1.80%	1.80%	1.81%	1.80%	1.55%	1.58%
TIE Subject to Refund	13,754	14,388	13,674	13,022	15,172	16,110
TIE Subject to Refund (% of TIE)	2.58%	2.60%	2.41%	2.25%	2.52%	2.56%

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 MPA 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 2020. The enrolment data also includes adjustments for individuals who have opted out of the program in each week. Table 36 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 projection of enrolments from 2021 to 2027 is based on the average weekly enrolments over the last 3 years (2017-2019), while the assumption to complete year 2020 is based on the 3-year average of weekly enrolments during the last 6 months of the year. 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 2020 and projected enrolments, Table 36 shows the historical and projected number of self-employed participants from 2010 to 2027.

Table 36 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	27,890	6,579	34,469
2021	29,665	6,781	36,445
2022	31,474	6,986	38,460
2023	33,249	7,188	40,437
2024	35,024	7,389	42,413
2025	36,799	7,591	44,390
2026	38,574	7,793	46,367
2027	40,349	7,994	48,343

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 2020 to 2027.

The most recent year for which complete data is available with regards to self-employed EI premiums and inherent covered earnings is tax year 2018. 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 2020 to 2027. 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 37 shows the projected self-employed covered earnings for Québec residents and out-of-Québec residents for years 2019 to 2027.

Table 37 Projected Covered Earnings for Self-Employed EI Participants ($ thousands)

	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
2019				191,238				21,590	212,829
2020	1.37%	37.2%	39.1%	266,057	1.37%	48.5%	50.6%	32,510	298,568
2021	2.58%	6.4%	9.1%	290,303	2.58%	3.1%	5.7%	34,373	324,676
2022	2.95%	6.1%	9.2%	317,088	2.95%	3.0%	6.1%	36,459	353,547
2023	2.55%	5.6%	8.3%	343,523	2.55%	2.9%	5.5%	38,469	381,992
2024	2.07%	5.3%	7.5%	369,353	2.07%	2.8%	4.9%	40,367	409,720
2025	2.26%	5.1%	7.4%	396,848	2.26%	2.7%	5.1%	42,407	439,255
2026	2.22%	4.8%	7.2%	425,245	2.22%	2.7%	4.9%	44,502	469,747
2027	2.49%	4.6%	7.2%	455,874	2.49%	2.6%	5.1%	46,789	502,663

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; in 2020, this includes the new Part VIII.4 (EI ERB) benefit.

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 2021).

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 2021, the maximum weekly benefit is 55% of the $56,300 annual MIE divided by 52, or $595.

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 insurable earnings above the MIE increased in 2014 and 2015 following the introduction of the variable best weeks, that is, a change in the benefit rate calculation. A further increase was observed in 2016 and is attributable in part to

the temporary extension of EI regular benefits in regions affected by commodities downturn since some regions with higher earnings than the average normal EI claimants were selected.

The proportion of benefit weeks for claimants with earnings above the MIE decreased to 46.5% in 2017 before increasing to 47.0% and 47.9% in 2018 and 2019 respectively. Based on partial data, this proportion is expected to be 47.2% in 2020. It is assumed to remain constant at 47.2% thereafter.

Table 38 Percentage of Benefit Weeks for Claimants with IE above the MIE

Year	% Above MIE
2013	41.9%
2014	44.6%
2015	47.2%
2016	48.0%
2017	46.5%
2018	47.0%
2019	47.9%
2020	47.2%
2021-2027	47.2%

The 2019 AWB for claimants with insurable earnings above and below the MIE was $562 and $372 respectively.

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 2.1% and 3.0% for 2020 and 2021 respectively. The average annual increase for years 2022 to 2027 is 2.3%. These AWB growth rates generally apply to all benefit types for 2021 and onwards.

Table 39 Average Weekly Benefits Growth Factors

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average Weekly Earnings ($)	1,028	1,057	1,075	1,104	1,131	1,156	1,182	1,208	1,236
% Change	2.7%	2.8%	1.7%	2.7%	2.4%	2.2%	2.2%	2.2%	2.3%
MIE ($)	53,100	54,200	56,300	57,200	58,400	59,900	61,300	62,700	64,100
% Change	2.7%	2.1%	3.9%	1.6%	2.1%	2.6%	2.3%	2.3%	2.2%
Proportion Above MIE	47.9%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%	47.2%
Proportion Below MIE	52.1%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%
AWB Growth	1.7%	2.1%	3.0%	2.1%	2.2%	2.4%	2.3%	2.2%	2.3%

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[1] 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[2]; and
- 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.

[1] In theory, EI regular beneficiaries outside the labour force (inactive) should also be added to the number of potential claimants since they receive benefits but are not counted as unemployed in the Labour Force Survey. Due to the lack of availability of data, those EI regular beneficiaries are not included in the analysis, which results in an implicit assumption of constant proportion as a percentage of unemployed.

[2] 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. This percentage is determined using the EI Monitoring and Assessment report, which is based on Statistics Canada's EI Coverage Survey. 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 (https://www.canada.ca/en/employment-social-development/programs/ei/ei-list/reports/regular-benefits/apply.html).

Table 40 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
2009	1,523	440	28.9%	190	12.5%	102	6.7%	995	65.3%
2010	1,486	532	35.8%	175	11.8%	110	7.4%	888	59.8%
2011	1,399	546	39.0%	178	12.7%	96	6.9%	771	55.1%
2012	1,372	535	39.0%	188	13.7%	92	6.7%	740	54.0%
2013	1,347	516	38.3%	201	14.9%	85	6.3%	715	53.1%
2014	1,322	508	38.4%	197	14.9%	83	6.3%	701	53.0%
2015	1,331	492	36.9%	165	12.4%	86	6.5%	761	57.2%
2016	1,361	507	37.3%	162	11.9%	88	6.5%	779	57.3%
2017	1,247	502	40.3%	149	12.0%	88	7.1%	683	54.8%
2018	1,155	461	39.9%	182	15.8%	77	6.7%	589	51.0%
2019	1,144	427	37.3%	172	15.0%	74	6.5%	619	54.1%

* The invalid job separation statistic for calendar year 2019 is estimated.

The number of unemployed individuals is provided by the Minister of Finance. Assumptions for 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 has increased following the economic downturn of 2008-2009. It reached 39.0% in 2011 and 2012 before decreasing in the next three years to 36.9% in 2015. The percentage then increased to reach 40.3% in 2017 before decreasing again in the following two years to reach 37.3% in 2019. The number of individuals without insurable earnings in the last 52 weeks decreased from 461,000 to 427,000 between 2018 and 2019. Based on the experience observed for the first six months of 2020, the proportion of individuals with no insurable earnings in the last 52 weeks is expected to decrease to 27.0% in 2020. It is subsequently assumed to increase until it reaches an ultimate value of 38.0% of unemployed in 2024. The large decrease in 2020 is attributable to the forced shutdown of the economy created 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.
- The percentage of unemployed individuals with an invalid job separation is highly behaviour driven and fluctuates with the economic situation. The proportion of 15.8% observed in 2018 is considerably higher than the 12.0% observed in 2017. It is expected to decrease to 15.0% in 2019 and to 11.0% in 2020 before increasing to an ultimate value of 13.0% in 2022. The large decrease in 2020 is attributable to the forced shutdown of the economy created by the COVID-19 pandemic. Based on the first few months of 2020 data published by Statistics Canada, 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 is expected to decrease significantly in 2020. Based on the first few months of available information for 2020, it is estimated that the ratio of working beneficiaries to unemployed will decrease to 3.5% in 2020. It will then slowly increase to reach an ultimate value of 6.5% in 2023.

The resulting projected proportion and number of potential claimants are presented in Table 41. The number of potential claimants as a percentage of unemployed is expected to decrease from 65.5% in 2020 to 55.5% in 2024.

Table 41 Projected Number of Potential Claimants

Calendar Year	Number of Unemployed (U) (thousands)	No Insurable Earnings in Last 52 Weeks	Invalid Job Separation	Working Beneficiaries	Potential Claimants	
		As a % of U	As a % of U	As a % of U	As a % of U	Number (thousands)
2020	1,929	27.0%	11.0%	3.5%	65.5%	1,265
2021	1,563	35.0%	12.0%	4.5%	57.5%	899
2022	1,354	36.0%	13.0%	5.5%	56.5%	765
2023	1,261	37.0%	13.0%	6.5%	56.5%	712
2024	1,219	38.0%	13.0%	6.5%	55.5%	676
2025	1,228	38.0%	13.0%	6.5%	55.5%	681
2026	1,242	38.0%	13.0%	6.5%	55.5%	690
2027	1,247	38.0%	13.0%	6.5%	55.5%	692

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 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 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 42 Historical Recipiency Rate

Calendar Year	Number of Potential Claimants (thousands)	Regular Beneficiaries (thousands)	Recipiency Rate
2009	995	770	77.4%
2010	888	718	80.9%
2011	771	608	78.8%
2012	740	555	75.0%
2013	715	523	73.2%
2014	701	508	72.5%
2015	761	535	70.2%
2016	779	564	72.3%
2017	683	533	78.0%
2018	589	464	78.8%
2019	619	452	72.9%

The recipiency rate decreased from 80.9% in 2010 to 70.2% in 2015; however, it increased to 72.3% in 2016 and to 78.0% in 2017 due to the temporary and permanent measures (extension of number of weeks of benefits in selected regions affected by commodities downturn, elimination of the category of claimants who are new entrants and re-entrants and the change in the waiting period from two to one week in 2017). The rate remained high (78.8%) in 2018 due to the continuation of the extension of number of weeks of benefits in selected regions affected by commodities downturn. It is expected to decrease to 72.9% in 2019 due to the termination of some temporary measures. The preliminary estimate for 2020 is 45.0% and it is assumed to increase to 70.0% in 2021 and to 72.5% in 2022 before reaching its ultimate value of 75.0% in 2023. The low recipiency rate for 2020 and 2021 is attributable to the EI ERB put in place by the Government for claims starting 15 March 2020, as well as to the transition measures aimed at facilitating access to EI as the EI ERB and the CERB are being wound down. The majority of people who would have normally received regular EI benefits and been counted as regular EI recipients are receiving the special measure benefits instead, and are accounted for elsewhere as recipients of that measure.

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 2019, but receives his first benefit payment only in February 2020, the portion of the benefits that relates to December will be recorded in the EI Operating Account for the year 2019.

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.

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 43 Number of Weeks

Calendar Year	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Weeks	52.2	52.4	52.2	52.0	52.0	52.4	52.2	52.2	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 2019, that is, the latest year of known actual regular EI income benefits. 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 pilot project and special measures are then added to the regular benefits projection as shown in Table 44.

Table 44 Regular Benefits ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Regular Benefits (Base)	10,647	13,732	15,567	13,950	13,745	13,466	13,827	14,305	14,683
Extension of the Seasonal-Worker Pilot Project	68	84	80	52	10	-	-	-	-
Measure - 13.1% UR for all regions	-	181	944	296	2	-	-	-	-
Measure - 300 Insurable Hours Credit	-	527	2,194	557	5	-	-	-	-
Measure - Minimum Benefit Rate of $400	-	95	699	134	0	-	-	-	-
Total Regular Benefits	**10,715**	**14,619**	**19,485**	**14,989**	**13,762**	**13,466**	**13,827**	**14,305**	**14,683**

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 using the expected change in the number of benefit weeks and average weekly benefits. However, as the number of fishing claimants and the average duration of fishing claims are relatively stable, only the expected change in average weekly benefits is used in forecasting fishing benefits.

$$FB_T = (W_T/W_{T-1}) \times (AWB_T/AWB_{T-1}) \times FB_{T-1}$$

(Yearly increase in average benefits) (Prior year's benefits)

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

The fishing benefits projection is shown in the following table.

Table 45 Fishing Benefits ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Fishing Benefits	340	348	357	363	371	383	391	399	408

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.

Work-Sharing benefits are projected using the expected 2020 base Work-Sharing expenditures, multiplied by the expected change in the number of employees and the average weekly benefits rate. Based on the first six months of 2020, the number of weeks of work-sharing benefits has increased significantly, resulting in an adjustment of 600% compared to the previous year. The increase can most likely be attributed to the COVID-19 pandemic and is expected to be temporary. Consequently, the number of weeks of benefits was adjusted downward in both 2021 and 2022. Additionnaly, the average weekly benefit is adjusted upward by 20% in 2020, as observed in the first six months of experience.

Projected Work-Sharing benefits due to the extension of the maximum duration for softwood lumber and steel and aluminium industries and the temporary work-sharing enhancement due to COVID-19 are provided by the Minister of ESD and added to the base Work-Sharing benefits.

$$WSB_T = (EE_T/EE_{T-1}) \times (W_T/W_{T-1}) \times (AWB_T/AWB_{T-1}) \times WSB_{T-1}$$

Change in the number of employees | Yearly increase in average benefits | Prior year's benefits

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

Table 46 shows the actual 2019 Work-Sharing benefits as well as the projection until 2027.

Table 46 Work-Sharing Benefits ($ millions)

	Actual	Forecast						
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Work-Sharing Benefits (Base)	12	98	42	17	18	19	20	20	21
Extending the Maximum Duration	0	12	3	-	-	-	-	-	-
Work-Sharing Temporary Measure – COVID-19	-	8	3	-	-	-	-	-	-
Total Work-Sharing Benefits	13	117	47	17	18	19	20	20	21

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 2019 using the expected change in the number of employees and in the average weekly benefits.

$$SB_T = (EE_T/EE_{T-1}) \times (W_T/W_{T-1}) \times (AWB_T/AWB_{T-1}) \times SB_{T-1}$$

Change in the number of employees | Yearly increase in average benefits | Prior year's benefits

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

Sickness claims data show a decrease in the number of weeks of sickness benefits for the first six months of 2020. For the full year, the number of weeks of sickness benefits is adjusted downward by 20%. This decrease in the number of weeks of sickness benefits is expected to be temporary due to COVID-19 and the EI ERB. As the situation reverts to normal and the EI ERB is phased out, the number of weeks of sickness benefits is adjusted upward by 10% in 2021, 7.5% in 2022 and 1.5% in 2023. The average weekly benefit is adjusted upward by 2.5% in 2020.

Maternity and Parental (MP) claims data show a higher number of weeks of MP benefits than expected for the first six months of 2020. For the full year 2020, the number of weeks of benefits is adjusted upward by 5%. For 2021, the number of weeks for normal benefits (i.e. before the temporary transition measures are applied) is adjusted downward by 9.0%. It is then expected to increase by 8.0% and 1.75% in 2022 and 2023 respectively.

For projection purposes, expenditures attributed to recent measures and changes to the program are excluded from the base year before the growth factors are applied. Expenditures attributed to recent program changes are subsequently added separately to obtain the total special benefits. Thus, the transition measures introduced by the Government are expected to more than compensate the temporary reduction in sickness and MP 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 take into account that self-employed persons must wait 12 months after registration to claim EI special benefits.

It is expected that in 2021, self-employed participants enrolling in the EI Program will receive $16.2 million in MP benefits, $0.9 million in sickness benefits, $43 thousand in compassionate care benefits and $119 thousand in Family Caregiver benefits.

Table 47 Special Benefits

	Actual	Forecast						
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Salaried Employees ($ millions)									
MP Benefits	3,905	3,914	3,802	4,267	4,520	4,742	4,895	5,066	5,244
Sickness Benefits	1,864	1,459	1,713	1,913	2,022	2,121	2,190	2,266	2,346
Compassionate Care Benefits	49	46	49	51	53	56	58	60	62
Family Caregiver Benefit	88	84	90	94	97	102	105	109	113
Sub-total	5,906	5,503	5,654	6,325	6,693	7,021	7,249	7,501	7,764
Self-Employed ($ thousands)									
MP Benefits	10,236	11,367	16,177	17,541	18,983	20,529	21,935	23,468	25,123
Sickness Benefits	555	617	878	952	1,030	1,114	1,190	1,273	1,363
Compassionate Care Benefits	17	30	43	46	50	54	58	62	66
Family Caregiver Benefit	75	83	119	129	139	150	161	172	184
Sub-total	10,883	12,097	17,215	18,667	20,202	21,847	23,344	24,975	26,736
Recent Permanent Changes ($ millions)									
Parental Sharing Benefit	223	277	289	301	313	326	339	353	368
Recent Temporary Changes ($ millions)									
Measure - 13.1% UR for all regions*	-	8	59	11	0	-	-	-	-
Measure - 480 Insurable Hours Credit*	-	118	917	211	0	-	-	-	-
Measure - Minimum Benefit Rate ($400)*	-	38	280	54	0	-	-	-	-
Total ($ millions)									
MP Benefits	4,139	4,313	4,954	4,771	4,852	5,088	5,257	5,443	5,637
Sickness Benefits	1,864	1,509	2,095	1,998	2,023	2,122	2,191	2,267	2,347
Compassionate Care Benefits	49	48	59	54	54	56	58	60	62
Family Caregiver Benefit	88	87	108	98	97	102	106	109	113
Total Special Benefits	**6,140**	**5,956**	**7,216**	**6,921**	**7,026**	**7,369**	**7,611**	**7,879**	**8,159**

* ESDC provided total estimates for all special benefits. They were split by type of benefits based on actual expenses of 2019.

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 is projected from the prior year actual based on the expected increase/decrease in regular and fishing benefits. The estimate for the forecast 2020 prior year actual is based on the actual first 6 months of benefit repayments and the historical average completion ratio after 6 months.

Table 48 EI Benefit Repayments ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Current Year Forecast	335	356	472	365	336	330	338	350	359
Prior Year									
Actual	298	263	356	472	365	336	330	338	350
Forecast	(336)	(335)	(356)	(472)	(365)	(336)	(330)	(338)	(350)
Sub-Total (Adjustment for prior year)	(38)	(72)	-	-	-	-	-	-	-
Refunds	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)
Total	289	276	464	357	328	321	330	342	351

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 49 include the additional LMDA investment of $1.8 billion announced in Budget 2017 ($1.25 billion remaining in calendar years 2020 to 2022), LMDA funding to support workers in seasonal industries announced in Budget 2018 ($3.7 million remaining in calendar year 2020), and LMDA funding to support workers impacted by steel and aluminium tariffs announced in June 2018 ($14.1 million remaining in calendar year 2020).

Table 49 Employment Benefits and Support Measures ($ millions)

	Actual	Forecast							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
EBSM (Fiscal Year)	2,476	2,449	2,531	2,532	2,107	2,107	2,107	2,107	2,107
	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
EBSM (Calendar Year)	2,464	2,899	2,529	2,532	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 50 are based on 25% of the current fiscal year and 75% of the next fiscal year.

Table 50 Administration Costs ($ millions)

	Actual	Forecast						
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Administration Costs (Fiscal Year)*	1,909	1,971	1,807	1,792	1,788	1,783	1,783	1,783	1,783
	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Administration Costs (Calendar Year)*	1,890	1,944	1,860	1,796	1,789	1,784	1,783	1,783	1,783

* Administration costs related to the new EI Training Support Benefit proposed in Budget 2019 and expected to launch in late 2021 are included.

As mentioned previously, the calculation of the reduction related to the EI program's savings due to the Québec Parental Insurance Plan includes variable administration 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 2020 to 2027 VAC are projected from actual costs incurred in 2019 as a constant percentage of MP benefits. When applicable, VAC are increased to reflect the minimum under the Canada-Québec Final Agreement.

Table 51 Variable Administrative Costs ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Variable Administration Costs	17.2	17.3	17.3	17.4	17.5	17.5	17.6	17.6	17.8

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 2019 was equal to 25% of the 2018-2019 expense and 75% of the 2019-2020 expense.

Based on fiscal year 2019-2020, the allowance for doubtful debts is forecasted as 1.9% of total projected Part I benefits. The write-offs for 2020-2021 and following fiscal years are forecasted

based on the proportion of write-offs over the opening allowance for doubtful debts for 2019-2020 as well as the expected increase in benefit payments.

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 52 Bad Debt Expense ($ millions)

	Actual	Forecast						
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Allowance for Doubtful Accounts (Current Year)	399	506	422	401	403	414	428	441	454
Net Allowance (Prior Year)									
Allowance for Doubtful Accounts (Prior Year)	400	399	506	422	401	403	414	428	441
Write-Offs	(66)	(82)	(97)	(60)	(64)	(68)	(71)	(73)	(75)
Total	334	317	409	362	337	335	343	355	366
Bad Debt Expense (Fiscal Year)	65	189	13	40	66	79	85	86	88
	Actual	Forecast						
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Bad Debt Expense (Calendar Year)	74	158	57	33	59	76	83	86	88

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 the base year using the expected annual change in Part I benefits.

Table 53 Penalties ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Penalties	55	72	93	77	74	74	76	79	81

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 2019 overnight rate was 1.75%. It was lowered to 1.25% on 4 March 2020, 0.75% on 16 March 2020 and 0.25% on 27 March 2020. The corresponding discount rate (Bank Rate) starting in March 2020 is 0.50% (0.25% + 0.25%). The overnight rate is projected for 2020 and

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

2021 based on the 3-month T-Bill forecast from the May 2020 Department of Finance private sector survey. It is then expected to increase further in the following years to reach an ultimate value of 2.1% with a corresponding discount rate of 2.35% in 2027. The rate of interest charged on overdue accounts is thus projected at 5.35% (2.35% + 3.00%) in 2027.

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 2020 is based on interest in 2019, increased for changes in Part I benefits and average interest rate from 2019 to 2020.

Table 54 Interest on Overdue Accounts Receivable ($ millions)

	Actual	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Average Interest Rate	5.00%	3.93%	3.75%	3.85%	4.15%	4.35%	4.65%	4.95%	5.35%
Interest	22	22	27	23	23	24	27	30	33

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 2021 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 2021, the years 2017, 2018 and 2019 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 2021.

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 2021 rates of reduction, the first payer cost ratio is equal to the average of the first payer cost for the years 2017 to 2019, divided by the average insurable earnings of all insured persons for the years 2017 to 2019.

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. 2017 and 2018). More information on the 2017 and 2018 first payer cost can be found in the 2020 Actuarial Report.

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 rates of different age, sector of employment and salary profiles between individuals with and

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

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.

Consequently, the 2019 hypothetical number of first payer job-attached EI sickness claims is 685,319 and the assumed average duration of these claims is 9.0 weeks. The resulting hypothetical number of first payer job-attached EI sickness benefit weeks for 2019 is 6,195,852.

The hypothetical number of first payer job-attached EI sickness benefit weeks for 2017 and 2018 is 5,591,763 and 5,990,174 respectively. More information is provided in the 2020 Actuarial Report.

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 $454.02 for 2019. The average weekly sickness benefits under a hypothetical first payer scenario for 2017 and 2018 are $435.14 and $443.12 respectively, as calculated in the 2020 Actuarial Report.

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 2021 rates of reduction is 0.4176%. Table 55 shows more details on how this first payer cost ratio is determined.

Table 55 First Payer Cost Ratio for Calculating 2021 Rates of Reduction

	2017*	2018*	2019	Average for 2021 Rates of Reduction
First Payer EI Sickness Benefit Weeks (A)	5,591,763	5,990,174	6,195,852	N/A
First Payer Average EI Sickness Benefits (B) ($)	435.14	443.12	454.02	N/A
First Payer Cost (A x B) ($)	2,433,215,000	2,654,347,000	2,813,033,000	2,633,531,667
Total Insurable Earnings (TIE) ($)	601,522,510,514	629,771,993,554	660,523,389,608	630,605,964,559
First Payer Cost Ratio (% of TIE)	0.4045%	0.4215%	0.4259%	0.4176%

* More information on the 2017 and 2018 numbers can be found in the 2020 Actuarial Report.

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 2017, 2018 and 2019, the total cost of job-attached EI sickness benefits for each category is shown in Table 56, and the insurable earnings for each category are shown in Table 57; the amounts shown for 2019 are based on preliminary data.

Table 56 Job-Attached EI Sickness Benefits per Category of Wage-Loss Plan ($)

	2017	2018	2019	Average for 2021 Rates of Reduction
Category 1	91,717,891	91,297,594	101,420,377	94,811,954
Category 2	10,471,109	11,262,658	12,847,740	11,527,169
Category 3	90,160,920	93,045,944	105,041,667	96,082,844
Category 4	2,562,627	2,769,051	3,485,271	2,938,983
Total	194,912,548	198,375,247	222,795,054	205,360,950

Table 57 Allocation of Insurable Earnings for Employers With a Qualified Wage-Loss Plan ($)

	2017	2018	2019	Average for 2021 Rates of Reduction
Category 1	47,640,582,833	49,122,215,497	51,190,562,695	49,317,787,008
Category 2	23,699,986,914	24,057,290,154	25,496,202,839	24,417,826,636
Category 3	189,720,199,816	194,914,432,005	200,204,639,390	194,946,423,737
Category 4	22,075,876,136	22,797,746,167	23,778,842,026	22,884,154,776
Total	283,136,645,699	290,891,683,823	300,670,246,949	291,566,192,157

The experience cost ratio used in the calculation of the 2021 rates of reduction for each category is shown in Table 58.

Table 58 Experience Cost Ratio per Category

	Average EI Sickness Costs ($) (A)	Average Insurable Earnings ($) (B)	Experience Cost Ratio (A/B)
Category 1	94,811,954	49,317,787,008	0.1922%
Category 2	11,527,169	24,417,826,636	0.0472%
Category 3	96,082,844	194,946,423,737	0.0493%
Category 4	2,938,983	22,884,154,776	0.0128%

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 59 shows the 2021 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 the frozen rate of 1.58% for residents of all provinces except Québec. The corresponding premium rate that applies to residents of Québec is 1.18%. Pursuant to section 62 of the EI Regulations and section 68 of the

EI Act, the employer multiplier is calculated from the unrounded rates[1] of reduction and the rounded rates of reduction are shown for illustration purposes only.

Table 59 2021 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	0.4176%	0.1922%	0.2254%	0.23%	1.257	1.209
Category 2	0.4176%	0.0472%	0.3704%	0.37%	1.166	1.086
Category 3	0.4176%	0.0493%	0.3683%	0.37%	1.166	1.086
Category 4	0.4176%	0.0128%	0.4048%	0.40%	1.144	1.057

The Commission will notify each registered employer of the applicable 2021 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 60 shows the estimated amount of premium reduction to be granted in 2021. The estimates are based on the historical distribution of insurable earnings by category, which was derived from Canada Revenue Agency T4 data.

Table 60 2021 Estimated Amount of Premium Reduction

	Estimated Number of Qualified Employers	2021 Insurable Earnings ($ millions)	Rates of Reduction	Premium Reduction ($ millions)
Category 1	2,400	51,771	0.2254%	117
Category 2	600	25,785	0.3704%	96
Category 3	25,400	202,476	0.3683%	746
Category 4	300	24,049	0.4048%	97
Total	28,700	304,081	N/A	1,055

[1] Due to administration system limitations, categories 2 and 3 employer multipliers in this report (1.166 and 1.086 for out-of-Québec and Québec employers respectively) are based on the rounded rate as the employer multiplier can not be different for a same rounded rate of reduction. Based on the unrounded rates, employer multipliers for category 2 would have been the same (1.166 and 1.086), while employer multipliers for category 3 would have been slightly higher (1.167 and 1.088).

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:

Assia Billig, FCIA, FSA
Alice Chiu, ACIA, ASA
Pascale Jomphe
Maxime L. Delisle, FCIA, FSA, CERA
Kelly Moore