



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

13th

on the Pension Plan for the Federally Appointed Judges

as at 31 March 2022

Office of the Chief Actuary

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29 September 2023

The Honourable Anita Anand, P.C., M.P.
President of the Treasury Board
Ottawa, Canada
K1A 0R5

Dear Minister:

Pursuant to Section 6 of the *Public Pensions Reporting Act*, I am pleased to submit this report on the actuarial review as at 31 March 2022 of the pension plan for the Federally Appointed Judges. This actuarial review is in respect of benefits and contributions which are established under the *Judges Act*

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'ABillig', written in dark ink.

Assia Billig, FCIA, FSA, PhD
Chief Actuary

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1 Highlights of the report

Main findings for the Pension Plan for the Federally Appointed Judges as at 31 March 2022

<p>Plan benefits</p>	<ul style="list-style-type: none"> ➤ Plan year 2023: \$216.3 million ➤ Plan year 2024: \$237.7 million ➤ Plan year 2025: \$256.1 million ➤ Plan year 2026: \$270.4 million
<p>Judges' contributions</p>	<ul style="list-style-type: none"> ➤ Plan year 2023: \$25.3 million ➤ Plan year 2024: \$26.6 million ➤ Plan year 2025: \$28.3 million ➤ Plan year 2026: \$29.5 million
<p>Government cost according to pay-as-you-go financing arrangement</p>	<ul style="list-style-type: none"> ➤ Plan year 2023: \$191.0 million ➤ Plan year 2024: \$211.1 million ➤ Plan year 2025: \$227.8 million ➤ Plan year 2026: \$240.9 million
<p>Current service cost as a percentage of payroll, if valued on an accrual basis</p>	<ul style="list-style-type: none"> ➤ Plan year 2023: 53.4% ➤ Plan year 2024: 53.3% ➤ Plan year 2025: 52.6% ➤ Plan year 2026: 52.5%
<p>Actuarial liability, if valued on an accrual basis</p>	<p>\$5,040 million as at 31 March 2022</p>

2 Introduction

This actuarial report on the pension plan for the Federally Appointed Judges (the Plan) was made pursuant to the *Public Pensions Reporting Act* (PPRA).

This actuarial valuation is as at 31 March 2022 and is in respect of pension benefits and contributions defined by the *Judges Act*.

The previous statutory actuarial report was prepared as at 31 March 2019. The next periodic review is scheduled for no later than 31 March 2025.

2.1 Purpose of the report

The Plan is financed through the Consolidated Revenue Fund (CRF) on a pay-as-you-go basis. The government's cost for any given year therefore corresponds to the difference between the Plan benefits and the judges' contributions. The purpose of this actuarial report is to show estimates as at the valuation date of projected plan benefits and contributions in accordance with the pay-as-you-go financing arrangement in effect.

As well, the PPRA requires that a cost certificate be prepared showing the estimated cost of benefits in respect of service. Accordingly, this report shows theoretical estimates of the actuarial liabilities as at the valuation date as well as the projected current service costs.

This report may not be suitable for other purposes.

2.2 Scope of the report

Section 3 presents a general overview of the valuation basis used in preparing this actuarial report. Section 4 presents the projected benefits and contributions of the Plan on a pay-as-you-go basis. Section 5 presents the actuarial liabilities on an accrual basis as well as the reconciliation of the changes in actuarial liabilities and the cost certificate.

Finally, section 6 provides the actuarial opinion for the current valuation.

The various appendices provide a summary of the Plan provisions, a description of data, methodology and assumptions employed.

3 Valuation basis

This report is based on pension benefit provisions enacted by legislation, summarized in Appendix A. Since the previous valuation report as at 31 March 2019, amendments, which address the salary and service in the annuity calculations as well as the suspension of contributions for a judge whom the Canadian Judicial Council has recommended being removed from office, were made to the *Judges Act*. The amendments have no impact on the benefit provisions. They may result in the salary and service in the annuity calculations being different for the applicable cases, which is expected to be reflected in the valuation data provided.

The Plan is financed through the CRF on a pay-as-you go basis. The Supplementary Retirement Benefits (SRB) Account was established by the government to track its pension benefit obligations with respect to the indexation provisions of the Plan. The Account is summarized in Appendix B. No other accounts were established to track obligations or transactions related to other provisions of the Plan. The membership data and tests performed are summarized in Appendix C.

The valuation was prepared in accordance with accepted actuarial practice in Canada and is based on methods and assumptions summarized in Appendices D, E and F.

All actuarial assumptions used in this report are best-estimate assumptions. They are independently reasonable and appropriate in aggregate for the purposes of the valuation at the date of this report.

Actuarial assumptions used in the previous report were revised based on economic trends and demographic experience. A complete description of the assumptions is shown in Appendices E and F. A summary of the ultimate economic assumptions used in this report is shown in the following table.

Table 1 Ultimate best-estimate economic assumptions		
Assumption	31 March 2022 valuation	31 March 2019 valuation
Level of inflation	2.0%	2.0%
Real increases in remuneration	0.9%	1.0%
Valuation rate	4.0%	4.5%

As of the date of the signing of this report, we were not aware of any subsequent events that may have a material impact on the results of this valuation.

4 Projected benefits and contributions

The government finances the Plan through the CRF on a pay-as-you-go basis. Other than the SRB Account, which was established by the government to track the contributions credited with respect to the indexation provisions of the Plan, no other accounts were established to track obligations or transactions related to the Plan.

A material portion of the cost of the benefit indexation provisions would normally be debited from the SRB Account. However, in practice, the prescribed contributions¹ credited to the SRB Account are effectively locked in the Account by a legislative anomaly².

Judges contribute 1% of salary to the SRB Account and contribute 6% of salary to the CRF if not eligible for an immediate (unreduced) annuity. In practice, all judges' contributions, including their prescribed contribution credited to the SRB Account, are made to the CRF and all benefits are paid from the CRF.

The following table shows the projected benefits of the Plan with the corresponding judges' contributions to the CRF (including the judges' contributions credited to the SRB Account).

Table 2 Projection of CRF benefits and contributions

Plan year ^a	Benefits		Judges contributions		Net CRF cost	
	\$ Millions	% of Payroll	\$ Millions	% of Payroll	\$ Millions	% of Payroll
2023	216.3	48.3	25.3	5.7	191.0	42.6
2024	237.7	51.1	26.6	5.7	211.1	45.4
2025	256.1	52.4	28.3	5.8	227.8	46.6
2026	270.4	53.4	29.5	5.8	240.9	47.6

a. Any reference to a given plan year in this report should be taken as the 12-month period ending 31 March of the given year.

The following table shows the projected judges' contributions and the corresponding government matching contributions to be credited to the SRB Account.

Table 3 SRB Account contributions
(\$ millions)

Plan year	Judges	Government	Total
2023	4.5	4.5	9.0
2024	4.7	4.7	9.4
2025	4.9	4.9	9.8
2026	5.1	5.1	10.2

¹ Judges contribute 1% of payroll and the government matches those contributions.

² Practically the only events to trigger a debit from the SRB Account are the death (with no survivor) or nonvested termination of a judge. Moreover, when such a death or termination occurs, only the judge's own accumulated contributions are debited, leaving the government's matching contributions as a credit in the SRB Account.

5 Actuarial review of the Plan

The PPRA requires that a cost certificate be prepared showing the estimated cost of benefits in respect of service for the major pension plans sponsored by the Federal Government as well as for the pension plan for the Federally Appointed Judges. However, the judges' plan differs significantly from the major public sector pension plans as it is financed in practice on a pay-as-you-go basis and the Plan benefits generally do not vary by length of service.

To conduct this actuarial review on an accrual basis, it was necessary to express each judge's projected benefit in unit credit terms, for each type of benefit. The projected accrued benefit actuarial cost method (used in the actuarial valuations of the major federal public sector pension plans) was used for valuation purposes. As described in Appendix D, the actuarial liability is the government's obligation in respect of all service rendered as at the valuation date; the current service cost is the government's future obligation in regards of all future payable benefits considered to accrue in respect of a given year.

The following actuarial liabilities and current service costs required by the PPRA are purely hypothetical since they do not reflect the pay-as-you-go financial arrangement of the Plan. They were computed using the data described in Appendix C, the methodology described in Appendix D, and the assumptions described in Appendices E and F.

5.1 SRB Account and actuarial liabilities

Table 4 SRB Account and actuarial liabilities
(\$ millions)

Component	31 March 2022	31 March 2019
Recorded SRB Account balance	279	247
Actuarial liability for judges	2,319	2,068
Actuarial liability for retirement pensioners	2,241	1,893
Actuarial liability for disability pensioners	137	128
Actuarial liability for surviving spouse and children	343	317
Total actuarial liability	5,040	4,406

5.2 Cost certificate

Table 5 Projection of current service costs

Plan year	Judges contributions (\$ millions)	Government current service cost (\$ millions)	Total current service cost (\$ millions)	Total current service cost (% of payroll)
2023	25.3	213.8	239.1	53.4
2024	26.6	221.5	248.1	53.3
2025	28.3	228.9	257.2	52.6
2026	29.5	236.1	265.6	52.5

5.3 Reconciliation of results with previous report

This section reconciles the actuarial liability and current service cost with the corresponding items of the previous valuation. Details on the experience gains and losses and on the revision of actuarial assumptions are provided herein afterward.

Table 6 Reconciliation of results

Component	Actuarial liability (\$ millions)	Current service cost (% of payroll)
As at 31 March 2019	4,406	54.1
Expected current service cost	664	N/A
Expected benefit payments	(562)	N/A
Interest	204	N/A
Expected current service cost change	N/A	(2.6)
Expected as at 31 March 2022	4,712	51.5
Methodology improvements	23	0.7
Experience gains and losses ^a	148	(0.2)
Revision of valuation assumptions	150	1.4
Data corrections	7	0.0
As at 31 March 2022	5,040	53.4

a. Gains are represented by negative numbers as shown in parentheses and losses are represented by positive numbers.

5.3.1 Experience gains and losses

Since the previous valuation, experience gains and losses have increased the actuarial liability by \$148 million and decreased the current service cost by 0.2% of payroll. The main items shown in the following table are explained afterward. Note that gains reduce the actuarial liability and losses increase the actuarial liability.

Table 7 Experience gains and losses
(\$ millions)

Component	Impact on actuarial liability
Pensionable disabilities	(9)
Mortality	28
Pensionable retirements and terminations	6
Salary increases	116
New entrants	2
Pension indexing	6
Miscellaneous	(1)
Experience gains and losses	148

5.3.1.1 Disability

The number of disabilities among judges was less than anticipated, creating a gain of \$9 million on the actuarial liability.

5.3.1.2 Mortality

The total number of deaths among judges was less than anticipated. Also, for pensioners and surviving spouses, even though the total number of deaths was in line with expected, the number of deaths at younger ages was less than expected. As a combined result, there was a loss of \$28 million on the actuarial liability.

5.3.1.3 Pensionable retirements and terminations

The total number of pensionable retirements and terminations were higher than expected, creating a loss of \$6 million on the actuarial liability.

5.3.1.4 Salary increases

The judicial salary increases during the inter-valuation period were higher than expected. In the previous report, the judicial salary increases were projected to be 1.7% for plan year 2022 and 2.3% for plan year 2023. The actual increases were 6.6% for plan year 2022 and 3.1% for plan year 2023. As a result, there was a loss of \$116 million on the actuarial liability.

5.3.1.5 Pension indexing

In the previous report, pension indexing was projected to be 2.0% as at 1 January 2020, 1.3% as at 1 January 2021, and 1.8% as at 1 January 2022. The actual indexation of pension was 2.0% as at 1 January 2020, 1.0% as at 1 January 2021, and 2.4% as at 1 January 2022, which resulted in a loss of \$6 million on the actuarial liability.

5.3.2 Revision of valuation assumptions

Actuarial assumptions were revised based on economic trends and demographic experience as described in Appendices E and F. These revisions combinedly have increased the actuarial liability by \$150 million and the current service cost by 1.4% of payroll. The following table presents the impact of the revisions of the assumptions, followed by a brief description of each impact. Details of economic assumptions and demographic assumptions are described in Appendix E and F respectively.

Table 8 Revision of valuation assumptions

Assumption	Impact on actuarial liability ^a (\$ millions)	Impact on current service cost ^a (% of payroll)
Demographic assumptions – Retirement rates	15	0.4
Demographic assumptions - Probability of an eligible spouse	29	0.2
Economic assumptions - Pension Indexation	207	0.2
Economic assumptions - Salary increase	21	0.4
Economic assumptions - Interest rate	(122)	0.2
Net impact of revision	150	1.4

a. Negative numbers shown in parentheses reduce the actuarial liability or current service cost.

5.3.2.1 Retirement rates

Overall, the retirement rates were moderately increased for certain younger ages, which results in a small increase in the actuarial liability and in the current service cost.

5.3.2.2 Probability of an eligible spouse

The probabilities of having an eligible surviving spouse were slightly increased for ages 70 through 100. This results in a small increase in the actuarial liability and in the current service cost.

5.3.2.3 Pension indexing

Pension indexation in plan years 2023 and 2024 has been increased significantly given recent higher inflation, which produces a significant increase in the actuarial liability but only a small increase in the current service cost since pension indexation in the short term has little impact for the active members.

5.3.2.4 Salary increase

Ultimate salary increase was reduced from 3.0% to 2.9%, but salary increases for plan years 2023 to 2025 were increased. Overall salary increases were slightly higher than in the previous valuation, which creates a small increase in the actuarial liability and in the current service cost.

5.3.2.5 Interest rate

Ultimate interest rate was reduced from 4.5% to 4.0%; meanwhile, interest rates for plan years 2023 through 2029 were significantly higher than those in the previous valuation. The equivalent flat interest rate for the purpose of calculating the actuarial liability as at 31 March 2022 is 3.6% compared to a flat rate of 3.4% as at 31 March 2022 based on the stream of interest rates from the previous valuation³. As a result, there is a significant decrease in the actuarial liability. On the other hand, the current service cost slightly increases because it is more impacted by the decrease in the ultimate interest rate.

³ The equivalent flat rate to calculate the actuarial liability as at 31 March 2019 was 3.0%, as stated in the previous valuation report.

5.4 Sensitivity to variations in key economic assumptions

The information required by statute, which is presented in this report, has been derived using best-estimate assumptions regarding future demographic and economic trends. The key best-estimate assumptions, i.e., those for which changes within a reasonable range have the most significant impact on the long-term financial results, are described in Appendices E and F. Given the length of the projection period and the number of assumptions required, it is unlikely that the actual experience will develop precisely in accordance with best-estimate assumptions that underlie the actuarial estimates. Individual sensitivity tests have been performed using alternative assumptions.

The following table measures the effect on the plan year 2023 current service cost and the liabilities as at 31 March 2022 when key economic assumptions are varied by one percentage point per annum.

Table 9 Sensitivity of results to variations in key economic assumptions

Assumption(s) varied	Current service cost (% of payroll)		Actuarial liability (\$ millions)	
	2023	Effect	31 March 2022	Effect
None (i.e. current basis)	53.4	None	5,040	None
Interest rates 1% higher	44.4	(9.0)	4,482	(558)
Interest rates 1% lower	65.1	11.7	5,719	679
Pension indexation 1% higher	59.3	5.9	5,536	496
Pension indexation 1% lower	48.4	(5.0)	4,609	(431)
Salaries 1% higher	58.7	5.3	5,192	152
Salaries 1% lower	48.8	(4.6)	4,903	(137)
Inflation 1% higher ^a	53.6	0.2	5,033	(7)
Inflation 1% lower ^a	53.3	(0.1)	5,049	9

a. Change in the inflation assumption impacts the assumptions for the interest rate, the pension indexation, as well as the salary increases.

The differences between the results above and those shown in the valuation can also serve as a basis for approximating the effect of other numerical variations in one of the key assumptions to the extent that such effects are linear.

5.5 Assessing and illustrating downside risks

This section focuses on assessing and illustrating downside risks due to potential adverse scenarios. It illustrates the potential impacts on the Plan of a decrease in the nominal yield on 10-year-plus Government of Canada bonds, as well as a scenario where future longevity improvement is higher than expected. Given the purpose of this section, only adverse scenarios are presented. This section is not meant to represent forecasts or predictions and should be interpreted with caution.

5.5.1 Decrease in the nominal yield on 10-year-plus Government of Canada bonds

In the event of a decrease of 1% in the nominal yield on 10-year-plus Government of Canada bonds, the resulting new money rate and consequently, the government's real cost of borrowing would also decrease by 1%. The financial impact on the Plan of this plausible adverse scenario would be an increase of \$679 million in actuarial liabilities and an increase in the 2023 current service cost of 11.7% of payroll.

5.5.2 Future longevity improvement higher than expected

The mortality rates are currently projected using the CPM Improvement Scale B (CPM-B), which was published in 2014 by the Canadian Institute of Actuaries and is based on the C/QPP study which reviewed trends of mortality experience since 1967. As of 2031, these improvement factors remain constant; however, if these improvement factors are underestimated, future mortality would be lower than expected. For example, the financial impact on the Plan of a possible adverse scenario where longevity improvement as of 2031 is 50% higher than projected would be an increase of \$25 million in actuarial liabilities and an increase in the 2023 current service cost of 0.5% of payroll. The cohort life expectancy of a member aged 65 would also increase by 0.2 years, as presented in the table below.

Table 10 Sensitivity of results to variations in longevity improvement factors

Longevity improvement factors	Current service cost (% of payroll)		Actuarial liability (\$ millions)		Cohort life expectancy of a member aged 65 as at 31 March 2022	
	2023	Effect	31 March		Male	Female
			2022	Effect		
Current basis	53.4	None	5,040	None	24.4	25.3
If ultimate factor 50% higher	53.9	0.5	5,065	25	24.6	25.5

6 Actuarial opinion

In our opinion, considering that this report was prepared pursuant to the *Public Pensions Reporting Act* which requires that the Plan be valued on an accrual basis, and that the purpose of this actuarial report is to show estimates of plan contributions in accordance with the financing arrangement (pay-as-you-go basis) in effect,

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

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. In particular, this report was prepared in accordance with the Standards of Practice (General Standards and Practice – Specific Standards for Pension Plans) published by the Canadian Institute of Actuaries.

To the best of our knowledge, as of the date of the signing of this report and after discussions with the Treasury Board of Canada Secretariat, we have not learned of any events that would materially impact the results of this valuation.



Assia Billig, FCIA, FSA
Chief Actuary



François Lemire, FCIA, FSA



Hao Chen, FCIA, FSA



John Kmetic, FCIA, FSA

Ottawa, Canada
29 September 2023

Appendix A Summary of Plan provisions

This summary describes the provisions in force as at 31 March 2022 of the pension plan established under the *Judges Act* (“Act”) and modified under the *Supplementary Retirement Benefits Act*. The first federal statute dealing with pensions for judges was enacted in 1868, with many subsequent amendments. The Act shall prevail if there is a discrepancy between this summary and the Act.

A.1 Membership

Membership in the Plan is compulsory for all judges appointed to federal or provincial courts by the Government of Canada.

A.2 Contributions

A.2.1 Judges

Judges contribute 1% of salary to the Supplementary Retirement Benefits (SRB) Account, and if not eligible for an unreduced pension, 6% of salary to the Consolidated Revenue Fund (CRF).

A.2.2 Government

The government deemed contributions are the excess of the Plan benefits paid from the CRF over the contributions by judges thereto. Government contributions of 1% of salary are also credited to the SRB Account.

A.3 Summary description of benefits

The judges’ pension plan mainly aims at providing an earnings-related lifetime retirement pension to eligible members of the judiciary. The Plan also provides pensions to judges in case of disability and to their spouses and children in case of death.

All annuities are indexed annually to the Consumer Price Index (CPI). They are payable in equal monthly instalments in arrears until the end of the month in which the pensioner or the survivor dies. If applicable, either a survivor annuity (Note A.4.11) or a residual benefit (Note A.4.12) is payable upon the death of the pensioner, and a residual benefit may be payable to the estate upon the death of the last survivor.

The benefits are summarized in the tables on the next page. The explanatory notes referred to in the tables are given in Appendix A.4.

Table 11 Summary description of benefits for judges

Type of termination	Benefit
Normal pensionable retirement (Notes A.4.1 and A.4.3)	Immediate annuity reduced pro rata if under 10 years of service at normal retirement age
Early pensionable retirement (Note A.4.4)	Deferred annuity, or reduced immediate annuity
Pensionable disability (Note A.4.2)	Immediate annuity
Nonvested termination (Note A.4.6)	Return of contributions (Note A.4.7)
Death leaving no eligible survivor(s) (Notes A.4.8 and A.4.9)	Return of contributions, and lump sum (Notes A.4.7 and A.4.10)
Death leaving eligible survivor(s) (Notes A.4.8 and A.4.9)	Annuity to eligible survivor(s), and lump sum (Notes A.4.10 and A.4.11)

Table 12 Summary description of benefits for pensioners

Type of termination	Benefit
Death leaving no eligible survivor(s) (Notes A.4.8 and A.4.9)	Residual benefit (Note A.4.12), if applicable
Death leaving eligible survivor(s) (Notes A.4.8 and A.4.9)	Annuity to eligible survivor(s) (Note A.4.11)

A.4 Explanatory notes

A.4.1 Normal pensionable retirement

Normal pensionable retirement means ceasing to hold judicial office on reaching normal retirement age of 75 years (70 years for certain judges appointed prior to 1 March 1987) or by satisfying the requirement that the sum of age and service (minimum of 15 years of service) be at least 80 years or, in respect only of a judge of the Supreme Court of Canada, that service be ten years or more.

An immediate annuity is payable upon retirement, except when a judge who has attained the normal retirement age has held judicial office for less than 10 years, in which case a prorated portion of the immediate annuity is payable.

A.4.2 Disability retirement

Disability retirement refers to the benefit applicable to a judge that has become afflicted with a permanent infirmity disabling him or her from the due execution of the office of judge and resigns from office by reason of that infirmity.

The benefit is an annuity payable is equal to two thirds of the salary annexed to the office held by the judge at the time of his or her disability termination.

A.4.3 Immediate annuity

Immediate annuity means an annuity that becomes payable immediately upon a normal pensionable retirement or a disability retirement. The initial annual amount of the annuity is equal to two thirds of the judge's annual salary at the time of ceasing to hold office, or in the case of a supernumerary judge of the then-current salary applicable to a higher judicial office, if such higher office was formerly held.

A.4.4 Early pensionable retirement

Early pensionable retirement means ceasing to hold judicial office and becoming entitled to a deferred annuity or a reduced immediate annuity before normal pensionable retirement by satisfying the requirement that age be at least 55 years with service of 10 years or more.

A.4.4.1 Deferred annuity

Deferred annuity means an annuity that becomes payable following early pensionable retirement to a former judge who reaches age 60 following early pensionable retirement.

The amount of the deferred annuity is calculated by multiplying two thirds of the amount of the salary annexed to the judge's office at the time of the election multiplied by a fraction of which:

- the numerator is the number of years, to the nearest one tenth of a year, during which the judge has continued in judicial office, and
- the denominator is the number of years, to the nearest one tenth of a year, during which the judge would have been required to continue in judicial office in order to be eligible for an unreduced pension (normal pensionable retirement).

A.4.4.2 Reduced immediate annuity

Reduced immediate annuity means a reduced annuity that becomes payable immediately upon early pensionable retirement. The initial annual amount of the annuity is equal to the amount of deferred annuity, but is reduced by 5% for every year that the annuity commences in advance of age 60.

A.4.5 Service

Service means holding the office of judge of a superior or county court or of the Tax Court of Canada, and includes the office of a person who is a deputy judge by virtue of section 60 of the *Federal Court Act*. Superior Court is interpreted to include the Supreme Court of Canada; county court includes any district court.

A.4.6 Nonvested terminations

Nonvested termination means ceasing to hold judicial office under any circumstance other than pensionable retirement, pensionable disability, or death.

A.4.7 Return of contributions

Return of contributions means the payment of an amount equal to the accumulated contributions paid with respect to the Plan by a judge. Interest is credited at the specified rate each 31 December on the accumulated contributions as at the preceding 31 December. The specified rate is the one applied under the *Income Tax Act* in respect of refunds of overpayments of tax.

A.4.8 Eligible surviving spouse

In the case of a judge, the eligible surviving spouse is the person who was married to the judge at the time of the judge's death or who establishes that he or she was cohabiting with the judge in a conjugal relationship at the time of the judge's death and had so cohabited for a period of at least one year.

In the case of a pensioner, the eligible surviving spouse is the person who was married to the pensioner before his or her death and before the time when he or she ceased to be a judge, or who was cohabiting in a relationship of a conjugal nature with the pensioner for at least one year immediately before his or her death, where such cohabitation commenced while the pensioner was a judge.

An annuity may also be granted to a survivor who became a spouse or began to cohabit with the judge in a conjugal relationship after the judge ceased to hold office if the former judge elects to reduce his annuity so that an annuity may be paid to that person.

A.4.9 Eligible surviving children

Eligible surviving children of a judge or pensioner include each child under age 18 and any child under age 25 who is in full-time attendance at a school or university, having been in attendance substantially without interruption since reaching 18 or, if more recent, since the death of the judge or pensioner.

A.4.10 Lump sum

If a judge dies, a lump sum equal to one sixth of the yearly salary of the judge is paid to the surviving spouse or, if there is no survivor, to the estate or succession of the judge.

A.4.11 Annuities to eligible survivor(s)

Annuities to the eligible surviving spouse and children of a judge or pensioner become payable immediately upon the death of that judge (pensioner). The annuity to the eligible surviving spouse is equal to one third of the annual salary of the judge or to one half of the pensioner's annuity, as applicable at the time of death. An eligible child receives an annuity equal to 20% of the surviving spouse's annuity, subject to reduction if there are more than four eligible children in the same family. The annuity otherwise payable to an eligible child is doubled if that child is an orphan.

A pensioner can elect an enhanced surviving spouse benefit with a maximum of 75% of his pension on an actuarially reduced basis to fund the enhancement.

A.4.12 Residual benefit

Residual benefit is equal to the amount, if any, by which the return of contributions exceeds the aggregate of all amounts paid to and in respect of a pensioner until the death of the pensioner, or, if applicable, until the subsequent death or loss of eligibility of the last survivor entitled to an annuity.

A.4.13 Indexation

All annuities payable under the Plan are adjusted every January to the extent warranted by the increase, as at 30 September of the previous year, in the 12-month average CPI. If the indicated adjustment is negative, annuities are not decreased for that year; however, the next following positive adjustment is diminished accordingly. Moreover, the first annual adjustment is prorated to reflect the number of whole months since the date of termination of service.

A.4.14 Division of pension with former spouse

Upon the breakdown of a spousal union (including common-law), a lump sum could be transferred by court order or by mutual consent to the credit of the former spouse of a judge or pensioner. The maximum transferable amount would be half of the actuarial value, calculated as at the transfer date, of the retirement pension deemed accrued by the judge or pensioner during the period of cohabitation.

Appendix B Supplementary Retirement Benefits Account

The SRB Account was established by the government to track the contributions credited with respect to the indexation provision of the Plan. Judges contribute 1% of payroll and the government matches those contributions. These credits would normally track a material portion of the cost of the benefit indexation provision, but in practice they are effectively locked in the SRB Account by a legislative anomaly. Practically the only events to trigger a debit from the SRB Account are the death (with no survivor) or non-vested termination of a judge. Moreover, when such a death or termination occurs, only the judge's own accumulated contributions are debited, leaving the government's matching contributions as a credit in the SRB Account. In practice, all judges' contributions are made to the CRF and all benefits under the Plan are borne by the CRF when they become due.

The SRB Account, which forms part of the Public Accounts of Canada, tracks individual balances held in respect of judges. Each such balance is the cumulative excess of the prescribed interest credits and SRB contributions over the benefits charged to the SRB Account in respect of the given judge. No formal debt instrument is issued to the SRB Account by the government in recognition of the amounts therein. Interest is credited quarterly on the minimum monthly balances in the SRB Account at the monthly rate corresponding to the effective annual yield, reduced by 0.125%, available at the end of the month on 5-year Government of Canada bonds.

Table 13 Reconciliation of balances in the SRB Account by plan year
(\$ millions)

Component	2020	2021	2022
Account opening balance	246.7	258.1	267.1
Judges contributions	4.0	4.1	4.4
Government contributions	4.0	4.1	4.4
Benefit payments	(0.0)	(0.0)	(0.0)
Interest credits	3.4	0.8	2.7
Account closing balance	258.1	267.1	278.6

The rates of return on the SRB Account in plan years 2020, 2021 and 2022 were 1.4%, 0.3% and 1.0% respectively. They were calculated based on the assumption that contributions were made in the middle of the year.

Appendix C Membership data

C.1 Sources and validation of membership data

The Office of the Commissioner of Federal Judicial Affairs provided relevant valuation input data on judges and on the corresponding pensioners and survivors.

We performed certain tests of internal consistency, as well as tests of consistency with the data used in the previous valuation, with respect to membership reconciliation, basic information (date of birth, date of hire, date of termination, sex, etc.), salary levels, and pensions to survivors and pensioners.

Based on the omissions and discrepancies identified by these and other tests, appropriate adjustments were made to the basic data after consulting with the data providers.

C.2 Summary of membership data

A summary of the valuation data as at 31 March 2022 and the reconciliation of judges, pensioners, and survivors during the period from April 2019 to March 2022 inclusive are shown in this section. Relevant detailed statistics on judges, pensioners and survivors are shown in Appendix G.

Table 14 Summary of membership data for judges

Component	As at 31 March 2022	As at 31 March 2019
Number	1,202	1,187
Average payroll for the following year	\$372,800	\$330,900
Average age	61.8	61.7
Average service	10.5	10.6

Table 15 Summary of membership data for retirement pensioners

Component	As at 31 March 2022	As at 31 March 2019
Number	752	677
Average pension	\$218,800	\$203,100
Average age	79.4	79.1

Table 16 Summary of membership data for disability pensioners

Component	As at 31 March 2022	As at 31 March 2019
Number	38	40
Average pension	\$209,300	\$191,700
Average age	74.8	75.4

Table 17 Summary of membership data for eligible surviving spouses

Component	As at 31 March 2022	As at 31 March 2019
Number	345	340
Average pension	\$98,600	\$90,200
Average age	83.3	83.0

Table 18 Summary of membership data for eligible surviving children

Component	As at 31 March 2022	As at 31 March 2019
Number	2	3
Average pension	\$32,500	\$26,800

Table 19 Reconciliation of membership

Component	Judges	Retirement pensioners	Disability pensioners	Surviving spouses	Surviving children
At 31 March 2019	1,187	677	40	340	3
Data corrections	0	0	0	3	0
New entrants	193	N/A	N/A	N/A	N/A
Pensionable retirements	(160)	160	N/A	N/A	N/A
Pensionable disabilities	(5)	N/A	5	N/A	N/A
Non vested terminations	(2)	N/A	N/A	N/A	N/A
New survivors	N/A	N/A	N/A	75	0
Deaths	(11)	(85)	(7)	(73)	0
Loss of eligibility	N/A	N/A	N/A	N/A	(1)
At 31 March 2022	1,202	752	38	345	2

Table 20 Reconciliation of judges

Component	Male	Female	Total
At 31 March 2019	703	484	1,187
New entrants	85	108	193
Pensionable retirements	(108)	(52)	(160)
Pensionable disabilities	(4)	(1)	(5)
Non vested terminations	(2)	0	(2)
Deaths	(7)	(4)	(11)
At 31 March 2022	667	535	1,202

Table 21 Reconciliation of retirement pensioners

Component	Male	Female	Total
At 31 March 2019	542	135	677
Pensionable retirements	108	52	160
Deaths	(79)	(6)	(85)
At 31 March 2022	571	181	752

Table 22 Reconciliation of disabled pensioners

Component	Male	Female	Total
At 31 March 2019	30	10	40
Pensionable disabilities	4	1	5
Deaths	(6)	(1)	(7)
At 31 March 2022	28	10	38

Table 23 Reconciliation of surviving spouses

Component	Male	Female	Total
At 31 March 2019	10	330	340
Data corrections	1	2	3
New surviving spouses	3	72	75
Deaths	0	(73)	(73)
At 31 March 2022	14	331	345

Appendix D Methodology

D.1 Actuarial cost method

Although the Plan provides benefits that do not vary by length of service, the projected accrued benefit actuarial cost method (also known as the projected unit credit method) was used, as in the previous valuation, to compute current service costs and actuarial liabilities.

To allow the use of the projected accrued benefit actuarial cost method, it was necessary to express each judge’s projected benefit in unit credit terms, for each type of benefit. To do so, the benefit projected in respect of a given judge was considered to have accrued uniformly from the date of the judge’s appointment to the commencement date of that benefit. For example, a retirement pension commencing at age 75 was deemed to accrue at the following rates, expressed as a percentage of salary throughout a judge’s career.

Table 24 Assumed annual accrual rates

Age at appointment	Annual accrual (%)
40	1.9
45	2.2
50	2.7
55	3.3
60	4.4
65	6.7

Consistent with this cost method, earnings are projected up to retirement using the assumed annual increases in judicial salaries.

D.1.1 Current service cost

Under the projected accrued benefit actuarial cost method, the current service cost, also called normal cost, computed in respect of a given year is the sum of the value, discounted in accordance with the actuarial assumptions, of all future payable benefits considered to accrue in respect of that year’s service.

All other things being equal, the current service cost for the total population, expressed as a percentage of total payroll, can be expected to remain stable as long as the average age and service of the total population remain constant.

The government current service cost is the total current service cost reduced by the judges’ contributions.

D.1.2 Actuarial liability

The actuarial liability with respect to contributors corresponds to the value, discounted in accordance with the actuarial assumptions, of all future payable benefits accrued as at the valuation date in respect of all previous service. For pensioners and survivors, the actuarial liability corresponds to the value, discounted in accordance with the actuarial assumptions, of future payable benefits.

D.1.3 Age and service determination

In the previous valuation, the Age Last methodology was applied to determine ages and services used for eligibility and decrements. Under this approach, the age is the one at the most recent birthday and the service is based on the member's completed years in judge's office.

In this valuation, the Age Nearest methodology is applied; age and service are determined by rounding the exact value to the nearest integer.

D.1.4 Actuarial excess / (shortfall)

Under the projected accrued benefit actuarial cost method, an actuarial excess (shortfall) that corresponds to the difference between the assets (or accounts) and actuarial liabilities would normally be calculated to determine necessary amortization payments or account adjustments. As the Plan is financed on a pay-as-you-go basis, actuarial deficits and amortization payments/account adjustments are not required and hence not presented in this report.

Appendix E Economic assumptions

All assumptions used in this report are best-estimate assumptions which reflect our best judgment of the future long-term experience of the Plan and do not include margins.

E.1 Inflation-related assumptions

E.1.1 Level of inflation

Price increases, as measured by changes in the Consumer Price Index (CPI), tend to fluctuate from year to year. In 2021, the Bank of Canada and the Government renewed their commitment to keep inflation between 1.0% and 3.0% until the end of 2026. The Bank of Canada renewed its monetary policy framework in 2021 and came up with new Canada's flexible inflation-targeting framework for 2022 to 2026. It is assumed that the Bank of Canada will remain committed to the mid-range 2.0% target. In this report, it is assumed that the level of inflation will decrease from 6.6% in plan year 2023 to 3.3% in plan year 2024, then remain at a level slightly above 2.0% until reaching its ultimate level of 2.0% in plan year 2028. On a calendar-year basis, the inflation is assumed to be 4.2% in calendar year 2023, then decrease to 2.2% in calendar year 2024 and ultimately reach 2.0% in calendar year 2027.

E.1.2 Pension indexing

The year's pension indexing factor was derived by applying the indexation formula described in Appendix A, which relates to the assumed Consumer Price Index increases over successive 12-month periods ending on 30 September.

E.2 Employment earnings increases

E.2.1 Average Canadian wage increase

The real-wage differential (i.e., increase in average employment earnings in excess of inflation) is developed taking into account historical trends, a possible labour shortage and an assumed moderate economic growth for Canada. Thus, a real-wage differential of negative 0.1% is assumed for calendar year 2023 and is assumed to gradually increase to the ultimate assumption of 0.9% by calendar year 2026. The ultimate real-wage differential assumption combined with the ultimate price increase assumption results in an assumed annual increase in Canadian nominal wages of 2.9% in calendar year 2027 and thereafter.

E.2.2 Judicial salary increase

Judicial salaries are expected to follow the same pattern of increase as the Industrial Aggregate (see foregoing discussion of average Canadian wage increase assumption) to which they are indexed, with a lag of a few months. In practice, the salary increase at each 1st of April is based on the increase in the Industrial Aggregate for the last calendar year with respect to the Industrial Aggregate for the preceding calendar year⁴.

⁴ For example, the salary increase at 1 April 2023 is based on the increase of the Industrial Aggregate for calendar year 2022 with respect to that of calendar year 2021.

E.3 Valuation interest rates

The judges' plan differs significantly from the major public sector pension plans as it is financed in practice on a pay-as you-go basis. However, the *Public Pensions Reporting Act* (PPRA) requires that a cost certificate be prepared showing the estimated cost of benefits in respect of service for the major pension plans sponsored by the Federal Government as well as for the pension plan for the Federally Appointed Judges. Since benefits paid from the Plan are paid from the CRF and there are no invested assets, the actuarial liabilities and current service costs are valued using the government's long-term cost of borrowing.

The government's real⁵ cost of borrowing is equal to the new money rate less the assumed rate of inflation. The new money rate is the nominal yield on 10-year-plus Government of Canada bonds and is set for each year in the projection period.

The annual real yield on 10-year-plus federal bonds is assumed to be negative 3.5% in plan year 2023, negative 0.2% for 2024 and then is assumed to increase gradually to its ultimate level of 2.0% first attained in plan year 2034. The ultimate real yield was 2.5% in the previous valuation.

The resulting assumed valuation interest rate in plan year 2023 is 3.1%. It is expected to gradually increase to its ultimate value of 4.0% in plan year 2034. For the purpose of calculating the liability as at 31 March 2022, using the variable interest rates is equivalent to using a flat discount rate of 3.6%.

⁵ Note that all of the real rates referred to in this report are actually real differentials.

E.4 Summary of economic assumptions

The economic assumptions used in this report are summarized in the following table.

Table 25 Summary of economic assumptions

Plan year	Inflation (%)		Employment earnings increase (%)		Valuation rate (%)
	CPI increase	Pension indexing ^a	Industrial aggregate ^b	Judicial salaries ^c	
2023 ^d	6.6	6.3	3.1	3.1	3.1
2024	3.3	5.1	4.1	3.1	3.1
2025	2.3	2.2	2.6	4.1	3.2
2026	2.1	2.2	2.9	2.6	3.3
2027	2.1	2.1	3.0	2.9	3.4
2028	2.0	2.1	2.9	3.0	3.5
2029	2.0	2.0	2.9	2.9	3.6
2030	2.0	2.0	2.9	2.9	3.6
2031	2.0	2.0	2.9	2.9	3.7
2032	2.0	2.0	2.9	2.9	3.8
2033	2.0	2.0	2.9	2.9	3.9
2034+	2.0	2.0	2.9	2.9	4.0

- a. Assumed to be effective as at 1 January.
- b. Rates are on a calendar year basis. For example, the rate for plan year 2023 is based on the increase of the industrial aggregate for the 12 months ending 31 December 2022 over that for the 12 months ending 31 December 2021.
- c. Assumed to be effective as at 1 April (e.g., 1 April 2022 for plan year 2023).
- d. Figures for plan year 2023 for all economic assumptions (in bold), are actual figures.

Appendix F Demographic assumptions

Except where otherwise noted, all demographic assumptions were determined from the Plan's own experience as was done in the past. Assumptions of the previous valuation were updated to reflect past experience to the extent that it was deemed credible.

The demographic assumptions in the previous report were based on the members' completed years of pensionable service, age at most recent birthday, or both. In this valuation, members' age and service are determined by rounding the exact value to the nearest integer. Previous assumptions were converted to reflect this change of methodology.

All references to assumptions from the previous valuation in this section refer to assumptions converted to Age Nearest basis.

F.1 New entrants

The total number of judges is assumed to increase by 1.0% per annum and it is assumed that there will be an equal number of male and female judges by 2030 (same as previous valuation). The number of male judges is assumed to decrease by 0.31% per annum from 2023 to 2030 and the number of female judges is assumed to rise by 2.6% in plan year 2023, with smaller increases thereafter until the ultimate increase of 1.0% is attained in plan year 2030. By 2030, both the number of male and female judges is assumed to increase by 1.0 % per annum.

For each sex, the age distribution of the future new judges was based on that of the actual new judges in the April 2019 to March 2022 period. The initial salary of new judges was assumed to be \$372,200 for plan year 2023, with increases in future plan years in accordance with the assumption for judges' salary increases.

F.2 Non-vested terminations

The number of non-vested terminations during the three years ended 31 March 2022 was in line with what was expected. Rates of non-vested terminations are not changed from the previous valuation, as shown in the table below. After conversion from Age Last basis to Age Nearest basis and rounding, these rates happen to be identical to those in previous valuation.

<u>Service in years</u>	<u>Rate</u>
0	3
1	2
2	1
3 to 9	1
10+	0

F.3 Disability retirements

During the three years ended 31 March 2022, the reported disabilities were in line with what was expected. The disability incidence rates for both males and females were not changed from the previous valuation.

Table 27 Rates of pensionable disability
(per 1,000 judges)^a

Age Nearest birthday	Male	Female
40	0.2	0.4
50	0.7	1.0
60	1.9	2.9
70	6.1	9.5

a. Disability rates are nil once eligible for an unreduced annuity.

F.4 Pensionable retirements

During the three years ended 31 March 2022, the total number of reported pensionable retirements represented 96% of those expected. More specifically, the actual number of retirements at age 74 was significantly lower than expected; meanwhile, the actual number of retirements at age 60 and between age 68 and 73 was higher than expected. Assumed pensionable retirement rates for those ages were adjusted accordingly, to the extent that the experience is deemed credible. The retirement rates are as in the table below.

Table 28 Rates of pensionable retirement
(per 1,000 judges)

Age Nearest birthday	Rounded years of service												
	10 to 13	14	15	16	17	18	19	20	21	22	23	24	25+
55	5	5	5	5	5	5	5	5	5	5	5	5	100
60	50	50	50	50	50	50	50	150	15	15	15	15	15
65	5	5	150	30	40	40	40	40	40	40	40	50	50
70	5	5	70	60	80	80	80	80	90	90	90	90	90
74	400	400	400	400	400	400	400	400	400	400	400	400	400
75+ ^a	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

a. Retirement becomes compulsory on the 75th birthday.

F.5 Mortality rates and longevity improvement factors

Mortality rates for judges, pensioners and surviving spouses were not changed since last valuation. Given the small size of the population, the available data are not sufficient to build a credible mortality experience study. In the absence of credible Plan experience, it was decided to use the mortality rates of the 2014 Canadian Pensioners Mortality Table (CPM2014) published by the Canadian Institute of Actuaries as a starting point. These mortality rates were developed from combined experience exhibited under public and private sector plans. Pension size adjustment factors were applied to the CPM2014 base mortality rates for judges and pensioners to reflect the correlation between pension amounts and cohort life expectancy. The weighted average adjustments for males and females are 0.74 and 0.92 respectively. No size adjustment was applied to the mortality rates for surviving spouses. Mortality rates for disabled pensioners are equal to the mortality rates of healthy pensioners as the CPM2014 reflects the combined expected rates of mortality for all retired members, including those who were disabled prior to retirement.

The mortality rates are projected from 2014 using the mortality improvement scale CPM Improvement Scale B (CPM-B). The CPM-B was published in 2014 by the Canadian Institute of Actuaries and is based on the C/QPP study which reviewed trends of mortality experience since 1967. The longevity improvement assumption did not change since the last valuation.

A sample of the resulting mortality rates for plan year 2023 is shown in the table below. The following two tables provide a sample of the mortality improvement factors and the calculated cohort life expectancies based on the mortality assumption described above.

Table 29 Rates of mortality

For 2023 Plan year (per 1,000 individuals)^a

Age Nearest birthday	Judges and pensioners		Surviving spouses	
	Male	Female	Male	Female
40	0.9	0.5	1.2	0.6
50	1.8	1.1	2.4	1.2
60	4.0	2.9	5.4	3.1
70	7.9	7.2	10.6	7.9
80	24.7	22.3	33.4	24.2
90	108.6	91.3	131.5	96.3
100	364.8	314.6	364.8	314.6
110	575.6	526.0	575.6	526.0

- a. The pensioner mortality rates are to be used when a division of pension is requested upon the breakdown of a spousal union. These mortality rates apply to both retirement and disability pensioners. Plan year 2023 mortality rates shown above are projected in accordance with the following assumed mortality improvement factors.

Table 30 Mortality improvement factors
Initial and Ultimate Plan Year Mortality Reductions (%)^a

Age Nearest birthday	Male		Female	
	2024	2031+	2024	2031+
40	1.48	0.80	1.05	0.80
50	1.05	0.80	0.92	0.80
60	1.45	0.80	1.10	0.80
70	1.65	0.80	1.18	0.80
80	1.58	0.80	1.18	0.80
90	0.67	0.48	0.67	0.48
100	0.19	0.30	0.19	0.30
110	0.15	0.23	0.15	0.23

a. The mortality rate reduction applicable during any plan year within the select period is found by linear interpolation between the figures for plan years 2024 and 2031.

Table 31 Cohort life expectancy of judges

Age Nearest birthday	As at 31 March 2022		As at 31 March 2031	
	Male	Female	Male	Female
60	29.1	30.1	29.5	30.5
65	24.4	25.3	24.8	25.7
70	19.8	20.7	20.2	21.1
75	15.5	16.3	15.8	16.7
80	11.4	12.3	11.7	12.5
85	7.9	8.7	8.1	8.9
90	5.0	5.7	5.1	5.9

F.6 Family composition

Assumptions for the probability of male members leaving, upon death, a spouse eligible for a survivor pension were slightly increased from the previous valuation. The average increase corresponds to 0.03 for members aged of 70 through 100 at death and reflects the experience since the last valuation. The number of new widows was 123% of expected during the three years ended 31 March 2022.

Assumptions for the age of the widows are unchanged from the previous valuation. Assumptions for the probability of female members leaving, upon death, a spouse eligible for a survivor pension and the age of widowers were unchanged from the previous valuation.

Assumptions for survivor benefits in respect of judges or pensioners are summarized in the following table.

Table 32 Assumptions for survivor benefits

Age Nearest birthday at death	Male		Female	
	Probability of an eligible spouse	Spouse age difference	Probability of an eligible spouse	Spouse age difference
40	0.89	(2)	0.90	3
50	0.95	(3)	0.90	3
60	0.98	(3)	0.84	3
70	0.90	(3)	0.62	2
80	0.79	(5)	0.36	0
90	0.53	(6)	0.15	(2)
100	0.19	(9)	0.03	(7)

F.7 Other assumptions

F.7.1 Reversals and recoveries

It is assumed that no pensioners will return to the active service.

F.7.2 Minimum death benefit

This valuation does not take into account the minimum death benefit in respect of deaths occurring after retirement. The resulting understatement of accrued liability and current service cost is immaterial because relatively few pensioners in the early years of retirement die without leaving an eligible survivor.

F.7.3 Special retirement provisions

Plan provisions allow certain judges to retire on a full pension before satisfying the normal requirement that the sum of age and service (minimum of 15 years) be at least 80 years. These provisions have been ignored in the valuation because only a handful of judges will retire thereunder.

F.7.4 Early retirement provisions

It is assumed that judges retiring under the early retirement provisions will choose a reduced immediate annuity.

F.7.5 Pension benefits division / Optional survivor benefit / Enhanced survivor benefit

No future pension benefits divisions were assumed in estimating current service costs and liabilities. Actual pension benefit divisions that occurred before 31 March 2022 were fully reflected in liabilities.

Two other provisions, namely the optional survivor benefit and the enhanced survivor benefit, were also treated like pension benefits divisions. Past elections were fully reflected in liabilities.

F.7.6 Sex of surviving spouses

Each eligible surviving spouse is assumed to be of the opposite sex to that of the member.

F.7.7 Salary of supernumerary judges

The pension for supernumerary judges is based on a projection of the current salary as opposed to the projection of a salary applicable to a higher judicial office, when such higher office was formerly held. This simplification does not have a material impact on valuation results.

Appendix G Detailed information on membership data

Table 33 Number of male judges as at 31 March 2022

Age Nearest birthday	Rounded years of service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	
45 to 49	6	2	1	0	0	0	0	9
50 to 54	43	35	1	0	0	0	0	79
55 to 59	44	38	16	3	0	0	0	101
60 to 64	33	51	42	18	3	0	0	147
65 to 69	12	38	53	30	16	4	0	153
70 to 75	2	17	48	55	30	20	6	178
All ages	140	181	161	106	49	24	6	667

Averages for male judges as at 31 March 2022:

- Average service: 10.9
- Average salary: \$373,000⁶
- Total salary: \$248,824,000⁶

Table 34 Number of female judges as at 31 March 2022

Age Nearest birthday	Rounded years of service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30+	
40 to 44	9	0	0	0	0	0	0	9
45 to 49	32	7	0	0	0	0	0	39
50 to 54	67	33	6	0	0	0	0	106
55 to 59	47	49	16	10	0	0	0	122
60 to 64	27	32	24	20	2	0	0	105
65 to 69	3	15	13	21	31	14	3	100
70 to 75	0	0	4	11	17	14	8	54
All ages	185	136	63	62	50	28	11	535

Averages for female judges as at 31 March 2022:

- Average service: 10.0
- Average salary: \$372,500⁶
- Total salary: \$199,290,000⁶

⁶ The average salary and total salary include a salary increase of 3.1% as at 1 April 2022.

Table 35 Male pensioners as at 31 March 2022

Age Nearest birthday	Annual retirement pension			Annual disability pension		
	Number of pensioners	Average pension (\$)	Total pension (\$)	Number of pensioners	Average pension (\$)	Total pension (\$)
Less than 65	5	198,500	992,500	3	226,300	679,000
65 to 69	13	220,900	2,871,700	4	229,300	917,000
70 to 74	72	218,200	15,710,400	8	224,000	1,792,000
75 to 79	174	228,500	39,759,000	4	206,100	824,000
80 to 84	132	223,900	29,554,800	4	186,700	747,000
85 to 89	118	214,000	25,252,000	3	180,200	541,000
90 +	57	193,100	11,006,700	2	169,800	340,000
All ages	571	219,200	125,147,100	28	208,600	5,840,000

Averages for male retirement pensioners as at 31 March 2022:

- Average age at 31 March 2022: 81.1
- Average age at retirement: 72.0

Averages for male disability pensioners as at 31 March 2022:

- Average age at 31 March 2022: 75.6
- Average age at retirement: 62.3

Table 36 Female pensioners as at 31 March 2022

Age Nearest birthday	Annual retirement pension			Annual disability pension ^a		
	Number of pensioners	Average pension (\$)	Total pension (\$)	Number of pensioners	Average pension (\$)	Total pension (\$)
Less than 65	7	194,600	1,362,000	1	*	*
65 to 69	29	213,200	6,183,000	0	N/A	N/A
70 to 74	71	219,000	15,549,000	6	216,000	1,296,000
75 to 79	47	224,100	10,533,000	2	214,000	428,000
80 to 84	14	218,800	3,063,000	0	N/A	N/A
85 to 89	8	213,700	1,710,000	1	*	*
90 +	5	196,600	983,000	0	N/A	N/A
All ages	181	217,600	39,383,000	10	211,500	2,115,000

a. Certain values are obscured by an asterisk to protect the confidentiality of plan members.

Averages for female retirement pensioners as at 31 March 2022:

- Average age at 31 March 2022: 74.2
- Average age at retirement: 67.5

Averages for female disability pensioners as at 31 March 2022:

- Average age at 31 March 2022: 72.7
- Average age at retirement: 59.8

Table 37 Survivors at 31 March 2022

Age Nearest birthday	Number	Annualized amount (\$) ^a	
		Average	Total
55 to 59	1	*	*
60 to 64	5	106,900	534,500
65 to 69	18	104,300	1,878,200
70 to 74	34	102,900	3,499,900
75 to 79	56	102,500	5,738,300
80 to 84	62	101,000	6,261,400
85 to 89	73	100,100	7,308,100
90 to 94	66	92,100	6,079,000
95 to 99	27	87,700	2,366,800
100 +	3	*	*
Spouses ^b	345	98,600	34,005,000
Children	2	32,500	65,000

a. Certain values are obscured by an asterisk to protect the confidentiality of plan members.

b. As at 31 March 2022, there were 14 male surviving spouses.

Average age of surviving spouses:

- As at 31 March 2022: 83.3
- At death of member: 71.6

Appendix H Acknowledgements

The Office of the Comptroller General of Canada provided the SRB Account balance as at 31 March 2022.

The Office of the Commissioner for Federal Judicial Affairs provided relevant valuation input data for all federally appointed judges and for the corresponding pensioners and survivors.

The co-operation and able assistance received from the above-mentioned data provider deserve to be acknowledged.

The following individuals assisted in the preparation of this report:

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