Provincial Judges and Applications Judges Unregistered Pension Plan

Actuarial Valuation as at March 31, 2024

December 23, 2024

Vancouver Office
M2-601 West Broadway
Vancouver BC V5Z 4C2
888-800-1450

Edmonton Office
10158 108 Street NW
Edmonton, AB T5J 1L3
800-770-2998

georgeandbell.com

Table of Contents

1. **Executive Summary** 2
2. **Introduction** 3
3. **Actuarial Opinion** 5
4. **Going Concern Valuation Results** 8
5. **Contribution Rates** 11

Appendix A — Plan Provisions 13
Appendix B — Plan Membership 17
Appendix C — Assets 22
Appendix D — Actuarial Methods 27
Appendix E — Actuarial Assumptions 28
Appendix F — Data Certificate 34

1. Executive Summary

Going Concern Funded Status	March 31, 2021 ($)	March 31, 2024 ($)
Going concern assets	251,997,000	304,282,000
Going concern liabilities		
Active members	106,484,000	98,241,000
Deferred vested members	0	314,000
Retired members and beneficiaries	152,828,000	183,357,000
Total liabilities	259,312,000	281,912,000
Actuarial excess (unfunded liability)	(7,315,000)	22,370,000
Going concern funded ratio	97.2%	107.9%

Government Contribution Requirements	March 31, 2021[1]	March 31, 2024[2]
Reserve Fund government normal actuarial cost as a percentage of excess pensionable salary	56.76%	44.28%
Unfunded liability amortization payments	$684,000	$0

Key Inputs	March 31, 2021	March 31, 2024
Discount rate	4.1%	5.1%
Inflation rate	2.0%	2.0%
Increase in pensionable salary	3.0% per year, 1st increase effective April 1, 2021	3.0% per year, 1st increase effective April 1, 2025
Maximum pension limit increase	2.75%	2.75%
Mortality	Males: 85% of 2014 CPM Public Table projected with Scale MI-2017 Females: 95% of 2014 CPM Public Table projected with Scale MI-2017	Males: 85% of 2014 CPM Public Table projected with Scale MI-2017 Females: 95% of 2014 CPM Public Table projected with Scale MI-2017
Retirement rates	100% at age 70	100% at age 70

[1] Assumed to be effective April 1, 2021, with unfunded liability amortized over 14 years.
[2] Assumed to be effective April 1, 2024.

2. Introduction

We have been retained by the Alberta Pensions Services Corporation, the "Administrator" of the Provincial Judges and Applications Judges Unregistered Pension Plan (the "Plan"), on behalf of the Judges Pension Advisory Committee to conduct an actuarial valuation of the Plan as at March 31, 2024. The Plan provides benefits in excess of the limits applicable to the *Provincial Judges and Applications Judges Registered Pension Plan* the ("Registered Plan"). The last complete valuation that was filed with the appropriate authorities was conducted as at March 31, 2021.

This report was prepared for its intended users, the Administrator, the Advisory Committee, and the Government of Alberta (the "Government" or "employer"), for the following purposes:

- to report on the financial condition of the Plan on a going concern basis;
- to determine the recommended contributions to the Plan under the statutory rules under *Alberta Regulation 196/2001, Provincial Judges and Applications Judges Registered and Unregistered Pension Plans,* as amended (the "*Regulation*"); and
- to provide the information and the actuarial opinion required by the *Regulation.*

The Plan utilizes a funding approach which uses a combination of an RCA and Reserve Fund.

While readers of this report may extend beyond the intended users noted above, notably Plan members, we shall not communicate the terms of our engagement or results of our work with other readers unless directed to do so by the Administrator. This report is not intended nor necessarily suitable for purposes other than those listed above.

Changes Since the Last Valuation

The last actuarial valuation of the Plan in which contribution rates were recommended was prepared as at March 31, 2021. Since the last actuarial valuation, the following changes have occurred:

1. The Order in Council 358/2022 established the salary rates for the period from April 1, 2017 to March 31, 2021.
2. The Order in Council 182/2023 established the salary rates for the period from April 1, 2021 to March 31, 2025.
3. The going concern economic assumptions were updated to reflect changes in expected future experience.

Details of the above changes that affect the funded status and required contributions are outlined in this report.

Terms of Engagement

This report has been prepared in accordance with the *Regulation*. No separate funding policy document exists.

Filings

In accordance with the *Regulation,* an actuarial valuation report must be prepared for the Minister of Finance at least once every three years as at the effective date of the Plan and not more than three years after the last actuarial valuation. In the intervening period, contributions must be made in accordance with the last filed valuation. The next actuarial valuation should be prepared no later than as at March 31, 2027.

No filings of this report are required with any regulatory authorities.

3. Actuarial Opinion

This opinion is given with respect to the Provincial Judges and Applications Judges Unregistered Pension Plan. We conducted a valuation of the Plan as at March 31, 2024. The administrator has confirmed that, between March 31, 2024 (the effective date of the data provided) and the date of this report, no subsequent events nor any extraordinary changes to the membership that would materially affect the results of this valuation have occurred, except as indicated in this report.

In our opinion, for the purposes of this report:

- The membership data on which the valuation is based are sufficient and reliable for the purposes of the valuation.
- The assumptions are appropriate for the purposes of the valuation.
- The methods employed in the valuation are appropriate for the purposes of the valuation.

We hereby certify that, in our opinion, as at March 31, 2024:

1. With respect to the purpose of determining the Plan's funded status on a going concern basis:

   a. The Plan has a going concern excess (excess of assets over liabilities) of $22,370,000, based on going concern assets of $304,282,000 and going concern liabilities of $281,912,000. The going concern funded ratio is 107.9%.

2. With respect to the purpose of determining the contribution requirements of the Plan for years after the valuation date:

   a. The Government's contributions towards the RCA with respect to the normal actuarial cost are 7.0% of excess pensionable salary.

   b. The rule for determining the Government's contributions towards the Reserve Fund with respect to the normal actuarial cost for the three years commencing April 1, 2024 is 44.28% of excess pensionable salary.

      The estimated total normal actuarial cost for the three years following the valuation date, including the portion of normal actuarial cost attributed to members and the Government are as follows:

	April 1, 2024 to March 31, 2025 ($)	April 1, 2025 to March 31, 2026 ($)	April 1, 2026 to March 31, 2027 ($)
Normal actuarial cost	**11,800,000**	**12,167,000**	**12,546,000**
Less: Government contributions to the RCA	(1,415,000)	(1,461,000)	(1,509,000)
Less: Required member contributions	(1,415,000)	(1,461,000)	(1,509,000)
Reserve fund government normal actuarial cost	8,970,000	9,245,000	9,528,000
Total pensionable salary	42,025,000	43,286,000	44,585,000
Capped pensionable salary	21,809,000	22,409,000	23,025,000
Excess pensionable salary	**20,216,000**	**20,877,000**	**21,560,000**
Reserve fund government normal actuarial cost			
As a percentage of total pensionable salary	21.34%	21.36%	21.37%
As a percentage of excess pensionable salary	**44.37%**	**44.28%**	**44.19%**

c. As the Plan is fully funded on the going concern basis, no additional contributions are required to amortize any unfunded liability.

3. We are not aware of any subsequent events, that have not already been taken into consideration, that could materially affect the results of this valuation.

4. The next valuation should be conducted no later than as at March 31, 2027.

This valuation was conducted in accordance with the statutory rules under *Alberta Regulation 196/2001, Provincial Judges and Applications Judges Registered and Unregistered Pension Plans,* as amended.

The content herein has been prepared exclusively from a financial viewpoint. This report does not constitute a legal opinion on the rights and duties of the Administrator, the Advisory Committee, or the members concerning the Plan.

Actuarial valuation results are estimates only and are based on assumptions and methods developed in accordance with actuarial standards of practice. Emerging experience differing from the assumptions used will result in gains or losses which will be revealed in future valuations, and which may affect future actuarial opinions.

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

We would be pleased to discuss any questions the user may have regarding the valuation.

Gregory M. Heise
Fellow, Canadian Institute of Actuaries

Jian Zhang
Fellow, Canadian Institute of Actuaries

George & Bell Consulting Inc.
December 23, 2024

4. Going Concern Valuation Results

4.1 Going Concern Funded Status

The following table describes the Plan's funded status on a going concern basis. The going concern liabilities are based on the benefits earned up to the valuation date assuming the Plan continues indefinitely.

Going Concern Funded Status	March 31, 2021 ($)	March 31, 2024 ($)
Going concern assets	251,997,000	304,282,000
Going concern liabilities		
Active members	106,484,000	98,241,000
Deferred vested members	0	341,000
Retired members and beneficiaries	152,828,000	183,357,000
Total liabilities	259,312,000	281,912,000
Actuarial excess (unfunded liability)	**(7,315,000)**	**22,370,000**
Going concern funded ratio	**97.2%**	**107.9%**

4.2 Reconciliation of Funded Status

The following table reconciles the change in the funded status over the course of the inter-valuation period.

Reconciliation of Funded Status	($)
Actuarial excess (unfunded liability) at March 31, 2021	(7,315,000)
Expected interest	(937,000)
Amortization payments in inter-valuation period with interest	2,181,000
Contributions greater than cost of benefits earned	8,579,000
Expected actuarial excess (unfunded liability) at March 31, 2024	2,508,000
Gain (loss) on investments	5,650,000
Experience gains and losses	
Salary	(9,875,000)
Retirement	(2,944,000)
Termination	157,000
Mortality	2,487,000
ITA limit higher than expected	1,099,000
Pension indexing higher than expected	(11,093,000)
Subtotal	(20,169,000)
Programming and miscellaneous changes	(1,850,000)
Assumption changes	
Increase in best estimate discount rate from 4.1% to 5.1%	36,231,000
Subtotal	36,231,000
Actuarial excess (unfunded liability) at March 31, 2024	22,370,000

4.3 Reconciliation of Normal Actuarial Cost Rate

The table below identifies the main components of the changes in the normal actuarial cost rate (the rate of excess pensionable salary reflecting the cost of current service benefits accruing under the Plan) from the prior valuation to this valuation.

Reconciliation of Normal Actuarial Cost Rate	% of excess pensionable salary
Normal actuarial cost rate at March 31, 2021	56.88%
Demographic changes of Plan membership and economic experience*	(0.70%)
Change in discount rate	(11.81%)
Normal actuarial cost rate at March 31, 2024	44.37%

* Includes s the shifting of excess pensionable earnings to capped pensionable earnings due to higher than expected increases in capped pensionable earnings

5. Contribution Rates

5.1 Contribution Rate in Respect of Normal Actuarial Costs

The normal actuarial cost is the cost, on the going concern basis, of benefits accruing under the Plan as a result of service after the valuation date. Based on the Plan provisions, membership data, and going concern assumptions and methods described in the Appendices, the following table provides details on the breakdown of the normal actuarial cost, along with the resulting normal actuarial cost rate.

	April 1, 2024 to March 31, 2025 ($)	April 1, 2025 to March 31, 2026 ($)	April 1, 2026 to March 31, 2027 ($)
Normal actuarial cost	**11,800,000**	**12,167,000**	**12,546,000**
Less: Government contributions to the RCA	(1,415,000)	(1,461,000)	(1,509,000)
Less: Required member contributions	(1,415,000)	(1,461,000)	(1,509,000)
Reserve fund government normal actuarial cost	8,970,000	9,245,000	9,528,000
Total pensionable salary	42,025,000	43,286,000	44,585,000
Capped pensionable salary	21,809,000	22,409,000	23,025,000
Excess pensionable salary	**20,216,000**	**20,877,000**	**21,560,000**
Reserve fund government normal actuarial cost			
As a percentage of total pensionable salary	21.34%	21.36%	21.37%
As a percentage of excess pensionable salary	**44.37%**	**44.28%**	**44.19%**

As the change in contribution rate will be implemented April 1, 2024, we have determined that a level contribution rate of 44.28% of excess pensionable salary commencing April 1, 2024 is equivalent to contributing based on the table above on excess pensionable salary over the 3-year period ending March 31, 2027.

5.2 Amortization Payments

Amortization payments are contributions necessary to amortize any unfunded liability over an appropriate payment period. The amortization payments as determined in the previous valuation were as follows:

Commencement of schedule	End Date for Schedule	Annual Payment ($)	Present Value at Mar. 31, 2021[1] ($)
April 1, 2021	March 31, 2035	684,000	7,315,000

As of this valuation, there are no amortization payments required due to the actuarial excess. Accordingly, the above schedule has been eliminated.

5.3 Actuarial Excess Usage

In accordance with Section 12 of the *Regulation* pertaining to the Plan, actuarial excess may be used by the Government to reduce its contributions subject to its contributions being at least equal to those of the members (representing the Government's contributions to the RCA). As at this valuation date, the Plan has going concern actuarial excess of $22,370,000 available for use.

[1] The present values were developed using the going concern discount rate of 4.1% per year, with payments assumed to be made monthly in arrears.

5.4 Recommended Government Contributions

The Regulation does not specify the method for determining the required Government contributions to the Reserve Fund. The recommended contributions to the Reserve Fund have been determined in a manner consistent with the development of the minimum required Government contributions to the Registered Plan.

The table below presents the development of the recommended Government contribution for each of the plan years covered by this report. The required contributions determined in this valuation report are assumed to take effect April 1, 2024. The recommended contributions to fund the normal cost are shown as a percentage of excess pensionable salary. Future recommended contributions may be adjusted once the next actuarial funding recommendations are certified.

Government Contributions	April 1, 2024 to March 31, 2027
Normal actuarial cost to the RCA as a % of excess pensionable salary	7.00%
Plus: Normal actuarial cost to the Reserve Fund as a % of excess pensionable salary	44.28%
Plus: Unfunded liability amortization payments	$0
Less: Use of actuarial excess*	$22,370,000

* Subject to minimum annual Government contributions equal to 7% of excess pensionable salary to the RCA to match member contributions.

Appendix A — Plan Provisions

A.1 Plan Provisions

This summary contains the main provisions of the Plan as at the valuation date. For a complete description, reference should be made to the statutory rules under Alberta Regulation 196/2001.

This summary does not constitute a legal interpretation of the Plan. All pertinent documents, acts, and regulations should be referred to for an interpretation in any specific circumstance.

Provision	Detail
Eligibility	Eligible participants include Provincial Judges and Applications Judges of the Province of Alberta.
Pensionable Salary	Pensionable salary is defined as the participant's actual salary.
Capped Salary	Determined as the participant's actual salary limited to the amount in any year which results in the maximum defined benefit for that year under the *Income Tax Regulations (Canada)*. For service after December 31, 1991 and before January 1, 2004, the capped salary is limited to $86,111. The capped salary increases in accordance with the provisions of the *Income Tax Act (Canada)*. For years after 2003, the capped salary is as follows:

Year	Capped Salary ($)	Year	Capped Salary ($)
2004	91,667	2015	140,945
2005	100,000	2016	144,500
2006	105,556	2017	145,722
2007	111,111	2018	147,222
2008	116,667	2019	151,278
2009	122,222	2020	154,611
2010	124,722	2021	162,278
2011	127,611	2022	162,278
2012	132,334	2023	175,334
2013	134,834	2024	180,500
2014	138,500	2025+	Indexed to Average Industrial Wage

Provision	Detail
Pensionable Service	Pensionable service, as defined under the provisions of the Plan, is not capped. However, pensionable service is zero and benefits cease to accrue when the participant has reached the maximum benefit accrual percentage (70%) or the latest pension accrual date as defined under the *Income Tax Act (Canada)*.
Retirement Age	Participants are eligible to retire under the Plan if they have attained age 55 and have at least five years of pensionable service.

Provision	Detail
Retirement Benefit	The total annual pension payable at retirement, as a percentage of highest average pensionable salary, is determined as: • 2% x the participant's years of pensionable service from January 1, 1992 to March 31, 1998, plus • 2.67% x the participant's years of pensionable service from April 1, 1998 to March 31, 2000, plus • 3% x the participant's years of pensionable service from April 1, 2000. The annual pension payable from the Plan is equal to the total annual pension as determined above, minus the annual pension payable from the Registered Plan. A summary of the benefits payable from the Registered Plan is included in our actuarial valuation report as at March 31, 2024. For retirements after March 31, 2006, highest average pensionable salary is the participant’s average annual salary in the three consecutive years of pensionable service in which such average is the highest. Benefits cease to accrue when the member has reached the maximum benefit accrual percentage (70%).
Early Retirement	For service from January 1, 1992 and before April 1, 1998, the pension is payable when the participant has attained age 55. For service from April 1, 1998, there is no reduction to the pension upon the later of the participant accruing 80 points (that is, attained age (at least 55) plus pensionable service is greater than or equal to 80) or attaining age 60. The pension would also be unreduced upon attaining the maximum accrual age. Otherwise, the retirement pension is reduced by 3% for each year that the participant’s early retirement age precedes the later of age 60 and the age at which 80 points would be reached (based on pensionable service to the date of termination).
Benefits on Disability	If the participant is not receiving benefits from an LTD plan and the participant is permanently and totally disabled, the participant is entitled to an immediate unreduced pension based on pensionable service and salary to the date of disability. If the participant is partially disabled, the pension is reduced in accordance with the Unregistered Plan rules.
Normal Form of Pension	The normal form of pension for a participant who does not have a pension partner at retirement is a lifetime pension. Upon the participant’s death, monthly payments cease. The normal form of pension for a participant who has a pension partner at retirement is a pension payable for the lifetime of the participant. Upon the participant’s death, a survivor pension equal to 75% of the participant’s pension is payable to the pension partner for the remaining lifetime of the pension partner.

Provision	Detail	
Pre-Retirement Death Benefits	**Without Pension Partner**	**Benefit**
	Less than 2 years pensionable service or Member less than 55	Refund of contributions with interest
	Member greater than 55 and 2 or more years pensionable service	Pension payable on a 10-year term basis or based on member's choice
	With Pension Partner	**Benefit**
	Less than 2 years pensionable service	Refund of contributions with interest
	2 or more years pensionable service	Lifetime pension amount equal to 75% of the normal pension
Termination Benefits	Less than 2 years of pensionable service	Refund of contributions with interest
	2 or more year of pensionable service	Either refund of contributions with interest or a deferred pension
Cost-of-Living Increases	For participants who terminated before April 1, 2009, cost-of-living increases are based on 60% of the increase in the Alberta CPI and apply to both deferred pensions and pensions-in-payment. For participants who terminated after March 31, 2009, cost-of-living increases are based on 100% of the increase in the Alberta CPI and apply to both deferred pensions and pensions-in-payment.	
Member Contributions	Members contribute 7% of their excess pensionable salary to the RCA. Contributions cease a) after a benefit accrual percentage of 70% is earned determined as: • 2.0% of years of pensionable service prior to April 1, 1998, plus • 2.67% of years of pensionable service between April 1, 1998 to March 31, 2000, plus • 3.0% of years of pensionable service from April 1, 2000 or b) after a member reaches the latest pension accrual date whichever of those events occurs first.	
Government Contributions	The Government contributes 7.0% of the member's excess pensionable salary to the RCA. The Government makes additional normal actuarial cost contributions to the Reserve fund. Such contributions are determined as the total normal actuarial cost, less Government contributions to the RCA and less member contributions to the RCA. In addition, the Government will make unfunded liability amortization payments in order to amortize any unfunded liability based on the recommendation in the actuarial valuation report.	
Plan termination	If the plan were to be terminated, the Government would continue to pay the promised benefits.	

Appendix B — Plan Membership

B.1 Source of Data

Alberta Pensions Services Corporation (APSC) provides administration services to the Plan and maintains pension records of Plan members on behalf of the Administrator. The relevant information to carry out this valuation was provided by APSC. We have reviewed the data to ensure its sufficiency and reliability, and consistency with the data used in the last valuation. Specific tests included:

1. A member by member reconciliation of the membership group from March 31, 2021 to March 31, 2024.
2. Tests for reasonableness of the data elements of the record of each individual entitled to or potentially entitled to a benefit under the Plan, including, but not limited to:
    a. Comparison of changes in age, salaries and pensionable service
    b. Comparison of the terminated and retired members with the files used for the prior valuation and the retirements, terminations, and deaths that occurred during the inter-valuation period
    c. Validation with APSC regarding all inconsistencies in comparison with the data used for the previous actuarial valuation, with adjustments made where necessary
    d. Comparison of the data provided with information contained in the Plan's financial statements.

The results of the above tests demonstrate that the membership data is substantially complete.

In addition, due to the nature of the financial information provided, it was not possible to trace any lump sum refunds individually. However, the effect of this omission was not material to the results of the valuation.

Active member salary rates used for the year following the valuation date were based on their position as provided by APSC and the salary rates described in the *Provincial Court Judges and Applications Judges Compensation Regulation*, as at April 1, 2024. The following table summarizes the salaries used:

Position	Salary ($)
Judge	$348,102.00
Assistant Chief Judge	$365,507.10
Deputy Chief Judge	$374,209.65
Chief Judge	$382,912.20

The capped salary rate for each active member for the year following the valuation date was the last capped salary rate shown in the table under Section A.1, pro-rated for 9 months, and 3 months at the next calendar year's rate, estimated using the expected rate of escalation in the maximum pension limit.

The membership data is sufficient and reliable for the purposes of this valuation.

B.2 Summary of Membership Data

There were the following members as of the current and last valuation dates:

Active Members

Membership Summary	March 31, 2021	March 31, 2024
Number of members	122	124
Average age	61.6	61.5
Average credited service	8.8	8.1
Average capped pensionable salary	$163,394	$181,741
Average expected pensionable salary	$305,415	$350,137
Percent female	40.2%	41.9%
Number of members accruing benefits	119	120

Deferred Vested Members

Membership Summary	March 31, 2021	March 31, 2024
Number of members	0	1
Average age	n/a	*
Average annual pension	n/a	*
Percent female	n/a	100.0%

** Not shown for confidentiality reasons.*

Retired Members

Membership Summary	March 31, 2021	March 31, 2024
Number of members	129	141
Average age	76.0	76.5
Average annual pension	$65,053	$82,063
Percent female	20.2%	24.8%

Beneficiaries

Membership Summary	March 31, 2021	March 31, 2024
Number of members	46	47
Average age	82.1	81.8
Average annual pension	$34,654	$42,247
Percent female	95.7%	93.6%

B.3 Changes in Membership Data

The following table shows the changes in the Plan membership since the last valuation date:

Reconciliation of Membership Data	Active Members	Deferred Members	Retirees and Beneficiaries	Total
As at March 31, 2021	122	0	175	297
New entrants	32	0	0	32
Retirements	(28)	0	28	0
Deaths – paid out	(1)	0	0	(1)
Terminations - deferred	(1)	1	0	0
Deaths or expiry of guarantee	0	0	(15)	(15)
As at March 31, 2024	124	1	188	313

B.4 Active Members — Detail

Distribution of Pensionable Salary and Service

Age	Under 5	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	Total
Under 50	9						9
	$350,036						$350,036
50 – 54	8	3					11
	$348,102	$348,102					$348,102
55 – 59	9	14	4	2			29
	$348,102	$349,345	$354,629	$348,102			$349,602
60 - 64	12	10	13	1			36
	$348,102	$351,583	$352,119	$365,507			$351,003
65 +	3	11	16	4	3	2	39
	$348,102	$351,267	$351,365	$348,102	$348,102	$348,102	$350,333
Total	41	38	33	7	5	2	124
	$348,527	$350,392	$352,058	$350,588	$348,102	$348,102	$350,137

Each cell shows: Number of members
Average annual pensionable salary

B.5 Retirees & Beneficiaries — Detail

Distribution of Annual Pension

Age	Retired Members & Beneficiaries
Under 60	2 $36,091
60 – 64	8 $66,361
65 – 69	15 $84,114
70 – 74	45 $90,421
75 – 79	47 $75,296
80 – 84	41 $70,688
85 – 89	17 $55,815
90 +	13 $18,213
Total	188 $72,109

Each cell shows: Number of members
Average annual pension

Appendix C — Assets

C.1 Plan Asset Information

Plan assets are held in trust and managed by Alberta Investment Management Corporation. The fund is audited annually by the Auditor General of Alberta. The asset data required for the valuation in respect of the Plan's trust fund was taken from the Plan's audited financial statements at March 31, 2024 (both the unregistered pension plan and the reserve fund).

The asset value has been tested and reconciled with the value at the last valuation. The benefits paid from the fund have also been examined and tested against the membership data.

C.2 Statement of Plan Assets and Asset Mix

A breakdown of the market value of the Reserve Fund as at the valuation date, with the last valuation shown for comparison, is shown in the following table:

	March 31, 2021		March 31, 2024	
Asset Class	Amount ($)	Asset Mix (%)	Amount ($)	Asset Mix (%)
Cash	0	0.0	20,298,000	7.0
Fixed income	97,895,000	41.9	113,336,000	38.9
Equities	95,986,000	41.1	102,630,000	35.2
Inflation sensitive	38,700,000	16.6	54,434,000	18.7
Strategic and currency investments	795,000	0.4	668,000	0.2
Subtotal	233,376,000	100.0	291,366,000	100.0
Adjustments				
Account Receivable	703,000		121,000	
Accounts Payable	(1,089,000)[1]		(1,335,000)[1]	
Subtotal	(386,000)		(1,214,000)	
Total	232,990,000		290,152,000	

[1] Total payable expenses from the unregistered plan are noted in its financial statements. We have assumed these amounts would come from the reserve fund even though the reserve fund statements make no reference to such amounts.

The following table summarize the assets of the RCA and refundable tax account as at the valuation date, with the last valuation shown for comparison:

	March 31, 2021	March 31, 2024
Market Value	**Amount ($)**	**Amount ($)**
RCA	355,000	143,000
Refundable Tax Account	18,652,000	13,987,000
Total	19,007,000	14,130,000

The RCA is 100% invested in cash and equivalents, and the refundable tax account does not earn interest or other income.

The following table summarizes the market value of assets of the total fund, adjusted for payables/receivables, as at the valuation date, with the last valuation shown for comparison.

	March 31, 2021	March 31, 2024
Market Value	**Amount ($)**	**Amount ($)**
Reserve Fund, adjusted for payables/receivables	232,990,000	290,152,000
RCA	355,000	143,000
Refundable Tax Account	18,652,000	13,987,000
Total	251,997,000	304,282,000

C.3 Changes to the Plan Assets

The following table shows the changes to the market value of the assets during the inter-valuation period:

Beginning of Period	April 1, 2021 ($)	April 1, 2022 ($)	April 1, 2023 ($)
Opening Asset Value	251,997,000	266,729,000	279,036,000
Contributions			
Employee - RCA	1,164,000	1,940,000	1,598,000
Employer - RCA	1,178,000	1,928,000	1,598,000
Employer – Reserve Fund	7,896,000	18,000,000	13,537,000
Subtotal	10,238,000	21,868,000	16,733,000
Benefit Payments			
Retirement benefits	(10,077,000)	(11,558,000)	(12,621,000)
Death benefits	(303,000)	(300,000)	(313,000)
Termination benefits	0	0	0
Subtotal	(10,380,000)	(11,858,000)	(12,934,000)
Transfers During Plan Year			
Into Plan	961,000	15,829,000	4,197,000
Out of Plan	(961,000)	(15,829,000)	(4,197,000)
Subtotal	0	0	0
Expenses			
Investment expenses	(1,470,000)	(1,377,000)	(1,629,000)
Non-investment expenses	(221,000)	(197,000)	(164,000)
Subtotal	(1,691,000)	(1,574,000)	(1,793,000)
Investment Earnings	16,565,000	3,871,000	23,240,000
Closing Asset Value	266,729,000	279,036,000	304,282,000
End of Period	**March 31, 2022**	**March 31, 2023**	**March 31, 2024**

C.4 Long Term Asset Mix

The Advisory Committee has adopted an investment policy that includes the long-term asset mix below. While not explicitly stated in the investment policy, it is understood that this mix applies to the reserve fund, given that the RCA and refundable tax account make up roughly 4.6% of the total unregistered plan fund as at the valuation date and are investment in cash or equivalents, or earn no interest (i.e., the refundable tax account). Long-term, an assumption has been made that the RCA, including refundable tax account, will comprise 5% of the entire Plan fund.

Asset Class	Target %
Fixed Income	**42.0%**
Money market	2.0%
Fixed Income	40.0%
Inflation Sensitive	**20.0%**
Real Estate	12.5%
Infrastructure	6.5%
Timberlands	1.0%
Equity	**38.0%**
Canadian equities	14.0%
Global equities	24.0%
Total	100.0%

C.5 Fund Rates of Return

The rate of return history of the market value of assets, net of all expenses, is shown below.

Year	Market Value
2015	12.2%
2016	0.9%
2017	10.1%
2018	4.9%
2019	7.0%
2020	(5.9%)
2021	16.7%
2022	5.9%
2023	0.8%
2024	7.6%
3-Yr. Ann.	4.8%

Appendix D — Actuarial Methods

D.1 Actuarial Cost Method — Going Concern Valuation

The projected unit credit actuarial cost method has been used for this valuation, as was the case in the previous valuation. Under this method, the going concern liabilities at the valuation date are the actuarial present value of benefits in respect of service prior to the valuation date, but based on pensionable salary projected to retirement. The normal actuarial cost is the present value, at the middle of the ensuing year, of benefits that accrue to active members in the ensuing year, again based on projected pensionable salary.

The pattern of future contributions necessary to pre-fund future benefit accruals for any one particular individual will increase gradually as a percentage of his or her pensionable salary as the individual approaches retirement. For a stable population (i.e., one where the demographics of the group remain relatively constant from year to year), the normal actuarial cost will remain relatively level as a percentage of pensionable salary.

An actuarial excess is the excess of the going concern assets over the going concern liabilities; an unfunded liability is the excess of the going concern liabilities over the going concern assets.

D.2 Asset Valuation Method — Going Concern Valuation

The actuarial value of the assets used to determine the going concern funded status is equal to the market value, adjusted for amounts payable and receivable. This method is the same as the one used in the last valuation.

Appendix E — Actuarial Assumptions

E.1 Actuarial Assumptions — Going Concern Valuation

The going concern valuation is based on the assumption that the Plan will continue to operate indefinitely into the future. At each valuation, past experience is compared to the assumptions made at the last valuation to determine if, together with known changes to plan provisions, investment policy, and expectations of future trends, the assumptions should be changed.

In this valuation, we reviewed the history of experience gains and losses and have provided a rationale for any assumption changes from the prior valuation which are described below. Emerging experience differing from these assumptions will result in experience gains and losses that will be revealed in future valuations.

The actuarial assumptions used in this and the last valuations are summarized in the following table. All rates and percentages are annualized unless otherwise noted.

Going Concern Assumptions	March 31, 2021	March 31, 2024
Economic		
Discount rate	4.1%	5.1%
Margin for adverse deviation	0.0% inherent in discount rate and 0.25% in salary increase assumption	0.0% inherent in discount rate and 0.25% in salary increase assumption
Inflation rate	2.0%	2.0%
Increases in pensionable salary	3.0% per year; 1st increase effective April 1, 2021	3.0% per year; 1st increase effective April 1, 2025
Maximum Pension Limit increases	2.75%	2.75%
Cost-of-living adjustments	**Termination date:** Prior to April 1, 2009: 1.2% After March 31, 2009: 2.0%	**Termination date:** Prior to April 1, 2009: 1.2% After March 31, 2009: 2.0%
Investment expenses	0.4% inherent in discount rate	0.4% inherent in discount rate
Non-investment expenses	0.1% inherent in discount rate	0.1% inherent in discount rate

Going Concern Assumptions	March 31, 2021		March 31, 2024	
Demographic				
Mortality	Males:	85% of CPM Public Table projected with Scale MI-2017	Males:	85% of CPM Public Table projected with Scale MI-2017
	Females:	95% of CPM Private Table projected with Scale MI-2017	Females:	95% of CPM Private Table projected with Scale MI-2017
Termination	No rates		No rates	
Disability	No rates		No rates	
Proportion of vested terminated members electing a deferred annuity	100%		100%	
Retirement	100% at age 70		100% at age 70	
Proportion of members with spouses	90% married; actual marital status for retired members		90% married; actual marital status for retired members	
Spousal age differential	Male spouse 4 years older		Male spouse 4 years older	

Further detail concerning these assumptions is summarized below.

Economic assumptions

Inflation Rate

As the level of inflation influences the rate of increase in several economic factors that affect the Plan, it is necessary for the going-concern valuation to have an assumption regarding the future inflation rate. As at the last valuation, the inflation rate is assumed to be 2.0% per year. This assumption is considered to be best estimate considering current economic and financial market conditions.

Discount rate

The primary economic assumption used in the going concern valuation is the discount rate, which is the rate of return that the fund is expected to earn over the long term. In this valuation, we have used a discount rate of 5.1% per year. At the last valuation, the assumed discount rate was 4.1% per year.

Discount rate	%
Expected inflation	2.9
Expected real return	2.0
Value added for rebalancing/diversification	0.4
Value added for active management	0.3
Expected investment expenses	(0.4)
Expected non-investment expenses	(0.1)
Margin for adverse deviation	0.0
Discount rate	5.1

In deriving the discount rate, we have assumed that the assets would be invested according to the Plan's Statement of Investment Policies and Goals revised at November 18, 2020.

The expected returns for the fund were estimated using our expected returns for applicable asset classes taking into account the target asset mix as outlined under the Plan's investment policy. Return assumptions for all asset classes are based on long-term expectations of at least 25 years.

The frequency of rebalancing the fund's weight in each asset class to its target in the investment policy, the weights themselves, and the time horizon, will all influence the long-term return. The long-term return is also influenced by the diversification of the fund. The expected effect of rebalancing and diversification on the fund's return was estimated based on a log-normal distribution.

A provision has been considered in the discount rate to consider the added value associated with active management for traditional asset classes. This provision is less than the estimated fees corresponding to active management for those asset classes.

The rate of return has been adjusted to consider expected investment management expenses on traditional asset classes. No investment management expenses have been considered for non-traditional asset classes as the expected real returns for those classes are assumed to be net of investment management fees.

The RCA and refundable tax account have been assumed to return 0% and are assumed to be approximately 5% of plan assets in the long-term. The expected real return for the total fund has been reduced accordingly.

Increases to average wages

As the rate of increase in average wages in the economy influences the rates of increase in the YMPE, maximum pension limit, member salaries, and other economic factors that affect the Plan, it is necessary for the going concern valuation to have an assumption regarding the future increases in average wages. Average wages are assumed to increase at 2.75% per year. This assumption is considered best estimate and is comprised of an annual increase of 2.0% on account of inflation, plus a best-estimate assumed increase of 0.75% on account of productivity.

The previous valuation used the same assumption.

Increases in pensionable salary

As the benefits paid to a member from the Plan are dependent on the member's future pensionable salary, it is necessary for the going concern valuation to have an assumption regarding the future increases in such salary. All active members' pensionable salaries are assumed to increase at 3.0% per year, with the first increase taking effect one year after the valuation date. This assumption includes a small margin of 0.25% per year.

The previous valuation assumed the first increase to pensionable salary would occur on April 1, 2021 at 3.0% per year, and annually per year thereafter.

Cost of living adjustments ("COLA")

As the Plan's benefits are increased after termination/retirement based on inflation, it is necessary to make an assumption regarding the rate of COLA that will be applied in the future. As at the last valuation, it has been assumed that COLA will be applied at 60% of the assumed inflation rate of 2.0%, or 1.2% per year for members who terminated prior to April 1, 2009 and 100% of the assumed inflation rate of 2.0% for member who terminated after March 31, 2009.

Demographic assumptions

Members may cease active status as a result of death, retirement, termination of membership, or disability and may cease to be entitled to monthly pension payments as a result of death.

Mortality

For this valuation, the gender-distinct mortality rates have been assumed to be in accordance with:

- for males, 85% of the Canadian Pensioner Mortality (CPM) 2014 – Public Sector Males mortality table with future improvements in mortality in accordance with Scale MI-2017; and
- for females, 95% of the Canadian Pensioner Mortality (CPM) 2014 – Public Sector Females mortality table with future improvements in mortality in accordance with the Scale MI-2017.

The same assumptions were used at the previous valuation. No pre-retirement mortality was assumed.

Retirement

A member's benefit entitlement under the Plan is dependent on when the member decides to commence, or is deemed to commence, to receive a pension from the Plan (referred to as "retirement" from the Plan). Accordingly, an assumption with respect to when a member is expected to retire from the Plan has been made.

For both this and the previous valuation, active and deferred vested members are assumed to retire at age 70. Retirements are assumed to occur at the beginning of each year with no retirements assumed to occur in the first year after the valuation date.

Termination

No allowance for termination of employment prior to retirement has been made as it would not have a material impact on the results. This is the same assumption as was used at the prior valuation.

Disability

We have made no allowance for the occurrence of disability before retirement. To the extent that members do become disabled before retirement, there may be an experience gain or loss.

Proportion of vested terminated members electing a lump sum payment versus a deferred annuity

We have assumed that 100% of members will elect a deferred annuity on termination. This is the same assumption as the last valuation.

Proportion of members with spouses and spousal age difference

Under the Plan terms, the value of pre-retirement death benefits depends on the existence and age of a surviving spouse. It has again been assumed that 90% of members are married to a spouse of the opposite gender, with the male spouse being 4 years older than the female spouse. Actual marital status is used for retired members.

Expenses

Expenses relating to investment management fees and certain administration and consulting fees incurred in relation to the Plan are paid from the Plan's assets. Consequently, it is appropriate that an assumption regarding such expenses be made.

Administration and custodial expenses charged to the fund have been less than 0.1% of the market value of assets over the past few years. Investment expenses charged to the fund have been roughly 0.6% per year over the past few years; we expect these to decrease over time. A best estimate allowance for non-investment expenses of 0.1% per year and investment expenses of 0.4% per year have been included in the discount rate. The previous valuation included an allowance in the discount rate of 0.1% per year for non-investment expenses and 0.4% per year for investment expenses.

Appendix F — Data Certificate

Administrator Certification

With respect to the actuarial valuation conducted on the Provincial Judges and Applications Judges Unregistered Pension Plan as at March 31, 2024, we hereby confirm that, to the best of our knowledge based on reporting prepared by and provided to us by Alberta Pensions Services Corporation:

- The data regarding Plan members and beneficiaries provided to George & Bell Consulting Inc. constitutes a complete and accurate description of the information contained in our files.
- There are no subsequent events nor any extraordinary changes to the membership, between March 31, 2024 and the report date, which would materially affect the results.

Date: January 15, 2025

Name (Printed): Kathryn Miller

Title: Interim VP, Pensions Services

Signature: