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

Ottawa, Canada
K1A 0H2

PENSION PLAN FOR FEDERALLY APPOINTED JUDGES

ACTUARIAL REPORT

(INCLUDING COST CERTIFICATE)

AS AT DECEMBER 31, 1985

Canada

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

Ottawa, Canada
K1A 0H2

March 7, 1988

The Honourable Donald Mazankowski
President of the Treasury Board
Ottawa

Sir:

Pursuant to section 6 of the Public Pensions Reporting Act, I have the honour to transmit herewith my valuation report on an actuarial review of the pension plan established under the Judges Act, as at December 31, 1985. The report includes a cost certificate required in accordance with section 5 of the Public Pensions Reporting Act.

This report was completed on August 25, 1987, but its submission had to await the Order in Council (passed March 4, 1988) designating the President of the Treasury Board to be the Minister for purposes of Subsection 9(1) of the Public Pensions Reporting Act as it pertains to the pension plan established under the Judges Act.

Subsection 9(1) of the Public Pensions Reporting Act requires the report to be laid before Parliament within thirty sitting days of its being filed with the Minister.

Respectfully submitted,

Walter Riese
Chief Actuary

Canada

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PUBLIC PENSIONS REPORTING ACT

Report on the Actuarial Review of the pension plan established under the Judges Act as at December 31, 1985

I. Introduction

Pursuant to paragraphs 3(1)(e) and 3(3)(a) of the Public Pensions Reporting Act (PPRA), we have made an actuarial review of the pension plan established under the Judges Act as at December 31, 1985. To our knowledge, this is the first actuarial review ever made of this pension plan for federally appointed judges (at federal and provincial courts).

For purposes of this report, as required by subsection 3(2) of the PPRA, the plan is deemed to include the related benefits payable under the Supplementary Retirement Benefits Act (inflation adjustments) and the related assets of the Supplementary Retirement Benefits Account.

The cost certificate required by section 5 of the PPRA is included as Section II of this report.

Bill C-41, an amendment affecting the costs of benefits under the Judges Act, received royal assent on June 30, 1987. This amendment, retroactive to April 17, 1985, provides a uniform compulsory retirement age of 75 for all federally appointed judges. Prior to the amendment the compulsory retirement age was 70 for judges of the Tax Court of Canada as well as for judges appointed to the Federal Court of Canada after May 31, 1971 or to a county or district court after October 6, 1971 but was 75 for all other judges. In order to provide the information required by section 4 of the PPRA, this report shows results both with and without the amendment.

II. Cost Certificate

(Pursuant to Section 5 of the Public Pensions Reporting Act)

For the old plan (prior to Bill C-41) the normal actuarial cost, that is, the total contribution required from contributors and Government combined to provide all benefits in respect of current service, was estimated to be 30.0% of salaries. Allowing for the two different contribution rates prescribed under the Judges Act (1.5% or 7% depending upon the date of appointment) the effective rate of contribution from the contributors is equivalent to 5.1% of salaries. As a result, it is estimated that currently Government contributions would have been required at a rate equal to 4.9 times the contributions from judges.

For the new plan, the normal cost is estimated to be 27.0% of salaries, resulting in current required Government contributions of 4.3 times the contributions from judges.

The above figures are expected to remain appropriate for the calendar years 1986, 1987 and 1988.

The estimated actuarial liability with respect to this pension plan as at December 31, 1985 was $325.5 million and $307.6 million for the old and new plans, respectively, of which $5.9 million was funded (recorded), the balance in each case being unfunded (unrecorded). The unfunded actuarial liability for the new plan could be amortized by fifteen annual special payments beginning December 31, 1986 of $32.1 million.

For illustrative purposes, Appendix 1 shows the unfunded actuarial liability (reflecting Bill C-41) to be $223.2 million on the basis of a set of dynamic economic assumptions whose main effect results from the assumption of higher interest rates in the early years.

The actuarial method is described in Section III.

III. Actuarial Method

The actuarial method used is known as the Unit Credit or Accrued Benefit Method. It contemplates contributions in any year sufficient to pay all future benefits in respect of service in that year. Benefits payable to retired judges and their survivors were assumed to accrue equally each year over the period from appointment age to assumed retirement age, varying between ages 65 and 75 in accordance with the assumed retirement rates in order to conform with the method included in the "Accounting Recommendations - April 1986" in respect of "Pension Costs and Obligations" issued by the Canadian Institute of Chartered Accountants.

The Normal Actuarial Cost (current service contributions) may be affected by changes in the underlying economic and demographic assumptions as well as by changes in the distribution of contributors by age and sex and relative salaries.

The actuarial liability is the actuarial present value of projected benefits in respect of service to the effective date of the valuation. It may be affected by net gains or losses from experience as well as by changes in assumptions.

In respect of the disability benefits for judges and survivor benefits payable on death before retirement (available without any service requirements), only the present value of benefits expected to become payable in the current year was included in the Normal Actuarial Cost (one-year term basis). Therefore, the actuarial liability in respect of active contributors includes no provision for these two benefits that might become payable in the future in respect of service before 1986.

IV. Valuation Assumptions

A. General Comments

After studying the actual experience during the five-year period ending December 31, 1985, other than economic assumptions were set as described in detail under the respective headings. These were combined with a traditional set of long-term economic assumptions for purposes of estimating long-term costs. However, for purposes of ascertaining the financial status of the plan on a reasonably realistic basis, a second valuation based on dynamic economic assumptions was made, the assumptions and results being shown in Appendix 1.

As noted in recent years in our reports on other public employer-sponsored pension plans, our primary purpose in treating these plans in a manner consistent with the practice for industrial pension plans is not to provide security through funding but to derive pension costs in an appropriate and reasonably comparable manner. Before discussing the various assumptions under individual headings, the following general comments relating to economic assumptions may be in order.

1. Effect of explicit or implicit level of inflation determining the general level of economic assumptions

   There are two aspects to the discussion under this heading:

   (a) The extent to which the required normal actuarial cost (current service contribution rate) is affected by the level of economic assumptions depends on the type of pension plan under consideration. For a pension plan of the career-average type, where the rate of interest is normally the sole economic assumption, a relatively higher level of interest produces a very substantially lower cost. For a final salary plan, such as provided by the Judges Act, where the effect of a relatively high assumed rate of interest tends to be offset to a large extent by the effect of an accompanying relatively high level of assumed salary increases, the effect is considerably smaller. Finally, for a fully indexed final salary plan, such as the pension provisions of the Judges Act combined with the applicable provisions of the Supplementary Retirement Benefits Act, the level of assumed inflation tends to have a very minor effect on normal costs if its relationship to assumed interest rates and general increases in salaries remains approximately the same.

(b) It seems unavoidable that actuaries, by their very act of attempting to use 'realistic' assumptions, influence expectations regarding future inflation and therefore actions affecting it. Thus, it may well be that the realism, desirable as it may appear to economists, accountants and actuaries, needs to be moderated, if there is to be any hope of maintaining a moderate long-term level of inflation.

2. <u>Effect of benefits beyond the terms of pension plans</u>

In recent years for a growing number of plans, in some cases as a result of collective bargaining, employers have adopted the practice of (a) making periodic ad hoc adjustments to pensions in payment to compensate for some or all of the purchasing power lost through inflation, and (b) increasing the benefits accrued to active members of flat-benefit or career-average type pension plans in order to keep earned pensions in a reasonable relationship to current rates of pay. When there is no explicit commitment under the terms of the plan for similar adjustments in the future, the normal actuarial cost and actuarial liabilities will include no provision for any future adjustments.

It might be argued, especially when adjustments occur with regularity, that the employer has made a strong moral commitment to maintain pension values at a certain level and that from an accounting point of view the costs are understated. It would be possible, of course, for the employer to make advance provision for future adjustments without contributing additional funds to the plan by setting up a special contingent liability in his balance sheet and by including the additions to such contingent liability account with the normal actuarial cost to the pension fund for purposes of assessing the total normal actuarial cost. Such practice might make for more valid comparison of the potential value of pensions under different plans and more equitable allocation of costs between different generations of shareholders, consumers and taxpayers. However, setting up a contingent liability in the employer's balance sheet might well be interpreted as converting a moral commitment into a promise, in which case the additional benefits should be considered part of the formal plan and funded in the same manner as basic benefits. For practical purposes, of course, this would eliminate the employer's option of updating benefits from time to time without any commitment regarding future adjustments.

B. Rate of Interest

For purposes of this review it was decided to use an assumed long-term rate of interest of 6.5% (see Appendix 1 for calculations on other assumptions). This rate is assumed to be composed of an inflation factor of 3.5% (the rate at which benefits are assumed to be indexed) and a real rate of return of about 3%*.

A rate of 3% is the long-term real rate of interest included in the recommendations of the Canadian Institute of Actuaries for the computation of minimum transfer values of fully indexed deferred pensions.

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* more precisely $\left(\frac{1.065}{1.035} - 1\right)$ or 2.899%

C. Salary Increases

For purposes of this valuation, we have assumed a level rate of general increases in salaries of 5%. This rate may be thought of as being composed of a 3.5% inflation factor and a 1.5%* factor for real general salary increases related to productivity and labour market conditions in the long-term. No promotional increases were assumed since the only promotions available are elevation to a higher court or to such positions as Chief Justice or Associate Chief Justice.

D. Rates of Retirement or Termination (for reasons other than death)

1. Rates of Termination with Return of Contributions

Based on the actual termination experience among contributors during the 1981-85 period the assumed rate was taken as 0.005 at all ages below 55 and as zero at higher ages.

2. Rates of Disability

The actual number of disabilities among contributors during the 1981-85 period was zero above age 70 and relatively small for ages below 60.

Rates of disability were derived directly from that experience and smoothed between the ages 60 and 70. These rates are shown in Appendix 3.

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*more precisely $\left(\frac{1.050}{1.035} - 1\right)$ or 1.449%

3. Rates of Retirement

On the basis of the actual number of retirements among contributors during the 1981-85 period the assumed rate of retirement was taken as 0.02 for ages 65 to 69 and 0.08 for ages 70 to 74, all remaining judges being assumed to retire at age 75.

It is to be noted that for the 196 judges with a compulsory retirement age of 70 (before the amendment), only those of the above rates assumed for ages 65 to 69 are applicable (a rate of 100% being applied at age 70). Only for purposes of estimating the impact of Bill C-41 is the full range of retirement rates applicable to all judges.

E. Rates of Mortality and Remarriage and Probability of Student Eligibility

1. Active Contributors

Although the actual number of deaths during the 1981-85 period was small, it was deemed that the 1983 GAM Table would be a good representation of expected mortality among contributors. Therefore, this basis (varying by sex) was used and is shown in Appendix 3.

2. Former contributors entitled to annuities

Different mortality rates generally apply to persons entitled to pensions because of disability as compared to persons entitled for other reasons. The 1983 GAM Table (varying by sex), when applied to both types of pensioners but with a three-year rating-up in age for the disabled, was found to provide a reasonable margin for expected continued increases in longevity. This basis was adopted for the valuation. The rates are shown in Appendix 4.

3. Surviving Spouses

The mortality rates adopted for the valuation of benefits to non-disabled former contributors were found to be equally appropriate for the valuation of annuities to both present and prospective surviving spouses. The remarriage rates are the same rates as used for purposes of the actuarial report on the Canada Pension Plan as at December 31, 1985.

The mortality rates and samples of the remarriage rates are shown in Appendices 4 and 5, respectively.

4. Children and Students

Annuities to children are payable up to age 18 in all circumstances and from age 18 up to age 25 if the child is unmarried and attending a school or university. The effect of mortality amongst these annuitants was ignored.

For purposes of valuing annuities in payment for students, the probability of a student at any age remaining eligible for allowance at the end of one year was derived from recent experience under the Canadian Forces Superannuation Act. These probabilities were used and are shown in Appendix 6.

F. Proportions of deceased contributors leaving eligible spouses, and Average ages of spouses corresponding to ages of contributors at death

The proportions leaving eligible spouses and the average ages of the surviving spouses are shown for quinquennial ages in Appendix 6.

V. Statistical and Accounting Data

The Office of the Commissioner for Federal Judicial Affairs (and the Office of the Registrar of the Supreme Court of Canada with respect to judges on that Court) provided seriatim records showing basic data on judges, former judges and survivors. All records were examined for consistency, interrelationships and general reasonableness with regard to individual members or survivors.

Tables derived from those records show pertinent statistics concerning contributors (Appendix 7), former contributors (Appendix 8A) and surviving spouses (Appendix 8B).

Information regarding the applicable portion of the balance in the Supplementary Retirement Benefits Account was obtained from the Office of the Comptroller General. Accumulated contributions had to be estimated due to the difficulty in obtaining actual data.

VI. Contributions and Costs

Using the actuarial method and the assumptions described in Sections III and IV, respectively, and the distribution of active contributors as at December 31, 1985 summarized in Appendix 7, the normal actuarial cost, i.e., the total rate that would be required from contributors and the Government combined to reflect the cost of future benefits in respect of current service was calculated to be 30.0% and 27.0% of salaries for the old and new plans, respectively.

After making allowance for the two different contribution rates prescribed under the Judges Act (1.5% or 7% depending upon the date of appointment), contributions from judges were calculated to be equal to approximately 5.1% of salaries, leaving an implicit Government cost of 24.9% of salaries or an amount equal to 4.9 times the contributions from judges for the old plan and 21.9% of salaries or 4.3 times judges' contributions for the new plan. Other things being equal, the Government cost would become smaller as the effective rate of contributions from contributors becomes greater as a result of judges contributing at 1.5% being gradually replaced (through attrition) by judges contributing at 7%.

If the plan were operated in accordance with normal pension practices, any actuarial losses attributable to adverse experience as compared to the valuation assumptions after allowing for any gains, would be amortized following presentation of periodic actuarial reports.

VII. Valuation Balance Sheet

The results of the valuation as at December 31, 1985 based on the actuarial method and the assumptions described in Sections III and IV, respectively, are summarized in the following balance sheet.

Assets

	Old Plan	New Plan
	(thousands)	
Balance in Supplementary Retirement Benefits Account in respect of judges	$ 5,858	$ 5,858
Total Assets	5,858	5,858
Unfunded Actuarial Liability	319,683	301,789
	$325,541	$307,647

Liabilities

		Old Plan	New Plan
		(thousands)	
Actuarial present value of prospective benefits to and in respect of active contributors		$170,362	$152,468
Actuarial present value of future benefits to persons entitled to an annuity			
Former judges	$ 89,669		
Spouses	65,363		
Children	147	155,179	155,179
Total Liabilities		$325,541	$307,647

The foregoing balance sheet indicates an unfunded (unrecorded) actuarial liability as at December 31, 1985, of $319.7 million and $301.8 million for the old and new plans, respectively.

A supplementary balance sheet for the new plan, based on dynamic economic assumptions, is presented in Appendix 1.

VIII. Actuarial Opinion and Acknowledgements

In conclusion, we wish to acknowledge the participation of the Office of the Commissioner for Federal Judicial Affairs and of the Office of the Registrar of the Supreme Court of Canada which provided the valuation data for judges and former judges subject to the Judges Act and their survivors as at the valuation date.

The work on this actuarial review was largely carried out by Claude Gagné, F.C.I.A., with advice from A.C. Cushing, F.C.I.A., under the direction of Pierre Treuil, F.C.I.A.

In my opinion, for the purposes of this actuarial report

(a) the data on which this report is based are sufficient and reliable,

(b) the assumptions that have been used are adequate and appropriate,

(c) the methods that have been employed are consistent with sound actuarial principles.

This report has been prepared and this opinion has been given in accordance with generally accepted actuarial principles and the Recommendations of the Canadian Institute of Actuaries.

Respectfully submitted,

Walter Riese, F.S.A., F.C.I.A.
Chief Actuary

Office of the Superintendent
of Financial Institutions
Ottawa, Canada
KIA OH2

August 25, 1987

APPENDIX 1

Valuation Balance Sheet using dynamic economic assumptions (and reflecting Bill C-41)

This balance sheet is constructed using the methods and assumptions described in Sections III and IV of this report, except that in contrast to the balance sheet in Section VII dynamic economic assumptions are used.

The purpose of these assumptions is to take account of the relatively high interest rates that are expected to continue for some time and at the same time to recognize in the short term increases in the Consumer Price Index and general salary levels slightly different from the long-term assumptions.

There is a danger in this approach, under the present economic circumstances, in that it may eliminate any expected actuarial gain from investment earnings that could cushion the effect of future actuarial losses from salary increases and indexing in excess of the assumed rates. Accordingly, an explicit margin was introduced into the assumed rates of interest.

It must be noted that except for a relatively small balance in the Supplementary Retirement Benefits Account, no assets have been accumulated for this plan. Therefore, for practical purposes there is no invested or notional fund which would have benefitted from the relatively high interest rates available in recent years.

For illustrative purposes, it was assumed that the funds of this plan would be commingled with those of the Public Service, Canadian Forces and RCMP Superannuation Accounts and notionally invested in similar fashion in long-term Government of Canada bonds, and expected interest earned on the funds was projected accordingly. Consistent with this assumption, it was thought appropriate to assume an ultimate new money rate of 6% rather than 6.5% in conjunction with an ultimate rate of increase in the CPI of 3.5%, implying an ultimate real rate of return of 2.5% (or more precisely, 2.415%) rather than 3% (or more precisely, 2.899%).

Dynamic Economic Assumptions

	Rates of Interest					
Year	Assumed New Money Rate	Projected Fund Yield	Assumed Fund Yield	Assumed Increases in CPI	Assumed Salary Increases	Assumed Rates of Indexing
	%	%	%	%	%	%
1986*	diverse	11.1	10.1	4.1	3.5	3.9
1987*	9.6	11.1	10.1	3.9	2.8	4.1
1988	8.8	11.1	10.1	3.8	3.5	4.0
1989	8.2	11.0	10.0	3.0	3.7	3.8
1990	8.0	10.8	9.8	2.9	4.0	3.2
1991	7.8	10.7	9.7	3.0	3.6	2.9
1992	7.7	10.5	9.5	3.0	3.4	3.0
1993	7.5	10.4	9.4	3.2	3.6	3.0
1994	7.3	10.3	9.3	3.5	4.0	3.2
1995	7.0	10.1	9.1	3.5	4.5	3.4
1996	6.8	9.9	8.9	3.5	5.0	3.5
1997	6.5	9.7	8.7	3.5	5.0	3.5
1998	6.3	9.5	8.5	3.5	5.0	3.5
1999	6.0	9.3	8.3	3.5	5.0	3.5
2000	6.0	9.0	8.0	3.5	5.0	3.5
2001	6.0	8.7	7.7	3.5	5.0	3.5
2002	6.0	8.2	7.2	3.5	5.0	3.5
2003	6.0	7.8	6.8	3.5	5.0	3.5
2004	6.0	7.6	6.6	3.5	5.0	3.5
2005	6.0	7.2	6.2	3.5	5.0	3.5
2006	6.0	6.9	6.0	3.5	5.0	3.5
2007	6.0	6.7	6.0	3.5	5.0	3.5
2008	6.0	6.6	6.0	3.5	5.0	3.5
2009	6.0	6.5	6.0	3.5	5.0	3.5
2010	6.0	6.4	6.0	3.5	5.0	3.5
2011	6.0	6.3	6.0	3.5	5.0	3.5
2012	6.0	6.2	6.0	3.5	5.0	3.5
2013	6.0	6.2	6.0	3.5	5.0	3.5
2014	6.0	6.1	6.0	3.5	5.0	3.5
2015	6.0	6.1	6.0	3.5	5.0	3.5
2016 & later	6.0	6.0	6.0	3.5	5.0	3.5

* Factors for 1986 as well as the salary increases and the rate of indexing for 1987 are based on actual experience. The new money rate for 1986 varied between 9.6% and 11.0%. For the following years, the salary increases effective April 1 and the rates of indexing effective January 1 are based, respectively, on assumed increases in average salaries (ratio of Industrial Aggregate for preceding year to corresponding value one year earlier) and in the Consumer Price Index (increase of the average CPI for twelve months ending the previous September over the average one year earlier); the assumed increases in average salaries and the Consumer Price Index to 1992 are consistent with the projections developed for the White Paper entitled Tax Reform 1987.

Balance Sheet based on Dynamic Economic Assumptions
(as at December 31, 1985, but reflecting Bill C-41)

Assets

	(thousands)
Share of contributors under the Judges Act in Supplementary Retirement Benefits Account (SRBA)	$ 5,858
Total Assets	$ 5,858
Unfunded actuarial liability	$223,157
	$229,015

Liabilities

Actuarial present value of prospective benefits to and in respect of contributors under the Judges Act	$101,475
Actuarial present value of future benefits to persons entitled to an annuity under the Judges Act	127,540
Total Liabilities	$229,015

The balance sheet suggests that through the use of dynamic economic assumptions, the total actuarial liabilities and, therefore, the notional unfunded actuarial liability as at December 31, 1985 might be reduced by about $78.6 million. The annual payment required to amortize the unfunded (unrecorded) liability over 15 years beginning in 1986 would be reduced from $32.1 to $28.9 million.

The margin which, as noted above, was introduced into the assumed rates of interest had the effect of increasing the total liabilities by $20.4 million.

APPENDIX 2

Summary of provisions of the pension plan established under the Judges Act and the relevant provisions of the Supplementary Retirement Benefits Act

(The explanatory notes referred to in this Appendix are given in Section D)

A. Coverage

Persons covered by this plan comprise

(a) all federally appointed judges to federal and provincial courts,

(b) former judges who are entitled to annuities payable under the Judges Act,

(c) surviving spouses and children who are entitled to annuities payable under the Judges Act.

B. Contributions from Judges and Credit from the Government

By Contributor

The rates of contribution payable until retirement are as follows:

Date of Appointment	
Before February 17, 1975	- 1.5% of salary directly to the Consolidated Revenue Fund
After February 16, 1975	- 6% of salary to the Consolidated Revenue Fund and 1% of salary to the Supplementary Retirement Benefits Account in the Consolidated Revenue Fund.

By Government

The Government makes credits to the Supplementary Retirement Benefits Account as follows:

(a) in each quarter, an amount equal to the total amount paid into the said Account during that quarter by way of contributions in respect of current service rendered by contributors,

(b) in each quarter, an amount representing interest calculated on the monthly balance in the Account at a rate of interest representative of the yield on outstanding Government of Canada Bonds having a term to maturity of five years, less 0.125%.

C. Summary of Benefits

1. Contributors

Type of Termination	Benefit depending on service (Note 1) Under 10 years of service	 10 or more years of service
Resignation (Note 2)	Return of contributions (Note 3)	Return of contributions
Elective retirement because of age (Note 2)	Return of contributions	1) With 10 to 15 years: return of contributions 2) With 15 or more years: immediate annuity (Note 4)
Compulsory retirement because of age (Note 2)	Immediate annuity prorated by the ratio that the number of years of service bears to 10 years	Immediate annuity

Type of Termination	Benefit depending on service (Note 1) Under 10 years of service	10 or more years of service
Resignation or retirement conducive to better administration of justice or in national interest	Return of contributions	1) With 10 to 15 years: return of contributions 2) With 15 or more years: immediate annuity
Retirement because of disability	Immediate annuity	Immediate Annuity
Death leaving no spouse or eligible children under age 25 (Note 5)	Return of contributions to the estate	Return of contributions to the estate
Death leaving spouse and/or eligible children under age 25	Annuity to surviving spouse and/or children (Notes 6 and 7)	Annuity to surviving spouse and/or children

2. Former contributors entitled to immediate annuities

Type of Termination	Benefit
Death leaving no spouse or eligible children under age 25	Residual benefit (Note 7)
Death leaving spouse and/or eligible children under age 25	Annuity to surviving spouse and/or children

3. Indexing

Under the Supplementary Retirement Benefits Act (SRBA) benefit adjustments corresponding to increases in the Consumer Price Index are provided for persons in receipt of pensions payable pursuant to various statutes. This Act applies to former judges and to surviving spouses and children entitled to annuities under the Judges Act.

The supplementary benefit is calculated by multiplying the amount of the annuity to which the person is entitled under the Judges Act by the ratio of the Benefit Index for the year of payment to the Benefit Index for the year in which the person in respect of whose service the pension is payable ceased to be a member of the judiciary, and subtracting the amount of the annuity. The Benefit Index for the years prior to 1971 is shown in a Schedule to the Act. The Benefit Index for any year after 1970 is equal to the Benefit Index for the preceding year multiplied by the average of the Consumer Price Index for Canada for the twelve-month period ending on September 30 of that preceding year and divided by the corresponding average for a period one year earlier.

Prior to 1973, the increase in the Benefit Index was limited to a maximum of 2% in any year. An amendment to the Supplementary Retirement Benefits Act in 1973 removed that limit and provided that the increase payable in January 1974 would take into account increases in the Consumer Price Index above the 2% ceiling since 1970. In January 1983, an amendment made as part of a general economic restraints program limited the increase for 1983 and 1984 to 6.5% and 5.5%, respectively.

Prior to January 1, 1974, the Supplementary Retirement Benefits Act provided that all supplementary benefits would be charged to the Account. Since that date, benefits paid in respect of a former contributor are charged to the Account only until their accumulated total equals the aggregate of all amounts credited to that Account in respect of that person, including interest. Supplementary benefits paid in excess of that aggregate are then charged to the Consolidated Revenue Fund. The Act also provides for a return of contributions paid by a member to the Supplementary Retirement Benefits Account, to the extent that such contributions exceed any benefit that has been or may be paid to or in respect of the member.

D. Explanatory Notes to Summary of Benefits in Section C of this Appendix

Note 1: Service

For purposes of the plan, "service" denotes holding "judicial office" which means the office of a judge of a superior or county court or of the Tax Court of Canada, and includes the office of a person who by virtue of section 60 of the Federal Court Act is a deputy judge. Superior court is interpreted to include the Supreme Court of Canada and county court to include any district court.

Note 2: Resignation and Retirement because of age

In this summary, "resignation" means ceasing to hold judicial office before reaching age 65, while "retirement because of age" means ceasing to hold judicial office on or after reaching the prescribed minimum retirement age (65), provided the contributor is not being retired because of disability.

Prior to the amendment, retirement was compulsory at age 70 for judges of the Tax Court of Canada as well as for judges appointed to the Federal Court of Canada after May 31, 1971 or to a county or district court after October 6, 1971 and at age 75 for all other judges. The exceptional provision for compulsory retirement at age 70 applicable to some judges was removed by Bill C-41. Retirement before the applicable compulsory retirement age is said to be "elective", as opposed to "compulsory".

Note 3: Return of Contributions

"Return of Contributions" means payment of an amount equal to the total current service contributions paid by a contributor plus interest at the rate of 4% per annum to December 31st of the year immediately preceding the year the contributor ceased to hold judicial office. Interest is credited each December 31st on the accumulated contributions with interest as at the preceding December 31st.

Note 4: Immediate Annuity

"Immediate Annuity" means an annuity that becomes payable immediately upon retirement or disability. The annual amount of the annuity is equal to two-thirds of the contributor's annual salary at the time he ceases to hold office, or of the current salary in the case of a Chief or Associate Chief Justice or Chief or Associate Chief Judge, if such office was formerly held.

Annuities are payable pro rata for any period less than a year and are paid in monthly instalments.

Note 5: Eligible Children

Eligible children under 25 include all children of the contributor under age 18, and any child of the contributor over age 18 and under 25, unmarried and in full-time attendance at a school or university, having been in such attendance substantially without interruption since he or she reached age 18 or the contributor died, whichever occurred later.

Note 6: Annuities to surviving spouse and children

Annuities to the surviving spouse and children of a contributor or former contributor are annuities that become payable immediately upon the death of the contributor. The annual amounts of the annuities are determined with references to the contributor's salary or former contributor's pension and are payable in monthly instalments.

The annuity to the surviving spouse is equal to one-third of the annual salary of the deceased contributor at the time of death or to one-half of the former contributor's annuity at the time of death.

A surviving spouse is entitled to this annuity except under the following circumstances:

(a) If at the date of the death of the judge, the surviving spouse was in receipt of an annuity granted under the Judges Act.

(b) If the surviving spouse married the judge after the judge ceased to hold office

(c) If a surviving spouse remarries, the payment of any annuity is suspended but is resumed in the event of dissolution or annulment of that marriage or death of his or her spouse by that marriage. In lieu of any further claim to the payment of the annuity, an amount equal to the return of contributions less the total amount of benefit payments made to the contributor and to the surviving

> spouse and children may be paid to the surviving spouse at any time before the dissolution or annulment of that marriage or the death of the spouse by that marriage, if there is no child of the contributor entitled to an annuity.

The annuity to an eligible child is equal to one-fifth of the annuity to the surviving spouse or, if the contributor dies leaving no spouse or the spouse dies subsequently, to two-fifth of the annuity that otherwise would have been granted to the surviving spouse, provided that the total amount of annuities to children shall not exceed four-fifth of the annuity to the surviving spouse or, if the contributor dies without leaving a spouse or the spouse dies subsequently, eight-fifth of that annuity.

Note 7: Residual Benefit

If on the death of a contributor there is no person to whom an annuity provided under the terms of the Act may be paid, or if the persons to whom such annuities may be paid die or cease to be entitled thereto and no other amount may be paid to them a residual benefit may be payable to the estate.

The residual benefit is equal to the amount by which the "return of contributions" exceeds the aggregate of all amounts paid to those persons and to the contributor.

The "return of contributions" is also payable to judges contributing at the rate of 1.5% of salary if at retirement or disability there are no eligible survivors, or if at any time thereafter all eligible survivors have died or ceased to be eligible.

APPENDIX 3

Rates of Decrement for Active Contributors

Age	Return of Contributions	Disability	Retirement	Mortality Males	Mortality Females
30	0.00500	0.00100		0.00061	0.00034
35	0.00500	0.00100		0.00086	0.00048
36	0.00500	0.00100		0.00091	0.00050
37	0.00500	0.00100		0.00097	0.00054
38	0.00500	0.00100		0.00104	0.00057
39	0.00500	0.00100		0.00113	0.00062
40	0.00500	0.00100		0.00124	0.00067
41	0.00500	0.00100		0.00137	0.00072
42	0.00500	0.00100		0.00153	0.00078
43	0.00500	0.00100		0.00172	0.00084
44	0.00500	0.00100		0.00193	0.00092
45	0.00500	0.00100		0.00218	0.00101
46	0.00500	0.00100		0.00247	0.00112
47	0.00500	0.00100		0.00279	0.00124
48	0.00500	0.00100		0.00314	0.00137
49	0.00500	0.00100		0.00351	0.00151
50	0.00500	0.00100		0.00391	0.00165
51	0.00500	0.00100		0.00432	0.00179
52	0.00500	0.00100		0.00476	0.00195
53	0.00500	0.00100		0.00520	0.00212
54	0.00500	0.00100		0.00566	0.00232
55	0.00000	0.00100		0.00613	0.00254
56	0.00000	0.00100		0.00662	0.00280
57	0.00000	0.00100		0.00714	0.00310
58	0.00000	0.00100		0.00772	0.00344
59	0.00000	0.00100		0.00838	0.00382
60	0.00000	0.00100		0.00916	0.00424
61	0.00000	0.00300		0.01006	0.00470
62	0.00000	0.00500		0.01113	0.00521
63	0.00000	0.00700		0.01239	0.00577
64	0.00000	0.00900		0.01387	0.00639
65	0.00000	0.01100	0.02000	0.01559	0.00706
66	0.00000	0.01300	0.02000	0.01758	0.00782
67	0.00000	0.01500	0.02000	0.01980	0.00868
68	0.00000	0.01700	0.02000	0.02223	0.00970
69	0.00000	0.01900	0.02000	0.02482	0.01092
70	0.00000	0.00000	0.08000	0.02753	0.01239
71	0.00000	0.00000	0.08000	0.03035	0.01413
72	0.00000	0.00000	0.08000	0.03337	0.01616
73	0.00000	0.00000	0.08000	0.03668	0.01848
74	0.00000	0.00000	0.08000	0.04039	0.02109

APPENDIX 4

Rates of Mortality assumed for non-disabled former judges and surviving spouses entitled to annuities

Age	Males	Females	Age	Males	Females
30	.000607	.000342	70	.027530	.012385
31	.000645	.000364	71	.030354	.014128
32	.000687	.000388	72	.033370	.016159
33	.000734	.000414	73	.036680	.018481
34	.000785	.000443	74	.040388	.021091
35	.000860	.000476	75	.044597	.023992
36	.000907	.000502	76	.049388	.027184
37	.000966	.000535	77	.054758	.030672
38	.001039	.000573	78	.060678	.034459
39	.001128	.000617	79	.067125	.038549
40	.001238	.000665	80	.074070	.042945
41	.001370	.000716	81	.081484	.047655
42	.001527	.000775	82	.089320	.052691
43	.001715	.000841	83	.097525	.058071
44	.001932	.000919	84	.106047	.063807
45	.002183	.001010	85	.114836	.069918
46	.002471	.001117	86	.124170	.076570
47	.002790	.001237	87	.133870	.084459
48	.003138	.001366	88	.144073	.091935
49	.003513	.001505	89	.154859	.101354
50	.003909	.001647	90	.166307	.111750
51	.004324	.001793	91	.178214	.123076
52	.004755	.001948	92	.190460	.135630
53	.005200	.002119	93	.203007	.149577
54	.005660	.002315	94	.217904	.165103
55	.006131	.002541	95	.234086	.182419
56	.006618	.002803	96	.248436	.201757
57	.007139	.003103	97	.263954	.222043
58	.007719	.003442	98	.280803	.243899
59	.008384	.003821	99	.299154	.268185
60	.009158	.004241	100	.319185	.295187
61	.010064	.004702	101	.341086	.325225
62	.011133	.005210	102	.365052	.358897
63	.012391	.005769	103	.393102	.395842
64	.013868	.006385	104	.427255	.438360
65	.015592	.007064	105	.469531	.487816
66	.017579	.007817	106	.521945	.545886
67	.019804	.008681	107	.586518	.614309
68	.022229	.009702	108	.665268	.694884
69	.024817	.010921	109	.760215	.789474

APPENDIX 5

Assumed Rates of Remarriage for Surviving Spouses

Widows

Age at becoming widow	Select Rates Year of Widowhood 1st yr.	3rd yr.	5th yr.	Age	Ultimate Rates*
30	.029	.086	.076	35	.040
35	.018	.048	.042	40	.025
40	.011	.027	.023	45	.014
45	.006	.015	.012	50	.008
50	.004	.008	.006	55	.004
55	.002	.004	.003	60	.002

Widowers

Age at becoming widower	Select Rates Year of being a widower 1st yr.	3rd yr.	5th yr.	Age	Ultimate Rates*
30	.065	.215	.198	35	.139
35	.047	.130	.116	40	.094
40	.031	.078	.069	45	.059
45	.019	.048	.040	50	.027
50	.013	.028	.022	55	.014
55	.008	.014	.011	60	.009

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* Rates are duration-specific (select) for 14 years for widows, 5 years for widowers.

APPENDIX 6

Proportions of Deceased Contributors Leaving Eligible Spouses, Average Age of Spouse Corresponding to Age of Contributor at Death and Proportions of Students Entitled to Annuities

Age at Death	Proportions Leaving Eligible Spouses	Average Age of Spouse	
		Female	Male
30	0.839	29	32
35	0.896	34	37
40	0.919	38	42
45	0.957	43	47
50	0.963	47	52
55	0.965	52	57
60	0.964	56	62
65	0.792	61	67
70	0.729	65	72
75	0.635	69	77
80	0.513	73	82
85	0.378	76	87
90	0.251	78	92
95	0.129	79	97
100	0.012	80	102

Proportions of Students Entitled to Annuities Remaining Eligible for Annuities at the end of the year of age

Age	Proportion
18	0.50
19	0.65
20	0.80
21	0.60
22	0.50
23	0.50
24	0.30

APPENDIX 7A

Male Contributors as at December 31, 1985

Number of Contributors
and
Average Current Salary

Age/Serv	0-4	5-9	10-14	15-19	20-24	25-29	30-34	0-34
35-39	4 105000							4 105000
40-44	16 103750	1 105000						17 103824
45-49	39 103775	17 102647	1 105000	1 100000				58 103401
50-54	64 103498	56 103343	26 105023	2 114600				148 103858
55-59	60 103157	59 103089	56 105091	12 104167				187 103779
60-64	31 103275	55 103182	49 104508	24 104329	9 101914	1 100000		169 103660
65-69	11 103536	19 101754	40 103911	13 104938	18 103272	2 109450	1 105000	104 103612
70-74	1 105000	- -	8 105488	19 103889	22 106895	6 106483	2 102500	58 105490
75	- -	- -	2 102500	4 103750	1 105000	2 105000		9 103889
35-75	226 103478	207 103033	182 104653	75 104483	50 104657	11 106164	3 103333	754 103856

Average Age: 58.7

Average Service: 9.5

APPENDIX 7B

Female Contributors as at December 31, 1985

Number of Contributors
and
Average Current Salary

Age/Serv	0-4	5-9	10-14	15-19	20-24	0-24
35-39	5 103000					5 103000
40-44	8 105000	2 102500				10 104500
45-49	5 98666	2 105000				7 100476
50-54	3 105000	3 114633	1 105000			7 109129
55-59	4 101250	1 100000	2 105000			7 102143
60-64	1 100000	3 111400	2 102500	1 105000	1 113900	8 107263
65-69	- -	- -	1 105000	- -	- -	1 105000
35-69	26 102628	11 108464	6 104167	1 105000	1 113900	45 104563

Average Age: 50.4

Average Service: 5.6

APPENDIX 8A

Retired Contributors as at December 31, 1985

Age	Other than Disability Pension: Number M	F	Total	Annual Pension* ($)	Disability Pension: Number M	F	Total	Annual Pension* ($)
55-59	1	-	1	27,996	2	-	2	127,897
60-64	-		-	-	4	-	4	250,569
65-69	5	-	5	341,361	9	-	9	556,148
70-74	13	-	13	847,787	6	-	6	413,127
75-79	53	-	53	3,348,406	3	-	3	225,397
80-84	39	-	39	2,700,619	-	-	-	-
85-89	15	-	15	1,043,821	1	-	1	41,718
90-94	4	-	4	164,116	-	-	-	-
95-99	1	-	1	35,546	-	-	-	-
Total	131	-	131	8,509,652	25	-	25	1,614,856

* Amounts reflect accrued indexation (Supplementary Retirement Benefits) to January 1, 1986, except for the amount of $27,996 which excludes accrued indexation of $14,076 that is not payable until age 60 for non-disability pensions.

APPENDIX 8B

Surviving Spouses as at December 31, 1985

Age	Number F	Number M	Number Total	Yearly Annuity* ($)
45-49	1	-	1	36,107
50-54	3	-	3	92,051
55-59	10	-	10	291,677
60-64	19	-	19	618,251
65-69	20	-	20	588,452
70-74	30	-	30	890,427
75-79	44	-	44	1,300,525
80-84	51	-	51	1,380,706
85-89	28	-	28	738,717
90-94	16	-	16	370,237
95-99	2	-	2	45,483
Total	224	-	224	6,352,633

* Amounts reflect accrued indexation (Supplementary Retirement Benefits) to January 1, 1986.