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

Pension Plan for Members of Parliament

Actuarial Report

(including cost certificate)

as at December 31, 1988

Canada

PENSION PLAN

FOR

MEMBERS OF PARLIAMENT

ACTUARIAL REPORT

(including Cost Certificate)

AS AT DECEMBER 31, 1988

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

Ottawa, Canada
K1A 0H2

June 25, 1990

The Honourable Robert de Cotret
President of the Treasury Board
Ottawa, Canada
K1A 0R5

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 as at December 31, 1988, of the pension plan established under the Members of Parliament Retiring Allowances Act. The report includes a cost certificate required in accordance with section 5 of the Public Pensions Reporting Act.

Subsection 9(1) of the Public Pensions Reporting Act requires a report filed with the Minister while Parliament is sitting to be laid before Parliament within thirty sitting days of its being filed. If Parliament is not then sitting, the Act requires the report to be laid before Parliament on any of the first thirty days thereafter that Parliament is sitting.

Respectfully submitted,

G.W. Poznanski
Chief Actuary

Canada

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PUBLIC PENSIONS REPORTING ACT

Report on the actuarial review as at December 31, 1988 of the pension plan established under the Members of Parliament Retiring Allowances Act

I. Introduction

The last actuarial review of the pension plan established under the Members of Parliament Retiring Allowances Act (MPRAA) was conducted as at December 31, 1985. Pursuant to paragraphs 3(1)(b) and 3(3)(a) of the Public Pensions Reporting Act (PPRA), the present review was conducted as at December 31, 1988. This report describes the results of the valuation and contains the cost certificate required by section 5 of the PPRA.

The Parliament of Canada Act restricts annual increases in remuneration to one percentage point below the lesser of the increase in the Consumers Price Index (CPI) and the increase in the Industrial Aggregate (average weekly wages and salaries). The current Members of Parliament Retiring Allowances Regulations stipulate that the interest to be credited to the Members of Parliament Retiring Allowances Account (MPRA Account) in respect of each quarter in each fiscal year shall be calculated at the rate of 2 1/2 per cent of the balance to the credit of the Account on the last day of the preceding quarter.

For the purpose of establishing costs, it is more appropriate to assume that ad hoc adjustments to the remuneration of Members of the House of Commons and of the Senate may well be made from time to time so as to maintain a reasonably consistent relationship between the remuneration and the Industrial Aggregate. Similarly, it would be prudent to assume that should the general level of interest rates change, the Regulations that stipulate the interest to be credited to the Account may be amended.

For this valuation we have assumed that the remuneration of the Members of the House of Commons and of the Senate will generally reflect the increases in the Industrial Aggregate and that the interest rate credited to the Account will follow the average rate credited to the combined Public Service Superannuation Account, the Canadian Forces Superannuation Account and the RCMP Superannuation Account. This rate is based on the returns realized on notional investments made by these Accounts in 20-year Government of Canada Bonds.

Appendix 1 of the report contains results determined on assumptions that reflect the stipulations in the Parliament of Canada Act regarding the rate of increase in the remuneration.

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

There were no changes in the benefit provisions of the plan during the intervaluation period from January 1, 1986 to December 31, 1988. However, Bill C-24, which received Royal Assent on June 29, 1989, repealed the provisions for suspending annuity entitlements of surviving spouses upon remarriage and of children between the ages of 18 and 25 in full-time attendance at a school or university upon marriage. Moreover, previously suspended annuities became eligible for reinstatement effective June 29, 1989. The effect of this change in benefit provisions has been valued in this review as if the change had been implemented as of the review date of December 31, 1988. We believe that the resulting overstatement in the liability is insignificant.

A summary description of the benefits provided under the plan is contained in Appendix 2.

II. Cost Certificate

Based on applying the actuarial methods and assumptions briefly described in Sections III and IV* to the data summarized in Appendices 7 and 8, we estimated the normal costs (the annual contributions required to provide benefits accruing in respect of a specified year of future service) to be the following percentages of Pensionable Payroll** for the three years following the review date:

Year	Group	Payable by Contributors %	Effective Cost to Government %	Total Normal Cost %
1989	House of Commons	11.1	34.7	45.8
	Term Senators	7.3	10.9	18.2
	Life Senators	7.0	4.1	11.1
	Total	10.3	29.2	39.5
1990	House of Commons	11.1	37.2	48.3
	Term Senators	7.3	11.2	18.5
	Life Senators	7.0	3.3	10.3
	Total	10.3	31.3	41.6
1991	House of Commons	11.1	39.4	50.5
	Term Senators	7.3	11.8	19.1
	Life Senators	4.0	6.0	10.0
	Total	10.3	33.3	43.6

We estimated the corresponding unfunded actuarial liability as at December 31, 1988 (the excess of the present value of projected benefits assumed to have accrued in respect of service to that date over the value of the assets of the plan as of the same date) to be $144.4 million.

The cost figures in this report pertain to pensions based on sessional indemnities and additional allowances, combined.

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* See Appendices 3 and 4 for greater detail.

** Pensionable Payroll includes

a) sessional indemnities for (i) Members of the House of Commons with less than 15 years service to their credit, (ii) Term Senators with less than 25 years' service to their credit, and (iii) Life Senators, and

b) additional allowances for which voluntary contributions are being paid by Members of the House of Commons and Term Senators.

The Pensionable Payroll at January 1, 1989 was estimated in millions of dollars, to be:

	(1) Sessional Indemnities	(2) Additional Allowances	(3) Total
House of Commons	$15.8	$2.3	$18.1
Term Senators	4.6	0.1	4.7
Life Senators	0.5	N/A	0.5
Total	$20.9	$2.4	$23.3

We estimated on the above basis that the 1989 normal cost is $9.2 million (.395 times $23.3 million). In addition the Prime Minister contributes 7% of his salary as Prime Minister and the government matches this amount.

We believe that the normal costs and the unfunded actuarial liability are a realistic assessment of the financial position of this plan. However, it is important to recognize the nature of the underlying assumptions. The dynamic economic assumptions we have used make allowance for the high rates of interest earned by the combined notional investments of the Public Service Superannuation Account, Canadian Forces Superannuation Account and the RCMP Superannuation Account. They contain relatively small margins for increases in remuneration.

(The term "dynamic economic assumptions" refers to the fact that the economic assumptions for interest, cost of living and increases in remuneration vary by calendar year; they do not remain static into the future).

The possible recurrence of higher levels of increases in the Industrial Aggregate and in prices and a return to more traditional levels of real interest rates could produce substantial new estimation adjustments (unfunded actuarial liabilities). Some protection against this is provided by the margin in the assumed valuation interest rates. For a number of years these rates are somewhat lower than the projected fund yields; if this margin were removed, total liabilities would be reduced by $19.3 million and total normal cost would be reduced by 5.6% of Pensionable Payroll in 1989.

The dynamic economic assumptions include interest rates, increases in remuneration and increases in the CPI which reach ultimate levels of 6%, 4.8% and 3.5%, respectively. If these rates had been assumed to apply, beginning at the date of valuation, the normal costs would have appeared as the following percentages of Pensionable Payroll:

Year	Group	Payable by Contributors %	Effective Cost to Government %	Total Normal Cost %
1989	House of Commons	11.1	56.7	67.8
	Term Senators	7.3	19.5	26.8
	Life Senators	7.0	7.4	14.4
	Total	10.3	48.1	58.4
1990	House of Commons	11.1	57.3	68.4
	Term Senators	7.3	18.9	26.2
	Life Senators	7.0	6.0	13.0
	Total	10.3	48.5	58.8
1991	House of Commons	11.1	57.7	68.8
	Term Senators	7.3	19.3	26.6
	Life Senators	4.0	8.6	12.6
	Total	10.3	49.2	59.5

These costs may be considered to represent the ultimate level of costs that could be expected to be reached in the future.

III. Actuarial Method

The actuarial method we used is the Unit Credit or Accrued Benefit Method. It contemplates contributions in any one year (normal cost) sufficient to fund all future benefits in respect of service in that year.

The actuarial liability is the actuarial present value of projected benefits assumed to have accrued in respect of service to the effective date of valuation; that is, to December 31, 1988.

For this review we applied the valuation method in accordance with the current recommendations of the Canadian Institute of Chartered Accountants for accounting for pension obligations in government financial statements "Public Sector Accounting Statement 5" dated November 1988. This application differs from that used for the review as at December 31, 1985. The details of the differences are described in Appendix 3.

IV. Actuarial Assumptions

Actuarial assumptions used in the valuation include economic assumptions and demographic assumptions.

We developed the dynamic economic assumptions after consultation with the Department of Finance and the Treasury Board Secretariat. In developing these assumptions, we used the projections contained in the February 1990 budget.

	Rates of Interest				Industrial	January 1	January 1
Year	New Money	Projected Fund Yield*	Valuation Rate	CPI Increases**	Aggregate Increases**	Pension Indexing***	Remuneration Increases***
	%	%	%	%	%	%	%
1989	10.0****	11.1****	10.1****	5.0****	5.0****	4.1****	3.1****
1990	10.2	11.0	10.0	4.7	4.1	4.7****	3.5****
1991	9.4	10.8	9.8	5.1	3.8	4.8	4.3
1992	8.5	10.7	9.7	3.4	3.6	5.0	3.9
1993	7.9	10.6	9.6	3.2	3.9	3.8	3.7
1994	7.3	10.4	9.4	2.8	3.7	3.3	3.8
1995	6.8	10.2	9.2	3.0	4.0	2.9	3.8
1996	6.4	10.0	9.0	3.5	4.8	3.0	3.9
1997	6.1	9.7	8.7	3.5	4.8	3.4	4.6
1998	6.0	9.5	8.5	3.5	4.8	3.5	4.8
1999	6.0	9.3	8.3	3.5	4.8	3.5	4.8
2000	6.0	9.0	8.0	3.5	4.8	3.5	4.8
2001	6.0	8.7	7.7	3.5	4.8	3.5	4.8
2002	6.0	8.4	7.4	3.5	4.8	3.5	4.8
2003	6.0	8.1	7.1	3.5	4.8	3.5	4.8
2004	6.0	7.9	6.9	3.5	4.8	3.5	4.8
2005	6.0	7.6	6.6	3.5	4.8	3.5	4.8
2006	6.0	7.4	6.4	3.5	4.8	3.5	4.8
2007	6.0	7.3	6.3	3.5	4.8	3.5	4.8
2008	6.0	7.1	6.1	3.5	4.8	3.5	4.8
2009	6.0	6.9	6.0	3.5	4.8	3.5	4.8
2010	6.0	6.7	6.0	3.5	4.8	3.5	4.8
2011	6.0	6.4	6.0	3.5	4.8	3.5	4.8
2012	6.0	6.3	6.0	3.5	4.8	3.5	4.8
2013	6.0	6.2	6.0	3.5	4.8	3.5	4.8
2014	6.0	6.1	6.0	3.5	4.8	3.5	4.8
Ultimate	6.0	6.0	6.0	3.5	4.8	3.5	4.8

* Projected fund yields for the combined Public Service, Canadian Forces and RCMP Superannuation Accounts.

** On calendar year basis.

*** Pension indexing and remuneration increase assumptions are based on 12- month average CPI and Industrial Aggregate increases, ending September of the previous year.

**** These figures represent actual experience.

The main demographic assumptions include the rates of mortality and disability, the probability of non-voluntary termination (including election defeat for Members of the House of Commons), probability of voluntary termination, proportion of members married at death, and age differences between the members and their spouses.

Appendix 4 contains a detailed description of the assumptions and justification for adopting them.

V. Valuation Balance Sheet

Based on the actuarial method and the assumptions described in Sections III and IV, the results for the valuation as at December 31, 1988 are summarized here.

Assets	($ millions)	Subtotals ($ millions)	Total ($ millions)
Account balances			
- MPRA Account	30.1		
- SRB Account	7.0	37.1	
P.V. of contributions for prior service due from members	.7		
P.V. of future contributions in respect of the Prime Minister's Plan*	.1	.8	
Total assets			37.9
Unfunded liability			144.4
			182.3
Liabilities			
P.V. of benefits to active contributors			
- House of Commons**	50.1		
- Term Senators	13.7		
- Life Senators	1.1	64.9	
P.V. of benefits to retired contributors			
- House of Commons**	100.4		
- Term Senators	3.9		
- Life Senators	.6	104.9	
P.V. of benefits to current survivor annuitants			
- Spouses**	11.0		
- Children	.0	11.0	
Outstanding withdrawals	1.5	1.5	
Total liabilities			182.3

* Includes matching government credits.
** Includes Prime Minister's plan.
P.V. means Present Value.

VI. Reconciliation of Unfunded Liability and Normal Cost

This section describes the various factors reconciling the changes in the unfunded liability and total normal cost between the last valuation (as at December 31, 1985) and this one.

	Unfunded Liability ($ millions)	Total Normal Cost (% of Pensionable Payroll)
At December 31, 1985	135.9	42.1
Interest on unfunded liability	28.2	--
Normal cost payments not made	17.4	--
Change in demographic characteristics (age-sex-service distribution) of active members	--	(2.6)
Data and assumption corrections	.2	6.2
Change in benefits, Bill C-24	.6	.1
Change in actuarial funding method	6.9	(1.9)
Experience gains and losses		
- Annuity payments made from Consolidated Revenue Fund	(7.5)	--
- Economic Experience		
- Interest earnings greater than expected	(4.0)	--
- Pension indexing greater than expected	1.8	--
- Remuneration increases less than expected	(.5)	--
- Demographic Experience		
- Mortality of annuitants	(2.0)	--
- House of Commons non-voluntary termination	(1.3)	--
- Proportion of eligible spouses	.2	--
- Miscellaneous	.7	--
Subtotal	(12.6)	--
Changes in actuarial assumptions		
- Changes to dynamic economic assumptions	(40.4)	(9.3)
- Remuneration increases	2.8	2.3
- Mortality of annuitants	6.0	1.8
- House of Commons non-voluntary termination	(1.1)	0.8
- Proportion of eligible spouses	.5	.0
Subtotal	(32.2)	(4.4)
At December 31, 1988	144.4	39.5

A. Interest on Unfunded Liability

An increase in unfunded liability of $28.2 million is the result of interest on the unfunded liability as at December 31, 1985 not being paid. We calculated this interest at 6.5% per annum for the three years to December 31, 1988. This was the interest rate assumption used in the 1985 valuation report.

B. Normal Cost Payments not Made

An increase in the unfunded liability of $17.4 million is the result of a portion of the normal cost payments not being made. This occurred because the government only matched member contributions to the MPRA Account and SRB Account and did not contribute at the rates shown in the 1985 Cost Certificate for the three succeeding years. The amount of $17.4 million includes interest accumulations at 6.5% per annum on normal cost payments not made.

C. Change in Demographic Characteristics (age-sex distribution) of Active Members

A decrease in the normal cost of 2.6% of Pensionable Payroll is due to the active membership at December 31, 1988 having a different distribution of ages, a different proportion of female members and a different distribution of service as compared to the membership in the 1985 valuation. (The cost of benefits being earned in respect of a member depends on the member's age, sex, and service.)

In the previous valuation, the normal cost of sessional indemnity benefits for Members of the House of Commons was determined on the basis of the age, sex, and service distribution averaged over the seven preceding triennial dates including December 31, 1985, rather than on the actual membership at December 31, 1985. With the adoption of dynamic economic assumptions, we determined the normal cost for this valuation on actual age-sex-service characteristics of the membership at the valuation date.

D. Data and Assumption Corrections

Correcting errors in the data used in the previous valuation resulted in a decrease in the unfunded liability of $0.9 million. Refining the application of assumptions to the data resulted in an increase in unfunded liability of $1.1 million. These two changes produced a net increase in the unfunded liability of $0.2 million.

The refinement in the application of assumptions to the data increased the normal cost by 6.2% of Pensionable Payroll.

E. Change in Benefits, Bill C-24

Bill C-24 removed the provision under which pensions to surviving spouses were suspended on remarriage and also the provision under which pensions to surviving children between the ages of 18 and 25 in full attendance at a school or university were suspended upon marriage. This increased the unfunded liability by \$0.6 million and the normal cost by .1% of Pensionable Payroll. Much of the cost of removing the remarriage clause was attributable to restoring eligibility to four surviving spouses who had already remarried; however, there is no retroactivity so these persons are not entitled to recover the suspended survivor benefits in respect of the period preceding the effective date of Bill C-24.

F. Change in Actuarial Funding Method

In the previous valuation, the method adopted to calculate the normal cost and the liability for accrued benefits was intended to comply with the rules of the Canadian Institute of Chartered Accountants (CICA) for accounting of pension costs and obligations as they existed at that time. Those rules were in Section 3460, "Accounting Recommendations - April 1986" in respect of "Pension Costs and Obligations". The specific rules for public sector accounting in government financial statements were not issued until 1988 in Public Sector Accounting Statement 5. We applied the new rules to this valuation.

We believe that the rules in CICA Public Sector Accounting Statement 5 are appropriate for determining the normal cost and the accrued liability for purposes of "funding" a plan as well as for accounting.

This change in rules (see Appendix 3 for details) resulted in an increase of \$6.9 million in the unfunded liability and a decrease in the normal cost of 1.9% of Pensionable Payroll.

G. Experience Gains and Losses and Changes in Actuarial Assumptions

This is our analysis of the effect on the unfunded liability and the normal cost of experience gains and losses (i.e. actual experience during the three year intervaluation period being different from the actuarial assumptions used in the valuation report as at December 31, 1985) and of the change in actuarial assumptions.

1) Annuity Payments Made from the Consolidated Revenue Fund

Supplementary retirement benefits payable in excess of contributions by and in respect of members (including interest) made to the SRB Account are charged directly to the Consolidated Revenue Fund. Benefits for Life Senators (other than benefits payable from the SRB Account) are also charged directly to the Consolidated Revenue Fund. Since these benefits are not paid by the plan, the plan gained $ 7.5 million.

2) Economic Experience and Assumptions

In the previous valuation, we used these "static" economic assumptions (assumptions regarding interest, remuneration increase, and indexing that did not vary from year to year):

a) Interest rate: We used a long-term rate of 6.5%. This rate was assumed to reflect an inflation rate of 3.5% (the rate at which benefits were assumed to be indexed) and a real rate of return of about 3%. During the intervaluation period, interest credited to the MPRA Account was in excess of that assumed. This excess accounted for a decrease in the unfunded liability of $4.0 million.

b) January 1st pension indexing: We used an assumed long-term inflation rate of 3.5%. An increase in the unfunded liability of $1.8 million resulted from indexing increases greater than assumed.

c) January 1st remuneration increases: The previous valuation recognized the statutory limitation on increases in remuneration of Senators and Members of the House of Commons. Estimates in the report were based on the assumption that remuneration would increase at a rate of 2.5%; that is, the assumed rate of increase in the CPI minus one percentage point. A decrease in the unfunded liability of $ 0.5 million resulted from remuneration increases that were less than expected because, in two of the intervaluation years, the Industrial Aggregate increased at a rate less than 3.5%.

Relatively high interest rates are expected to be earned on current notional investments and on new investments for some time into the future. Therefore, to reflect the evolving economic situation better, we adopted for the current valuation "dynamic" economic assumptions (see Appendix 4 for detail).

This change in assumptions resulted in a decrease in the unfunded liability of $ 40.4 million and a decrease in the normal cost of 9.3% of Pensionable Payroll.

In this valuation we have assumed that increases in remuneration of members will, over time, retain a reasonable relationship to the increases in the Industrial Aggregate. This change in assumptions resulted in an increase in unfunded liability of $2.8 million and an increase in normal cost of 2.3% of the Pensionable Payroll.

3) Demographic Experience and Assumptions

a) Mortality of Annuitants (including Pensioners, Surviving Spouses and Disabled Pensioners)

In the previous valuation, the mortality of pensioners (except those disabled) and surviving spouses was assumed to follow the 1983 Group Annuity Mortality (GAM) Table developed by the Society of Actuaries. The Table is an appropriate representation of mortality experienced by pension plan members. The extra mortality of a disabled pensioner was recognized by adding three years to the actual age and then applying the 1983 GAM Table.

After allowing for normal statistical fluctuations, our analysis indicated that the 1983 GAM Table was an acceptable representation of the underlying mortality of pensioners, surviving spouses and disabled pensioners (subject to rating up in age). The experience gain during the intervaluation period was $2.0 million.

However, the 1983 GAM Table is a static table that makes no allowance for future expected decreases in mortality. In the long run, it may not be a particularly appropriate standard for the future mortality of current annuitants. It would be even less appropriate as a standard for the mortality of future retirees and surviving spouses arising from the current active or retired membership.

As described in Section E of Appendix 4, our approach reflects the expected falling mortality rates in the future. Altogether, the introduction of projected mortality raised the plan's unfunded liability by $6.0 million and its total normal cost by 1.8% of Pensionable payroll.

b) House of Commons - Non-voluntary Termination

The rate of non-voluntary termination is the probability of an election times the probability that the member will be defeated. In the previous valuation, we took the probability of an election in any year as 30%, representing average experience. The probability of an election defeat was based on length of service as a Member of the House of Commons. The intervaluation experience gain resulting from the use of these assumptions was $1.3 million.

During the intervaluation period, one election did occur, which is approximately the number expected based on this assumption. Nevertheless, we changed the assumption for the current valuation to a probability of an election based on the number of years since the previous election and on whether a majority government was elected in the previous election. We expect this to produce a better representation of future experience than the former assumption.

An analysis of the probability of election defeat showed a more significant correlation with age than with length of service. Therefore in the current valuation, we based the probability of an election defeat on age.

The decrease in the unfunded liability and the increase in normal cost resulting from the changes in these assumptions were rather small; $1.1 million in the unfunded liability and 0.8% of Pensionable Payroll for the normal cost.

c) Proportion of Eligible Spouses

In the previous valuation, the proportions of eligible spouses entitled to an annuity when the member died were based on 1981 Statistics Canada data for the distribution of population by marital status, sex and quinary age groups. In addition, we assumed a three-year age difference between male and female spouses. The intervaluation experience loss resulting from the use of these assumptions was $0.2 million.

For the current valuation, the proportions of eligible spouses are based on 1986 Statistics Canada data. The proportion of eligible spouses based on the 1986 data is slightly lower below age 60 and slightly higher from about age 60 to 65 than the corresponding proportions used in the previous valuation. This change caused an increase in liability of $0.5 million but the normal cost was not materially affected.

4) Miscellaneous

A net loss of $0.7 million arose from other factors that are of lesser importance.

VII. Data and Acknowledgments

The Accounting Division of the Administration and Personnel Branch of the Senate provided seriatim records showing basic data on Term and Life Senators. Similar records for the Members of the House of Commons and Prime Minister were provided by the House of Commons Division of the Department of Supply and Services. We examined all records for consistency, interrelationships and general reasonableness with regard to individual members or survivors.

The Office of the Comptroller General provided information regarding the applicable portion of the balance in the MPRA Account and the SRB Account.

We wish to acknowledge the co-operation and able assistance received from the three offices.

VIII. Actuarial Opinion

In my opinion, for the purpose 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, and

(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 for Valuation of Pension Plans of the Canadian Institute of Actuaries.

Respectfully submitted,

G.W. Poznanski, F.S.A., F.C.I.A.
Chief Actuary

Ottawa, Canada
June 25, 1990

APPENDIX 1

Estimates Based on Assumption that Remuneration Increases in Accordance with the Parliament of Canada Act

In the Cost Certificate shown in Section II of this report, normal cost estimates are provided based on dynamic economic assumptions, including the assumption that remuneration would increase in the long run in proportion to the Industrial Aggregate (of Average Weekly Wages and Salaries). We consider this approach more realistic in establishing long-term costs than the assumption that increases in remuneration would be limited indefinitely to the lesser of the increase in the CPI and the increase in the Industrial Aggregate, minus one percentage point.

This Appendix sets out the normal costs calculated in accordance with the provisions of the Parliament of Canada Act, namely, that annual increases in remuneration will be limited to the lesser of the increase in CPI and the increase in the Industrial Aggregate, minus one percentage point. Appendix 5A illustrates the assumptions underlying these normal costs. On this basis, the normal actuarial costs are estimated to be the following percentages of Pensionable Payroll for the three years following the review date:

Year	Group	Payable by Contributors %	Effective Cost to Government %	Total Normal Cost %
1989	House of Commons	11.1	31.7	42.8
	Term Senators	7.3	9.1	16.4
	Life Senators	7.0	3.9	10.9
	Total	10.3	26.5	36.8
1990	House of Commons	11.1	34.0	45.1
	Term Senators	7.3	9.0	16.3
	Life Senators	7.0	3.1	10.1
	Total	10.3	28.3	38.6
1991	House of Commons	11.1	36.3	47.4
	Term Senators	7.3	9.4	16.7
	Life Senators	4.0	5.7	9.7
	Total	10.3	30.3	40.6

We estimated the corresponding unfunded actuarial liability as at December 31, 1988 to be $141.2 million.

APPENDIX 2

Summary of the Members of Parliament Retiring Allowances Act and Relevant Provisions of Supplementary Retirement Benefits Act for Current Members

A. Definitions

"Sessional indemnity" means the allowance to a member pursuant to sections 55 to 58 of the Parliament of Canada Act.

"Additional allowances" are allowances or salaries paid to Members of the Senate and House of Commons in their capacities as Prime Minister, Speaker, Minister, Leader of the Opposition, Parliamentary Secretary, etc.

B. Coverage

There are four main groups of members covered by this plan:

1. Members of the House of Commons

2. Members of the Senate not included in 3. (Term Senators*)

3. Members of the Senate appointed prior to June 2, 1965 and who did not elect to contribute to the MPRA Account (Life Senators)

   This category of members is further divided into

   i) Members of the Senate who had not attained age 75 and who gave notice on or before April 1, 1971 of their intention to resign at age 75

   ii) Members not included in i)

4. the Prime Minister who may also participate in the plan as a Member of the House of Commons or as a Senator

The contributions and benefits for Members of the House of Commons and Term Senators, as described in this Appendix, are those that have applied since 1981.

* They hold their place in the Senate until age 75.

C. Contributions from Members and the Government

Members' Contributions

Contributions from Members are required at the following rates in respect of sessional indemnity:

	Account to Which Contributions are Credited		
Group	MPRA Account	SRB Account	Consolidated Revenue Fund
Members of House of Commons	10% for 15 years	1%	N/A
Term Senators	6% for 25 years	1%	N/A
Life Senators	N/A	1%	6% for 26 2/3 years

The Prime Minister is required to contribute 6% in respect of salary as Prime Minister, payable under the Salaries Act, to the MPRA Account and 1% of such salary to the SRB Account.

Members of the House of Commons and Term Senators in receipt of additional allowances contribute 10% of such allowances to the MPRA Account and 1% to the SRB Account, unless they elect not to contribute or to contribute only on a portion of allowances.

A member may elect to contribute for prior service as a member.

Government Contributions

i) The Government matches members' contributions to the MPRA Account and the SRB Account.

ii) Supplementary Retirement Benefits (see G below) payable in excess of contributions by and in respect of members (including interest) are charged directly to the Consolidated Revenue Fund.

iii) Benefits for Life Senators (other than benefits payable from the SRB Account) are charged directly to the Consolidated Revenue Fund rather than to the MPRA Account.

D. Basic Retiring Allowance

House of Commons and Term Senators

A member is eligible to receive a basic retiring allowance upon termination of membership after having contributed for at least six years.

The amount of annual allowance payable to a member is determined by multiplying the member's best six-year average sessional indemnity by a fraction which is the sum of (a) plus (b), where

(a) = the lesser of .75 and the sum of (i) and (ii), where

- i) = .05 times the number of years of credit for contributions with respect to sessional indemnity as a Member of the House of Commons
- ii) = .03 times the number of years of credit for contributions with respect to sessional indemnity as a Senator

(b) = .05 times the number of years of credit determined by adding the ratios of the member's contributions to the MPRA Account in respect of additional allowances received by the member in a calendar year to 10% of the maximum sessional indemnity in that calendar year.

Life Senator

The Governor in Council may grant an annuity equal to two-thirds of the sessional indemnity to a Senator who is disabled or who gave the required notice of intention to resign at age 75 and resigns within one year of attaining age 75.

Prime Minister

A member becomes eligible to receive a basic retiring allowance after having held the office of Prime Minister for at least four years and having attained age 65. However, the allowance is not payable for any period during which the member is a Senator or a Member of the House of Commons.

The amount of the basic retiring allowance under the Prime Minister's Plan is two-thirds of the salary payable to the Prime Minister under the Salaries Act on the date the allowance commences.

E. Basic Survivor Allowance

House of Commons and Term Senators

The following basic annual allowances are payable on the death of a member or former member who has satisfied the eligibility requirements for a retiring allowance:

a) to a surviving spouse until remarriage*, three-fifths of the basic allowance** and

b) if there is a surviving spouse, to each child under age 18 (or unmarried* child between 18 and 25, if a full-time student), one-tenth of the basic allowance subject to a maximum of three-tenths,

   or if there is no surviving spouse, to each child under age 18 (or unmarried* child between 18 and 25, if a full-time student), two-tenths of the basic allowance, subject to a maximum of eight-tenths.

   In the case of a former member, no allowance is payable unless the marriage existed while the deceased spouse was a member.

Life Senator

An annuity may be granted to the surviving spouse of a Life Senator who either having given the notice of intention to resign, dies before attaining age 75 or dies while in receipt of an annuity.

The amount of the surviving spouse's annuity is the greater of (a) and (b), where

(a) = two-ninths of the sessional indemnity at the earlier of death or resignation, and

(b) = the lesser of
   i) thirty per cent of the Senator's contributions, and
   ii) one-third of the applicable sessional indemnity (as in a)

The annuity ceases on the remarriage* of the surviving spouse.

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* The provision for the suspension of (i) a surviving spouse's allowance on remarriage; and (ii) an allowance to a child, while married, between the ages of 18 and 25 and in full-time attendance at a school or university, was repealed effective June 29, 1989.

** The "basic allowance" is the annual allowance a member was receiving or would have been eligible to receive if he or she had ceased to be a member immediately before death.

Prime Minister

An annual allowance is payable to the spouse of a deceased member, if the member had held the office of Prime Minister for at least four years and the surviving spouse was the spouse at the time the member held the office of Prime Minister. The allowance ceases on the remarriage* of the surviving spouse.

The amount of the allowance is one-half the allowance that was payable to the former Prime Minister or would have been payable if immediately preceding death he or she had ceased to be a member and had attained age 65.

F. Withdrawal Allowance

House of Commons and Term Senators

If a member ceases to be a member before satisfying the eligibility requirements for a retiring allowance, or if the member is disqualified from the Senate or is expelled from the House of Commons, the member is entitled to a return of all contributions with interest at the rate of 4% per annum compounded annually.

Life Senator

If a member is disqualified from the Senate, then the member is entitled to a return of all contributions with interest at the rate of 4% per annum compounded annually.

Prime Minister

If a member ceases to be a member before holding the office of Prime Minister for at least four years, the member is entitled to a return of all contributions with interest at 4% per annum compounded annually.

* See footnote * page 23

G. Supplementary Retirement Benefits

Pursuant to the SRBA, benefit adjustments corresponding to increases in the Benefit Index are provided in respect of the basic allowances payable from the MPRA Account to former contributors and their survivors as well as in respect of annuities to Life Senators and their survivors.

For purposes of administering the SRBA, the Benefit Index, in respect of each calendar year is normally* calculated as the Benefit Index for the preceding year multiplied by the average of the CPI for the 12 month period ending on September 30 of that preceding year, all divided by the average for a corresponding period one year earlier.

Although survivor benefits are indexed immediately, retiring allowances are not indexed until age 60. But the increase at that age reflects the increase in the Benefit Index since commencement of the allowance.

The SRBA provides for a return of contributions paid by a member to the SRB Account with interest to the extent that such contributions exceed any benefit that has been or may be paid to or in respect of the member.

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* As part of a general economic restraint program, increases for 1983 and 1984 were limited to 6.5% and 5.5% respectively.

H. General

Minimum Benefit

If a member or former member dies leaving no eligible survivor, or the survivor dies or becomes ineligible, the amount by which the member's contributions, including interest, exceed any amounts paid to the member and any survivors is paid to the member's estate.

Suspension of Allowance

An allowance payable to a former member is suspended for the whole month during any part of which such person is a member of the Senate or the House of Commons.

Repayment of Withdrawal Allowances

If a member ceases to be a member, receives a withdrawal allowance and subsequently becomes a member again, the member may repay the withdrawal allowance and regain credit for the previous service.

Rate of Interest for Lump Sum Calculations

The rate of interest used in calculating withdrawal allowances and lump sum repayments of withdrawal allowances and prior service contributions is 4%. (Interest on withdrawn contributions is paid only for periods after December 31, 1973.)

Amortization of Lump Sums

Any payments that a member may elect to make with respect to prior service, including repayment of withdrawal allowances, may be amortized using a rate of interest set by regulation, currently at 8%.

Interest Credited to Accounts

The rate of interest to be credited to the MPRA Account is set by regulation, currently at 2.5% per quarter. Interest is credited at the end of the quarter on the balance at the beginning of the quarter. However, for purposes of this report (including Appendix 1), we assumed that the rates credited would be the same as the rates expected to be credited to the combined Public Service Superannuation Account, the Canadian Forces Superannuation Account and the Royal Canadian Mounted Police Superannuation Account.

Interest is credited to the SRB Account at the end of each quarter. It is calculated monthly and credited quarterly on the minimum balance at a rate representative of the yield on outstanding Government of Canada Bonds having a term to maturity of five years, less 0.125%.

APPENDIX 3

Detailed Description of Actuarial Methods

A. Actuarial Method to Value Liabilities

We used the unit credit cost method to value plan benefits for active contributors. Under this method, the contributions in any year (normal cost) are sufficient to fund projected benefits in respect of service or pensionable service in that year. The corresponding actuarial liability is sufficient to fund all projected benefits accrued to the valuation date.

For Members of the House of Commons and Term Senators, sessional indemnity benefits accrue at rates such that maximum pensions are accrued at 15 and 25 years of pensionable service respectively. For these two groups, we calculated normal costs and the accrued liability in respect of benefits defined in terms of sessional indemnity in accordance with the formula in the plan, namely, that these benefits accrue over the pensionable service of members. For benefits for Life Senators and benefits based on additional allowances which are not earned over a maximum number of years, we determined the normal cost and accrued liability on the assumption that these benefits accrue over the potential period of service of members.

This approach conforms to the recommendations contained in the Public Sector Accounting Statement 5, issued in November 1988 by the Canadian Institute of Chartered Accountants.

We also used the unit credit cost method in the previous valuation as at December 31, 1985. However, it was applied in accordance with the rules contained in Section 3460, "Accounting Recommendations - April 1986" in respect of "Pension Costs and Obligations", which were the recommended rules of the Canadian Institute of Chartered Accountants at that time. According to those rules, all benefits were assumed to accrue over the full service lifetime of a member even if the resulting rate of accrual differed from that stipulated in the plan. Accordingly, in the 1985 valuation, benefits based on sessional indemnity for Members of the House of Commons and for Term Senators were assumed to accrue over their full service lifetime, instead of over the maximum 15- and 25-year accrual period. All other benefits were also assumed to accrue over the full service lifetime in the previous valuation.

Both the normal cost and the actuarial liability can be affected by changes in the underlying economic and demographic assumptions. The normal cost is also subject to variations in the distribution of contributors by age, sex, service and relative salary. It is also heavily influenced by the probability of an election occurring in a given year. This in turn depends on the status of the Parliament (whether majority or minority) and the time elapsed since the last election. The actuarial liability is usually affected by net gains or losses from experience since the date of the previous valuation.

In respect of the Prime Minister's plan, the actuarial liabilities include the present value of the full benefit, and the assets include the present value of future contributions and matching government credits to the MPRA and SRB Accounts.

B. Actuarial Method to Value Assets

The assets represent the accumulated contributions to the plan, net of benefit payments. They are shown at their "book" value; i.e., they are not adjusted to reflect changes in the interest environment.

APPENDIX 4

Detailed Description of Actuarial Assumptions

This Appendix describes the actuarial assumptions we used in conjunction with the method described in Appendix 3. The economic assumptions and assumptions in respect of survivors are common to all four groups covered by this plan -- Members of the House of Commons, Term Senators, Life Senators, and the Prime Minister. Other assumptions may differ among the groups, as described in this Appendix.

A. Common Economic Assumptions

The three common economic assumptions we used to value the benefits were the interest rate assumption, the January 1st pension indexing assumption, and the January 1st salary increase assumption.

For the purposes of the estimates in the main body of the report, we used the economic assumptions shown in Section IV. For purposes of estimates in Appendix 1, we used the economic assumptions shown in Appendix 5A. These are identical to those in Section IV, except for the salary increase assumption. In Section IV, the January 1st rate of salary increases is assumed to be equal to the rate of change in the Industrial Aggregate*. In Appendix 5A, the January 1st rate of salary increases is taken as the lesser of the rate of change in the CPI* and the Industrial Aggregate*, minus one percentage point, reflecting the restriction on remuneration increases in the Parliament of Canada Act.

Regulations provide that the MPRA Account shall be credited with 2.5% interest per quarter. Nevertheless, for the purposes of this report, we decided to assume that this rate would be adjusted from time to time to parallel closely the rates credited to the Public Service, Canadian Forces, and RCMP Superannuation Accounts. Accordingly, the projected fund yields shown in Section IV and Appendix 5A were developed for the combined funds of these Accounts. We further assumed that these Accounts would be increased to equal the liabilities of the three corresponding pension plans on January 1, 1991 and that no contributions would be received after 1990. The resulting projected fund yields were deemed appropriate for the purposes of this valuation.

The valuation interest assumptions for the years 1989 to 2008 were obtained by subtracting a one percentage point margin from the projected fund yield. The margin declines until the year 2015 when it disappears altogether, the ultimate interest rate of 6% per annum having been reached.

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* Calculated as the ratio of a twelve month average ending September 30 of the preceding year to a similar twelve month average ending one year earlier.

B. Rate of Voluntary Termination

Members of the House of Commons

These rates were assumed to apply in all years (including years in which an election is held). Voluntary termination is defined as any termination other than death or non-re-election (as defined in C below). Based on experience from 1963 through 1988 we calculated probabilities varying by years of service. We grouped years of service after 24. The rates are shown in Appendix 5B. Members were assumed to terminate voluntarily at age 75.

Term Senators

The probability of voluntary termination was set at 0 for service less than six years and at 1% for service greater than or equal to six years.

Life Senators

The probability of voluntary termination was set at 0.

C. Rate of Non-voluntary Termination

Members of the House of Commons

The rate of non-voluntary termination is equal to the probability of an election times the probability that the Member will be defeated.

a) Probability of an election

Experience since Confederation revealed the following:

Duration of Parliament since last election (to the nearest year)	Number of elections in a given year since last election, depending on status of existing Parliament	
	Majority	Minority
1	1	4
2	-	1
3	1	2
4	14	1
5	9	-
	25	8

Excluding the period prior to the 1917 election which comprised only majority governments, the characteristics of succeeding Parliaments appear as follows:

Status preceding election	Probability of indicated status following election	
	Majority	Minority
Majority	8/13	5/13
Minority	5/9	4/9

Based on these data, we developed probabilities of an election varying by calendar year for each year in the future. In developing these probabilities we took into account that no election occurred between November 1988 and the writing of this report and that a majority government was elected at the last election. The probabilities shown in Appendix 5C, tend toward a value between 0.30 and 0.31 in the long term.

b) Probability of election defeat

The rate of non-re-election represents the proportion of Members at the end of a Parliament who are not Members on the first day of the immediately following Parliament.

We analyzed the experience since 1963 by individual age cells and service cells.

An analysis of the results by age and service cells indicated a correlation with age. Therefore, probabilities varying by age were developed. They are shown in Appendix 5C.

Term Senators

We set the probability of non-voluntary termination at 1 at age 75 and 0 at other ages.

Life Senators

The probability of non-voluntary termination was set at 1 at age 75, for those members who gave notice on or prior to April 1, 1971 of their intention to resign at age 75. Otherwise, the probability of non-voluntary termination was set at 0.

D. Rate of Permanent Disability

Members of the House of Commons

Since no special benefit is provided in the event of disability, we included this probability with the voluntary termination assumption for Members of the House of Commons.

Term Senators

Since no special benefit is provided in the event of disability, we included this probability with the Term Senators voluntary termination assumption.

Life Senators

For the current group of Life Senators we assumed that the rate of permanent disability is adequately represented by the 1983 Group Annuity Mortality (GAM) Table.

E. Rate of Mortality

i) For active members, we used the 1983 GAM Table.

ii) For annuitants, including spouses, the 1983 GAM Table was also used. In addition we adopted this Table to represent the mortality of disabled Life Senators, but we increased the age of such Senators by three years before applying the Table.

We projected the mortality rates from this Table into the future by assuming constant annual percentage decreases of such rates, varying by age. The projection scale used is a modification of Projection Scale H of the Society of Actuaries.

iii) No mortality was assumed for children because the mortality at the applicable ages is very low.

See Appendix 5D for sample rates of mortality and the mortality projection factors.

F. Common Assumption that a Terminated Member of the Senate or the House of Commons will subsequently become a Member of the Senate or the House of Commons

The probability is assumed to be equal to zero. Such events are recognized in the valuation following their occurrence. In our opinion, the impact of this approach on the estimate of normal costs or liabilities is not material.

G. Common Assumptions with respect to Survivors Benefits

Remarriage Rates

Nil, since remarriage is no longer a decrement from June 29, 1989.

Proportion of Members and Former Members Married at Death

The proportions assumed were based on the distribution of population by marital status, sex and quinary age groups for Canada, 1986, as published by Statistics Canada.

Proportions at individual ages were interpolated using the Cubic Spline Interpolation method. Sample proportions are shown in Appendix 5E.

Age Difference between Spouses

Females were assumed to be three years younger than their spouses.

Children

All married participants were assumed to have children that are 28, 30 and 32 years younger than the father. Further, it was assumed that all child beneficiaries will remain eligible for benefits until age 23.

H. Administrative Expenses

No provision was made in the liabilities or normal cost with respect to the cost of administering the plan.

APPENDIX 5A

Economic Assumptions
(with Salary Increase Restriction*)

Year	Rates of Interest: New Money %	Rates of Interest: Projected** Fund yield %	Rates of Interest: Valuation Rate %	CPI Increases*** %	Industrial Aggregate Increases*** %	January 1 Pension Indexing**** %	January 1 Remuneration Increases**** %
1989	10.0*****	11.1*****	10.1*****	5.0*****	5.0*****	4.1*****	3.1*****
1990	10.2	11.0	10.0	4.7	4.1	4.7*****	3.5*****
1991	9.4	10.8	9.8	5.1	3.8	4.8	3.3
1992	8.5	10.7	9.7	3.4	3.6	5.0	2.9
1993	7.9	10.6	9.6	3.2	3.9	3.8	2.7
1994	7.3	10.4	9.4	2.8	3.7	3.3	2.3
1995	6.8	10.2	9.2	3.0	4.0	2.9	1.9
1996	6.4	10.0	9.0	3.5	4.8	3.0	2.0
1997	6.1	9.7	8.7	3.5	4.8	3.4	2.4
1998	6.0	9.5	8.5	3.5	4.8	3.5	2.5
1999	6.0	9.3	8.3	3.5	4.8	3.5	2.5
2000	6.0	9.0	8.0	3.5	4.8	3.5	2.5
2001	6.0	8.7	7.7	3.5	4.8	3.5	2.5
2002	6.0	8.4	7.4	3.5	4.8	3.5	2.5
2003	6.0	8.1	7.1	3.5	4.8	3.5	2.5
2004	6.0	7.9	6.9	3.5	4.8	3.5	2.5
2005	6.0	7.6	6.6	3.5	4.8	3.5	2.5
2006	6.0	7.4	6.4	3.5	4.8	3.5	2.5
2007	6.0	7.3	6.3	3.5	4.8	3.5	2.5
2008	6.0	7.1	6.1	3.5	4.8	3.5	2.5
2009	6.0	6.9	6.0	3.5	4.8	3.5	2.5
2010	6.0	6.7	6.0	3.5	4.8	3.5	2.5
2011	6.0	6.4	6.0	3.5	4.8	3.5	2.5
2012	6.0	6.3	6.0	3.5	4.8	3.5	2.5
2013	6.0	6.2	6.0	3.5	4.8	3.5	2.5
2014	6.0	6.1	6.0	3.5	4.8	3.5	2.5
Ultimate	6.0	6.0	6.0	3.5	4.8	3.5	2.5

* Remuneration increases are restricted to the lesser of the increase in the Consumer Price Index and the Industrial Aggregate, minus one percentage point. Pension index and remuneration increase assumptions were based on 12-month average CPI and Industrial Aggregate increases ending September of the previous year.

** Projected fund yields for the combined Public Service, Canadian Forces and RCMP Superannuation Accounts.

*** On calendar year basis.

**** Pension indexing and remuneration increase assumptions are based on 12 month average CPI and Industrial Aggregate increases, ending September of the previous year.

***** These figures represent actual experience.

APPENDIX 5B

House of Commons
Rate of Voluntary Termination

Years of Service	Voluntary Termination
0	.006
1	.006
2	.006
3	.009
4	.011
5	.013
6	.015
7	.019
8	.024
9	.030
10	.035
11	.039
12	.040
13	.041
14	.042
15	.042
16	.043
17	.044
18	.045
19	.049
20	.054
21	.061
22	.068
23	.075
24 and after	.080

APPENDIX 5C

House of Commons
Probability of an Election and Election Defeat

Year	Probability of an Election	Age	Probability of Election Defeat
1989	.000	49 and under	.250
1990	.000	50	.273
1991	.042	51	.288
1992	.592	52	.300
1993	.506	53	.308
1994	.146	54	.311
1995	.149	55	.312
1996	.348	56	.311
1997	.433	57	.311
1998	.298	58	.314
1999	.218	59	.319
2000	.284	60	.326
2001	.355	61	.335
2002	.330	62	.344
2003	.274	63	.354
2004	.278	64	.364
2005	.316	65	.375
2006	.323	66	.390
2007	.300	67	.409
2008	.289	68	.433
2009	.302	69	.464
2010	.312	70 and after	.500
2011	.306		
2012	.298		
2013	.299		
2014	.306		
2015	.306		
2016	.302		
2017	.301		
2018 and after	.303		

APPENDIX 5D

Sample
Rates of Mortality

Age nearest birthday	Rates of Mortality for Active Members: Males	Rates of Mortality for Active Members: Females	Mortality Projection Factor for Annuitants Reduction % P.A.: Males	Mortality Projection Factor for Annuitants Reduction % P.A.: Females	Rates of 1989 Mortality for non-disabled Annuitants: Males	Rates of 1989 Mortality for non-disabled Annuitants: Females
25	.0005	.0003	.10	.50	.0005	.0002
30	.0006	.0003	.50	.75	.0006	.0003
35	.0009	.0005	.75	1.25	.0008	.0004
40	.0012	.0007	1.00	1.75	.0012	.0006
45	.0022	.0010	1.50	1.75	.0020	.0009
50	.0039	.0016	1.50	1.50	.0036	.0015
55	.0061	.0025	1.25	1.50	.0057	.0023
60	.0092	.0042	1.25	1.25	.0085	.0039
65	.0156	.0071	1.25	1.25	.0145	.0066
70	.0275	.0124	1.00	1.25	.0259	.0115
75	.0446	.0240	1.00	1.00	.0420	.0226
80	.0741	.0429	.75	1.00	.0708	.0404
85	.1148	.0699	.75	1.00	.1098	.0658
90	.1663	.1118	.50	.75	.1614	.1069
95	.2341	.1824	.25	.50	.2306	.1770
100	.3192	.2952	.00	.00	.3192	.2952
105	.4695	.4878	.00	.00	.4695	.4878
109	1.0000	1.0000	.00	.00	1.0000	1.0000

APPENDIX 5E

Assumed Proportions of Members and Former Members Married at Death

Age at Death	Males	Females
25	.454	.607
30	.721	.791
35	.821	.827
40	.856	.837
45	.867	.834
50	.867	.822
55	.859	.788
60	.851	.730
65	.842	.641
70	.817	.521
75	.768	.385
80	.689	.252
85	.573	.139
90	.446	.071
95	.335	.049
100	.244	.044
105	.175	.031
109	.131	.014

APPENDIX 6A

Reconciliation of Active Membership

	House of Commons	Term Senators	Life Senators
At December 31, 1985	282	90	12
New Entrants	133*	11	N/A
Terminations			
Voluntary Termination			
- Annuity (Vested)	(10)	(1)	N/A
- Lump Sum (Non-vested)	(2)	0	0
Non-voluntary Termination			
- Annuity (Vested)	(48)	(6)	0
- Lump Sum (Non-vested)	(60)	(2)	0
Death			
- Annuity to Spouse/Child	0	(1)	(1)
- Lump Sum	(1)	(1)	(1)
Appointment to Senate	0	N/A	N/A
Disability Annuity	N/A	N/A	(2)
Total Terminations	(121)	(11)	(4)
At December 31, 1988	294	90	8

* Includes 4 retired members who were re-elected.

APPENDIX 6B

Reconciliation of Annuitants

	Retired Contributors		Survivors	
	Non-disabled	Disabled	Spouses	Children
At December 31, 1985	310*	6	77	5
Correction to data	(6)*	-	1**	-
New entrants	65	2	21	-
Terminations				
Re-election to House of Commons	(4)	N/A	N/A	N/A
Appointment to Senate	-	N/A	N/A	N/A
Remarriage or marriage	N/A	N/A	(1)	-
Attainment of Age 18 (or 25 if attending school or university)	N/A	N/A	N/A	(3)
Death	(28)	(5)	(7)	
Total Terminations	(32)	(5)	(8)	(3)
At December 31, 1988	337	3	91	2
Reinstatement at June 29, 1989 due to Bill C-24	N/A	N/A	4	0

* In the last valuation report, 310 non-disabled annuitants were shown at December 31, 1985. Six were incorrectly included; three 3 had died and three had transferred their credits to the Public Service Superannuation Plan.

** Missing surviving spouse annuitant not included in the previous valuation.

APPENDIX 7A

Members of the House of Commons as at January 1, 1989

Attained Age	Completed Years of Service 0-4	5-9	10-14	15-19	20-24	25-29	30+	All Durations
25-29	2	0	0	0	0	0	0	2
30-34	16	2	0	0	0	0	0	18
35-39	28	6	0	1	0	0	0	35
40-44	38	4	0	0	1	0	0	43
45-49	46	13	3	5	1	0	0	68
50-54	34	11	7	4	3	0	0	59
55-59	28	4	4	4	5	1	0	46
60-64	7	5	1	0	2	0	0	15
65-69	4	0	0	2	1	0	0	7
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	1	0	0	0	1
All Ages	203	45	15	17	13	1	0	294

Average Age :	48.0
Average Service :	5.0
Members with 6 years or more of service (vested) :	86
Sessional Indemnity per Member :	$60,000
Total Sessional Indemnity :	$17,640,000
Members with Maximum Benefit* :	30
Total Sessional Indemnity for members with less than Maximum Benefit :	$15,840,000
Estimated number of Members with Additional Allowances** :	79
Estimated Average Additional Allowances** :	$28,900
Estimated Total Additional Allowances** :	$2,281,300

* Such members may contribute and earn benefits only with respect to supplementary benefits (indexing) and additional allowances.

** These are the additional allowances on which members are voluntarily making contributions to the MPRA and SRB Accounts.

APPENDIX 7B

Term Senators as at January 1, 1989

Attained Age	Completed Years of Service 0-4	5-9	10-14	15-19	20-24	25-29	30+	All Durations
40-44	1	0	0	0	0	0	0	1
45-49	8	0	0	0	0	0	0	8
50-54	5	3	2	1	2	0	0	13
55-59	4	2	2	3	1	0	0	12
60-64	1	2	3	6	6	1	1	20
65-69	5	3	1	4	4	1	4	22
70-74	2	3	4	2	3	0	0	14
All Ages	26	13	12	16	16	2	5	90

Average Age :	61.1
Average Service :	13.0
Members with 6 years or more of service (vested) :	62
Sessional Indemnity per Member :	$60,000
Total Sessional Indemnity :	$5,400,000
Senators with Maximum Benefit* :	13
Total Sessional Indemnity for Members with less than Maximum Benefit :	$4,620,000
Estimated number of Senators in receipt of Additional Allowances** :	7
Estimated Average Additional Allowances** :	$18,900
Estimated Total Additional Allowances** :	$132,500

* Such members may contribute and earn benefits only with respect to supplementary benefits (indexing) and additional allowances.

** These are the additional allowances on which members are voluntarily making contributions to the MPRA and SRB Accounts.

APPENDIX 7C

Life Senators as at January 1, 1989

Attained Age	Completed Years of Service 20-24	25-29	30-34	35-39	40-44	45+	All Durations
65-69	1	1	0	0	0	0	2
70-74	0	0	1	0	0	0	1
75-79	0	0	0	0	0	0	0
80-84	0	1	2	0	0	1	4
85-89	0	0	0	0	1	0	1
90-94	0	0	0	0	0	0	0
95-99	0	0	0	0	0	0	0
All Ages	1	2	3	0	1	1	8

Average Age :	78.3
Average Service :	33.3
Sessional Indemnity per Member :	$60,000
Total Sessional Indemnity :	$480,000
Members with Maximum Contributory Service :	0

APPENDIX 8

Retired Contributors and Surviving Spouses as at January 1, 1989

	Retired Contributors			Surviving Spouses		
		Annual Pension			Annual Pension	
Age	Number	MPRAA $	SRBA* $	Number	MPRAA $	SRBA* $
30-34	1	22,227	4,175 **	0	0	0
35-39	1	16,236	3,050 **	0	0	0
40-44	13	360,754	34,399 **	2	12,863	8,011
45-49	19	484,110	76,074 **	0	0	0
50-54	26	710,849	96,791 **	0	0	0
55-59	36	808,284	222,720 **	3	28,407	14,650
60-64	58	1,164,911	356,389	6	24,189	36,676
65-69	62	913,053	499,790	15	138,880	78,055
70-74	39	447,836	356,093	22	124,198	116,344
75-79	43	519,829	357,895	17	136,587	110,353
80-84	24	264,034	248,883	11	45,290	58,000
85-89	15	153,480	203,007	7	26,043	62,671
90-94	3	7,024	19,035	7	29,624	42,499
95-99	0	0	0	1	1,541	3,940
Total	340	$5,872,627	$2,478,301	91	$567,622	$531,199

		Average Pension			Average Pension	
Deferred Indexing	96	$25,026	$4,554 **	--	--	--
Indexation Payable	244	$14,222	$8,365	91	$6,238	$5,837

* SRBA benefits shown include increases effective January 1, 1989.

** Indexation accrued but not payable until age 60.