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 31 December 1991

Canada

PENSION PLAN

FOR

MEMBERS OF PARLIAMENT

ACTUARIAL REPORT

(including Cost Certificate)

AS AT 31 DECEMBER 1991

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

Ottawa, Canada
K1A 0H2

21 December 1993

The Honourable Arthur C. Eggleton, M.P.
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 the actuarial review as at 31 December 1991 of the pension plan established under the Members of Parliament Retiring Allowances Act. The report includes the 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 sitting days thereafter.

Yours sincerely,

Bernard Dussault

Bernard Dussault
Chief Actuary

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APPENDICES

Report on the actuarial review as at 31 December 1991 of the pension plan established under the Members of Parliament Retiring Allowances Act

I. Introduction

The previous actuarial review of the pension plan established under the Members of Parliament Retiring Allowances Act (MPRAA) was conducted as at 31 December 1988. Pursuant to paragraphs 3(1)(b) and 3(3)(a) of the Public Pensions Reporting Act (PPRA), the present review was conducted as at 31 December 1991.

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). In any event, the SRB Account has been merged with the MPRA Account as of 1 January 1992.

For purposes of this report, we did not include any provision for the benefits in respect of the Senators appointed before 1 June 1965 (referred to as "Life Senators"), since their benefits are payable from general revenues rather than from the MPRA Account.

Bill C-24, which received Royal Assent on 29 June 1989, brought some changes in the benefit provisions of the plan during the intervaluation period from 1 January 1989 to 31 December 1991. It repealed the provisions for suspending annuity entitlements of survivors upon marriage or remarriage. This change in benefit provisions has been valued in the preceding report.

Bill C-55, which received Royal Assent on 29 September 1992, changed many of the provisions of the MPRAA. Three of the most important changes introduced by this Bill are as follows:

- Retirement Compensation Arrangement (RCA) for tax compliance purposes;
- division of pension benefits upon spousal union breakdown; and
- survivor benefit option in respect of spousal unions established after retirement.

The cost certificate required by section 5 of the PPRA is included as Section VIII of this report. This certificate, like the rest of this report, is based on the amended plan (as if Bill C-55 was effective 31 December 1991 instead of 1 January 1992).

II. Plan Overview

A. Introduction

The provisions of the plan established under the MPRAA, as amended by Bill C-55, are fully described in Appendix 1. This plan generally provides fully indexed annuities to eligible Members who retire and to all eligible survivors. As well, lump sum payments are payable under certain circumstances. The Members contribute to the plan at the rate of 11% of remuneration for Members of the House of Commons and 7% of remuneration for Senators and the government bears the residual cost.

Although the pension plan for Members of Parliament shares many similarities with the other government-sponsored plans (i.e., Public Service, Canadian Forces, and Royal Canadian Mounted Police), there are some significant differences. Some of the most important characteristics of this plan are discussed below.

B. Differences with Other Public Pension Plans

1. Benefit Formula

This pension plan has an annual benefit accrual rate of 5% for Members of the House of Commons and 3% for Senators. The total benefit accrued rate applies to the best six-year average salary and benefits are payable immediately upon retirement, regardless of age, for those having served at least six years. However, indexing generally does not start before age 60 is reached.

If a Member retires before satisfying the six-year eligibility rule, the only benefit is a return of the Member's contributions accumulated with interest.

Benefits are also payable to survivors, generally at 60% and 10% of the Member's benefit for the eligible surviving spouse and each surviving child, respectively.

2. Salary and Interest Assumptions

The Parliament of Canada Act restricts annual increases in remuneration to one percentage point below the lesser of the increase in the Consumer Price

Index (CPI) and the increase in the Industrial Aggregate of average weekly earnings. The current Members of Parliament Retiring Allowances Regulations stipulate that the amount of interest to be credited to the Members of Parliament Retiring Allowances Account (MPRA Account) in respect of each quarter of a fiscal year shall be equal to 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 to maintain a reasonably consistent relationship between the remuneration and the Industrial Aggregate. Similarly, it would be reasonable 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 therefore assumed that the remuneration of the Members of the House of Commons and of the Senate will increase in line with the Industrial Aggregate and that the interest credited to the Account will be at a rate that follows the average rate used to credit interest to the combined Public Service Superannuation Account, the Canadian Forces Superannuation Account and the Royal Canadian Mounted Police Superannuation Account. This rate is based on the returns realized on notional investments made by these Accounts in 20-year Government of Canada bonds. Section IX of the report shows the effect on results of using assumptions other than based on salary increase restrictions and short-term interest rates.

C. Pension Reform

Bill C-55 received Royal Assent on 29 September 1992. This Bill amended certain Acts related to pensions, including the MPRAA, and also enacted the Pension Benefits Division Act (PBDA).

Appendix 1 describes the provisions of the pension plan established under the amended Members of Parliament Retiring Allowances Act. Among the main modifications from the previous plan that are described below, only the funding changes (1 and 2 below) have a material financial effect on this pension plan; other amendments brought about by Bill C-55 are deemed to be cost neutral.

1. The primary thrust of the amendments is to alter the Members' retirement arrangements to achieve compliance with the new rules of the Income Tax Act for registered pension plans. This is accomplished by dividing, effective 1 January 1992, the Members' plan into two parts, the first one consisting of

the portion conforming with the registration rules and the other one which is treated, for income tax purposes, as a "Retirement Compensation Arrangement" (RCA), with the associated payment of refundable tax. This arrangement is generally transparent to the Members but entails higher costs to the pension plan sponsor through the refundable tax.

2. The amended legislation provides for the full funding, in accordance with actuarial principles, of existing pension obligations and those to accrue in the future. The government must credit adequate contributions to meet the cost of pension obligations as they accrue. Furthermore, effective 1 January 1992, the MPRA Account has been combined with the related portion of the Supplementary Retirement Benefits Account (for indexing). Unfunded liabilities identified in future regular actuarial reports must be covered by equal annual instalments over a period of not more than 15 years.

3. The PBDA, which is not yet in force, provides for a division of pension benefits on marital (including common-law) breakdown. The division would be made, in respect of years of cohabitation, on the basis of an application for division and the application would have to be supported by a court order or separation agreement providing for the division of pension benefits. The spouse's share cannot be more than 50% of the commuted value of the pension benefits acquired by the plan member during the period subject to division. The valuation of pension benefits will be made on the basis of generally accepted actuarial principles and regulations will provide for the adjustment to the plan member's pension benefits following a division of pension benefits. This new provision is therefore deemed to be cost neutral.

4. The revised legislation allows plan members to elect survivor coverage in respect of spousal relationships established after retirement, at a cost to be actuarially determined. This provision has yet to come in force and is also deemed to be cost neutral, the full cost being borne by the pensioner electing the option.

The actuarial liability and normal cost estimates of the amended plan are shown in Sections VII and VIII, respectively, and are based on the actuarial method and actuarial assumptions described in Sections III and IV, respectively. The financial effect of Bill C-55 can be found in the actuarial analysis (Section XI).

III. Actuarial Method

A. Actuarial Method to Value Liabilities

The actuarial method used to value plan benefits is the projected accrued benefit (unit credit) actuarial cost method. It contemplates contributions in any one year (normal cost) sufficient to fund all future benefits accruing in respect of service in that year; the actuarial liability is the actuarial present value of total projected benefits accrued in respect of service up to the valuation date.

For Members of the House of Commons and Senators, sessional indemnity benefits accrue at rates such that maximum pensions are accrued only after completion of 15 and 25 years of pensionable service, respectively (unless there is movement from one chamber to the other). 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 the benefits based on additional allowances[1] (including the Prime Minister's), 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 uniformly and gradually over the expected period of service of the Member.

This approach conforms to the recommendations contained in Public Sector Accounting Statement 5, issued in November 1988 by the Canadian Institute of Chartered Accountants for the accounting of pension obligations in government financial statements.

B. Actuarial Method to Value Assets

The assets stem from contributions to the plan, net of benefit payments, plus interest thereon. They are shown at their book value; i.e., they are not adjusted to reflect the changes in market values or interest rates. However, by using dynamic interest assumptions, we effectively reflect the earning power of these assets.

1 For a definition of additional allowance, see Section A in Appendix 1.

IV. Valuation Assumptions

This section describes the actuarial assumptions used in the valuation. It is divided into three components: economic assumptions, demographic assumptions, and other assumptions. Based on our analysis of recent experience and our expectations for the future, we modified many of the assumptions used in the previous valuation. The actuarial analysis supporting the modifications is in Section XI.

A. Economic Assumptions

1. Basic Economic Assumptions

For each future calendar year, we needed to make a numerical assumption for each of the following basic economic factors:

- average yield available on purchase of a 20-year federal bond (new money rate);
- increase in the Consumer Price Index (CPI); and
- increase in the Industrial Aggregate of average weekly earnings.

To develop these interrelated assumptions, we reviewed economic forecasts, including the projections in the 26 April 1993 federal budget. We reached three principal conclusions as a result of our review of long-term economic forecasts:

- real rates on new long-term investments are likely to return to a level of 3% per annum in the near future;
- inflation will gradually rise to a level of 3% per annum; and
- real salary increases (productivity gains), after fluctuating during the recession, will level off at 1% per annum.

Each of these conclusions differs somewhat from the corresponding assumption adopted in the previous valuation for the ultimate period (1999 and later). The changes in assumptions, together with the rationale therefor, are as follows:

- The ultimate real interest rate is now 3% per annum instead of 2.5% per annum. The latter seems low relative to the experience of the last 25 years and the current outlook for the Canadian economy (globalization of markets, size of the public debt, etc.). Accordingly, we have adopted 3% per annum for this valuation.

- The assumed ultimate level of inflation is now 3% per annum instead of 3.5% per annum. Inflation was fairly stable at levels of 4% to 5% in the 1983-91 period, but dropped below 2% in 1992. With the prospects of moderate inflation from now on, it appears appropriate at this time to reduce the long-term expectations by half a percentage point.
- The assumed ultimate productivity gains are now 1% per annum instead of 1.3% per annum. In recent actuarial reports consideration was given to using 1% for productivity. We believe that it is time to recognize fully this lower level which corresponds to the average experience of the last 25 years.

These assumptions are similar to the ultimate assumptions selected by the government as "management's best estimate" for the measurement of pension obligations in the 1991-92 Public Accounts. The main difference relates to the ultimate productivity gains which were assumed at 0.5% per annum for accounting purposes.

2. Derived Economic Assumptions

Having adopted the basic economic assumptions, we were able to derive the following assumptions (ignoring the salary and interest restrictions mentioned in Section II.B.2):

- projected fund yields;
- valuation interest rates;
- remuneration increases applicable on 1 January of each year; and
- pension indexing factors applicable on 1 January of each year.

For purposes of developing the first two derived assumptions, we considered that the three major public sector pension plans (Public Service, Canadian Forces, and Royal Canadian Mounted Police) had, through a buy-and-hold strategy, accumulated in aggregate an asset portfolio consisting entirely of 20-year federal bonds. We then assumed that no further contributions would be made after 31 December 1991 since the book value of the notional investments exceeded the corresponding plan liabilities projected for that date. Next we projected the yields on the closed fund beyond 1991 by assuming a continuation of the buy-and-hold strategy and the reinvestment of the net cash flow in each year (borrowing if net cash flow is negative) at the assumed new money rates. Finally we obtained our valuation interest rates by reducing the relevant projected fund yields by one percentage point, but not below 6% per annum. The margin in interest rates so introduced thus remains constant until 2008 and then declines until the year 2015 when it disappears altogether, the ultimate interest rate of 6% per annum having been reached.

As mentioned in Section II.C, a refundable tax on the net cash flow is paid annually from the RCA Account. To simulate this additional charge, we assume that the valuation interest rates used to estimate the actuarial present value of future benefits paid out of the RCA Account will be 50% of those used to estimate the actuarial present value of future benefits from the MPRA Account.

The annual remuneration increases for Members were derived from the increases in the Industrial Aggregate of average weekly earnings. However we took into account the freeze on Members' remuneration for 1992 to 1994.

Lastly, we derived the pension indexing factors by applying to the assumed rates of increase in the CPI the formula given in Section 4 of Appendix 1.

For this valuation, we thus adopted economic assumptions as shown in the following chart and Table:

Chart 1

DYNAMIC ECONOMIC ASSUMPTIONS USED IN THE VALUATION

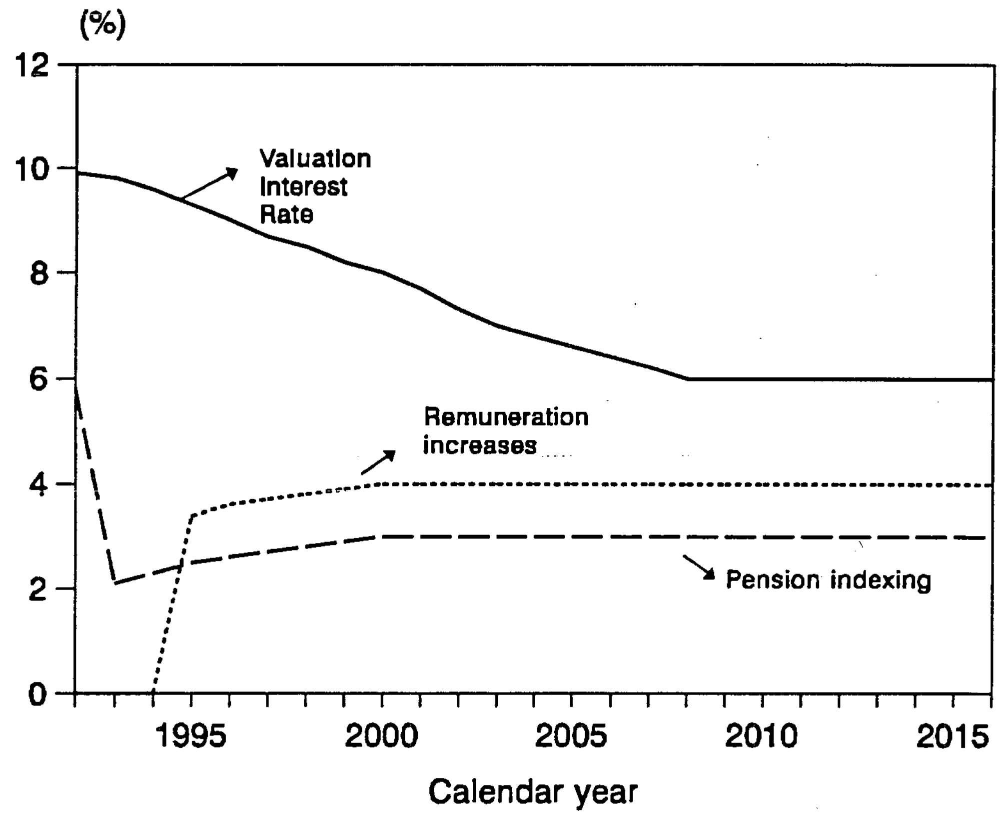


Table 1

DYNAMIC ECONOMIC ASSUMPTIONS
(Percentages)

	Basic Assumptions			Derived Assumptions			
Calendar Year	New Money Interest	Industrial Aggregate Increases	CPI Increases	Projected Fund Yield	Valuation Interest[2]	Remuneration Increases[3]	Pension Indexing[3]
1992	**9.1**	**3.4**	**1.5**	**10.9**	9.9	**0.0**	**5.8**
1993	7.7	3.1	2.5	10.8	9.8	**0.0**	**2.1**
1994	6.7	3.5	2.5	10.6	9.6	**0.0**	2.3
1995	6.0	3.6	2.6	10.3	9.3	3.4	2.5
1996	6.0	3.7	2.7	10.0	9.0	3.6	2.6
1997	6.0	3.8	2.8	9.7	8.7	3.7	2.7
1998	6.0	3.9	2.9	9.5	8.5	3.8	2.8
1999	6.0	4.0	3.0	9.2	8.2	3.9	2.9
2000	6.0	4.0	3.0	9.0	8.0	4.0	3.0
2001	6.0	4.0	3.0	8.7	7.7	4.0	3.0
2002	6.0	4.0	3.0	8.3	7.3	4.0	3.0
2003	6.0	4.0	3.0	8.0	7.0	4.0	3.0
2004	6.0	4.0	3.0	7.8	6.8	4.0	3.0
2005	6.0	4.0	3.0	7.6	6.6	4.0	3.0
2006	6.0	4.0	3.0	7.4	6.4	4.0	3.0
2007	6.0	4.0	3.0	7.2	6.2	4.0	3.0
2008	6.0	4.0	3.0	7.0	6.0	4.0	3.0
2009	6.0	4.0	3.0	6.9	6.0	4.0	3.0
2010	6.0	4.0	3.0	6.7	6.0	4.0	3.0
2011	6.0	4.0	3.0	6.4	6.0	4.0	3.0
2012	6.0	4.0	3.0	6.2	6.0	4.0	3.0
2013	6.0	4.0	3.0	6.1	6.0	4.0	3.0
2014	6.0	4.0	3.0	6.0	6.0	4.0	3.0
2015+	6.0	4.0	3.0	6.0	6.0	4.0	3.0

Bold figures represent actual experience.

2 The rates shown are for the MPRA Account. For RCAs corresponding rates are half of those for the MPRA Account.

3 Assumed annual increases in pension indexing and remuneration are based on 12-month average CPI and Industrial Aggregate increases, ending in September of the previous year. These increases are applicable on 1 January of each year.

B. Demographic Assumptions

1. New Entrants

For purposes of estimating the normal costs shown in the cost certificate (Section VIII), we made assumptions with respect to the number, sex and age of new entrants for the 1992-1994 period. New entrants include Members elected to the House of Commons and Members appointed to the Senate. We made similar assumptions for Members who start receiving additional allowances.

We assumed that the number and sex distribution of the new entrants to be such that the population and the sex distribution of the House of Commons and the Senate will stay constant in the future.

The age distribution of the 1992-1994 new Members of the House of Commons and of Members starting to receive additional allowances was based on the plan 1982-1991 experience, whereas the age distribution of 1992-1994 new Senators was based on the historical experience of this group, given its smaller size. In addition, we assumed that new entrants receiving additional allowances had all completed three years in Parliament.

The distributions of these groups are shown in Table 22 of Appendix 2.

2. Members of the House of Commons

Tables 18 to 21 in Appendix 2 show the probability of termination from the House of Commons for any reason other than death, the probability of a general election, the mortality rates, and the proportions of Members leaving an eligible spouse at death. With the exception of the probabilities of membership termination and general election, all of the assumptions vary by sex.

The assumed probability of ceasing to be a Member of the House of Commons was determined for any given year in relationship to the probability of a general election for that year. In the preceding valuations, terminations were deemed to be either voluntary or non-voluntary. From past experience we found that more Members than expected terminated voluntarily during an election year. We therefore decided to merge the probabilities of non-voluntary terminations and voluntary terminations in respect of a general election year. These probabilities are up to 44% higher than the non-voluntary probabilities assumed in the previous report. On the other hand, the probabilities of termination from the House of Commons during a non-general election year are up to 65% lower than the probabilities of voluntary terminations assumed in the previous report. We also assumed that, in any event, Members do not serve beyond age 75.

For the first time with this valuation, the mortality assumption for Members takes into account at all ages the expected future improvements in the rates of mortality. Mortality rates for years subsequent to 1992 are obtained by applying the annual improvement factors to the rates assumed for that year (all shown in Table 20 of Appendix 2). The mortality rates shown in Table 20 are the 1983 GAM Table projected to 1992.

Since no specific benefit (other than immediate indexing) is provided in the event of disability, we included this probability within the termination assumption for Members of the House of Commons. We also ignored the expected extra mortality of disabled pensioners as well as their immediate indexing. The net effect of this simplifying procedure is negligible.

3. <u>Senators</u>

The probability of termination was set equal to zero for service less than 6 years and at 1% per annum for service greater than or equal to six years. In any event, Senators cannot serve beyond age 75.

With regard to mortality, the same approach as for Members of the House of Commons also applies.

Since no specific benefit is provided in the event of disability, we included this probability within the Senators termination assumption.

4. <u>Prime Minister</u>

We assumed that the Prime Minister would hold the office of Prime Minister until she or he leaves the House of Commons. In other words, the rates of termination for the Members of the House of Commons are also used for the Prime Minister. The same assumption was made for mortality.

5. Pensioners

With respect to pensioners, the only decrement applied is mortality, assumed to follow the 1983 GAM Table fully projected from 1983 onward.

As in the previous valuation, the mortality assumptions take into account the expected future improvements (reductions in the rates of mortality) at all ages. We obtained the mortality rates for the years subsequent to 1992 by applying the annual projection factors shown in Table 20 of Appendix 2 to the 1992 mortality rates also shown in Table 20. The new projection factors are somewhat higher than those used in the previous valuation for males aged 55 to 91 inclusive and for females aged 56 to 85 inclusive.

6. Surviving Spouses

To estimate the value of the pensions payable to the surviving spouses pursuant to the death of Members and pensioners, we have to make an assumption for the proportion of Members or pensioners with an eligible spouse upon death. The "proportions married" shown in Table 21 of Appendix 2, as compared with the proportions assumed in the previous valuation, are lower for males and females up to age 55, about the same between ages 56 to 65, and higher thereafter.

We maintained the same assumptions as in the previous valuation regarding the average age of the surviving spouse at the date of death of the Member or pensioner. We assumed that the female spouses are three years younger than their male spouses.

We assumed, as in the previous report, that surviving spouses are subject to the mortality assumed for Members of the same age and sex.

7. Surviving Children

We assumed that each married Member or pensioner has, at time of death, three children being 28, 30 and 32 years younger than the father, respectively. It was further assumed that all children beneficiaries would remain eligible for benefits until age 23 irrespective of school attendance status. We ignored the effect of mortality in determining the value of pensions payable to eligible children given that the effect of child mortality on projections is practically negligible.

C. Other Assumptions

1. Probability of a general election

Experience data since Confederation reveal the following:

Table 2

FREQUENCY OF GENERAL ELECTIONS

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

The most recent general election that is included in Table 2 took place on 21 November 1988. Prior to 1917, all general elections gave rise to majority governments. The characteristics of the 1917 and subsequent Parliaments are as follows:

Table 3

CHARACTERISTICS OF SUCCESSIVE PARLIAMENTS

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

Based on these data, we developed probabilities of a general election varying by calendar year for each year in the future. In developing these probabilities, we took into account that a majority government was elected at the last election (1988) and that no general election occurred between November 1988 and December 1992. The probabilities shown in Table 19 of Appendix 2 tend toward a value of 0.303 in the long term, meaning that general elections are called every 3.3 years on average.

2. Nature of decrements

We assumed that all decrements were permanent and therefore no subsequent re-entry would occur. In other words, no terminated Member of the Senate or the House of Commons would subsequently become a Member of the Senate or the House of Commons. If such events actually occur, they 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.

3. Administration Expenses

No provision was made in estimating the actuarial liability or the normal cost for the cost of administering the plan.

V. Reconciliation of Membership

Tables 4 and 5 were derived from plan data.

Table 4

RECONCILIATION OF MEMBERS

	Members of House of Commons	Senators	Total
At 31 December 1988	294	90	384
New Entrants	5[4]	25[5]	30
Terminations	(3)	(12)	(15)
Deaths	(1)	(4)	(5)
At 31 December 1991	295	99[6]	394

Table 5

RECONCILIATION OF ANNUITANTS

	Pensioners	Survivors	
		Spouses	Children
At 31 December 1988	340	91	2
Reinstatements resulting from Bill C-24	-	4	0
New annuitants	13	17	4
Re-election to House of Commons	(1)	-	-
Appointment to Senate	(2)	-	-
Attainment of age 18, or 25 if attending school or university	-	-	(2)
Deaths	(30)	(11)	0
Removals[7]	(3)	(22)	0
At 31 December 1991	317	79	4

4 Includes one former member who was re-elected.

5 Includes two appointments of former members.

6 Excludes one vacant seat and four senators appointed prior to 1 June 1965.

7 Removal of pensioners and survivors of senators appointed prior to 1 June 1965, whose benefits are payable directly from the CRF.

VI. Plan Membership Data and Analysis

A. Members

There were 394 Members of Parliament at the end of 1991, of whom 55 were female. The average age of Members of the House of Commons was 50.9 years and the average length of pensionable service was 8.4 years, whereas it was 61.5 and 12.9 years, respectively, for the Senators. The annual sessional indemnity in 1992 was $64,400. In addition, there were 99 Members who were receiving additional allowances averaging $26,216.

Appendix 3 shows detailed information on the age, pensionable service and average remuneration of the Members of the House of Commons and of the Senate.

B. Pensioners and Survivors

There were 400 beneficiaries receiving pensions from the plan at the end of 1991, of whom 317 were pensioners and 83 were survivors. Of those 317 pensioners, 15 were female. The average age of pensioners was 67.5 years and the average age of surviving spouses was 73.6 years. At the end of 1991 (including 1 January 1992 indexing, but excluding deferred indexing), benefits were payable at an annual rate of $9,738,906 which corresponds to an annual pension of $24,347 per claimant.

Table 26 in Appendix 4 shows a summary of all benefits in course of payment, broken down by type of benefit and by source of payment. Tables 27 to 29 show information on the benefits in course of payment by age and type of benefit.

The yearly amounts of pension shown in Tables 26 to 29, and from which the above amounts are extracted, take into account the 1 January 1992 indexation increase of 5.8% pursuant to the MPRAA.

VII. Valuation Balance Sheet

On the basis of the actuarial method and the assumptions described in Sections III and IV, and of the data summarized in Section VI, the results of the actuarial valuation as at 31 December 1991 (but including events of 1 January 1992) of the pension plan established under the amended MPRAA are summarized below.

Table 6

BALANCE SHEET (in millions of dollars)

Assets and Unfunded Actuarial Liability	MPRA ACCOUNT		RCA ACCOUNT		TOTAL	
Balance of Accounts as of 31 December 1991	42.7		0.0		42.7	
Special credits of 1 January 1992	157.9		0.1		158.0	
Actuarial present value of future Member contributions and matching government credits for prior service	0.6		0.0		0.6	
Total assets		201.2		0.1		201.3
Unfunded Actuarial Liability		10.9		1.3		12.2
Total Assets and Unfunded Actuarial Liability		212.1		1.4		213.5

Actuarial Liability

For prospective benefits to Members					
• House of Commons	79.9		0.0		
• Senate	15.3		0.0		
• Prime Minister	0.0		0.6		
		95.2		0.6	95.8
For benefits to pensioners					
• House of Commons	98.5		0.0		
• Senate	7.1		0.0		
• Prime Minister	0.0		0.8		
		105.6		0.8	106.4
For benefits to survivors					
• Spouses	11.3		0.0		
• Children	0.0		0.0		
		11.3		0.0	11.3
Total Actuarial Liability		212.1		1.4	213.5

VIII. Cost Certificate

We estimated the normal cost of the plan by applying the actuarial methods described in Section III to the assumptions described in Section IV, and to the data, of which a summary is given in Section VI.

The normal cost as a percentage of the pensionable payroll[8] is expected to be as follows for each of the next three years:

Table 7

NORMAL COSTS WITH RESPECT TO THE MPRA ACCOUNT
(as percentages of pensionable payroll)

Year	Group	Pensionable Payroll ($ million)	Payable by Members	Cost to Government	Normal Cost
1992	House of Commons	19.1	3.93	10.35	14.28
	Senate	5.6	3.74	6.61	10.35
	Total	24.7	3.89	9.51	13.40
1993	House of Commons	21.1	3.94	10.57	14.51
	Senate	5.5	3.76	7.32	11.08
	Total	26.6	3.90	9.90	13.80
1994	House of Commons	19.1	4.00	11.71	15.71
	Senate	5.7	3.66	8.24	11.90
	Total	24.8	3.92	10.92	14.84

8 Pensionable payroll includes:

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

b) additional allowances for which voluntary contributions are being paid by Members of the House of Commons and Senators, as well as the additional allowance for the Prime Minister.

Table 8

NORMAL COSTS WITH RESPECT TO THE RCA ACCOUNT
(as percentages of pensionable payroll)

Year	Group	Pensionable Payroll ($ million)	Payable by Members	Cost to Government	Normal Cost
1992	House of Commons	19.1	7.19	60.02	67.21
	Senate	5.6	3.56	10.98	14.54
	Prime Minister	.1	7.00	111.17	118.17
	Total	24.7[9]	6.39	49.27	55.66
1993	House of Commons	21.1	7.15	60.49	67.64
	Senate	5.5	3.59	12.10	15.69
	Prime Minister	.1	7.00	115.35	122.35
	Total	26.6[9]	6.43	50.83	57.26
1994	House of Commons	19.1	7.12	67.95	75.07
	Senate	5.7	3.69	13.04	16.73
	Prime Minister	.1	7.00	143.84	150.84
	Total	24.8[9]	6.36	55.85	62.21

The cost figures in this report pertain to pensions based on the combination of sessional indemnities and additional allowances.

The estimate of the pensionable payroll for calendar year 1992 is shown in Table 9 below.

Table 9

PENSIONABLE PAYROLL FOR CALENDAR YEAR 1992
(in millions of dollars)

	Sessional Indemnities	Additional Allowances	Total
House of Commons	16.6	2.5	19.1
Senate	5.4	0.2	5.6
Total	22.0	2.7	24.7

9 The Prime Minister's salary is not added up in the total since it is already part of the pensionable payroll of the Members of the House of Commons.

Applying the total normal cost rates of Tables 7 and 8 to the total pensionable payroll of Table 9, the 1992 total normal cost is estimated at $17.1 million (13.40% plus 55.66% of $24.7 million) or 69.1% of the total pensionable payroll.

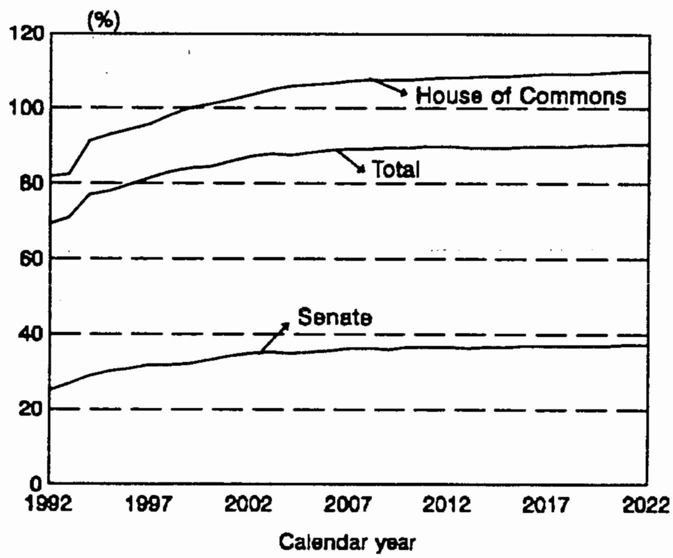
The dynamic economic assumptions make allowance for the high rates of interest currently earned by the aggregate notional investments of the Public Service Superannuation Account, the Canadian Forces Superannuation Account and the Royal Canadian Mounted Police Superannuation Account. Dynamic economic assumptions reflect the fact that new money interest rates, increases in the cost of living and increases in remuneration vary by calendar year until the ultimate year.

Given that the 1992 total normal cost of 69.1% of pensionable payroll is based on assumptions that reflect both the ultimate and the current higher real rates of interest, it should not be considered an indicator of the long-term (ultimate) cost of the plan.

Chart 2 shows the trend of the normal costs in the upcoming years if the economic assumptions are realized over the projection period. The chart shows that the expected long-term (ultimate) cost of the plan will reach 92% of pensionable payroll.

Chart 2

PROJECTION OF NORMAL COST
(As percentage of pensionable payroll)



IX. Sensitivity Analysis

This section examines the sensitivity of the valuation results to variations in the economic assumptions. Table 10 summarizes the effect of specific variations in the economic assumptions, followed by some comments:

Table 10

SENSITIVITY OF THE TOTAL NORMAL COST AND OF THE ACTUARIAL LIABILITY TO VARIATIONS IN THE ECONOMIC ASSUMPTIONS

	Actuarial Liability ($ Million)		Total Normal Cost (%)	
	Amount	Difference	% of Pensionable Payroll	Difference
1991 Valuation Assumptions	213.5		69.1	
Variation of the Interest Rates				
Removing margin	192.2	21.3	63.4	5.7
Adding 1%[10]	188.0	25.5	61.0	8.1
In accordance with current Regulations	158.8	54.7	46.7	22.4
Variation of the Salary Increases				
Reducing by 0.5%[10]	212.5	1.0	68.1	1.0
In accordance with current Regulations	210.1	3.4	65.7	3.4
Variation of the Pension Indexing				
Reducing by 1%[10]	192.5	21.0	60.0	9.1

A. Variation of the Interest Assumption

The early recurrence of more traditional real rates of interest would increase the actuarial liability. The margin (described in Section IV under Economic Assumptions) in the assumed interest rates provides some protection against this contingency. If we removed this margin, the actuarial liability as at

10 Variation in the opposite direction would have the opposite effect.

31 December 1991 would be reduced to $192.2 million (and the unfunded liability of $12.2 million would become an actuarial surplus of $9.1 million) and the 1992 normal cost would be reduced from 69.1% to 63.4% of pensionable payroll.

The actuarial liability was estimated assuming a long-term real interest rate of approximately 3% which may be regarded as reasonably consistent with the expected return on long-term government bonds. If the plan funds were invested in the private sector, it would be reasonable to assume an interest rate one percent higher. If the assumed valuation interest rate was increased by 1% in respect of every year in the future, the actuarial liability would be decreased to $188.0 million, and the 1992 normal cost would be reduced to 61.0% of pensionable payroll.

Furthermore, if the currently prescribed interest rate of 2.5% per quarter was assumed to apply from now on and to continue unchanged forever, then the actuarial liability, without any margin, would decrease to $158.8 million, and the normal cost would be reduced to 46.7% of pensionable payroll.

B. Variation of the Salary Increase Assumption

The actuarial liability estimate assumes ultimate productivity gains (i.e. real salary increases) of about 1% per annum. The 1991-92 Public Accounts assumed about 0.5% (based on "management's best estimate"). If we subtracted 0.5% from our assumed salary increases starting in 1995, then the actuarial liability would decrease by $1.0 million and the 1992 normal cost by 1.0% of pensionable payroll.

Similarly, if the current regulation prescribing salary increases was assumed to continue forever, the actuarial liability would be reduced to $210.1 million and the normal cost to 65.7% of pensionable payroll, using such salary increase restrictions from 1995 onward.

It is to be noted that the effect of the variation in the salary increase assumption is smaller than what could be expected, due to the current two-year wage freeze and the imminence of a general election.

C. Variation of the Indexing Assumption

This valuation is based on an ultimate assumption of increases in the Consumer Price Index of 3.0% per annum, from which pensions are indexed. If instead we assumed 1.0% less per annum for all future indexing, then the actuarial liability would decrease by $21.0 million and the normal cost would decrease by 9.1% of pensionable payroll.

X. Reconciliation of Unfunded Actuarial Liability and of Normal Cost

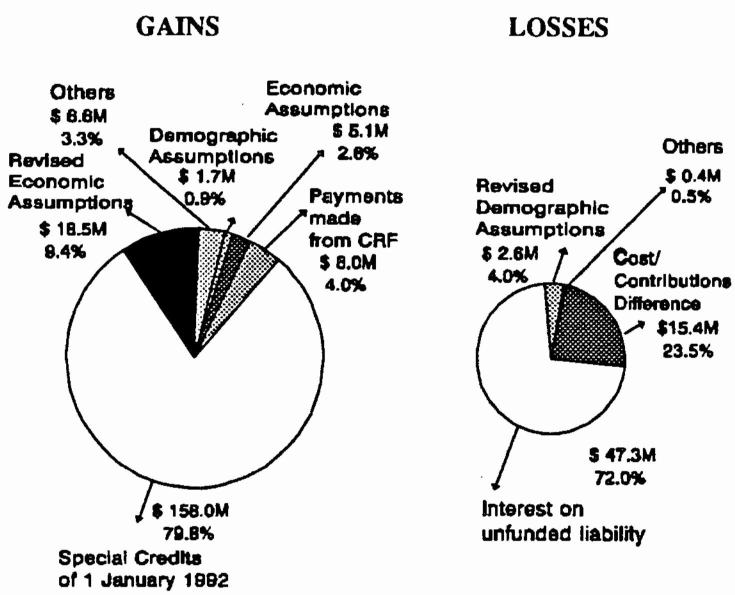
The previous actuarial report showed an unfunded actuarial liability (excess of actuarial liability over assets) of $144.4 million which has now decreased by $132.2 million to $12.2 million.

The previous report showed a normal cost of 39.5% of pensionable payroll for 1989, rising over a certain number of years thereafter almost entirely as a result of the gradual transition from dynamic to ultimate economic assumptions and to a closer date of a general election. The expected normal cost for 1992 (not shown in that report) was 45.3% of pensionable payroll. The currently estimated 1992 total normal cost of 69.1% of pensionable payroll (see Section VIII of this report) is higher than the previously anticipated 1992 normal cost.

Chart 3 shows the most important elements of the gains and losses while the various factors reconciling the changes in the unfunded liability and in the total normal cost between the previous valuation and this one are shown in Table 11 and analyzed in Section XI.

Chart 3

RECONCILIATION OF THE UNFUNDED ACTUARIAL LIABILITY
(in $ Millions and as percentages of gains or losses)



Total Gains: $	197.9 Million
Total Losses: $	65.7 Million
Net Decrease in Unfunded Actuarial Liability: $	132.2 Million

Table 11

RECONCILIATION OF THE UNFUNDED ACTUARIAL LIABILITY AND OF THE NORMAL COST

		Unfunded Liability ($ Millions)		Total Normal Cost (% of Pensionable Payroll)
At 31 December 1988		144.4		39.5
Anticipated increase to 1991		47.3		6.2
Corrections to data and Accounts		(1.8)		(0.4)
Contributions smaller than normal cost		15.4		-
Indexation payments made directly from Consolidated Revenue Fund		(8.0)		-
Special credits of 1 January 1992		(158.0)		-
Effect of Bill C-55		0.3		28.0
Economic experience gains and losses				
Interest earnings	(0.9)			
Remuneration increases	(5.0)			
Pension indexing	0.9			
Subtotal		(5.0)		-
Demographic experience gains and losses				
Mortality of Members and annuitants	0.4			
Non-voluntary termination (House of Commons)	(0.1)			
Voluntary termination (House of Commons)	(1.1)			
Proportion leaving eligible spouse	0.1			
Return to Parliament	(1.0)			
Subtotal		(1.7)		-
Revisions in economic assumptions				
Interest earnings	(0.7)		(0.1)	
Remuneration increases	(3.4)		(1.9)	
Pension indexing	(14.5)		(2.6)	
Subtotal		(18.6)		(4.6)
Revisions in demographic assumptions				
Mortality of annuitants	3.8		0.7	
Mortality of Members	(1.3)		(0.1)	
Termination	1.2		(0.2)	
Probability of general election	(1.9)		(0.7)	
Proportion leaving eligible spouse	0.8		0.1	
Subtotal		2.6		(0.2)
Miscellaneous		(4.7)		0.6
At 31 December 1991		12.2		69.1

XI. Actuarial Analysis

The preceding section shows the various types of actuarial gains and losses experienced by the plan during the three-year period ending 31 December 1991. It also shows the financial effect of the revisions made to the actuarial assumptions. This section elaborates on the most significant items.

A. Anticipated Increase to 1991

The unfunded actuarial liability increased by $47.3 million on account of interest accruing on it, compounded using the interest rates assumed in the 1988 report. The anticipated increase in the total normal cost (6.2% of pensionable payroll) is almost entirely due to a partial transition to ultimate economic assumptions and to a closer date of the general election.

B. Corrections to Data and Accounts

Correction of data used in the previous valuation resulted in a decrease of $0.4 million in the unfunded liability and a decrease of 0.4% of pensionable payroll in the normal cost. From the Accounts we also discovered that the outstanding benefits of $1.5 million shown in the balance sheet of the preceding report were overestimated by $1.4 million. These two changes produced a decrease in the unfunded liability of $1.8 million.

C. Contributions Smaller than Normal Cost

The unfunded liability increased by $15.4 million on account of a portion of the normal cost payments not being made. As required by statute at that time, the government matched the Member contributions to the MPRA Account ($6.5 million) and SRB Account ($0.8 million) as opposed to the total normal cost of $29.1 million, in accordance with the rates shown in the 1988 Cost Certificate for 1989 to 1991. The amount of $15.4 million includes interest accruing on the unpaid normal cost, computed using the assumptions of the 1988 valuation report. It is to be noted that Bill C-55 now requires the plan to be fully funded on an ongoing basis.

D. Indexation Payments Made Directly from the Consolidated Revenue Fund

In accordance with the SRBA (before amendment by Bill C-55), supplementary retirement benefits payable in excess of contributions by and in respect of Members (including interest) made to the SRB Account were charged directly to the Consolidated Revenue Fund. Since these benefits were not paid from the MPRA Account, the plan gained $8.0 million.

E. Special Credits of 1 January 1992

As required by Bill C-55, an actuarial deficiency credit of $158.0 million was made to the MPRA Account as of 1 January 1992, and $0.1 million was transferred into the RCA Account.

F. Effect of Bill C-55

Bill C-55 generated an actuarial liability of $1.4 million in the RCA Account and decreased the liability by $1.1 million in the MPRA Account as of 1 January 1992. The normal cost for 1992 was also increased, on account of the extra cost of the RCAs, by 28.0% of pensionable payroll. The extra cost of the RCAs is mainly attributable to the non-interest bearing asset of refundable tax on deposit with Revenue Canada.

G. Experience Gains and Losses and Changes in Valuation Assumptions

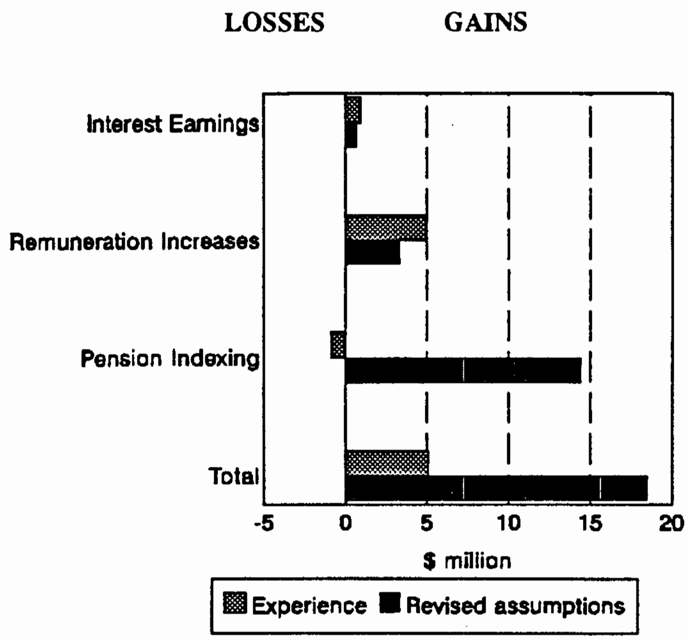
The effect on the unfunded liability and on the normal cost of experience gains and losses (i.e., actual experience during the three-year intervaluation period being different from the actuarial assumptions used in the valuation report as at 31 December 1988) and of the revisions in actuarial assumptions is discussed below:

1. Economic Experience and Assumptions

For each economic assumption, the chart below shows the contribution to the experience gain of $5.0 million and to the revised economic assumptions gain of $18.6 million.

Chart 4

GAIN RESULTING FROM THE ECONOMIC ASSUMPTIONS



In the previous valuation, we used dynamic economic assumptions (assumptions regarding interest, remuneration increases, and indexing) somewhat different from those in this report. Experience compared as follows:

(a) Interest earnings: During the intervaluation period, interest credited to the MPRA Account and SRB Account was in excess of that assumed. This excess accounted for a decrease in the unfunded liability of $0.9 million.

(b) Remuneration increases: The previous valuation did not recognize the statutory limitation on increases in the remuneration of Senators and Members of the House of Commons except when actual experience was available. Previous estimates were based on the assumption that the remuneration would increase in line with the Industrial Aggregate. This gain was further increased by the government's decision to grant no annual increase in the sessional indemnity and to decrease the additional allowances by 5% during 1992. The limitations on increases in remuneration decreased the unfunded liability by $5.0 million.

(c) Pension indexing: The actual rates had been used for 1990 and 1991, since they were available for the preparation of the 1988 report. The actual rate for 1992 is higher than expected by 0.8%, which resulted in a loss of $0.9 million.

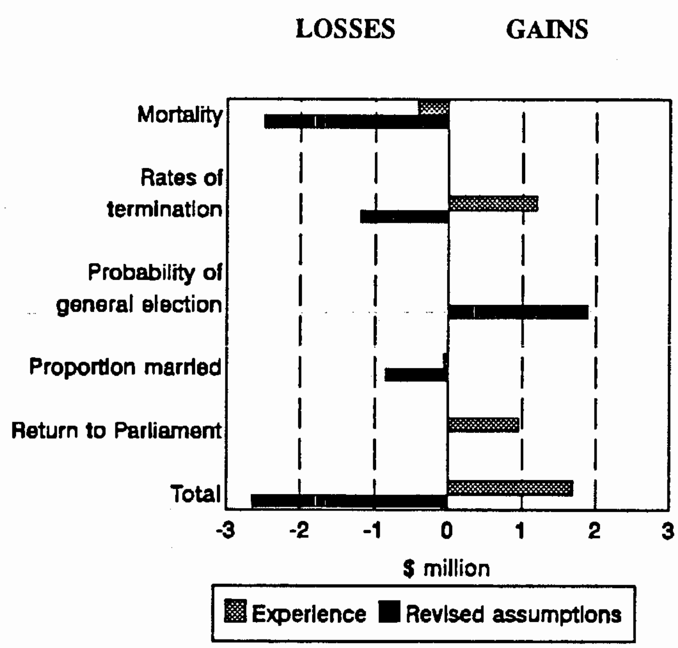
The adoption of revised economic assumptions for 1992 and beyond was by far the most important of the many changes in actuarial assumptions, causing the unfunded liability to drop by $18.6 million and the normal cost to fall by 4.6% of pensionable payroll, mainly attributable to the decrease in the cost of living expectations.

2. Demographic Experience and Assumptions

The chart below shows the contribution of each demographic factor to the experience gain of $1.7 million (i.e., decrease in the unfunded liability) and to the loss of $2.6 million (i.e., increase in the unfunded liability) due to revisions in demographic assumptions.

Chart 5

GAIN RESULTING FROM THE DEMOGRAPHIC ASSUMPTIONS



(a) Mortality

There was an experience loss of $0.4 million during the intervaluation period due to mortality, and a net increase of $2.5 million in the unfunded liability and a net increase in the normal cost of 0.6% of pensionable payroll resulting from revisions in the mortality assumptions.

(i) Mortality of Pensioners and Surviving Spouses

There was effectively no change in the mortality assumption from the last valuation since there was no material difference between actual and expected mortality from 1989 to 1991.

However, for this valuation we decided to revise the assumed mortality improvements. The improvement scale used is a modification of Projection Scale H of the Society of Actuaries. The improvement factors used for males at age 55 to 91 and for females at age 56 to 85 are somewhat higher than those used in the previous valuation. Sample improvement factors are shown in Appendix 2, Table 20. Altogether, the introduction of revised mortality assumptions for pensioners and surviving spouses increased the unfunded liability by $3.8 million and raised the total normal cost by 0.7% of pensionable payroll.

(ii) Mortality of Members

The GAM83 Table was retained from the previous valuation. However, for the first time, we decided to use the same approach as for the pensioners' projected mortality, i.e., assume mortality improvements. This revision decreased the unfunded liability by $1.3 million and decreased the total normal cost by 0.1% of pensionable payroll. These net decreases result mainly from lower expected survivor benefits.

(b) Rates of Termination (House of Commons)

In the preceding report we used distinct rates of voluntary termination and of non-voluntary termination for Members of the House of Commons. Non-voluntary termination rates corresponded to the probability of a general election times the probability that the Member would not be re-elected; voluntary terminations corresponded to any termination other than death or non-re-election. The voluntary terminations therefore included all terminations except those that occurred on general election dates and deaths. These rates were assumed to apply in all years.

According to the 1989-91 experience, the 1988 voluntary termination assumptions were far too large. Three Members actually terminated during that period whereas we expected 16. We discovered that voluntary terminations were higher in years of general elections, explaining the significant difference, given that there was no general election in that period. The intervaluation experience gains resulting from these two types of termination were $0.1 million and $1.1 million respectively.

In light of this information we decided to change the definition of termination for the Members of the House of Commons. In this report, one set of termination rates is assumed to apply during a general election year and another set to apply during a non-election year.

(i) Rates of Termination during an Election Year

The rate of termination during a general election year corresponds to the probability of an election times the probability that the Member will terminate during an election year. Termination during an election year is defined as any termination other than by death.

After studying the 1981-1991 experience as well as the 1963-1991 experience, we concluded that there was a decreasing trend in terminations other than death or non-re-election. Experience data for 1963 to 1991 were analyzed by age and service duration and we concluded that the rates based on age had a better correlation with the experience. Greater credibility was imputed to recent trends by applying a weight of 50% to the 1963-1991 experience data and a weight of 50% to the 1981-1991 experience data. The resulting probabilities are shown in Appendix 2, Table 18.

(ii) Rates of Termination During a Non-Election Year

The rate of termination during a non-election year corresponds to the probability of not having a general election during a given year times the probability that the Member will terminate during a non-election year. Termination during a non-election year is defined as any termination other than by death.

Using experience data for 1963 to 1991, we calculated probabilities varying by duration of service. In accordance with the trends observed in terminations other than by death or during a non re-election year, we applied a weight of 50% to the 1963-1991 experience data and 50% to the 1981-1991 experience data. The resulting probabilities are shown in Appendix 2, Table 18.

The adoption of these revised probabilities of termination increased the unfunded liability by $1.2 million and decrease the normal cost by 0.2% of the pensionable payroll.

(c) Probability of General Election

Regarding the probability of a general election, we maintained the same approach as for the previous valuation: it is a function of the number of years since the previous election and of whether or not a majority government was elected in the previous election. The decreases in the unfunded liability and in the normal cost resulting from the updating of these assumptions to 1991 were $1.9 million and 0.7% of pensionable payroll, respectively.

(d) Proportion Leaving Eligible Spouse

In the previous valuation, the proportions of Members and pensioners leaving spouses eligible for a survivor annuity upon death were based on Statistics Canada 1986 census data (i.e., distribution of population by marital status, sex and quinary age groups). The intervaluation experience loss resulting from the use of these assumptions was $0.1 million.

For the current valuation, the assumed proportions leaving an eligible spouse are based on Statistics Canada 1991 census data. These proportions are lower below age 60 and slightly higher over age 60 than the corresponding proportions used in the previous valuation. This change caused an increase of $0.8 million in the unfunded liability and an increase of 0.1% of pensionable payroll in the normal cost.

(e) Pensioners returning to Parliament

We assumed in the previous report that no pensioner would return to Parliament after leaving the House of Commons or the Senate. However, between 1989 and 1991, one pensioner was re-elected to the House of Commons and two pensioners were appointed to the Senate. The total liabilities released by the former pensioners amounted to $2.7 million whereas the liabilities arising from the new Members were $1.7 million, which produced a net gain of $1 million (including effect of interest).

H. Miscellaneous

As mentioned in the introduction, we now ignore benefits payable to or in respect of "Life Senators". The removal of those benefits decreased the unfunded liability by $3.2 million and increased the normal cost by 0.6% of pensionable payroll.

In the previous valuation, the method used to calculate the liability for the accrued benefits of the Prime Minister included the present value of his future contributions in the assets and the present value of his benefits in the liabilities. These benefits are of a flat-rate type and therefore not deemed to be earned over a given number of years. For this valuation, we determined the normal cost and the accrued liability as if these benefits were accruing gradually and uniformly over the expected period of service of the Member. This methodological change resulted in an increase of $0.2 million in the unfunded liability and in a negligible increase in the normal cost.

Refinements in the valuation methodology also decreased the unfunded liability by $1.8 million.

A residual net loss of $0.1 million arose from other factors.

XII. Data, Acknowledgements and Actuarial Opinion

The Accounting Division of the Administration and Personnel Branch of the Senate provided seriatim records comprising valuation data on Senators. Similar records for the Members of the House of Commons and for the Prime Minister were provided by the House of Commons Division of the Department of Human Resources Development. We examined all records for consistency, interrelationships and general reasonableness with regard to individual Members, pensioners and survivors.

The Office of the Comptroller General provided information regarding the balance in the MPRA and RCA Accounts.

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

The work on this actuarial review was carried out by Michel Rapin, F.S.A., F.C.I.A. and Laurie Brazeau, A.S.A., under the direction of Claude Gagné, F.S.A., F.C.I.A.

In my opinion, for the purpose of this actuarial report:

- the data on which this report is based are sufficient and reliable;
- the assumptions that have been used are adequate and appropriate; and
- 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 the Valuation of Pension Plans of the Canadian Institute of Actuaries.

Bernard Dussault

Bernard Dussault, F.S.A., F.C.I.A.
Chief Actuary

Ottawa, Canada
21 December 1993

APPENDIX 1

Summary of the Members of Parliament Retiring Allowances Act (MPRAA)

The following summary description of the plan provisions takes into account the amending provisions of Bill C-55. For a summary description of the pre-amendment pension plan, please refer to the previous valuation report.

A. Definitions

"Sessional indemnity" corresponds to the remuneration of a Member provided pursuant to sections 55 to 58 of the Parliament of Canada Act.

"Additional allowance" corresponds to the remuneration of a Member in his or her capacity as Prime Minister, Speaker, Minister, Leader of the Opposition, Parliamentary Secretary, etc.

"Basic retirement allowance" means

(i) in the case of a pensioner:

The aggregate of all the retirement allowances and additional retirement allowances that the pensioner was receiving from the Members of Parliament Retiring Allowances Account (MPRA Account) at the time of death or would have been entitled to receive if the pensioner had reached sixty years of age immediately before death.

(ii) in the case of a Member:

The aggregate of all the retirement allowances and additional retirement allowances that the Member would have been entitled to receive from the MPRA Account if the Member had ceased to be a Member and had reached sixty years of age immediately before death.

The "Retirement Compensation Arrangement (RCA)" is a vehicle for providing pension benefits not allowed to be paid under registered pension plans (RPP). The main difference between an RCA and a RPP is the refundable tax payable under an RCA. Fifty percent of all amounts credited to the RCA Account each year (contributions and interest) must be paid to Revenue Canada as a refundable tax under the Income Tax Act (ITA), whereas an amount equal to 50% of all benefits paid out of the plan to or on behalf of Members is paid back by Revenue Canada to the RCA Account.

"Earnings limit" in relation to a Member in respect of one or more sessions in any calendar year, means the maximum pensionable salary (sessional indemnity and additional allowances) in respect of which benefits may be accrued during that calendar year for the purposes of a registered pension plan within the meaning of the ITA. That amount was $86,111 in 1992 and will be indexed after 1995 in accordance with the Industrial Composite of average weekly earnings.

"Compensation allowance" means an allowance paid in accordance with the provisions of the Members of Parliament Retirement Compensation Arrangements (Part II of the MPRAA).

"Basic compensation allowance" means

(i) in the case of a pensioner:

The aggregate of all the compensation allowances and additional compensation allowances that the pensioner was receiving from the Members of Parliament Retirement Compensation Arrangements Account at the time of death, calculated as if the pensioner had reached sixty years of age immediately before death.

(ii) in the case of a Member:

The aggregate of all the compensation allowances and additional compensation allowances that the Member would have been entitled to receive from the Members of Parliament Retirement Compensation Arrangements Account if the Member had ceased to be a Member and had reached sixty years of age immediately before death.

B. Coverage

There are five main categories of participants covered in this report:

1. Members of the House of Commons;
2. Members of the Senate appointed after 1 June 1965;
3. The Prime Minister, who also participates in the plan as a Member of the House of Commons or as a Senator;
4. Pensioners; and
5. Eligible surviving spouses and children.

C. Provisions of the Pension Plan

1. Credits and Charges to the Accounts

(a) Contributions from Members

Members of the House of Commons and Senators are required to contribute at the rates shown in Table 12 on their sessional indemnity. Members receiving additional allowances may contribute at rates up to those shown in Table 13, unless they elect not to contribute.

Table 12

MEMBER CONTRIBUTIONS IN RESPECT OF SESSIONAL INDEMNITY

	Sessional indemnity	
Group	up to the earnings limit[11]	greater than the earnings limit
Members of the House of Commons		
Member is less than 71 years of age		
MPRA Account	4% for 15 years 1% thereafter	0% 0%
RCA Account	7% for 15 years 0% thereafter	11% for 15 years 1% thereafter
Member has reached 71 years of age		
MPRA Account	0%	0%
RCA Account	11% for 15 years 1% thereafter	11% for 15 years 1% thereafter
Senators		
Member is less than 71 years of age		
MPRA Account	4% for 25 years 1% thereafter	0% 0%
RCA Account	3% for 25 years 0% thereafter	7% for 25 years 1% thereafter
Member has reached 71 years of age		
MPRA Account	0%	0%
RCA Account	7% for 25 years 1% thereafter	7% for 25 years 1% thereafter

11 Rate changes after 15 or 25 years apply regardless of age. This change may apply somewhere between 15 and 25 years for a Member moving from the House to the Senate or vice versa.

Table 13

MEMBER CONTRIBUTIONS IN RESPECT OF ADDITIONAL ALLOWANCES[12]

Group	Sessional indemnity plus additional allowances	
	up to the earnings limit	greater than the earnings limit
Member is less than 71 years of age		
MPRA Account	4%	0%
RCA Account	7%	11%
Member has reached 71 years of age		
MPRA Account	0%	0%
RCA Account	11%	11%

The Prime Minister must also contribute 7% of the additional salary as Prime Minister in the RCA Account.

(b) Prior Service Contributions

When a person ceases to be a Member and subsequently becomes a Member again, that person may elect to contribute to the MPRA and RCA Accounts in respect of any previous session during which that person was a Member. The rate of contribution required from the Member depends on the time of the election, as shown in the following Table:

12 Members of House of Commons and Senators contribute at the same rate in respect of additional allowances.

Table 14

MEMBER CONTRIBUTIONS IN RESPECT OF PRIOR SERVICE

Time of election to contribute	Sessional indemnity plus additional allowances: up to the earnings limit	Sessional indemnity plus additional allowances: greater than the earnings limit
Member of House of Commons		
Election on or after 1 January 1992		
Member is less than 71 years of age		
MPRA Account	4%	0%
RCA Account	7%	11%
Member has reached 71 years of age		
MPRA Account	0%	0%
RCA Account	11%	11%
Election before 1 January 1992		
MPRA Account	10%[13]	10%[13]
RCA Account	0%	0%
Senator		
Election on or after 1 January 1992		
Member is less than 71 years of age		
MPRA Account	4%	0%
RCA Account	3%	7%
Member has reached 71 years of age		
MPRA Account	0%	0%
RCA Account	7%	7%
Election before 1 January 1992		
MPRA Account	6%[13]	6%[13]
RCA Account	0%	0%

13 These percentages represent the maximum contribution rates required by the Act. In addition, the Member must contribute 1% to the Supplementary Retirement Benefits Account (for purposes of indexing).

In addition, the Member must pay interest on these contributions, calculated at a rate and in the manner prescribed by the regulations made under the Act.

(c) Government Credits

As required by the Act, the government makes contributions to the pension plan by crediting to the MPRA and RCA Accounts, in respect of every month, an amount equal to the total amount estimated by the Minister to be required to provide for the costs of all allowances, supplementary benefits and other benefits that have accrued in respect of that month.

The government also credits an amount representing interest on the balance of the MPRA and RCA Accounts, in accordance with the regulations.

(d) Amortization of any deficit for service before 1 January 1992

The total value of all retirement allowances and other benefits accrued under this Act before 1 January 1992 had to be estimated. Any unfunded liability as at that date was required to be amortized in the MPRA Account at the time and in the manner determined by the Minister, but over a period of not more than 15 years.

(e) Amounts of SRB Account transferred into the MPRA Account on 1 January 1992

The portion of the balance of the Supplement Retirement Benefits (SRB) Account as at 1 January 1992 which related to the Members of Parliament was credited to the MPRA Account as of that date.

(f) Amounts of MPRA Account transferred into the RCA Account on 1 January 1992

The Prime Minister's contributions along with accumulated interest was transferred to the RCA Account as of 1 January 1992.

(g) Income tax payments or refunds

The RCA Account is charged or credited in each calendar year an amount equal to the net amount of tax, if any, determined at the end of the year to be payable under subsection 207.7(1) or refundable under subsection 207.7(2) of the ITA.

(h) Future unfunded liabilities

If an unfunded liability is identified in any future actuarial report, the Minister must credit the amount considered by him or her to be necessary to fully fund the benefits, amortized over a period of not more than 15 years.

2. Allowances

(a) Retirement Allowance and Compensation Allowance

A Member is eligible to receive an annual allowance upon termination of membership after having contributed for at least six years. The portion of the annual allowance paid by the MPRA Account is called the retirement allowance while the portion of the annual allowance paid by the RCA Account is called the compensation allowance. The annual amount of retirement allowance and of compensation allowance payable to a Member is determined by multiplying the Member's best six-year average sessional indemnity by the fraction corresponding to the sum of i) plus ii), where

i) is the sum of:

- the annual accrual rate shown in Table 15 for the retirement and compensation allowances times the number of years of credit for contributions with respect to sessional indemnity as a Member of the House of Commons, and

- the annual accrual rate shown in Table 16 for the retirement and compensation allowances times the number of years of credit for contributions with respect to sessional indemnity as a Senator;

this sum being subject to a maximum of 0.75;

Table 15

ANNUAL ACCRUAL RATE AND TYPE OF ALLOWANCE IN RESPECT OF SESSIONAL INDEMNITY FOR A MEMBER OF THE HOUSE OF COMMONS

Period of pensionable service		Annual accrual rate	Type of allowance
Credited before 1 January 1992			
MPRA Account		5%	Immediate allowance
RCA Account		0%	
Credited from 1 January 1992			
Sessional Indemnity up to the earnings limit			
Service accrued when Member is less than 71 years old			
MPRA Account		2%	Deferred allowance to age 60
RCA Account		3%	Deferred allowance to age 60
	and	5%	Temporary allowance up to age 60
Service accrued after Member has reached 71 years old			
MPRA Account		0%	
RCA Account		5%	Immediate allowance
Sessional Indemnity greater than the earnings limit			
MPRA Account		0%	
RCA Account		5%	Immediate allowance

Table 16

ANNUAL ACCRUAL RATE AND TYPE OF ALLOWANCE IN RESPECT OF SESSIONAL INDEMNITY FOR A SENATOR

Period of pensionable service		Annual accrual rate	Type of allowance
Credited before 1 January 1992			
MPRA Account		3%	Immediate allowance
RCA Account		0%	
Credited from 1 January 1992			
Sessional Indemnity up to the earnings limit			
Service accrued when Member is less than 71 years old			
MPRA Account		2%	Deferred allowance to age 60
RCA Account		1%	Deferred allowance to age 60
	and	3%	Temporary allowance up to age 60
Service accrued after Member has reached 71 years old			
MPRA Account		0%	
RCA Account		3%	Immediate allowance
Sessional Indemnity greater than the earnings limit			
MPRA Account		0%	
RCA Account		3%	Immediate allowance

ii) is the annual accrual rate shown in Table 17 times the number of years of credit determined by adding the ratios of the Member's rate of contribution to the MPRA and RCA Accounts in respect of additional allowances payable to the Member in a calendar year to the rate of contribution to the MPRA and RCA Accounts in respect of sessional indemnity (without the 15 or 25 year limit) in that calendar year (also shown in Table 17).

Table 17

ANNUAL ACCRUAL RATE AND TYPE OF ALLOWANCE IN RESPECT OF ADDITIONAL ALLOWANCES[14]

Period of pensionable service	Annual accrual rate	Sessional indemnity rate of contribution[15]	Type of allowance
Credited before 1 January 1992			
MPRA Account	5%	10%	Immediate allowance
RCA Account	0%		
Credited from 1 January 1992			
Additional allowances plus sessional indemnity is less than or equal to the earnings limit			
Service accrued when Member is less than 71 years of age			
MPRA Account	2%	4%	Deferred allowance to age 60
RCA Account	3%	7%	Deferred allowance to age 60
and	5%	7%	Temporary allowance up to age 60
Service accrued after Member has reached 71 years of age			
MPRA Account	0%		
RCA Account	5%	11%	Immediate allowance
Additional allowances plus sessional indemnity is greater than the earnings limit			
MPRA Account	0%		
RCA Account	5%	11%	Immediate allowance

14 Members of House of Commons and Senators have the same annual accrual rate.

15 Without the 15 or 25 year limit (see footnote to Table 12).

Prime Minister

The Prime Minister is eligible to receive a compensation allowance in respect of the Prime Minister's salary upon termination of membership after having contributed for at least four years as Prime Minister. The annual amount of compensation allowance, payable from the day on which that person ceases to be a Member or reaches 65 years of age, whichever is the later, is equal to two-thirds of the annual salary payable to the Prime Minister in that capacity on that day.

(b) Survivor Allowance

The following survivor allowances are payable on the death of a Member or pensioner who has satisfied the eligibility requirements for a retirement or compensation allowance:

i) Members of Parliament or pensioners

- to an eligible surviving spouse, three-fifths of the Member's or pensioner's basic retirement allowance and basic compensation allowance[16];

- if there is an eligible surviving spouse, to each child under age 18 (or child between 18 and 25, if a full-time student), one-tenth of the Member's or pensioner's basic retirement allowance and basic compensation allowance[16] subject to a maximum of three-tenths,

  or if there is no eligible surviving spouse, to each child under age 18 (or child between 18 and 25, if a full-time student), two-tenths of the Member's pensioner's basic retirement allowance and basic compensation allowance[16], subject to a maximum of eight-tenths.

16 See Section A of this appendix for a definition of basic retirement allowance and basic compensation allowance.

ii) Prime Minister

A survivor allowance is payable to a surviving spouse if the surviving spouse was the spouse at the time when that person held the office of Prime Minister and if that person has satisfied the eligibility requirements for a compensation allowance as Prime Minister. The survivor allowance equals one half of the compensation allowance that the person was receiving as former Prime Minister at the time of death or would have been eligible to receive if, immediately before the time of death, that person had ceased to hold the office of Prime Minister and had reached 65 years of age.

In the case of a pensioner, no allowance is payable unless the marriage existed while the deceased spouse was a Member (soon to be modified by Bill C-55).

3. Withdrawal Benefit

If a Member ceases to be a Member before satisfying the eligibility requirements for a retirement allowance or a compensation 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 his or her contributions with interest at a rate specified in the regulations.

4. Indexing

Benefit adjustments corresponding to increases in the Consumer Price Index (CPI) are provided in respect of the allowances payable from both the MPRA and RCA Accounts to pensioners and survivors.

The adjusted benefit, with adjustment applicable at the beginning of each calendar year, is calculated by applying to the benefit the ratio of the average of the CPI for the 12-month period ending on 30 September of the preceding year to the average for the corresponding period one year earlier.

Although survivor benefits and disability pensions are indexed immediately, Member's retirement or compensation allowances are not indexed until age 60. However, the increase at that age reflects the cumulative increase since commencement of the allowance.

5. General

(a) Minimum Benefit

If a Member or pensioner dies leaving no eligible survivor, or if the survivor dies, the amount by which the Member's contributions exceed any annuity payments made to the Member and to his or her survivors is payable to the Member's estate.

(b) Suspension of Allowance

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

(c) Rate of Interest for Lump Sum Calculations

The rate of interest used in calculating withdrawal benefits and lump sum repayments of withdrawal benefits and prior service contributions is prescribed by regulation (currently 4% per annum).

(d) Amortization of Lump Sums

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

(e) Interest Credited to Accounts

The rate of interest to be credited to the MPRA and RCA Accounts 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.

Appendix 2 - Table 18

HOUSE OF COMMONS: PROBABILITY OF TERMINATION

Completed Years of Service	During a Non-Election Year	Age Last Birthday	During an Election Year
0	.002	46 and under	.347
1	.003	47	.356
2	.003	48	.367
3	.004	49	.380
4	.005	50	.396
5	.005	51	.412
6	.006	52	.429
7	.008	53	.444
8	.009	54	.456
9	.011	55	.467
10	.012	56	.476
11	.014	57	.483
12	.014	58	.488
13	.015	59	.491
14	.015	60	.495
15	.015	61	.497
16	.015	62	.503
17	.015	63	.511
18	.017	64	.521
19	.018	65	.536
20	.021	66	.555
21	.023	67	.579
22	.026	68	.600
23	.029	69	.600
24	.032	70	.600
25	.035	71	.600
26 and after	.038	72 and after	.600

Appendix 2 - Table 19

HOUSE OF COMMONS: PROBABILITY OF ELECTION

Year	Probability of a General Election
1992	0.000
1993	1.000
1994	0.217
1995	0.100
1996	0.157
1997	0.465
1998	0.427
1999	0.221
2000	0.209
2001	0.325
2002	0.378
2003	0.304
2004	0.254
2005	0.289
2006	0.332
2007	0.320
2008	0.287
2009	0.288
2010	0.310
2011	0.315
2012	0.302
2013	0.295
2014	0.302
2015	0.308
2016	0.305
2017	0.300
2018	0.301
2019	0.305
2020	0.305
2021	0.303
2022	0.302
2023	0.303
2024	0.304
2025	0.303
2026	0.302
2027 and after	0.303

Appendix 2 - Table 20

SAMPLE RATES OF MORTALITY FOR MEMBERS, PENSIONERS AND SURVIVORS

Age Last Birthday	1992 Rates of Mortality		Mortality Improvement Reduction % per year	
	Males	Females	Males	Females
25	.0005	.0002	.10	.50
30	.0006	.0003	.50	.75
35	.0008	.0004	.75	1.25
40	.0012	.0006	1.00	1.75
45	.0020	.0009	1.50	1.75
50	.0036	.0015	1.50	1.50
55	.0057	.0023	1.30	1.50
60	.0085	.0039	1.30	1.50
65	.0147	.0065	1.30	1.50
70	.0258	.0116	1.25	1.50
75	.0420	.0224	1.25	1.45
80	.0699	.0398	1.20	1.45
85	.1107	.0669	.90	1.05
90	.1643	.1107	.55	.70
95	.2397	.1874	.10	.30
100	.3301	.3102	.00	.00
105	.4957	.5169	.00	.00
109	1.0000	1.0000	.00	.00

Appendix 2 - Table 21

PROPORTIONS OF MEMBERS AND PENSIONERS MARRIED AT DEATH

Age Last Birthday at Death	Males	Females
25	.261	.481
30	.530	.678
35	.816	.828
40	.827	.822
45	.853	.816
50	.858	.806
55	.861	.785
60	.851	.733
65	.837	.653
70	.820	.544
75	.781	.409
80	.711	.271
85	.604	.156
90	.462	.079
95	.334	.049
100	.247	.045
105	.152	.023
109	.033	.004

Appendix 2 - Table 22

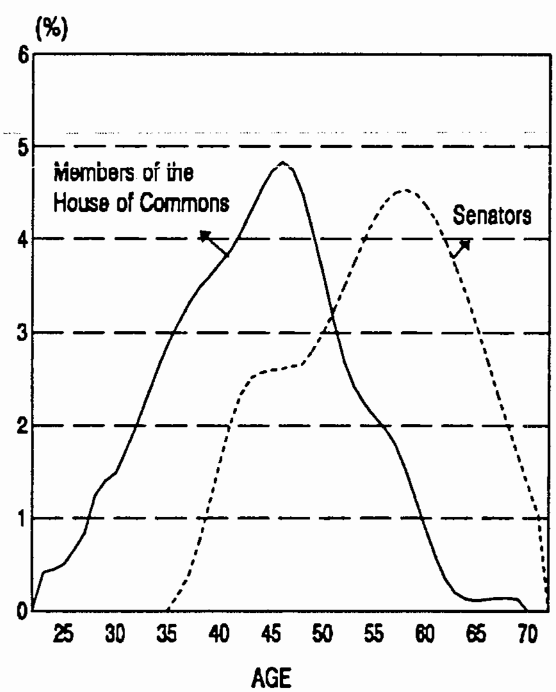
NEW ENTRANTS DISTRIBUTION

Age Last Birthday	House of Commons	Senate	Receiving Additional Allowances
20-24	.0055	.0000	.0000
25-29	.0423	.0000	.0148
30-34	.1006	.0000	.0607
35-39	.1634	.0245	.1247
40-44	.2054	.1102	.1896
45-49	.2288	.1327	.2643
50-54	.1401	.1749	.1962
55-59	.0862	.2215	.1164
60-64	.0215	.1958	.0333
65-69	.0062	.1169	.0000
70-74	.0000	.0235	.0000

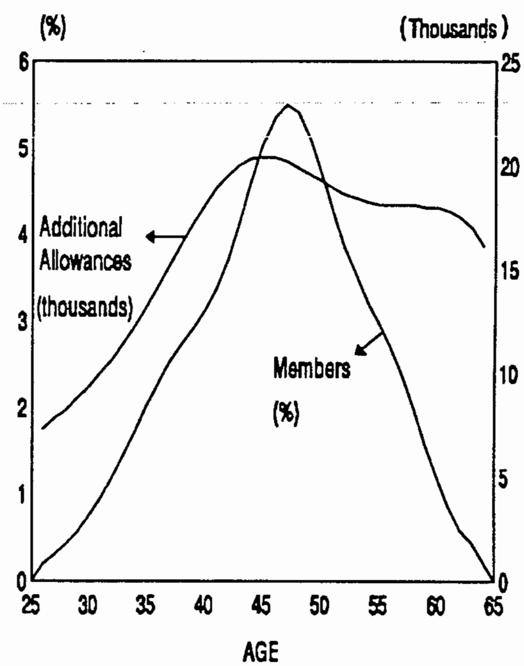
Chart 6

NEW ENTRANTS DISTRIBUTION

IN PARLIAMENT



RECEIVING ADDITIONAL ALLOWANCES



Appendix 3 - Table 23

SUMMARY OF MEMBERS OF PARLIAMENT AS AT 31 DECEMBER 1991

	House of Commons	Senate
Number of Members:	295	99
Average age (last birthday):	50.9	61.5
Average service (completed years):	8.4	12.9
Total sessional indemnity:	$18,998,000	$6,375,600
Sessional indemnity per Member:	$64,400	$64,400
Members without vested benefits:	122	29
Members with vested benefits and with less than maximum benefit:	136	54
Members with maximum benefit[17]:	37	16
Total sessional indemnity for Members with less than maximum benefit:	$16,615,200	$5,345,200
Number of Members with additional allowances[18]:	89	10
Total of additional allowances:	$2,454,890	$140,500
Average of additional allowances:	$27,583	$14,050

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

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

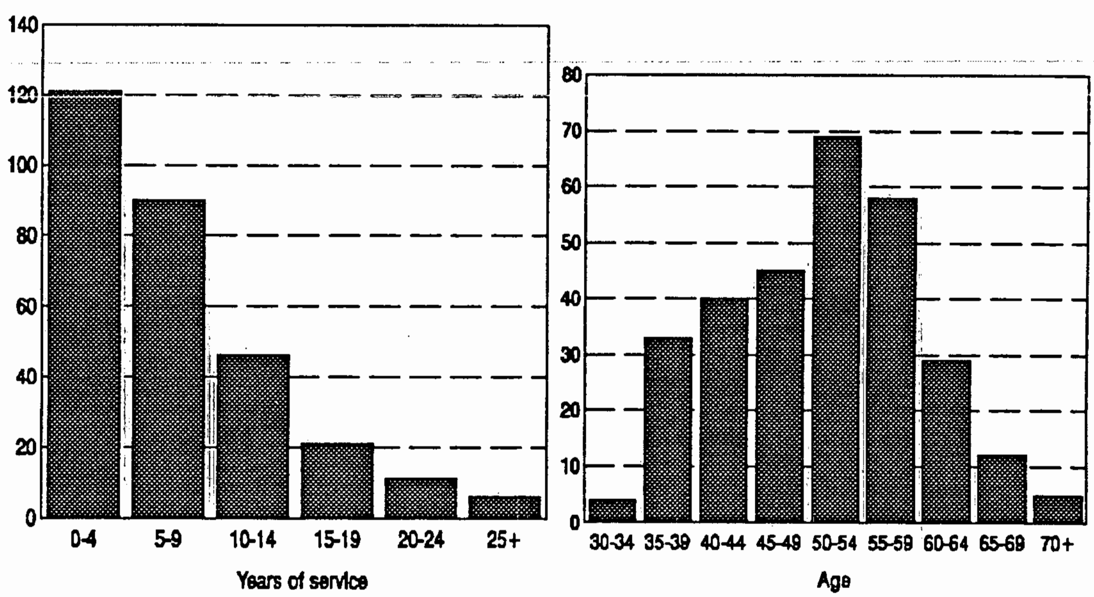
Appendix 3 - Table 24

MEMBERS OF THE HOUSE OF COMMONS AS AT 31 DECEMBER 1991

Age Last Birthday	Completed Years of Service: Males 0-5	Males 6-14	Males 15+	Females 0-5	Females 6-14	Females 15+	All Durations
30-34	2	1	0	0	1	0	4
35-39	18	13	0	1	1	0	33
40-44	21	12	1	5	1	0	40
45-49	17	20	2	6	0	0	45
50-54	20	29	8	5	7	0	69
55-59	12	29	10	3	4	0	58
60-64	7	9	10	2	1	0	29
65-69	1	6	2	1	2	0	12
70-74	1	0	3	0	0	0	4
75-79	0	0	0	0	0	0	0
80-84	0	0	1	0	0	0	1
All Ages	99	119	37	23	17	0	295

Chart 7

MEMBERS OF THE HOUSE OF COMMONS AS AT 31 DECEMBER 1991



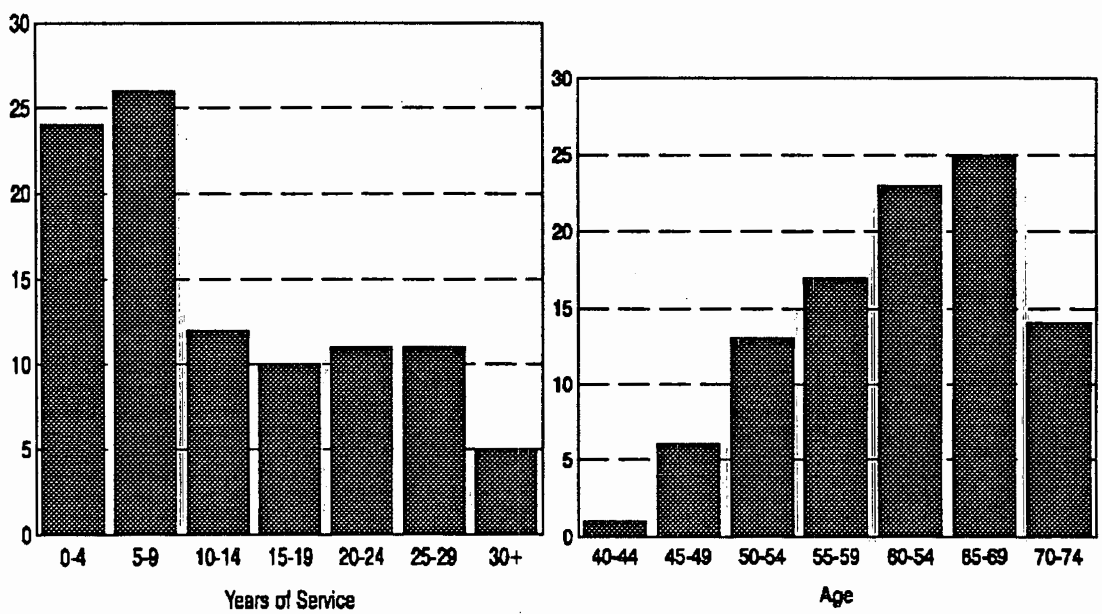
Appendix 3 - Table 25

SENATORS AS AT 31 DECEMBER 1991

Age Last Birthday	Completed Years of Service: Males 0-5	Males 6-24	Males 25+	Females 0-5	Females 6-24	Females 25+	All Durations
40-44	0	0	0	1	0	0	1
45-49	0	3	0	1	2	0	6
50-54	7	3	1	1	1	0	13
55-59	5	8	2	1	1	0	17
60-64	6	11	3	2	1	0	23
65-69	2	16	5	1	1	0	25
70-74	1	6	5	1	1	0	14
All Ages	21	47	16	8	7	0	99

Chart 8

SENATORS AS AT 31 DECEMBER 1991



Appendix 4 - Table 26

SUMMARY OF BENEFITS AS AT 31 DECEMBER 1991

	Number	Annual Allowances $	Indexing[19] $	Total $
Pensioners				
With deferred indexing				
Total:	73	1,859,629	648,896	2,508,525
Average:		25,474	8,889	34,363
With immediate indexing				
Total:	244	3,953,080	2,739,495	6,692,575
Average:		16,201	11,227	27,429
Surviving Spouses				
With immediate indexing				
Total:	79	575,663	602,671	1,178,334
Average:		7,287	7,629	14,916
Surviving Children				
With immediate indexing				
Total:	4	4,911	3,457	8,368
Average:		1,228	864	2,092
All recipients (excluding deferred indexing portion)				
Total:	400	6,393,283	3,345,623	9,738,906
Average:		15,983	8,364	24,347

19 Indexing benefits shown include indexing increases effective 1 January 1992.

Appendix 4 - Table 27

PENSIONERS AS AT 31 DECEMBER 1991

Age Last Birthday	Number	Annual Allowances $	Indexing[20] $	Total $
35-39	1	22,227	8,423 [21]	30,650
40-44	4	97,379	24,805 [21]	122,184
45-49	16	422,817	122,891 [21]	545,708
50-54	24	554,194	202,338 [21]	756,532
55-59	28	763,012	290,439 [21]	1,053,451
60-64	45	1,008,943	428,474	1,437,417
65-69	60	1,011,627	709,658	1,721,285
70-74	49	811,703	548,441	1,360,144
75-79	45	655,368	423,741	1,079,109
80-84	31	357,772	385,860	743,632
85-89	13	105,670	235,293	340,963
90-94	1	1,997	8,028	10,025
Total	317 [22]	$5,812,709	$3,388,391	9,201,100

Average Age (last birthday): 67.5
Average Pension (excluding deferred indexing): $26,979

20 Indexing benefits shown include increases effective 1 January 1992.

21 Indexation accrued but not payable until age 60.

22 Of this total, 15 pensioners are female.

Appendix 4 - Table 28

SURVIVING SPOUSES AS AT 31 DECEMBER 1991

Age Last Birthday	Number	Annual Allowances $	Indexing[23] $	Total $
40-44	1	8,878	5,347	14,225
45-49	1	3,985	6,023	10,008
50-54	2	21,526	5,841	27,367
55-59	1	3,349	3,842	7,191
60-64	6	61,669	52,069	113,738
65-69	9	114,770	50,061	164,831
70-74	21	143,151	156,478	299,629
75-79	17	93,820	147,896	241,716
80-84	16	114,884	146,122	261,006
85-89	3	3,662	12,097	15,759
90-100	2	5,969	16,895	22,864
Total	79[24]	575,663	602,671	1,178,334

Appendix 4 - Table 29

SURVIVING CHILDREN AS AT 31 DECEMBER 1991

Age Last Birthday	Number	Annual Allowances $	Indexing[23] $	Total $
0-17	1	664	1,004	1,668
18-24	3	4,247	2,453	6,700
Total	4	4,911	3,457	8,368

23 Indexing benefits shown include increases effective 1 January 1992.

24 All widows, aged 73.6 years (last birthday) on average, with average pension of $14,916.