

**ACTUARIAL REPORT**

**as at 31 March 1998**

**on the**

**Pension Plan for**

**MEMBERS of PARLIAMENT**

9 August 1999

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

Dear Minister:

Pursuant to section 6 of the *Public Pensions Reporting Act*, I am pleased to submit my report on the actuarial review as at 31 March 1998 of the pension plan established under the *Members of Parliament Retiring Allowances Act*.

Yours sincerely,

Michael Hafeman  
Acting Chief Actuary  
Public Insurance and Pension Programs

## TABLE OF CONTENTS

	<u>Page</u>
I- Overview .....	1
II- Data .....	5
III- Methodology .....	12
IV- Assumptions .....	14
V- Results	
A- Balance Sheet as at 31 March 1998 .....	25
B- Cost Certificate .....	26
C- Sensitivity of Estimates to Variations in Key Assumptions ....	29
D- Reconciliation of Results with Previous Report .....	31
VI- Conclusions .....	36

## APPENDICES

1. Summary of Plan Provisions .....	37
2. Sample Demographic Assumptions .....	51
3. Summaries of Membership Data .....	57

## **I- Overview**

The financial soundness of the pension plan established under the *Members of Parliament Retiring Allowances Act* (MPRAA) rests on the balances in the Members of Parliament Retiring Allowances Account (MPRA Account) and on the Members of Parliament Retirement Compensation Arrangements Account (MPRCA Account) which form part of the public debt of Canada. The plan is not funded through investments in marketable securities. Instead, the plan's assets are borrowed by the government.

### **A- Purpose of this Report**

This actuarial review of the pension plan established under the MPRAA was made as at 31 March 1998 pursuant to the *Public Pensions Reporting Act* (PPRA). The previous review was made as at 31 March 1995. The date of the next periodic review contemplated by the PPRA is 31 March 2001.

In accordance with accepted actuarial practice, the main purpose of this actuarial report is to show realistic estimates of:

- the balance sheet of the pension plan as at the valuation date, i.e. its assets, its liabilities, and the surplus or deficit as at that date;
- the annual amount required to amortize over a period of years any surplus or deficit revealed as at the valuation date; and
- the projected cost of the plan for each of the next three plan years<sup>1</sup> following the valuation date.

### **B- Main Findings**

1. As at 31 March 1998, the plan had an overall surplus of \$37.3 million, being the difference between the assets of \$337.8 million and the liabilities of \$300.5 million.
2. The statutes governing the operation of the plan do not address the disposition of a surplus. However, if the \$37.3 million surplus were amortized as a deficit would be, then the total contributions to the plan would be reduced by \$4.2 million in each of the next 15 plan years. This annual reduction corresponds to 17.21% of pensionable payroll for the 1999 plan year.
3. The total normal cost of the plan estimated for the 1999 plan year is 49.65% of pensionable payroll, that is \$12.1 million, and is estimated to increase to 51.19% and 52.28% of pensionable payroll, respectively, for the following two plan years. This gradual increase in costs mainly reflects a partial transition from current to ultimate economic assumptions and the greater probability of

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<sup>1</sup> Any reference to a given *plan year* in this report should be taken as the 12-month period ending 31 March of the given year.

having a general election. The rate of 49.65% for the 1999 plan year closely corresponds to the projection of the previous report.

### **C- Recent Developments**

Although demographic and short-term economic assumptions on which this report is based have changed from those of the previous report, the key long-term economic assumptions have not changed, i.e. a new money interest rate of 6%, and annual rates of increases in the Consumer Price Index (CPI) and in average employment earnings of 3% and 4%, respectively.

The most important development having taken place since the previous report's date was the adoption of Bill C-85, which received Royal Assent on 13 July 1995. These amendments were included in the preceding review even though the date of the Royal Assent was subsequent to the date of the former review. The underlying modifications are described below.

#### **1. Election to Continue the Coverage Under the MPRAA**

A Member of the House of Commons in the thirty-fifth Parliament or a person who becomes a member of the House of Commons during the thirty-fifth Parliament may, within 60 days after the day on which this section came into force or within 60 days after that person becomes a Member, if later, elect to contribute under the MPRAA. This election is irrevocable and the MPRAA continues to apply for a Member who makes this election.

If the Member does not make this election, all accrued benefits earned in his respect after 25 October 1993 are foregone and the Member's contributions made in this respect are refundable to the Member with interest at a rate specified in the regulations. Moreover, in respect of Members with less than six years of membership in the plan as at 25 October 1993, contributions made in respect of service prior to that date are also refundable.

#### **2. Reduced Contribution Rates**

##### **(a) Member's Contributions in Respect of Sessional Indemnity<sup>2</sup>**

The aggregate contribution rate, in respect of the sessional indemnity of Members (excluding Senators), is decreased by 2% from 11% to 9%. The rate in respect of Senators' sessional indemnity remains unchanged at 7%.

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<sup>2</sup> For a definition of sessional indemnity, see section A of Appendix 1.

**(b) Member's Contributions in Respect of Additional Allowance**<sup>3</sup>

The aggregate contribution rate, in respect of Members of Parliament (including Senators) who elect to contribute in respect of additional allowance, is decreased by 2% from 11% to 9%.

**3. Reduced Pension Accrual Rates****(a) Accrued Benefits in Respect of Sessional Indemnity**

The aggregate rate of pension accruing in respect of Members' (excluding Senators) sessional indemnity earned after the amended legislation comes into force is decreased by 1% from 5% to 4%. The rate in respect of Senators remains unchanged at 3%.

**(b) Accrued Benefits in Respect of Additional Allowance**

The aggregate rate of pension accruing annually in respect of Members' additional allowance earned after the amended legislation came into force is decreased by 1% from 5% to 4% for each relevant additional year of service.

**4. Minimum Pensionable Age**

The portion of retirement allowances payable to a Member in respect of pensionable service accruing on or after 13 July 1995 does not start to be payable before the day on which the Member reaches age 55 or becomes entitled to receive a disability pension under the *Canada Pension Plan* or a provincial pension plan similar thereto, if earlier. For purposes of this report, no disabilities were assumed.

**5. Double-Dipping Provision**

Where a pensioner in receipt of a pension under this plan also receives remuneration of at least \$5,000 in any one-year period as holding a federal position or pursuant to a federal service contract, the aggregate of all retirement allowances under the MPRAA to that pensioner in that year shall be reduced by one dollar for each dollar of such remuneration received in that year.

The effect of the double-dipping provision has been taken into account in the present review by reducing pensioners' retirement allowances, when they started receiving remuneration as a federal government employee or pursuant to a federal service contract.

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<sup>3</sup> For a definition of additional allowance, see section A of Appendix 1.

## **6. Extension of Survivor Benefits to Common-Law Spouses**

The definition of eligible survivor was expanded to include any person of the opposite sex who establishes that she was cohabiting in a conjugal relationship with the Member or pensioner for at least one year and, in the case of a pensioner, that the period of cohabitation commenced before the time when the pensioner ceased to be a Member.

## **7. Apportionment of Survivor Benefits**

Survivor benefits may be apportioned between a previous spouse, still legally married but no longer cohabiting with the Member/pensioner immediately before his death, and a current spouse having cohabited with the deceased Member/pensioner for at least one year immediately before his<sup>4</sup> death. In the case of a pensioner, cohabitation must have commenced while he was still an active Member.

Bill C-47, which received Royal Assent on 18 June 1998, amended some provisions of the MPRAA. It was decided to include these amendments in this review even though the date of the Royal Assent is subsequent to the date of this review because these two dates are very close to each other and the amendments have a material effect on the cost certificate and on the liabilities (item 4, page 33). The underlying modifications are described below.

### **1. Election to Resume Coverage Under the MPRAA**

A Member of the House of Commons in the thirty-fifth Parliament or a person who becomes a Member of the House of Commons during the thirty-fifth Parliament who did not elect to contribute under the MPRAA, within 60 days after the day on which Bill C-85 came into force or within 60 days after that person becomes a Member, if later, is entitled to make an election within 90 days after the day which Bill C-47 comes into force to have the MPRAA Act resume to apply to the Member. This election is irrevocable and the Act is deemed to apply to a Member of the House of Commons as if it had always applied to the Member.

### **2. Sessional Allowance Increases in the Thirty-Sixth Parliament**

The sessional allowance for the twelve month period beginning on 1 January 1998 and for the twelve month period beginning on every successive 1 January during the thirty-sixth Parliament is the sessional allowance payable for the twelve month period immediately before that period increased by two per cent.

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<sup>4</sup> For simplicity, the masculine gender is used throughout this report.

## II- Data

### A- Accounts

#### 1. Reconciliation of Balances in the Members of Parliament Retiring Allowances Account

**Table 1**  
**Members of Parliament Retiring Allowances Account**

Plan year	(in millions of dollars)		
	1996	1997	1998
Retiring Allowances Account opening balance	235.1	245.8	258.1
INCOME			
Members' contributions	1.0	0.9	0.9
Government contributions	1.7	1.6	1.7
Interest	23.9	25.0	26.3
Subtotal	26.6	27.5	28.9
EXPENDITURES			
Annual Allowances	14.9	15.0	15.3
Withdrawal allowances	0.3	0.1	0.4
Pension division payments	0.6	0.1	0.4
Subtotal	15.8	15.2	16.1
Retiring Allowances Account closing balance	245.8	258.1	270.9

The above table shows the reconciliation of assets in the Members of Parliament Retiring Allowances Account from the last valuation date to the current valuation date. (Some amounts in this table do not add to the totals due to rounding.) Since the last valuation, the Account balance has grown by \$35,872,691 (i.e. a 15.3% increase) to reach \$270,924,618 as at 31 March 1998. The net growth in the Account balance is to a large extent the result of interest credits made.

## 2. Reconciliation of Balances in the Members of Parliament Retirement Compensation Arrangements Account

Table 2  
Members of Parliament Retirement Compensation Arrangements Account

Plan year	(in millions of dollars)		
	1996	1997	1998
MPRCA Account opening balance	22.0	25.6	29.8
INCOME			
Members' contributions	1.2	1.1	1.1
Government contributions	6.0	4.9	5.4
Interest	2.6	2.9	3.3
Subtotal	9.8	8.9	9.8
EXPENDITURES			
Annual Allowances	0.8	0.8	1.0
Withdrawal allowances	0.5	0.0	0.7
Refundable Tax remitted to Revenue Canada	4.8	3.9	4.0
Pension division payments	0.0	0.0	0.0
Subtotal	6.1	4.7	5.7
MPRCA Account closing balance	25.6	29.8	33.9

The above table shows the reconciliation of assets in the Members of Parliament Retirement Compensation Arrangements Account from the last valuation date to the current valuation date. Since the last valuation, the MPRCA Account balance has grown by \$11,956,105 (i.e. a 54.4% increase) to reach \$33,919,541 as at 31 March 1998. The Account owes to Revenue Canada an amount of \$1.1 million, which represents the refundable tax due for the first three months of 1998. The net growth in the Account balance is to a large extent the result of current contributions made by Members and Government.

### 3. Reconciliation of Balances in the Combined Accounts

Table 3  
Members of Parliament Combined Accounts

	(in millions of dollars)			
	MPRAA	MPRCA	Revenue Canada	Combined
<b>Account balances as at 31 March 1995</b>	235.1	22.0	19.0	276.1
Net Cash Flow				
1 April 1995 to 31 March 1998				
INCOME				
Members' contributions	2.8	3.5		6.3
Government contributions	5.0	16.3		21.3
Tax remitted to Revenue Canada			12.7	12.7
Interest	75.2	8.7		83.9
<b>Subtotal</b>	<b>83.0</b>	<b>28.5</b>	<b>12.7</b>	<b>124.2</b>
EXPENDITURES				
Annual Allowances	45.2	2.5		47.7
Withdrawal allowances	0.9	1.3		2.2
Refundable Tax		12.7		12.7
Pension division payments	1.1	0.1		1.2
<b>Subtotal</b>	<b>47.1</b>	<b>16.5</b>		<b>63.6</b>
<b>Account balances as at 31 March 1998</b>	270.9	33.9	31.6	336.4

Revenue Canada holds, in the name of the plan sponsor, a refundable tax on all the credits to the MPRCA Account. Accordingly, fifty percent of all amounts credited to the MPRCA Account each year (contributions and interest) are transferred to Revenue Canada as an eventual refundable tax under the *Income Tax Act* (ITA), and refunded at a rate equal to 50% of all benefits paid out of the MPRCA Account to or on behalf of Members.

#### 4. Rates of Return

The *Members of Parliament Retiring Allowances Regulations* stipulate that the amount of interest to be credited to the MPRA and the MPRCA Accounts in respect of each quarter of a plan year shall be equal to 2.5% of the balance to the credit of the Account on the last day of the preceding quarter.

#### 5. Sources of Asset Data

The Account entries shown in items 1 to 3 above were taken from the Public Accounts of Canada. In accordance with section 8 of the PPRA, the Office of the Comptroller General of Canada provided a certification of the assets of the plan as at 31 March 1998.

### B- Membership

#### 1. Highlights

The individual data in respect of members, pensioners and eligible survivors were provided as at 31 March 1998 and are summarized in more detail in Appendix 3.

#### (a) Members of Parliament

The main characteristics of the 301 Members of the House of Commons and the 97 Senators as at 31 March 1998 are summarized in the following Table:

**Table 4**  
**Members of Parliament**

	Number	Average	
		Age	Service
House of Commons			
MPRAA Participants <sup>5</sup>			
Males	203	49.1	5.0
Females	58	50.0	3.2
Vacant seats	0		
Did not elect to be covered	40		
Senate			
MPRAA Participants			
Males	71	64.0	14.3
Females	26	63.2	6.9
Vacant seats	7		

<sup>5</sup> Include 8 males and 1 female who elected to resume coverage under MPRAA under Bill C-47.

The remuneration of Members of Parliament comes from two sources: sessional indemnity and additional allowance. Sessional indemnity is the regular remuneration received by every Member of Parliament. In 1998, the annual sessional indemnity was \$65,600. Additional allowance is the remuneration of a Member in his capacity as Minister, Speaker, Leader of Opposition, etc. As at the valuation date, 73 Members were receiving additional allowances averaging \$28,802 per concerned Member per annum.

Tables 30, 31 and 32 of Appendix 3 show detailed information for each group.

**(b) Pensioners and Survivors**

As at 31 March 1998, the plan was paying benefits to pensioners and surviving spouses at the following annual rates:

**Table 5**  
**Pensioners and Survivors**

Type of Beneficiary	Number	Annual Allowances (\$)	Average	
			Age	Annual Allowance (\$)
Pensioners	410	14,348,416	67.2	34,996
Surviving spouses	116	2,085,908	76.9	17,982
Surviving children	6	15,061	15.1	2,510
Grand Total	532	16,449,385		30,920

Tables 33 to 42 of Appendix 3 show detailed information on the retirement allowances to pensioners and survivors. Annual retirement allowances shown in the above Table are, in respect of pensioners under age 60, exclusive of indexation deferred to age 60.

**2. Sources of Data**

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 Public Works and Government Services Canada Department. In accordance with section 8 of the PPRA, the Comptroller General of Canada provided a certification of the notional assets of the MPRA and MPRCA Accounts for

purposes of this valuation. The co-operation and able assistance received from the above-mentioned data providers deserve to be acknowledged.

### **3. Validation of Membership Data**

The principal tests applied to the basic data can be separated into two categories:

#### **(a) Status-Related Tests**

The valuation data supplied by the Accounting Division of the Administration and Personnel Branch of the Senate and by the House of Commons Division of the Public Works and Government Services Canada Department contains status information for each Member during the period from 1 April 1995 to 31 March 1998. The following status tests were made:

- i)** a reconciliation was made between the status of Members and pensioners as at 1 April 1995 per the current valuation data and the status of Members as at 31 March 1995 per the previous valuation data;
- ii)** a reconciliation was made between the status of Members and pensioners as at 31 March 1998 per the current valuation data and the status of Members as shown in the 1998 Canadian Parliamentary Guide;
- iii)** for active members, verifying that the age and pensionable service of Members of Parliament are reasonable in comparison with the information included in the historical actuarial valuation data and in the 1998 Canadian Parliamentary Guide;
- iv)** for all pensioners, a comparison was made of Members valuation data as at 31 March 1998 with the membership shown in the historical data base maintained by the Chief Actuary for valuation purposes.

#### **(b) Benefits-Related Tests**

Consistency tests were made to ensure that all proper information required to value the members' benefits based on their status as at 31 March 1998 was included:

**i) For Active Members**

Verifying that the Members' additional allowance was reasonable.

**ii) For Pensioners and Survivors in Receipt of an Allowance**

For pensioners and survivors emerging between 1 April 1995 and 31 March 1998, verifying that the amount of the retirement allowance, including indexation up to 1 January 1998, is consistent with the expected retirement allowance estimated using the information included in the historical actuarial valuation data; and

For pensioners and survivors entitled to a retirement allowance as at 1 April 1995, verifying that the amount of retirement allowance shown in the current valuation data agrees with that shown in the historical actuarial valuation data.

**(c) Adjustments to Status and Benefit Data**

Based on the omissions and discrepancies identified by the tests mentioned above and several additional tests, appropriate adjustments were made to the basic data after consulting with the data providers.

### **III- Methodology**

#### **A- Assets**

The assets of the plan consist essentially of the recorded balance in the MPRA and the MPRCA Accounts and of the Refundable Tax Account held by Revenue Canada. The assets in the MPRA and MPRCA Accounts are shown at the book value of the underlying notional bond portfolio and are recognized as part of the public debt.

The only other plan asset consists of the value, discounted in accordance with the projected yields on the Account, of all future Member contributions and government credits in respect of prior service elections.

#### **B- Normal Costs**

The projected accrued benefit actuarial cost method (also known as the projected unit credit method) was used to compute normal costs. Under this method, the normal cost computed in respect of a given year corresponds to the value, discounted in accordance with the projected yields (described in section D below and shown in section IV-C), of all future benefits considered to accrue in respect of that year's service. Consistent with this cost method, sessional indemnity and additional allowance are projected to retirement in accordance with the assumed annual increases in average remuneration.

#### **C- Liabilities**

##### **1. Members of Parliament**

Consistent with the projected accrued benefit actuarial cost method employed to estimate normal costs, the plan's liabilities in respect of Members of Parliament as at the valuation date correspond to the value, discounted in accordance with the projected yields on the Accounts, of all future benefits having accrued as at that date in respect of all previous years' service.

##### **2. Pensioners and Survivors**

Consistent with accepted actuarial practice and standards, the plan's liabilities as at the valuation date in respect of pensioners (including deferred annuitants) and survivors correspond to the value, discounted in accordance with the projected yields on the Accounts, of all outstanding future benefits.

#### **D- Assumed Interest Rates**

The current *Members of Parliament Retiring Allowances Regulations* stipulate that the amount of interest to be credited to the MPRA and the MPRCA Accounts in respect of each quarter of a plan year shall be equal to 2.5% of the balance to the credit of the Account on the last day of the preceding quarter.

For the purpose of projecting costs and liabilities, it appears more appropriate to assume that should the general level of interest rates change, the Regulations that stipulate the interest to be credited to the Accounts may be amended. Therefore, the projected yields assumed in computing the present value of benefits involved in estimating the normal costs and liabilities mentioned in sections B and C above are the projected annual yields on the combined book value of Superannuation Accounts of the pension plans established under the *Public Service, Canadian Forces, and Royal Canadian Mounted Police Superannuation Acts*. These three plans were deemed the most appropriate model to estimate the future interest rates. As in the previous valuation, the yields were determined using the open-group approach, meaning that expected future contributions are taken into account in projecting the annual yield on the combined Superannuation Accounts of the three plans.

The open-group approach was retained in accordance with the plan provision, common to the three above-mentioned plans, stipulating that the average yield on the combined Accounts is to be used in allocating aggregate investment earnings to each of the three Accounts.

The projected yields were determined by an iterative process involving the notional assets of the three Accounts as at the valuation date, the assumed future new money interest rates (shown in section IV-C), and all future contributions as well as all future expected benefits payable in respect of all pension entitlements either accrued before the valuation date or accruing thereafter.

#### **E- Membership Data**

For valuation purposes, data for Members of the House of Commons and Senators were grouped by individual age and by number of years of service.

For Members of Parliament who were receiving or are receiving additional allowance, data were grouped accordingly to their total remuneration, based on whether it was higher or lower than the maximum pensionable salary<sup>6</sup>.

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<sup>6</sup> For a definition of maximum pensionable salary, see section A of Appendix 1.

## IV- Assumptions

### A- Basic Economic Assumptions

The following basic assumptions in respect of each future year are not used directly in the valuation. However, the valuation is based on the economic assumptions derived therefrom (see the following subsection).

#### 1. Interest Rate on New Money

The ultimate real rate of return<sup>7</sup> on the investment of future net cash flows in long-term (at least 20 years to maturity) Government of Canada bonds is projected to be 3% per annum. This real rate is unchanged from the previous valuation.

Over the last 60 years, the real-return differential on long Government of Canada bonds has often been less than 3% per annum. In fact, negative differentials were not uncommon until the early 1980s. It is only in the last 15 years that high real-return differentials (as much as 8% per annum) have prevailed. The current expectations in the capital markets, as measured by the pricing of long Government of Canada real-return bonds, are that the differentials will average 4% per annum for the next three decades. Taking all of these factors into account, the assumed ultimate differential of 3% per annum seems reasonable.

The real-return differential is expected to decrease annually from 4.9% in the 1999 plan year until the ultimate level of 3% per annum is first attained in the 2004 plan year.

#### 2. Price Increase

Price increases, as measured by changes in the Consumer Price Index (CPI), tend to fluctuate from year to year. Over the last 50 years, the trend was generally upward until the early 1980s and downward since then. For example, the average annual increases in the CPI for the 50-, 25- and 10-year periods ending in 1997 were 4.44%, 5.83% and 2.80%, respectively.

Based on these trends as well as judgement regarding the long-term outlook for inflation, an ultimate annual rate of price increase of 3% has been assumed. This is the same ultimate price increase assumption used in the previous valuation. The rates of price increase are assumed to increase annually from

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<sup>7</sup> Note that all of the real rates of return referred to in this report are actually real-return differentials, i.e. the difference between the effective annual coupon yield on long Government of Canada bonds and the rate of increase in prices. This differs from the technical definition of the real rate of return, which, in the case of the ultimate new money rate assumption, would be 2.91% (derived from 1.06/1.03) rather than 3%.

0.7% in the 1999 plan year until the ultimate level of 3% per annum is first attained in the 2004 plan year.

### **3. Average Canadian Wage Increase**

The Industrial Aggregate index maintained by Statistics Canada measures the average earnings of employed Canadians. The real-wage differential for Canada is then the excess of the Industrial Aggregate increase over the price increase.

Historically, the real-wage differential has fluctuated significantly from year to year. The trend was generally downward through the late 1980s, with some improvement since then; for example, the 10-year average annual real-wage differential was -0.59% for the period ending 1987 and 0.32% for the period ending 1997. Over the longer term, the annual real-wage differential averaged 1.52% for the 50-year period ending 1997.

Many factors have influenced the real rates of increase in average annual wages, including general productivity improvements, the move to a service economy and decreases in the average hours worked. Considering these factors, together with the historical trends and judgement regarding the long-term course of the economy, an ultimate real-wage differential of 1% per annum has been assumed for plan year 2004 and thereafter. This ultimate differential is unchanged from the assumption used in the previous report. Combined with the price increase assumption already described, it results in assumed nominal annual increases in Canadian wages of 4% in the plan year 2004 and thereafter. Before then, the real-wage differential is assumed to vary from year to year, the average being close to the ultimate differential.

## **B- Derived Economic Assumptions**

The following assumptions were derived from the key economic assumptions:

### **1. Valuation Interest Rate**

The valuation interest rate is the projected fund yield. It is required for the computation of present values of benefits involved to determine the plan's liabilities and normal costs. The methodology used to determine the projected fund yields is described in section III-D.

### **2. Pension Indexing Factor**

The year's pension indexing factor is involved in the valuation process by virtue of its role in the pension inflation adjustments. It was derived by applying the indexation formula described in Appendix 1, which relates to the assumed CPI increases over successive 12-month periods ending on 30 September.

**3. Members of Parliament Remuneration Increase**

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. For the thirty-sixth Parliament, the remuneration of Members of Parliament will increase annually by 2 per cent as provided in Bill C-47. The dissolution of this Parliament was assumed to occur at the end of the plan year 2001. Thereafter, the remuneration of the Members of the House of Commons and of the Senate is assumed to increase in line with this provision of the *Parliament of Canada Act*.

**4. Maximum Pensionable Salary (MPS) Increase**

The MPS is involved in the valuation process because the benefits accrued in respect of pensionable salary (sessional indemnity and additional allowance) over the MPS must be funded with a Retirement Compensation Arrangement (RCA). The MPS was \$86,111 in 1998 and will be indexed after 2004 in accordance with the increase in the assumed Industrial Aggregate of Average Weekly Earnings over successive 12-month periods ending on 30 June.

## C- Summary of Key and Derived Economic Assumptions

**Table 6**  
**Economic Assumptions**  
 (Annual percentages)

Plan Year	Interest		Inflation		Employment Earnings		
	New Money Rate	Valuation Rate <sup>8</sup>	Price Increase	Pension Indexing	Industrial Aggregate Increase	MPS <sup>9</sup> Increase	Members of Parliament Remuneration Increase
1999	5.6	9.61	0.7	0.9	2.6	0.0	2.0
2000	5.6	9.27	1.5	0.9	2.2	0.0	2.0
2001	5.7	8.92	1.9	1.5	2.7	0.0	2.0
2002	5.8	8.56	2.3	1.9	3.2	0.0	0.9
2003	5.9	8.17	2.8	2.3	3.7	0.0	1.3
2004	6.0	7.91	3.0	2.8	4.0	0.0	1.8
2005	6.0	7.68	3.0	3.0	4.0	4.0	2.0
2006	6.0	7.45	3.0	3.0	4.0	4.0	2.0
2007	6.0	7.28	3.0	3.0	4.0	4.0	2.0
2008	6.0	7.12	3.0	3.0	4.0	4.0	2.0
2009	6.0	6.96	3.0	3.0	4.0	4.0	2.0
2010	6.0	6.81	3.0	3.0	4.0	4.0	2.0
2011	6.0	6.66	3.0	3.0	4.0	4.0	2.0
2012	6.0	6.42	3.0	3.0	4.0	4.0	2.0
2013	6.0	6.31	3.0	3.0	4.0	4.0	2.0
2014	6.0	6.22	3.0	3.0	4.0	4.0	2.0
2015	6.0	6.15	3.0	3.0	4.0	4.0	2.0
2016	6.0	6.05	3.0	3.0	4.0	4.0	2.0
2017	6.0	5.99	3.0	3.0	4.0	4.0	2.0
2018	6.0	5.96	3.0	3.0	4.0	4.0	2.0
2019	6.0	5.96	3.0	3.0	4.0	4.0	2.0
2020	6.0	5.97	3.0	3.0	4.0	4.0	2.0
2021	6.0	5.98	3.0	3.0	4.0	4.0	2.0
2022	6.0	5.99	3.0	3.0	4.0	4.0	2.0
2023 +	6.0	6.00	3.0	3.0	4.0	4.0	2.0

<sup>8</sup> The rates shown are for the MPRA Account. Corresponding rates for the MPRCA Account are 50% of those for the MPRA Account.

<sup>9</sup> MPS stands for Maximum Pensionable Salary (refer to section B-4 above).

**D- Margin Against Adverse Fluctuations**

Actuarial valuations prepared for private employers' pension plans normally include safety margins. This is done mainly to ensure that on plan wind-up there would be, taking into account possible future fluctuations in economic and demographic factors, sufficient funds for the payment of all future benefits accrued as at the wind-up date. Such rationale does not appear to apply to this plan because it is sponsored by the Government of Canada.

There is an implicit margin in the liabilities to the extent that the assumed ultimate real rate of return (i.e. 3% per annum) is considered to be on the low side. If the plan were funded conventionally, this margin would tend to produce surpluses in future valuations.

**E- Members Receiving Additional Allowance**

Some Members, in addition to their sessional indemnity, receive an additional allowance in their capacity as Minister, Speaker, Leader of Opposition, etc. The Members may elect not to contribute from this additional allowance to the MPRA and MPRCA Accounts, in which case additional benefits will not be accrued. To determine the normal costs in the future plan years, assumptions regarding who will receive these additional allowances in future are required.

For this review, any Member receiving an additional allowance at the valuation date is deemed to continue to receive it as long as he remains a Member of Parliament. We did not change this assumption from the preceding review.

**F- Demographic Assumptions**

Except where otherwise noted, all demographic assumptions were determined from the plan's own experience as was done in the past. Assumptions of the previous valuation were updated to reflect the experience of April 1995 to December 1997. As for the previous valuation, demographic assumptions were grouped on a *last* basis, i.e. age and years of service were rounded to the next lower integer.

**1. Members of Parliament****(a) New Members**

To estimate the normal costs shown in the cost certificate (section V-B), assumptions are required regarding the number, age, and sex of future new Members. New Members include Members elected to the House of Commons and Members appointed to the Senate. Similar assumptions were made for Members who start receiving additional allowances.

The number of future entrants was determined so that, along with the assumed future terminations, the number of Members in the House of Commons and the Senate would remain constant in the future for both

males and females. Furthermore, for the Senate, we assumed that the vacant seats will be filled in the plan year 1999 and an additional seat will be added to represent the new Territory, the Nunavut, created in April 1999.

The assumed age distributions of the new Members in the House of Commons are based on the plan's 1982-1997 experience, whereas the assumed age distributions of new Senators and of Members starting to receive additional allowances are based on the plan's 1965-1997 experience for these groups, given their smaller size. Moreover, it was assumed that new entrants would start receiving additional allowances only after having completed at least three years in Parliament.

Greater credibility was imputed to recent trends by applying, for the new Members in the House of Commons, a weight of 75% to the 1995 MPRAA actuarial review assumptions and a weight of 25% to the 1995-1997 experience. For new Senators and for Members starting to receive additional allowances a weight of 75% was applied to the 1965-1997 experience data and a weight of 25% was applied to the 1992-1997 experience data. The distributions of these groups by age and by sex are shown in Table 26 of Appendix 2.

**(b) Rates of Termination**

**i) Members of the House of Commons**

The 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 this report, a particular set of termination rates is assumed to apply during a general election year and a distinct set to apply during a non-election year.

Disability incidence was not taken into account in this valuation. Therefore, the expected extra mortality of disabled pensioners as well as their benefits were not taken into account. The effect of this omission on valuation results is considered negligible but will continue to be examined in the next actuarial valuation through the analysis of gains and losses.

**• 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 such election year. Termination during an election year is defined as any termination other than death.

Except for the general election in 1993, analysis of the 1983-1997 experience as well as the 1963-1997 experience reveals a decreasing trend over the years in terminations other than deaths. Experience data for 1963 to 1997 were analyzed by age and service duration and suggest that the rates varying by age have a better correlation with the average experience than those varying by duration. Greater credibility was imputed to recent trends by applying a weight of 25% to the 1963-1997 experience data and a weight of 75% to the 1983-1997 experience data. The resulting probabilities are shown in Appendix 2, Table 22.

- **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 death.

The observed results are volatile throughout the years. The reasons for Members to terminate are not always identified in the data. The probabilities of termination were computed by duration of service. It has been decided to keep the same shape of the 1995 MPRAA termination rates by service but adjust the level by the ratio of actual to expected terminations. In accordance with the trends observed for terminations other than deaths, a factor of 0.66 was applied to the 1995 MPRAA termination rates. This factor was derived by applying a weight of 25% to the ratio of 1963-1997 experience data and a weight of 75% to the ratio of 1983-1997 experience data. The resulting probabilities are shown in Appendix 2, Table 22.

- ii) **Senators**

From experience it has been decided to change the probability of termination for Senators. The probability of termination is still assumed equal to zero for service less than 6 years. For service greater than fifteen years the rates have been increased to 1.5% per annum while for service between six years and fifteen years the rates increase smoothly. These termination rates are deemed to cover all types of terminations, i.e. voluntary terminations and disabilities. As Senators must leave the Senate by age 75, the termination rate for this age was set at unity.

**(c) Probability of General Election**

Experience data since Confederation reveal the following:

**Table 7**  
**Frequency of General Elections**

Duration of Parliament since last general election  (to rounded 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	15	1
5	10	-
TOTAL	27	8

The most recent general election covered in Table 7 took place on 2 June 1997. Prior to 1917, all general elections gave rise to majority governments. The characteristics of the 1917 and subsequent Parliaments are as follows:

**Table 8**  
**Characteristics of Past Parliaments**

Status preceding general election	Probability of given status following general election	
	Majority	Minority
Majority	10/15	5/15
Minority	5/9	4/9

Based on these data, probabilities of a general election were developed for each plan year in the future. In developing these probabilities, account was taken of the majority government elected at the last election (1997) and that no general election occurred between June 1997 and March 1998. The probabilities shown in Table 23 of Appendix 2 tend toward a value of 0.295 in the long term, implying that general elections are called every 3.4 years on average.

**(d) Mortality Rates and Longevity Improvement Factors**

Because of the relatively small size of the plan, the inter-valuation period does not provide enough data to reach credible conclusions about mortality. We used all the available membership data from the period 1963-1997. To account for mortality improvements, the mortality rates are assumed subject to the longevity improvement factors as under the Group Annuity Reserving Tables (GAR-94). It was decided to use the GAR-94 tables reduced for 4.25 years of mortality improvements. These mortality rates were multiplied by 88% for males and 112% for females to reflect the mortality experience under the plan.

Mortality rates after the 1999 plan year were adjusted by assuming constant annual percentage decreases of such rates, varying by age. The longevity improvement factors were used in conjunction with the 1999 plan year mortality rates for Members of Parliament, pensioners and surviving spouses. The projection scale used is a modification of Projection Scale AA of the Society of Actuaries used with the UP(uninsured pensioner)-94 mortality table. An adjustment of 0.25% was added to all non-zero factors. These longevity improvement factors have been developed for the 1996 PSSA actuarial review. Sample projected longevity improvement factors are shown in Table 24, Appendix 2.

**(e) Assumptions in Respect of Married Members of Parliament****i) Proportions of Members of Parliament Married at Death**

Separate rates were assumed for males and females and were determined by developing a survival model from the 1980-1997 experience. The resulting proportions are higher than the corresponding proportions used in the previous valuation for ages up to 60 and lower thereafter.

**ii) Number and Average Age of Children at Death of Member**

It was assumed that each married Member has, at time of death, three children being 28, 30 and 32 years younger than the Member, respectively.

**iii) Average Age of Spouse at Death of Member**

This average age is assumed to vary by sex in accordance with the plan's experience.

**iv) Spousal Union Breakdown**

Assumptions on spousal union breakdown would be required for the valuation of the *Pension Benefits Division Act* provisions, but this was not taken into account in this report. It would have a negligible affect on the plan's financial results.

**2. Assumptions in Respect of Pensioners**

**(a) Mortality Rates**

The mortality basis deemed to apply to Members of Parliament (see section 1 above) is also assumed to apply to pensioners.

**(b) Other Assumptions**

In respect of pensioners, the following assumptions used for Members of Parliament also apply:

- longevity improvement factors;
- proportions married at death;
- average age of spouse at death of Member;
- number and average age of children at death of Member.

**3. Assumptions for Survivors**

**(a) Mortality Rates**

The mortality basis deemed to apply to Members of Parliament (see section 1 above) is also assumed to apply to surviving spouses.

Mortality rates after plan year 1999 were adjusted using the longevity improvement factors used for Members of Parliament.

**(b) Proportions of Students Still Eligible for Allowances**

The payment of an allowance to a child between ages 18 and 25 is conditional on the child attending school full-time. It was assumed that all children beneficiaries would remain eligible for benefits until age 23 irrespective of school attendance status. The effect of mortality was not taken into account in determining the value of pensions payable to eligible children given that the effect of child mortality on the projections is negligible.

**G- Other Assumptions****1. Pension Benefits Division / Optional Survivor Benefit**

Pension benefits divisions have almost no effect on the valuation results because the corresponding liability is reduced, on average, by roughly the amount paid to the credit of the former spouse. Consequently, no future pension benefits divisions were assumed in estimating normal costs and liabilities. However, past pension benefits divisions were fully reflected in liabilities.

The optional survivor benefit gives a member who has married after retirement the right to make an election, within prescribed period of time, for a survivor benefit. However, the member must accept an actuarially determined reduction in pension for as long as both the spouse and the marriage survive. The optional survivor benefit was also treated like pension benefits divisions for the same reason.

**2. Double-Dipping Provision**

A pensioner receiving remuneration of at least \$5,000 in the valuation year as a federal government employee or pursuant to a federal service contract is assumed to continue receiving this remuneration up to age 62. The annual allowances of those aged 62 or over at the valuation date are assumed to resume immediately. According to this assumption, no annual allowance will be paid from the MPRAA up to that age. Following attainment of age 62, the annual allowance will resume.

No future double-dipping was assumed in estimating normal costs and liabilities.

**3. Administrative Expenses**

To compute the liabilities and normal costs, no provision was made regarding the expenses incurred for the administration of the plan. These expenses, which are not charged to the MPRA or MPRCA Accounts, are borne entirely by the government and are commingled with other government expenses.

## V- Results

### A- Balance Sheet as at 31 March 1998

The following balance sheet was prepared using the data described in section II, the valuation methods described in section III, and the assumptions described in section IV. It takes into account the plan amendments encompassed by Bill C-47.

**Table 9**  
**Balance Sheet**

<b>Assets</b>	<b>ACCOUNTS</b> (\$ millions)		
	<b>MPRA</b>	<b>MPRCA</b>	<b>Combined</b>
Balance in Accounts	270.9	33.9	304.8
Actuarial present value of future contributions and government credits in respect of prior service	0.8	0.6	1.4
Refundable Tax Account		31.6	31.6
<b>Total assets</b>	<b>271.7</b>	<b>66.1</b>	<b>337.8</b>
<b>Liabilities</b>			
<b>House of Commons</b>			
For benefits to and in respect of current Members	24.2	38.0	62.2
For benefits to and in respect of former Members			
• Retirement pensioners	165.2	20.4	185.6
• Surviving spouses and children	11.8	0.0	11.8
<b>Subtotal</b>	<b>201.2</b>	<b>58.4</b>	<b>259.6</b>
<b>Senate</b>			
For benefits to and in respect of Senators	14.7	4.0	18.7
For benefits to and in respect of former Senators			
• Retirement pensioners	13.9	0.9	14.8
• Surviving spouses and children	5.3	0.3	5.6
<b>Subtotal</b>	<b>33.9</b>	<b>5.2</b>	<b>39.1</b>
<b>Prime Minister</b>			
For benefits to and in respect of Prime Minister	0.0	0.3	0.3
For benefits to and in respect of former Prime Ministers			
• Retirement pensioners	0.0	1.5	1.5
<b>Subtotal</b>	<b>0.0</b>	<b>1.8</b>	<b>1.8</b>
<b>Total liabilities</b>	<b>235.1</b>	<b>65.4</b>	<b>300.5</b>
<b>Surplus</b>	<b>36.6</b>	<b>0.7</b>	<b>37.3</b>

## B- Cost Certificate

The normal costs, assets and liabilities were computed using the data summarized in section II, the methodology described in section III and the assumptions described in section IV. They were determined taking into account the plan amendments encompassed by Bill C-47. Emerging experience, differing from the corresponding assumptions, will result in gains or losses which will be analyzed in subsequent reports.

### 1. Normal Cost

The normal costs are expressed below as a percentage of the pensionable payroll which corresponds to the sessional indemnities for Members of the House of Commons and Senators having accrued less than 75% in pension credits as at the valuation date, and additional allowances for which voluntary contributions are being paid by Members of the House of Commons and Senators, as well as the salary payable to the member as Prime Minister.

Table 10 represents the total normal costs which is the sum of the normal cost to be paid with respect to the MPRA Account and the normal costs to be paid with respect to the MPRCA Account. The MPRAA and MPRCA normal costs are shown separately in Tables 11 and 12 respectively.

**Table 10**  
**Total Normal Costs as Percentages of Pensionable Payroll**

Plan Year		Members' Portion	Government's Portion	Normal Cost
1999	House of Commons	9.03	48.35	57.38
	Senate	7.24	16.41	23.65
	Prime Minister	7.00	103.24	110.24
	Total	8.62	41.03	49.65
2000	House of Commons	9.03	50.53	59.56
	Senate	7.22	16.90	24.12
	Prime Minister	7.00	105.50	112.50
	Total	8.60	42.59	51.19
2001	House of Commons	9.05	51.95	61.00
	Senate	7.20	17.70	24.90
	Prime Minister	7.00	106.75	113.75
	Total	8.61	43.67	52.28

**Table 11**  
**Normal Costs with Respect to the MPRAA Account**

Plan Year		Members' Portion (%)	Government's Portion (%)	Normal Cost (%)
1999	House of Commons	3.83	10.92	14.75
	Senate	3.37	5.78	9.15
	Total	3.72	9.70	13.42
2000	House of Commons	3.79	11.80	15.59
	Senate	3.44	6.20	9.64
	Total	3.70	10.43	14.13
2001	House of Commons	3.81	12.61	16.42
	Senate	3.45	6.53	9.98
	Total	3.72	11.09	14.81

**Table 12**  
**Normal Costs with Respect to the MPRCA Account**

Plan Year		Members' Portion (%)	Government's Portion (%)	Normal Cost (%)
1999	House of Commons	5.20	37.43	42.63
	Senate	3.87	10.63	14.50
	Prime Minister	7.00	103.24	110.24
	Total	4.90	31.33	36.23
2000	House of Commons	5.24	38.73	43.97
	Senate	3.78	10.70	14.48
	Prime Minister	7.00	105.50	112.50
	Total	4.90	32.16	37.06
2001	House of Commons	5.24	39.34	44.58
	Senate	3.75	11.17	14.92
	Prime Minister	7.00	106.75	113.75
	Total	4.89	32.58	37.47

The cost figures in this report pertain to pensions accrued in respect of both sessional indemnities and additional allowances.

The estimate of the pensionable payroll for the 1999 plan year is shown in Table 13 below.

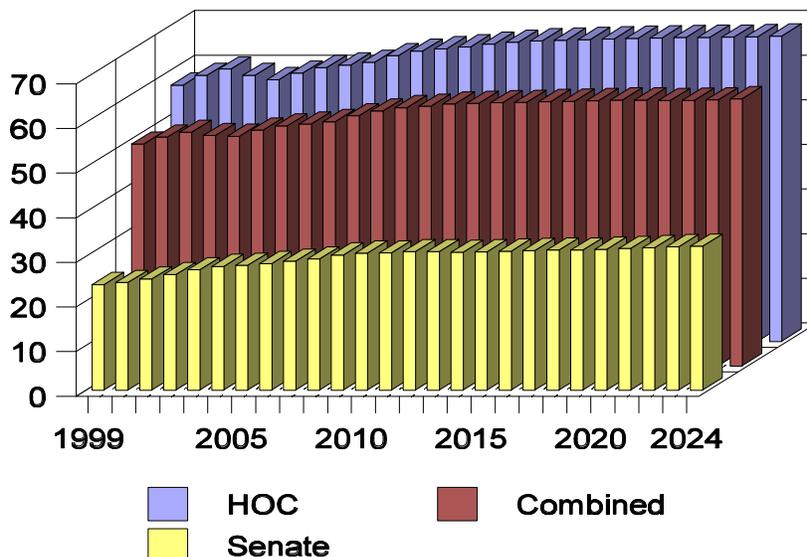
**Table 13**  
**Pensionable Payroll for 1999 Plan Year**

	Sessional Indemnities (\$ millions)	Additional Allowances (\$ millions)	Total (\$ millions)
House of Commons	16.6	2.0	18.6
Senate	5.7	0.1	5.8
Total	22.3	2.1	24.4

The normal cost should normally gradually increase in the future due to the partial transition from the current to the ultimate economic assumptions and the greater probability to have a general election in those years.

Chart 1 shows the trend of the normal costs in the upcoming years if the assumptions are realized over the projection period. The chart shows that the expected long-term (ultimate) total cost of the plan will reach 59.8% of pensionable payroll.

**Chart 1**  
**Projection of Normal Cost**  
(As percentage of pensionable payroll)



## 2. Summary Balance Sheet

The assets of the plan were \$337.8 million as at 31 March 1998. The total liabilities as at the same date are estimated at \$300.5 million, leaving a surplus of \$37.3 million. Amortizing this surplus over 15 years would correspond to a reduction in annual contribution of \$4.2 million (corresponding to 17.2% of pensionable payroll for the 1999 plan year), which was estimated using the yields described in section III-D and shown in section IV-C.

## C- Sensitivity of Estimates to Variations in Key Assumptions

The supplementary estimates shown below indicate the degree to which the valuation results shown in the Cost Certificate depend on some of the key assumptions. The differences between the results below and those shown in the Cost Certificate can also serve as a basis for approximating the effect of other numerical variations in a key assumption, to the extent that such effects are indeed linear. Table 14 summarizes the effect of specific variations in the economic assumptions, followed by some comments:

**Table 14**  
**Sensitivity of the Total Normal Cost and the Actuarial Liability**  
**to Variations in the Economic Assumptions**

	Actuarial Liability (\$ millions)		Total Normal Cost (% of pensionable payroll)	
	Amount	Difference	Percentage	Difference
1998 Valuation Assumptions	300.5		49.65	
Variation in Interest Rates				
In accordance with regulations	225.1	-75.4	32.13	-17.52
Increasing the investment yields by 1%	266.0	-34.5	42.28	-7.37
Variation in Remuneration Increase				
Increasing by 0.5%	302.1	1.6	50.79	1.14
Following the IAI <sup>10</sup>	305.2	4.7	53.28	3.63
Variation in Pension Indexing				
Increasing by 1%	341.9	41.4	60.07	10.42
Constant Ultimate Economic Assumptions	371.3	70.8	57.61	7.96

<sup>10</sup> Industrial Aggregate Increase: refer to second bullet in section C-2 below.

### **1. Investment Yields**

- If the currently prescribed interest rate of 2.5% per quarter was assumed to continue unchanged forever, then the actuarial liability would decrease to \$225.1 million, and the combined normal cost would be reduced from 49.65% to 32.13% of the pensionable payroll.
- The valuation reflects a deemed investment policy of buying and holding long-term Government of Canada bonds. If the investment portfolio also included a significant equity component, it would be appropriate to project higher rates of return. As a measure of sensitivity, an increment of one percentage point in the projected yields would decrease the 1999 normal cost by 7.37% of pensionable payroll (from 49.65% to 42.28%). At the same time the actuarial liability would be reduced to \$266.0 million.

### **2. Real Rate of Increase in Average Remuneration**

- If the assumed real rate of increase in average remuneration was increased from 1% to 1.5% from 2001 onward, then the 1999 total normal cost would increase by 1.14% of pensionable payroll from 49.65% to 50.79% and the actuarial liability would increase by \$1.6 million to \$302.1 million.
- If the payroll rate increases were assumed to follow the Industrial Aggregate Increase (IAI), then the actuarial liability would increase to \$305.2 million, and the normal cost would be increased from 49.65% to 53.28% of pensionable payroll.

### **3. Pension Indexing**

If the pension indexation assumption were increased by one percentage point in all years (e.g. from 3% to 4% ultimately), then the actuarial liability would be increased by \$41.4 million and the normal cost would be increased by 10.42% of pensionable payroll. It must be noted that the increase in the CPI has an effect not only on the pension indexing but also on the remuneration increase as described in section IV, paragraph B-3.

### **4. Constant, as Opposed to Streamed, Economic Assumptions**

The 1999 total normal cost of 49.65% of pensionable payroll takes into account, among other things, the fact that the projected fund yields until 2016 are higher than the ultimate level of 6% assumed thereafter. If the projected fund yields and other economic factors were deemed constant at their otherwise assumed ultimate value (i.e. 6% for interest, 2% for annual increase in remuneration, and 3% for inflation) from the valuation date onward, the resulting normal cost for 1999 for the combined MPRA and MPRCA Accounts would be 57.61% instead of 49.65% of pensionable payroll while the actuarial liability would increase to \$371.3 million.

**D- Reconciliation of Results with Previous Report**

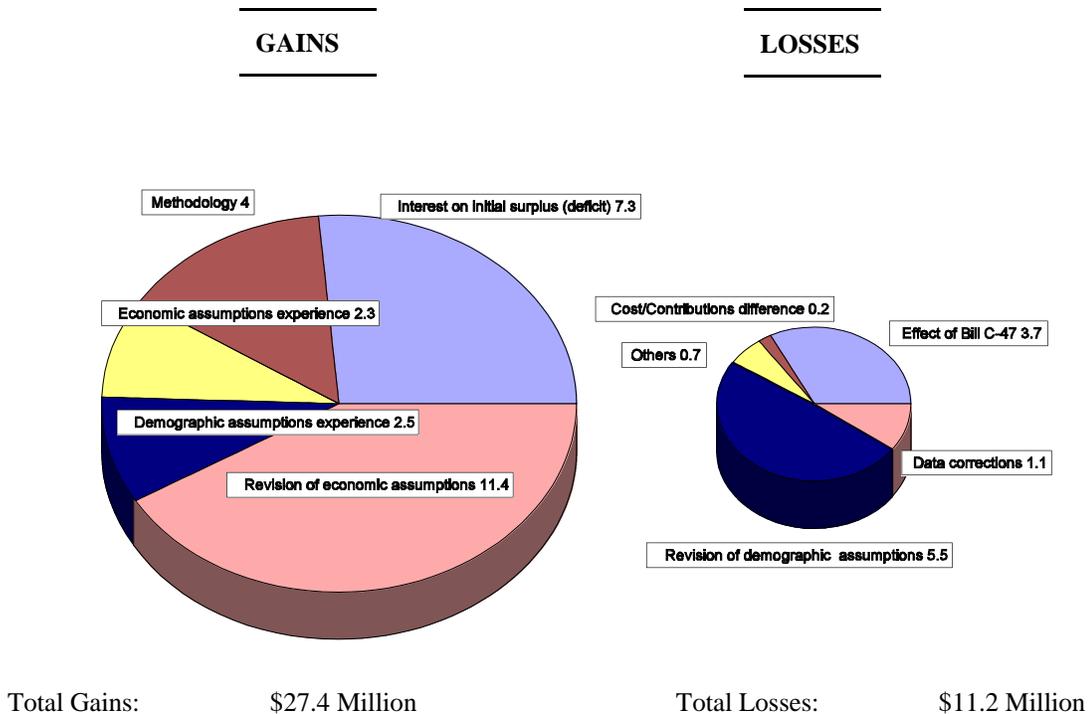
This section describes the various factors reconciling the surplus and normal cost determined by this valuation with the corresponding items of the previous valuation.

The previous actuarial report showed a surplus of \$21.1 million which has now increased by \$16.2 million, resulting in a surplus of \$37.3 million.

The previous report showed a total normal cost of 46.1% of pensionable payroll for 1996. The expected normal cost for 1999 (not shown in that report) was 48.0% of pensionable payroll. The current estimate of the 1999 plan year total normal cost of 49.7% of pensionable payroll (section V-B) is about the same as the previously anticipated 1999 normal cost.

Chart 2 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 15. The main items of this Table are explained on the following pages.

**Chart 2**  
**Reconciliation of Surplus**  
 (\$ millions )



**Table 15**  
**Reconciliation of Results with Previous Report**

	Surplus (Deficit) (\$ millions)		Normal Cost (as a % of pensionable payroll)	
	MPRA	MPRCA	MPRA	MPRCA
<b>At 31 March 1995</b>	<b>17.4</b>	<b>3.7</b>	<b>10.47</b>	<b>35.61</b>
Interest on surplus	6.0	1.3	0.00	0.00
Expected normal cost change	0.0	0.0	1.83	0.13
Data corrections	-1.0	-0.1	-0.06	-2.53
Cost/Contributions difference	0.7	-0.9	0.00	0.00
Effect of Bill C-47	-1.3	-2.4	0.49	1.37
<b>Experience gains and losses</b>				
Interest earnings	2.0	0.1	0.00	0.00
Pension indexation	0.6	0.0	0.00	0.00
Remuneration increases	-0.2	-0.2	0.00	0.00
New entrants	-0.4	-0.7	-0.06	0.22
Return to Parliament	1.7	0.2	0.00	0.00
Termination from Parliament	-1.3	0.1	0.00	0.00
Mortality	0.0	-0.5	0.00	0.00
Effect of PBDA and OSB	0.6	0.1	0.00	0.00
Double-Dipping provision	1.9	0.7	0.00	0.00
Miscellaneous	-0.3	-0.4	-0.01	0.00
<b>Subtotal</b>	<b>4.6</b>	<b>-0.6</b>	<b>-0.07</b>	<b>0.22</b>
<b>Revision of valuation assumptions and methodology</b>				
Interest rates	-3.5	-0.8	0.33	0.47
Pension indexation	11.1	1.5	-0.05	-0.15
Remuneration increases	1.4	1.7	-0.51	-1.41
Termination	0.1	0.3	-0.02	-0.18
Probability of general election	1.0	-2.2	0.92	2.34
Mortality	-2.8	-1.4	0.24	0.91
Proportion married at death	0.7	0.2	-0.02	-0.07
Widow(er) age	-1.0	-0.4	0.05	0.21
Methodology	3.2	0.8	-0.18	-0.69
<b>Subtotal</b>	<b>10.2</b>	<b>-0.3</b>	<b>0.76</b>	<b>1.43</b>
<b>At 31 March 1998</b>	<b>36.6</b>	<b>0.7</b>	<b>13.42</b>	<b>36.23</b>

## **Explanation of the Foregoing Reconciliation**

### **1. Interest on the Surplus**

The interest to 31 March 1998 on the surplus of \$21.1 million as at 31 March 1995 amounted to \$7.3 million, based on the interest rates assumed in the previous report for the three-year intervaluation period.

### **2. Expected Normal Cost Change**

The irregular pattern in the normal cost from plan years 1996 to 1999 projected in the previous report is mainly caused by the effect of Bill C-85 on the normal cost for the plan year 1996. For the next two plan years the normal costs increase are due to a partial transition from current to ultimate economic assumptions and the greater probability of having a general election.

### **3. Cost/Contributions Difference**

As required by the Act, the government determines its contributions to the Accounts as that amount which, when combined with the Member contributions in respect of current service, is sufficient to cover the cost, as estimated by the President of the Treasury Board, of all future benefits that have accrued in respect of a specific year. The Government's contribution is estimated every year on the basis of the economic assumptions used to estimate the Government's obligation for accounting purposes, which are normally different from the economic assumptions used in the triennial actuarial review. The difference between the normal cost estimated in the preceding review and the contributions credited in the Accounts produced a decrease in the surplus of \$0.2 million.

### **4. Effect of Bill C-47**

Nine Members elected to resume their coverage under the MPRAA. A decrease in the surplus of \$1.1 million results from the difference between the liabilities for benefits accrued by them from 24 October 1993 up to the valuation date and the expected contributions accumulated with interest for that period.

The remuneration increase of two per cent per year during the thirty-sixth Parliament decreased the surplus by \$2.6 million and increased the normal cost for the 1999 plan year by 1.86%.

### **5. Experience Gains and Losses**

- **Economic Experience**

During the intervaluation period, investment earnings credited to the MPRA and MPRCA Accounts were greater than those assumed. This accounted for an increase in the surplus of \$2.1 million. An increase in the surplus of \$0.6 million resulted from pension indexing increases less than assumed. A decrease in the surplus of \$0.4 million resulted mainly from

retroactive effect of Bill C-47 on remuneration at beginning of the 1998 calendar year, making the actual increase 2% compared to the 1% increase assumed for 1998 in the previous valuation.

- **Demographic Experience**

- ▶ **Return to Parliament**

There were five members who had been re-elected during the three years since the last valuation who were receiving a retirement allowance or a compensation allowance. These allowances payable to them are suspended for the whole period during which they are Senator or Member of the House of Commons. This suspension results in an increase in the surplus of \$1.4 million. Two Members in the House of Commons have been nominated to the Senate which resulted in an increase in the surplus of \$0.5 million.

- ▶ **Suspension of Allowances Due to Double-Dipping Provision**

Seventeen former Senators or Members of the House of Commons were receiving remuneration of at least \$5,000 in the valuation year as a federal government employee or pursuant to a federal service contract. By reducing pensioners' retirement or compensation allowances by one dollar for each dollar of such remuneration received, the surplus has been increased by \$2.6 million.

## 6. Revision of Valuation Assumptions

- **Economic Assumptions**

- ▶ **Interest Rates**

For the plan years 2000 to 2018, inclusive, the projected fund yields are materially lower (0.16% per annum on average) than the corresponding projected fund yields of the previous valuation. As a result, the surplus decreased by \$4.3 million and the normal cost increased by 0.8% of payroll.

- ▶ **Pension Indexation**

The revised pension indexation assumption for the six plan years following the valuation date averages 1.17% per annum lower than was assumed for those years in the previous valuation. As a result the surplus increased by \$12.6 million and the normal cost decreased by 0.2% of payroll.

- ▶ **Remuneration Increases**

The assumed annual remuneration increases for the plan years 2002 to 2004, inclusive, average 0.7% lower than in the previous valuation. This revision of the salary increase assumption caused the surplus to

increase by \$3.1 million and the normal cost to fall by 1.92% of payroll.

- **Demographic Assumptions**

- ▶ **General Election**

- The probabilities of having a general election for each plan year in the future have been revised, taking into account the general election that occurred in 1997. As a result the surplus decreased by \$1.2 million and the normal cost increased by 3.26% of payroll due to the greater number of Members who will be entitled to retirement allowances at termination.

- ▶ **Mortality**

- Both components of the mortality basis, namely the rates assumed for the 1999 plan year and the improvement factors applying to those rates in subsequent years, were revised in this valuation. As a result the surplus decreased by \$4.2 million and the normal cost rose by 1.15% of payroll, with most of the increase being attributable to the revision of the improvement factors.

- **Methodology**

- Revisions were made to the valuation methodology to more precisely reflect the application of the plan provisions. These refinements resulted in a \$4.0 million increase in the surplus and a 0.87% of payroll decrease in the normal cost.

## **VI- Conclusions**

### **A- Surplus**

Considering that the surplus as at 31 March 1998 is large, whether expressed absolutely (\$37.3 million) or relatively (12.4% of liabilities or 3.1 times the estimated normal cost for the 1999 plan year), and that

- the liabilities computed in respect of all benefits accrued by 31 March 1998 were estimated on an adequate and realistic basis, and
- the normal costs computed for the 1999, 2000 and 2001 plan years make adequate provision for the full funding of benefits projected to accrue during those years,

it would be appropriate to address the plan's surplus as soon as possible. However, the statute and regulations governing the operation of the plan are silent on this matter.

### **B- Actuarial Standards**

In my opinion, considering that this report was prepared pursuant to the PPRA,

- the valuation input data on which it is based are sufficient and reliable;
- the assumptions that have been used are, in aggregate, appropriate;
- the methodology employed is appropriate; and
- the value of the assets exceeds the wind-up liabilities at the valuation date.

This report has been prepared, and my opinion given, in accordance with accepted actuarial practice, and particularly with the Canadian Institute of Actuaries' Standard of Practice for the Valuation of Pension Plans.

Michael Hafeman, F.S.A., F.C.I.A.  
Acting Chief Actuary  
Public Insurance and Pension Programs

Ottawa, Canada  
9 August 1999

**APPENDIX 1**

**Summary of Plan Provisions,  
including Bill C-47 which became effective 18 June 1998,  
of the pension plan established under the  
*Members of Parliament Retiring Allowances Act***

The following summary description of the plan provisions takes into account the provisions of Bill C-47 which came in force as at 18 June 1998. In case of discrepancy between the provisions of the Act and this summary, the Act prevails.

## **A- Definitions**

### **1. Sessional Indemnity**

Corresponds to the remuneration of a Member provided pursuant to sections 55 to 58 of the *Parliament of Canada Act*.

### **2. Additional Allowance**

Corresponds to the remuneration of a Member in his capacity as Prime Minister, Speaker, Minister, Leader of the Opposition, Parliamentary Secretary, etc.

### **3. Basic Retirement Allowance**

#### **(a) In the Case of a Pensioner**

The aggregate of all the retirement allowances and additional retirement allowances that the pensioner was receiving from the MPRA Account at the time of death or would have been entitled to receive if the pensioner had reached 60 years of age immediately before death.

#### **(b) 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 60 years of age immediately before death.

### **4. Retirement Compensation Arrangement**

It is a vehicle for providing the portion of retirement allowances not allowed to be paid under registered pension plans (RPP). Nonetheless, Member's contributions to the Members of Parliament Retirement Compensation Arrangement (MPRCA) Account are tax deductible. However, the plan sponsor (the government) pays a refundable tax on all credits to the MPRCA Account. Accordingly, fifty percent of all amounts credited to the MPRCA Account each year (contributions and interest) are accordingly transferred to Revenue Canada as an eventual refundable tax under the *Income Tax Act* (ITA), and refunded at a rate equal to 50% of all benefits paid out of the MPRCA Account to or on behalf of Members.

**5. Earnings Limit**

In relation to a Member in respect of one or more sessions in any calendar year, means the maximum pensionable earnings (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 1998 and will be indexed after 2004 in accordance with the Industrial Composite of average weekly earnings.

**6. Compensation Allowance**

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

**7. Basic Compensation Allowance****(a) 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 60 years of age immediately before death.

**(b) 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 60 years of age immediately before death.

**B- Membership****1. Senators**

Membership in the plan is compulsory for all Senators nominated after 21 June 1965.

**2. Members of the House of Commons**

A Member of the House of Commons in the thirty-fifth Parliament has 60 days, after the later of the day on which Bill C-85 came into force or the first day that he becomes a Member, to elect to contribute under the plan.

**3. Election to Resume Coverage Under the MPRAA**

A Member of the House of Commons in the thirty-fifth Parliament who did not elect to contribute under the MPRAA is entitled to make an election to have the MPRAA Act resume to apply to the Member. This election is irrevocable and the Act is deemed to apply to a Member of the House of Commons making such an election as if it had always applied to the Member.

## C- Financing

### 1. Contributions

#### (a) Members

- **Sessional Indemnity**  
Members of the House of Commons who elect to participate in the plan and Senators are required to contribute a percentage of their sessional indemnity to the Accounts at the rates shown in Table 17.
  
- **Additional Allowance**  
Members receiving additional allowances may contribute at rates up to those shown in Table 16.
  
- **Prime Minister**  
The Prime Minister must also contribute 7% of the additional allowance as Prime Minister to the MPRCA Account.
  
- **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 MPRCA 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 the election is made, as shown in the Table 18. In addition, the Member must pay interest on those contributions, calculated at a rate and in the manner prescribed by the regulations made under the Act.

A Member may amortize the debt arising from an election with respect to prior service, including a reimbursement of withdrawal benefits, if any, by making a series of payments determined in accordance with a prescribed interest rate (currently 8% per annum) and mortality table (currently CLT 1941).

#### (b) Government

The government credits the Accounts as follows in respect of its contributions for current and prior pensionable service:

- Current Service**  
 The government determines its normal monthly credit to the Accounts as that amount, which when combined with the Member contributions in respect of current service, is sufficient to cover the cost, as estimated by the President of the Treasury Board, of all future benefits that have accrued in respect of that month.
- Prior Service**  
 The government credits to the Accounts in respect of elected prior service are analogous to those described in respect of current service.
- Special Credits**  
 If an unfunded actuarial liability is identified through a statutory triennial actuarial report, the MPRA and MPRCA Accounts are to be credited with such annual amounts that in the opinion of the President of the Treasury Board will fully amortize this deficit over a period not exceeding 15 years.

**Appendix 1 -Table 16**  
**Member's Contributions in Respect of Additional Allowances**

	Sessional Indemnity Plus Additional Allowances	
	Up to the earnings limit	Amount over the earnings limit
<b>Member is less than 71<sup>11</sup> years of age</b>		
MPRA Account	4%	0%
MPRCA Account		
Contributions made on or after 13 July 1995	5%	9%
Contributions made before 13 July 1995	7%	11%
<b>Member has reached 71 years of age</b>		
MPRA Account	0%	0%
MPRCA Account		
Contributions made on or after 13 July 1995	9%	9%
Contributions made before 13 July 1995	11%	11%

<sup>11</sup> Although the *Income Tax Act* currently limits active membership in registered pension plans to age 69, the MPRAA has not yet been amended to maintain this consistency.

**Appendix 1 -Table 17  
Member's Contributions in Respect of Sessional Indemnity**

Group	Sessional Indemnity	
	Up to the earnings limit	Amount over the earnings limit
<b>Members of the House of Commons</b>		
<b>Member is less than 71 years of age</b>		
MPRA Account	4% per year until Member accrues 75% benefits; 1% thereafter	0%
MPRCA Account		
Contributions made on or after 13 July 1995	5% per year until Member accrues 75% benefits; 0% thereafter	9% per year until Member accrues 75% benefits; 1% thereafter
Contributions made before 13 July 1995	7% per year until Member accrues 75% benefits; 0% thereafter	11% per year until Member accrues 75% benefits; 1% thereafter
<b>Member has reached 71 years of age</b>		
MPRA Account	0%	0%
MPRCA Account		
Contributions made on or after 13 July 1995	9% per year until Member accrues 75% benefits; 1% thereafter	9% per year until Member accrues 75% benefits; 1% thereafter
Contributions made before 13 July 1995	11% per year until Member accrues 75% benefits; 1% thereafter	11% per year until Member accrues 75% benefits; 1% thereafter
<b>Senators</b>		
<b>Member is less than 71 years of age</b>		
MPRA Account	4% per year until Member accrues 75% benefits; 1% thereafter	0%
MPRCA Account	3% per year until Member accrues 75% benefits; 0% thereafter	7% per year until Member accrues 75% benefits; 1% thereafter
<b>Member has reached 71 years of age</b>		
MPRA Account	0%	0%
MPRCA Account	7% per year until Member accrues 75% benefits; 1% thereafter	7% per year until Member accrues 75% benefits; 1% thereafter

**Appendix 1 - Table 18**  
**Member's Contributions in Respect of Prior Service**

Time of Election to Contribute	Sessional Indemnity Plus Additional Allowances	
	Up to the earnings limit	Amount over the earnings limit
<b>Members of the House of Commons</b>		
<b>Election on or after 13 July 1995</b>		
Member is less than 71 years of age		
MPRA Account	4%	0%
MPRCA Account	5%	9%
Member has reached 71 years of age		
MPRA Account	0%	0%
MPRCA Account	9%	9%
<b>Election between 1 January 1992 and 13 July 1995</b>		
Member is less than 71 years of age		
MPRA Account	4%	0%
MPRCA Account	7%	11%
Member has reached 71 years of age		
MPRA Account	0%	0%
MPRCA Account	11%	11%
<b>Election before 1 January 1992</b>		
MPRA Account	10%	10%
MPRCA Account	0%	0%
<b>Senators</b>		
<b>Election on or after 1 January 1992</b>		
Member is less than 71 years of age		
MPRA Account	4%	0%
MPRCA Account	3%	7%
Member has reached 71 years of age		
MPRA Account	0%	0%
MPRCA Account	7%	7%
<b>Election before 1 January 1992</b>		
MPRA Account	6%	6%
MPRCA Account	0%	0%

**2. Income Tax Payments or Refunds**

The MPRCA Account is charged or credited in each calendar year with 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.

**3. Investment Earnings**

The interest rate applying to net cash flows (contributions minus benefits, as well as income tax payments or refunds) to the MPRA and MPRCA Accounts is set by regulation and is currently 2.5% per quarter. Interest is credited at the end of the quarter on the balance at the beginning of the quarter.

**4. Payment of Benefits**

All benefit payments pursuant to the plan are charged to the MPRA or MPRCA Accounts.

**D- Summary Description of Benefits**

**1. Retirement Allowance and Compensation Allowance**

**(a) Members of Parliament Covered by the Plan**

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 MPRCA 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 highest average of the Member's sessional indemnity over any period of six consecutive years by the fraction corresponding to the sum of (i) plus (ii), where

- i) is the sum, subject to a maximum of 0.75, of:
  - the total annual accrual rates as shown in Table 19 for the retirement and compensation allowances accrued by a Member of the House of Commons for contributions with respect to sessional indemnity, and
  - the total annual accrual rates as shown in Table 20 for the retirement and compensation allowances accrued by a Senator for contributions with respect to sessional indemnity.
- ii) is the total annual accrual rates shown in Table 21 adjusted each year by the ratios of the Member's rate of contribution to the MPRA and MPRCA Accounts in respect of additional allowances payable to the Member in a calendar year to the rate of contribution to the MPRA and MPRCA

Accounts in respect of sessional indemnity in that calendar year (also shown in Table 21).

**(b) 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.

**2. Members Who Did Not Elect to be Covered by the Plan**

Following Bill C-85, if a Member did not elect to be covered by the plan, that choice applies in respect of service on and after 25 October 1993 as well as, in respect of Members with less than six years of membership as at that date, to pensionable service before that date. In such a case, the Member's contributions made in respect of such service are refundable to the Member with interest at a rate specified in the regulations.

**3. Survivor Benefits**

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:

**(a) Members of Parliament or Pensioners**

- to an eligible surviving spouse, three-fifths of the sum of the basic retirement allowance plus the basic compensation allowance of the Member or the pensioner;
- if there is an eligible surviving spouse, in respect of each child under age 18 (or child between 18 and 25, if a full-time student), one-tenth of the sum of the basic retirement allowance plus the basic compensation allowance of the Member or the pensioner, subject to a maximum of three-tenths, or
- if there is no eligible surviving spouse, in respect of each child under age 18 (or child between 18 and 25, if a full-time student), two-tenths of the sum of the basic retirement allowance plus the basic compensation allowance of the Member or the pensioner, subject to a maximum of eight-tenths.

**(b) 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, the allowance described above is payable only if the marriage existed while the deceased spouse was a Member of Parliament.

**4. 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 contributions with interest at a rate specified in the regulations.

**5. 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.

**6. Indexation**

Benefit adjustments corresponding to increases in the Consumer Price Index (CPI) are provided in respect of the allowances payable from both the MPRA and MPRCA 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 September 30 of the preceding year to the average for the corresponding period one year earlier.

Although survivor benefits and disability pensions are indexed immediately when they commence to be paid, retirement or compensation allowances are not indexed until age 60. However, the increase at that age reflects the cumulative increase since the Member ceased to hold parliamentary office.

The benefit adjustment is equal to the initial amount of annual allowance to which the beneficiary is entitled multiplied by the excess, over one, of the ratio of the Benefit Index for the year of payment to the Benefit Index for the deemed date on which the person to whom or in respect of whose service the pension is payable

ceased to hold parliamentary office. If the actual date of termination is after 21 June 1982, then the deemed date is the first day of the next calendar month; otherwise, it is the first day of January immediately preceding the actual date of termination.

**7. 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.

**8. Double-Dipping Provision**

Where a pensioner in receipt of a pension under this plan also receives remuneration of at least \$5,000 in any one-year period as a federal government employee or pursuant to a federal service contract, the aggregate of all retirement allowances under the MPRAA to that pensioner in that year shall be reduced by one dollar for each dollar of such remuneration received in that year.

**9. 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).

**Appendix 1 - Table 19**  
**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
<b>Accruing from 13 July 1995</b>		
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
MPRCA Account	2% and 4%	Deferred allowance to age 60 Temporary allowance from age 55 up to age 60
Service accrued after Member has reached 71 years old		
MPRA Account	0%	
MPRCA Account	4%	Immediate allowance
Sessional Indemnity greater than the earnings limit		
MPRA Account	0%	
MPRCA Account	4%	Deferred allowance to age 55
<b>Accruing between 1 January 1992 and 13 July 1995</b>		
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
MPRCA Account	3% and 5%	Deferred allowance to age 60 Temporary allowance up to age 60
Service accrued after Member has reached 71 years old		
MPRA Account	0%	
MPRCA Account	5%	Immediate allowance
Sessional Indemnity greater than the earnings limit		
MPRA Account	0%	
MPRCA Account	5%	Immediate allowance
<b>Accruing before 1 January 1992</b>		
MPRA Account	5%	Immediate allowance
MPRCA Account	0%	

**Appendix 1 - Table 20**  
**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
<b>Accruing from 13 July 1995</b>		
Sessional Indemnity up to the earnings limit		
Service accrued when Senator is less than 71 years old		
MPRA Account	2%	Deferred allowance to age 60
MPRCA Account	1% and 3%	Deferred allowance to age 60 Temporary allowance from age 55 up to age 60
Service accrued after Senator has reached 71 years old		
MPRA Account	0%	
MPRCA Account	3%	Immediate allowance
Sessional Indemnity greater than the earnings limit		
MPRA Account	0%	
MPRCA Account	3%	Deferred allowance to age 55
<b>Accruing between 1 January 1992 and 13 July 1995</b>		
Sessional Indemnity up to the earnings limit		
Service accrued when Senator is less than 71 years old		
MPRA Account	2%	Deferred allowance to age 60
MPRCA Account	1% and 3%	Deferred allowance to age 60 Temporary allowance up to age 60
Service accrued after Senator has reached 71 years old		
MPRA Account	0%	
MPRCA Account	3%	Immediate allowance
Sessional Indemnity greater than the earnings limit		
MPRA Account	0%	
MPRCA Account	3%	Immediate allowance
<b>Accruing before 1 January 1992</b>		
MPRA Account	3%	Immediate allowance
MPRCA Account	0%	

**Appendix 1 - Table 21**  
**Annual Accrual Rate and Type of Allowance in Respect of Additional Allowances**

Period of Pensionable Service	Annual Accrual Rate	Sessional Indemnity Rate of Contribution	Type of Allowance
<b>Credited from 13 July 1995</b>			
Additional allowances plus sessional indemnity is less than or equal to the earnings limit			
Service accrued when Member is less than 71 years old			
MPRA Account	2%	4%	Deferred allowance to age 60
MPRCA Account	2% and 4%	5% 5%	Deferred allowance to age 60 Temporary allowance from age 55 up to age 60
Service accrued after Member has reached 71 years of age			
MPRA Account	0%		
MPRCA Account	4%	9%	Immediate allowance
Additional allowances plus sessional indemnity is greater than the earnings limit			
MPRA Account	0%		
MPRCA Account	4%	9%	Deferred allowance to age 55
<b>Credited between 1 January 1992 and 13 July 1995</b>			
Additional allowances plus sessional indemnity is less than or equal to the earnings limit			
Service accrued when Member is less than 71 years old			
MPRA Account	2%	4%	Deferred allowance to age 60
MPRCA Account	3% and 5%	7% 7%	Deferred allowance to age 60 Temporary allowance up to age 60
Service accrued after Member has reached 71 years old			
MPRA Account	0%		
MPRCA Account	5%	11%	Immediate allowance
Additional allowances plus sessional indemnity is greater than the earnings limit			
MPRA Account	0%		
MPRCA Account	5%	11%	Immediate allowance
<b>Credited before 1 January 1992</b>			
MPRA Account	5%	10%	Immediate allowance
MPRCA Account	0%		

**APPENDIX 2**

**Samples of Demographic Assumptions**

**Appendix 2 - Table 22**  
**House of Commons: Sample of Assumed Rates of Termination**

Completed Years of Service	During a Non-Election Year	Age Last Birthday	During an Election Year
0	0.0007	25	0.2000
1	0.0020	30	0.2548
2	0.0033	35	0.3468
3	0.0040	40	0.3870
4	0.0046	45	0.3938
5	0.0046	50	0.4115
6	0.0046	55	0.4618
7	0.0059	60	0.5278
8	0.0073	65	0.5835
9	0.0086	70	0.6180
10	0.0099	74	0.6200
11	0.0119		
12	0.0132		
13	0.0152		
14 and more	0.0158		

**Appendix 2 - Table 23**  
**House of Commons: Assumed Rates of Election**

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Plan Year	Probability of a General Election
1999	0.000
2000	0.000
2001	0.039
2002	0.584
2003	0.498
2004	0.129
2005	0.132
2006	0.344
2007	0.439
2008	0.289
2009	0.197
2010	0.272
2011	0.358
2012	0.328
2013	0.259
2014	0.263
2015	0.311
2016	0.322
2017	0.291
2018	0.275
2019	0.293
2020	0.309
2021	0.300
2022	0.287
2023	0.289
2024	0.299
2025	0.300
2026	0.294
2027	0.291
2028	0.295

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**Appendix 2 - Table 24**  
**Sample Rates of Mortality for Members, Pensioners and Survivors**

Age Last Birthday	Assumed Rates of Mortality for 1999 Plan Year		Annual % Reduction in Assumed Mortality Rates after 1999 Plan Year	
	Males	Females	Males	Females
25	0.000628	0.000335	1.25	1.65
30	0.000777	0.000411	0.75	1.25
35	0.000826	0.000557	0.75	1.35
40	0.001027	0.000812	1.05	1.75
45	0.001480	0.001109	1.55	1.85
50	0.002367	0.001621	2.05	1.95
55	0.004043	0.002707	2.15	1.05
60	0.007384	0.005305	1.85	0.75
65	0.013573	0.010320	1.65	0.75
70	0.022064	0.016408	1.75	0.75
75	0.034748	0.026764	1.65	1.05
80	0.058926	0.046677	1.25	0.95
85	0.093574	0.080602	0.95	0.85
90	0.149065	0.140127	0.65	0.55
95	0.230630	0.226351	0.45	0.45
100	0.314531	0.337443	0.35	0.35
105	0.403749	0.468269	0.00	0.00
110	0.482591	0.588790	0.00	0.00
115	1.000000	1.000000	0.00	0.00

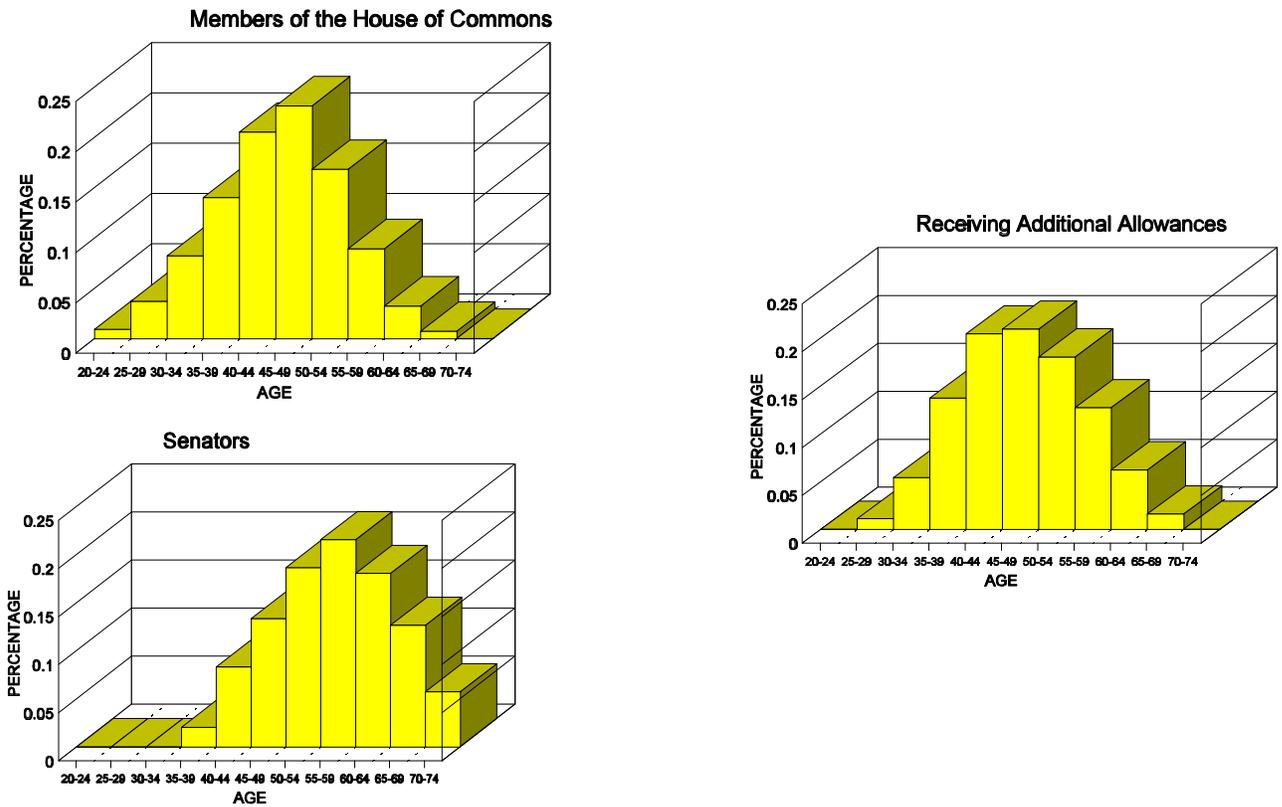
**Appendix 2 - Table 25**  
**Assumed Proportions of Members and Pensioners Married at Death and**  
**Age Difference Between Surviving Spouse and Deceased Member or Pensioner**

Age Last Birthday at Death	Proportion Married at Death		Average Age of Surviving Spouse	
	Males	Females	Females	Males
25	0.900	0.600	22	26
30	0.900	0.600	27	32
35	0.900	0.600	32	37
40	0.900	0.600	37	42
45	0.900	0.600	42	47
50	0.900	0.600	47	53
55	0.891	0.681	52	58
60	0.872	0.669	57	62
65	0.854	0.607	62	67
70	0.808	0.509	67	71
75	0.740	0.415	71	75
80	0.649	0.311	75	79
85	0.538	0.210	79	82
90	0.411	0.124	82	85
95	0.283	0.062	86	88
100	0.172	0.026	88	90
105	0.091	0.009	91	93
110	0.041	0.002	93	95
115	0.015	0.001	95	97

**Appendix 2 - Table 26**  
**Assumed New Entrants Distribution**

Age Last Birthday	House of Commons	Senate	Receiving Additional Allowances
20 - 24	0.009	0.000	0.000
25 - 29	0.037	0.000	0.011
30 - 34	0.082	0.000	0.054
35 - 39	0.140	0.020	0.137
40 - 44	0.205	0.083	0.204
45 - 49	0.231	0.133	0.209
50 - 54	0.168	0.186	0.180
55 - 59	0.089	0.215	0.127
60 - 64	0.032	0.180	0.062
65 - 69	0.007	0.126	0.016
70 - 74	0.000	0.057	0.000

**Appendix 2 - Chart 3**  
**New Entrants Distribution**



**APPENDIX 3**

**Summaries of Membership Data**

## Reconciliation of Membership

The following tables, derived from the basic data, show relevant statistics concerning Members of Parliament, pensioners and survivors during the period from April 1995 to March 1998 inclusive.

### Appendix 3 - Table 27

#### Reconciliation of Members of Parliament Contributing to the MPRA and MPRCA Accounts

	House of Commons			Senate		
	Male	Female	Total	Male	Female	Total
As at 1 April 1995	192	42	234	83	18	101
Data corrections	-3	3	0	-1	1	0
New Entrants	71	25	96	10	9	19
Terminations from 1995 to 1998						
Retirement Allowances						
Terminations	-28	-3	-31	-13	-1	-14
Deaths	0	0	0	-4	0	-4
Subtotal	-28	-3	-31	-17	-1	-18
Lump Sum Benefits						
Terminations	-36	-9	-45	-3	-1	-4
Deaths	0	0	0	-1	0	-1
Subtotal	-36	-9	-45	-4	-1	-5
Appointment to Senate	-1	-1	-2	0	0	0
As at 31 March 1998	195	57	252	71	26	97
Members electing to resume coverage	8	1	9	0	0	0
Total included in valuation	203	58	261	71	26	97

**Appendix 3 - Table 28**  
**Reconciliation of Pensioners**

	Former Members House of Commons			Former Senators		
	Male	Female	Total	Male	Female	Total
Entitled 1 April 1995	375	23	398	29	4	33
New Entitlements	28	3	31	13	1	14
Terminations						
Deaths	-36	0	-36	-7	0	-7
Return to Parliament	-6	0	-6	0	0	0
Subtotal	-42	0	-42	-7	0	-7
Entitled 31 March 1998	361	26	387	35	5	40
Pensioners, included above, who have their annual allowances suspended due to double-dipping provision	14	1	15	2	0	2
Pensioners currently receiving an annual allowance	347	25	372	33	5	38

**Appendix 3 - Table 29**  
**Reconciliation of Survivors**

	Former Members House of Commons			Former Senators		
	Widow	Widower	Total	Widow	Widower	Total
Entitled 1 April 1995	68	1	69	21	1	22
New Entitlements	23	0	23	11	0	11
Deaths	-7	0	-7	-2	0	-2
Entitled 31 March 1998	84	1	85	30	1	31

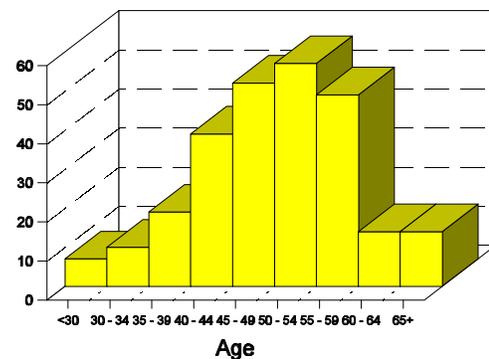
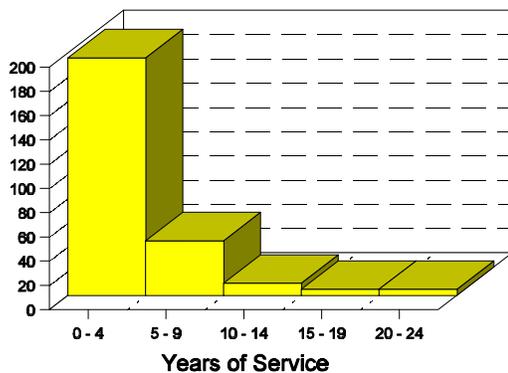
**Appendix 3 - Table 30**

**Members of the House of Commons Contributing to the MPRA and MPRCA Accounts as at 31 March 1998**  
(Excluding Members who did not Elect to Continue to be Covered)

Age Last Birthday	Completed Years of Service								All Durations
	Males				Females				
	0-5	6-9	10-14	15+	0-5	6-9	10-14	15+	
20 - 24	1	0	0	0	0	0	0	0	1
25 - 29	5	0	0	0	1	0	0	0	6
30 - 34	9	0	0	0	1	0	0	0	10
35 - 39	11	1	1	0	5	0	0	0	18
40 - 44	25	5	2	0	6	1	0	0	39
45 - 49	30	6	1	2	11	1	1	0	52
50 - 54	33	9	2	1	11	2	0	0	58
55 - 59	23	8	2	3	10	3	0	0	49
60 - 64	4	5	0	2	3	0	0	0	14
65 - 69	7	1	0	2	1	0	0	0	11
70 - 74	2	0	0	0	0	0	1	0	3
All Ages	150	35	8	10	49	7	2	0	261

**Appendix 3 - Chart 4**

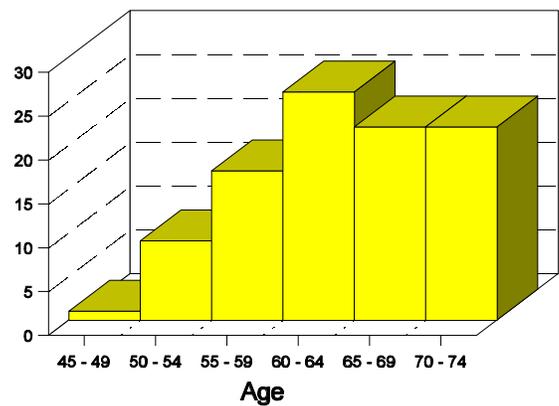
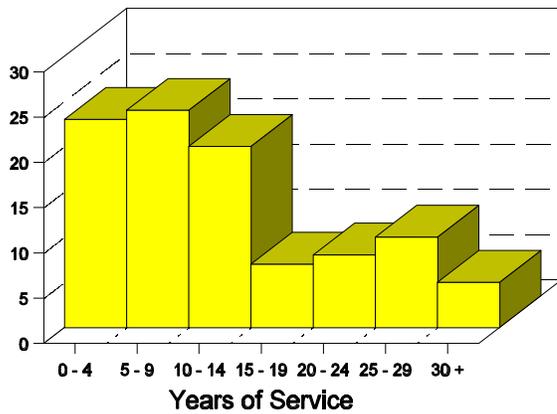
**Members of the House of Commons Contributing to the MPRA and MPRCA Accounts as at 31 March 1998**  
(Excluding Members who did not Elect to Continue to be Covered)



**Appendix 3 - Table 31**  
**Senators as at 31 March 1998**

Age Last Birthday	Completed Years of Service								All Durations
	Males				Females				
	0-5	6-9	10-14	15+	0-5	6-9	10-14	15+	
45 - 49	1	0	0	0	0	0	0	0	1
50 - 54	2	1	3	0	1	1	1	0	9
55 - 59	3	4	4	1	3	1	1	0	17
60 - 64	4	4	2	8	5	0	2	1	26
65 - 69	1	4	3	9	2	1	2	0	22
70 - 74	4	1	2	10	2	2	0	1	22
All Ages	15	14	14	28	13	5	6	2	97

**Appendix 3 - Chart 5**  
**Senators as at 31 March 1998**



**Appendix 3 - Table 32**  
**Number of Members of Parliament Receiving Additional Allowance as at 31 March 1998 and their Average Additional Allowance**<sup>12</sup>

Age Last Birthday	Completed Years of Service								All Durations	
	Males				Females					
	0-5	6-9	10-14	15+	0-5	6-9	10-14	15+		
30 - 34	2	0	0	0	0	0	0	0	0	2
	9,175	0	0	0	0	0	0	0	0	9,175
35 - 39	1	0	1	0	0	0	0	0	0	2
	35,683	0	30,000	0	0	0	0	0	0	32,842
40 - 44	4	2	1	0	0	0	0	0	0	7
	35,385	10,700	47,577	0	0	0	0	0	0	30,074
45 - 49	5	2	1	1	0	0	0	0	0	9
	22,452	47,577	47,577	10,300	0	0	0	0	0	29,477
50 - 54	3	4	1	0	2	0	0	0	0	10
	35,285	29,814	47,577	0	29,138	0	0	0	0	33,096
55 - 59	6	6	2	1	4	1	1	0	0	21
	21,010	15,680	41,239	47,577	19,919	35,684	47,577	0	0	24,435
60 - 64	2	4	0	2	3	1	0	0	0	12
	10,700	35,384	0	60,659	29,426	47,577	0	0	0	35,009
65 - 69	1	1	0	2	3	1	0	0	0	8
	10,700	24,200	0	47,577	20,561	47,577	0	0	0	29,914
70 - 74	0	0	1	1	0	0	0	0	0	2
	0	0	7,600	31,600	0	0	0	0	0	19,600
All ages	24	19	7	7	12	3	1	0	0	73
	23,827	26,086	37,544	43,707	23,993	43,613	47,577	0	0	28,802

Average age last birthday: 52.4 years

Average service at last anniversary: 8.0 years

<sup>12</sup> Out of 73 Members receiving additional allowances, 7 Members were Senators.

**Appendix 3 - Table 33**  
**Pensioners' Annual Allowances in Pay as at 31 March 1998**  
**(Including Both Former Members of the House of Commons and Senators)**

Age Last Birthday	Number			Annual Allowances Payable From		
	Male	Female	Total	MPRA Account (\$)	MPRCA Account (\$)	Combined (\$)
35 - 39	0	1	1	22,729	5,634	28,363
40 - 44	8	0	8	208,136	53,455	261,591
45 - 49	16	2	18	522,124	119,374	641,498
50 - 54	29	0	29	775,856	108,473	884,329
55 - 59	45	7	52	1,744,589	268,954	2,013,543
60 - 64	55	7	62	2,515,619	165,558	2,681,177
65 - 69	58	2	60	2,038,992	104,697	2,143,689
70 - 74	57	5	62	2,131,455	34,023	2,165,478
75 - 79	59	2	61	1,935,484	116,342	2,051,826
80 - 84	27	2	29	697,478	910	698,388
85 - 89	20	1	21	608,048	0	608,048
90 - 94	5	1	6	115,100	0	115,100
95 - 99	1	0	1	55,386	0	55,386
<b>Total</b>	<b>380</b>	<b>30</b>	<b>410</b>	<b>13,370,996</b>	<b>977,420</b>	<b>14,348,416</b>

**Appendix 3 - Table 34**  
**Former Members of the House of Commons as at 31 March 1998**  
**Entitled to Annual Allowances Payable from the MPRA Account**

Age Last Birthday	Number			Annual Allowances Payable			
	Male	Female	Total	Before Age 60 (\$)	From Age 60		
					Basic (\$)	Indexing (\$)	Total (\$)
35 - 39	0	1	1	22,729	24,981	1,536	26,517
40 - 44	8	0	8	208,136	231,024	23,304	254,328
45 - 49	16	2	18	522,124	573,383	52,084	625,467
50 - 54	29	0	29	775,856	822,987	165,820	988,807
55 - 59	45	6	51	1,730,156	1,830,337	283,632	2,113,969
60 - 64	53	7	60		2,084,989	359,938	2,444,927
65 - 69	58	2	60		1,526,781	512,211	2,038,992
70 - 74	50	5	55		1,238,582	607,871	1,846,453
75 - 79	45	1	46		729,564	597,003	1,326,567
80 - 84	22	0	22		168,210	292,171	460,381
85 - 89	16	0	16		194,802	228,691	423,493
90 - 94	4	1	5		19,422	53,789	73,211
95 - 99	1	0	1		13,500	41,886	55,386
<b>Total</b>	<b>347</b>	<b>25</b>	<b>372</b>	<b>3,259,001</b>	<b>9,458,562</b>	<b>3,219,936</b>	<b>12,678,498</b>

**Appendix 3 - Table 35**  
**Former Members of the House of Commons as at 31 March 1998**  
**Entitled to Annual Allowances Payable from the MPRCA Account**

Age Last Birthday	Number			Annual Allowances Payable					
	Male	Female	Total	Before Age 55 (\$)	From Ages 55 to 60 (\$)	From Age 60 <sup>13</sup>			
						Basic (\$)	Indexing (\$)	Total (\$)	
35 - 39	0	1	1	5,634	5,634	3,382	208	3,590	
40 - 44	8	0	8	53,455	59,184	36,297	1,499	37,796	
45 - 49	16	2	18	119,374	133,091	81,833	3,400	85,233	
50 - 54	29	0	29	108,473	118,443	71,314	3,424	74,738	
55 - 59	45	6	51		267,741	215,182	7,795	222,977	
60 - 64	53	7	60			153,572	8,040	161,612	
65 - 69	58	2	60			100,514	4,183	104,697	
70 - 74	50	5	55			28,930	1,779	30,709	
75 - 79	45	1	46			39,413	18,284	57,697	
80 - 84	22	0	22			0	0	0	
85 - 89	16	0	16			0	0	0	
90 - 94	4	1	5			0	0	0	
95 - 99	1	0	1			0	0	0	
Total	347	25	372	286,936	584,093	730,437	48,612	779,049	

<sup>13</sup> Include Prime Minister's 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.

**Appendix 3 - Table 36**  
**Former Senators as at 31 March 1998**  
**Entitled to Annual Allowances Payable from the MPRA Account**

Age Last Birthday	Number			Annual Allowances Payable				
	Male	Female	Total	Before Age 60 (\$)	From Age 60			
					Basic (\$)	Indexing (\$)	Total (\$)	
55 - 59	0	1	1	14,433	15,221	1,279	16,500	
60 - 64	2	0	2		68,906	1,786	70,692	
65 - 69	0	0	0		0	0	0	
70 - 74	7	0	7		242,303	42,699	285,002	
75 - 79	14	1	15		586,648	22,269	608,917	
80 - 84	5	2	7		204,095	33,002	237,097	
85 - 89	4	1	5		113,608	70,947	184,555	
90 - 94	1	0	1		16,241	25,648	41,889	
Total	33	5	38	14,433	1,247,022	197,630	1,444,652	

**Appendix 3 - Table 37**  
**Former Senators as at 31 March 1998**  
**Entitled to Annual Allowances Payable from the MPRCA Account**

Age Last Birthday	Number			Annual Allowances Payable				
	Male	Female	Total	Before Age 55 (\$)	From Ages 55 to 60 (\$)	From Age 60		
						Basic (\$)	Indexing (\$)	Total (\$)
55 - 59	0	1	1		1,213	424	36	460
60 - 64	2	0	2			3,895	51	3,946
65 - 69	0	0	0			0	0	0
70 - 74	7	0	7			3,154	160	3,314
75 - 79	14	1	15			57,529	1,116	58,645
80 - 84	5	2	7			835	75	910
85 - 89	4	1	5			0	0	0
90 - 94	1	0	1			0	0	0
Total	33	5	38		1,213	65,837	1,438	67,275

**Appendix 3 - Table 38**  
**Former Members of the House of Commons and Senators as at 31 March 1998**  
**Annual Allowances from the MPRA Account Suspended due to Double-Dipping Provision**

Age Last Birthday	Number			Annual Allowances Payable				
	Male	Female	Total	Before Age 60 (\$)	From Age 60			
					Basic (\$)	Indexing (\$)	Total (\$)	
40 - 44	1	0	1	10,021	17,240	164	17,404	
45 - 49	1	0	1	10,021	17,298	220	17,518	
50 - 54	1	1	2	20,042	34,919	332	35,251	
55 - 59	3	0	3	59,530	131,031	15,490	146,521	
60 - 64	6	0	6		170,563	43,523	214,086	
65 - 69	1	0	1		65,218	1,030	66,248	
70 - 74	3	0	3		179,844	17,577	197,421	
Total	16	1	17	99,614	616,113	78,336	694,449	

**Appendix 3 - Table 39**  
**Former Members of the House of Commons and Senators as at 31 March 1998**  
**Annual Allowances from the MPRCA Account Suspended due to Double-Dipping Provision**

Age Last Birthday	Number			Annual Allowances Payable				
	Male	Female	Total	Before Age 55 (\$)	From Ages 55 to 60 (\$)	From Age 60		
						Basic (\$)	Indexing (\$)	Total (\$)
40 - 44	1	0	1	11,373	16,718	9,499	90	9,589
45 - 49	1	0	1	12,210	17,001	9,724	123	9,847
50 - 54	1	1	2	24,419	34,647	19,770	188	19,958
55 - 59	3	0	3		7,807	10,300	535	10,835
60 - 64	6	0	6			39,890	659	40,549
65 - 69	1	0	1			0	0	0
70 - 74	3	0	3			754	40	794
Total	16	1	17	48,002	76,173	89,937	1,635	91,572

**Appendix 3 - Table 40**  
**Surviving Spouses of Former Members of House of Commons**  
**Entitled to Immediate Annual Allowances as at 31 March 1998**

Age Last Birthday	Number	Allowances Payable From MPRA Account			Allowances Payable From MPRCA Account		
		Basic (\$)	Indexing (\$)	Total (\$)	Basic (\$)	Indexing (\$)	Total (\$)
45 - 49	1	8,878	6,783	15,661	0	0	0
50 - 54	1	3,985	7,034	11,019	0	0	0
55 - 59	6	93,963	30,752	124,715	0	0	0
60 - 64	0	0	0	0	0	0	0
65 - 69	13	138,165	120,380	258,545	0	0	0
70 - 74	14	155,371	106,783	262,154	331	20	351
75 - 79	14	119,283	121,909	241,192	0	0	0
80 - 84	17	79,047	167,042	246,089	0	0	0
85 - 89	13	62,700	143,560	206,260	0	0	0
90 - 94	5	11,702	40,011	51,713	0	0	0
95 - 99	1	1,068	4,073	5,141	0	0	0
<b>Total</b>	<b>85</b>	<b>674,162</b>	<b>748,327</b>	<b>1,422,489</b>	<b>331</b>	<b>20</b>	<b>351</b>

**Appendix 3 - Table 41**  
**Surviving Spouses of Former Senators**  
**Entitled to Immediate Annual Allowances as at 31 March 1998**

Age Last Birthday	Number	Allowances Payable From MPRA Account			Allowances Payable From MPRCA Account		
		Basic (\$)	Indexing (\$)	Total (\$)	Basic (\$)	Indexing (\$)	Total (\$)
40 - 44	1	5,996	19	6,015	2,263	7	2,270
45 - 49	1	27,365	7,848	35,213	0	0	0
50 - 54	0	0	0	0	0	0	0
55 - 59	1	21,737	137	21,874	2,160	14	2,174
60 - 64	2	38,342	217	38,559	10,178	60	10,238
65 - 69	0	0	0	0	0	0	0
70 - 74	6	140,649	26,117	166,766	159	14	173
75 - 79	6	70,989	36,951	107,940	504	45	549
80 - 84	6	72,679	44,105	116,784	0	0	0
85 - 89	8	108,331	46,182	154,513	0	0	0
Total	31	486,088	161,576	647,664	15,264	140	15,404

**Appendix 3 - Table 42**  
**Surviving Children**  
**Entitled to Immediate Annual Allowances as at 31 March 1998**

Age Last Birthday	Number	Allowances Payable From MPRA Account			Allowances Payable From MPRCA Account		
		Basic (\$)	Indexing (\$)	Total (\$)	Basic (\$)	Indexing (\$)	Total (\$)
0 - 17	4	3,000	8	3,008	1,132	4	1,136
18 - 24	2	9,317	1,600	10,917	0	0	0
Total	6	12,317	1,608	13,925	1,132	4	1,136