

ACTUARIAL REPORT

as at 31 March 1996

on the

Pension Plan for the

Royal Canadian Mounted Police



Office of the Superintendent
of Financial Institutions Canada

Bureau du surintendant
des institutions financières Canada

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23 January 1998

The Honourable Marcel Massé, P.C., M.P.
President of the Treasury Board
Ottawa, Canada
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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 1996 of the pension plan established under the *Royal Canadian Mounted Police Superannuation Act*.

Yours sincerely,

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Chief Actuary
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I- Overview

The financial soundness of the pension plan established under the *Royal Canadian Mounted Police Superannuation Act* (RCMPSA) rests on the balance in the RCMPS Account which forms 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- Raison d'être of this Actuarial Report

This actuarial review of the pension plan established under the RCMPSA was made as at 31 March 1996 pursuant to the *Public Pensions Reporting Act* (PPRA). The previous review was made as at 31 December 1992. This report is thus the first to be based on fiscal years rather than calendar years. The date of the next periodic review contemplated by the PPRA is 31 March 1999.

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, liabilities and 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 years¹ following the valuation date.

B- Main Findings

The main findings of this actuarial review are the following:

1. As at 31 March 1996, the plan had a surplus of \$1.91 billion resulting from the difference between the assets of \$7.55 billion and the liabilities of \$5.64 billion.
2. The statutes governing the operation of the plan do not address the disposition of a surplus. However, if the \$1.91 billion surplus were amortized as a deficit would be, then the contributions to the plan would be reduced by \$228 million in each of the next 15 years. This annual reduction corresponds to 24.0% of pensionable payroll for the 1997 plan year.
3. The normal cost of the plan for the 1997 plan year is 19.34% of pensionable payroll, that is \$184 million, and is estimated to increase to 20.32% and 20.99% 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. The rate of 19.34% closely corresponds to the projection of the previous report.

¹ 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.

C- Developments Since the Previous Report's Date

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 developments described below have in aggregate a non-material effect on the valuation results.

During the intervaluation period, certain plan provisions were changed by Bill C-55, which received Royal Assent on 29 September 1992. The Bill amended certain Acts relating to pensions, including the RCMPSA, and also enacted the *Special Retirement Arrangements Act* and the *Pension Benefits Division Act*, all of which came into force by the valuation date. Also during the intervaluation period, the Royal Canadian Mounted Police began an early retirement program that added significantly to the liabilities of the plan.

1. *Special Retirement Arrangements Act*

Under this Act a supplementary pension plan known as a Retirement Compensation Arrangement (RCA) was established in respect of the portion of employment earnings that is no longer pensionable under the RCMPSA (see item C-3 below). The first actuarial report on the RCA is contemplated as at 31 March 1999, i.e. the same as that contemplated for the next report on the RCMPSA.

2. *Pension Benefits Division Act*

This Act provides for a division, upon spousal union breakdown, of pension benefits accrued during the cohabitation period. The member's spouse's portion of the accrued benefits is accordingly paid out as a lump sum determined using current market values.

This change, which has no material effect on the valuation results, became effective 30 September 1994 as a result of the legislative authority under the PBDA which was included in Bill C-55.

3. Amendments to the RCMPSA

This report is based on the plan provisions described in Appendix 1, which incorporates the following three changes arising from Bill C-55.

(a) Optional Survivor Benefit

The amending legislation allows pensioners to provide survivor benefits in respect of marriages at age 60 or over. The full cost of the survivor benefit is borne by the pensioner in the form of a reduction to the pension amount as long as the spousal union remains intact. The full amount of retirement pension is restored to the pensioner if and when the spousal union terminates for any reason.

This change, which has no material effect on the valuation results, became effective on 6 May 1994 as a result of the legislative authority under Bill C-55.

(b) Leave Without Pay

Members may now choose not to contribute in respect of leave without pay periods in excess of three months. They may also elect later on to purchase the pension benefits relating to such periods in the form of elective service.

This change, which has no material effect on the valuation results, became effective on 1 December 1995 as a result of the legislative authority under Bill C-55.

(c) Maximum Pensionable Earnings

Under the amending tax-related legislation, the RCMPSA regulations prescribe the yearly maximum pensionable earnings in respect of service from 23 February 1995 onward. The maximum was \$98,400 in 1995, with scheduled increases for each calendar year thereafter. The effect of this limit on contributions and benefits (survivor benefits are not affected by the limit) is taken into account in this valuation; however, its effect is not material because only a handful of members are actually affected.

4. Early Retirement Program

The early retirement program was concentrated in the 1995 to 1997 calendar years, inclusive. Under the program, many long-service plan members accepted severance packages to retire earlier than would otherwise have been the case; their positions were then eliminated or partially transferred to other employees. As shown in Section V-D, the program increases the normal cost for the 1997 plan year by 0.06% of pensionable payroll and decreases the surplus as at 31 March 1996 by \$60 million.

II- Data

A- Account

1. Reconciliation of Balances in RCMP Superannuation Account

(in millions of dollars)				
Account balance as at 31 December 1992				5,340.7
Net cash flow-1 January 1993 to 31 March 1993				150.8
Plan year	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1994-1996</u>
Public Accounts opening balance	5,491.5	6,138.4	6,819.8	5,491.5
INCOME				
Investment earnings	587.2	641.9	708.2	1,937.3
Employer contributions	126.0	125.9	119.4	371.3
Employee contributions	60.3	59.8	57.2	177.3
Transfers received	<u>0.6</u>	<u>0.3</u>	<u>0.3</u>	<u>1.2</u>
Subtotal	774.1	827.9	885.1	2,487.1
EXPENDITURES				
Annuities	125.5	144.6	165.9	436.0
Pension divisions	N/A	N/A	8.9	8.9
Returns of contributions	1.5	1.7	2.1	5.3
Transfers sent	0.1	0.1	0.2	0.4
Cash termination allowances	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.3</u>
Subtotal	127.2	146.5	177.2	450.9
Public Accounts closing balance	6,138.4	6,819.8	7,527.7	7,527.7
Account balance as at 31 March 1996			7,527.7	7,527.7

The above table shows the reconciliation of the RCMP Superannuation Account between the last valuation date and the current valuation date. Since the last valuation, the Account balance has grown by \$2,187,000,000 (i.e. a 41% increase) to reach \$7,527,700,000 as at 31 March 1996. The net growth in the Account balance is to a large extent the result of interest credits made.

2. Rates of Return

The following rates of return on the Account by plan year were calculated using the foregoing entries. These results differ somewhat from those shown in the actuarial reports as at 31 March 1996 and 1997, respectively, on the Public Service and Canadian Forces pension plans even though the quarterly yields used to compute actual investment earnings are identical for all three plans. The main reasons for this discrepancy are that:

- (a) the uniform quarterly yields are applied only to the opening balance of the Accounts but not whatsoever to the cash flows during the quarter, and
- (b) the results below were computed assuming a uniform distribution of cash flows during the plan year by imputing to them one half year of interest.

	<u>%</u>
1994	10.64
1995	10.42
1996	10.38

3. Sources of Asset Data

The Account entries shown in item 1 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 1996.

B- Membership

1. Highlights

The individual data in respect of contributors, pensioners, and eligible survivors were provided as at 31 March 1995, and are shown in the summaries of data in Appendix 3. The methodology used to project these membership data one year to the valuation date of 31 March 1996 is described in section III-E below. Following are the highlights of membership data as at 31 March 1995.

(a) Contributors

There were 18,152 contributors as at 31 March 1995, of whom 86% were male. The average age last birthday of the contributors was 39.3 years and the average pensionable service was 15.6 completed years. The annualized pensionable payroll¹ was \$962.1 million (average annual pensionable earnings were \$53,325 for the 18,042 contributors included therein).

¹ As defined in Note 1 in section F of Appendix 1.

Some 88% of the contributors were Regular Members¹ of the Force, the remainder being Civilian Members². Tables 3D to 3G of Appendix 3 show detailed information by sex on the age, years of pensionable service and average annual pensionable earnings of Regular Members and Civilian Members.

(b) Pensioners

There were 5,778 pensioners as at 31 March 1995, of whom 96% were male. The average age last birthday of pensioners was 57.6 years; at date of retirement or disability, it was 48.8 years. The aggregate annual pension payments were \$152.8 million (average was \$26,445). All pensions were in course of payment as at 31 March 1995 except for 18 pensions deferred to age 60.

Some 91% of the pensioners were retired or disabled Regular Members, the remainder being retired or disabled Civilian Members. Tables 3H to 3K of Appendix 3 show detailed information by sex on the benefits in course of payment to retired or disabled Regular Members and Civilian Members.

(c) Eligible Survivors

There were 740 surviving spouses as at 31 March 1995, of whom 99% were female. The average age last birthday of surviving spouses was 61.4 years; at date of death of the member, it was 52.4 years. The aggregate annual spousal allowance payments were \$6.3 million (average was \$8,575). Table 3L of Appendix 3 shows detailed information on the benefits in course of payment to eligible survivors, including children.

2. Validation of Membership Data

The principal validation tests applied to the valuation input data were as follows:

- reconciling the membership data with the data used in the previous valuation report (see tables 3A, 3B and 3C of Appendix 3);
- comparing the membership with that published in the Report on the Administration of the RCMP Superannuation Account for the year ending 31 March 1995;
- checking that the salary of a contributor is within a certain range and reasonably consistent in comparison with the salary of that contributor in the previous valuation report;
- verifying that the pensionable service of a contributor is reasonably consistent in relation to the attained age; and

¹ Unlike a *Civilian Member*, a *Regular Member* holds a rank in the Force.

- comparing the initial pension of each contributor retiring during the January 1993 to March 1995 period with the expected pension based on the 31 December 1992 valuation data, taking into account any changes arising from service after 31 December 1992.

Based on the omissions and discrepancies¹ identified by these and other tests, appropriate adjustments were made to the basic data after consulting with the data providers.

3. Sources of Membership Data

The Classification and Compensation Branch of the Royal Canadian Mounted Police provided relevant valuation input data on contributors while the RCMP Services Section of Public Works and Government Services Canada did so in respect of pensioners and survivors. The co-operation and able assistance received from the above-mentioned data providers deserve to be acknowledged.

¹ Late in the valuation process, the amount of annuity benefits to be paid in the 1996 plan year projected per the valuation data was found to be 4% less than the corresponding amount of annuity benefits actually paid per the RCMP SA financial statements. In retrospect, it is now known that a similar shortfall of 2% existed in respect of the 1992 valuation. For future valuations, detailed accounting data will be requested so that such discrepancies can be resolved.

III- Methodology

A- Assets

The assets of the plan consist essentially of the recorded balance in the RCMP Superannuation Account, which forms part of the Public Accounts of Canada. These assets are shown at the book value of the underlying notional bond portfolio described in Appendix 1. For consistency, the normal costs and liabilities are determined using the projected yields, described in section D below, that fully reflect the earning power of the assets. If a market value approach had been taken, the resulting higher asset value would have been largely offset by the higher liabilities attributable to discounting at market new money interest rates, which were lower than the yields projected for this valuation.

The only other plan asset consists of the value, discounted in accordance with the projected yields, of all future member contributions and government credits (see section IV-G-10) 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, of all future benefits accruing in respect of that year's service. Consistent with this cost method, pensionable earnings are projected up to retirement using the assumed annual increases in average pensionable earnings (including seniority and promotional increases).

C- Liabilities

1. Contributors

Consistent with the projected accrued benefit actuarial cost method employed to estimate normal costs, the plan's liabilities in respect of contributors as at the valuation date correspond to the value, discounted in accordance with the projected yields, described in section D below, 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, described in section D below, of all outstanding future benefits to which these individuals are entitled.

D- Projected Yields

The projected yields (shown in section IV-C below) used 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 book value of the combined Superannuation Accounts of the pension plans established under the *Public Service, Canadian Forces, and Royal Canadian Mounted Police Superannuation Acts*. The yields were determined using the open-group approach, meaning that all expected future contributions to the plan were taken into account in projecting the annual yields on the Account.

The open-group approach was adopted 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 actual investment earnings on the combined existing assets of the three accounts as at the valuation date, the assumed future new money interest rates (also shown in section IV-C), and all future contributions as well as all future expected benefits payable in respect of all pension entitlements accruing both before and after the valuation date.

In previous reports, the projected yields were determined on a closed-group basis. The effect of the new open-group approach is shown in section V-D on the reconciliation of surplus and normal cost.

E- Membership Data

Unlike previous valuations, individual valuation data on each member were not grouped by individual ages for purposes of this valuation. The valuation results were not appreciably changed by this switch to the seriatim approach.

The data on members referred to in section II-B above were provided as at 31 March 1995, which is one year earlier than the valuation date of this report. These data were accordingly projected to the 31 March 1996 valuation date generally using the demographic assumptions of the previous valuation and the actual economic experience (1.6% indexation increase for pensioners but no general pay increase for contributors) for the relevant one-year projection period. However, no seniority or promotional increases were assumed for contributors with less than three years of pensionable service, in recognition of the seniority freeze in effect during the projection period. As well, the rates of pensionable retirement were increased by half to reflect the early retirement program in effect during the year.

IV- Assumptions

A- Key Economic Assumptions

The following key economic assumptions are required for valuation purposes in respect of each year following the valuation date:

- average new money interest rate applicable to long-term (at least 20 years to maturity) Government of Canada bonds purchased during the year;
- increase in the CPI;
- increase in the Industrial Aggregate of Average Weekly Earnings; and
- increase in contributors' average annual employment earnings (exclusive of seniority and promotional increases).

These assumptions were made by analysing past experience (i.e. over the last 10, 25, and 50 years), current experience, and expectations for the future. Three main conclusions were reached as a result of these analyses:

1. High current real rates of return (i.e. the excess of new money interest rates over annual increases in the CPI) on long-term Government of Canada bonds are expected to return eventually to 3% per annum.
2. Low current increases in the CPI will rise gradually to eventually reach an ultimate level of 3% per annum.
3. Low current real increases in average earnings (i.e. the excess of increases in average annual employment earnings over CPI increases) will rise gradually to eventually reach an ultimate level of 1% per annum. The assumed increase in contributors' average annual employment earnings would normally, for any year, be the same as the assumed increase in the Industrial Aggregate of Average Weekly Earnings. However, it was adjusted in the short term to reflect the continuation of the RCMP salary freeze until 31 December 1997.

These conclusions are the same as those underlying the ultimate values assumed for the previous valuation. The rationale is as follows:

1. The assumed ultimate real rate of return on long-term Government of Canada bonds at 3% per annum appears reasonable considering the average experience of the last 25 years and the expected impact on the Canadian economy of free trade, international competition and the size of the public debt.

2. The assumed ultimate level of inflation at 3% per annum, with the prospects of stable moderate inflation from now on, seems appropriate. Considering the normal fluctuations in the financial and labour markets, inflation is not expected to remain at the historically low rates experienced over the last five years (average of 1.6% per annum was the lowest in three decades). However, a return to the high inflation rates of the 1970s and 1980s (average of 6.9% per annum over 20 years) is judged to be unlikely.
3. The assumed ultimate productivity rate (i.e. real increase in average employment earnings) was kept at 1% per annum, which lies about midway between the average Canadian experience of the past 25 years (0.59% per annum) and 50 years (1.50% per annum).

B- Derived Economic Assumptions

The following assumptions were derived from the key economic assumptions:

1. Projected Yields on the Account

These yields are required for the computation of present values of benefits to determine the plan's liabilities and normal costs. The methodology used to determine the projected yields on the Account is described in section III-D.

2. Year's Increase in the Canada Pension Plan (CPP) Year's Maximum Pensionable Earnings (YMPE)

The YMPE is involved in the valuation process because the plan is integrated with the CPP. The assumed increase in the YMPE for a given year was derived, in accordance with the *Canada Pension Plan Act*, to correspond to the increase in the assumed Industrial Aggregate of Average Weekly Earnings over successive 12-month periods ending on 30 June.

3. Year's Increase in the 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 formula described in Appendix 1 to the assumed CPI increases over successive 12-month periods ending on 30 September.

C- Summary of Key and Derived Economic Assumptions

Plan Year	Interest		Inflation		Employment Earnings		
	New Money Interest	Yield Projected on Account	CPI Increase	Pension Indexing ¹	Industrial Aggregate Increase	YMPE Increase ¹	Average Pensionable Earnings Increase ^{1, 2}
1997 ³	7.7%	10.11%	2.0%	1.6%	3.0%	1.1%	0.0%
1998	7.2	9.97	2.2	2.0	3.2	2.9	3.1
1999	6.8	9.73	2.4	2.2	3.4	3.1	3.3
2000	6.5	9.47	2.6	2.4	3.6	3.3	3.5
2001	6.2	9.16	2.8	2.6	3.8	3.5	3.7
2002	6.0	8.81	3.0	2.8	4.0	3.7	3.9
2003	6.0	8.41	3.0	3.0	4.0	3.9	4.0
2004	6.0	8.14	3.0	3.0	4.0	4.0	4.0
2005	6.0	7.89	3.0	3.0	4.0	4.0	4.0
2006	6.0	7.65	3.0	3.0	4.0	4.0	4.0
2007	6.0	7.46	3.0	3.0	4.0	4.0	4.0
2008	6.0	7.30	3.0	3.0	4.0	4.0	4.0
2009	6.0	7.13	3.0	3.0	4.0	4.0	4.0
2010	6.0	6.97	3.0	3.0	4.0	4.0	4.0
2011	6.0	6.81	3.0	3.0	4.0	4.0	4.0
2012	6.0	6.57	3.0	3.0	4.0	4.0	4.0
2013	6.0	6.45	3.0	3.0	4.0	4.0	4.0
2014	6.0	6.36	3.0	3.0	4.0	4.0	4.0
2015	6.0	6.28	3.0	3.0	4.0	4.0	4.0
2016	6.0	6.18	3.0	3.0	4.0	4.0	4.0
2017	6.0	6.11	3.0	3.0	4.0	4.0	4.0
2018	6.0	6.07	3.0	3.0	4.0	4.0	4.0
2019	6.0	6.04	3.0	3.0	4.0	4.0	4.0
2020	6.0	6.02	3.0	3.0	4.0	4.0	4.0
2021+	6.0	6.00	3.0	3.0	4.0	4.0	4.0

1 Assumed to be effective as at 1 January.

2 Exclusive of seniority and promotional increases.

3 Figures for the 1997 plan year reflect actual experience.

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.

However, a secondary objective of a margin consists of ensuring as much as possible that any eventual difference between assets and liabilities will be positive rather than negative, and therefore that any required financing adjustments will be in respect of a surplus rather than a deficit. This objective is deemed to be met implicitly in this valuation through the assumed ultimate real rate of return on investments which, at 3% per annum, most likely errs on the safe side.

In the previous report, the explicit margin corresponded to an increase of one quarter of a percentage point in the pension indexing factor (see section B above) derived for 1996 and subsequent years. For this report, the explicit margin was removed. The removal of this explicit margin entails a reduction in the liabilities and in the normal cost, which is shown in section V-D.

E- Seniority and Promotional Salary Increases

Seniority means length of service, and *promotion* means changing to a higher rank. The seniority and promotional salary increase assumptions for contributors in each of the first three years of pensionable service were retained from the previous valuation but shifted as much as two years earlier to compensate for the two-year seniority freeze ended June 1996. The shifting applies only until the 1999 plan year. The assumption for the fourth and later years of service is roughly 25% lower than the previous one, with one exception. For Regular Members with ten years of service, it has quadrupled because the Senior Constable Provisional Allowance is taken into account for the first time.

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 January 1993 to March 1995.

1. Age, Sex and Employment Earnings of New Contributors

To estimate the normal costs shown in the cost certificate (section V-B), assumptions were made as to the demographic characteristics of future new contributors. It was assumed that the number, sex, and type of new contributors would be such that the population of each subgroup of contributors increases annually as follows:

	<u>%</u>
Male Regular Members	(1)
Female Regular Members	4
Male Civilian Members	0
Female Civilian Members	3

If these assumptions for the subgroups were to be realized, then the overall population of contributors would remain essentially constant for the next 20 years. Despite the early retirement program in effect during 1996 and 1997, the number of contributors is expected to remain steady because enough additional positions (with different duties) are created.

For each subgroup, the age distribution of new contributors was based on that of the actual new contributors during the 1995 plan year. The initial salary of new Civilian Members in a given age-sex cell in the 1997 plan year was assumed to be the same as the corresponding experience in the 1995 plan year; for all new Regular Members it was assumed to be in accordance with the salary schedule in effect since January 1993. Initial salary is assumed to increase in future plan years in accordance with the assumption for contributors' average earnings increase.

2. Other Assumptions Regarding All Contributors

Table 2A of Appendix 2 shows the assumed seniority and promotional salary increases. Tables 2B to 2F show, respectively, the assumed rates of decrement arising from:

- terminations with nonvested benefits (entitlement to a return of employee contributions with interest rather than to an annuity or an allowance);
- pensionable disabilities (contributor becomes a *disability pensioner* entitled to an immediate disability pension);
- pensionable retirements (contributor becomes a *retirement pensioner* entitled to an immediate or deferred retirement pension); and
- mortality for the 1997 plan year.

For this valuation, the assumed rates of terminations with nonvested benefits for all types of contributors except male Civilian Members are generally 10% to 25% lower than those of the previous valuation.

The rates of pensionable disability assumed for this valuation are much the same as in the previous valuation, except for increases of up to 25% for males at ages 40 to 50.

The ultimate rates of pensionable retirement (i.e. for the 1999 plan year and thereafter) assumed for Regular Members correspond on average to those of the previous valuation. The change in a few age/service cells is as much as 10%. The ultimate rates for almost all Civilian Members are 10% higher than the previous rates. The select rates of pensionable retirement assumed for the 1997 and 1998 plan years are equal to the ultimate rates increased by half to recognize the early retirement program in effect during the select period.

The rates of mortality deemed applicable at the contributor ages for the 1997 plan year are generally close to those projected for that year in the previous valuation. Mortality rates beyond the 1997 plan year were determined by applying the longevity improvement factors shown in table 2G of Appendix 2 to the rates assumed for that base year. The improvement factors are equal to Projection Scale AA (published by the Society of Actuaries in 1994) increased by 0.25% per annum to reflect the mortality experience under the Public Service pension plan from 1987 to 1995. Virtually all of the improvement factors at the contributor ages are slightly higher than their counterparts in the previous valuation.

3. Pensioners

Table 2F of Appendix 2 shows the mortality rates applicable in the 1997 plan year for pensioners as well as contributors. Table 2G shows the longevity improvement factors applying after the 1997 plan year. Mortality rates for retirement pensioners are generally somewhat less than the rates previously assumed for the 1997 plan year. For the first time, it was assumed that a disability pensioner would experience higher mortality (excess is 240% at age 30, grading down to zero by age 90) than would a retirement pensioner. The mortality improvement factors have been increased materially (by as much as 50% at some ages) for males at the pensioner ages but have been decreased even more materially (by 50% at most ages) for females.

4. Surviving Spouses

Tables 2H and 2I of Appendix 2 show the proportion of contributors and pensioners assumed to leave, upon death, a spouse eligible for a survivor allowance under the plan. The probability of a male leaving a widow averages 3% higher than was assumed in the previous valuation, as does the probability of a female over age 65 leaving a widower.

Tables 2H and 2I of Appendix 2 also show the assumed age difference between the surviving spouse and the deceased contributor or pensioner. For

almost all male pensioners aged 80 and over, the widow is expected to be one or two years younger than was assumed in the previous valuation. Similarly, for almost all female pensioners the widower is expected to be one or two years younger than was assumed in the previous valuation.

The mortality rates deemed applicable to surviving spouses in the 1997 plan year (table 2F of Appendix 2) are generally close to the rates assumed for that year in the previous valuation. Assumed longevity improvement factors (table 2G of Appendix 2) were applied to obtain mortality rates applicable beyond the 1997 plan year.

5. Surviving Children

It was assumed that the number of eligible children surviving a contributor or a pensioner would be in accordance with tables 2H and 2I of Appendix 2, which also show the average age of those surviving children. To determine the value of pensions payable to eligible children, the rates of pension termination were assumed to be zero prior to age 17, and 15% per annum thereafter until expiry of the benefit on the 25th birthday. These assumptions are materially the same as in the previous valuation.

G- Other Assumptions

1. Election of Options

Experience data indicate that a Regular Member voluntarily retiring with 10 to 20 years of service in the Force while under the applicable retirement age usually elects a return of contributions rather than a deferred annuity; it was assumed that this would continue to apply. The same assumption was made in respect of Civilian Members voluntarily retiring before reaching age 50. However, it was assumed that Civilian Members voluntarily retiring at or beyond age 50 would, if eligible, elect an annual allowance or an immediate annuity.

2. Pension Benefits Division / Optional Survivor Benefit / Leave Without Pay

Pension benefits divisions have no material effect on the plan because the liabilities of the plan are reduced 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.

Two other provisions, i.e. optional survivor benefit and suspension of membership while on leave without pay, were also treated like pension benefits divisions for the same reason.

3. Retirement Age of Regular Members

For simplicity, it was assumed that all Regular Members at least 56 years old could retire because of age as defined in Appendix 1. In practice, this is true only for ranks up to corporal who joined the Force before July 1988; all other Regular Members may retire because of age at a higher age, ranging from age 57 to age 60. This simplifying assumption overstates the liabilities and the normal cost only in respect of Regular Members who joined the Force at ages 33 and over; since they are relatively few, the overstatement is negligible.

4. Maximum Age of Contributors

It was assumed that all Regular Members would leave service before their 60th birthday and that all Civilian Members would do so before their 65th birthday. With respect to the five Civilian Members already at least age 65, it was assumed that retirement would occur immediately after 31 March 1995.

5. Minimum Death Benefit

This valuation does not take into account the minimum death benefit, described in Note 14, section F of Appendix 1, in respect of deaths occurring after retirement. The resulting understatement of accrued liability and normal cost is not material because almost all of the relatively few pensioners who die in the early years of retirement do leave an eligible survivor.

6. CPP Contribution Rates

In accordance with the CPP amending Bill tabled in the House of Commons 25 September 1997, the CPP contribution rate for employees is assumed herein to rise from 2.8% in 1996 to its ultimate level of 4.95% by the calendar year 2003. The previous schedule of CPP employee contribution rates increased more slowly, taking 12 more years to reach the same level of 4.95%.

7. CPP Offset for Retirement Pensioners

Although the CPP amending Bill of 25 September 1997 incorporates a change to base the CPP benefit on a contributor's last five years of service instead of the current three years, no corresponding change was assumed for the calculation of the CPP offset at age 65 to the RCMP/PSA retirement pension. Such a change would require an amendment to the Act.

8. CPP Offset for Disability Pensioners

The CPP offset status of current disability pensioners under age 65 was determined in accordance with the valuation data. Accordingly, it was assumed that one-third of future disability pensioners would receive a CPP disability pension. In the previous valuation, the proportions of future and current disability pensioners assumed to receive a CPP disability pension were 0% and 100%, respectively. The overall financial effect of adopting the revised proportions for the CPP disability offset is negligible.

9. Maximum Pensionable Earnings

The tax-related limit of \$98,600 prescribed for the 1996 calendar year was assumed to rise very slowly until 1 January 2005, and to rise thereafter in accordance with the assumed increase in the Industrial Aggregate of Average Weekly Earnings, as prescribed under the current legislation. Very few members are affected by this new assumption; consequently the effect on the valuation results is negligible.

10. Funding of Elected Prior Service

The government credits to the Account in each future year in respect of prior service elections made before the valuation date are assumed to be 2.81 times the corresponding future contributions by the contributors making the elections. This ratio was taken from the allocation of the normal cost for the 1999 plan year as shown in section V-B-2.

11. Outstanding Termination Payments

Payments owing to former contributors as at 31 March 1996 were ignored in this valuation. The consequent understatement of liability is negligible because there were fewer than a dozen such cases and the average owing was modest.

12. 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 against the RCMPS Account, are borne entirely by the government and are commingled with all other government expenses.

13. Nature of Terminations

It was assumed that terminations with nonvested benefits, pensionable disabilities and retirements were permanent and that therefore no subsequent re-entry would occur.

V- Results

A- Balance Sheet as at 31 March 1996

The following balance sheet was prepared using the data described in section II, the methodology described in section III, and the assumptions described in section IV.

<u>Assets</u>	<u>\$ millions</u>
Balance in RCMP Superannuation Account	7,527.7
Present value of future contributions and government credits in respect of elected prior service	<u>23.7</u>
Total Assets	7,551.4
<u>Liabilities</u>	
For benefits accrued to, and in respect of, contributors:	
• Regular Members	3,013.2
• Civilian Members	<u>247.8</u>
	3,261.0
For benefits payable to, and in respect of:	
• Regular Members	
Retirement pensioners	2,100.4
Disability pensioners	78.0
Surviving spouses	80.2
Surviving children	<u>1.7</u>
	2,260.3
• Civilian Members	
Retirement pensioners	102.4
Disability pensioners	9.5
Surviving spouses	7.5
Surviving children	<u>0.1</u>
	<u>119.5</u>
Total Liabilities	5,640.8
<u>Surplus</u>	1,910.6

B- Cost Certificate

The normal costs, assets and liabilities were computed using the data described in section II, the methodology described in section III, and the assumptions described in section IV. Emerging experience, differing from the corresponding assumptions, will result in gains or losses to be revealed in subsequent reports.

1. Normal Costs

The following normal costs are expressed as a dollar amount as well as a percentage of the projected pensionable payroll (see F-1 in Appendix 1) in each given plan year.

<u>Plan Year</u>	<u>% of Pensionable Payroll</u>	<u>Millions of Dollars</u>
1997	19.34	184
1998	20.32	194
1999	20.99	206
2000	21.67	219
2001	22.33	233
2002	22.89	245
2003	23.34	258
2004	23.76	271
2005	24.13	285
2006	24.43	298
2011	25.35	368
2016	25.53	454
2021	25.51	563

The annual increase in the normal cost (expressed as a % of pensionable payroll) from 1997 to 2002 reflects mainly the partial transition of all economic assumptions from their current to their ultimate values. The annual increase in the normal cost (expressed as a % of pensionable payroll) from 2003 to 2016 reflects mainly the balance of the transition from the high yields projected for the immediate future (e.g. 10.11% for the 1997 plan year) to the lower ultimate rate (6% per annum) assumed for the 2021 plan year and thereafter.

2. Allocation of Normal Costs

The foregoing normal costs are borne jointly by contributors and the government. Contributors make required contributions in accordance with a prescribed formula (see Appendix 1), with the government covering the balance of the normal cost. The following table shows the allocation of the normal cost expressed as a percentage of pensionable payroll, as well as the ratio of the cost borne by the government to that borne by the contributors.

Plan Year	<u>Allocation of Normal Costs</u>		Ratio
	<u>Government</u>	<u>Contributors</u>	
1997	13.55%	5.79%	2.34
1998	14.67	5.65	2.60
1999	15.47	5.51	2.81
2000	16.35	5.32	3.07
2001	17.25	5.08	3.39
2002	18.05	4.84	3.73
2003	18.73	4.62	4.06
2004	19.27	4.49	4.29
2005	19.65	4.48	4.39
2006	19.97	4.46	4.47
2011	20.95	4.40	4.76
2016	21.19	4.34	4.88
2021	21.21	4.30	4.93

The initial ratio of 2.34 nearly doubles in the first seven years, partly because the rate at which contributors make required contributions to the plan decreases as the CPP contribution rate rises rapidly until 2003 to its ultimate level of 4.95% (see item IV-G-6). The ratio increases more slowly thereafter, reaching a value of 4.93 in the 2021 plan year.

3. Normal Cost by Type of Contributor

The normal cost for the plan is the weighted average of the separate normal costs for Regular Members and Civilian Members. For example, in the 1997 plan year the overall normal cost of 19.34% of pensionable payroll is the composite of 19.77% for Regular Members and 15.90% for Civilian Members. The difference in normal costs is chiefly attributable to the more generous early retirement provisions available only to Regular Members.

4. Summary Balance Sheet

The assets of the plan were \$7.55 billion as at 31 March 1996. The total liabilities as at the same date are estimated at \$5.64 billion, leaving a surplus of \$1.91 billion. Amortizing this surplus over 15 years would correspond to an annual amount of \$228 million (payable monthly and corresponding to 24.0% of pensionable payroll for the 1997 plan year) which was estimated using the yields described in section III-D and shown in section IV-C.

C- Sensitivity of Normal Costs to Variations in Key Assumptions

The supplementary estimates shown below indicate the degree to which the 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.

1. Productivity (real rate of annual increase in average employment earnings)

If the assumed productivity gains were reduced by one percentage point from 1998 onward (e.g. from 1% to 0% ultimately), then the 1997 normal cost would decrease by 1.66% of pensionable payroll (from 19.34% to 17.68%).

2. Investment Yields

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 (e.g. from 6% to 7% ultimately) would decrease the 1997 normal cost by 4.02% of pensionable payroll (from 19.34% to 15.32%) and the normal cost for 2017 by 5.59% of pensionable payroll.

3. Pension Indexing

If the pension indexation assumption were reduced by one percentage point in all years (e.g. from 3% to 2% ultimately), then the 1997 normal cost would decrease by 2.26% of pensionable payroll (from 19.34% to 17.08%).

4. Mortality

If the mortality rates assumed in each future year were reduced by one-tenth, then the 1997 normal cost would increase by 0.26% of pensionable payroll (from 19.34% to 19.60%).

If the assumed improvements in longevity after the 1997 plan year (see table 2F of Appendix 2) were disregarded, then the 1997 normal cost would decrease by 0.99% of pensionable payroll (from 19.34% to 18.35%).

D- Reconciliation of Results with Previous Report

This section describes the various factors reconciling the surplus and normal cost of this valuation with the corresponding items of the previous valuation. Figures in brackets indicate negative amounts. The main items are explained in the following pages.

	<u>Surplus</u> (\$ millions)	<u>Normal Cost</u> (% of pensionable payroll)
As at 31 December 1992	1,275	16.97 (for calendar year 1993)
Interest on initial surplus	491	-
Expected normal cost change	-	3.55
Data corrections	17	-
Cost/contributions difference	9	-
Early retirement program	(60)	0.06
Experience gains (losses)		
Seniority and promotional increases	40	-
Investment earnings	14	-
New members	-	0.17
Minor items	(8)	-
Miscellaneous	<u>7</u>	<u>(0.06)</u>
Subtotal	53	0.11
Removal of explicit margin	172	(0.62)
Revision of valuation assumptions		
Seniority and promotional increases	49	(0.34)
Pension indexation	43	(0.03)
Mortality	(37)	0.13
Employment earnings increases	36	(0.26)
Projected yields	28	(0.09)
Proportion married at death	(13)	0.04
YMPE increases	(12)	0.08
Pensionable retirements	(10)	0.05
Minor items	<u>(11)</u>	<u>0.05</u>
Subtotal	73	(0.37)
Revision of valuation methodology		
Adoption of open-group approach	(122)	(0.40)
Refinements of methodology	<u>3</u>	<u>0.04</u>
Subtotal	<u>(119)</u>	<u>(0.36)</u>
As at 31 March 1996	1,911	19.34 (for plan year 1997)

Explanations of the Above Reconciliation

1. Interest on Initial Surplus

The interest to 31 March 1996 on the \$1,275 million surplus as at 31 December 1992 amounted to \$491 million, based on the yields projected in the previous report for the 3.25-year intervaluation period.

2. Expected Normal Cost Change

The gradual increase in the normal cost from 1993 to 1996 projected in the previous report mainly reflected a partial transition from current to ultimate economic assumptions.

3. Cost/Contributions Difference

In accordance with the previous cost certificate, the sum of the projected annual normal costs for the intervaluation period of 3.25 years was \$586 million. However, the contributions made to the Superannuation Account amounted to \$590 million. This cost/contributions difference accumulated with interest caused the surplus to rise by \$9 million.

4. Early Retirement Program

Under the early retirement program, selected plan members were induced to retire earlier than they otherwise would have done. The extra cost to the pension plan was estimated in respect of all members availing themselves of the program, whether it was in the 1996 plan year (i.e. before the valuation date) or in the 1997 and 1998 plan years. It was assumed that retirement rates in the three years would be increased by half. The surplus accordingly decreased by \$60 million and the normal cost increased by 0.06% of pensionable payroll.

5. Seniority and Promotional Increases

The actual seniority and promotional increases in the January 1993 to March 1995 period were much less than expected in the previous report, partly because a two-year seniority freeze was imposed effective June 1994. Consequently there was an experience gain of \$40 million. The assumption was revised to take into account the effects of the seniority freeze and of diminished promotional expectations. This revision increased the surplus by a further \$49 million and decreased the normal cost by 0.34% of pensionable payroll.

6. Projected Yields

The projected yields developed using the closed-group approach are marginally higher than those projected in the previous valuation for the 1997 plan year and thereafter, causing the surplus to increase by \$28 million. (The closed-group yields were replaced by open-group yields; see item 11 below.) The new money interest rate assumed for the 1997 plan year is almost the same as that previously assumed, causing the closed-group normal cost to decrease by only 0.09% of pensionable payroll.

7. Removal of Margin

Removal of the margin of one quarter of a percentage point from the pension indexation assumption for 1997 and subsequent years increased the surplus by \$172 million and decreased the normal cost by 0.62% of pensionable payroll.

8. Employment Earnings Increases

The assumed rates of annual increases in average employment earnings (excluding seniority and promotional increases) for the plan years 1998 to 2002, inclusive, are lower than in the previous valuation. This revision caused the surplus to rise by \$36 million and the normal cost to fall by 0.26% of pensionable payroll.

9. Pension Indexation

The assumed pension indexation increases up to and including the 2002 plan year are lower than the corresponding assumption (excluding the margin of one quarter of a percentage point) in the previous valuation. This revision caused the surplus to increase by \$43 million and the normal cost to decrease by 0.03% of pensionable payroll.

10. Mortality

Both components of the mortality basis, namely the rates assumed for the 1997 plan year and the improvement factors applying to those rates for subsequent years, were revised in this valuation. As a result the surplus decreased by \$43 million and the normal cost increased by 0.15% of pensionable payroll, with roughly half being attributable to the revision of each of the two components. As well, a small amount (\$6 million) of surplus and a small reduction (0.02% of pensionable earnings) of the normal cost was created by introducing a separate mortality basis for disability pensioners.

11. Revision of Valuation Methodology

The change from the closed-group approach to the open-group approach produced lower projected yields for calculating the present values of accrued benefits; accordingly the surplus fell by \$122 million. The related change in methodology is more fundamental for the normal cost than for the liabilities in that for the first 20 years the projected yields are now used instead of the assumed current new money interest rate, causing the normal cost to fall by 0.40% of pensionable payroll.

VI- Conclusions

A- Surplus

Considering that the surplus as at 31 March 1996 is very large, whether expressed absolutely (\$1.91 billion) or relatively (34% of liabilities or alternatively 10.4 times the estimated normal cost for the 1997 plan year), and that

- the liabilities computed in respect of all benefits accrued by 31 March 1996 were estimated on an adequate and realistic basis, and
- the normal costs computed for the 1997, 1998 and 1999 plan years make adequate provision for the full funding of benefits projected to accrue during those years,

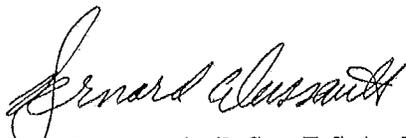
it would be appropriate to address the plan's surplus as soon as possible. However, the statutes governing the operation of the plan are silent on this matter.

B- Actuarial Standards

In my opinion, considering that this report was prepared pursuant to the *Public Pensions Reporting Act*,

- the valuation input data on which it is based are sufficient and reliable subject to the caveat described in the footnote to section II-B-2;
- 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.



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Chief Actuary
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Ottawa, Canada
23 January 1998

APPENDIX 1

Summary of Plan Provisions

Pensions for members of the Royal Canadian Mounted Police (the *Force*) were provided under the *Royal Canadian Mounted Police Act* until the *Royal Canadian Mounted Police Pension Continuation Act* and the *Royal Canadian Mounted Police Superannuation Act* (RCMPSA) were enacted in 1959. The current provisions of the pension plan established under the latter Act are summarized in this Appendix. However, the Act shall prevail if there is a discrepancy between it and the summary.

A- Membership

Membership in the plan is compulsory for all members of the Force regardless of length of service. Continued membership in the plan became optional for members of the Force who transferred to the Canadian Security Intelligence Service when it was established in 1984.

B- Assets

The plan is financed through the RCMP Superannuation Account, which forms part of the Public Accounts of Canada. The Account is credited with all contributions made by the members and the government, and charged with all benefit payments when they become due. The Account is also credited with investment earnings as though net cash flows were invested quarterly in 20-year Government of Canada bonds issued at prescribed interest rates and held to maturity. No formal debt instrument is issued to the Account by the government in recognition of the amounts therein.

C- Contributions

1. Contributors

During the first 35 years of pensionable service, contributors make required contributions to the Account equal to 7.5% of pensionable earnings (see Note 1 of section F below) minus their contributions to the CPP. Thereafter they contribute 1% of pensionable earnings. Contributors may elect to contribute in respect of a period of prior service, as described in Note 3 of section F below.

2. Government

(a) Current Service

The government determines its normal monthly contribution to the Account as that amount, which when combined with the required contributions by contributors 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 pensionable service during that month. The government

credits averaged 209% of required contributions by contributors during the January 1993 to March 1996 period.

(b) Elected Prior Service

The government credits to the Account in respect of elected prior service are analogous to those already described in respect of current service.

(c) Unfunded Liability

If an unfunded actuarial liability is revealed in a statutory actuarial report, the Account is to be credited with such annual amounts that in the opinion of the President of the Treasury Board will fully amortize the deficit over a period not exceeding 15 years.

D- Investment Earnings

1. Interest Rate on New Money

The interest rate on the newly issued notional bonds is the same as that applying to the CPP, i.e. the average rate on outstanding Government of Canada bonds with 20 or more years to maturity.

2. Allocation of Investment Earnings

Investment earnings are credited every three months to the Account on the basis of the actual average yield for the corresponding period on the combined Superannuation Accounts of the Public Service, Canadian Forces, and Royal Canadian Mounted Police pension plans.

E- Summary Description of Benefits

The pension plan established under the RCMPSA mainly aims at providing an employment earnings-related lifetime retirement pension to the eligible members of the RCMP. The plan also provides benefits to members in case of disability and to the spouse and children in case of death.

Subject to its integration with the pensions paid by the CPP, the initial rate of retirement pension is equal to 2% of the highest average of annual pensionable earnings over any period of six consecutive years, multiplied by the number of years of pensionable service not exceeding 35. Once in pay, the pension is indexed annually with the CPI. Such indexation also applies to deferred pensions during the deferral period.

Entitlement to benefits depends on either service in the Force or pensionable service, as defined in Notes 2 and 3 of section F below. The explanatory notes referred to in this summary description are given in section F.

1. Regular Members

<u>Type of Termination</u>	<u>Service in the Force¹</u>	<u>Benefit</u>
Retirement because of age (Note 4)	Under 10 years	Greater of: <ul style="list-style-type: none"> • return of contributions (Note 5), or • cash termination allowance (Note 6)
	10 or more years	Immediate annuity (Note 7)
Compulsory retirement to promote economy or efficiency in the Force	Under 10 years	Return of contributions
	10 to 19 years	Choice of : <ul style="list-style-type: none"> • return of contributions, • deferred annuity (Note 8), or • reduced immediate annuity (Note 9)
	20 or more years	Immediate annuity
Compulsory retirement because of misconduct	Any period	At the discretion of the Treasury Board (Note 10)
Voluntary retirement	Under 10 years	Return of contributions
	10 to 19 years	Choice of: <ul style="list-style-type: none"> • return of contributions, or • deferred annuity
	20 years to exactly 24 years	Annual allowance (Note 11)
	24 years and at least one day	Immediate annuity
<u>Type of Termination</u>	<u>Pensionable Service</u>	<u>Benefit</u>
Compulsory retirement because of disability	Under 10 years	Greater of: <ul style="list-style-type: none"> • return of contributions, or • cash termination allowance
	10 or more years	Immediate annuity
Death leaving no eligible survivor (Notes 12 and 13)	Under 5 years	Return of contributions to nominated beneficiary, otherwise to estate
	5 or more years	Minimum death benefit (Note 14)
Death leaving eligible survivor(s)	Under 5 years	Greater of: <ul style="list-style-type: none"> • return of contributions, or • one month of pay per year of pensionable service
	5 or more years	Annual allowance to eligible survivor(s) (Note 15)

¹ Regardless of years of service in the Force, the benefit is only a return of contributions if pensionable service is less than 10 years.

2. Civilian Members

<u>Type of Termination</u>	<u>Pensionable Service</u>	<u>Benefit</u>
Voluntary retirement at age 60 or over	Under 5 years	Return of contributions (Note 5)
	5 or more years	Immediate annuity (Note 7)
Compulsory retirement because of misconduct	Under 5 years	Return of contributions
	5 or more years	At the discretion of the Treasury Board (Note 10)
Voluntary retirement before age 60	Under 5 years	Return of contributions
	5 to 29 years	Choice of <ul style="list-style-type: none"> • return of contributions, • deferred annuity (Note 8), or • annual allowance (Note 16)
	30 to 34 years <ul style="list-style-type: none"> • under age 55 • age 55 or over 	As for 5 to 29 years Immediate annuity
	35 or more years	Immediate annuity
Compulsory retirement because of disability	Under 5 years	Greater of: <ul style="list-style-type: none"> • return of contributions, or • cash termination allowance (Note 6)
	5 or more years	Immediate annuity
Death leaving no eligible survivor (Notes 12 and 13)	Under 5 years	Return of contributions to nominated beneficiary, otherwise to estate
	5 or more years	Minimum death benefit (Note 14)
Death leaving eligible survivor(s)	Under 5 years	Greater of: <ul style="list-style-type: none"> • return of contributions, or • one month of pay per year of pensionable service
	5 or more years	Annual allowance to eligible survivor(s) (Note 15)

3. Benefits Paid after the Death of a Pensioner

<u>Type of Termination</u>	<u>Benefit</u>
Death leaving no eligible survivor	Minimum death benefit (Note 14)
Death leaving eligible survivor(s)	Annual allowance to eligible survivor(s) (Note 15)

4. Division of Pension in Case of Spousal Union Breakdown

In accordance with the PBDA, upon the breakdown of a spousal union (including common-law), a lump sum can be transferred by court order from the RCMPS Account to the credit of the former spouse of a contributor or pensioner. The maximum transferable amount (MTA) is half the value, calculated as at the transfer date, of the retirement pension accrued by the contributor or pensioner during the period of cohabitation. If the member's benefits are not vested, the MTA corresponds to half the member's contributions, made during the period subject to division, accumulated with interest at the rate applicable on a refund of contributions. The benefits of the contributor or pensioner are then reduced accordingly.

5. Indexation

(a) Level of Indexation Adjustments

All immediate and deferred annuities (pensions and allowances) are adjusted every January to the extent warranted by the increase, as at 30 September of the previous year, in the 12-month average CPI. If the indicated adjustment is negative, annuities are not decreased for that year; however, the next following adjustment is diminished accordingly.

(b) First Indexation Adjustment

Indexation adjustments accrue from the end of the month in which employment terminates. The first annual adjustment following termination of employment is prorated accordingly.

(c) Commencement of Indexation Payments

The indexed portion of a retirement, disability or survivor pension starts being paid only once the pension is put into pay. However, regarding a retirement pension, the pensioner must, in the case of a Regular Member, but not a Civilian Member, be at least 55 years old provided also the sum of age and pensionable service is at least 85; otherwise the Regular Member must be at least 60 years old.

F- Explanatory Notes

1. Pensionable Earnings

Pensionable earnings means the annual employment earnings (excluding overtime but including pensionable allowances such as bilingual bonuses) of a contributor, subject for tax purposes to a prescribed yearly maximum from 23 February 1995 onward. The maximum was \$98,400 for the 1995 calendar year, rising marginally to \$98,600 for the 1996 calendar year.

Pensionable payroll means the aggregate pensionable earnings of all contributors with less than 35 years of pensionable service.

2. Service in the Force

Service in the Force normally includes any period during which a person made required contributions to the RCMP Superannuation Account, regardless of whether such contributions were subsequently withdrawn from the Account. As well, it includes any period of service as a member of any other police force subsequently taken over by the Force.

3. Pensionable Service

Pensionable service includes any period of service in the Force in respect of which a contributor either (1) made contributions that remain in the Account or (2) elected to contribute. It also includes any period of prior service with another employer in respect of which a contributor has elected to contribute in accordance with the provisions of the Act.

4. Retirement Because of Age

Retirement because of age normally means ceasing to be a Regular Member on or after reaching age 60, for reason other than disability or misconduct. Regular Members who joined the Force before July 1988 may elect to retain the prescribed retirement ages (56 for ranks up to corporal, 57 for sergeants, and 58 for staff sergeants and majors) in effect at that time.

5. Return of Contributions

Return of contributions means the payment of an amount equal to the accumulated current and prior service contributions paid or transferred by the contributor into the Account. Interest is credited at the rate of 4% per annum each 31 December on the accumulated contributions with interest as at the prior 31 December.

6. Cash Termination Allowance

Cash termination allowance means an amount equal to one month's salary, at the rate authorized to be paid to the contributor at the date of termination, multiplied by the number of years of pensionable service to the credit of the contributor, minus the total reduction in previous contributions to the Account by virtue of the integration of the plan with the CPP.

7. Immediate Annuity

Immediate annuity means an unreduced pension (see item 9 below) that becomes payable immediately upon a pensionable retirement or pensionable disability. The annual amount is equal to 2% of the highest average of annual pensionable earnings (calculated without reference to the yearly maximum described in Note 1) of the contributor over any period of six¹ consecutive years, multiplied by the number of years of pensionable service not exceeding 35. For contributors with periods of part-time pensionable service, earnings used in the six-year average are based on a full-time scheduled work week but the resulting average is multiplied by the number (divided by 37.5) of hours worked per week averaged over the entire pensionable service. If such highest six-year earnings average exceeds the yearly maximum prescribed for the calendar year in which service is terminated, then the annual amount is reduced by 2% of such excess, multiplied by the number of years of pensionable service after 23 February 1995.

When a pensioner attains age 65 or becomes entitled to a disability pension from the CPP, the annual amount of pension is reduced by 0.7% of the *indexed CPP annual pensionable earnings*² (or, if lesser, the indexed six-year pensionable earnings average on which the immediate annuity is based), multiplied by the *years of CPP pensionable service*³.

Annuities are payable in equal monthly instalments in arrears until the end of the month in which the pensioner dies or when the disabled pensioner recovers from disability. Upon the death of the pensioner, either a survivor allowance (Note 15) or a residual benefit (Note 14) may be payable.

¹ If the number of years of pensionable service is less than six, then the averaging is over the entire period of pensionable service.

² *Indexed CPP annual pensionable earnings* means the average of the YMPE, as defined in the CPP, over the last three years of pensionable service, increased by indexation proportionate to that accrued in respect of the immediate annuity.

³ *Years of CPP pensionable service* means the number of years of pensionable service after 1965 or after attaining age 18, whichever is later, but not exceeding 35.

8. Deferred Annuity

Deferred annuity means an annuity that normally becomes payable to a former contributor who reaches age 60. The annual payment is determined as for an immediate annuity (Note 7) but is also adjusted to reflect the indexation (paragraph E-5 above) from date of termination to the commencement of benefit payments.

The deferred annuity becomes an immediate annuity during any period of disability beginning before age 60. If the disability ceases before age 60, the immediate annuity reverts to the original deferred annuity unless the pensioner elects an annual allowance (Notes 11 and 16) which is a prescribed actuarial equivalent to the deferred annuity.

9. Reduced Immediate Annuity

Reduced immediate annuity means an immediate annuity for which the annual amount of annuity determined as described in Note 7 is reduced until age 65 by 5% for each full year, not exceeding six, by which the period of service in the Force is less than 20 years. This type of annuity may be chosen by a Regular Member who has completed between 10 and 20 years of service in the Force upon being compulsorily retired

- on account of a reduction in the Force, or
- to promote economy or efficiency (offered only at the discretion of the Treasury Board).

10. Retirement Because of Misconduct

Upon compulsory retirement because of misconduct, a contributor is entitled to

- a return of contributions, or
- a greater benefit as specified by the Treasury Board but not exceeding that available in the absence of misconduct.

11. Annual Allowance for Regular Members

Annual allowance means, for a Regular Member, an immediate annuity reduced by 5% for each full year by which

- the period of service in the Force is less than 25 years, or
- the age at retirement is less than the applicable retirement age,

whichever is the lesser.

12. Eligible Surviving Spouse

Eligible surviving spouse means the surviving spouse of a contributor or pensioner except if:

- the contributor or pensioner died within one year of commencement of the spousal union, unless the Treasury Board is satisfied that the health of the contributor or pensioner at the time of such commencement justified an expectation of surviving for at least one year;
- the pensioner married at age 60 or over, unless after such marriage the pensioner either:
 - ▶ became a contributor again (in such cases, common-law unions are accepted); or
 - ▶ made an optional survivor benefit election within 12 months following marriage to accept a reduced pension so that the new spouse would be eligible for a survivor benefit. This reduction is reversed if and when the new spouse predeceases the pensioner or the spousal union is terminated for reason other than death; or
- the pensioner is a female who retired before 20 December 1975 and did not make an optional survivor benefit election within the one-year period ending 6 May 1995.

13. Eligible Surviving Children

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

14. Minimum Death Benefit

If a contributor or a pensioner dies without leaving any eligible survivor, there is paid a lump sum equal to the greater of

- the return of contributions, and
- five times the annual amount of the immediate annuity to which the contributor would have been, or the pensioner was entitled, at the time of death,

less all amounts already paid to the pensioner. Indexation adjustments are excluded from these calculations.

The same formula is used to determine the lump sum payable upon the death of an eligible survivor, except that all amounts (excluding indexation adjustments) already paid to the survivor are also subtracted.

15. Annual Allowance for Eligible Survivors

Annual allowance means, for the eligible surviving spouse and children of a contributor or pensioner, an annuity that becomes payable immediately upon the death of that individual. The amount of the allowance is determined with reference to a *basic allowance* that is equal to 1% of the highest average of annual pensionable earnings, without regard to the yearly maximum (Note 1), of the contributor over six consecutive years, multiplied by the number of years of pensionable service not exceeding 35.

The annual allowance for a spouse is equal to the basic allowance unless the spouse became eligible as a result of an optional survivor benefit election, in which case it is equal to the percentage of the basic allowance specified by the pensioner making the election.

The annual allowance for an eligible surviving child is equal to 20% of the basic allowance, subject to a reduction if there are more than four eligible surviving children in the same family. The annuity otherwise payable to an eligible surviving child is doubled if the child is an orphan.

Annual allowances are not integrated with those of the CPP and are payable in equal monthly instalments in arrears until the end of the month in which the survivor dies or otherwise loses eligibility. If applicable, a residual benefit (Note 14) is payable to the estate upon the death of the last survivor.

16. Annual Allowance for Civilian Members

Annual allowance means, for a Civilian Member, an annuity payable immediately on retirement or upon attaining age 50, if later. The amount of the allowance is equal to the amount of the deferred annuity to which the Civilian Member would otherwise be entitled, reduced by 5% of such annuity multiplied by the difference between 60 and the age when the allowance becomes payable. However, if the Civilian Member is at least 50 years old, and has at least 25 years of pensionable service, then the difference is reduced to the greater of

- 55 minus the age, and
- 30 minus the number of years of pensionable service.

The Treasury Board can waive all or part of the reduction for Civilian Members who are involuntarily retired at ages 55 and over with at least ten years of service in the Force.

If a former Civilian Member entitled to an annual allowance commencing at age 50 becomes disabled before then, the entitlement changes to an immediate annuity (Note 7). If disability ceases before age 60, then the entitlement changes to a deferred annuity (Note 8) unless the pensioner elects an annual allowance that is the prescribed actuarial equivalent to the deferred annuity.

APPENDIX 2

Sample Demographic Assumptions

Table 2A

**Assumed Seniority and Promotional Increases
(expressed as a percentage of annual earnings)**

<u>Pensionable Service¹</u>				<u>Regular</u>	<u>Civilian</u>
<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000+</u>	<u>Members²</u>	<u>Members</u>
				(%)	(%)
0, 1, 2	0	0	0	23.5	5.0
3	1, 2, 3	1	1	12.3	4.5
4	4	2, 3, 4	2	6.6	3.9
-	-	-	3	1.3	2.7
-	-	-	4	0.9	2.4
↓	↓	↓			
→	→	→	→	5	2.1
				6	1.8
				7	1.7
				8	1.5
				9	1.4
				10	1.3
				11	1.2
				12	1.1
				13	1.0
				14	0.9
				15	0.9
				16	0.8
				17	0.8
				18	0.8
				19	0.8
				20	0.8
				21	0.7
				22	0.7
				23	0.7
				24	0.7
				25	0.7
				26	0.6
				27	0.6
				28	0.6
				29	0.6
				30	0.6
				31	0.6
				32	0.6
				33	0.6
				34	0.6
				35+	0.6

¹ Expressed in completed years, as calculated at the beginning of the indicated plan year.

² Includes 0.1% attributable to service allowance increases on every fifth anniversary of engagement.

Table 2B

Assumed Rates of Termination with Nonvested Rights¹

<u>Pensionable Service²</u>	<u>Regular Members³</u>		<u>Civilian Members⁴</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
0	.034	.053	.039	.074
1	.025	.040	.027	.052
2	.020	.033	.025	.041
3	.018	.031	.023	.040
4	.017	.031	.022	.040
5	.016	.027	.021	.036
6	.012	.024	.016	.032
7	.010	.021	.013	.027
8	.009	.021	.011	.025
9	.008	.019	.009	.024
10	.007	.018	.008	.023
11	.006	.017	.007	.022
12	.005	.015	.006	.020
13	.004	.013	.006	.017
14	.004	.010	.005	.013
15	.003	.007	.003	.009
16	.002	.005	.002	.006
17	.002	.003	.002	.004
18	.001	.002	.001	.003
19	.001	.002	.001	.002
20	.001	.001	.001	.002
21	-	.001	-	.001

¹ Includes all terminations resulting in a lump sum payment, other than deaths leaving no eligible survivor(s) and occurring after at least five years of pensionable service.

² Expressed in completed years.

³ Rates at durations ten and over do not apply from age 56 onward.

⁴ Rates at durations five and over do not apply from age 50 onward.

Note: Rates are halved for the plan year in which footnote 3 or 4 first applies.

Table 2C

Assumed Rates¹ of Pensionable Disability

<u>Age Last Birthday</u>	<u>Male</u>	<u>Female</u>
28	.0001	.0001
29	.0001	.0003
30	.0001	.0005
31	.0001	.0007
32	.0002	.0009
33	.0003	.0013
34	.0004	.0018
35	.0006	.0024
36	.0007	.0027
37	.0008	.0029
38	.0009	.0033
39	.0010	.0036
40	.0011	.0040
41	.0013	.0043
42	.0015	.0046
43	.0018	.0049
44	.0021	.0053
45	.0025	.0057
46	.0028	.0060
47	.0031	.0063
48	.0035	.0067
49	.0039	.0070
50	.0044	.0074
51	.0051	.0081
52	.0058	.0089
53	.0067	.0097
54	.0077	.0106
55	.0088	.0116
56	.0100	.0128
57	.0113	.0141
58	.0129	.0156
59	.0146	.0172

¹ Rates apply only if at least ten years of pensionable service have been completed (five years, if a Civilian Member), but not if the sum of the age (minimum 55 years) and the years of pensionable service is at least 85. Rates are halved for the plan year in which these criteria are first met or cease to be met.

Table 2D

Assumed Ultimate¹ Rates² of Pensionable Retirement for Regular Members

<u>Age Last Birthday</u>	<u>Completed Years of Pensionable Service</u>							
	<u>9-18</u>	<u>19</u>	<u>20-22</u>	<u>23</u>	<u>24-28</u>	<u>29-33</u>	<u>34</u>	<u>35+</u>
37	-	.003	-	-	-	-	-	-
38	-	.006	.004	-	-	-	-	-
39	-	.015	.009	-	-	-	-	-
40	-	.022	.014	-	-	-	-	-
41	-	.027	.018	.041	-	-	-	-
42	-	.032	.021	.047	.045	-	-	-
43	-	.038	.024	.052	.051	-	-	-
44	-	.041	.027	.056	.053	-	-	-
45	-	.043	.027	.062	.055	-	-	-
46	-	.046	.029	.068	.055	-	-	-
47	-	.049	.032	.072	.060	.064	-	-
48	-	.051	.032	.074	.063	.067	-	-
49	-	.055	.035	.080	.078	.076	-	-
50	-	.057	.037	.086	.076	.081	-	-
51	-	.064	.040	.097	.087	.092	-	-
52	-	.076	.049	.118	.110	.111	.192	-
53	-	.105	.067	.163	.148	.150	.288	.194
54	-	.153	.101	.238	.217	.194	.390	.307
55	.080	.188	.125	.291	.270	.253	.467	.348
56	.010	.197	.122	.296	.280	.242	.496	.361
57	.020	.186	.114	.286	.262	.236	.489	.352
58	.030	.177	.111	.272	.254	.237	.462	.340
59+	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

¹ The ultimate rates apply to the 1999 plan year and thereafter. The select rates applying to the 1997 and 1998 plan years are equal to the ultimate rates increased by half, but not exceeding 1.000.

² Rates shown for duration 19 up to age 54 and for duration 9 are halved in practice to recognize that pensionable retirement can occur only after 20 or 10 years of service, respectively, have been completed.

Table 2E

Assumed Ultimate¹ Rates² of Pensionable Retirement for Civilian Members

<u>Age Last Birthday</u>	<u>Completed Years of Pensionable Service</u>							
	<u>4-8</u>	<u>9-13</u>	<u>14-18</u>	<u>19-23</u>	<u>24-28</u>	<u>29-33</u>	<u>34</u>	<u>35+</u>
49	.004	.009	.013	.013	.009	.032	-	-
50	.004	.009	.013	.013	.009	.032	-	-
51	.004	.009	.013	.013	.011	.048	-	-
52	.004	.009	.013	.013	.013	.063	.093	-
53	.004	.009	.013	.013	.013	.082	.094	.110
54	.021	.041	.061	.062	.060	.255	.556	.818
55	.021	.042	.061	.062	.061	.100	.322	.540
56	.021	.041	.061	.062	.062	.199	.374	.545
57	.021	.041	.063	.063	.062	.301	.421	.550
58	.021	.042	.061	.061	.061	.398	.463	.545
59	.281	.281	.279	.289	.689	.702	.702	.702
60	.189	.186	.187	.191	.464	.469	.469	.469
61	.095	.095	.093	.094	.234	.234	.234	.234
62	.095	.094	.095	.097	.234	.236	.234	.234
63	.234	.234	.234	.236	.580	.585	.585	.585
64	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

¹ The ultimate rates apply to the 1999 plan year and thereafter. The select rates applying to the 1997 and 1998 plan years are equal to the ultimate rates increased by half, but not exceeding 1.000.

² Rates shown for duration 4 and for age 49 are halved in practice to recognize that pensionable retirement can occur only after 5 years of service have been completed or age 50 has been attained, respectively.

Table 2F

Assumed Mortality Rates for 1997 Plan Year

<u>Age Last Birthday</u>	<u>Regular Members¹</u>		<u>Civilian Members¹</u>		<u>Surviving Spouses</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	.0005	.0002	.0007	.0002	.0010	.0003
25	.0006	.0003	.0008	.0003	.0010	.0003
30	.0007	.0003	.0010	.0003	.0013	.0004
35	.0008	.0004	.0010	.0005	.0016	.0006
40	.0011	.0006	.0013	.0007	.0018	.0010
45	.0015	.0008	.0019	.0009	.0025	.0016
50	.0025	.0012	.0030	.0015	.0040	.0026
55	.0042	.0019	.0052	.0023	.0067	.0042
60	.0076	.0037	.0097	.0045	.0118	.0066
65	.0138	.0072	.0175	.0086	.0190	.0104
70	.0221	.0115	.0288	.0137	.0302	.0164
75	.0354	.0191	.0456	.0229	.0488	.0275
80	.0572	.0333	.0768	.0398	.0792	.0473
85	.0924	.0574	.1215	.0686	.1243	.0809
90	.1432	.0994	.1923	.1188	.1862	.1357
95	.2209	.1591	.2938	.1902	.2647	.2141
100	.2930	.2362	.3988	.2824	.3639	.3235
105	.3869	.3277	.4300	.3918	.4860	.4692
110	.4398	.4121	.4637	.4926	.4930	.4844
115	.5000	.5000	.5000	.5000	.5000	.5000

¹ Rates apply only to contributors and retirement pensioners. Rates for disability pensioners are a multiple of these rates, grading uniformly from 3.4 at age 30 to 1.4 at age 70 and then to 1.0 at age 90.

Table 2G
Assumed Longevity Improvements

<u>Age Last Birthday</u>	<u>Annual Reductions¹ in Mortality Rates after 1997</u>	
	<u>Male</u>	<u>Female</u>
20	2.2 %	1.8 %
25	1.3	1.6
30	.8	1.2
35	.8	1.3
40	1.1	1.7
45	1.6	1.8
50	2.1	1.9
55	2.2	1.0
60	1.9	.7
65	1.7	.7
70	1.8	.7
75	1.7	1.0
80	1.3	.9
85	1.0	.8
90	.7	.5
95	.5	.4
100	.4	.3

¹ Annual reductions are applied to the mortality rates assumed for the 1997 plan year. For example, the assumed male mortality rate at age 50 for the 2007 plan year is the rate assumed for the 1997 plan year multiplied ten times by (1 - .021).

Table 2H
Assumptions for Survivor Allowances¹
in respect of Male Members

<u>Age Last Birthday at Death</u>	<u>Proportion Married at Death</u>	<u>Widow Age Difference²</u>	<u>Eligible Children</u>	
			<u>Average Number</u>	<u>Average Age</u>
25	.41	(1)	.23	3
30	.69	(1)	1.18	4
35	.83	(1)	1.61	8
40	.89	(1)	1.63	12
45	.91	(1)	1.52	16
50	.92	(2)	1.00	19
55	.93	(2)	.40	20
60	.93	(3)	.18	21
65	.88	(3)	.06	22
70	.83	(3)	.03	23
75	.77	(3)	.02	24
80	.68	(4)	-	-
85	.56	(4)	-	-
90	.42	(5)	-	-
95	.27	(6)	-	-
100	.14	(8)	-	-
105	.06	(11)	-	-
110	.02	(14)	-	-
115	.01	(18)	-	-

¹ Payable unless the deceased member was a contributor with less than five years of pensionable service.

² Age of widow less age of husband, both calculated at death of husband.

Table 2I
Assumptions for Survivor Allowances¹
in respect of Female Members

<u>Age Last Birthday at Death</u>	<u>Proportion Married at Death</u>	<u>Widower Age Difference²</u>	<u>Eligible Children</u>	
			<u>Average Number</u>	<u>Average Age</u>
25	.35	1	.12	2
30	.48	2	.76	3
35	.52	2	1.09	7
40	.52	2	1.15	11
45	.52	2	1.01	15
50	.51	3	.61	19
55	.50	3	.24	21
60	.47	3	.06	23
65	.42	2	.02	24
70	.36	2	-	-
75	.29	1	-	-
80	.21	1	-	-
85	.13	0	-	-
90	.07	(2)	-	-
95	.03	(4)	-	-
100	.01	(6)	-	-

¹ Payable only if the deceased member had completed at least five years of pensionable service.

² Age of widower less age of wife, both calculated at death of wife.

APPENDIX 3

Summaries of Membership Data

Table 3A

Reconciliation of Membership

The following table, derived from the basic data, shows pertinent statistics concerning contributors, pensioners, and survivors during the period from January 1993 to March 1995 inclusive. Tables 3B and 3C show further details on reconciliations, by sex and type, of the contributors and the pensioners.

	<u>Contributors</u>	<u>Retirement Pensioners</u>	<u>Disability Pensioners</u>	<u>Eligible Surviving Spouses</u>	<u>Eligible Surviving Children</u>
As at 31 December 1992	18,731	4,575	255	637	255 ¹
Data corrections	(2)	16	-	9	
New members	772	-	-	-	
Re-engagements	27	(1)	-	-	
Nonvested terminations	(283)	-	-	-	
Pensionable disabilities	(69)	-	69	-	
Pensionable retirements	(982)	982	-	-	
Deaths	(42)	(96)	(17)	(29)	
Emerging survivors	-	-	-	123	
Transfers to other plans	—	(5)	—	—	—
As at 31 March 1995	18,152	5,471	307	740	251 ¹

¹ The available data were insufficient to allow the reconciliation of the change in the population of eligible surviving children.

Table 3B

Detailed Reconciliation of Contributors

	<u>Regular Members</u>		<u>Civilian Members</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
As at 31 December 1992	15,046	1,540	1,217	928
Data corrections	(7)	(3)	2	6
New members	432	146	88	106
Re-engagements	17	3	-	7
Nonvested terminations	(153)	(61)	(23)	(46)
Pensionable disabilities	(55)	(7)	(3)	(4)
Pensionable retirements	(879)	(7)	(64)	(32)
Deaths	<u>(34)</u>	<u>(1)</u>	<u>(6)</u>	<u>(1)</u>
As at 31 March 1995	14,367	1,610	1,211	964

Table 3C

Detailed Reconciliation of Pensioners

A- Retirement Pensioners

	<u>Former Regular Members</u>		<u>Former Civilian Members</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
As at 31 December 1992	4,203	2	250	120
Data corrections	12	-	2	2
Re-engagements	(1)	-	-	-
New pensioners	879	7	64	32
Deaths	(77)	-	(14)	(5)
Transfers to other plans	<u>(5)</u>	<u>-</u>	<u>-</u>	<u>-</u>
As at 31 March 1995	5,011	9	302	149

B- Disability Pensioners

	<u>Former Regular Members</u>		<u>Former Civilian Members</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
As at 31 December 1992	190	11	26	28
Data corrections	-	-	-	-
New pensioners	55	7	3	4
Deaths	<u>(12)</u>	<u>-</u>	<u>(5)</u>	<u>-</u>
As at 31 March 1995	233	18	24	32

Table 3D

Male Regular Members as at 31 March 1995

**Number of Contributors
and
Average Annual Pensionable Earnings¹**

Age Last Birthday	Completed Years of Pensionable Service							All Years of Service
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	
to 24	122	3	-	-	-	-	-	125
	\$42,400	50,500	-	-	-	-	-	\$42,600
25-29	750	557	6	-	-	-	-	1,313
	\$46,300	50,500	48,300	-	-	-	-	\$48,100
30-34	384	1,176	696	31	-	-	-	2,287
	\$47,100	50,700	51,900	51,200	-	-	-	\$50,500
35-39	108	388	959	1,373	171	-	-	2,999
	\$46,200	50,900	52,100	53,500	55,300	-	-	\$52,600
40-44	22	131	216	812	2,286	91	-	3,558
	\$45,300	51,100	52,300	53,900	57,000	60,700	-	\$55,800
45-49	12	71	47	222	848	1,632	36	2,868
	\$45,700	50,500	51,400	53,100	57,100	62,400	65,400	\$59,600
50-54	3	34	27	39	106	222	554	985
	\$50,600	50,200	51,300	53,200	54,100	63,000	68,400	\$63,900
55-59	-	17	5	23	16	13	58	132
	-	<u>\$49,300</u>	<u>50,800</u>	<u>50,500</u>	<u>52,500</u>	<u>55,500</u>	<u>68,200</u>	<u>\$58,900</u>
All Ages	1,401	2,377	1,956	2,500	3,427	1,958	648	14,267 ²
	\$46,200	50,700	52,000	53,500	56,800	62,300	68,200	\$54,800

Average age last birthday: 39.7 years

Average pensionable service last anniversary: 16.7 years

Annualized pensionable payroll: \$781,438,000

¹ As defined in Note 1 in section F of Appendix 1.

² There are 100 additional contributors who have completed the maximum 35 years of pensionable service.

Table 3E
Female Regular Members as at 31 March 1995
Number of Contributors
and
Average Annual Pensionable Earnings¹

Age Last Birthday	Completed Years of Pensionable Service						All Years of Service
	0-4	5-9	10-14	15-19	20-24	25-29	
to 24	89 \$42,800	1 *	- -	- -	- -	- -	90 \$42,900
25-29	221 \$46,000	208 50,300	2 51,100	- -	- -	- -	431 \$48,100
30-34	71 \$46,400	344 50,600	111 51,300	2 52,000	- -	- -	528 \$50,200
35-39	16 \$45,600	77 50,500	124 51,300	114 52,100	13 51,400	- -	344 \$51,100
40-44	7 \$49,800	21 50,000	31 50,900	70 52,900	34 53,200	1 *	164 \$52,100
45-49	1 *	6 \$50,700	2 51,700	18 52,400	13 54,300	3 *	43 \$52,500
50-54	1 *	- -	- -	8 *	- -	- -	9 \$50,100
55-59	- -	- -	- -	- -	1 *	- -	1 *
All Ages	406 \$45,400	657 50,500	270 51,300	212 52,300	61 53,000	4 54,300	1,610 \$49,700

Average age last birthday: 32.7 years

Average pensionable service last anniversary: 8.7 years

Annualized pensionable payroll: \$80,017,000

¹ As defined in Note 1 in section F of Appendix 1.

* Not shown to protect the privacy of contributors.

Table 3F

Male Civilian Members as at 31 March 1995

**Number of Contributors
and
Average Annual Pensionable Earnings¹**

Age Last Birthday	Completed Years of Pensionable Service							All Years of Service
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	
to 24	19	3	-	-	-	-	-	22
	\$35,100	36,000	-	-	-	-	-	\$35,200
25-29	39	23	-	-	-	-	-	62
	\$39,100	43,000	-	-	-	-	-	\$40,500
30-34	52	62	45	2	-	-	-	161
	\$42,700	45,700	48,100	45,600	-	-	-	\$45,400
35-39	27	42	95	55	3	-	-	222
	\$43,300	46,500	51,800	50,300	46,000	-	-	\$49,300
40-44	18	23	52	74	51	9	-	227
	\$48,700	49,400	50,700	54,800	52,700	51,200	-	\$52,200
45-49	16	12	22	38	82	42	6	218
	\$43,000	51,400	51,100	55,100	55,900	53,900	52,800	\$53,600
50-54	10	16	25	24	35	32	33	175
	\$51,800	43,400	50,400	52,300	52,800	54,800	50,000	\$51,300
55-59	1	6	20	30	9	10	9	85
	*	\$43,300	48,800	45,700	50,800	66,700	50,600	\$49,800
60-64	1	3	5	6	9	1	1	26
	*	\$56,600	41,900	51,300	46,600	*	*	\$50,600
65-69	-	-	-	-	1	1	1	3
	-	-	-	-	*	*	*	\$43,600
All Ages	183	190	264	229	190	95	50	1,201 ²
	\$42,700	46,100	50,300	52,100	53,600	55,200	50,400	\$49,800

Average age last birthday: 42.6 years

Average pensionable service last anniversary: 14.5 years

Annualized pensionable payroll: \$59,763,000

¹ As defined in Note 1 in section F of Appendix 1.

² There are 10 additional contributors who have completed the maximum 35 years of service.

* Not shown to protect the privacy of contributors.

Table 3G
Female Civilian Members as at 31 March 1995
Number of Contributors
and
Average Annual Pensionable Earnings¹

Age Last Birthday	Completed Years of Pensionable Service							All Years of Service
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	
to 24	17 \$34,500	4 36,300	- -	- -	- -	- -	- -	21 \$34,800
25-29	61 \$36,700	31 38,200	- -	- -	- -	- -	- -	92 \$37,200
30-34	61 \$39,400	75 41,900	47 41,400	7 41,500	- -	- -	- -	190 \$41,000
35-39	30 \$35,900	47 40,300	67 46,200	41 42,200	7 40,500	- -	- -	192 \$42,100
40-44	17 \$36,800	38 39,900	35 41,800	63 46,700	65 47,200	3 44,500	- -	221 \$44,100
45-49	13 \$34,900	20 39,000	25 44,200	26 43,000	17 48,000	29 51,200	3 48,600	133 \$44,400
50-54	7 \$46,800	11 40,200	13 45,300	15 42,800	16 48,500	6 48,800	2 44,300	70 \$45,100
55-59	1 *	1 *	6 \$40,900	7 43,200	6 43,900	9 48,500	2 *	32 \$46,500
60-64	1 *	1 *	1 *	4 \$39,900	1 *	3 50,800	1 *	12 \$47,100
65-69	- -	- -	- -	1 *	- -	- -	- -	1 *
All Ages	208 \$37,600	228 40,500	194 43,800	164 44,100	112 47,100	50 50,000	8 46,600	964 \$42,400

Average age last birthday: 39.4 years

Average pensionable service last anniversary: 11.6 years

Annualized pensionable payroll: \$40,874,000

¹ As defined in Note 1 in section F of Appendix 1.

* Not shown to protect the privacy of contributors.

Table 3H

Male Regular Member Pensioners as at 31 March 1995

**Number of Pensioners by Type
and
Amounts of Annual Pension¹**

<u>Age Last Birthday</u>	<u>Retirement Pensioners</u>			<u>Disability Pensioners</u>		
	<u>Number</u>	<u>Average</u>	<u>Total</u>	<u>Number</u>	<u>Average</u>	<u>Total</u>
30-34	2	\$9,000	\$18,000	-	-	-
35-39	7	14,600	102,000	7	\$11,700	\$82,000
40-44	119	19,600	2,332,000	31	15,700	487,000
45-49	647	23,700	15,334,000	52	20,000	1,040,000
50-54	1,030	27,600	28,428,000	36	22,000	792,000
55-59	1,332	31,400	41,825,000	47	24,800	1,166,000
60-64	1,235	29,400	36,309,000	31	21,000	651,000
65-69	396	24,000	9,504,000	15	18,400	276,000
70-74	113	23,300	2,633,000	5	17,200	86,000
75-79	65	19,500	1,268,000	9	11,100	100,000
80-84	49	15,400	755,000	-	-	-
85-89	12	12,500	150,000	-	-	-
90-94	<u>4</u>	<u>17,300</u>	<u>69,000</u>	<u>-</u>	<u>-</u>	<u>-</u>
All Ages	5,011	\$27,684	\$138,727,000	233	\$20,086	\$4,680,000

Average age last birthday
At 31 March 1995: 57.2 years
At retirement: 48.1 years

Average age last birthday
At 31 March 1995: 53.8 years
At disability: 45.6 years

¹ Equals initial amounts of pension plus all accrued indexation to and including 1 January 1995, reduced by any CPP and PBDA offsets in effect as at 31 March 1995. All pensions are in pay except for 9 retirement pensions deferred to age 60. All accrued indexation is in pay except that in respect of retirement pensioners who have not yet satisfied at least one of the relevant criteria for receiving indexation payments.

Table 3I

Male Civilian Member Pensioners as at 31 March 1995

**Number of Pensioners by Type
and
Amounts of Annual Pension¹**

Age Last Birthday	Retirement Pensioners			Disability Pensioners		
	Number	Average	Total	Number	Average	Total
40-44	2	\$19,000	\$38,000	-	-	-
45-49	-	-	-	-	-	-
50-54	6	21,500	129,000	3	\$13,300	\$40,000
55-59	54	28,100	1,517,000	8	18,900	151,000
60-64	87	23,800	2,071,000	5	17,600	88,000
65-69	76	13,800	1,049,000	6	9,700	58,000
70-74	50	15,100	755,000	1	*	*
75-79	20	18,000	360,000	1	*	*
80-84	5	17,800	89,000	-	-	-
85-89	<u>2</u>	<u>17,000</u>	<u>34,000</u>	<u>-</u>	<u>-</u>	<u>-</u>
All Ages	302	\$20,007	\$6,042,000	24	\$14,542	\$349,000

Average age last birthday
At 31 March 1995: 65.0 years
At retirement: 58.3 years

Average age last birthday
At 31 March 1995: 61.3 years
At disability: 53.2 years

¹ As defined in table 3H. All pensions are in pay except for 5 retirement pensions deferred to age 60.

* Not shown to protect the privacy of pensioners.

Table 3J
Female Regular Member Pensioners as at 31 March 1995

**Number of Pensioners by Type
and
Amounts of Annual Pension¹**

<u>Age Last Birthday</u>	<u>Retirement Pensioners</u>			<u>Disability Pensioners</u>		
	<u>Number</u>	<u>Average</u>	<u>Total</u>	<u>Number</u>	<u>Average</u>	<u>Total</u>
30-34	-	-	-	1	*	*
35-39	3	\$10,700	\$32,000	7	\$10,700	\$75,000
40-44	3	15,300	46,000	4	13,500	54,000
45-49	1	*	*	4	10,800	43,000
50-54	-	-	-	-	-	-
55-59	1	*	*	1	*	*
60-64	<u>1</u>	<u>*</u>	<u>*</u>	<u>1</u>	<u>*</u>	<u>*</u>
All Ages	9	\$13,000	\$117,000	18	\$12,222	\$220,000

Average age last birthday
At 31 March 1995: 45.2 years
At retirement: 43.3 years

Average age last birthday
At 31 March 1995: 42.4 years
At disability: 38.4 years

¹ As defined in table 3H. All pensions are in pay.

* Not shown to protect the privacy of pensioners.

Table 3K
Female Civilian Member Pensioners as at 31 March 1995

**Number of Pensioners by Type
and
Amounts of Annual Pension¹**

<u>Age Last Birthday</u>	<u>Retirement Pensioners</u>			<u>Disability Pensioners</u>		
	<u>Number</u>	<u>Average</u>	<u>Total</u>	<u>Number</u>	<u>Average</u>	<u>Total</u>
30-34	-	-	-	2	\$5,000	\$10,000
35-39	-	-	-	2	8,000	16,000
40-44	-	-	-	4	9,000	36,000
45-49	1	*	*	5	12,200	61,000
50-54	4	\$12,300	\$49,000	4	9,500	38,000
55-59	27	22,100	597,000	3	11,700	35,000
60-64	39	17,500	683,000	4	10,300	41,000
65-69	30	13,400	402,000	5	7,600	38,000
70-74	29	12,700	368,000	2	15,000	30,000
75-79	11	11,300	124,000	1	*	*
80-84	7	12,300	86,000	-	-	-
85-89	-	-	-	-	-	-
90-94	<u>1</u>	<u>*</u>	<u>*</u>	<u>-</u>	<u>-</u>	<u>-</u>
All Ages	149	\$15,671	\$2,335,000	32	\$9,719	\$311,000

Average age last birthday
At 31 March 1995: 65.9 years
At retirement: 58.5 years

Average age last birthday
At 31 March 1995: 54.0 years
At disability: 46.2 years

¹ As defined in table 3H. All pensions are in pay except for 4 retirement pensions deferred to age 60.

* Not shown to protect the privacy of pensioners.

Table 3L
Eligible Survivors as at 31 March 1995
Number of Eligible Widow(er)s and Children
and
Amounts of Annual Allowance¹

<u>Age Last Birthday</u>	<u>Number</u>	<u>Average</u>	<u>Total</u>
30-34	9	\$4,100	\$37,000
35-39	23	4,600	106,000
40-44	44	5,400	238,000
45-49	75	7,800	585,000
50-54	67	10,300	690,000
55-59	124	10,500	1,302,000
60-64	124	11,200	1,389,000
65-69	75	8,200	615,000
70-74	57	7,200	410,000
75-79	55	7,400	407,000
80-84	57	7,200	410,000
85-89	24	5,200	125,000
90-94	5	4,500	23,000
95-99	<u>1</u>	<u>*</u>	<u>*</u>
Widow(er)s²	740	\$8,575	\$6,341,000
Children	251	\$1,677	\$421,000

Average age last birthday of widow(er)s

At 31 March 1995: 61.4 years

At death of contributor: 52.4 years

¹ Equals initial amounts of annual allowance plus all indexation to and including 1 January 1995.

² All but 10 are widows.

* Not shown to protect the privacy of survivors.