



Office of the Superintendent
of Financial Institutions Canada

Bureau du surintendant
des institutions financières Canada

Ottawa, Canada
K1A 0H2

**PENSION PLAN
FOR THE
PUBLIC SERVICE OF CANADA**

ACTUARIAL REPORT

(including cost certificate)

AS AT DECEMBER 31, 1986

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February 24, 1989

The Honourable Robert de Cotret
President of the Treasury Board
Ottawa

Sir:

Pursuant to section 6 of the Public Pensions Reporting Act, I have the honour to transmit herewith my valuation report on an actuarial review of the pension plan established under the Public Service Superannuation Act, as at December 31, 1986. The report includes a cost certificate required in accordance with section 5 of the Public Pensions Reporting Act.

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

Respectfully submitted,

Walter Riese
Chief Actuary

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PUBLIC PENSIONS REPORTING ACT

Report on the Actuarial Review of the
pension plan established under the
Public Service Superannuation Act
as at December 31, 1986

I. Introduction

In accordance with paragraphs 3(1)(c) and 3(3)(a) of the Public Pensions Reporting Act (PPRA), we have made an actuarial review of the pension plan established under the Public Service Superannuation Act (PSSA) as at December 31, 1986. The last actuarial review was made as at December 31, 1983.

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

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

II. Cost Certificate

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

The normal actuarial costs, i.e. the contributions required to provide all benefits in respect of future service, are estimated to be the following percentages of remuneration:

<u>Year</u>	<u>Payable by Contributors*</u> (%)	<u>Effective Cost to Government</u> (%)	<u>Total Normal Cost</u> (%)
1987	6.27	6.37	12.64
1988	6.21	6.97	13.18
1989	6.15	7.63	13.78

The unrecorded (unfunded) actuarial liability as at December 31, 1986, is estimated to be \$4,221M. This is considered to be a realistic assessment at the present time. However, it is important to recognize the nature of the underlying assumptions. The dynamic economic assumptions that have been used make allowance for the high rates of interest on existing notional investments and contain only a relatively small margin for increases in wage and price levels above those that have been experienced in the last few years.

The recurrence of relatively higher levels of increases in salaries and prices resulting in a return to more traditional levels of real interest rates could produce substantial new estimation adjustments (unfunded actuarial liabilities). Some protection against this is provided by the margin in the assumed interest rates; if it were removed, total liabilities would be reduced by 12% and the total normal cost by 17%.

The actuarial method and assumptions are described in Sections III and IV. The assumptions include rates of interest, increases in salary levels and increases in the Consumer Price Index which reach ultimate levels of 6%, 5% and 3.5%, respectively. If these rates had been assumed to apply, beginning at the date of valuation, the normal costs would have appeared as follows:

<u>Year</u>	<u>Payable by Contributors</u> (%)	<u>Effective Cost to Government</u> (%)	<u>Total Normal Cost</u> (%)
1987	6.28	15.37	21.65
1988	6.22	15.54	21.76
1989	6.16	15.71	21.87

* Contributions payable by members consist of (a) 1% of salary plus (b) 6.5% of salary less Canada/Quebec Pension Plan contributions during the first 35 years of pensionable service. These contribution rates were converted into an equivalent uniform percentage of salary applicable to salaries paid until completion of 35 years of pensionable service for contributors on December 31, 1986, but allowing for increases in the CPP/QPP contribution rate effective January 1, 1987 and each year thereafter.

The foregoing table assumes a long-term real interest rate of about 2.4% which may be regarded as reasonably consistent with investment in long-term government bonds. If the notional investments were more in line with private sector pension funds, it would be reasonable to use an assumed interest rate one percentage point higher, in which case the normal costs would appear as follows:

<u>Year</u>	<u>Payable by Contributors</u> (%)	<u>Effective Cost to Government</u> (%)	<u>Total Normal Cost</u> (%)
1987	6.28	10.27	16.55
1988	6.22	10.43	16.65
1989	6.16	10.60	16.76

III. Actuarial Method

The actuarial method used is known as the Unit Credit or Accrued Benefit Method. It contemplates contributions in any year sufficient to fund all future benefits in respect of service during that year. This method is the one included in the "Accounting Recommendations - April 1986" in respect of "Pension Costs and Obligations" as well as "Public Sector Accounting Statement 5 - September 1988" issued by the Canadian Institute of Chartered Accountants.

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

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

IV. Actuarial Assumptions

A. Economic Assumptions

After consultation with the Department of Finance and the Treasury Board Secretariat, the following assumptions were adopted.

Year	Rates of Interest			Assumed Increases in CPI	Assumed General Salary Increases	Assumed Rate of Indexing
	Assumed on New Money	Projected* Fund Yield	Assumed Fund Yield			
	%	%	%	%	%	%
1987*	Diverse	11.1	10.1	4.4	3.5	4.1
1988*	11.0	11.1	10.1	4.2	4.2	4.3
1989*	11.0	11.1	10.1	3.8	3.5	4.1
1990	10.0	11.0	10.0	3.3	3.5	3.9
1991	9.0	11.0	10.0	3.2	3.5	3.4
1992	8.5	10.9	9.9	3.3	4.0	3.2
1993	8.5	10.7	9.7	3.4	4.0	3.3
1994	8.0	10.6	9.6	3.4	4.0	3.4
1995	8.0	10.5	9.5	3.5	4.5	3.4
1996	7.5	10.3	9.3	3.5	5.0	3.5
1997	7.0	10.1	9.1	3.5	5.0	3.5
1998	6.5	9.9	8.9	3.5	5.0	3.5
1999	6.0	9.6	8.6	3.5	5.0	3.5
2000	6.0	9.3	8.3	3.5	5.0	3.5
2001	6.0	9.0	8.0	3.5	5.0	3.5
2002	6.0	8.6	7.6	3.5	5.0	3.5
2003	6.0	8.3	7.3	3.5	5.0	3.5
2004	6.0	8.1	7.1	3.5	5.0	3.5
2005	6.0	7.8	6.8	3.5	5.0	3.5
2006	6.0	7.6	6.6	3.5	5.0	3.5
2007	6.0	7.4	6.4	3.5	5.0	3.5
2008	6.0	7.2	6.2	3.5	5.0	3.5
2009	6.0	7.0	6.0	3.5	5.0	3.5
2010	6.0	6.7	6.0	3.5	5.0	3.5
2011	6.0	6.5	6.0	3.5	5.0	3.5
2012	6.0	6.4	6.0	3.5	5.0	3.5
2013	6.0	6.3	6.0	3.5	5.0	3.5
2014	6.0	6.3	6.0	3.5	5.0	3.5
2015	6.0	6.2	6.0	3.5	5.0	3.5
2016	6.0	6.1	6.0	3.5	5.0	3.5
2017	6.0	6.0	6.0	3.5	5.0	3.5
2018	6.0	6.0	6.0	3.5	5.0	3.5

* See footnote on page 5.

B. Promotional salary increases

Analysis of the data indicated that average promotional increases were somewhat higher than they had appeared in the preceding study above age 50 and were somewhat lower for some younger age ranges. In any event, it appeared desirable to construct new rates of increase related to service rather than age based on the 1984-86 experience. The new rates are shown in Appendix 3.

C. Short-term rates of termination

Subject to certain minor exceptions, a return of contributions is the only benefit applicable in respect of a contributor who dies or otherwise ceases to be employed in the Public Service before he has to his credit five years of pensionable service. Thus, for valuation purposes, the rates of termination required for each of the first five years of pensionable service are the rates at which contributors cease to be employed for any reason. These are referred to herein as "short-term rates of termination".

The experience during the 1984-86 period indicated that, except in the first year, termination rates for both male and female contributors were generally lower than those assumed for the preceding valuation. It was considered desirable to use a revised set of termination rates based on the experience from 1981 to 1986, which implied rates somewhat lower than the rates assumed in the preceding (1983) valuation except in the first year of service where, however, they remained below the rates used in the 1980 valuation. The rates used in this valuation are shown in Appendix 4.

D. Rates of termination for reasons other than age, age and service, disability or death after five or more years of pensionable service and Proportions of terminating contributors electing to take a deferred annuity or annual allowance

The termination rates experienced during the 1984-86 period were found to be lower than those assumed for the preceding valuation for both males and females, and it was considered desirable to construct new rates based on the experience from 1981 to 1986. Moreover, new computer programs allowed the use of rates varying by age and service, and tests indicated that substantially more accurate results would be obtained by using duration-specific rates to the end of the twelfth year of service. The new rates are shown in Appendix 5.

* Assumptions for 1987 and the rates of indexing for 1988 and 1989 are based on actual experience. The interest rate on new money in 1987 varied between 9.2% and 11.4%. The projected fund yield is based on the assumption that the assets of the plan are increased to equal liabilities on January 1, 1990 and that no contributions are received after 1989.

As described in the "Summary of Benefits" in Appendix 2, contributors who terminate service for reasons other than age, age and service, disability or death and have five or more years of pensionable service have the option of electing a return of contributions, a deferred annuity to commence at age 60, or an annual allowance to commence immediately if the contributor's age is 50 or over, or at age 50 if the contributor's age is under 50. Contributors terminating after age 45 with at least 10 years of pensionable service must elect a deferred annuity or an annual allowance in respect of service after September 30, 1967.

The study of the 1984-86 experience revealed that factors developed for the preceding valuation generally overestimated the proportions electing a deferred annuity or annual allowance below age 50 but underestimated them at higher ages. New sets of proportions for males and females were developed, reflecting the 1984-86 experience but giving it only 50% credibility at ages below 46. It should be noted that above age 44 with respect to service after September 1967 these factors are applicable only in the case of terminations with five to ten years of service. The proportions are shown in Appendix 5.

The amount of an annual allowance is determined by the application of arbitrary* factors (based on the age and length of service) to the amount of the deferred annuity to which a terminating contributor is entitled. As in the preceding valuation, annual allowances were assumed to be actuarially equivalent to deferred annuities.

E. Rates of retirement because of age or age and service

In this report, the expression "retirement because of age" applies to contributors entitled to an immediate annuity because of attainment of age 60 and completion of at least five years of pensionable service. In general the expression "retirement because of age and service" applies to retirements with entitlement to an immediate annuity at ages 55 to 59 with at least 30 years of pensionable service**.

The number of retirements during the 1984-86 period was somewhat lower than expected for ages 64 to 66 and in the case of females also for ages below 60, but was somewhat higher for other cases.

The EDP programs prepared for this valuation allowed retirement rates to vary by age and service, and it was decided to develop rates on that basis, since this would result in substantially greater accuracy. The rates adopted largely reflect the experience of the 1981-1986 period, although they are somewhat higher below age 63 for males and age 64 for females; however, the rates are somewhat lower than the 1984-86 experience; they are shown in Appendix 6.

* See Note 8 in Appendix 2.

** See Note 3 in Appendix 2.

F. Rates of retirement because of disability

The experience during 1984-86 indicated a reversal of the trend toward lower rates of retirement because of disability which was observed in the two preceding valuations. New rates which reflect the 1984-86 experience were adopted for this valuation and are shown in Appendix 7.

The trend toward a higher proportion of contributors retiring on account of disability being eligible for CPP/QPP disability benefits continued during the 1984-86 period. As a result, it was decided to assume that 70% rather than 50% of contributors retiring on account of disability would have their basic annuities reduced at the outset and the remainder at age 65 when the normal CPP/QPP retirement pensions become payable. (See Note 4 in Appendix 2.)

G. Mortality of contributors employed in the Public Service with five or more years of pensionable service

The number of actual deaths of contributors during the 1984-86 period was generally greater than that expected on the basis used for purposes of the preceding valuation. It was deemed desirable to construct new mortality rates for this valuation, closely reflecting the 1981-86 experience. The rates used are shown in Appendix 8.

H. Mortality of contributors entitled to an annuity or annual allowance for reasons other than disability

The mortality rates adopted for the preceding valuation could have been retained, since the experience of the 1984-86 period indicated that they contained enough margin for expected improvement. However, for purposes of this valuation, it was decided to replace the static mortality tables that included a substantial margin for improvement by a table more in line with current mortality in conjunction with a projection scale. Mortality rates during 1987 were assumed to be slightly lower than experienced during the 1984-86 period; they are shown in Appendix 9. Mortality rates for later years were obtained by means of projection factors which are shown in Appendix 10.

I. Mortality of contributors entitled to an annuity because of disability

The 1984-86 experience indicated that the margin for future improvement contained in the rates used in the preceding valuation had disappeared for males and was disappearing for females. For purposes of the current valuation, the approach used was similar to the one described in the preceding section with respect to non-disability pensioners.

The rates assumed applicable for 1987 are shown in Appendix 10. For males, they are equal to 95% of the graduated rates based on the 1984-86 experience, excluding the first two years of retirement. For females, they are equal to the rates used after the first two years of retirement in the preceding valuation; these rates represent about 86% of the mortality experienced during the 1984-86 experience for this group.

The projection factors used to obtain the rates for later years are also shown in Appendix 10.

J. Surviving Spouses

The 1984-86 experience indicated that the mortality and remarriage rates for widows and widowers adopted for purposes of the preceding two valuations could be retained for this valuation. However, with regard to assumed mortality rates, it was decided to adopt the same approach as described above with respect to retired contributors. Moreover, some minor adjustments in the remarriage rates for widows appeared desirable.

For widows, the remarriage rates are based on the following percentages of the 1962 Railroad Retirement Board (U.S.) rates: 50% in the first year of widowhood, 65% in the second, third and fourth year and, except at the very young ages, 75% thereafter. Rates of mortality equal to 95% of the Life Tables 1980-82, Canada, were assumed applicable to 1987 and projected in accordance with projection factors.

For widowers, the remarriage rates assumed were the same as those used for purposes of the Canada Pension Plan (Actuarial Report No. 10). The mortality rates assumed applicable to 1987 are those of the Life Tables 1980-82, Canada, as published by Statistics Canada, which are also projected in accordance with projection factors.

The mortality rates for 1987 as well as sample remarriage rates are shown in Appendix 11. The projection factors are shown in Appendix 10.

K. Proportions of contributors married at death and average ages of spouses corresponding to ages of contributors at death

With regard to the proportion of contributors married at death, the 1984-86 experience indicated that the assumptions adopted for the preceding valuation could be retained with respect to retired male contributors but that somewhat higher proportions would be appropriate for retired female contributors and somewhat lower proportions for both male and female active contributors.

The average age of surviving spouses for contributors who died during the 1984-86 period tended to be slightly higher than assumed in the preceding valuation for male contributors but it tended to be lower for female contributors below age 71.

The assumptions adopted for this valuation are shown in Appendix 12.

L. Children and Students

In the current as well as preceding valuations, mortality was ignored in determining the value of allowances payable to children and students, because such allowances are not payable after the 25th birthday and the effect of mortality at the relevant ages would have been negligible.

As payment of an allowance to a child between ages 18 and 25 is conditional on the child being in full-time attendance at school, probabilities of a child at any age continuing to be eligible during the next year of age are needed.

The data for the 1981-86 period indicated that the probability used in the preceding valuation was slightly high for age 18 and somewhat low for higher ages. The factors used for this valuation are shown in Appendix 12.

M. Integration with Canada/Quebec Pension Plan

As described in Note 4 of Appendix 2, the basic annuity of a retired contributor reaching age 65 or becoming entitled to a disability pension under the Canada/Quebec Pension Plan (C/QPP) is reduced by reason of the co-ordination of the Public Service Superannuation Plan with the C/QPP.

In valuing the liability for future benefits, it is necessary to have the proportions of contributors, by age, whose highest 6-year average salary is below the final 3-year Average CPP Maximum Pensionable Earnings as well as the ratios of this 6-year average salary of such contributors to the CPP Maximum. As at January 1, 1987, the CPP Maximum Pensionable Earnings were \$25,900 and designed to increase approximately in proportion to average industrial wages and salaries. For purposes of this report the increase is assumed to be equal to the assumed general salary increases.

The proportions and ratios used in this valuation are shown in Appendix 13. The proportions are somewhat different from those developed for the preceding valuation, but the effect of the difference is relatively small.

V. Data and Membership Statistics

The basic data required in respect of contributors or their survivors entitled to annuities or annual allowances are maintained on computer files by the Superannuation Branch of the Department of Supply and Services; data in respect of active contributors are maintained in a similar manner by the Pension and Insurance Products Group of the same department. Data concerning salaries of contributors as at December 31, 1986, and their total contributions paid to the same date were prepared by the various pay offices and merged with the basic records by matching Social Insurance Numbers.

Contributors employed in the Public Service

	Contributors 84-01-01	Entrants 1984-86	Terminations 1984-86				Contributors 86-12-31	
			Less than 5 years of pensionable service	Five or more years of pensionable service				
				Age(1)	Death	Disability(2)	Other(3)	
Males	195,642	32,798	16,102	15,512	1,432	1,440	7,113	186,841
Females	<u>113,381</u>	<u>37,386</u>	<u>19,452</u>	<u>4,391</u>	<u>329</u>	<u>576</u>	<u>6,111</u>	<u>119,908</u>
	309,023	70,184	35,554	19,903	1,761	2,016	13,224	306,749

(1) Contributors who retired with entitlement to an immediate annuity at age 60 or over, or at ages 55 to 59 with 30 or more years of pensionable service, or at earlier points in the case of air traffic controllers.

(2) Contributors who ceased to be employed at ages under 60 because of disability. (The benefit received was either an immediate annuity, a cash termination allowance, or a return of contributions, with annuities accounting for 98.6% of the cases).

(3) Contributors who ceased to be employed at ages under 55, or ages 55 to 59 with less than 30 years of service for reasons other than death or disability, unless qualified for immediate annuities as air traffic controllers. (Subject to the restriction described in Note 10 in Appendix 2, the benefit was either a return of contributions, a deferred annuity or an annual allowance).

Pertinent statistics derived from tabulations relating to persons entitled to annuities or annual allowances some time during the 1984-86 period are shown in the following tables:

Persons Entitled to an Annuity or Annual Allowance

Former contributors

	<u>Entitled 84-01-01</u>	<u>Became entitled 1984-86</u>	<u>Ceased to be entitled 1984-86</u>			<u>Entitled 1986-12-31</u>		
			<u>Died</u>	<u>Re- employed or recovered</u>	<u>Other*</u>	<u>In payment</u>	<u>Deferred</u>	<u>Total</u>
<u>Males</u>								
Entitlements for reasons other than disability	65,357	19,025	8,063	78	803	72,923	2,515	75,438
Entitlements because of disability	<u>6,594</u>	<u>1,473</u>	<u>1,052</u>	<u>2</u>	<u>-</u>	<u>7,013</u>	<u>-</u>	<u>7,013</u>
Total	71,951	20,498	9,115	80	803	79,936	2,515	82,451
<u>Females</u>								
Entitlements for reasons other than disability	24,820	6,379	1,899	52	504	27,458	1,286	28,744
Entitlements because of disability	<u>2,952</u>	<u>594</u>	<u>279</u>	<u>2</u>	<u>-</u>	<u>3,265</u>	<u>-</u>	<u>3,265</u>
Total	27,772	6,973	2,178	54	504	30,723	1,286	32,009
<u>Grand Total</u>	99,723	27,471	11,293	134	1,307	110,659	3,801	114,460

* Includes contributors who ceased to be entitled to deferred annuities upon becoming disabled and entitled to immediate annuities and who are included in new entitlements because of disability as well as contributors who elected the capitalized value of small annuities.

Surviving Spouses

	Entitled <u>1984-01-01</u>	Became entitled <u>1984-86</u>	Ceased to be entitled <u>1984-86</u>		Entitled <u>1986-12-31</u>
			Died	Remarried	
Widows	34,439	7,374	4,088	274	37,451
Widowers	484	372	69	46	741

Children and Students

	Entitled <u>1984-01-01</u>	Became entitled <u>1984-86</u>	Ceased to be entitled <u>1984-86</u>		Entitled <u>1986-12-31</u>
			Attained age 18	Ceased to be eligible as a student	
Children	2,184	897	1,313	-	1,768
Students	1,703	1,529	-	1,760	1,472

VI. Normal Actuarial Cost

Normal actuarial cost, i.e., the total rates required from contributors and the Government to reflect the costs of benefits in respect of future service, are shown in the Cost Certificate (Section II).

The total normal cost for 1989 on the basis of the assumptions described in Section IV is shown in the Cost Certificate as 13.78% of salary, while on the basis of the assumptions used for purposes of the preceding report (Appendix 1D) the corresponding figure would be 13.88%. The various factors accounting for the decrease of 0.10% of remuneration are shown below:

	<u>Increase (Decrease)</u> % of salary
Mortality rates among pensioners	.50
Termination rates	.49
Retirement rates	.40
Promotional salary increases	(.43)
Economic assumptions	(.89)
Miscellaneous	<u>(.17)</u>
	(.10)

VII. Valuation Balance Sheet and Gain and Loss Analysis

The results of the valuation as at December 31, 1986, based on the actuarial method and assumptions described in Sections III and IV, respectively, are shown in the following balance sheet:

Assets

(\$ millions)

Balance of Accounts (Par value)*

PSSA	24,544.3
SRBA	2,426.4

Actuarial present value of future instalments of past service contributions and matching credits by the Government

Employed contributors	230.6	
Retired contributors	38.7	<u>269.3</u>

Total assets 27,240.0

Unrecorded (unfunded) actuarial liability 4,220.9

31,460.9

Liabilities

Actuarial present value of prospective benefits to and in respect of employed contributors 17,356.3

Actuarial present value of benefits to persons entitled to an annuity or annual allowance

Disabled contributors	782.1	
Others, including deferred annuities	11,660.2	
Spouses	1,651.4	
Children and Students	10.9	<u>14,104.6</u>

Total actuarial liability 31,460.9

*The balances include outstanding matching government credits in respect of employee contributions up to December 31, 1986, amounting to \$406.4 million for the two accounts combined.

The foregoing balance sheet indicates an unrecorded (unfunded) liability of about \$4,221 million. This represents an increase of \$220 million over the value shown on page 23 of the preceding report. The major actuarial gains and losses which account for this increase are as follows:

Actuarial Gains and Losses
(in millions of dollars)

	<u>Gain</u>	<u>Loss</u>	<u>Net Gain (Loss)</u>
Operational gains and losses			
- Retirements		275	
- Terminations		201	
- Pensioner and survivor mortality	157		
- Promotional salary increases	244		
- General Salary Increases	44		
- Interest		1,616	
- Contribution rate excess	329		
- Indexing benefits charged directly to Consolidated Revenue Fund	1,515		
- Prior service		225	
- Data corrections		390	
- Procedural changes	46		
- Miscellaneous (net)	<u>101</u>		
	2,436	<u>2,707</u>	(271)
Changes in actuarial assumptions and methods			
- Economic assumptions	951		
- Retirement (non-disability)		756	
- Termination		402	
- Promotional salary increases	229		
- Age differences between spouses	80		
- Proportion of disabled eligible for C/QPP	69		
- Pensioner and survivor mortality		56	
- Active contributor mortality	52		
- Other assumptions and methods (net)*		<u>116</u>	
	<u>1,381</u>	<u>1,330</u>	<u>51</u>
Total net loss			(220)

* Includes \$106 million loss from assuming employer's prior service contributions equal to employee contributions rather than 1.79 times, as assumed in the preceding report.

VIII. Actuarial Opinion and Acknowledgements

In closing we wish to acknowledge the co-operation and able assistance of the Pension and Insurance products Group, the Superannuation Branch and the Information Systems Directorate of Supply and Services Canada.

In my opinion, for the purposes of this actuarial report

- (a) the data on which this report is based are sufficient and reliable;
- (b) the assumptions that have been used are adequate and appropriate;
- (c) the methods that have been employed are consistent with sound actuarial principles.

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

Respectfully submitted,



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

Ottawa, Canada

February 24, 1989

APPENDIX 1

Estimates relating to existing financing provision of
Public Service Superannuation Act

The existing financing provisions of the PSSA contemplate the recognition of actuarial liabilities relating to basic PSSA benefits, but not those relating to indexing pursuant to the Supplementary Retirement Benefits Act.

The PSSA provides for the liquidation of any unfunded actuarial liability and for special credits to the PSS Account relating to salary increases in excess of the rates assumed in the preceding actuarial report.

On the basis of the assumptions described in the report, it was estimated that as at December 31, 1986, the assets relating to the PSSA amounting to \$24,794 million exceeded the actuarial liabilities by about \$5,867 million.

With regard to salary increases, it was estimated on the basis of the same assumptions that additional liabilities arising out of general salary increases in excess of the assumed rate for a year require special credits to the Account equal to 1.39 times the increase in the effective payroll in excess of the assumed rate for a year.

APPENDIX 2

Summary of the Pension Plan for Contributors to the
Public Service Superannuation Account

A. Coverage

The Public Service Superannuation Act requires contributions from and grants benefits to every full-time employee in the Public Service who has attained age 18 and is in receipt of an annual salary of at least \$900, subject to a few exceptions.

The term Public Service as used in the Act includes all positions in any department or portion of the executive government of Canada, or the Senate and House of Commons, the Library of Parliament and any board, commission or corporation listed in a Schedule to the Act.

Persons engaged as sessional employees, postmasters or assistant postmasters in revenue post offices and some others may be designated as contributors by the President of the Treasury Board either individually or as members of a class.

The main groups of persons employed in the Public Service to which the Act does not apply are part-time employees, persons engaged locally outside Canada and employees of some Crown Corporations covered by separate pension plans.

The two main groups of persons entitled to receive benefits are:

- (i) former contributors who become entitled to lump sum payments, immediate or deferred annuities or immediate or deferred annual allowances; and
- (ii) surviving spouses and children who are entitled to annual allowances payable out of the Account by reason of the death of a contributor while employed in the Public Service or while entitled to an annuity or allowance.

Benefits may also be payable to the estates of deceased contributors or former contributors in certain cases where there are no eligible spouses or children entitled to receive annual allowances.

B. Credits and charges to the Public Service Superannuation (PSS) Account and the Supplementary Retirement Benefits (SRB) Account

1. Contributions from contributors

(a) Current Service

The rate of contributions to the PSS Account is 6.5% of salary reduced in each case by the amount that the contributor would be required to contribute under the Canada Pension Plan (CPP) in respect of that salary if that salary, expressed in terms of an annual rate, were the total amount of his income for the year from pensionable employment as defined in that Act and that Act applied* to his employment. For example, in 1988, the CPP required contributions of 2.0% of annual salary above \$2,600 but not above \$26,500.

Contributions cease after a contributor has to his credit 35 years of pensionable service (less the number of years of service upon which any pension benefit is based that is payable to the contributor out of the Consolidated Revenue Fund, or out of any account or fund in the Consolidated Revenue Fund other than the Superannuation account, or out of a pension fund pursuant to which contributions have been paid out of the Consolidated Revenue Fund in respect of employees engaged locally outside Canada).

Air traffic controllers are required to contribute an additional two percent of salary to the PSS Account.

In addition, all contributors regardless of length of service are required to contribute one percent of salary to the SRB Account.

(b) Prior Service

A contributor may elect to contribute for certain types of prior service** which then count as pensionable service. In general, if an election for a period of pensionable service is made by an employee within one year after last becoming a contributor under the PSSA, the amount that he is required to contribute is equal to the total contributions that would have been paid during that period of service at the rate of contribution in force for current service at that time applied to the salary authorized to be paid to the contributor at the most recent date of becoming a contributor, together with interest. The amount of the interest

* Residents of Quebec contribute to the Quebec Pension Plan which, except in 1973, has required identical contributions.

** See Note 1 in section D of this Appendix.

is equal to simple interest at 4% per annum from the middle of each fiscal year in which contributions would have been made, if the contributor had been making such contributions during the period for which he elected to pay, until the date of the election.

For some major types of prior pensionable service for which a contributor elects to pay, the amount of contribution required is double that determined by this general rule. Included in this category is any period of service in pensionable employment, prior to becoming employed in the Public Service, to the credit of the contributor in a superannuation or pension plan approved by the President of the Treasury Board for purposes of the PSSA, which had been established for the benefit of persons engaged in that employment.

If a contributor makes an election for a period of pensionable prior service more than one year after becoming a contributor, the amount required to be contributed is based on the contributor's salary at the date of election.

Any contributor electing to contribute for pensionable prior service must be medically examined as prescribed by regulation, unless the contributor was employed in the Public Service, or was a member of the Canadian Forces or the Royal Canadian Mounted Police for a period of at least five years immediately prior to last becoming a contributor. A contributor making an election more than one year after last becoming a contributor must pass the medical examination for the election to be valid. For other elections, if the contributor fails to pass the medical examination when required, benefits related to such pensionable prior service are limited to a return of contributions unless the contributor continues to be employed in the Public Service for a further period of not less than five years after the date of the examination or is again medically examined and passes the examination.

The total amount of the required contributions for prior service may be paid in a lump sum at the date of election or by monthly instalments. For contributors under age 45 at the date of election, the monthly instalment period may not extend beyond the 65th birthday; if the contributor is age 45 or over, the monthly instalment period may not be longer than 20 years. Monthly instalments are computed in accordance with regulations on the basis of the Canadian Life Tables No. 2 (1941) Males or Females, as the case may be, and interest at 4% per annum.

2. Contributions from employer

The Government and the Public Service Corporations, as employers credit the PSS and SRB Accounts with amounts matching the contributions of their respective employees. In addition, the Government credits the PSS Account with such amounts as, in the opinion of the Minister of Finance, are required to provide for the increase in cost of the benefits payable under the PSSA as a result of any salary increase applicable to at least one percent of the contributors or are required to meet the cost of benefits payable under the Act as shown by the most recent actuarial report on the PSS Account.

The "matching credits" by the Government are made in the fiscal year following the year in which the contributions were made by its employees. The technique for financing the other two types of employer contributions is to credit to the PSS Account the full amount estimated to be required in the fiscal year that the salary increase is authorized or the actuarial report is laid before Parliament and to charge such amounts to the Consolidated Revenue Fund in five equal annual instalments beginning in such fiscal year.

3. Interest

In its role as custodian of the account, the Government credits the PSS Account with amounts representing interest on the balance in the PSS Account from time to time calculated at the interest rate assumed in the preceding actuarial valuation and at such supplementary rate as may be provided by regulation. However, the Minister may apply such supplementary interest to reduce the instalments being charged to the Consolidated Revenue Fund in respect of increases in costs due to salary increases and in respect of unfunded actuarial liabilities indicated in statutory actuarial reports.

Until the quarter ending June 30, 1969, interest was credited to the PSS Account on the last day of each quarter in the fiscal year at the rate of one percent of the balance to the credit of the PSS Account on the last day of the preceding quarter, i.e. approximately 4% per annum. The total rate at which interest is now credited to the PSS Account changes every three months and is calculated as if the amounts not required for payment of benefits in each quarter pursuant to the PSSA and the Canadian Forces and RCMP Superannuation Acts had been invested on a basis similar to the one used for the Canada Pension Plan, i.e. in twenty-year bonds having a yield equivalent to the average yield on Government of Canada bonds with 20 or more years to maturity outstanding at that time.

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

4. Payments of Benefits

All payments pursuant to the PSSA (i.e. excluding indexing) are charged to the PSS Account. Benefits resulting from indexing pursuant to the SRBA are charged to the SRB Account only until the accumulated total paid in respect of a former contributor equals the aggregate of all amounts credited to the SRB Account in respect of that person, including interest. SRBA benefits paid in excess of that aggregate are then charged directly to the Consolidated Revenue Fund.

C. Summary of Benefits*

(1) Contributors with less than five years of pensionable service (Note 1)

With a few exceptions, the only benefit to which a contributor in this category is entitled upon termination of service is a "return of contributions" (Note 2).

(2) Contributors with five or more years of pensionable service

(a) Contributors employed in Public Service at date contingency occurs

<u>Contingency</u>	<u>Benefit</u>
Retirement because of age or age and service (Note 3)	Immediate annuity (Note 4)
Retirement because of disability (Note 3)	At option of contributor (Note 10): (A) immediate annuity (Note 5), or (B) cash termination allowance (Note 6) or return of contributions, whichever is greater

* The explanatory notes referred to in this summary are given in section D of this Appendix.

<u>Contingency</u>	<u>Benefit</u>
Termination for reasons other than age, age and service, disability, misconduct or death (Note 3)	At option of contributor (Note 10): (A) return of contributions, (B) deferred annuity (Note 7), (C) annual allowance payable immediately, if age 50 or over, and otherwise upon attaining age 50 (Note 8)
Dismissal because of misconduct	(A) return of contributions, or (B) with the consent of the Treasury Board, the whole or part specified by the Treasury Board of any benefit to which the contributor would have been entitled if employment had ceased for a reason other than misconduct (Note 9)
Death leaving no surviving spouse or eligible children	Return of contributions or five times the annuity to which the contributor would have been entitled at the time of his death, whichever is greater
Death leaving surviving spouse and/or eligible children	Annual allowance (Notes 11 and 12)

(b) Contributors who have ceased to be employed in the Public Service and are entitled to annuities or annual allowances

<u>Contingency</u>	<u>Benefit</u>
Disability before age 60 while entitled to a deferred annuity or an annual allowance	Immediate annuity (Note 5)
Death leaving no surviving spouse or eligible children	Minimum benefit (Note 12)
Death leaving surviving spouse and/or eligible children	Annual allowances (Notes 11 and 12)

(3) Indexing

The Supplementary Retirement Benefits Act (SRBA) was enacted in 1970 to provide benefit adjustments related to increases in the cost of living for persons in receipt of pensions payable out of the Consolidated Revenue Fund. This Act applies to former contributors to the PSS Account and their surviving spouses and children who are entitled to annuities or annual allowances.

The supplementary benefit is calculated by multiplying the amount of the annuity or annual allowance to which the person is entitled from the PSS Account by the ratio of the Benefit Index for the year of payment to the Benefit Index for the year in which the person to whom or in respect of whose service the pension is payable ceased to be employed, and subtracting the amount of the annuity or annual allowance. The Benefit Index for the years prior to 1971 is shown in a Schedule in the Act. The Benefit Index for any year after 1970 is equal to the Benefit Index for the preceding year multiplied by the average of the Consumer Price Index for Canada for the twelve-month period ending on September 30 of that preceding year and divided by the average for a corresponding period one year earlier. Prior to 1973, the increase in the Benefit Index was limited to a maximum of 2% in any year. An amendment to the Supplementary Retirement Benefits Act in 1973 removed that limit and provided that the increase payable in January 1974 would take into account increases in the Consumer Price Index above the 2% ceiling since 1970. In January 1983, an amendment made as part of a general economic restraints program limited the increase for 1983 and 1984 to 6.5% and 5.5%, respectively. Since 1983 the increase in the Benefit Index is prorated in respect of annuitants who have been in receipt of benefits for less than the full preceding calendar year (i.e. for contributors who retired or in respect of contributors who died during the preceding year).

Under the terms of the original Act of 1970, the supplementary benefits were payable to all former contributors in receipt of annuities or annual allowances who had attained age 60 or, if less than that age, were disabled, and to all spouses and children in receipt of annual allowances. The amendments effective January 1, 1973 provided for the payment of benefits to all former contributors in receipt of annuities or annual allowances except in cases of dismissal for misconduct.

D. Explanatory Notes

Note 1

The amount of any annuity or allowance to which a contributor or the surviving spouse or children may become entitled and, in some cases, the reduction factor used in determining the amount of an annual allowance payable to a contributor depend on the number of years of pensionable service to the credit of the contributor at the date employment in the Public Service ceased.

"Pensionable Service" of a contributor is defined in the PSSA and includes in general terms any period of service in the Public Service for which the contributor has been required to contribute or has elected to contribute, if eligible to do so, and such other types of service for which the contributor has elected to make special contributions as required. The periods of service in the Public Service or in other employment for which a contributor may be eligible to elect to contribute include the following:

- (a) a period of service before becoming a contributor under the PSSA during which the contributor was employed in the Public Service and was receiving a salary;
- (b) a period of service in respect of which the contributor has received any amount by way of a return of contributions or other lump sum payment under the PSSA;
- (c) a period of active service in the forces during World War II or with the Korean Special Force prior to becoming a member of the Public Service;
- (d) a period of pensionable full-time service with the Canadian Forces, the Royal Canadian Mounted Police, or an employer with whom a reciprocal transfer agreement has been completed;
- (e) a period of service in civilian war service of a kind specified by regulation;
- (f) a period of service in pensionable employment, immediately prior to becoming employed in the Public Service, subject to a pension plan approved by the President of the Treasury Board for this purpose.

Note 2

"Return of Contributions" means the payment of an amount equal to the total current and prior service contributions paid by the contributor into the PSS Account and the SRB Account or paid into any other superannuation account or pension fund and transferred to the PSS and SRB Accounts plus interest credited to December 31st of the year immediately preceding the year the contributor ceased to be employed in the Public Service. Interest at the rate of 4% per annum is credited each December 31st (beginning in 1974) on the accumulated contributions with interest as at the prior December 31st.

Note 3

In this summary, "retirement because of age or age and service" means ceasing to be employed in the Public Service, for any reason other than misconduct or death, at age 60 or over with at least five years of pensionable service, or at ages 55 to 59 with pensionable service of 30 years or more. In the case of Air Traffic Controllers it also means ceasing to be employed after completion of 20 years of operational service in case of "involuntary retirement" or after attainment of age 50 and completion of 25 years of operational service in case of "voluntary retirement". It follows that "retirement because of disability" refers only to those retirements for that reason where the contributor would not be entitled to the same benefits by reason of age or age and service and that (excluding Air Traffic Controllers) "termination for reasons other than age, age and service, disability, misconduct or death" refers only to terminations before age 55 or at ages 55 to 59 with less than 30 years of pensionable service.

Note 4

"Immediate annuity" means an annuity that becomes payable to a contributor immediately upon his becoming entitled thereto. The annual amount of "basic annuity" is equal to 2% of average annual salary in respect of any selected six-year period of pensionable service multiplied by the number of years of pensionable service up to a maximum of 35. The six-year period may consist of consecutive periods of pensionable service totalling six years. If a contributor has less than six years of pensionable service, the average annual salary is based on salary in respect of the contributor's total pensionable service. Any annuity or annual allowance is ordinarily payable in equal monthly instalments in arrears until the end of the month in which the person receiving it dies or ceases to be entitled thereto.

When a contributor entitled to an annuity or annual allowance has reached age 65 or has become entitled to a disability pension under the terms of the Canada Pension Plan or Quebec Pension Plan, the annuity or annual allowance is reduced by an amount equal to 0.7% of the average salary multiplied by the number of years of pensionable service after 1965 that are counted in the calculation of the basic annuity, provided that the average salary used in this calculation will have a maximum value of the "Average Maximum Pensionable Earnings". The latter amount is the average of the "Year's Maximum Pensionable Earnings" as defined in the Canada

Pension Plan for the year in which the contributor ceased to be employed in the Public Service and for each of the two preceding years.

Note 5

When a contributor under age 60 and entitled to an annuity in respect of a disability is certified in accordance with regulations to have regained his health or to be capable of performing the duties of his or her former position in the Public Service or any other position in the Public Service commensurate with the contributor's qualifications, entitlement to that annuity ceases and entitlement to a deferred annuity becomes effective.

When a contributor entitled to a deferred annuity or annual allowance becomes disabled before age 60, the contributor ceases to be entitled to that deferred annuity or annual allowance and becomes entitled to an immediate annuity adjusted in accordance with regulations to take into account the amount of any annual allowance which the contributor may have received prior to becoming disabled.

Note 6

"Cash termination allowance" means an amount equal to one month's salary for each year of pensionable service (in the usual case at the rate of salary authorized to be paid to the contributor at the time that he ceases to be employed in the Public Service) less an amount equal to the reduction in contributions paid to the PSS Account because of co-ordination with the Canada Pension Plan and the Quebec Pension Plan.

Note 7

"Deferred annuity" means an annuity that becomes payable to a former contributor upon reaching age 60. The annual amount of the annuity is computed as described in Note 4.

Note 8

The amount of the annual allowance is equal to the amount of the deferred annuity to which the contributor could have elected to receive, reduced by the product obtained by multiplying 5% of that amount by a factor varying with age and length of pensionable service at retirement.

For a contributor age 50 or more with not less than 25 years of credited pensionable service, the factor is the greater of fifty-five minus the age and thirty minus the number of years of pensionable service.

For a contributor age 55 or more who has been employed in the Public Service on a full-time basis for a period or periods totalling at least ten years and who does not retire voluntarily the factor is thirty minus the number of years of pensionable service. In any such case the whole or part of the reduction calculated using this factor may be waived by the Treasury Board.

For all other cases the factor is sixty minus the contributor's age.

In all cases, the factor is determined by expressing age or length of service to the nearest one-tenth of a year.

Note 9

In the case of dismissal because of misconduct, the capitalized value of any annuity or annual allowance granted by the Treasury Board computed in accordance with regulations on the basis of the a(f) and a(m) Ultimate Tables of mortality and interest at 4% per annum may not be less than the "return of contributions" as defined in Note 2.

Note 10

If on termination of employment a contributor has attained age 45 and has 10 or more years of credited pensionable service, the right to select a "return of contributions" or a "cash termination allowance" benefit is limited to the period of pensionable service prior to October 1, 1967. With respect to the service on and after that date, the benefit must be an annuity or an annual allowance.

Note 11

"Annual allowance" to the surviving spouse of an active contributor or a former contributor entitled to receive an annuity or annual allowance means one-half of the annual amount of "basic annuity" computed as described in Note 4. This is termed the "basic allowance".

No allowance is payable to the widower of a female contributor, unless the contributor was employed in the Public Service and had 35 years of pensionable service or was required to contribute to the PSS Account on or after December 20, 1975.

If the age of the contributor exceeds that of the surviving spouse by 20 or more years, the allowance is reduced. If a contributor dies within one year following marriage, no allowance is payable to the surviving spouse, if the Treasury Board is not satisfied that the contributor was at the time of marriage in such a condition of health as to justify his or her having an expectation of surviving for at least one year thereafter. Also, if a contributor marries after having become entitled to an annuity or annual allowance, the surviving spouse is not entitled to any annual allowance unless, after the marriage, the former contributor again became or continued to be a contributor*.

* "Contributor" includes a person who is employed in the Public Service but, having 35 years of pensionable service, is no longer required to contribute to the PSS Account.

If a surviving spouse remarries, the allowance is either suspended during the period of remarriage or forfeited, if the spouse requests and receives a return of contributions less all payments made to the contributor, surviving spouse and children. Such request can only be made during the period of remarriage if there is no child of the contributor entitled to an annual allowance under the PSSA.

The allowance to a surviving spouse which has been suspended upon remarriage will be resumed in the event of the dissolution or annulment of that marriage, or the death of the new spouse.

"Annual allowance" to each child of a deceased contributor means one-fifth of the "basic allowance" described above, or if there is no living spouse, two-fifths of the basic allowance. The allowance is payable to any children under age 18 until they reach their 18th birthday, and to any children 18 years or older until they reach their 25th birthday provided they remain unmarried and have been in full-time attendance at school or university substantially without interruption since their 18th birthday or the death of the contributor whichever occurred later. The total amount of allowance payable to the eligible children of a deceased contributor may not exceed that which would be payable if there were four eligible children.

A child born to the widow of a contributor is not entitled to an annual allowance unless the child was conceived before the death of the contributor. Also a child who was born to or adopted by a contributor or who became the stepchild of a contributor after the contributor ceased to be employed in the Public Service is not entitled to an annual allowance unless, in the case of a child born to a contributor, the child was conceived before the contributor ceased to be employed.

Note 12

If upon the death of a contributor there is no person to whom an allowance provided under the terms of the PSSA may be paid, or if the persons to whom such allowances may be paid die or cease to be entitled thereto and no other amount may be paid to them, there is paid to the estate of the contributor:

- (1) if the contributor was not employed in the Public Service on or after December 20, 1975, any amount by which the amount of "return of contributions" exceeds the aggregate of all amounts paid to those persons and to the contributor;
- (2) if the contributor was employed in the Public Service on or after December 20, 1975, an amount similar to (1) above, except that in respect of the PSSA the "return of contributions" is taken as equal to at least five times the immediate annuity to which the contributor was or would have been entitled at the time of his death.

APPENDIX 3

Promotional Salary Increases

<u>Service</u>	<u>Males</u> (%)	<u>Females</u> (%)
0	3.9	4.2
1	3.2	3.6
2	2.6	2.9
3	2.0	2.3
4	1.6	1.9
5	1.3	1.6
6	1.2	1.4
7	1.1	1.3
8	1.0	1.2
9	0.9	1.2
10	0.9	1.1
11	0.8	1.1
12	0.8	1.0
13	0.7	0.9
14	0.6	0.9
15	0.6	0.9
16	0.5	0.8
17	0.5	0.8
18	0.4	0.9
19	0.4	0.9
20	0.4	1.0
21	0.5	1.0
22	0.5	1.1
23	0.5	1.1
24	0.5	1.2
25	0.5	1.2
26	0.5	1.3
27	0.6	1.4
28	0.6	1.4
29	0.6	1.4
30	0.6	1.4
31	0.6	1.5
32	0.6	1.5
33	0.6	1.6
34	0.7	1.6
35	0.8	1.6
36	1.0	1.6
37	1.2	1.7
38	1.3	1.7
39	1.5	1.7
40	1.6	1.7
41	1.7	1.7
42	1.8	1.7
43	1.9	1.7
44	1.9	1.7

APPENDIX 4

Short-term rates of termination (for all reasons)

Age	Males					Females				
	Completed years of pensionable service					Completed years of pensionable service				
	0	1	2	3	4	0	1	2	3	4
18	.325	.141	.120	.083	-	.244	.125	.090	.062	-
19	.311	.137	.111	.080	.080	.251	.128	.090	.064	.054
20	.297	.132	.103	.077	.074	.258	.133	.091	.066	.056
21	.283	.128	.095	.073	.068	.265	.138	.091	.068	.058
22	.271	.124	.087	.070	.063	.272	.144	.093	.070	.060
23	.261	.121	.081	.066	.057	.279	.149	.096	.072	.062
24	.253	.119	.077	.063	.052	.282	.153	.100	.075	.063
25	.247	.118	.074	.060	.049	.283	.155	.103	.078	.065
30	.234	.113	.076	.060	.049	.281	.144	.104	.082	.068
35	.229	.113	.080	.061	.051	.267	.125	.080	.070	.060
40	.239	.115	.073	.058	.048	.266	.118	.073	.058	.048
41	.244	.115	.072	.057	.047	.267	.118	.073	.055	.046
42	.250	.116	.071	.057	.047	.268	.118	.073	.054	.045
43	.256	.116	.071	.056	.046	.270	.118	.072	.052	.044
44	.262	.116	.071	.056	.046	.271	.117	.072	.051	.043
45	.268	.116	.072	.056	.045	.272	.117	.072	.050	.042
46	.273	.117	.072	.056	.044	.273	.118	.072	.050	.042
47	.277	.117	.073	.056	.044	.273	.119	.072	.050	.043
48	.280	.118	.074	.057	.044	.274	.121	.071	.050	.044
49	.282	.119	.075	.057	.044	.277	.123	.070	.050	.045
50	.283	.121	.076	.058	.044	.281	.126	.069	.049	.046
51	.285	.123	.077	.059	.044	.287	.128	.068	.050	.048
52	.287	.125	.078	.060	.044	.296	.131	.068	.050	.049
53	.291	.128	.081	.062	.045	.306	.133	.068	.052	.050
54	.296	.131	.084	.064	.046	.317	.136	.071	.054	.051
55	.305	.135	.088	.068	.047	.331	.139	.076	.057	.053
56	.317	.141	.093	.072	.050	.347	.144	.083	.063	.057
57	.335	.148	.100	.079	.055	.365	.149	.093	.070	.061
58	.359	.156	.110	.089	.061	.385	.157	.107	.080	.068
59	.388	.166	.122	.101	.070	.408	.167	.124	.092	.076
60	.423	.177	.138	.116	.081	.433	.178	.146	.107	.086
61	.463	.189	.157	.135	.095	.461	.192	.170	.126	.098
62	.507	.202	.179	.157	.111	.491	.207	.198	.146	.113
63	.554	.216	.205	.181	.129	.522	.275	.229	.170	.129
64	.700	.400	.450	.450	.200	.700	.300	.400	.350	.200
65	.900	.750	.750	.600	.450	.700	.750	.750	.850	.750
66+	.900	.350	.210	.270	.200	.900	.450	.600	.500	.250

APPENDIX 5A

MALES

Rates of termination for reasons other than age,
age and service, disability or death

Age	Completed years of pensionable service								Proportions electing deferred annuity or annual allowance**
	5	6	7	8	9	10	11	12+	
21	.052	-	-	-	-	-	-	-	-
22	.048	.031	-	-	-	-	-	-	-
23	.044	.030	.034	-	-	-	-	-	.0001
24	.040	.030	.031	.020	-	-	-	-	.0009
25	.037	.029	.028	.019	.015	-	-	-	.0027
26	.034	.029	.025	.018	.015	.011	-	-	.0046
27	.032	.028	.023	.017	.015	.011	.007	-	.0067
28	.031	.028	.021	.016	.015	.012	.008	.013	.0091
29	.031	.028	.020	.016	.015	.012	.009	.012	.0120
30	.031	.028	.020	.016	.015	.013	.010	.012	.0148
31	.032	.028	.021	.016	.015	.014	.011	.011	.0183
32	.033	.028	.022	.017	.015	.014	.012	.010	.0226
33	.034	.029	.023	.018	.015	.015	.013	.009	.0271
34	.034	.029	.025	.020	.016	.017	.014	.008	.0317
35	.034	.030	.026	.021	.017	.018	.014	.008	.0367
36	.034	.031	.027	.022	.017	.020	.014	.008	.0434
37	.034	.031	.028	.023	.018	.021	.014	.008	.0525
38	.034	.032	.028	.024	.019	.022	.014	.009	.0637
39	.034	.032	.028	.025	.020	.023	.014	.009	.0752
40	.035	.032	.028	.025	.020	.023	.014	.009	.0854
41	.035	.031	.028	.025	.021	.023	.015	.008	.0941
42	.035	.031	.027	.025	.021	.023	.015	.008	.1007
43	.035	.030	.026	.025	.021	.022	.016	.008	.1058
44	.035	.030	.025	.024	.021	.020	.016	.008	.1100
45	.034	.029	.024	.023	.021	.019	.016	.007	.1147
46	.033	.029	.024	.022	.021	.018	.016	.007	.1268
47	.032	.028	.023	.021	.022	.017	.016	.006	.1468
48	.032	.028	.023	.020	.022	.016	.015	.006	.1770
49	.031	.028	.022	.019	.022	.016	.015	.007	.2158
50	.032	.027	.022	.019	.022	.016	.015	.011	.2605
51	.032	.027	.022	.019	.022	.017	.016	.013	.3023
52	.033	.027	.021	.020	.022	.017	.016	.015	.3454
53	.034	.026	.021	.020	.022	.018	.016	.018	.3882
54	.036	.026	.021	.021	.022	.019	.016	.020	.4307
55	.037	.026	.021	.022	.022	.019	.017	.017	.4731
56	.039	.026	.021	.023	.023	.020	.016	.016	.5152
57	.041	.026	.022	.023	.024	.021	.016	.017	.5573
58	.043	.026	.022	.024	.025	.021	.016	.019	.5994
59	.044	.026	.022	.024	.025	.022	.015	.020	.6415

* See Note 3 in Appendix 2.

**See Note 10 in Appendix 2.

APPENDIX 5B

FEMALES

Rates of termination for reasons other than age,
service, disability or death

Age	Completed years of pensionable service								Proportions electing deferred annuity or annual allowance**
	5	6	7	8	9	10	11	12+	
21	.053	-	-	-	-	-	-	-	.0004
22	.053	.052	-	-	-	-	-	-	.0009
23	.054	.051	.043	-	-	-	-	-	.0015
24	.054	.050	.043	.042	-	-	-	-	.0022
25	.055	.050	.042	.041	.034	-	-	-	.0039
26	.056	.049	.042	.040	.033	.034	-	-	.0056
27	.057	.048	.042	.039	.032	.033	.035	-	.0076
28	.057	.046	.042	.038	.032	.033	.033	.027	.0097
29	.056	.044	.041	.037	.031	.032	.031	.026	.0123
30	.055	.043	.040	.035	.031	.032	.029	.025	.0148
31	.054	.042	.039	.033	.031	.031	.026	.024	.0178
32	.053	.041	.038	.031	.030	.029	.024	.022	.0217
33	.051	.040	.037	.030	.029	.027	.022	.021	.0258
34	.049	.039	.036	.029	.027	.026	.021	.019	.0297
35	.046	.037	.036	.029	.026	.025	.020	.018	.0337
36	.043	.036	.035	.028	.025	.024	.020	.016	.0390
37	.041	.035	.035	.028	.024	.023	.020	.015	.0461
38	.038	.034	.034	.027	.024	.022	.020	.014	.0545
39	.036	.034	.033	.027	.024	.022	.021	.014	.0630
40	.035	.034	.032	.026	.025	.022	.022	.013	.0701
41	.034	.033	.031	.025	.027	.023	.023	.013	.0759
42	.033	.033	.031	.025	.028	.023	.023	.013	.0805
43	.033	.032	.030	.025	.029	.023	.023	.013	.0844
44	.033	.031	.029	.025	.030	.022	.022	.013	.0884
45	.033	.030	.029	.025	.030	.021	.021	.012	.0937
46	.033	.029	.028	.024	.030	.021	.020	.011	.1030
47	.033	.029	.027	.024	.029	.020	.019	.011	.1213
48	.033	.028	.026	.024	.028	.020	.019	.012	.1509
49	.034	.028	.026	.025	.028	.020	.019	.014	.1913
50	.035	.028	.026	.025	.028	.021	.019	.017	.2414
51	.037	.029	.027	.025	.028	.023	.020	.020	.2951
52	.039	.030	.029	.025	.030	.025	.022	.024	.3548
53	.041	.032	.031	.026	.031	.028	.024	.028	.4201
54	.044	.033	.033	.027	.033	.031	.027	.032	.4898
55	.046	.035	.036	.029	.034	.034	.030	.035	.5627
56	.049	.037	.039	.032	.036	.038	.034	.038	.6379
57	.052	.038	.042	.034	.037	.041	.037	.040	.7141
58	.054	.040	.045	.037	.039	.045	.041	.041	.7904
59	.057	.042	.048	.040	.040	.048	.044	.041	.8666

* See Note 3 in Appendix 2.

**See Note 10 in Appendix 2.

APPENDIX 6

Rates of retirement because of age or age and service*

MALES

Age	Completed years of pensionable service									
	5-9	10-14	15-19	20-24	25-29	30	31	32-34	35	36+
48-49	-	-	-	-	.0001	.0001	.0001	.0001	-	-
50	-	.0001	.0001	.0001	.0005	.0005	.0005	.0005	.0005	-
51-53	-	-	-	-	.0001	.0001	.0001	.0001	.0001	.0001
54	-	.0020	.0020	.0020	.0050	.0400	.0500	.0400	.0500	.0900
55	-	.005	.005	.005	.020	.180	.170	.180	.320	.190
56	-	.002	.002	.002	.010	.180	.120	.180	.240	.120
57	-	.002	.002	.002	.010	.190	.110	.190	.240	.100
58	-	.002	.002	.002	.010	.190	.110	.190	.220	.100
59	.015	.025	.025	.025	.050	.230	.160	.230	.300	.150
60	.090	.110	.120	.150	.210	.300	.210	.190	.400	.230
61	.090	.100	.100	.130	.170	.240	.200	.180	.380	.200
62	.090	.100	.120	.140	.190	.230	.200	.180	.400	.220
63	.120	.140	.150	.170	.230	.330	.270	.220	.460	.250
64	.430	.450	.490	.510	.550	.600	.530	.510	.730	.500
65	.800	.840	.870	.900	.920	.960	.870	.860	.920	.800
66	.550	irrespective of service								
67-69	.500	"	"	"	"	"	"	"	"	"

FEMALES

Age	Completed years of pensionable service									
	5-9	10-14	15-19	20-24	25-29	30	31	32-34	35	36+
54	-	-	-	.0005	.0050	.0600	.1100	.0600	.1000	.1500
55	-	-	.0005	.0005	.0250	.2500	.2000	.1700	.4700	.3300
56	-	.0010	.0005	.0005	.0150	.3000	.1900	.1500	.2300	.2300
57	-	.0010	.0005	.0005	.0150	.2600	.1900	.1400	.4400	.1800
58	-	.0010	.0005	.0005	.0100	.2300	.1400	.1200	.2700	.1700
59	.0200	.0250	.0300	.0400	.0800	.2200	.1900	.1800	.4000	.1800
60	.090	.130	.170	.210	.260	.300	.240	.200	.400	.250
61	.090	.120	.140	.150	.210	.250	.130	.200	.350	.220
62	.110	.120	.140	.150	.190	.250	.220	.140	.250	.190
63	.110	.130	.160	.180	.240	.200	.180	.170	.400	.230
64	.450	.490	.500	.470	.530	.530	.480	.460	.600	.540
65	.820	.840	.860	.870	.880	.890	.920	.900	.900	.900
66	.550	irrespective of service								
67	.500	"	"	"	"	"	"	"	"	"
68-69	.400	"	"	"	"	"	"	"	"	"

*See Note 3 in Appendix 2.

APPENDIX 7

Rates of retirement because of disability*

<u>Age</u>	<u>Males</u>	<u>Females</u>
21	.0002	-
22	.0002	-
23	.0002	.0001
24	.0002	.0001
25	.0002	.0002
26	.0002	.0002
27	.0002	.0003
28	.0002	.0003
29	.0002	.0004
30	.0003	.0004
31	.0003	.0005
32	.0003	.0005
33	.0003	.0005
34	.0003	.0005
35	.0004	.0006
36	.0004	.0006
37	.0005	.0007
38	.0006	.0008
39	.0007	.0009
40	.0008	.0011
41	.0010	.0013
42	.0012	.0015
43	.0014	.0018
44	.0016	.0021
45	.0020	.0025
46	.0024	.0030
47	.0029	.0036
48	.0035	.0043
49	.0042	.0051
50	.0051	.0059
51	.0061	.0069
52	.0071	.0079
53	.0083	.0089
54	.0094	.0099
55	.0106	.0109
56	.0119	.0119
57	.0132	.0128
58	.0145	.0136
59	.0157	.0144

* See Note 3 in Appendix 2.

APPENDIX 8

Rates of mortality for employed contributors

<u>Age</u>	<u>Males</u>	<u>Females</u>
25	.0009	.0003
30	.0007	.0004
35	.0008	.0006
40	.0013	.0008
41	.0015	.0009
42	.0017	.0009
43	.0019	.0010
44	.0020	.0011
45	.0022	.0012
46	.0025	.0014
47	.0027	.0015
48	.0030	.0017
49	.0034	.0018
50	.0037	.0020
51	.0042	.0022
52	.0047	.0024
53	.0052	.0026
54	.0058	.0028
55	.0065	.0031
56	.0072	.0034
57	.0079	.0038
58	.0087	.0042
59	.0095	.0047
60	.0103	.0052
61	.0112	.0058
62	.0121	.0064
63	.0130	.0071
64	.0139	.0078
65	.0148	.0087
66	.0157	.0096
67	.0167	.0108
68	.0176	.0121
69	.0185	.0138

APPENDIX 9

Rates of mortality assumed applicable in 1987* for contributors retired for reasons other than disability

<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Age</u>	<u>Males</u>	<u>Females</u>
40	.001522	.000796	75	.054876	.030205
41	.001697	.000861	76	.059649	.033305
42	.001905	.000935	77	.064789	.036605
43	.002147	.001021	78	.070285	.040106
44	.002426	.001122	79	.076126	.043809
45	.002745	.001241	80	.082300	.047717
46	.003100	.001374	81	.090538	.052950
47	.003487	.001518	82	.099244	.058546
48	.003903	.001672	83	.108361	.064523
49	.004343	.001830	84	.117830	.070897
50	.004804	.001992	85	.127595	.077687
51	.005283	.002165	86	.137967	.085078
52	.005778	.002355	87	.148744	.093843
53	.006289	.002572	88	.160081	.102150
54	.006812	.002823	89	.172066	.112616
55	.007353	.003114	90	.184785	.124167
56	.007932	.003448	91	.198016	.136751
57	.008577	.003825	92	.211622	.150700
58	.009315	.004246	93	.225563	.166197
59	.010175	.004712	94	.242116	.183448
60	.011182	.005225	95	.260096	.202688
61	.012370	.005789	96	.276040	.224174
62	.013768	.006410	97	.293282	.246715
63	.015409	.007095	98	.312003	.270999
64	.017324	.007849	99	.332393	.297983
65	.019532	.008686	100	.354650	.327986
66	.022004	.009646	101	.378984	.361361
67	.024699	.010780	102	.405613	.398774
68	.027574	.012135	103	.436780	.439825
69	.030589	.013761	104	.474728	.487067
70	.033727	.015698	105	.521701	.542018
71	.037078	.017955	106	.579939	.606540
72	.040756	.020534	107	.651687	.682566
73	.044876	.023435	108	.739187	.772094
74	.049552	.026658	109	.844683	.877193

* See Appendix 10 for projection factors.

APPENDIX 10

Rates of mortality assumed applicable in 1987 for contributors retired because of disability and projection factors

Age	Rates for 1987		Reduction % p.a.		Age	Rates for 1987.		Reduction % p.a.	
	Males	Females	Males	Females		Males	Females	Males	Females
25	.0071	.0069	0.10	0.50	65	.0447	.0203	1.25	1.25
26	.0079	.0070	0.18	0.55	66	.0481	.0215	1.20	1.25
27	.0086	.0071	0.26	0.60	67	.0520	.0228	1.15	1.25
28	.0093	.0072	0.34	0.65	68	.0561	.0243	1.10	1.25
29	.0101	.0073	0.42	0.70	69	.0604	.0259	1.05	1.25
30	.0108	.0074	0.50	0.75	70	.0648	.0277	1.00	1.05
31	.0115	.0075	0.55	0.85	71	.0692	.0296	1.00	1.06
32	.0123	.0076	0.60	0.95	72	.0736	.0318	1.00	1.07
33	.0130	.0077	0.65	1.05	73	.0779	.0343	1.00	1.08
34	.0137	.0078	0.70	1.15	74	.0822	.0370	1.00	1.09
35	.0145	.0079	0.75	1.25	75	.0866	.0401	1.00	1.00
36	.0152	.0080	0.80	1.35	76	.0913	.0435	0.95	1.00
37	.0159	.0081	0.85	1.45	77	.0964	.0473	0.90	1.00
38	.0166	.0082	0.90	1.55	78	.1020	.0516	0.85	1.00
39	.0173	.0084	0.95	1.65	79	.1081	.0564	0.80	1.00
40	.0179	.0086	1.00	1.75	80	.1149	.0620	0.75	1.00
41	.0186	.0088	1.10	1.75	81	.1225	.0685	0.75	1.00
42	.0193	.0090	1.20	1.75	82	.1308	.0761	0.75	1.00
43	.0200	.0092	1.30	1.75	83	.1401	.0847	0.75	1.00
44	.0207	.0094	1.40	1.75	84	.1501	.0942	0.75	1.00
45	.0214	.0096	1.50	1.75	85	.1607	.1048	0.75	1.00
46	.0222	.0098	1.50	1.70	86	.1718	.1164	0.70	0.95
47	.0229	.0100	1.50	1.65	87	.1834	.1293	0.65	0.90
48	.0235	.0103	1.50	1.60	88	.1952	.1434	0.60	0.85
49	.0242	.0106	1.50	1.55	89	.2073	.1590	0.55	0.80
50	.0248	.0109	1.50	1.50	90	.2197	.1762	0.50	0.75
51	.0254	.0112	1.45	1.50	91	.2323	.1949	0.45	0.70
52	.0261	.0116	1.40	1.50	92	.2473	.2154	0.40	0.65
53	.0267	.0120	1.35	1.50	93	.2690	.2377	0.35	0.60
54	.0272	.0124	1.30	1.50	94	.2921	.2619	0.30	0.55
55	.0279	.0128	1.25	1.50	95	.3168	.2882	0.25	0.50
56	.0287	.0133	1.25	1.45	96	.3431	.3164	0.20	0.40
57	.0295	.0138	1.25	1.40	97	.3710	.3467	0.15	0.30
58	.0305	.0144	1.25	1.35	98	.4004	.3790	0.10	0.20
59	.0318	.0150	1.25	1.30	99	.4312	.4133	0.05	0.10
60	.0333	.0157	1.25	1.25	100	.4634	.4494	-	-
61	.0351	.0165	1.25	1.25	101	.4969	.4872	-	-
62	.0371	.0173	1.25	1.25	102	.5314	.5265	-	-
63	.0394	.0182	1.25	1.25	103	.5668	.5669	-	-
64	.0418	.0192	1.25	1.25	104	.6027	.6080	-	-

APPENDIX 11

Rates of remarriage and mortality assumed for widows

<u>Age at becoming Widow</u>	<u>Remarriage rates by year of widowhood</u>			<u>Attained Age</u>	<u>Mortality Rate for 1987*</u>	<u>Ultimate Remarriage Rate**</u>
	<u>1st yr.</u>	<u>3rd yr.</u>	<u>5th yr.</u>			
25	.045	.105	.053	30	.0005	.050
30	.028	.078	.039	35	.0008	.034
35	.017	.050	.026	40	.0013	.021
40	.010	.027	.018	45	.0020	.013
45	.005	.014	.011	50	.0032	.008
50	.003	.008	.007	55	.0050	.005
55	.002	.006	.005	60	.0076	.003
				65	.0119	
				70	.0188	
				75	.0305	
				80	.0513	
				85	.0855	
				90	.1363	
				95	.1638	

Rates of remarriage and mortality assumed for widowers

<u>Age at becoming Widower</u>	<u>Remarriage rates by year of being a widower</u>			<u>Attained Age</u>	<u>Mortality Rate for 1987*</u>	<u>Ultimate Remarriage Rate**</u>
	<u>1st yr.</u>	<u>3rd yr.</u>	<u>5th yr.</u>			
25	.071	.258	.258	30	.0013	.198
30	.065	.215	.198	35	.0015	.139
35	.047	.130	.116	40	.0022	.094
40	.031	.078	.069	45	.0037	.059
45	.019	.048	.040	50	.0063	.027
50	.013	.028	.022	55	.0103	.014
55	.008	.014	.011	60	.0163	.009
				65	.0256	
				70	.0391	
				75	.0593	
				80	.0894	
				85	.1320	
				90	.1898	
				95	.2223	

* See Appendix 10 for projection factors.

** Remarriage rates are duration-specific for five years.

APPENDIX 12

Proportions of contributors married at death
and
Average ages of spouses corresponding to ages
of contributors at death

Age of Contributor at Death (last birthday)	Males			Females		
	Proportions Married		Average Age of Widow	Proportions Married		Average Age of Widower
	Employed Contributor	Retired Contributor		Employed Contributor	Retired Contributor	
25	.554	.332	24	.541	.318	26
30	.637	.467	29	.628	.393	32
35	.721	.573	33	.637	.479	37
40	.801	.652	38	.619	.560	42
45	.831	.718	43	.617	.603	47
50	.852	.771	48	.612	.591	53
55	.882	.809	53	.554	.511	58
60	.890	.829	57	.453	.370	63
65	.836	.821	62	.347	.245	67
70		.777	66		.164	72
75		.692	70		.111	76
80		.580	75		.074	79
85		.470	79		.044	82
90		.373	84		.017	86
95		.299	88			
100		.240	92			

Proportions of Students Entitled to Allowances
Remaining Eligible for Allowances
(at the end of the year of age)

<u>Age</u>	<u>Proportion</u>
18	0.68
19	0.78
20	0.80
21	0.76
22	0.71
23	0.68
24	0.58

APPENDIX 13

<u>Age</u>	<u>(A)</u> Proportion of contributors whose highest 6-year average salary is below the final 3-year CPP <u>Maximum Pensionable Earnings*</u>		<u>(B)</u> Ratio of 6-year average salary for proportion in (A) to final 3-year CPP maximum*	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
18	1.000	1.000	.705	.665
19	.996	1.000	.735	.700
20	.921	.994	.763	.728
21	.844	.956	.784	.751
22	.767	.916	.802	.771
23	.687	.871	.816	.787
24	.608	.823	.826	.802
25	.533	.773	.836	.808
26	.467	.723	.842	.813
27	.413	.676	.848	.819
28	.369	.637	.850	.824
29	.332	.604	.850	.830
30	.301	.575	.850	.835
31	.273	.549	.850	.835
32	.249	.525	.851	.834
33	.227	.506	.851	.830
34	.208	.493	.851	.828
35	.191	.486	.851	.824
36	.176	.486	.852	.820
37	.165	.491	.852	.816
38	.157	.498	.852	.816
39	.151	.504	.852	.816
40	.147	.512	.852	.816
41	.144	.522	.852	.815
42	.143	.532	.852	.814
43	.145	.541	.852	.814
44	.148	.549	.852	.814
45	.152	.556	.852	.814
50	.185	.585	.848	.812
55	.231	.605	.844	.816
60	.273	.619	.836	.815
65	.300	.625	.806	.792
69	.300	.625	.758	.756

* Average of the "Year's Maximum Pensionable Earnings" as defined in the Canada pension Plan for the year of retirement or death and those for the two preceding years.

APPENDIX 14A

Number of active male contributors and their average salary on December 31, 1986

Attained Age	Completed years of service										All Years of Service	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
to 24	2,861 \$24,270	368 \$25,638										3,229 \$24,426
25-29	8,264 \$28,029	7,522 \$29,013	633 \$28,253									16,419 \$28,488
30-34	7,091 \$30,750	11,991 \$32,103	10,789 \$31,429	559 \$32,245								30,430 \$31,551
35-39	4,644 \$33,152	8,039 \$34,412	14,923 \$36,136	7,681 \$36,393	812 \$34,125							36,099 \$35,378
40-44	2,710 \$35,135	4,223 \$36,101	7,491 \$38,931	7,923 \$40,866	6,020 \$36,659	685 \$36,959						29,052 \$38,176
45-49	1,388 \$35,436	2,329 \$35,074	3,852 \$38,466	4,071 \$42,826	5,148 \$39,880	4,358 \$37,340	963 \$36,439					22,109 \$38,740
50-54	891 \$34,342	1,581 \$33,807	2,634 \$35,849	2,578 \$39,974	3,160 \$39,568	3,864 \$38,888	4,887 \$37,471	745 \$36,256				20,340 \$37,707
55-59	609 \$34,993	1,194 \$32,700	2,209 \$33,973	2,045 \$37,926	2,505 \$37,165	2,550 \$37,303	3,414 \$37,595	2,270 \$37,378	162 \$36,412			17,006 \$36,578
60-64	344 \$36,071	758 \$32,087	1,511 \$32,891	1,402 \$35,399	1,616 \$35,541	1,501 \$35,211	1,663 \$37,046	1,370 \$39,159	598 \$37,711	53 \$37,092		10,816 \$35,699
65 +	39 \$33,942	108 \$32,992	209 \$35,071	194 \$36,037	203 \$37,103	163 \$34,153	144 \$36,199	144 \$39,028	97 \$39,419	40 \$34,949		1,341 \$36,064
All Ages	28,841 \$30,620	38,104 \$32,634	44,267 \$35,310	26,429 \$39,049	19,475 \$37,854	13,148 \$37,485	11,098 \$37,340	4,529 \$37,785	857 \$37,659	93 \$36,170		186,841 \$35,179

Average Age = 42.1

Average Service = 14.1 years

APPENDIX 148

Number of active female contributors and their average salary on December 31, 1986

Attained Age	Completed years of service										All Years of Service	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
to 24	4,797 \$22,273	981 \$23,023										5,778 \$22,401
25-29	8,842 \$25,289	10,516 \$25,553	1,297 \$25,873									20,655 \$25,460
30-34	6,549 \$26,876	9,673 \$28,471	8,624 \$28,187	785 \$28,655								25,631 \$27,974
35-39	4,927 \$26,295	6,302 \$28,506	6,497 \$31,937	3,627 \$30,873	541 \$30,167							21,894 \$29,460
40-44	3,317 \$26,013	4,531 \$27,476	3,589 \$30,991	1,948 \$33,697	1,349 \$31,175	279 \$31,101						15,013 \$29,200
45-49	1,912 \$25,202	3,093 \$26,186	2,657 \$28,918	1,290 \$31,303	735 \$32,341	762 \$30,955	205 \$30,608					10,654 \$28,161
50-54	1,069 \$24,621	2,153 \$25,418	2,285 \$27,047	1,261 \$29,008	711 \$30,404	546 \$29,715	610 \$29,700	108 \$30,245				8,743 \$27,296
55-59	527 \$24,608	1,355 \$24,937	1,833 \$26,580	1,177 \$27,942	763 \$27,939	490 \$29,794	385 \$30,529	176 \$31,012	26 \$30,329			6,732 \$27,077
60-64	230 \$24,844	662 \$24,734	1,133 \$25,805	791 \$27,114	585 \$27,749	416 \$28,555	287 \$28,336	123 \$29,563	66 \$29,154	6 \$29,956		4,299 \$26,694
65 +	18 \$25,357	73 \$25,639	110 \$27,101	97 \$28,025	96 \$26,345	58 \$29,658	25 \$28,001	21 \$27,259	6 \$26,825	5 \$27,668		509 \$27,208
All Ages	32,188 \$25,349	39,339 \$26,910	28,025 \$29,079	10,976 \$30,442	4,780 \$30,093	2,551 \$30,062	1,512 \$29,747	428 \$30,218	98 \$29,323	11 \$28,916		119,908 \$27,565

Average Age = 38.2

Average Service = 9.1 years

APPENDIX 15A

Retired contributors as at December 31, 1986
Other than disability pensions

Immediate Pensions

Age	Number of Pensioners			Annual Pension *	
	Male	Female	Total	PSSA	SRBA**
				\$	\$
35-39	6	-	6	47,856	3,574
40-44	1	-	1	4,214	158
45-49	3	1	4	49,087	6,437
50-54	782	379	1,161	12,193,901	807,644
55-59	4,170	11,471	55,641	82,956,601	7,205,586
60-64	13,714	4,787	18,501	207,928,189	52,877,815
65-69	23,315	7,421	30,736	245,354,055	105,811,543
70-74	16,096	5,832	21,928	114,947,628	112,883,043
75-79	8,400	3,881	12,281	43,455,930	72,607,413
80-84	3,950	2,147	6,097	15,608,456	33,958,385
85-89	1,614	1,112	2,726	5,675,705	14,076,870
90-94	733	351	1,084	1,962,635	5,452,326
95-99	132	64	196	306,138	952,318
100-104	7	11	18	18,030	61,435
105-109	0	1	1	1,210	4,230
TOTAL	72,923	27,458	100,381	730,509,635	406,708,777

Deferred Pensions

Age	Number of Pensioners			Annual Pension *	
	Male	Female	Total	PSSA	SRBA**
				\$	\$
25-29	1	7	8	15,166	1,585
30-34	20	30	50	141,715	25,784
35-39	161	124	285	984,697	339,845
40-44	347	150	497	2,446,021	921,743
45-49	531	259	790	5,185,942	1,600,942
50-54	644	288	932	5,179,744	2,556,878
55-59	715	366	1,081	4,254,505	3,234,046
60-64	96	62	158	458,280	445,433
TOTAL	2,515	1,286	3,801	18,666,070	9,126,256

* Amounts of pension at age 65 and over reflect the C/QPP integration adjustments.

** Accumulated indexing includes increase effective January 1, 1987

APPENDIX 15B

Retired contributors as at December 31, 1986

Disability Pensions

<u>Age</u>	<u>Number of Pensioners</u>			<u>Annual Pension *</u>	
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>PSSA</u>	<u>SRBA**</u>
				\$	\$
25-29	2	5	7	15,505	447
30-34	20	27	47	111,271	11,578
35-39	52	52	104	327,250	39,554
40-44	107	55	162	564,263	102,515
45-49	223	94	317	1,619,798	321,032
50-54	495	264	759	4,911,097	952,098
55-59	1,223	508	1,731	10,483,805	2,973,114
60-64	1,932	722	2,654	12,108,553	8,025,163
65-69	1,757	671	2,428	7,622,527	9,705,564
70-74	812	464	1,276	2,925,078	5,606,220
75-79	245	246	491	990,222	2,352,971
80-84	81	79	160	276,395	753,952
85-89	35	53	88	107,967	352,607
90-94	20	22	42	55,307	191,371
95-99	6	3	9	11,536	40,331
100-104	3	-	3	4,800	16,781
TOTAL	7,013	3,265	10,278	42,135,374	31,445,298

* Reflects reductions related to C/QPP integration where C/QPP disability pension is payable or at age 65 and over.

** Accumulated indexing includes increase effective January 1, 1987.

APPENDIX 15C

Surviving spouses eligible for allowances as at December 31, 1986

Age	Widows			Widowers		
	Number	Annual Allowances		Number	Annual Allowances	
		PSSA \$	SRBA* \$		PSSA \$	SRBA* \$
20-24	1	1,185	121	1	1,332	59
25-29	24	39,015	4,098	3	3,598	82
30-34	68	126,190	27,329	12	24,198	2,366
35-39	190	512,440	133,570	27	46,644	9,511
40-44	308	952,211	315,067	29	54,653	11,550
45-49	555	1,788,156	673,017	27	58,035	17,050
50-54	1,067	3,468,874	1,536,827	52	151,825	39,499
55-59	2,458	7,962,257	4,613,002	82	227,523	69,315
60-64	4,953	13,796,284	11,532,458	142	365,999	120,649
65-69	6,601	15,827,532	18,233,367	149	345,092	149,632
70-74	6,501	12,066,575	19,023,508	116	231,988	140,557
75-79	5,559	8,178,549	16,579,705	70	116,956	94,219
80-84	4,367	5,020,982	12,272,442	27	37,999	30,094
85-89	3,019	3,029,972	8,373,243	3	9,249	7,386
90-94	1,445	1,356,604	4,071,855	1	248	580
95-99	293	252,404	809,701	-	-	-
100-104	38	28,769	97,587	-	-	-
105-109	4	3,161	11,052	-	-	-
TOTAL	37,451	74,411,160	98,307,949	741	1,675,339	692,549

* Accumulated indexing includes increases effective January 1, 1987.