Carleton University Retirement Plan

Application for Stage 1 Temporary Solvency Funding Relief

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Executive Summary

Carleton University Retirement Plan (the "Plan") is a hybrid pension plan sponsored by Carleton University (the "University"). Analysis of the Carleton University Retirement Plan shows that Carleton University faces material increased contributions to the Plan as a result of the financial market crisis of 2008-2009 and solvency regulations imposed by the provincial government. An actuarial valuation must be filed effective as at July 1, 2010, and the financial position of the Plan at that date shows that the Plan will be in a deficit position and, as a result, special contributions by the University to the Plan will be required. In addition, University contributions to the Minimum Guarantee fund in respect of future service cost will also increase as a result of more members projected to retire under the defined benefit provision of the Plan due to the significant investment losses on the money purchase defined contribution component of the Plan.

Under current funding regulations, total University contributions over the next four years (July 1, 2010 to June 30, 2014) are projected to be on average about \$35.5 million per annum (18.6% of payroll) as compared to the University contributions from July 1, 2009 to June 30, 2010 of \$11.5 million (7.4% of payroll).

The deficits and additional contribution requirements put pressure on the University's operating budget and will put pressure on the financial stability of the Plan. Recognizing the importance of a financially-stable Plan for all current and future Plan members, the Pension Committee researched a number of possibilities for managing the situation, including changes to the benefit design, funding policy, and investment policy of the Plan. The result of this work is the following amendments which have been approved by the University's Board of Governors:

• Effective July 1, 2011, increase members' contributions by up to 2% of pensionable earnings to the Minimum Guarantee fund until the earlier of 10 years or until such time as special payments to the Plan cease; and

• Effective July 1, 2012, make the early retirement reduction factors used in calculating Minimum Guarantee pensions equal to the actuarial equivalent factors currently being used to calculate Money Purchase pensions.

In total, these amendments are expected to reduce the present value of future university costs and of aggregate benefits by more than the prescribed savings target as described in the paper released on February 10, 2011 by the Ministry of Finance with details of the temporary solvency funding relief for certain pension plans in the broader public sector. Under the proposed temporary solvency funding relief, total University contributions over the next four years (July 1, 2010 to June 30, 2014) are projected to be on average about \$18.5 million per annum (10.3% of payroll) inclusive of the above amendments.

As detailed in this application for Stage 1 relief under the proposed temporary solvency funding relief measures for certain pension plans in the broader public sector, the Carleton University Retirement Plan should meet the eligibility criteria to enter Stage 1 as:

- the Plan provides defined benefits;
- the Plan is not a multi-employer pension plan;
- the Plan is not a jointly-sponsored plan;
- the Plan is sponsored by Carleton University which is a broader public sector employer;
- Plan members continue to accrue defined benefits under the Plan;
- the Plan's Stage 1 valuation report will be as of July 1, 2010 and will indicate a ratio of assets to liabilities on both going-concern and solvency bases of less than 0.9;
- this application contains a funding plan indicating steps taken to make the Plan more sustainable in the long term.

Governance of the Plan

The Carleton University Retirement Plan ("the Plan") became effective July 1, 1958. A history of the Plan is included in Appendix E. The Plan is a single-employer hybrid pension plan with a defined contribution money purchase component and a defined benefit minimum guarantee component. The Plan is sponsored by Carleton University who is responsible for all matters relating to the administration of the Plan.

Carleton University established a Pension Committee for the purpose of administration of the Plan. The Pension Committee is required to be comprised of the Director of Pension Fund Management, the Director of Human Resources or designate and members appointed or elected by the various university associations (academic and non-academic), collective bargaining agents and Board of Governors. All members of the Pension Committee are voting members.

The current composition of the Pension Committee is as follows:

- Betsy Springer (Chair), Pension Fund Management
- Martha Attridge Bufton, (CUPE 2424), Library
- Terry Doelle (CUPE 910, University Safety, CUPE 3778), Facilities Management and Planning
- Ed Kane (Union-exempt staff), University Services
- Bill Lawson (CUASA), Retired
- Shirley Mills (CUASA), Mathematics and Statistics
- Duncan Watt (Secretary), Vice President (Finance and Administration)
- Bill Wolfenden, Board of Governors

The Pension Committee, per Section 15.03 of the Plan document (included in Appendix E):

"...shall determine all questions arising in the administration of the Plan, including the interpretation and application of the provisions of the Plan together with eligibility, service, earnings and retirement dates of Members for purposes of the Plan."

And

"...shall also be responsible for reviewing the performance of the Trust Fund, which includes meeting with the Investment Counsel periodically, and for the preparation of recommendations concerning any proposed changes in the Plan, including proposed changes to the plan design, as well as concerning any proposed changes in the appointment of the Trustee and/or Investment Counsel for the purposes of the Plan."

Therefore, the Pension Committee works to ensure that the promised benefits can be delivered to Plan members during retirement. The Pension Committee does not make University human resources and/or operating decisions. Recommendations of the Pension Committee are subject to the approval of the Board of Governors upon the recommendations of the Audit and Finance Committee of the Board.

Savings Target

The prescribed savings target is defined as 1 minus the minimum of A and B where:

- A is the average ratio of the market value of plan assets to going concern liabilities, up to 1.00, determined in the last three valuations filed and in the Stage 1 valuation.
- B is the average ratio of solvency assets to solvency liabilities up to 1.00, determined in the last three valuations filed and in the Stage 1 valuation.

For Carleton University Retirement Plan, Stage 1 valuation is as at July 1, 2010 and the last three valuations filed were as at July 1, 2004, July 1, 2006 and July 1, 2007.

The Stage 1 valuation as at July 1, 2010 (required valuation) indicates that both the ratio of the market value of the plan assets to the going concern liabilities and the ratio of the solvency assets to the solvency liabilities are less than 0.9 (85% and 80% respectively). Appendix A provides a preliminary summary of the financial position of the Plan as at July 1, 2010 as well as the assumptions used. A complete actuarial valuation report as at July 1, 2010 will be filed by the new filing extension deadline of May 31, 2011.

The savings target for the Carleton University Retirement Plan is 6.1%. This is based on combined assets and liabilities for money purchase and defined benefit components since the plan is a hybrid plan. The funded ratios are calculated without any smoothing and are capped at 1.00 at each valuation date. Details of the calculation are shown in the table below.

	Market Value of	Going-Concern			Solvency	
Valuation Date	Assets	Liabilities	Ratio (A)	Solvency Assets	Liabilities	Ratio (B)
1-Jul-04	635,135,000	643,300,000	98.7%	634,660,000	644,995,000	98.4%
1-Jul-06	712,834,000	720,794,000	98.9%	712,334,000	737,003,000	96.7%
1-Jul-07	824,578,000	825,467,000	99.9%	824,078,000	809,469,000	100.0%
1-Jul-10	688,000,000	806,000,000	85.4%	688,000,000	856,000,000	80.4%
Average (of last 4 valuations)			95.7%			93.9%

Savings target = 1 - Minimum (A, B) = 1 - 0.939 = 0.061 or 6.1%

The present value of aggregate benefits as at July 1, 2013 before any plan changes, for active members only in respect of past and future service, is estimated to be \$610 million. This was calculated using the aggregate cost method at the expected Stage 1 progress valuation date (July 1, 2013) based on same going concern actuarial assumptions used for Stage 1 valuation (July 1, 2010).

Therefore, the required reduction¹ in present value of future university costs or in accrued liability from changes in contribution rates and/or changes in benefit provisions is estimated to be \$37 million (6.1% of \$610 million as at July 1, 2013).

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¹ As described in the paper released on February 10, 2011 by the Ministry of Finance with details of the temporary solvency funding relief for certain pension plans in the broader public sector.

Funding Plan

Analysis of the Plan shows that Carleton University faces material increased contributions to the Plan as a result of the financial market crisis of 2008-2009 and solvency regulations imposed by the provincial government. An actuarial valuation must be filed effective as at July 1, 2010, and the financial position of the Plan at that date shows that the Plan will be in a deficit position. As a result, special contributions by the University to the Plan will be required. These are expected to be about \$18 million annually commencing July 1, 2011 and projected to be over \$40 million in 2013/2014 under current funding regulations.

The deficits and special contributions put pressure on the financial stability of the Plan. Recognizing the importance of a financially-stable Plan for all current and future Plan members, the Pension Committee researched a number of possibilities for managing the situation, including changes to the benefit design, funding policy, and investment policy of the Plan.

The following is a brief outline of the possible changes that the Pension Committee has analyzed over a number of months from 2009 to 2010.

- Additional contributions
 - Additional Money Purchase contributions for university and members
 - Additional Money Purchase contributions for members only
 - Member contributions towards the deficit or towards the Minimum Guarantee
- Close/freeze defined benefit component
 - Closing the defined benefit Minimum Guarantee
 - Accrued benefits for each active employee in respect of the Minimum Guarantee are frozen (i.e. no further service and contributions; final average earnings continues to increase) and future service would be pure Money Purchase with no minimum test at retirement (future contributions are tracked separately)

- Freeze the Minimum Guarantee and expand the Money Purchase pension
 - Same as above with respect to the Minimum Guarantee benefit with additional Money Purchase contributions by the university
- Changes in Minimum Guarantee benefit
 - Change in early retirement benefits
 - Cap on earnings used to determine the Minimum Guarantee pension
 - Cap on service used to determine the Minimum Guarantee pension
 - Cap on earnings used to determine the Minimum Guarantee pension and Money Purchase contributions
 - Change in Minimum Guarantee benefit

The review of the various plan design changes included analysis of the estimated impact on both members and university.

The result of the above analysis and review resulted in the Pension Committee recommending the following three amendments which have been approved by the Board of Governors and are in the process of being filed with Financial Services Commission of Ontario and with Canada Revenue Agency.

Amendment 1 – Increase Member Contribution Rates

An amendment to increase members' contributions, effective with the first pay period following July 1, 2011, by 1.7% of pensionable earnings up to the Year's Maximum Pensionable Earnings (YMPE) and 2.4% above the YMPE, capped at 2% of pensionable earnings. These additional contributions will continue until the earlier of 10 years or until such time as special payments to the Plan cease. The contributions will be to the Minimum Guarantee Fund. Future excess surpluses (after reserves are restored) will be shared between the Members and the University pro-rata based on the additional contributions to the Minimum Guarantee Fund.

The present value of such members' contributions to the Minimum Guarantee fund is estimated to be \$25 million as at July 1, 2013.

Amendment 2 – Calculation of Pensions at Early Retirement

Effective for retirements after July 1, 2012, an amendment to make the early retirement reduction factors used in calculating Minimum Guarantee pensions equal to the actuarial equivalent factors currently being used to calculate Money Purchase pensions for those members not of eligible retirement age at the effective date of the change. (Eligible retirement age is the earlier of age 55 or 10 years prior to a Member's normal retirement date.)

The present value of aggregate benefits is estimated to decrease by \$36 million as at July 1, 2013 due to the change in early retirement reduction factors.

Amendment 3 - Administration Fee Charged to Deferred Members

Effective July 1, 2011, an amendment to charge an administration fee for current and future deferred members, who are not of eligible retirement age at the date of termination, from the Money Purchase Component Account balances.

Therefore, in total, these amendments are expected to reduce the present value of future university costs and of aggregate benefits by \$61 million (or 10%) which is in excess of the savings target of \$37 million (or 6.1%).

In addition to the above plan changes that are expected to be effective within 2 years of the Stage 1 valuation date of July 1, 2010, the plan was amended effective July 1, 2003 as follows.

- Bridge benefits have been removed from the Plan for members who had not attained age 55 (or who were not within 10 years of their normal retirement date) with 10 years of service as at July 1, 2003.
- For service and contributions on and after July 1, 2003, the non-reduction guarantee for pensions in payment no longer applies.
- Effective July 1, 2003, the Money Purchase contribution formula was changed to remove non-reduction contributions and to add 0.25% of pensionable earnings to the University contributions.

The removal of the bridge benefit is estimated to have reduced the present value of aggregate benefits as at July 1, 2013 by approximately \$7 million. This was calculated using the aggregate cost method at the expected Stage 1 progress valuation date (July 1, 2013) based on same going concern actuarial assumptions used for Stage 1 valuation (July 1, 2010). This reduction does not include the savings from any members who retired since July 1, 2003 without a bridge benefit who would have otherwise been entitled to that benefit.

The removal of the non-reduction guarantee for pensions in respect of service on and after July 1, 2003 will result in greater reduction in both future university costs and pension plan's risk as more of the accrued service for plan members is after July 1, 2003.

Furthermore, Carleton University has reduced the pension plan's risk relating to post-retirement mortality by requiring Money Purchase account balances to be converted to Money Purchase pension using GAR-1994 generational mortality table instead of GAM-1994 static mortality table. This change in mortality table was phased in over 4 years from 2007 to 2010.

Communication with Members and Bargaining Agents

A presentation was made in April 2010 to the executives of the bargaining agents representing members in the Carleton University Retirement Plan to provide an update on the financial position of the Plan and to explain to the executives of Carleton University's employee groups certain changes to the Plan recommended by the Pension Committee. A copy of the presentation is enclosed in Appendix C.

A letter was sent in July 2010 and in January 2011 to all current and future members of the Carleton University Retirement Plan to advise them of amendments to the Plan that have been recommended by the Pension Committee and approved by the Board of Governors. A copy is enclosed in Appendix B. This letter will also be provided to any future members of the Plan.

Nine information sessions were held from November 2010 to January 2011 to members of the Carleton University Retirement Plan to provide an update on the financial position of the Plan and to explain changes to the Plan announced in the July 5, 2010 memo to current members of the Plan. A copy of the presentation is enclosed in Appendix D.

Additional information sessions will be held in Q2-Q3 2011 to members of the Carleton University Retirement Plan to review the process that needs to be followed to obtain temporary solvency funding relief and to go over the details of the savings target and the funding plan included in this application for Stage 1 relief.

A letter will also be sent to all retired members of the Plan with a summary of the funding plan contained in this application.

Collective Bargaining Agents

The following table identifies the collective bargaining agents representing members of the pension plan:

Collective Bargaining Agent	Number of Members Represented	Date Collective Bargaining Agreements Expire
	(as at March 2011)	
The Canadian Union of Public Employees Local 910 (CUPE 910)	57	December 31, 2014
The Canadian Union of Public Employees Local 2424 (CUPE 2424)	750	June 30, 2014
The Canadian Union of Public Employees local 3778 (CUPE 3778)	6	March 30, 2011
Carleton University Academic Staff Association (CUASA)	845	April 30, 2012

In addition, there are 301 members not represented by a collective bargaining agent.

Appendix A

Financial Position as at July 1, 2010Summary of Financial Position (in \$millions)

	July 1, 2010 *	July 1, 2007
Going-Concern Financial Position		•
Market value of assets	\$688	\$824.6
Actuarial liability (including reserves)	\$806	\$825.5
Funding excess (unfunded liability)	(\$118)	\$(0.9)
Solvency Financial Position		
Solvency assets	\$688	\$824.1
Solvency liability	\$856	\$809.5
Solvency excess (deficiency)	(\$169)	\$14.6
Transfer ratio	80%	98%

^{*} Based on preliminary results of actuarial valuation as at July 1, 2010 (report to be filed by May 31, 2011)

Going-Concern Assumptions

	July 1, 2010	July 1, 2007
Discount rate	6.3% per annum	6.5% per annum
Salary Increases	5% per annum from July 1, 2010	5% per annum from July 1, 2007
Increases in the YMPE	3.5% per annum, from \$47,200 (2010)	3.5% per annum, from \$43,700 (2007)
Increases in the Income Tax Act Maximum Pension	3.5% per annum starting in 2010	3.5% per annum starting in 2010 (\$2,222 per year of service for 2007; \$2,333 for 2008; \$2,444 for 2009)
Increases in the Income Tax Act Maximum MP Contributions	3.5% per annum starting in 2010	3.5% per annum starting in 2010 (\$20,000 for 2007; \$21,000 for 2008; \$22,000 for 2009)
Future Pension Increases for Current Retirees	As per plan terms based on historical fund return prior to valuation date and based on above discount rate following valuation date	As per plan terms based on historical fund return prior to valuation date and based on above discount rate following valuation date

Mortality Table	1994 Group Annuity Reserving Mortality Table (GAR 1994 Generational) for all members		 Actives and Deferred Members: 1994 Group Annuity Reserving Mortality Table (GAR 1994 Generational) Pensioners: 1994 Uninsured Pensioners Mortality Table with 21 years of projected increases in longevity 		
Termination Rates	Same as last valuation, sample rates:		Sample rates:		
		ortion of members assumed to inate employment each year	Age	Proportion of members assumed to terminate employment each year	
	20	.360	20	.360	
	25	.200	25	.200	
	30	.112	30	.112	
	35	.063	35	.063	
	39	.039	39	.039	
	40+	.000	40+	.000	
Retirement Age	Age 63, or if later	63, or 1 year after the date of valuation er		Age 63, or 1 year after the date of valuation if later	
Reserves	Non-reduc only	Non-reduction reserve for active members only		Non-reduction reserve for all members	

Solvency Assumptions

	July 1, 2010	July 1, 2007	
Mortality Table	GAR 1994 for transfers	GAR 1994 for transfers	
	UP 1994 @ 2020 for annuity purchases	UP 1994 @ 2015 for annuity purchases	
Interest Rates (spot rates)	3.7% for 10 years and 5.1%	5.0% for all years for transfers	
	thereafter for transfers	5.0% for all years for annuity	
	4.29% for all years for annuity purchases	purchases	
Future Pension Increases	As per plan terms based on historical fund return prior to valuation date and based on above interest rates following valuation date	As per plan terms based on historical fund return prior to valuation date and based on above interest rates following valuation date	
Increases in Salary, YMPE, and Income Tax Act Maximum Pension	not applicable	not applicable	
Termination Rates	not applicable	not applicable	
Retirement age	Age 65 for members with <55 points; age 55 for members with 55+ points	Age 65 for members with <55 points; age 55 for members with 55+ points	
Windup Expenses	\$500,000	\$500,000	

Appendix B

Letter to Members Regarding Amendments to the Retirement Plan

Enclosed is a copy of a letter that was sent in July 2010 and in January 2011 to all current members of the Carleton University Retirement Plan to advise them of amendments to the Plan that have been recommended by the Pension Committee and approved by the Board of Governors.

Appendix C

Presentation to Executives of Union Groups

Enclosed is a copy of a presentation that was made in April 2010 to the executives of the bargaining agents representing members in the Carleton University Retirement Plan to provide an update on the financial position of the Plan and to explain to the executives of Carleton University's employee groups certain changes to the Plan recommended by the Pension Committee.

Appendix D

Presentation to Members

Enclosed is a copy of a presentation that was made in nine information sessions which were held from November 2010 to January 2011 to members of the Carleton University Retirement Plan to provide an update on the financial position of the Plan and to explain changes to the Plan announced in the July 5, 2010 memo to current members of the Plan.

Appendix E

History of the Plan, Plan Document and Amendments

History of the Plan

A brief history of the Plan is given below.

Effective April 1, 1948, the University established the Carleton University Employee Retirement Annuity Plan which was basically a money purchase plan. Both the Members' and the University's contributions were applied to purchase Canadian Government Annuities until the maximum annuity of \$1,200 per Member was reached. Once this limit was reached, any further contributions were invested in a Trust Fund.

Effective July 1, 1958, the Retirement Plan was established. Each Member was allowed to elect the proportion of his or her and the University's contributions on his or her behalf to be invested in equities, fixed income securities, and Canadian Government Annuities. On retirement, the equity fund held to the Member's credit was to be used to purchase a variable annuity, whenever possible, and the fixed income fund was used to purchase a fixed annuity.

The Plan was further amended effective January 1, 1966. A provision was introduced to permit Members over age 45, whose projected pensions at retirement were less than 60% of their current salary, to make additional contributions to the Plan which would be partially matched by the University.

The amendment and restatement of the Plan as at July 1, 1973 applied retroactively to April 1, 1948. In the restatement of the Plan, the money-purchase design was retained, but in addition, a provision was introduced which guaranteed each Member a minimum level of retirement benefit related to his or her final average earnings and service to retirement. The accumulated money purchase funds of the Members were used to provide variable annuities, which are adjusted annually relative to the experience of the Trust Fund.

The Members were no longer permitted to direct the proportion of their contributions to be invested in fixed income or equity securities and the University no longer contributed in respect of Members' additional contributions.

Under the revised Plan, a Money Purchase Component Account and an Additional Voluntary Contributions Account were established for each Member. The market value as at June 30, 1973 of the units that had been purchased by each Member's required contributions was credited to his or her Money Purchase Component Account. The market value of the units as at June 30, 1973 held to each Member's credit and purchased from Additional Contributions was credited to his or her Additional Voluntary Contribution Account.

Effective July 1, 1981 the minimum pension level was improved. Pension adjustments after retirement were to be provided on either the money purchase or minimum guarantee pensions based upon the investment earnings of the Trust Fund. Pensions for those retired between July 1, 1973 and June 30, 1981 were adjusted to reflect these improvements.

Effective July 1, 1983 unisex factors were adopted for the Plan and a Portability provision was introduced.

Effective July 1, 1988, the salary averaging method was changed from final average six to final average five years.

Effective July 1, 1992, the early retirement reductions applicable to minimum guaranteed pensions were changed from an actuarial equivalent to ¼% per month prior to normal retirement age. In addition, a bridge benefit of \$3,142 per annum was introduced, payable from early retirement age to age 65, pro-rated for those with less than 35 years of service at retirement.

Several changes to the contribution and benefit levels were implemented effective July 1, 1993:

- The bridge benefit increased to \$4,547 per annum for retirements on or after July 1, 1993, with further scheduled increase at July 1, 1994 and July 1, 1995, to \$4,630 and \$4,653 at those respective dates;
- The normal form of pension was changed from a life annuity with no guarantee period to a life annuity guaranteed for 5 years;
- The Members' contribution requirement was reduced to 1.3% of earnings less 1.8% of Canada Pension Plan contributory earnings (but in no event would the required amount become negative), effective until June 30, 1994. At the same time, the University's Money Purchase contribution requirements were reduced to 3.7% of earnings less 1.8% of CPP contributory earnings over the same period. In order for Members' accounts to be credited with the same level of total contributions, were the

noted adjustments not in effect during the period, additional allocations of 7% of earnings were made to Members' Money Purchase Accounts from the Minimum Guarantee Fund;

Finally, an additional 1% of earnings was credited by the University to each Member's Money Purchase Component Account from the Minimum Guarantee Fund, from July 1, 1993 to June 30, 1994.

Effective January 1, 1996, further benefit improvements and contribution reductions were implemented, such that:

- The bridge benefit payable would be pro-rated for those with less than 20 years of service at retirement, and the amount of bridge benefit would increase to \$4,737 from July 1, 1996;
- For the period April 1, 1994 to March 31, 1997, the Members' contribution requirement was changed to 3.5% of earnings less 1.8% of CPP contributory earnings. Once again the University's Money Purchase contribution requirements were reduced, to 5.9% of earnings less 1.8% of CPP contributory earnings over the same period. In order for Members' accounts to be credited with the same level of total contributions, were the noted adjustments not in effect during the period, additional allocations of 2.6% of earnings were made to Members' Money Purchase Accounts from the Minimum Guarantee Fund;
- The additional contribution allocations were extended, as follows: an additional 1% of earnings from July 1, 1994 to June 30, 1995, an additional 2% of earnings from July 1, 1995 to June 30, 1996, all allocated from the Minimum Guarantee Fund.

Effective from July 1, 1996, the plan was amended as follows:

- Effective July 1, 1996 the change in Member's contribution requirements to 3.5% of earnings less 1.8% of CPP contributory earnings was extended to cover the period from April 1, 1997 to September 30, 1999. The University's Money Purchase contribution requirements were reduced to 4.81% of earnings less 1.8% of CPP contributory earnings, retroactively to July 1, 1996 and extending to September 30, 1999. In addition, the University allocated 3.69% of earnings to Members' Money Purchase Accounts from the Minimum Guarantee Fund;
- An additional 1% of earnings was credited by the University to each Member's Money Purchase Account from the Minimum Guarantee Fund, from July 1, 1996 to June 30, 1997. From July 1, 1997 to June 30, 1998, another 1% allocation was made, subject to the investments of the Trust Fund earning an average annualized rate of return of 6.5% over the period July 1, 1996 to December 31, 1997.

Effective July 1, 1999, the plan was amended as follows:

- The amount of the bridge benefit was increased to \$4,929.84 per annum.
- Effective for the period from October 1, 1999 until September 30, 2000, the Members' contribution requirement was changed to 5.0% of earnings less 1.8% of CPP contributory earnings. The University's Money Purchase contribution requirement was adjusted to 6.07% of earnings less 1.8% of CPP contributory earnings over the same period. In order for Members' accounts to be credited with the same level of total contributions, were the noted adjustments not in effect during the period, additional allocations of 0.93% of earnings were made to Members' Money Purchase Accounts from the Minimum Guarantee Fund.

Effective July 1, 2000, the amount of bridge benefit was increased to \$5,039.04 per annum.

Effective from January 1, 2001, the contribution and benefit formulas were changed as follows:

- The Members' contribution requirement as well as the University's Money Purchase matching contribution requirement were changed to 4.37% of earnings up to the YMPE plus 6% of earnings above the YMPE;
- The Minimum Guarantee pension benefits were changed to 1.29% of final average earnings up to the final average YMPE plus 2.0% of final average earnings above the final average YMPE multiplied by years of credited service.

Effective from July 1, 2001, the plan was amended as follows:

- The amount of bridge benefit was increased to \$5,176.32 per annum;
- The calculation of post-retirement pension increases for Members retiring on and after July 1, 2001 was changed so that for the first three annual pension increases following retirement, the annual increases take into account investment returns on the Fund only in the post-retirement years.

Effective from July 1, 2003, the plan was amended as follows:

- Bridge benefits have been removed from the Plan for members who had not attained age 55 (or who were not within 10 years of their normal retirement date) with 10 years of service as at July 1, 2003.
- For service and contributions on and after July 1, 2003, the non-reduction guarantee for pensions in payment no longer applies.
- Effective July 1, 2003, the Money Purchase contribution formula was changed to remove non-reduction contributions and to add 0.25% of pensionable earnings to the University contributions.

Plan Document

Enclosed is the plan document for the Carleton University Retirement Plan effective July 1, 2003.

Amendments

The following amendments since December 31, 1999 are also enclosed:

- Amendment to the Plan effective January 1, 2000 which provided for an increase in the amount of the bridge benefit.
- Amendment to the Plan effective January 1, 2001 which:
 - clarified the definition of credited service;
 - changed the contribution formula for both members and the University Money Purchase matching contributions as well as the Minimum Guarantee pension benefit formula; and
 - permitted members to withdraw their additional voluntary contributions from the Plan during employment.
- Amendment to the Plan effective June 30, 2001 which changed the calculation of post-retirement pension increases so that for the first three annual pension increases following retirement, the annual increases take into account investment returns on the Fund only in the post-retirement years.
- Amendment to the Plan effective January 1, 2001 which provided for an increase in the amount of the bridge benefit.
- Amendment to the 1998 Plan Text effective July 1, 2001 and to the 1992 Plan Text effective January 1, 1992 to implement compliance requirements of the Canada Revenue Agency and to amend the formula for calculating annual increases consequential to the same change included in the above amendment effective June 30, 2011.
- A resolution amending the Plan effective July 1, 2003 to:
 - remove the early retirement supplement (bridge benefit);
 - remove the non-reduction feature from the Money Purchase provision and Minimum Guarantee provision of the Plan in respect of service on and after July 1, 2003; and
 - maintain a bookkeeping account for University contribution holidays.
- Amendment to the Plan effective January 1, 2010 which updated the governance arrangements of the Plan.
- Amendment to the Plan effective July 1, 2003, January 1, 2010 and July 1, 2010 which updated the governance arrangements of the Plan.

- Amendment to the Plan effective July 1, 2011 to implement an increase in member contribution rates and to provide for a related shared contribution holiday provision.
- Amendment to the Plan effective July 1, 2012 to implement changes with respect to the calculation of pensions at early retirement.
- Amendment to the Plan effective July 1, 2011 to confirm the policy regarding the charging of an administration fee.

Appendix F

Actuarial Valuation Reports

Enclosed are actuarial valuation reports as of the following dates that were filed with Financial Services Commission of Ontario and with Canada Revenue Agency since December 31, 1999:

- July 1, 2001,
- July 1, 2004,
- July 1, 2006, and
- July 1, 2007.

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Mercer (Canada) Limited 161 Bay Street P.O. Box 501 Toronto, Ontario M5J 2S5 +1 416 868 2000