ISO 9001
ACTUARIAL VALUATIONS
of pension plans

UNIVERSITY OF GUELPH

PENSION PLAN FOR NON-PROFESSIONAL STAFF OF UNIVERSITY OF GUELPH

Actuarial Valuation as at August 1, 2010

Registration Number 0324632

April 2011

This document is being filed with the Financial Services Commission of Ontario and the Canada Revenue Agency as required by statute and contains confidential financial information regarding the plan, the plan sponsor, and the plan members. Therefore, pursuant to subsection 20(1)(b) of the *Access to Information Act (Canada)*, or a corresponding provision under any comparable federal or provincial legislation, a government institution shall not disclose this document to any party as a result of a request under the *Access to Information Act (Canada)* or other applicable legislation.

TOWERS WATSON

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Introduction

This report with respect to the Pension Plan for Non-Professional Staff of University of Guelph has been prepared for the University of Guelph, the plan administrator, and presents the results of the actuarial valuation of the plan as at August 1, 2010.

The principal purposes of the report are:

- to present information on the financial position of the plan on a going concern basis;
- to compare actual and expected experience under the plan on a going concern basis;
- to present information on the financial position of the plan on a solvency basis;
- to review the hypothetical windup status of the plan;
- to provide the basis for employer contributions; and
- to provide the information and the actuarial opinion required by the *Pension Benefits Act (Ontario)* and Regulation thereto and by the *Income Tax Act (Canada)* and Regulations thereto.

The previous actuarial valuation of the plan was prepared as at August 1, 2007. Since the previous actuarial valuation, the solvency and hypothetical windup actuarial assumptions have been updated to reflect market conditions at the valuation date. In addition, there have been the changes to the going concern actuarial basis as outlined in the report. There have been changes to the plan provisions since the previous valuation for certain members effective May 1, 2009; details regarding these changes, including the funding implications, are outlined in our letter to the Financial Services Commission of Ontario dated July 30, 2009.

This report summarizes the results of the actuarial valuation and contains an actuarial opinion as an integral part of the report. The supporting detailed information on assets, actuarial basis, membership data and plan provisions is contained in the Appendices.

Since the previous actuarial valuation, the Canadian Institute of Actuaries published new *Standards of Practice for Pension Commuted Values* effective April 1, 2009. The new standards have been reflected for purposes of the solvency and hypothetical windup valuations.

The *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective April 1, 2009 have been revised effective February 1, 2011 to update the discount rate and mortality assumptions. The revised standards have not been reflected for purposes of the solvency and hypothetical windup valuations but will be reflected in the next actuarial valuation.

Since the previous actuarial valuation, the pension surplus threshold under the *Income Tax Act (Canada)* has been amended to increase the threshold to 25% of the actuarial liability. The new pension surplus threshold has been reflected for purposes of establishing the contribution requirements.

On December 8, 2010, Ontario Bill 120, *Securing Pension Benefits Now and for the Future Act, 2010*, received Royal Assent. The amendments under Bill 120 provide a framework for changes in funding rules for plans registered in the province of Ontario and will be effective at a date to be proclaimed. The effect of the future changes to funding rules resulting from Bill 120 has not been reflected in this report. Future changes to contribution requirements resulting from Bill 120 will be reflected in the first actuarial opinion prepared and filed on or after the effective date of Bill 120.

We are not aware of any events which occurred subsequent to the valuation date that would materially change the plan's financial position on or after the valuation date.

The information contained in this report was prepared for the University of Guelph, for its internal use and for filing with the Financial Services Commission of Ontario and the Canada Revenue Agency, in connection with the actuarial valuation of the plan prepared by Towers Watson Canada Inc. ("Towers Watson"). This report is not intended, nor necessarily suitable, for other parties or for other purposes. Further distribution of all or part of this report to other parties (except where such distribution is required by applicable legislation) or other use of this report is expressly prohibited without Towers Watson's prior written consent.

Going Concern Financial Position

Statement of Financial Position

(dollars in thousands)	*August 1, 2010*	*August 1, 2007*
Actuarial Value of Assets	$ 14,195	$ 14,257
Actuarial Liability		
Active and disabled members	$ 2,198	$ 2,452
Retired members and beneficiaries	5,517	6,108
Terminated vested members	178	146
Total actuarial liability	$ 7,893	$ 8,706
Actuarial Surplus (Unfunded Actuarial Liability)	$ 6,302	$ 5,551

Comment:

- The financial position of the plan on a going concern basis is determined by comparing the actuarial value of assets to the actuarial liability and is a reflection of the assets available for the benefits accrued in respect of credited service prior to the valuation date assuming the plan continues indefinitely.
- The incremental going concern liability at May 1, 2009 resulting from the plan change at that date is $15,000.

Reconciliation of Financial Position

(dollars in thousands)			
Actuarial surplus (unfunded actuarial liability) as at August 1, 2007			$ 5,551
Change in plan provisions as at May 1, 2009			(15)
Net special payments:			
■ Going concern amortization payments	$ 0		
■ Solvency amortization payments	0		
■ Transfer deficiency payments	0		
■ Other contributions	0		0
Application of:			
■ Actuarial surplus	$ (136)		
■ Prepaid contributions	0		(136)
Expected interest on:			
■ Actuarial surplus (unfunded actuarial liability) (including May 1, 2009 plan change)	$ 1,153		
■ Going concern amortization payments	0		
■ Solvency amortization payments	0		
■ Transfer deficiency payments	0		
■ Prepaid contributions	0		
■ Other contributions	0		
■ Application of actuarial surplus	(15)		
■ Application of prepaid contributions	0		1,138
Plan experience:			
■ Investment gains (losses)	$ (727)		
■ Liability gains (losses) [1]	651		(76)
Change in actuarial basis [2]			(160)
Actuarial surplus (unfunded actuarial liability) as at August 1, 2010			$ 6,302

Notes:

[1] The liability gains (losses) of $651,000 are comprised of a gain (loss) on salary experience of $160,000, a gain (loss) due to cost of living increase experience of $79,000 and a gain (loss) due to miscellaneous sources of $412,000.

[2] The change in the actuarial basis of $(160,000) is due to the change in mortality assumption.

Solvency and Hypothetical Windup Financial Position

Statement of Financial Position

(dollars in thousands)	*August 1, 2010*	*August 1, 2007*
Solvency Value of Assets		
Market value of assets	$ 12,904	$ 15,841
Provision for plan windup expenses	(75)	(75)
Total solvency value of assets	$ 12,829	$ 15,766
Solvency Liability		
Active and disabled members	$ 3,088	$ 3,226
Retired members and beneficiaries	6,184	6,601
Terminated vested members	244	184
Total solvency liability	$ 9,516	$ 10,011
Solvency Surplus (Unfunded Solvency Liability)	$ 3,313	$ 5,755

Comments:

- The financial position of the plan on a solvency basis is determined by comparing the solvency value of assets to the solvency liability (the actuarial present value of benefits accrued in respect of credited service prior to the valuation date, calculated as if the plan were wound up on that date).
- The solvency and hypothetical windup actuarial valuation results presented in this report are determined under a scenario where, following a plan windup, the employer discontinues its operations.
- Under an amendment to the Regulation to the *Pension Benefits Act (Ontario)*, the employer had the option prior to November 26, 1992 to make an election to exclude from the solvency liability any benefits relating to plant closure and permanent layoff. This plan does not have any such benefits.
- In addition, the Regulation permits certain benefits to be excluded from the solvency liability. The full hypothetical windup liability, taking into account all of the benefits excluded under the Regulation, is $10,139,000 as of August 1, 2010. Consequently, the hypothetical windup surplus (unfunded hypothetical windup liability) as at the valuation date is $2,690,000.
- The incremental solvency and PBGF liability at May 1, 2009 resulting from the plan change at that date is $20,000.

Contributions

Normal Actuarial Cost and Amortization Payments (Ensuing Year)

(dollars in thousands)	*August 1, 2010*	*August 1, 2007*
Employer Normal Actuarial Cost		
Estimated annual contribution	$ 24	$ 55
Estimated member contributions	8	16
% of member contributions [1]	292%	336%
Annual Amortization Payments		
Going concern	$ 0	$ 0
Solvency	0	0
Total	$ 0	$ 0
Estimated Member Contributions	$ 8	$ 16

Note:

[1] As a result of the scheduled reduction to member contribution rates effective May 1, 2012 for USW and Exempt members, the employer normal actuarial cost as a percentage of member contributions will change to 534% at May 1, 2012. This percentage reflects that some members are expected to have reached the plan's 35 year service cap at May 1, 2012.

Comments:

- The employer normal actuarial cost rate changed by 2% of employee contributions due to the change in plan provisions at May 1, 2009, (52)% of employee contributions due to the change in membership profile and by 6% of employee contributions due to the change in actuarial basis since the previous valuation.

- Pursuant to Section 147.2(2) of the *Income Tax Act (Canada)*, this valuation reveals that the plan has an excess actuarial surplus of $4,329,000. The excess actuarial surplus must be applied towards the employer normal actuarial cost until the excess actuarial surplus has been depleted or until a subsequent actuarial opinion is filed under the *Income Tax Act (Canada)* demonstrating that either the plan no longer has an excess actuarial surplus or that it no longer has assets sufficient to meet its obligations on a windup basis. In 2009, the Regulation to the *Pension Benefits Act (Ontario)* was amended to temporarily restrict employer contribution holidays in certain circumstances. As a result, one or more actuarial cost certificates may need to be filed in order for the employer to apply the actuarial surplus towards the normal actuarial cost contributions in respect of certain periods covered by this report.

Timing of Contributions

To satisfy the requirements of Ontario pension legislation, the employer normal actuarial cost must be paid monthly and within 30 days of the month to which it pertains while the amortization payments must also be paid monthly but within the period to which they are applicable. Members' contributions must be remitted to the fund monthly and within 30 days of the month to which they pertain.

In addition, within 60 days after this report is filed with the Financial Services Commission of Ontario, the employer must make a special contribution equal to the excess, if any, of:

- the amount of employer contributions (employer normal actuarial cost and amortization payments) that should have been paid after August 1, 2010 according to the minimum contribution requirements revealed by this report (determined with regard to any reported prepaid contributions available to meet these minimum contribution requirements), over
- the actual amount of employer contributions made in respect of periods after August 1, 2010.

Interest must be added to this excess, with such interest determined by reference to the going concern discount rate for payments in respect of employer normal actuarial cost or going concern amortization payments and the solvency discount rate for payments in respect of solvency amortization payments.

To satisfy the requirements of the *Income Tax Act (Canada)*, employer contributions that are remitted to the plan in the taxation year or within 120 days after the end of such taxation year are deductible in such taxation year provided they were made to fund benefits in respect of periods preceding the end of the taxation year.

Other Statutory Contributions

Additional contributions may be required in respect of the transfer values for terminating members. Where applicable, such additional contributions must be remitted before the related transfer value may be paid in full to the terminated member. Details are provided in Appendix E.

Future Contribution Levels

Future contribution levels may change as a result of future changes in the actuarial methods and assumptions, the membership data, the plan provisions and the legislative rules, or as a result of future experience gains or losses, none of which has been anticipated at this time. Emerging experience, differing from the assumptions, will result in gains or losses that will be revealed in future actuarial valuations.

Actuarial Opinion

In our opinion, for the purposes of the going concern, solvency and hypothetical windup valuations, the data on which the valuations are based are sufficient and reliable, the assumptions are and the methods employed in the valuations are appropriate. This report has been prepared, and our opinion has been given, in accordance with accepted actuarial practice in Canada. The valuations have been conducted in accordance with our understanding of the funding and solvency standards prescribed by the *Pension Benefits Act (Ontario)* and Regulation thereto, and in accordance with our understanding of the requirements of the *Income Tax Act (Canada)* and Regulations thereto. This actuarial opinion forms an integral part of the report.

Based on the results of these valuations, we hereby certify that, in our opinion, as at August 1, 2010:

- The plan does not have prepaid contributions, referred to as the prior year credit balance in the Regulation to the *Pension Benefits Act (Ontario)*.

- The actuarial surplus (unfunded actuarial liability), determined by comparing the actuarial liability, the measure of obligations of the plan on a going concern basis, to the actuarial value of assets, is $6,302,000.

- The solvency surplus (unfunded solvency liability), determined by comparing the solvency liability, as defined in the Regulation to the *Pension Benefits Act (Ontario)*, to the solvency value of assets, is $3,313,000.

- The statutory solvency excess (deficiency) revealed at this valuation is $3,313,000. Since there is neither an unfunded actuarial liability nor a statutory solvency deficiency, no amortization payments are required in order to comply with the Regulation to the *Pension Benefits Act (Ontario)*.

- The hypothetical windup surplus (unfunded hypothetical windup liability), determined by comparing the hypothetical windup liability, the measure of the obligations of the plan on a hypothetical windup basis including the value of any potential obligations that may have been excluded for purposes of the solvency valuation, to the solvency value of assets, is $2,690,000.

- The excess actuarial surplus, pursuant to Section 147.2(2) of the *Income Tax Act (Canada)*, is $4,329,000.

- The rule for computing the employer normal actuarial cost is 292% of member contributions for the period August 1, 2010 to April 30, 2012 and 534% of member contributions for the period May 1, 2012 to July 31, 2013. Based on the plan membership used for this valuation, adjusted at May 1, 2012 for members who are expected to have reached the plan's 35 year service cap, the normal actuarial cost for the next three years is estimated to be:

(dollars in thousands)	*Year*		
	2010/2011	*2011/2012*	*2012/2013*
Estimated employer normal actuarial cost	$ 24	$ 21	$ 11
Estimated member contributions	$ 8	$ 7	$ 2

Given the present financial position of the plan, the employer is not required to make normal actuarial cost contributions to the plan until the effective date of the next actuarial opinion.

Further, the excess actuarial surplus of $4,329,000 must be applied towards the employer's contributions in respect of the normal actuarial cost, up to the hypothetical windup surplus of $2,690,000. Employer contributions to the plan are not permitted until the excess actuarial surplus has been so applied or until a subsequent actuarial opinion is filed under the *Income Tax Act (Canada)* demonstrating that either the plan no longer has an excess actuarial surplus or that it no longer has assets sufficient to meet its obligations on a windup basis. In 2009, the Regulation to the *Pension Benefits Act (Ontario)* was amended to temporarily restrict employer contribution holidays in certain circumstances. As a result, one or more actuarial cost certificates may need to be filed in order for the employer to apply the actuarial surplus towards the normal actuarial cost contributions in respect of certain periods covered by this report.

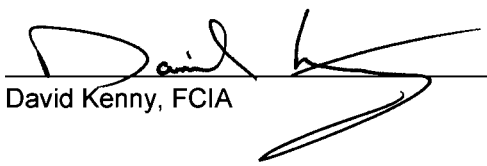
- The transfer ratio, as defined in the Regulation to the *Pension Benefits Act (Ontario)*, is not less than 100%. The solvency ratio, defined as the ratio of the solvency assets to the solvency liabilities, is not less than 100%.

- The assessment base determined for the Pension Benefits Guarantee Fund (PBGF) is $0. The PBGF liabilities are $9,516,000. Additional liabilities for excluded plant closure benefits, in accordance with section 37(4)(a)(ii) of the Regulation to the *Pension Benefits Act (Ontario)*, are $0.

- In accordance with the Regulation to the *Pension Benefits Act (Ontario)*, the next actuarial valuation should be performed with an effective date not later than August 1, 2013. The basis for employer contributions presented in this report is effective until the next actuarial opinion is filed.

The results presented in this report have been developed using a particular set of actuarial assumptions. Other results could have been developed by selecting different actuarial assumptions. The results presented in this report are reasonable actuarial results based on actuarial assumptions reflecting our expectation of future events.

Towers Watson Canada Inc.



David Kenny, FCIA

April 26, 2011
Date

Daniela Prieto

Daniela Prieto, FCIA

April 26, 2011
Date

Assets

Statement of Plan Assets (All Plans)

The assets of the University of Guelph's three pension plans are held in a commingled fund managed by a number of investment managers. The master trustee as at August 1, 2010 is CIBC Mellon. The asset information used in this report was provided by RBC Dexia, CIBC Mellon and the University for the period August 1, 2007 to August 1, 2010. All of this information has been relied upon by Towers Watson following tests of reasonableness with respect to contributions, benefit payments and investment income.

As at August 1, 2010, an amount of $3,825,000 was payable to the master trust, comprised of the following:

(dollars in thousands)	*Professional Plan*	*Retirement Plan*	*Non-Professional Plan*	*Total*
Employer normal cost contributions in transit	$ 380	$ 128	$ 0	$ 508
Employee contributions in transit	213	97	0	310
Accrued investment counsel and trustee fees	(597)	(222)	(13)	(832)
Estimated refunds, fees and expenses due but not paid and other receivables at August 1, 2010	(1,624)	(2,170)	(17)	(3,811)
Net receivable (payable)	$ (1,628)	$ (2,167)	$ (30)	$ (3,825)

Assets

Statement of Market Value (All plans)

(dollars in thousands)	*August 1, 2010*		*August 1, 2007*	
Invested Assets				
Short term notes and cash	$ 35,762	4.3%	$ 37,667	4.2%
Bonds and Debentures	$ 250,112	30.0%	$ 268,151	29.9%
Stocks:				
■ Canadian stocks and pooled investment funds	$ 190,772	22.9%	$ 233,175	26.0%
■ Foreign stocks and pooled investment funds	355,869	42.8%	357,834	39.9%
■ Total stocks	$ 546,641	65.7%	$ 591,009	65.9%
Total Invested Assets	$ 832,515	100.0%	$ 896,827	100.0%
Other Assets				
Accrued income	$ 2,724		$ 3,453	
Net accounts receivable/ (payable)	(3,825)		19,294	
Total other assets	$ (1,101)		$ 22,747	
Total Assets	$ 831,414		$ 919,574	

Comment:

- The asset mix ranges stipulated by the plan's investment policy in respect of various major asset classes is as follows: 17%-27% in Canadian equity, 25%-50% in foreign equity, 23%-38% in bonds and debentures, 0%-15% in alternatives and 0%-15% in short-term investments and cash.

Reconciliation of Assets (Market Value)

(dollars in thousands)

	Non-Professional Plan	*All Plans*
Assets as at August 1, 2007	$ 15,841	$ 919,574
Receipts:		
■ Contributions:		
— Employer normal actuarial cost	$ 0	$ 52,417
— Employer amortization contributions	0	550
— Employer transfer deficiency contributions	0	0
— Employer other contributions	0	0
— Members' required contributions	41	36,747
— Members' other contributions	0	2,299
■ Investment return, net of investment expenses	(787)	(38,284)
■ Total receipts	$ (746)	$ 53,729
Transfer to other University Plans	$ 0	$ 0
Disbursements:		
■ Benefit payments:		
— Pension payments	$ 1,775	$ 115,651
— Lump sum settlements	337	21,748
■ Non-investment expenses	79	4,490
■ Total disbursements	$ 2,191	$ 141,889
Assets as at August 1, 2010	$ 12,904	$ 831,414

Comment:

- The rate of return earned on the market value of assets (all plans), net of all expenses, from August 1, 2007 to August 1, 2010 is approximately -1.6% p.a.

Development of the Actuarial Value of Assets (All Plans)

(dollars in thousands)	*Adjusted Market Value Beginning from September 30:*					
	2005	*2006*	*2007*	*2008*	*2009*	*Aug. 1, 2010*
Adjusted market value as at September 30, 2005	$ 733,752					
Net contributions	(34,436)					
Assumed interest earned for 2004/2005 at 6.5%	46,575					
Adjusted market value as at September 30, 2006	$ 745,891	$ 807,406				
Net contributions	16,734	16,734				
Assumed interest earned for 2005/2006 at 6.5%	49,027	53,025				
Adjusted market value as at September 30, 2007	$ 811,652	$ 877,165	$ 893,210			
Net contributions	7,417	7,417	7,417			
Assumed interest earned for 2006/2007 at 6.5%	52,998	57,257	58,300			
Adjusted market value as at September 30, 2008	$ 872,067	$ 941,839	$ 958,927	$ 805,670		
Net contributions	(22,547)	(22,547)	(22,547)	(22,547)		
Assumed interest earned for 2007/2008 at 6.5%	55,952	60,487	61,597	51,636		
Adjusted market value as at September 30, 2009	$ 905,472	$ 979,779	$ 997,977	$ 834,759	$828,145	
Net contributions	(14,688)	(14,688)	(14,688)	(14,688)	(14,688)	
Assumed interest earned for 2008/2009 at 6.5%	48,649	52,674	53,659	44,818	44,460	
Adjusted market value as at August 1, 2010	$ 939,433	$1,017,765	$1,036,948	$ 864,889	$857,917	$ 835,239
Actuarial Value of Assets						
Weighted average of the adjusted market values as at August 1, 2010	$ 926,025	= 1/5 x (2/12 x 939,433 + 1,017,765 + 1,036,948 + 864,889 + 857,917 + 10/12 x 835,239)				
Net accounts receivables/ (payable)	(3,825)					
Actuarial value of assets	$ 922,200					

Comments:

- The asset valuation method is described in Appendix B.
- The starting value of each column is the actual market value of invested assets (including accrued investment income) at the indicated date.
- The rate of return earned on the actuarial value of assets (all plans), net of all expenses, from August 1, 2007 to August 1, 2010 is approximately 5.2% p.a.

Actuarial Value of Assets by Plan

The actuarial value of assets for the total fund is allocated to each of the three plans participating in the Fund. The actuarial value of invested assets, excluding the net accounts receivable/(payable) of $(3,825,000), is allocated in proportion to the number of units of the total fund held by each plan. The number of units held by each plan and the allocated actuarial values are as follows:

(dollars in thousands)

Plan	*Number of Units*	*Actuarial Value of Assets*[1]	*Pending Inter-Plan Transfers*	*Net Accounts Receivable / (Payable)*	*Total Actuarial Value of Assets* *Before Collar*[2]	*After Collar*[2]
Professional	5,971,765	$ 662,411	$ 2,501	$ (1,628)	$ 663,284	$ 657,263
Retirement	2,244,237	248,939	(2,501)	(2,167)	244,271	243,098
Non-Professional	132,296	14,675	-	(30)	14,645	14,195
Total	8,348,298	$ 926,025	$ 0	$ (3,825)	$ 922,200	$ 914,556

Notes:

[1] Excluding net accounts receivable / (payable).

[2] Methodology used to determine the Actuarial Value of Assets includes provision that resulting amount must be within 90% - 110% of market value of assets.

Actuarial Basis

Going Concern

Asset Valuation Method

The development of the actuarial value of assets was performed for the three University plans, i.e., the Professional Plan, the Retirement Plan and the Non-Professional Plan, in total. The total invested assets were allocated among the three plans in proportion to the units allocated to each plan by the trustee, to which net outstanding amounts were then incorporated on a plan-by-plan basis.

The actuarial value of assets was calculated as the weighted average of the market value of invested assets at the valuation date and the five previous adjusted market values at September 30 of the five previous years. The market value of assets at the valuation date was assigned a weight of 10/12, the adjusted market value at September 30 of the four previous years were each assigned a weight of 100%, and the adjusted market value at September 30, 2005 was assigned at weight of 2/12. The adjusted market values at the current valuation date were developed from the fund's market value at September 30 of the five preceding years. To obtain these adjusted market values, the market values at September 30th of each of the five preceding years were accumulated to the valuation date with net contributions and assumed investment return. Net contributions were calculated as contributions less benefit payments and non-investment expenses and were assumed to occur uniformly throughout each year. Assumed investment return was calculated assuming that each year the assets earned interest at the going concern liability discount rate in effect during such year. The actuarial value of invested assets was determined for all plans combined, with the result allocated pro rata to each plan's market value of invested assets. This was then adjusted for net outstanding amounts and so that the value is within 90%/110% of market value on a plan-by-plan basis.

The objective of the asset valuation method is to produce a smoother pattern of going-concern surplus (deficit) and hence a smoother pattern of contributions, consistent with the long-term nature of a going concern valuation.

Such smoothing is achieved by use of an averaging process which systematically recognizes investment returns different from expectations over a five-year period. This method will be expected to average periods of outperformance with periods of underperformance.

The expected return of 6.50% has been selected to equal the expected return on the assets over long periods of time, with a margin for adverse deviations. As such, it is anticipated that, on average, the asset valuation method will tend to produce a result that is somewhat less than the market value of assets.

Actuarial Cost Method

The actuarial liability and the normal actuarial cost were calculated using the projected unit credit cost method.

Prospective benefits were calculated for each active and disabled member according to the plan provisions and actuarial assumptions. The actuarial liability was calculated as the actuarial present value of the

member's prospective benefits multiplied by the ratio of the member's credited service prior to the valuation date to the member's total potential credited service (the service prorate method). The calculation of the actuarial present value of the member's prospective benefits reflects additional entitlements which may arise due to the application of the plan's two-times contributions refund feature, and is at least equal to twice the member's contributions with interest.

The actuarial liability for retired members and beneficiaries and terminated vested members was calculated as the actuarial present value of their respective benefits.

The normal actuarial cost for each active and disabled member was calculated as the actuarial present value of the member's prospective benefits divided by the member's total potential credited service, but not less than the member's required contributions. The employer normal actuarial cost for each active and disabled member was determined as the excess of the total normal actuarial cost over the member's required contributions. The normal actuarial cost rate determined by the projected unit credit cost method will be stable over time if the demographic characteristics of the active and disabled plan membership remain stable from valuation to valuation. All other things being equal, an active and disabled membership whose average age increases (decreases) between actuarial valuations will result in an increasing (decreasing) normal actuarial cost rate.

Benefit Security

The purpose of the going concern actuarial cost method is to assign a value to the benefits accrued to the valuation date under the plan and to measure the value of benefits accruing in ensuing years. A comparison of the actuarial value of assets with the actuarial liability measured under the projected unit credit cost method gives an indication of the security of the benefits earned to date based on the going concern actuarial assumptions used in the actuarial valuation.

Solvency and Hypothetical Windup

Asset Valuation Method

The market value of assets has been used for the solvency and hypothetical windup valuations, adjusted for net outstanding amounts. The resulting value has been reduced by a provision for plan windup expenses.

Actuarial Cost Method

The solvency and hypothetical windup liabilities were calculated using the unit credit cost method.

The solvency and hypothetical windup liabilities for active and disabled members were calculated as the actuarial present value of all benefits accrued up to the valuation date (treating all members as if vested). In accordance with the terms of the plan, solvency and hypothetical windup liabilities for each active and disabled member is at least equal to the value of twice the member's contributions with interest at the valuation date.

The solvency and hypothetical windup liabilities for retired members and beneficiaries and terminated vested members were calculated as the actuarial present value of their respective benefits.

Benefit Security

The purpose of the solvency and hypothetical windup actuarial cost method is to assign a value to the benefits accrued to the valuation date under the plan assuming the plan were to be wound up as at the valuation date. A comparison of plan assets with the liabilities measured under the unit credit cost method gives an indication of the security of the benefits earned to date based on the actuarial assumptions used in these actuarial valuations.

Other Considerations

As specified by the Canadian Institute of Actuaries' *Practice-Specific Standards for Pension Plans*, the solvency and hypothetical windup assumptions do not include a margin for adverse deviations.

The solvency and hypothetical windup actuarial valuations have been prepared on a hypothetical basis. In the event of an actual plan windup, the plan assets may have to be allocated between various classes of plan members or beneficiaries as required by applicable pension legislation. Such potential allocation has not been performed as part of these solvency and hypothetical windup valuations.

Assumptions

	Going Concern	Solvency and Hypothetical Windup
Economic Assumptions (per annum)		
Liability discount rate	6.50% (net of expenses)	Settlement by: ■ Commuted value: 3.50% for 10 years, 5.10% thereafter [1] ■ Annuity purchase: 4.30% [2]
Rate of salary increase	3.75% (nil for disabled members)	Actual prior earnings used
Escalation of YMPE under Canada/Québec Pension Plan	3.25%	Actual prior YMPEs used
Escalation of *Income Tax Act (Canada)* maximum pension limitation	3.25% [3]	Current level
Inflation	2.50%	N/A
Post-retirement pension increases	0.50%	Settlement by: ■ Commuted value: 0.00% for 10 years, 0.53% thereafter [4] ■ Annuity purchase: 0.77% [5]
Demographic Assumptions		
Mortality	1994 Uninsured Pensioner Mortality Table with 5% margin, projected to 2020 using Scale AA (refer to Tables 1 and 2) [6]	1994 Uninsured Pensioner Mortality Table, projected to 2020 using Scale AA (refer to Tables 1 and 2) [6]
Withdrawal	Age-related rates (refer to Table 3)	N/A
Disability incidence/recovery	Nil	N/A
Retirement/pension commencement	Age and service-related rates (refer to Table 4)	Age 55, or attained age if greater (see B-12 for further details)
Other		
Percentage of members with eligible spouses at pension commencement	75%	Same
Years male spouse older than female spouse	3	Same
Percentage of members receiving settlement by commuted value (balance assumed to elect settlement by annuity purchase)	N/A	Inactive members: 0% Active members: ■ under 55 years old: 100% ■ aged 55 years and over: 25%

	Going Concern	Solvency and Hypothetical Windup
Application of Rule of 60	N/A [7]	Same
Provision for expenses	None; return on plan assets is net of all expenses	$75,000

Notes:

[1] 5.25%for 10 years and 5.00% thereafter at previous valuation.

[2] 5.00% at previous valuation.

[3] The *Income Tax Act (Canada)* maximum pension limit of $2,494.44 per year of service in 2010 is indexed starting in 2011 in the current valuation.

[4] 0.43% for 10 years and 0.35% thereafter at previous valuation.

[5] 0.75% at previous valuation.

[6] 1994 Uninsured Pensioner Mortality Table, projected to 2015 using Scale AA at previous valuation.

[7] All active and disabled members will be eligible to retire with an unreduced pension by age 60 in conjunction with the plan's 85 point provision. Accordingly, no assumption is required in respect of the Rule of 60.

Table 1 — 1994 Uninsured Pensioner Mortality Table [1]

Age	Male	Female	Age	Male	Female
20	0.000545	0.000305	65	0.015629	0.009286
21	0.000570	0.000308	66	0.017462	0.010423
22	0.000598	0.000311	67	0.019391	0.011574
23	0.000633	0.000313	68	0.021354	0.012648
24	0.000671	0.000313	69	0.023364	0.013665
25	0.000711	0.000313	70	0.025516	0.014763
26	0.000749	0.000316	71	0.027905	0.016079
27	0.000782	0.000324	72	0.030625	0.017748
28	0.000811	0.000338	73	0.033549	0.019724
29	0.000838	0.000356	74	0.036614	0.021915
30	0.000862	0.000377	75	0.040012	0.024393
31	0.000883	0.000401	76	0.043933	0.027231
32	0.000902	0.000427	77	0.048570	0.030501
33	0.000912	0.000454	78	0.053991	0.034115
34	0.000913	0.000482	79	0.060066	0.038024
35	0.000915	0.000514	80	0.066696	0.042361
36	0.000927	0.000550	81	0.073780	0.047260
37	0.000958	0.000593	82	0.081217	0.052853
38	0.001010	0.000643	83	0.088721	0.058986
39	0.001075	0.000701	84	0.096358	0.065569
40	0.001153	0.000763	85	0.104559	0.072836
41	0.001243	0.000826	86	0.113755	0.081018
42	0.001346	0.000888	87	0.124377	0.090348
43	0.001454	0.000943	88	0.136537	0.100882
44	0.001568	0.000992	89	0.149949	0.112467
45	0.001697	0.001046	90	0.164442	0.125016
46	0.001852	0.001111	91	0.179849	0.138442
47	0.002042	0.001196	92	0.196001	0.152660
48	0.002260	0.001297	93	0.213325	0.167668
49	0.002501	0.001408	94	0.231936	0.183524
50	0.002773	0.001536	95	0.251189	0.200229
51	0.003088	0.001686	96	0.270441	0.217783
52	0.003455	0.001864	97	0.289048	0.236188
53	0.003854	0.002051	98	0.306750	0.255605
54	0.004278	0.002241	99	0.323976	0.276035
55	0.004758	0.002466	100	0.341116	0.297233
56	0.005322	0.002755	101	0.358560	0.318956
57	0.006001	0.003139	102	0.376699	0.340960
58	0.006774	0.003612	103	0.396884	0.364586
59	0.007623	0.004154	104	0.418855	0.389996
60	0.008576	0.004773	105	0.440585	0.415180
61	0.009663	0.005476	106	0.460043	0.438126
62	0.010911	0.006271	107	0.475200	0.456824
63	0.012335	0.007179	108	0.485670	0.471493
64	0.013914	0.008194	109	0.492807	0.483473

Note:

[1] The mortality rates for years after 1994 are computed using the mortality improvement rates in Table 2.

Table 2 — Scale AA Mortality Improvement Table [1]

Age	*Male*	*Female*	*Age*	*Male*	*Female*
20	0.019	0.016	65	0.014	0.005
21	0.018	0.017	66	0.013	0.005
22	0.017	0.017	67	0.013	0.005
23	0.015	0.016	68	0.014	0.005
24	0.013	0.015	69	0.014	0.005
25	0.010	0.014	70	0.015	0.005
26	0.006	0.012	71	0.015	0.006
27	0.005	0.012	72	0.015	0.006
28	0.005	0.012	73	0.015	0.007
29	0.005	0.012	74	0.015	0.007
30	0.005	0.010	75	0.014	0.008
31	0.005	0.008	76	0.014	0.008
32	0.005	0.008	77	0.013	0.007
33	0.005	0.009	78	0.012	0.007
34	0.005	0.010	79	0.011	0.007
35	0.005	0.011	80	0.010	0.007
36	0.005	0.012	81	0.009	0.007
37	0.005	0.013	82	0.008	0.007
38	0.006	0.014	83	0.008	0.007
39	0.007	0.015	84	0.007	0.007
40	0.008	0.015	85	0.007	0.006
41	0.009	0.015	86	0.007	0.005
42	0.010	0.015	87	0.006	0.004
43	0.011	0.015	88	0.005	0.004
44	0.012	0.015	89	0.005	0.003
45	0.013	0.016	90	0.004	0.003
46	0.014	0.017	91	0.004	0.003
47	0.015	0.018	92	0.003	0.003
48	0.016	0.018	93	0.003	0.002
49	0.017	0.018	94	0.003	0.002
50	0.018	0.017	95	0.002	0.002
51	0.019	0.016	96	0.002	0.002
52	0.020	0.014	97	0.002	0.001
53	0.020	0.012	98	0.001	0.001
54	0.020	0.010	99	0.001	0.001
55	0.019	0.008	100	0.001	0.001
56	0.018	0.006	101	0.000	0.000
57	0.017	0.005	102	0.000	0.000
58	0.016	0.005	103	0.000	0.000
59	0.016	0.005	104	0.000	0.000
60	0.016	0.005	105	0.000	0.000
61	0.015	0.005	106	0.000	0.000
62	0.015	0.005	107	0.000	0.000
63	0.014	0.005	108	0.000	0.000
64	0.014	0.005	109	0.000	0.000

Note:

[1] Using the q_x^{1994} rates defined in Table 1 and the AA_x rates defined above, the resulting mortality rate for age x in calendar year y is: $q_x^y = q_x^{1994} \cdot (1 - AA_x)^{y-1994}$.

Table 3 — Withdrawal Rates

Age	*Rate*
20 to 24	.090
25 to 29	.070
30 to 34	.050
35 to 39	.040
40 to 44	.030
45 to 49	.020
50 to 54	.015
55	0

Table 4 — Retirement Rates [1]

Age	*Rate* [2]
55 to 59	.05
60	.20
61	.15
62	.15
63	.15
64	.15
65	1.00

Note:

[1] All terminated vested members are assumed to commence their pension at their earliest unreduced retirement date, as defined by the terms of the plan (i.e. the earlier of the date at which the member would have attained 85 points and age 65).

[2] Plus 0.05 at age where member first attains 85 points if prior to age 65.

Rationale for Actuarial Assumptions

The rationale for the material actuarial assumptions used in the valuations is summarized below.

Going Concern Assumptions

Liability discount rate

The assumption is an estimate of the expected long-term return on plan assets, net of non-investment expenses expected to be paid from the plan of 0.20% of invested assets, less a margin for adverse deviations. The expected long-term return is based on returns for each major asset class in which the plan is expected to be invested (net of investment expenses), the plan's investment policy and additional net returns assumed to be achieved due to active management and periodic rebalancing to maintain the plan's investment policy.

Rate of salary increase

The assumption reflects an assumed rate of inflation of 2.25% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy. In addition, an allowance of 0.25% per annum has been made to reflect the average expected increase as a result of individual employee merit and promotion. The merit/promotion assumption is based on discussions with University of Guelph management concerning their future expectations. An allowance of 0.25% per annum has also been made as a margin for adverse deviation.

Escalation of YMPE under Canada/Quebec Pension Plan

The YMPE is indexed annually based on increases in the Industrial Aggregate Wage index for Canada. The assumption reflects an assumed rate of inflation of 2.25% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy.

Escalation of Income Tax Act (Canada) maximum pension limitation

The maximum pension limitation under the *Income Tax Act (Canada)* is scheduled to be indexed annually based on assumed increases in the Industrial Aggregate Wage index. The assumption reflects an assumed rate of inflation of 2.25% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy.

Inflation

The assumption reflects an estimate of future inflation considering current economic and financial market conditions. An allowance of 0.25% per annum has also been included as a margin for adverse deviations.

Post-retirement pension increases

The assumption has been determined by applying the post-retirement increase provision specified in the plan to the inflation assumption.

Mortality

The rates of mortality were developed by adjusting the 1994 Uninsured Pensioner Mortality Table after considering the experience of the plan over the period 2003 to 2009. Applying Projection Scale AA to 2020 provides allowance for improvements in mortality after 1994 and is commonly considered reasonable for projecting mortality experience into the future.

Withdrawal

The rates of withdrawal were developed based on a review of plan experience for the years 2000 to 2006 and an assessment of future expectations.

Disability incidence/recovery

There are no disability benefits under the plan other than the accrual of retirement income during disability and the waiver of employee contributions. Consequently, the assumption of no incidence of disability or recovery therefrom makes an appropriate allowance, in combination with the other assumptions, for such continued accruals.

Retirement/pension commencement

Active and disabled members

The rates of retirement were developed based on a review of plan experience for the years 2000 to 2006 and an assessment of future expectations.

Terminated vested members

All terminated members are assumed to commence their pension at their earliest unreduced retirement date, as defined by the terms of the plan (i.e. the earlier of the date at which the member would have attained 85 points and age 65, with a minimum commencement age of 55).

Percentage of members with eligible spouses at pension commencement

When provided, the actual data on the spouse were used for retired and terminated vested members. For other members, the assumed percentage of members with a spouse is based on a review of plan experience in year 2006.

Years male spouse older than female spouse

When provided, the actual data on the spouse were used for retired and terminated vested members. For other members, the assumption is based on a review of plan experience in year 2006 and an assessment of future expectations for members of the plan.

Provision for expenses

The liability discount rate is net of all expenses. The assumed level of expenses reflected in the liability discount rate is based on recent experience of the plan and an assessment of future expectations.

Solvency and Hypothetical Windup Assumptions

Liability discount rate

In the event of a plan windup, it is expected that a portion of the liabilities will be settled by a group annuity purchase and the balance of the liabilities will be settled by commuted value transfers.

For the calculation of the portion of the solvency and hypothetical windup liability relating to the benefits that are expected to be settled by a group annuity purchase, the liability discount rate corresponds to an approximation of the annuity purchase rates as at the valuation date following consideration of the Canadian Institute of Actuaries' Educational Note published in 2010 and updated on August 30, 2010 by the Pension Plan Financial Reporting Committee providing guidance on assumptions for solvency and hypothetical windup valuations.

For the calculation of the portion of the solvency and hypothetical windup liability relating to the benefits that are expected to be settled by commuted value transfers, the liability discount rates have been determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective April 1, 2009. For this valuation, the August 2010 rates have been used. At the previous valuation, the liability discount rates were determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective February 1, 2005 that were consolidated into the *Practice-Specific Standards for Pension Plans* effective May 1, 2006.

Escalation of Income Tax Act (Canada) maximum pension limitation

The *Income Tax Act (Canada)* maximum pension limitation specified in the Act for the year of the valuation is applied without consideration for future scheduled increases, as pension entitlements are determined as at the valuation date.

Post-retirement pension increases

For benefits that are expected to be settled by commuted value transfers, the assumption has been determined in accordance with the Canadian Institute of Actuaries' *Standards of Practice for Pension Commuted Values*. For the benefits that are expected to be settled by a group annuity purchase, the assumption has been set following consideration of the Canadian Institute of Actuaries' Educational Note published in 2010 by the Pension Plan Financial Reporting Committee providing guidance on assumptions for solvency and hypothetical windup valuations.

For the solvency valuation, as permitted under the Regulation to the *Pension Benefits Act (Ontario)*, post-retirement pension increases are assumed to be nil. For the hypothetical windup valuation, the assumption has been determined by applying the post-retirement increase provision specified in the plan to the inflation assumption.

Mortality

For benefits that are expected to be settled by commuted value transfers, the assumption has been determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective April 1, 2009. For the benefits that are expected to be settled by a

group annuity purchase, the assumption has been set following consideration of the Canadian Institute of Actuaries' Educational Note published in 2010 and updated on August 30, 2010 by the Pension Plan Financial Reporting Committee providing guidance on assumptions for solvency and hypothetical windup valuations. Where applicable, no pre-retirement mortality has been assumed in order to approximate the value of pre-retirement death benefits.

At the previous valuation, for benefits that are expected to be settled by commuted value transfers, the mortality assumption was determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective February 1, 2005 that were consolidated into the *Practice-Specific Standards for Pension Plans* effective May 1, 2006.

Retirement/pension commencement

- Active and disabled members: pension commences at the age that produces the highest value (including statutory grow-in rights for members in Ontario).

- Terminated vested members: pension commences at earliest unreduced retirement date under the terms of the plan (i.e. the earlier of the date at which the member would have attained 85 points and age 65, with a minimum commencement age of 55).

For benefits that are expected to be settled by commuted value transfers, this assumption is in accordance with the Canadian Institute of Actuaries' *Standards of Practice for Pension Commuted Values*. For the benefits that are expected to be settled by a group annuity purchase, this is consistent with the expected assumption that would have been used by insurers to price the group annuity.

Percentage of members with eligible spouses at pension commencement

See rationale for going concern assumptions.

Years male spouse older than female spouse

See rationale for going concern assumptions.

Percentage of members receiving settlement by commuted value

This assumption has been determined by considering the benefit provisions of the plan, legislative requirements to offer specific settlement options to various classes of members, and, in particular, the options to be provided to members upon plan windup. The assumption also reflects the expectation that members further from retirement are more likely to elect to settle their pension benefit by a commuted value transfer, while members closer to retirement are more likely to elect to settle their pension benefit through a group annuity purchase where this option is available. In addition, the assumption reflects past plan experience for terminating and retiring members.

Provision for expenses

Allowance was made for normal administrative, actuarial, legal and other costs which would be incurred if the plan were to be wound up (excluding costs relating to the resolution of surplus or deficit issues). The

valuation is premised on a scenario in which the employer discontinues its operations on the windup date and all costs incurred as a result of plan windup were assumed to be paid from the pension fund.

Directions from Plan Administrator

For purposes of preparing this valuation report, the plan administrator has directed that:

- The actuarial valuation is to be prepared as at August 1, 2010.
- This report is to be prepared on the basis that the value of benefits arising from future inflation be excluded from the solvency liability as permitted under Regulation 14(8)(c) to the Pension Benefits Act (Ontario).
- Since to the best of the knowledge of the plan administrator, there is no partial plan windup or termination with an effective date prior to the date of this valuation, involving members employed in Ontario, not yet completed where the partial windup/termination portion of the plan is in a surplus position on the date of this valuation, this report is to be prepared on the basis that there will be no retroactive changes to previously filed partial windup/termination reports, if any, and neither the applicable pension regulator nor the plan sponsor will order/declare any partial plan windup/termination with an effective date prior to the valuation date.
- The hypothetical windup valuation results presented in this report are to be determined under a scenario where the employer discontinues its operations and all expenses are paid from the pension fund.
- This report is to be prepared on the basis that the employer is entitled to apply the actuarial surplus, if any, revealed in an actuarial valuation report to meet its contribution requirements under the plan while the plan remains a going concern, to the extent permitted by applicable pension legislation. (This report does not address the disposition of any surplus assets remaining in the event of plan windup.) If an applicable pension regulator or other entity with jurisdiction directs otherwise, certain financial measures contained in this report, including contribution requirements, may be affected.
- This report is to be prepared on the basis that the statutory solvency position be determined using the market value of assets and the discount rates in effect at the valuation date.

Membership Data

Summary of Membership

	August 1, 2010	*August 1, 2007*
Active and disabled members:		
■ Number	9	12
■ Average age	60.7	58.5
■ Average credited service	33.8	30.7
■ Annual payroll	$ 433,548	$ 537,000
■ Average salary	$ 48,172	$ 44,791
Retired members and beneficiaries:		
■ Number	86	96
■ Average age	80.8	78.4
■ Total lifetime annual pension	$ 591,448	$ 623,397
■ Average lifetime annual pension	$ 6,877	$ 6,494
Terminated vested members:		
■ Number	3	2
■ Average age	57.0	55.5
■ Total lifetime annual pension	$ 21,627	$ 21,060
■ Average lifetime annual pension	$ 7,209	$ 10,530

Comment:

- Membership data were supplied by University of Guelph's third-party administrator, ACS, A Xerox Company, as at August 1, 2010.

Review of Membership Data

The membership data were reviewed for reasonableness and found to be sufficient and reliable for the purposes of the valuation. Elements of the data review included the following:

- ensuring that the data were intelligible (i.e., that an appropriate number of records was obtained, that the appropriate data fields were provided and that the data fields contained valid information);
- preparation and review of membership reconciliations to ascertain that the complete membership of the pension plan was accounted for;
- preparation and review of age and service distributions for active and disabled members for reasonableness;
- comparison, for active and disabled members, of average age, average pensionable earnings, aggregate employee contribution account balances and average pensionable service to the prior valuation data for reasonableness;
- comparison, for active and disabled members, of aggregate employee contribution data to actual employee contribution remittances made to the plan for the period since the previous valuation date;
- comparison, for terminated vested members, of average age and average deferred pension to the prior valuation data for reasonableness;
- comparison, for retired members and beneficiaries, of average age and average pension payments to the prior valuation data for reasonableness; and
- comparison of aggregate pension payments data to actual payments made from the plan for the period prior to the valuation date.

Distributions of Membership

The following definitions apply to the distribution that follows:

■ Age	Age as at August 1, 2010 rounded to nearest year
■ Service	Credited service as at August 1, 2010 as per plan provisions rounded to the nearest year
■ Salary	Annual rate of salary as at August 1, 2010
■ Contributions	Required member contributions with interest as at August 1, 2010

Active and Disabled Members

		Service								
Age		*0 - 4*	*5 - 9*	*10 - 14*	*15 - 19*	*20 - 24*	*25 - 29*	*30 - 34*	*35 +*	*Total*
<50	Number									
	Average Salary									
	Average Contributions									
50 - 54	Number									
	Average Salary									
	Average Contributions									
55 - 59	Number							2		2
	Average Salary							$32,545		$32,545
	Average Contributions							$26,001		$26,001
60 - 64	Number							4	3	7
	Average Salary							$49,218	$57,194	$52,636
	Average Contributions							$72,581	$97,682	$83,338
65 +	Number									
	Average Salary									
	Average Contributions									
Total	Number							6	3	9
	Average Salary							$43,660	$57,194	$48,172
	Average Contributions							$57,054	$97,682	$70,597

Average Age = 60.7 Average Credited Service = 33.8

Membership Reconciliation

Active and disabled members:	
■ As at August 1, 2007	12
■ New entrants (including re-employed)	0
■ Retirements	(2)
■ Terminations:	
— Not settled	0
— With lump sum settlement	0
— With deferred pension entitlement	0
■ Deaths:	
— Not settled	0
— With lump sum settlement	(1)
— With survivor's pension	0
■ Transferred out	0
■ Transferred in	0
■ Data corrections	0
■ As at August 1, 2010	9
Retired members and beneficiaries:	
■ As at August 1, 2007	96
■ New retirements	2
■ New beneficiaries	4
■ Deaths:	
— Without survivor's pension	(12)
— With survivor's pension	(4)
■ Data corrections	0
■ As at August 1, 2010	86
Terminated vested members:	
■ As at August 1, 2007	2
■ New vested terminations	0
■ Lump sum settlements	0
■ Retirements	0
■ Deaths:	
— With lump sum settlement	0
— With survivor's pension	0
■ Re-classified (previously held as outstanding payment)	1
■ Data corrections	0
■ As at August 1, 2010	3

Summary of Plan Provisions

The following is an outline of the principal features of the plan which are of financial significance to valuing the plan benefits. This summary is based on the most recently restated plan document as of September 30, 1993 and amendments up to and including the valuation date, as provided by University of Guelph. For a detailed description of the benefits, please refer to the plan document.

Plan Effective Date

September 1, 1965.

Definitions

Best Average Earnings

Average earnings for the best 36 consecutive months prior to date of termination or retirement.

CPI Increase

Increase in average Canadian Consumer Price Index in the 12-month period ending in April of one year over a similar period in the previous year.

Credited Service

Continuous service since the Effective Date during which regular contributions are made. Proportionate Credited Service is granted to part-time Members. Credited Service is limited to 35 years.

Earnings

Basic earnings (annualized for part-time Employees), including deferred income, excluding bonuses, overtime payments and other payments. Earnings for disabled Members, during the period of disability, are deemed to be equal to the Member's earnings in the 12 months immediately prior to disability and increased annually to reflect the percentage increase in the salary base level for the Member's union, association, or group, as applicable.

Employee

Full-time or part-time, permanent, non-professional staff.

YMPE Average

Average YMPE for the 60 consecutive months immediately prior to date of termination or retirement.

Eligibility for Membership

The plan was closed to new Members effective July 1, 1981.

Employee Contributions

The contribution rate is 3.75% of Earnings up to the YMPE plus 5.25% of Earnings in excess of the YMPE.

Effective May 1, 2007, the contribution rate for Exempt Group and USW Local 4120 for Earnings up to the YMPE are as follows:

Group	*May 1, 2007 to April 30, 2012*	*On and After May 1, 2012*
Exempt Group	5.14%	4.11%
USW Local 4120	5.36%	4.10%

Effective May 1, 2009, for CUPE 1334, the contribution rates have increased as follows:

— For earnings up to the YMPE: 4.82% from May 1, 2009 to April 30, 2024 and 4.14% thereafter; and

— For earnings above the YMPE: 6.32% from May 1, 2009 to April 30, 2024 and 5.64% thereafter.

Members are not required to contribute after completion of 35 years of Credited Service. Contributions are waived during disability.

Normal Retirement

Eligibility

First day of the month next following or coincident with attainment of age 65.

Annual Pension

1.267% of the Member's Best Average Earnings not exceeding the YMPE Average, plus 1.667% of the Member's Best Average Earnings in excess of the YMPE Average, for each year of Credited Service.

Notwithstanding the above, effective May 1, 2007 for Exempt Group and USW Local 4120 and effective May 1, 2009 for CUPE 1334, the pension is determined as 1.367% of the Member's Best Average Earnings not exceeding the YMPE Average, plus 1.667% of the Member's Best Average Earnings in excess of the YMPE Average, for each year of Credited Service.

The actuarial equivalent lump sum value of the benefit earned prior to January 1, 1987 shall not be less than the employee's contributions made during such period together with Credited Interest. The employee's contributions made subsequent to January 1, 1987 together with Credited Interest shall not pay for more than 50% of the actuarial equivalent lump sum value of the benefit earned during such period.

Early Retirement

Eligibility

Attainment of age 55.

Annual Pension

Member's pension is reduced by 1/4% for each month that retirement precedes the earliest of:

(a) normal retirement age; and

(b) attainment of 85 points (sum of Member's age and Credited Service determined based on the presumption that the Member remained in active service).

There is no reduction for retirement after age 60 where such retirement is at the request of the University.

Postponed Retirement

Eligibility

Retirement from the University after age 65, but in no event after age 69.

Annual Pension

Pension accrued at date of retirement.

Forms of Payment

Timing

Pensions are payable monthly on the last day of each calendar month.

Normal Form

Monthly pension payable at the end of each month for life, together with a continuation of 60% to the spouse on the Member's earlier death. A survivor's pension is payable to the Member's children under certain circumstances. A Member without a spouse receives a monthly pension payable for life, guaranteed for 60 months in any event.

Optional Form

Optional forms of pension are available on an actuarial equivalent basis. Optional forms include variations in term certain guarantee and varying levels of continuation for spousal forms.

Disability

Required Member contributions cease during disability; Credited Service continues to accrue and Earnings are indexed during disability.

Death Benefit

Before Retirement

A lump sum payment equal to the greater of twice the member's required contributions, with interest, and the commuted value of the member's Accrued Pension.

After Retirement

Based on normal form or optional form of pension elected by a Member.

Termination of Employment

Accrued pension, payable from normal retirement date, or from early retirement date reduced in accordance with the early retirement pension terms above. In such event, the actuarial equivalent lump sum value of the benefit earned prior to January 1, 1987 shall not be less than the Employee's contributions made during such period together with interest. Also, the Employee's contributions made subsequent to January 1, 1987 together with interest shall not pay for more than 50% of the actuarial equivalent lump sum value of the benefit earned during such period.

Alternatively, a Member may elect to have the greater of twice his required contributions, with interest, and the commuted value of his accrued pension transferred to a registered vehicle on a locked-in basis.

In lieu of the above, a Member who has not completed two years of plan membership may elect to receive a refund of required Employee contributions with interest.

Adjustments to Pensions in Payment

Pensions are increased annually while in payment to reflect the excess, if any, by which the previous year's CPI increase (maximum 8%) is over 2.0%.

Income Tax Act (Canada) Maximum

Current Income Tax Act (Canada) limit, or such higher amount as permitted from time to time. The plan provisions provide for limitation on pre-1990 past service benefits as defined in subsection 8504(6) of the Regulations to the Income Tax Act (Canada).

PBGF Assessment, Transfer Ratio and Solvency Ratio

(dollars in thousands)		*August 1, 2010*
PBGF Assessment		
Solvency liability: [1]		
■ Total	$	9,516
■ Ontario PBGF liability [2]		9,516
■ Ontario additional PBGF liability [3]		0
Solvency value of assets: [1 4]		
■ Total		12,904
■ Ontario PBGF assets		12,904
PBGF assessment base [2]		0
Plan membership (including inactive members):		
■ Total		98
■ Ontario		98
Transfer Ratio		
Solvency value of assets [1 4]	$	12,904
Lesser of estimated employer contributions for the period until the next valuation [5] and prepaid contributions		0
Hypothetical windup liability [1]		10,139
Transfer ratio [6]		Not less than 100%
Solvency Ratio		
Solvency value of assets [1 4]	$	12,904
Solvency liability [1]		9,516
Solvency ratio [5]		Not less than 100%

Notes:

[1] Reflects net outstanding amounts.

[2] Excludes the Ontario additional PBGF liability.

[3] As specified in the Regulation to the *Pension Benefits Act (Ontario)*, the additional PBGF liability is the additional solvency liability for plant closure and permanent layoff benefits excluded for those Ontario members who are immediately eligible for the benefit at the valuation date, if any.

[4] Prior to deduction of provision for plan windup expenses.

[5] Based on the solvency ratio defined as the ratio of solvency assets to solvency liabilities, the next valuation of the plan is due with an effective date not later than August 1, 2013.

[6] As the transfer ratio is not less than 100%, payments of the commuted value of pension entitlements for terminated members can be paid in full. Pursuant to Regulations 19(4) or 19(5) to the *Pension Benefits Act (Ontario)*, approval of the Superintendent will be required to make commuted value transfers if there has been a significant decline in the transfer ratio after the valuation date.

Certificate of the Plan Administrator

I hereby certify that to the best of my knowledge and belief:

- the information on plan assets forwarded to Towers Watson Canada Inc. and summarized in Appendix A of this report is complete and accurate;
- the directions from the plan administrator contained in Appendix B of this report are accurate and reflect the plan administrator's judgement of the plan provisions and/or an appropriate basis for the actuarial valuation of the plan;
- the data forwarded to Towers Watson Canada Inc. and summarized in Appendix C of this report are a complete and accurate description of all persons who are members of the plan, including beneficiaries who are in receipt of a retirement income, in respect of service up to the date of the actuarial valuation;
- the summary of plan provisions contained in Appendix D of this report is accurate; and
- there have been no events which occurred subsequent to the valuation date that would materially change the plan's financial position on or after the valuation date.

Signature

JOHN MILES
ASSIST. V.P., FINANCE
UNIVERSITY OF GUELPH
Name

April 28/2011
Date

Martha Harley
~~Date~~ SIGNATURE

ASST. VP Human Resources
Title

DATE: April 28, 2011