

UNIVERSITY OF GUELPH

*PENSION PLAN FOR NON-PROFESSIONAL STAFF OF
UNIVERSITY OF GUELPH*

Actuarial Valuation as at August 1, 2007

Registration Number 0324632

December 2007

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.

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Introduction

This report has been prepared for and at the request of the University of Guelph and presents the results of the actuarial valuation, as at August 1, 2007, of the Pension Plan for Non-Professional Staff of University of Guelph.

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 windup status of the plan;
- to provide the basis for employer contributions; and
- to provide the information and the actuarial opinion required by the Financial Services Commission of Ontario and the Canada Revenue Agency.

The previous actuarial valuation of the plan was prepared as at September 30, 2006. Since the previous actuarial valuation, the solvency and windup actuarial bases have been updated as outlined in the report. Also, since the previous actuarial valuation, the plan provisions were changed for certain members effective May 1, 2007; the financial impact of this change at May 1, 2007 was set out in the previous actuarial valuation.

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.

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

The information contained in this report was prepared for 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 Towers Perrin's actuarial valuation of the plan. This report is not intended or 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 Perrin's prior written consent.

Going Concern Financial Position

Statement of Financial Position

<i>(dollars in thousands)</i>	<i>August 1, 2007</i>	<i>September 30, 2006</i>
Actuarial Value of Assets	\$ 14,257	\$ 13,414
Actuarial Liability		
Active and disabled members	\$ 2,452	\$ 2,576
Retired members and beneficiaries	6,108	5,615
Terminated vested members	146	320
Total actuarial liability	<u>\$ 8,706</u>	<u>\$ 8,511</u>
Actuarial Surplus (Unfunded Actuarial Liability)	\$ 5,551	\$ 4,903

Comments:

- 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, 2007 resulting from the plan change at that date is \$145,000.

Reconciliation of Financial Position

(dollars in thousands)

Actuarial surplus (unfunded actuarial liability) as at September 30, 2006	\$		4,903
Change in plan provisions as at May 1, 2007			(145)
Net special payments:			
■ Going concern amortization payments	\$	0	
■ Solvency amortization payments		0	
■ Transfer deficiency payments		0	
■ Other contributions		0	0
Application of:			
■ Actuarial surplus	\$	(48)	
■ Prepaid contributions		0	(48)
Expected interest on:			
■ Actuarial surplus (unfunded actuarial liability) (including May 1, 2007 plan change)	\$	262	
■ Going concern amortization payments		0	
■ Solvency amortization payments		0	
■ Transfer deficiency payments		0	
■ Other contributions		0	
■ Application of actuarial surplus		(2)	260
Plan experience:			
■ Investment gains (losses)	\$	619	
■ Liability gains (losses)		(38)	581
Actuarial surplus (unfunded actuarial liability) as at August 1, 2007	\$		5,551

Solvency Financial Position

Statement of Financial Position

<i>(dollars in thousands)</i>	<i>August 1, 2007</i>	<i>September 30, 2006</i>
Solvency Value of Assets		
Market value of assets	\$ 15,841	\$ 14,904
Reserve for plan windup expenses	(75)	(75)
Total solvency value of assets	\$ 15,766	\$ 14,829
Solvency Liability		
Active and disabled members	\$ 3,226	\$ 3,612
Retired members and beneficiaries	6,601	6,299
Terminated vested members	184	409
Total solvency liability	\$ 10,011	\$ 10,320
Solvency Surplus (Unfunded Solvency Liability)	\$ 5,755	\$ 4,509

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).
- Under the Regulation to the Pension Benefits Act (Ontario), the employer may elect 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 other benefits to be excluded from the solvency liability. The full windup liability, taking into account all of the benefits excluded under the Regulation, is \$10,683,000 as at August 1, 2007. Consequently, the windup surplus (unfunded windup liability) as at the valuation date is \$5,083,000.
- The incremental solvency and PBGF liability at May 1, 2007 resulting from the plan change at that date is \$204,000.

Determination of the Statutory Solvency Deficiency

The minimum funding requirements under the Regulation to the Pension Benefits Act (Ontario) are based on the statutory solvency deficiency as at the valuation date. In calculating the statutory solvency deficiency, various adjustments can be made to the solvency financial position including:

- recognition of the present value of existing amortization payments, including any going concern amortization payments established at the valuation date, due to be paid within the periods prescribed by the Regulation (however, amortization payments for future benefit increases excluded in the calculation of the solvency liability have not been included in the present value of existing amortization payments);
- smoothing of the asset value by use of an averaging technique;
- adjustment to the solvency liability by use of an averaging technique in determining the discount rate used to value the liabilities; and
- removal of any prepaid contributions from the asset value.

To the extent that there exists a statutory solvency deficiency, after taking account of these adjustments, additional amortization payments must be made. If there is no statutory solvency deficiency, the statutory solvency excess may be used to reduce the period of any existing solvency amortization payments.

Statutory Solvency Deficiency

<i>(dollars in thousands)</i>	<i>August 1, 2007</i>	<i>September 30, 2006</i>
Solvency surplus (unfunded solvency liability)	\$ 5,755	\$ 4,509
Adjustments to solvency position:		
■ Present value of existing amortization payments	\$ 0	\$ 0
■ Smoothing of asset value	0	(1,490)
■ Averaging of liability discount rate	0	614
■ Prepaid contributions	0	0
■ Total	\$ 0	\$ (876)
Statutory solvency excess (statutory solvency deficiency)	\$ 5,755	\$ 3,633

Contributions

Normal Actuarial Cost and Amortization Payments (Ensuing Year)

<i>(dollars in thousands)</i>	<i>August 1, 2007</i>	<i>September 30, 2006</i>
Employer Normal Actuarial Cost		
Estimated annual contribution:		
■ October 1 to April 30		\$ 38
■ May 1 to September 30 ¹		<u>25</u>
■ Total annual contribution ¹	\$ 55	\$ <u>63</u>
Estimated member contributions:		
■ October 1 to April 30		\$ 9
■ May 1 to September 30 ¹		<u>9</u>
■ Total member contributions ¹	\$ 16	\$ <u>18</u>
% of member contributions:		
■ October 1 to April 30		418%
■ May 1 to September ¹		268%
■ August 1 to July 31	336%	
Annual Amortization Payments		
Going concern	\$ 0	\$ 0
Solvency	<u>0</u>	<u>0</u>
Total	\$ 0	\$ 0
Estimated Member Contributions ¹	\$ 16	\$ 18

Note:

¹ For period commencing September 30, 2006, results reflect the plan change effective May 1, 2007.

Comments:

- Relative to the employer normal actuarial cost rate at May 1, 2007, the rate changed by 68% of employee contributions due to the change in membership profile since the previous valuation.
- The employer may apply the actuarial surplus of \$5,551,000 towards the normal actuarial cost.
- Pursuant to Section 147.2(2) of the Income Tax Act (Canada), this valuation reveals that the plan has an excess actuarial surplus of \$4,680,000. 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 certification 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.

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, 2007 according to the minimum contribution requirements revealed by this report (determined with regard to any reported prepaid contributions or surplus available to meet these minimum contribution requirements), over
- the actual amount of employer contributions made in respect of periods after August 1, 2007.

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 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 valuation, the solvency valuation and the windup valuation, the data on which the valuations are based are sufficient and reliable, the assumptions are, in aggregate, appropriate 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. The valuations have been conducted in accordance with the funding and solvency standards prescribed by the Pension Benefits Act (Ontario) and Regulation thereto, and in conformity with the requirements of the Income Tax Act (Canada) and Regulation 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, 2007:

- 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 \$5,551,000.
- 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 \$5,755,000.
- The statutory solvency excess (deficiency) revealed at this valuation is \$5,755,000. 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).
- If the plan had been wound up on the valuation date, the market value of plan assets would have been greater than the actuarial liabilities of the plan.
- The excess actuarial surplus, pursuant to Section 147.2(2) of the Income Tax Act (Canada), is \$4,680,000.
- The rule for computing the employer normal actuarial cost is 336% of member contributions. Based on the plan membership used for this valuation, the normal actuarial cost for the next three years is estimated to be:

(dollars in thousands)

<i>Year</i>	<i>Estimated member contributions</i>	<i>Estimated employer normal actuarial cost</i>
2007/ 2008	\$ 16	\$ 55
2008/ 2009	\$ 17	\$ 56
2009/ 2010	\$ 17	\$ 59

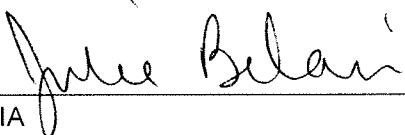
Given the present financial position of the plan, the employer is not required to make normal actuarial cost contributions to the plan until the effective date of the next actuarial certification.

Further, the excess actuarial surplus of \$4,680,000 must be applied towards the employer's contributions in respect of the normal actuarial cost. Employer contributions to the plan are not permitted until the excess actuarial surplus has been so applied or until a subsequent actuarial certification 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.

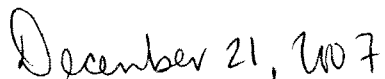
- The transfer ratio, as defined in the Regulation to the Pension Benefits Act (Ontario), is not less than 100%.
- The assessment base determined for the Pension Benefits Guarantee Fund (PBGF) is \$0. The PBGF liabilities are \$10,010,000. Additional liabilities for excluded plant closure benefits, in 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, 2010. 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.

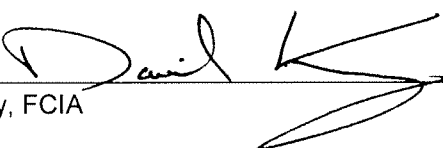
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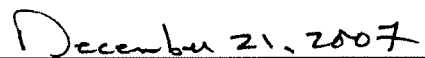
Julie Belair, FCIA



Date



David Kenny, FCIA



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, 2007 is RBC Dexia. The asset information used in this report was provided by RBC Dexia and the University as at August 1, 2007. All of this information has been relied upon by Towers Perrin following tests of reasonableness with respect to contributions and pension payments.

As at August 1, 2007, an amount of \$19,294,000 was receivable to the master trust, comprised of the following:

<i>(dollars in thousands)</i>	<i>Professional Plan</i>	<i>Retirement Plan</i>	<i>Non-Professional Plan</i>	<i>Total</i>
Employer contributions in transit	\$ 17,529	\$ 12,087	\$ 0	\$ 29,616
Employee contributions in transit	0	0	0	0
Accrued investment counsel and trustee fees	(700)	(246)	(20)	(966)
Estimated refunds, fees and expenses due but not paid and other receivables at August 1, 2007	<u>(7,431)</u>	<u>(1,910)</u>	<u>(15)</u>	<u>(9,356)</u>
Net receivable (payable)	\$ 9,398	\$ 9,931	\$ (35)	\$ 19,294

Assets

Statement of Market Value (All plans)

<i>(dollars in thousands)</i>	<i>August 1, 2007</i>		<i>September 30, 2006</i>	
Invested Assets				
Short term notes and cash	\$ 37,667	4.2%	\$ 21,549	2.7%
Bonds and Debentures	\$ 268,151	29.9%	\$ 238,167	29.6%
Stocks:				
■ Canadian stocks and pooled investment funds	\$ 233,175	26.0%	\$ 243,797	30.3%
■ Foreign stocks and pooled investment funds	<u>357,834</u>	<u>39.9%</u>	<u>300,312</u>	<u>37.4%</u>
■ Total stocks	\$ 591,009	65.9%	\$ 544,109	67.7%
Total Invested Assets	\$ 896,827	100.0%	\$ 803,825	100.0%
Other Assets				
Accrued income	\$ 3,453		\$ 3,581	
Net accounts receivable/ (payable)	<u>19,294</u>		<u>(7,830)</u>	
Total other assets	\$ 22,747		\$ (4,249)	
Total Assets	\$ 919,574		\$ 799,576	

Reconciliation of Assets (Market Value)

(dollars in thousands)

	<i>Non-Professional Plan</i>	<i>All Plans</i>
Assets as at September 30, 2006	\$ 14,904	\$ 799,576
Receipts:		
■ Contributions:		
— Employer normal actuarial cost	\$ 0	\$ 14,750
— Employer amortization contributions	0	25,454
— Employer transfer deficiency contributions	0	0
— Employer other contributions	0	28,000
— Members' required contributions	13	8,633
— Members' other contributions	0	195
■ Investment return, net of investment expenses	<u>1,449</u>	<u>79,309</u>
■ Total receipts	\$ 1,462	\$ 156,341
Transfer to other University Plans	\$ 0	\$ 0
Disbursements:		
■ Benefit payments:		
— Pension payments	\$ 499	\$ 30,012
— Lump sum settlements	0	5,025
■ Non-investment expenses	<u>26</u>	<u>1,306</u>
■ Total disbursements	\$ 525	\$ 36,343
Assets as at August 1, 2007	\$ 15,841	\$ 919,574

Comment:

- The rate of return earned on the market value of assets (all plans), net of all expenses, from September 30, 2006 to August 1, 2007 is approximately 11.8% p.a.

Development of the Actuarial Value of Assets (All Plans)

(dollars in thousands)

Adjusted Market Value Beginning from:

	Sept. 30, 2002	Sept. 30, 2003	Sept. 30, 2004	Sept. 30, 2005	Sept. 30, 2006	Aug. 1, 2007
Adjusted market value as at September 30, 2002	\$ 562,064					
Net contributions	(7,888)					
Assumed interest earned for 2002/2003 at 6.5%	36,278					
Adjusted market value as at September 30, 2003	\$ 590,454	\$ 623,245				
Net contributions	(13,289)	(13,289)				
Assumed interest earned for 2003/2004 at 6.5%	37,948	40,079				
Adjusted market value as at September 30, 2004	\$ 615,113	\$ 650,035	\$ 667,162			
Net contributions	(18,473)	(18,473)	(18,473)			
Assumed interest earned for 2004/2005 at 6.5%	39,382	41,652	42,765			
Adjusted market value as at September 30, 2005	\$ 636,022	\$ 673,214	\$ 691,454	\$ 733,752		
Net contributions	(34,436)	(34,436)	(34,436)	(34,436)		
Assumed interest earned for 2005/2006 at 6.5%	40,222	42,640	43,825	46,575		
Adjusted market value as at September 30, 2006	\$ 641,808	\$ 681,418	\$ 700,843	\$ 745,891	\$ 807,406	
Net contributions	13,540	13,540	13,540	13,540	13,540	
Assumed interest earned for 2006/2007 at 6.5%	35,131	37,277	38,329	40,769	44,101	
Adjusted market value as at August 1, 2007	\$ 690,479	\$ 732,235	\$ 752,712	\$ 800,200	\$ 865,047	\$ 900,280
Actuarial Value of Assets						
Weighted average of the adjusted market values as at August 1, 2007	\$ 803,101	= 1/5 x (2/12 x 690,479 + 732,235 + 752,712 + 800,200 + 865,047 + 10/12 x 900,280)				
Net accounts receivables/ (payable)	19,294					
Actuarial value of assets	\$ 822,395					

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 September 30, 2007 to August 1, 2007 is approximately 10.8% 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 of \$19,294,000, 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	\$ 6,123,947	\$ 580,732	\$ 1,234	\$ 9,398	\$ 591,364	\$ 595,423
Retirement	2,194,448	208,099	(1,234)	9,931	216,796	217,937
Non-Professional	<u>150,475</u>	<u>14,270</u>	<u>0</u>	<u>(35)</u>	<u>14,235</u>	<u>14,257</u>
Total	\$ 8,468,870	\$ 803,101	\$ 0	\$ 19,294	\$ 822,395	\$ 827,617

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, 2002 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. Note that for the current valuation, the going concern discount rate at August 1, 2007 has been used throughout the averaging period. 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.

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 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 (only in respect to those benefits included in the liability measure) based on the going concern actuarial assumptions used in the actuarial valuation.

Solvency and Windup

Asset Valuation Method

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

At the previous valuation, an asset adjustment for purposes of determining the statutory solvency deficiency was calculated using the same smoothing approach that was used for the going concern valuation.

Actuarial Cost Method

The solvency liability and the windup liability was calculated using the unit credit cost method.

The solvency liability and the windup liability for active and disabled members was 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 windup liabilities for each active or disabled member is at least equal to the value of twice the member's contributions with interest at the valuation date.

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

Benefit Security

The purpose of the solvency and 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 terminate 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 (only in respect of those benefits included in the liability measure) based on the actuarial assumptions used in these actuarial valuations.

Other Considerations

The solvency and windup assumptions do not include a provision for adverse deviation.

The solvency and windup actuarial valuation has 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 this solvency and windup valuation.

Assumptions

	Going Concern	Solvency and Windup
Economic Assumptions (per annum)		
Liability discount rate	6.50% (net of expenses)	Settlement by: <ul style="list-style-type: none"> ■ Commuted value: 5.25% for 10 years, 5.00% thereafter¹ ■ Annuity purchase: 5.00%²
Post-retirement pension increases	0.50%	Settlement by: <ul style="list-style-type: none"> ■ Commuted value: 0.43% for 10 years, 0.35% thereafter³ ■ Annuity purchase: 0.75%
Rate of salary increase	3.75%	Actual prior earnings used
Escalation of YMPE under Canada Pension Plan	3.25%	Actual prior YMPs used
Escalation of Income Tax Act (Canada) maximum pension limitation	Scheduled increases to 2009, increasing at 3.25% after 2009	Current level
Inflation	2.50%	N/A
Demographic Assumptions		
Mortality	1994 Uninsured Pensioner Mortality Table, projected to 2015 using Scale AA (refer to Tables 1 and 2)	Same
Withdrawal	Age-related rates (refer to Table 3)	N/A
Disability incidence/recovery	Nil ⁴	N/A
Retirement	Age and service-related rates (refer to Table 4)	Age 55, or attained age if greater
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	Active members: <ul style="list-style-type: none"> ■ Under 55 years: 100% ■ Aged 55 and over: 25% Inactive members: 0%
Application of Rule of 60	N/A ⁵	Same
Expenses	None; return on plan assets is net of all expenses	\$75,000

Notes:

- ¹ 4.75% for 10 years and 5.00% thereafter for unaveraged rates and 4.80% for 10 years and 5.95% thereafter for averaged rates at previous valuation.
- ² 4.50% for unaveraged rate and 5.20% for averaged rate at previous valuation.
- ³ 0.55% for 10 years and 0.67% thereafter at previous valuation.
- ⁴ 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.
- ⁵ All active 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

<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Age</i>	<i>Male</i>	<i>Female</i>
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

<i>Age</i>	<i>Rate</i>
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

<i>Age</i>	<i>Rate</i> ¹
55 to 59	.05
60	.20
61	.15
62	.15
63	.15
64	.15
65	1.00

Note:

¹ Plus 0.05 at age where member first attains 85 points if prior to age 65.

Method of Calculating Solvency and Windup Discount Rates

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 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 2007 by the Pension Plan Financial Reporting Committee providing guidance on assumptions for windup, hypothetical windup and solvency valuations.

For the calculation of the portion of the solvency and 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* approved by the Canadian Institute of Actuaries effective May 1, 2006. For this valuation, the August 2007 rates have been used.

At the previous valuation, the statutory solvency deficiency was determined using discount rates averaged over a five-year period.

Expense Assumption (Solvency and Windup)

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 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.

Direction From Plan Administrator

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

- Since to the best of the knowledge of University of Guelph, there have not been any partial plan windups effective prior to the valuation date involving members employed in Ontario where the plan was in a surplus position on the effective date of the partial windup, this report is to be prepared on the basis that there will be no retroactive changes to previously filed partial windup reports, if any, and neither the applicable pension regulator nor the plan sponsor will order/declare any partial plan windups effective prior to the valuation date. To the extent a prior report is changed or a new partial plan windup is declared, certain financial measures, including liabilities, the amount of assets available for members' pension benefit entitlements and contribution requirements, contained in this report may be impacted.
- 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 impacted.
- 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.
- 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).

Membership Data

Summary of Membership

	<i>August 1, 2007</i>	<i>September 30, 2006</i>
Active and disabled members:		
■ Number	12	14
■ Average age	58.5	58.1
■ Average credited service	30.7	29.9
■ Annual payroll	\$ 537,000	\$ 617,000
■ Average salary	\$ 44,791	\$ 44,075
Retired members and beneficiaries:		
■ Number	96	94
■ Average age	78.4	78.5
■ Total lifetime annual pension	\$ 623,397	\$ 583,762
■ Average lifetime annual pension	\$ 6,494	\$ 6,210
Terminated vested members:		
■ Number	2	3
■ Average age	55.5	55.0
■ Total lifetime annual pension	\$ 21,060	\$ 35,937
■ Average annual pension	\$ 10,530	\$ 11,979

Comments:

- Membership data were supplied by University of Guelph's third-party administrator, ExcellerateHRO, as at August 1, 2007.

Review of Membership Data

The membership data was 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 was 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;
- preparation and review of age and years since retirement distributions for retired members and beneficiaries 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 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 pensions to the prior valuation data for reasonableness;
- comparison, for retired members and beneficiaries, of average age and average pensions to the prior valuation data for reasonableness; and
- comparison of aggregate pension payments to actual payments made from the plan for the period prior to the valuation date.

Active and Disabled Members

Age		Service							Total
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	
<50	Number								
	Average Salary								
	Average Contributions								
50 - 54	Number							1	1
	Average Salary								
	Average Contributions								
55 - 59	Number						3	5	8
	Average Salary								\$49,244
	Average Contributions								\$63,410
60 - 64	Number						1	1	2
	Average Salary								\$52,106
	Average Contributions								\$71,998
65 +	Number							1	1
	Average Salary								
	Average Contributions								
Total	Number						4	8	12
	Average Salary						\$48,203	\$43,085	\$44,791
	Average Contributions						\$48,874	\$61,802	\$57,493

Average Age = 58.5

Average Credited Service = 30.7

Membership Reconciliation

Active and disabled members:

■ As at September 30, 2006	14
■ 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	0
— With survivor's pension	0
■ Transferred out	0
■ Transferred in	0
■ Data corrections	0
■ As at August 1, 2007	12

Retired members and beneficiaries:

■ As at September 30, 2006	94
■ New retirements	3
■ New beneficiaries	3
■ Deaths:	
— Without survivor's pension	(1)
— With survivor's pension	(3)
■ Data corrections	0
■ As at August 1, 2007	96

Terminated vested members:

■ As at September 30, 2006	3
■ New vested terminations	0
■ Lump sum settlements	0
■ Retirements	(1)
■ Deaths:	
— With lump sum settlement	0
— With survivor's pension	0
■ Re-employed	0
■ Data corrections	0
■ As at August 1, 2007	2

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

Accrued Pension

Accrued Pension is a proportion of a Member's total regular pension payable from normal retirement date, based on Best Average Earnings at termination or retirement and total possible Credited Service to normal retirement date. The proportion is the ratio of Credited Service to date of retirement or termination to the total possible Credited Service to normal retirement date, had membership in the Plan continued to that date.

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, for Exempt Group and USW Local 4120, the contribution rate for Earnings up to the YMPE has increased as follows:

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

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, 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

The Accrued 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

Accrued Pension 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%.

Pensions in payment have also been adjusted in recent years on an adhoc basis beyond what had previously been committed under plan terms. The most recent adhoc increase in lifetime pensions for retirees and beneficiaries was September 30, 2004 equal to 1.0%

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 and Transfer Ratio

(dollars in thousands)

August 1, 2007

PBGF Assessment

Solvency liability: ¹

■ Total	\$	10,010
■ Ontario PBGF liability ²		10,010
■ Ontario additional PBGF liability ³		0

Solvency value of assets: ¹

■ Total	15,841
■ Ontario PBGF assets	15,841

PBGF assessment base ² 0

Plan membership (including inactives):

■ Total	110
■ Ontario	110

Transfer Ratio

Solvency value of assets ¹ \$ 15,841

Lesser of estimated employer contributions for the period until the next valuation ⁴ and prepaid contributions 0

Windup liability ¹ 10,683

Transfer 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 that would result if plant closure benefits, which the employer elected to exclude, are included for those Ontario members who are immediately eligible for the benefit at the valuation date.


⁴ The next valuation of the plan is due with an effective date not later than August 1, 2010.

⁵ 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.

Certificate of the Employer

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

- the information on plan assets forwarded to Towers Perrin 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 Perrin Inc. and summarized in Appendix C of this report is 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 includes all provisions which have a material effect on the determination of plan contributions and liabilities; and
- there have been no subsequent events that would materially change the plan's financial position after the valuation date.



Signature

Dec 18/2007

Date

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

Title

Marsha Harley
Asst. V.P. Human Resources
University of Guelph