

UNIVERSITY OF WINDSOR EMPLOYEES' RETIREMENT PLAN

REPORT ON THE ACTUARIAL VALUATION FOR FUNDING PURPOSES

AS AT JULY 1, 2011

MARCH 2012

Financial Services Commission of Ontario Registration Number: 0310573

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Note to reader regarding actuarial valuations:

This valuation report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future. If maintained indefinitely, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

To prepare the results in this report, actuarial assumptions are used to model a single scenario from a range of possibilities for each valuation basis. The results based on that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. Different assumptions or scenarios within the range of possibilities may also be reasonable, and results based on those assumptions would be different. Furthermore, actuarial assumptions may be changed from one valuation to the next because of changes in regulatory and professional requirements, developments in case law, plan experience, changes in expectations about the future and other factors.

The valuation results shown in this report also illustrate the sensitivity to one of the key actuarial assumptions, the discount rate. We note that the results presented herein rely on many assumptions, all of which are subject to uncertainty, with a broad range of possible outcomes and the results are sensitive to all the assumptions used in the valuation.

Should the plan be wound up, the going concern funded status and solvency financial position, if different from the wind-up financial position, become irrelevant. The hypothetical wind-up financial position estimates the financial position of the plan assuming it is wound-up on the valuation date. Emerging experience will affect the wind-up financial position of the plan assuming it is wound-up in the future. In fact, even if the plan were wound-up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

Because actual plan experience will differ from the assumptions used in this valuation, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.

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Summary of Results

	01.07.2011	01.07.2008
Going Concern Financial Status		
Smoothed value of assets	\$139,169,800	\$135,903,500
Going concern funding target	\$140,131,200	\$126,644,800
Funding excess (shortfall)	(\$961,400)	\$9,258,700
Hypothetical Wind-up Financial Position		
Wind-up assets	\$146,189,300	\$131,065,700
Wind-up liability	\$148,250,600	\$114,426,500
Wind-up excess (shortfall)	(\$2,061,300)	\$16,639,200
Solvency Financial Position		
Solvency assets	\$146,189,300	\$131,065,700
Solvency liability	\$148,250,600	\$114,426,500
Solvency excess (deficiency)	(\$2,061,300)	\$16,639,200
Transfer ratio	0.99	1.15
Ratio of solvency assets to solvency liabilities	0.99	1.15
Funding Requirements in the Year Following the Valuation¹		
Total current service cost	\$6,107,500	\$6,631,700
Minimum special payments	\$454,536	\$0
Total current service cost plus minimum special payments	\$6,562,036	\$6,631,700
Estimated member's required contributions	\$3,299,300	\$2,162,900
Estimated employer's required contributions	\$3,299,300	\$2,162,900
Estimated current service cost to be met from funding excess	\$0	\$2,305,900
Total	\$6,598,600	\$6,631,700
Estimated minimum required contribution	\$6,562,036	\$4,325,800 ²
Estimated maximum eligible contribution	\$8,168,800	\$6,631,700
Next required valuation date	July 1, 2014	July 1, 2011

¹ Provided for reference purposes only. Contributions must be remitted to the Plan in accordance with the Minimum Funding Requirements and Maximum Eligible Contributions sections of this report.

² In accordance with the Pension Benefits Act (Ontario), no contributions are required to be made. However, in accordance with the Plan text (and subject to the limits imposed by the Income Tax Act), both members and the University are required to make contributions.

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Introduction

To University of Windsor

At your request, we have conducted an actuarial valuation of the University of Windsor Employees' Retirement Plan (the "Plan"), sponsored by University of Windsor (the "University"), as at the valuation date, July 1, 2011. We are pleased to present the results of the valuation.

Purpose

The purpose of this valuation is to determine:

- The funded status of the plan as at July 1, 2011 on going concern, hypothetical wind-up and solvency bases
- The minimum required funding contributions from July 1, 2011, in accordance with the *Pension Benefits Act (Ontario)*
- The maximum permissible funding contributions from July 1, 2011, in accordance with the *Income Tax Act*

The information contained in this report was prepared for the internal use of the University of Windsor and for filing with the Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report will be filed with the Financial Services Commission of Ontario and with the Canada Revenue Agency. This report is not intended or suitable for any other purpose.

In accordance with pension benefits legislation, the next actuarial valuation of the Plan will be required as at a date not later than July 1, 2014, or as at the date of an earlier amendment to the Plan.

Terms of Engagement

In accordance with our terms of engagement with the University of Windsor, our actuarial valuation of the Plan is based on the following material terms:

- It has been prepared in accordance with applicable pension legislation and actuarial standards of practice in Canada.
- As instructed by the University of Windsor, we have reflected a margin for adverse deviations in our going concern valuation by reducing the going concern discount rate by 0.55% per year.

- We have reflected the University of Windsor's decisions for determining the solvency funding requirements, summarized as follows:
 - The same plan wind-up scenario was hypothesized for both hypothetical wind-up and solvency valuations.
 - The solvency financial position was determined on a market value basis.
 - No funding relief measures have been applied.

See the Valuation Results – Solvency section of the report for more information.

Events Since the Last Valuation at July 1, 2008 *Retirement Plan*

There have been no special events since the last valuation date.

This valuation reflects the provisions of the Plan as at July 1, 2011. Effective July 1, 2009, a review of the financial position of the Plan on a funding basis indicated that the Plan had sufficient funding excess to continue paying a portion of the current service cost throughout the period until June 30, 2010. Effective July 1, 2010, member and plan sponsor contribution rates were increased as follows:

- 9.2% of earnings up to the Year's Basic Exemption (YBE), plus
- 6.4% of earnings above YBE and up to the Year's Maximum Pensionable Earnings (YMPE), plus
- 9.2% of earnings above YMPE

There have been no other amendments to the Plan since the date of the previous valuation, and we are not aware of any pending definitive or virtually definitive amendments coming into effect during the period covered by this report that would materially impact the results of the valuation. The Plan provisions are summarized in Appendix F.

Assumptions

We have used the same going concern valuation assumptions and methods as were used for the previous valuation, except for the following:

	Current valuation	Previous valuation
Discount rate:	5.60%	6.00%
Pensionable earnings increases:	4.00%	5.00%
Retirement rates:	Actives – Age related table Deferreds – 100% at age 60	Actives – 100% at age 64 Deferreds – 100% at age 65
Termination rates:	Age related table	None

The hypothetical wind-up and solvency assumptions have been updated to reflect market conditions at the valuation date.

A summary of the going concern, and hypothetical wind-up and solvency methods and assumptions are provided in Appendices C and D, respectively.

Regulatory Environment and Actuarial Standards

There have been no changes to the *Pension Benefits Act (Ontario)* (the "Act") or the relevant regulations which impact the funding of the Plan.

The Government of Ontario has announced its intention to make changes to the funding requirements for pension plans registered in Ontario and the bill related to these changes has received Royal assent. However, the intended changes to the funding requirements which impact the funding of single-employer pension plans will be contained in regulations which have not yet been adopted.

A new Canadian actuarial Standard of Practice for determining pension commuted values ("CIA CV Standard") became effective on April 1, 2009. The new CIA CV Standard changed the assumptions to be used to value the solvency and wind-up liabilities for benefits assumed to be settled through a lump sum transfer. The financial impact of the change in the CIA CV Standard has been reflected in this actuarial valuation.

A new Canadian actuarial Standard of Practice – *Practice Specific Standards of Practice for Pension Plans* became effective December 31, 2010 (the "CIA Pension Standards"). The requirements of the CIA Pension Standards have been reflected in this report.

Subsequent Events

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation. However, since the valuation date, there have been significant fluctuations in the financial markets which will have led to a deterioration of the funded position of the Plan since the valuation date. Our valuation reflects the financial position of the Plan as of the valuation date and does not take into account any experience after the valuation date.

Impact of Case Law

We have assumed that all the Plan's assets are available to cover the Plan's liabilities presented in this report.

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Valuation Results – Going Concern

Financial Status

A going concern valuation compares the relationship between the value of Plan assets and the present value of expected future benefit cash flows in respect of accrued service, assuming the Plan will be maintained indefinitely.

The results of the current valuation, compared with those from the previous valuation, are summarized as follows:

	01.07.2011	01.07.2008
Assets		
Market value of assets	\$146,516,500	\$131,369,700
In-transit amounts	(\$27,200)	(\$29,000)
Asset smoothing adjustment	(\$7,319,500)	\$4,562,800
Smoothed value of assets	\$139,169,800	\$135,903,500
Going concern funding target		
• Active members	\$86,861,800	\$78,623,900
• Disabled members	\$2,691,200	\$2,940,900
• Suspended members	\$2,249,800	\$1,812,100
• Pensioners and survivors	\$46,909,300	\$42,016,900
• Deferred pensioners	\$1,419,100	\$1,251,000
Total	\$140,131,200	\$126,644,800
Funding excess (shortfall)	(\$961,400)	\$9,258,700

The going concern funding target includes a provision for adverse deviations.

Reconciliation of Financial Status

Funding excess (shortfall) as at previous valuation		\$9,258,700
Interest on funding excess (funding shortfall) at 6.00% per year		\$1,768,600
Current service cost drawn from previous funding excess with interest		(\$6,476,000)
Expected funding excess (funding shortfall)		\$4,551,300
Net experience gains (losses)		
• Net investment return	(\$10,509,600)	
• Increases in pensionable earnings	\$10,961,500	
• Demographic experience	(\$1,700)	
Total experience gains (losses)	\$450,200	\$450,200
Impact of asset smoothing adjustment		(\$12,753,900)
Impact of changes in assumptions		\$6,837,100
Net impact of other elements of gains and losses		(\$46,100)
Funding excess (shortfall) as at current valuation		(\$961,400)

Current Service Cost

The current service cost is an estimate of the present value of the additional expected future benefit cash flows in respect of pensionable service that will accrue in each year after the valuation date, assuming the Plan will be maintained indefinitely.

The current service cost during the year following the valuation date compared with the corresponding value determined in the previous valuation, is as follows:

	2011	2008
Estimated Members' required contributions for current service cost	\$3,053,750	\$2,162,900
Estimated University matching contributions for current service cost	\$3,053,750	\$2,162,900
Estimated current service cost to be met from funding excess	\$0	\$2,305,900
Total current service cost	\$6,107,500	\$6,631,700
Total current service cost expressed as a percentage of members' pensionable earnings	13.1%	14.6%

The key factors that have caused a change in the current service cost since the previous valuation are summarized in the following table:

Current service cost as at previous valuation	14.6%
Demographic changes	0.7%
Changes in assumptions	-2.2%
Current service cost as at current valuation	13.1%

Discount Rate Sensitivity

The following table summarizes the effect on the going concern funding target shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Going concern funding target	\$140,131,200	\$163,897,400
Current service cost	\$6,107,500	\$7,608,400

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Valuation Results – Hypothetical Wind-up

Financial Position

When conducting a hypothetical wind-up valuation, we determine the relationship between the respective values of the Plan's assets and its liabilities assuming the Plan is wound up and settled on the valuation date, assuming benefits are settled in accordance with the Act and under circumstances producing the maximum wind-up liabilities on the valuation date. However, to the extent permitted by law, the actuary may disregard:

- Benefits that would not be payable under the hypothesized scenario
- Plan member earnings after the valuation date

The hypothetical wind-up financial position as of the valuation date, compared with that at the previous valuation, is as follows:

	01.07.2011	01.07.2008
Assets		
Market value of assets	\$146,516,500	\$131,369,700
In-transit amounts	(\$27,200)	(\$29,000)
Termination expense provision	(\$300,000)	(\$275,000)
Wind-up assets	\$146,189,300	\$131,065,700
Present value of accrued benefits for:		
• Active members	\$88,633,000	\$63,880,600
• Disabled members	\$2,987,600	\$2,949,400
• Suspended members	\$2,233,400	\$1,428,300
• Pensioners and survivors	\$52,693,100	\$44,640,400
• Deferred pensioners	\$1,703,500	\$1,527,800
Total wind-up liability	\$148,250,600	\$114,426,500
Wind-up excess (shortfall)	(\$2,061,300)	\$16,639,200

Wind-up Incremental Cost to July 1, 2014

The wind-up incremental cost is an estimate of the present value of the projected change in the hypothetical wind-up liabilities from the valuation date until the next scheduled valuation date, adjusted for the benefit payments expected to be made in that period.

The hypothetical wind-up incremental cost determined in this valuation, compared with the corresponding value determined in the previous valuation, is as follows:

	01.07.2011
Number of years covered by report	3 years
Total hypothetical wind-up liabilities at the valuation date (A)	\$148,250,600
Present value of projected hypothetical wind-up liability at the next required valuation (including expected new entrants) plus benefit payments until the next required valuation (B)	\$173,761,600
Hypothetical wind-up incremental cost (B – A)	\$25,511,000

The incremental cost may not be an appropriate measure of the contributions that would be required to maintain the financial position of the Plan on a hypothetical wind-up basis unchanged from the valuation date and the next required valuation date, if actual experience is exactly in accordance with the going concern valuation assumptions. This is because it does not reflect the fact that the expected return on plan assets (based on the going concern assumptions) is greater than the discount rate used to determine the hypothetical wind-up liabilities.

Discount Rate Sensitivity

The following table summarizes the effect on the hypothetical wind-up liabilities shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Total hypothetical wind-up liability	\$148,250,600	\$169,297,700

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Valuation Results – Solvency

Overview

The Act also requires the financial position of the Plan to be determined on a solvency basis. The financial position on a solvency basis is determined in a similar manner to the Hypothetical Wind-up Basis, except for the following:

Exceptions	Reflected in valuation based on the terms of engagement
The circumstance under which the Plan is assumed to be wound-up could differ for the solvency and hypothetical wind-up valuations.	The same circumstances were assumed for the solvency valuation as were assumed for the hypothetical wind-up.
Certain benefits can be excluded from the solvency financial position. These include: <ul style="list-style-type: none"> (a) any escalated adjustment (e.g. indexing), (b) certain plant closure benefits, (c) certain permanent layoff benefits, (d) special allowances other than funded special allowances, (e) consent benefits other than funded consent benefits, (f) prospective benefit increases, (g) potential early retirement window benefit values, and (h) pension benefits and ancillary benefits payable under a qualifying annuity contract. 	No benefits were excluded from the solvency liabilities shown in this valuation.
The financial position on the solvency basis needs to be adjusted for any Prior Year Credit Balance.	Not applicable.
The solvency financial position can be determined by smoothing assets and the solvency discount rate over a period of up to 5 years.	Smoothing was not used.
The benefit rate increases coming into effect after the valuation date can be reflected in the solvency valuation.	Not applicable.

Financial Position

The financial position on a solvency basis is the same as the financial position on the Hypothetical Wind-up Basis shown in the previous section. The transfer ratio is 99% compared to 115% at the previous valuation.

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Minimum Funding Requirements

The Act prescribes the minimum contributions that must be made to the Plan. The minimum contributions in respect of a defined benefit component of a pension plan are comprised of going concern current service cost and special payments to fund any going concern or solvency shortfalls.

Under the cost sharing provisions of the plan, subject to any limits under the *Income Tax Act*, the funding excess is applied to reduce the University's contributions to the same amount as the employee contributions. If the funding excess is insufficient and the University contributions cannot be reduced to the same amount as the employee contributions, then the employee contributions are to be increased such that the members and the University each contribute 50% of the total amount required to fund the plan.

On the basis of the assumptions and methods described in this report, the rule for determining the minimum total required monthly contributions, as well as an estimate of the contributions, from the valuation date until the next required valuation are as follows:

Contribution rule				Estimated contributions	
Period beginning	Monthly current service cost ³	Explicit monthly expense allowance	Minimum monthly special payments	Monthly current service cost including expense allowance	Total minimum monthly contributions
July 1, 2011	13.1%	\$0	\$37,878	\$508,958	\$546,836
July 1, 2012	13.1%	\$0	\$37,878	\$529,317	\$567,195
July 1, 2013	13.1%	\$0	\$37,878	\$550,489	\$588,367

The estimated contribution amounts above are based on projected members' pensionable earnings. Therefore the actual current service cost will be different from the above estimates and, as such, the contribution requirements should be monitored closely to ensure contributions are made in accordance with the Act.

The development of the minimum special payments is summarized in Appendix A.

³ Expressed as a percentage of members' pensionable earnings.

Other Considerations

Differences between Valuation Bases

There is no provision in the minimum funding requirements to fund the difference between the hypothetical wind-up and solvency shortfalls, if any.

In addition, although minimum funding requirements do include a requirement to fund the going concern current service cost, there is no requirement to fund the expected growth in the hypothetical wind-up or solvency liability after the valuation date, which could be greater than the going concern current service cost.

Timing of Contributions

Funding contributions are due on a monthly basis. Contributions for current service cost must be made within 30 days following the month to which they apply. Special payment contributions must be made in the month to which they apply.

Retroactive Contributions

The University must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following the valuation date. This contribution, along with an allowance for interest, is due no later than 60 days following the date this report is filed.

Payment of Benefits

The Act imposes certain restrictions on the payment of lump sums from the Plan when the transfer ratio revealed in an actuarial valuation is less than one. If the transfer ratio shown in this report is less than one, the plan administrator should ensure that the monthly special payments are sufficient to meet the requirements of the Act to allow for the full payment of benefits, and otherwise should take the prescribed actions.

Additional restrictions are imposed when:

- The transfer ratio revealed in the most recently filed actuarial valuation is less than one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined by 10% or more since the date the last valuation was filed.
- The transfer ratio revealed in the most recently filed actuarial valuation is greater than or equal to one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined to less than 0.9 since the date the last valuation was filed.

As such, the administrator should monitor the transfer ratio of the Plan and, if necessary, take the prescribed actions.

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Maximum Eligible Contributions

The *Income Tax Act* (the "ITA") limits the amount of contributions that can be remitted to the defined benefit component of a registered pension plan. However, notwithstanding the limit imposed by the ITA, for plans which are not 'Designated' as defined in the ITA, in general, the minimum required contributions under the Act can be remitted.

In accordance with Section 147.2 of the ITA and *Income Tax Regulation* 8516, for a plan which is underfunded on either a going concern or on a hypothetical wind-up basis the maximum permitted contributions are equal to the current service cost, including the explicit expense allowance if applicable, plus the greater of the going concern funding shortfall and hypothetical wind-up shortfall.

For a plan which is fully funded on both going concern and hypothetical wind-up bases, a contribution equal to the current service cost, including the explicit expense allowance if applicable, may be remitted as long as the surplus in the plan does not exceed a prescribed threshold. Specifically, in accordance with Section 147.2 of the ITA, for a plan which is fully funded on both going concern and hypothetical wind-up bases, the plan may not retain its registered status if the employer makes a contribution while the going concern funding excess exceeds 25% of the going concern funding target.

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Actuarial Opinion

In our opinion, for the purposes of the valuations:

- the membership data on which the valuation is based are sufficient and reliable
- the assumptions are appropriate
- the methods employed in the valuation are appropriate

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the *Pension Benefits Act (Ontario)*.



Bill Watson

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

March 23, 2012

Date



Emelie C. Rahilly

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

March 23, 2012

Date

APPENDIX A

Prescribed Disclosure

Definitions

The Act defines a number of terms as follows:

Defined Term	Description	Result
Transfer Ratio	The ratio of: (a) solvency assets minus the lesser of the Prior Year Credit Balance and the minimum required employer contributions until the next required valuation; to (b) the sum of the solvency liabilities and liabilities for benefits, other than benefits payable under qualifying annuity contracts that were excluded in calculating the solvency liabilities.	0.99
Prior Year Credit Balance	Accumulated excess of contributions made to the pension plan in excess of the minimum required contributions (note: only applies if the University chooses to treat the excess contributions as a Prior Year Credit Balance).	\$0
Solvency Assets	Market value of assets including accrued or receivable income and excluding the value of any qualifying annuity contracts ⁴ .	\$146,189,300
Solvency Asset Adjustment	The sum of: (a) the difference between smoothed value of assets and the market value of assets; (b) the present value of any going concern special payments (including those identified in this report) within 5 years following the valuation date; (c) the present value of any previously scheduled solvency special payments (excluding those identified in this report)	\$0 \$426,400 \$0
		\$426,400

⁴ In accordance with accepted actuarial practice, for purposes of determining the financial position, the market value of plan assets was adjusted for any in-transit benefit payments, contributions, and other in-transit cash flows, and reduced by a provision for estimated termination expenses payable from the Plan's assets that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

Defined Term	Description	Result
Solvency Liabilities	Liabilities determined as if the plan had been wound up on the valuation date, including liabilities for plant closure benefits or permanent layoff benefits that would be immediately payable if the employer's business were discontinued on the valuation date of the report, but, if elected by the plan sponsor, excluding liabilities for, <ul style="list-style-type: none"> (a) any escalated adjustment, (b) excluded plant closure benefits, (c) excluded permanent layoff benefits, (d) special allowances other than funded special allowances, (e) consent benefits other than funded consent benefits, (f) prospective benefit increases, (g) potential early retirement window benefit values, and (h) pension benefits and ancillary benefits payable under a qualifying annuity contract. 	\$148,250,600
Solvency Liability Adjustment	The amount by which solvency liabilities are adjusted as a result of using a solvency valuation interest rate that is the average of market interest rates calculated over the period of time used in the determination of the smoothed value of assets.	\$0
Solvency Deficiency	The amount by which the sum of: <ul style="list-style-type: none"> (a) the solvency liabilities (b) the solvency liability adjustment (c) the prior year credit balance 	<ul style="list-style-type: none"> \$148,250,600 \$0 \$0 <hr/> \$148,250,600
	Exceeds the sum of <ul style="list-style-type: none"> (d) the solvency assets (e) the solvency asset adjustment 	<ul style="list-style-type: none"> \$146,189,300 \$426,400 <hr/> \$146,615,700
		<hr/> \$1,634,900

Timing of Next Required Valuation

In accordance with the Act the next valuation of the Plan would be required at an effective date within one year of the current valuation date if:

- The ratio of solvency assets to solvency liabilities is less than 80%.
- The ratio of solvency assets to solvency liabilities is less than 85% and solvency liabilities exceed solvency assets by \$5 million or more.
- The employer elected to exclude plant closure or permanent lay-off benefits under Section 5(18) of the regulations, and has not rescinded that election.

Otherwise, the next valuation of the Plan would be required at an effective date no later than three years after the current valuation date.

Accordingly, the next valuation of the Plan will be required as of July 1, 2014.

Special Payments

Based on the results of this valuation, the Plan is not fully funded. In accordance with the Act, any going concern deficits must be amortized over a period not exceeding 15 years and any solvency deficits must be amortized over a period not exceeding 5 years.

As such, special payments must be made as follows:

Type of payment	Start date	End date	Monthly Special Payment	Present Value	
				Going Concern Basis ⁵	Solvency Basis ⁶
New going concern	July 1, 2011	June 30, 2026	\$7,836	\$961,400	\$426,400
New solvency	July 1, 2011	June 30, 2016	\$30,042		\$1,634,900
Total			\$37,878		\$2,061,300

⁵ Calculation only considers going concern special payments and is based on a going concern discount rate.

⁶ Calculation considers both solvency and going concern special payments (five years only) and is based on the average solvency discount rate.

Pension Benefit Guarantee Fund (PBGF) Assessment

The PBGF assessment base and liabilities are derived as follows:

Solvency assets	\$146,489,300	(a)
PBGF liabilities	\$148,250,600	(b)
Solvency liabilities	\$148,250,600	(c)
Ontario asset ratio	100.00%	(d) = (b) ÷ (c)
Ontario portion of the fund	\$146,489,300	(e) = (a) x (d)
PBGF assessment base	\$1,761,300	(f) = (b) – (e)
Amount of additional liability for plant closure and/or permanent layoff benefits which is not funded and subject to the 2% assessment pursuant to s.37(4)	\$0	(g)

The PBGF assessment is calculated as follows:

\$5 for each Ontario member	\$5,980	(h)
0.5% of PBGF assessment base up to 10% of PBGF liabilities	\$8,807	(i)
1.0% of PBGF assessment base between 10% and 20% of PBGF liabilities	\$0	(j)
1.5% of PBGF assessment base over 20% of PBGF liabilities	\$0	(k)
Sum of (h), (i), (j) and (k)	\$14,787	(l)
\$300 for each Ontario member	\$358,800	(m)
Lesser of (l) and (m)	\$14,787	(n)
2.0% of additional liabilities ((g) x 2%)	\$0	(o)
Total Guarantee Fund Assessment ((n) + (o), no less than \$250) (before applicable tax)	\$14,787	(p)

APPENDIX B

Plan Assets

The pension fund is held in trust by Northern Trust Company. In preparing this report, we have relied upon fund statements prepared by Northern Trust Company.

Reconciliation of Market Value of Plan Assets

The pension fund transactions since the last valuation are summarized in the following table:

	2009	2010	2011
July 1	\$131,369,700	\$118,922,600	\$126,700,400
PLUS			
University contributions	\$2,215,700	\$2,292,500	\$3,506,700
Members' contributions	\$2,215,700	\$2,292,500	\$3,506,700
Other contributions	\$1,200	\$20,200	\$0
Investment income and gains (losses)	\$(11,165,400)	\$9,098,200	\$18,769,600
	\$(6,732,800)	\$13,703,400	\$25,783,000
LESS			
Pension payments	\$4,344,900	\$4,302,000	\$4,473,700
Lump sum refunds	\$670,600	\$853,900	\$753,600
Expenses	\$698,800	\$769,700	\$739,600
	\$5,714,300	\$5,925,600	\$5,966,900
June 30	\$118,922,600	\$126,700,400	\$146,516,500
Rate of return net of expenses ⁷	(9.05%)	7.02%	14.13%

The market value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Market value of invested assets	\$146,516,500	\$131,369,700
In-transit amounts		
• Members' contributions	\$0	\$0
• University's contributions	\$0	\$0
• Expenses	\$0	\$0
• Benefit payments	(\$27,200)	(\$29,000)
Market value of assets adjusted for in-transit amounts	\$146,489,300	\$131,340,700

⁷ Assuming mid-period cash flows.

We have tested the pensions paid, the lump-sums paid and the contributions for consistency with the membership data for the Plan members who have received benefits or made contributions. The results of these tests were satisfactory.

Investment Policy

The plan administrator adopted a statement of investment policy and procedures. This policy is intended to provide guidelines for the manager(s) as to the level of risk which is commensurate with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The constraints on the asset mix and the actual asset mix at the valuation date are provided for information purposes:

	Investment Policy			Actual Asset Mix as at July 1, 2011
	Minimum	Target	Maximum	
Equities	50%	60.0%	70%	59.2%
Bonds	25%	37.5%	50%	37.4%
Cash and cash equivalents	0%	2.5%	10%	3.4%
		100.0%		100.0%

APPENDIX C

Methods and Assumptions – Going Concern

Valuation of Assets

For this valuation, we have continued to use a moving three-year average method to determine the smoothed value of assets. Under this method, fund investment return (net of expenses) above or below the expected return during a given year are spread on a straight-line basis over three years. As a result, the asset value produced at July 1, 2011 recognizes the following percentages of the fund investment return different from the expected return that arose during the past three years:

Period	Percentage of Gains (Losses) Recognized
2010/2011:	33.33%
2009/2010:	66.67%
before 2009/2010:	100.00%

The asset values produced by this method are related to the market value of the assets, with the advantage that, over time, the market-related asset values will tend to be more stable than market values. To the extent that more capital gains than losses will arise over the long term, the smoothed value will tend to be lower than the market value. The smoothed value of the assets at July 1, 2011, was derived as follows:

Market value of assets		\$146,516,486
LESS		
Fund returns above or below expected 6.00% ⁸	2009/2010: \$1,209,718 x 1/3% =	\$403,239
	2010/2011: \$10,374,364 x 2/3% =	\$6,916,242
		\$7,319,482
Smoothed value of assets		\$139,197,004

⁸ 6.00% per year is the expected annual rate of return in effect in 2009 through 2011 based on the July 1, 2008 actuarial valuation for funding purposes.

The smoothed value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Smoothed value of assets	\$139,197,000	\$135,932,500
In-transit amounts		
• Members' contributions	\$0	\$0
• University's contributions	\$0	\$0
• Expenses	\$0	\$0
• Benefit payments	(\$27,200)	(\$29,000)
Smoothed value of assets, adjusted for in-transit amounts	\$139,169,800	\$135,903,500

Going Concern Funding Target

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going concern valuation, we have continued to use the projected unit credit actuarial cost method. Under this method, we determine the present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date, including ancillary benefits, based on projected final average earnings. This is referred to as the funding target.

The funding excess or funding shortfall, as the case may be, is the difference between the market or smoothed value of assets and the funding target. A funding excess on a market value basis indicates that the current market value of assets and expected investment earnings are expected to be sufficient to meet the cash flows in respect of benefits accrued to the valuation date as well as expected expenses – assuming the plan is maintained indefinitely. A funding shortfall on a market value basis indicates the opposite – that the current market value of the assets is not expected to meet the plan's cash flow requirements in respect of accrued benefits and absent additional contributions.

As required under the Act, a funding shortfall will be amortized over no more than 15 years through special payments. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

The actuarial cost method used for the purposes of this valuation produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial cost method provides an effective funding target for a plan that is maintained indefinitely.

Current Service Cost

The current service cost is the present value of projected benefits to be paid under the plan with respect to service expected to accrue in each year following the valuation date.

Under the projected unit credit actuarial cost method, the current service cost for an individual member will increase each year as the member approaches retirement. However, the current service cost of the entire group, expressed as a percentage of the members' pensionable earnings, can be expected to remain stable as long as the average age of the group remains constant.

Under the cost sharing provisions of the plan, subject to any limits under the Income Tax Act, the funding excess, if any, is applied to reduce the University's contributions to the same amount as the employee contributions. If the funding excess is insufficient and the University contributions cannot be reduced to the same amount as the employee contributions, then the employee contributions are to be increased such that the members and the University each contribute 50% of the total amount required to fund the plan.

Actuarial Assumptions – Going Concern Basis

The present value of future benefit payment cash flows is based on economic and demographic assumptions. At each valuation we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary.

Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The table below shows the various assumptions used in the current valuation in comparison with those used in the previous valuation.

Assumption	Current valuation	Previous valuation
Discount rate:	5.60%	6.00%
Inflation:	2.60%	2.50%
ITA limit / YMPE increases:	3.50%	3.50%
Pensionable earnings increases:	4.00%	5.00%
Post retirement pension increases:	n/a	n/a
Interest on employee contributions:	3.40%	5.50%
Retirement rates:	Active – Age related table Deferred – 100% at age 60	Active – 100% at age 64 Deferred – 100% at age 65
Termination rates:	Age related table	None
Mortality rates:	100% of the rates of the 1994 Uninsured Pensioner Mortality Table	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality improvements:	Fully generational using Scale AA	Fully generational using Scale AA
Disability rates:	None	None

The assumptions are best estimates with the exception that the discount rate includes a margin for adverse deviations, as shown below.

Age Related Tables

Sample rates from the age related tables are summarized in the following table:

Age	Termination	Retirement
20	4.0%	0.0%
25	6.0%	0.0%
30	4.0%	0.0%
35	4.0%	0.0%
40	1.0%	0.0%
45	1.0%	0.0%
50	1.0%	0.0%
55	0.0%	0.0%
56	0.0%	0.0%
57	0.0%	0.0%
58	0.0%	0.0%
59	0.0%	5.0%
60	0.0%	5.0%
61	0.0%	5.0%
62	0.0%	5.0%
63	0.0%	5.0%
64	0.0%	50.0%
65	0.0%	50.0%
66	0.0%	15.0%
67	0.0%	100.0%

Pensionable Earnings

The benefits ultimately paid will depend on each member's final average earnings. To calculate the pension benefits payable upon retirement, death or termination of employment, we have taken rate of pay on July 1, 2011, and assumed that such pensionable earnings will increase at the assumed rate.

Rationale for Assumptions

A rationale for each of the assumptions used in the current valuation is provided below.

Discount Rate

We have discounted the expected benefit payment cash flows using the expected investment return on the market value of the fund. Other bases for discounting the expected benefit payment cash flows may be appropriate, particularly for purposes other than those specifically identified in this valuation report.

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy.
- Additional returns assumed to be achievable due to active equity management less than or equal to the fees related to active equity management. Such fees were determined by the difference between the provision for total investment expenses and the hypothetical fees that would be incurred for passive management of all assets.
- Implicit provision for expenses determined as the average rate of expenses paid from the fund over the last three years.
- A margin for adverse deviations of 0.55%.

The discount rate was developed as follows:

Assumed investment return	6.40%
Additional returns for active management	0.30%
Expense provision	(0.55%)
Margin for adverse deviation	(0.55%)
Net discount rate	<u>5.60%</u>

Inflation

The inflation assumption is based on market expectations of long-term inflation implied by the yields on nominal and real return bonds at the valuation date.

Income Tax Act Pension Limit and Year's Maximum Pensionable Earnings

The assumption is based on historical real economic growth and the underlying inflation assumption.

Pensionable Earnings

The assumption is based on general wage growth assumptions increased by our best estimate of future merit and promotional increases over general wage growth considering current economic and financial market conditions.

Retirement Rates

The assumption is based on experience over the years 2006-2007 to 2010-2011.

Termination Rates

The assumption is based on experience from 2001-2002 to 2010-2011.

Mortality Rates

Due to the size of the Plan, there is no meaningful mortality experience but there is no reason to expect the mortality to differ from the 1994 Uninsured Pensioners mortality table. Furthermore, there is strong evidence of continuing improvement in mortality since 1994 and it has become an industry standard to assume this trend continues into the future. We have used the AA projection scale to allow for improvements in mortality since 1994 and indefinitely in the future.

Based on the assumption used, the life expectancy of a member age 65 at the valuation date is 19.6 years for males and 22.0 years for females.

Interest on Employee Contributions

The assumption is based on Plan terms and the underlying investment return assumption on Federal mid-term bonds.

Disability Rates

Use of a different assumption would not have a material impact on the valuation.

APPENDIX D

Methods and Assumptions – Hypothetical Wind-up and Solvency

Hypothetical Wind-up Basis

The Canadian Institute of Actuaries requires actuaries to report the financial position of a pension plan on the assumption that the plan is wound-up on the effective date of the valuation, with benefits determined on the assumption that the pension plan has neither a surplus nor a deficit. For the purposes of the hypothetical wind-up valuation, the plan wind-up is assumed to occur in circumstances that maximize the actuarial liability.

To determine the actuarial liability on the hypothetical wind-up basis, we have valued those benefits that would have been paid had the Plan been wound-up on the valuation date, including benefits that would be immediately payable if the employer's business were discontinued on the valuation date, with all members fully vested in their accrued benefits.

The circumstance in which the plan wind-up is assumed to have taken place is that the University ceases operations on the valuation date. No benefits payable on plan wind-up were excluded from our calculations.

Upon plan wind-up members are given options for the method of settling their benefit entitlements. The options vary by eligibility and by province of employment, but in general, involve either a lump sum transfer or an immediate or deferred pension.

The value of benefits assumed to be settled through a lump sum transfer is based on the assumptions described in Section 3500 – *Pension Commuted Values* of the Canadian Institute of Actuaries Standards of Practice applicable for July 1, 2011.

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of purchasing annuities.

We have estimated the cost of settlement through purchase of annuities in accordance with the *Canadian Institute of Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2010 and December 30, 2011* and subsequent *Educational Note Supplement: Guidance for Assumptions for Hypothetical Wind-up and Solvency Valuations Update – Effective March 31, 2011*.

We have not included a provision for adverse deviation in the solvency and hypothetical wind-up valuations.

The assumptions are as follows:

Form of Benefit Settlement Elected by Member

Lump sum	70% of active and deferred members under age 55 and 40% of active and deferred members over age 55 elect to receive their benefit entitlement in a lump sum
Annuity purchase	All remaining members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits are assumed to be settled through the purchase of deferred or immediate annuities from a life insurance company.

Basis for Benefits Assumed to be Settled through a Lump Sum

Mortality rates:	UP94 Generational
Interest rate:	3.60% per year for 10 years, 4.90% per year thereafter
Maximum pension limit:	\$2,552.22 increasing at 2.86% per year for 10 years, 3.77% per year thereafter

Basis for Benefits Assumed to be Settled through the Purchase of an Annuity

Mortality rates:	UP94 Generational
Interest rate:	4.19% per year
Maximum pension limit:	\$2,552.22 increasing at 3.43% per year

Retirement Age

Maximum value:	Members are assumed to retire at the age which maximizes the value of their entitlement from the Plan based on the eligibility requirements which have been met at the valuation date
Grow-in:	The benefit entitlement and assumed retirement age of Ontario members whose age plus service equals at least 55 at the valuation date, reflect their entitlement to grow into early retirement subsidies

Other Assumptions

Special payments	Discounted at the average interest rate of 3.98% per year
Final average earnings:	Based on actual pensionable earnings over the averaging period
Family composition:	Same as for going concern valuation
Termination expenses:	\$300,000

To determine the hypothetical wind-up position of the Plan, a provision has been made for estimated termination expenses payable from the Plan's assets in respect of actuarial and administration expenses that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

Because the settlement of all benefits on wind-up is assumed to occur on the valuation date and is assumed to be uncontested, the provision for termination expenses does not include custodial, investment management, auditing, consulting and legal expenses that would be incurred between the wind-up date and the settlement date or due to the terms of a wind-up being contested. Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

In determining the provision for termination expenses payable from the Plan's assets, we have assumed that the plan sponsor would be solvent on the wind-up date. We have also assumed, without analysis, that the Plan's terms as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the Plan.

Actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.

Incremental Cost

In order to determine the incremental cost, we estimate the hypothetical wind-up liabilities at the next valuation date. We have assumed that the cost of settling benefits by way of a lump sum or purchasing annuities remains consistent with the assumptions described above. Since the projected hypothetical wind-up liabilities will depend on the membership in the Plan at the next valuation date, we must make assumptions about how the Plan membership will evolve over the period until the next valuation.

We have assumed that the Plan membership will evolve in a manner consistent with the going concern assumptions as follows:

- Members terminate, retire and die consistent with the termination, retirement and mortality rates used for the going concern valuation.
- Pensionable earnings, the *Income Tax Act* pension limit and the Year's Maximum
- Pensionable Earnings increase in accordance with the related going concern assumptions.
- Active members accrue pensionable service in accordance with the terms of the Plan.
- To accommodate for new entrants to the Plan, we have added to the projected liability, an amount equal to the liability of new entrants that have joined the Plan since the previous valuation.

Solvency Basis

In determining the financial position of the Plan on the solvency basis, we have used the same assumptions and methodology as were used for determining the financial position of the Plan on the hypothetical wind-up basis.

The solvency position is determined in accordance with the requirements of the Act.

APPENDIX E

Membership Data

Analysis of Membership Data

The actuarial valuation is based on membership data as at July 1, 2011, provided by the University.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

	01.07.2011	01.07.2008
Active Members		
Number	758	775
Total pensionable earnings (2011/2012, 2008/2009)	\$46,652,271	\$45,551,179
Average pensionable earnings for the following year	\$61,547	\$58,776
Average years of pensionable service	13.2 yrs	11.2 yrs
Average age	48.0	45.7
Accumulated contributions with interest	\$31,400,604	\$25,122,894
Disabled Members		
Number	17	20
Total pensionable earnings (2011/2012, 2008/2009)	\$994,880	\$989,498
Average pensionable earnings for the following year	\$58,522	\$49,475
Average years of pensionable service	18.6 yrs	19.4 yrs
Average age	56.2	56.2
Accumulated contributions with interest	\$902,301	\$932,657
Suspended Members		
Number	18	13
Total pensionable earnings (2011/2012, 2008/2009)	\$2,033,196	\$1,439,393
Average pensionable earnings for the following year	\$112,955	\$110,723
Average years of pensionable service	7.5 yrs	8.9 yrs
Average age	50.1	52.5
Accumulated contributions with interest	\$565,163	\$470,453
Deferred Pensioners		
Number	56	69
Total annual pension	\$164,169	\$172,953
Average annual pension	\$2,932	\$2,507
Average age	49.0	46.8
Accumulated additional contributions with interest	\$178,090	N/A
Pensioners and Survivors		
Number receiving lifetime pension	347	334
Total annual lifetime pension	\$4,466,737	\$3,864,252
Average annual lifetime pension	\$12,872	\$11,570
Average age	73.5	72.2
Number receiving temporary pension	24	57
Total annual temporary pension	\$216,420	\$434,320
Average annual temporary pension	\$9,017	\$7,620

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

Reconciliation of Membership

	Active Members	Suspended Members	Disabled Members	Deferred Pensioners	Pensioners and Survivors	Total
Total at 01.07.2008	775	13	20	69	334	1,211
New entrants	52	-	-	-	-	52
Suspended	(6)	6	-	-	-	-
LTD	(7)	-	7	-	-	-
Re-activated	2	-	(2)	-	-	-
Terminations:						
• Not vested	-	-	-	-	-	-
• Transfers/lump sums	(21)	-	-	(11)	-	(32)
• Deferred pensions	(8)	-	-	8	-	-
Deaths	(6)	-	(1)	(2)	(28)	(37)
Retirements	(23)	(1)	(7)	(2)	33	-
Beneficiaries	-	-	-	-	8	8
Data adjustments	-	-	-	(6)	-	(6)
Total at 01.07.2011	758	18	17	56	347	1,196

The distribution of the active members by age and pensionable service as at July 1, 2011 is summarized as follows:

**Distribution of Active Members by Age Group and Pensionable Service
as at July 1, 2011**

AGE	Years of Pensionable Service									TOTAL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
< 25										
25 - 29	18	5								23
	60,467	54,165								59,097
30 - 34	34	41	2							77
	55,999	58,158	*							57,085
35 - 39	21	40	9	1						71
	60,150	65,712	70,951	*						64,799
40 - 44	28	35	22	12	8					105
	64,337	63,556	63,792	63,012	50,014					62,720
45 - 49	24	40	23	9	21	6				123
	62,452	62,056	64,349	58,398	65,125	77,645				63,579
50 - 54	20	33	17	16	22	47	1			156
	60,341	60,884	69,923	61,109	60,912	66,457	*			63,364
55 - 59	9	21	12	18	19	24	25	1		129
	52,363	57,019	52,158	60,345	54,864	60,960	63,202	*		58,497
60 - 64	5	15	7	5	7	10	8	9		66
	54,158	63,317	61,115	55,425	51,245	63,207	74,422	60,014		61,390
65 - 69	1	2	1	1		1		2		8
	*	*	*	*		*		*		51,040
70+										
TOTAL	160	232	93	62	77	88	34	12		758
	59,610	61,344	63,650	60,447	58,558	65,173	65,126	63,105		61,547

* For individual cells with information on two members or less, the average earnings are not disclosed for confidentiality reasons.

The distribution of the inactive members by age as at July 1, 2011 is summarized as follows:

Distribution of Inactive Members by Age Group as at July 1, 2011

Age	Deferred Pensioners		Pensioners and Survivors		
	Number	Average Lifetime Pension	Number	Average Lifetime Pension	Average Bridge Pension
< 25	0	0	0	0	0
25 – 29	1	*	0	0	0
30 – 34	3	1,312	0	0	0
35 – 39	9	2,441	0	0	0
40 – 44	10	2,253	0	0	0
45 – 49	9	1,537	0	0	0
50 – 54	6	2,929	4	11,051	0
55 – 59	5	9,071	50	17,418	9,017
60 – 64	10	3,434	76	17,604	0
65 – 69	3	468	72	12,089	0
70 – 74	0	0	62	11,450	0
75 – 79	0	0	49	9,333	0
80 – 84	0	0	24	5,506	0
85 – 89	0	0	10	4,393	0
90 – 94	0	0	0	0	0
95 +	0	0	0	0	0
Total	56	2,932	347	12,872	9,017

** For individual cells with information on two members or less, the average pension is not disclosed for confidentiality reasons.*

APPENDIX F

Summary of Plan Provisions

This valuation is based on the plan provisions in effect on July 1, 2011. Since the previous valuation, the contributions rates have increased to 9.2% of pensionable earnings up to the Year's Basic Exemption (YBE), 6.4% of earnings above YBE and up to the Year's Maximum Pensionable Earnings (YMPE) and 9.2% of earnings above YMPE.

The following is a summary of the main provisions of the Plan in effect on July 1, 2011. This summary is not intended as a complete description of the Plan.

Background	<p>The Plan became effective September 1, 1955.</p> <p>Benefits are based on a set formula and are paid for by the University and Member contributions.</p>
Eligibility for membership	<p>Any Non-Teaching Employee must become a Member upon completion of 30 days of employment. However, each Union member must become a Member on his/her seniority date.</p> <p>An Employee who is employed on a less than full-time basis is eligible to become a Member on the first day of the month coincident with or following the completion of 24 months of Continuous Service, provided that, in each of the two immediately preceding consecutive calendar years, the employee has:</p> <ul style="list-style-type: none">• earned at least 35% of the YMPE; or• worked at least 700 hours for the Employer.
Employee Contributions	<p>Members contribute an amount equal to:</p> <ol style="list-style-type: none">9.2% of earnings up to the Year's Basic Exemption; plus6.4% of earnings in excess of the Year's Basic Exemption, up to the Year's Maximum Pensionable Earnings; plus9.2% of earnings in excess of the Year's Maximum Pensionable Earnings <p>Subject to contribution limits under the <i>Income Tax Act</i>, the University shall contribute a minimum amount equal to the employee contributions in aggregate.</p> <p>A provision is also made for the Members to contribute additional voluntary contributions up to the limits allowed for deductibility under the appropriate sections of the <i>Income Tax Act</i>.</p>

Cost Sharing Provisions	<p>If at any time, the Actuary certifies that the assets of the Pension fund exceed its liabilities (such excess referred to as "funding excess"), such funding excess shall be applied in the following order:</p> <ul style="list-style-type: none"> a) first, the funding excess shall be applied to reduce or eliminate any unfunded liabilities or experience deficiencies b) second, the funding excess shall be applied to reduce the University's contributions in respect of the normal cost benefits, provided that, where permitted under the <i>Income Tax Act</i>, the amount contributed by the University each Plan Year shall not be less than the aggregate regular employee contributions for the years <p>If, after the application of funding excess, the University's contributions exceed the aggregate regular contributions, the employee contributions shall be increased such that the members and the University each contribute 50% of the total amount required to fund the Plan provided that the aggregate contributions made by a Member for any calendar year shall not exceed the maximum amount permitted under the <i>Income Tax Act</i> for that calendar year.</p>
Retirement Dates	<p>Normal Retirement Date</p> <ul style="list-style-type: none"> • The normal retirement date is the first day of the month coincident with or next following the member's 65th birthday. <p>Early Retirement Date</p> <ul style="list-style-type: none"> • Early retirement is permitted during the 10-year period prior to the Normal Retirement Date. <p>Disability Retirement Date</p> <ul style="list-style-type: none"> • Retirement on total and permanent disability is allowed after age 50 and completion of 15 years of Continuous Service. <p>Postponed Retirement Date</p> <ul style="list-style-type: none"> • A Member may elect to postpone retirement beyond Normal Retirement Date.
Normal Retirement Pension	<p>1.5% of the Member's Best Average Earnings not in excess of the Average Canada Pension Plan Base</p> <p>PLUS</p> <p>2.0% of the Member's Best Average Earnings in excess of the Average Canada Pension Plan Base</p> <p>MULTIPLIED BY</p> <p>The Member's pensionable service.</p>
Pensionable earnings	<p>Gross salary or wage, as determined by the University.</p>
Early Retirement Pension	<p>If a member retires early, the member will be entitled to a pension that is calculated the same way as for a normal retirement. The basic pension payable, however, will be reduced by a given percentage for each month before the normal retirement date, as follows:</p> <ul style="list-style-type: none"> • For the first 60 months: 0.33% per month • For the next 60 months: 0.50% per month
Postponed Retirement Pension	<p>If a member elects to postpone retirement, the member will be entitled to a pension that is calculated the same way as for a normal retirement.</p>

Disability Retirement Pension	If a member retires early, the member will be entitled to a pension that is calculated the same way as for a normal retirement. The pension payable will not be reduced to reflect the early payment in the event of total and permanent disability retirement.
Post-Retirement Indexing	Each June 30, pensions are adjusted by one-half of the excess of the Average Fund Rate of Return over the valuation interest rate, capped at 50% of the CPI for the year. The adjustment is not allowed to reduce pensions. Members retiring in the year the adjustment is made will receive a pro-rated portion of the adjustment.
Maximum Pension	<p>The total annual pension payable from the Plan upon retirement, death or termination of employment cannot exceed the lesser of:</p> <ul style="list-style-type: none">• 2% of the average of the best three consecutive years of total compensation paid to the member by the University, multiplied by total credited service; and• \$2,552.22 indexed from 2011 or such other maximum permitted under the <i>Income Tax Act</i>, multiplied by the member's total credited service. <p>The maximum pension is determined at the date of pension commencement.</p> <p>For service prior to January 1, 1992, service is capped at 35 years when determining the maximum pension. Also, for service prior to January 1, 1992, the value of the pension benefit provided upon early retirement cannot exceed the above maximum pension payable at age 60 in the form of a single life annuity guaranteed for 10 years.</p> <p>For service on and after January 1, 1992, the above maximum must be reduced by $\frac{1}{4}$ of 1% for each month by which pension commencement preceded the earliest day on which:</p> <ul style="list-style-type: none">• The Member attains age 60;• The Member completes 30 years of Continuous Service;• The Members' age plus Continuous Service are equal to 80;• The Member suffers a total and permanent disability.

Death Benefits

Pre-retirement:

- If a member dies before the normal retirement date and before any pension payments have begun, the member's spouse, or beneficiary if there is no spouse, will receive a lump sum settlement equal to the sum of the following:
 - 100% of the Member's required contributions made prior to January 1, 1987, with Credited Interest, increasing by 10% for each complete year of Continuous Service in excess of 10 years, reaching 200% after 20 or more years of Continuous Service;
 - The greater of:
 - 100% of the Member's required contributions made on or after January 1, 1987 and prior to January 1, 1992, with Credited Interest, increasing by 10% for each complete year of Continuous Service in excess of 10 years, reaching 200% after 20 or more years of Continuous Service; and
 - The Commuted Value of the pension accrued on and after January 1, 1987 and prior to January 1, 1992;
 - The Commuted Value of the pension accrued on and after January 1, 1992;
 - The Member's additional voluntary contributions with Credited Interest.

Post retirement:

- The normal form of payment is a lifetime pension guaranteed for five years. However, the member may elect to receive an optional form of pension on an actuarial equivalent basis provided such election is made at least 3 months prior to retirement.
 - If the member has a spouse on the date pension payments commence, the automatic form of payment is a 60% joint and survivor pension. The amount of this pension will be the actuarial equivalent of the normal form pension.
-

**Termination
Benefits**

Benefits Earned Prior To January 1, 1987

Less than age 45 or before completion of 10 years of membership:

- A lump sum refund of the Member's required contributions with Credited Interest.

After attainment of age 45 and after completion of 10 years of membership:

- A deferred lifetime pension, based on the member's earnings, contributions and credited service accrued prior to January 1, 1987 up to the date of termination.

Benefits Earned On And After January 1, 1987

Less than two years of membership:

- A lump sum refund of the Member's required contributions with Credited Interest.

At least two years of membership:

- A deferred lifetime pension, based on the member's earnings, contributions and credited service accrued on or after January 1, 1987 up to the date of termination.

Additional Voluntary Contributions

A Member who terminates employment is entitled to either:

- Leave the balance of any additional voluntary contributions, under the Plan to provide an additional pension; or
- Receive a lump sum refund of any additional voluntary contributions with Credited Interest.

Payment of Benefits

Deferred pensions are payable commencing at age 65. However, a member may elect to receive a reduced early retirement pension as early as age 55.

A terminating Member may elect to transfer the Commuted Value of the deferred pension to another registered pension plan or registered retirement savings plan.

50% Cost Rule

If a member dies, retires or terminates employment and his/her own contributions made after January 1, 1987, with Credited Interest thereon, exceeds 50% of the value of the benefit earned in respect of that service, then the excess shall be paid to the Member, or his/her Spouse or Beneficiary in the case of a deceased Member, in a single lump sum payment.

Disability Accrual

During any period of Total Disability, the Member shall continue to accrue benefits under the Plan as though he/she were still actively employed, but the Member shall be deemed to have received Earnings and to have made contributions during the disability period based on his/her level of Earnings prior to disability including improvements in earnings as provided in subsequent contracts or University policies.

The Member is not required to make Employee Contributions during any period of Total Disability.

APPENDIX G

University Certification

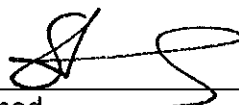
With respect to the Report on the Actuarial Valuation for Funding Purposes as at July 1, 2011, of the University of Windsor Employees' Retirement Plan I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the University's engagement with the actuary, particularly the requirement to include a margin of 0.55% in the discount rate used to perform the going concern valuation.
- The valuation reflects the University's decisions in regards to determining the solvency funding requirements.
- A copy of the official plan documents and of all amendments made up to July 1, 2011 were provided to the actuary and is reflected appropriately in the summary of plan provisions contained herein.
- The asset information summarized in Appendix B is reflective of the Plan's assets.
- The membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to July 1, 2011.
- All events subsequent to July 1, 2011 that may have an impact on the Plan have been communicated to the actuary.

March 27, 2012

Date

Signed



Sandra Aversa
Vice-President, Planning and
Administration



Mercer (Canada) Limited