

OTPP Financial Basis Valuation.pdf

January 31, 2014

Mark Rozic, Manager (Acting)
External Reporting Branch
Office of the Provincial Controller Division
Ministry of Finance
2nd Floor, Office 260, Frost Building South
7 Queen's Park Crescent
Toronto, Ontario M7A 1Y7

Dear Mr. Rozic:

I am responding to a letter dated December 18, 2013 from Ms. Leah Myers that requested actuarial and financial information about the Ontario Teachers' Pension Plan (registered pension plan - RPP) and the Retirement Compensation Arrangement (RCA) at December 31, 2013. Please note that effective January 1, 2014, our President and Chief Executive Officer is Mr. Ron Mock.

Items 1, 3 (except the benefit payment breakdown), 6 and 10 are included in the enclosed letter from Mercer (Canada) Limited (with the exception of the RCA information which will follow when it is available).

Item 2 - Market Value of Pension Fund Assets (\$ millions)

Please note that we no longer use an asset smoothing method for our financial statements. As such, there is no separate "actuarial" value of assets.

Market value of assets at December 31, 2013	\$ 140,777
---	------------

Item – 3(a) RPP Benefits Paid (\$ millions)

Retirement Pensions	\$ 4,744
Survivor Pensions	243
Disability Pensions	28
Lump Sum Death Benefits	68
Refunds	1
Commutated Value Transfers	41
Transfers to Other Plans	8
Family Law Value Transfers	17
Total	<u>\$ 5,150</u>

Item – 3(b) RCA Benefits Paid

The RCA pension payments made in 2013 were \$6.33 million and the RCA lump sum payments in 2013 were \$.26 million.

Item - 4(a) RPP Contributions (\$ millions)**Members**

Current Service	\$	1,483
Optional Credit		28
Total		<u>1,511</u>

Province of Ontario

Current Service	\$	1,464
Interest		37
Optional Credit		26
Total	\$	<u>1,527</u>

Other Employers	\$	29
Transfers from Other Plans		14
Total	\$	<u>43</u>

Grand Total	\$	<u>3,081</u>
-------------	----	--------------

Item 4(b) - RCA Contributions (\$ millions)

Members	\$	6.9
Province of Ontario		5.3
Other Employers		1.6
Total	\$	<u>13.8</u>

Item 4(c) - Payments re: Foregone Inflation Adjustments

The foregone inflation amounts for 2012 payments which is part of the government billing for payment in January 2014 are as follows:

	Total	Province of Ontario
RPP	\$ 783,069	\$ 767,247
RCA	<u>1,049</u>	<u>1,027</u>
Total	\$ <u>784,118</u>	\$ <u>768,274</u>

Item 5 - Economic Assumptions

RPP	RCA
4.2%	2.1%
3.0%	3.0%
2.0%	2.0%
2.2%	0.1%

Item 7 - Net Gain and Loss on Actuarial Value of Assets

Not yet available.

Item 8 - Schedule of Contributions and Interest Receivable (\$ millions)

Contributions	\$	2,914
Interest		51
Total	\$	2,965

Item 9 - Number of Pensioners and Active Members as at December 31, 2013

Pensioners	127,000
Active Members	180,000

Item 11 - Financial Statements

Not yet available.

We will provide any outstanding information as soon as it is available. In addition, we will send an updated version of this letter if any of the information contained herein is subsequently changed.

Please do not hesitate to call if you have any questions.

Sincerely,



Mary Cover, FSA, FCIA
 Director, Actuarial Service & Tax
 (416) 730-2976
 mary_cover@otpp.com



Lise Houle
Principal

161 Bay Street
P.O. Box 501
Toronto, Ontario M5J 2S5
416 868 2039 Fax 416 868 7695
lise.houle@mercer.com
www.mercer.ca

31 January 2014

Ms. Mary Cover
Director, Actuarial, Tax & Accounts Receivables Services
Ontario Teachers' Pension Plan Board
5650 Yonge Street
Toronto, ON M2M 4H5

Private & Confidential

Subject: December 31, 2013 Valuation Results Using the Province's Assumptions

Dear Mary,

As requested, we have provided you with information for the Ontario Teachers' Pension Plan (OTPP) on points 1, 3, 6 and 10 in the December 18, 2013 letter from the Ministry of Finance to Jim Leech. As instructed in the Ministry letter, the following sets of assumptions have been used:

	Basis 1	Basis 2	Basis 3A	Basis 3B*
Valuation discount rate	6.75%	6.50%	6.50%	6.50%
Inflation rate	2.50%	2.50%	2.25%	2.25%
Real valuation discount rate	4.25%	4.00%	4.25%	4.25%
Salary escalation rate ¹	3.50%	3.50%	3.25%	3.25% ²

We are not expressing any opinion on these assumptions.

For each basis, all the other assumptions and the valuation methods are those used by the Ontario Teachers' Pension Plan Board in the December 31, 2013 valuation for financial statement purposes. As requested, for all four bases noted above we have prepared the valuation results using a 0% salary growth assumption as at September 1, 2013, as to allow for the assessment of the "Putting Students First Act, 2012". From September 1, 2014 onwards, the respective salary growth assumptions shown in the table were applied. We have also

¹ 0% salary growth assumption as at September 1, 2013.

² 2.25% for the four years September 1, 2014 to September 1, 2017 inclusive and 3.25% thereafter.



Page 2
31 January 2013
Ms. Mary Cover
Ontario Teachers' Pension Plan Board

assumed salary growth due to experience related increases in our calculations in addition to the salary increases noted in the table above.

The results further reflect an additional 2% salary increase for ETFO members negotiated in 2013 that is effective at the start of the 2014/2015 school year.

For the valuation results under Basis 3B, we have applied the same assumptions as Basis 3A, with the exception that the salary growth assumption has been changed to 2.25% for the September 1, 2014, 2015, 2016 and 2017 increases.

The Province has requested that we prepare the results using the "projected benefit method, pro-rated on services". In our calculations below we have used the projected benefit method, pro-rated on service with two attribution periods to reflect the different indexing provisions for service accrued to December 31, 2009 and service accrued from January 1, 2010.

The Province has also requested that we prepare the results assuming that inflation protection for post 2009 service will be provided at 100% and at 50% of the assumed inflation rate. In this letter we have included results using both of these alternative inflation protection levels.

The figures presented in this letter exclude the Ontario Teachers' Retirement Compensation Arrangement ("OTRCA"), which provides benefits to members that are in excess of those permitted to be provided from the registered pension plan. The Province has requested information on the OTRCA based on what will be reported in the OTRCA's 2013 financial statements, and does not require calculations on any other basis.

The results as at December 31, 2013 are summarized in the following tables.

Page 3
31 January 2013
Ms. Mary Cover
Ontario Teachers' Pension Plan Board

Results using 100% conditional indexing for post 2009 service

	Basis 1	Basis 2	Basis 3	Basis 3*
Valuation discount rate:	6.75%	6.50%	6.50%	6.50%
Inflation rate:	2.50%	2.50%	2.25%	2.25%
Salary escalation rate:	3.50%	3.50%	3.25%	3.25%³
	(\$ million)	(\$ million)	(\$ million)	(\$ million)
1. Actuarial present value (APV) of accrued pension benefits at December 31, 2012 using Last Year's Basis 1	\$105,954	\$105,954	\$105,954	\$105,954
2. Increase in the APV of accrued pension benefits				
Interest on the APV of accrued pension benefits	\$7,067	\$7,067	\$7,067	\$7,067
Current Service Cost	2,626	2,626	2,626	2,626
Contributions for optional credit	27	27	27	27
Repayment of refunds	1	1	1	1
Transfers from other plans	13	13	13	13
Experience losses	0	0	0	0
Change in actuarial assumptions and methods	0	3,970	281	0
	\$9,734	\$13,704	\$10,015	\$9,734
3. Decrease in the APV of accrued pension benefits				
Pensions paid	\$5,084	\$5,084	\$5,084	\$5,084
Refund of contributions	0	0	0	0
Lump sum payments and transfers	66	66	66	66
Experience gains	956	956	956	956
Change in actuarial assumptions and methods	58 ⁴	0	0	912
	\$6,164	\$6,106	\$6,106	\$7,018
4. Net increase in the APV of accrued pension benefits	\$3,570	\$7,598	\$3,909	\$2,716
5. APV of accrued pension benefits at December 31, 2013	\$109,524	\$113,552	\$109,863	\$108,670

³ 2.25% for the four years following the 2014 calendar year.

⁴ Change due to commuted value assumption to value benefits payable upon termination

Page 4
31 January 2013
Ms. Mary Cover
Ontario Teachers' Pension Plan Board

Results using 50% conditional indexing for post 2009 service

	<u>Basis 1</u>	<u>Basis 2</u>	<u>Basis 3</u>	<u>Basis 3*</u>
Valuation discount rate:	6.75%	6.50%	6.50%	6.50%
Inflation rate:	2.50%	2.50%	2.25%	2.25%
Salary escalation rate:	3.50%	3.50%	3.25%	3.25%⁵
	(\$ million)	(\$ million)	(\$ million)	(\$ million)
1. Actuarial present value (APV) of accrued pension benefits at December 31, 2012 using Last Year's Basis 1	\$104,877	\$104,877	\$104,877	\$104,877
2. Increase in the APV of accrued pension benefits				
Interest on the APV of accrued pension benefits	\$6,982	\$6,982	\$6,982	\$6,982
Current Service Cost	2,258	2,258	2,258	2,258
Contributions for optional credit	27	27	27	27
Repayment of refunds	1	1	1	1
Transfers from other plans	13	13	13	13
Experience losses	0	0	0	0
Change in actuarial assumptions and methods	0	3,754	308	0
	\$9,281	\$13,035	\$9,589	\$9,281
3. Decrease in the APV of accrued pension benefits				
Pensions paid	\$5,084	\$5,084	\$5,084	\$5,084
Refund of contributions	0	0	0	0
Lump sum payments and transfers	66	66	66	66
Experience gains	834	834	834	834
Change in actuarial assumptions and methods	29 ⁶	0	0	843
	\$6,013	\$5,984	\$5,984	\$6,827
4. Net increase in the APV of accrued pension benefits	\$3,268	\$7,051	\$3,605	\$2,454
5. APV of accrued pension benefits at December 31, 2013	\$108,145	\$111,928	\$108,482	\$107,331

⁵ 2.25% for the four years following the 2014 calendar year.

⁶ Change due to commuted value assumption to value benefits payable upon termination



Page 5
31 January 2013
Ms. Mary Cover
Ontario Teachers' Pension Plan Board

We have the following comments on the results:

- Our valuation of the actuarial present value of the accrued pension benefits as at December 31, 2013 is based on membership data as at August 31, 2013. The valuation results determined as at August 31, 2013 are then extrapolated forward to December 31, 2013 and we have used the actual inflation adjustment as at January 1, 2014 of 0.90% for pre-2010 service and 0.45% for post-2009 service.
- We have assumed that the Province used Last Year's Basis 1 in establishing the actuarial present value of accrued pension benefits as at December 31, 2012. This is the same as Basis 1 for the current year.
- We have assumed that any change in the Province's assumptions (i.e. nominal and real discount rates, inflation rate, and salary escalation rate would occur at December 31, 2013).

The Expected Average Remaining Service Lifetime of active employees at August 31, 2013 and estimated for December 31, 2013, is 14.5 years.

The experience gains and losses incurred on the plan liabilities since the prior year are relatively modest. The net gain was primarily attributable to the lower than expected level of inflation for the January 1, 2014 indexing, offset by small demographic losses and losses arising due to the YMPE increasing at a lower rate than assumed for the prior valuation.

If you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lise Houle'.

Lise Houle

Copy:
Scott Clausen, Mercer
Jason Lipping, Mercer