

OTPP Board Letter for Additional Information.pdf

January 30, 2015

Mark Rozic, Manager (Acting)
External Reporting Branch
Office of the Provincial Controller Division
Treasury Board Secretariat
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 15, 2014 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, 2014.

Items 1, 3 (except the benefit payment breakdown), 6, 10 and 11 are included in the enclosed letter from Mercer (Canada) Limited.

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, 2014	\$ 154,485
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Item – 3(a) RPP Benefits Paid (\$ millions)

Retirement Pensions	\$ 4,883
Survivor Pensions	257
Disability Pensions	27
Lump Sum Death Benefits	58
Refunds	1
Commutated Value Transfers	45
Transfers to Other Plans	9
Family Law Value Transfers	26
Total	\$ 5,306

Item – 3(b) RCA Benefits Paid

The RCA pension payments made in 2014 were \$7.56 million and the RCA lump sum payments in 2014 were \$1.47 million.

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

Members

Current Service	\$	1,547
Optional Credit		31
Total	\$	1,578

Province of Ontario

Current Service	\$	1,528
Interest		37
Optional Credit		28
Total	\$	1,593

Other Employers	\$	32
Transfers from Other Plans		13
Total	\$	45

Grand Total	\$	3,216
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Item 4(b) - RCA Contributions (\$ millions)

Members	\$	5.4
Province of Ontario		4.6
Other Employers		0.8
Total	\$	10.8

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

The foregone inflation amounts for 2013 payments which is part of the government billing for payment in January 2015 are as follows:

	Total	Province of Ontario
RPP	\$ 1,062,350	\$ 1,040,330
RCA	8,097	7,929
Total	\$ 1,070,447	\$ 1,048,259

Item 5 - Economic Assumptions

	RPP	RCA
Discount Rate	3.35%	1.675%
Salary Escalation Rate	2.70%	2.70%
Inflation Rate	1.70%	1.70%
Real Rate	1.65%	-0.025%

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

Not applicable. 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.

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

Contributions	\$	3,047
Interest		51
Total	\$	3,098

Item 9 - Number of Pensioners and Active Members as at December 31, 2014

Pensioners	129,000
Active Members	182,000

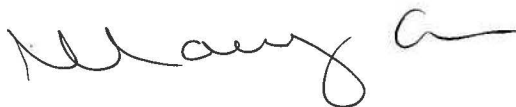
Item 12 – Financial Statements

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
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cc: Alex Killoch – Ministry of Finance

OTPP Mercer Actuarial Financial Information.pdf



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30 January 2015

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, 2014 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, 10 and 11 in the December 15, 2014 letter from the Ministry of Finance to Mr. Ron Mock. As instructed in the Ministry letter, the following sets of assumptions have been used in calculating the liabilities as at December 31, 2014:

	Basis 1	Basis 2	Basis 3	Basis 4
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	3.50%	3.50%	3.25%	3.25% ¹

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, 2014 valuation for financial statement purposes. This includes the adoption of the 2014 base mortality tables and two-dimensional projection scales for future improvements in mortality, as developed by the University of Waterloo for the Ontario Teachers' Pension Plan. For all four scenarios noted above, the results reflect the additional 2% salary increase for ETFO members negotiated in

¹ 2.25% for the 2014/2015 through 2018/2019 school years and 3.25% thereafter.

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Ontario Teachers' Pension Plan Board

2013 that is effective at the start of the 2014/2015 school year as well as assumed salary growth due to experience related increases.

For the sake of clarity, we note that the assumed increases in the YMPE and maximum pension limits under the Income Tax Act are the same rates as the salary growth rates noted for each of the four bases.

For the valuation results under Basis 4, we have applied the same assumptions as Basis 3, with the exception that the salary growth assumption has been changed to 2.25% for the 2014/2015, 2015/2016, 2016/2017, 2017/2018 and 2018/2019 school years as directed by the Province. For Basis 4, the YMPE and maximum pension limits under the Income Tax Act were assumed to remain at 3.25% per year for the full projection period.

The Province has 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.

At the Province's request, the liabilities have been calculated using the "projected benefit method, pro-rated on services". In the calculations presented in this letter, we have used the projected benefit method, pro-rated on service with three attribution periods to reflect the different indexing provisions for service accrued to December 31, 2009, service accrued from January 1, 2010 to December 31, 2013 and service accrued from January 1, 2014. However, we note that the same level of indexing was applied to all service from January 1, 2010 to December 31, 2014 for purposes of calculating the liabilities provided in this letter (whether the results are based on 100% or 50% conditional indexing).

We have included information regarding the experience gain/loss incurred relative to salary growth during the year as well as the impact on the December 31, 2014 liabilities due to changing the rate of inflation and salary growth assumption in Bases 3 and 4 in our tables relative to the assumptions from Bases 1 and 2. We note that since the assumed increases in salaries determined by the Province are set equal to the assumed inflation rate plus 1%, we have not separately identified the changes in salary only without the corresponding changes in inflation.

The results as at December 31, 2014 are summarized in the following tables.

Results using 100% conditional indexing for post 2009 service (results in \$ millions)

	Basis 1	Basis 2	Basis 3	Basis 4
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%²
1. Actuarial present value (APV) of accrued pension benefits at December 31, 2013 using Last Year's Basis 1	\$109,524	\$109,524	\$109,524	\$109,524
2. Increase in the APV of accrued pension benefits				
Interest on the APV of accrued pension benefits	\$7,311	\$7,311	\$7,311	\$7,311
Current Service Cost (mid-year)	2,893	2,893	2,893	2,893
Contributions for optional credit	30	30	30	30
Repayment of refunds	1	1	1	1
Transfers from other plans	13	13	13	13
Change in valuation assumptions and methods:				
Change in mortality assumption	1,054	1,054	1,054	1,054
Change in interest rate from Basis 1	0	4,131	4,131	4,131
Change in inflation rate and salary growth rates from Basis 1	0	0	(4,006)	(5,666)
Change in other actuarial assumptions and methods	116 ³	116	116	116
	\$11,418	\$15,549	\$11,543	\$9,883
3. Decrease in the APV of accrued pension benefits				
Pensions paid	\$5,167	\$5,167	\$5,167	\$5,167
Refund of contributions	1	1	1	1
Lump sum payments and transfers	138	138	138	138
Experience gains:				
Salary experience gains	8	8	8	8
All other experience gains	292	292	292	292
	\$5,606	\$5,606	\$5,606	\$5,606
4. Net increase in the APV of accrued pension benefits	\$5,812	\$9,943	\$5,937	\$4,277
5. APV of accrued pension benefits at December 31, 2014	\$115,336	\$119,467	\$115,461	\$113,801
6. Annual current service cost at January 1, 2015	\$2,891	\$3,066	\$2,899	\$2,779

² 2.25% for the years 2015 to 2019

³ Change due to commuted value assumption to value benefits payable upon termination

Results using 50% conditional indexing for post 2009 service (results in \$ millions)

	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%⁴
1. Actuarial present value (APV) of accrued pension benefits at December 31, 2013 using Last Year's Basis 1	\$108,145	\$108,145	\$108,145	\$108,145
2. Increase in the APV of accrued pension benefits				
Interest on the APV of accrued pension benefits	\$7,205	\$7,205	\$7,205	\$7,205
Current Service Cost (mid-year)	2,472	2,472	2,472	2,472
Contributions for optional credit	30	30	30	30
Repayment of refunds	1	1	1	1
Transfers from other plans	13	13	13	13
Change in valuation assumptions and methods:				
Change in mortality assumption	1,045	1,045	1,045	1,045
Change in interest rate from Basis 1	0	3,972	3,972	3,972
Change in inflation and salary growth rates from Basis 1	0	0	(3,677)	(5,264)
Change in other actuarial assumptions and methods	109 ⁵	109	109	109
	\$10,875	\$14,847	\$11,170	\$9,583
3. Decrease in the APV of accrued pension benefits				
Pensions paid	\$5,167	\$5,167	\$5,167	\$5,167
Refund of contributions	1	1	1	1
Lump sum payments and transfers	138	138	138	138
Experience gains:				
Salary experience gains	8	8	8	8
All other experience gains	410	410	410	410
	\$5,724	\$5,724	\$5,724	\$5,724
4. Net increase in the APV of accrued pension benefits	\$5,151	\$9,123	\$5,446	\$3,859
5. APV of accrued pension benefits at December 31, 2014	\$113,296	\$117,268	\$113,591	\$112,004
6. Annual current service cost at January 1, 2015	\$2,494	\$2,637	\$2,534	\$2,430

⁴ 2.25% for years 2015 to 2019

⁵ Change due to commuted value assumption to value benefits payable upon termination

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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, 2014 and the 2015 current service costs are based on membership data as at August 31, 2014. The actuarial present value of accrued pension benefits as at August 31, 2014 is then extrapolated forward to December 31, 2014, reflecting expected cashflows and the actual inflation adjustment as at January 1, 2015 of 1.70% for pre-2010 service and 1.02% for post-2009 service. The 2014 mid-year current service is based on membership data as at August 31, 2013.
- 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, 2013. 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, 2014).

The Expected Average Remaining Service Lifetime of active employees at August 31, 2014 and estimated for December 31, 2014, is 14.4 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, 2015 indexing offset by small demographic losses.

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 2014 financial statements, and does not require calculations on any other basis.

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

Sincerely,



Lise Houle

Copy:

Scott Clausen, Mercer

Jason Lipping, Mercer

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