



**THE CORPORATION OF THE CITY OF YORK
EMPLOYEE PENSION PLAN
REPORT ON THE ACTUARIAL VALUATION
FOR FUNDING PURPOSES AS AT
DECEMBER 31, 2013**

MARCH 2014

Financial Services Commission of Ontario Registration Number: 0320622
Canada Revenue Agency Registration Number: 0320622

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. The content of the report may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission. All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used or relied upon without reference to the report as a whole.

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.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security and/or benefit-related issues should not be made solely on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic and societal factors, including financial scenarios that assume future sustained investment losses.

Funding calculations reflect our understanding of the requirements of the Pension Benefits Act (Ontario), the Income Tax Act and related regulations that are effective as of the valuation date. Mercer is not engaged in the practice of law or tax advice. This report does not constitute and is not a substitute for legal advice.

CONTENTS

1. Summary of Results.....	1
2. Introduction	3
3. Valuation Results – Going Concern.....	5
4. Valuation Results – Hypothetical Wind-up.....	8
5. Valuation Results – Solvency.....	10
6. Minimum Funding Requirements.....	12
7. Maximum Eligible Contributions	14
8. Actuarial Opinion.....	15
Appendix A: Prescribed Disclosure	16
Appendix B: Plan Assets	19
Appendix C: Methods and Assumptions – Going Concern	24
Appendix D: Methods and Assumptions – Hypothetical Wind-up and Solvency.....	28
Appendix E: Membership Data.....	31
Appendix F: Summary of By-law Provisions.....	33
Appendix G: Post Retirement Adjustments.....	35
Appendix H: Employer Certification	37

m:\cityyork\2014\fundng\report\val 31122013york_draft.doc

1

Summary of Results

	31.12.2013	31.12.2010
	(\$000's)	(\$000's)
Asset Values		
Market value of assets	47,197	50,012
Rate of return during the year, market values (gross)	13.28%	8.69%
Going-Concern Financial Position		
Actuarial value of assets	44,774	49,828
Actuarial liability	44,493	50,168
Funding excess (deficiency)	281	(340)
Wind-up Financial Position		
Market value of assets (net of termination expenses)	47,122	49,952
Wind-up liability	46,696	(54,038)
Wind-up excess/(deficiency)	426	(4,086)
Transfer Ratio	101%	93%
Solvency Financial Position		
Solvency assets	47,122	49,952
Asset smoothing adjustment	(3,340)	(808)
Smoothed assets	43,782	49,144
Solvency liability	46,696	54,038
Solvency liability adjustment	15	(539)
Adjusted solvency liability	46,711	53,499
Solvency excess (shortfall)	(2,929)	(4,355)
Plan Membership		
	31.12.2013	31.12.2010
▪ Active	0	0
▪ Suspended or disabled	0	0
▪ Retired members in receipt of pensions	123	142
▪ Surviving spouses in receipt of pensions	84	96
Total membership	207	238

Funding Requirements (annualized)	2014	2011
Minimum Employer contribution (per PBA, Reg. 5.1(e))	\$1,036,692	\$1,614,834
Maximum Employer contribution (per ITA, Reg. 8516(3))	\$1,036,692	\$4,086,000
Maximum Employer contribution (per CRA, Q&A) **	\$0	\$4,086,000

Next valuation date, not later than 31.12.2016 31.12.2013

Schedule of Employer Contributions	2014	2015*	2016*
Current Service Cost	0	0	0
Unfunded Liability	0	0	0
Solvency Deficiency (per PBA) ***	\$1,036,692	\$641,676	\$493,068
Total	\$1,036,692	\$641,676	\$493,068

* Subject to change if a valuation is prepared as at December 31, 2014

** RPP consultation session – Questions from industry November 22, 2000 Q&A, question 1.

*** Since there is no going-concern or windup deficiency, no contributions may be permitted as per the CRA Q&A.

2

Introduction

To The York Employees' Pension and Benefits Committee

At the request of the Pension Committee of the City of Toronto, we have conducted an actuarial valuation of the Corporation of the City of York Employee Pension Plan (the "Plan"), sponsored by the City of Toronto (the "Employer"), as at the valuation date, December 31, 2013. 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 December 31, 2013 on going concern, hypothetical wind-up and solvency bases
- The minimum required funding contributions from January 1, 2014, in accordance with the *Pension Benefits Act (Ontario)*
- The maximum permissible funding contributions from January 1, 2014, in accordance with the *Income Tax Act*

The information contained in this report was prepared for the internal use of the Pension Committee and the Employer and for filing with the Financial Services Commission of Ontario (the "FSCO") and with the Canada Revenue Agency (the "CRA"), in connection with our actuarial valuation of the Plan. 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 December 31, 2016, or as at the date of an earlier amendment to the Plan.

Terms of Engagement

In accordance with our terms of engagement with the City of York Pension Committee, 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.
- We have reflected the Committee'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
 - Although permissible, no benefits were excluded from the solvency liabilities; and
 - The solvency financial position was determined on a four year smoothed basis

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

Events Since the Last Valuation at December 31, 2010

Pension Plan

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

This valuation reflects the provisions of the Plan as at December 31, 2013. The Plan has not been amended 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. The Plan provisions are summarised in Appendix F.

Assumptions

We have used the same going concern valuation assumptions and methods as were used for the previous valuation except the mortality table which was updated to the new CPM 2014 Public Service Table with projection scale CPM-B.

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.

Subsequent Events

It has been discovered that, in respect of members who retired since January 1, 1987, the 50% rule refund of excess contributions amount, if any, may not have been processed. The issue is under investigation and a resolution has not yet been reached. At this time, the impact of the above, if any, is not known and cannot as yet be quantified, however it is not expected to be material.

After checking with representatives of the Employer, 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. 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

This report has been prepared on the assumption that all of the assets in the pension fund are available to meet all of the claims on the Plan. We are not in a position to assess the impact that the Ontario Court of Appeal's decision in *Aegon Canada Inc. and Transamerica Life Canada versus ING Canada Inc.* or similar decisions in other jurisdictions might have on the validity of this assumption.

We are not aware of any partial plan wind-up having been declared in respect of the Plan where the Monsanto decision may apply. In preparing this actuarial valuation, we have therefore assumed that all the Plan's assets are available to cover the Plan's liabilities presented in this report.

3

Valuation Results – Going Concern

Financial Status (000's)

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:

	31.12.2013 (\$000s)	31.12.2010 (\$000s)
Assets		
Market value of assets	47,197	50,012
Asset smoothing adjustment	(2,423)	(184)
Smoothed value of assets	44,774	49,828
Going concern funding target		
• Retired members' pensions	35,119	39,996
• Spouses and other survivor pensions	9,374	10,172
Total	44,493	50,168
Funding excess (shortfall)	281	(340)

Reconciliation of Financial Status (\$000s)

Funding excess (shortfall) as at 31.12.2010		(340)
Interest on funding excess (funding shortfall) at 5.50% per year		(19)
Employer's special payments, with interest		1,660
Expected funding excess (funding shortfall)		1,301
Net experience gains (losses)		
• Net Investment return	(1,661)	
• Mortality	(555)	
• Miscellaneous	(1)	
Total experience gains (losses)	(2,217)	(2,217)
Funding excess (shortfall) as at 31.12.2011		(916)
Interest on funding excess (funding shortfall) at 5.5% per year		(50)
Employer's special payments, with interest		1,559
Employer's contributions drawn from previous funding excess with interest		0
Expected funding excess (funding shortfall)		593
Net experience gains (losses)		
• Investment return	758	
• Mortality	14	
• Retirement	0	
Total experience gains (losses)	772	772
Net impact of other elements of gains and losses		(3)
Funding excess (shortfall) as at 31.12.2012		1,362
Interest on funding excess (funding shortfall) at 5.50% per year		75
Employer's special payments, with interest		897
Expected funding excess (funding shortfall)		2,334
Impact of change in assumptions		(3,072)
Net experience gains (losses)		
• Net Investment return	894	
• Mortality	127	
Total experience gains (losses)	1,021	1,021
Net impact of other elements of gains (losses)		(2)
Funding excess (shortfall) as at 31.12.2013		281

Discount Rate Sensitivity

The following table summarises 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 (\$000's)	Reduce Discount Rate by 1% (\$000's)	% Increase
Going concern funding target	44,493	47,539	6.8%

4

Valuation Results – Hypothetical Wind-up

Financial Position (000's)

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:

	31.12.2013 (\$000s)	31.12.2010 (\$000s)
Assets		
Market value of assets	47,197	50,012
Termination expense provision	(75)	(60)
Wind-up assets	47,122	49,952
Present value of accrued benefits for:		
• Retired members' pensions	36,900	43,139
• Surviving spouse pensions	9,796	10,899
Total wind-up liability	46,696	54,038
Wind-up excess (shortfall)	426	(4,086)

Wind-up Incremental Cost to December 31, 2016

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 is nil since there are no active members accruing benefits and no changes expected to future pensioner benefits.

Discount Rate Sensitivity

The following table summarises 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 (\$000's)	Reduce Discount Rate by 1% (\$000's)	% Increase
Total hypothetical wind-up liability	\$46,696	\$50,054	7.2%

5

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.
<p>Certain benefits can be excluded from the solvency financial position. These include:</p> <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.	Solvency assets and liabilities were smoothed over 4 years.
The benefit rate increases coming into effect after the valuation date can be reflected in the solvency valuation.	Not applicable.

Financial Position (000's)

The financial position on a solvency basis, compared with the corresponding figures from the previous valuation, is as follows:

	31.12.2013 (\$000s)	31.12.2010 (\$000s)
Assets		
Market value of assets	47,197	50,012
Termination expense provision	(75)	(60)
Net assets	47,122	49,952
Liabilities		
Total hypothetical wind-up liabilities	46,696	54,038
Difference in circumstances of assumed wind-up	0	0
Value of excluded benefits	(0)	(0)
Liabilities on a solvency basis	46,696	54,038
Surplus (shortfall) on a market value basis	426	(4,086)
Liability smoothing adjustment	(15)	539
Asset smoothing adjustment	(3,340) ¹	(808) ²
Surplus (shortfall) on a solvency basis	(2,929)	(4,355)
Transfer ratio	101%	93%

¹ Averaging method adjustment = 75% of investment gains from 2013, (\$2,898,000), plus 50% of investment gains from 2012, (\$860,000), plus 25% of investment losses from 2011, \$418,000.

² Averaging method adjustment = 75 % of investment gains from 2010, (\$1,305,000), plus 50% of investment gains from 2009, (\$1,551,000), plus 25% of investment losses from 2008, \$2,048,000.

6

Minimum Funding Requirements

The Act prescribes the minimum contributions that the City of Toronto must make 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.

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

Employer's contribution rule				Estimated employer's contributions	
Period beginning	Monthly current service cost	Explicit monthly expense allowance	Minimum monthly special payments	Monthly current service cost including expense allowance	Minimum monthly contributions
January 1, 2014	0	0	\$86,391	0	\$86,391
January 1, 2015	0	0	\$53,473	0	\$53,473
January 1, 2016	0	0	\$41,089	0	\$41,089

Since all active members had retired as at December 31, 2013, no Employer contributions are required for current service.

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

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 (if any), 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 monthly basis. Special payment contributions must be made in the month to which they apply.

Retroactive Contributions

The Employer 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 0.85 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.

7

Maximum Eligible Contributions

The *Income Tax Act* (the "ITA") limits the amount of employer 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 employer's 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, the employer can remit a contribution equal to the employer's current service cost, including the explicit expense allowance if applicable, 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.

Schedule of Maximum Contributions

The Employer is permitted to fully fund the greater of the going concern and hypothetical wind-up shortfalls; which are nil, as well as make current service cost contributions, which are nil. The Employer is also permitted to make contributions as required under the PBA.

However, based on the November 22, 2000 Q&A, the CRA does not permit past service contributions in excess of the wind-up and going-concern deficit.


8

Actuarial Opinion

In our opinion, for the purposes of the valuations,

- the membership data on which the valuation is based are sufficient and reliable
- all of the assumptions were independently reasonable at the time the valuation was prepared and are, in aggregate, appropriate, and
- 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)*.



Anil Narale

Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

15.5.2014

Date



Frank Dekeyser

Associate of the Society of Actuaries
Associate of the Canadian Institute of Actuaries

May 15, 2014

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.	1.01
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 Employer chooses to treat the excess contributions as a Prior Year Credit Balance).	0
Solvency Assets	Market value of assets including in-transit contributions and payments, estimated plan termination expenses and accrued or receivable income and excluding the value of any qualifying annuity contracts.	\$47,122,000
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)	(\$3,340,000) \$0 \$674,000
		(\$2,666,000)

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. 	\$46,696,000
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.	\$15,000
Solvency Deficiency	The amount, if any, 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 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"> \$46,696,000 \$15,000 \$0 <hr/> \$46,711,000 \$47,122,000 (\$2,666,000) <hr/> \$44,456,000 <hr/> \$2,255,000

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 85%.

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, since the ratio of solvency assets to solvency liabilities is 101% at December 31, 2013, the next valuation of the Plan will be required as of December 31, 2016.

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 ³	Solvency Basis ⁴
Solvency	01/01/2010	31/12/2014	\$32,918		\$387,500
Solvency	01/01/2011	31/12/2015	12,384		286,500
New solvency	01/01/2014	31/12/2018	41,089		2,255,000
Total			\$86,391		\$2,929,000

The Plan does not have a going concern deficiency at December 31, 2013, therefore, no going concern special payments are required.

The present value of the remaining previously scheduled solvency special payments is lower than the solvency shortfall resulting in a new solvency deficiency of \$2,255,000 as at December 31, 2013. As a result, a new solvency special payment schedule had to be established.

Pension Benefit Guarantee Fund (PBGF) Assessment

In accordance with subsection 47(1)(p.18) of the Regulations under the *Pension Benefits Act (Ontario)*, the pension benefits provided by this Plan are not guaranteed by the Pension Benefits Guarantee Fund (PBGF) and are therefore exempt from the filing of PBGF assessment certificate (subsection 18(7) of the regulations) and payment of an annual PBGF assessment (section 37 of the Regulations).

³ Calculation only considers going concern special payments and is based on a going concern discount rate.

⁴ Calculation considers both solvency and going concern special payments (five years only) and is based on the average solvency discount rate.

APPENDIX B

Plan Assets

As at December 31, 2013, the pension fund is held by CIBC Mellon and is invested in accordance with the investment policy by Beutel Goodman.

The going-concern assets are recorded at an "Actuarial Value" which is determined as follows:

- (1) The market value of total assets at the previous year-end is accumulated, together with the current year's cash flow, with interest at the valuation rate of 5.50%; and
- (2) The difference between the accumulation in (1) and the market value of total assets at the valuation date is spread over the current year and the three succeeding years in four equal amounts.

The value determined in accordance with the above method is **\$44,774,000** as at December 31, 2013.

The effect of the foregoing is shown below (in \$000s).

Assets of the Pension Fund	Market Value	Actuarial Value
I. Cash and Equivalents		
▪ Cash and short-term investments	528	528
II. External Management		
Short-term investments	1,291	1,291
Bonds	20,155	20,155
Canadian equities	12,313	12,313
Foreign equities	12,910	12,910
Subtotal	46,669	46,669
III. Smoothing Adjustment		(2,423)
Total	47,197	44,774
Net amount in-transit	0	0
Total Fund	47,197	44,774

Under this adopted asset valuation method, the Plan's investment rate of return (net of investment expenses) was equal to 7.71% in 2013, 7.41% in 2012 and 2.25% in 2011.

The currently unrecognized elements of the market value of assets will be taken into account in future years in the following amounts (\$000s).

2014	25% of 2011 loss	(523)	
	25% of 2012 gain	291	
	25% of 2013 gain	788	556
2015	25% of 2012 gain	291	
	25% of 2013 gain	788	1,079
2016	25% of 2013 gain	788	788
Total			2,423

Reconciliation of Plan Assets

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

	Market Value (\$000s)	Actuarial Value (\$000s)
Value at 31.12.2010	50,012	49,828
PLUS		
Employer's contributions	1,616	1,616
Investment income and gains (losses)	791	1,211
LESS		
Pensions for Members	4,373	4,373
Pensions for Widows & Others	1,373	1,373
Administration and investment fees	244	244
Value at 31.12.2011	46,429	46,665
PLUS		
Employer's contributions	1,518	1,518
Investment income and gains (losses)	3,862	3,468
LESS		
Pensions for Members	4,150	4,150
Pensions for Widows & Others	1,377	1,377
Administration and investment fees	254	254
Value at 31.12.2012	46,028	45,870
PLUS		
Employer's contributions	873	873
Investment income and gains (losses)	5,803	3,538
LESS		
Pensions for Members	3,994	3,994
Pensions for Widows & Others	1,271	1,271
Administration and investment fees	242	242
Value at 31.12.2013	47,197	44,774

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 December 31, 2013
	Minimum	Target	Maximum	
Canadian Equities	20%	25%	30%	26.1%
Foreign Equities	20%	25%	30%	27.4%
Canadian Universe Bonds	20%	25%	30%	21.4%
Canadian Long Bonds	20%	25%	30%	21.3%
Cash and cash equivalents	0%	0%	10%	3.8%
		100%		100.0%

Because of the mismatch between the Plan's assets (which are invested in accordance with the above investment policy) and the Plan's liabilities (which tend to behave like long bonds) the Plan's financial position will fluctuate over time. These fluctuations could be significant and could cause the Plan to become under, or over, funded even if the Employer contributes to the Plan based on the funding requirements presented in this report.

Historical Fund Performance

Annual rates of return, net of investment expenses, for the last 16 years are provided below on both a market value and actuarial value bases.

	Year-end Market Value	Market Value Rate of Return	Year-end Actuarial Value	Actuarial Value Rate of Return
2013	\$47,197,000	12.86%	\$44,774,000	7.71%
2012	\$46,028,000	8.34%	\$45,870,000	7.41%
2011	\$46,429,000	1.36%	\$46,665,000	2.25%
2010	\$50,012,000	8.39%	\$49,828,000	2.11%
2009	\$50,543,000	11.40%	\$53,327,000	2.16%
2008	\$48,040,000	-9.90%	\$54,984,000	2.85%
2007	\$57,156,000	2.12%	\$57,046,000	7.57%
2006	\$58,764,000	9.33%	\$55,755,000	9.46%
2005	\$56,236,000	10.61%	\$53,424,000	4.78%
2004	\$53,087,000	8.93%	\$53,292,000	0.42%
2003	\$51,524,000	11.27%	\$55,969,000	0.61%
2002	\$46,557,000	-8.38%	\$55,899,000	0.10%
2001	\$57,408,000	-5.64%	\$62,147,000	4.60%

	Year-end Market Value	Market Value Rate of Return	Year-end Actuarial Value	Actuarial Value Rate of Return
2000	\$67,243,000	8.12%	\$65,496,000	7.65%
1999	\$68,313,000	9.22%	\$66,974,000	7.18%
1998	\$68,709,000	6.75%	\$68,709,000	14.00%

Historical Updates to Pensions In-Payment

Annual post retirement adjustments (PRA) for the last 18 years, applicable to pensions that have been in payment for at least one year on the effective date, are provided below.

Effective Date	PRA Update *	Effective Date	PRA Update
July 1, 1996	1.16%	July 1, 2006	0.00%
July 1, 1997	2.91%	July 1, 2007	0.00%
July 1, 1998	3.59%	July 1, 2008	0.00%
July 1, 1999	4.41%	July 1, 2009	0.00%
July 1, 2000	4.79%	July 1, 2010	0.00%
July 1, 2001	4.01%	July 1, 2011	0.00%
July 1, 2002	0.00%	July 1, 2012	0.00%
July 1, 2003	0.00%	July 1, 2013	0.00%
July 1, 2004	0.00%		
July 1, 2005	0.00%		

** The PRA updates indicated are the maximum pension increases determined under the excess yield method. It should be noted that the annual increase for some pensioners is limited to the cumulative change in CPI since the last adjustment.*

APPENDIX C

Methods and Assumptions – Going Concern

Valuation of Assets

For this valuation, we have used an adjusted market-value method to determine the smoothed value of assets. This method is described in Appendix B.

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 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. 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 must 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 during the period until the next valuation. Since all Plan members are retired and in receipt of a pension, there are no further benefit accruals and therefore no current service cost.

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:	5.50%	5.50%
Explicit expenses:	0	0
Post retirement pension increases:	0.00%	0.00%
Retirement rates:	All members are retired	All members are retired
Mortality rates:	100% of the rates of the CPM2014 Public Sector Mortality Table	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality improvements:	Projection Scale CPM-B	Projection Scale AA
Eligible Survivor:	Based on actual data	Based on actual data
Allowance for Remarriage:	0.25% of pensioner liability	0.25% of pensioner liability

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

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. *Based on Mercer's methodology, estimated returns range from a low of 5.49%, with a conservative equity premium, to a high of 6.66%, with an optimistic equity premium.*
- No additional returns are assumed to be achievable due to active equity management. *We have assumed hypothetical fees that would be incurred for passive management of all assets of 0.10%.*
- Implicit provision for non-investment expenses determined as the average rate of non-investment expenses paid from the fund over the last 3 years. *On this basis we have determined an implicit expense provision of 0.20%*
- No specific margin for adverse deviations has been mandated by the regulators or communicated to us by the Committee.

The discount rate was developed as follows:

Assumed investment return	In the range 5.84% to 6.66%
Passive investment expenses	(0.10%)
Implicit expense provision	(0.20%)
Implicit margin for adverse deviation	In the range (0.04%) to (0.86%)
Net discount rate	5.50%

Post Retirement Pension Increases

The assumption is based on the Plan formula and inflation assumption above.

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 CPM 2014 public sector mortality table. Furthermore, there is strong evidence of continuing improvement in mortality in recent years and it has become an industry standard to assume this trend continues into the future. We have used the CPM-B projection scale to allow for improvements in mortality from 2014 and indefinitely in the future.

Based on the assumption used, the life expectancy of a member age 65 at the valuation date is 22.6 years for males and 24.5 years for females.

Eligible Spouse

Actual status used for retirees.

The survivor benefit assumption is based on actual data provided and an allowance for remarriage of 0.25% of the pensioner liability.

Subject to the entitlement of the prior spouse, if any, the 3-year waiting period specified in the Plan and the requirements under the *Pension Benefits Act (Ontario)*, a spouse acquired after retirement date may be entitled to receive the spousal pension. Based on remarriage rates for older adults in Canada, it was estimated that the additional liability as a result of this provision is approximately 0.25% of the pensioner liability

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.

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 December 31, 2013.

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.

However, it may not be possible to settle the liabilities through the purchase of annuities due to the size of the Plan and the limited annuity market in Canada. We have assumed that the settlement of such liabilities would be priced on the same basis as the smaller group annuities that are available in the market.

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. The January 24, 2014 CIA Educational Note Supplement (Re: Guidance for Assumptions for Hypothetical Wind-up and Solvency Valuations Update - Effective December 31, 2013, and Applicable to Valuations with Effective Dates between December 31, 2013, and December 30, 2014) supports adding 50 to 80 basis points (depending on liability duration) arithmetically to the unadjusted yield on Government of Canada long-term bonds (CANSIM series V39062) in conjunction with the UP 1994 mortality tables with generational mortality improvements projected using scale AA, as a proxy for estimating the cost of purchasing a group of annuities.

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

Assumptions for determination of the hypothetical wind-up and solvency liability are as follows:

Actuarial Assumptions – Windup and Solvency Liability

Mortality rates:	UP1994 table, fully generational using scale AA
Interest rate for benefits to be settled through annuity purchase:	3.63% per year
Liability duration (based on 3.83% discount rate):	7.0 years
Allowance for re-marriage:	0.25% of pensioner liability
Post retirement cost-of-living increases	0.00%

Assumptions for determination of the solvency liability adjustment are as follows:

Actuarial Assumptions – Solvency Liability Adjustment

Mortality rates:	UP1994 table, fully generational using scale AA
Interest rate for benefits to be settled through annuity purchase:	3.625% per year
Allowance for re-marriage:	0.25% of pensioner liability
Post retirement cost-of-living increases	0.00%

We have used an average of the annuity proxy rates as at December 31, 2010 (4.48% + mortality adjustment of 0.05%=4.53% per year), December 31, 2011 (3.31% per year), December 31, 2012 (2.96% per year), and December 31, 2013 (3.63%) which produces a rate of 3.625% per year (rounded to the nearest 1/8%).

Other assumptions are as follows;

Other Assumptions

Special payments:	Discounted at the average smoothed interest rate of 3.625% per year
Termination expenses:	\$75,000 (i.e. greater of: \$75,000 and \$250 per pensioner/survivor)

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

There is no incremental cost since there are no remaining actives accruing benefits and no future adjustments assumed to pensioner benefits prior to the date of the next valuation.

Solvency Basis

The value of assets used for determining the financial position of the Plan on the solvency basis includes the solvency assets plus a solvency asset adjustment.

The *solvency assets* are determined as the market value of investments held by the Plan plus any cash balances of the Plan and accrued or receivable income items.

The *solvency asset adjustment* is determined as (1) the present value at the interest rate used to calculate the solvency liability adjustment of the special payments required to eliminate any going-concern unfunded liability and pre-existing solvency deficiency that are scheduled for payment within 5 years of the valuation date, plus (2) the amount, positive or negative, by which the value of the solvency assets are adjusted as a result of applying an averaging method that stabilizes short-term fluctuations of the Plan assets.

The value of the liabilities used for determining the financial position of the Plan on the solvency basis includes the solvency liabilities plus a solvency liability adjustment.

To determine the *solvency liability*, we have valued those benefits that would have been paid had the Plan been wound up on the valuation date with all members vested in their accrued benefits.

The *solvency liability adjustment* is determined as the amount, positive or negative, by which the value of the solvency liabilities are adjusted as a result of using a solvency valuation interest rate that is the average of the market interest rates calculated over a period of 4 years (the same period used for the averaging method used to determine the solvency asset adjustment).

The difference between (1) the sum of the solvency assets and solvency asset adjustment and (2) the sum of the solvency liability and solvency liability adjustment is called the *solvency excess* or *solvency deficiency*, as the case may be.

Since all members have qualified for a retirement pension, we have assumed that all benefits will be settled through the purchase of annuities and have used a valuation interest rate for solvency purposes which, when used with the 1994 Uninsured Pensioners mortality table (i.e. UP1994) fully generational using scale AA, provides an estimate of group annuity purchase rates for non-indexed pensions.

APPENDIX E

Membership Data

Analysis of Membership Data

The actuarial valuation is based on membership data as at October 31, 2013 adjusted to December 31, 2013, provided by the City of Toronto.

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.

	31.12.2013	31.12.2010
Pensioners		
Number	123	142
Total annual lifetime pension	\$3,940,328	\$4,494,765
Total annual temporary pension	\$0	\$25,968
Average annual lifetime pension	\$32,035	\$31,836
Average age	81.0	79.0
Spousal Pensioners		
Number	84	96
Total annual lifetime pension	\$1,261,290	\$1,329,670
Total annual temporary pension	\$0	\$0
Average annual lifetime pension	\$15,015	\$13,851
Average age	84.0	82.0

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

	Actives	Pensioners	Spousal Pensioners	Total
Total at 31.12.2010	0	142	96	238
Transfers/lump sums				
Deaths – no spouse		(3)	(2)	(5)
Deaths – with spouse		(5)	5	
Total at 31.12.2011	0	134	99	233
Transfers/lump sums				
Deaths – no spouse		(2)	(8)	(10)
Deaths – with spouse		(4)	4	
Total at 31.12.2012	0	128	95	223
Transfers/lump sums				
Deaths – no spouse		(4)	(12)	(16)
Deaths – with spouse		(1)	1	
Total at 31.12.2013	0	123	84	207

The distribution of the inactive members by age as at the valuation date is summarized as follows:

Age	Pensioners		Surviving Spouses	
	Number	Average Annual Pension	Number	Average Annual Pension
Under 60				
60 – 64			2	\$18,663
65 – 69	5	\$22,148	2	29,335
70 – 74	19	42,073	7	21,604
75 – 79	33	37,414	13	16,847
80 – 84	32	33,865	21	17,388
85 – 89	23	19,441	20	11,363
90 – 94	8	29,048	12	11,745
Over 95	3	10,775	7	8,817
Total	123	\$32,035	84	\$15,015
Males	108	\$34,404	6	\$9,795
Females	15	\$14,983	78	\$15,417

APPENDIX F

Summary of By-law Provisions

This valuation is based on the plan provisions in effect on December 31, 2013. Since the previous valuation, the Plan has not been amended.

The following is a summary of the main provisions of the Plan, contained in By-law no. 3001999, which are relevant to the actuarial valuation. For complete details reference should be made to the formal Plan document. This summary is not intended as a complete description of the Plan.

Background	The Plan became effective January 1, 1955. Benefits are based on a set formula and are entirely paid for by the Employer.
Eligibility for membership	Employees hired before July 1, 1968.
Employee Contributions	<u>Firefighters</u> : 4.4% of Salary up to YMPE, and 6.5% of Salary over YMPE. <u>All Others</u> : 3.9% of Salary up to YMPE, and 6.0% of Salary over YMPE. Since all active members had completed 35 years of pensionable service as at December 31, 2003, there are no further contribution requirements after this date.
Employer Contributions	Such amounts as certified by the Actuary in the actuarial valuation reports.
Retirement Dates	Normal Retirement Date • Age 60 for firefighters; age 65 for others.
Disability Retirement	Permitted, with unreduced accrued pension, (a) after 10 years, if disability is total and permanent, or (b) after 20 years, if the employee is incapable of continuing in the employer's service.
Normal Retirement Pension	2% of employee's best consecutive 5-year average earnings, multiplied by his number of years of service up to a maximum of 35 years, less (after 65 or total disability) 0.7% of final 3 year average YMPE, multiplied by number of years of service after 1.1.66, up to a maximum of 35 years. For years of service after 1990, Revenue Canada restricted pensions to a flat dollar amount per year of service. For 2006, (the year that the last member retired), this amount was 2,111.11.

Pensionable earnings	Base pay.
Early Retirement Pension	<ul style="list-style-type: none"> • Unreduced pensions upon completion of 30 years of service and attainment of age 55 (age 50 for firefighters). • Otherwise the pension will be actuarially reduced.
Maximum Pension	All pensions are subject to the maximum limitations imposed by the Municipal Act and the Income Tax Act.
Pre-Retirement Death benefits	The pre-retirement death benefit is equal to five times the annual pension accrued to date of death, less any benefit payments made prior to death, less any benefit payments made prior to date of death. In addition, commencing 5 years after the date of death an eligible widow or widower will receive 50% of the annual pension accrued to date of death, and if there are any surviving children this benefit will be increased by 10% of the accrued pension for each eligible child up to a maximum benefit of 75% of the accrued pension. If there is no surviving widow or widower the 50% benefit will be divided equally among the eligible surviving children. Dependent children's benefits cease on attainment of age 21.
Form of Retirement Pension	The normal form of pension benefit for a member who is not married at retirement is a lifetime pension, guaranteed for 5 years and for a married member is a joint and survivor 60% pension, guaranteed for 5 years. Effective as at January 1, 2002, survivor benefits are provided on post-retirement marriage, after the spouse has completed a 3-year period of marriage or co-habitation in a conjugal relationship.
Withdrawal Benefits	Vested pension, or return of terminated member's pre-1987 contributions plus interest plus the commuted value of the member's post-1986 accrued pension.
Employer Cost-Sharing	Upon termination, death or retirement, the member or his beneficiary is entitled to receive the excess, if any, of the member's post-1986 contributions plus interest over 50% of the commuted value of the pension earned over the same period.
Post-Retirement Adjustments	Each July 1, the monthly income of members in receipt of pensions, survivors in receipt of pensions and terminated vested members entitled to a deferred pension shall be increased, as determined annually by the actuary and subject to Revenue Canada limitations, by a factor calculated as the sum of the inactive lives excess yields calculated for each of the 4 previous calendar years divided by 4. The inactive lives excess yield means the earnings of the pension fund that are in excess of that needed to match the inactive liabilities.

APPENDIX G

Post Retirement Adjustments

Post Retirement Adjustments at July 1, 2014

The Post Retirement Adjustment (PRA) at July 1, 2013 is based on the average of the Inactive Lives Excess Yields calculated for each of the previous 4 calendar years (i.e. 2010, 2011, 2012, and 2013).

If the increase calculated is zero or negative, no adjustment to pensions is to be granted. In accordance with the calculation on the following page, since the increase calculated is negative, no adjustment to pensions arises at July 1, 2014.

Calculation of PRA at July 1, 2014

The calculation of the PRA as at July 1, 2014 on pensions in payment at December 31, 2013 is as follows:

	2013	2012	2011	2010
MV of assets at Dec. 31	47,197,000	46,028,000	46,429,000	50,012,000
Inactive liability at Dec. 31 based on Jan 1 benefits	44,493,000	44,508,000	47,581,000	50,168,000
Inactive Lives Reserve				
OILR at Jan. 1	44,508,000	47,581,000	50,168,000	54,135,000
CILR at Dec. 31	44,493,000	44,508,000	47,581,000	50,168,000
Inactive Lives Fund				
OILF at Jan. 1	44,508,000	46,429,000	50,012,000	50,543,000
Fund income & appreciation	5,612,000	3,862,000	792,000	4,185,000
Pensions paid in year	(5,265,000)	(5,527,000)	(5,746,000)	(5,977,000)
Expenses paid in year	(242,000)	(254,000)	(245,000)	(212,000)
CILF at Dec. 31	44,613,000	44,510,000	44,813,000	48,539,000
Inactive Lives Excess Yield (CILF-CILR)/CILR	0.27%	0.00%	-5.82%	-3.25%
4-Year Average Excess Yield	-2.20%			
PRA Adjustment for 2014	0.00%			

Definition of Terms and Actuary's Interpretations

Inactive Lives Excess Yield (s2.27), means "the earnings of the Fund that are in excess of that needed to match the liabilities established for pensioners, survivors and deferred members. This percentage is calculated annually by the formula:

$$100\% \times (\text{CILF} - \text{CILR})/\text{CILR} "$$

Opening Inactive Lives Reserve (OILR) (s2.34), means "the liability of the Fund, as determined by the Actuary, with regard to pensioners, deferred members eligible for pensions and survivors in receipt of pension benefits as of each January 1.

We have interpreted the OILR to be equal to the inactive going-concern actuarial liabilities as of each January 1 (i.e. as of December 31 of the previous year).

Opening Inactive Lives Fund (OILF) (s2.33), means "the amount of the Fund set aside to match the OILR. This amount, as determined by the Actuary, will always equal the OILR for the same calendar year."

We have set the OILF equal to the OILR, except when the market value of assets at January 1 is less than the OILR at that date, in which case we have ignored the second sentence in the definition of OILF (concluding it to be inconsistent) and set the OILF to be equal to the market value of assets at that date. An alternate interpretation of this definition can impact the calculation of the PRA.

Closing Inactive Lives Reserve (CILR) (s2.12), means "the liability of the Fund, as determined by the Actuary, with regard to pensioners, deferred members eligible for pensions and survivors in receipt of pension benefits as of each December 31. The reserve shall be calculated using the amounts of pension and recipients utilized in determining the OILR for the same calendar year."

We have interpreted the CILR to be equal to the inactive going-concern actuarial liabilities as of each December 31, but excluding the liability for any amendments during the year which affected the pension benefits of the inactive members and excluding liability for new retirements.

Closing Inactive Lives Fund (CILF) (s2.11), means "the amount, as determined by the Actuary, of the OILF at the end of the calendar year. This figure is calculated by adjusting the OILF for the investment income, recognized capital gains and losses and expenses on a pro rata basis with the entire Fund, and assuming that all benefits paid to recipients valued in that year's OILR are paid from the OILF."

We have interpreted the above calculation of the CILF to include all interest and dividend income and both realized and unrealized capital gains and losses. As well, if the OILF is less than the OILR, we have interpreted the pro rata percentage to be 100%, otherwise the pro rata percentage is equal to the ratio of OILF to total Fund at January 1. The contributions made to the Fund in a calendar year are not included in the CILF for that year.

APPENDIX H

Employer Certification

With respect to the Report on the Actuarial Valuation for Funding Purposes as at December 31, 2013, of the Corporation of the City of York Employee Pension Plan I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the Pension Committee's engagement with the actuary described in section 2 of this report, particularly the Employer's decisions in regards to determining the going-concern and solvency funding requirements
- A copy of the official plan documents and of all amendments made up to December 31, 2013 were provided to the actuary and are reflected appropriately in the summary of the Plan provisions contained herein.
- The asset information summarised 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 October 31, 2013, and adjustments to December 31, 2013.
- All events subsequent to December 31, 2013 that may have an impact on the Plan have been communicated to the actuary.

AG

Date

May 28/2014

Signed

Mike Wiseman

Name

Mike Wiseman



Mercer (Canada) Limited
161 Bay Street, P.O. Box 501
Toronto, Ontario M5J 2S5
+1 416 868 2000

10
11
12
13