Attachment 2

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METROPOLITAN TORONTO POLICE BENEFIT FUND

REPORT ON THE ACTUARIAL VALUATION FOR FUNDING PURPOSES AS AT DECEMBER 31, 2013

MARCH 2014

Financial Services Commission of Ontario Registration Number: 0351585
Canada Revenue Agency Registration Number: 0351585

MARSH & McLENNAN COMPANIES

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.

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Summary of Results

	31.12.2013 ($000's)	31.12.2010 ($000's)
Asset Values		
Market value of assets	$542,818	$559,290
Rate of return during the year (gross)	11.50%	10.84%
Going-Concern Financial Position		
Actuarial value of assets	$522,954	$545,826
Going-concern funding target	505,214	544,321
Funding excess (shortfall)	$17,740	$1,505
Hypothetical Wind-up Financial Position		
Wind-up assets	$542,527	$558,979
Wind-up liability	545,075	592,047
Wind-up excess (shortfall)	(2,548)	($33,068)
Transfer Ratio	100%	95%
Solvency Financial Position		
Solvency assets	$542,527	$558,979
Asset smoothing adjustment	(30,360)	(20,321)
Smoothed assets	$512,167	$538,658
Solvency liability	$545,075	$592,047
Liability smoothing adjustment	4,342	(7,106)
Adjusted solvency liability	$549,417	$584,941
Solvency excess (shortfall)	($37,250)	($46,283)
Indexation Reserve Account	$0	$0
Plan Membership		
Active	2	6
Suspended or disabled	0	0
Retired members in receipt of pensions	1,215	1,335
Surviving spouses in receipt of pensions	721	727
Total membership	1,938	2,068

Funding Requirements (Annual)	**2014**	**2011**
Minimum Employer contribution (PBA, Reg. 5.1(e))	$13,998,000	$12,987,600
Maximum Employer contribution (ITA, Reg.8516(3))	$13,998,000	$46,283,000
Maximum Employer contribution (CRA, Q&A) **	$2,548,000	$33,068,000

Schedule of Employer Contributions **	**2014**	**2015***	**2016***
Current Service Cost	$0	$0	$0
Unfunded Liability	0	0	0
Solvency Deficiency (per PBA) ***	13,998,000	9,014,400	5,664,000
Total	$13,998,000	$9,014,400	$5,664,000

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

*** RPP consultation session – Questions from the Industry, November 22, 2000 Question 1.*

**** Contributions in excess of $2,548,000 may not be allowed as per CRA Q&A.*

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Introduction

To Trustees, Metropolitan Toronto Police Benefit Fund

At the request of the Trustees of the Metropolitan Toronto Police Benefit Fund (the "Board"), we have conducted an actuarial valuation of the Metropolitan Toronto Police Benefit Fund (the "Plan"), sponsored by 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 Trustees, the Employer and for filing with the Financial Services Commission of Ontario ("FSCO") and with the Canada Revenue Agency ("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.

Indexation Reserve Account

Based on the results of this valuation, the Indexation Reserve Account is $0.

Terms of Engagement

In accordance with our terms of engagement with the Trustees, 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 Trustee'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

Changes in By-law Provisions

There have been no material changes to the By-law provisions since the previous valuation as at December 31, 2010. A summary of the main By-law provisions in effect on the valuation date is provided 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

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.

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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	31.12.2010
Assets		
Market value of assets	$542,818	$559,290
Asset smoothing adjustment	(19,864)	(13,464)
Smoothed value of assets	$522,954	$545,826
Going concern funding target		
• Active and disabled officers	$2,339	$5,607
• Retired members' pensions	396,588	434,919
• Spouses and other survivor pensions	106,278	103,620
• Reserve for 50% Rule Refunds	9	175
Total	$505,214	$544,321
Funding excess (shortfall)	$17,740	$1,505

Reconciliation of Financial Status ($000s)

Funding excess (shortfall) as at 31.12.2010		$1,505
Interest on funding excess (funding shortfall) at 5.50% per year		83
Employer's special payments in 2011 with interest		13,363
Expected funding excess (funding shortfall)		$14,951
Net experience gains (losses)		
• Net Investment return	($18,345)	
• Retirement	307	
• Mortality	(1,397)	
• Salary increase (greater) lower than expected	10	
• Change in 50% Rule refunds reserve	101	
Total experience gains (losses)	($19,324)	($19,324)
Net impact of other elements of gains and losses		223
Funding excess (shortfall) as at 31.12.2011		($4,150)
Interest on funding excess (funding shortfall) at 5.50% per year		(228)
Employer's special payments in 2011 with interest		13,340
Expected funding excess (funding shortfall)		$8,962
Net experience gains (losses)		
• Net Investment return	$16,034	
• Retirement	186	
• Mortality	412	
• Salary increase (greater) lower than expected	(35)	
• Change in Section 24 Refunds	31	
• Change in 50% Rule refunds reserve	(14)	
• Elimination of in-transit payment assumed to be owed to Police	1,411	
Total experience gains (losses)	$18,025	$18,025
Net impact of other elements of gains and losses		(68)
Funding excess (shortfall) as at 31.12.2012		$26,919
Interest on funding excess (funding shortfall) at 5.50% per year		1,481
Employer's special payments in 2013 with interest		13,340
Expected funding excess (funding shortfall)		$41,740
Net experience gains (losses)		
• Net Investment return	$9,496	
• Retirement	137	
• Mortality	(1,826)	
• Salary increase (greater) lower than expected	37	
Total experience gains (losses)	$7,844	$7,844
Change in assumptions		(31,872)
Net impact of other elements of gains and losses		28
Funding excess (shortfall) as at 31.12.2013		$17,740

Current Service Cost

As at December 31, 2013 all active members had completed 35.0 years of credited service. Therefore, no further contributions for current service are required by the Employer and the Plan members.

Discount Rate Sensitivity ($000s)

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	Reduce Discount Rate by 1%	% Increase
Going concern funding target	$505,214	$547,784	8.4%

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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	31.12.2010
Assets		
Market value of assets	$542,818	$559,290
Termination expense provision	(291)	(311)
Wind-up assets	$542,527	$558,979
Present value of accrued benefits for:		
• Active and disabled officers	$2,750	$6,328
• Retired officers	430,130	473,914
• Survivors	112,186	111,480
• Reserve for 50% Rule Refunds	9	175
Total wind-up liability	$545,075	$592,047
Wind-up excess (shortfall)	($2,548)	($33,068)

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 the three active members have reached the max service of 35.0 years and is no longer accruing benefits and there are no changes expected to the benefits for pensioners.

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	Reduce Discount Rate by 1%	% Increase
Total hypothetical wind-up liability	$545,075	$594,084	9.0%

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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: (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 (000s)

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

	31.12.2013	31.12.2010
Assets		
Market value of assets	$542,818	$559,290
Termination expense provision	(291)	(311)
Net assets	$542,527	$558,979
Liabilities		
Total hypothetical wind-up liabilities	$545,075	$592,047
Difference in circumstances of assumed wind-up	0	0
Value of excluded benefits	(0)	(0)
Liabilities on a solvency basis	$545,075	$592,047
Surplus (shortfall) on a market value basis	($2,548)	($33,068)
Liability smoothing adjustment	($4,342)	$7,106
Asset smoothing adjustment	(30,360)*	(20,321)**
Surplus (shortfall) on a solvency basis	($37,250)	($46,283)
Transfer ratio	100%	95%

* Averaging method adjustment = 75% of investment gains from 2013, ($27,212,000), plus 50% of investment gains from 2012, ($8,724,000) plus 25% of investment losses from 2011, $5,576,000.

** Averaging method adjustment = 75% of investment gains from 2010, ($23,271,000), plus 50% of investment gains from 2009, ($28,171,000), plus 25% of investment losses from 2008, $31,121,000.

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Minimum Funding Requirements

The Act prescribes the minimum contributions that 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.

The Act prescribes the minimum contributions that the City of Toronto must make to the Plan. The minimum contributions 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**	**Total minimum monthly contributions**
January 1, 2014	$0	$0	$1,166,500	$0	$1,166,500
January 1, 2015	$0	$0	$751,200	$0	$751,200
January 1, 2016	$0	$0	$472,000	$0	$472,000

As at December 31, 2013 all active members had completed 35.0 years of credited service. Therefore, no further contributions for current service are required by the Employer and the Plan members.

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, 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. 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 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.

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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; $2,548,000, as well as make current service cost contributions which is nil. The portion of this contribution representing the payment of the hypothetical wind-up shortfall can be increased with interest at 3.72% per year from the valuation date to the date the payment is made, and must be reduced by the amount of any deficit funding made from the valuation date to the date the payment is made.

It should be noted that, although the Employer is permitted to make contributions as required under the PBA, based on the November 22, 2000 Q&A, the CRA does not permit past service contributions in excess of the wind-up or going-concern deficit.

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Indexation Reserve Account

General

The pension plan that the Plan can be fairly compared with is the Ontario Municipal Employees Retirement System (OMERS).OMERS has adopted automatic indexation. It was, and is, our opinion that the Plan with its closed membership could not afford to undertake automatic indexation but, instead, may use available assets to meet inflationary pressures on a yearly basis.

In 1991 a policy was adopted by the Board that:

a) assets not required to meet specific current pension liabilities be held in an Indexation Reserve Account (IRA);

b) the IRA be limited to 30% of the going-concern liability for non-indexed benefits;

c) the IRA be built up to the maximum before any allocation of surplus be considered; and

d) minor improvements in pension benefits and increases in pensions due to cost-of-living inflation should be limited to the extent that the IRA is sufficient.

Indexation Reserve Account

The change in the Indexation Reserve Account during 2011, 2012, and 2013 is outlined below.

	($000)	($000)
Indexation Reserve Account at December 31, 2010		**$0**
January 1, 2011 cost-of-living increases to pensions		0
Indexation Reserve Account at January 1, 2011		**$0**
Indexation Reserve Account at December 31, 2011		
a) Going-concern excess (deficiency)	($4,150)	
b) Solvency excess (deficiency)	($50,720)	
Indexation Reserve Account at December 31, 2011 (lesser of (a) and (b) but not less than 0)		**$0**
January 1, 2012 cost-of-living increases to pensions		0
Indexation Reserve Account at January 1, 2012		**$0**
Indexation Reserve Account at December 31, 2012		
a) Going-concern excess (deficiency)	$26,919	
b) Solvency excess (deficiency)	($50,572)	
Indexation Reserve Account at December 31, 2012 (lesser of (a) and (b) but not less than 0)		**$0**
January 1, 2013 cost-of-living increases to pensions		0
Indexation Reserve Account at December 31, 2013		
a) Going-concern excess (deficiency)	$17,740	
b) Solvency excess (deficiency)	($37,250)	
Indexation Reserve Account at December 31, 2013 (lesser of (a) and (b) but not less than 0)		**$0**

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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 were independently reasonable at the time the valuation was prepared and are, in aggregate, 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)*.

Anil Narale
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

15.5.2015
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 (000's)
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.	1.0
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 accrued or receivable income and excluding the value of any qualifying annuity contracts[1].	$542,527
Solvency Asset Adjustment	The sum of:	
	(a) the difference between smoothed value of assets and the market value of assets	($30,360)
	(b) the present value of any going concern special payments (including those identified in this report) within 5 years following the valuation date	$0
	(c) the present value of any previously scheduled solvency special payments (excluding those identified in this report)	$11,347
		($19,013)

[1] 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 (000's)
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, (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.	$545,075
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.	$4,342
Solvency Deficiency	The amount, if any, by which the sum of:	
	(a) the solvency liabilities	$545,075
	(b) the solvency liability adjustment	$4,342
	(c) the prior year credit balance	$0
		$549,417
	Exceeds the sum of	
	(d) the solvency assets	$542,527
	(e) the solvency asset adjustment	($19,013)
		$523,514
		$25,903

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 greater than 85% as 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:

				Present Value	
Type of payment	**Start date**	**End date**	**Monthly Special Payment**	**Going Concern Basis**[2]	**Solvency Basis**[3]
Solvency	31.12.2009	31.12.2014	$415,300		$4,888,700
Solvency	31.10.2010	31.12.2015	279,200		6,458,200
New solvency	31.12.2013	31.12.2018	472,000		25,903,100
Total			$1,166,500		$37,250,000

The present value of the previously scheduled solvency special payments is less than the solvency shortfall resulting in a new solvency deficiency of $25,903,100. 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.14) 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).

[2] Calculation only considers going concern special payments and is based on a going concern discount rate.

[3] 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 in trust by CIBC Mellon and is invested in accordance with the investment policy described below.

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 $523,209,000 at December 31, 2013. This amount is further adjusted with net payments in-transit of $255,000, producing an **Actuarial Value of $522,954,000** at December 31, 2013.

Amounts in-transit at December 31, 2013 (i.e. contributions and payments made in January 2014 in respect of 2013 and amounts held for payments in respect of earlier years) include:

- $255,000, in respect of investment management fees.

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

Assets of the Pension Fund at December 31, 2013		Market Value	Actuarial Value
I.	Cash and Equivalents		
	Cash and short-term investments	16,106	16,106
II.	Active Management		
	Bonds	229,280	229,280
	Canadian equities	142,043	142,043
	Foreign equities	155,644	155,644
	Subtotal	526,967	526,967
III.	Smoothing Adjustment		(19,864)
Total (before in-transit amounts)		543,073	523,209
Net amount in-transit		(255)	(255)
Total (after in-transit amounts)		**542,818**	**522,954**

Under this adopted asset valuation method, the Plan's investment rate of return in 2013 was equal to 7.50% (net of investment management expenses).

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

2014	25% of 2011 loss	(6,759)	
	25% of 2012 gain	2,786	
	25% of 2013 gain	7,017	3,044
2015	25% of 2012 gain	2,786	
	25% of 2013 gain	7,017	9,803
2016	25% of 2013 gain	7,017	7,017
Total			**19,864**

The pension fund custodian is CIBC Mellon and the assets are invested in accordance with the investment policy by the following investment managers as at December 31, 2013:

Manager	Investments
Addenda/TAL	Bonds
Fiera	Bonds
Phillips, Hager & North	Foreign Equities
Scheer Rowland	Canadian Equities
Aurion	Canadian Equities
TD Asset Mgmt	U.S. Equities

Reconciliation of Fund Assets ($ 000)

		Market Value	Actuarial Value
Value at 31.12.2010		**$559,290**	**$545,826**
Net amount in-transit	$1,755	1,755	1,755
Adjusted Value at 31.12.2010		$561,045	$547,581
I. Contributions			
Employee Contributions	$0		
Employer Contributions	13,010	13,010	13,010
II. Adjusted Investment Income		4,404	11,946
III. Pensions & Other Benefits			
Pensions for Members	$40,507		
Pensions for Widows & Others	12,770		
50% Rule Refunds	79	(53,356)	(53,356)
IV. Actuarial, Legal and Other Fees			
Actuarial Fees	$216		
Custodial Fees	134		
Investment Management Fees	1,288		
Other Fees (audit, legal, etc.)	53	(1,691)	(1,691)
Value at 31.12.2011 (before in-transits)		**$523,412**	**$517,490**
Net amount in-transit		(1,431)	(1,431)
Value at 31.12.2011 (after in-transits)		**$521,981**	**$516,059**

		Market Value	Actuarial Value
Value at 31.12.2011		**521,981**	**516,059**
Net amount in-transit		1,431	1,431
Adjusted Value at 31.12.2011		**523,412**	**517,490**
I. Contributions			
Employee Contributions	$0		
Employer Contributions	12,988	12,988	12,988
II. Adjusted Investment Income		40,783	45,263
III. Pensions & Other Benefits			
Pensions for Members	$38,554		
Pensions for Widows & Others	12,822		
50% Rule Refunds	0	(51,376)	(51,376)
IV. Actuarial, Legal and Other Fees			
Actuarial Fees	$187		
Custodial Fees	110		
Investment Management Fees	1,538		
Other Fees (audit, legal, etc.)	72	(1,907)	(1,907)
Value at 31.12.2012 (before in-transits)		**523,900**	**522,458**
Net amount in-transit		(20)	(20)
Value at 31.12.2012 (after in-transits)		**523,880**	**522,438**

		Market Value	Actuarial Value
Value at 31.12.2012		**523,880**	**522,438**
Net amount in-transit		20	20
Adjusted Value at 31.12.2012		**523,900**	**522,458**
I. Contributions			
Employee Contributions	$0		
Employer Contributions	12,988	12,988	12,988
II. Adjusted Investment Income		57,839	39,417
III. Pensions & Other Benefits			
Pensions for Members	$36,934		
Pensions for Widows & Others	12,748		
50% Rule Refunds	6	(49,688)	(49,688)
IV. Actuarial, Legal and Other Fees			
Actuarial Fees	$196		
Custodial Fees	104		
Investment Management Fees	1,606		
Other Fees (audit, legal, etc.)	60	(1,966)	(1,966)
Value at 31.12.2013 (before in-transits)		**543,073**	**523,209**
Net amount in-transit		(255)	(255)
Value at 31.12.2013 (after in-transits)		**542,818**	**522,954**

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
	Minimum	Target	Maximum	as at 31.12.2013
Canadian Equities	10%	30%	40%	26.2%
Foreign Equities	15%	20%*	35%	28.6%
Canadian Bonds	30%	45%**	70%	42.2%
Cash and cash equivalents	0%	5%	30%	3.0%
		100%		100.0%

** 12.5% US and 7.5% foreign non-US*

*** 22.5% universe bonds and 22.5% long bonds*

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	$542,818,000	11.13%	$522,954,000	7.50%
2012	523,880,000	7.79%	522,438,000	8.78%
2011	521,981,000	0.82%	516,059,000	2.02%
2010	559,290,000	10.58%	545,826,000	1.75%
2009	549,657,000	16.03%	582,273,000	1.73%
2008	522,040,000	-14.47%	624,022,000	2.56%
2007	673,066,000	1.54%	665,248,000	8.71%
2006	719,666,000	10.86%	666,841,000	10.78%
2005	698,384,000	11.78%	651,137,000	5.28%
2004	675,192,000	8.53%	670,341,000	2.73%
2003	686,160,000	9.89%	718,335,000	2.56%
2002	689,130,000	-4.84%	767,318,000	2.30%
2001	793,752,000	0.97%	817,167,000	8.72%
2000	855,847,000	6.02%	818,830,000	13.30%
1999	875,285,000	7.10%	788,636,000	16.22%
1998	876,995,000	13.31%	736,078,000	11.15%

Historical Updates to Pensions In-Payment

Annual cost-of-living adjustments (COLA) for the last 27 years, applicable to pensions that have been in payment for at least one year on the effective date, are provided below. Adjustments are currently based on a ratio of the index determined on a 12 month average to December of the current year over the average to December of the prior year.

Effective Date	COLA Update	Effective Date	COLA Update
July 1, 1987	4.75%	January 1, 2001	2.69%
July 1, 1988	3.00%	January 1, 2002	2.62%
July 1, 1989	5.21%	January 1, 2003	2.30%
July 1, 1990	5.10%	January 1, 2004	0.00%
July 1, 1991	5.00%	January 1, 2005	0.00%
July 1, 1992	3.80%	January 1, 2006	0.00%
July 1, 1993	2.10%	January 1, 2007	0.00%
July 1, 1994	1.70%	January 1, 2008	0.00%
July 1, 1995	0.20%	January 1, 2009	0.00%
July 1, 1996	1.80%	January 1, 2010	0.00%
July 1, 1997	2.20%	January 1, 2011	0.00%
July 1, 1998	0.70%	January 1, 2012	0.00%
January 1, 1999	0.90%	January 1, 2013	0.00%
January 1, 2000	2.58%		

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 [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. 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 have accrued 35 years of pensionable service at the valuation date, 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%
Pensionable earnings increases:	3.50%	3.50%
ITA limit / YMPE increases:	3.50%	3.50%
Explicit expenses:	$0	$0
Post retirement pension increases:	0.00%	0.00%
Retirement rates:	Current age +1	100% at greater of age 58 and current age+1
Mortality rates:	100% of the rates of the CPM 2014 Public Sector Mortality Table	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality improvements:	Projection Scale CPM-B	Fully generational using Scale AA
Eligible Survivor:	Based on actual data	Based on actual data
Allowance for Remarriage:	0.75% of pensioner liability	0.75% 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 payments 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 selected is 5.50% per annum. This rate is supported as follows:

- 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 5.78%, with a conservative equity premium, to a high of 6.60%.
- Additional returns assumed to be achievable due to active equity management (net of related expenses). We have assumed no additional return due to active equity management.
- Implicit provision for expenses determined as the average rate of administrative expenses paid from the fund over the last 3 years plus expected passive management fees. On this basis, we have determined an implicit expense provision of 0.10%.
- No specific margin for adverse deviations has been mandated by the regulators or communicated to us by the Trustees.

The components of the selected discount rate are summarized as follows:

Assumed investment return:	In the range 5.78% to 6.60%
Implicit expense provision:	(0.10%)
Implicit margin for adverse deviation:	In the range of (0.18%) to (1.00%)
Net discount rate:	5.50%

Post retirement pension increases

No assumption has been made for future pension increases.

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 0.75% of the pensioner liability.
- Subject to the entitlement of the prior spouse, if any, the 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. The Plan provides that the new spouse of a pensioner, whose former spouse at retirement has died or who was without spouse at retirement, is eligible for a survivor pension provided that the new spousal relationship, as defined in the Plan, has been in effect for a minimum of 2 years, with a pro rata share of the spousal pension for spousal relationships of less than 2 years. In order to make allowance for the possible increase in future liabilities on remarriage of a pensioner, based on remarriage rates for older adults in Canada, we have loaded the pensioner liabilities by 0.75% as an allowance for remarriage.
- It has been assumed that 100% of active members are married. Female souses are assumed to be 4 years younger than males.

Allowance for stepped pensions

Upon the death of a pensioner whose pension has been stepped at retirement, the Plan provides a pension to the spouse whereby the survivor percentage is applied to the post-65 pre-stepped pension rather than the post-65 pension in payment. A stepped pension is a pension that has been increased before age 65 and reduced after age 65 to produce a level pension in anticipation of the OAS pension commencing from age 65.

We have performed a calculation based on the membership data supplied to estimate the spousal pension.

Reserve for 50% Rule Refunds

It has been discovered that, in respect of members who retired since January 1, 1987, the 50% rule refund of excess contributions amount may not have been processed. In the last valuation we included a reserve of $175,000 in the liabilities for these unpaid benefits. Due to payments made in 2011, 2012, and 2013, this reserve has reduced to $9,000 as at December 31, 2013.

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 circumstances in which the plan wind-up is assumed to have taken place are as follows: 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 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

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:	3.72% per year
Liability duration (based on 3.83% discount rate):	8.6 years
Allowance for re-marriage:	0.75% 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:	0.75% 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 (3.72% per year, based on a liability duration of 8.6 years) 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:	$291,000 (based on $150 per pensioner/survivor and $250 per other member)

We have not included a margin for adverse deviations in the solvency and hypothetical windup valuations.

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 any remaining active members have accrued the maximum 35 years of credited service at the valuation date and we have assumed no future cost of living adjustments to pensions.

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 virtually 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 generational mortality table, 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 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
Active Members		
Number	2	6
Average years of pensionable service	35.0	35.0
Average age	66.4	63.7
Average pensionable earnings in year	$151,212	$121,283
Pensioners		
Number	1,215	1,335
Total annual lifetime pension	$35,976,712	$39,203,761
Total annual bridge pension	$203,497	$2,192,395
Average total annual pension	$29,778	$31,008
Average age	75.2	72.9
Spousal Pensioners		
Number	721	727
Total annual lifetime pension	$12,677,688	$12,443,213
Total annual bridge pension	$184,913	$291,006
Average total annual pension	$17,840	$17,516
Average age	79.3	77.6

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	6	1,335	727	2,068
Pension Splits				
Exits By:				
Retirement	(2)	2		
Death – no spouse		(10)	(35)	(45)
Death – with spouse		(28)	28	
Data Corrections			1	1
Total at 31.12.2011	4	1,299	721	2,024
Pension Splits				
Exits By:				
Retirement	(1)	1		
Death – no spouse		(13)	(36)	(49)
Death – with spouse		(34)	34	
Data Corrections				
Total at 31.12.2012	3	1,253	719	1,975
Pension Splits				
Exits By:				
Retirement	(1)	1		
Death – no spouse		(14)	(23)	(37)
Death – with spouse		(25)	25	
Data Corrections				
Total at 31.12.2013	2	1,215	721	1,938

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

	Pensioners		Surviving Spouses	
Age	**Number**	**Average Pension**	**Number**	**Average Pension**
45 – 49			2	$19,190
50 – 54			5	20,247
55 – 59			11	21,167
60 – 64	17	$41,127	40	21,854
65 – 69	322	29,651	77	17,059
70 – 74	336	29,942	69	17,944
75 – 79	195	29,715	134	17,372
80 – 84	219	29,981	172	18,520
85 – 89	103	27,854	140	17,715
90 – 94	22	27,857	61	15,527
95 – 99	1	30,956	10	12,375
Total	1,215	$29,778	721	$17,840
Males	1,175	$30,014	2	$15,616
Females	40	$22,843	719	$17,846

APPENDIX F

By-law Provisions

The following is a summary of the main provisions of the Plan, contained in By-law no. 15-92, which are relevant to the actuarial valuation. For complete details reference should be made to the formal plan document

The following is a summary of the main provisions of the Plan in effect on December 31, 2013. This summary is not intended as a complete description of the Plan.

Background	The Plan became effective January 1, 1957. Benefits are based on a set formula and are entirely paid for by the Employer.
Eligibility for membership	Police officers hired before July 1, 1968.
Employee Contributions	Prior to 1999: 7.00% of annual pensionable earnings up to the YMPE, 8.50% of higher annual earnings. 1999 through 2002 inclusive: 0.00% of annual pensionable earnings 2003: 2.43% of annual pensionable earnings up to the YMPE, and 2.93% of higher annual earnings. 2004: 7.30% of annual pensionable earnings up to the YMPE, 9.80% of higher annual earnings. Contributions cease after completion of 35 years of credited service.
Employer Contributions	Same as Member contributions
Retirement Dates	Normal Retirement • Age 60 Early Retirement • Attainment of age 50, or completion of 25 years of service
Disability Retirement	Permitted, with full accrued pensions, (a) if disability occurred in the line of duty; or (b) if on total and permanent disability; or (c) after 20 years service, on a "worn-out" basis.
Normal Retirement Pension	2% of employee's highest consecutive 5-year average earnings, multiplied by his number of years of service up to a maximum of 35 years, less (after age 65 or total disability) 0.7% of final 3 year average of YMPE, multiplied by number of years of service after 1.1.66, up to a maximum of 35 years.
Pensionable earnings	Base pay.

Early Retirement Pension	• Unreduced pensions upon completion of 25 years of service, or upon attainment of age 55. • Reduced pensions are available from age 50. The reduction is 4% per year from earlier of age 55 or completion of 25 years of service. For retirements from July 1, 1998 to June 20, 2003 the reduction was 2.5% per year.
Maximum Pension	All pensions are subject to the maximum limitation imposed by the Municipal Act and the Income Tax Act (ITA). Pensions accrued after 1991 are subject to the maximum pension limitations under the ITA.
Minimum Death Benefits	Return of the deceased member's contributions plus interest.
Spousal Benefits	66.67% of the deceased member's normal pension.
Orphans' Pensions	If there is no spouse, 66.67% of the deceased member's normal pension payable until youngest orphan reaches 21. If there is a spouse, an amount per child under age 21 where the total paid to spouse and orphans is not to exceed 100% of the deceased member's normal pension.
Other Pre-Retirement Death Benefits	Return of deceased member's pre-1987 contributions plus interest, plus the commuted value of the deceased member's post-1986 accrual pension, in lieu of the spouse pension.
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.

Notes:

a. The Fund is subject to the provisions of the Pension Benefits Act (Ontario).

b. In the case of an officer who retires on or after the attainment age of age 50 or after the completion of 30 years of service, or because of total and permanent disability, a special benefit is paid equivalent to 1% of salary from January 1, 1980 to April 3, 1984 plus 0.5% of salary thereafter, all accumulated with interest. These Section 24 special benefits were refunded in 2001 or 2002 to existing pensioners and surviving spouses who did not take advantage of this retirement provision and are refunded to any future retirees who do not take advantage of this provision.

APPENDIX G

Employer Certification

With respect to the Report on the Actuarial Valuation for Funding Purposes as at December 31, 2013, of the Metropolitan Toronto Police Benefit Fund I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the Trustee's engagement with the actuary.
- A copy of the official plan documents and of all amendments made up to December 31, 2013 were provided to the actuary and is reflected appropriately in the summary of 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.

May 28/2014

Date

Signed

Mike Wiseman

Name

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