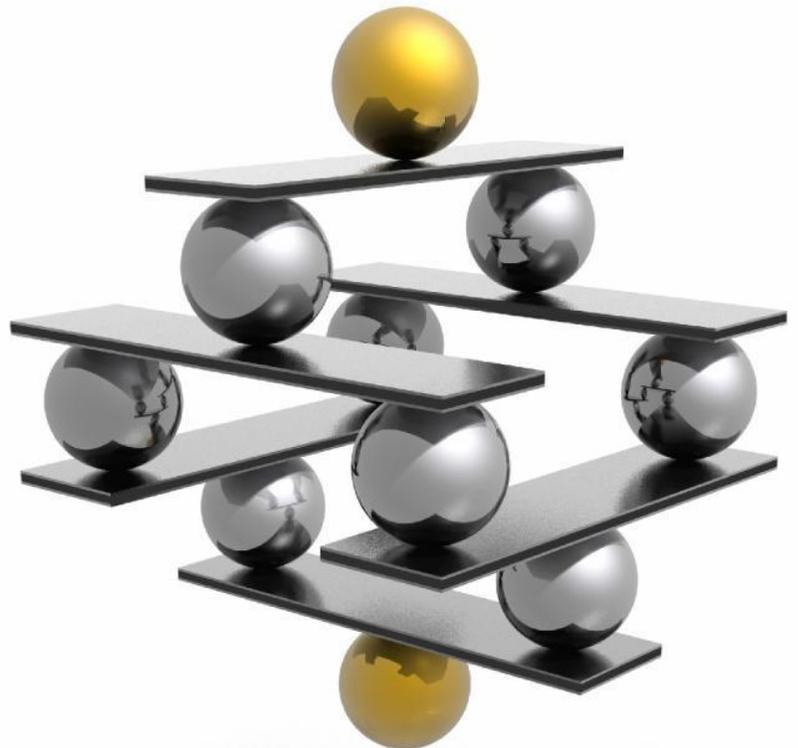


Aon Hewitt

The Annuities Underwritten by the Municipal Employees' Pension Plan Actuarial Valuation as at December 31, 2013

Management Valuation

May 6, 2014



Aon Hewitt

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Executive Summary

An actuarial valuation has been prepared on the Annuities Underwritten by The Municipal Employees' Pension Plan (the "Plan") as at December 31, 2013 to meet the requirements of a Funding Policy adopted by the Municipal Employees' Pension Commission (the "Commission") to provide a framework for the sound financial management of the Plan and to assist the Commission in its decision-making process, its development of recommendations to the Minister of Finance and its communication with stakeholders. This section provides an overview of the important results and the key valuation assumptions which have had a bearing on these results. The next actuarial valuation for the purpose of filing with the regulatory authorities should be performed no later than as at December 31, 2015.

Summary of Principal Results

	December 31, 2013		December 31, 2012 ¹	
	Management	Solvency	Management	Solvency
Assets	\$ 20,439,000	\$ 20,036,000	\$ 21,852,000	\$ 21,427,000
Liabilities	18,894,000	22,561,000	21,144,000	26,183,000
Surplus/(Deficit)	\$ 1,545,000	\$ (2,525,000)	\$ 708,000	\$ (4,756,000)

Key Assumptions

The principal assumptions to which the valuation results are most sensitive are outlined in the following table.

	December 31, 2013		December 31, 2012	
	Management	Solvency	Management	Solvency
Discount rate	6.5%	3.6%	6.5%	3.0%
Inflation rate	2.5%	3.44%	2.0%	2.61%
Mortality table	UP94 generational	UP94 generational	UP94 generational	UP94 generational

Respectfully submitted,



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May 6, 2014

¹ Subsequent to the preparation of the December 31, 2012 valuation report, the market value of assets of the annuity fund was reduced by \$353,000. The revised assets are shown here.

Section 1: Introduction

Purpose and Terms of Engagement

We have been engaged by the Municipal Employees' Pension Commission and hereafter referred to as the "Commission", to conduct an actuarial valuation of the Annuities underwritten by Municipal Employee's Pension Plan (the "Plan") as at December 31, 2013 in accordance with the Plan's funding policy, based on the actuarial assumptions and methods summarized herein. More specifically, the purposes of the valuation are to:

- Determine the financial position of the Plan on a best estimate going concern basis as at December 31, 2013;
- Determine the financial position of the Plan on a solvency basis as at December 31, 2013;
- Determine how much surplus, if any, is available for increase to the non-indexed annuities on an excess interest basis; and
- Provide cash flow projections of the annuities paid from the Plan.

The results of this report may not be appropriate for accounting or regulatory filing purposes or any other purposes not listed above.

While we have been engaged by the Commission to conduct this actuarial valuation, we note that the users of our work may well extend to parties external to the Commission. Out of respect for the Commission's confidentiality, however, we shall not undertake to communicate the terms of our engagement or results of our work with such other users unless so directed by the Commission.

The next required valuation for regulatory filing purposes will be as at December 31, 2015.

Summary of Changes Since the Last Valuation

The last such actuarial valuation in respect of the Plan was performed as at December 31, 2012. Since the time of the last valuation, there have been no changes to the best estimate assumptions, but the market value of assets at December 31, 2012 was restated and reduced by \$353,000. The December 31, 2012 results in this report reflect the restated market value of assets.

Information and Inputs

In order to prepare our valuation, we have relied upon the following information:

- Membership data compiled as at December 31, 2013 by the Public Employees Benefits Agency (PEBA);
- Asset data taken from the Plan's audited financial statements; and
- A copy of the act and regulations governing the Plan.

Furthermore, our actuarial assumptions and methods have been chosen to reflect our understanding of the Commission's desired funding objectives with due respect to accepted actuarial practice in Canada and the Plan's funding policy.

Section 1: Introduction

Subsequent Events

On February 13, 2014, the Canadian Institute of Actuaries (CIA) released their final report and mortality tables from their study of Canadian pensioner mortality levels and trends. The results of their report suggest that:

- the widely used 1994 Uninsured Pensioner (UP94) mortality table together with generational improvements as per Scale AA understates Canadian life expectancies; and
- more rapid improvements in life expectancies have been observed than suggested by the widely used AA improvement scale.

Since the release of the report, there has been a great deal of pressure in the industry to adopt the new Canadian Pensioner Mortality tables, which could result in a potentially material increase in liabilities for the Plan. If a funding valuation report were to be filed as at December 31, 2013, the CPM-B mortality improvement projection scale would have to be reflected in the calculation of the liabilities, which would be greater than those shown in this report. However, for the purposes of this report, no change in the mortality assumption has been made from that used in the December 31, 2012 valuation.

As of the date of this report, we have not been made aware of any other subsequent events which would have an effect on the results of this valuation. However, the following points should be noted in this regard:

- Actual experience deviating from expected after December 31, 2013 will result in gains or losses which will be reflected in the next actuarial valuation report; and
- To the best of our knowledge, the results contained in this report are based on the regulatory and legal environment in effect at the date of this report and do not take into consideration any potential changes that may be currently under review. To the extent that actual changes in the regulatory and legal environment transpire, any financial impact on the Plan as a result of such changes will be reflected in future valuations.



Section 2: Management Valuation Results

Financial Position of the Plan under Management Valuation

The management valuation provides an assessment of the Plan's financial position at the valuation date on the premise that the Plan continues on into the future indefinitely.

The selection of the applicable actuarial assumptions and methods reflect the Plan's funding objectives, as communicated by the Commission, actuarial standards of practice, and pension standards.

On the basis of the funding policy, plan provisions, membership data, best estimate assumptions and methods, and asset information described in the Appendices, the financial position of the Plan under the management valuation as at December 31, 2013 is shown in the following table. The results as at December 31, 2012 are also shown for comparison purposes.

Financial Position under Management Valuation

	December 31, 2013	December 31, 2012
Market Value of Assets	\$ 20,439,000	\$ 21,852,000
Going Concern Liabilities		
Former plan pensions	\$ 12,746,000	\$ 14,655,000
Pensions from excess contributions	<u>6,148,000</u>	<u>6,489,000</u>
Total Liabilities	\$ 18,894,000	\$ 21,144,000
Surplus/(Unfunded Liability)	\$ 1,545,000	\$ 708,000

Section 2: Management Valuation Results

Change in Financial Position

During the period from December 31, 2012 to December 31, 2013, the financial position of the Plan changed from a surplus of \$1,061,000 to a surplus of \$1,545,000. The major components of this change are summarized in the following table.

Reconciliation of the Financial Position under Management Valuation For the Period from December 31, 2012 to December 31, 2013

Surplus/(Unfunded Liability) as at December 31, 2012	\$ 1,061,000
Revision to assets	(353,000)
Revised Surplus/(Unfunded Liability) as at December 31, 2012	\$ 708,000
Expected interest on surplus (unfunded liability)	46,000
Expected Surplus/(Unfunded Liability) as at December 31, 2012	\$ 754,000
Change in liabilities due to experience gains/(losses)	
Gain on mortality experience	551,000
Gain from investment earnings greater than expected	339,000
Gain on indexation less than expected	16,000
Loss due to new retirees	(115,000)
Surplus/(Unfunded Liability) as at December 31, 2013	\$ 1,545,000

Management Valuation Sensitivity Results

In accordance with the Canadian Institute of Actuaries Standards of Practice specific to pension plans that became effective December 31, 2010, the table below presents the sensitivity of the management liabilities of using a discount rate 1% lower than that used for the management valuation.

	Valuation Basis	Based on Rate of	Effect	
	December 31, 2013	1% Lower	\$	%
Management liabilities	\$ 18,894,000	\$ 19,972,000	\$ 1,078,000	5.7%

Note that using a discount rate 1% higher than that assumed would result in a comparable reduction in the Plan's liabilities.



Section 2: Management Valuation Results

Alternate Assumption Analysis

The following table outlines the impact of using alternate assumptions for the mortality table and the inflation rate assumption. In light of the recently released mortality tables from the CIA, we have analyzed two alternative mortality assumptions. The first uses the UP1994 table with mortality improvements projected to 2014 using Scale AA and future generational mortality improvements in accordance with the CIA's CPM-B projection scale. The second uses the CIA's full CPM-Private mortality scale with generational mortality improvements in accordance with the CPM-B projection scale, but adjusted to produce the same results as under the first alternative. We have also analyzed the impact of using an alternative inflation rate assumption of 2.25% per annum instead of 2.50%. Each scenario is independent of the others.

Management Results	Liabilities (\$000s)	Funded Status (\$000s)	Funded Ratio (%)
Base Results	\$ 18,894	\$ 1,545	108.2%
UP94@2014 with CPM-B	\$ 19,067	\$ 1,372	107.2%
112% of CPM-Private	\$ 18,650	\$ 1,789	109.6%
2.25% Inflation	\$ 19,073	\$ 1,366	107.2%

Section 3: Solvency Valuation Results

Solvency Financial Position of the Plan

The solvency valuation is a financial assessment of the Plan that is required by the Plan's funding policy and is performed in accordance with requirements prescribed by *The Pension Benefits Act, 1992* (Saskatchewan) (the "Act"). It is intended to provide an assessment of the Plan's financial position at the valuation date on the premise that certain obligations as prescribed by the Act are settled on the valuation date for all members.

On the basis of the plan provisions, membership data, solvency assumptions and methods and asset information described in the Appendices, as well as the requirements of the Act, the solvency financial position of the Plan as at December 31, 2013 is shown in the following table. The solvency financial position of the Plan as at December 31, 2012 is shown for comparison purposes.

Solvency Financial Position

	December 31, 2013	December 31, 2012
Assets		
Solvency assets	\$ 20,439,000	\$ 21,852,000
Estimated wind up expenses	<u>(403,000)</u>	<u>(425,000)</u>
Total Assets	\$ 20,036,000	\$ 21,427,000
Solvency Liabilities		
Former plan pensions	\$ 14,897,000	\$ 17,842,000
Pensions from excess contributions	<u>7,664,000</u>	<u>8,341,000</u>
Total Liabilities	\$ 22,561,000	\$ 26,183,000
Solvency Surplus/(Deficiency)	\$ (2,525,000)	\$ (4,756,000)

Solvency Valuation Sensitivity Results

In accordance with the Canadian Institute of Actuaries Standards of Practice specific to pension plans that became effective December 31, 2010, the table below presents the sensitivity of the solvency liabilities to using a discount rate of 1% lower than that used for the solvency valuation.

	December 31, 2013	Based on Rate of 1% Lower	Effect	
			\$	%
Solvency liabilities	\$ 22,561,000	\$ 23,897,000	\$ 1,336,000	5.9%

Note that using a discount rate 1% higher than that assumed would result in a comparable reduction in the solvency liabilities.



Section 3: Solvency Valuation Results

Incremental Cost on a Solvency Basis

The incremental cost on a solvency basis represents the present value at December 31, 2013 of the expected aggregate change in the solvency liabilities between December 31, 2013 and the next calculation date, which is December 31, 2014. For a plan that only includes members in receipt of annuity benefits, it is expected that the liabilities will decline by the amount of expected benefit payments, so the incremental cost on a solvency basis, for the period from December 31, 2013 to December 31, 2014 is \$0.



Section 4: Cash Flow Projection

The following table shows the projected annual annuity payments for the next 52 years assuming no new annuities are added and mortality on the management valuation basis. These annuity payments include future indexing of the indexed annuities, but no future increases for the non-indexed annuities.

Year starting Jan 1	Cash Flow	Year starting Jan 1	Cash Flow
2014	\$ 2,806,000	2040	\$ 112,000
2015	2,625,000	2041	93,000
2016	2,443,000	2042	77,000
2017	2,261,000	2043	64,000
2018	2,082,000	2044	52,000
2019	1,905,000	2045	43,000
2020	1,737,000	2046	35,000
2021	1,573,000	2047	29,000
2022	1,420,000	2048	23,000
2023	1,276,000	2049	19,000
2024	1,141,000	2050	16,000
2025	1,015,000	2051	13,000
2026	901,000	2052	10,000
2027	796,000	2053	8,000
2028	700,000	2054	7,000
2029	613,000	2055	6,000
2030	536,000	2056	5,000
2031	466,000	2057	4,000
2032	404,000	2058	3,000
2033	349,000	2059	2,000
2034	301,000	2060	2,000
2035	258,000	2061	1,000
2036	220,000	2062	1,000
2037	187,000	2063	1,000
2038	158,000	2064	1,000
2039	133,000	2065	-

Appendix A: Glossary of Terms

- The **estimated wind up expenses** is an estimate of the administrative and other expenses expected to be charged against the pension fund if the Plan were to terminate on the valuation date.
- The **management liabilities** are the actuarial present value of benefits earned in respect of service prior to the valuation date. The going concern liabilities are calculated using the going concern assumptions and methods summarized in Appendix D of this report.
- The **management financial position** is the difference between the actuarial value of assets and the going concern liabilities.
- **Solvency assets** are the market value of pension fund assets adjusted to reflect contributions, benefit payments, transfers and fees/expenses in-transit at the valuation date.
- The **solvency liabilities** are the actuarial present value of benefits earned in respect of service prior to the valuation date determined as if the Plan were wound up on the valuation date. The solvency liabilities are calculated using the solvency valuation assumptions summarized in Appendix E of this report.
- The **solvency surplus/(deficiency)** is the difference between the solvency assets (net of estimated wind up expenses) and the solvency liabilities.
- The **surplus/(unfunded liability)** is the difference between the actuarial value of assets and the management liabilities.



Appendix B: Assets

Market Value of Assets

The following is a summary of the composition of the Plan's assets by asset type. This has been taken from the Plan's audited financial statements, dated March 21, 2014.

	December 31, 2013	
	\$	%
Cash and short term	\$ 837,000	4.1%
Bonds	6,170,000	30.2%
Equities	8,668,000	42.4%
Private Equity	25,000	0.1%
Infrastructure	732,000	3.6%
Pooled Funds	3,991,000	19.5%
Net accounts receivable	<u>16,000</u>	<u>0.1%</u>
Total Invested Assets	\$ 20,439,000	100.0%

Target Asset Mix

The target asset mix of the fund, upon which the December 31, 2013 discount rate assumption has been based, is provided in the following table. This has been taken from the Plan's Statement of Investment Policies and Procedures dated November 2013.

	Minimum	Target	Maximum
Canadian Bonds – Corporate	7%	10%	13%
Canadian Bonds – Core Plus	7%	10%	13%
Canadian Bonds – Long-term Core Plus	7%	10%	13%
Canadian Bonds – Short Term	0%	5%	10%
Canadian Equities	10%	15%	20%
U.S. Equities (Large Capitalization)	2%	4%	6%
U.S. Equities (Small Capitalization)	2%	4%	6%
Non-North American Equities	2%	4%	6%
Global Equities	13%	18%	23%
Private Equity	0%	5%	8%
Infrastructure	4%	10%	13%
Real Estate	3%	<u>5%</u>	8%
		100.0%	

Appendix B: Assets

Reconciliation of Changes in Market Value of Assets

The table below reconciles changes in the market value of assets between December 31, 2012 and December 31, 2013.

	December 31, 2013	December 31, 2012
Market Value of Assets, Beginning of Year	\$ 22,205,000	\$ 22,656,000
Revision to assets	(353,000)	-
Revised Market Value of Assets, Beginning of Year	\$ 21,852,000	22,656,000
Transfer-In	-	(14,000) ¹
Annuities paid	(3,074,000)	(3,330,000)
Total investment income	1,926,000	3,146,000
Investment management expenses	(216,000)	(184,000)
Administration expenses	(49,000)	(69,000)
Market Value of Assets, End of Year	\$ 20,439,000	\$ 22,205,000
Adjustment for pending transfers-in	-	-
Adjusted Market Value of Assets, End of Year	\$ 20,439,000	\$ 22,205,000
Rate of return, net of all expenses	8.2%	13.8%

¹ An adjustment for pending transfers-in of \$50,000 was made as of December 31, 2011, but actual transfers-in during 2012 were only \$36,000. This represents the net adjustment for actual transfers being less than expected during 2012.

Appendix C: Membership Data

Source of Data

Data as to the membership of the Plan was compiled as at December 31, 2013 and provided by the Public Employees Benefits Agency. The relevant data required as of December 31, 2013 to carry out this valuation was extracted from these records. The data was checked for consistency with the previous valuation, general reasonableness, internal consistency and reconciled with the previous valuation's membership data. Data testing did not include an independent audit from source records to test for completeness and accuracy.

Data checks included, but were not limited to, a review of changes to annual pensions and personal data (i.e. birth dates, dates of hire, etc) from the previous valuation to this valuation, and any duplicate records. The checks were reviewed with the plan administrator and appropriate adjustments were made.

Membership Reconciliation – Total Annuities³

	Annuitants	Survivors	Total
December 31, 2012	847	571	1,418
New	5	-	5
Data correction	-	(3)	(3)
Death – No further payments	(39)	(37)	(76)
Death – To spouse/beneficiary	(37)	37	0
Beneficiary payment expiry	-	(2)	(2)
December 31, 2013	776	566	1,342

Membership Reconciliation – Former Plan Annuities

	Annuitants	Survivors	Total
December 31, 2012	324	328	652
New	-	-	-
Death – No further payments	(25)	(22)	(47)
Death – To spouse/beneficiary	(16)	16	-
Beneficiary payment expiry	-	-	-
December 31, 2013	283	322	605

³ Annuitants receiving both a former plan annuity and an excess contribution annuity have been combined into one record for the purposes of this reconciliation.



Appendix C: Membership Data

Membership Reconciliation – Excess Contribution Annuities

	Annuitants	Survivors	Total
December 31, 2012	709	394	1,103
New	5	-	5
Data correction	-	(3)	(3)
Death – No further payments	(29)	(28)	(57)
Death – To spouse/beneficiary	(30)	30	0
Beneficiary payment expiry	0	(2)	(2)
December 31, 2013	655	391	1,046

Membership Data⁴

Former Plan Pension - Annuitants

	December 31, 2012	December 31, 2013
Membership	324	283
Average age	83.7 years	84.1 years
Average monthly annuity payment	\$347	\$345
Average period since commencement of annuity	21.6 years	22.2 years

Former Plan Pension - Survivors

	December 31, 2012	December 31, 2013
Membership	328	322
Average age	83.0 years	83.6 years
Average monthly annuity payment	\$260	\$247
Average period since commencement of annuity	25.2 years	25.9 years

⁴ All average pension amounts include the 1.29% increase at January 1, 2014 for indexed pensions.



Appendix C: Membership Data

Pension from Excess - Annuitants

	December 31, 2012	December 31, 2013
Membership	709	655
Average age	81.9 years	82.4 years
Average monthly payment from Excess	\$76	\$78
Average period since commencement of annuity	18.3 years	18.8 years

Pension from Excess - Survivors

	December 31, 2012	December 31, 2013
Membership	394	391
Average age	80.9 years	81.7 years
Average monthly payment from Excess	\$35	\$35
Average period since commencement of annuity	22.2 years	23.0 years

Appendix D: Management Assumptions and Methods

Actuarial Assumptions and Methods

A member's entitlements under a pension plan are generally funded during the period over which service is accrued by the member. The cost of each member's benefits is allocated in some fashion over the member's service. An actuarial valuation provides an assessment of the extent to which allocations relating to periods prior to a valuation date (often referred to as the actuarial liabilities) are covered by the plan's assets.

The management valuation provides an assessment of a pension plan on the premise that the plan continues on into the future indefinitely based on best estimate assumptions in respect of future events upon which a plan's benefits are contingent and methods that effectively determine the way in which a plan's costs will be allocated over the members' service. The true cost of a plan, however, will emerge only as experience develops, investment earnings are received, and benefit payments are made.

This appendix summarizes the assumptions and methods that have been used for the management valuation of the Plan at the valuation date. The assumptions and methods have been chosen to reflect our understanding of the Plan's funding objectives with due respect to accepted actuarial practice and regulatory constraints. For purposes of this valuation, the methods and assumptions were reviewed and changes as indicated were made.

Assumptions and Methods

The actuarial assumptions and methods used in the current and previous valuations are summarized below and described on the following pages.

	December 31, 2013	December 31, 2012
Economic Assumptions		
Discount rate, net of all expenses	6.5%	Same
Inflation rate	2.5%	Same
Investment expenses	Included in discount rate	Same
Non-investment expenses	Included in discount rate	Same
Demographic Assumptions		
Mortality	UP94 with generational projection	Same
Margin for adverse deviation	None	Same



Appendix D: Management Assumptions and Methods

Description of Actuarial Assumptions and Methods

Economic Assumptions

Discount Rate

We have used a discount rate of 6.5%.

The overall expected return (“best-estimate”) is 6.5%, which is based on an inflation rate of 2.5%, yielding a real rate of return on the pension fund assets of 4.0%. This best-estimate rate of return was developed using best-estimate returns for each major asset class in which the pension fund is invested and then using a building block approach, based on the Plan’s investment policy, to develop an overall best-estimate rate of return for the entire pension fund. Any additional gains from rebalancing and diversification have been included above.

In order to set the discount rate, we have incorporated the following adjustments to the overall expected rate of return:

Development of Discount Rate			
Overall expected return			6.91%
Non-investment expenses			(0.40)%
Investment expenses			
Passive	(1)	(0.03)%	
Actively managed	(2)	<u>(0.60)%</u>	
		(1)+(2)	(0.63)%
Additional returns due to active management			0.60%
Interest rate overlay			<u>(0.00)%⁵</u>
Unrounded Discount Rate			6.48%

Therefore, we have arrived at a discount rate of 6.48% per year, which has been rounded to 6.50%. This assumption is best estimate and therefore contains no margins for adverse deviation.

Inflation Rate

The inflation rate is assumed to be 2.5% per year. This reflects our best estimate of future inflation considering current economic and financial market conditions.

Expenses

Since the discount rate has been established net of all investment expenses, no explicit assumption is required for all/investment expenses.

⁵ It is worth noting that there is an expected additional return of roughly 0.2-0.5% due to the effect of the leveraged position of the plan as a result of the interest rate overlay. However, as there is some uncertainty as to its exact impact, we have not added any additional expected return from the overlay at this point. This component of the discount rate will continue to be monitored in future valuations.

Appendix D: Management Assumptions and Methods

Demographic Assumptions

Mortality

The membership of this Plan is not sufficiently large to develop its own plan-specific mortality table. The 1994 Uninsured Pensioner Mortality Table (“UP94”) reflects the mortality experience as of 1994 for a large sample of North American pension plans. Applying projection scale AA to generational mortality provides allowance for improvements in mortality after 1994 and is generally considered reasonable for projecting mortality experience into the future. This table is commonly used for valuations where the mortality experience of the membership of a plan is insufficient to assess plan specific experience and where there is no reason to expect the mortality experience of the Plan to differ significantly from that of other pension plans.

Generational mortality rates depend on the year of birth of a member and vary by age. For example, the mortality rate at age 80 for a member age 70 at the valuation date (e.g. 49.34 expected deaths per 1,000 lives for males in the table below) will be higher than the mortality rate at age 80 for a member age 60 (e.g. 44.62 expected deaths per 1,000 lives for males in the table below) at the valuation date. The mortality rates decline due to projected mortality improvements over time.

Mortality rates per 1,000 lives at selected ages are as follows:

Mortality per 1,000 lives - Male

Current age	Mortality per 1,000 lives at each future age				
	80	85	90	95	100
60	44.62	76.22	134.58	225.00	321.24
70	49.34	81.77	140.08	229.55	324.47
80	54.55	87.72	145.81	234.19	327.73
90	n/a	n/a	151.77	238.93	331.03

Mortality per 1,000 lives - Female

Current age	Mortality per 1,000 lives at each future age				
	80	85	90	95	100
60	31.98	55.56	107.58	179.35	279.92
70	34.31	59.00	110.86	182.98	282.73
80	36.81	62.66	114.24	186.68	285.57
90	n/a	n/a	117.73	190.45	288.44



Appendix D: Management Assumptions and Methods

Actuarial Cost Method

The single premium actuarial cost method was used to determine the actuarial liabilities. Under this method, the accrued liability at December 31, 2013 is determined as the lump sum required to fully fund the annuity payments at that date. Since the liabilities are fully funded with a lump sum transfer of assets there is no normal actuarial cost for the Fund. This is the same method as used in the previous valuation.

Asset Valuation Method

Market value, adjusted by in-transit cash flows was used as the actuarial value of assets for this valuation.



Appendix E: Solvency Assumptions and Methods

Valuation Assumptions

	December 31, 2013	December 31, 2012
Economic Assumptions		
Annuity purchase discount rate		
—Without indexation	3.60%	3.00%
—With indexation	0.15%	0.38%
Demographic Assumptions		
Mortality rates	1994 Uninsured Pensioner Mortality Table with fully generational projection scale AA (sex-distinct rates)	Same
Other		
Wind up expenses	\$403,000	\$425,000
Actuarial cost method	Unit credit	No change
Asset valuation method	Market value of assets adjusted to reflect in-transit items as of the valuation date	No change

Estimated Wind Up Expenses

Plan wind up expenses would normally include such items as fees related to preparation of the actuarial wind up report, fees imposed by a pension supervisory authority, legal fees, administration, custodial and investment management expenses. We have estimated this to be \$300 per member, which is unchanged from the previous valuation.

Actuarial Cost Methods

Unit credit (accrued benefit) cost method as prescribed.

Asset Valuation Method Considerations

Assets for solvency purposes have been determined using market value.



Appendix F: Summary of Plan Provisions

This section contains a brief summary of the provisions of the Plan that are relevant for valuation purposes as it pertains to annuity benefits:

Life Annuities

Life annuities are paid for the life of the annuitant based on:

- rates of interest offered at the time the annuity commences; and
- the form of the annuity.

Forms of Annuities

The following is a brief description of the various forms of annuities currently being paid out of the retirement fund:

Life Annuity

The annuity is payable on a monthly basis in arrears for the life of the annuitant. If the annuitant dies before the end of the guarantee period, the remaining guaranteed payments are paid to the last designated beneficiary. A single member can purchase an annuity guaranteed for 0, 5, 10, or 15 years. A member with a spouse can purchase a single life annuity if the spouse waives the right to a joint annuity.

Joint and Last Survivor Annuity

The annuity is payable on a monthly basis in arrears for the life of the annuitant and the spouse. In the month following the death of the annuitant, monthly benefits are payable to the spouse for the remainder of the spouse's lifetime. The continuing benefits for the spouse are selected at the time of retirement as either 100%, 75%, 60% or 50% of the annuitant's payments. The member may purchase a joint annuity with a 0, 5, 10 or 15-year guarantee on the annuitant's payments. The current annuities being paid include continuing benefits for spouses at percentages equal to 50%, 60%, 75% and 100%.

Upon the death of both the annuitant and the spouse and after any applicable guarantee period, payments cease and no further benefits are payable.



Appendix F: Summary of Plan Provisions

Indexed Annuities

Effective February 28, 1997, the Plan began underwriting annuities that included provisions for indexing at 100% of the increases in the Consumer Price Index (CPI). Increases in the annuity payments for “indexed annuities” are granted on each January 1 following the member’s retirement date. The increase at January 1, 2013 was 1.81% and the increase at January 1, 2014 was 1.29%. The increase for indexing on the first January 1 following a member’s date of retirement is provided on a pro-rata basis from the month of retirement. Members have the option of choosing an annuity that includes future indexing or not.

Excess Interest Increases for Non-Indexed Annuities

With effect from January 1, 2003, annuities, other than indexed annuities, will be increased by the excess over the lesser of 6% and the discount rate used to determine the annuity at retirement, of the rate of return in the immediately preceding year on the assets supporting the annuity liabilities, subject to there being sufficient funds to do so. The rate of return in a particular year will be determined by PEBA using a smoothing technique. The increase in any year will not be greater than the increase in the Consumer Price Index for the previous year.



Appendix G: Administrator Certification

With respect to the Annuities Underwritten by the Municipal Employee's Pension Plan, forming part of the actuarial report as at December 31, 2013, I hereby certify that, to the best of my knowledge and belief:

- The asset data contained in Appendix B of this report is complete and accurate;
- The membership data summarized in Appendix C of this report form a complete and accurate description of all persons who are entitled to benefits under the terms of the Plan in respect of service up to the date of the valuation;
- The summary of the Plan provisions contained in Appendix F is an accurate summary of the current Plan provisions; and
- The actuary has been notified of all relevant events subsequent to the valuation measurement date.

Date May 6, 2014

Signed 

Name Kevin Sockett

Title Manager, Pension Programs