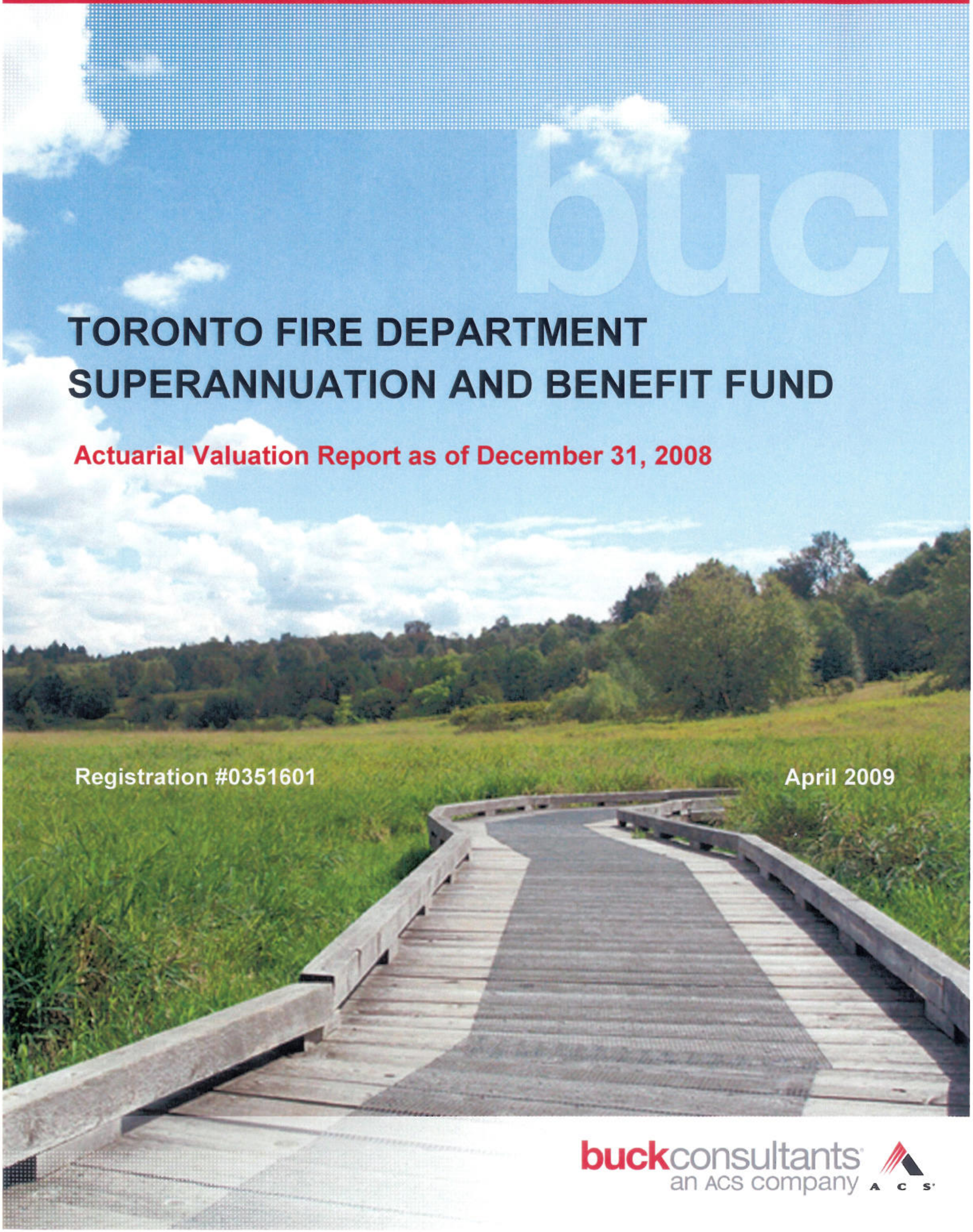


TORONTO FIRE DEPARTMENT SUPERANNUATION AND BENEFIT FUND

Actuarial Valuation Report as of December 31, 2008

Registration #0351601

April 2009

buckconsultants
an ACS company

Table of Contents

Appendices

1. Executive Summary

This report has been prepared for and at the request of the Toronto Fire Department Superannuation and Benefit Fund Committee and presents the key results of the actuarial valuation of the Toronto Fire Department Superannuation and Benefit Fund (the "Plan") as of December 31, 2008. The previous valuation of the Plan was prepared by Buck Consultants as of December 31, 2007.

1.1 Contributions

The annual minimum cash contribution requirements for 2009, 2010, and 2011 are nil.

1.2 Going Concern

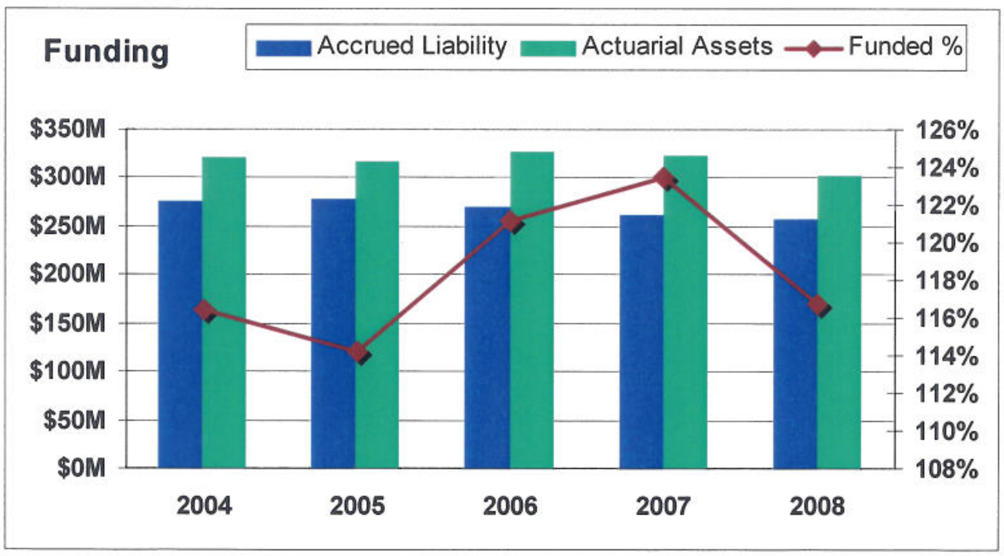
The financial position on a going-concern basis has worsened during the inter-valuation period as a result of the following three main factors:

Investment experience loss of $12.0 million on the actuarial value of assets;

Cost of living increases effective January 1, 2008, resulting in a loss of $5.7 million; and

Change in the valuation discount rate resulting in a loss of $4.4 million.

As a result of the experience and benefit improvements mentioned above, the going-concern surplus is now $43.4 million as compared to $61.5 million at the previous valuation, as shown in the graph below.



1. Executive Summary (continued)

1.3 Solvency

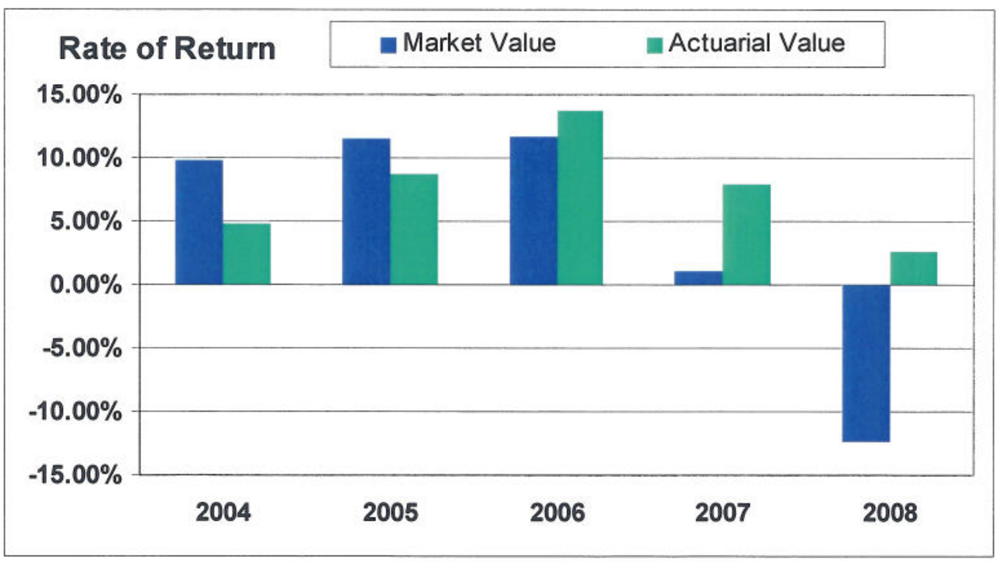
During the inter-valuation period, the solvency position declined primarily due to the poor market conditions in 2008 that resulted in a net investment return of -12.4% on a market value basis. The benefit improvement granted in 2008 also contributed to the decline in the solvency position. If the Plan were to wind up, there would be a deficit of $24.9 million as at December 31, 2008 compared to a surplus of $26.4 million at the previous valuation.

Smoothing of the assets and liabilities was introduced this year which improved the solvency position to a $4.4 million surplus. The solvency liability adjustment, which resulted from averaging the annuity purchase rates over a four year period, had a negative impact on the solvency surplus position by $5.4 million. The solvency asset adjustment, which resulted from using the four-year moving average market value, had a positive impact on the solvency surplus position by $34.7 million.

The ratio of solvency assets to solvency liabilities is 92% as at December 31, 2008 compared with 109% at the previous valuation. Given the ratio is greater than 90%, the Plan does not have a solvency concern as defined under Ontario pension regulation. Therefore, the next actuarial valuation is required to be filed with the regulators not later than December 31, 2011.

1.4 Investments

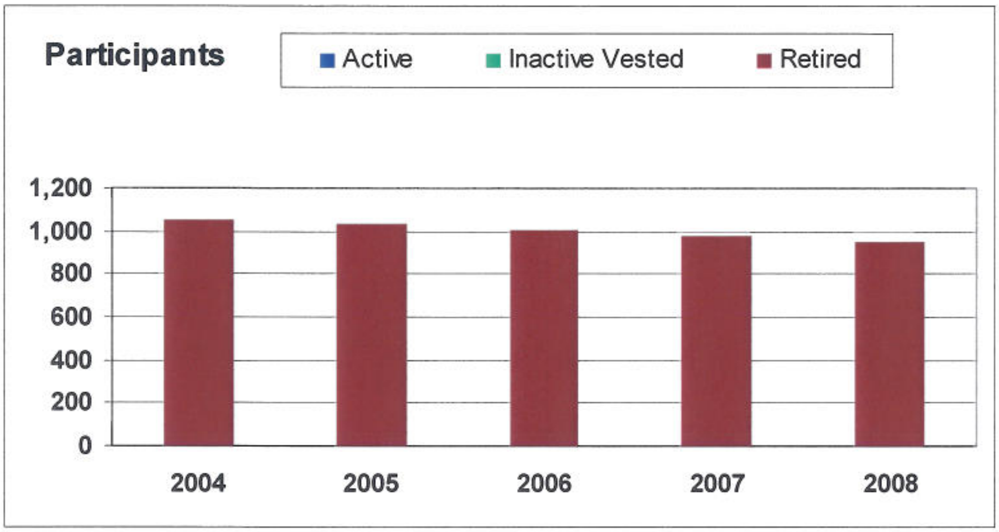
The Plan's investments earned -12.4% in 2008 on a market value basis and 2.6% in 2008 on an actuarial value basis. The annual returns for the last five years are shown below.



1. Executive Summary (continued)

1.5 Membership

The Plan membership used in our valuation is summarized below. Total participant counts are decreasing as the Plan is closed to new entrants. Pensioners and beneficiaries comprise the total membership. The average age of pensioners and beneficiaries has increased from 74.4 to 75.2 since the previous valuation.



1.6 Assumption Changes

At this valuation, the going-concern discount rate was changed from 6.5% per annum to 6.25% per annum. In addition, the annuity purchase rate used in the solvency valuation increased from 4.50% per annum to 4.85% per annum. The four-year average of the annuity purchase rate is 4.61% per annum. The assumptions were reviewed and are consistent with actuarial best practice and guidance by the Canadian Institute of Actuaries. The actuarial cost method and all other actuarial assumptions used in this valuation are the same as those used in the previous valuation.

1.7 Cost of Living Increases

This valuation reflects pension increases effective January 1, 2008.

1.8 Plan Amendments

There have been no new Plan amendments since the previous valuation.

1. Executive Summary (continued)

1.9 Sensitivity Analysis

Given the Plan is currently in a surplus position on a going concern basis, the wind-up valuation is of primary concern at the moment. The wind-up position is sensitive to both changes in discount rate and changes in the market value of assets, with declines being of obvious concern. If the discount rate used for the annuity purchase basis were to fall by 0.25%, the wind-up deficit would further decrease by approximately $6 million. If the market value of assets were to drop by 10% at January 1, 2009, the wind-up deficit would further decrease by approximately $27 million.

1.10 Sign Off

The following sections provide detailed supporting analysis and disclosures for the results summarized above and meet both professional and regulatory standards. If you have any questions, please feel free to contact me.

Cindy Rynne

April 30, 2009

Cynthia L. Rynne
Fellow, Society of Actuaries
Fellow, Canadian Institute of Actuaries

Date

2. Introduction

2.1 Primary Purpose

The primary purposes of this actuarial valuation report are as follows:

- To determine the financial position of the Plan on a going concern basis and recommend an appropriate amount of contributions;
- To compare actual and expected experience on a going concern basis;
- To determine the financial position of the Plan on a solvency basis and ensure solvency contribution requirements are met within the recommended contributions;
- To review the Excess Surplus provisions and ensure that the recommended contributions adhere to those restrictions;
- To review the wind-up status of the Plan; and
- To form part of the government filings, as required by the Financial Services Commission of Ontario ("FSCO") and the Canada Revenue Agency ("CRA") for statutory and tax purposes.

2.2 Limitations

It should be noted that the results of this valuation are presented at a single point in time. Both the going concern and solvency funded positions of the Plan can change with time and the reader should bear that in mind when using this report as a guide for the current funded positions, now or in the future.

The solvency valuation is for the most part based on prescribed assumptions whereas the going concern valuation is based on assumptions made by the Plan actuary, subject to discussions with the Plan sponsor. Those assumptions lie within a reasonable range of potential outcomes.

2.3 Third Party Disclaimer

This report is intended for the Toronto Fire Department Superannuation and Benefit Fund Committee and the City of Toronto and it should not be shared with others (unless required by pension legislation) without our consent. Please note that we take no responsibility for any actions that may be taken by third parties based upon the contents of this report.

2. Introduction (continued)

2.4 Subsequent Events

We are unaware of any significant events, other than the market volatility since the completion of this valuation, that would have a material affect on the results of this report.

2.5 Cost of Living Increases

Commencing 1986, City Council adopted a policy of providing ad hoc increases in pension to pensioners based on excess interest indexing methodology. The policy provided for and subject to City Council approval, each year, ad hoc increases subject to a minimum of 50% increase in the Consumer Price Index (the "CPI"), year over year, December to December, and a maximum increase equal to the lesser of the increase form "excess interest" and 100% CPI.

Commencing 1997, the Plan by-laws were amended to provide for future increases to pensioners including spouses of deceased retired members, based on the lesser of:

(a) the investment rate of return of Fund assets (using a 5-year smoothing technique) in excess of the rate of return required to maintain the actuarial solvency of the Benefit Fund as determined by the Actuary, and

(b) the increase in the year over year level of the average CPI,

to the extent that actuarial surplus is available.

Pensions in payment to pensioners and spouses that commenced prior to January 1, 2008 were increased by 2.16% effective January 1, 2008.

For information purposes only, the estimated cost at December 31, 2008 to provided anticipated future ad hoc pension increases based on 100% of the increase in the CPI is $57,767,000, based on the current valuation data and valuation assumptions.

2.6 Confirmation

We confirm that this report complies with the Canadian Institute of Actuaries' standards of practice, the Ontario Pension Benefits Act, and the Income Tax Act.

3. Asset Information

3.1 Source of Information

The custodian of the Plan assets is CIBC Mellon. For the purposes of this valuation, we have relied on the draft financial statements as at December 31, 2008 provided by the City of Toronto.

3.2 Asset Reconciliation (Market Value)

The table below reconciles the change in the market value of assets from the last valuation to the market value of assets as of December 31, 2008, and also shows the reconciliation for the previous two calendar years.

Asset Reconciliation	2006	2007	2008
Market Value as of January 1st	$354,492,791	$362,577,845	$336,525,030
less Benefit Payments	(31,488,147)	(29,747,434)	(29,392,884)
plus Investment Earnings	40,868,728	4,898,412	(38,574,758)
less Investment and Administrative Expenses	(1,295,527)	(1,203,793)	(1,281,366)
Market Value as of December 31st	$362,577,485	$336,525,030	$267,276,022
Market Value as at December 31, 2008			**$267,276,022**

3.3 Asset Allocation (Mix)

The market value of assets held in the trust fund as of December 31, 2008 was allocated between the following major investment categories as follows:

Asset Allocation	Amount	% Weight
Canadian Equity	$ 39,289,000	14.7%
U.S. Equity	36,082,000	13.5%
International Equity	30,202,000	11.3%
Canadian Bonds	147,269,000	55.1%
Short-term	14,434,000	5.4%
Total Invested Assets as of December 31, 2008	$ 267,276,000	100%

3. Asset Information (continued)

3.4 Actuarial Value of Assets

The actuarial value of assets is a four-year moving average market value used to reduce contribution volatility.

Because the current actuarial value of assets does not take full account of the recent investment gains and losses, only a proportion of that experience will be recognized immediately, resulting in an actuarial investment return that differs from the actual return on a market value basis.

The following information shows the development of the actuarial value of assets.

Year End	Investment (Gain)/Loss $	% of (Gain)/Loss Deferred	Deferred (Gain)/Loss $
2008	50,081,123	75	37,560,842
2007	5,775,618	50	2,887,809
2006	(23,031,354)	25	(5,757,839)
Actuarial Value Adjustment			**34,690,812**

Using the Actuarial Value Adjustment amount above, the Actuarial Value of Assets as of December 31, 2008 is therefore determined as follows:

Actuarial Value of Assets	December 31, 2008
Market Value of Assets	$ 267,276,000
plus Actuarial Value Adjustment	$ 34,691,000
Actuarial Value of Assets	**$ 301,967,000**

3.5 Performance of the Fund

The annual net rates of return (investment income and capital appreciation) earned on the market value and actuarial values of the assets in the past three years were as follows:

Year	Return on Market Value	Return on Actuarial Value
2008	(12.4%)	2.6%
2007	1.1%	8.0%
2006	11.7%	13.7%
Three-Year Average	**(0.4%)**	**8.0%**

The rates of return shown above are net of investment and administrative fees. The rate of return calculation assumes that all cash flow items are uniformly distributed throughout the year. We believe that is a reasonable assumption in view of the inter-valuation experience.

4. Going Concern Valuation

The financial position of the Plan on a going concern basis is determined by comparing the actuarial value of assets to the accrued liability, in respect of accrued benefits, assuming the Plan will continue indefinitely.

To determine the value of liabilities, we build a model of all future expected cash flows to be paid from the Plan, adjust for the likelihood of payment, and discount to the valuation date in accordance with the assumptions made.

Details of the actuarial method and assumptions are set out in Appendix A to this Report.

If the accrued liability exceeds the actuarial value of assets, the shortfall, known as the Unfunded Accrued Liability (UAL) must be amortized and paid for over no more than 15 years.

4.1 Financial Position

The financial position on a going concern basis as of December 31, 2008 is summarized below.

Financial Position		December 31, 2008		December 31, 2007
Accrued Liabilities				
a. Pensioners	$	203,397,000	$	207,838,000
b. Beneficiaries		55,175,000		54,012,000
Total Accrued Liabilities	$	258,572,000	$	261,850,000
Actuarial Value of Assets	$	301,967,000	$	323,324,000
Surplus / (Unfunded Accrued Liability)	**$**	**43,395,000**	**$**	**61,474,000**

4. Going Concern Valuation (continued)

4.2 Reconciliation of Surplus/UAL

The following table is a reconciliation of the Surplus/UAL from the last valuation to this valuation. An explanation of the major items follows in Section 4.3.

Reconciliation of Financial Position From Previous Valuation (in 000's)		
Surplus / (UAL) as of December 31, 2007		$ 61,474
Interest on Surplus / (UAL)	$ 3,996	
Expected Surplus / (UAL) as of December 31, 2008		$ 65,470
Cost of living increases effective January 1, 2008		(5,695)
Change in valuation assumptions		(4,375)
Experience Gains / (Losses) due to:		
Investments	(12,025)	
Mortality	694	
Total Experience Gains / (Losses)		(11,331)
Other		(674)
Surplus / (UAL) as of December 31, 2008		**$ 43,395**

4.3 Explanation of Reconciliation of Surplus/UAL Items

The following section briefly describes the major gain/loss items that occurred since the prior valuation.

a. **Cost of Living Increases Effective January 1, 2008**

As a result of operation of the provision for future increases in the by-law, there was an ad-hoc increase in post-retirement pensions of 2.16% per annum granted effective January 1, 2008 to eligible retirees and beneficiaries. The actual cost of this increase was $5,695,000.

b. Change in Valuation Assumption

Since the last valuation, the valuation discount rate was changed from 6.5% per annum to 6.25% per annum (net of all expenses) to better reflect long term expectations. This resulted in a loss of $4,375,000.

c. Investment Experience

The Plan's actual net rate of return on the actuarial value of assets of 2.6% was lower than the expected net investment return assumption of 6.50% for 2008. This resulted in a loss of $12,025,000.

4.4 Schedule of Going Concern Payments

As the Plan has a going concern surplus, there are no special payments required. Employer contributions are shown in Section 6.

4.5 Going Concern Maximum or "Excess Surplus"

The income tax rules require that employer contributions be suspended once the amount of the going-concern surplus in the Plan exceeds a specified level and provided there are no solvency funding requirements. The amount of excess surplus in the Plan as of December 31, 2008 is determined below.

Excess Surplus	December 31, 2008	
2 x Current Service Cost	$ 0	(a)
10% of Actuarial Accrued Liability	31,634,000	(b)
Maximum of (a) & (b)	31,634,000	(c)
20% of Actuarial Accrued Liability	63,268,000	(d)
Maximum Allowable Surplus [Minimum of (c) & (d)]	31,634,000	(e)
Going Concern Surplus	(14,372,000)	(f)
Excess Surplus: (f) – (e)	**$ 0**	

Note: Excess surplus is based on actuarial liabilities reflecting pension increases at 100% CPI as per Section 8516 of the regulations under the Income Tax Act.

The Plan does not have an excess actuarial surplus pursuant to Section 147.2(2) of the Income Tax Act.

5. Solvency Valuation

The *Pension Benefits Act (Ontario)* requires an artificial measure of solvency based on assumptions, which are prescribed by the Act, to assess the financial status of the Plan under a worst case scenario of Plan termination and wind-up.

The solvency valuation is used to establish a minimum annual amount of employer contributions to finance any shortfall in assets under this measure.

5.1 General

The financial position of the Plan on a solvency basis is determined by comparing the market value of assets, adjusted for in-transit items, to the solvency liability (the actuarial present value of benefits, as determined by the Act, earned for service prior to the valuation date, calculated as if the pension plan were wound up on that date).

The minimum funding requirements under the Regulation to the *Pension Benefits Act* (Ontario) are based on the solvency deficiency as of the valuation date. In calculating the solvency deficiency, various adjustments can be made to the solvency financial position, including:

- Recognition of the present value of existing amortization payments, including any going concern amortization payments established at the valuation date, due to be paid within the periods prescribed by the Regulation (in this case, five years);
- Smoothing of the asset value by use of an averaging technique;
- Adjustment to the solvency liability by use of an averaging technique in determining the discount rate used to value the liabilities;

Furthermore, the following adjustments can be made in determining the solvency liability and assets:

- Removal of any prepaid contributions from the asset value; and
- Removal of certain benefits permitted by the Act, with respect to grow-in of plant closure, permanent lay off and special allowance benefits.

To the extent that there exists a solvency deficiency, after taking account of these adjustments, additional amortization payments must be made over a period of not more than five years. If there is no solvency deficiency, the solvency excess may be used to reduce the period of any existing solvency amortization payments or may by used to offset any additional solvency deficiency created by benefit improvements.

5.2 Solvency Financial Position

The financial position of the Plan on a solvency basis and the development of any new solvency payment requirements since the prior valuation are shown below:

Solvency Financial Position	December 31, 2008	December 31, 2007
Solvency Liabilities		
Pensioners & Beneficiaries	$ 292,034,000	$ 310,029,000
Total Solvency Liabilities	$ 292,034,000	$ 310,029,000
Solvency Assets		
Market Value of Assets	$ 267,276,000	$ 336,525,000
Wind-Up Expenses	(100,000)	(100,000)
Net Solvency Assets	$ 267,176,000	$ 336,425,000
Solvency Adjustments		
PV of Special Payments	$ 0	$ 0
Solvency Liability Adjustment	(5,420,000)	0
Solvency Asset Averaging Adjust.	34,691,000	0
Total Solvency Adjustments	$ 29,271,000	$ 0
Solvency (Excess)/Deficiency	$ (4,413,000)	$ (26,396,000)
New Solvency Payment	**$ 0**	**$ 0**

5. Solvency Valuation (continued)

5.3 Solvency Concern

As at the valuation date, the ratio of solvency assets (i.e. market value of assets) to the solvency liabilities is 0.92. While the Plan's solvency liabilities exceed the solvency assets by more than $5 million, the Plan does not have a "solvency concern" as defined under the Pension Benefits Act, R.S.O. 1990 (Ontario) as the above ratio is greater than 0.90. Therefore, the next valuation to be filed with the Financial Services Commission of Ontario must be a report dated not later than December 31, 2011.

5.4 Wind-Up Financial Position

The wind-up liabilities are equal to the solvency liabilities for this plan. If the Plan had been wound up on December 31, 2008, it would have shown a deficit of $24,858,000. The wind-up liabilities are equal to the solvency liabilities as there are no benefits for members to grow into eligibility for plant shutdown.

The following table shows the wind-up position of the Plan as of December 31, 2008.

Wind-Up Financial Position	December 31, 2008	December 31, 2007
Wind-up Liabilities		
Pensioners and Beneficiaries	$ 292,034,000	$ 310,029,000
Total Wind-up Liabilities	$292,034,000	$ 310,029,000
Wind-up Assets		
Market Value of Assets	$ 267,276,000	$ 336,525,000
Wind-Up Expenses	(100,000)	(100,000)
Net Wind-up Assets	$ 267,176,000	$ 336,425,000
Wind-up Surplus/(Deficit)	**$ (24,858,000)**	**$ 26,396,000**

5.5 Schedule of Solvency Payments

As the Plan does not have a solvency deficiency, there are no special payments required.

5.6 Pension Benefits Guarantee Fund (PBGF) Assessment

Under Section 47(1) of Regulation 909 of the Pension Benefits Act, R.S.O. 1990, the pension benefits provided by this Plan are not guaranteed by the Pension Benefits Guarantee Fund and this Plan is exempt from any Guarantee Fund assessment.

6. Employer Contributions

In this section we set out the range of allowable employer contributions to the Plan for the next three years. The range of allowable employer contributions is based on the minimum that the employer must pay each year as prescribed by provincial pension regulations and the maximum allowable as prescribed by the Income Tax Act.

6.1 Minimum Employer Contributions

Since there are no longer any active members in the Plan and the Plan has a surplus under both the going-concern and solvency bases, the minimum employer contributions for 2009, 2010 and 2011 are nil.

6.2 Maximum Employer Contributions

The maximum allowable employer contributions for the years 2009 to 2011 are as follows:

	2009	2009	2010
Current service cost	$ 0	$ 0	$ 0
plus Administrative Expenses	100,000	0	0
plus Wind-up Shortfall	$24,758,000	$ 0	$ 0
Maximum Employer Contributions	**$24,858,000**	**$ 0**	**$ 0**

The above maximum allowable contribution schedule assumes that the full wind-up shortfall as of December 31, 2008 is paid into the plan during 2009. Over the three-year period from 2009 to 2011, the total wind-up contributions cannot exceed $24,858,000.

If the employer makes contributions in excess of the maximum allowable amounts, the Plan may be revoked of its registered status under the Income Tax Act.

6.3 Recommended Contributions

We recommend that contributions be made at minimum levels indicated in this report due to the level of the ongoing surplus in the Plan and the unlikelihood of the Plan winding up. Therefore, no contributions are recommended until the next valuation report is filed.

7. Sensitivity Analysis

It should be noted that the results of this valuation are presented at a single point in time. Both the going-concern and solvency/wind-up positions of the Plan can change with time and the potential for such variations must be borne in mind when using this report as a guide for the current funded positions, now or in the future.

This section provides details on the sensitivity of the wind-up valuation results to two key situations:

a. Discount rate, and
b. Market Correction (a one-time drop in assets in the pension plan).

7.1 Discount Rate

If the assumed annuity purchase rate dropped by 0.25% (i.e. 25 basis points), the current wind-up deficit would further decrease by approximately $6 million.

7.2 Market Correction

If the pension plan assets experienced a one-time drop of 10% due to a market correction, the current wind-up deficit would further decrease by approximately $27 million.

8. Actuarial Cost Certificate and Opinion

Toronto Fire Department Superannuation and Benefit Fund
Registration #0351601

In our opinion, for the purposes of this actuarial valuation report, the data is sufficient and reliable, the assumptions are appropriate and the methods employed in the valuations are appropriate.

This report has been prepared, and our opinion has been given, in accordance with accepted actuarial practice. This actuarial valuation has been conducted in accordance with the funding and solvency standards prescribed by the *Pension Benefits Act* (Ontario) and Regulation, and in conformity with the requirements of the Income Tax Act (Canada) and Regulation. This actuarial opinion forms an integral part of the report.

Based on the results of this actuarial valuation report as of December 31, 2008, we certify that in our opinion:

1. The Plan does not have a prior year credit balance or prepaid contribution balance.
2. There are no employer or employee contributions required under the Plan.
3. There is an actuarial surplus of $43,395,000 in the Plan on a going concern basis.
4. The is no excess actuarial surplus, pursuant to Section 147.2(2) of the Income Tax Act.
5. There is no solvency deficiency under the Plan.
6. If the plan had been wound up on the valuation date, the market value of plan assets (net of wind-up expenses) would have been $24,858,000 less than the wind-up liabilities of the plan.
7. The transfer ratio, as defined in the Regulation to the *Pension Benefits Act* (Ontario), is 0.92.
8. Under Section 47(1) of Regulation 909 of the Pension Benefits Act, R.S.O. 1990, the pension benefits provided by this Plan are not guaranteed by the Pension Benefits Guarantee Fund and this Plan is exempt from any Guarantee Fund assessment.
9. In accordance with the Regulation to the Pension Benefits Act (Ontario), the next actuarial valuation report should be prepared with a valuation date not later than December 31, 2011.
10. We are unaware of any subsequent events since the completion of this valuation that would have a material affect on the results of this report.

The undersigned is available to answer any questions with respect to this valuation report.

Cindy Rynne

Cynthia L. Rynne
Fellow, Society of Actuaries
Fellow, Canadian Institute of Actuaries

April 30, 2009

Date

Appendix A Going Concern Assumptions and Method

The assumptions and methods used in the going concern valuation are described below. If actual Plan experience differs from the assumptions below, gains and losses will arise. Any changes to assumptions from the previous valuation are referenced by footnote.

A.1 Economic Assumptions

Investment Return[1]: 6.25% per annum, net of investment and administrative expenses.

Post-Retirement Indexation[2]: No provision has been made for future post-retirement adjustments in the liabilities. Post-retirement adjustments granted up to and including 2008 have been included in the liabilities.

Future post-retirement adjustments based on 100% CPI (Consumer Price Index) indexation were projected and valued to increase actuarial liabilities for the purpose of determining excess surplus and eligible contributions under Section 147.2(2) of the Income Tax Act. The increase in CPI is assumed to be 2.75% per annum.

A.2 Non-Economic Assumptions

Mortality: UP 1994 Table projected to 2005, Scale AA.

Marital Status: 80% of members have a spouse at retirement.

Spouse's Age: Females three years younger than males.

A3. Methods

Actuarial Cost: Unit Credit Method

The accrued liability for pensioners and beneficiaries is the present value of their respective benefits.

Actuarial Value of Assets: The actuarial value of assets is a 4-year moving-average market value. This method recognizes realized and unrealized investment gains and losses over a period of 4 years. This method provides for a margin of conservatism generally resulting in an actuarial value of assets that is less than the market value.

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[1] Prior valuation: 6.50% per annum, net of investment and administrative expenses.
[2] Prior valuation: 3.00% per annum.

Appendix B Rationale for Going Concern Assumptions

The following rationale is provided to support the most significant going-concern actuarial assumptions used in this report:

B.1 Investment Return (Discount Rate)

The investment return assumption is 6.25% per annum and reflects a best-estimate gross rate of return of 6.50% per annum less 0.25% for investment management and administrative fees.

The best-estimate gross rate of return was developed by establishing expected 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 asset allocation. It is assumed that the plan's asset allocation will not change over time.

In determining a return on equity investments we have assumed an equity risk premium (i.e. difference between expected return on Canadian equities and Canadian bonds) of 3.0% per annum.

B.2 Mortality

The 1994 Uninsured Pensioner Mortality Table reflects the mortality experience as of 1994 for a large sample of North American pension plans. Applying projection scale AA to 2005 provides allowance for improvements in mortality after 1994.

Further projections to reflect mortality improvements are not required based on the mortality gains experienced in the current and previous valuations. Therefore, we recommend the 1994 Uninsured Pensioner Mortality Table projected to 2005.

Appendix C Solvency Assumptions and Method

The assumptions and methods used in the solvency valuation are prescribed by regulation and are described below. Any changes to assumptions from the previous valuation are referenced by footnote.

C.1 Assumptions

Mortality: UP 1994 projected to year 2015, Scale AA.

Annuity Purchase Rate:[1] 4.85% per annum for all members in accordance with the Canadian Institute of Actuaries guidelines for solvency valuations.

Smoothed Annuity Purchase Rate[2] The following table shows the smoothed annuity purchase rate based on four-year averaging. The rates below are in accordance with the Canadian Institute of Actuaries guidelines for solvency valuations in each respective year.

Valuation Dates	Rate
December 31, 2008	4.85%
December 31, 2007	4.50%
December 31, 2006	4.60%
December 31, 2005	4.50%
Average Rate	**4.61%**

Benefits Excluded : No future potential post-retirement ad-hoc adjustments have been included in the solvency and wind-up liabilities.

Asset Valuation Method[3]**:** Four-year moving-average market value.

Actuarial Cost Method: Traditional Unit Credit method.

Provision for Wind-Up expenses: $100,000.

C.2 Wind-up Valuation

The assumptions and methods used are the same as those described under section C.1 above. There are no additional wind-up liabilities as there are no excluded benefits or special provisions on plan wind-up.

[1] Prior valuation: 4.50% per annum for all members.
[2] Prior valuation: Not applied.
[3] Prior valuation: Market value of assets.

Appendix D Summary of Membership Data

The membership data was provided and is maintained by the Toronto Fire Department Superannuation and Benefit Fund Committee. The membership data was reviewed for reasonableness and consistency and found to be sufficient and reliable for the purposes of the valuation.

D.1 Data Tests

The tests done in review of the data include the following:

- ✓ High level review of the data to determine that an appropriate number of records was obtained, the appropriate data fields were provided and that the data fields contained valid information;
- ✓ A membership reconciliation was prepared to ensure the complete membership of the pension plan was accounted for;
- ✓ For inactive vested members, deferred pension amounts were reviewed against the prior valuation data for consistency;
- ✓ For retired members and beneficiaries, dates of birth and pension amounts were reviewed against the prior valuation data for consistency; and
- ✓ Aggregate pension payments in the data were compared to actual payments shown in the trust statement.

Since the form of pension and spouse date of birth for inactive vested and retired members are not readily available for valuation purposes, the assumptions shown in Appendix A2 have been adopted. The form of pension for members assumed to be married is life with 66-2/3% of the member's pension continuing to the spouse following the member's death. The form of pension for members not assumed married is life only.

D.2 Summary of Plan Participants Included in the Valuation

	December 31, 2008		December 31, 2007	
	Male	Female	Male	Female
Pensioners				
Number	621	-	643	-
Average Age (years)	74.1	-	73.2	-
Annual Benefit	$22,069,244	-	$22,544,747	-
Average Annual Benefit	$35,538	-	$35,062	-
Beneficiaries				
Number	-	334	-	337
Average Age (years)	-	77.2	-	76.7
Annual Benefit	-	$6,807,254	-	$6,641,542
Average Annual Benefit	-	$20,381	-	$19,708

Appendix D Summary of Membership Data (continued)

D.3 Pensioners – by Age as of December 31, 2008

Age	Count	Total Annual Benefits	Average Annual Benefits
60-64	55	$2,335,725	42,268
65-69	141	5,021,329	35,612
70-74	149	5,377,197	36,088
75-79	165	5,820,007	35,272
80-84	56	1,820,105	30,501
85-90	52	1,601,704	30,802
90+	3	93,177	31,059
TOTAL	**621**	**$ 22,069,244**	**$ 35,538**

D.4 Beneficiaries – by Age as of December 31, 2008

Age	Count	Total Annual Benefits	Average Annual Benefits
54 & under	2	$46,834	$ 23,417
55-59	6	146,577	24,429
60-64	27	623,418	23,089
65-69	34	770,154	22,652
70-74	62	1,407,417	22,700
75-79	62	1,237,829	19,964
80-84	80	1,516,334	18,954
85-89	42	778,242	18,530
90+	19	280,301	14,753
TOTAL	**334**	**$ 6,807,108**	**$ 20,381**

Appendix D Summary of Membership Data (continued)

D.5 Data Reconciliation

	Retirees	Beneficiaries	Total
Number at December 31, 2007	643	337	980
Changes due to:			
Deaths with beneficiary	(15)	15	-
Deaths without beneficiary	(7)	(18)	(25)
Total Changes	(22)	(3)	(25)
Number at December 31, 2008	**621**	**334**	**955**

Appendix E Summary of Plan Provisions

The following is a summary the main features of the plan which are of financial significance to valuing the plan benefits. This summary is based on the most recent document and amendments up to and including the valuation date. For a detailed description of the benefits, please refer to the plan document. Any changes to the plan provisions since the prior valuation are referenced by footnote.

Plan Members

All members of the Fire Department, except those who became members after May 8, 1961, at an age in excess of 26 years, or after July 1, 1968.

Normal Retirement Benefit

Eligibility:

The first of the month coincident with or next following attainment of age 65.

Amount:

On completion of 30 or more years of continuous service, an annual pension equal to 2% of the member's average annual earnings during the 60 consecutive months which produce the highest average, multiplied by his credited service up to 35 years; less a CPP offset equal to 0.7% of the lesser of such average earnings and the average of the YMPE at retirement and the 2 preceding years multiplied by his credited service after January 1, 1966. The CPP offset commences when the member attains age 65.

Creditable Service Limit:

Maximum of 35 years.

Minimum Pension:

Member's annual pension shall not be less than $13,600.

Normal Form of Pension:

No Spouse
Pension payable for life.

With a Spouse
Pension with a spousal lifetime pension of 66-2/3% of the initial amount following the later of the member's death.

Appendix E Summary of Plan Provisions (continued)

Early Retirement Benefit

Eligibility:	Earlier of: a) Age 55 & 2 years of service, b) 30 years of service,
Amount:	Normal Retirement Benefit reduced as follows: a) 55 & 2 years of service – actuarial equivalent from earliest unreduced retirement age. b) Age 55 & 30 years of service – unreduced

Death Benefits

Pre-Retirement:	Lump sum amount equal to the actuarial equivalent of the pension earned on and after January 1, 1987.
Post-Retirement:	If single at retirement - Beneficiary will receive greater of: a) the member's contributions with interest plus $100 for each year of service, and b) the commuted value of the member's benefit accrued after December 31, 1986 plus the member's contributions made prior to January 1, 1987 with interest. If a Spouse at retirement – Pension equal to 66-2/3% of the pension accrued to the date of the member's death payable for the life of Spouse.

Termination Benefits

Eligibility:	Two years of Plan membership.
Amount:	*For Benefits Accrued Prior to January 1, 1987* After age 45 and 10 years of service or after 20 years of service, equal to Normal Retirement Benefit but based on service before January 1, 1987. *For Benefits Accrued After January 1, 1987* After 2 years of credited service, equal to Normal Retirement Benefit but based on service after December 31, 1986.

Employee Contributions

Effective January 1, 1998, members with less than 35 years of service contribute to the Plan at the rate of 5.5% of their salary less their contributions to the Canada Pension Plan. Prior to January 1, 1998, the contribution rate was 7.5% of salary less contributions to the Canada Pension Plan.

Ad Hoc Post-Retirement Adjustments

Commencing 1986, City Council adopted a policy of providing ad hoc increases in pensions to pensioners based upon an excess interest indexing methodology. Subject to City Council approval, each year, ad hoc increases in pension were provided, with a minimum increase of 50% of the increase in the Consumer Price Index (CPI) on a year over year basis, and a maximum increase of the lesser of the excess investment return on the Benefit Fund and 100% CPI.

Commencing 1997, the Plan by-laws were amended to provide for future increases to pensioners including spouses of deceased retired members, based on the lesser of:

(a) the investment rate of return of Fund assets (using a 5-year smoothing technique) in excess of the rate of return required to maintain the actuarial solvency of the Benefit Fund as determined by the Actuary, and

(b) the increase in the year over year level of the average CPI,

to the extent that actuarial surplus is available.

Appendix F Employer Certification

Toronto Fire Department Superannuation and Benefit Fund Committee
Toronto Fire Department Superannuation and Benefit Fund
Registration #0351601

I hereby certify that to the best of my knowledge and belief:

1. The Plan Provisions summarized in Appendix E are complete, accurate and up-to-date for the purpose of representing member benefit entitlements that significantly affect the financial condition of the Plan;
2. The membership data summarized in Appendix D is complete and accurate for all persons who are entitled or will become entitled to benefits under the Plan in respect of service up to the date of the valuation;
3. The asset information provided to us and summarized in Section 3 is complete and accurate; and
4. There have been no subsequent events that would materially change the plan's financial position since the valuation date.
5. The actuary has been provided with the official Plan Text and all subsequent amendments pertaining to the Plan.

Toronto Fire Department Superannuation and Benefit Fund Committee.

IMMA MONARDO
Name

I Monardo
Signature

MANAGER, PENSION
Title

APRIL 14, 2009
Date

Appendix G Annual Information Summary

(To be enclosed with the report)

ACTUARIAL INFORMATION SUMMARY

Please see the instructions for completing this form. If an item does not apply, enter "N/A".

Part I – Plan Information and Contributions 1999/08/01

1. Name of registered pension plan
The Toronto Fire Department Superannuation and Benefit Fund

2. Registration number
Canada Customs and Revenue Agency: **0351601** Other:

3. Is this plan a designated plan? [ ] Yes [X] No

4. Valuation date of report: YYYY **2008** MM **12** DD **31**

5. End date of period covered by report: YYYY **2011** MM **12** DD **31**

6. Purpose of the report (Indicate the reason(s) for which the report was prepared):

[ ] a. Initial report for a newly established plan
[X] b. Regular (triennial or annual) report for an ongoing plan
[ ] c. Interim report in respect of an amendment to an ongoing plan
[ ] d. Other (please explain) ______

7. Normal cost and special payments (prior to application of any credits and/or suplus) for covered period:

Periods (see instructions)	Period 1	Period 2	Period 3	Period 4
a. Period start date (YYYY MM DD)	2009 01 01	2010 01 01	2011 01 01	
Period end date (YYYY MM DD)	2009 12 31	2010 12 31	2011 12 31	
b. Normal cost (DB provision) (1) Members	$ 0	$ 0	$ 0	
(2) Employer	$ 0	$ 0	$ 0	
c. Normal cost (DC provision) (1) Members				
(2) Employer				
d. Special payments for going concern unfunded liability and/or solvency deficiency	$ 0	$ 0	$ 0	

Part II – Membership and Actuarial Information

8. Membership information	Number	Average Age	Average Pensionable Service	Average Salary	Average Pension
a. Active members	0	N/A	N/A	N/A	N/A
b. Retired members	955	75.18	N/A	N/A	$30,237
c. Other participants	0	N/A	N/A	N/A	N/A

9. Actuarial basis for going concern valuation (see instructions)

a. Asset valuation method
[ ] (1) Market [X] (2) Smoothed Market [ ] (3) Book [ ] (4) Book & Market combination [ ] (5) Other

b. Liability valuation method
[X] (1) Accrued benefit (unit credit) [ ] (2) Entry age normal [ ] (3) Individual level premium [ ] (4) Aggregate
[ ] (5) Other (specify) ______

9. Actuarial basis for going concern valuation (cont'd)

c. Selected actuarial assumptions
Where a flat rate is used, enter the rate under "Ultimate rate" and "N/A" under "Initial rate" and "Number of years*"

	Initial rate	Number of years*	Ultimate rate
(1) Valuation interest rate			
(a) active members	N/A	N/A	N/A
(b) retired members	N/A	N/A	6.25%
(2) Rate of indexation	N/A	N/A	0.0%
(3) Rate of general wage and salary increase	N/A	N/A	0.0%
(4) YMPE escalation rate	N/A	N/A	0.0%
(5) Canada Customs and Revenue Agency's maximum pension limit escalation rate	N/A	N/A	0.0%
(6) Rate of CPI increase	N/A	N/A	0.0%

* from valuation date before ultimate rate becomes effective

(7) Year Canada Customs and Revenue Agency's maximum pension limit escalation commences N/A

(8) Mortality Table

☐ (a) 1983 GAM ☐ (b) 1983 GAM (without margin) ☐ (c) 1971 GAM ☐ (d) 1994 GAM Static

☐ (e) 1994 Group Annuity Reserving (GAR) ☐ (f) 1994 UP ☒ (g) Other (specify) UP94 projected to 2005-Scale AA

(9) Allowance for promotion, seniority and merit increases

☐ (a) Included in (3) above ☐ (b) Separate scale based on age or service ☒ (c) No allowance

(10) If a MEPP, number of hours of work per member per plan year N/A

(11) Was a withdrawal scale used? ☐ Yes ☒ No

(12) (a) Were variable retirement rates used? ☐ Yes ☒ No

(b) If "No", what is the assumed retirement age? N/A

10. Actuarial basis for solvency

	Initial rate	Select period	Ultimate rate
a. Valuation interest rate			
(1) active members	N/A	N/A	N/A
(2) retired members	N/A	N/A	4.85%
b. Rate of indexation	N/A	N/A	0.0%

c. Mortality table ☐ (1) 1983 GAM ☐ (2) 1994 UP ☒ (3) Other (specify) UP94 projected to 2015-Scale AA

11. Balance sheet information (see instructions)

a. Market value of assets, adjusted for receivables and payables $ 267,276,000
Amount of contributions receivable included in market value above $ 0

b. Going concern valuation

(1) Going concern assets $ 301,967,000

(2) Going concern liabilities

(a) for active members $ 0

(b) for retired members $ 258,572,000

(c) for other participants $ 0

(d) other reserve $ 0

(3) Net funded position surplus/(deficit) $ 43,395,000

11. Balance sheet information (cont'd)

c. Solvency valuation

Complete 11c(1), (2) and (3) only if the report contains an explicit solvency valuation

(1) Solvency assets

(a) solvency assets with adjustment for expense provision, if any .... **$ 267,176,000**

(b) amount of wind-up expense provision reflected in (a) above .... **$ 100,000**

(2) Solvency liabilities

(a) for active members .... **$ 0**

(b) for retired members .... **$ 292,034,000**

(c) for other participants .... **$ 0**

(d) other reserve .... $ ______

(3) Net solvency position surplus/(deficit) .... **$ (24,858,000)**

d. If the plan provides benefit increases coming into effect during the period covered by the report but after the valuation date, have those increases been reflected in

(1) the going concern liabilities in 11b(2)? .... [X] N/A [ ] Yes [ ] No

(2) the solvency liabilities in 11c(2)? .... [X] N/A [ ] Yes [ ] No

12. Actuarial gains/(losses)

a. Was a gain/loss analysis done? .... [X] Yes [ ] No

b. If line 12a is "Yes", indicate amount of gain/(loss) due to:

(1) change in actuarial assumptions .... **$ (4,375,000)**

(2) change in asset valuation method .... **N/A**

(3) change in liability valuation method .... **N/A**

(4) plan amendments/changes .... **N/A**

(5) investment experience .... **$ (12,025,000)**

(6) retirement experience .... **N/A**

(7) major contributing sources other than (1) to (6) above (specify)

Mortality **694,000**

Cost of living increases effective January 1, 2008 .... **$ (5,695,000)**

(8) all other sources (combined) .... **$ (674,000)**

13. Are there any subsequent event(s) that have not been reflected in the valuation? (Refer to CIA Standard of Practice) .... [ ] Yes [X] No

14. Are any of the actuary's statements of opinion qualified? .... [ ] Yes [X] No

Part III – Ontario (OPBA) Specific Information

15. Additional valuation information

a. Going concern valuation

(1) Have escalated adjustments been included in going concern liabilities? ..... [X] N/A [ ] Yes [ ] No

b. Solvency valuation

(1) Have any of the "excludable" benefits been excluded? ..... [X] N/A [ ] Yes [ ] No

(2) If "Yes", enter the total amount of liabilities being excluded ..... ________

16. Miscellaneous

a. Prior year credit balance ..... $ **0**

b. Transfer ratio (express in decimal format) **0.92**

c. Guarantee Fund assessment

(1) PBGF liabilities ..... **N/A**

(2) PBGF assessment base ..... **N/A**

(3) Amount of additional liabilty for plant closure and/or permanent layoff benefits as described in clause 37(4)(a)(ii)(A) of Regulation 909, R.R.O. 1990, as amended ..... **N/A**

Part IV – Federal (PBSA) Specific Information

17. Additional solvency valuation information

a. Solvency ratio ..... ________

Part V – Canada Customs and Revenue Agency Specific Information

18. Amount claimed as eligible contribution(s) under subsection 147.2(2) of the *Income Tax Act*, R.S.C. 1985 (5th supp.), c.1, as amended, as

a. unfunded accrued liability ..... $ **0**

b. solvency deficiency ..... $ **0**

c. first year normal cost for a DB provision ..... $ **0**

Part VI – Certification by Actuary

As the actuary who signed the funding valuation report (the "Report"), I certify that this Actuarial Information Summary accurately reflects the information provided in the Report.

Dated this **30th** (day) day of **April** (month), **2009** (year).

Cindy Rynne
Signature of actuary

Cynthia Rynne
Print or type name of actuary

Buck Consultants Limited
Name of firm

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