TORONTO FIRE DEPARTMENT SUPERANNUATION AND BENEFIT FUND

Actuarial Valuation Report as of December 31, 2009

Registration #0351601

April 2010

A Xerox Company

buckconsultants

Table of Contents

	Page
1. Introduction	1
2. Asset Information	3
3. Going Concern Valuation	5
4. Solvency Valuation	8
5. Employer Contributions	10
6. Sensitivity Analysis	12
7. Actuarial Cost Certificate and Opinion	13
APPENDICES	
A. Going Concern Assumptions and Methods	15
B. Rationale for Going Concern Assumptions	17
C. Solvency Assumptions and Methods	18
D. Summary of Membership Data	20
E. Summary of Plan Provisions	22
F. Certification	25
G. Actuarial Information Summary	26

1. Introduction

This report has been prepared for and at the request of 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, 2009. The previous valuation of the Plan was prepared by Buck Consultants as of December 31, 2008.

1.1 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 the related appropriate contribution rate;
- 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 that the solvency contribution requirements are met;
- To review the Excess Surplus provisions and ensure that the recommended contributions adhere to those restrictions;
- To determine the windup status of the Plan; and
- To form part of the government filings, as required by the Financial Services Commission of Ontario ("FSCO") and Canada Revenue Agency ("CRA") for statutory and tax purposes.

1.2 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.

By necessity, we make a single estimate and that should not be taken to imply it is the only possible outcome.

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.

1.3 Subsequent Events

The City is currently reviewing past administrative practices of the Plan concerning the 50% excess contribution rule. In our opinion, the results of this review will not materially affect the results of this valuation.

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

This report is based on approval by City Council of cost of living increase effective January 1, 2010 based on 100% of the CPI.

1.4 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.

Cost of living increases were not provided in 2009.

For information purposes only, the estimated cost at December 31, 2009 to provide anticipated future ad hoc pension increases based on 100% of the increase in the CPI is $48,983,000, based on the current valuation data and valuation assumptions. This report includes the cost to provide an increase to pensioners and beneficiaries effective January 1, 2010 based on 100% of CPI on both the going concern and solvency bases, subject to City Council approval.

1.5 Confirmation

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

2. Asset Information

2.1 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 for 2009 as provided by the City of Toronto.

2.2 Asset Reconciliation (Market Value)

The table below reconciles the change in the market value of assets from the last valuation of the Plan to the market value of assets as of December 31, 2009.

Asset Reconciliation	2009
Market Value as of January 1st	$ 267,276,022
Benefit Payments	(28,274,165)
Investment Earnings	37,804,967
Investment and Administrative Expenses	(1,342,620)
Market Value as of December 31st	**$ 275,464,204**

2.3 Asset Allocation (Mix)

The asset mix of the Plan as of the December 31, 2009 was allocated between the following major investment categories:

Asset Class	% Weight
Canadian Equity	20.4%
U.S. Equity	13.0%
International Equity	15.0%
Canadian Bonds	46.8%
Short-term	4.8%
Total Invested Assets as of December 31, 2009	**100%**

2.4 Performance of the Fund

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

Year	Net Return on Market Value	Net Return On Actuarial Value
2009	14.4%	2.5%
2008	(12.4%)	2.6%
2007	1.1%	8.0%
Three-Year Average	**0.4%**	**4.3%**

The rates of return shown above are net of investment and administrative expenses. 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.

3. 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 going concern liabilities, 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, adjusted for the likelihood of payment, and discounted to the valuation date in accordance with the assumptions made.

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

If the going concern liabilities exceed the actuarial value of assets, the shortfall, known as the going concern unfunded liability, must be amortized and paid for over no more than 15 years.

3.1 Financial Position

The financial position on a going concern basis as of December 31, 2008 and December 31, 2009 are:

Financial Position	December 31, 2009	December 31, 2008
Actuarial Value of Assets	$ 295,119,000 [1]	$301,967,000
Going Concern Liabilities		
Pensioners	192,569,000	203,397,000
Beneficiaries	56,195,000	55,175,000
Total Going Concern Liabilities	$ 248,764,000	$258,572,000
Surplus / (Going Concern Unfunded Liability)	**$ 46,355,000**	**$ 43,395,000**

(1) Developed in Section A.3.

3.2 Reconciliation of the Surplus / (Going Concern Unfunded Liability)

The following table is a reconciliation of the Surplus / (Going Concern Unfunded Liability) from the last valuation to this valuation. An explanation of the major items is provided in Section 3.3.

Reconciliation of Financial Position From Previous Valuation		
Surplus / (Going Concern Unfunded Liability) as of December 31, 2008		$43,395,000
Interest on Surplus / (Going Concern Unfunded Liability)		2,712,000
Experience Gains / (Losses) due to:		
Investment Loss on Actuarial Value of Assets	$ (10,924,000)	
Mortality	1,689,000	
Other Experience	(8,000)	
Total Experience Gains / (Losses)		(9,243,000)
Change in Liability Valuation Assumptions		(4,170,000)
Change in Asset Valuation Method		14,361,000
Cost of providing 100% CPI for 2010		(700,000)
Surplus / (Going Concern Unfunded Liability) as of December 31, 2009		**$46,355,000**

3.3 Explanation of Reconciliation of Surplus / (Going Concern Unfunded Liability) Items

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

a. Investment Experience

The Plan's actual return on the actuarial value of assets of 2.50% was significantly less than the expected investment return assumption of 6.25% for the valuation period. This resulted in a loss of $10,924,000.

b. Change in Asset Valuation Method

Since the last valuation the asset valuation method has been modified as described in Section A.3. This resulted in a gain of $14,316,000.

c. Change in Valuation Assumptions

Since the last valuation the discount rate assumption was changed from 6.25% per annum to 6.00% per annum (net of all expenses) to better reflect long term expectations. This resulted in a loss of going concern liabilities of $4,170,000.

d. Cost of Providing 100% CPI for 2010

This report includes the cost of providing a 100% CPI increase to pensioners and beneficiaries effective January 1, 2010.

3.4 Schedule of Going concern Special Payments

As the Plan has a going concern surplus, there are no special payments required. Employer contributions are shown in Section 5.

4. Solvency Valuation

The Pension Benefits Act (Ontario) requires a 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 windup.

4.1 Solvency Financial Position

The financial position of the Plan on a solvency basis is determined by comparing the solvency assets to the solvency liabilities (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 following table shows the solvency position of the Plan as of December 31, 2008 and December 31, 2009.

Solvency Financial Position	December 31, 2009	December 31, 2008
Solvency Assets		
Market Value of Assets	$275,464,000	$267,276,000
Windup Expenses	(100,000)	(100,000)
Total Solvency Assets	$275,364,000	$267,176,000
Solvency Liabilities		
Pensioners and Beneficiaries	285,969,000	292,034,000
Total Solvency Liabilities	$285,969,000	$292,034,000
Solvency Surplus / (Solvency Unfunded Liability)	**$ (10,605,000)**	**$ (24,858,000)**

If the Plan were to be wound up on the valuation date, the windup liabilities would be equal to the solvency liabilities. Consequently the unfunded windup liability as of the valuation date is $10,605,000.

The solvency liabilities include $800,000 in respect of the CPI increase effective January 1, 2010 which is subject to City Council approval.

4.2 Transfer Ratio

The Plan's transfer ratio is determined by dividing the market value of assets by the solvency liabilities. As of December 31, 2009 the Plan has a solvency transfer ratio of 0.97 prior to the 2010 CPI increase and 0.96 after the 2010 CPI increase. 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. As a result, the next required actuarial valuation to be filed with the authorities is a valuation dated not later than December 31, 2012.

4.3 Statutory Solvency Excess / (Deficiency)

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

- Recognition of the present value of existing special payments, including any going concern special 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; and
- Removal of any prepaid contributions from the asset value.

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

Statutory Solvency Excess / (Deficiency)	December 31, 2009	December 31, 2008
Solvency Surplus / (Solvency Unfunded Liability)	$(10,605,000)	$(24,858,000)
Solvency Adjustments:		
Present Value of Special Payments	$ 0	$ 0
Solvency Liability Adjustment	4,940,000	(5,420,000)
Solvency Asset Averaging Adjustment	19,655,000 [1]	34,691,000
Total Solvency Adjustments	$24,595,000	$29,271,000
Statutory Solvency Excess / (Deficiency)	**$13,990,000**	**$ 4,413,000**

[1] The solvency asset averaging adjustment is developed in Section A.3.

4.4 Schedule of Solvency Special Payments

As the Plan has a statutory solvency surplus, there are no special payments required.

4.5 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.

5. Employer Contributions

In this section we set out the range of allowable employer contributions to the Plan for the next year. 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.

5.1 General

The allowable range of employer contributions is based on the following different measures:

- minimum going concern funding;
- going concern maximum or “excess surplus”; and
- minimum solvency funding.

If the Plan has a solvency funding requirement (i.e., a statutory solvency funded position less than 100%), then the going concern maximum or “excess surplus” measure is not applicable. In addition, the calculation of any solvency special payments recognizes any going concern special payments that are required to be made.

Sections 5.2 and 5.3 below show the range of allowable employer contributions after considering the different measures mentioned above.

5.2 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 statutory solvency basis, the minimum employer contributions for 2010, 2011 and 2012 are nil.

5.3 Maximum Allowable Employer Contributions

The maximum allowable employer contributions for the years 2010 to 2012 are as follows:

	2010	2011	2012
Estimated Employer Normal Cost	$ 0	$ 0	$ 0
Solvency Unfunded Liability	10,605,000	0	0
Maximum Employer Contributions	**$10,605,000**	**$ 0**	**$ 0**

The above maximum allowable contribution schedule assumes that the full solvency unfunded liability revealed as of December 31, 2009 would be paid into the fund during 2010.

The Company must not make contributions in excess of the maximum allowable amounts, as the Plan may be revoked of its registered status under the Income Tax Act.

5.4 Timing of Employer Contributions

The Ontario Regulation 909 under the Pension Benefits Act (Ontario) requires that the normal cost contributions be paid in monthly installments within 30 days after the month for which the contributions are payable, and that all going concern and solvency deficiency special payments be paid by equal monthly installments throughout the fiscal year of the Plan.

The first employer contribution due after submission of this report to the government authorities must be increased by the excess, if any of:

- The amount of required employer contributions that should have been paid after December 31, 2009 according to the minimum contribution requirements revealed by this report, over
- The actual amount of employer contributions made in respect of periods after December 31, 2009.

Interest must be added to this excess, with such interest determined by reference to the going concern discount rate for payments in respect of the normal cost or going concern special payments and the solvency discount rate for payments in respect of solvency special payments.

To satisfy the requirements of the Income Tax Act (Canada), employer contributions that are remitted to the Plan in the taxation year or within 120 days after the end of such taxation year are deductible in such taxation year provided they were made to fund benefits in respect of periods preceding the end of the taxation year.

5.5 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.

6. 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 funded 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 funded positions, now or in the future.

This section provides details on the sensitivity of the solvency valuation results to two key situations:

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

6.1 Discount Rate

If the assumed annuity purchase rate dropped by 0.25% (i.e. 25 basis points), the current solvency unfunded liability would further increase by approximately $6 million.

6.2 Market Correction

If the pension plan assets experienced a one-time drop of 10%, due to a market correction, the current solvency unfunded liability would further decrease by approximately $28 million.

7. 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 report 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, 2009, 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 $46,355,000 in the Plan on a going concern basis.

4. There is no excess actuarial surplus, pursuant to Section 147.2(2) of the Income Tax Act.

5. There is no statutory solvency deficiency under the Plan.

6. If the Plan had been wound up on the valuation date, the market value of Plan assets (less the provision for the windup expenses) would have been $10,605,000 less than the wind up liabilities of the Plan.

7. This valuation revealed a statutory solvency excess of $13,990,000.

8. The transfer ratio, as defined in the Regulation to the Pension Benefits Act (Ontario), is 0.96.

9. 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.

10. 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, 2012.

11. 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

April 27, 2010

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

Date

Appendix A Going Concern Assumptions and Methods

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]: 6.00% per annum, net of investment and administrative expenses.

Post-Retirement Indexation: No provision has been made for future post-retirement adjustments 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 2.50% per annum. Previously, 2.75% per annum was assumed.

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 [2]: The actuarial value of assets is a 4-year moving-average market value. This method recognizes investment gains and losses over a period of 4 years based on the expected investment return assumption. There is no bias under this method.

---

[1] Prior valuation: 6.25% per annum, net of investment and administrative expenses.
[2] Prior valuation: 4-year moving average market value with recognition of realized and unrealized investment gains and losses over a period of 4 years.

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.

Market Value Experience	As of December 31st		
	2007	2008	2009
Market Value of Assets	$336,525,030	$267,276,022	$275,464,204
Discount Rate	6.50%	6.50%	6.25%
Expected Gross Investment Income	$22,615,988	$20,933,896	$15,834,574
Actual Gross Investment Income	3,694,619	(39,856,124)	36,462,347
Market Value Investment Gain / (Loss)	**$(18,921,369)**	**$(60,790,020)**	**$20,627,773**

Year End	Investment Gain / (Loss) $	% of Gain / (Loss) Deferred	Deferred Gain / (Loss) $
2009	$20,627,773	75%	$15,470,830
2008	(60,790,020)	50%	(30,395,010)
2007	(18,921,369)	25%	(4,730,343)
Actuarial Value Adjustment			**$(19,654,523)**

Actuarial Value of Assets	December 31, 2009
Market Value of Assets	$275,464,204
Actuarial Value Adjustment	19,654,523
Actuarial Value of Assets	**$295,118,727**

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 6.00% per annum and reflects a best-estimate gross rate of return of 6.58% per annum less 0.35% for investment management and administrative fees, less 0.23% for provision for adverse deviations.

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 3.6% 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 Methods

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 and Method

Mortality: [(1)] UP 1994 projected to year 2020, Scale AA.

Annuity Purchase Rate: [(2)] 4.50% per annum for all members in accordance with the Canadian Institute of Actuaries guidelines for solvency valuations.

Smoothed Annuity Purchase Rate: [(3)] The following table shows the smoothed annuity purchase rate based on a four-year smoothing method.

Valuation Dates	Rate
December 31, 2009	4.50%
December 31, 2008	5.00%
December 31, 2007	4.65%
December 31, 2006	4.75%
Average Rate	**4.73%**

Note: Rates prior to 2009 were adjusted to reflect change in mortality table.

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

Actuarial Cost Method: Traditional Unit Credit method.

Value of Assets: Four-year moving-average market value.

Provision for Windup Expenses: $100,000

(1) Prior valuation: UP1994 projected to 2015, Scale AA.
(2) Prior valuation: 4.85% per annum.
(3) Prior valuation: 4.61% per annum.

C.2 Adjustments to Solvency Position

In order to minimize the impact of fluctuations in the discount rate used to value the solvency liabilities from year-to-year, the Pension Benefits Act permits smoothing techniques to be employed on both the solvency assets and the solvency liabilities. For the purpose of this valuation, a smoothing adjustment over a four-year period has been used.

C.3 Asset Smoothing Adjustment

The development of the asset smoothing adjustment is shown in Section A.3.

C.4 Liability Smoothing Adjustment

The solvency liability smoothing adjustment is obtained by taking the difference between the solvency liabilities calculated using the solvency discount rate in effect as of the valuation date and the solvency liabilities using an average discount rate over a period of four years. Development of the average rate is provided in Section C.1 above.

Appendix D Summary of Membership Data

The membership data was provided and maintained by Toronto Fire Department Superannuation and Benefit Fund. 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

- ✓ 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, 2009	December 31, 2008
Pensioners		
Number	585	621
Average Age (years)	74.8	74.1
Annual Benefit	$20,779,008	$22,069,244
Average Annual Benefit	$35,520	$35,538
Beneficiaries		
Number	339	334
Average Age (years)	77.6	77.2
Annual Benefit	$6,935,895	$6,807,254
Average Annual Benefit	$20,460	$20,381

D.3 Data Reconciliation

	Pensioners	Beneficiaries	Total
Number at December 31, 2008	621	334	955
Changes due to:			
New Entrants	0	0	0
Vested termination	0	0	0
Non-vested termination	0	0	0
Paid out	0	0	0
Retirements	0	0	0
Deaths w/ survivor	(23)	23	0
Deaths w/o survivor	(13)	(18)	(31)
Data Corrections	0	0	0
Total Changes	(36)	5	(31)
Number at December 31, 2009	**585**	**339**	**924**

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.

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 Certification

Toronto Fire Department Superannuation and Benefit Fund
Registration #0351601

I hereby certify on behalf of the Toronto Fire Department Superannuation and Benefit Fund, that to the best of my knowledge and belief:

1. The Plan Provisions summarized in Appendix E are 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 summarized in Sections 2.2 and 2.3 is complete and accurate;

4. There have been no subsequent events since the last valuation date that would materially change the plan's financial position as presented in this report; and

5. The actuary has been provided with the official Plan text and all subsequent amendments pertaining to the Plan.

Imma Monardo	IMonardo
Name	Signature
Manager, Pension	March 9, 2010
Title	Date

Appendix G Actuarial Information Summary

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

A. 001. Name of registered pension plan

The Toronto Fire Department Superannuation and Benefit Fund

B. 002. Registration number

Canada Revenue Agency: 0351601 **Other:**

C. 003. Is this plan a designated plan? ☐ Yes ☒ No

D. 004. Valuation date of report YYYY 2009 MM 12 DD 31

E. 005. End date of period covered by report YYYY 2012 MM 12 DD 31

F. 006. Purpose of the report (indicate the reason(s) for which the report was prepared)

☐ Initial report for a newly established plan
☒ Regular (triennial or annual) report for an ongoing plan
☐ Interim report in respect of an amendment to an ongoing plan
☐ Partial Termination
☐ Termination
☐ Conversion
☐ Other (please explain) ______

G. Contributions (prior to application of any credits and/or surplus) for covered period

Periods (see instructions)	Period 1	Period 2	Period 3	Period 4
007. Period start date (YYYY MM DD)	2010 01 01	2011 01 01	2012 01 01	
008. Period end date (YYYY MM DD)	2010 12 31	2011 12 31	2012 12	
Normal cost (defined benefit provision) **009.** Members	0	0	0	
010. Employer	0	0	0	
010a. Explicit expense allowance included in employer normal cost above	0	0	0	
Normal cost (money purchase provision) **011.** Members	0	0	0	
012. Employer	0	0	0	
Special payments **013.** Special payments for going-concern unfunded liability and/or solvency deficiency	0	0	0	
Fixed contributions **014.** Estimated dollar amounts of fixed employer and, if applicable, member contributions (defined benefit provision)	0	0	0	
014a. Estimated dollar amounts of fixed employer and, if applicable, member contributions (money purchase provision)	0	0	0	

Part II - Membership and Actuarial Information

H. Membership Information	Number	Average Age	Average Pensionable Service	Average Salary	Average Annual Pension
015. Active members	0	N/A	N/A	N/A	N/A
016. Retired members	924	74.8	N/A	N/A	$29,944
017. Other participants	0	N/A	N/A	N/A	N/A

I. Actuarial basis for going-concern valuation (see instructions)

020. Asset valuation method

☐ Market ☒ Smoothed Market ☐ Book ☐ Book & Market combination ☐ Other

021. Liability valuation method

☒ Accrued benefit (unit credit) ☐ Entry age normal ☐ Individual level premium ☐ Aggregate
☐ Other (Specify) ______

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

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*"

Valuation interest rate

	Initial Rate	Number of years*	Ultimate rate
025. active members	n/a%	n/a	0%
026. retired members	n/a%	n/a	6.00%
027. Rate of indexation	n/a%	n/a	0%
028. Rate of general wage and salary increase	n/a%	n/a	0%
029. YMPE escalation rate	n/a%	n/a	0%
030. *Income Tax Regulations'* maximum pension limit escalation	n/a%	n/a	0%
031. Rate of CPI increase	n/a%	n/a	0%

* from valuation date before ultimate rate becomes effective

035. Year *Income Tax Regulations*' maximum pension limit escalation commences n/a

036. Mortality table

☐ 1994 GAM Static ☐ 1994 Group Annuity Reserving (GAR) ☒ 1994 UP

☐ 80% of 1983 GAM ☐ Other (specify)

036a. Generational Mortality Table

Has an assumption of generational mortality improvements been made? ☐ Yes ☒ No

036b. Projected Mortality Table

Has a projection of mortality improvements been made? ☒ Yes ☐ No

036b.(i) If "Yes", what is the year to which the mortality improvements have been projected (see instructions)? 2005

037. Allowance for promotion, seniority and merit increases

☐ Included in (line **028.**) above ☐ Separate scale based on age or service ☒ No allowance

038. Allowance for expenses

038a. Allowance for investment expenses

☒ Implicit ☐ Explicit

038b. Allowance for administrative expenses

☒ Implicit ☐ Explicit

039. If a multi-employer plan, number of hours of work per member per plan year n/a

040. Was a withdrawal scale used? ☐ Yes ☒ No

041. Were variable retirement rates used? ☐ Yes ☒ No

042. If "No", what is the assumed retirement age? n/a

J. Actuarial basis for solvency valuation

Valuation interest rate

	Initial Rate	Select period	Ultimate rate
045. active members (electing a lump sum option)	n/a%	n/a	0%
046. active members (electing an annuity option)	n/a%	n/a	0%
047. retired members	n/a%	n/a	4.5%
048. Rate of indexation	n/a%	n/a	0%

049. Mortality table ☒ 1994 UP ☐ Other (specify)

049a. Year of projection (see instructions) 2020

K. Balance sheet information (defined benefit provisions, see instructions)

050. Market value of assets, adjusted for receivables and payables 275,464,000

051. Amount of contributions receivable included in market value above 0

Going-concern valuation

052. Going-concern assets 295,119,000

053. Optional ancillary contributions account balance included in going-concern assets above for a flexible pension plan (if applicable) 0

Going-concern liabilities

060. for active members 0

061. for retired members 248,764,000

062. for other participants 0

063. for optional ancillary benefits to be provided under a flexible pension plan (if applicable) 0

064. other reserve 0

K. Balance sheet information (defined benefit provisions, see instructions) (cont'd)

070. Net funded position – surplus/(deficit)	46,355,000
071. Additional voluntary contributions	0
072. Money purchase assets (if applicable)	0

Solvency Valuation

Complete lines **080.** to **100.** only if the report contains an explicit solvency valuation

Solvency Assets

080. solvency assets with adjustment for expense provision, if any	275,364,000
081. amount of wind-up expense provision reflected in line **080**	100,000
082. optional ancillary contributions account balance included in solvency assets above for a flexible pension plan (If applicable)	0

Solvency Liabilities

090. for active members	0
091. for retired members	285,969,000
092. for other participants	0
093. for optional ancillary benefits to be provided under a flexible pension plan (if applicable)	0
094. other reserve	0
100. Net solvency position – surplus/(deficit)	(10,605,000)

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:

102. the going-concern liabilities in lines **060.** to **064.**?	☒ N/A	☐ Yes	☐ No
103. the solvency liabilities in lines **090.** to **094.**?	☒ N/A	☐ Yes	☐ No

L. Actuarial gains/(losses)

110. Was a gain/loss analysis done? ☒ Yes ☐ No

111. If line **110.** is "Yes", indicate the date of the last filed funding Valuation report and the Net funded position as at that date — YYYY MM DD: 2008 12 31 — 43,395,000

If line **110.** is "Yes", indicate amount of gain/(loss) due to:

112. interest on surplus (unfunded liability)	2,712,000
113. special payments made	0
114. amounts used for contribution holiday	0
115. change in actuarial assumptions	(4,170,000)
116. change in the asset valuation method	14,361,000
117. change in liability valuation method	0
118. plan amendments/changes	0
119. investment experience	(10,924,000)
120. retirement experience	0
121. mortality experience	1,689,000
122. withdrawal experience	0
123. salary increase experience	0
124. optional ancillary contributions forfeited	0

Major contributing sources other than lines **112.** to **124.** above (specify)

125. **100% CPI**	(700,000)
126.	
127. all other sources (combined)	(8,000)

M. Subsequent events

135. Are there any subsequent event(s) that have not been reflected in the valuation? (Refer to the SOP) ☐ Yes ☒ No

N. Statement of opinion

136. Does the Report include the statements of opinion required by the SOP (data, assumptions, methods, accepted actuarial practice)? ☒ Yes ☐ No

136a. Are any of the actuary's statements of opinion qualified? ☐ Yes ☒ No

Part III - Information required by the Financial Services Commission of Ontario

0. Additional valuation information

Going-concern valuation

140. Have escalated adjustments been included in going-concern liabilities? ☒ N/A ☐ Yes ☐ No

Solvency valuation

141. Have any of the "excludable" benefits been excluded? ☒ N/A ☐ Yes ☐ No

142. If line **141.** is "Yes", enter the total amount of liabilities being excluded ____________

P. Miscellaneous

145. Prior year credit balance ____ 0

146. Transfer ratio (express in decimal format) ____ 0.96

Guarantee fund assessment

147. PBGF liabilities ____ n/a

148. PBGF assessment base ____ n/a

149. Amount of additional liability 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

149a. Number of Ontario plan beneficiaries ____ 924

Part IV - Information required by the Office of the Superintendent of Financial Institutions Canada

Q. Additional solvency valuation information

150. Has a smoothing method been used to determine solvency assets? ☐ Yes ☐ No

150a. Has the method used to determine assets changed since the last valuation? ☐ Yes ☐ No

If the answer to line **150a.** is "Yes", complete line **150b.** or **150c.**, as appropriate:

150b. The change in method increases solvency assets by the amount of $ ____________

150c. The change in method decreases solvency assets by the amount of $ ____________

160. Solvency ratio (express in decimal format) ____________

161. Actuarial Present Value of Special Payments to be made within five years of the valuation date, prior to the determination of any solvency deficiency on that date (see instructions) ____________

162. Liability for active members who are within ten years of pensionable age and whose entitlement is valued at an interest rate basis stated on line **045.** ____________

163. Liability for active members who are within ten years of pensionable age and whose entitlement is valued at an interest rate basis stated on line **046.** ____________

164. Liability for active members who are not within ten years of pensionable age ____________

165. Pensionable age:

a. May a member become entitled - with no employer consent required - to an unreduced retirement pension prior to the normal retirement age? ☐ Yes ☐ No

b. If "Yes" to a., state the applicable age and/or service conditions:

		Age requirement	Service requirement			Age requirement	Service requirement
Active members	1)			Deferred vested members	1)		
	2)				2)		
	3)				3)		
	4)				4)		
	5)				5)		

c. Are these benefits reflected in the solvency valuation? ☐ N/A ☐ Yes ☐ No

166. Do the liabilities determined in the Report include the impact of one or several plan amendment(s) that affect the value of benefits having accrued prior to the Report's valuation date, and which were not included in the prior report? ☐ Yes ☐ No

167. Does the Report account for one or several plan amendment(s) that affect only the cost of benefits that will accrue after the Report's valuation date, and which were not included in the prior report? ☐ Yes ☐ No

168. If the answer to either question **166** or **167** is "Yes", provide the amendment number and effective date ____________ Amendment number

____________ Effective date

Part V— Information required by the Canada Revenue Agency

R. Additional information

173. Surplus / (deficit) determined at the valuation dale as per the instructions:

173a. Going-concern basis	46,355,000
173b. Wind-up basis	(10,605,000)
173c. For designated plans, maximum funding valuation basis	n/a

174. Excess surplus determined at the valuation date:

174a. Going-concern basis	0
174b. For designated plans, maximum funding valuation basis	n/a

175. For designated plans, employer normal cost determined under the maximum funding valuation basis:

Period 1	n/a
Period 2	n/a
Period 3	n/a
Period 4	n/a

176. Minimum surplus required under applicable pension benefit legislation before contribution holiday:

176a. Going-concern basis	n/a
176b. Wind-up basis	n/a

177. Maximum amount that could be claimed as eligible employer contribution(s) – defined benefit provisions – under subsection 147.2(2) of the *Income Tax Act*:

177a. Unfunded liability	10,605,000
177b. Normal Cost:	
Period 1	n/a
Period 2	n/a
Period 3	n/a
Period 4	n/a

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 27 (day) day of April (month), 2010 (year)

Cindy Rynne
Signature of actuary

Cynthia L. Rynne
Print or type name of actuary

Buck Consultants
Name of firm

416-865-0060
Telephone number