
City of
Chattanooga
General
Pension Plan

Actuarial
Review and Analysis
as of
January 1, 2009



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Summary of Results

Introduction

This Report presents the results of an actuarial review and analysis of the City of Chattanooga General Pension Plan as of January 1, 2009. The purposes of this actuarial analysis are:

- To perform the annual actuarial review and analysis in accordance with the provisions of Subsection (2) of Section 3.39 of the Chattanooga City Charter,
- To compute the annual contribution rate required to fund the Plan in accordance with actuarial principles for the 2009-2010 year, and
- To present those items required for disclosure under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Plan Cost

Since the last actuarial review and analysis was performed as of January 1, 2008, the contribution rate has increased. The table below shows a brief summary.

	Contribution Amount	Contribution Rate (% of Payroll)
January 1, 2008 (2009 Contribution)	\$ 3,567,792	6.31%
January 1, 2009 (2010 Contribution) Before Method Changes	\$ 8,840,109	14.82%
January 1, 2009 (2010 Contribution) After Method Changes	\$ 7,425,735	12.45%

The primary reason for the increase in Plan cost was investment losses experienced during 2008. The Plan's asset smoothing policies serve to recognize the loss gradually. Without these policies (i.e. fully recognizing 2008 investment losses immediately), the contribution rate would be more than 19% of pay.

This report has been prepared using generally accepted actuarial methods and assumptions. If there are any questions about the report contents, please feel free to contact us.

Respectfully submitted,



Graham A. Schmidt, ASA



Gregory M. Stump, FSA

Change in Plan Cost from January 1, 2008 to January 1, 2009

The table below shows the breakdown of the change in Plan cost from January 1, 2008 to January 1, 2009.

	Contribution Rate (% of Payroll)
January 1, 2008	6.31%
Change in Cost due to:	
Demographic (gains)/losses	(0.50%)
Salary (gains)/losses	0.47%
New entrants	0.43%
Investment (gains)/losses	7.04%
Changes in actuarial assumptions	1.07%
January 1, 2009 Preliminary	14.82%
Changes in Asset Methods from 80% -120% corridor to 70% to 130% corridor from 5 year smoothing to 10 year smoothing	(2.37%)
Final January 1, 2009	12.45%

Among the causes of the cost changes were the following:

- Actual demographic experience was slightly better than the expected behavior in aggregate, resulting in a decrease in Plan cost of 0.50% of pay. Demographic gains and losses occur because of status changes other than expected, including retirements, deaths, disabilities, and terminations.
- Salary increases were higher than those assumed in aggregate, causing a cost increase of 0.47% of payroll.
- The addition of new Plan members resulted in a cost increase of 0.43% of pay.

The Plan’s active population has remained relatively level over the past few years. However, new members are still entering the Plan to replace those who leave. When new members enter the Plan, they immediately add to the Normal Cost of the Plan, but have only a minor impact on the Unfunded or Surplus. Therefore, new entrants tend to drive the overall cost closer to the long-term Normal Cost, which in this case results in an increase in the City contribution.

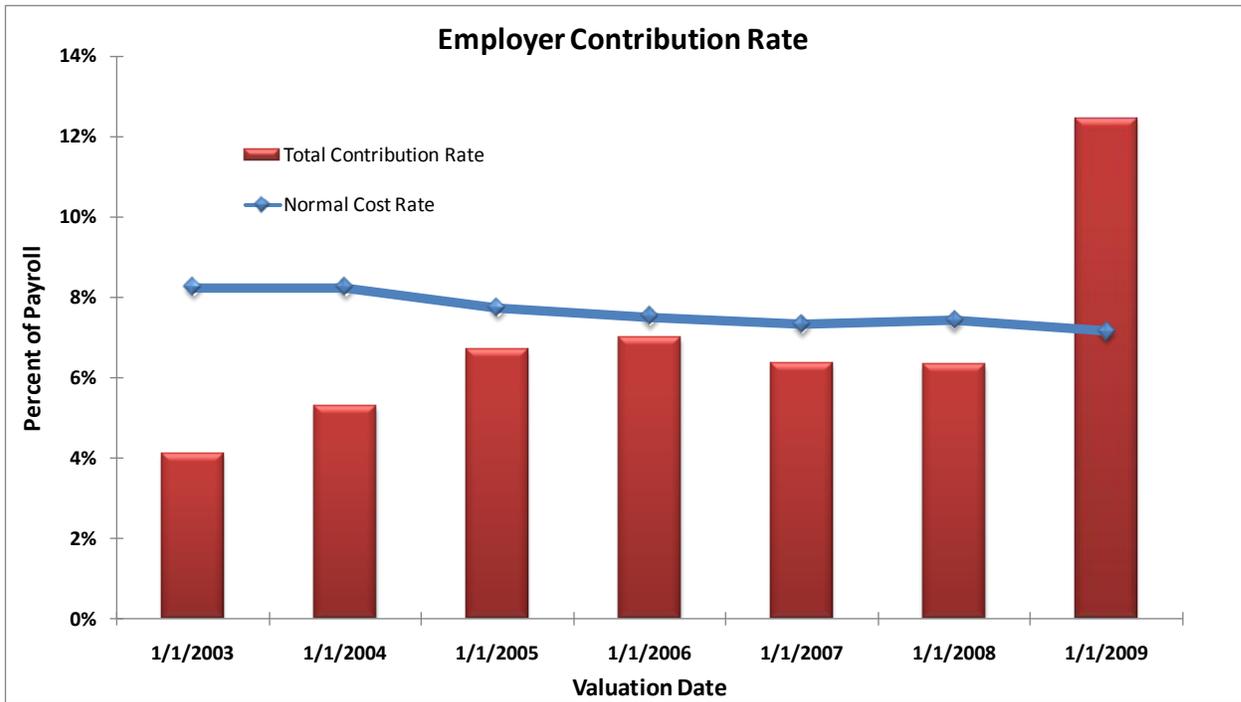
- Significant losses from Plan investments have served to increase the contribution rate substantially: Plan assets decreased by over 30% during the course of the year. Partial deferral of these losses resulted in an actuarial return of approximately (13.4%), still well below the assumed annual return of 7.75%. This loss on an actuarial basis is approximately \$50 million. Amortization of this amount resulted in an annual payment of \$4.2 million, or 7.04% of payroll.

- An experience was recently conducted covering the years 2004 through 2008. The study resulted in several changes in demographic assumptions, including rates of retirement, termination, disability, and mortality. Details regarding prior and current assumptions can be found in Section 1.3 of this Report. Adoption of the new assumptions reflects a more realistic expectation of future demographic experience, and results in a slightly higher contribution rate. The increase in the Plan cost due to assumption changes is 1.07% of payroll, or \$0.6 million.
- The Board recently adopted two changes in asset smoothing methods: First, the number of years for gain and loss recognition was increased from five to ten years. Second, the “asset corridor”, the range of values outside which the actuarial value of assets may not fall, was expanded from 80% - 120% of the market value to 70% - 130% of such. These changes were adopted in order to enable a more stable contribution pattern in the future.

Calculation of City Contributions

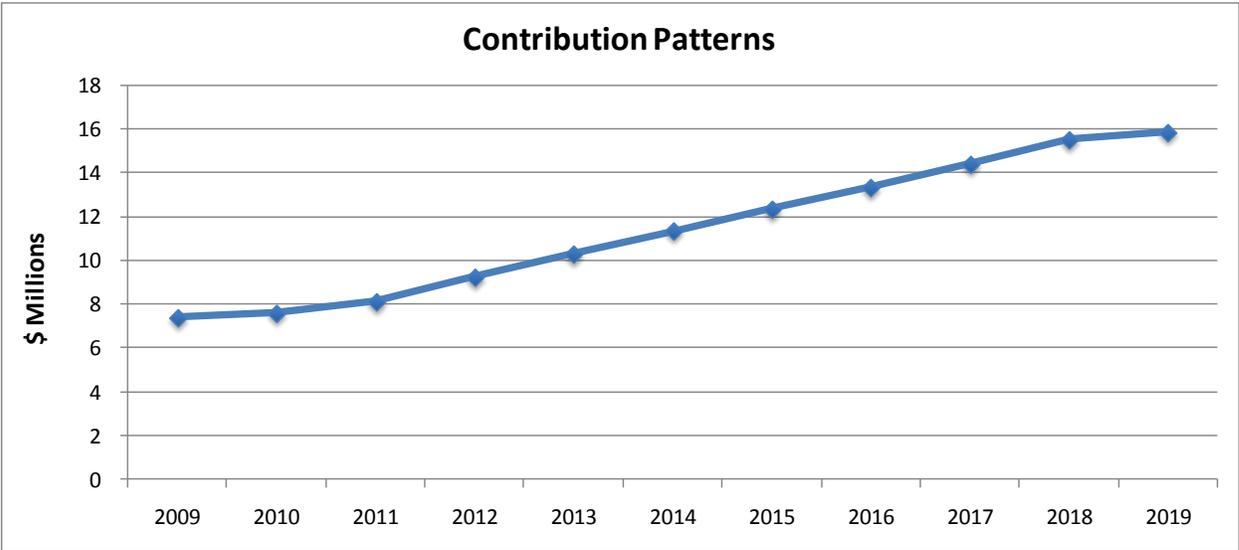
The 2010 contribution of \$7.4 million is calculated based on a projected payroll of \$59.6 million. The contribution amount is presented for budgeting purposes only; the actual recommended City contributions should be based on the contribution rate (percentage of pay) of 12.45%, made on a monthly basis.

The chart below shows the history of the City’s actuarially determined contribution rates over the past several years. The rate remained relatively level from 2005 through 2008, but increased substantially primarily as a result of 2008 investment experience. Amortization of these losses now accounts for roughly 40% of the total recommended contribution rate.



Future Costs

The graph below shows a hypothetical projection of contributions to the Fund over the next ten years. Implicit in this scenario is the assumption that there will be no gains or losses from any source during the forecast period. This is an impossible scenario; however, the diagram is instructive as it reveals a generally increasing cost pattern, as current losses are recognized and unfunded actuarial liabilities are amortized over time.



Hypothetically assuming an extended period of investment gains (15% returns for four consecutive years for example), recommended contribution amounts would still remain in the \$5 million to \$10 million range for the next few years.

Section 1

Summary of Plan Provisions, Member Statistics, and Actuarial Assumptions

1.1: Brief Outline of Plan Provisions

Definitions

Average Compensation

A Participant's Average Compensation is the arithmetic average using the Participant's highest paid three full calendar years of service or, if less than three years of Credited Service have been completed, the average is calculated using the number of years and months actually completed by the Participant.

Credited Service

The length of time a person participated in the Plan or any former plan prior to the date as of which Credited Service is being determined, expressed in years and completed calendar months.

Appointed charter officials, elected City Council members, and appointed judgeship officials earn Credited Service for the Plan in the amount of 1.5 years for each single year they are employed by the City.

Plan Year

July 1 – June 30

Participation

Employees of the City of Chattanooga, including elected officials, join the Plan on the date they become a permanent employee with the following exceptions:

- Seasonal and temporary employees;
- Firefighters and police officers;
- Persons rendering a service under contract.

Each employee hired after February 1, 1979, shall be a participant of this Plan as a condition of employment. Each such employee's participation shall commence with the first payroll period.

Normal Retirement Benefit

Eligibility

Participants are eligible for normal retirement on the first day of the month after reaching age 62 or upon satisfying the Rule of 80.

Benefit Amount

The total annual benefit under normal retirement is calculated using one of the following formulas:

1. 2% of Average Compensation multiplied by the number of full years of Credited Service (up to 20 years and 40% maximum), plus 1% of Average Compensation multiplied by each additional full year of Credited Service beyond 20 years; or
2. 60% of Average Compensation, less 50% of the primary Social Security amount payable at age 62 (PIA), plus 1% of Average Compensation for each full year in excess of 25, multiplied by a fraction, the numerator of which is equal to Credited Service not in excess of 25, and the denominator of which is equal to 25.

Formula 2 only applies to employees hired prior to January 1, 1985. Participants with 10 or more years of Credited Service on December 31, 1994 will receive the larger benefit from Formula 1 or Formula 2. All other participants will have their benefits calculated using Formula 1.

Form of Benefit

The normal form of payment is a straight life annuity option that pays the monthly benefit to the participant until his death. The beneficiary receives no payments after the participant's death under this payment method.

Early Retirement Benefit

Eligibility

Participants are eligible for early retirement on the first day of the month after reaching age 55 with 5 years of Credited Service.

Benefit Amount

A monthly deferred early retirement benefit is payable on the Participant's normal retirement date, provided he is then living, and computed in the manner set forth above for the normal retirement benefit.

Subject to the written approval of the Board, an immediate monthly life annuity shall be payable, the amount of which shall be the amount of the normal retirement benefit, reduced by 5/24 of 1% for each full month his early retirement date precedes his 62nd birthday.

Form of Benefit

The normal form of payment is a straight life annuity option.

Disability Retirement Benefit

Eligibility

A participant is eligible for a disability retirement benefit if the participant becomes disabled in the line of duty or not in the line of duty. If a participant becomes disabled not in the line of duty after five years of service, or if he becomes disabled in the line of duty regardless of the number of years of service, he may retire and receive a disability pension.

Benefit Amount

The disability retirement benefit, payable to age 65, consists of 60% of earnings minus the primary Social Security disability benefit. Upon attainment of age 65, the employee becomes entitled to his regular pension as defined under normal retirement above, with full credit for the years of service during which he was disabled if totally disabled as a result of any injury in the line of duty.

Form of Benefit

The benefit form is the same as that for a normal service retirement benefit.

Pre-Retirement Death Benefit (Refund of Contributions)

Eligibility

Participants are eligible for a death benefit if the participant dies before he has completed 5 years of service and before he has attained age 62.

Benefit Amount

The beneficiary shall receive a refund of all the deceased participant's contributions to the Plan, without interest, payable within 15 days after the date of death.

Pre-Retirement Death Benefit (Monthly Benefit)

Eligibility

Participants are eligible for a death benefit if the participant dies after he has completed 5 years of service or after he has attained age 62.

Benefit Amount

Upon the death of a participant, any option he may have elected, in lieu of his otherwise retirement benefit, shall be payable as though he had been entitled to have such option benefit commence on his date of death; and in the event such a participant has not elected any option prior to his death, a benefit shall be payable to the deceased participant's surviving spouse, if any, as though he had elected a ten-year certain and life form of annuity.

If the death occurs in the line of duty, the participant's benefit shall be calculated using 25 years of Credited Service, if the participant had less than 25 years of Credited Service at the time of his death.

Termination Benefit

Eligibility

A participant is eligible for a refund of contributions if he terminated employment before becoming eligible for any other benefit.

Benefit Amount

The member will receive a refund of his contributions. If the employee has completed at least 5 years of Credited Service, he will receive interest on his contributions, at the rate of 6.0% per annum, from the date of termination to the date the refund is made.

Optional Benefit Forms

Prior to retirement, a member may elect to convert his retirement allowance into a benefit of equivalent actuarial value in accordance with one of the optional forms described below.

1. Option A – 120 Payments and Life Certain

Option A provides a decreased pension benefit payable for life to the retired participant, with the first 120 payments (10 years) guaranteed. Any guaranteed payments due after the death of the retired participant are paid to the designated beneficiary, if any, who survives the retired participant.

2. Option B – Joint and Survivor

Option B provides a reduced retirement benefit payable to the retired participant for life. If the participant dies, a surviving beneficiary will continue to receive the identical benefit. All benefits end when both the participant and the beneficiary are deceased.

3. Option C – Modified Joint and Survivor

Option C provides a reduced retirement benefit payable to the retired participant for life. If the participant dies, a surviving beneficiary will continue to receive 50% of the retiree's benefit. All benefits end when both the participant and the beneficiary are deceased.

4. Option D – Modification of Option B (Pop-up)

Option D provides a reduced retirement benefit payable to the retired participant for life. If the participant predeceases his beneficiary, the identical benefit will continue for the life of the surviving beneficiary. If the beneficiary dies before the participant, the participant's benefit payment will be increased to the full monthly benefit payment as if the participant had elected the normal form (a straight annuity) of payment. This increased benefit will be paid to the participant until his death.

5. Option E – Modification of Option C (Pop-up)

Option E provides a reduced retirement benefit payable to the retired participant for life. If the participant predeceases his beneficiary, 50% of the benefit will continue for the life of the surviving beneficiary. If the beneficiary dies before the participant, the participant's benefit payment will be increased to the full monthly benefit payment as if the participant had elected the normal form (a straight annuity) of payment. This increased benefit will be paid to the participant until his death.

6. Deferred Retirement Option Provision (DROP)

The Deferred Retirement Option Provision (DROP) offers a participant the option of receiving a portion of his total benefit as a lump-sum cash payment at the time he retires. When a participant elects the DROP, his monthly benefit payments are reduced.

The DROP payment can be paid in annual installments up to three years, depending on the participant's total Credited Service. The participant must have 26 years of Credited Service to be eligible for a one-year DROP payment, 27 years of service to be eligible for a two-year DROP payment, and at least 28 years of service to be eligible for a three-year DROP payment.

Post Retirement Adjustments

An annual cost-of-living adjustment will be made to amounts paid to or on account of a retired participant each January 1. The adjustment shall be equal to 3%.

Funding

Both the City and the plan participants share in the cost of the Plan.

Each actively employed participant shall pay 2% of his compensation to the Plan through payroll deductions. An employee contribution is required for each payroll period during which a participant receives compensation.

The City contribution rate is determined on the basis of an actuarial review and analysis of the Plan made as of December 31 of the preceding Plan year.

Changes in Benefit Provisions since Prior Year

There have been no changes in benefit provisions since the prior review.

1.2: Participant Data Summary

	January 1, 2008	January 1, 2009
<u>Active Participants</u>		
Number	1,534	1,532
Number Vested	1,094	1,074
Non-Vested	440	458
Average Age	48.1	48.3
Average Eligibility Service	11.6	11.8
Average Pay	\$35,187	\$38,566
<u>Inactive Participants</u>		
Number of Service Retired Participants	600	604
Average Age	71.1	71.0
Average Annual Benefit	\$13,656	\$14,255
Number of Beneficiaries	125	133
Average Age	64.9	66.1
Average Annual Benefit	\$9,103	\$9,590
Number of Disabled Participants	54	55
Average Age	60.1	60.6
Average Annual Benefit	\$8,520	\$8,592
Number of Terminated Vested Participants	83	96
Average Age	48.5	48.8
Average Annual Benefit	\$7,458	\$7,509

Changes in Plan Membership

	Active	Vested Terminated	Disabled	Retired	Beneficiaries	Total Participants
Members on January 1, 2008	1,534	83	54	600	125	2,396
New January 2, 2008 through January 1, 2009	143	(2)				141
Terminated with Vested Benefits	(18)	18				0
Became Disabled	(5)		5			0
Retired	(36)	(2)		38		0
Died or Terminated without a Vested Benefit	(86)	(1)	(3)	(20)	(7) ¹	(117)
Died with Beneficiary Payable			(1)	(14)	15	0
QDRO Commenced						0
Members on January 1, 2009	1,532	96	55	604	133	2,420

¹ Includes 4 beneficiaries with temporary payment form whose benefits expired.

1.3: Actuarial Methods and Assumptions

Actuarial Method

The annual actuarial contribution to pay for the retirement benefits provided to retired employees of the City of Chattanooga is computed under the Entry Age Normal Actuarial Cost Method. Under this Cost Method:

- A Total Normal Cost for the plan is calculated as a dollar amount. The City Normal Cost is the Total Normal Cost minus the expected employee contributions to the Plan.
- The liability for all future pension benefits payable by the City to current and future retired employees is computed. This is called the Fully Projected Liability.
- A portion of this liability is assigned to service earned to the date of the review. This portion is called the Actuarial Accrued Liability. The difference between the Fully Projected Liability and the Actuarial Accrued Liability is to be funded by future Total Normal Costs.
- The actuarial value of the assets on hand to pay these benefits is subtracted from the Actuarial Accrued Liability, producing the Unfunded Actuarial Accrued Liability.
- The Unfunded Actuarial Accrued Liability is amortized in level dollar payments over a rolling 30-year period.

The City’s contribution to the Plan is determined by adding the City Normal Cost as determined above to the amortization of the Unfunded Actuarial Accrued Liability. Interest on the required contribution is calculated as of the middle of the year.

Actuarial Assumptions

Measurement Date	All assets and liabilities are computed as of January 1, 2009.
Rate of Return	The annual rate of return (net of investment and administrative expenses) on the actuarial value of Plan assets is assumed to be 7.75%.
Contribution Earnings Rate	Employee contribution balances accumulate at an annual interest rate of 6.00%, from the time of termination to the time of payment, if the participant had at least 5 years of Credited Service at the time of termination.
Cost of Living	The cost of living as measured by the Consumer Price Index (CPI) is assumed to increase at the rate of 3.00% per year.

Increases in Pay

Assumed pay increases for active Participants consist of increases due to cost of living adjustments and those due to longevity and promotion. The rates listed below include the general pay increase due to the cost of living of 3.00%

Rates of assumed annual rates of future pay increases among participants depend on service, and are given by the following table.

<u>Service</u>	<u>Annual Rate</u>
0 – 5 years	5.50%
6 – 9 years	5.00%
10 and over	4.50%

Participant Mortality

Rates of mortality for retired employees and their beneficiaries are based on the age and sex of the individual, and given by the 1983 Group Annuity Mortality Table (2 year set forward for retired males).

Representative rates are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
45	0.002183	0.001010
50	0.003909	0.001647
55	0.006131	0.002541
60	0.009158	0.004241
65	0.015592	0.007064
70	0.027530	0.012385
75	0.044597	0.023992
80	0.074070	0.042945
85	0.114836	0.069918
90	0.166307	0.111750
95	0.234086	0.182419
100	0.319185	0.295187

Previously, mortality was assumed to occur in accordance with the 1951 Group Annuity Table Projected to 1980 (set back 5 years for females).

Disabled Employee Mortality

Rates of mortality for all disabled employees are based on the age of the individual. Representative rates are as follows:

<u>Age</u>	<u>Male Rate</u>	<u>Female Rate</u>
40	0.028200	0.020900
50	0.038300	0.025700
60	0.060300	0.033100
70	0.083676	0.045940
80	0.144521	0.080894
90	0.250003	0.160006
100	0.440098	0.290090

Previously, a unisex table was used for disabled mortality.

Service Retirement

Rates of early and normal service retirement among employees eligible to retire are assumed to depend on age and sex and are given by the following table.

<u>Age</u>	<u>Standard</u>	<u>Rule of 80</u>
50-54	0.0%	12.0%
55-60	2.4%	12.0%
61	6.0%	30.0%
62	30.0%	
63-69	15.0%	
70+	100%	

The prior rates assumed are shown in the table below.

<u>Age</u>	<u>Male</u>	<u>Female</u>
Less than 55	0.00%	0.00%
55 – 61*	4.00%	7.00%
62	50.00%	50.00%
63 – 64	25.00%	25.00%
65 and above	100.00%	100.00%

* For ages 55 – 61, rates are multiplied by a factor of 5 if eligible for unreduced benefits under the “Rule of 80”.

Disability

Rates of disability are assumed to increase with age. Representative rates are as follows:

<u>Age</u>	<u>Annual Rate</u>
30	0.060%
35	0.080%
40	0.120%
45	0.190%
50	0.260%
55	0.330%
60	0.400%

Rates of disability were previously given by the 1965 Railroad Retirement Board Table (the same rates apply for participants age 40 or younger under old and new assumptions).

Termination

Rates of termination for all employees from causes other than death, disability, and service retirement are based on the employee's age and service.

Representative rates of withdrawal are shown in the following table:

<u>Age</u>	<u>Service</u>			
	<u>0-1 Year</u>	<u>2-4 Years</u>	<u>5-9 Years</u>	<u>10+ Years</u>
Less than 35	25.0%	15.0%	10.0%	4.0%
36 and over	13.0%	8.0%	5.0%	1.0%

Prior rates are summarized in the table below:

<u>Age</u>	<u>Service</u>		
	<u>0-1 Years</u>	<u>2-4 Years</u>	<u>5+ Years</u>
Less than 30	16.0%	8.0%	8.0%
30 – 45	8.0%	4.0%	4.0%
46 and over	8.0%	4.0%	2.0%

Family Composition

85% of all Participants are assumed to be married. Male spouses are assumed to be four years older than their wives.

Changes in Assumptions

Changes in assumptions since the prior year are noted above.



Actuarial Value of Plan Assets – Prior Method

The actuarial value is equal to the expected actuarial value, plus 20% of the difference between market value and expected actuarial value. The actuarial value is limited to market value +/- 20%.

Actuarial Value of Plan Assets – Changes in Methods

Several changes were adopted since 2008 regarding the determination of the actuarial value of assets for the purpose of computing contributions to the Fund. These changes are:

1. Investment gains and losses are determined based on the difference between expected and actual market value.
2. Annual gains and losses are tracked and recognized over a period of ten years.
3. The actuarial value cannot be less than 70% or greater than 130% of the market value.

Participant Data

Data regarding active and inactive Participants and their beneficiaries as of the measurement date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Participant data was neither verified nor audited. However, various checks for reasonableness and consistency with the prior year's data were made.

Section 2

Asset Information

2.1: Income Statement January 1, 2008 through December 31, 2008

	Actual Market Value	Expected Actuarial Value	Expected Market Value
Market / Actuarial Value at January 1, 2008	\$ 249,721,119	\$ 241,197,693	\$ 249,721,119
Contributions			
Employee Contributions	3,351,286	3,351,286	3,351,286
Employer Contributions	1,056,221	1,056,221	1,056,221
Other Receipts	-	-	-
Total Contributions	\$ 4,407,507	\$ 4,407,507	\$ 4,407,507
Investment Income			
Investment Income / Asset Appreciation	(76,399,475)	N/A	N/A
Other Investment Income	2,729,093	N/A	N/A
Investment Expenses	(527,824)	N/A	N/A
Total Investment Income	\$ (74,198,206)	\$ 18,450,069	\$ 19,110,635
Disbursements			
Benefit Payments and Refunds	(10,152,492)	(10,152,492)	(10,152,492)
Expenses	(129,681)	(129,681)	(129,681)
Other Expenses	(389,898)	(389,898)	(389,898)
Total Disbursements	\$(10,672,071)	\$(10,672,071)	\$(10,672,071)
Market / Expected Value at December 31, 2008	\$ 169,258,349	\$ 253,383,198	\$ 262,567,190
Approximate Market / Assumed Return	(30.1%)	7.75%	7.75%

2.2: Computation of Actuarial Value of Assets

	Prior Methods	New Methods
(1) Expected Value 12/31/2008	253,383,198	262,567,190
	(actuarial)	(market)
(2) Actual Market Value 12/31/2008	169,258,349	169,258,349
(3) Gain/(Loss) During Year	(84,124,849)	(93,308,841)
(4) Prior Gains/(Losses)	N/A	21,824,401
(5) Total Adjustment for Past Gains/(Losses)	(16,824,970)	(66,586,556)
(see below)	(add to expected actuarial value)	(subtract from market value)
(6) Actuarial Value as of 12/31/2008 without corridor	236,558,228	235,844,905
(7) Corridor Lower Limit	135,406,679	118,480,844
(8) Corridor Upper Limit	203,110,019	220,035,854
(9) Final Actuarial Value	203,110,019	220,035,854
Approximate Rate of Return based on Actuarial Value	(13.4%)	(6.3%)
Ratio of Actuarial Value to Market Value	120%	130%

Year	Gain/(Loss)	Unrecognized Amount
2008	(93,308,841)	(83,977,957)
2007	9,722,278	7,777,823
2006	12,611,673	8,828,171
2005	1,309,012	785,407
	Corridor Adjustment	(15,809,051)

Section 3

Actuarial Computations

3.1: Computation of Annual Contribution as of January 1, 2008

(1)	Employer Normal Cost	4,190,257
(2)	Active Present Value of Benefits	162,613,230
(3)	Inactive Present Value of Benefits	
	Retirees	87,559,572
	Beneficiaries	9,844,565
	Disabled	3,294,230
	Vested Deferred	<u>3,145,002</u>
	Total	103,843,368
(4)	Total Present Value of Benefits ((2)+(3))	266,456,598
(5)	Active Accrued Liability	127,998,426
(6)	Total Accrued Liability ((3)+(5))	231,841,794
(7)	Actuarial Value of Assets (Section 2.2)	241,197,693
(8)	Net Unfunded Liability (Surplus) ((6)-(7))	(9,355,899)
(9)	Amortization of Net Unfunded Liability (Surplus) Over 30 Years as a Level Dollar Amount	(753,167)
(10)	Annual Contribution ((1)+(9))	3,437,090
(11)	Annual Contribution with Interest	3,567,792
(12)	Projected Payroll	56,581,858
(13)	Total Cost as a Percentage of Projected Payroll ((11)÷(12))	6.31%

3.2: Computation of Annual Contribution as of January 1, 2009

	Old Assumptions Expected Assets	Old Assumptions Actual Assets	New Assumptions	New Assumptions and Methods
(1) Employer Normal Cost	4,310,733	4,310,733	4,260,629	4,260,629
(2) Active Present Value of Benefits	173,303,512	173,303,512	181,301,741	181,301,741
(3) Inactive Present Value of Benefits				
Retirees	91,898,331	91,898,331	93,570,231	93,570,231
Beneficiaries	11,020,073	11,020,073	11,514,224	11,514,224
Disabled	3,440,695	3,440,695	3,849,262	3,849,262
Vested Deferred	<u>3,729,716</u>	<u>3,729,716</u>	<u>3,726,934</u>	<u>3,726,934</u>
Total	110,088,815	110,088,815	112,660,651	112,660,651
(4) Total Present Value of Benefits ((2)+(3))	283,392,327	283,392,327	293,962,392	293,962,392
(5) Active Accrued Liability	137,615,655	137,615,655	143,313,194	143,313,194
(6) Total Accrued Liability ((3)+(5))	247,704,470	247,704,470	255,973,845	255,973,845
(7) Actuarial Value of Assets (Section 2.2)	253,383,198	203,110,019	203,110,019	220,035,854
(8) Net Unfunded Liability (Surplus) ((6)-(7))	(5,678,728)	44,594,451	52,863,826	35,937,991
(9) Amortization of Net Unfunded Liability (Surplus) Over 30 Years as a Level Dollar Amount	(457,148)	3,589,934	4,255,633	2,893,073
(10) Annual Contribution ((1)+(9))	3,853,585	7,900,667	8,516,262	7,153,702
(11) Annual Contribution with Interest	4,000,125	8,201,105	8,840,109	7,425,735
(12) Projected Payroll	59,637,956	59,637,956	59,645,747	59,645,747
(13) Total Cost as a Percentage of Projected Payroll ((11)÷(12))	6.71%	13.75%	14.82%	12.45%

Section 4

Disclosure Information

4.1: Schedules of Funding Status and Employer Contributions Required Under GASB Statements No. 25 and 27

The Governmental Accounting Standards Board (GASB) Statements No. 25 and 27 relate to the disclosure of pension liabilities on a public employer’s financial statements. For accounting periods beginning after June 15, 1996, information required under these statements must be prepared for a public employer who seeks compliance with generally accepted accounting principles (GAAP) on behalf of its public employee retirement system.

GASB Statement No. 25 requires preparation of schedules of funding status and employer contributions, as well as the disclosure of plan provisions, actuarial assumptions, and other information.

The required schedules are shown below. In each case, we have relied upon information from our files and contained in the reports of prior actuaries employed by the City in completing the schedules. While we have no reason to believe the information in our files or in prior actuaries’ reports is inaccurate, we strongly recommend that City personnel verify the schedules below before they are included in Plan or City financial statements.

Schedule of Funding Status						
Actuarial Measurement Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Liability as a Percent of Payroll
1/1/1997	\$114,621,917	\$99,328,522	(\$15,293,395)	115.4%	\$39,136,370	-39.08%
1/1/1998	\$129,592,442	\$109,916,957	(\$19,675,485)	117.9%	\$38,223,969	-51.47%
1/1/1999	\$144,836,426	\$116,471,155	(\$28,365,271)	124.4%	\$43,969,283	-64.51%
1/1/2000	\$209,084,823	\$144,143,794	(\$64,941,029)	145.1%	\$46,338,563	-140.14%
1/1/2001	\$216,594,554	\$154,893,409	(\$61,701,145)	139.8%	\$47,490,020	-129.92%
1/1/2002	\$219,767,852	\$171,457,511	(\$48,310,341)	128.2%	\$51,681,537	-93.48%
1/1/2003	\$195,813,753	\$167,271,964	(\$28,541,789)	117.1%	\$53,221,374	-53.63%
1/1/2004	\$200,844,363	\$180,133,668	(\$20,710,695)	111.5%	\$53,322,027	-38.84%
1/1/2005	\$206,837,961	\$198,874,444	(\$7,963,517)	104.0%	\$53,531,483	-14.88%
1/1/2006	\$214,548,519	\$209,643,031	(\$4,905,488)	102.3%	\$54,636,392	-8.98%
1/1/2007	\$227,026,979	\$219,030,651	(\$7,996,328)	103.7%	\$54,545,300	-14.66%
1/1/2008	\$241,197,693	\$231,841,794	(\$9,355,899)	104.0%	\$56,581,858	-16.54%
1/1/2009	\$220,035,854	\$255,973,845	\$35,937,991	86.0%	\$59,645,747	60.25%

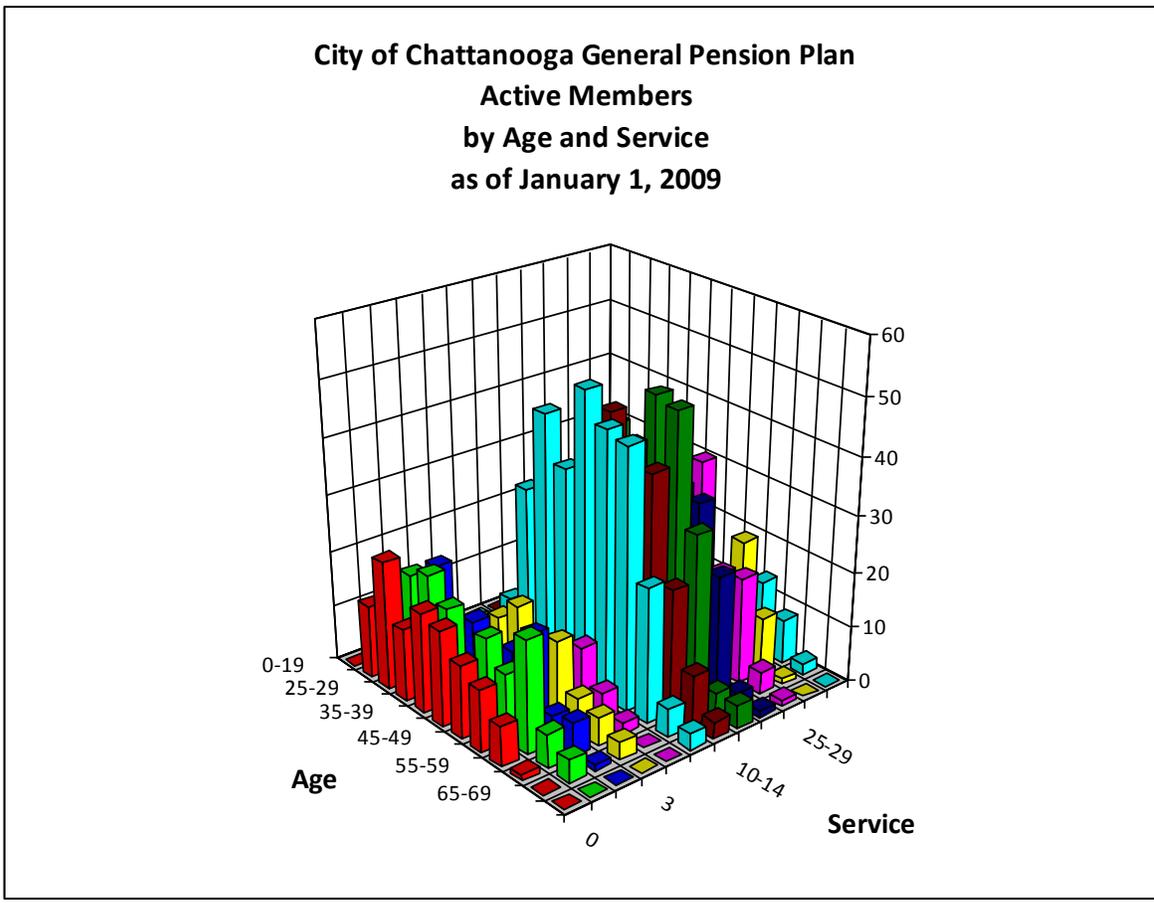
Schedule of City Contributions				
Fiscal Year Ending	Annual Required Contribution	Actual Contribution	Percentage Contributed	Net Pension Obligation/(Asset)
2005	\$2,096,333	\$2,146,352	102.4%	(\$4,343,073)
2006	\$3,518,054	\$3,518,054	100.0%	(\$4,255,701)
2007	\$3,786,128	\$3,786,128	100.0%	(\$4,216,376)
2008	\$3,502,000	\$3,502,000	100.0%	(\$4,177,414)
2009	\$3,351,000	\$3,351,000	100.0%	(\$4,138,811)

Determination of Annual Pension Cost / Net Pension Obligation/(Asset) as of December 31, 2008	
Annual Required Contribution (w/ interest to middle of year)	\$3,600,000
Interest on Net Pension Obligation/(Asset)	(323,750)
Adjustment to Annual Required Contribution	<u>362,352</u>
Annual pension cost	3,635,302
Contributions made	3,600,000
Increase (Decrease) in Net Pension Obligation	38,602
Net Pension Obligation/(Asset) beginning of year	<u>(4,177,414)</u>
Net Pension Obligation/(Asset) end of year	(4,138,811)

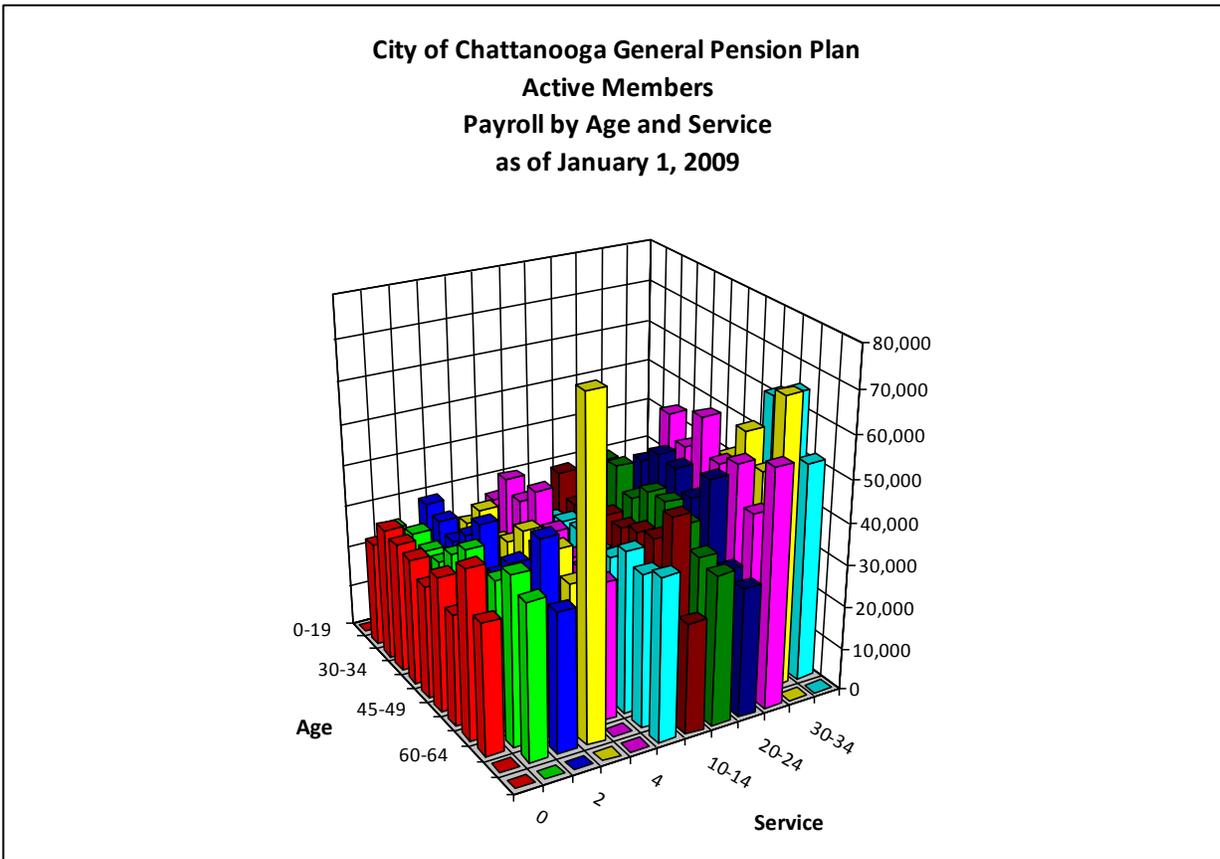
The table below summarizes certain information about this actuarial report.

Measurement date	January 1, 2009
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar
Remaining amortization period	30 Years (Open)
Asset valuation method	Market value, with 10 year recognition of investment gains and losses, not less than 70% or greater than 130% of market value.
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.50% - 5.50%
*Includes inflation at	3.00%
Cost of living adjustments	3.00%

Appendix: Detailed Data Summaries



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	1	0	0	0	0	0	0	0	0	0	0	1
20-24	13	2	2	4	1	0	0	0	0	0	0	0	22
25-29	23	19	19	6	1	8	1	0	0	0	0	0	77
30-34	13	21	9	9	2	30	10	0	0	0	0	0	94
35-39	18	17	13	12	7	45	28	16	0	0	0	0	156
40-44	17	7	9	16	7	37	42	42	14	1	0	0	192
45-49	13	16	12	7	6	52	47	37	37	17	0	0	244
50-54	11	12	17	14	11	47	43	50	33	36	8	0	282
55-59	7	20	5	6	5	46	40	49	32	18	22	13	263
60-64	1	6	6	5	2	24	22	30	21	19	10	8	154
65-69	0	4	1	3	0	5	9	4	2	4	1	2	35
70+	0	0	0	0	0	3	3	4	1	1	0	0	12
Total	116	125	93	82	42	297	245	232	140	96	41	23	1,532



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	24,526	0	0	0	0	0	0	0	0	0	0	24,526
20-24	25,147	17,216	32,062	22,136	21,200	0	0	0	0	0	0	0	24,328
25-29	31,597	28,968	30,432	28,298	32,651	28,316	29,456	0	0	0	0	0	30,049
30-34	31,019	27,821	28,522	34,436	40,184	33,758	38,853	0	0	0	0	0	32,295
35-39	30,221	28,007	32,578	29,594	37,634	31,857	33,786	43,017	0	0	0	0	32,885
40-44	26,851	32,737	37,959	32,482	42,514	34,123	38,034	44,145	43,947	53,779	0	0	37,644
45-49	32,171	36,774	29,182	37,863	36,002	34,907	36,761	39,300	47,993	48,301	0	0	38,655
50-54	26,557	29,001	34,849	36,835	32,667	32,689	36,340	43,204	47,344	57,777	46,949	0	40,371
55-59	40,124	35,830	36,478	39,303	33,042	34,172	38,393	43,687	42,963	49,529	55,591	62,204	42,309
60-64	31,021	40,027	46,307	34,548	32,792	38,421	39,777	41,213	49,972	52,094	48,848	65,169	44,610
65-69	0	37,109	32,927	78,588	0	36,271	47,348	36,657	31,875	43,165	68,229	51,667	45,120
70+	0	0	0	0	0	38,566	26,106	35,502	30,570	56,475	0	0	35,256
Total	29,996	31,524	33,333	34,977	35,748	33,933	37,417	42,338	46,228	52,764	52,568	62,319	38,566

Inactive Data Summary

Age	Number of Participants		
	Service Retired and Beneficiaries	Disabled	Terminated Vested
0-29	1	0	0
30-34	2	0	3
35-39	7	0	13
40-44	4	2	13
45-49	6	5	21
50-54	17	5	24
55-59	70	14	17
60-64	123	11	5
65-69	153	11	0
70-74	119	6	0
75-79	101	1	0
80-84	68	0	0
85-89	40	0	0
90-94	20	0	0
95+	6	0	0
Total Participants	737	55	96

Age	Average Monthly Benefit		
	Service Retired and Beneficiaries	Disabled	Terminated Vested
0-29	\$ 155	\$ 0	\$ 0
30-34	502	0	356
35-39	361	0	332
40-44	478	852	461
45-49	818	1,112	739
50-54	1,072	919	881
55-59	1,318	661	604
60-64	1,198	512	355
65-69	1,132	545	0
70-74	1,174	956	0
75-79	1,203	912	0
80-84	1,011	0	0
85-89	924	0	0
90-94	697	0	0
95+	258	0	0
Total Participants	\$ 1,118	\$ 716	\$ 626

Benefit Form Elections

Retired Participants	
Straight Life Annuity	293
10 Year Certain & Life	80
100% Joint & Survivor	98
50% Joint & Survivor	52
100% Joint & Survivor with Pop-Up	50
50% Joint & Survivor with Pop-Up	31
Total Retired Participants	604
Disabled Participants	
Straight Life Annuity	30
10 Year Certain & Life	5
100% Joint & Survivor	16
50% Joint & Survivor	1
100% Joint & Survivor with Pop-Up	2
50% Joint & Survivor with Pop-Up	1
Total Disabled Participants	55