

---

**Firemen's Annuity and Benefit  
Fund of Chicago, Illinois**

**Actuarial Valuation Report**

**For the Year Ending December 31, 2005**

**April 2006**

**GRS**

Gabriel Roeder Smith & Company

---



April 12, 2006

Retirement Board of the  
Firemen's Annuity and Benefit Fund of Chicago  
20 South Clark, Suite 1400  
Chicago, IL 60603

### **Actuarial Certification**

Dear Members of the Board:

At your request, we have performed an actuarial valuation for the Firemen's Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2005. This valuation has been performed to measure the funding status of the Fund and determine the contribution levels for 2006. In addition, it includes disclosure information required under GASB Statement No. 25 and Statement No. 27. The assumptions and methods used were selected by the actuary and meet the parameters set for the disclosure presented in the financial section by Government Accounting Standards Board (GASB) Statement No. 25. These actuarial valuations of the Fund are performed annually.

We have provided supporting schedules for the actuarial section of the comprehensive annual financial report, including:

- Schedule of Active Member Data
- Retirements and Beneficiaries Added to and Removed from Rolls
- Solvency (Termination) Test
- Analysis of Financial Experience

We have also provided the following schedules in the financial sections of the report. We relied on information from the prior actuary for years before 1999.

- Schedule of Funding Progress
- Schedule of Employer Contributions

This valuation is based upon:

- a) **Data relative to the members of the Fund** — Data for active members and persons receiving benefits from the fund was provided by the Fund's staff. We have tested this data for reasonableness.
- b) **Asset Values** — The values of assets of the Fund were provided by the Fund's staff. Actuarial value of assets was used to develop actuarial results for the State-reporting basis, as well as for GASB Statement No. 25 and Statement No. 27.
- c) **Actuarial Method** — The actuarial method utilized by the Fund is the Entry-Age Actuarial Cost Method. The objective of this method is to amortize the costs of Fund benefits over the entire career of each member as a level percentage of compensation. Any Unfunded Actuarial Accrued Liability (UAAL) under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL.
- d) **Actuarial Assumptions** — The discount rate used to value the liabilities for the health insurance supplement was changed from 8.0 percent to 4.5 percent. All other actuarial assumptions remain unchanged from the prior valuation. The assumptions used are set forth in Appendix 4: Actuarial Methods and Assumptions of the Valuation Report.

The funding objective is to provide employer and employee contributions sufficient to provide the benefits of the Fund when due. The provision of State Law establishing the Fund constrains employer contributions to be 2.26 times the employee contribution level in the second prior fiscal year. Thus, with an administrative lag, the employer contribution is designed to match the employee contribution in a 2.26:1 relationship. The most recent actuarial valuation of the Fund on the State reporting basis shows that a ratio of 4.54:1 is needed to adequately finance the Fund.

The valuation results set forth in this report are based on the data and actuarial techniques described above, and upon the provisions of the Fund as of the valuation date. Based on these items, we certify these results to be true and correct.

To the best of our knowledge this report is complete and accurate and was conducted in accordance with standards of practice promulgated by the Actuarial Standards Board and in compliance with the City Ordinance. The actuarial assumptions used for the valuation produce results which, in the aggregate, are reasonable. This valuation was produced under the supervision of a member of the Academy of Actuaries with significant experience in valuing public employee retirement systems.

Gabriel, Roeder, Smith and Company



Michael R. Kivi, FSA  
Senior Consultant



Alex Rivera, FSA  
Senior Consultant

# TABLE OF CONTENTS

---

<b>Summary of Valuation Results</b>		<b>1</b>
<b>Appendix 1</b>	<b>Results of Actuarial Valuation</b>	
Table 1	Summary	9
Table 2	Development of Annual Required Contribution Under GASB #25 and GASB #43 for 2006	11
Table 3	Reconciliation of Unfunded Liability	12
Table 4	Summary of Basic Actuarial Values	13
Table 5	History of Recommended Employer Multiples	14
Table 6	Ordinary Death Benefit Reserve	15
Table 7	Summary of Reserves	16
Table 8	Actuarial Accrued Liability Prioritized Solvency Test	17
<b>Appendix 2</b>	<b>Assets of the Plan</b>	<b>18</b>
Table 9	Reconciliation of Asset Values	19
Table 10	Development of Actuarial (Market-Related) Value of Assets	20
<b>Appendix 3</b>	<b>Data Reflecting Plan Members</b>	
Exhibit A	Summary of Changes in Active Participants	21
Exhibit B	Summary of Changes in Annuitants and Beneficiaries	22
Exhibit C	Total Lives and Annual Salaries Classified by Age and Years of Service as of 12/31/2005	
Part I	Active Male Participants	23
Part II	Active Female Participants	24
Part III	All Active Participants	25

## TABLE OF CONTENTS (CONT'D)

---

### Appendix 3 (Cont'd)

Exhibit D	Showing Number of Refund Payments Made During Year for Fiscal Year Ending 12/31/2005	
Part I	Male Employees	26
Part II	Female Employees	27
Exhibit E	Showing Statistics on Service Retirement Annuities Classified by Age as of 12/31/2005	28
Exhibit F	Showing Statistics on Widow's Annuities Classified by Age as of 12/31/2005	29
Exhibit G	Showing Statistics on Miscellaneous Annuities for Fiscal Year Ending 12/31/2005	30
Exhibit H	Showing Participants Receiving Duty Disability Classified by Age and Length of Service as of 12/31/2005	
Part I	Male	31
Part II	Female	31
Exhibit I	Showing Participants Receiving Ordinary Disability Classified by Age and Length of Service as of 12/31/2005	
Part I	Male	32
Part II	Female	32
Exhibit J	Showing Participants Receiving Occupational Disease Disability Classified by Age and Length of Service as of 12/31/2005	
Part I	Male	33
Part II	Female	33
Exhibit K	History of Average Annual Salaries	34
Exhibit L	New Annuities Granted During 2005	35
Exhibit M	Retirees and Beneficiaries by Type of Benefit	36

## TABLE OF CONTENTS (CONT'D)

---

### Appendix 3 (Cont'd)

Exhibit N	Average Employee Retirement Benefits Payable	37
Exhibit O	History of Annuities 1977-2005	
	Part I Employee Annuitants (Male and Female)	38
	Part II Spouse Annuitants (not including compensation)	39
Exhibit P	History of Retirees and Beneficiaries Added to and Removed from Benefit Payroll	40
<b>Appendix 4</b>	<b>Actuarial Methods and Assumptions</b>	
	Actuarial Methods and Assumptions	41
<b>Appendix 5</b>	<b>Summary of Provisions of the Fund</b>	
	Summary of Principal Eligibility and Benefit Provisions	46
<b>Appendix 6</b>	<b>Legislative Changes 1968 through 2005</b>	53
<b>Appendix 7</b>	<b>Additional Exhibits — GASB Disclosures</b>	
Exhibit A-1	GASB #25 and #27 Disclosures	64
Exhibit A-2	Schedule of Funding Progress for GASB #25	65
Exhibit A-3	Schedule of Employer Contributions for GASB #25	66
Exhibit A-4	Supplementary Information for GASB #25 and GASB #27	67
Exhibit A-5	Annual Pension Cost and Contributions Made for GASB #27	68
Exhibit A-6	Pension Cost Summary for GASB #27	69
Exhibit A-7	Development of Net Pension Obligation (NPO) at January 1, 1997	70

## SUMMARY OF VALUATION RESULTS

---

This report sets forth the results of the actuarial valuation of the Firemen's Annuity and Benefit Fund of the City of Chicago ("Fund") as of December 31, 2005. The purposes of this valuation are:

1. To develop the minimum actuarially determined contribution for 2006.
2. To develop the annual required contributions (ARC) under GASB #25 and GASB #43.
3. To develop the annual pension cost under GASB #27.
4. To review the funding status of the Fund.

The funding status, in basic terms, is a comparison of the fund's liabilities to assets expressed as either an unfunded liability or as a ratio of assets to liabilities. This comparison can be measured in various ways. Fund liabilities are dependent on the actuarial assumptions and actuarial cost method. Fund assets can be measured at market value, book value, or some variation to smooth the fluctuations that invariably occur from year to year.

For State reporting, as well as for Fund and City financial reports, the funding status is measured using liabilities under the Entry Age Normal funding method and the Actuarial (Market-Related) Value of Assets.

The Actuarial (Market-Related) Value of Assets is determined from market value with investment gains and losses smoothed over a five-year period. The actuarial assumptions used to determine the liabilities are the same in all three measures.

### **Comments on Results**

For State reporting purposes, the minimum actuarially determined contribution for the year ending December 31, 2006 is \$196.4 million including estimated employee contributions of \$32.1 million. This is 57.5% of the total payroll for the Fund and a \$3.3 million increase over the minimum actuarial contribution for 2005.

The annual required contribution (ARC) under GASB #25 for the year ending December 31, 2006, is \$160.2 million, which is for pension benefits only. This amount is net of employee contributions of \$32.1 million.

GASB #43 requires the calculation of a separate ARC for Other Postemployment Benefits (OPEB) beginning with the Fund's 2006 fiscal year. The ARC for the 2006 fiscal year is determined in the actuarial valuation as of December 31, 2005. The OPEB ARC for the fiscal year ending December 31, 2006, is \$4.1 million.

Because of the requirements of GASB #43, there are some differences between the calculation of the ARC for pension benefits and the ARC for OPEB. These differences are summarized below.

	<u>Pension ARC</u>	<u>OPEB ARC</u>
<b>Investment Return</b>	8.00 % per year	4.50% per year
<b>Assets</b>	5-year smoothed market	No assets (Pay-as-you-go)
<b>Amortization Period</b>	40 years	30 years

## SUMMARY OF VALUATION RESULTS (CONT'D)

---

GASB #43 requires that the investment return assumption (or “discount rate”) used to value OPEB liabilities be based on the estimated long-term yield on the investments expected to be used to finance the payment of benefits. The investment return assumption of 4.50 percent reflects the fact that OPEB liabilities are considered to be funded on a pay-as-you-go basis. That is, the health insurance supplement is financed with current contributions, and no separate healthcare asset account exists to pay the health insurance supplement.

Beginning with the actuarial valuation as of December 31, 2006, GASB #25 will require the use of a 30-year amortization period to determine the pension ARC, which is already required for the OPEB ARC beginning with this valuation.

The Unfunded Actuarial Liability increased from \$1.61 billion to \$1.68 billion during the year, resulting in a change in funding ratio from 42.33% percent to 41.75% percent. The increase in the Unfunded Actuarial Liability is largely attributable to a loss on the Actuarial Value of Assets and changes in the Actuarial Assumptions used to value the healthcare supplement.

Based on the Market Value of Assets, the Unfunded Actuarial Liability increased from \$1.59 billion to \$1.61 billion, and the funded ratio increased from 43.18 percent to 44.21 percent.

Actuarially determined contribution requirements increased and funded ratios (based on market-related asset values) decreased from the prior year levels. A number of factors combined to produce this result.

- The employer cost in excess of actual contributions was approximately \$60.5 million.
- Plan assets earned more than the assumed 8.0% return. However, there was a loss on the market-related value of assets of \$32.2 million due to recognition of prior year losses compared to a gain of \$17.3 million on market value of assets.

A more thorough examination of these and other factors can be found in the Reconciliation of Unfunded Liability section and the gain/loss calculation of Table 3.

A summary of the primary results of this valuation is shown in the following table.



## SUMMARY OF VALUATION RESULTS (CONT'D)

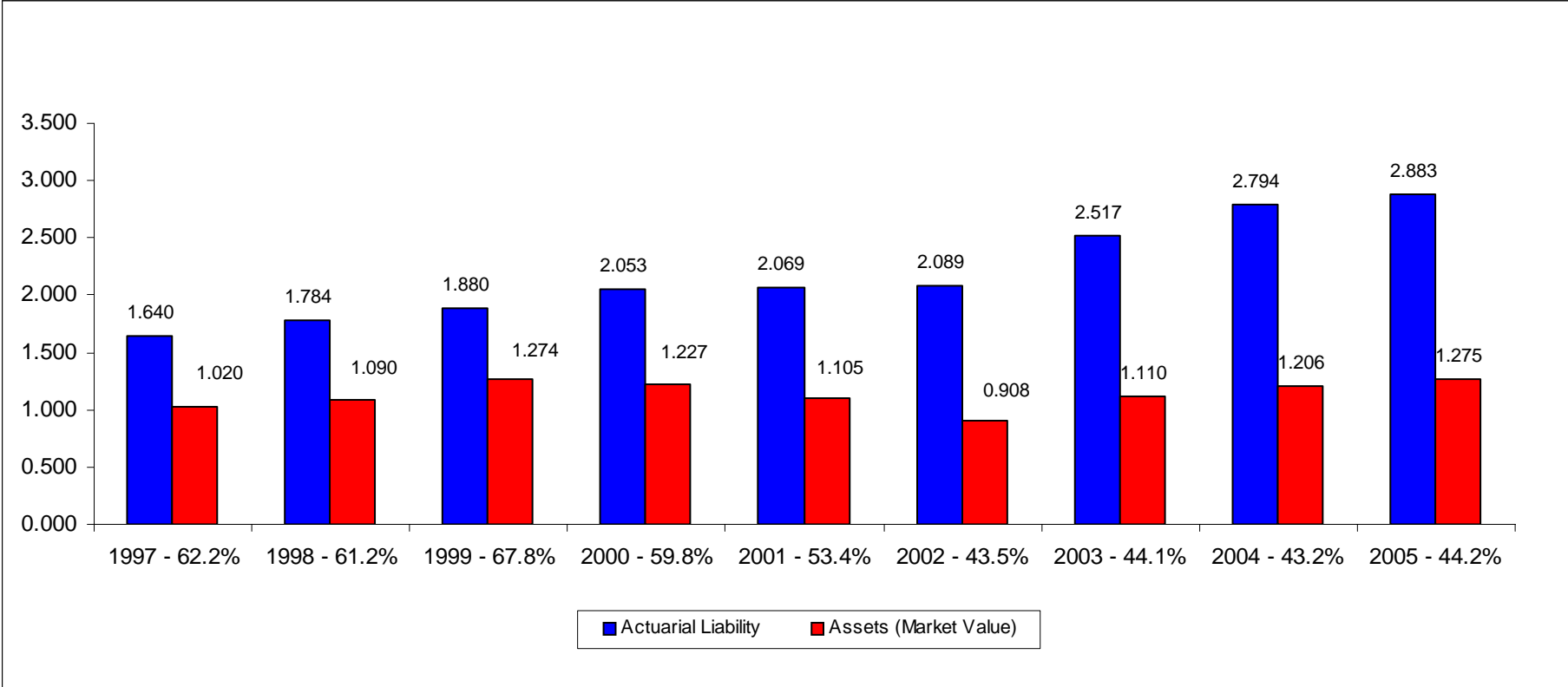
	December 31, 2004		December 31, 2005	
	\$ in Millions	% of Pay <sup>1</sup>	\$ in Millions	% of Pay <sup>1</sup>
<b>Contribution Levels</b>				
Minimum Actuarially Determined Contribution (State Reporting)	\$ 193.1	57.74	\$ 196.4	57.55
Annual Required Contribution <sup>2</sup> (GASB 25 and 43)	161.7	48.35	164.3	48.15
<b>Funding Status -- State/GASB #25</b>				
Market-Related Value of Assets	\$ 1,182.6	353.62	\$ 1,203.7	352.72
Actuarial Liability	2,793.5	835.32	2,882.9	844.81
Funding Ratios	42.33%	N/A	41.75%	N/A
<b>Funding Status -- Market Value</b>				
Market Value of Assets	\$ 1,206.2	360.67	\$ 1,274.7	373.52
Actuarial Liability	2,793.5	835.32	2,882.9	844.81
Funding Ratios	43.18%	N/A	44.21%	N/A
<b>Funding Status -- Book Value</b>				
Book Value of Assets	\$ 995.6	297.71	\$ 1,071.4	313.96
Actuarial Liability	2,793.5	835.32	2,882.9	844.81
Funding Ratios	35.64%	N/A	37.16%	N/A

<sup>1</sup>Payroll for 2004 was \$334.4 million and for 2005 was \$341.3 million.

<sup>2</sup>ARC for the following fiscal year. The 2006 ARC is the total ARC under GASB #23 and GASB #45. The 2006 ARC for pension is \$160,246,525 and the 2006 ARC for OPEB is \$4,075,175.

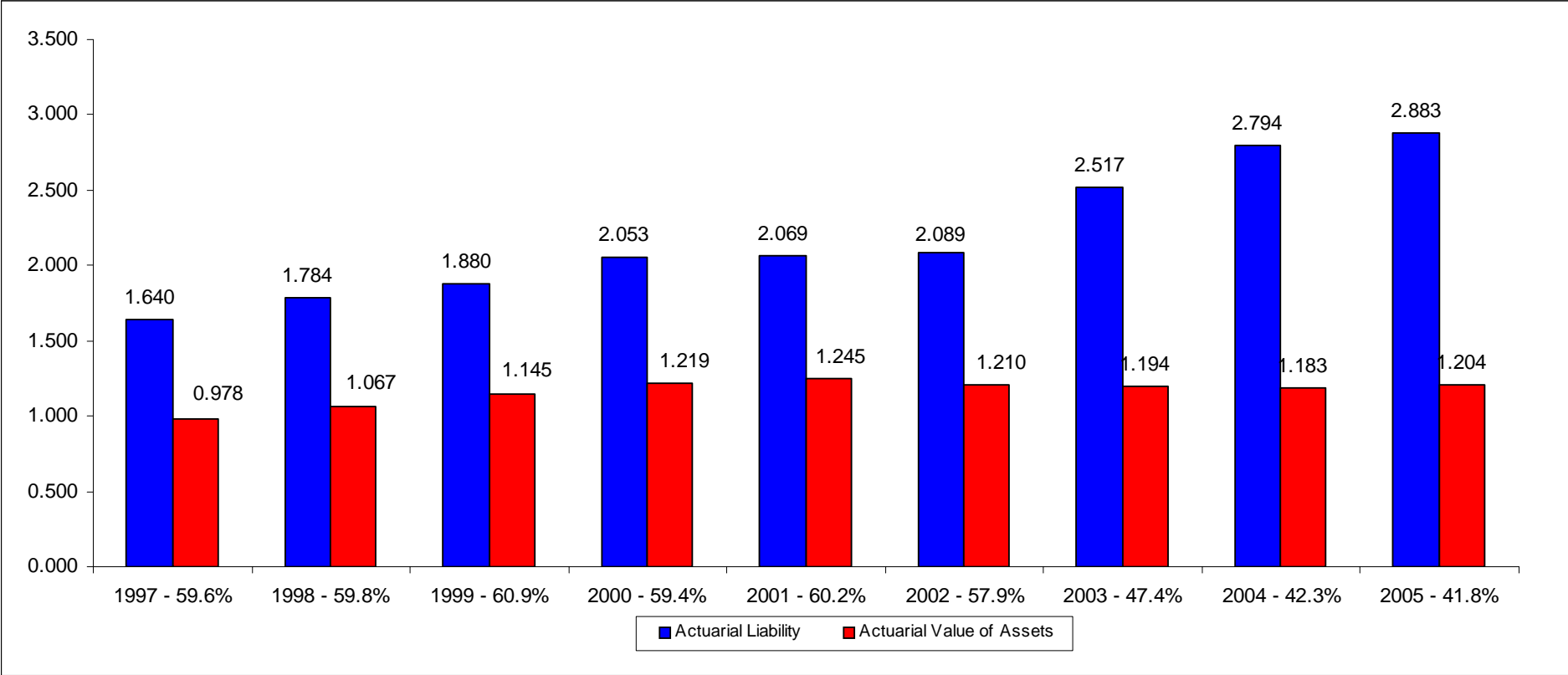
**SUMMARY OF VALUATION RESULTS (CONT'D)**

**COMPONENTS OF FUNDING RATIO  
BASED ON MARKET VALUE  
(\$ IN BILLIONS)**



**SUMMARY OF VALUATION RESULTS (CONT'D)**

**COMPONENTS OF FUNDING RATIO  
GASB #25 / STATE REPORTING  
(\$ IN BILLIONS)**



## SUMMARY OF VALUATION RESULTS (CONT'D)

---

### Participants

The major characteristics of the data on the members of the Fund are summarized as follows:

	<u>December 31, 2004</u>	<u>December 31, 2005</u>
<b>Active Participants</b>		
Number	4,856	4,999 <sup>1</sup>
Average Age	44.0	44.0
Average Service	15.2	15.0
Average Annual Salary	\$68,868	\$68,264
<b>Retirees</b>		
Number	2,441	2,442
Average Age	71.2	71.3
Average Monthly Benefit	\$ 3,806	\$ 3,993
<b>Survivors</b>		
Number	1,434	1,436 <sup>2</sup>
Average Age	75.7	75.7
Average Monthly Benefit	\$ 1,365	\$ 1,512

<sup>1</sup> Includes seven participants on ordinary disability who continue to accrue benefit service.

<sup>2</sup> Includes one parent annuitant.

Total participants receiving benefits under the Fund, including disability, widow, and children, increased 0.1% during 2005 from 4,353 to 4,357. Total expenditures for these benefits increased from \$156.4 million in 2004 to \$166.1 million during 2005, or 6.2%.

### Changes in Provisions of the Fund

There were no changes to the provisions of the Fund since the last valuation.

### Analysis of Actuarial Assumptions

Actuarial assumptions are used to project future demographic and economic expectations for purposes of valuing the liabilities of the plan. The assumptions should reflect current patterns. However, their primary orientation is the long-term outlook for each factor affecting the valuation. Thus, while actual experience will fluctuate over the short run, actuarial assumptions are chosen in an attempt to model the future long-term experience.

## SUMMARY OF VALUATION RESULTS (CONT'D)

---

There are two general types of actuarial assumptions:

1. Demographic Assumptions - reflect the flow of participants into and out of a retirement system, and
2. Economic Assumptions - reflect the effect of the economic climate on a retirement system.

Demographic assumptions can be readily studied over recent plan experience. Economic assumptions can be studied against recent experience; however, future experience is more likely to be a result of outside factors than of plan specifics. The most significant demographic assumptions are: active turnover, retirement, and post-retirement mortality. The most significant economic assumptions are: pay increases, investment return, and inflation. Other actuarial assumptions include: disability incidence, active mortality, and percent married.

### **Asset Valuation Method**

The method used to develop the Fund's Actuarial Value of Assets is as follows: In years when Fund assets earn above 8 percent (i.e., experience gain) or below 8 percent (i.e., experience loss) the gain (or loss) will be gradually recognized over five years. This approach both smoothes the Fund's level of contribution and insures the Fund's assets will track the market value of assets.

### **2005 Experience Analysis**

#### **Pay Increase**

The current salary increase assumption consists of a 4.0 percent base increase with an additional service-based increase. The overall effect is an annual increase of approximately 5.0 percent. When comparing members active in both 2004 and 2005 the average salary increase was 2.3 percent. This was 2.7 percent below our aggregate assumption of 5.0 percent resulting in an actuarial gain of approximately \$40.7 million, or 1.4 percent of total liabilities.

#### **Investment Return**

The Fund had an investment gain in 2005 of \$17.3 million relative to the 8 percent expected rate of return on a market value basis. The loss on the Actuarial (Market-Related) Value of Assets relative to the 8 percent expected rate of return was \$32.2 million due to the recognition of deferred investment gains and losses.

#### **Changes in Plan Provisions**

The current valuation reflects no changes in benefits. However, liabilities were increased due to the reclassification of several widows as compensation widows as a result of the Bertucci court option which was reported in the prior valuation. The reclassification increased liabilities by \$11.7 million or 0.4 percent of total liabilities.

#### **Changes in Actuarial Assumptions**

The discount rate used to value OPEB liabilities was decreased from 8.0 percent to 4.5 percent. This change increased liabilities by approximately \$12.4 million.

## SUMMARY OF VALUATION RESULTS (CONT'D)

---

### **Other**

The combination of retirements, disablements, and deaths resulted in a net actuarial loss of \$17.3 million. Gains and losses from all other sources, including new hires and programming modifications, resulted in a net gain of \$25.1 million. The net actuarial loss is about 0.9 percent of the liabilities at December 31, 2005, which is well within the range of reasonable variation.

### **Conclusion**

Based on our analysis of the recent experience and expectation of the future, we believe that the current assumption set represents a reasonable set of actuarial assumptions. Table 3 of Appendix 1 shows a more detailed development of the actuarial gains and losses for the plan years ending December 31, 2004 and December 31, 2005.

# **Appendix 1**

## **Results of Actuarial Valuation**



**TABLE 1**  
**SUMMARY**

	<u>December 31,</u> <u>2004</u>	<u>December 31,</u> <u>2005</u>
<b><u>Assets</u></b>		
Market Value - Beginning of Year	\$1,109,560,535	\$1,206,177,759
<b><u>Income</u></b>		
Investment Income Net Expenses	\$139,496,742	\$112,016,356
Employer Contributions	55,532,454	90,128,915
Employee Contributions	37,734,425	35,696,863
Miscellaneous	24,322,475	456,518
Subtotal	<u>\$257,086,096</u>	<u>\$238,298,652</u>
 <u>Outgo (Refunds, Benefits, &amp; Administration)</u>	 <u>\$160,468,872</u>	 <u>\$ 169,818,928</u>
 Market Value - End of Year	 \$1,206,177,759	 \$1,274,657,483
Actuarial Value - End of Year	1,182,578,954	1,203,654,052
Book Value - End of Year	995,613,912	1,071,406,121
 <b><u>Members</u></b>		
Active	4,856	4,999
Retirees	2,441	2,442
Survivors	1,434 <sup>2</sup>	1,436 <sup>2</sup>
Disabilities	357	361
Children	114	111
 <b><u>Payroll Data</u></b>		
Valuation Payroll <sup>1</sup>	\$ 334,423,753	\$ 341,252,492
Average Salary	68,868	68,264

<sup>1</sup> The valuation payroll includes compensation for seven ordinary disability participants. They continue to accrue benefit service and hence additional liability while on ordinary disability.

<sup>2</sup> Includes Widow, Compensation, and Parent Annuitants.



**TABLE 1 (CONT'D)**  
**SUMMARY**

	<b>December 31, 2004</b>	<b>December 31, 2005</b>
<b><u>Actuarial Values</u></b>		
<b><u>Funding - State Basis</u></b>		
Actuarial Liability	\$2,793,524,355	\$2,882,935,717
Assets - Actuarial Value - Net	1,182,578,954	1,203,654,052
Unfunded Liability	1,610,945,401	1,679,281,665
Funded Ratio	42.33%	41.75%
Actuarially Required Total Contribution <sup>1</sup>	\$193,111,835	\$196,379,947
Deficiency in Required Contribution (est.)	65,272,611	79,981,820
Required Employer Contribution Multiple	5.19	4.54
<b><u>Termination Values</u></b>		
Liability	\$2,032,135,444	\$2,154,198,274
Deficiency	849,556,490	950,544,222
Quick Ratio	58.19%	55.87%
<b><u>GASB #25 and #43 Values</u></b>		
Actuarial Liability	\$2,793,524,355	\$2,882,935,717
Assets - Actuarial Value	1,182,578,954	1,203,654,052
Unfunded Liability	1,610,945,401	1,679,281,665
Funded Ratio	42.33%	41.75%
Annual Required Contribution (ARC) <sup>2</sup>	161,696,388	164,321,700
<b><u>Market Values</u></b>		
Actuarial Liability	\$2,793,524,355	\$2,882,935,717
Assets - Market Value	1,206,177,759	1,274,657,483
Unfunded Liability	1,587,346,596	1,608,278,234
Funded Ratio	43.18%	44.21%

<sup>1</sup>Includes projected employee contributions of \$31,415,447 for December 31, 2004, and \$32,058,247 for December 31, 2005.

<sup>2</sup>ARC for the following fiscal year. The 2006 ARC is the total ARC under GASB #23 and GASB #45. The 2006 ARC for pension is \$160,246,525 and the 2006 ARC for OPEB is \$4,075,175.

**TABLE 2**  
**DEVELOPMENT OF ANNUAL REQUIRED**  
**CONTRIBUTION UNDER GASB #25 AND GASB #43 FOR 2006<sup>1</sup>**

	<b>Pension</b>	<b>Health Ins. Supplement</b>	<b>Total</b>
(1) Normal Cost	\$ 57,835,993	\$ 1,384,294	\$ 59,220,287
(2) Actuarial Accrued Liability (AAL)	\$ 2,838,698,561	\$ 44,237,156	\$ 2,882,935,717
(3) Unfunded AAL (UAAL)			
(a) Actuarial Value of Assets	\$ 1,203,654,052	\$ -	\$ 1,203,654,052
(b) UAAL [2-3(a)]	\$ 1,635,044,509	\$ 44,237,156	\$ 1,679,281,665
(4) Amortization (Level \$) Payable at Beginning of Year <sup>2</sup>	\$ 126,958,423	\$ 2,598,839	\$ 129,557,262
(5) Minimum Actuarially Calculated Contribution			
(a) Interest Adjustment for Semimonthly Payment	\$ 7,510,356	\$ 92,042	\$ 7,602,398
(b) Total Minimum Contribution [1+4+5(a)]; but not less than zero	\$ 192,304,772	\$ 4,075,175	\$ 196,379,947
(c) Total Minimum Contribution (Percent of Pay)	56.35%	1.19%	57.55%
(6) Estimated Member Contributions	\$ 32,058,247	\$ -	\$ 32,058,247
(7) Annual Required Contribution (ARC)			
(a) Annual Required Contribution [5(b)-6]	\$ 160,246,525	\$ 4,075,175	\$ 164,321,700
(b) Annual Required Contribution (Percent of Pay)	46.96%	1.19%	48.15%
(8) Estimated City Contribution (after 4% loss)	\$ 83,087,049	\$ 2,192,752 <sup>3</sup>	\$ 85,279,801
(9) City Contribution Deficiency/(Excess)			
(a) in Dollars [(7(a)-8)]	\$ 77,159,476	\$ 1,882,423	\$ 79,041,899
(b) as a Percentage of Pay	22.61%	0.55%	23.16%
(10) Combined City/Member Contributions Deficiency/(Excess)			
(a) in Dollars [5(b)-6-8]	\$ 77,159,476	\$ 1,882,423	\$ 79,041,899
(b) as a Percentage of Pay	22.61%	0.55%	23.16%

<sup>1</sup> Pension liabilities were discounted at 8.0% per year, and OPEB liabilities were discounted at 4.5% per year.

<sup>2</sup> Pension UAAL is amortized over a 40-year period. The health insurance supplement is amortized over a 30-year period.

<sup>3</sup> Represents expected health insurance supplemental benefits for 2006.

**TABLE 3**  
**RECONCILIATION OF UNFUNDED LIABILITY**

---

	<b>2004</b>	<b>2005</b>
<u>Unfunded Actuarial Accrued Liability - Beginning of Year</u>	\$1,323,260,340	\$1,610,945,401
Gains (Losses) During the Year Attributable to:		
Employer Cost in Excess of Contributions	(70,306,036)	(60,494,782)
Gain (Loss) on Investment Return	(64,535,198)	(32,194,356)
Gain (Loss) from Salary Changes	29,032,651	40,654,533
Gain (Loss) from Demographic Assumptions	(20,163,645)	(17,264,774)
Gain (Loss) from Transfer from MEABF	24,201,945	
Gain (Loss) from Additional Bertucci Liability	-	(11,681,326)
Gain (Loss) from Assumption Changes	-	(12,434,686)
Gain (Loss) from Law Changes	(172,545,026)	-
Gain (Loss) from All Other Sources	(13,369,752)	25,079,127
Composite Actuarial Gain (Loss)	(\$287,685,061)	(\$68,336,264)
<u>Unfunded Actuarial Accrued Liability - End of Year</u>	\$1,610,945,401	\$1,679,281,665

**TABLE 4**  
**SUMMARY OF BASIC ACTUARIAL VALUES**

	<b>APV of Projected Benefits</b>	<b>Actuarial Accrued Liability (AAL)</b>
<u>(1) Values for Active Members</u>	\$1,813,113,700	\$1,196,558,095
<u>(2) Values for Inactive Members</u>		
(a) Retired	1,225,934,727	1,225,934,727
(b) Spouse Annuitants	160,643,606	160,643,606
(c) Compensation Widows	58,439,642	58,439,642
(d) Ordinary Disability	3,038,660	3,038,660
(e) Occupational Disease Disability	66,794,706	66,794,706
(f) Duty Disability	148,313,482	148,313,482
(g) Inactive (Deferred Vested)	16,963,324	16,963,324
(h) Children	6,155,478	6,155,478
(i) Parent Annuitants	93,997	93,997
Total for Inactives	\$1,686,377,622	\$1,686,377,622
<u>(3) Grand Totals</u>	\$3,499,491,322	\$2,882,935,717
<u>(4) Normal Cost for Active Members</u>	\$59,220,287	
<u>(5) Actuarial Present Value of Future Compensation</u>	\$3,529,704,045	

**TABLE 5**  
**HISTORY OF RECOMMENDED EMPLOYER MULTIPLES**

Year of Report	Statutory Multiple	Normal Cost Plus Interest	Normal Cost Plus 40-Year Amortization	
			Level \$	Level % of Salary
1982 <sup>1,2</sup>	2.26	4.04	4.21	3.05
1983 <sup>1,2</sup>	2.26	4.66	4.84	3.71
1984	2.26	4.89	5.08	3.86
1985 <sup>2</sup>	2.26	5.07	5.27	4.03
1986 <sup>1</sup>	2.26	4.70	4.86	3.71
1987 <sup>1</sup>	2.26	4.39	4.54	3.47
1988	2.26	4.53	4.68	3.58
1989 <sup>1,2</sup>	2.26	4.39	4.52	3.41
1990 <sup>1,2</sup>	2.26	4.41	4.55	3.43
1991	2.26	4.55	4.69	3.53
1992 <sup>2</sup>	2.26	4.75	4.89	3.69
1993 <sup>2</sup>	2.26	4.89	5.03	3.81
1994 <sup>1,2</sup>	2.26	4.92	5.09	3.71
1995 <sup>2</sup>	2.26	5.16	5.33	3.78
1996	2.26	5.02	5.19	3.78
1997 <sup>1,2,3</sup>	2.26	3.95	4.08	3.00
1998 <sup>2,4</sup>	2.26	4.31	4.22	2.91
1999	2.26	3.56	3.49	2.41
2000 <sup>1</sup>	2.26	4.39	4.30	2.99
2001 <sup>4</sup>	2.26	4.61	4.44	3.12
2002	2.26	4.07	4.19	2.93
2003 <sup>1,2</sup>	2.26	4.90	5.08	3.18
2004 <sup>2,5</sup>	2.26	4.99	5.19	3.22
2005 <sup>1,6,7</sup>	2.26	4.35	4.54	3.09

<sup>1</sup> Change in actuarial assumptions.

<sup>2</sup> Change in benefits.

<sup>3</sup> Change in asset valuation method to GASB.

<sup>4</sup> Change in actuary.

<sup>5</sup> To reflect long term funding requirements, we have excluded \$10,182,825 from the 2003 employee contribution in the calculation of the recommended multiples. This amount is employee contributions for the retroactive pay increases.

<sup>6</sup> Amortization for OPEB is based on a 30-year period, and pension is based on a 40-year period.

<sup>7</sup> There was a significant decrease in the multiple from 2004 to 2005. This change is primarily due to the significant increase in employee contributions used to calculate the multiple because of retroactive pay increases. The employee contributions used in this calculation increased from \$32,482,563 for 2004 to \$37,734,425 for 2005.

**TABLE 6**  
**ORDINARY DEATH BENEFIT RESERVE**

---

**ASSETS**

Fund Balance	\$ (8,049,339)
Present Values of Future Contributions:	
Contributions by Members at \$30.00 a Year	1,579,764
Annual City Contribution of \$142,000	1,495,809
Unfunded Liability	20,246,130
<b>TOTAL ASSETS</b>	<b>\$ 15,272,364</b>

**LIABILITIES**

Present Value of Future Death Benefits (3%, Plan Mortality Basis)	
Active Members	4,978,592
Retired Members	10,293,772
<b>TOTAL LIABILITIES</b>	<b>\$ 15,272,364</b>

Note: Benefits are also included in the accrued liability and valued on the actuarial assumptions.

**TABLE 7**  
**SUMMARY OF RESERVES**

---

	<u>2004</u>	<u>2005</u>
Prior Service Annuity Reserve	\$ 1,043,519,902	\$ 1,093,501,679
City Contribution Reserve	524,209,444	580,983,152
Annuity Payment Reserve	516,068,486	551,718,149
Salary Deduction Reserve	434,873,222	481,645,463
Death Benefit Reserve	(7,266,357)	(8,049,339)
Ordinary Disability Reserve	(1,897)	(231,693)
Supplementary Payment Reserve	1,236,805	921,562
Gift Reserve	2,026,672	2,418,416
Reserve (Deficit)	<u>(1,308,488,518)</u>	<u>(1,428,249,905)</u>
Total Net Assets for Pension Benefits	\$1,206,177,759	\$1,274,657,483

**TABLE 8**  
**ACTUARIAL ACCRUED LIABILITY**  
**PRIORITIZED SOLVENCY TEST**

Valuation Date 12/31	(1)	(2)	(3)	Actuarial Value of Assets	Portion (%) of Present Value Covered by Assets		
	Active Member Contributions	Retirees and Beneficiaries	Active Members (ER Financed Portion)		(1)	(2)	(3)
1985 <sup>a,b</sup>	\$152,857,789	\$ 363,559,004	\$389,856,354	\$ 370,219,440	100.00%	59.79%	0.00%
1986 <sup>a,b</sup>	159,247,413	409,282,863	393,153,564	440,687,231	100.00%	68.76%	0.00%
1987 <sup>a,b</sup>	171,040,140	442,476,049	384,316,705	483,965,269	100.00%	70.72%	0.00%
1988	176,885,164	500,141,377	359,459,177	511,237,886	100.00%	66.85%	0.00%
1989 <sup>a,b</sup>	180,224,846	533,989,887	361,889,786	554,780,349	100.00%	70.14%	0.00%
1990 <sup>a,b</sup>	203,385,446	551,819,011	388,646,637	562,765,339	100.00%	65.13%	0.00%
1991 <sup>b</sup>	220,541,857	582,545,890	429,281,414	593,664,230	100.00%	64.05%	0.00%
1992	233,769,778	620,585,314	413,794,955	636,208,355	100.00%	64.85%	0.00%
1993 <sup>b</sup>	247,328,526	652,460,861	401,268,935	680,145,547	100.00%	66.34%	0.00%
1994	231,721,857	820,223,870	388,977,064	712,992,314	100.00%	58.68%	0.00%
1995 <sup>b</sup>	284,613,679	890,790,702	356,835,156	787,000,898	100.00%	56.40%	0.00%
1996	302,854,182	928,790,813	344,144,574	845,432,187	100.00%	58.42%	0.00%
1997 <sup>a,b</sup>	320,757,406	992,967,015	326,296,251	978,313,319	100.00%	66.22%	0.00%
1998 <sup>b,c</sup>	335,026,373	1,075,922,284	372,620,521	1,066,891,190	100.00%	68.02%	0.00%
1999	357,739,707	1,146,375,517	375,551,644	1,145,215,019	100.00%	68.69%	0.00%
2000 <sup>a</sup>	354,336,276	1,279,911,268	419,092,931	1,219,486,962	100.00%	67.59%	0.00%
2001 <sup>c</sup>	379,067,821	1,294,672,267	394,977,813	1,245,129,955	100.00%	66.89%	0.00%
2002	394,531,369	1,329,341,162	364,833,686	1,209,768,204	100.00%	61.33%	0.00%
2003 <sup>a,b</sup>	422,940,367	1,458,548,217	635,779,523	1,194,007,767	100.00%	52.87%	0.00%
2004 <sup>b</sup>	443,541,204	1,588,594,240	761,388,911	1,182,578,954	100.00%	46.52%	0.00%
2005 <sup>a</sup>	467,820,652	1,686,377,622	728,737,443	1,203,654,052	100.00%	43.63%	0.00%

<sup>a</sup> Change in actuarial assumptions.

<sup>b</sup> Change in benefits.

<sup>c</sup> Change in actuary.



## **Appendix 2**

### **Assets of the Plan**



## **ASSETS OF THE PLAN**

---

The book value of the plan assets, net of accounts payable, increased from \$996 million as of December 31, 2004, to \$1,071 million as of December 31, 2005. The market value of the plan assets increased from \$1,206 million as of December 31, 2004, to \$1,275 million as of December 31, 2005. Table 9 details the development of asset values during 2005 and Table 10 shows the development of the actuarial value of assets as of December 31, 2005.

**TABLE 9**  
**RECONCILIATION OF ASSET VALUE**  
**AS OF DECEMBER 31, 2005**

	<u>Market Value</u>	<u>Book Value</u>
1. Value of assets as of 12/31/2004	\$ 1,206,177,759	\$ 995,613,912
2. Income for plan year:		
a) Member contributions	\$ 35,696,863	\$ 35,696,863
b) City contributions	90,128,915	90,128,915
c) Investment income net of expenses	112,016,356	119,328,841
d) Miscellaneous revenue	456,518	456,518
e) Total income	\$ 238,298,652	\$ 245,611,137
3. Disbursements for plan year:		
a) Benefit payments	\$ 166,058,709	\$ 166,058,709
b) Refunds	1,469,848	1,469,848
c) Administration	2,290,371	2,290,371
d) Total disbursements	\$ 169,818,928	\$ 169,818,928
4. Value of assets as of 12/31/2005	\$1,274,657,483	\$1,071,406,121
5. Estimated rate of return in 2005:		
a) Gross (Investment expense of \$5,394,733 )	9.94%	12.84%
b) Net of investment expense	9.46%	12.25%

Method used for calculating rate of return does not reflect specific timing of income and outflows. It is also based on total assets, not invested assets.

**TABLE 10**  
**DEVELOPMENT OF ACTUARIAL (MARKET RELATED)**  
**VALUE OF ASSETS**  
**AS OF DECEMBER 31, 2005**

**1. Expected Return on Market Value of Assets**

- a) Market value of assets as of 12/31/2004 \$1,206,177,759  
b) Actual income and disbursements in year ending 12/31/2005 weighted for timing

Item	Amount	Weight for Timing	Weighted Amount
i) Member contributions	\$35,696,863	50.0%	\$17,848,432
ii) City contributions	90,128,915	50.0%	45,064,458
iii) Miscellaneous revenue	456,518	50.0%	228,259
iv) Benefit payments	(166,058,709)	50.0%	(83,029,355)
v) Refunds	(1,469,848)	50.0%	(734,924)
vi) Administration	(2,290,371)	50.0%	(1,145,186)
vii) Total			(\$21,768,316)

- c) Market value of assets adjusted for actual income and disbursements [(a) + (b)(vii)] \$1,184,409,443  
d) Assumed rate of return on plan assets for the year 8.00%  
e) Expected return [(c) \* (d)] \$94,752,755

**2. Actual Return on Market Value of Assets for Year Ending 12/31/2005**

- a) Market value of assets as of 12/31/2004 \$1,206,177,759  
b) Income (less investment income) for year ending 12/31/2005 126,282,296  
c) Disbursements paid in year ending 12/31/2005 169,818,928  
d) Market value of assets as of 12/31/2005 1,274,657,483  
e) Actual return [(d) + (c) - (b) - (a)] \$112,016,356

**3. Investment Gain/(Loss) for Year Ending 12/31/2005 [2(e) - 1(e)]**

\$17,263,601

**4. Actuarial Value of Assets as of 12/31/2005**

- a) Market value of assets as of 12/31/2005 \$1,274,657,483  
b) Deferred investment gains and (losses) for last 5 years

	Plan Year	Gain/(Loss)	Percent Deferred	Deferred Amount
i)	2001	(\$169,736,871)	0.00%	\$0
ii)	2002	(229,979,378)	20.00%	(45,995,876)
iii)	2003	179,300,444	40.00%	71,720,178
iv)	2004	52,447,080	60.00%	31,468,248
v)	2005	17,263,601	80.00%	13,810,881
vi)	Total	(\$150,705,124)		\$71,003,431

- c) Actuarial Value of Assets \$1,203,654,052

Note: Beginning with the December 31, 1998, valuation, the calculated value is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last 5 years at the rate of 20% per year.

## **Appendix 3**

### **Data Reflecting Plan Members**

---

**EXHIBIT A**  
**SUMMARY OF CHANGES IN ACTIVE PARTICIPANTS**  
**FOR FISCAL YEAR ENDING DECEMBER 31, 2005**

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Number of Participants at Beginning of Fiscal Year	4,572	277	4,849
Increases:			
Participants Added During Year	283	22	305
Participants Returning From Inactive or Disability Status	<u>2</u>	<u>1</u>	<u>3</u>
Totals	4,857	300	5,157
Decreases:			
Terminations During Year	<u>152</u>	<u>13</u>	<u>165</u>
Number of Participants at End of Fiscal Year	4,705	287	4,992
Total Inactive Participants			180
<u>Terminations:</u>			
Withdrawal (With Refunds) <sup>1</sup>	9	0	9
Withdrawal (Without Refunds)	21	3	24
Ordinary Disability Benefit	1	1	2
Occupational Disease Disability Benefit	10	3	13
Duty Disability Benefit	20	2	22
Retirements	85	4	89
Deaths (Occupational)	0	0	0
Deaths (Non-occupational)	<u>6</u>	<u>0</u>	<u>6</u>
<b>Totals</b>	<b>152</b>	<b>13</b>	<b>165</b>

<sup>1</sup>This total differs from the total of 27 shown in Exhibit D due to the fact that only 9 of the refunds were paid to participants who were considered to be active as of December 31, 2004.

**EXHIBIT B**  
**SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES**  
**FOR FISCAL YEAR ENDING DECEMBER 31, 2005**

	<u>Number at Beginning of Year</u>	<u>Additions During Year</u>	<u>Terminations During Year</u>	<u>Number at End of Year</u>
Service Retirement Annuities	2,441	126	125	2,442
Spouse Annuitants	1,352	94	116	1,330
Children's Annuities	114	7	10	111
Parent Annuities	1	0	0	1
Ordinary Disability Benefit (Non-Occupational)	7	2	2	7
Occupational Disease Disability Benefit	113	16	22	107
Duty Disability Benefit (Occupational)	244	26	16	254
Widows' Compensation Annuities (Service Connected Death)	81	25	1	105
Totals	<u>4,353</u>	<u>296</u>	<u>292</u>	<u>4,357</u>

**EXHIBIT C**  
**PART I – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE MALE PARTICIPANTS CLASSIFIED BY**  
**AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2005**

AGE	Years of Service									Total	Annual Salary
	Under 1 year	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 and over		
Under 20										0	\$ 0
20 to 24		10 404,160								10	404,160
25 to 29	12 484,992	38 1,796,976	16 1,005,744							66	3,287,712
30 to 34	40 1,616,640	179 9,410,838	289 17,879,028	58 3,608,340						566	32,514,846
35 to 39	26 1,050,816	201 10,230,348	332 20,632,878	86 5,568,810	13 935,202					658	38,418,054
40 to 44	14 565,824	102 5,167,056	167 10,295,754	239 15,436,248	521 37,254,384	17 1,378,710				1,060	70,097,976
45 to 49	6 242,496	43 2,183,586	62 3,826,644	155 10,021,956	373 26,368,830	109 8,405,796	311 25,565,430	1 92,574		1,060	76,707,312
50 to 54	3 121,248	7 381,048	22 1,364,664	44 2,808,840	138 9,472,512	110 8,326,158	487 40,223,754	33 3,023,100	1 94,914	845	65,816,238
55 to 59		1 54,744	5 307,146	9 581,202	33 2,288,352	34 2,495,262	228 18,198,756	31 2,870,238	19 1,773,378	360	28,569,078
60 to 64				2 124,860	3 211,944	1 79,854	32 2,540,172	8 679,584	24 2,231,646	70	5,868,060
65 and over										0	0
W/O DOB	4 161,664	6 242,496								10	404,160
<b>Total Active</b>	<b>105</b>	<b>587</b>	<b>893</b>	<b>593</b>	<b>1,081</b>	<b>271</b>	<b>1,058</b>	<b>73</b>	<b>44</b>	<b>4,705</b>	
<b>Annual Salary<sup>1</sup></b>	<b>\$4,243,680</b>	<b>\$29,871,252</b>	<b>\$55,311,858</b>	<b>\$38,150,256</b>	<b>\$76,531,224</b>	<b>\$20,685,780</b>	<b>\$86,528,112</b>	<b>\$6,665,496</b>	<b>\$4,099,938</b>		<b>\$ 322,087,596</b>

<sup>1</sup> The number of participants and annual salary listed includes information on active participants only.

Hence, information on the 7 ordinary disability participants, who continue to earn benefit service, is not included in this exhibit.



**EXHIBIT C**  
**PART II – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE FEMALE PARTICIPANTS CLASSIFIED BY**  
**AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2005**

AGE	Years of Service									Total	Annual Salary
	Under 1 year	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 and over		
Under 20										0	\$ 0
20 to 24										0	0
25 to 29	1 40,416	9 392,424	4 246,402							14	679,242
30 to 34	4 161,664	10 540,690	19 1,172,430							33	1,874,784
35 to 39	2 80,832	16 816,378	22 1,390,434	11 732,930	2 139,872					53	3,160,446
40 to 44	1 40,416	5 258,456	14 868,950	14 920,466	44 3,140,802	2 162,216				80	5,391,306
45 to 49	1 40,416	3 163,296	6 391,542	13 829,908	32 2,283,504	7 535,866	5 451,092			67	4,695,624
50 to 54		2 106,806		5 314,022	13 908,718	4 311,946	2 175,008	1 84,906		27	1,901,406
55 to 59				1 67,626	1 77,370		5 469,338			7	614,334
60 to 64				1 62,430	3 204,510	1 66,888	1 69,570			6	403,398
65 and over										0	0
W/O DOB										0	0
<b>Total Active</b>	<b>9</b>	<b>45</b>	<b>65</b>	<b>45</b>	<b>95</b>	<b>14</b>	<b>13</b>	<b>1</b>	<b>-</b>	<b>287</b>	
<b>Annual Salary<sup>1</sup></b>	<b>\$363,744</b>	<b>\$2,278,050</b>	<b>\$4,069,758</b>	<b>\$2,927,382</b>	<b>\$6,754,776</b>	<b>\$1,076,916</b>	<b>\$1,165,008</b>	<b>\$84,906</b>	<b>\$0</b>	<b>\$ 18,720,540</b>	

<sup>1</sup> The number of participants and annual salary listed includes information on active participants only.

Hence, information on the 7 ordinary disability participants, who continue to earn benefit service, is not included in this exhibit.

**EXHIBIT C**  
**PART III – TOTAL LIVES AND ANNUAL SALARIES OF ALL ACTIVE PARTICIPANTS CLASSIFIED BY**  
**AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2005**

AGE	Years of Service									Total	Annual Salary
	Under 1 year	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 and over		
Under 20										0	\$ 0
20 to 24		10 404,160								10	404,160
25 to 29	13 525,408	47 2,189,400	20 1,252,146							80	3,966,954
30 to 34	44 1,778,304	189 9,951,528	308 19,051,458	58 3,608,340						599	34,389,630
35 to 39	28 1,131,648	217 11,046,726	354 22,023,312	97 6,301,740	15 1,075,074					711	41,578,500
40 to 44	15 606,240	107 5,425,512	181 11,164,704	253 16,356,714	565 40,395,186	19 1,540,926				1,140	75,489,282
45 to 49	7 282,912	46 2,346,882	68 4,218,186	168 10,851,864	405 28,652,334	116 8,941,662	316 26,016,522	1 92,574		1,127	81,402,936
50 to 54	3 121,248	9 487,854	22 1,364,664	49 3,122,862	151 10,381,230	114 8,638,104	489 40,398,762	34 3,108,006	1 94,914	872	67,717,644
55 to 59		1 54,744	5 307,146	10 648,828	34 2,365,722	34 2,495,262	233 18,668,094	31 2,870,238	19 1,773,378	367	29,183,412
60 to 64				3 187,290	6 416,454	2 146,742	33 2,609,742	8 679,584	24 2,231,646	76	6,271,458
65 and over										0	0
W/O DOB	4 161,664	6 242,496								10	404,160
<b>Total Active</b>	<b>114</b>	<b>632</b>	<b>958</b>	<b>638</b>	<b>1,176</b>	<b>285</b>	<b>1,071</b>	<b>74</b>	<b>44</b>	<b>4,992</b>	
<b>Annual Salary<sup>1</sup></b>	<b>\$4,607,424</b>	<b>\$32,149,302</b>	<b>\$59,381,616</b>	<b>\$41,077,638</b>	<b>\$83,286,000</b>	<b>\$21,762,696</b>	<b>\$87,693,120</b>	<b>\$6,750,402</b>	<b>\$4,099,938</b>		<b>\$ 340,808,136</b>

<sup>1</sup> The number of participants and annual salary listed includes information on active participants only.

Hence, information on the 7 ordinary disability participants, who continue to earn benefit service, is not included in this exhibit.

**EXHIBIT D - PART I**  
**SHOWING NUMBER OF REFUND PAYMENTS MADE**  
**DURING YEAR TO MALE EMPLOYEES**  
**FOR FISCAL YEAR ENDING DECEMBER 31, 2005**

Age at Date of Refund	Length of Service at Date of Refund <sup>1</sup>						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	5 and over	
Without Record	12	0	0	0	0	0	<b>12</b>
Under 20	0	0	0	0	0	0	<b>0</b>
20 to 24	0	0	0	0	0	0	<b>0</b>
25 to 29	0	0	0	0	0	0	<b>0</b>
30 to 34	0	0	0	0	1	1	<b>2</b>
35 to 39	0	1	0	0	0	2	<b>3</b>
40 to 44	0	1	1	0	0	3	<b>5</b>
45 to 49	0	0	0	0	0	2	<b>2</b>
50 to 54	0	0	0	0	0	0	<b>0</b>
55 to 59	0	0	0	0	0	0	<b>0</b>
60 & over	0	0	0	0	0	0	<b>0</b>
<b>Totals</b>	<b>12</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>24</b>

<sup>1</sup> Includes only the actual number of refunds paid or accrued during fiscal year reported.

**EXHIBIT D - PART II**  
**SHOWING NUMBER OF REFUND PAYMENTS MADE**  
**DURING YEAR TO FEMALE EMPLOYEES**  
**FOR FISCAL YEAR ENDING DECEMBER 31, 2005**

Age at Date of Refund	Length of Service at Date of Refund <sup>1</sup>						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	5 and over	
Without Record	2	0	0	0	0	0	<b>2</b>
Under 20	0	0	0	0	0	0	<b>0</b>
20 to 24	0	0	0	0	0	0	<b>0</b>
25 to 29	0	0	0	0	0	0	<b>0</b>
30 to 34	0	0	0	0	0	0	<b>0</b>
35 to 39	0	0	0	0	0	0	<b>0</b>
40 to 44	0	0	0	0	0	0	<b>0</b>
45 to 49	0	0	0	0	0	1	<b>1</b>
50 to 54	0	0	0	0	0	0	<b>0</b>
55 to 59	0	0	0	0	0	0	<b>0</b>
60 & over	0	0	0	0	0	0	<b>0</b>
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>

<sup>1</sup> Includes only the actual number of refunds paid or accrued during fiscal year reported.

**EXHIBIT E**  
**SHOWING STATISTICS ON SERVICE RETIREMENT ANNUITIES**  
**CLASSIFIED BY AGE AS OF DECEMBER 31, 2005**

AGE	MALE		FEMALE		TOTAL	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 50	2	\$ 11,400	0	\$ 0	2	\$ 11,400
50	6	220,558	1	8,971	7	229,529
51	7	306,262	1	5,700	8	311,962
52	13	546,005	0	0	13	546,005
53	23	950,270	3	142,333	26	1,092,603
54	15	691,467	1	5,700	16	697,167
55	14	579,714	2	48,011	16	627,725
56	14	575,350	0	0	14	575,350
57	12	578,981	0	0	12	578,981
58	27	1,484,081	0	0	27	1,484,081
59	27	1,305,228	0	0	27	1,305,228
60	36	1,934,421	0	0	36	1,934,421
61	48	2,540,264	1	68,510	49	2,608,774
62	74	4,189,950	1	49,930	75	4,239,880
63	156	9,403,274	0	0	156	9,403,274
64	132	7,621,753	0	0	132	7,621,753
65	138	7,438,900	0	0	138	7,438,900
66	86	4,789,828	1	68,697	87	4,858,525
67	80	4,242,330	0	0	80	4,242,330
68	67	3,543,172	1	42,873	68	3,586,045
69	122	6,515,083	0	0	122	6,515,083
70	87	4,760,289	0	0	87	4,760,289
71	93	5,234,561	0	0	93	5,234,561
72	100	5,171,729	0	0	100	5,171,729
73	93	4,794,957	0	0	93	4,794,957
74	125	6,017,391	0	0	125	6,017,391
75	118	5,431,333	0	0	118	5,431,333
76	93	4,005,712	0	0	93	4,005,712
77	86	3,532,632	0	0	86	3,532,632
78	94	3,720,927	0	0	94	3,720,927
79	85	3,262,524	0	0	85	3,262,524
80	77	2,583,399	0	0	77	2,583,399
81	60	2,078,842	0	0	60	2,078,842
82	42	1,385,070	0	0	42	1,385,070
83	34	1,155,793	0	0	34	1,155,793
84	32	1,061,036	0	0	32	1,061,036
85+	112	2,908,842	0	0	112	2,908,842
<b>Totals</b>	<b>2,430</b>	<b>\$116,573,328</b>	<b>12</b>	<b>\$440,725</b>	<b>2,442</b>	<b>\$117,014,053</b>

**EXHIBIT F**  
**SHOWING STATISTICS ON WIDOW'S ANNUITIES**  
**CLASSIFIED BY AGE AS OF DECEMBER 31, 2005**

Age	No. <sup>1</sup>	Annual Payments	Age	No. <sup>1</sup>	Annual Payments
Under 30	0	\$ 0	58	10	\$ 157,573
30	0	0	59	14	295,423
31	0	0	60	10	162,599
32	0	0	61	13	265,480
33	0	0	62	19	340,482
34	1	13,675	63	21	427,361
35	0	0	64	24	515,286
36	0	0	65	11	198,126
37	0	0	66	29	489,895
38	2	39,393	67	27	536,265
39	2	29,201	68	25	443,595
40	0	0	69	38	702,242
41	3	46,187	70	34	630,645
42	4	52,796	71	33	595,123
43	3	53,409	72	34	555,362
44	6	90,510	73	39	631,312
45	1	12,000	74	53	849,788
46	2	24,000	75	59	905,536
47	7	115,262	76	57	860,116
48	6	92,766	77	60	882,651
49	6	127,929	78	48	713,279
50	2	29,870	79	66	940,528
51	4	75,469	80	55	797,083
52	4	82,139	81	46	679,152
53	3	57,859	82	43	605,412
54	6	141,097	83	42	525,390
55	14	247,528	84	51	664,577
56	9	192,087	85+	276	3,460,301
57	8	117,173			
			<b>Total</b>	<b>1,330</b>	<b>\$20,470,932</b>

<sup>1</sup>Excludes Parent Annuitants and Compensation Annuitants.

**EXHIBIT G**  
**SHOWING STATISTICS ON MISCELLANEOUS ANNUITIES**  
**FOR FISCAL YEAR ENDING DECEMBER 31, 2005**

	<u>No.</u>	<u>Annual Payments</u>
Children's Annuities	111	891,616
Widows' Compensation Annuities	105	5,568,084
Ordinary Disability Benefits	7	200,342
Occupational Disease Disability Benefits	107	4,855,511
Duty Disability Benefits	254	10,916,662
Parent Annuities	1	10,862
<b>Totals</b>	<b>585</b>	<b>\$22,443,077</b>

**EXHIBIT H – PART I**  
**SHOWING MALE PARTICIPANTS RECEIVING DUTY DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	2	96,672	0	0	0	0	0	0	2	96,672
40 to 44	1	62,591	4	125,879	4	132,645	6	272,255	2	108,258	0	0	17	701,628
45 to 49	5	280,982	4	111,573	7	237,116	12	426,452	7	337,130	4	214,526	39	1,607,779
50 to 54	9	557,429	2	64,037	12	372,773	21	702,776	7	297,795	18	982,762	69	2,977,572
55 to 59	5	307,019	1	31,857	7	226,542	11	346,272	13	557,138	23	1,252,598	60	2,721,426
60 & over	1	55,784	0	0	0	0	4	147,479	4	143,553	22	1,073,955	31	1,420,771
<b>Totals</b>	<b>21</b>	<b>\$ 1,263,805</b>	<b>11</b>	<b>\$ 333,346</b>	<b>32</b>	<b>\$ 1,065,748</b>	<b>54</b>	<b>\$ 1,895,234</b>	<b>33</b>	<b>\$ 1,443,874</b>	<b>67</b>	<b>\$ 3,523,841</b>	<b>218</b>	<b>\$ 9,525,848</b>

**EXHIBIT H – PART II**  
**SHOWING FEMALE PARTICIPANTS RECEIVING DUTY DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	1	54,617	0	0	0	0	1	54,617
40 to 44	2	99,636	1	28,725	0	0	1	43,916	1	47,129	0	0	5	219,406
45 to 49	0	0	1	27,372	4	148,173	3	133,413	1	59,648	1	51,485	10	420,091
50 to 54	0	0	0	0	3	95,547	7	238,943	0	0	2	96,794	12	431,284
55 to 59	0	0	1	24,627	3	98,064	3	105,573	0	0	0	0	7	228,264
60 & over	0	0	0	0	0	0	0	0	1	37,152	0	0	1	37,152
<b>Totals</b>	<b>2</b>	<b>\$ 99,636</b>	<b>3</b>	<b>\$ 80,724</b>	<b>10</b>	<b>\$ 341,784</b>	<b>15</b>	<b>\$ 576,462</b>	<b>3</b>	<b>\$ 143,929</b>	<b>3</b>	<b>\$ 148,279</b>	<b>36</b>	<b>\$ 1,390,814</b>



**EXHIBIT I – PART I**  
**SHOWING MALE PARTICIPANTS RECEIVING ORDINARY DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	1	25,232	0	0	0	0	0	0	1	25,232
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	1	30,189	0	0	1	30,189
45 to 49	0	0	0	0	0	0	0	0	0	0	2	59,901	2	59,901
50 to 54	0	0	0	0	0	0	1	31,868	0	0	0	0	1	31,868
55 to 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 & over	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>1</b>	<b>\$ 25,232</b>	<b>1</b>	<b>\$ 31,868</b>	<b>1</b>	<b>\$ 30,189</b>	<b>2</b>	<b>\$ 59,901</b>	<b>5</b>	<b>\$ 147,190</b>

**EXHIBIT I – PART II**  
**SHOWING FEMALE PARTICIPANTS RECEIVING ORDINARY DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	2	53,152	0	0	0	0	0	0	2	53,152
50 to 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55 to 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 & over	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>2</b>	<b>\$ 53,152</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>2</b>	<b>\$ 53,152</b>

**EXHIBIT J – PART I**  
**SHOWING MALE PARTICIPANTS RECEIVING OCCUPATIONAL DISEASE DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	1	39,784	0	0	0	0	1	39,784
45 to 49	0	0	0	0	0	0	2	76,110	2	86,130	4	184,057	8	346,297
50 to 54	0	0	0	0	0	0	3	103,722	3	108,437	12	537,367	18	749,526
55 to 59	0	0	0	0	0	0	2	62,430	4	140,669	36	1,728,252	42	1,931,351
60 & over	0	0	0	0	0	0	2	84,636	0	0	31	1,471,999	33	1,556,635
<b>Totals</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>10</b>	<b>\$ 366,682</b>	<b>9</b>	<b>\$ 335,236</b>	<b>83</b>	<b>\$ 3,921,675</b>	<b>102</b>	<b>\$ 4,623,593</b>

**EXHIBIT J – PART II**  
**SHOWING FEMALE PARTICIPANTS RECEIVING OCCUPATIONAL DISEASE DISABILITY**  
**CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2005**

ATTAINED AGE	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	1	42,080	0	0	0	0	1	42,080
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	0	0	0	0	0	1	52,685	1	52,685
50 to 54	0	0	0	0	0	0	0	0	0	0	1	60,159	1	60,159
55 to 59	0	0	0	0	1	35,634	0	0	0	0	0	0	1	35,634
60 & over	0	0	0	0	0	0	1	41,360	0	0	0	0	1	41,360
<b>Totals</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>	<b>1</b>	<b>\$ 35,634</b>	<b>2</b>	<b>\$ 83,440</b>	<b>0</b>	<b>\$ 0</b>	<b>2</b>	<b>\$ 112,844</b>	<b>5</b>	<b>\$ 231,918</b>

**EXHIBIT K**  
**HISTORY OF AVERAGE ANNUAL SALARIES**

Year End	Members in Service <sup>1</sup>	Current Year			Average		Actuarial Assumptions	CPI Chicago
		Increase	Salary	Increase	Salary	Increase		
1972	4,647	--	68,371,056	--	14,713	--	3.5%	3.0%
1973	4,743	2.1%	71,356,838	4.4%	15,045	2.3%	3.5%	6.3%
1974	4,587	(3.3)%	74,052,960	3.8%	16,144	7.3%	3.5%	10.6%
1975	4,484	(2.2)%	81,108,696	9.5%	18,088	12.0%	5.0%	8.0%
1976	4,321	(3.6)%	83,776,152	3.3%	19,388	7.2%	5.0%	4.7%
1977	4,434	2.6%	89,614,440	7.0%	20,211	4.2%	5.0%	6.3%
1978	4,478	1.0%	94,615,320	5.6%	21,129	4.5%	5.0%	8.5%
1979	4,297	(4.0)%	97,074,696	2.6%	22,591	6.9%	5.0%	12.5%
1980	5,054	17.6%	116,136,192	19.6%	22,979	1.7%	5.0%	14.5%
1981	4,884	(3.4)%	122,107,512	5.1%	25,002	8.8%	5.0%	9.5%
1982	4,834	(1.0)%	134,633,208	10.3%	27,851	11.4%	6.0%	6.9%
1983	5,294	9.5%	162,697,584	20.8%	30,732	10.3%	6.0%	4.0%
1984	5,147	(2.8)%	160,434,312	(1.4)%	31,170	1.4%	6.0%	3.8%
1985	5,047	(1.9)%	157,426,898	(1.9)%	31,192	0.1%	6.0%	3.8%
1986	5,103	1.1%	176,451,816	12.1%	34,578	10.9%	6.0%	2.1%
1987	5,183	1.6%	186,840,432	5.9%	36,049	4.3%	6.0%	4.1%
1988	5,233	1.0%	188,093,568	0.7%	35,944	(0.3)%	6.0%	3.9%
1989	5,231	0.0%	194,241,480	3.3%	37,133	3.3%	6.0%	5.0%
1990	5,337	2.0%	211,869,720	9.1%	39,698	6.9%	6.0%	5.4%
1991	5,323	(0.3)%	227,649,000	7.4%	42,767	7.7%	6.0%	4.0%
1992	5,204	(2.2)%	223,578,000	(1.8)%	42,963	0.5%	6.0%	3.0%
1993	5,124	(1.5)%	221,600,136	(0.9)%	43,247	0.7%	6.0%	3.0%
1993 <sup>2</sup>	4,710	(8.1)%	202,080,072	(8.8)%	42,904	(0.8)%	6.0%	3.0%
1994	4,753	0.9%	226,703,496	12.2%	47,697	11.2%	6.0%	2.2%
1995	4,678	(1.6)%	228,604,584	0.8%	48,868	2.5%	6.0%	3.2%
1996	4,806	2.7%	233,033,832	1.9%	48,488	(0.8)%	6.0%	2.7%
1997	4,856	1.0%	234,726,936	0.7%	48,338	(0.3)%	5.0%	2.7%
1998	4,783	(1.5)%	262,248,978	11.7%	54,829	13.4%	5.0%	1.5%
1999	4,855	1.5%	271,335,540	3.5%	55,888	1.9%	5.0%	2.6%
2000	4,878	0.5%	275,106,756	1.4%	56,397	0.9%	5.0%	4.0%
2001	4,930	1.1%	277,964,912	1.0%	56,382	0.0%	5.0%	0.8%
2002	4,910	(0.4)%	277,053,144	(0.3)%	56,426	0.1%	5.0%	2.5%
2003	4,909	0.0%	335,170,501	21.0%	68,277	21.0%	5.0%	1.7%
2004 <sup>3</sup>	4,856	(1.1)%	334,423,753	(0.2)%	68,868	0.9%	5.0%	2.2%
2005	4,999	2.9%	341,252,492	2.0%	68,264	(0.9)%	5.0%	3.6%
<b>Average Increase (Decrease) for the last 5 years:</b>		<b>0.5 %</b>		<b>4.7 %</b>		<b>4.2 %</b>		<b>2.2 %</b>

<sup>1</sup> Includes those members who were on disability through 1993.

<sup>2</sup> Restates without disabilities for comparison. Percent increases (decreases) are based on change from with disabilities in 1993 to without disabilities in 1994.

<sup>3</sup> Average annual increase in average salary 1972-2005, is about 4.8% compounded. The average annual increase in the annual average Chicago CPI for the same period is about 4.7% compounded.

**EXHIBIT L**  
**NEW ANNUITIES GRANTED DURING 2005**

	<b>Annuitants</b>	<b>Widows/ Widowers of Deceased Employees<sup>1</sup></b>	<b>Widows/ Widowers of Deceased Annuitants</b>	<b>Compensation Widows/ Widowers<sup>3</sup></b>
Number retired/deceased	126	8	80	25
Average age attained [Employee]	59.2	59.5	77.2	57.0
Average length of service	31.4	31.8	31.3	28.6
Average spouse age	57.2	56.6	72.4	68.2
Average annual salary [4 out of 10]	\$ 81,747	N/A	N/A	N/A
Average annual final salary	\$ 85,169	N/A	N/A	N/A
Total annual annuity	\$ 7,448,685	229,167	1,553,652	1,418,631
Average annual annuity	\$ 59,117	28,646	19,421	56,745
Total statutory liability	\$ 125,766,849	3,356,689	13,230,920	18,733,123
Average liability	\$ 998,150	419,586	165,387	749,325
Total investment [Employee-paid for tax purposes]	\$ 12,139,152	N/A	N/A	N/A
Average investment <sup>2</sup>	\$ 96,342	N/A	N/A	N/A
Liability/cost	10.36	N/A	N/A	N/A
Liability/final pay	11.72	N/A	N/A	N/A

<sup>1</sup> Not including compensation or supplemental.

<sup>2</sup> Based on previously taxed contributions.

<sup>3</sup> Does not include transfers from supplemental widows.

**EXHIBIT M**  
**RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT**

Years	ANNUITANTS						DISABILITY			Widow/ Widower Comp.	Total
	Employee	Disability Pensioner	Spouse	Supplemental Wid/Widower	Child	Parent	Ordinary	Duty	Occup.		
1981	1,777	8	1,229	77	149	3	9	172	189	46	3,659
1982	1,784	4	1,231	78	142	3	15	184	198	43	3,682
1983	1,786	3	1,241	84	122	2	12	187	196	42	3,675
1984	1,813	3	1,228	79	129	2	6	199	198	44	3,701
1985	1,884	2	1,224	77	129	2	6	211	191	49	3,775
1986	2,025	1	1,233	75	126	2	5	226	158	56	3,907
1987	2,080	1	1,236	87	121	2	7	233	143	46	3,956
1988	2,180	1	1,245	83	115	2	9	216	117	43	4,011
1989	2,235	1	1,237	68	108	1	8	235	122	55	4,070
1990	2,242	0	1,248	67	106	1	11	253	133	51	4,112
1991	2,226	0	1,264	65	121	1	14	267	143	49	4,150
1992	2,261	0	1,277	68	113	1	11	286	147	40	4,204
1993	2,257	0	1,291	69	114	1	10	274	140	35	4,191
1994	2,207	0	1,316	66	114	2	6	284	142	36	4,173
1995	2,248	0	1,332	62	110	1	8	297	144	40	4,242
1996	2,257	0	1,328	61	110	1	8	292	169	44	4,270
1997	2,235	0	1,348	60	111	1	11	296	194	46	4,302
1998	2,251	0	1,360	56	125	2	8	295	197	49	4,343
1999	2,351	0	1,450	56	139	2	5	295	203	49	4,550
2000	2,538	0	1,440	51	132	2	6	257	139	49	4,614
2001 <sup>1</sup>	2,422	0	1,330	0	116	2	2	262	147	89	4,370
2002	2,411	0	1,330	0	121	1	2	257	144	85	4,351
2003	2,412	0	1,322	0	119	1	3	249	121	82	4,309
2004	2,441	0	1,352	0	114	1	7	244	113	81	4,353
2005	2,442	0	1,330	0	111	1	7	254	107	105	4,357

<sup>1</sup> In 2001 all Supplemental Widows were moved into the Compensation Widows Group.

**EXHIBIT N**  
**AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE**

<b>Years Ended</b>	<b>Average Annual Benefit</b>	<b>Average Current Age of Retirees</b>	<b>Average Annual Benefit at Retirement Current Year</b>	<b>Average Age at Retirement Current Year</b>	<b>Average Years of Service at Retirement Current Year</b>
1981	\$ 10,266	67	\$ 16,551	59.2	29.8
1982	11,083	67	15,862	59.0	28.3
1983	11,749	68	19,351	60.8	30.2
1984	13,012	68	21,401	59.4	30.5
1985	14,243	68	22,897	59.1	30.4
1986	15,635	68	24,826	58.6	29.8
1987	16,833	68	26,342	59.1	30.4
1988	18,476	68	28,166	61.4	31.1
1989	19,732	68	29,967	60.4	31.1
1990	20,853	68	30,038	60.3	30.9
1991	21,942	69	30,983	60.0	31.4
1992	23,503	69	32,758	59.9	31.3
1993	25,031	69	34,267	61.6	31.7
1994	26,262	70	34,391	59.8	31.2
1995	27,935	70	38,872	60.3	32.1
1996	29,304	70	40,406	60.4	32.0
1997	30,787	70	41,543	59.8	31.6
1998	32,503	71	43,905	60.1	32.1
1999	34,067	71	44,001	60.4	31.4
2000	36,458	71	48,534	63.5	34.2
2001	38,048	71	45,768	60.2	30.9
2002	40,052	71	45,346	59.7	30.8
2003	42,131	71	50,943	60.2	31.7
2004	45,675	71	59,608	60.0	32.1
2005	47,917	71	59,117	59.2	31.4

**EXHIBIT O – PART I**  
**HISTORY OF ANNUITIES 1977-2005**  
**EMPLOYEE ANNUITANTS (MALE AND FEMALE)**

---

<b>Year End</b>	<b>Number of Annuitants</b>	<b>Total Annuities</b>	<b>Average Annuities</b>
1977	1,531	\$ 11,489,466	\$ 7,505
1978	1,622	13,321,159	8,213
1979	1,691	15,196,774	8,987
1980	1,738	16,834,908	9,686
1981	1,785	18,324,696	10,266
1982	1,788	19,816,065	11,083
1983	1,789	21,018,158	11,749
1984	1,816	23,648,174	13,022
1985	1,886	26,863,056	14,243
1986	2,026	31,676,856	15,635
1987	2,081	35,030,176	16,833
1988	2,181	40,296,025	18,476
1989	2,235	44,101,893	19,732
1990	2,242	46,752,084	20,853
1991	2,226	48,843,715	21,942
1992	2,261	53,140,074	23,503
1993	2,257	56,495,862	25,031
1994	2,207	57,960,522	26,262
1995	2,248	62,797,419	27,935
1996	2,257	66,139,690	29,304
1997	2,235	68,808,890	30,787
1998	2,251	73,163,601	32,503
1999	2,351	80,090,897	34,067
2000	2,538	92,529,624	36,458
2001	2,422	92,152,832	38,048
2002	2,411	96,565,842	40,052
2003	2,412	101,620,962	42,131
2004	2,441	111,491,737	45,675
2005	2,442	117,014,053	47,917

**EXHIBIT O – PART II**  
**HISTORY OF ANNUITIES 1977-2005**  
**WIDOW/WIDOWER ANNUITANTS**  
**(INCLUDING PARENT BUT NOT COMPENSATION ANNUITANTS)**

---

<b>Year End</b>	<b>Number of Annuitants <sup>1</sup></b>	<b>Total Annuities</b>	<b>Average Annuities</b>
1977	1,239	\$ 3,304,974	\$ 2,667
1978	1,254	3,462,000	2,761
1979	1,294	3,635,109	2,809
1980	1,322	3,770,964	2,852
1981	1,309	4,390,509	3,354
1982	1,312	5,007,540	3,817
1983	1,327	5,220,709	3,934
1984	1,309	5,203,409	3,975
1985	1,303	5,328,940	4,090
1986	1,310	5,843,911	4,461
1987	1,325	6,273,158	4,734
1988	1,330	6,617,019	4,975
1989	1,319	7,743,932	5,871
1990	1,316	8,031,199	6,103
1991	1,330	9,316,132	7,005
1992	1,346	10,774,709	8,005
1993	1,361	12,121,722	8,906
1994	1,384	13,680,765	9,885
1995	1,395	14,495,633	10,391
1996	1,389	14,709,232	10,590
1997	1,409	15,397,832	10,928
1998	1,418	15,969,975	11,262
1999	1,508	18,136,173	12,027
2000	1,493	18,352,906	12,293
2001	1,332	16,516,021	12,399
2002	1,331	17,006,519	12,777
2003	1,323	17,490,584	13,220
2004	1,353	19,297,527	14,263
2005	1,331	20,481,794	15,388



**EXHIBIT P**  
**HISTORY OF RETIREES AND BENEFICIARIES**  
**ADDED TO AND REMOVED FROM BENEFIT PAYROLL**

Yr.	Added to Payroll		Removed from Payroll		Payroll End of Year		Average Annual Benefits	Increase to Avg. Benefits
	No.	Annual Benefits.	No.	Annual Benefits	No.	Annual Benefits		
<b>Employee Annuitants (Male and Female)</b>								
1994	64	\$3,884,646	114	\$2,419,986	2,207	\$57,960,532	\$26,262	4.9%
1995	143	7,076,962	102	2,240,065	2,248	62,797,429	27,935	6.4
1996	101	5,578,794	92	2,236,533	2,257	66,139,690	29,304	4.9
1997	98	5,578,537	120	2,909,337	2,235	68,808,890	30,787	5.1
1998	122	5,356,352	106	2,446,381	2,251	73,163,601	32,503	5.6
1999	118	5,192,157	18	245,975	2,351	80,090,897	34,067	4.8
2000	265	12,861,578	78	2,413,778	2,538	92,529,624	36,458	7.0
2001	114	5,171,784	230	5,548,576	2,422	92,152,832	38,048	4.4
2002	107	4,851,988	118	438,978	2,411	96,565,842	40,052	5.3
2003	134	6,826,357	133	1,771,237	2,412	101,620,962	42,131	5.2
2004	147	14,053,559	118	4,182,784	2,441	111,491,737	45,675	8.4
2005	126	10,248,119	125	4,725,803	2,442	117,014,053	47,917	4.9
<b>Widow/Widower Annuitants (Not Including Compensation)</b>								
1994	90	\$2,145,835	67	\$586,792	1,384	\$13,680,765	\$9,885	11.0%
1995	97	1,592,509	86	777,641	1,395	14,495,633	10,391	5.1
1996	64	860,178	70	646,579	1,389	14,709,232	10,590	1.9
1997	91	1,314,596	71	625,996	1,409	15,397,832	10,928	3.2
1998	86	1,188,236	73	778,838	1,418	15,969,975	11,262	3.1
1999	90	1,268,687	0	0	1,508	18,136,173	12,027	6.8
2000	70	1,204,364	85	987,631	1,493	18,352,906	12,293	2.2
2001	127	1,865,460	288	3,702,345	1,332	16,516,021	12,399	0.9
2002	73	1,316,617	74	826,119	1,331	17,006,519	12,777	3.0
2003	87	1,475,058	95	990,993	1,323	17,490,584	13,220	3.5
2004	92	2,595,350	62	788,407	1,353	19,297,527	14,263	7.9
2005 <sup>1</sup>	94	2,596,899	116	1,412,632	1,331	20,481,794	15,388	7.9

<sup>1</sup> Including Parent Annuitants but not Compensation Annuitants.

## **Appendix 4**

# **Actuarial Methods and Assumptions as of December 31, 2005**



# ACTUARIAL METHODS AND ASSUMPTIONS AS OF DECEMBER 31, 2005

---

## I. ACTUARIAL COST METHOD

An Actuarial Cost Method is a set of techniques used by the actuary to develop contribution levels under a retirement plan. The Actuarial Cost Method used in this valuation for all purposes is the Entry Age Actuarial Cost Method. Under this Method, a Normal Cost is developed by amortizing the actuarial value of benefits expected to be received by each active participant (as a level percentage of pay) over the total working lifetime of that participant, from hire to termination.

To the extent that current assets and future Normal Costs do not support participants' expected future benefits, an Unfunded Actuarial Accrued liability ("UAAL") develops. The UAAL is generally amortized over a defined period of time (e.g. 40 years) The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL.

## II. CURRENT ACTUARIAL ASSUMPTIONS

### A. *Demographic Assumptions*

Mortality:	1983 Group Annuity Mortality Table, sex distinct.
Disabled Mortality:	1992 Railroad Retirement Board's Disabled Annuitant's Mortality Table.
Rates of Disability:	Rate at which members are assumed to become disabled under the provisions of the Fund. The rates assumed are as follows:

<b>Attained Age</b>	<b>Rates</b>
20-24	0.0016
25-29	0.0020
30-34	0.0028
35-39	0.0040
40-44	0.0052
45-49	0.0096
50-54	0.0190
55-59	0.0370
60-63	0.0450

Of the participants who become disabled, 35% are assumed to be duty disability, 60% are assumed to be occupational disease disability, and 5% are assumed to be ordinary disability.

**ACTUARIAL METHODS AND ASSUMPTIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

Rate of Retirement:                    The table below shows the assumed rates of retirement.

<b>Attained Age</b>	<b>Firefighters Rates</b>	<b>EMT Rates</b>
50	0.05	0.05
51	0.03	0.03
52	0.03	0.03
53	0.03	0.03
54	0.03	0.03
55	0.08	0.08
56	0.08	0.08
57	0.08	0.08
58	0.08	0.08
59	0.12	0.12
60	0.20	0.20
61	0.25	0.25
62	0.40	0.40
63	1.00	0.40
64		0.40
65		1.00

**ACTUARIAL METHODS AND ASSUMPTIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

Rate of Termination:           The following sample rates exemplify the table:

<u>Years of Service</u>	<u>Rate</u>
1	0.002
5	0.007
10	0.007
15	0.007
20	0.007
25	0.007
30	0.007

***B. Economic Assumptions***

Investment Return Rate:       8.00% per annum for pensions and 4.50% for OPEB. OPEB rate effective as of December 31, 2005.

Future Salary Increases:       Assumed rates of individual salary increase at 4.0% per year, plus an additional percentage based on the following service scale:

<u>Years of Service</u>	<u>Rates</u>
0	18.0%
1	5.5%
2	5.0%
3	5.0%
4	5.0%
5-9	0.0%
10	3.5%
11-14	0.0%
15	3.5%
16-19	0.0%
20	3.5%
21-24	0.0%
25	3.5%
26-29	0.0%
30	3.5%
Over 30	0.0%

**ACTUARIAL METHODS AND ASSUMPTIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

Asset Value: For State reporting, the actuarial value of assets is smoothed by using a five-year average market value.

For GASB #25 and #27, the actuarial value of assets is smoothed by using a five-year average market value.

**C. Other Assumptions**

Marital Status: It is assumed that 85% of members have an eligible spouse. The male spouse is assumed six years older than the female spouse. No assumption is made about other dependents.

Group Health Insurance: It is assumed for valuation purposes that the current health insurance supplement will continue for life for all employee annuitants (and their future widows). The amount of the Fund-paid health insurance from July 1, 2003 until June 30, 2008 is \$85.00 per month for each annuitant (employees and widows) not qualified to receive Medicare benefits and \$55.00 if qualified. After June 30, 2008, the amounts will be \$95.00 and \$65.00, respectively. It is assumed that all annuitants age 65 and over will be eligible for Medicare and all annuitants less than age 65 will not be eligible for Medicare. Future widows of retirees are assumed to be eligible for Medicare, as well as widow annuitants that are currently receiving a health insurance supplement.

Only retirees, beneficiaries and children who the Fund has indicated have Fund paid insurance are valued with this benefit.

**ACTUARIAL METHODS AND ASSUMPTIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

Required Ultimate Multiple:	The actuarial requirements (adjusted for tax levy loss) less expected employee contributions divided by the actual employee contributions made in the second prior year.
Loss in Tax Levy:	4% overall loss on tax levy is assumed.

## **Appendix 5**

### **Summary of Provisions of the Fund as of December 31, 2005**





**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005**

---

**PARTICIPANTS**

Person employed by the City of Chicago in its fire service as firefighter, fire paramedic, fire engineer, marine engineer, or fire pilot, whose duty it is to participate in the work of controlling and extinguishing fire at the location of any such fire, whether or not he is assigned to fire service other than the actual extinguishing of fire.

**SERVICE**

In computing service, the following periods shall be counted:

All periods of active service, vacation, leave of absence with whole or part pay, military service, periods of disability for which he receives disability benefit, and leave of absence without pay to perform the duties of a member of the General Assembly prior to January 9, 1997. It is computed on a day to day basis. Employees may purchase the 1980-strike time and periods of suspension less than one year. Employees may purchase, with 4% interest, periods of employment of the Chicago Fire Department from 1970 until the employee entered this fund.

**RETIREMENT ANNUITY**

*Eligibility*

Attainment of age 50 with at least 10 years of service.

*Mandatory*

Retirement is mandatory for a participant who has attained age 63, except for emergency medical technicians.

*Accumulation Annuity*

At age 50 or more, with 10 or more years of service, the employee is entitled to an annuity based on the sums accumulated for age and service annuity plus 1/10 of the sum accumulated from the contributions by the City for the age and service annuity for each completed year of service after the first 10 years. At age 50 or more with 20 or more years or at age 63, the employee is entitled to an annuity based on all sums accumulated to his or her credit. The maximum is 75 % of highest salary.

*Minimum Formula Annuity*

If the employee has 20 or more years of service (the annuity will begin no earlier than age 50), he or she is entitled to the following annuity: 50% plus 2.5% of the final average salary for each year or fraction of service over twenty years. Maximum is 75% of the final average salary.

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

***Retirement at Age 63 with Less than 20 Years Service<sup>1</sup>***

An employee who reaches compulsory retirement age with less than 20 years but greater than 10 years of service shall be entitled to a minimum annuity equal to 30% of final average salary for the first 10 years of service plus an additional 2% for each year in excess of 10, not to exceed 50 percent of final average salary.

***Automatic Increase in Annuity***

If an employee qualifies for a minimum formula annuity, 1.5% of the original annuity, starting on the first of the month one year after retirement or the first of the month following attainment of age 60 (age 55 if born before January 1, 1955, effective January 16, 2004), whichever is later, with a maximum of 30% (20 years). Such increases shall be 3% for firefighters born before January 1, 1955, (effective January 16, 2004), and such firefighters shall not be subject to the 30% maximum increase.

***Minimum Annuity***

The minimum monthly annuity is \$1,050 if the firefighter retired at age 50 or over with at least 20 years of service.

**WIDOW/WIDOWER ANNUITY**

Payable until remarriage if widow/widower remarries before age 60, except Compensation and Supplemental Annuities. If the annuity is suspended because the widow/widower remarries before age 60, annuity payments will be resumed if the subsequent marriage ends. Any widow/widower's annuity, which was suspended on account of remarriage prior to December 31, 1989, will be resumed, if subsequent marriage ends, the later of July 14, 1995, or when the marriage ended. Beginning January 16, 2004, widows retain their rights to benefits after remarriage at any age. Benefits are not available to a widow of a fireman who received a refund of contributions for widow's benefits, unless the refund is repaid with 4% interest per year.

***Death in Service (Non-Duty)***

- (1) If the firefighter dies with at least 1.5 years of service, 30% of the salary attached to the rank of a first class firefighter in the classified career service at the time of the firefighter's death; or,
- (2) 50% of the annuity the deceased firefighter would have received if he had retired just prior to the date of death; or,
- (3) Money purchase based on the total salary deductions and City contributions for age and service annuity and widow/widower's annuity.
- (4) The widow of an active fireman with 10 or more years of service will receive no less than 50 percent of the benefit that the active fireman would have received had they attained age 50 and 20 years of service.

---

<sup>1</sup> Between January 1994 and December 2000, benefits have been administered as if there were no compulsory retirement age. Beginning December 2000 benefits have been administered as if age 63 is the compulsory retirement age for non-EMT participants and there is no compulsory retirement age for EMT participants.

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

***Death In Service (Duty Related)***

***Compensation Annuity<sup>2</sup>***

The annuity paid to the spouse equals 75% of the firefighter's salary attached to his civil service position at the time of his death. This amount increases as the salary of the position increases. This benefit is payable until the year in which the firefighter would have reached the compulsory retirement age.

***Death In Service (Duty Disability)***

***Compensation Annuity***

The annuity paid to the spouse of a member who dies in receipt of duty disability benefits equals 75% of the firefighter's salary attached to his civil service position at the time of his death. This amount increases as the salary of the position increases.

***Death after Retirement***

- (1) If the firefighter dies after retirement, the annuity is 50% of the retirement annuity that the deceased firefighter was receiving at the time of his or her death; or,
- (2) money purchase based on the sums accumulated for the spouse annuity plus 10% of the accumulated City contributions for each year of service from 10 to 20 years, and full accumulated City contributions after 20 years of service.

***Maximum Annuity***

No maximum dollar amount.

***Minimum Annuity***

The minimum monthly annuity for any widow/widower is \$1,000.

**CHILD ANNUITY**

Upon the death of the firefighter, unmarried children less than age 18 (except where child is so physically or mentally handicapped as to be unable to support himself), who have been born or legally adopted and at least one year prior to death or withdrawal (except if duty death, then no one year limit on adoption). The amount of annuity payable for a child is 10% of the current annual maximum salary of a first class firefighter while a widow/widower survives; 15% when no widow/widower survives.

**FAMILY MAXIMUM**

The total annuities for widow/widower and children cannot exceed 60% for non-duty death, or 100% for duty death, of the current maximum annual salary of a first class firefighter.

---

<sup>2</sup> Between January 1994 and December 2000, benefits have been administered as if there were no compulsory retirement age. Beginning December 2000 benefits have been administered as if age 63 is the compulsory retirement age for non-EMT participants and there is no compulsory retirement age for EMT participants.

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

**PARENT ANNUITY**

Parent's annuity is provided for each surviving parent of a firefighter who dies prior to separation from service, or while out of service with at least 20 years; provided there is no widow/widower or child and that the deceased firefighter was contributing to their support. The benefit is an amount equal to 18% of the current annual salary attached to the classified position held by the firefighter at the time of death.

**DISABILITIES**

***Duty Disability Benefit***<sup>3</sup>

Injury incurred in the performance of duty. The amount of the benefit is 75 % of salary at the time the disability is allowed payable to employee's compulsory retirement age plus \$30 per month for each unmarried child less than age 18 (except where the child is so physically or mentally handicapped as to be unable to support him/herself), but the total amount of child benefits shall not exceed 25% of salary. Effective January 1, 1994, the minimum benefit, if the employee has been on disability at least 10 years, is 50% of current salary at the rank held by the employee when he was removed from the Department payroll. Salary deductions are contributed by the City. There are no age or service requirements for retirement on money purchase annuity and receiving full contributions.

***Occupational Disease Disability***<sup>3</sup>

A firefighter who has 10 or more years of service and is unable to perform his or her duties by reason of heart disease, tuberculosis, or any disease of the lungs or respiratory tract, resulting solely from his or her service as a firefighter. Occupational disease also includes disabling cancer of the type which may be caused by exposure to heat, radiation or a known carcinogen as defined by the International Agency for Research on Cancer. The amount of the benefit is 65% of salary at the time of the employee's removal from the Department payroll payable to compulsory retirement age plus \$30 a month for each unmarried child less than age 18 (except where the child is so physically or mentally handicapped as to be unable to support him/ herself), but the total amount of child's benefits shall not exceed 25% of salary. Effective January 1, 1994 the minimum benefit, if the employee has been on disability at least 10 years, is 50% of current salary at the rank held by the employee when he or she was removed from Department payroll. Salary deductions are contributed by the City. There are no age or service requirements for retirement on money purchase annuity and receiving full contributions.

***Ordinary Disability Benefit***

Cause other than the performance of an act of duty, payable after 30 days for a period equal to 50% of total service (not including any previous O.D. time), but not to exceed 5 years. The disability benefit is 50% of salary at time of disability less pension deductions. When the disabled firefighter becomes eligible for the minimum formula annuity, the disability benefit shall cease, and he or she shall thereafter receive an annuity; however, there are no age or service requirements to retire on money purchase from disability prior to qualification for the minimum formula annuity if the disability then terminates.

---

<sup>3</sup> Between January 1994 and December 2000, benefits have been administered as if there were no compulsory retirement age. Beginning December 2000 benefits have been administered as if age 63 is the compulsory retirement age for non-EMT participants and there is no compulsory retirement age for EMT participants.

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

**DEATH BENEFIT**

In active service, on an authorized leave of absence, if death occurs within 60 days of receipt of salary, receiving duty or ordinary disability benefit, occurring within 60 days of termination of such benefit, or occurring on retirement while in receipt of annuity and separation was effective after age 50 and application was made within 60 days from separation; payable to written beneficiaries or, if none, to estate.

<u>Age</u>	<u>Death in Service After July 1, 1983</u>	<u>Death After Retirement After July 1, 1983</u>
49 and under	\$12,000	\$6,000
50	11,600	6,000
51	11,200	6,000
52	10,800	6,000
53	10,400	6,000
54	10,000	6,000
55	9,600	6,000
56	9,200	6,000
57	8,800	6,000
58	8,400	6,000
59	8,000	6,000
60	7,600	6,000
61	7,200	6,000
62	6,800	6,000
63	6,400	6,000
64 and over	6,000	6,000

**GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PREMIUMS**

The pension fund shall provide payments in the amount of \$85 per month for non-Medicare eligible city annuitants and \$55 per month for Medicare eligible city annuitants from July 1, 2003, through June 30, 2008. Thereafter, the pension fund shall provide payments in the amount of \$95 per month for non-Medicare eligible city annuitants and \$65 per month for Medicare eligible city annuitants from July 1, 2008, through June 30, 2013.

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

**REFUNDS**

***To Firefighters***

Of entire amount (excluding ordinary disability pension deductions) with interest at 4% if entered before June 30, 1953, and 3% otherwise, before age 50, or before age 57 and less than 10 years service. A firefighter who receives a refund and who subsequently reenters the service shall not receive, nor his or her widow/widower or parents, any annuity benefit or pension unless the refund is repaid with 4% interest. Repayment must be made within two years after reentry.

**FOR WIDOW/WIDOWER ANNUITY**

If the Firefighter is not married when he retires on annuity, he or she will receive a refund of all his or her contributions, with interest, for spouse's annuity.

**REFUNDS OF REMAINING AMOUNTS**

If amounts contributed by a Firefighter (with interest) are not paid out to him or her, in the form of a refund or annuity, or his or her widow/widower in the form of annuity, the remaining amounts (with interest) shall be paid out to his or her heirs, or to administrator of estate, for burial expense. If there are children under age 18, amount necessary to pay children annuities will not be refunded. There will be no refund paid to a widow/widower whose annuity is suspended because of remarriage.

**DEDUCTIONS AND CONTRIBUTIONS**

	<u>Deductions</u>	<u>City Contributions<sup>1</sup></u>
Employee	7.125%	8.500%
Spouse	1.500%	2.000%
Ordinary Disability	0.125%	0.000%
Annuity Increase	<u>0.375%</u>	<u>0.000%</u>
	9.125%	10.500%

<sup>1</sup> Credited to participant's Accumulation Annuity and Widow's Annuity accounts

The city shall levy a tax annually at a rate on the dollar of the assessed valuation of all taxable property that will produce an amount not to exceed the total amount of contributions by the firefighters to the Fund made in the calendar year two years prior multiplied by 2.26 for 1982 and each year thereafter, plus \$142,000 for the Ordinary Death Benefit.

**DEATH BENEFIT**

Employees contribute \$2.50 per month at the same time and with the same frequency as other deductions (with each payment of salary).

**SUMMARY OF  
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS  
AS OF DECEMBER 31, 2005 (CONT'D)**

---

**TAX SHELTER OF EMPLOYEE SALARY DEDUCTIONS**

Beginning January 1, 1982, employee contributions were designated for income tax purposes to be made by the employer. The W-2 salary is therefore reduced by the amount of contribution. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is received. For the purpose of benefits, refunds or financing, these contributions will be treated as employee contributions.

**COMPULSORY RETIREMENT AGE**

Effective January 1, 1994, the federal law (ADEA) allowing compulsory retirement at age 63 lapsed. As such, duty disability and occupational disease disability benefits and widow/widower compensation benefits may be "open ended", i.e., without limiting age.

Effective December 2000 the City of Chicago enacted a compulsory retirement age of 63 for non-EMT participants. As such, all disability benefits for non-EMT participants cease at age 63 and become payable as retiree benefits.

**COMPENSATION WIDOWS**

Beginning January 1, 2001, mandatory retirement will have no impact on Widow benefits. Therefore, effective with the December 31, 2001, valuation, all Supplemental Widows have been re-classified as Compensation Widows. The classification of Supplemental Widows has been discontinued.

## **Appendix 6**

### **Legislative Changes 1968 through 2005**

---



## LEGISLATIVE CHANGES 1968 THROUGH 2005

---

### 1968 to 1979 Sessions

- Compensation widow/widower annuities changed from \$300 to 75% of salary;
- Supplemental widow/widower annuities became 40% of salary;
- 5-year average salary became 4 years;
- Minimum employee annuities increased from \$200 in stages;
- Minimum widow/widower annuities increased from \$100 in stages;
- Children's annuities changed from \$40/\$60 to 10%/15% of salary of first class firefighter;
- Parent annuities increased to 18% of salary of first class firefighter;
- Lump sum benefits were increases; and
- The deduction from salary increased from 1% to 1.5% of salary for the spouse annuity.

### 1979 Session

#### ***SB 854***

Recall of elective members of the Board of Trustees.

#### ***HB 291***

Authorizes investment in Time Deposits of Certificate of Deposit.

#### ***HB 2012***

Employer may pick up, under IRS Code Section 414(h), the employee contributions for all compensation earned after December 31, 1980 by a reduction in the cash salary, an offset to a future salary increase, or by a combination of both.

### 1980 Session

Transfer of credit to the General Assembly System.

#### ***HB 3635***

Reversed all changes made by HB 2012 and put the pick up section as a new paragraph. They are treated as employee contributions for all purposes including refunds and determination of the tax levy.

### 1981 Session

#### ***SB 21***

Actuarial Reporting Standards.

#### ***SB 851***

Authorizes investments in conventional mortgage pass-through securities.

#### ***SB 879***

Financial statement required by Department of Insurance within 6 months and actuarial statement within 9 months. \$100 penalty per day if late.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **HB 291**

Increase minimum survivor's annuity from \$200 to \$250.

### **Spring 1982 Session**

#### **SB 740**

3% post-retirement increase for employees born before January 1, 1930. All increases begin at age 60 instead of age 63 effective July 1, 1982.

#### **SB 1127**

Group health hospital and surgical insurance premium \$55 for annuitant not qualified to receive Medicare; \$21 if annuitant is qualified, effective January 1, 1983.

#### **SB 1579**

Expanded fiduciary standards, prohibited transactions, civil action may be brought by Attorney General or by a participant. List of permitted investments moved to general section of the statute.

#### **HB 2361**

Election by mail ballot.

### **Spring 1983 Session**

#### **SB 22**

Delegation of investment authority restrictions.

#### **SB 1147**

Minimum reporting and actuarial information for 1984.

#### **HB 366, SB 288**

Changes fiduciary standards: party in interest definition; reasonable care of co-fiduciary; eliminates civil action.

#### **HB 377**

Cancer as occupational disability.

#### **HB 380**

Paramedics as members July 1, 1983.

#### **HB 455**

Bill of Rights.

#### **HB 483**

Temporary position defined.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **HB 514**

10% prudent person investment category.

### **HB 755**

Change in lump sum death benefit: \$6,000 if retired, \$12,000 if active and under age 50, reduced by \$400 each year age 50 or older.

### **HB 758**

Vote by mail.

50/20 2% minimum annuity formula (52/22 in 1984; 51/21 in 1985; 50/20 in 1986 and after).

30% salary of first class firefighter; widow/widower of active employee with 1.5 years of service effective June 30, 1984.

50% of retirement pension being paid (includes increases); widow/widower of retiree effective June 30, 1984.

### **City Ordinance**

Change in lump sum death benefit: \$6,000 if retired, \$12,000 if active and under age 50, reduced by \$400 each year age 50 or older.

Changes compulsory retirement from 63 to 70.

### **1984 Session**

Direct deposit.

Illinois Public Employees' Pension Laws Commission abolished.

### **1985 Session**

#### **HB 164**

Occupational disability benefits from 50% to 65% of salary for new disabilities.

Survivors' annuity for death in service 50% of the firefighter's annuity as if the deceased firefighter had retired just prior to the date of death.

Removes alcoholism and venereal disease prohibition against paying ordinary disability.

Removes adoption before age 50 requirement for child's benefit.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **1986 Session**

#### ***HB 2630***

Removes the age 18 limitation for handicapped children of duty and occupational disease disability recipients.

Provides for waiver of annual physical examination for disability recipients if firefighter is permanently disabled and unable to ever return to service.

### **1987 Session**

None.

### **1988 Session—City Ordinance**

Compulsory retirement changed to age 63.

### **1989 Session**

#### ***HB 332***

\$325 minimum widow/widower annuity effective January 1, 1988.

#### ***SB 95***

Changed the amount of fund paid health insurance “supplement” from January 1, 1988, until December 31, 1992, to \$65 per month for each annuitant not qualified to receive Medicare benefits (and \$35 if qualified) and from January 1, 1993, until December 31, 1997, the amounts are \$75 and \$45, respectively. Widow/widowers will now be eligible for supplement. The City will be required to pay 50% of the aggregate cost of health care claims for the retired group under all health care plans offered by the City. A procedure was established for the City to determine, with the help of an independent actuary, the aggregate cost of claims and premiums for each calendar year from 1989 through 1998 for the retired group.

\$475 minimum employee annuity effective January 1, 1990.

Compensation and Supplemental annuitants may remarry after 1989 without loss of benefits.

Employee refunds must be repaid at 4% before the later of 2 years after the date of reentry or January 1, 1992.

3% postretirement increase beginning January 1, 1990 for employees born after December 31, 1929, and before January 1, 1940.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

Employee may purchase periods of suspension (not to exceed a total of 1 year of service) and 1980 strike time (not to exceed 23 days). Paramedic who transferred from the pension fund established under Article 8 of this Code to this Fund by operation of Public Act 83-780 may purchase Article 8 service at 4% annual compound interest rate prior to January 1, 1992, if the employee received a refund from the Article 8 fund.

### **1990 Session**

#### ***SB 136***

Amends Chapter 120, Paragraph 671 of the Revenue Act to provide for a separate listing on the tax bill of the dollar amount of tax due from the person assessed, which is allocable to a tax levied under the Illinois Pension Code, or any other tax levied by a municipality or township for public pension or retirement purposes. Effective January 1, 1990.

#### ***SB 1951***

Signed January 14, 1991. Service credit will be given for any periods prior to January 14, 1993 that an active firefighter who is a member of the General Assembly is absent to perform his legislative duties. No payment is required for this service credit. The current salary of the rank would be used for average salary for annuity purposes.

Any firefighter who had service as a paramedic in the Municipal Fund and received a refund of contributions could receive credit for the service in the Fire Fund by making written application to the Board by January 1, 1992 and paying for the service.

Beginning December 31, 1990, any firefighter with at least 20 years of service may withdraw from the service at any age and receive an annuity calculated under Section 6-128 beginning at age 50 if under that age at withdrawal.

Beginning January 1, 1990, the minimum widow/widower annuity is \$400 per month for all those receiving a widow/widower annuity on January 14, 1991 and for future widow/widowers of employees who retired at age 50 or over with at least 20 years of service.

If a widow/widower remarries after December 31, 1989, after attaining age 60, the annuity will continue without interruption. If the annuity is suspended because of remarriage before attaining age 60, annuity payments will be resumed if the subsequent marriage ends.

If any widow/widower receives a widow/widower annuity from the Fire Fund and after December 31, 1989, marries a firefighter in the Fund, his/her first widow/widower annuity will be canceled if she accepts any payment of a second widow/widower's annuity after he dies.

Beginning January 14, 1991, any city officer can transfer his Fire service to the Municipal Fund.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **1991 Session**

None.

### **1992 Session**

#### ***HB 969***

Approved March 26, 1992. Beginning January 1992, the minimum retirement annuity (requires retirement at age 50 or over with at least 20 years of service) was increased to \$650 per month and the minimum widow/widower annuity was increased to \$500 for those receiving annuity and those who will be eligible in the future (requires retirement or death in service at age 50 or over with at least 20 years of service).

#### ***SB 1650***

Approved January 25, 1993.

The minimum retirement annuity (requires retirement at age 50 with at least 20 years of service) was increased to \$750 per month on January 1, 1993, and \$850 per month on January 1, 1994.

The minimum widow/widower annuity (requires retirement or death in service at age 50 or over with at least 20 years of service) was increased to \$600 per month on January 1, 1993 and \$700 per month on January 1, 1994 for those eligible present and future widow/widowers.

Service credit will be given for any periods in General Assembly prior to January 9, 1997 (instead of January 14, 1993).

The annuitant may waive all or any portion of his annuity.

### **1993 Session**

#### ***SB 358***

Approved January 10, 1994. Beginning January 1, 1994, minimum Duty and Occupational Disease Disabilities have been established, if the employee has been on the disability for 10 years: 50% of current salary of rank at removal from Department payroll.

#### ***ADEA***

Effective January 1, 1994, the federal law (ADEA) allowing compulsory retirement at age 63 lapsed. As such, duty disability and occupational disease disability benefits and widow/widower compensation benefits may be "open ended", i.e., without limiting age.

### **1994 Session**

None.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **1995 Session**

#### ***SB 114***

Approved July 14, 1995.

The minimum widow/widower annuity was increased to \$700 per month for anyone entitled to receive a widow/widower annuity.

A widow/widower's annuity that was previously terminated because of remarriage before December 31, 1989 will be resumed upon proper application if the subsequent marriage has ended.

Employees have until 2 years after the date of reentry or January 1, 2000 to repay a refund.

For employee annuitants born before January 1, 1945, the 3 % postretirement increase begins at age 55.

The provisions relating to purchase of credit for certain periods of service as a paramedic or other fire department employee were changed.

The City is authorized to substitute funds obtained from borrowings and other sources for a portion of its authorized tax levy for pension purposes.

The amount of earnings that may be taken into account by any retirement system is limited to the maximum dollar limitation specified in Section 401(a)(17) of the Internal Revenue Code, except for persons who became participants before 1996.

The Fund is authorized to make certain involuntary distributions required by Section 401(a)(9) of the Internal Revenue Code.

#### ***SB 424***

Approved July 7, 1995.

The Pension Laws Commission was created as a legislative support services agency.

### **1996 Session**

#### ***SBJPA***

On August 20, 1996 the Small Business Job Protection Act was signed by President Clinton.

Treatment of governmental plans under Code Section 415:

Rule limiting annual benefit to 100% of the average of the highest 3-year compensation no longer applies.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

Excess benefit plans are permitted to provide participants with benefits in excess of the Code Section 415 limits.

Early retirement reduction does not apply to certain survivor and disability benefits.

The definition of compensation now includes elective deferrals.

Taxation of distributions:

\$5,000 death benefit exclusion was repealed for deaths after August 20, 1996.

Five-year averaging for lump sum distributions was repealed effective January 1, 2000.

Annuity payments will be taxed according to a simplified general rule, which uses investment and age as of annuity starting date for annuities, which start on or after November 19, 1996.

### **1997 Session**

#### ***HB 313***

Signed June 27, 1997.

Coverage in the City group health insurance is extended through June 30, 2002, with some modification in plans offered. Pension fund supplement remains \$45 and \$75 for Medicare eligible and non-Medicare eligible annuitants respectively.

### **1998 Union Contract Cost of Living Increases**

The following salary increases are scheduled:

1.5% effective July 1, 1995.

1.5% effective January 1, 1996.

1.5% effective July 1, 1996.

3.5% effective January 1, 1997.

3.75% effective January 1, 1998.

2.25% effective January 1, 1999.

### **1998 Session**

The minimum widow/widower annuity (requires retirement or death in service at age fifty or over with at least twenty years of service) was increased to \$800 per month on January 1, 1999 for those eligible present and future widow/widowers.



## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### **1999 Session**

None.

### **2000 Session**

In 2000 the City of Chicago enacted mandatory retirement for all firefighters, except for emergency medical technicians, upon attainment of age 63.

### **2001 Session**

None.

### **2002 Session**

#### ***HB 5168***

Effective June 28, 2002

The pension fund subsidy for retiree health insurance was extended through June 30, 2003 (other than child annuitants). The subsidy is \$75 per month if the annuitant is not eligible for Medicare and \$45 per month if the annuitant is eligible for Medicare.

### **2003 Session**

#### ***SB 1701***

Effective July 1, 2003.

The healthcare benefits were increased to \$85 per month for non-Medicare eligible participants and \$55 per month for Medicare eligible participants for the period from July 1, 2003 through June 30, 2008. Thereafter, the benefits are increased from \$85 to \$95 and \$55 to \$65 for the period July 1, 2008 to June 30, 2013.

The healthcare benefits referred to above are not and shall not be construed to be pension or retirement benefits for the purposes of Section 5 of Article XIII of the Illinois Constitution of 1970.

### **2004 Session**

#### ***PA 93-0654***

Effective January 16, 2004

Changes to the definition of salary used for benefit calculation

- For members born before 1955, who hold an exempt position above career service rank, salary means the actual salary attached to the exempt rank position.
- Salary as an ambulance commander shall be included. Employee contributions must be made retroactively before 1/1/2006. Beneficiaries may also make the contributions.
- Additional compensation for being licensed as an EMT shall be included.
- Duty availability pay shall be included. Employee contributions must be made retroactively before 1/1/2006. Beneficiaries may also make the contributions.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### *PA 93-0654(continued)*

An employee who reaches the compulsory retirement age with greater than 10 years of service, but less than 20 is now entitled to an annuity of 30 percent of average salary for the first 10 years of service plus an additional two percent for each year in excess of 10, not to exceed 50 percent.

The minimum annuity formula accrual rate for service after 20 years was increased from 2.0 percent to 2.5 percent with total benefits limited to 75 percent of final average pay.

The minimum benefit for retirements at age 50 with 20 years of service was increased to \$950 per month during 2004 and \$1,050 per month thereafter.

The minimum widow annuity was increased to \$900 per month during 2004 and \$1,000 per month thereafter.

The widow of an active fireman with 10 or more years of service will receive no less than 50 percent of the benefit the active firemen would have received had he attained age 50 and 20 years of service.

A widow who was married to a deceased fireman before the fireman began to receive a retirement annuity and for at least one year preceding the fireman's death is entitled to a widow's benefit. Any refunded contributions must be repaid with four percent interest.

A widow's benefit will continue following remarriage. Those annuities previously terminated will resume.

Members born prior to January 1, 1955, are entitled to a three percent simple COLA commencing at the later of age 55 or the first anniversary of retirement. Members born on or after January 1, 1955, are entitled to a 1.5 percent COLA commencing at the later of age 60 or the first anniversary of retirement limited to 30 percent. Previously the cutoff date was January 1, 1945.

Former city contributions for paramedics will be transferred to this fund with 11 percent interest and credited to the individual fireman if he or she pays for prior service as a paramedic in full.

### **Bertucci court opinion**

Effective June 29, 2004

For members who die while receiving duty disability payments, the widow's benefit is now 75 percent of the member's salary attached to his civil service position. The benefit increases as the salary attached to this position increases. Previously the widow's benefit was 50 percent of the member's benefit.

### **PA 93-0917 (HB 378)**

Effective August 12, 2004

Changes the widow eligibility conditions by expanding widow benefits that were previously limited by marriage conditions after withdrawal or disability. Benefits cannot be reinstated or granted earlier than January 16, 2004.

## LEGISLATIVE CHANGES 1968 THROUGH 2005 (CONT'D)

---

### *PA 93-0917(continued)*

A fireman who accumulated service under the Municipal Employees' Annuity and Benefit Fund of Chicago, who terminated and received a refund, may purchase such service credit until January 1, 2005. Those firemen that retired after January 16, 2004, but before the effective date of this act may still purchase service before January 1, 2005, and have their benefit recalculated. Employer contributions with interest, for such service, will be transferred from the Municipal Employees' Annuity and Benefit Fund to the Firemen's Annuity and Benefit Fund.

### **2005 Session**

#### **SB 23**

Approved June 27, 2005

Prohibits the investment or deposit from the retirement system or pension fund to certain entities doing business in or with the government of the Republic of the Sudan. Fund managing companies must certify that, as required under Section 1-110.5 of the pension code, they have not loaned to, invested in, or otherwise transferred any of the pension fund assets to a forbidden entity.

# **Appendix 7**

## **Additional Exhibits**



## **EXHIBIT A-1**

### **GASB #25 AND #27 DISCLOSURES**

---

The Governmental Accounting Standards Board (GASB) has adopted Statement #25, changing the way in which governmental retirement systems must report financial information. GASB #25 is effective for Fund and City reporting in 1997.

GASB #25 and #27 make a number of significant changes to retirement plan reporting. They eliminate the dual reporting of actuarial liabilities that was required under GASB #5. Under GASB #5, many plans including the Fund, reported liabilities determined under one actuarial cost method for internal purposes, but were required to also provide liabilities determined under the Projected Unit Credit method for financial reports. Under GASB #25 and #27, systems select one actuarial method from several acceptable alternatives, and report all information on this one basis.

This report includes the following Exhibits with information required to be reported under GASB #25 and #27.

***Exhibit A-2: Schedule of Funding Progress for GASB #25***

This exhibit shows a 10-year history of funding progress. The funding progress is a comparison of Actuarial Value of Assets with the Actuarial Accrued Liability (AAL), and a comparison of the unfunded AAL (UAAL) with compensation.

***Exhibit A-3: Schedule of Employer Contributions for GASB #25***

This exhibit shows the Annual Required Contribution (ARC) as computed under GASB #25 and the percent of this amount actually received. This exhibit includes a nine-year history.

***Exhibit A-4: Supplementary Information for GASB #25 and #27***

This exhibit has certain information required in the notes to the Fund and City financial reports.

***Exhibit A-5: Annual Pension Cost and Contributions Made for GASB #27***

This exhibit shows the components of annual pension cost (ARC, interest on the Net Pension Obligation (NPO), and the adjustment to the ARC), increase or decrease in the NPO, and the NPO at the end of the year. The exhibit also includes the dollar amount of contributions made.

***Exhibit A-6: Pension Cost Summary for GASB #27***

This exhibit shows a nine-year summary of annual pension cost, percentage of annual pension cost contributed that year, and NPO at the end of the year.

***Exhibit A-7: Development of Net Pension Obligation (NPO) at January 1, 1997***

This exhibit documents the calculation of the pension liability at transition in accordance with GASB #27.

**EXHIBIT A-2**  
**SCHEDULE OF FUNDING PROGRESS**  
**FOR GASB #25**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
12/31/2005	\$ 1,203,654,052	\$ 2,882,935,717	\$ 1,679,281,665	41.75 %	\$ 341,252,492	492.09 %
12/31/2004	1,182,578,954	2,793,524,355	1,610,945,401	42.33	334,423,753	481.71
12/31/2003	1,194,007,767	2,517,268,107	1,323,260,340	47.43	335,170,501	394.80
12/31/2002	1,209,768,204	2,088,706,217	878,938,013	57.92	277,053,144	317.25
12/31/2001	1,245,129,955	2,068,717,901	823,587,946	60.19	277,964,912	296.29
12/31/2000	1,219,486,962	2,053,340,475	883,853,513	59.39	275,106,756	303.10
12/31/1999	1,145,215,019	1,879,666,868	734,451,849	60.93	271,335,540	270.68
12/31/1998	1,066,891,190	1,783,569,178	716,677,988	59.82	262,248,978	273.28
12/31/1997	978,313,319	1,640,020,672	661,707,353	59.65	234,726,936	281.91
12/31/1996	845,432,187	1,575,789,570	730,357,383	53.65	233,033,832	313.41

**EXHIBIT A-3**  
**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
**FOR GASB #25**

---

<b>For Year Ending December 31</b>	<b>Annual Required Contribution</b>	<b>Actual Employer Contribution</b>	<b>Percentage Contributed</b>
2006 <sup>1</sup>	\$160,246,525	TBD	TBD
2005	161,696,388	\$90,128,915	55.74%
2004	134,762,334	55,532,454	41.21%
2003	111,079,054	60,234,206	54.23%
2002	105,106,367	59,452,787	56.56%
2001	104,014,168	60,399,909	58.07%
2000	90,530,458	65,928,675	72.82%
1999	87,959,556	53,410,352	60.72%
1998	78,020,603	48,397,527	62.03%
1997	86,981,231	54,921,536	63.14%

<sup>1</sup> Starting with fiscal year 2006, GASB #25 disclosure will include pension benefits only. The retiree healthcare supplement will be recognized under GASB #43 disclosure. For fiscal year 2006, the pension GASB #25 ARC is \$160,246,525 and the OPEB GASB #43 ARC is \$4,075,175.

**EXHIBIT A-4**  
**SUPPLEMENTARY INFORMATION FOR**  
**GASB #25 AND GASB #27**

---

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

<b>Valuation date</b>	December 31, 2005
<b>Actuarial Cost Method</b>	Entry Age
<b>Actuarial Value of Assets</b>	5-year smoothed market
<b>Amortization Method</b>	Level dollar
<b>Remaining Amortization Period</b>	40 years
<b>Actuarial Assumptions:</b>	
<b>Pension Investment Rate of Return</b>	8.0%
<b>OPEB Investment Rate of Return</b>	4.5%
<b>Projected Salary Increases</b>	4.0% per year, plus an additional percentage related to service and promotion
<b>Post-retirement Increases</b>	1.5% simple interest for 20 years for members born in or after 1955 3% simple interest for life for members born before 1955



**EXHIBIT A-5**  
**ANNUAL PENSION COST AND CONTRIBUTIONS**  
**MADE FOR GASB #27**

---

**Contribution rates**

City	Proceeds from a tax levy not more than an amount equal to the total amount of contributions by the employees to the Fund made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 2.26.
------	---

Plan members	9.125%
--------------	--------

**Annual Pension Cost:**

Annual Required Contribution (ARC)	\$161,696,388
Interest on Net Pension Obligation	57,400,748
Adjustment to ARC	<u>(55,713,380)</u>
Total	\$163,383,756

<b>Contributions Made</b>	<b>\$ 90,128,915</b>
---------------------------	----------------------

**Net Pension Obligation (NPO):**

NPO, Beginning of Year	\$717,509,354
Increase/(Decrease) in NPO	<u>73,254,841</u>
NPO, End of Year	\$790,764,195

<b>Pension Liability at Transition (January 1, 1997)</b>	<b>\$369,267,330</b>
--	----------------------

**EXHIBIT A-6  
PENSION COST SUMMARY  
FOR GASB #27**

---

<b>Year Ended December 31</b>	<b>Annual Pension Cost</b>	<b>% of Annual Pension Cost Contributed</b>	<b>Net Pension Obligation</b>
2005	\$163,383,756	55.16%	\$790,764,195
2004	136,259,855	40.75%	717,509,354
2003	112,453,771	53.56%	636,781,953
2002	106,370,746	55.89%	584,562,388
2001	105,173,254	57.43%	537,644,429
2000	91,629,104	71.95%	492,871,084
1999	88,974,566	60.03%	467,170,655
1998	78,963,730	61.29%	431,606,441
1997	86,732,136	63.37%	401,040,238

**EXHIBIT A-7**  
**DEVELOPMENT OF NET PENSION OBLIGATION (NPO) AT JANUARY 1, 1997**

<b>Year Ending December 31:</b>	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Assumptions and Method</b>										
Interest Rate	7.5%	7.5%	7.5%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Amortization Period (years)	40	40	40	40	40	40	40	40	40	40
Cost Method	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN
<b>Annual Pension Cost</b>										
Actuarially Determined Contribution (ADC)										
Normal Cost	\$44,023,556	\$44,652,516	\$45,746,453	\$43,184,329	\$47,236,555	\$51,515,900	\$52,304,610	\$53,235,963	\$48,144,514	\$49,878,875
40 Year Amortization	39,898,154	39,352,208	40,223,713	42,067,968	46,890,387	51,539,966	50,994,199	50,104,234	58,739,960	60,136,652
<b>Total ADC</b>	<b>\$83,921,710</b>	<b>\$84,004,724</b>	<b>\$85,970,166</b>	<b>\$85,252,297</b>	<b>\$94,126,942</b>	<b>\$103,055,866</b>	<b>\$103,298,809</b>	<b>\$103,340,197</b>	<b>\$106,884,474</b>	<b>\$110,015,527</b>
Interest on NPO	-	2,769,886	5,550,082	8,059,065	10,439,561	13,342,202	16,836,891	20,063,899	23,224,933	26,163,631
Adjustment to ADC	-	(2,827,639)	(5,596,880)	(8,127,020)	(10,527,588)	(13,454,705)	(16,978,861)	(20,233,079)	(23,420,768)	(26,384,245)
<b>Annual Pension Cost</b>	<b>\$83,921,710</b>	<b>\$83,946,971</b>	<b>\$85,923,368</b>	<b>\$85,184,342</b>	<b>\$94,038,915</b>	<b>\$102,943,363</b>	<b>\$103,156,839</b>	<b>\$103,171,017</b>	<b>\$106,688,639</b>	<b>\$109,794,913</b>
<b>Contributions for Year</b>										
Employer Contributions	\$29,562,500	\$34,339,139	\$37,016,865	\$36,478,751	\$36,504,134	\$38,448,497	\$42,036,863	\$42,727,953	\$41,616,542	\$43,527,172
Employee Contributions	17,427,400	17,163,621	17,544,210	18,949,395	21,251,755	20,811,264	20,782,382	20,930,122	28,338,382	24,045,799
<b>Total Contributions</b>	<b>\$46,989,900</b>	<b>\$51,502,760</b>	<b>\$54,561,075</b>	<b>\$55,428,146</b>	<b>\$57,755,889</b>	<b>\$59,259,761</b>	<b>\$62,819,245</b>	<b>\$63,658,075</b>	<b>\$69,954,924</b>	<b>\$67,572,971</b>
<b>Net Pension Obligations (NPO)</b>										
NPO at Beginning of Year	\$0	\$36,931,810	\$69,376,021	\$100,738,313	\$130,494,509	\$166,777,535	\$210,461,137	\$250,798,731	\$290,311,673	\$327,045,388
Annual Pension Cost	83,921,710	83,946,971	85,923,368	85,184,342	94,038,915	102,943,363	103,156,839	103,171,017	106,688,639	109,794,913
Total Contributions	(46,989,900)	(51,502,760)	(54,561,075)	(55,428,146)	(57,755,889)	(59,259,761)	(62,819,245)	(63,658,075)	(69,954,924)	(67,572,971)
<b>NPO at End of Year</b>	<b>\$36,931,810</b>	<b>\$69,376,021</b>	<b>\$100,738,313</b>	<b>\$130,494,509</b>	<b>\$166,777,535</b>	<b>\$210,461,137</b>	<b>\$250,798,731</b>	<b>\$290,311,673</b>	<b>\$327,045,388</b>	<b>\$369,267,330</b>