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

## **Actuarial Valuation Report**

For the Year Ending December 31, 2003

**April 2004** 



Gabriel, Roeder, Smith & Company Actuaries and Consultants



## GABRIEL, ROEDER, SMITH & COMPANY CONSULTANTS & ACTUARIES

20 North Clark Street • Suite 1100 • Chicago, IL 60602•312-456-9800 • Fax 312-456-9801

April 12, 2004

Retirement Board of the Firemen's Annuity and Benefit Fund of Chicago Suite 2550 One North Franklin Street Chicago, IL 60606

#### **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, 2003. This valuation has been performed to measure the funding status of the Fund and determine the contribution levels for 2004. 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

## Firemen's Annuity and Benefit Fund of Chicago Page 2

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. We have increased benefits for those individuals affected by the retro pay increase whose benefits had not yet been recalculated.
- 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 actuarial assumptions have been changed since the last report to reflect the results of the experience study performed for the period of January 1, 1998 through December 31, 2002. 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 5.08:1 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, ASA

alex Rivera

Senior Consultant

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#### **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, 2003. The purposes of this valuation are:

- 1. To develop the minimum actuarially determined contribution for 2004.
- 2. To develop the annual required contributions (ARC) under GASB #25.
- 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, 2004 is \$166.2 million including estimated employee contributions of \$31.5 million. This is 49.60% of the total payroll for the Fund and a \$29.1 million increase over the minimum actuarial contribution for 2003.

The annual required contributions (ARC) under GASB #25 for the year ending December 31, 2004 is \$134.8 million, which is 40.21% of the total payroll. This amount is net of estimated employee contributions of \$31.5 million. The 2004 ARC of \$134.8 million compares with the 2003 ARC of \$111.1 million. The ARC is determined using an actuarial value of assets and a forty-year level dollar amortization of the unfunded actuarial liability.

The funding status declined from the prior year. The unfunded liability increased from \$879 million to \$1,323 million and the funding ratio decreased from 57.92% to 47.43% using the smoothed Actuarial (Market Related) Value of Assets. The funded ratio is 44.08% when the market value of assets is compared to GASB #25 actuarial liabilities.

Plan contributions 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 average annual salary increased significantly due to the retroactive pay increase affecting the period 7/1/99-6/30/03; the assumed salary increase rate was 5.0%.
- The employer cost in excess of actual contributions was approximately \$31.8 million.
- Plan assets earned more than the assumed 8% return. However, there was a loss on the market-related value of assets of \$62.4 million due to recognition of prior year losses compared to a gain of \$179.3 million on market value of assets.
- The change in actuarial assumptions increased liabilities by approximately \$154.2 million.

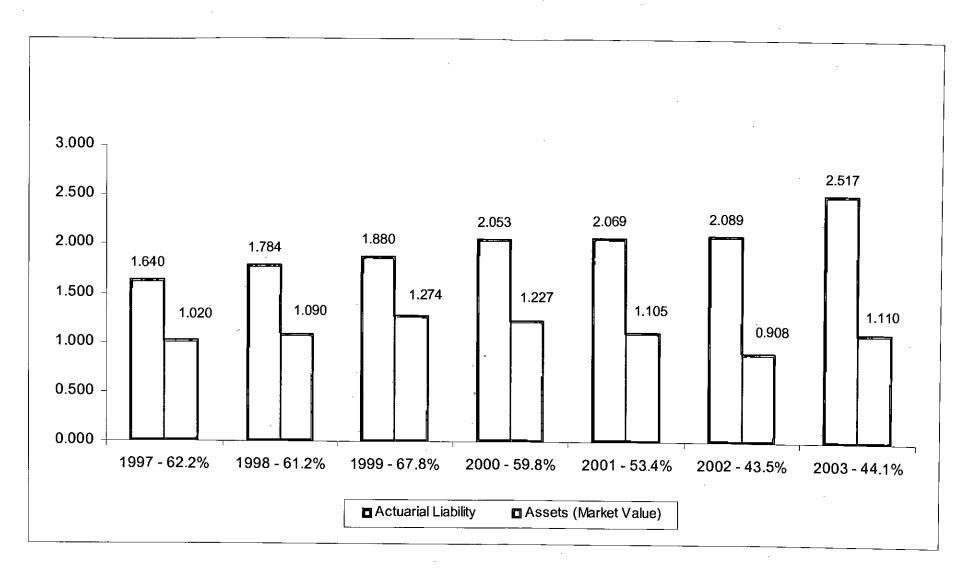
A more thorough examination of these and other factors can be found in the Reconciliation of Unfunded Liability section and the gain/loss calculation of Table 3.

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

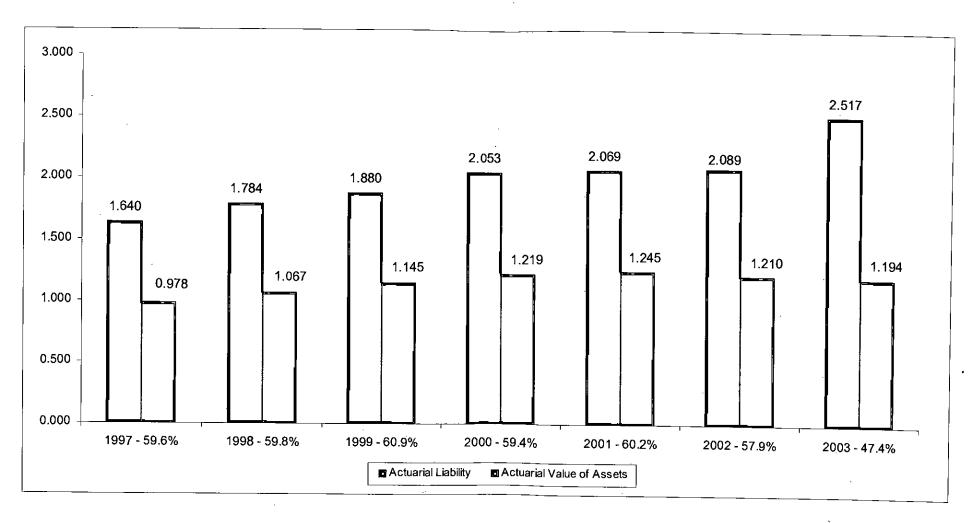
	December 31, 2002		December 31, 2003	
	\$ in Millions	% of Pay <sup>1</sup>	\$ in Millions	% of Pay <sup>1</sup>
Contribution Levels			•	
Minimum Actuarially Determined	\$ 137.1	49.50	\$ 166.2	49.60
Contribution (State Reporting)				
Annual Required Contribution	. 111.1	40.09	134.8	40.21
(GASB 25)				
Funding Status State/GASB #25				
Market-Related Value of Assets	\$ 1,209.8	436.66	\$ 1,194.0	356.24
Actuarial Liability	2,088.7	753.90	2,517.3	751.04
Funding Ratios	57.92%	N/A	47.43%	N/A
Funding Status Market Value				
Market Value of Assets	\$ 907.8	327.66	\$ 1,109.6	331.04
Actuarial Liability	2,088.7	753.90	2,517.3	751.04
Funding Ratios	43.46%	N/A	44.08%	N/A
Funding Status Book Value				
Book Value of Assets	\$ 950.7	343.16	\$ 947.0	282.56
Actuarial Liability	2,088.7	753.90	2,517.3	751.04
Funding Ratios	45.52%	N/A	37.62%	N/A

<sup>&</sup>lt;sup>1</sup>Payroll for 2002 was \$277.1 million and for 2003 was \$335.2 million.

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



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



#### **Participants**

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

	December 31, 2002	December 31, 2003
Active Participants		
Number	4,910	$4,909^{-1}$
Average Age	43.1	43.5
Average Service	14.7	15.0
Average Annual Salary	\$56,426	\$68,277
Retirees		
Number	2,411	2,412
Average Age	71.3	71.2
Average Monthly Benefit	\$ 3,338	\$ 3,511
Survivors		
Number	1,416	$1,405^{-2}$
Average Age	75.5	75.5
Average Monthly Benefit	\$ 1,216	\$ 1,285

<sup>&</sup>lt;sup>1</sup> Includes three participants on ordinary disability who continue to accrue benefit service.

Total participants receiving benefits under the Fund, including disability, widow, and children, decreased 1.0% during 2003 from 4,351 to 4,309. Total expenditures for these benefits increased from \$137.7 million in 2002 to \$147.8 million during 2003, or 7.3%.

#### Changes in Provisions of the Fund

PA 93-0042 was passed in 2003 and made the following changes to the Fund provisions.

- 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 definition of "city annuitant" was updated to include a person receiving a child's annuity.

#### **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 run experience.

<sup>&</sup>lt;sup>2</sup> Includes one parent annuitant.

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.

An experience review of the economic and demographic assumption was performed using data for plan years 1998 through 2002. The study demonstrated that the current assumption set was consistent with recent experience and minor adjustments were made to these assumptions including:

- Changing salary increases, from 5 percent at all ages, to 4 percent wage inflation plus a seniority-based scale
- Changing retirement and disability rates from entry age/attained age-based to attained-age based only
- Changing turnover rates from entry age/attained age-based to service-based only
- Changing mortality rates to 1983 Group Annuity Mortality, sex distinct

#### **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% (i.e., experience gain) or below 8% (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.

#### 2003 Experience Analysis

#### Pay Increase

The pay increase assumption prior to the 2003 valuation consisted of two parts, a base salary increase (3%) and a longevity-based increase (2%). Overall, the average salary for 2003 increased significantly from the 2002 salary due to the retroactive pay increase. When comparing members active in both 2002 and 2003 the average salary increase was 23.0%. This was 17.1% above our aggregate assumption of 5% resulting in an actuarial loss of approximately \$175.8 million.

#### **Investment Return**

The Fund had an investment gain in 2003 of \$179.3 million relative to the 8% expected rate of return on a market value basis. The loss on the Actuarial (Market-Related) Value of Assets relative to the 8% expected rate of return was \$62.4 million due to the recognition of deferred investment gains and losses.

#### **Actuarial Assumptions**

The valuation as of December 31, 2003, reflects the results of the experience study performed for the period from January 1, 1998 through December 31, 2002. The change in assumptions increased actuarial liabilities by \$154.2 million or 6.1% of total liabilities.

#### Changes in Plan Provisions

The current valuation reflects the increase in the pension fund subsidy for retiree healthcare benefits applicable to annuitants who participate in the City's healthcare plan. This change increased liabilities by \$7.8 million or 0.3% of total liabilities.

#### Other

The combination of retirements, disablements and mortality resulted is a net actuarial loss of \$7.8 million, or 0.3% of the December 31, 2003 liabilities. Gains and losses from all other sources, including the increase in current annuitant benefits due to retroactive increases, resulted in a net loss of \$4.5 million. This is about 0.2% of the December 31, 2003 liabilities, 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, as modified by the experience study, 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, 2002 and December 31, 2003.

## Appendix 1

# **Results of Actuarial Valuation**

TABLE 1

#### **SUMMARY**

	December 31, 2002	December 31, 2003
Assets		
Market Value - Beginning of Year	\$1,104,939,587	\$907,801,957
Income	, ,	
Investment Income Net Expenses	(\$143,720,881)	\$249,995,138
Employer Contributions	59,452,787	60,234,206
Employee Contributions	27,622,476	42,665,388
Miscellaneous	257,645	83,850
Subtotal	(\$56,387,973)	\$ 352,978,582
Outgo (Refunds, Benefits, & Administration)	\$140,749,657	\$ 151,220,004
Market Value - End of Year	\$907,801,957	\$1,109,560,535
Actuarial Value - End of Year	1,209,768,204	1,194,007,767
Book Value - End of Year	950,744,457	947,044,024
Members		
Active	4,910	4,909
Retirees	2,411	2,412
Survivors	$1,416^{-2}$	1,405 2
Disabilities	401	370
Children	. 121	119
Payroll Data		
Valuation Payroll <sup>1</sup>	\$ 277,053,144	\$ 335,170,501
Average Salary	56,426	68,277

<sup>&</sup>lt;sup>1</sup> The valuation payroll includes compensation for three 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**

	December 31, 2002	December 31, 2003
Actuarial Values		
Funding - State Basis		
Actuarial Liability	\$2,088,706,217	\$2,517,268,107
Assets - Actuarial Value - Net	1,209,768,204	1,194,007,767
Unfunded Liability	878,938,013	1,323,260,340
Funded Ratio	57.92%	47.43%
Actuarially Required Total Contribution 1	\$137,131,772	\$166,249,194
Deficiency in Required Contribution (est.)	48,668,080	72,335,538
Required Employer Contribution Multiple	4.19	5.08
Termination Values		
Liability	\$1,723,872,531	\$1,881,488,584
Deficiency	514,104,327	687,480,817
Quick Ratio	70.18%	63.46%
GASB #25 Values		
Actuarial Liability	\$2,088,706,217	\$2,517,268,107
Assets - Actuarial Value	1,209,768,204	1,194,007,767
Unfunded Liability	878,938,013	1,323,260,340
Funded Ratio	57.92%	47.43%
Annual Required Contribution (ARC)	111,079,054	134,762,334
<u> 1arket Values</u>		
Actuarial Liability	\$2,088,706,217	\$2,517,268,107
Assets - Market Value	907,801,957	1,109,560,535
Unfunded Liability	1,180,904,260	1,407,707,572

<sup>&</sup>lt;sup>1</sup>Includes projected employee contributions of \$26,052,718 for December 31, 2002 and \$31,486,860 for December 31, 2003.

## TABLE 2

# DEVELOPMENT OF ACTUARIALLY CALCULATED CONTRIBUTION FOR 2004 (STATE BASIS)

#### AND

# DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION UNDER GASB #25 FOR 2004

(1) Normal Cost	\$57,007,511
(2) Actuarial Accrued Liability (AAL)	\$2,517,268,107
(3) Unfunded AAL (UAAL)	
(a) Actuarial Value of Assets	\$1,194,007,767
(b) UAAL (2-3(a))	1,323,260,340
(4) 40-Year Amortization (Level \$) Payable at Beginning of Year at 8.0%	\$102,748,913
(5) Minimum Actuarially Calculated Contribution	
(a) Interest Adjustment for Semimonthly Payment	6,492,770
(b) Total Minimum Contribution (1+4+5(a))	166,249,194
(c) Total Minimum Contribution (Percent of Pay)	49.60%
(6) Estimated Member Contributions	\$31,486,860
(7) Annual Required Contribution (ARC)	
(b) Annual Required Contribution (5(b)-6)	\$134,762,334
(c) Annual Required Contribution (Percent of Pay)	40.21%
(8) Estimated City Contribution	\$62,426,796
(9) Deficiency/(Excess)	
(a) in Dollars (7(b)-8)	\$72,335,538
(b) as a Percentage of Pay	21.58%

TABLE 3
RECONCILIATION OF UNFUNDED LIABILITY

	2002	2003
Unfunded Actuarial Accrued Liability - Beginning of Year	\$823,587,946	\$878,938,013
Gains (Losses) During the Year Attributable to:		
Employer Cost in Excess of Contributions	(\$42,204,810)	(\$31,822,636)
Gain (Loss) on Investment Return	(79,418,728)	(62,375,871)
Gain (Loss) from Salary Changes	57,839,048	(175,769,581)
Gain (Loss) from Demographic Assumptions	9,777,592	(7,830,805)
Gain (Loss) from Assumption Changes	-	(154,247,385)
Gain (Loss) from Law Changes	_	(7,788,230)
Gain (Loss) from All Other Sources <sup>1</sup>	(1,343,169)	(4,487,819)
Composite Actuarial Gain (Loss)	(\$55,350,067)	(\$444,322,327)
Unfunded Actuarial Accrued Liability - End of Year	\$878,938,013	\$1,323,260,340

 $<sup>^{\</sup>it I} \ {\it Includes increase in current annuitant benefits due to retroactive pay increases}.$ 

TABLE 4
SUMMARY OF BASIC ACTUARIAL VALUES

	APV of Projected Benefits	Actuarial Accrued Liability (AAL)
(1) Values for Active Members	\$1,638,998,272	\$1,058,719,890
(2) Values for Inactive Members		
(a) Retired	1,053,223,539	1,053,223,539
(b) Spouse Annuitants	140,779,382	140,779,382
(c) Compensation Widows	39,920,600	39,920,600
(d) Disability	207,314,062	207,314,062
(e) Inactive (Deferred Vested)	10,740,530	10,740,530
(e) Children	6,475,385	6,475,385
(f) Parent Annuitants	94,719	94,719
Total for Inactives	\$1,458,548,217	\$1,458,548,217
(3) Grand Totals	\$3,097,546,489	\$2,517,268,107
(4) Normal Cost for Active Members	\$57,007,511	
(5) Actuarial Present Value of Future Compensation	\$3,562,938,520	

TABLE 5 HISTORY OF RECOMMENDED EMPLOYER MULTIPLES

**Normal Cost** 

		Plus 40-Year Amortization	
Statutory	Normal Cost		Level %
M ultiple	Plus Interest	_ Level \$	of Salary
2.26	,		
			3.05
2.26	4.66	4.84	3.71
2.26	4.89	5.08	3.86
2.26	5.07	5.27	4.03
2.26	4.70	4.86	3.71
2.26	4.39	4.54	3.47
2.26	4.53	4.68	3.58
2.26	4.39	4.52	3.41
2.26	4.41	4.55	3.43
2.26	4.55	4.69	3.53
2.26	4.75	4.89	3.69
2.26	4.89	5.03	3.81
2.26	4.92	5:09	3.71
2.26	5.16	5.33	3.78
2.26	5.02	5.19	3.78
2.26	3.95	4.08	3.00
2.26	4.31	4.22	2.91
2.26	3.56	3.49	2.41
2.26	4.39	4.30	2.99
2.26	4.61	4.44	3.12
2.26	4.07	4.19	2.93
2.26	4.90	• 5.08	3.18
	2.26 2.26 2.26 2.26 2.26 2.26 2.26 2.26	Multiple         Plus Interest           2.26         4.04           2.26         4.66           2.26         4.89           2.26         5.07           2.26         4.70           2.26         4.39           2.26         4.39           2.26         4.41           2.26         4.75           2.26         4.89           2.26         4.92           2.26         5.16           2.26         5.02           2.26         3.95           2.26         4.31           2.26         3.56           2.26         4.39           2.26         4.39           2.26         4.39           2.26         4.61           2.26         4.07	Statutory Multiple         Normal Cost Plus Interest         Level \$           2.26         4.04         4.21           2.26         4.66         4.84           2.26         4.89         5.08           2.26         5.07         5.27           2.26         4.70         4.86           2.26         4.39         4.54           2.26         4.53         4.68           2.26         4.39         4.52           2.26         4.41         4.55           2.26         4.55         4.69           2.26         4.75         4.89           2.26         4.89         5.03           2.26         5.16         5.33           2.26         5.02         5.19           2.26         3.95         4.08           2.26         4.31         4.22           2.26         3.56         3.49           2.26         4.39         4.30           2.26         4.39         4.30           2.26         4.61         4.44           2.26         4.61         4.44           2.26         4.07         4.19

Change in actuarial assumptions
 Change in benefits
 Change in asset valuation method to GASB

<sup>&</sup>lt;sup>4</sup> Change in actuary

#### TABLE 6

#### ORDINARY DEATH BENEFIT RESERVE

#### ASSETS

Fund Balance \$ (6,492,966)

Present Values of Future Contributions:

Contributions by Members at \$30.00 a Year 1,588,956

Annual City Contribution of \$142,000 1,532,096

Unfunded Liability 18,426,819

#### **LIABILITIES**

\$ 15,054,904

Present Value of Future Death Benefits (3%, Plan Mortality Basis)

Active Members 4,843,341

Retired Members 10,211,563

TOTAL LIABILITIES \$ 15,054,904

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

TOTAL ASSETS

TABLE 7
SUMMARY OF RESERVES

•	2002	2003
Prior Service Annuity Reserve	\$ 850,269,401	\$ 950,817,070
City Contribution Reserve	467,146,024	513,547,004
Annuity Payment Reserve	411,075,650	470,888,286
Salary Deduction Reserve	386,790,572	424,954,937
Death Benefit Reserve	(5,636,492)	(6,492,966)
Ordinary Disability Reserve	213,521	152,158
Supplementary Payment Reserve	1,666,253	1,469,622
Gift Reserve	1,280,112	1,746,352
Reserve (Deficit)	(1,205,003,084)	(1,247,521,928)
Total Net Assets for Pension Benefits	\$ 907,801,957	\$ 1,109,560,535

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

Valuation Date	(1) Active Member	(2) Retirees and	(3) Active Members (ER Financed	Actuarial Value of	•	6) of Prese red by Ass	
12/31	Contributions	Beneficiaries	Portion)	Assets	(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 a,b	159,247,413	409,282,863	393,153,564	440,687,231	100.00%	68.76%	0.00%
1987 a,b	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 b,c	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 °	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 a,b	422,940,367	1,458,548,217	635,779,523	1,194,007,767	100.00%	52.87%	0.00%
_							-

Change in actuarial assumptions
 Change in benefits
 Change in actuary

# Appendix 2

## **Assets of the Plan**

# TABLE 9 RECONCILIATION OF ASSET VALUE AS OF DECEMBER 31, 2003

	Market Value	Book Value
1. Value of assets as of 12/31/2002	\$ 907,801,957	\$ 950,744,457
2. Income for plan year:		
a) Member contributions	\$ 42,665,388	\$ 42,665,388
b) City contributions	60,234,206	60,234,206
c) Investment income net of expenses	249,995,138	44,536,127
d) Miscellaneous revenue	83,850	83,850
e) Total income	\$ 352,978,582	\$ 147,519,571
3. Disbursements for plan year:		
a) Benefit payments	\$ 147,813,232	\$ 147,813,232
b) Refunds	1,360,018	1,360,018
c) Administration	2,046,754	2,046,754
d) Total disbursements	\$ 151,220,004	\$ 151,220,004
4. Value of assets as of 12/31/2003	\$ 1,109,560,535	\$ 947,044,024
5. Estimated rate of return in 2003:		
a) Gross (Investment expense of \$4,528,358)	28.88%	5.31%
b) Net of investment expense	28.29%	4.81%

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, 2003

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

a) Market value of assets as of 12/31/2002

\$907,801,957

b) Actual income and disbursements in year ending 12/31/2003 weighted for timing

		Weight for	Weighted
Item	Amount	Timing	Amount
i) Member contributions	\$42,665,388	50.0%	\$21,332,694
ii) City contributions	60,234,206	50.0%	30,117,103
iii) Miscellaneous revenue	83,850	50.0%	41,925
iv) Benefit payments	(147,813,232)	50.0%	(73,906,616)
v) Refunds	(1,360,018)	50.0%	(680,009)
vi) Administration	(2,046,754)	50.0%	(1,023,377)
vii) Total		•	(\$24,118,280)

c) Market value of assets adjusted for actual income and disbursements [(a) + (b)(vii))]

\$883,683,677

d) Assumed rate of return on plan assets for the year

8.00%

e) Expected return [(c) \* (d)]

\$70,694,694

#### 2. Actual Return on Market Value of Assets for Year Ending 12/31/2003

3. Investment Gain/(Loss) for Year Ending 12/31/2003 [2(e) - 1(e)]	\$179,300,444
e) Actual return $[(d) + (c) - (b) - (a)]$	\$249,995,138
d) Market value of assets as of 12/31/2003	1,109,560,535
c) Disbursements paid in year ending 12/31/2003	151,220,004
b) Income (less investment income) for year ending 12/31/2003	102,983,444
a) Market value of assets as of 12/31/2002	\$907,801,957

### 4. Actuarial Value of Assets as of 12/31/2003

a) Market value of assets as of 12/31/2003

\$1,109,560,535

b) Deferred investment gains and (losses) for last 5 years

			Percent	Deferred
	Plan Year	Gain/(Loss)	Deferred	Amount
i)	1999	\$139,349,009	0.00%	\$0
ii)	2000	(110,026,059)	20.00%	(22,005,212)
iii)	2001	(169,736,871)	40.00%	(67,894,748)
iv)	2002	(229,979,378)	60.00%	(137,987,627)
v)	2003	179,300,444	80.00%	143,440,355
vi)	Tota1	(\$191,092,855)	-	(\$84,447,232)

c) Actuarial Value of Assets

\$1,194,007,767

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, 2003

· -	Male	Female	Total
Number of Participants at Beginning of Fiscal Year	4,643	265	4,908
Increases: Participants Added During Year Participants Returning From Inactive or Disability Status	113 13	19 0	132
Totals	4,769	284	5,053
Decreases: Terminations During Year	140	7	147
Number of Participants at End of Fiscal Year	4,629	277	4,906
Total Inactive Participants			160
Terminations:			
Withdrawal (With Refunds) <sup>1</sup>	6	2	8
Withdrawal (Without Refunds)	19	. 2	21
Ordinary Disability Benefit	1	0	1
Occupational Disease Disability Benefit	10	0	10
Duty Disability Benefit	12	1 .	13
Retirements	. 80	1 .	81
Deaths (Occupational)	0	0	0
Deaths (Non-occupational)	· 12	1	13
Totals	140	7	147

<sup>&</sup>lt;sup>1</sup>This total differs from the total of 20 shown in Exhibit D due to the fact that only 8 of the refunds were paid to participants who were considered to be active as of December 31, 2002.

# EXHIBIT B SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES FOR FISCAL YEAR ENDING DECEMBER 31, 2003

	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Service Retirement Annuities	2,411	134	133	2,412
Spouse Annuitants	1,330	87	95	1,322
Children's Annuities	121	9	11	119
Parent Annuities	1	. 0	Ö	1
Ordinary Disability Benefit (Non-Occupational)	2	2	1	3
Occupational Disease Disability Benefit	144	11	34	121
Duty Disability Benefit (Occupational)	257	14	22	249
Widows' Compensation Annuities <sup>1</sup> (Service Connected Death)	85	0	3	82
Totals	4,351	257	299	4,309

<sup>&</sup>lt;sup>1</sup>All Supplemental Widows were moved into Compensation Widows Group.

EXHIBIT C
PART I – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE MALE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF 12/31/2003

					Years of Se	rvice	<del>_</del>	****			
AGE	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	Total	Annual Salary
Under 20	2	2	-	-	-	_	_	_		4	
	80,832	91,146	- 🔍	-	-	-	-	-	-	S	171,9
20 to 24	-	2	-	-	-	_	_	-	_	2	
	_	102,690	-	-	-	-	•	-	-		102,69
25 to 29	16	103-	57	-	-	_	-	•	_	176	
	646,656	5,597,538	3,500,712	-	-	-	-	-	-		9,744,9
30 to 34	. 31	238	287	4		-	-	-	_	560	
	1,252,104	12,987,456	17,770,146	276,582	-	-	-	-	-		32,286,2
35 to 39	28	155	233	123	114		_	_	-	653	
	1,131,648	8,565,756	14,321,586	8,252,448	8,109,846	-	-	-	-		40,381,2
40 to 44	12	67	227	296	356	31	_	_	-	989 -	
	484,992	3,628,914	13,934,838	19,642,344	25,380,432	2,473,914	-	-	-		65,545,4
45 to 49	4	29	80	126	226	564	86 、	1	_	1,116	Š
	161,664	1,598,814	4,912,746	8,227,176	15,781,950	43,524,066	7,258,278	81,840	-	-,	81,546,5
50 to 54	-	6	30	36	78	314	234 ~	. 1	_	699	
	-	337,782	1,844,988	2,361,444	5,351,742	23,163,594	19,421,040	94,914	-		52,575,5
55 to 59	-	1	8	5	16	69	111-	89	13	312	
	-	50,730	486,360	312,150	1,061,574	4,996,692	8,929,104	7,57 <b>9</b> ,548	1,126,032		24,542,1
60 to 64	-	-	-	3	2	3	. 15	41	54	118	
		-	-	192,486	129,276	204,672	1,149,228	3,393,330	5,148,432		10,217,4
65 and over	-	-	-	-	-	-	_	_	-	0	
			-	•	-,	-	-	-	-		
W/O DOB										0	
									,		
Total Active	93	603	922	593	792	981	446	132	67	4,629	
nnual Salary	\$3.757:896	\$22,060,826	\$\$6.771.276	\$20.264.620	\$55 914 970	\$74.262.029	\$36,757,650	£11140 622	\$6,274,464		317,114,23

<sup>&</sup>lt;sup>1</sup> The number of participants and annual salary listed includes information on active participants only. Annual salary includes EMT pay. Hence, information on the three 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 12/31/2003

	Years of Service										
AGE	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	Total	Annual Salary
Under 20	-	-	-	_	_	_				0	
	-	-	-	_	-	-	-	_	•	U	\$
20 to 24	-	-		_	_	. <del>-</del>			_	0	•
	-	-	-	_	-		-	_	-	U	
25 to 29	1	16	-	_	_	_	_			17	
	40,416	858,732	-	-	-		_		-	1 /	899,14
30 to 34	4	19	11 -	_	_	_			•	2.4	0,7,14
	161,664	1,026,996	693,864	-	-	•	-	-	-	34	1,882,52
35 to 39	· -	15	19	22	11				-	<b>65</b>	1,002,32
	-	783,870	1,202,568	1,464,924	799,566	- -	-	-	· -	67	4,250,92
40 to 44	1	6	13	20	28	3					4,230,92
	40,416	321,732	813,834	1,311,084	2,003,268	214,704	-	-	-	71	4 705 01
45 to 49		1	8	13	21	10	_	-	-		4,705,03
13 10 47	-	40,416	508,500	839,442	1,470,522	777,936	4 350,016	٠	-	<b>5</b> 7	2.007.02
50 to 54	1	,	200,200					•	-	_	3,986,83
30 10 34	40,416	-	-	6 391,938	6 440,766	4 314,454	175 000	-	-	19	4.0.00.00
55 to 59	10,110						175,008	-			1,362,58
33 10 39	-	-	-	1 67,626	2 134,574	1 89,832	2	-	-	6	
60 40 64		_	-				157,440	-	-		449,47
60 to 64	-	-	60,342	-	142.000	1	1 02 574	-	-	5	
65	-	-	00,342	. <del>-</del>	142,008	66,888	92,574		-		361,81
65 and over	-	-	•	-	-	1 72 25 :	-	-	-	1	
W/O DOD	-	-	-	-	_	72,384	-	· · -	-		72,38
W/O DOB				-						0	
							<u> </u>	•			
Total Active	7	57	52	62	70	20	. 9	-	-	277	
nual Salary <sup>1</sup>	\$282,912	\$3,031,746	\$3,279,108	\$4.075.014	\$4,990,704	\$1,536,198	\$775,038	\$0	\$0		\$17,970,72

<sup>&</sup>lt;sup>1</sup> The number of participants and annual salary listed includes information on active participants only. Annual salary includes EMT pay. Hence, information on the three 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 12/31/2003

					Years of Se	rvice				•	
AGE	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	Total	Annual Salary
Under 20	2 80,832	91,146								4	171,97
20 to 24		2 102,690			-					· <b>2</b>	102,69
25 to 29	. 17 687,072	6,456,270	57 3,500,712							193	10,644,0
30 to 34	35 1,413,768	257 14,014,452	298 18,464,010	4 276,582					-	594	34,168,8
35 to 39	28 1,131,648	170 9,349,626	252 15,524,154	145 9,717,372	125 8,909,412					720-	44,632,2
40 to 44	13 525,408	73 3,950,646	240 1 <b>4</b> ,748,672	316 20,953,428	384 27,383;700	34 2,688,618	,	•		1,060	70,250,4
45 to 49	4 161,664	30 1,639,230	88 5,421,246	139 9,066,618	247 17,252,472	574 44,302,002	90 7,608,294	1 81,840		1,173	85,533,3
50 to 54	1 40,416	6 337,782	30 1,844,988	42 2,753,382	84 5,792,508	318 23,478,048	236 19,596,048	1 94,914		718	53,938,0
55 to 59		1 50,730	8 486,360	6 379,776	18 1,196,148	70 5,086,524	9,086,544	89 7,579,548	13 1,126,032	318	24,991,6
60 to 64			1 60,342	3 192,486	4 271,284	4 271,560	16 1,241,802	41 3,393,330	54 5,148,432	123	10,579,2
65 and over						1 72,384				1	72,3
W/O DOB					. · · · · · · · · · · · · · · · · · · ·				. •	0	
Total Active	100	660	974	655	862	1,001	455	132	67	4,906	
nnual Salary	\$4,040,808	\$35,992,572	\$60,050,484	\$43,339,644	\$60,805,524	\$75,899,136	\$37.532.688	\$11,149,632	\$6,274,464	4	335,084,95

<sup>&</sup>lt;sup>1</sup> The number of participants and annual salary listed includes information on active participants only. Annual salary includes EMT pay. Hence, information on the three 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, 2003

· .	Length of Service at Date of Refund									
Age at Date of Refund	Under 1 Year	Between 1 and 2		Between 3 and 4		5 and over 1	Total			
Without Record		1				1	. 2			
Under 20							0			
20 to 24							0			
25 to 29		,	2			1	2			
30 to 34				1			1			
35 to 39		·				•	0			
40 to 44	•					4	. 4			
45 to 49						2	2			
50 to 54							0.			
55 to 59					1		1			
60 & over						2	2			
Totals	0.	1	2	1	1	9	14			

Includes only the actual number of refunds paid or accrued during fiscal year reported.

<sup>&</sup>lt;sup>1</sup> Includes three refunds from male participants paid to their estate.

#### EXHIBIT D - PART II SHOWING NUMBER OF REFUND PAYMENTS MADE DURING YEAR TO FEMALE EMPLOYEES FOR FISCAL YEAR ENDING DECEMBER 31, 2003

_	Length of Service at Date of Refund								
Age at Date of Refund		Between 1 and 2				5 and -	Total		
Without Record							0		
Under 20							0		
20 to 24							0		
25 to 29			1	1			2		
30 to 34	•				,	•	0		
35 to 39							0		
40 to 44							0		
45 to 49						. 2	2		
50 to 54						2	2		
55 to 59							0		
60 & over							0		
Totals	0	0	1	1	0	. 4	6		

Includes only the actual number of refunds paid or accrued during fiscal year reported.

<sup>&</sup>lt;sup>1</sup> Includes two refunds from female participants paid to their estate.

# EXHIBIT E SHOWING STATISTICS ON SERVICE RETIREMENT ANNUITIES CLASSIFIED BY AGE AS OF DECEMBER 31, 2003

		MALE		FEMALE		TOTAL	
	Annual		Annual		Annual		
AGE	No.	Payments	No.	Payments	No.	Payments	
UNDER 50	4	\$ 18,050	1	\$ 5,700	5	\$ 23,750	
50	5	133,370			5	133,370	
51	13	435,63 <b>7</b>	1	42,939	14	<b>478,57</b> 6	
52	7 .	228,171			7	228,171	
53	10	342,781	2	45,596	12	388,377	
54	10	330,258			10	330,258	
55	6	208,499			6	208,499	
56	23	973,278			.23	973,278	
57	20	767,656			20	767,656	
58	19	775,403			19	775,403	
59	26	1,081,136			26	1,081,136	
60	48	2,333,756			48	2,333,756	
61	84	4,149,123			84	4,149,123	
62	83	4,059,887			83	4,059,887	
. 63	142	6,750,530			142	6,750,530	
. 64	87	4,326,312		•	87	4,326,312	
65	. 84	4,053,908			84	4,053,908	
66	7 <b>3</b>	3,560,213		,	73	3,560,213	
67	129	6,392,703		•	129	6,392,703	
68	91	4,538,657		•	91	4,538,657	
69	. 97	4,973,039			97	4,973,039	
70	106	5,054,530			106	5,054,530	
71	101	4,832,993		i.	101	4,832,993	
72	136	6,257,932			136	6,257,932	
73	129	5,592,571			129	5,592,571	
74	108	4,434,917			108	4,434,917	
75	91	3,560,481			91	3,560,481	
76	105	3,899,397			105	3,899,397	
77	96	3,508,360			96	3,508,360	
78	91	2,907, <b>6</b> 61			91	2,907,661	
79	75	2,525,309			7 <b>5</b>	2,525,309	
80	52	1,650,068			52	1,650,068	
81	41	1,364,408			41	1,364,408	
82	46	1,388,114			. 46	1,388,114	
83	34	890,550			34	890,550	
84	30	732,449			30	732,449	
85+	106	2,494,620			1 <b>0</b> 6	2,494,620	
otals	2,408	\$101,526,727	4	\$94,235	2,412	\$101,620,962	

#### EXHIBIT F SHOWING STATISTICS ON WIDOW'S ANNUITIES CLASSIFIED BY AGE AS OF DECEMBER 31, 2003

Age Under 30 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	No. 1 0 0 0 1 0 0 0 0 2 0 2	Payments  \$ 0 0 0 13,675 0 0 29,201 0	58 59 60 61 62 63 64 65	No. 1  12  8  16  17  19  9  29  20	Payments \$ 185,707 142,253 248,211 294,481 392,740 131,030 449,699 364,274
30 31 32 33 34 35 36 37 38 39 40 41 42 43	0 0 1 0 0 0 0 0 2	0 0 13,675 0 0 0 0 29,201	59 60 61 62 63 64 65	12 8 16 17 19 9 29	142,253 248,211 294,481 392,740 131,030 449,699
31 32 33 34 35 36 37 38 39 40 41 42 43	0 1 0 0 0 0 0 2	0 13,675 0 0 0 0 29,201	60 61 62 63 64 65	16 17 19 9 29	248,211 294,481 392,740 131,030 449,699
32 33 34 35 36 37 38 39 40 41 42 43	1 0 0 0 0 0 2	13,675 0 0 0 0 29,201	61 62 63 64 65	17 19 9 29	294,481 392,740 131,030 449,699
33 34 35 36 37 38 39 40 41 42 43	0 0 0 0 2 0	0 0 0 0 29,201	62 63 64 65	19 9 29	392,740 131,030 449,699
34 35 36 37 38 39 40 41 42 43	0 0 0 2 0	0 0 0 29,201	63 64 65	9 29	131,030 449,699
35 36 37 38 39 40 41 42 43	0 0 2 0	0 0 29,201	64 65	29	449,699
36 37 38 39 40 41 42 43	0 2 0	0 29,201	65		
37 38 39 40 41 42 43	2	29,201		20	364 274
38 39 40 41 42 43	2				. 207,474
39 40 41 42 43		٥	66	22	332,622
40 41 42 43	2	,	67	32	551,969
41 42 43		30,238	68	35	613,886
42 43	2	28,796	69	26 .	440,767
43	2	24,417	70	28	395,349
	4	54,936	71	39	593,077
44	1	9,830	72	46	608,320
• •	1	11,855	73	59	827,355
45	5	89,796	74	58	788,340
46	6	86,773	75	62	834,429
47	3	. 55,081	76	45	612,920
48	3	46,743	77	67	879,852
49	2	31,187	78	53	671,186
50	2	35,931	79	45	598,983
51	2	28,072	80	47	556,790
52	6	117,695	81	43	450,601
53	12	175,647	82	56	630,383
54	6	107,238	83	27	316,003
55	6	82,620	84	45	466,424
56	8	103,499	85+	271	2,756,451
57	10	182,603			

<sup>&</sup>lt;sup>1</sup>Excludes Parent Annuitants and Compensation Annuitants.

# EXHIBIT G SHOWING STATISTICS ON MISCELLANEOUS ANNUITIES FOR FISCAL YEAR ENDING DECEMBER 31, 2003

	No.	Annual Payments
Children's Annuities	119	\$927,387
Widows' Compensation Annuities	82	\$4,170,966
Ordinary Disability Benefits	3	85,549
Occupational Disease Disability Benefits	121	5,062,868
Duty Disability Benefits	249	9,748,664
Parent Annuities	1	10,649
Totals	575	\$20,006,083

# EXHIBIT H – PART I SHOWING MALE PARTICIPANTS RECEIVING DUTY DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

_	Un	der 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total
ATTAINED		Annual		Annual		Annual		Annual		Annual		Annual	=	Annual
AGE	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
UNDER 30	_												0	\$ 0
30 to 34													0	. 0
35 to 39			1	41,135			3	128,925					4	170,060
40 to 44			4	111,396	6	206,936	6	259,055	1	51,476			17	628,863
45 to 49			3	81,597	10	315,797	17	568,020	8	332,663	6	311,234	44	1,609,311
50 to 54			2	63,473	10	307,5 <b>2</b> 6	18	585,096	10	415,521	17	890,474	57	2,262,090
55 to 59			1	31,245	4	127,536	9	293,135	8	292,517	27	1,299,091	49	2,043,524
60 & over					2	59,160	7	255,633	7	238,746	30	1,328,560	46	1,882,099
Totals	0	\$0	11	\$ 328,846	32	\$ 1,016,955	60	\$ 2,089,864	34	\$ 1,330,923	80	\$ 3,829,359	217	\$ 8,595,947

# EXHIBIT H – PART II SHOWING FEMALE PARTICIPANTS RECEIVING DUTY DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

	Un	der 1 Year		1 to 4		5 to 9		10 to 14		15 to 19	2	0 & Over	7	<b>Fotal</b>
ATTAINED		Annual		Annual		Annual		Annual		Annual	•	Annual	•	Annual
AGE	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
UNDER 30													0	\$ 0
30 to 34				-				•			-		0	0
· 35 to 39			1	28,211			2	98,532	'				3	126,743
40 to 44			1	26,835	1	32,046	1	43,142	1	47,129			4	149,152
45 to 49		-			3	96,200	7	257,673			1	51,035	11	404,908
50 to 54					4	125,718 <sup>-</sup>	4	141,309	<u> </u>		1	39,227	9	306,254
55 to 59			1	24,144	1	32,046	1	29,580	2	79,890			5	165,660
60 & over	<u> </u>	····											0	0
Totals	0	\$0	3	\$ 79,190	9	\$ 286,010	15	\$ 570,236	3	\$ 127,019	2	\$ 90,262	32	\$ 1,152,717

# EXHIBIT I – PART I SHOWING MALE PARTICIPANTS RECEIVING ORDINARY DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

-	Ur	der 1 Year		1 to 4		5 to 9		10 to 14		15 to 19	2	0 & Over	T	Cotal
ATTAINED AGE	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
UNDER 30								<u> </u>					,	
30 to 34													0	\$ (
35 to 39													0	(
40 to 44									1	30,189			1	30,189
45 to 49				-	ľ				<b>1</b> .	50,10×	1	<b>2</b> 9,852	1	29,852
50 to 54		-								-	•	27,052	,	20,000)
55 to 59							,						-0	(
60 & over					<u> </u>				-				0	(
Totals	0	\$0	0	\$0	0	\$0	0	\$0	1	\$ 30,189	1	\$ 29,852	2	\$ 60,041

# EXHIBIT I – PART II SHOWING FEMALE PARTICIPANTS RECEIVING ORDINARY DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

-	Un	der 1 Year		1 to 4		5 to 9		10 to 14		15 to 19	26	0 & Over	T	otal
ATTAINED		Annual		Annual		Annual		Annual		Annual		Annual	-	Annual
AGE	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
UNDER 30													0	\$ 0
30 to 34											. :		0	. 0
35 to 39		-		-	1	<b>2</b> 5,508 -				-	İ		1	25,508
40 to 44		-	ł	-				•			٠.	•	0	0
45 to 49	-												0	0
50 to 54						•							0	0
55 to 59									i			-	0	. 0
60 & over													0	0
Totals	0 -	\$0	0	\$0	1	\$ 25,508	. 0	\$0	0	\$0	0	\$0	- 1	\$ 25,508

# EXHIBIT J – PART I SHOWING MALE PARTICIPANTS RECEIVING OCCUPATIONAL DISEASE DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

	<u>.</u> Un	der 1 Year		1 to 4		5 to 9		10 to 14		15 to 19	2	0 & Over		<b>Fotal</b>
ATTAINED AGE	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No	Annual
		· uye	Τ	- ayments	Τ	1 ayments	110.	1 ayınıcınıs	140.	1 ayınıcınıs	1NO.	Payments	No.	Payments
UNDER 30												•	0	\$
30 to 34							. ·	•		•			0	·
35 to 39					;							- '	0	
40 to 44			<b>1</b> ·				1	39,784	ĺ				1	39,78
45 to 49			'.		ſ		3	105,933	·1	34,798	3	124,502	7	265,23
50 to 54		•		4			. 2	70,704	5	171,105	9	381,401	16	623,21
55 to 59						,	2	61,206	3	107,485	46	2,041,968	51	2,210,65
60 & over						<u>.</u>	2	72,063	4	125,661	39	1,691,014	45	1,888,73
Totals	0	. \$0	0	\$0	.0	\$0	10	\$ 349,690	13 -	\$ 439,049	97	\$ 4,238,885	120	\$ 5,027,62

# EXHIBIT J – PART II SHOWING FEMALE PARTICIPANTS RECEIVING OCCUPATIONAL DISEASE DISABILITY CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2003

	Un	der 1 Year		1 to 4		5 to 9	· .	10 to 14		15 to 19		20 & Over	7	Fotal
ATTAINED		Annual		Annual		Annual		Annual		Annual		Annual	_	Annual
AGE	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
UNDER 30	-							•						· \$
30 to 34									`	•			ا م	Ψ
35 to 39		•		-			-				,		ا م	1
40 to 44			,								ľ		اَ	
45 to 49			'									•	ا م	
50 to 54					۱.								0	-
55 to 59					1	35,244						*	1	35,24
60 & over										•			0	,55,24
Totals	0	\$0	0	\$0	1	\$ 35,244	0 ·	\$0	0	\$0	0	\$0		\$ 35,244

# EXHIBIT K HISTORY OF AVERAGE ANNUAL SALARIES

Year	Members		Current Year		Average		Actuarial	<b>CP</b>
End	in Service <sup>1</sup>	Increase	Salary	Increase	Salary	Increase	Assumptions	Chica
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	4,710	(8.1)%	202,080,072	(8.8)%	42,904	(0.8)%	6.0%	3.0
1993 <sup>2</sup>	5,124	(1.5)%	221,600,136	(0.9)%	43,247	0.7%	6.0%	3.0
1994 3	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	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
verage Inc								
Decrease) f						,		
ast 5 years:	•	0.5 %		5.3 %		4.8 %		2.3

Includes those members who were on disability through 1994.

Restates without disabilities for comparison. Percent increases (decreases) are based on change from with disabilities to without disabilities in 1994.

Beginning in 1994, occupational disease and duty disability beneficiaries are no longer included as actives. Without disabilities included in 1993, there would have been 4,710 actives with total salaries of \$202,080,072 and an average salary of \$42,904. The percent increase from 1993 to 1994 without disability beneficiaries in either year would be 0.9% for members in service, 12.2% for total salary, and 11.2% for average salary.

Average annual increase in average salary 1972-2003, is about 4.9% compounded. The average annual increase in the annual average Chicago CPI for the same period is about 4.8% compounded.

# **EXHIBIT** L **NEW ANNUITIES GRANTED DURING 2003**

		<del></del>			<del></del>
		Annuitants	Widows/ Widowers of Deceased Employees <sup>1</sup>	Widows/ Widowers of Deceased Annuitants	Compensation Widows/ Widowers <sup>3</sup>
Number retired/deceased	١.	134	15	72	0
Average age attained [Employee]	Ì	60.2	54.3	78.1	N/A
			?	•	
Average length of service		31.7	23.3	21.1	N/A
Average spouse age		57.6	52.7	76.0	N/A
Average annual salary	\$	71,176	N/A	N/A	N/A
[4 out of 10]					
-					
Average annual final salary	\$	71,176	N/A	N/A	N/A
Total annual annuity		6,826,357	318,603	1,156,455	N/A
Average annual annuity		50,943	21,240	16,062	N/A
Total statutory liability	\$	118,859,535	\$5,552,290	\$8,523,411	N/A
, ,					
Average liability	\$	887,011	\$ 370,153	\$ 118,381	N/A
Total investment	<b> </b>	10,735,454	N/A	N/A	N/A
[Employee-paid for tax purposes]	<u> </u>	,,			· · ·
[					
Average investment <sup>2</sup>	\$	80,115	N/A	N/A	N/A
Liability/cost		11.07	N/A	N/A	N/A
Liability/final pay	$ _{\$}$	12.46	N/A	N/A	N/A
page	<u> </u>	12.10	13772	14/2 *	13/2 %

Not including compensation or supplemental.
 Based on previously taxed contributions.
 Does not include transfers from supplemental widows.

# EXHIBIT M RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

			ANNUITA	ANTS	·		DIS	SABILITY	7	Widow/	
		Disability		Supplemental	. ,					Widower	•
Years	Employee	Pensioner	Spouse	Wid/Widower	Child	Parent	Ordinary	Duty	Occup.	Comp.	Total
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	, <b>0</b>	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	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

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

# EXHIBIT N AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Years Ended	Average Annual Benefit	Average Current Age of Retirees	Average Annual Benefit at Retirement Current Year	Average Age at Retirement Current Year	Average Years o Service at Retirement Current Year
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

# EXHIBIT O – PART I HISTORY OF ANNUITIES 1977-2003 EMPLOYEE ANNUITANTS (MALE AND FEMALE)

Year End	Number of Annuitants	Total Annuities	Average Annuities
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

# EXHIBIT O – PART II HISTORY OF ANNUITIES 1977-2003 WIDOW/WIDOWER ANNUITANTS

(INCLUDING PARENT BUT NOT COMPENSATION ANNUITANTS)

Year End	Number of Annuitants 1	Total Annuities	Average Annuities
		,	
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

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

·	Added to Payroll		Remo	ved from Payroll	Pay	roll End of Year	Average Annual	Increase to Avg.
Yr.	No.	Annual Benefits.	No.	Annual Benefits	No.	Annual Benefits	Benefits	Benefits
				Employee Annuita	nts (Mal	e and Female)		
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
			Widow/V	Vidower Annuitants	(Not In	cluding Compensatio	n)	
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 1	87	1,475,058	95	990,993	1,323	17,490,584	13,220	3.5

<sup>&</sup>lt;sup>1</sup> Including Parent Annuitants but not Compensation Annuitants

# Appendix 4

Actuarial Methods and Assumptions as of December 31, 2003

## ACTUARIAL METHODS AND ASSUMPTIONS AS OF DECEMBER 31, 2003

#### 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:

Attained Rates Age 0.0016 20-24 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 0.0450 60-63

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.

Rate of Retirement:

The table below shows the assumed rates of retirement.

Attained	Firefighters	EMT
Age	Rates	Rates
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

Rate of Termination:

The following sample rates exemplify the table:

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

#### B. Economic Assumptions

Investment Return Rate:

8.0% per annum (net of investment expense). This assumption

contains a 3.0% inflation assumption and a 5.0% real rate of

return assumption.

Future Salary Increases:

Assumed rates of individual salary increase at 4.0% per year, plus an

additional percentage based on the following service scale:

Years of	
Service	Rates
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%

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 Fundpaid 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.

Benefit Increase:

Benefits for individuals affected by the retro pay increase whose

benefits had not been recomputed have been adjusted.

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, 2003

#### **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

(1) At age 53 and 23 years of service the employee is entitled to 50%, plus 1% for each year of service after 23 years and before age 53, plus 2 % for each year of service after 23 years and age 53, of final average salary (highest 4 consecutive years within last 10). Maximum is 75% of highest salary.

(2) In lieu of the above 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 if it is greater than (1) above: 50% plus 2% of the final average salary for each year or fraction of service over twenty years. Maximum is 75% of the final average salary.

### Retirement at Age 63 with Less than 23 Years Service<sup>1</sup>

An employee who reaches compulsory retirement age with less than 23 years shall be entitled to a minimum annuity equal to an amount determined by the product of his or her years of service and 2% of his or her average salary for the 4 consecutive highest years of salary within the last 10 years. Maximum is 75 % of highest 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, 1945, effective January 1, 1996), whichever is later, with a maximum of 30% (20 years). Such increases shall be 3% for firefighters born before January 1, 1945 (effective January 1, 1996), and such firefighters shall not be subject to the 30% maximum increase.

#### Minimum Annuity

Beginning January 1, 1990, the monthly annuity for any firefighter who has retired at age 50 or over with 20 or more years of service shall not be less than \$475. Beginning January 1, 1992, the monthly annuity is \$650 if the firefighter retired at age 50 or over with at least 20 years of service. Beginning January 1, 1993, the monthly annuity is \$750 if the firefighter retired at age 50 or over with at least 20 years of service. Beginning January 1, 1994, the monthly annuity is \$850 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.

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.

#### 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.

#### 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 payable until the date the firefighter would have attained compulsory retirement age. This amount increases as the salary of the position increases.

# Supplemental Annuity<sup>2</sup>

Payable thereafter in the amount of 40% of the salary attached to the employee's 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 on annuity on January 1, 1992 or future widow/widowers of employees on annuity, who retired at age 50 or more with at least 20 years of service, is \$500. Beginning January 1, 1993, the minimum monthly annuity for a widow/widower of an employee who retired at age 50 or more with at least 20 years of service is \$600. Beginning January 1, 1994, the minimum monthly annuity for a widow/widower of an employee who retired at age 50 or more with at least 20 years of service is \$700. Beginning January 1, 1996, the minimum monthly annuity for any widow/widower who is entitled to an annuity is \$700. Beginning January 1, 1999, the minimum monthly annuity for any widow/widower who is a survivor of an employee who retired at age 50 or over with at least 20 years of service is \$800.

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.

#### **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 bom 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.

#### 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

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.

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.

#### **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.

Age	Death in Service After July 1, 1983	Death After Retirement After July 1, 1983				
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.

#### **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**

	<b>Deductions</b>	City Contributions <sup>1</sup>			
Employee	7.125%	8.500%			
Spouse	1.500%	2.000%			
Ordinary Disability	0.125%	0.000%			
Annuity Increase	0.375%	0.000%			
•	9.125%	$1\overline{0.500\%}$			

<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 2 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).

#### 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 allowing compulsory retirement age 63 has 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 2003** 

#### LEGISLATIVE CHANGES 1968 THROUGH 2003

#### 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.

#### 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.

#### 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.

#### 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.

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.

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.

#### 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 has 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.

#### 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.

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.

#### 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.

# 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 six-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 six-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 six-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)	oility (AAL)  AAL  ntry Age (UAAL)		Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)	
	12/21/2002	# 1 104 007 767	P 2 517 269:107	D 1 202 060 240	47 400/	0.005.150.501		
	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	833,853,513	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	

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

For Year Ending December 31	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed		
2004	\$134,762,334	TBD	TBD		
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%		

# 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:

Valuation date

December 31, 2003

Actuarial Cost Method

Entry Age

Actuarial Value of Assets

5-year smoothed market

Amortization Method

Level dollar

Remaining Amortization Period

40 years

**Actuarial Assumptions:** 

Investment rate of return

8.0%

Projected salary increases

4.0% per year, plus an additional percentage related to service

Post-retirement increases

1.5% simple interest for 20 years for members born in or after 1945 3% simple interest for life for members born before 1945

# 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)	\$111,079,054
Interest on Net Pension Obligation	46,764,991
Adjustment to ARC	(45,390,274)
Total	\$112,453,771
Contributions Made	\$ 60,234,206
Net Pension Obligation (NPO):	
NPO, Beginning of Year	\$584,562,388
Increase/(Decrease) in NPO	52,219,565
NPO, End of Year	\$636,781,953
· · · · · · · · · · · · · · · · · · ·	
Pension Liability at Transition (January 1, 1997)	\$369,267,330

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

Year Ended December 31	Annual Pension Cost	% of Annual Pension Cost Contributed	Net Pension Obligation		
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		

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

Year Ending December 31: Assumptions and Method	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
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
Annual Pension Cost	,				•					
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
Total ADC	\$83,921,710	\$84,004,724	\$85,970,166	\$85,252,297	\$94,126,942	\$103,055,866	\$103,298,809	\$103,340,197	\$106,884,474	\$110,015,527
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)
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
Contributions for Year										
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
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
Net Pension Obligations (NPO)										
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)
NPO at End of Year	\$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	\$369,267,330
•										