

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'
ANNUITY AND BENEFIT FUND OF CHICAGO
ACTUARIAL VALUATION REPORT
FOR THE YEAR ENDING DECEMBER 31, 2012
APRIL 2013**

April 5, 2013

The Retirement Board of the
Laborers' and Retirement Board Employees'
Annuity and Benefit Fund of Chicago
321 North Clark Street, Suite 1300
Chicago, Illinois 60654

Subject: Actuarial Certification

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2012. An actuarial valuation of the Fund is performed annually. The valuation has been performed to measure the funding status of the Fund. It includes disclosure information required under Governmental Accounting Standards Board (GASB) Statement No. 25, Statement No. 27, Statement No. 43, and Statement No. 45. The assumptions and methods used were recommended by the actuary and approved by the Board. The assumptions and methods meet the parameters set for the disclosure presented in the financial section by GASB Statement No. 25 and GASB Statement No. 43.

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

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

We have also provided the following schedules for the financial sections of the report.

- Schedule of Funding Progress
- Schedule of Employer Contributions

This valuation is based upon:

- a. Data Relative to the Members of the Fund** – Data utilized for active members and persons receiving benefits from the Fund was provided by the Fund's staff. We have tested this data for reasonableness. However, we have not audited the data.

- b. Asset Values** – The values of assets of the Fund were provided by the Fund's staff. An actuarial value of assets was used to develop actuarial results for GASB Statement No. 25 and Statement No. 27.
- c. Actuarial Method** – The actuarial method utilized by the Fund is the Entry-Age Normal Actuarial Cost Method. The objective of this method is to recognize 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 amortized. All actuarial gains and losses under this method are reflected in the UAAL.
- d. Actuarial Assumptions** – Updated actuarial assumptions have been adopted by the Board beginning with this valuation based on the recommendations of the experience study performed for the period from January 1, 2004, through December 31, 2011.

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 1.00 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 1:1 relationship. Employer contributions for the plan year cease when all actuarial accrued liabilities of the Fund are fully funded. The most recent actuarial valuation of the Fund on the State reporting basis indicates that a ratio of 7.48 (rather than 1.00) is needed to adequately finance the Fund in Fiscal Year 2013 on an actuarially sound basis under a policy of contributing normal cost plus 30-year level dollar amortization of the unfunded liability. It should be noted that the statutory employer contributions have been less than the Annual Required Contribution (ARC) for the past seven years and are again expected to be less than the ARC for 2013. In order for employer contributions to be increased, the State legislature would first need to amend the statute. Under the current funding policy, if all future assumptions are realized, the funding ratio is projected to deteriorate until assets are depleted within about 15 to 20 years. The current statutory funding policy does not comply with generally accepted actuarial standards for the funding of retirement systems. We recommend that an actuarially sound funding policy be adopted as soon as possible.

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. One or more of the undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Sincerely,



Alex Rivera, F.S.A., E.A., M.A.A.A.
Senior Consultant



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Consultant



Paul T. Wood, A.S.A.
Senior Analyst

ADDITIONAL DISCLOSURES REQUIRED BY ACTUARIAL STANDARDS OF PRACTICE

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

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SUMMARY OF ACTUARIAL VALUATION

	<u>December 31, 2011</u>	<u>December 31, 2012</u>	<u>% Change</u>
ACTUARIAL VALUES			
Actuarial Values			
Actuarial Liability	\$ 2,191,181,762	\$ 2,374,842,631	8.38 %
Assets - Actuarial Value	1,422,414,349	1,315,913,597	(7.49)%
Unfunded Liability (Surplus)	768,767,413	1,058,929,034	37.74 %
Funded Ratio	64.92%	55.41%	(14.65)%
Annual Required Contribution (ARC)	\$ 80,636,419	\$ 109,290,128	35.53 %
Market Values			
Actuarial Liability	\$ 2,191,181,762	\$ 2,374,842,631	8.38 %
Assets - Market Value	1,313,603,639	1,371,077,046	4.38 %
Unfunded Liability	877,578,123	1,003,765,585	14.38 %
Funded Ratio	59.95%	57.73%	(3.70)%
Book Values			
Actuarial Liability	\$ 2,191,181,762	\$ 2,374,842,631	8.38 %
Assets - Book Value	1,214,975,270	1,214,919,910	(0.00)%
Unfunded Liability (Surplus)	976,206,492	1,159,922,721	18.82 %
Funded Ratio	55.45%	51.16%	(7.74)%

Actuarial Liability includes both pension and OPEB.

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2011</u>	<u>December 31, 2012</u>	<u>% Change</u>
Assets			
Market Value - Beginning of Year	\$1,427,214,175	\$1,313,603,639	(7.96)%
Income			
Investment Income	(4,510,715)	173,460,076	3,945.51 %
Employer Contributions & Misc.	15,358,602	14,414,835	(6.14)%
Employee Contributions	16,068,655	16,559,017	3.05 %
Subtotal	<u>26,916,542</u>	<u>204,433,928</u>	659.51 %
Outgo (Refunds, Benefits & Expenses)	<u>140,527,078</u>	<u>146,960,521</u>	4.58 %
Net Change	<u>(113,610,536)</u>	<u>57,473,407</u>	150.59 %
Market Value - End of Year	\$1,313,603,639	\$1,371,077,046	4.38 %
Book Value - Beginning of Year	\$1,250,365,087	\$1,214,975,270	(2.83)%
Income			
Investment Income	73,710,004	115,931,309	57.28 %
Employer Contributions & Misc.	15,358,602	14,414,835	(6.14)%
Employee Contributions	16,068,655	16,559,017	3.05 %
Subtotal	<u>105,137,261</u>	<u>146,905,161</u>	39.73 %
Outgo (Refunds, Benefits & Expenses)	<u>140,527,078</u>	<u>146,960,521</u>	4.58 %
Net Change	<u>(35,389,817)</u>	<u>(55,360)</u>	99.84 %
Book Value - End of Year	\$1,214,975,270	\$1,214,919,910	(0.00)%
Actuarial Value - Beginning of Year	\$1,529,403,512	\$1,422,414,349	(7.00)%
Income			
Investment Income	2,110,658	9,485,917	349.43 %
Employer Contributions & Misc.	15,358,602	14,414,835	(6.14)%
Employee Contributions	16,068,655	16,559,017	3.05 %
Subtotal	<u>33,537,915</u>	<u>40,459,769</u>	20.64 %
Outgo (Refunds, Benefits & Expense)	<u>140,527,078</u>	<u>146,960,521</u>	4.58 %
Net Change	<u>(106,989,163)</u>	<u>(106,500,752)</u>	0.46 %
Actuarial Value - End of Year	\$1,422,414,349	\$1,315,913,597	(7.49)%

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2011</u>	<u>December 31, 2012</u>	<u>% Change</u>
Members			
Actives ¹	2,852	2,865	0.46 %
Inactives	1,417	1,408	(0.64)%
Retirees	2,721	2,737	0.59 %
Survivors	1,221	1,182	(3.19)%
Reversionary Annuitants ^{2, 3}		22	N/A
Disabilities	244	255	4.51 %
Children	38	35	(7.89)%
Payroll Data			
Valuation Payroll	\$ 195,238,332	\$ 198,789,741	1.82 %
Average Salary	\$ 68,457	\$ 69,386	1.36 %

¹Active participants include disabled employees.

²Prior to December 31, 2012, reversionary annuitants were included with survivors.

³Includes 20 reversionary annuitants that are also survivors.

DISCUSSION OF VALUATION RESULTS

This report sets forth the results of the actuarial valuation of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2012. The purposes of this valuation are:

1. To develop the minimum actuarially determined contribution for 2013.
2. To develop the annual required contribution (ARC) under GASB #25 and GASB #43.
3. To develop the annual pension cost under GASB #27 and the annual OPEB cost under GASB #45.
4. To review the funding status of the Fund.

The funded status in basic terms is a comparison of the Fund's liabilities to assets expressed as either 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 Fund and City financial reports, the funding status is measured using liabilities under the Entry Age Normal funding method and the Actuarial Value of Assets. The Actuarial Value of Assets is determined by annually spreading the difference between expected and actual investment earnings over a five-year period.

Actuarial Obligations of the Fund

The value of all future pension payments, calculated using the actuarial assumptions contained in this report, is the sum of payments to two major groups of beneficiaries – the retired lives and the active lives.

1. Retired Lives:

For those currently receiving known benefits, i.e., current retirees, widows, widowers, and children, the value is determined based on estimated future longevity with the future benefit payment discounted to present time at the assumed investment earnings rate.

2. Active Lives:

The value of future payments for active employees who will receive benefits in the future is estimated, because the amount of pension is only known at the actual time of retirement. This estimate is made using various assumptions as to future salary increases; probable retirement age; and probability of death, withdrawal, or disablement before retirement. For active employees, the goal is to have enough assets on hand at retirement to pay for all future benefits promised. To provide for an orderly accumulation of these required assets, an actuarial funding method is used. Using the "Entry Age Normal" funding method, assets are allocated as a level amount (expressed as a percentage of salary) over the employee's working lifetime. These allocated costs are called "normal costs" and are sufficient, if set aside each year, to fully fund his or her benefits when and if he or she retires. The actuarial reserve (amount of assets needed now) is the present value of future benefits less the present value of future normal costs to be paid.

DISCUSSION OF VALUATION RESULTS (CONT'D)

The difference between the sum of actuarial reserves for active and retired lives (“the Actuarial Accrued Liability”) and the Actuarial Value of Assets is called the “Unfunded Actuarial Accrued Liability.” If assets exceed the liability, there is a surplus. The unfunded liability depends upon the benefits, the characteristics of the covered group of employees and retirees, the actuarial assumptions, and the actuarial funding method. The unfunded liability can be thought of as the amount of assets that will be needed in future years to provide for all future benefits payable when added to the future normal costs determined by the actuarial funding method.

3. Actuarial Balance:

For the pension fund to be in balance (funded ratio of 100 percent), the present value of all benefits payable in the future must equal the sum of present assets plus the present value of all future contributions. If a plan is 100 percent funded, it does not mean that no contributions are ever needed again. It simply means that the plan is where it should be at a particular point in time. The assets of the plan are sufficient to provide for future benefits payable based on service to the date of valuation. **Future contributions are still needed** to fund the “normal costs” for service after the date of the valuation in order to have sufficient assets at retirement to provide the future payments of the total projected benefit.

Summary of Results

The annual required contribution (ARC) under GASB #25 for the year ending December 31, 2013, is \$106.2 million, which is for pension benefits only. This amount is net of estimated employee contributions of \$17.21 million and is based on a 30-year amortization period.

GASB #43 requires the calculation of a separate ARC for Other Postemployment Benefits (OPEB) beginning with the Fund’s 2006 Fiscal Year. The OPEB ARC for the Fiscal Year ending December 31, 2013, is \$3.09 million.

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

	<u>Pension ARC</u>	<u>OPEB ARC</u>
Investment Return Assumption	7.50% per year	4.50% per year
Assets	5-year smoothed market	No assets (Pay-as-you-go)

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

DISCUSSION OF VALUATION RESULTS (CONT'D)

Beginning with the December 31, 2006, actuarial valuation, GASB #25 requires the use of a 30-year amortization period to determine the pension ARC.

Effective with Fiscal Year Ending December 31, 2014, GASB #67 is replacing GASB #25 for pension plan financial reporting requirements. GASB #68 is replacing GASB #27 for employer financial reporting effective with fiscal year ending December 31, 2015. The discount rate used for GASB #67 and #68 reporting purposes will produce a blended or average discount rate based on 7.50 percent for the projected benefits for all current members that can be paid from current assets and projected investment return, future employee contributions from current members, and future employer contributions attributable to current members, and a municipal bond rate (for example 4.00 percent) for the portion of the projected benefits after assets are depleted. We believe the liability based on the GASB blended rate will become the predominant liability that users will focus on.

Due to the blended discount rate and shorter amortization periods required under GASB #67 and #68, the liabilities and pension expense will be much higher and more volatile than under the current standards. A measurement of the blended discount rate, liability and pension expense has not yet been performed.

The Unfunded Actuarial Accrued Liability based on the Actuarial Value of Assets increased from \$768.77 million to \$1,058.93 million during the year, resulting in a change in funding ratio from 64.9 percent to 55.4 percent. The increase in the Unfunded Actuarial Accrued Liability is mainly attributable to an increase in the Actuarial Accrued Liability due to implementing updated assumptions that were recommended in the most recent experience study, unfavorable investment return on the actuarial value of assets due to additional recognition of the investment losses from 2008 and 2011, and contributions less than Normal Cost plus interest on the Unfunded Actuarial Accrued Liability. A more thorough examination of these and other factors can be found in the Reconciliation of Unfunded Actuarial Accrued Liability (gain/loss analysis) in Table 2 and the Reconciliation of Funded Ratio in Table 2A.

Based on the Market Value of Assets, the Unfunded Actuarial Accrued Liability increased from \$877.58 million to \$1,003.77 million, and the funded ratio decreased from 60.0 percent to 57.7 percent.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Plan Membership

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

	December 31, 2011	December 31, 2012
Active Members¹		
Number	2,852	2,865
Vested	2,304	2,226
Non-vested	548	639
Average Age	47.7	47.4
Average Service	16.0	15.6
Average Annual Salary	\$68,457	\$69,386
Inactive Members		
Number	1,417	1,408
Average Age	54.9	55.9
Average Service	2.2	2.2
Retirees		
Number	2,721	2,737
Average Age	69.6	69.6
Average Annual Benefit	\$41,056	\$42,688
Surviving Spouses		
Number	1,221	1,182
Average Age	77.2	77.2
Average Annual Benefit	\$12,763	\$13,072
Reversionary Annuitants^{2,3}		
Number		22
Average Age		70.5
Average Annual Benefit		\$5,856
Children	38	35
Total Members	8,249	8,249

¹Active members include disabled employees.

²Prior to December 31, 2012, reversionary annuitants were included with survivors.

³Includes 20 reversionary annuitants that are also survivors.

Total participants receiving benefits under the Fund, including disability, surviving spouses, reversionary annuitants, and children, increased 0.17 percent during 2012, from 4,224 to 4,231. Total expenditures for benefits increased from \$134 million in 2011 to \$140 million during 2012, or 4.48 percent.

Changes in Provisions of the Fund

The following Public Acts were passed in 2012 by the 97th General Assembly that made changes to the Fund Provisions.

P. A. 97-0651 (HB 3813), approved January 5, 2012

P. A. 97-0967 (HB 3969), approved August 16, 2012

These changes do not directly impact the liabilities of the Fund as of the valuation date. A detailed description of the provisions in the Public Acts passed in 2012 can be found in the Historic Information section of this report.

Discussion 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.

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.

The actuarial assumptions have been changed since the last report to reflect the results of the experience study performed for the period January 1, 2004, through December 31, 2011. The Board adopted the new assumptions at their February 19, 2013, meeting.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Following is a summary of the assumptions adopted by the Board as a result of the most recent experience study:

- **Inflation:** Maintain the current assumed rate of 3.00 percent.
- **Investment return:** Change the investment return assumption from 8.00 percent, net of investment expenses, compounded annually, to 7.50 percent. This reflects an underlying inflation assumption of 3.00 percent.
- **OPEB discount rate:** Maintain the discount rate assumption of 4.50 percent used to value the retiree health insurance supplement. This reflects an underlying inflation assumption of 3.00 percent.
- **Payroll growth assumption:** Change the general payroll growth assumption from 3.00 percent to 3.75 percent, which reflects an underlying general or price inflation assumption of 3.00 percent.
- **Salary increase:** Modify the current salary increase assumptions to reflect 3.75 percent wage inflation plus a service-based component for merit, longevity and promotion, ranging from 0.25 percent to 6.25 percent based on years of service.
- **Mortality rates:** Maintain the current assumption which was first adopted in the 2011 valuation.
- **Retirement rates:** Use predominantly service-based rates with higher rates at older ages, and 100 percent retirement at the earlier of 40 years of service or age 80. The modified rates result in more projected retirements at younger ages and less projected retirements at older ages than under the previous assumptions.
- **Disability rates:** Continue to value disability as a term cost only, as a majority of the disabilities were short-term in nature. Increase disability costs from 1.5 percent of payroll to 2.5 percent of payroll.
- **Withdrawal rates:** Decrease the rates of withdrawal based on the actual experience and recognition that members may become inactive and subsequently be rehired and accrue additional benefits as active members.
- **Cost method:** Continue to use the entry age normal actuarial cost method.
- **Amortization method:** Continue to use the 30-year level dollar amortization method used to calculate the Annual Required Contribution for Governmental Accounting Standards Board (GASB) 25 and 27.
- **Asset smoothing method:** Continue to use the current asset smoothing method. Gains and losses (the difference between the actual investment return and the expected investment return) are smoothed in over a five-year period at a rate of 20 percent per year. There is currently no asset corridor.
- **Dependent assumptions:** Maintain the current assumption that 85 percent of members have an eligible spouse and males are four years older than their spouses. No dependent assumptions are made for current retirees as actual eligible spouse data is provided.
- **Load for reciprocal benefits:** Continue to not apply a liability load to account for reciprocal benefits.

Experience Analysis

The Fund had an investment gain in 2012 of \$73.0 million relative to the 8.00 percent expected rate of return, on a market value basis. The loss on an actuarial basis relative to the 8.00 percent expected rate of return was \$99.8 million due to the recognition of deferred investment losses from 2008 and 2011.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Individual salary increases varied among plan participants, but the overall increase was lower than anticipated by the actuarial assumptions, resulting in an experience gain of \$11.2 million.

Combined City and employee contributions were less than Normal Cost plus interest on the Unfunded Actuarial Accrued Liability, which resulted in an increase in the Unfunded Actuarial Accrued Liability of \$63.3 million. Contributions lower than Normal Cost plus interest have increased the Unfunded Actuarial Accrued Liability for the past nine years.

The assumption changes increased the Unfunded Actuarial Accrued Liability by \$130.4 million, or 5.5 percent of the liabilities at December 31, 2012. The change in discount rate from 8.00 percent to 7.50 percent accounted for over 90 percent of the change in accrued liability.

There was an additional loss of \$7.9 million from all other factors, including actual retirement, termination, disability, mortality experience, and data changes. This is about 0.33 percent of the liabilities at December 31, 2012, which is a reasonable variation.

Tables 2 and 2A summarize the experience gains and losses for the year.

Funding Analysis

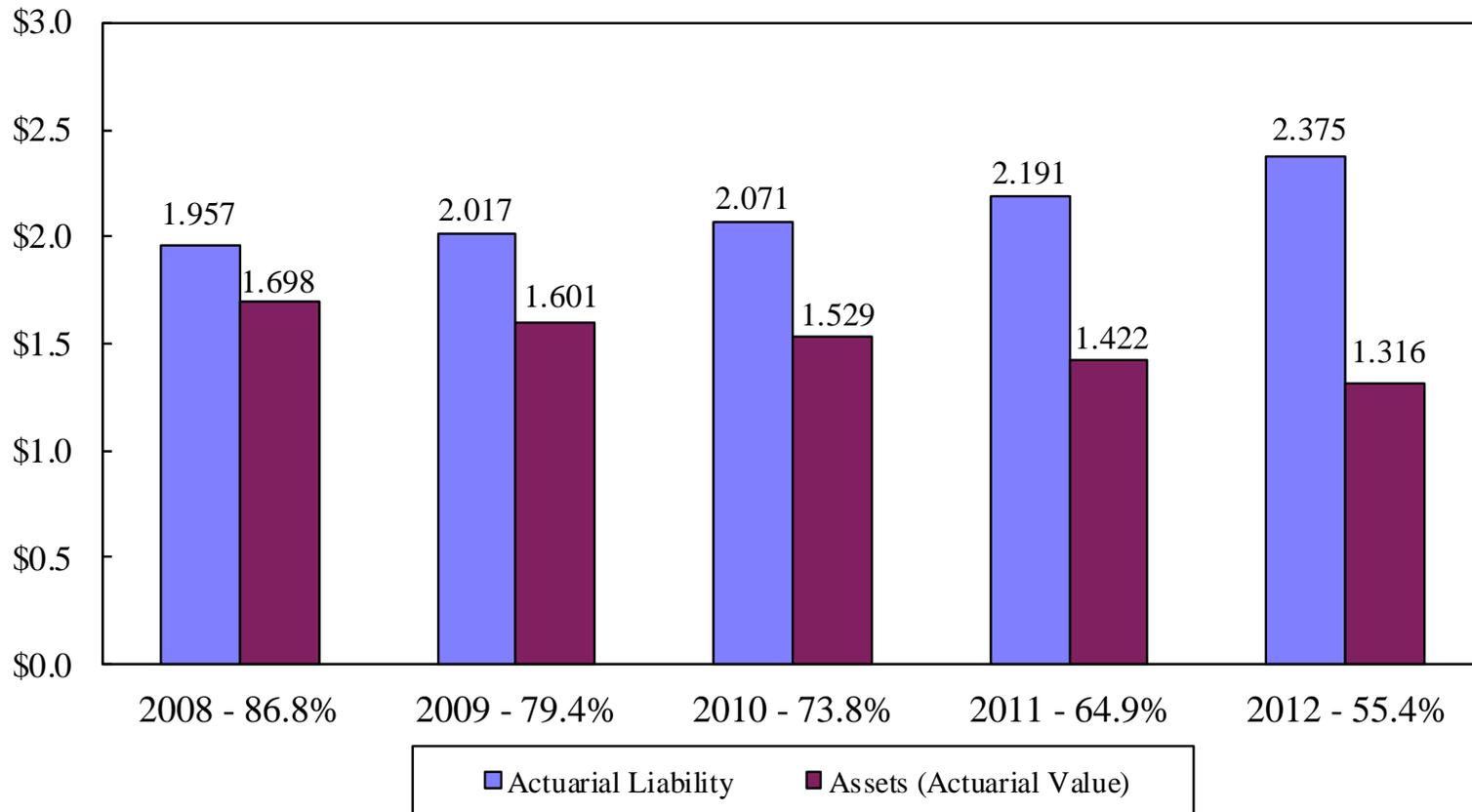
The following charts summarize the various measures of benefit security (funded ratio) examined in this valuation and highlight the trends of the measures.

Conclusion

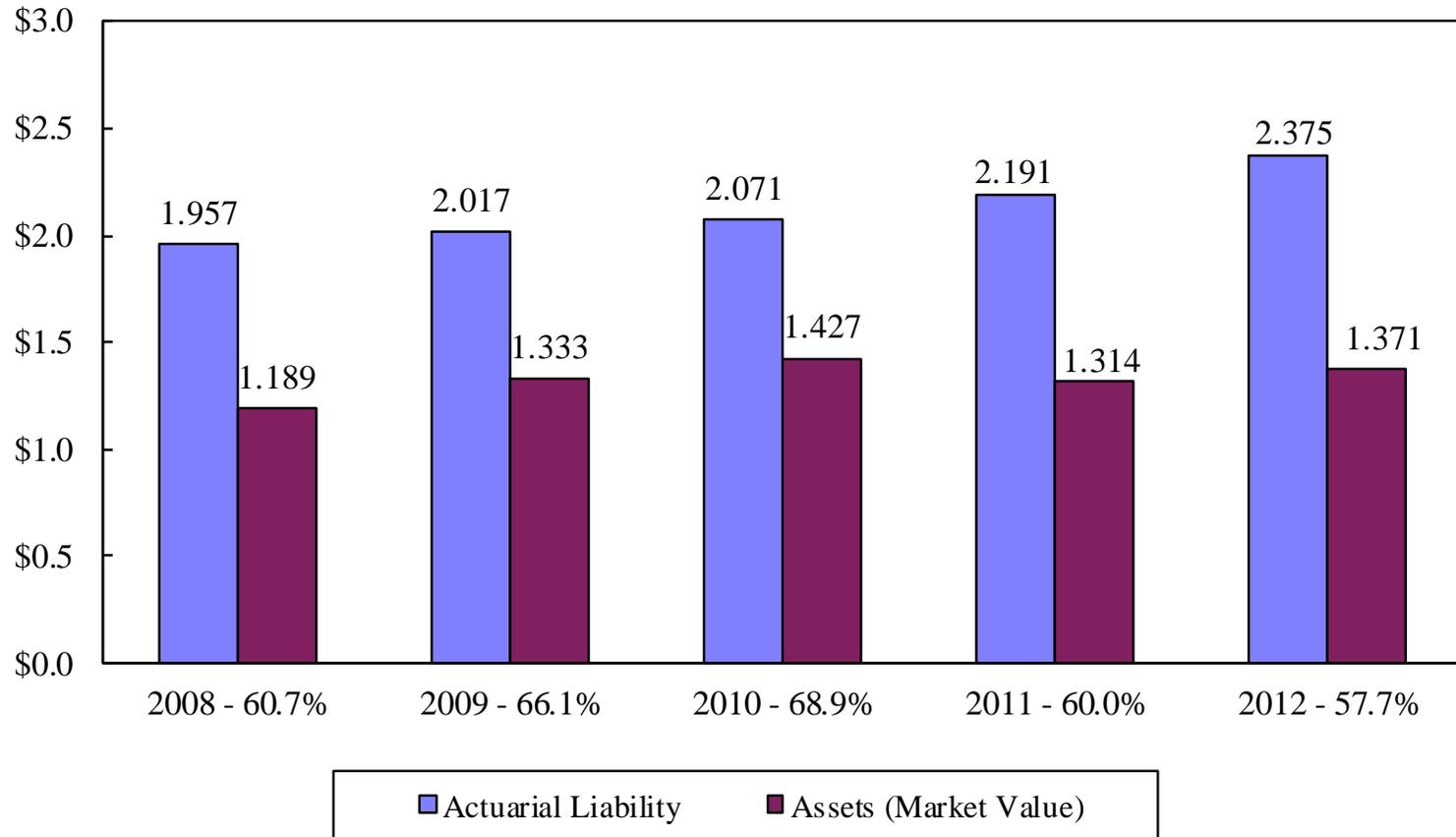
When measured using the Actuarial Value of Assets, which smoothes gains and losses over a five-year period, the funding ratio decreased from 64.9 percent in 2011 to 55.4 percent in 2012. On a market value basis the funded ratio decreased from 60.0 percent in 2011 to 57.7 percent in 2012. The funding ratio using the Actuarial Value of Assets is expected to increase slightly toward the funding ratio using the market value of assets. There are deferred asset gains that will be recognized in the Actuarial Value of Assets in the next four years. However, contributions continue to be insufficient to adequately finance the plan, and will result in further decreases in the funding ratio. Under the current funding policy, if all future assumptions are realized, the funding ratio is projected to deteriorate until assets are depleted within about 15 to 20 years.

The current statutory funding policy impacts the ability to achieve higher returns over the long-term because assets may need to be liquidated in order to pay annual benefits. This could result in a change in the asset allocation in the future to more liquid assets with a lower return. We recommend that the funding policy and assumed investment return be reviewed every year. If the funding policy is not strengthened within the next few years, the current investment return assumption may not continue to be supportable.

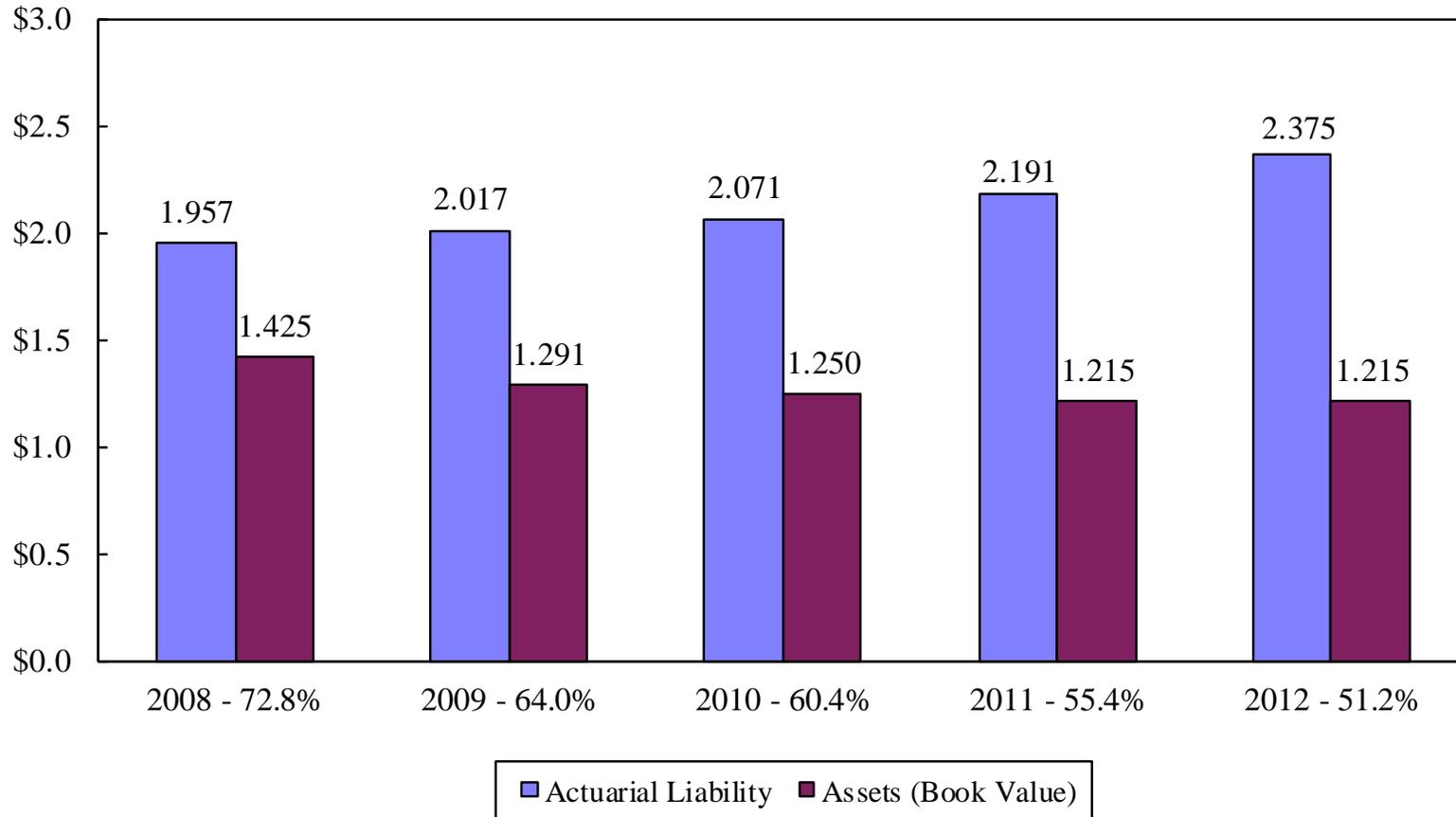
**COMPONENTS OF FUNDING RATIO
BASED ON ACTUARIAL VALUE
(\$ IN BILLIONS)**



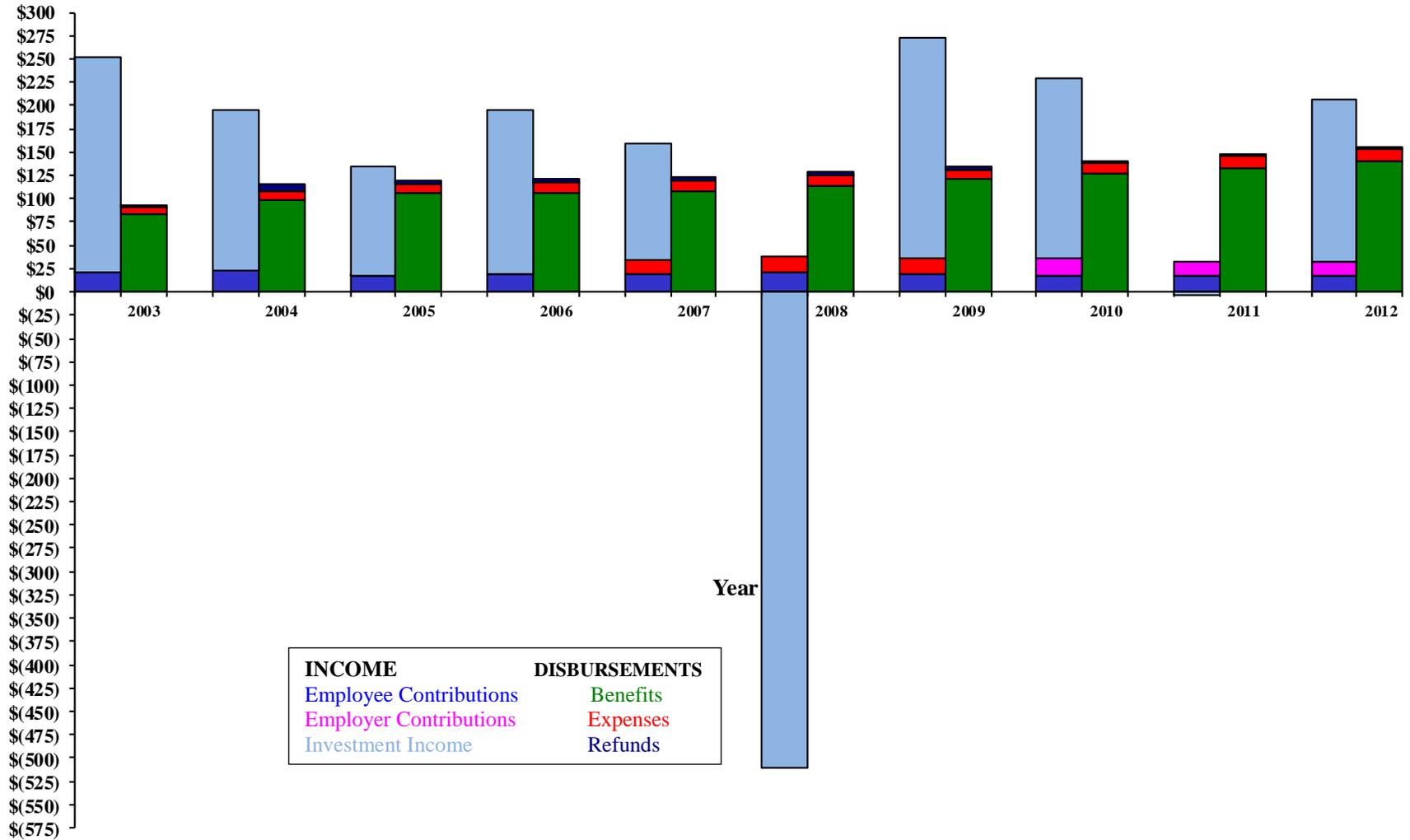
**COMPONENTS OF FUNDING RATIO
BASED ON MARKET VALUE
(\$ IN BILLIONS)**



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



SUMMARY OF INCOME AND DISBURSEMENTS (\$ IN MILLIONS)



ACTUARIAL COMPUTATIONS

TABLE 1
DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION
UNDER GASB #25 FOR 2013

	2012	2013
(1) Normal Cost ¹	\$ 30,762,167	\$ 38,513,323
(2) Actuarial Accrued Liability (AAL) ¹	2,152,853,902	2,336,189,276
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	1,422,414,349	1,315,913,597
(b) UAAL [2-3(a)]	730,439,553	1,020,275,679
(4) Amortization (30-Year Level \$) Payable at BOY	60,076,917	80,360,933
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	3,691,853	4,536,187
(b) Total Minimum Contribution [1+4+5(a); but not less than zero]	94,530,937	123,410,443
(c) Total Minimum Contribution (Percent of Pay)	48.42%	62.08%
(6) Estimated Member Contributions	16,964,543	17,211,033
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 77,566,394	\$ 106,199,410
(b) Annual Required Contribution (Percent of Pay)	39.73%	53.42%
(8) Estimated City Contribution (after 4% loss) ²	11,808,235	11,552,137
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a)-8(c)]	65,758,159	94,647,273
(b) as a Percentage of Pay	33.68 %	47.61 %
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8(c)]	\$ 65,758,159	\$ 94,647,273
(b) as a Percentage of Pay	33.68 %	47.61 %

¹ Excludes health insurance supplement.

² Total statutory required contribution less expected benefit payments for the health insurance supplement.

TABLE 1A
DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION
UNDER GASB #43 FOR 2013

	<u>2012</u>	<u>2013</u>
(1) Normal Cost ¹	\$ 749,005	\$ 750,108
(2) Actuarial Accrued Liability (AAL) ¹	38,327,860	38,653,355
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	-	-
(b) UAAL [2-3(a)]	38,327,860	38,653,355
(4) Amortization (30-Year Level \$) Payable at BOY	2,251,681	2,270,803
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	69,339	69,807
(b) Total Minimum Contribution [1+4+5(a)]; but not less than zero	3,070,025	3,090,718
(c) Total Minimum Contribution (Percent of Pay)	1.57%	1.55%
(6) Estimated Member Contributions	-	-
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 3,070,025	\$ 3,090,718
(b) Annual Required Contribution (Percent of Pay)	1.57%	1.55%
(8) Estimated City Contribution ²	2,494,517	2,479,511
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a)-8)]	575,508	611,207
(b) as a Percentage of Pay	0.29%	0.31%
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8]	\$ 575,508	\$ 611,207
(b) as a Percentage of Pay	0.29%	0.31%

¹ The normal cost and actuarial accrued liabilities for the health insurance supplement are based on a discount rate of 4.50 percent. Excludes pension liabilities.

² Represents expected benefit payments for the health insurance supplement.

TABLE 1B
DEVELOPMENT OF CITY CONTRIBUTION REQUIREMENTS

	<u>Fiscal Year 2013</u>	<u>Fiscal Year 2014</u>
Preliminary Determination of City Contribution		
Applicable Members' Contribution, Two Years Prior	\$ 14,616,309	\$ 15,074,541
Statutory Contribution Multiple	1.00	1.00
Statutory City Contribution	14,616,300	15,074,500
Actuarial Liability at Valuation Date	2,191,181,762	2,374,842,631
Actuarial Value of Assets at Valuation Date	1,422,414,349	1,315,913,597
Funded Ratio	64.92%	55.41%

TABLE 1C
ACTIVE ACCRUED LIABILITY AND NORMAL COST BY TIER
INCLUDES PENSION AND HEALTHCARE

	<u>Tier 1 Members</u>	<u>Tier 2 Members</u> ²	<u>Total</u>
(1) Count	2,635	230	2,865
(2) Payroll	\$ 186,406,594	\$ 12,383,147	\$ 198,789,741
(3) Average Payroll	\$ 70,743	\$ 53,840	\$ 69,386
(4) Actuarial Accrued Liability (AAL) ¹	\$ 831,168,904	\$ 834,269	\$ 832,003,173
(5) Normal Cost ¹	\$ 37,524,550	\$ 1,738,881	\$ 39,263,431
(6) Normal Cost as a Percent of Pay	20.1%	14.0%	19.8%
(7) Member Contributions as a Percent of Pay	8.5%	8.5%	8.5%
(8) Net Employer Normal Cost as a Percent of Pay	11.6%	5.5%	11.3%

¹ The normal cost and liabilities for healthcare are based on a discount rate of 4.5%.

² Members who began participating on or after January 1, 2011.

TABLE 2
RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
(GAIN/LOSS ANALYSIS)

	2008	2009	2010	2011	2012
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
Beginning of Year	\$91,995,570	\$258,960,825	\$416,135,443	\$541,982,320	\$768,767,413
(Gains) Losses During the Year Attributable to:					
Contributions Less Than (in Excess of) Normal Cost plus Interest	1,261,981	20,908,058	32,836,243	44,792,683	63,344,488
(Gain) Loss on Investment Return on the Actuarial Value of Assets	112,839,821	136,557,090	97,274,017	115,961,584	99,757,018
(Gain) Loss from Salary Changes	12,298,504	(13,437,593)	(19,309,030)	(17,752,499)	(11,246,150)
(Gain) Loss from Retirement, Termination, & Mortality	10,719,816	13,067,408	14,391,903	18,062,145	7,410,741
(Gain) Loss from Data Corrections and Unexpected Service Changes	3,650,332	79,655	653,745	964,087	505,176
(Gain) Loss from Active Member Definition Change	26,194,801	-	-	-	-
Change in Methodology	-	-	-	-	-
Change in Assumptions	-	-	-	64,757,093	130,390,348
Plan Amendments	-	-	-	-	-
Net Increase (Decrease) in UAAL	166,965,255	157,174,618	125,846,878	226,785,092	290,161,621
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
End of Year	\$258,960,825	\$416,135,443	\$541,982,320	\$768,767,413	\$1,058,929,034

TABLE 2A
RECONCILIATION OF FUNDED RATIO

	2008	2009	2010	2011	2012
Funded Ratio Beginning of Year	95.03%	86.77%	79.37%	73.83%	64.92%
Expected Increase if All Assumptions Realized	0.14%	0.40%	0.58%	0.67%	0.88%
Expected Funded Ratio	95.17%	87.17%	79.95%	74.50%	65.80%
Gains (Losses) During the Year Attributable to:					
Contributions in Excess of (Less Than) Normal Cost plus Interest	-0.07%	-1.04%	-1.58%	-2.11%	-2.82%
Gain (Loss) on Investment Return on the Smoothed Value of Assets	-5.92%	-6.77%	-4.69%	-5.46%	-4.44%
Gain (Loss) from Salary Changes	-0.57%	0.53%	0.70%	0.57%	0.30%
Gain (Loss) from Retirement, Termination, & Mortality	-0.50%	-0.51%	-0.52%	-0.58%	-0.20%
Gain (Loss) from Data Corrections	-0.16%	-0.01%	-0.03%	-0.03%	-0.01%
(Gain) Loss from Active Member Definition Change	-1.18%	0.00%	0.00%	0.00%	0.00%
Change in Methodology	0.00%	0.00%	0.00%	0.00%	0.00%
Change in Assumptions	0.00%	0.00%	0.00%	-1.97%	-3.22%
Plan Amendments	0.00%	0.00%	0.00%	0.00%	0.00%
Total Gains (Losses) During the Year	-8.40%	-7.80%	-6.12%	-9.58%	-10.39%
Funded Ratio End of Year	86.77%	79.37%	73.83%	64.92%	55.41%

TABLE 3
SUMMARY OF BASIC ACTUARIAL VALUES

	APV of Projected Benefits	2013 Normal Cost
(1) Values for Active and Inactive Members		
(a) Retirement	\$ 991,488,137	\$ 23,430,142
(b) Termination - Vested	48,055,428	3,061,140
(c) Termination - Non-Vested	3,907,593	1,715,574
(d) Death	13,263,520	591,204
(e) Inactive Vested and Non-Vested	22,126,279	-
(f) Health Insurance	19,251,004	750,108
(g) Disability	-	4,969,744
(h) Expenses of Administration	-	4,745,519
Total for Active and Inactive Members	\$ 1,098,091,961	\$ 39,263,431
(2) Values for Members in Payment Status	\$ 1,519,775,727	\$ -
(3) Grand Totals	\$ 2,617,867,688	\$ 39,263,431
Actuarial Present Value of Future Compensation		\$ 1,650,892,528

TABLE 4
ACTUARIAL ACCRUED LIABILITY PRIORITIZED
SOLVENCY TEST

Valuation Date 12/31	(1)	(2)	(3)	Actuarial Value of Assets	Portion (%) of Present Value Covered		
	Active and Inactive Member Contributions	Retirees and Beneficiaries	Active and Inactive Members (ER Financed Portion)		By Assets		
					(1)	(2)	(3)
2003 ¹	\$ 246,529,315	\$ 721,917,308	\$ 660,116,410	\$1,679,796,167	100.00%	100.00%	100.00%
2004 ^{1,2}	213,524,642	1,055,408,468	405,681,541	1,649,959,130	100.00%	100.00%	93.92%
2005 ²	224,180,889	1,023,899,580	494,220,019	1,635,595,437	100.00%	100.00%	78.41%
2006	237,321,146	1,046,426,600	525,488,397	1,664,058,080	100.00%	100.00%	72.37%
2007	247,854,869	1,074,580,007	527,271,642	1,757,710,948	100.00%	100.00%	82.55%
2008	254,588,537	1,129,920,171	572,879,125	1,698,427,008	100.00%	100.00%	54.80%
2009	254,604,734	1,203,586,162	559,296,180	1,601,351,633	100.00%	100.00%	25.60%
2010	254,138,112	1,281,511,698	535,736,023	1,529,403,512	100.00%	99.51%	0.00%
2011 ²	251,243,991	1,403,258,511	536,679,260	1,422,414,349	100.00%	83.46%	0.00%
2012 ²	253,449,161	1,519,775,727	601,617,743	1,315,913,597	100.00%	69.91%	0.00%

¹ Change in benefits.

² Change in actuarial assumptions.

The prioritized solvency test is another means of checking a system's progress under its funding program, based on the Actuarial Accrued Liability. In this test, the plan's present assets (cash and investments) are compared with obligations in order of priority: (1) active and inactive member contributions on deposit; (2) the present value of future benefits to present retired lives; (3) the employer financed portion for present active and inactive members. In a system that has been following the discipline of financing, the obligation for active and inactive member contributions on deposit (present value 1) and the present value of future benefits to present retired lives (present value 2) will be fully covered by present assets (except in rare circumstances). In addition, the Actuarial Accrued Liability for present active and inactive members (present value 3) is covered by the remainder of present assets. Generally, if the system has been following a system of amortizing the Unfunded Liability, the funded portion of present value (3) will increase over time.

Due to the inadequacy of the current statutory funding policy, the current assets are only sufficient to cover active and inactive member contributions and 70 percent of retiree liabilities. The present value of employer financed benefits for active and inactive members is completely unfunded.

TABLE 5
STATUTORY RESERVES AS OF DECEMBER 31, 2012

	New in 2012			Continuing from 2011			Total		
	Annuity Payment Fund	Prior Service Fund	Total	Annuity Payment Fund	Prior Service Fund	Total	Annuity Payment Fund	Prior Service Fund	Total
Statutory Reserve ¹									
Retirees	\$ 27,486,260	\$ 80,809,455	\$ 108,295,715	\$ 266,255,281	\$ 1,058,059,100	\$ 1,324,314,381	\$ 293,741,541	\$ 1,138,868,555	\$ 1,432,610,096
Future Surviving Spouses	\$ 5,937,328	\$ 4,587,809	\$ 10,525,137	\$ 72,318,571	\$ 91,126,066	\$ 163,444,637	\$ 78,255,899	\$ 95,713,875	\$ 173,969,774
Spouses ²	\$ 5,971,595	\$ 3,705,477	\$ 9,677,072	\$ 50,411,998	\$ 44,872,041	\$ 95,284,039	\$ 56,383,593	\$ 48,577,518	\$ 104,961,111
Annual Benefits									
Retirees	\$ 2,201,275	\$ 4,039,963	\$ 6,241,238	\$ 28,485,122	\$ 82,109,426	\$ 110,594,548	\$ 30,686,397	\$ 86,149,389	\$ 116,835,786
Future Surviving Spouses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spouses ²	\$ 597,354	\$ 430,764	\$ 1,028,118	\$ 7,198,563	\$ 7,352,979	\$ 14,551,542	\$ 7,795,917	\$ 7,783,743	\$ 15,579,660

¹As required by State statutes, calculated using the Combined Annuity Mortality Table with interest at 3.00 percent per annum, except for employees and spouses of employees who were participants on or before January 1, 1952, for whom the American Experience Table of Mortality with interest at 4.00 percent per annum is used.

²Surviving spouses also include reversionary annuitants.

TABLE 6
STATE REPORTING DISCLOSURE

	<u>2011</u>	<u>2012</u>
APV of Credited Projected Benefits		
Payable to Retirees and Beneficiaries	\$ 1,403,258,511	\$ 1,519,775,727
Current Active and Inactive Employees:		
Accumulated Employee Contributions	251,243,991	253,449,161
Payable to Vested and Non-Vested Employees	<u>355,344,993</u>	<u>398,917,221</u>
Total APV	<u>\$ 2,009,847,495</u>	<u>\$ 2,172,142,109</u>
Net Assets Available for Benefits, Actuarial Value	<u>\$ 1,422,414,349</u>	<u>\$ 1,315,913,597</u>
Unfunded AAL (AAL in excess of assets)	\$ 587,433,146	\$ 856,228,512
Percent Funded	70.77 %	60.58 %
Unfunded AAL as Percent of Payroll	300.88%	430.72%
Payroll	\$ 195,238,332	\$ 198,789,741

TABLE 7
ACTUARIAL RESERVE LIABILITIES
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2012

Accrued Liabilities for Active and Inactive Participants ¹	\$ 855,066,904
Reserves For:	
Service Retirement Pension	\$ 1,245,979,337
Future Widows of Current Retirees	128,151,493
Surviving Spouse Pension	119,500,283
Health Insurance Supplement	25,772,762
Children Annuitants	371,852
	<hr/>
Total Accrued Liabilities	\$ 2,374,842,631
Unfunded Actuarial Liabilities (Surplus)	1,058,929,034
Actuarial Net Assets	\$ 1,315,913,597

¹ *Accrued liabilities for active participants includes retirement liability for members in ordinary or duty disabled status. Liability for disability benefits is recognized as a one-year term cost of 2.50 percent of pay added to the normal cost.*

ASSETS OF THE PLAN

ASSETS OF THE PLAN

The book value of plan assets, net of accounts payable, remained level at \$1.21 billion as of December 31, 2011, and December 31, 2012, and the market value of plan assets increased from \$1.31 billion as of December 31, 2011, to \$1.37 billion as of December 31, 2012. Table 8 details the development of asset values during 2012 and Table 9 shows the development of the actuarial value of assets as of December 31, 2012.

TABLE 8
RECONCILIATION OF ASSET VALUES
AS OF DECEMBER 31, 2012

	<u>Market Value</u>	<u>Book Value</u>
(1) Value of Assets as of 12/31/2011	\$ 1,313,603,639	\$ 1,214,975,270
(2) Income for Plan Year:		
(a) Member Contributions	\$ 16,559,017	\$ 16,559,017
(b) City Contributions & Miscellaneous	14,414,835	14,414,835
(c) Investment Income Net of Expenses	172,608,874	115,080,107
(d) Income from Securities Lending	851,202	851,202
(e) Total Income	<u>\$ 204,433,928</u>	<u>\$ 146,905,161</u>
(3) Disbursements for Plan Year:		
(a) Benefit Payments - Pension	\$ 137,058,112	\$ 137,058,112
(b) Benefit Payments - Health Insurance Supplement	2,561,930	2,561,930
(c) Refunds and Rollovers	2,594,960	2,594,960
(d) Administration	4,745,519	4,745,519
(e) Total Disbursements	<u>\$ 146,960,521</u>	<u>\$ 146,960,521</u>
(4) Value of Assets as of 12/31/2012	\$ 1,371,077,046	\$ 1,214,919,910
(5) Estimated Rate of Return in 2012:		
(a) Gross (Investment Expense of \$8,908,746)	14.52%	10.79%
(b) Net of Investment Expense	13.81%	10.02%

TABLE 9
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
AS OF DECEMBER 31, 2012

(1) Expected Return on Market Value of Assets for Prior Year

(a) Market Value of Assets as of 12/31/2011 \$ 1,313,603,639
(b) Actual Income and Disbursements in Prior Year Weighted for Timing

Item	Amount	Weight for Timing	Weighted Amount
i) Member Contributions	\$ 16,559,017	50.0%	\$ 8,279,509
ii) City Contributions & Misc.	14,414,835	50.0%	7,207,418
iii) Benefit Payments	(139,620,042)	50.0%	(69,810,021)
iv) Refunds	(2,594,960)	50.0%	(1,297,480)
v) Administration	(4,745,519)	50.0%	(2,372,760)
vi) Total	\$ (115,986,669)		\$ (57,993,334)

(c) Market Value of Assets Adj. for Actual Income and Disbursements [(a) + (b)(vi)] \$ 1,255,610,305
(d) Assumed Rate of Return on Plan Assets for the Year 8.00%
(e) Expected Return [(c) * (d)] \$ 100,448,824

(2) Actual Return on Market Value of Assets for Prior Year

(a) Market Value of Assets as of 12/31/2011 \$ 1,313,603,639
(b) Income (less investment income) for Prior Plan Year 30,973,852
(c) Disbursements Paid in Prior Year 146,960,521
(d) Market Value of Assets as of 12/31/2012 1,371,077,046
(e) Actual Return [(d) + (c) - (b) - (a)] \$ 173,460,076

(3) Investment Gain/(Loss) for Prior Year [2(e) - 1(e)]

\$ 73,011,252

(4) Actuarial Value of Assets as of 12/31/2012

(a) Market Value of Assets as of 12/31/2012 \$ 1,371,077,046
(b) Deferred Investment Gains and (Losses) for Last 5 Years

Plan Year	Gain/(Loss)	Weight for Timing	Deferred Amount
i) 2008	\$ (649,736,992)	0.00%	\$ -
ii) 2009	145,726,305	20.00%	29,145,261
iii) 2010	90,508,751	40.00%	36,203,500
iv) 2011	(114,323,856)	60.00%	(68,594,314)
v) 2012	73,011,252	80.00%	58,409,002
vi) Total	\$ (454,814,540)		\$ 55,163,449

(c) Actuarial Value of Assets \$ 1,315,913,597

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 percent per year.

PLAN MEMBER DATA

EXHIBIT A
SUMMARY OF CHANGES IN ACTIVE AND INACTIVE PARTICIPANTS
FOR THE YEAR ENDING DECEMBER 31, 2012

Active Participants ¹	Number at Beginning of Year	New	Inactive to Active	Total Increases	Decreases	Number at End of Year
Males	2,352	143	3	146	152	2,346
Females	500	39	1	40	21	519
Active Total	2,852	182	4	186	173	2,865
Inactive Participants	Number at Beginning of Year	New	Active to Inactive	Total Increases	Decreases	Number at End of Year
Males	1,268	-	17	17	29	1,256
Females	149	-	8	8	5	152
Inactive Total	1,417	-	25	25	34	1,408
Total - Actives and Inactives	4,269	182	29	211	207	4,273

¹All employees receiving ordinary and duty disability benefits are included in the active count.

EXHIBIT B
SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES
FOR THE YEAR ENDING DECEMBER 31, 2012

Annuitants and Beneficiaries	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Employee Annuitants	2,721	136	120	2,737
Surviving Spouse Annuitants ¹	1,220	53	91	1,182
Reversionary Annuitants ²	20	2	-	22
Child Annuitants	38	5	8	35
Annuitant Totals	3,999	196	219	3,976
Actives Receiving Disability				
Ordinary Disability Benefit	54	108	102	60
Duty Disability Benefit	190	287	282	195
Disability Totals	244	395	384	255
Totals	4,243	591	603	4,231

¹ Excludes one surviving spouse reclassified as reversionary annuitant.

² 20 reversionary annuitants are also surviving spouses.

EXHIBIT C
PART I – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE MALE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2012

Attained Age	Completed Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	1	2	-	-	-	-	-	-	-	3
	\$ 45,178	\$ 120,473	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 165,651
20-24	8	24	1	-	-	-	-	-	-	33
	\$ 401,616	\$ 1,335,230	\$ 68,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,805,049
25-29	14	38	18	2	-	-	-	-	-	72
	\$ 690,893	\$ 2,192,259	\$ 1,195,536	\$ 150,592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,229,280
30-34	13	37	47	68	7	-	-	-	-	172
	\$ 608,322	\$ 2,236,159	\$ 3,106,134	\$ 4,938,443	\$ 540,467	\$ -	\$ -	\$ -	\$ -	\$ 11,429,525
35-39	4	23	24	110	75	3	-	-	-	239
	\$ 250,266	\$ 1,423,131	\$ 1,551,865	\$ 7,533,806	\$ 5,594,022	\$ 244,400	\$ -	\$ -	\$ -	\$ 16,597,490
40-44	3	30	47	130	110	48	1	-	-	369
	\$ 131,290	\$ 1,776,874	\$ 3,101,146	\$ 9,091,542	\$ 8,098,050	\$ 3,569,513	\$ 71,469	\$ -	\$ -	\$ 25,839,884
45-49	5	19	20	117	111	107	38	14	-	431
	\$ 225,832	\$ 1,099,942	\$ 1,391,870	\$ 8,028,372	\$ 7,873,865	\$ 7,900,891	\$ 3,036,873	\$ 1,186,000	\$ -	\$ 30,743,645
50-54	1	17	29	92	107	81	66	78	3	474
	\$ 40,934	\$ 978,220	\$ 1,809,370	\$ 6,409,929	\$ 7,609,792	\$ 6,136,255	\$ 4,828,501	\$ 6,387,869	\$ 237,182	\$ 34,438,052
55-59	-	8	26	72	74	58	38	32	20	328
	\$ -	\$ 440,511	\$ 1,751,166	\$ 4,865,146	\$ 5,208,641	\$ 4,170,827	\$ 2,895,128	\$ 2,409,881	\$ 1,548,725	\$ 23,290,025
60-64	4	-	8	23	46	17	17	24	10	149
	\$ 188,178	\$ -	\$ 521,665	\$ 1,570,056	\$ 3,212,148	\$ 1,178,494	\$ 1,257,355	\$ 1,771,872	\$ 826,614	\$ 10,526,382
65-69	-	-	3	17	9	8	5	3	7	52
	\$ -	\$ -	\$ 200,262	\$ 1,126,894	\$ 673,857	\$ 596,211	\$ 354,536	\$ 202,542	\$ 467,750	\$ 3,622,052
70 & Over	-	-	-	2	7	4	2	6	3	24
	\$ -	\$ -	\$ -	\$ 85,693	\$ 479,565	\$ 286,998	\$ 140,816	\$ 496,329	\$ 302,479	\$ 1,791,880
Total	53	198	223	633	546	326	167	157	43	2,346
	\$ 2,582,509	\$ 11,602,799	\$ 14,697,217	\$ 43,800,473	\$ 39,290,407	\$ 24,083,589	\$ 12,584,678	\$ 12,454,493	\$ 3,382,750	\$ 164,478,915

EXHIBIT C

PART II – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE FEMALE PARTICIPANTS CLASSIFIED BY AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2012

Attained Age	Completed Years of Service									35 & Over	Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over		
Under 20	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20-24	4	5	-	-	-	-	-	-	-	-	9
	\$ 180,712	\$ 202,882	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 383,594
25-29	1	9	9	-	-	-	-	-	-	-	19
	\$ 54,672	\$ 497,279	\$ 593,377	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,145,328
30-34	3	7	24	11	-	-	-	-	-	-	45
	\$ 158,954	\$ 388,532	\$ 1,673,402	\$ 764,419	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,985,307
35-39	4	10	11	30	20	-	-	-	-	-	75
	\$ 204,132	\$ 574,403	\$ 742,766	\$ 2,029,149	\$ 1,336,377	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,886,827
40-44	2	8	15	29	26	5	2	-	-	-	87
	\$ 102,066	\$ 458,088	\$ 978,614	\$ 1,918,525	\$ 1,774,533	\$ 350,782	\$ 163,896	\$ -	\$ -	\$ -	\$ 5,746,504
45-49	-	8	17	22	19	15	6	-	-	-	87
	\$ -	\$ 501,462	\$ 1,041,523	\$ 1,437,410	\$ 1,315,817	\$ 1,027,275	\$ 405,755	\$ -	\$ -	\$ -	\$ 5,729,242
50-54	1	3	17	28	18	17	14	-	-	-	98
	\$ 37,704	\$ 161,407	\$ 1,124,093	\$ 1,807,368	\$ 1,227,639	\$ 1,243,530	\$ 1,150,183	\$ -	\$ -	\$ -	\$ 6,751,924
55-59	-	2	3	16	18	15	8	1	-	-	63
	\$ -	\$ 122,324	\$ 211,702	\$ 1,009,013	\$ 1,216,847	\$ 1,037,871	\$ 561,604	\$ 75,227	\$ -	\$ -	\$ 4,234,588
60-64	-	1	1	6	10	4	2	-	-	-	24
	\$ -	\$ 56,888	\$ 68,203	\$ 515,005	\$ 632,558	\$ 247,998	\$ 141,139	\$ -	\$ -	\$ -	\$ 1,661,791
65-69	-	-	-	6	1	1	2	-	-	-	10
	\$ -	\$ -	\$ -	\$ 413,029	\$ 68,203	\$ 83,832	\$ 111,877	\$ -	\$ -	\$ -	\$ 676,941
70 & Over	-	-	-	-	1	1	-	-	-	-	2
	\$ -	\$ -	\$ -	\$ -	\$ 50,952	\$ 57,828	\$ -	\$ -	\$ -	\$ -	\$ 108,780
Total	15	53	97	148	113	58	34	1	-	-	519
	\$ 738,240	\$ 2,963,265	\$ 6,433,680	\$ 9,893,918	\$ 7,622,926	\$ 4,049,116	\$ 2,534,454	\$ 75,227	\$ -	\$ -	\$ 34,310,826

EXHIBIT C
PART III – TOTAL LIVES AND ANNUAL SALARIES OF ALL ACTIVE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2012

Attained Age	Completed Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	1	2	-	-	-	-	-	-	-	3
	\$ 45,178	\$ 120,473	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 165,651
20-24	12	29	1	-	-	-	-	-	-	42
	\$ 582,328	\$ 1,538,112	\$ 68,203	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,188,643
25-29	15	47	27	2	-	-	-	-	-	91
	\$ 745,565	\$ 2,689,538	\$ 1,788,913	\$ 150,592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,374,608
30-34	16	44	71	79	7	-	-	-	-	217
	\$ 767,276	\$ 2,624,691	\$ 4,779,536	\$ 5,702,862	\$ 540,467	\$ -	\$ -	\$ -	\$ -	\$ 14,414,832
35-39	8	33	35	140	95	3	-	-	-	314
	\$ 454,398	\$ 1,997,534	\$ 2,294,631	\$ 9,562,955	\$ 6,930,399	\$ 244,400	\$ -	\$ -	\$ -	\$ 21,484,317
40-44	5	38	62	159	136	53	3	-	-	456
	\$ 233,356	\$ 2,234,962	\$ 4,079,760	\$ 11,010,067	\$ 9,872,583	\$ 3,920,295	\$ 235,365	\$ -	\$ -	\$ 31,586,388
45-49	5	27	37	139	130	122	44	14	-	518
	\$ 225,832	\$ 1,601,404	\$ 2,433,393	\$ 9,465,782	\$ 9,189,682	\$ 8,928,166	\$ 3,442,628	\$ 1,186,000	\$ -	\$ 36,472,887
50-54	2	20	46	120	125	98	80	78	3	572
	\$ 78,638	\$ 1,139,627	\$ 2,933,463	\$ 8,217,297	\$ 8,837,431	\$ 7,379,785	\$ 5,978,684	\$ 6,387,869	\$ 237,182	\$ 41,189,976
55-59	-	10	29	88	92	73	46	33	20	391
	\$ -	\$ 562,835	\$ 1,962,868	\$ 5,874,159	\$ 6,425,488	\$ 5,208,698	\$ 3,456,732	\$ 2,485,108	\$ 1,548,725	\$ 27,524,613
60-64	4	1	9	29	56	21	19	24	10	173
	\$ 188,178	\$ 56,888	\$ 589,868	\$ 2,085,061	\$ 3,844,706	\$ 1,426,492	\$ 1,398,494	\$ 1,771,872	\$ 826,614	\$ 12,188,173
65-69	-	-	3	23	10	9	7	3	7	62
	\$ -	\$ -	\$ 200,262	\$ 1,539,923	\$ 742,060	\$ 680,043	\$ 466,413	\$ 202,542	\$ 467,750	\$ 4,298,993
70 & Over	-	-	-	2	8	5	2	6	3	26
	\$ -	\$ -	\$ -	\$ 85,693	\$ 530,517	\$ 344,826	\$ 140,816	\$ 496,329	\$ 302,479	\$ 1,900,660
Total	68	251	320	781	659	384	201	158	43	2,865
	\$ 3,320,749	\$ 14,566,064	\$ 21,130,897	\$ 53,694,391	\$ 46,913,333	\$ 28,132,705	\$ 15,119,132	\$ 12,529,720	\$ 3,382,750	\$ 198,789,741

EXHIBIT D
PART I - AGE AND SERVICE DISTRIBUTION FOR INACTIVES - MALES
AS OF DECEMBER 31, 2012

(Males Only)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	1	-	-	-	-	-	-	-	-	1
25-29	6	4	-	-	-	-	-	-	-	10
30-34	10	19	6	2	-	-	-	-	-	37
35-39	31	24	6	7	-	-	-	-	-	68
40-44	45	23	8	3	3	-	-	-	-	82
45-49	88	22	8	6	-	2	-	-	-	126
50-54	236	43	5	3	5	6	6	-	-	304
55-59	155	63	9	3	7	5	-	-	-	242
60-64	99	38	9	3	-	1	-	-	-	150
65-69	40	20	4	2	2	1	1	2	-	72
70 & Over	79	57	7	7	5	2	5	-	-	162
w/o DOB	1	1	-	-	-	-	-	-	-	2
Total	791	314	62	36	22	17	12	2	0	1,256
Average Age										56.57
Average Service										2.14

For inactives without a birthdate on record, we assumed an average age of 55.87.

EXHIBIT D
PART II - AGE AND SERVICE DISTRIBUTION FOR INACTIVES - FEMALES
AS OF DECEMBER 31, 2012

(Females Only)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	-	-	-	-	-	-	-	-	-	0
25-29	2	2	-	-	-	-	-	-	-	4
30-34	4	9	-	-	-	-	-	-	-	13
35-39	19	20	-	-	-	-	-	-	-	39
40-44	6	7	1	3	-	-	-	-	-	17
45-49	7	6	1	-	1	-	-	-	-	15
50-54	14	4	1	4	-	1	-	-	-	24
55-59	9	1	1	1	-	-	-	-	-	12
60-64	4	3	-	-	-	-	-	-	-	7
65-69	-	-	1	1	-	-	-	-	1	3
70 & Over	6	3	6	2	1	-	-	-	-	18
w/o DOB	-	-	-	-	-	-	-	-	-	0
Total	71	55	11	11	2	1	0	0	1	152
Average Age										50.07
Average Service										2.80

EXHIBIT D
PART III - AGE AND SERVICE DISTRIBUTION FOR INACTIVES - TOTAL
AS OF DECEMBER 31, 2012

(Males and Females Combined)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	1	-	-	-	-	-	-	-	-	1
25-29	8	6	-	-	-	-	-	-	-	14
30-34	14	28	6	2	-	-	-	-	-	50
35-39	50	44	6	7	-	-	-	-	-	107
40-44	51	30	9	6	3	-	-	-	-	99
45-49	95	28	9	6	1	2	-	-	-	141
50-54	250	47	6	7	5	7	6	-	-	328
55-59	164	64	10	4	7	5	-	-	-	254
60-64	103	41	9	3	-	1	-	-	-	157
65-69	40	20	5	3	2	1	1	2	1	75
70 & Over	85	60	13	9	6	2	5	-	-	180
w/o DOB	1	1	-	-	-	-	-	-	-	2
Total	862	369	73	47	24	18	12	2	1	1,408
Average Age										55.87
Average Service										2.21

For inactives without a birthdate on record, we assumed an average age of 55.87.

EXHIBIT E
STATISTICS ON EMPLOYEE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2012

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 50	3	\$ 17,676	-	\$ -
50-54	162	9,248,942	-	-
55-59	437	22,477,512	15	484,404
60-64	459	21,963,500	20	699,408
65-69	402	17,715,759	17	419,460
70-74	379	16,429,116	23	572,688
75-79	265	10,286,628	21	547,812
80-84	177	6,634,241	35	771,444
85-89	141	4,877,484	40	682,380
90-94	59	1,652,004	43	722,172
95-99	4	93,492	29	462,768
100 & over	-	0	6	76,896
Totals	2,488	\$ 111,396,354	249	\$ 5,439,432
Average Age	68.46		81.67	

EXHIBIT F
PART I - STATISTICS ON SURVIVING SPOUSE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2012

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -
30-34	-	-	1	9,600
35-39	-	-	2	19,200
40-44	1	14,232	2	19,200
45-49	-	-	19	268,728
50-54	4	37,884	35	499,128
55-59	2	12,936	63	963,525
60-64	1	9,600	63	1,039,329
65-69	1	10,068	106	1,524,548
70-74	1	9,600	156	2,214,105
75-79	-	-	172	2,461,392
80-84	3	28,800	197	2,409,847
85-89	7	73,008	195	2,275,164
90-94	3	34,080	104	1,098,237
95-99	2	19,200	40	380,220
100 & over	-	-	2	19,200
Totals	25	\$ 249,408	1,157	\$ 15,201,423
Average Age	75.79		77.26	

EXHIBIT F
PART II - STATISTICS ON REVERSIONARY ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2012

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -
30-34	1	774	-	-
35-39	-	-	-	-
40-44	-	-	-	-
45-49	1	601	-	-
50-54	-	-	-	-
55-59	-	-	2	15,336
60-64	-	-	3	31,955
65-69	-	-	5	29,946
70-74	-	-	1	5,184
75-79	-	-	3	16,464
80-84	-	-	2	12,972
85 & Over	-	-	4	15,597
Totals	2	\$ 1,375	20	\$ 127,454
Average Age	39.58		73.53	

EXHIBIT F
PART III - STATISTICS ON CHILDREN ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2012

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 6	1	\$ 3,000	-	\$ -
6	1	3,000	-	-
7	1	2,640	-	-
8	2	5,640	-	-
9	1	3,000	1	2,640
10	1	2,640	2	5,280
11	1	3,000	-	-
12	2	5,280	3	8,280
13	4	10,920	1	3,000
14	-	-	-	-
15	1	2,640	2	5,280
16	3	8,280	6	15,840
17	1	2,640	1	3,000
Totals	19	\$ 52,680	16	\$ 43,320
Average Age	12.17		14.26	

EXHIBIT G
PART I – NUMBER OF REFUND PAYMENTS MADE DURING 2012
TO MALE EMPLOYEES

Age at Date of Valuation	Length of Service at Date of Refund						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	5 and Over	
Under 20	-	-	-	-	-	-	-
20 to 24	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	3	3
35 to 39	-	-	1	-	-	1	2
40 to 44	-	1	-	-	-	3	4
45 to 49	-	-	-	-	-	5	5
50 to 54	-	1	-	-	-	2	3
55 to 59	1	1	-	-	-	1	3
60 & Over	-	-	-	-	-	-	-
Totals	1	3	1	-	-	15	20

PART II – NUMBER OF REFUND PAYMENTS MADE DURING 2012
TO FEMALE EMPLOYEES

Age at Date of Valuation	Length of Service at Date of Refund						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	5 and Over	
Under 20	-	-	-	-	-	-	-
20 to 24	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-
30 to 34	-	-	1	-	-	-	1
35 to 39	-	-	-	-	-	-	-
40 to 44	-	1	-	-	-	1	2
45 to 49	-	-	-	-	-	-	-
50 to 54	-	-	-	-	-	-	-
55 to 59	-	-	-	-	-	-	-
60 & Over	-	-	-	-	-	-	-
Totals	-	1	1	-	-	1	3

Includes those who took a refund from both active and inactive status.

EXHIBIT H
HEALTH INSURANCE COVERAGE
CLASSIFIED BY AGE AS OF DECEMBER 31, 2012

<u>Age</u>	<u>Single Coverage</u>	<u>Family Coverage</u>	<u>Total Covered</u>	<u>Total Not Covered</u>	<u>Total Annuitants</u>	<u>% Covered Annuitants</u>
Employee Annuitants						
30-39	-	-	-	1	1	0.00%
40-49	2	-	2	-	2	100.00%
50-59	233	267	500	114	614	81.43%
60-69	329	378	707	191	898	78.73%
70-79	261	280	541	147	688	78.63%
80-89	182	101	283	110	393	72.01%
90 & Over	72	12	84	57	141	59.57%
Total	1,079	1,038	2,117	620	2,737	77.35%
Spouse Annuitants						
30-39	-	1	1	2	3	33.33%
40-49	3	5	8	14	22	36.36%
50-59	40	5	45	59	104	43.27%
60-69	79	2	81	90	171	47.37%
70-79	199	3	202	127	329	61.40%
80-89	245	-	245	157	402	60.95%
90 & Over	82	-	82	69	151	54.30%
Total	648	16	664	518	1,182	56.18%

EXHIBIT I
PART I – MALE PARTICIPANTS RECEIVING DUTY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2012

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
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	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
30 to 34	-	-	-	-	4	210,194	5	250,255	-	-	-	-	9	460,449
35 to 39	-	-	-	-	1	41,777	11	536,076	2	106,064	1	70,356	15	754,273
40 to 44	-	-	-	-	1	52,634	10	525,157	6	313,092	1	42,167	18	933,050
45 to 49	-	-	1	56,472	-	-	11	523,021	9	457,688	12	648,398	33	1,685,579
50 to 54	-	-	1	35,802	-	-	7	348,082	9	465,224	18	988,712	35	1,837,820
55 to 59	-	-	1	50,825	1	40,919	8	406,951	9	447,812	6	287,493	25	1,234,000
60 & Over	-	-	-	-	-	-	6	329,394	10	534,643	4	234,546	20	1,098,583
Totals	-	\$ -	3	\$ 143,099	7	\$ 345,524	58	\$ 2,918,936	45	\$ 2,324,523	42	\$ 2,271,672	155	\$ 8,003,754

PART II – FEMALE PARTICIPANTS RECEIVING DUTY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2012

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
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	-	\$ -	1	\$ 54,912	1	\$ 47,689	-	\$ -	-	\$ -	-	\$ -	2	\$ 102,601
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	1	35,802	4	208,837	-	-	2	102,304	-	-	7	346,943
40 to 44	-	-	1	54,912	-	-	5	215,373	1	47,034	-	-	7	317,319
45 to 49	-	-	-	-	2	102,773	2	109,824	3	144,144	2	101,384	9	458,125
50 to 54	-	-	-	-	2	81,978	3	150,181	1	51,152	2	82,430	8	365,741
55 to 59	-	-	-	-	-	-	2	106,064	2	88,046	2	90,542	6	284,652
60 & Over	-	-	-	-	-	-	-	-	1	47,034	-	-	1	47,034
Totals	-	\$ -	3	\$ 145,626	9	\$ 441,277	12	\$ 581,442	10	\$ 479,714	6	\$ 274,356	40	\$ 1,922,415

Benefit payments are annual amount before Workers' Compensation offset.

EXHIBIT I (CONT'D)
PART III – MALE PARTICIPANTS RECEIVING ORDINARY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2012

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
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	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
30 to 34	-	-	-	-	1	23,868	-	-	-	-	-	-	1	23,868
35 to 39	-	-	-	-	-	-	1	34,102	-	-	-	-	1	34,102
40 to 44	-	-	-	-	2	53,029	3	77,927	1	32,947	1	36,608	7	200,511
45 to 49	-	-	-	-	-	-	-	-	1	20,706	5	174,012	6	194,718
50 to 54	-	-	2	71,531	-	-	1	34,102	5	158,663	7	234,156	15	498,452
55 to 59	-	-	-	-	-	-	3	98,956	-	-	6	212,763	9	311,719
60 & Over	-	-	-	-	-	-	1	34,102	3	101,203	2	73,216	6	208,521
Totals	-	\$ -	2	\$ 71,531	3	\$ 76,897	9	\$ 279,189	10	\$ 313,519	21	\$ 730,755	45	\$ 1,471,891

PART IV – FEMALE PARTICIPANTS RECEIVING ORDINARY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2012

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
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	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
30 to 34	-	-	-	-	1	34,102	-	-	-	-	-	-	1	34,102
35 to 39	-	-	-	-	-	-	1	34,102	-	-	-	-	1	34,102
40 to 44	-	-	-	-	1	30,690	-	-	-	-	-	-	1	30,690
45 to 49	-	-	-	-	1	31,793	1	22,686	1	34,102	1	27,936	4	116,517
50 to 54	-	-	-	-	3	95,680	1	30,982	-	-	-	-	4	126,662
55 to 59	-	-	-	-	-	-	2	58,240	1	31,907	-	-	3	90,147
60 & Over	-	-	-	-	-	-	-	-	1	24,972	-	-	1	24,972
Totals	-	\$ -	-	\$ -	6	\$ 192,265	5	\$ 146,010	3	\$ 90,981	1	\$ 27,936	15	\$ 457,192

EXHIBIT J
HISTORY OF AVERAGE ANNUAL SALARIES

Year Ended	Members in Service	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase	Actuarial Salary Assumption	CPI Chicago¹
2003	3,719	(2.85)%	\$205,691,917	(0.83)%	\$55,308	2.08 %	5.00 %	1.70 %
2004	3,135	(15.70)%	171,476,937	(16.63)%	54,698	(1.10)%	4.50 %	2.21 %
2005	3,141	0.19 %	182,809,397	6.61 %	58,201	6.41 %	4.50 %	3.59 %
2006	3,215	2.36 %	193,176,272	5.67 %	60,086	3.24 %	4.50 %	0.71 %
2007	3,138	(2.40)%	192,847,482	(0.17)%	61,456	2.28 %	4.50 %	4.73 %
2008	3,325	5.96 %	216,744,211	12.39 %	65,186	6.07 %	4.50 %	(0.58)%
2009	3,124	(6.05)%	208,626,493	(3.75)%	66,782	2.45 %	4.50 %	2.54 %
2010	2,956	(5.38)%	199,863,410	(4.20)%	67,613	1.24 %	4.50 %	1.23 %
2011	2,852	(3.52)%	195,238,332	(2.31)%	68,457	1.25 %	4.50 %	2.06 %
2012	2,865	0.46 %	198,789,741	1.82 %	69,386	1.36 %	4.50 %	1.68 %
Average Increase (Decrease) for the Last Five Years		(1.80)%		0.61 %		2.46 %	4.50 %	1.38 %

¹ CPI-Chicago as of the valuation date.

EXHIBIT K
PART I - NEW ANNUITIES GRANTED DURING 2012

	Male Annuitants	Female Annuitants	Spouse of Deceased Employees	Spouse of Deceased Annuitants
Number Retired/Deceased ¹	125	10	7	45
Average Age Attained	58.3	62.0	51.8	72.2
Average Length of Service	28.9	19.5	23.9	N/A
Total Annual Final Salary	\$ 9,320,186	\$ 624,965	\$ 472,680	N/A
Average Annual Final Salary	\$ 74,561	\$ 62,496	\$ 67,526	N/A
Total Annual Annuity	\$ 5,950,922	\$ 290,316	\$ 139,476	\$ 887,868
Average Annual Annuity	\$ 47,607	\$ 29,032	\$ 19,925	\$ 19,730
Total Actuarial Liability	\$ 81,763,750	\$ 4,322,057	\$ 1,704,692	\$ 7,941,212
Average Actuarial Liability	\$ 654,110	\$ 432,206	\$ 243,527	\$ 176,471
Total Contributed by EE ²	\$ 17,471,768	\$ 916,551	\$ 928,271	N/A
Average Contribution	\$ 139,774	\$ 91,655	\$ 132,610	N/A
Liability/Contributions	4.68	4.72	1.84	N/A
Liability/Final Pay	8.77	6.92	3.61	N/A
Expected Future Lifetime (yrs.)	22.52	24.56	34.05	16.91
Payback Period (yrs.)	2.9360	3.1570	6.6555	N/A
Replacement Ratio ³	63.85 %	46.45 %	29.51 %	N/A

¹ Does not include one new retiree and one new survivor who were no longer on annuity at the end of the year and one new reversionary annuitant who is not also a surviving spouse annuitant.

² Includes "Pickup".

³ Ratio of average annual annuity to average annual final salary.

EXHIBIT K
PART II - ANALYSIS OF INITIAL RETIREMENT BENEFITS FOR EMPLOYEES

	Years of Credited Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+		
2007										
Avg Monthly Annuity	\$ 361	\$ 1,378	\$ 1,480	\$ 2,498	\$ 2,690	\$ 2,474	\$ 4,180	\$ 4,799	\$ 3,515	
Avg Monthly FAS	\$ 5,451	\$ 7,168	\$ 4,921	\$ 5,641	\$ 5,339	\$ 3,873	\$ 5,520	\$ 6,048	\$ 5,444	
Number of Retirees	3	2	10	2	9	5	54	10	95	
2008										
Avg Monthly Annuity	\$ 325	\$ 975	\$ 1,241	\$ 1,390	\$ 2,803	\$ 3,283	\$ 4,433	\$ 4,819	\$ 3,707	
Avg Monthly FAS	\$ 6,033	\$ 5,700	\$ 4,048	\$ 2,883	\$ 5,291	\$ 5,146	\$ 5,773	\$ 6,012	\$ 5,538	
Number of Retirees	5	4	6	3	7	14	73	8	120	
2009										
Avg Monthly Annuity	\$ 431	\$ 1,081	\$ 1,366	\$ 1,905	\$ 2,653	\$ 3,429	\$ 4,384	\$ 5,005	\$ 3,707	
Avg Monthly FAS	\$ 5,981	\$ 6,697	\$ 4,922	\$ 4,487	\$ 5,284	\$ 5,286	\$ 5,718	\$ 6,257	\$ 5,553	
Number of Retirees	1	3	10	16	12	26	77	24	169	
2010										
Avg Monthly Annuity	\$ 497	\$ 794	\$ 1,293	\$ 1,819	\$ 2,684	\$ 3,995	\$ 4,865	\$ 5,895	\$ 4,002	
Avg Monthly FAS	\$ 6,094	\$ 5,592	\$ 4,409	\$ 5,153	\$ 5,499	\$ 6,089	\$ 6,347	\$ 7,369	\$ 6,113	
Number of Retirees	4	4	7	14	18	19	81	16	163	
2011										
Avg Monthly Annuity	\$ 355	\$ -	\$ 1,701	\$ 1,941	\$ 2,790	\$ 3,665	\$ 5,013	\$ 5,411	\$ 4,107	
Avg Monthly FAS	\$ 7,085	\$ -	\$ 5,923	\$ 5,048	\$ 5,397	\$ 5,734	\$ 6,609	\$ 6,772	\$ 6,326	
Number of Retirees	8	-	12	6	13	22	86	16	163	
2012										
Avg Monthly Annuity	\$ 258	\$ 636	\$ 1,256	\$ 2,512	\$ 2,705	\$ 3,833	\$ 5,013	\$ 5,730	\$ 3,824	
Avg Monthly FAS	\$ 4,613	\$ 5,519	\$ 4,895	\$ 5,716	\$ 5,258	\$ 6,004	\$ 6,580	\$ 7,162	\$ 6,085	
Number of Retirees	4	6	9	9	22	17	54	15	136	

EXHIBIT L
NEW RECIPROCAL ANNUITIES GRANTED DURING 2012

	Reciprocal	
	Male Annuitants	Female Annuitants
Number Retired	16	-
Average Age Attained	61.9	-
Number with Spouses	11	-
Average Spouse Age	63.6	-
Percentage with Spouse	68.75%	-
Total Annual Annuity	\$ 261,804	\$ -
Average Annual Annuity	\$ 16,363	\$ -
Total Liability (7.5% RP 2000)	\$ 3,458,415	\$ -
Average Liability	\$ 216,151	\$ -

EXHIBIT M
HISTORY OF RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

Years	Annuitants				Disability		Compensation	Reciprocal	
	Employee	Spouse	Child	Reversionary	Ordinary	Duty	Annuitants ²	Employee	Spouse
2003	2,270	1,334	67		74	106	-	202	61
2004	2,589	1,314	62		63	92	1	247	65
2005 ¹	2,489	1,301	52		56	120	1	248	66
2006 ¹	2,432	1,265	52		42	129	1	251	70
2007 ¹	2,388	1,254	45		58	118	1	256	62
2008 ¹	2,380	1,236	47		61	145	1	266	62
2009	2,413	1,210	41		62	188	1	270	62
2010	2,429	1,197	39		44	184	1	273	58
2011 ¹	2,438	1,158	38		54	190	1	283	63
2012	2,448	1,122	35	22 ^{3,4}	60	195	1	289	60

¹ Includes one Reversionary Annuitant included as a Spouse Annuitant that is not a Spouse Annuitant.

² Compensation Annuitant is also included as a Spouse Annuitant.

³ Prior to December 31, 2012, Reversionary Annuitants were included with Spouse Annuitants.

⁴ Includes 20 Reversionary Annuitants that are also Spouse Annuitants.

EXHIBIT N
HISTORY OF AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Year Ended	Average Annual Benefit	Average Current Age of Retirees	Average Annual Benefit at Retirement Current Year	Average Age at Retirement Current Year	Average Years Service at Retirement Current Year
2003	\$25,576	73.0	\$34,201	58.6	25.21
2004 ¹	29,177	70.6	40,825	57.3	30.87
2005	30,492	70.8	39,105	57.0	30.44
2006	31,664	70.9	38,015	56.6	28.87
2007	33,242	70.9	42,234	57.0	29.82
2008	35,037	70.7	44,496	56.3	30.11
2009	36,868	70.3	44,581	57.8	29.29
2010	38,962	70.0	48,489	58.2	29.09
2011	41,056	69.6	49,135	58.0	29.54
2012	42,688	69.6	46,231	58.6	28.16

¹Early retirement incentive offered to employees.

EXHIBIT O
SURVIVING SPOUSES RECEIVING BENEFITS AS OF DECEMBER 31, 2012
BY AGE AND YEARS IN PAY STATUS

Attained Age	Number of Years in Pay Status						Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Over	
Under 30	-	-	-	-	-	-	-
30 to 34	1	1	-	-	-	-	2
35 to 39	-	-	1	-	1	-	2
40 to 44	-	1	1	-	1	-	3
45 to 49	3	5	10	1	1	-	20
50 to 54	3	9	13	7	4	3	39
55 to 59	7	16	23	12	3	6	67
60 to 64	5	13	21	18	5	5	67
65 to 69	5	26	30	17	14	20	112
70 to 74	3	33	34	35	19	34	158
75 to 79	7	32	45	26	29	36	175
80 to 84	7	30	30	37	35	63	202
85 & Over	5	30	53	56	60	153	357
Totals	46	196	261	209	172	320	1,204

Includes 2 reversionary annuitants that are not also spouse annuitants.

EXHIBIT P
HISTORY OF ANNUITIES 2003 – 2012

Employee Annuitants (Male and Female)			
Year Ended	Number of Annuitants	Total Annuities	Average Annuities
2003	2,472	\$ 63,224,248	\$ 25,576
2004	2,836	82,746,720	29,177
2005	2,737	83,457,267	30,492
2006	2,683	84,953,928	31,664
2007	2,644	87,891,144	33,242
2008	2,646	92,708,484	35,037
2009	2,683	98,915,980	36,868
2010	2,702	105,275,352	38,962
2011	2,721	111,712,416	41,056
2012	2,737	116,835,786	42,688
Surviving Spouse and Reversionary Annuitants			
Year Ended	Number of Annuitants	Total Annuities	Average Annuities
2003	1,395	\$ 14,573,819	\$ 10,447
2004	1,379	14,755,032	10,700
2005 ¹	1,367	14,913,483	10,910
2006 ¹	1,335	15,003,432	11,239
2007 ¹	1,316	15,164,628	11,523
2008 ¹	1,298	15,281,964	11,773
2009	1,272	15,375,816	12,088
2010	1,255	15,605,676	12,435
2011 ¹	1,221	15,583,920	12,763
2012 ²	1,204	15,579,660	12,940

¹Includes one Reversionary Annuitant.

²Includes 20 Reversionary Annuitants that are also Spouse Annuitants.

EXHIBIT Q
SCHEDULE OF RETIRED MEMBERS
BY AMOUNT AND TYPE OF BENEFIT AS OF DECEMBER 31, 2012

Amount of Monthly Benefit	Number of Employee Annuitants	Number of Spouse Annuitants	Number of Reversionary Annuitants¹	Number of Child Annuitants	Total Number of Annuitants
\$ 1 - 250	39	17	5	35	96
251 - 500	33	5	9	-	47
501 - 750	29	11	5	-	45
751 - 1,000	37	714	1	-	752
1,001 - 1,250	36	123	1	-	160
1,251 - 1,500	216	108	-	-	324
1,501 - 1,750	79	62	-	-	141
1,751 - 2,000	85	67	1	-	153
2,001 - 2,250	89	34	-	-	123
2,251 - 2,500	95	21	-	-	116
2,501 - 2,750	102	9	-	-	111
2,751 - 3,000	85	2	-	-	87
3,001 - 3,250	123	5	-	-	128
3,251 - 3,500	124	1	-	-	125
3,501 - 3,750	185	2	-	-	187
3,751 - 4,000	219	-	-	-	219
4,001 - 4,250	224	1	-	-	225
4,251 - 4,500	221	-	-	-	221
4,501 - 4,750	174	-	-	-	174
4,751 - 5,000	114	-	-	-	114
5,001 - 5,250	77	-	-	-	77
5,251 - 5,500	72	-	-	-	72
5,501 - 5,750	74	-	-	-	74
5,751 - 6,000	47	-	-	-	47
Over \$6,000	158	-	-	-	158
Totals	2,737	1,182	22	35	3,976

Includes 20 reversionary annuitants that are also spouse annuitants.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012**

ACTUARIAL METHODS AND ASSUMPTIONS

AS OF DECEMBER 31, 2012

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 principal Actuarial Cost Method used in this valuation is the Entry Age Normal Actuarial Cost Method. Under this Method, a Normal Cost is developed by spreading the actuarial value of benefits expected to be received by each active participant over the total working lifetime of that participant, from date of hire to termination, as a level percentage of pay.

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., 30 years). The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL.

CURRENT ACTUARIAL ASSUMPTIONS

(Adopted as of December 31, 2012, unless otherwise stated)

Demographic Assumptions

Post Retirement Mortality: RP2000 Combined Healthy mortality table, sex distinct, set forward one year for males and setback 2 years for females. No adjustment is made for post-disabled mortality. The mortality table used is a static table and provides an estimated margin of 18 percent for future mortality improvements.

Pre-Retirement Mortality: 80 percent of post-retirement mortality.

Mortality assumptions first adopted for the December 31, 2011, valuation.

Disability: Disability cost valued as a term cost of 2.50 percent of payroll.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

RATE OF RETIREMENT:

Tier 1 Age-and-Service-Based Rates of Retirement

<u>Attained Age</u>	<u>Years of Service</u>								
	10	11-14	15-19	20-24	25-29	30-32	33-34	35-39	40+
50-54	-	-	-	-	-	24 %	40 %	35 %	100 %
55-59	-	-	-	16 %	24 %	24	40	35	100
60-64	16 %	10 %	10 %	16	24	24	40	35	100
65-69	16	16	24	24	24	24	40	35	100
70-79	24	24	24	24	24	24	40	40	100
80+	100	100	100	100	100	100	100	100	100

Tier 2 Age-and-Service-Based Rates of Retirement

<u>Attained Age</u>	<u>Years of Service</u>	
	10-39	40+
62-66	24 %	100 %
67-69	40	100
70-79	40	100
80+	100	100

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

RATE OF TERMINATION:

<u>Service¹</u>	<u>Rate</u>
0	8.00%
1	7.00%
2-3	5.00%
4-9	4.00%
10-15	3.00%
16-19	2.00%
20-29	1.50%
30+	1.00%

¹Based on service at beginning of valuation year.

Economic Assumptions

Investment Return Rate and Discount Rate: 7.50 percent per annum (net of investment expense) for pensions and 4.50 percent per annum for OPEB. The 7.50 percent assumption contains a 3.00 percent inflation assumption and a 4.50 percent real rate of return assumption for pension. OPEB discount rate adopted 2005.

Future Salary Increases: The assumed base rate of individual salary increase is 3.75 percent per year, plus a service-based increase in the first 15 years.

Completed Years of Service¹	Additional Increase	Total Increase
1	6.25 %	10.00 %
2	4.75	8.50
3	3.75	7.50
4	3.25	7.00
5	2.25	6.00
6	1.25	5.00
7 – 15	0.25	4.00
16 – 30+	0.00	3.75

¹Based on projected service at end of valuation year.

Asset Value: The Actuarial Value of Assets is smoothed by using a five-year phase-in of each year's unexpected investment gains and losses.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

Other Assumptions

- Marital Status: It is assumed that 85 percent of active members have an eligible spouse. The male spouse is assumed to be four years older than the female spouse. No assumption is made about other dependents.
- Disability: Liability for disability benefits is recognized as a one-year term cost of 2.50 percent of pay added to the normal cost.
- Reciprocal Service: No assumption for reciprocal service.
- Benefit Service: Exact fractional years of service are used to determine the amount of benefit payable.
- Decrement Timing: All decrements are assumed to occur mid-year.
- Decrement Relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
- Decrement Operation: Turnover decrements do not operate after member reaches retirement eligibility for a minimum annuity formula benefit.
- Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.
- Pay Increase Timing: Middle of (fiscal) year.
- Group Health Insurance: It is assumed for valuation purposes that the health insurance supplement in effect prior to June 30, 2013, will continue for life for all employee annuitants (and their future surviving spouses). The amount of the Fund paid health insurance from July 1, 2008, until June 30, 2013, is \$95.00 per month for each annuitant (employees and surviving spouses) not qualified to receive Medicare benefits, and \$65.00 if qualified. It is assumed that all annuitants age 65 and older will be eligible for Medicare and all annuitants less than age 65 will not be eligible for Medicare. Future surviving spouses of retirees, age 65 and older, are assumed to be eligible for Medicare, as well as surviving spouse annuitants that are currently receiving a health insurance supplement.
- It is assumed that 75 percent of future retirees will elect to receive the health insurance supplement at retirement, first adopted for the valuation as of December 31, 2011.
- Required Ultimate Multiple: Is based on 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: 4.00 percent overall loss on tax levy is assumed.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

THREE METHODS OF FINANCING UNFUNDED LIABILITY

Normal Cost

Plus Interest Method: This is the method of valuation that was used in reports prior to 1997. It is intended to continue the current provisions of the Article governing the Plan in full force and effect on a permanent basis and in the amount required each year to keep the unfunded liability from increasing if all assumptions are realized.

The normal cost plus interest only method of funding is that recommended by the former Illinois Public Employees' Pension Laws Commission. It was also the minimum required for private pension plans for IRS qualification before ERISA.

Normal Cost Plus
30-Year Amortization
Method:

GASB #25 and #43 require a 30-year amortization of the unfunded liability. We have calculated the cost of amortizing the existing unfunded liability.

Both of these cost methods, the normal cost plus interest method and the normal cost plus 30-year amortization method, express the past service costs as a level annual dollar amount. It assumes that there will be a stable membership with a growing payroll. Consequently, as the total payroll increases in the future, the level annual dollar amount becomes a decreasing percent of the total payroll.

Under both methods, level dollar amounts represent a greater percent of payroll initially and a decreasing percent of payroll as future payrolls increase.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

THREE METHODS OF FINANCING UNFUNDED LIABILITY (CONT'D)

Level Annual Percent
of Payroll Method:

An alternative method for funding that is commonly used for public employee pension plans is a method that sets the funding standard cost objective as a level annual percent of payroll rather than as a level annual dollar amount. This method will result in increasingly greater dollar amounts each year as payrolls increase.

This constant percent of payroll method is permitted under GASB #25 and GASB #43. Note that if this amount is recomputed each year with the same “open” amortization period, the unfunded liability will never be amortized.

For the Retirement Board’s guidance, we have estimated the financial effects of these different amortization methods. The costs under these funding methods are contingent upon all actuarial assumptions being met and continued active membership at the same level. These three methods meet the requirements set forth in Illinois Compiled Statutes, Chapter 40, and Section 5/1A-102.

Actuarial Assets with Various Amortization Methods	Required 2013 Tax Levy	Required Multiple	Unfunded Liability Will	Portion Applicable to Unfunded Liability
1. Normal Cost Plus Interest Only	N/A	6.78	Remain Constant	\$72,846,523
2. Normal Cost Plus 30-Year Level Dollar Amortization	N/A	7.48	Decrease	\$82,631,736
3. Normal Cost Plus 30-Year Level % of Payroll	N/A	5.44	Increase	\$55,736,639
4. Present Law	14,616,300	1.00		

When evaluating and selecting a funding policy, it is important to consider the projected improvement of the funded ratio over time. In addition, the current and projected future funded status can change significantly downward or upward due to unfavorable or favorable experience on investment returns, salary increases, retirement patterns, longevity and changing plan membership.

**SUMMARY OF PROVISIONS OF THE FUND
AS OF DECEMBER 31, 2012**

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012**

PLAN DESCRIPTION

Any employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance as labor service or any person employed by a retirement board of any annuity and benefit fund in the city is covered by the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Laborers' Plan) which is a defined benefit single employer pension plan with a money purchase minimum. Although this is a single employer plan, the defined benefits, as well as the employer and employee contribution levels, are mandated in Illinois Compiled Statutes (Chapter 40, Pensions, Article 5/11) and may be amended only by the Illinois legislature. The City of Chicago accounts for the plan as a pension trust fund. The City of Chicago payroll for employees covered by the Laborers' Plan for the year ended December 31, 2012, was \$198,789,741. At December 31, 2012, the Laborers' Plan membership consisted of:

Retiree, surviving spouse, reversionary annuitant, and child annuitants currently receiving benefits	3,976
Terminated inactive employees entitled to benefits or a refund of contributions but not yet receiving them	1,408
Current employees (includes 255 disabilities)	2,865

The Laborers' Fund provides retirement benefits as well as death and disability benefits. Employees age 55 or more with at least 10 years of service are entitled to receive a money purchase annuity with partial city contributions if under age 60 with less than 20 years of service. Employees age 55 or more with at least 20 years of service or age 50 or more with at least 30 years of service are entitled to receive a minimum formula annuity of 2.4 percent per year of service times the final average salary (highest average annual salary for any 4 consecutive years within the last 10 years of service immediately preceding the date of retirement). If the employee retires prior to age 60, the annuity shall be reduced by $\frac{1}{4}$ of 1.00 percent for each month the employee is under age 60, unless the employee is 50 or over with at least 30 years of service or 55 or over with at least 25 years of service. The original annuity is limited to 80 percent of the highest average annual salary. Beginning January 1, 1999, there is a 10-year deferred vested benefit payable at age 60. Employees who retire at age 60 or over with at least 10 years of service are entitled to a minimum of \$850 per month.

The monthly annuity is increased by 3.00 percent in January of the year of the first payment date following the later of age 60 or the first anniversary of retirement, and by 3.00 percent annually thereafter; except that for an employee retiring prior to age 60 the first increase will occur no later than January of the year of the first payment date following the later of (1) the third anniversary of retirement or (2) the attainment of age 53.

Participants that first became members on or after January 1, 2011, are subject to different retirement eligibility conditions and benefit provisions as described on the following pages.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

PLAN DESCRIPTION (CONT'D)

Covered employees are required to contribute 8.50 percent of their salary to the Laborers' Plan. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with 3.00 percent interest.

The City of Chicago is required by state statutes to contribute the remaining amounts necessary to finance the requirements of the Fund. It is required to levy a tax at a rate 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 1.00 annually. The total amount of contributions by the employees for purposes of establishing the tax levy amount shall not include contributions for service credit purchases under the Early Retirement Incentive provided for in Section 11-133.3 of the Illinois Pension Code.

Participants that first became members on or after January 1, 2011, are subject to a cap on pensionable salary upon which contributions are made as described on the following pages.

DEFINITIONS

These terms are defined in Article 1A of the Illinois Pension Code *Regulation of Public Pensions*.

“Accrued liability” means the actuarial present value of future benefit payments and appropriate administrative expenses under a plan, reduced by the actuarial present value of all future normal costs (including any participant contributions) with respect to the participant included in the actuarial valuation of the plan.

“Actuarial present value” means the single amount, as of a given valuation date, that results from applying actuarial assumptions to an amount or series of amounts payable or receivable at various times.

“Actuarial value of assets” means the value assigned by the actuary to the assets of a plan for the purposes of an actuarial valuation.

“Beneficiary” means a person eligible for or receiving benefits from the pension fund.

“Credited projected benefit” means that portion of a participant’s projected benefit based on an allocation taking into account service to date determined in accordance with the terms of the plan based on anticipated future compensation.

“Current value” means the fair market value when available; otherwise, the fair value as determined in good faith by a trustee, assuming an orderly liquidation at the time of the determination.

“Normal cost” means that part of the actuarial present value of all future benefit payments and appropriate administrative expenses assigned to the current year under the actuarial valuation method used by the plan (excluding any amortization of the unfunded accrued liability).

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

“Participant” means a participating member or deferred pensioner or annuitant of the pension fund, or a beneficiary thereof.

“Pension Fund” or “Fund” means the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago established under Article 11 of the Illinois Pension Code.

“Plan year” means the calendar year for which the records of a given plan are kept.

“Projected benefits” means benefit amounts which are expected to be paid at various future times under a particular set of actuarial assumptions, taking into account, as applicable, the effect of advancement in age and past and anticipated future compensation and service credits.

“Supplemental annual cost” means that a portion of the unfunded accrued liability is assigned to the current year under one of the following bases:

1. interest only on the unfunded accrued liability;
2. the level annual amount required to amortize the unfunded accrued liability over a period not exceeding 30 years (40 years for pension unfunded accrued liability prior to 2007);
3. the amount required for the current year to amortize the unfunded accrued liability over a period not exceeding 30 years as a level percentage of payroll (40 years for pension unfunded accrued liability prior to 2007).

“Total annual cost” means the sum of the normal cost plus the supplemental annual cost.

“Unfunded accrued liability” means the excess of the accrued liability over the actuarial value of the assets of a plan.

“Vested pension benefit” means an interest obtained by a participant or beneficiary in that part of an immediate or deferred benefit under a plan which arises from the participant’s service and is not conditional upon the participant’s continued service for an employer any of whose employees are covered under the plan, and which has been forfeited under the terms of the plan.

PARTICIPANTS

Any person employed by the City or the Board of Education in a position classified as labor service of the employer, any person employed by the Board, and any person employed by the Retirement Board of any other Annuity and Benefit Fund which is in operation for the employer.

SERVICE

For minimum annuity, one half-year credit is given for one complete month of service and a full year credit is given for one complete month of service plus service in at least five other months. For money purchase annuity, 700 hours of service in any calendar year constitutes one year of service credit. For Ordinary Disability credit, the exact number of days, months and years is used.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

RETIREMENT ANNUITY

Money Purchase Formula

Maximum is 60 percent of highest salary. Applies in cases where an employee is age 55 or older and has a minimum of 10 years of service. If employee is age 55 to 60 with service less than 20 years, the annuity is based on all employee deductions plus 1/10th of the City contributions for each year over 10. In the case of withdrawal before age 55 and application after age 55, the annuity is based on employee deductions plus 1/10th of the City contributions for each year over 10, with interest to date of application or age 55, whichever is later. The age factor for age 55 is used.

The annuity is based on all employee deductions and City contributions in cases where the employee is (a) age 55 to 60 with 20 or more years of service; (b) age 60 or older; or (c) resigning at the time of disability credit expiration.

Participants that first became members on or after January 1, 2011, are eligible for benefits under the money purchase formula upon attainment of eligibility for retirement benefits at age 62 with 10 years of service.

Minimum Annuity Formula

Maximum is 80 percent of final average salary.

An employee age 60 or older with at least 10 years of service, or an employee age 55 or older, with at least 20 years of service, or an employee age 50 or older with at least 30 years of service, is entitled to an annuity equal to 2.40 percent, for each year of service of the final average salary during the four highest consecutive years within the last 10 years of service prior to retirement. If the employee withdraws from service before age 60 with less than 20 years of service, he can begin to receive an annuity no earlier than age 60. For an employee who is eligible to begin receiving an annuity before age 60, the annuity is discounted 0.25 percent for each month the employee is younger than age 60, unless he has at least 30 years of service and is age 50 or over, or has at least 25 years of service and is age 55 or over.

The employee will receive a minimum annuity of \$850 per month if the employee withdraws from service at age 60 or older with at least 10 years of service.

Participants that first became members on or after January 1, 2011, are first eligible for an unreduced annuity benefit upon attainment of age 67 with 10 years of service. Members are first eligible to begin receiving a reduced annuity benefit upon attainment of age 62 with 10 years of service. The annuity is discounted 0.50 percent for each full month the employee is younger than age 67. Final average salary is calculated using salary from the eight highest consecutive years within the last 10 years of service prior to retirement. Pensionable salary is limited to \$106,800 in 2011, increased by the lesser of 3 percent and one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12-month period ending with the September preceding the November 1, which is the date that the new amount will be calculated and made available to the pension funds.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

Reversionary Annuity

An employee may elect to reduce his or her annuity by an amount less than or equal to \$400 to provide a reversionary annuity for a spouse, parent, child, brother, or sister, to begin upon the employee's death. The election must be made before retirement and have been in effect one year prior to death. The one-year requirement is waived if the beneficiary is the employee's spouse. The death of the employee before retirement voids this election. The reversionary annuity cannot exceed 100 percent of the employee's reduced annuity. If the employee resigns after June 30, 1983, the 3.00 percent automatic annual increase in the annuity will be computed on the original, not the reduced, annuity; if the beneficiary dies before the employee annuitant, the full annuity is restored for annuities granted after June 30, 1983. The amount of the monthly reversionary annuity is determined by multiplying the amount of the monthly reduction in the employee's annuity by a factor based on the age of the employee and the difference between the ages of the employee and the reversionary annuitant at the starting date of the employee's annuity.

Automatic Increase in Annuity

An employee annuitant is entitled to receive an increase of 3.00 percent of the currently payable annuity (compound). This increase begins in January of the year of the first payment date following the earlier of:

- 1.) the later of the third anniversary of retirement and age 53, and
- 2.) the later of the first anniversary of retirement and age 60.

Increases apply only to life annuities.

An employee annuitant that first became a member on or after January 1, 2011, that is eligible to receive an increase in annuity benefit, shall receive an annual increase equal to the lesser of 3 percent and one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12-month period ending with the September preceding the increase. The increase is based on the amount of the originally granted benefit (simple). This increase begins on January 1 of the year of the first payment date following the later of:

- 1.) *attainment of age 67, and*
- 2.) *the first anniversary of the annuity start date.*

SPOUSE ANNUITY

The surviving spouse annuity is the greater of the annuity under the money purchase formula or the minimum annuity formula. Surviving spouses who remarry on or after September 4, 2000, will not have their annuities terminated.

Money Purchase Formula

When an employee retires, the spouse's annuity is fixed, based on employee deductions and City contributions made for spouses' annuity purposes and a joint life age factor. (If the employee is a female, these are deductions accumulated since October 1974.)

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

If the employee dies in service, the spouse's annuity is based on all sums accumulated to their credit.

For 3.00 percent annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, surviving spouse's single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity), without regard to gender.

Spouses' Minimum Annuity Formula

If the employee retires or dies in service and is at least age 55 with 20 or more years of service, or is at least age 50 with 30 or more years of service, the spouse's annuity is equal to half the amount of annuity the employee was entitled to receive at the time of retirement or death in service. This annuity must then be discounted 0.25 percent for each month the spouse is under age 55 (or age 50 if the employee had at least 25 years of service) at the time the employee retires or dies in service.

If the employee dies while receiving a retirement annuity, the spouse is eligible for an annuity of one-half of the employee's annuity at death. This annuity is discounted for his/her age under 55 at the time of the employee's death, unless the employee had at least 25 years of service and withdrew from service on or after June 27, 1997, in which case the spouse annuity would be discounted for spouse age under 50 at the time of the employee's death.

If the employee dies in service on or after January 1, 2002, with at least 10 years of service, the spouse is entitled to an annuity of half of the minimum formula annuity earned and accrued to the credit of the employee at the date of death. For the purposes of this benefit, the minimum formula annuity earned and accrued to the credit of the employee is equal to 2.40 percent for each year of service of the highest average annual salary for any four consecutive years within the last 10 years of service immediately preceding the date of death, up to a maximum of 80 percent of the highest average annual salary. This annuity is not reduced due to the age of the employee or spouse. The spouse is eligible for this annuity only if the marriage was in effect for 10 full years or more.

The spouse will receive a minimum annuity of \$800 per month if the employee retires with at least 10 years of service or dies in service with at least five years of service.

For participants that first became members on or after January 1, 2011, the annuity payable to the surviving spouse is equal to 66 2/3 percent of the participant's earned retirement annuity at the date of death without a reduction due to age.

Automatic Increase in Annuity

The widow or survivor of a participant that first became a member on or after January 1, 2011, shall receive an annual increase equal to the lesser of 3 percent and one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12-month period ending with the September preceding the date of the increase. The increase is based on the amount of the originally granted survivor's benefit (simple). This annual increase begins on January 1 following the commencement of the widow's or survivor's annuity if the deceased member died while receiving an annuity benefit and on January 1 following the first anniversary of the commencement of the annuity otherwise.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

Child's Annuity

A child's annuity is provided for unmarried children of a deceased employee who are under the age of 18, if the child was conceived or born before the withdrawal from service. The annuity is \$220 per month while the spouse of the deceased employee is alive and \$250 per month if the spouse is deceased.

Family Maximum

Non-Duty Death: 60 percent of final monthly salary.

Duty Death: 70 percent of final monthly salary.

DISABILITIES

Duty Disability Benefits

Any employee who becomes disabled as the result of an injury incurred in the performance of any act of duty shall have a right to receive a duty disability benefit in the amount of 75 percent of salary at date of injury, plus \$10 a month for each unmarried child (the issue of the employee) less than age 18. Child's duty disability benefit is limited to 15 percent of the employee's salary as of the date of injury. Duty disability benefits begin one day after the later of the last day worked or the last day paid.

If the disability has resulted from any mental disorder, physical defect or disease which existed at the time such injury was sustained, the duty disability benefit shall be 50 percent of salary at date of injury. Disablement because of heart attacks, strokes, or any disablement due to heart disease shall not be considered the result of an accident suffered in the performance of duty. However, the employee will receive service credit and the City will contribute salary deductions for annuity purposes if the employee is receiving Workers' Compensation.

A duty disability benefit is payable to age 65 if the disability benefits begin before age 60. For an employee who begins disability on or after age 60, disability will continue for five years. A duty disability benefit which continues for more than five years and which starts before the employee's age 60, will be increased by 10 percent on January 1st of the sixth year. The City contributes salary deductions for annuity purposes for the duty disability benefit. Such amounts contributed by the City after December 31, 1983, while the employee is receiving duty disability benefits, are not refundable to the employee and will be used for annuity purposes only.

Ordinary Disability Benefit

This benefit is granted for disability incurred other than in performance of an act of duty and is 50 percent of salary as of the last day worked. The first payment shall be made one month after the disablement occurs. Disability is payable until age 65 and limited to a maximum of 25 percent of the employee's total service or five years, whichever occurs first.

For ordinary disability benefits paid on or after January 1, 2001, the Fund credits amounts equal to the amounts ordinarily contributed by an employee for annuity purposes for any period during which the employee receives ordinary disability. These amounts are used for annuity purposes but are not credited for refund purposes.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PREMIUMS

The pension fund shall provide payments in the amount of \$95 per month for non-Medicare eligible city annuitants (defined in section 160.1 of Article 11 of the Illinois Pension Code as persons receiving an age and service annuity, a widow's annuity, a child's annuity, or a minimum annuity as a direct result of previous employment by the City of Chicago) and \$65 per month for Medicare eligible city annuitants from July 1, 2008, through June 30, 2013.

The city health care plans referred to above and the pension fund's payments to the city for such plans 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.

Should the Board of Education continue to sponsor a retiree health plan, the pension fund is authorized to provide payments to the Board of Education, on behalf of each eligible annuitant who chooses to participate in the Board of Education retiree health benefit plan, in the amount of \$95 per month for non-Medicare eligible participants and \$65 per month for Medicare eligible participants from July 1, 2008, through June 30, 2013.

The Board of Education health benefit plan referred to above and the pension fund's payments to the Board of Education for such plan 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.

REFUNDS

To Employees

An employee who resigns before age 55, or before age 60 with less than 10 years of service, is entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.

If the annuity of an employee is less than \$800 a month, the employee may elect to receive a refund, as above, in lieu of an annuity.

Spouse's annuity deductions are payable to the employee if not married when he retires.

To Spouses

The spouse may choose a refund in lieu of annuity if the annuity would be less than \$800 per month.

Remaining Amounts

Amounts contributed by the employee excluding 0.50 percent deductions for annuity increases, and which have not yet been paid out as annuity, are refundable to his estate with interest to his retirement or death if the employee died in service.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2012 (CONT'D)**

DEDUCTIONS AND CONTRIBUTIONS

Members are required to contribute 8.50 percent of their salary to the pension fund.

For participants that first became members on or after January 1, 2011, pensionable salary, upon which member contributions are made, is limited to \$106,800 in 2011, increased by the lesser of 3 percent and one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12-month period ending with the September preceding the November 1, which is the date that the new amount will be calculated and made available to the pension funds.

The City shall annually levy a tax which, when added to the amounts deducted from the salaries of the employees, or otherwise contributed by them, will be sufficient for the requirements of the Fund. The tax will produce an amount that does not exceed the 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 1.00 for the year 1999 and each year thereafter. The total amount of contributions by the employees shall not include contributions for service credit purchases under Section 11-133.3 for purposes of establishing the tax levy amount.

When the balance of the prior service reserve equals its liabilities (including in addition to all other liabilities, the present value of all annuities, present or prospective, according to the applicable mortality tables and rates of interest), the City shall cease to contribute the amounts to provide prior service annuities and other annuities and benefits. All liabilities attributable to the cost of the Early Retirement Incentive created by Public Act 93-0654 are to be excluded from the determination of a required City contribution.

TAX SHELTER OF EMPLOYEE SALARY DEDUCTIONS

Beginning January 1, 1982, the City employee salary deductions were designated for income tax purposes to be made by the employer. The W-2 salary is therefore reduced by the amount of contributions. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is granted. For the purposes of benefits, refunds, or financing, these contributions are treated as employee contributions. Effective January 16, 2004, the Fund may allow the employee to designate any optional contribution amounts that he has elected to pay to the Fund as employer contributions for income tax purposes. The contributions shall be made by the employer through a reduction in payroll to the employee and the election to have the employer make the optional contributions is irrevocable. For the purposes of benefits, refunds, or financing, these contributions are treated as employee contributions.

Beginning September 1, 1981, the Board of Education paid contributions in the amount of 7.00 percent of the employee's salary. The 1985 amendments contained a provision whereby the amount of pick-up, if any, is included in the pensionable salary for contributions and benefits. Such provision was retroactive to September 1, 1981. Beginning May 28, 2000, the remainder of contributions due for Board of Education employee salary deductions was designated for income tax purposes to be made by the employer and treated in the same manner as City employee salary deductions.

HISTORICAL INFORMATION

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012

1984 Session

- Direct deposit.
- Illinois Public Employees' Pension Laws Commission abolished.

1985 Session

HB 398

- 1.80, 2.00, 2.20, 2.40 percent benefit accrual rate for those born before January 1, 1936, and retiring after August 16, 1985.
- Reduction in age discount factor (employee and widow) from 0.50 percent to 0.25 percent for employees born before January 1, 1936, and retiring or dying in service after August 16, 1985.
- Health insurance supplement up to \$25 per month if the employee is age 65 or older with at least 15 years of service (for each employee annuitant in receipt of annuity and for each employee who retires on annuity in the future).
- Disability provisions extended to age 70 in certain cases.
- Unisex money purchase factors for widows/widowers.
- Membership provisions extended to age 70.
- Board of Education employee contribution "pick up" included in the definition of salary for contribution and benefit purposes.

1986 Session

HB 2630

- Cap removed on spouse maximum annuity.
- Automatic post-retirement increase to begin on first anniversary of retirement following attainment at age 60.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

1987 Session

HB 2715

- 1.80, 2.00, 2.20, 2.40 percent benefit accrual rate for those born on or after January 1, 1936, and retiring on or after January 1, 1988.
- Reduction in age discount factor (employee and widow) from 0.50 percent to 0.25 percent for employees born on or after January 1, 1936, and retiring or dying in service on or after January 1, 1988. No discount for employee age less than 60 if employee has at least 35 years of service.
- Minimum employee annuity of \$250 and minimum spouse annuity of \$200 under certain conditions.
- Change amount of children's benefits to \$120 or \$150 effective January 1, 1988.
- Provide for certain "Good Government" initiatives.
- Remove chronic alcoholism restriction for ordinary disability.

1988 Session

- No changes.

1989 Session

SB 95

- Signed August 23, 1989. 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. Widows will now be supplemented and employee annuitants will no longer be required to meet the age 65 and 15 years of service requirements. The City will be required to pay 50 percent of the aggregated 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 1997 for the retired group.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

HB 332

- Signed August 23, 1989. Eliminated age related discriminatory provisions as required by Federal law or regulation. Provided for Age Discrimination changes effective January 1, 1988, to eliminate age 65 requirements for marriage in service and children's benefits, provided contributions after age 65 for spouse benefits, provided employee accumulation annuities be computed after age 70, provided employee and spouse accumulation annuities not be "fixed" at age 65, provided no age 70 restriction on disability benefits, provided for active members over age 65 that their accounts be "unfixed" and accumulate interest until the date of withdrawal, and provided that there be no age 70 membership limitation and removed the permitted "no spouse" refund at age 65.
- Eliminated the \$300, \$400 or \$500 maximum spouse annuity limitation for spouses of employees who retired before January 23, 1987, but die after January 23, 1987.
- Allow for local labor officials on a leave of absence from the Fund to contribute for their current service as a local labor official.

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. Beginning for withdrawals on or after January 1, 1991, annuity payments will be made as of the first day of the calendar month during the annuity payment period.
- 2.20 percent benefit accrual rate for employees retiring on or after July 1, 1990.
- No discount for employee age less than 60 if employee has at least 30 years of service and retires on or after July 1, 1990.
- Minimum employee annuity of \$350 and minimum spouse of \$300 under certain conditions.
- Spouses and widows of employees retiring or dying in service on or after July 1, 1990, with 20 or more years of service at age 55 or over will be eligible for half of the employees' annuity discounted 0.25 percent for each month the spouse or widow is less than 55.
- Retroactive eligibility for 35 years no discount and spouse and widow annuities computed as half of employee annuity.
- Refund in lieu of \$300 annuity.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Disability benefit retroactive one year from application; duty disability deductions in lieu for heart attack or stroke; 10 percent increase in duty disability benefit January 1 of the sixth year.
- Collateral for securities lending expanded.
- Fractional payment for refund repayment and temporary service authorized. Credit established by fractional payment shall be earliest service for which credit may be established.

1991 Session

- No changes.

1992 Session

SB 1650

- Signed January 25, 1993.
- Transfer provisions for County elected officers and judges.
- Early Retirement Incentive was created for withdrawals from December 31, 1992, to June 30, 1993.
 - Requires a total of 20 years of service (with at least 10 in this fund, and up to five purchased under ERI).
 - Requires age 55 or older.
 - Requires an election form to be filed before June 1, 1993.
 - Requires a member to be a current contributor on November 1, 1992, and have not previously retired under this Article.
 - Provides for elimination of the age discount for employees 55-60.
 - Provides for 80 percent maximum final average salary compared to the present 75 percent.
 - Provides for an optional purchase of up to five years of service credit for 4.25 percent of the November 1, 1992, salary.
 - Provides for a 24-month option to pay for ERI service.
 - Provides for a tax levy derived from ERI contributions.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

1993 Session

- No changes.

1994 Session

- No changes.

1995 Session

SB 114

- Approved July 14, 1995.
- 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 percent of the average of the highest three-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.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- 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 15

- Approved June 27, 1997.
- For withdrawals from service occurring on or after July 1, 1990, an alternate method of calculating salary using the annual equivalent of average salary instead of the salary rate applicable for the greatest part of the year is allowed.
- Annuities effective on or after January 1, 1998, will be payable on the first day of the calendar month.
- The prudent person rule for investing is allowed.
- An eligible employee is allowed to contribute for all periods of temporary service while still in City service, for up to 90 days after withdrawal from City service, or while in reciprocal service.
- The Board is allowed to adopt rules prescribing the manner of repaying refunds and purchasing any optional credit including accepting rollovers for payments.
- The City is allowed to use deposits from any legal source (including borrowing) in lieu of all or part of the tax levy on or after June 27, 1997.
- The requirement that any person employed by a retirement board of any other annuity and benefit fund in the City apply for participation in the Fund is eliminated.
- Payment is allowed for service as a police officer, firefighter, or public school teacher in the City.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

HB 313

- Approved June 27, 1997.
- For withdrawals from service occurring on or after June 27, 1997, an employee (and spouse) age 50 or over with at least 30 years of service is eligible to receive an annuity based on the minimum annuity formula.
- For withdrawals from service occurring on or after June 27, 1997, an employee under age 60 with at least 25 years of service is not subject to an age discount.
- The spouse of an employee dying on or after June 27, 1997, while receiving an annuity is eligible for one half of the employee's annuity at death, discounted for the spouse's age under 55 at the time of employee's death. Excess spouse refund, if any, must be repaid.
- Beginning June 27, 1997, employees already receiving annuity will receive a minimum annuity of \$550 for life (reciprocal annuitants must have at least five years of Laborers' service). Any future employee annuitant withdrawing from service after attainment of age 60 with 10 or more years of service would qualify for this minimum.
- Beginning June 27, 1997, widow(er)s already receiving annuity will receive a minimum annuity of \$500 for life (reciprocal annuitants must have at least five years of Laborers' service). For future spouses of retirees, 10 years of service is required. For spouses of employees dying in service in the future, five years of service is required.
- Beginning June 27, 1997, the child's annuity will be increased to \$220 per month if the spouse of the deceased employee parent survives or \$250 per month if no such spouse survives.
- Coverage in the City group health insurance is extended through June 30, 2002, with some modification in the plans offered. Pension fund supplement remains \$45 and \$75 for Medicare eligible and non-Medicare eligible annuitants respectively.
- Beginning June 27, 1997, spouses of employees dying in service after age 50, with at least 30 years of service or after age 55 with 25 years of service, will be eligible to receive 50 percent of the annuity that the employee would have received. This annuity will be reduced by 0.25 percent per month for each month that the spouse is below the age of 55.

HB 1641

- Approved August 22, 1997.
- Beginning August 22, 1997, for spouses of employees who retired or died in service before January 23, 1987, the previous \$300, \$400, or \$500 maximum spouse annuity limitation is removed. If an excess spouse refund was paid, it must be repaid with interest.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Service paid under Section 11-221 can be counted for ordinary disability purposes for periods of disability on or after August 22, 1997.
- Early Retirement Incentive was created for withdrawals from December 31, 1997, to June 30, 1998.
 - Requires a total of 20 years of service (with at least 10 in this fund, up to five in a Reciprocal fund, and up to five purchased under ERI) and age 55 or older.
 - Requires a total of 30 years of service (with at least 10 years of that service in this fund and without including any service purchased under the ERI provisions) and age 50 or older.
 - Requires an election form to be filed before June 1, 1998.
 - Requires a member to be a current contributor on November 1, 1997, and have not previously retired under this Article.
 - Provides for elimination of the age discount for employees age 55 to 60.
 - Provides for 80 percent maximum final average salary compared to the present 75 percent.
 - Provides for an optional purchase of up to five years of service credit for 4.25 percent of the November 1, 1997, salary.
 - Provides for a 24-month option to pay for ERI service.
 - Provides for a tax levy derived from ERI contributions.

1998 Session

HB 3515

- Approved August 14, 1998.
- Beginning January 1, 1999, the automatic increase for employee annuitants changed to 3.00 percent compounded for all past, current, and future annuitants regardless of the effective date of the annuity. Term annuities are not eligible for the increase.
- Employees withdrawing after January 1, 1999, will be eligible for the minimum formula upon attainment of age 60 if they have at least 10 years of service.
- Beginning January 1, 1999, employees already receiving an annuity as of August 14, 1998, will receive a minimum annuity of \$850 for life (reciprocal annuitants must have at least five years of Laborers' service). Any future employee annuitant withdrawing from service after August 14, 1998, after attainment of age 60 with 10 or more years of service would qualify for this minimum.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Beginning January 1, 1999, widow(er)s already receiving annuity as of August 14, 1998, will receive a minimum of \$800 for life (reciprocal annuitants must have at least five years of Laborers' service). For future spouses of retirees dying after August 14, 1998, 10 years of service is required. For spouses of employees dying in service after August 14, 1998, five years of service is required.
- The conditions of the reversionary option were changed as follows:
 - The nullification of reversionary payment due to employee dying was reduced to 365 days after written designation was filed with the board and now applies only to parents, children and siblings (not spouses).
 - Employees may reduce their monthly annuity by as much as \$400.
 - The increased annuity for spouse may now be as much as 100 percent of the reduced employee annuity.
- Spouses and widows that are eligible for the "50 percent employee amount" will no longer have this amount reduced for under age 55 if the employee dies on or after January 1, 1998, and withdrew from service on or after June 27, 1997, and the employee retired after age 55 with at least 25 years of service or after age 50 with at least 30 years of service. The age discount will only apply if the spouse is under age 50.
- The child of an annuitant who withdraws after January 1, 1998, having attained age 50 with at least 30 years of service is eligible for a child annuity upon the death of the annuitant.
- The required employer multiple has been set at 1.00 for 1999 and beyond.
- Money deposited under 5/11-169(f) may be used by the Fund for any of the purposes for which the proceeds of the tax levied by the City under this section may be used.
- The number of board members is changed from five to eight. The makeup of the board is two ex-officio members, three appointed persons, two employees and one annuitant.

HB 1612

- Qualified Illinois Domestic Relations Orders recognized effective July 1, 1999.

1999 Session

- No Change.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

2000 Session

HB 1583

- Approved July 6, 2000.
- An employee or widow whose annuity would amount to less than \$800 per month may elect to receive a refund in lieu of annuity. Formerly, only employees and widows whose annuity would be less than \$300 per month could choose a refund.
- The reversionary annuity tables have been extended down to age 50 from age 55 to comply with the change in the law allowing retirement at age 50 with 30 years of service.
- The Board is allowed to pay an annuity (if the person qualifies) directly to a Medicare approved, State certified nursing home or to a publicly owned and operated nursing home, hospital, or mental institution. Each person must qualify under the provisions of this amendment.
- Annuities of widows who remarry on or after the date 60 days after the effective date of this amendment would not be terminated upon remarriage.
- For annuities effective before January 1, 1998, all annuity payments will be made on the first day of the calendar month, for the entire month without proration.

2001 Session

EGTRRA

- On June 7, 2001, the Economic Growth and Tax Relief Reconciliation Act of 2001 was signed by President Bush.
- Beginning January 1, 2002, payments for eligible optional service credits may be made with funds rolled over from a 457 deferred compensation plan or a 403(b) tax deferred annuity plan (if allowed by the 457 or 403(b) plan).

2002 Session

SB 314

- Effective July 1, 2002.
- The accrual rate for the minimum formula annuity is changed from 2.20 percent to 2.40 percent of final average salary and the maximum annuity is changed from 75 percent to 80 percent of final average salary for employees withdrawing from service on or after January 1, 2002.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- The 3.00 percent post-retirement automatic increase will now begin no later than three years after retirement for an eligible retiree (An eligible retiree is an employee annuitant, not a widow or widower annuitant, originally granted a lifetime annuity). For eligible retirees less than age 60 on the first anniversary of retirement, the 3.00 percent increase will begin at the earlier of age 60, and the latest of the following dates:
 - The third anniversary of retirement
 - The attainment of age 53; or
 - January 1, 2002

For eligible retirees age 60 or older on the first anniversary of retirement, the 3.00 percent increase will begin on the first anniversary of retirement.

HB 5168

- Effective June 28, 2002.
- For the eligible spouse of an employee who dies in service on or after August 28, 2002, with at least 10 years of service, the annuity is no less than 50 percent of the minimum formula annuity the employee would have been entitled to based on service and salary to the date of death without regard to age eligibility requirements. This is equal to 2.40 of final average salary for each year of service. The employee and the spouse must have been married for ten years.
- For children of employees who die in service on or after June 28, 2002, there is no service requirement for eligibility for children's annuity.
- The definition of "child" now includes any child adopted before employee withdraws from service and at least one year prior to the date any benefit for the child accrues. Previously the adoption also had to take place before the employee attained age 55.
- For ordinary disability benefits paid on or after January 1, 2001, the ordinary disability benefit is 50 percent of the employee's salary at the date of disability with the amounts ordinarily contributed by the employee for annuity purposes contributed by the Fund. These contributions are not refundable.
- The pension fund supplement for retiree health insurance was extended through June 30, 2003. For annuitants (other than child annuitants) taking the employer-provided plan, the supplement 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.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- The healthcare benefits were increased to \$85 per month for non-Medicare eligible participants and \$55 per month for Medicare eligible participants for the period from July 1, 2003, through June 30, 2008. Thereafter, the benefits are increased from \$85 to \$95 and \$55 to \$65 for the period July 1, 2008, to June 30, 2013.
- The healthcare benefits referred to above are not and shall not be construed to be pension or retirement benefits for the purposes of Section 5 of Article XIII of the Illinois Constitution of 1970.

2004 Session

HB 600

- Effective January 16, 2004.
- Early Retirement Incentive was created for withdrawals from January 31, 2004, to February 29, 2004 (or to May 31, 2004, for those deemed critical employees).
 - Requires an election form to be filed before January 31, 2004.
 - Requires a member to be a current contributor who has not previously retired under this Article and satisfy one of the following:
 - Active as of October 15, 2003
 - Returned to active from approved leave of absence prior to December 15, 2003
 - Receiving ordinary or duty disability benefits as of October 15, 2003
 - Restored to service by January 31, 2004, after having been involuntarily laid off
 - Requires that employees that reenter service forfeit their right to receive benefits and will have their benefits recalculated at the time of retirement excluding the benefits provided under the ERI.
 - Requires that the participant is age 50 with 10 years of creditable service in this Fund and have 70 combined years of age and service, with service in one or more systems under the Reciprocal Act (excluding service purchased under the ERI).
 - Provides for elimination of the age discount for employees younger than age 60.
 - Provides for an optional purchase of up to five years of service credit for 4.25 percent of the monthly salary rate in effect October 15, 2003.
 - Provides for a 24-month option to pay for ERI service.
 - Provides for the exclusion of ERI contributions from the base from which the tax levy is derived.
 - Provides for the exclusion of the liabilities arising from the ERI for the purpose of determining if a contribution by the city is required.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Provides for a lump sum benefit option of 100 percent of salary at retirement and an actuarially reduced monthly annuity for those employees who were eligible for the maximum benefit (excluding purchased service under the ERI).
- Allows Board members to continue until the end of their terms without forfeiting the benefits provided by the early retirement incentive.
- Automatic increases in annuities will now take effect in the January of each year in which they are to be provided.
- An employee who previously withdrew contributions from the Fund, may have his rights under the Fund restored after repaying the withdrawn contributions with interest after completing the required amount of service after the date of refund. The required service is:
 - 90 days of service under this Fund or
 - Two years of service under any participating Fund under the Reciprocal Act.
- Employees may elect to have their optional contributions “picked-up” by the employer, to be treated as employer contributions for tax purposes. The employee election is irrevocable.
- For the eligible spouse of an employee who died in service on or after January 1, 2002, and before August 28, 2002, with at least 10 years of service, the annuity is no less than 50 percent of the minimum formula annuity the employee would have been entitled to based on service and salary to date of death without regard to age eligibility requirements. This minimum formula annuity is equal to 2.40 percent of final average salary for each year of service. The employee and spouse must have been married for ten years.

2005 Session

SB 23

- Approved June 27, 2005.
- Prohibits the investment or deposit from the retirement system or pension fund to certain entities doing business in or with the government of the Republic of the Sudan. Fund managing companies must certify that under Section 1-110.5 of the pension code that they have not loaned to, invested in, or otherwise transferred any of the pension fund assets to a forbidden entity.

SB 253

- Approved August 4, 2005.
- Provides that, to qualify as an “emerging investment manager”, the maximum value of an investment portfolio that a manager manages is \$2,000,000,000 (was \$400,000,000).

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

SB 1446

- Approved August 22, 2005.
- Provides for various changes in provisions and procedures concerning Qualified Illinois Domestic Relations Orders. Allows for alternate payee's benefit to be based on a percentage of employee's benefit. Effective July 1, 2006.

2006 Session

- No Change.

2007 Session

HB 49

- Approved August 17, 2007.
- Provides that, beginning on the effective date, legally adopted children shall be entitled to the same benefits as other children, and no child's or survivor's benefit shall be disallowed because the child is an adopted child.

SB 1169

- Approved August 28, 2007.
- Provides that, in order for an Illinois finance entity to be eligible for investment or deposit of retirement system or pension fund assets, the Illinois finance entity must annually certify that it complies with the requirements of the High Risk Home Loan Act and the rules adopted pursuant to that Act that are applicable to that Illinois finance entity. Requires the retirement system or pension fund to divest its assets with the Illinois finance entity if the certification is not made. Provides that these certification requirements are severable.

2008 Session

- No Change.

2009 Session

SB 2520

- Approved February 17, 2009.
- Provides that, before any action is taken by the Board on an application for a duty disability benefit or a widow's compensation or supplemental benefit, the employee or widow shall file a claim with the employer to establish that the disability or death occurred while the employee was acting within the scope of and in the course of his or her duties. Provides an offset of disability benefits for any amounts provided to the employee or surviving spouse as temporary total disability payments, permanent disability payments, a lump sum settlement award, or other payment under the Workers' Compensation Act or the Workers' Occupational Diseases Act. Makes other changes concerning disability benefits.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

HB 2257

- Approved August 25, 2009.
- Provides that it is the public policy of the State to encourage pension funds to promote the economy of Illinois through the use of economic opportunity investments within the bounds of financial and fiduciary prudence. Provides that the pension funds submit a report to the Governor and General Assembly by September 1 of each year identifying the economic opportunity investments made by the Fund, the primary location of the business or project, the percentage of the Fund's assets in economic opportunity investments, and the actions the Fund has taken to increase the use of economic opportunity investments.
- Requires the Fund to instruct the investment advisors to utilize investment strategies designed to ensure that all securities transactions are executed in such a manner that the total explicit and implicit costs and the total proceeds in every transaction are the most favorable under the circumstances.

SB 364

- Approved April 3, 2009.
- Requires Board members to file a verified written statement of economic interest annually with the office of the Clerk of Cook County.
- Requires the Board to adopt a policy that sets quantifiable utilization goals for the management of assets in specific asset classes for emerging investment managers. Goals shall be separated by minority ownership, female ownership, and person with a disability ownership.
- Requires that if at least one emerging firm(s) meet criteria of search process, at least one shall be invited to present to the Board for final consideration.
- Requires the Board to adopt a policy that sets forth goals for increasing the racial, ethnic and gender diversity of its fiduciaries, including its consultants and senior staff.
- Requires the Board to adopt a policy that sets forth goals for utilization of WMDBE firms for all contracts and services, based on the percentage of total dollar amount of all contracts let.
- Requires the Board to adopt a policy that sets forth goals for increasing the utilization of minority broker-dealers.
- Requires an annual report to the Governor and General Assembly on the utilization of "emerging firms" as defined by Article 1 of the Pension Code.
- Requires the Board to award all contracts for investment services using a competitive process that is substantially similar to the process required for the procurement of professional services under Article 35 of the Illinois Procurement Code. Requires the Board to adopt a procurement policy which will be posted on the Fund's website and filed with the Illinois Procurement Policy Board.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Provides that a person may not act as a consultant or investment adviser unless that person is registered as an investment adviser or bank under the Federal Investment Advisers Act of 1940.
- Requires investment contracts between the Retirement Board and investment service providers to include certain required information.
- Provides that consultant contracts cannot exceed five years in duration; however, incumbent consultant may compete for new contract.
- Requires investment consultants and advisers to disclose all direct and indirect fees, commissions, penalties, and other compensation paid by or on behalf of the investment consultant or adviser in connection with the services provided.
- Requires that a description of every contract let for investment services be posted on the website, including name of entity awarded the contract, amount of contract, total fees paid, and disclosure describing the factors that contributed to the selection.
- Requires the Fund to maintain a website that shall include standard investment reporting, a copy of relevant Board policies, a listing of investment consultants and managers, a notification of any requests for investment services, and the names and e-mail addresses of Board members, Fund directors, and senior staff.
- Requires Board members to attend at least eight hours of ethics training per year and requires each Board to annually certify its member's compliance and submit an annual certification to the Division of Insurance of the Department of Financial and Professional Regulation.
- Prohibits any Fund trustee or employee or their spouses or immediate family living with them to intentionally solicit or accept any gift from any prohibited source as prescribed in Article 10 of the State Officials and Employees Ethics Act, including educational materials and missions and travel expenses for discussing Fund business.
- Provides that any person who knowingly makes any false statement or falsifies or permits falsifying any record of the pension fund in an attempt to defraud is guilty of a Class 3 felony.
- Provides that no person or entity shall retain a person or entity to influence the outcome of an investment decision or the procurement of investment advice to a pension fund for compensation, contingent upon the decision of the Board.
- Requires approval for travel or education mission expense of a Trustee by a majority of the Board prior to the mission.

SB 1440

- Approved August 18, 2009.
- Provides that the Fund may, and to the extent required by federal law shall, allow an employee to roll over a refund, lump-sum benefit, or other non-periodic distribution (including the non-taxable portion) directly to any entity that is designated in writing by the

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

person, is qualified under federal law to accept the distribution, and has agreed to accept the distribution.

2010 Session

Public Act 96-0889 (SB 1946)

- Approved April 14, 2010.
- Establishes a new tier of benefits for participants that first become members on or after the effective date of January 1, 2011.
 - Final average compensation is based on the average of the highest consecutive eight years within the last ten years of service.
 - Establishes a cap on final average salary of \$106,800, as automatically increased by the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
 - Increases eligibility for a retirement annuity:
 - Age 67 with 10 years of service for an unreduced benefit.
 - Age 62 with 10 years of service for a reduced benefit. Reduction is one-half percent for each full month that retirement precedes age 67.
 - Changes provisions for automatic increases in annuity:
 - Increases begin in the year following the later of the first anniversary of the annuity start date and attainment of age 67
 - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
 - Increases are based on the amount of the originally granted benefit (not compounded).
 - Changes benefits provided to surviving spouses:
 - Surviving spouse annuity is equal to 66 2/3 percent of the participant's earned retirement annuity at the date of death
 - Provides an automatic increase in annuity
 - Increases begin on January 1 in the year following the commencement of the survivor's annuity if the deceased member died while receiving a retirement annuity and January 1 following the first anniversary of commencement otherwise
 - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
 - Increases are based on the amount of the originally granted benefit (not compounded).
 - Establishes that members that are receiving a retirement annuity and accept a full-time position under the same Article or another Article established under the Illinois Compiled Statutes, would have their benefits suspended during employment. Their benefits would be recalculated, if applicable, upon termination of employment.

Public Act 96-1490 (SB 550)

- Approved December 30, 2010.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Amends certain provisions established in SB1946 that apply to participants that first become members on or after January 1, 2011:
 - Establishes the period for calculating the annual unadjusted percentage increase in the Consumer Price Index-U as the 12-month period ending with September for purposes of capping salary and calculating the automatic increase in annuity percentage.
 - Establishes that the salary cap of \$106,800 applies for all purposes under the Code, including the calculation of benefits and employee contributions.
 - Establishes that the survivor's annuity is calculated with no reduction due to age.
 - Establishes that members who withdraw before age 62, or with less than 10 years of service, regardless of age, are entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.
 - Establishes that increases in annuity for employee annuitants commence on January 1.

2011 Session

Public Act 97-0530 (SB 1672)

- Approved August 23, 2011.
- Requires all pension funds and retirement systems subject to the Code to comply with the federal Heroes Earnings Assistance and Relief Tax Act of 2008.

Public Act 97-0609 (SB 1831)

- Approved August 26, 2011.
- Applies to those members hired on or after January 1, 2012.
 - Provides that if a new hire is receiving a retirement annuity or pension and accepts a contractual position to provide services to a governmental entity from which he or she has retired, then that person's annuity or pension will be suspended during that contractual service.
 - Makes it a Class A misdemeanor for a pensioner who is seeking contractual employment to fail to notify certain persons about his or her retirement status before accepting an employment contract.

Public Act 97-0504 (HB 1670)

- Approved August 23, 2011.
- Amends the Open Meetings Act.
 - Requires each elected or appointed member of a public body subject to this Act who is such a member on the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
 - Requires those members to complete the training not later than one year after the effective date of the amendatory Act.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

- Requires each elected or appointed member of a public body subject to the Act who becomes such a member after the effective date of the amendatory Act to successfully complete the electronic training curriculum developed and administered by the Public Access Counselor.
- Requires those members to complete the training not later than the 90th day after the date the member either (i) takes the oath of office, if the member is required to take an oath of office to assume the person's duties as a member of the public body or (ii) otherwise assumes responsibilities as a member of the public body, if the member is not required to take an oath of office to assume the person's duties as a member of the governmental body.
- Requires each member who successfully completes the curriculum to file a copy of the certificate of completion with the public body.
- Provides that the failure of one or more members of a public body to complete the training required by this Section does not affect the validity of an action taken by the public body.
- Provides that an elected or appointed member of a public body subject to this Act who has successfully completed the required training and filed a copy of the certificate of completion with the public body is not required to subsequently complete that training.

2012 Session

Public Act 97-0651 (HB 3813)

- Approved and effective January 5, 2012.
- Requires any reasonable suspicion of fraud against the Fund to be reported to the State's Attorney for investigation.
- Changes provisions for Union Leaves of Absence as follows:
 - Service credit can be accrued only for union leaves that begin before the effective date of this amendatory Act.
 - "Any pension plan established by the local labor organization" is defined as any pension plan in which the member can receive credit as a result of his membership in the local labor organization. This is a declaration of existing law.
 - Salary used for calculation of final average salary must be a salary paid by an employer, not by the union. This is a declaration of existing law.
 - Minimum annuity section 11-134 is changed to add to the final average salary the product of (1) final average salary, (2) the average percentage increase in the CPI during the leave of absence, and (3) the number of years of leave of absence. This does not seem to deal with a situation where the employee may have been on leave within the last 10 years but is last with Laborers. It also only amends paragraph (f-1) which applies to those members who go on annuity on or after the attainment of age 60.
 - Does not change that contributions are based current salary with the union.

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2012 (CONT'D)

Public Act 97-0967 (HB 3969)

- Approved and effective August 16, 2012.
- Applies if the member retired after the effective date with less than 2 years of service in a participating system under the Reciprocal Act after General Assembly service.
- Requires that if the final average salary in a participating system is used to calculate the annuity, the employer must pay the General Assembly Retirement System for any increased cost of the General Assembly annuity that is attributable to the higher salary under the participating system.

EXHIBIT S

HISTORY OF RECOMMENDED EMPLOYER MULTIPLES AND TAXES LEVIED

Year of Report	Statutory Multiple	Normal Cost Plus Interest	Normal Cost Plus 30-Year Amortization ¹²	Normal Cost Plus 30-Year % of Salary Amortization ¹²	Tax Levy Year	Normal Cost		Total Tax Levy
						City	Park	
						1984	1.37	
1985 ²	1.37	1.60	2.08	1.33	1985	15,618,000	29,000	15,647,000
1986 ¹	1.37	0.99	1.84	0.94	1986	15,373,000	25,000	15,398,000
1987 ¹	1.37	1.13	1.90	1.03	1987	15,260,000	21,000	15,281,000
1988	1.37	1.03	1.87	0.98	1988	15,380,000	20,000	15,400,000
1989 ^{1,2}	1.37	0.56	1.49	0.56	1989	15,442,000	14,000	15,456,000
1990 ^{1,2}	1.37	1.01	1.80	0.93	1990	15,261,000	12,000	15,273,000
1991	1.37	0.93	1.70	0.90	1991	16,382,000	10,000	16,392,000
1992 ²	1.37	0.80	1.75	0.80	1992	16,835,000	11,000	16,846,000
1993 ²	1.37	0.83	1.96	0.83	1993	18,036,000	11,000	18,047,000
1994 ^{1,2}	1.37	0.64	1.84	0.64	1994	17,069,000	12,000	17,081,000
1995 ²	1.37	0.75	1.87	0.75	1995	18,726,000	9,500	18,735,500
1996	1.37	0.66	1.75	0.66	1996	20,037,300	6,900	20,044,200
1997 ^{1,2,3,4}	1.37	N/A	N/A	N/A	1997	19,645,400	4,300	19,649,700
1998 ^{1,2,4}	1.37	N/A	N/A	N/A	1998	19,757,000	4,600	19,761,600
1999 ^{1,4,5}	1.00	N/A	N/A	N/A	1999	14,676,000	1,898	14,677,898
2000 ⁴	1.00	N/A	N/A	N/A	2000 ⁵	0	0	0
2001 ⁴	1.00	N/A	N/A	N/A	2001 ⁷	0	0	0
2002 ^{2,4}	1.00	N/A	N/A	N/A	2002 ⁸	0	0	0
2003 ²	1.00	0.44	0.43	0.53	2003 ⁹	0	0	0
2004 ^{1,2}	1.00	0.67	0.67	0.63	2004 ¹⁰	0	0	0
2005 ¹	1.00	1.18	1.23	0.63	2005 ¹¹	0	0	0
2006	1.00	1.54	1.64	1.30	2006 ¹³	0	0	0
2007	1.00	1.12	1.19	0.99	2007	15,460,000	0	15,460,000
2008	1.00	1.98	2.12	1.60	2008	17,891,000	0	17,891,000
2009	1.00	2.54	2.76	1.97	2009	17,545,800	0	17,545,800
2010	1.00	3.57	3.89	2.71	2010	18,239,700	0	18,239,700
2011 ¹	1.00	4.95	5.41	3.67	2011 ¹	15,635,700	0	15,635,700
2012 ¹	1.00	6.78	7.48	5.44	2012 ¹	14,898,700	0	14,898,700

¹ Change in actuarial assumptions.

² Change in benefits.

³ Change in asset valuation method to GASB.

⁴ No contribution is required under these valuation methods.

⁵ Change in actuary.

⁶ Tax levy based on the statutory multiple would be \$16,726,700, of which \$100 is for Park.

⁷ Tax levy based on the statutory multiple would be \$16,504,660.

⁸ Tax levy based on the statutory multiple would be \$16,892,000.

⁹ Tax levy based on the statutory multiple would be \$19,430,000.

¹⁰ Tax levy based on the statutory multiple would be \$19,570,600.

¹¹ Tax levy based on the statutory multiple would be \$18,970,900.

¹² 40-year amortization for years prior to 2006; 30-year amortization for 2006 and after.

¹³ Tax levy based on the statutory multiple would be \$17,193,400.

EXHIBIT T
ANNUAL REQUIRED CONTRIBUTIONS OF EMPLOYER
AND TREND INFORMATION

Year	Annual Required Contribution (ARC) of the Employer¹	Required Statutory Basis²	Actual³	Percent of ARC Contributed
2003 ⁴	\$ -	\$ 18,652,733	\$ 366,920	N/A
2004 ⁴	8,513,018	18,787,778	202,684	2.38%
2005 ⁴	12,774,103	18,212,098	40,435	0.32%
2006 ⁴	21,142,739	16,505,724	106,270	0.50%
2007	25,293,490	14,840,698	15,458,982	61.12%
2008	21,216,989	17,175,360	17,580,428	82.86%
2009	37,199,049	16,843,872	17,189,811	46.21%
2010	50,274,041	17,510,112	17,938,810	35.68%
2011	60,801,575	15,010,272	15,358,602	25.26%
2012	80,636,419	14,302,752	14,414,835	17.88%

¹Under Normal Cost plus Level-Dollar Amortization. Amortization period of 30 years beginning in 2007 and 40 years prior to 2007. Negative ARC values are set to zero, as no contribution is then required.

²Tax levy after 4.00 percent overall loss.

³Net tax levy plus miscellaneous. Includes prior year adjustments for taxes beginning in 1991.

⁴The City of Chicago did not levy a tax for the Fund this year.

Year	Assets Available for Benefits as a % of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (Surplus) as a % of Covered Payroll End of Year	Employer Contribution as a % of Covered Payroll
2003	103.15%	(24.91)%	0.18%
2004	98.53%	14.38 %	0.10%
2005	93.88%	58.37 %	0.02%
2006	91.98%	75.15 %	0.06%
2007	95.03%	47.70 %	8.02%
2008	86.77%	119.48 %	8.11%
2009	79.37%	199.46 %	8.24%
2010	73.83%	271.18 %	8.98%
2011	64.92%	393.76 %	7.87%
2012	55.41%	532.69 %	7.25%

Actuarial accrued liabilities and contributions include pension and OPEB.

EXHIBIT W
HISTORY OF RETIREES AND BENEFICIARIES
ADDED TO PAYROLLS 2003-2012

Year	Added to Payroll		Removed from Payroll		Payroll End of Year		Average	Increase in
	No.	Ann. Benefits ¹	No.	Ann. Benefits	No.	Ann. Benefits	Annual Benefit	Average Benefit
Employee Annuitants (Male and Female)								
2003	150	\$ 6,731,957	139	\$ 2,773,616	2,472	\$ 63,224,248	\$ 25,576	6.20%
2004 ²	525	23,029,473	161	3,507,001	2,836	82,746,720	29,177	14.08%
2005	55	3,997,885	154	3,287,338	2,737	83,457,267	30,492	4.51%
2006	79	4,971,772	133	3,475,111	2,683	84,953,928	31,664	3.84%
2007	95	6,301,188	134	3,363,972	2,644	87,891,144	33,242	4.98%
2008	120	7,756,776	118	2,939,436	2,646	92,708,484	35,037	5.40%
2009	169	9,882,832	132	3,675,336	2,683	98,915,980	36,868	5.22%
2010	163	10,367,852	144	4,008,480	2,702	105,275,352	38,962	5.68%
2011	163	10,624,236	144	4,187,172	2,721	111,712,416	41,056	5.37%
2012	136	9,154,278	120	4,030,908	2,737	116,835,786	42,688	3.97%
Surviving Spouse and Reversionary Annuitants								
2003	59	\$ 807,971	86	\$ 847,204	1,395	\$ 14,573,819	\$ 10,447	1.67%
2004	68	1,030,666	84	849,453	1,379	14,755,032	10,700	2.42%
2005 ³	84	1,108,608	96	950,157	1,367	14,913,483	10,910	1.96%
2006 ³	69	1,052,875	101	962,926	1,335	15,003,432	11,239	3.01%
2007 ³	68	1,007,856	87	846,660	1,316	15,164,628	11,523	2.53%
2008 ³	64	972,408	82	855,072	1,298	15,281,964	11,773	2.17%
2009	49	866,592	75	772,740	1,272	15,375,816	12,088	2.67%
2010	57	1,000,668	74	770,808	1,255	15,605,676	12,435	2.87%
2011 ³	57	1,000,152	91	1,021,908	1,221	15,583,920	12,763	2.64%
2012 ⁴	74	1,028,112	91	1,032,372	1,204	15,579,660	12,940	1.39%

¹ Annual benefits added to payroll include post-retirement increase amounts.

² Early retirement incentive offered to employees.

³ Includes one Reversionary Annuitant.

⁴ Number added in 2012 includes 20 Reversionary Annuitants that are also Surviving Spouses.

GASB EXHIBITS

EXHIBIT A-1
GASB #25, #27, #43, AND #45 DISCLOSURES

GASB: Financial Accounting Information

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (GASB) has issued Statement No. 25 – Financial Reporting for Defined Benefit Pension Plans and Statement No. 27 – Accounting for Pensions by State and Local Governmental Employers. Under GASB #25 and #27, systems select one actuarial method from several acceptable alternatives, and report all information on this one basis. GASB has issued Statement No. 43 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and Statement No. 45 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. GASB #43 and #45 pertain to postretirement benefits other than pensions and are similar to GASB #25 and #27.

This report includes the following exhibits with information required to be reported under GASB #25, #27, #43 and #45. GASB has released GASB #67 and GASB #68 which replace Statements #25 and #27 and significantly change the calculations of the unfunded liability, annual pension expense, and employer's balance sheet liability. However, GASB #67 is first effective with fiscal year ending December 31, 2014, and GASB #68 is first effective with fiscal year ending December 31, 2015. Therefore, the information presented in this report is based on the current GASB #25 and #27 requirements. **This information is presented in draft form for review. Please let us know if there are any changes so that we may maintain consistency with the financial statements.**

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

This exhibit shows a history of funding progress under GASB. 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 payroll.

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

This exhibit shows the Annual Required Contribution (ARC) as computed under GASB #25.

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

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

Exhibit A-5: History of Annual Pension Cost and Contributions Made for GASB #27 from 1997

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 for years 1997-2012. The exhibit also includes the dollar amount of City contributions made.

EXHIBIT A-1
GASB #25, #27, #43, AND #45 DISCLOSURES (CONT'D)

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-8: Schedule of Funding Progress for GASB #43

This exhibit shows a history of funding progress under GASB #43. 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 payroll.

Exhibit A-9: Schedule of Employer Contributions for GASB #43

This exhibit shows the Annual Required Contribution (ARC) as computed under GASB #43.

Exhibit A-10: History of Annual OPEB Cost and Contributions Made for GASB #45 from 2007

This exhibit shows the components of annual OPEB cost (ARC, interest on the Net OPEB Obligation (NOO), and the adjustment to the ARC), increase or decrease in the NOO, and the NOO at the end of the year for year 2012. The exhibit also includes the dollar amount of City contributions made to pay current year health insurance supplement benefits.

Exhibit A-11: OPEB Cost Summary for GASB #45

This exhibit shows a summary of annual OPEB cost, percentage of annual OPEB cost contributed that year, and NOO at the end of the year.

Exhibit A-12: Supplementary Information for GASB #43 and #45

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

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b - a) / c]
2003	\$ 1,679,796,167	\$ 1,628,563,033	\$ (51,233,134)	103.15 %	\$ 205,691,917	(24.91)%
2004	1,649,959,130	1,674,614,651	24,655,521	98.53 %	171,476,937	14.38 %
2005 ¹	1,635,595,437	1,742,300,488	106,705,051	93.88 %	182,809,397	58.37 %
2006 ²	1,664,058,080	1,767,682,490	103,624,410	94.14 %	193,176,272	53.64 %
2007	1,757,710,948	1,808,295,354	50,584,406	97.20 %	192,847,482	26.23 %
2008	1,698,427,008	1,915,324,017	216,897,009	88.68 %	216,744,211	100.07 %
2009	1,601,351,633	1,975,748,829	374,397,196	81.05 %	208,626,493	179.46 %
2010	1,529,403,512	2,030,024,556	500,621,044	75.34 %	199,863,410	250.48 %
2011	1,422,414,349	2,152,853,902	730,439,553	66.07 %	195,238,332	374.13 %
2012	1,315,913,597	2,336,189,276	1,020,275,679	56.33 %	198,789,741	513.24 %

¹ OPEB liabilities are discounted at a rate of 4.50 percent beginning in 2005.

² OPEB liabilities excluded beginning in 2006.

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

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
1. Contribution Multiplier	1.00	1.00	1.00	1.00	1.00	1.00
2. Payroll (beginning of year)	\$193,176,272	\$192,847,482	\$216,744,211	\$208,626,493	\$199,863,410	\$195,238,332
3. City of Chicago Contribution, Net of Reserve for Loss in Tax Collection	13,256,147	15,232,804	14,626,771	15,351,944	12,778,697	11,852,905
4. City of Chicago Contribution as a Percent of Covered Payroll	6.86%	7.90%	6.75%	7.36%	6.39%	6.07%
5. Employee Contributions	18,413,407	19,418,435	17,538,297	16,319,992	16,068,655	16,559,017
6. Employee Contributions as a Percent of Covered Payroll	9.53%	10.07%	8.09%	7.82%	8.04%	8.48%
7. Current Year Normal Cost	28,484,278	28,904,557	32,466,860	31,468,846	30,535,687	30,762,167
8. Normal Cost as a Percent of Covered Payroll	14.75%	14.99%	14.98%	15.08%	15.28%	15.76%
9. Level Dollar Amortization of the Unfunded Liability	8,522,861	4,160,447	17,839,264	30,793,280	41,174,891	60,076,917
10. Level Dollar Amortization as a Percent of Covered Payroll	4.41%	2.16%	8.23%	14.76%	20.60%	30.77%
11. Interest Adjustment for Semi-Monthly Payment	1,504,032	1,343,817	2,044,525	2,530,438	2,914,438	3,691,853
12. Actuarially Determined Contribution (ADC) ¹ (NC + level dollar amort. + interest adjustment)	38,511,172	34,408,821	52,350,649	64,792,564	74,625,016	94,530,937
13. ADC as a Percent of Covered Payroll	19.93%	17.83%	24.15%	31.06%	37.34%	48.42%
14. Annual Required Contribution (ARC) ¹ (ADC - estimated employee contributions)	21,725,805	17,652,023	33,517,429	46,664,704	57,258,593	77,566,394
15. ARC as a Percent of Covered Payroll	11.25%	9.15%	15.46%	22.37%	28.65%	39.73%

¹ADC and ARC amounts cannot be less than zero.

ARC excludes amounts attributable to health insurance supplement beginning in 2006.

The amortization period used for determining level dollar amortization payments of the unfunded liability was 30 years beginning in 2007 and 40 years prior to 2007.

In the year 2012, City contributions and miscellaneous income to fund pension benefits totaled \$11,852,905 or 6.07 percent of beginning of year payroll. In addition, employee contributions were \$16,559,017 or 8.48 percent of beginning of year payroll. The Annual Required Contribution (ARC) was equal to \$77,566,394; therefore, there was a deficit of contributions and miscellaneous income of \$65,713,489 or 33.66 percent of beginning of year payroll.

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

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

Valuation Date	December 31, 2012
Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	5-year smoothed market
Amortization Method	Level dollar; Open
Remaining Amortization Period	30 years
Actuarial Assumptions:	
Pension Investment Rate of Return ¹	7.5%, December 31, 2012
	8.0%, December 31, 2011
Projected Base Salary Increases ¹	3.75% per year
¹ Includes Inflation at:	3.0% per year
Post Retirement Benefit Increases	3.0% per year beginning at the earlier of
	1) the later of the 1st of January of the year
	after retirement and age 60
	2) the later of the 1st of January of the year
	after the second anniversary of retirement
	and age 53

Actuarial Accrued Liability (AAL)

	<u>December 31, 2011</u> ²	<u>December 31, 2012</u> ²
Payable to Retirees and Beneficiaries	\$ 1,377,151,788	\$ 1,494,002,965
Current Employees:		
Accumulated Employee Contributions		
Including Statutory Interest	251,243,991	253,449,161
Payable to Vested and Non-Vested		
Employees (not split)	524,458,123	588,737,150
Total Actuarial Accrued Liability	<u>\$ 2,152,853,902</u>	<u>\$ 2,336,189,276</u>
Net Plan Actuarial Assets	<u>1,422,414,349</u>	<u>1,315,913,597</u>
Unfunded AAL (assets in excess of AAL)	\$ 730,439,553	\$ 1,020,275,679
Percent Funded	66.07 %	56.33 %
Unfunded AAL as Percent of Payroll	374.13 %	513.24 %
Payroll	\$ 195,238,332	\$ 198,789,741

² Excludes liability for health insurance supplement.

EXHIBIT A-5
HISTORY OF ANNUAL PENSION COST AND CONTRIBUTIONS
MADE FOR GASB #27 FROM 1997

Year Ending December 31:	2005	2006	2007	2008	2009	2010	2011	2012
Contribution Rates								
Plan Members:	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
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: ¹	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Annual Pension Cost								
Annual Required Contribution (ARC)	\$ 12,774,103	\$ 21,142,739	\$ 21,725,805	\$ 17,652,023	\$ 33,517,429	\$ 46,664,704	\$ 57,258,593	\$ 77,566,394
Interest on NPO	(21,617,869)	(20,650,015)	(19,015,660)	(18,295,347)	(18,060,689)	(16,508,842)	(13,966,716)	(10,376,932)
Adjustment to ARC	20,982,384	20,042,981	19,549,910	18,809,360	18,568,109	16,972,663	14,359,115	10,668,475
Annual Pension Cost	\$ 12,138,618	\$ 20,535,705	\$ 22,260,055	\$ 18,166,036	\$ 34,024,849	\$ 47,128,525	\$ 57,650,992	\$ 77,857,937
Employer Contributions ²	\$ 40,435	\$ 106,270	\$ 13,256,147	\$ 15,232,804	\$ 14,626,771	\$ 15,351,944	\$ 12,778,697	\$ 11,852,905
Net Pension Obligations (NPO)								
NPO at Beginning of Year	\$ (270,223,367)	\$ (258,125,184)	\$ (237,695,749)	\$ (228,691,841)	\$ (225,758,609)	\$ (206,360,531)	\$ (174,583,950)	\$ (129,711,655)
Increase/(Decrease) in NPO	12,098,183	20,429,435	9,003,908	2,933,232	19,398,078	31,776,581	44,872,295	66,005,032
NPO at End of Year	\$ (258,125,184)	\$ (237,695,749)	\$ (228,691,841)	\$ (225,758,609)	\$ (206,360,531)	\$ (174,583,950)	\$ (129,711,655)	\$ (63,706,623)

¹ The proceeds from the tax levy less health insurance supplement benefit payments are contributed to fund the pension benefits beginning in 2007.

² Provided by prior actuary for years before 1999.

³ The City of Chicago did not levy a tax for Laborers' this year. These amounts include miscellaneous income and changes in reserves for tax loss and collections for taxes more than five years old.

EXHIBIT A-5 (CONT'D)
HISTORY OF ANNUAL PENSION COST AND CONTRIBUTIONS
MADE FOR GASB #27 FROM 1997

Year Ending December 31:	1997	1998	1999	2000	2001	2002	2003	2004
Contribution Rates								
Plan Members:	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
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: ¹	1.37	1.37	1.00	1.00	1.00	1.00	1.00	1.00
Annual Pension Cost								
Annual Required Contribution (ARC)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,513,018
Interest on NPO	(10,936,776)	(13,500,288)	(15,344,702)	(17,724,805)	(19,010,060)	(20,424,891)	(21,669,708)	(22,230,417)
Adjustment to ARC	10,936,776	13,500,288	-	2,342,460	1,984,628	4,947,535	15,027,772	21,576,925
Annual Pension Cost	\$ -	\$ -	\$ (15,344,702)	\$ (15,382,345)	\$ (17,025,432)	\$ (15,477,356)	\$ (6,641,936)	\$ 7,859,526
Employer Contributions ²	\$ 32,043,902	\$ 23,055,176	\$ 14,406,579	\$ 683,352 ³	\$ 659,946 ³	\$ 82,865 ³	\$ 366,920 ³	\$ 202,684 ³
Net Pension Obligations (NPO)								
NPO at Beginning of Year	\$ (136,709,698)	\$ (168,753,600)	\$ (191,808,776)	\$ (221,560,057)	\$ (237,625,754)	\$ (255,311,132)	\$ (270,871,353)	\$ (277,880,209)
Increase/(Decrease) in NPO	(32,043,902)	(23,055,176)	(29,751,281)	(16,065,697)	(17,685,378)	(15,560,221)	(7,008,856)	7,656,842
NPO at End of Year	\$ (168,753,600)	\$ (191,808,776)	\$ (221,560,057)	\$ (237,625,754)	\$ (255,311,132)	\$ (270,871,353)	\$ (277,880,209)	\$ (270,223,367)

¹ The proceeds from the tax levy less health insurance supplement benefit payments are contributed to fund the pension benefits beginning in 2007.

² Provided by prior actuary for years before 1999.

³ The City of Chicago did not levy a tax for Laborers' this year. These amounts include miscellaneous income and changes in reserves for tax loss and collections for taxes more than five years old.

EXHIBIT A-6
PENSION COST SUMMARY FOR GASB #27

Year Ended December 31	Annual Pension Cost	% of Annual Pension Cost Contributed	Net Pension Obligation
2007	\$ 22,260,055	59.55%	\$ (228,691,841)
2008	18,166,036	83.85%	(225,758,609)
2009	34,024,849	42.99%	(206,360,531)
2010	47,128,525	32.57%	(174,583,950)
2011	57,650,992	22.17%	(129,711,655)
2012	77,857,937	15.22%	(63,706,623)

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

Year Ending December	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Assumptions and Method										
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	\$ 18,826,921	\$ 20,008,465	\$ 19,803,585	\$ 17,819,965	\$ 20,777,427	\$ 21,637,649	\$ 20,261,167	\$ 21,316,661	\$ 20,451,183	\$ 21,340,898
40 Year Amortization	(693,500)	935,719	(151,802)	(3,030,467)	868,508	(925,113)	(5,449,447)	(7,246,462)	(7,571,950)	(13,950,958)
Total ADC	\$ 18,133,421	\$ 20,944,184	\$ 19,651,783	\$ 14,789,498	\$ 21,645,935	\$ 20,712,536	\$ 14,811,720	\$ 14,070,199	\$ 12,879,233	\$ 7,389,940
Interest on NPO	-	(628,987)	(1,146,199)	(1,796,270)	(2,998,697)	(3,639,511)	(4,348,031)	(5,806,534)	(7,176,840)	(8,775,457)
Adjustment to ADC	-	642,102	1,155,863	1,811,417	3,023,982	3,670,199	4,384,694	5,855,495	7,237,356	8,849,453
Annual Pension Cost	\$ 18,133,421	\$ 20,957,299	\$ 19,661,447	\$ 14,804,645	\$ 21,671,220	\$ 20,743,224	\$ 14,848,383	\$ 14,119,160	\$ 12,939,749	\$ 7,463,936
Contributions for Year										
Employer Contributions	\$ 14,745,709	\$ 15,157,663	\$ 15,257,738	\$ 17,029,493	\$ 15,989,678	\$ 16,574,721	\$ 17,734,532	\$ 16,954,732	\$ 18,311,622	\$ 19,623,717
Employee Contributions	11,774,209	11,740,621	12,529,606	12,805,486	13,691,711	13,025,003	15,345,146	14,293,250	14,610,842	14,856,703
Total Contributions	\$ 26,519,918	\$ 26,898,284	\$ 27,787,344	\$ 29,834,979	\$ 29,681,389	\$ 29,599,724	\$ 33,079,678	\$ 31,247,982	\$ 32,922,464	\$ 34,480,420
Net Pension Obligations (NPO)										
NPO at Beginning of Year	\$ -	\$ (8,386,497)	\$ (14,327,482)	\$ (22,453,379)	\$ (37,483,713)	\$ (45,493,882)	\$ (54,350,382)	\$ (72,581,677)	\$ (89,710,499)	\$ (109,693,214)
Annual Pension Cost	18,133,421	20,957,299	19,661,447	14,804,645	21,671,220	20,743,224	14,848,383	14,119,160	12,939,749	7,463,936
Total Contributions	(26,519,918)	(26,898,284)	(27,787,344)	(29,834,979)	(29,681,389)	(29,599,724)	(33,079,678)	(31,247,982)	(32,922,464)	(34,480,420)
NPO at End of Year	\$ (8,386,497)	\$ (14,327,482)	\$ (22,453,379)	\$ (37,483,713)	\$ (45,493,882)	\$ (54,350,382)	\$ (72,581,677)	\$ (89,710,499)	\$ (109,693,214)	\$ (136,709,698)

EXHIBIT A-8
SCHEDULE OF FUNDING PROGRESS FOR GASB #43

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b - a) / c]
2007	\$ -	\$ 41,411,164	\$ 41,411,164	0.00%	\$ 192,847,482	21.47%
2008	-	42,063,816	42,063,816	0.00%	216,744,211	19.41%
2009	-	41,738,247	41,738,247	0.00%	208,626,493	20.01%
2010	-	41,361,276	41,361,276	0.00%	199,863,410	20.69%
2011	-	38,327,860	38,327,860	0.00%	195,238,332	19.63%
2012	-	38,653,355	38,653,355	0.00%	198,789,741	19.44%

EXHIBIT A-9
SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR GASB #43

	2006	2007	2008	2009	2010	2011	2012
1. Payroll (beginning of year)	\$182,809,397	\$193,176,272	\$192,847,482	\$216,744,211	\$208,626,493	\$199,863,410	\$195,238,332
2. Current Year Normal Cost	1,023,208	1,045,917	1,051,630	1,127,307	1,075,783	1,033,073	749,005
3. Normal Cost as a Percent of Covered Payroll	0.56%	0.54%	0.55%	0.52%	0.52%	0.52%	0.38%
4. 30-Year Level Dollar Amortization of the Unfunded Liability	2,439,744	2,441,189	2,432,818	2,471,160	2,452,034	2,429,888	2,251,681
5. 30-Year Level Dollar Amortization as a Percent of Covered Payroll	1.33%	1.26%	1.26%	1.14%	1.18%	1.22%	1.15%
6. Interest Adjustment for Semi-Monthly Payment	80,021	80,579	80,518	83,153	81,520	80,021	69,339
7. Actuarially Determined Contribution (ADC) (NC + 30-year level dollar + interest adjustment)	3,542,974	3,567,685	3,564,966	3,681,620	3,609,337	3,542,982	3,070,025
8. ADC as a Percent of Covered Payroll	1.94%	1.85%	1.85%	1.70%	1.73%	1.77%	1.57%
9. Annual Required Contribution (ARC) (ADC - estimated employee contributions)	3,542,974	3,567,685	3,564,966	3,681,620	3,609,337	3,542,982	3,070,025
10. ARC as a Percent of Covered Payroll	1.94%	1.85%	1.85%	1.70%	1.73%	1.77%	1.57%
11. City of Chicago Contribution	0 ¹	2,202,835	2,347,624	2,563,040	2,586,866	2,579,905	2,561,930
12. City of Chicago Contribution as a Percent of Covered Payroll	0.00%	1.14%	1.22%	1.18%	1.24%	1.29%	1.31%
13. Percentage of ARC Contributed	0.00%	61.74%	65.85%	69.62%	71.67%	72.82%	83.45%

¹ The City of Chicago did not make a contribution for Laborers' for 2006. The health insurance supplement benefits were financed by Plan investment income.

EXHIBIT A-10
HISTORY OF ANNUAL OPEB COST AND CONTRIBUTIONS
MADE FOR GASB #45 FROM 2007

Year Ending December 31:	2007	2008	2009	2010	2011	2012
Annual OPEB Cost						
Annual Required Contribution (ARC)	\$ 3,567,685	\$ 3,564,966	\$ 3,681,620	\$ 3,609,337	\$ 3,542,982	\$ 3,070,025
Interest on NOO	-	61,418	115,354	164,104	207,860	248,340
Adjustment to ARC	-	(80,182)	(150,596)	(214,240)	(271,362)	(324,211)
Annual OPEB Cost	<u>\$ 3,567,685</u>	<u>\$ 3,546,202</u>	<u>\$ 3,646,378</u>	<u>\$ 3,559,201</u>	<u>\$ 3,479,480</u>	<u>\$ 2,994,154</u>
Employer Contributions	\$ 2,202,835	\$ 2,347,624	\$ 2,563,040	\$ 2,586,866	\$ 2,579,905	\$ 2,561,930
Net OPEB Obligations (NOO)						
NOO at Beginning of Year	\$ -	\$ 1,364,850	\$ 2,563,428	\$ 3,646,766	\$ 4,619,101	\$ 5,518,676
Increase/(Decrease) in NOO	<u>1,364,850</u>	<u>1,198,578</u>	<u>1,083,338</u>	<u>972,335</u>	<u>899,575</u>	<u>432,224</u>
NOO at End of Year	\$ 1,364,850	\$ 2,563,428	\$ 3,646,766	\$ 4,619,101	\$ 5,518,676	\$ 5,950,900

EXHIBIT A-11
OPEB COST SUMMARY FOR GASB #45

Year Ended December 31	Annual OPEB Cost	% of Annual OPEB Cost Contributed	Net OPEB Obligation
2007	\$ 3,567,685	61.74%	\$ 1,364,850
2008	3,546,202	66.20%	2,563,428
2009	3,646,378	70.29%	3,646,766
2010	3,559,201	72.68%	4,619,101
2011	3,479,480	74.15%	5,518,676
2012	2,994,154	85.56%	5,950,900

EXHIBIT A-12
SUPPLEMENTARY INFORMATION FOR
GASB #43 AND #45

Valuation Date	December 31, 2012
Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	No Assets (Pay-as-you-go)
Amortization Method	Level dollar; Open
Remaining Amortization Period	30 years
Actuarial Assumptions:	
OPEB Investment Rate of Return ^a	4.5%
Projected Base Salary Increases ^a	3.75% per year
^a Includes Inflation at:	3.0% per year
Healthcare Cost Trend Rate	0% ¹

Actuarial Accrued Liability (AAL)

	<u>December 31, 2011</u> ²	<u>December 31, 2012</u> ²
Payable to Retirees and Beneficiaries	\$ 26,106,723	\$ 25,772,762
Current Employees:		
Accumulated Employee Contributions		
Including Statutory Interest	-	-
Payable to Vested and Non-Vested		
Employees (not split)	<u>12,221,137</u>	<u>12,880,593</u>
Total Actuarial Accrued Liability	<u>\$ 38,327,860</u>	<u>\$ 38,653,355</u>
Net Plan Actuarial Assets	-	-
Unfunded AAL (assets in excess of AAL)	\$ 38,327,860	\$ 38,653,355
Percent Funded	0.00 %	0.00 %
Unfunded AAL as Percent of Payroll	19.63 %	19.44 %
Payroll	\$ 195,238,332	\$ 198,789,741

¹ Trend not applicable - Fixed dollar subsidy.

² Actuarial Accrued Liability for OPEB at Valuation Date.