

**MUNICIPAL EMPLOYEES' ANNUITY AND
BENEFIT FUND OF CHICAGO**
ACTUARIAL VALUATION REPORT FOR THE YEAR ENDING
DECEMBER 31, 2013
APRIL 2014



April 10, 2014

The Retirement Board of the
Municipal Employees' Annuity and Benefit
Fund of Chicago
321 N. Clark Street, Suite 700
Chicago, IL 60654-4767

Subject: Actuarial Valuation and Certification

Board Members:

At your request, we have performed an actuarial valuation for the Municipal Employees' Annuity and Benefit Fund of Chicago ("the Plan") as of December 31, 2013. An actuarial valuation of the Plan is performed annually. The valuation has been performed to measure the funding status of the Plan and determine the actuarially required contribution for 2014. 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 and 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 Plan** – Data utilized for active members and persons receiving benefits from the Plan was provided by the Plan'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 Plan were provided by the Plan'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 Plan is the Entry Age Normal Actuarial Cost Method. The objective of this method is to recognize the costs of Plan benefits over the entire career of each member as a level of 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** – The same actuarial assumptions as last year were used for this valuation with the exception of the assumption pertaining to the duration and amortization of payments of the health insurance supplement for eligible annuitants. The current actuarial assumptions were first adopted for use with the December 31, 2012, valuation report.
- e) **Plan Provisions** – The valuation is based on provisions in effect as of December 31, 2013.

The funding objective is to provide employer and employee contributions sufficient to provide the benefits of the Plan when due. The provision of State Law establishing the Plan constrains employer contributions to be 1.25 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 1.25:1 relationship. This valuation of the Plan shows that a ratio of 6.53 is needed to adequately finance the Plan in fiscal year 2014 on an actuarial 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 eleven years and are again expected to be less than the ARC for 2014. 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 10 to 15 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 based 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 Plan 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., F.C.A.
Senior Consultant



Paul T. Wood, A.S.A., M.A.A.A., F.C.A.
Consultant

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

ACTUARIAL VALUES	<u>December 31, 2012</u>	<u>December 31, 2013</u>	<u>Percent Change</u>
Actuarial Values			
Actuarial Liability	\$ 13,637,460,046	\$ 13,856,493,366	1.61 %
Assets - Actuarial Value	5,073,320,275	5,114,207,803	0.81 %
Unfunded Liability (Surplus)	8,564,139,771	8,742,285,563	2.08 %
Funded Ratio	37.20%	36.91%	(0.79)%
Annual Required Contribution (ARC)	\$ 834,398,482	\$ 848,864,496	1.73 %
Market Values			
Actuarial Liability	\$ 13,637,460,046	\$ 13,856,493,366	1.61 %
Assets - Market Value	5,182,669,659	5,421,676,295	4.61 %
Unfunded Liability (Surplus)	8,454,790,387	8,434,817,071	(0.24)%
Funded Ratio	38.00%	39.13%	2.96 %
Book Values			
Actuarial Liability	\$ 13,637,460,046	\$ 13,856,493,366	1.61 %
Assets - Book Value	4,714,152,568	4,571,003,387	(3.04)%
Unfunded Liability (Surplus)	8,923,307,478	9,285,489,979	4.06 %
Funded Ratio	34.57%	32.99%	(4.57)%

Actuarial Liability and Annual Required Contribution include both pension and OPEB.

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2012</u>	<u>December 31, 2013</u>	<u>% Change</u>
Assets			
Market Value - Beginning of Year	\$ 5,053,248,869	\$ 5,182,669,659	2.56 %
Income			
Investment Income	589,198,468	735,272,432	24.79 %
Employer Contributions	158,380,709	157,704,971	(0.43)%
Employee Contributions	130,266,293	131,532,173	0.97 %
Subtotal	<u>877,845,470</u>	<u>1,024,509,576</u>	16.71 %
Outgo (Refunds, Benefits & Expenses)	<u>748,424,680</u>	<u>785,502,940</u>	4.95 %
Net Change	<u>129,420,790</u>	<u>239,006,636</u>	84.67 %
Market Value - End of Year	\$ 5,182,669,659	\$ 5,421,676,295	4.61 %
Book Value - Beginning of Year	\$ 4,874,683,099	\$ 4,714,152,568	(3.29)%
Income			
Investment Income	299,247,147	353,116,615	18.00 %
Employer Contributions	158,380,709	157,704,971	(0.43)%
Employee Contributions	130,266,293	131,532,173	0.97 %
Subtotal	<u>587,894,149</u>	<u>642,353,759</u>	9.26 %
Outgo (Refunds, Benefits & Expenses)	<u>748,424,680</u>	<u>785,502,940</u>	4.95 %
Net Change	<u>(160,530,531)</u>	<u>(143,149,181)</u>	10.83 %
Book Value - End of Year	\$ 4,714,152,568	\$ 4,571,003,387	(3.04)%
Actuarial Value - Beginning of Year	\$ 5,552,291,417	\$ 5,073,320,275	(8.63)%
Income			
Investment Income	(19,193,464)	537,153,324	2898.63 %
Employer Contributions	158,380,709	157,704,971	(0.43)%
Employee Contributions	130,266,293	131,532,173	0.97 %
Subtotal	<u>269,453,538</u>	<u>826,390,468</u>	206.69 %
Outgo (Refunds, Benefits & Expense)	<u>748,424,680</u>	<u>785,502,940</u>	4.95 %
Net Change	<u>(478,971,142)</u>	<u>40,887,528</u>	108.54 %
Actuarial Value - End of Year	\$ 5,073,320,275	\$ 5,114,207,803	0.81 %

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2012</u>	<u>December 31, 2013</u>	<u>% Change</u>
Members			
Actives ¹	31,326	30,647	(2.17)%
Inactives	13,465	14,254	5.86 %
Retirees	19,614	20,113	2.54 %
Deferreds	3	3	0.00 %
Survivors	4,225	4,207	(0.43)%
Reversionary Annuitants	129	138	6.98 %
Disabilities	530	440	(16.98)%
Children	149	141	(5.37)%
Payroll Data			
Valuation Payroll ²	\$ 1,590,793,702	\$ 1,580,288,709	(0.66)%
Average Salary	50,782	51,564	1.54 %

¹ Active members include disabled employees.

² Valuation payroll is based on pensionable pay for Tier 2 members.

DISCUSSION OF VALUATION RESULTS

This report sets forth the results of the actuarial valuation of the Municipal Employees' Annuity and Benefit Fund of Chicago ("the Plan") as of December 31, 2013. The purposes of this valuation are:

1. To develop the minimum actuarially determined contribution for 2014.
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 Plan.

The funded status in basic terms is a comparison of the Plan'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. Plan liabilities are dependent on the actuarial assumptions and actuarial cost method. Plan assets can be measured at market value, book value or some variation to smooth the fluctuations that invariably occur from year to year.

For Plan 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 Plan

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, since 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.

DISCUSSION OF VALUATION RESULTS (CONT'D)

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 value of future normal costs to be paid.

The difference between the sum of actuarial reserves for active and retired lives (“the Actuarial Accrued Liability”) and the present 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.

For the pension plan 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 provide 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, 2014, is \$839.0 million, which is for pension benefits only. This amount is net of estimated employee contributions of \$137.0 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, 2014, is \$9.8 million. As a result of P. A. 98-0043, the amortization period used to calculate the GASB #43 ARC was changed from a 30-year open period to a three-year closed period because benefits will no longer be paid after December 31, 2016.

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

DISCUSSION OF VALUATION RESULTS (CONT'D)

insurance supplement is financed with current contributions, and no separate healthcare asset account exists to pay the health insurance supplement.

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 single equivalent 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 the portion of the projected benefits after assets are depleted. The municipal bond rate is based on a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). We believe the liability based on the GASB single equivalent rate will become the predominant liability on which users will focus.

Due to the single equivalent discount rate and shorter amortization periods required under GASB #67 and #68, the unfunded liabilities and pension expense will be much higher and more volatile than under the current standards. A measurement of the single equivalent discount rate, unfunded liability and pension expense has not yet been performed. However, if the current funding policy is not improved significantly, GASB #67 and #68 actuarial liabilities at December 31, 2014, will be based on a single equivalent discount rate which is expected to be much lower than the current assumption of 7.50 percent, resulting in a significant increase to the unfunded actuarial liability.

The Total ARC for FY 2014 is \$848.9 million, which is \$692.8 million more than the statutory contribution (after the assumed 4 percent loss on the tax levy) of \$156.1 million. The difference between the ARC and the statutory contributions represents a “net pension obligation” (NPO) (and “net OPEB obligation” (NOO) for OPEB) as defined under GASB. The NPO and NOO are viewed as the accumulated value of contribution variances – where GASB defines contribution variances as the difference between the ARC and the statutory contribution. In lay terms, the NPO and NOO could be viewed as a “past due” on the annual required contributions.

As shown in Exhibit A-5 of this report, the NPO (accumulated missed contributions) has increased from less than \$0 as of December 31, 2006, to over \$2.7 billion as of December 31, 2013, and is projected to increase significantly in fiscal year 2014 (\$692.8 million) and in the future. A large and growing NPO may raise concerns in the capital markets and impact the cost of debt and borrowing for the City.

The Unfunded Actuarial Accrued Liability based on the Actuarial Value of Assets increased from \$8.564 billion to \$8.742 billion during the year, resulting in a decrease in the funding ratio from 37.2 percent to 36.9 percent. The increase in the Unfunded Actuarial Accrued Liability is mainly attributable to the continued shortfall in contributions relative to the actuarially determined contribution requirement. 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 decreased from \$8.455 billion to \$8.435 billion, and the funded ratio increased from 38.0 percent to 39.1 percent.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Plan Membership

	<u>December 31, 2012</u>	<u>December 31, 2013</u>
Active Members ¹		
Number	31,326	30,647
Vested	17,037	16,441
Non-vested	14,289	14,206
Average Age	46.8	46.7
Average Service	11.9	11.9
Average Annual Salary	\$50,782	\$51,564
Inactive Members		
Number	13,465	14,254
Average Age	45.9	46.1
Average Service	4.0	4.0
Retirees		
Number	19,614	20,113
Average Age	72.6	72.6
Average Annual Benefit	\$33,423	\$34,357
Deferreds		
Number	3	3
Average Age	52.7	52.3
Average Annual Benefit	\$9,168	\$5,268
Surviving Spouses		
Number	4,225	4,207
Average Age	77.9	78.1
Average Annual Benefit	\$13,007	\$13,402
Reversionary Annuitants		
Number	129	138
Average Age	80.4	79.6
Average Annual Benefit	\$4,580	\$4,784
Children		
	149	141
Total Members	68,911	69,503

¹ Active members include disabled employees.

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

Total members receiving benefits under the Plan increased 2.0 percent during 2013, from 24,117 to 24,599, while the number of active members decreased 2.2 percent from 31,326 to 30,647. Total expenditures for benefits increased from \$705 million in 2012 to \$746 million during 2013, or 5.8 percent.

Changes in Provisions of the Plan

The following Public Acts were passed in 2013 by the 98th General Assembly that made changes to the Fund Provisions.

P. A. 98-0043 (SB 1584), approved June 28, 2013

P. A. 98-0433 (HB 2620), approved August 16, 2013

Public Act 98-0043 effective June 28, 2013, eliminates payment of the health insurance supplement to eligible annuitants at the earlier of December 31, 2016, or upon termination of the city health care plan. During previous valuations, payment of the health insurance supplement was assumed to continue for life for all eligible employee annuitants. Due to Public Act 98-0043, we have assumed payment of the health insurance supplement terminates as of December 31, 2016. This change in the Fund provisions decreased actuarial liabilities by \$130.3 million.

Public Act 98-0433 effective August 16, 2013, creates an exception to the current selection process for obtaining investment services and does 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 2013 can be found in the Historical 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.

DISCUSSION OF VALUATION RESULTS (CONT'D)

2013 Experience Analysis

The Fund had an investment gain in 2013 of \$365 million relative to the 7.50 percent expected rate of return on a market value basis. The gain on an actuarial value basis relative to the 7.50 percent expected rate of return was \$175 million due to the deferred recognition of prior year investment gains and losses.

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 \$152 million. Service credit changes and purchases resulted in an experience loss of \$7 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 \$628 million. Contributions lower than Normal Cost plus interest have increased the Unfunded Actuarial Accrued Liability each year for the past twelve years.

The changes in the Fund provisions due to Public Act 98-0043 decreased the Unfunded Actuarial Accrued Liability by \$130 million.

There was an additional loss of \$1 million from all other factors, including actual retirement, termination, disability, mortality experience and data changes. This is about zero percent of the December 31, 2013, liabilities.

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

Funding Analysis

The charts on pages 11 through 14 summarize the various measures of benefit security (funded ratio) examined in this valuation and highlight the trends of the measures.

Conclusion

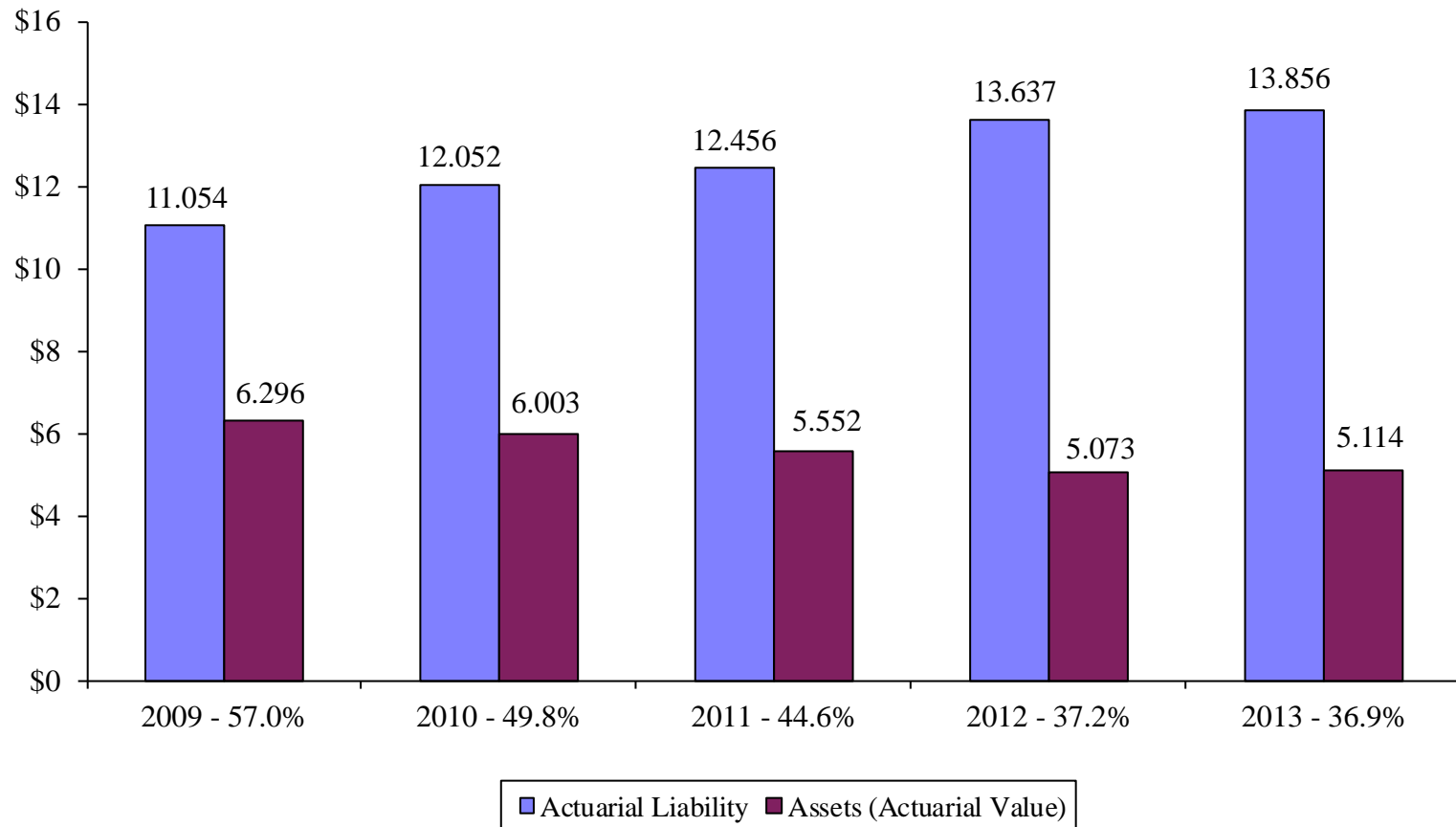
When measured using the Actuarial Value of Assets, which smoothes gains and losses over a five-year period, the funding ratio decreased from 37.2 percent in 2012 to 36.9 percent in 2013. On a market value basis, the funded ratio has increased from 38.0 percent in the last valuation to 39.1 percent in this valuation. The funded ratio using the Actuarial Value of Assets is expected to slightly increase for the next few years toward the funded ratio using the Market Value of Assets as 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 Fund, 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 10 to 15 years. If assets become depleted, the Plan would then be funded on a pay-as-you-go policy with contributions equal to annual benefit payments. The pay-as-you-go policy is projected to increase the annual contribution by three to four times the amount currently required.

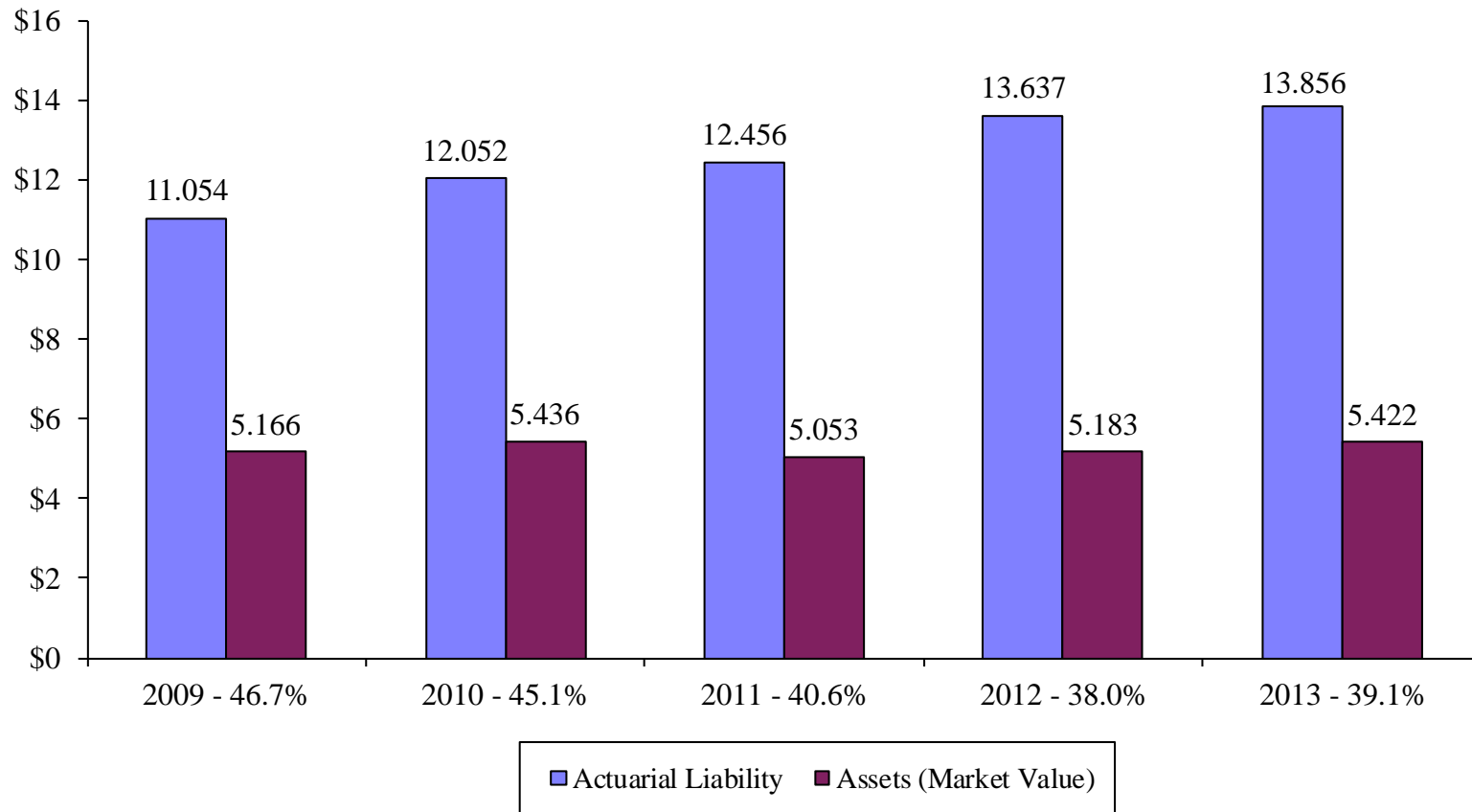
The Net Pension Obligation (NPO) has increased from less than \$0 as of December 31, 2006, to over \$2.7 billion as of December 31, 2013, and is projected to increase in the future due to contribution shortfalls compared with the Annual Required Contribution (ARC). A large and growing NPO may raise concerns in the capital markets and impact the cost of debt and borrowing for the City.

The current statutory funding policy impacts the ability to achieve higher returns over the long-term because it is projected that 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 to an appropriate level within the next year, the current investment return assumption will not be supportable for financial reporting purposes.

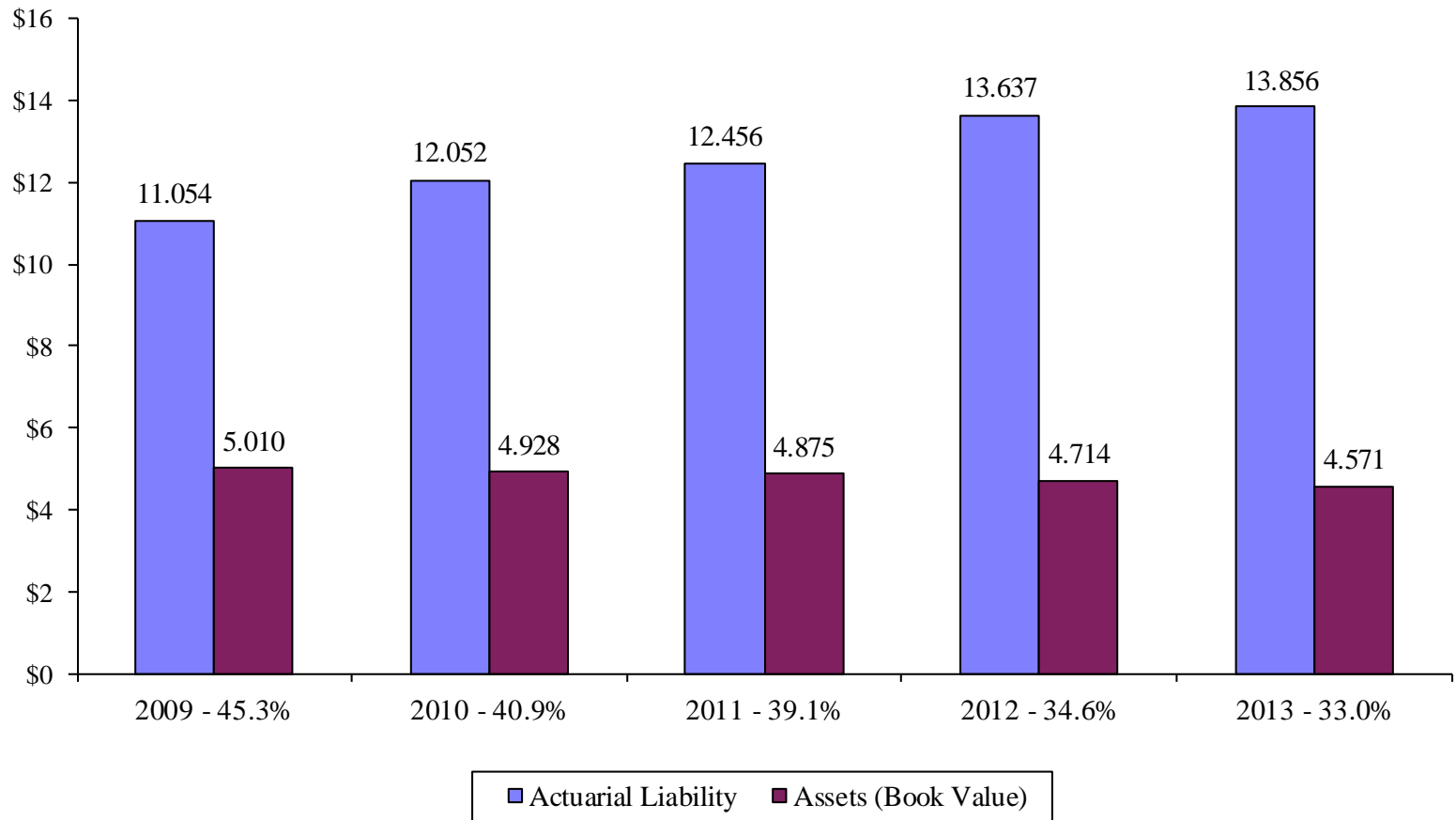
**COMPONENTS OF FUNDED RATIO
BASED ON ACTUARIAL VALUE OF ASSETS
(\$ IN BILLIONS)**



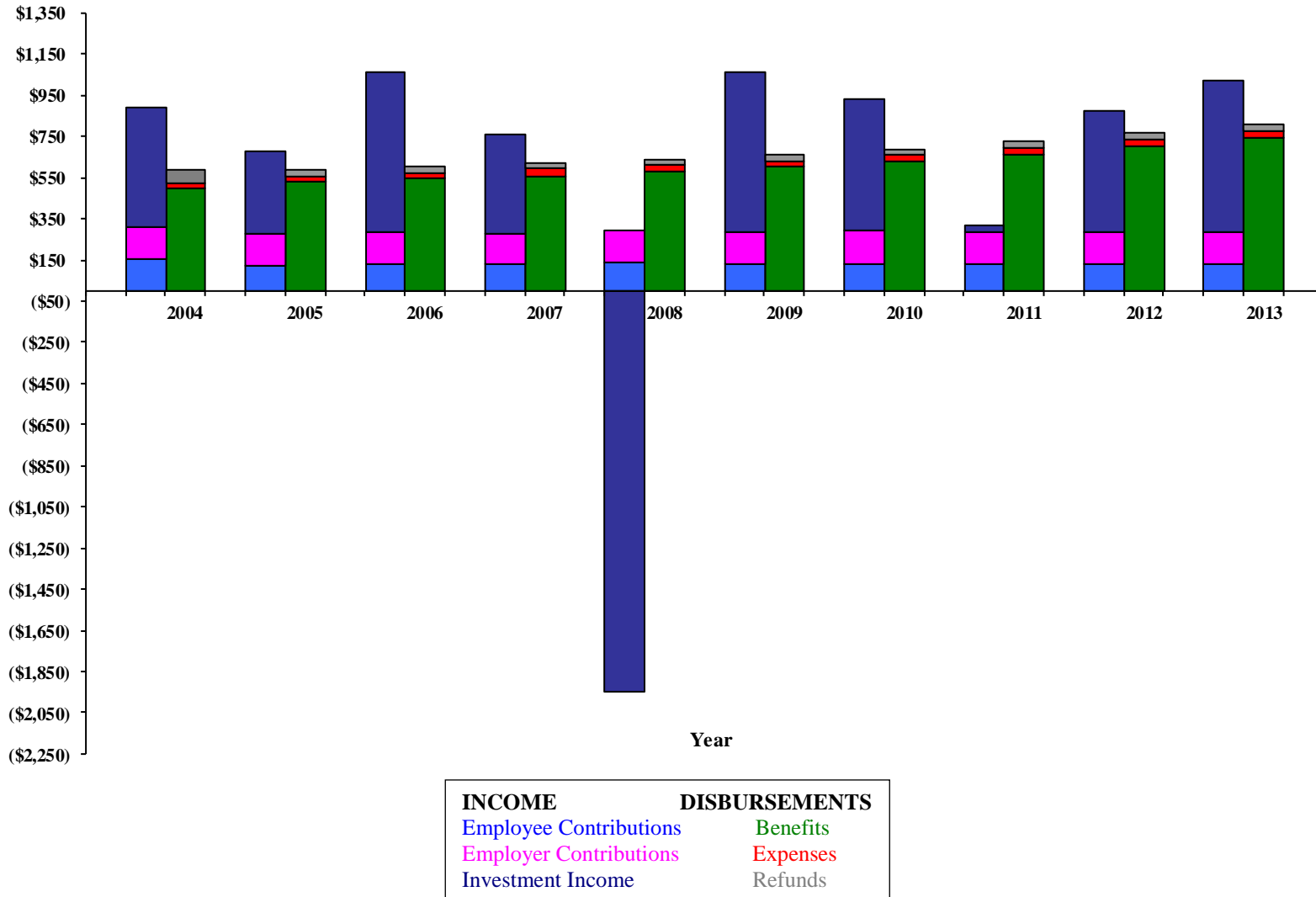
**COMPONENTS OF FUNDED RATIO
BASED ON MARKET VALUE
(\$ IN BILLIONS)**



**COMPONENTS OF FUNDED 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 2014

	<u>2013</u>	<u>2014</u>
(1) Normal Cost ¹	\$ 260,928,789	\$ 253,742,329
(2) Actuarial Accrued Liability (AAL) ¹	\$ 13,475,376,963	\$ 13,828,920,032
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	\$ 5,073,320,275	\$ 5,114,207,803
(b) UAAL [2-3(a)]	\$ 8,402,056,688	\$ 8,714,712,229
(4) Amortization (30-Year Level \$) Payable at BOY	\$ 661,779,091	\$ 686,405,073
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	\$ 35,210,107	\$ 35,875,591
(b) Total Minimum Contribution [1+4+5(a)]; but not less than zero	\$ 957,917,987	\$ 976,022,993
(c) Total Minimum Contribution (Percent of Pay)	60.22%	61.76%
(6) Estimated Member Contributions	\$ 137,895,298	\$ 136,984,690
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 820,022,689	\$ 839,038,303
(b) Annual Required Contribution (Percent of Pay)	51.55%	53.09%
(8) Estimated City Contribution (after 4% loss) ²	\$ 146,690,683	\$ 146,823,893
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a)-8)]	\$ 673,332,006	\$ 692,214,410
(b) as a Percentage of Pay	42.33%	43.80%
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8]	\$ 673,332,006	\$ 692,214,410
(b) as a Percentage of Pay	42.33%	43.80%

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 2014

	2013	2014 ³
(1) Normal Cost ¹	\$ 4,529,064	\$ 5,749
(2) Actuarial Accrued Liability (AAL) ¹	\$ 162,083,083	\$ 27,573,334
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	\$ -	\$ -
(b) UAAL [2-3(a)]	\$ 162,083,083	\$ 27,573,334
(4) Amortization (30-Year Level \$) Payable at BOY ⁴	\$ 9,522,039	\$ 9,598,511
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	\$ 324,690	\$ 221,933
(b) Total Minimum Contribution [1+4+5(a)]; but not less than zero	\$ 14,375,793	\$ 9,826,193
(c) Total Minimum Contribution (Percent of Pay)	0.90%	0.62%
(6) Estimated Member Contributions	\$ -	\$ -
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 14,375,793	\$ 9,826,193
(b) Annual Required Contribution (Percent of Pay)	0.90%	0.62%
(8) Estimated City Contribution ²	\$ 9,543,317	\$ 9,267,107
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a)-8)]	\$ 4,832,476	\$ 559,086
(b) as a Percentage of Pay	0.30%	0.04%
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8]	\$ 4,832,476	\$ 559,086
(b) as a Percentage of Pay	0.30%	0.04%

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.

³ The normal cost and actuarial accrued liabilities for the health insurance supplement were determined based on the provisions of P. A. 98-0043.

⁴ For fiscal year 2013, the amortization period is 30 years and for fiscal year 2014, the amortization period is three years.

TABLE 1B
DEVELOPMENT OF CITY CONTRIBUTION REQUIREMENTS

	Fiscal Year 2014	Fiscal Year 2015
Preliminary Determination of City Contribution		
Applicable Members' Contribution, Two Years Prior	\$ 130,075,555	\$ 131,189,154
Statutory Contribution Multiple	1.25	1.25
Statutory City Contribution	162,594,400	163,986,400
GASB #25 and #43 Annual Required Contribution (ARC)	848,864,496	N/A
Actuarial Liability at Valuation Date	13,637,460,046	13,856,493,366
Actuarial Value of Assets at Valuation Date	5,073,320,275	5,114,207,803
Funded Ratio	37.20%	36.91%

TABLE 1C
ACTIVE ACCRUED LIABILITY AND NORMAL COST BY TIER

	<u>Tier 1 Members</u>	<u>Tier 2 Members²</u>	<u>Total</u>
(1) Count	24,770	5,877	30,647
(2) Payroll	\$ 1,345,015,199	\$ 235,273,510	\$ 1,580,288,709
(3) Average Payroll	\$ 54,300	\$ 40,033	\$ 51,564
(4) Actuarial Accrued Liability (AAL) ¹	\$ 5,489,635,401	\$ 31,037,605	\$ 5,520,673,006
(5) Total Normal Cost ¹	\$ 228,936,833	\$ 24,811,245	\$ 253,748,078
(6) Total Normal Cost as a Percent of Pay	17.0%	10.5%	16.1%
(7) Member Contributions as a Percent of Pay	8.5%	8.5%	8.5%
(8) Net Normal Cost as a Percent of Pay	8.5%	2.0%	7.6%

¹ The normal cost and liabilities for healthcare are based on a discount rate of 4.5% and were determined based on the provisions of P. A. 98-0043.

² Members participating on or after January 1, 2011.

TABLE 2
RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

	2009	2010	2011	2012	2013
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
Beginning of Year	\$3,936,346,961	\$4,758,504,409	\$6,048,840,271	\$6,903,880,605	\$8,564,139,771
(Gains) Losses During the Year Attributable to:					
Contributions Less Than (in Excess of) Normal Cost plus Interest	263,525,304	320,818,396	449,777,576	520,449,450	627,790,221
(Gain) Loss on Investment Return on the Actuarial Value of Assets	541,514,597	412,377,681	501,202,990	445,339,476	(174,927,836)
(Gain) Loss from Salary Changes	(2,224,555)	(60,823,939)	(107,481,719)	(71,303,218)	(152,470,480)
(Gain) Loss from Retirement, Termination, & Mortality	7,921,619	26,339,285	60,500,888	28,400,986	1,496,498
(Gain) Loss from Data Corrections	-	-	-	-	-
(Gain) Loss from Transfers	-	-	-	-	-
Change in Methodology	-	-	-	-	-
Non-ERI Service Credit Changes and Purchases	11,420,483	14,796,688	10,008,932	5,952,536	6,597,107
Change in Assumptions	-	576,827,751	(58,968,333)	731,419,936	-
Plan Amendments	-	-	-	-	(130,339,718)
Net Increase (Decrease) in UAAL	822,157,448	1,290,335,862	855,040,334	1,660,259,166	178,145,792
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
End of Year	\$4,758,504,409	\$6,048,840,271	\$6,903,880,605	\$8,564,139,771	\$8,742,285,563

TABLE 2A
RECONCILIATION OF FUNDED RATIO

	2009	2010	2011	2012	2013
Funded Ratio Beginning of Year	62.89%	56.95%	49.81%	44.57%	37.20%
Expected Increase If All Assumptions Realized	1.45%	1.65%	2.00%	2.09%	2.20%
Expected Funded Ratio	64.34%	58.60%	51.81%	46.66%	39.40%
Gains (Losses) During the Year Attributable to:					
Contributions in Excess of (Less Than) Normal Cost plus Interest	-2.39%	-2.79%	-3.58%	-4.02%	-4.45%
Gain/(Loss) on Investment Return on the Smoothed Value of Assets	-4.91%	-3.58%	-4.00%	-3.44%	1.24%
Gain/(Loss) from Salary Changes	0.01%	0.27%	0.39%	0.21%	0.40%
Gain/(Loss) from Retirement, Termination, & Mortality	-0.04%	-0.12%	-0.22%	-0.08%	-0.01%
Gain/(Loss) from Data Corrections	0.00%	0.00%	0.00%	0.00%	0.00%
Gain/(Loss) from Transfers	0.00%	0.00%	0.00%	0.00%	0.00%
Change in Methodology	0.00%	0.00%	0.00%	0.00%	0.00%
Non-ERI Service Credit Changes and Purchases	-0.06%	-0.06%	-0.04%	-0.02%	-0.02%
Change in Assumptions	0.00%	-2.51%	0.21%	-2.11%	0.00%
Plan Amendments	0.00%	0.00%	0.00%	0.00%	0.35%
Total Gains (Losses) During the Year	-7.39%	-8.79%	-7.24%	-9.46%	-2.49%
Funded Ratio End of Year	56.95%	49.81%	44.57%	37.20%	36.91%

TABLE 3
SUMMARY OF BASIC ACTUARIAL VALUES

	APV of Projected Benefits	2014 Normal Cost
(1) Values for Active and Inactive Members		
(a) Retirement	\$ 7,080,678,763	\$ 179,981,646
(b) Termination - Vested	402,101,329	26,978,682
(c) Termination - Non Vested	77,264,797	23,791,939
(d) Death	101,386,100	4,638,984
(e) Inactive Vested and Non-Vested	395,674,652	-
(f) Health Insurance ¹	4,022,211	5,749
(g) Disability	-	11,852,165
(h) Expenses of Administration	-	6,498,913
Total for Actives and Inactives	\$ 8,061,127,852	\$ 253,748,078
(2) Values for Members in Payment Status	\$ 7,938,850,949	\$ -
(3) Grand Totals	\$ 15,999,978,801	\$ 253,748,078
Actuarial Present Value of Future Compensation		\$ 14,522,781,469

¹ The actuarial present value of projected benefits and normal cost for health insurance were determined based on the provisions of P. A. 98-0043.

TABLE 4
ACTUARIAL ACCRUED LIABILITY PRIORITIZED SOLVENCY TEST

Valuation Date 12/31	(1)	(2)	(3)	Actuarial Value of Assets	Portion (%) of Present Value Covered By Assets		
	Active and Inactive Member Contribution	Retirees and Beneficiaries	Active and Inactive Members (ER Financed Portion)		(1)	(2)	(3)
	2004 ²	\$ 1,165,883,637	\$ 5,217,025,314		\$ 2,425,591,993	\$ 6,343,076,159	100.00%
2005 ¹	1,252,060,754	5,325,007,461	2,673,143,602	6,332,378,676	100.00%	95.40%	0.00%
2006	1,347,789,693	5,438,978,756	2,905,551,034	6,509,145,626	100.00%	94.90%	0.00%
2007	1,437,604,071	5,572,797,922	3,176,213,194	6,890,462,918	100.00%	97.85%	0.00%
2008	1,536,221,953	5,701,015,809	3,368,610,969	6,669,501,770	100.00%	90.04%	0.00%
2009	1,610,503,053	5,874,606,230	3,569,183,317	6,295,788,191	100.00%	79.75%	0.00%
2010 ¹	1,682,418,161	6,438,552,003	3,931,259,712	6,003,389,605	100.00%	67.11%	0.00%
2011 ¹	1,724,683,910	6,803,140,300	3,928,347,812	5,552,291,417	100.00%	56.26%	0.00%
2012 ¹	1,724,021,890	7,633,045,219	4,280,392,937	5,073,320,275	100.00%	43.88%	0.00%
2013 ²	1,763,193,047	7,938,850,949	4,154,449,370	5,114,207,803	100.00%	42.21%	0.00%

¹Change in actuarial assumptions.

²Change in benefits.

The prioritized solvency test is another means of checking a plan'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; and (3) the employer financed portion for present active and inactive members. In a plan that has been following an actuarially sound 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) will be partially covered by the remainder of present assets. Generally, if the plan 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 42 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, 2013

	New in 2013			Continuing from 2012			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	\$160,774,891	\$ 400,577,146	\$ 561,352,037	\$1,324,071,339	\$5,086,680,562	\$6,410,751,901	\$1,484,846,230	\$5,487,257,708	\$6,972,103,938
Future Surviving Spouses	\$ 28,967,915	\$ 20,344,401	\$ 49,312,316	\$ 304,101,472	\$ 406,823,658	\$ 710,925,130	\$ 333,069,387	\$ 427,168,059	\$ 760,237,446
Spouses ²	\$ 18,612,324	\$ 15,775,819	\$ 34,388,143	\$ 164,199,641	\$ 159,320,745	\$ 323,520,386	\$ 182,811,965	\$ 175,096,564	\$ 357,908,529
Annual Benefits									
Retirees	\$ 14,904,432	\$ 23,586,240	\$ 38,490,672	\$ 162,588,453	\$ 489,942,555	\$ 652,531,008	\$ 177,492,885	\$ 513,528,795	\$ 691,021,680
Future Surviving Spouses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spouses ²	\$ 2,299,904	\$ 2,293,036	\$ 4,592,940	\$ 25,290,059	\$ 27,158,917	\$ 52,448,976	\$ 27,589,963	\$ 29,451,953	\$ 57,041,916

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>2012</u>	<u>2013</u>
APV of Credited Projected Benefits		
Payable to Retirees and Beneficiaries	\$ 7,633,045,219	\$ 7,938,850,949
Current Active and Inactive Employees:		
Accumulated Active and Inactive Employee Contributions	1,724,021,890	1,763,193,047
Payable to Vested and Non-Vested Employees	3,032,162,130	2,989,544,623
Total APV	\$ 12,389,229,239	\$ 12,691,588,619
Net Assets Available for Benefits, Actuarial Value	5,073,320,275	5,114,207,803
Unfunded AAL (AAL in excess of assets)	\$ 7,315,908,964	\$ 7,577,380,816
Percent Funded	40.95%	40.30%
Unfunded AAL as Percent of Payroll	459.89%	479.49%
Payroll	\$ 1,590,793,702	\$ 1,580,288,709

TABLE 7
ACTUARIAL RESERVE LIABILITIES
FOR THE FISCAL YEAR ENDING DECEMBER 31, 2013

Accrued Liabilities for Active and Inactive Participants ¹	\$ 5,917,642,417
Reserves For:	
Service Retirement Pension	\$ 7,023,134,311
Future Spouses of Current Retirees	496,357,611
Surviving Spouse Pension	394,530,726
Health Insurance Supplement ²	23,578,656
Child Annuitants	1,249,645
	<hr/>
Total Accrued Liabilities	\$ 13,856,493,366
Unfunded Actuarial Liabilities	\$ 8,742,285,563
Actuarial Net Assets	\$ 5,114,207,803

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 0.75 percent of pay added to the normal cost.*

² *Reserves for the health insurance supplement were determined based on the provisions of P. A. 98-0043.*

ASSETS OF THE PLAN

ASSETS OF THE PLAN

The book value of plan assets, net of accounts payable, decreased from \$4.71 billion as of December 31, 2012, to \$4.57 billion as of December 31, 2013, and the market value of plan assets increased from \$5.18 billion as of December 31, 2012, to \$5.42 billion as of December 31, 2013. Table 8 details the development of asset values during 2013 and Table 9 shows the development of the actuarial value of assets as of December 31, 2013.

TABLE 8
RECONCILIATION OF ASSET VALUES
AS OF DECEMBER 31, 2013

	<u>Market Value</u>	<u>Book Value</u>
(1) Value of Assets as of 12/31/2012	\$ 5,182,669,659	\$ 4,714,152,568
(2) Income for Plan Year:		
(a) Member Contributions	\$ 131,532,173	\$ 131,532,173
(b) City Contributions & Miscellaneous	157,704,971	157,704,971
(c) Investment Income Net of Expenses	735,272,432	353,116,615
(d) Total Income	<u>\$ 1,024,509,576</u>	<u>\$ 642,353,759</u>
(3) Disbursements for Plan Year:		
(a) Benefit Payments - Pension	\$ 736,039,491	\$ 736,039,491
(b) Benefit Payments - Health Insurance Supplement	9,508,087	9,508,087
(c) Refunds and Rollovers	33,456,449	33,456,449
(d) Administration	6,498,913	6,498,913
(e) Total Disbursements	<u>\$ 785,502,940</u>	<u>\$ 785,502,940</u>
(4) Value of Assets as of 12/31/2013	\$ 5,421,676,295	\$ 4,571,003,387
(5) Estimated Rate of Return in 2013:		
(a) Gross (Investment Expense of \$25,937,106)	15.43 %	8.49 %
(b) Net of Investment Expense	14.90 %	7.91 %

TABLE 9
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
AS OF DECEMBER 31, 2013

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

(a) Market Value of Assets as of 12/31/2012	\$ 5,182,669,659
(b) Actual Income and Disbursements in Prior Year Weighted for Timing	

Item	Amount	Weight for Timing	Weighted Amount
i) Member Contributions	\$ 131,532,173	50.0%	\$ 65,766,087
ii) City Contributions & Misc.	157,704,971	50.0%	78,852,486
iii) Benefit Payments	(745,547,578)	50.0%	(372,773,789)
iv) Refunds	(33,456,449)	50.0%	(16,728,225)
v) Administration	(6,498,913)	50.0%	(3,249,457)
vi) Total	\$ (496,265,796)		\$ (248,132,898)

(c) Market Value of Assets Adj. for Actual Income and Disbursements [(a) + (b)(vi)]	\$ 4,934,536,761
(d) Assumed Rate of Return on Plan Assets for the Year	7.50%
(e) Expected Return [(c) * (d)]	\$ 370,090,257

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

(a) Market Value of Assets as of 12/31/2012	\$ 5,182,669,659
(b) Income (less investment income) for Prior Plan Year	289,237,144
(c) Disbursements Paid in Prior Year	785,502,940
(d) Market Value of Assets as of 12/31/2013	5,421,676,295
(e) Actual Return [(d) + (c) - (b) - (a)]	\$ 735,272,432

(3) Investment Gain/(Loss) for Prior Year

\$ 365,182,175

(4) Actuarial Value of Assets as of 12/31/2013

(a) Market Value of Assets as of 12/31/2013	\$ 5,421,676,295
(b) Deferred Investment Gains and (Losses) for Last 5 Years	

Plan Year	Gain/(Loss)	Weight for Timing	Deferred Amount
i) 2009	\$ 413,471,595	0.00%	\$ -
ii) 2010	240,039,034	20.00%	48,007,807
iii) 2011	(386,707,137)	40.00%	(154,682,855)
iv) 2012	203,329,666	60.00%	121,997,800
v) 2013	365,182,175	80.00%	292,145,740
vi) Total	\$ 835,315,333		\$ 307,468,492

(c) Actuarial Value of Assets [(a) - (b) (vi)]	\$ 5,114,207,803
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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 FISCAL YEAR ENDING DECEMBER 31, 2013

Active Participants ¹	Number at Beginning of Year²	New	Inactive to Active	Total Increases	Decreases	Number at End of Year
Males	12,701	1,127	65	1,192	1,271	12,622
Females	18,625	1,422	137	1,559	2,159	18,025
Active Total	31,326	2,549	202	2,751	3,430	30,647
Inactive Participants ²	Number at Beginning of Year	New	Active to Inactive	Total Increases	Decreases	Number at End of Year
Males	5,182	42	701	743	432	5,493
Females	8,283	48	1,182	1,230	752	8,761
Inactive Total	13,465	90	1,883	1,973	1,184	14,254
Total - Actives and Inactives	44,791					44,901

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

²Includes 16 active members reclassified as male, 11 active members reclassified as female and 3 inactive members reclassified as female.

EXHIBIT B
SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES
FOR FISCAL YEAR ENDING DECEMBER 31, 2013

Annuitants and Beneficiaries	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Employee Annuitants	19,614	1,242	743	20,113
Deferred Employee Annuitants	3	1	1	3
Surviving Spouse Annuitants	4,225	255	273	4,207
Reversionary Annuitants ¹	129	15	6	138
Child Annuitants	149	17	25	141
Annuitant Total	24,120	1,530	1,048	24,602
	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Actives Receiving Disability				
Ordinary Disability Beneficiaries	280	415	468	227
Duty Disability Beneficiaries	250	277	314	213
Disability Total	530	692	782	440
Total - Annuitants and Disabilities	24,650			25,042

¹Includes 123 reversionary annuitants that 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, 2013

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	15	4	-	-	-	-	-	-	-	-	19
	\$ 280,789	\$ 86,232	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 367,021
20-24	85	251	3	-	-	-	-	-	-	-	339
	\$ 2,478,909	\$ 6,903,920	\$ 63,094	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,445,923
25-29	175	612	178	13	-	-	-	-	-	-	978
	\$ 6,674,480	\$ 24,887,432	\$ 7,141,076	\$ 495,963	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,198,951
30-34	156	538	371	141	30	-	-	-	-	-	1,236
	\$ 7,324,846	\$ 27,485,141	\$ 19,014,585	\$ 8,015,812	\$ 2,008,384	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 63,848,768
35-39	116	403	345	280	133	15	-	-	-	-	1,292
	\$ 5,189,586	\$ 22,365,323	\$ 20,926,671	\$ 17,460,344	\$ 9,500,185	\$ 1,062,783	\$ -	\$ -	\$ -	\$ -	\$ 76,504,892
40-44	87	374	372	338	336	116	3	-	-	-	1,626
	\$ 3,607,650	\$ 20,806,855	\$ 24,242,247	\$ 22,594,768	\$ 24,368,747	\$ 8,828,169	\$ 221,250	\$ -	\$ -	\$ -	\$ 104,669,686
45-49	62	243	328	355	346	376	152	12	-	-	1,874
	\$ 2,869,998	\$ 14,430,945	\$ 20,324,497	\$ 23,914,668	\$ 25,975,596	\$ 29,941,856	\$ 11,810,489	\$ 978,471	\$ -	\$ -	\$ 130,246,520
50-54	45	207	331	326	363	385	339	112	2	-	2,110
	\$ 1,985,539	\$ 11,405,928	\$ 19,130,570	\$ 21,681,181	\$ 26,962,987	\$ 30,514,304	\$ 26,762,544	\$ 9,590,731	\$ 133,864	\$ -	\$ 148,167,648
55-59	43	130	212	280	267	343	274	145	21	-	1,715
	\$ 2,039,843	\$ 7,303,131	\$ 11,844,287	\$ 18,458,362	\$ 19,918,334	\$ 27,298,878	\$ 21,093,131	\$ 12,114,335	\$ 1,782,371	\$ -	\$ 121,852,672
60-64	10	73	142	163	158	174	161	72	22	-	975
	\$ 358,463	\$ 4,080,001	\$ 8,205,281	\$ 10,622,966	\$ 11,754,955	\$ 12,724,965	\$ 13,159,555	\$ 5,605,822	\$ 1,485,172	\$ -	\$ 67,997,180
65-69	7	20	47	55	49	54	47	19	14	-	312
	\$ 337,369	\$ 834,814	\$ 2,593,201	\$ 3,649,583	\$ 3,620,877	\$ 3,835,905	\$ 3,565,019	\$ 1,498,371	\$ 1,050,740	\$ -	\$ 20,985,879
70 & Over	1	5	27	34	19	28	15	9	8	-	146
	\$ 19,167	\$ 91,621	\$ 906,825	\$ 1,747,922	\$ 1,310,986	\$ 2,002,071	\$ 1,114,862	\$ 672,195	\$ 647,533	\$ -	\$ 8,513,182
w/o DOB	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	802	2,860	2,356	1,985	1,701	1,491	991	369	67		12,622
	\$ 33,166,639	\$ 140,681,343	\$ 134,392,334	\$ 128,641,569	\$ 125,421,051	\$ 116,208,931	\$ 77,726,850	\$ 30,459,925	\$ 5,099,680	\$ -	\$ 791,798,322

EXHIBIT C
PART II – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE FEMALE
PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2013

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	17	5	-	-	-	-	-	-	-	22
	\$ 413,205	\$ 111,550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 524,755
20-24	181	354	8	-	-	-	-	-	-	543
	\$ 5,112,478	\$ 9,578,199	\$ 236,911	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,927,588
25-29	224	802	214	29	-	-	-	-	-	1,269
	\$ 7,551,733	\$ 28,371,458	\$ 6,579,131	\$ 853,187	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,355,509
30-34	176	665	471	197	41	-	-	-	-	1,550
	\$ 6,723,088	\$ 28,569,948	\$ 20,029,493	\$ 8,525,916	\$ 2,203,966	\$ -	\$ -	\$ -	\$ -	\$ 66,052,411
35-39	134	497	485	424	151	26	-	-	-	1,717
	\$ 5,049,449	\$ 20,587,170	\$ 22,425,219	\$ 21,611,110	\$ 7,989,236	\$ 1,525,795	\$ -	\$ -	\$ -	\$ 79,187,979
40-44	109	444	496	581	416	207	15	-	-	2,268
	\$ 4,016,663	\$ 18,411,870	\$ 20,684,665	\$ 27,341,897	\$ 24,400,892	\$ 12,290,958	\$ 749,139	\$ -	\$ -	\$ 107,896,084
45-49	78	379	491	618	492	384	176	14	-	2,632
	\$ 2,687,655	\$ 13,916,590	\$ 18,269,387	\$ 26,180,983	\$ 27,113,429	\$ 22,561,326	\$ 12,023,371	\$ 1,047,435	\$ -	\$ 123,800,176
50-54	51	295	477	725	599	536	312	57	1	3,053
	\$ 1,785,227	\$ 10,442,052	\$ 17,152,973	\$ 27,835,428	\$ 28,129,956	\$ 29,304,255	\$ 20,211,016	\$ 3,839,184	\$ 88,812	\$ 138,788,903
55-59	46	204	385	624	512	505	299	73	17	2,665
	\$ 1,644,436	\$ 7,244,970	\$ 12,518,768	\$ 23,049,293	\$ 23,323,074	\$ 24,513,729	\$ 17,178,112	\$ 5,001,877	\$ 1,113,911	\$ 115,588,170
60-64	14	87	222	301	331	295	188	49	17	1,504
	\$ 374,569	\$ 3,541,573	\$ 7,175,378	\$ 10,478,459	\$ 15,736,984	\$ 14,769,203	\$ 9,884,522	\$ 2,593,596	\$ 1,056,976	\$ 65,611,260
65-69	4	29	92	97	106	108	64	31	22	553
	\$ 164,505	\$ 725,506	\$ 2,669,669	\$ 3,536,597	\$ 4,940,730	\$ 5,180,185	\$ 3,407,515	\$ 1,604,467	\$ 1,132,723	\$ 23,361,897
70 & Over	1	13	38	29	37	43	39	18	31	249
	\$ 109,971	\$ 404,875	\$ 997,106	\$ 816,614	\$ 1,570,283	\$ 1,649,744	\$ 1,802,439	\$ 805,847	\$ 1,238,776	\$ 9,395,655
w/o DOB	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	1,035	3,774	3,379	3,625	2,685	2,104	1,093	242	88	18,025
	\$ 35,632,979	\$ 141,905,761	\$ 128,738,700	\$ 150,229,484	\$ 135,408,550	\$ 111,795,195	\$ 65,256,114	\$ 14,892,406	\$ 4,631,198	\$ 788,490,387

EXHIBIT C
PART III – TOTAL LIVES AND ANNUAL SALARIES OF ALL ACTIVE
PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2013

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	32	9	-	-	-	-	-	-	-	-	41
	\$ 693,994	\$ 197,782	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 891,776
20-24	266	605	11	-	-	-	-	-	-	-	882
	\$ 7,591,387	\$ 16,482,119	\$ 300,005	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,373,511
25-29	399	1,414	392	42	-	-	-	-	-	-	2,247
	\$ 14,226,213	\$ 53,258,890	\$ 13,720,207	\$ 1,349,150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,554,460
30-34	332	1,203	842	338	71	-	-	-	-	-	2,786
	\$ 14,047,934	\$ 56,055,089	\$ 39,044,078	\$ 16,541,728	\$ 4,212,350	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,901,179
35-39	250	900	830	704	284	41	-	-	-	-	3,009
	\$ 10,239,035	\$ 42,952,493	\$ 43,351,890	\$ 39,071,454	\$ 17,489,421	\$ 2,588,578	\$ -	\$ -	\$ -	\$ -	\$ 155,692,871
40-44	196	818	868	919	752	323	18	-	-	-	3,894
	\$ 7,624,313	\$ 39,218,725	\$ 44,926,912	\$ 49,936,665	\$ 48,769,639	\$ 21,119,127	\$ 970,389	\$ -	\$ -	\$ -	\$ 212,565,770
45-49	140	622	819	973	838	760	328	26	-	-	4,506
	\$ 5,557,653	\$ 28,347,535	\$ 38,593,884	\$ 50,095,651	\$ 53,089,025	\$ 52,503,182	\$ 23,833,860	\$ 2,025,906	\$ -	\$ -	\$ 254,046,696
50-54	96	502	808	1,051	962	921	651	169	3	-	5,163
	\$ 3,770,766	\$ 21,847,980	\$ 36,283,543	\$ 49,516,609	\$ 55,092,943	\$ 59,818,559	\$ 46,973,560	\$ 13,429,915	\$ 222,676	\$ -	\$ 286,956,551
55-59	89	334	597	904	779	848	573	218	38	-	4,380
	\$ 3,684,279	\$ 14,548,101	\$ 24,363,055	\$ 41,507,655	\$ 43,241,408	\$ 51,812,607	\$ 38,271,243	\$ 17,116,212	\$ 2,896,282	\$ -	\$ 237,440,842
60-64	24	160	364	464	489	469	349	121	39	-	2,479
	\$ 733,032	\$ 7,621,574	\$ 15,380,659	\$ 21,101,425	\$ 27,491,939	\$ 27,494,168	\$ 23,044,077	\$ 8,199,418	\$ 2,542,148	\$ -	\$ 133,608,440
65-69	11	49	139	152	155	162	111	50	36	-	865
	\$ 501,874	\$ 1,560,320	\$ 5,262,870	\$ 7,186,180	\$ 8,561,607	\$ 9,016,090	\$ 6,972,534	\$ 3,102,838	\$ 2,183,463	\$ -	\$ 44,347,776
70 & Over	2	18	65	63	56	71	54	27	39	-	395
	\$ 129,138	\$ 496,496	\$ 1,903,931	\$ 2,564,536	\$ 2,881,269	\$ 3,651,815	\$ 2,917,301	\$ 1,478,042	\$ 1,886,309	\$ -	\$ 17,908,837
w/o DOB	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	1,837	6,634	5,735	5,610	4,386	3,595	2,084	611	155	30,647	
	\$ 68,799,618	\$ 282,587,104	\$ 263,131,034	\$ 278,871,053	\$ 260,829,601	\$ 228,004,126	\$ 142,982,964	\$ 45,352,331	\$ 9,730,878	\$ 1,580,288,709	

EXHIBIT C
PART IV – TOTAL LIVES AND ANNUAL SALARIES OF BOARD OF EDUCATION
PLAN MEMBERS CLASSIFIED BY AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2013

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	21	7	-	-	-	-	-	-	-	-	28
	\$ 576,546	\$ 171,782	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 748,328
20-24	203	512	7	-	-	-	-	-	-	-	722
	\$ 6,192,318	\$ 14,121,066	\$ 249,742	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,563,126
25-29	291	1,165	299	6	-	-	-	-	-	-	1,761
	\$ 9,807,386	\$ 41,469,977	\$ 10,702,861	\$ 220,538	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62,200,762
30-34	213	909	575	228	15	-	-	-	-	-	1,940
	\$ 8,381,986	\$ 37,916,258	\$ 23,750,400	\$ 10,838,570	\$ 1,183,734	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,070,948
35-39	157	638	455	374	68	6	-	-	-	-	1,698
	\$ 6,374,140	\$ 25,270,078	\$ 19,259,480	\$ 16,513,048	\$ 3,151,460	\$ 253,200	\$ -	\$ -	\$ -	\$ -	\$ 70,821,406
40-44	126	578	508	494	264	115	7	-	-	-	2,092
	\$ 4,353,930	\$ 22,556,536	\$ 20,472,209	\$ 19,746,613	\$ 12,580,564	\$ 5,672,590	\$ 305,684	\$ -	\$ -	\$ -	\$ 85,688,126
45-49	87	446	496	553	313	252	120	9	-	-	2,276
	\$ 3,107,925	\$ 16,522,834	\$ 18,125,255	\$ 20,194,260	\$ 14,188,466	\$ 12,840,776	\$ 7,589,168	\$ 631,274	\$ -	\$ -	\$ 93,199,958
50-54	59	344	488	628	439	392	220	45	-	-	2,615
	\$ 2,273,908	\$ 11,419,471	\$ 16,890,194	\$ 21,028,007	\$ 18,160,201	\$ 18,769,697	\$ 12,311,272	\$ 3,080,101	\$ -	\$ -	\$ 103,932,851
55-59	46	232	358	552	357	389	229	47	10	-	2,220
	\$ 1,723,891	\$ 8,070,380	\$ 11,230,124	\$ 18,803,040	\$ 14,380,973	\$ 17,710,142	\$ 11,399,095	\$ 3,140,419	\$ 833,097	\$ -	\$ 87,291,161
60-64	11	109	226	275	224	197	139	30	16	-	1,227
	\$ 291,692	\$ 4,460,134	\$ 7,144,629	\$ 9,034,006	\$ 9,044,670	\$ 8,766,733	\$ 6,385,515	\$ 1,583,633	\$ 962,272	\$ -	\$ 47,673,284
65-69	4	36	75	71	48	73	48	12	5	-	372
	\$ 131,999	\$ 966,090	\$ 1,994,691	\$ 2,658,130	\$ 1,782,910	\$ 3,064,435	\$ 2,186,363	\$ 516,701	\$ 242,409	\$ -	\$ 13,543,728
70 & Over	1	11	45	19	15	20	19	7	7	-	144
	\$ 109,971	\$ 324,509	\$ 969,034	\$ 535,357	\$ 472,517	\$ 706,638	\$ 656,459	\$ 257,307	\$ 359,910	\$ -	\$ 4,391,702
w/o DOB	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	1,219	4,987	3,532	3,200	1,743	1,444	782	150	38		17,095
	\$ 43,325,692	\$ 183,269,115	\$ 130,788,619	\$ 119,571,569	\$ 74,945,495	\$ 67,784,211	\$ 40,833,556	\$ 9,209,435	\$ 2,397,688	\$ -	\$ 672,125,380

EXHIBIT C
PART V – TOTAL LIVES AND ANNUAL SALARIES OF CITY PLAN MEMBERS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2013

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	10	2	-	-	-	-	-	-	-	12
	\$ 110,448	\$ 26,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 136,448
20-24	61	92	4	-	-	-	-	-	-	157
	\$ 1,384,019	\$ 2,349,825	\$ 50,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,784,107
25-29	108	247	92	36	-	-	-	-	-	483
	\$ 4,418,827	\$ 11,719,655	\$ 2,974,673	\$ 1,128,612	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,241,767
30-34	119	289	264	108	56	-	-	-	-	836
	\$ 5,665,948	\$ 17,932,423	\$ 15,125,914	\$ 5,513,106	\$ 3,028,616	\$ -	\$ -	\$ -	\$ -	\$ 47,266,007
35-39	93	261	375	329	213	35	-	-	-	1,306
	\$ 3,864,895	\$ 17,653,350	\$ 24,092,410	\$ 22,402,006	\$ 14,163,283	\$ 2,335,378	\$ -	\$ -	\$ -	\$ 84,511,322
40-44	70	240	359	424	483	207	11	-	-	1,794
	\$ 3,270,383	\$ 16,662,189	\$ 24,292,722	\$ 30,087,258	\$ 35,738,527	\$ 15,330,917	\$ 664,705	\$ -	\$ -	\$ 126,046,701
45-49	53	176	320	416	524	504	207	17	-	2,217
	\$ 2,449,728	\$ 11,824,701	\$ 20,130,892	\$ 29,434,348	\$ 38,822,938	\$ 39,230,034	\$ 16,186,076	\$ 1,394,632	\$ -	\$ 159,473,349
50-54	37	158	317	419	522	527	430	124	3	2,537
	\$ 1,496,858	\$ 10,428,509	\$ 19,244,795	\$ 28,125,282	\$ 36,854,142	\$ 40,837,125	\$ 34,591,278	\$ 10,349,814	\$ 222,676	\$ 182,150,479
55-59	43	102	239	348	421	458	343	169	28	2,151
	\$ 1,960,388	\$ 6,477,721	\$ 13,132,931	\$ 22,310,867	\$ 28,812,288	\$ 34,042,365	\$ 26,723,054	\$ 13,691,767	\$ 2,063,185	\$ 149,214,566
60-64	12	51	137	188	263	271	209	91	22	1,244
	\$ 431,890	\$ 3,161,440	\$ 8,198,276	\$ 12,020,159	\$ 18,246,440	\$ 18,657,662	\$ 16,516,597	\$ 6,615,785	\$ 1,505,537	\$ 85,353,786
65-69	7	13	64	81	106	89	63	38	30	491
	\$ 369,875	\$ 594,230	\$ 3,268,179	\$ 4,528,050	\$ 6,720,484	\$ 5,951,655	\$ 4,786,171	\$ 2,586,137	\$ 1,824,744	\$ 30,629,525
70 & Over	1	7	19	44	41	50	35	20	32	249
	\$ 19,167	\$ 171,987	\$ 793,361	\$ 2,029,179	\$ 2,408,752	\$ 2,880,144	\$ 2,260,842	\$ 1,220,735	\$ 1,526,399	\$ 13,310,566
w/o DOB	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	614	1,638	2,190	2,393	2,629	2,141	1,298	459	115	13,477
	\$ 25,442,426	\$ 99,002,030	\$ 131,304,416	\$ 157,578,867	\$ 184,795,470	\$ 159,265,280	\$ 101,728,723	\$ 35,858,870	\$ 7,142,541	\$ 902,118,623

EXHIBIT D
AGE AND SERVICE DISTRIBUTION FOR INACTIVES
AS OF DECEMBER 31, 2013

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	3	-	-	-	-	-	-	-	-	3
20-24	124	114	2	-	-	-	-	-	-	240
25-29	452	726	41	1	-	-	-	-	-	1,220
30-34	497	1,154	158	17	-	-	-	-	-	1,826
35-39	391	1,035	241	74	5	-	-	-	-	1,746
40-44	405	1,014	301	162	38	8	-	-	-	1,928
45-49	550	881	274	163	74	27	3	-	-	1,972
50-54	263	772	291	248	131	75	27	2	-	1,809
55-59	206	606	284	222	138	40	12	2	-	1,510
60-64	155	448	162	88	43	25	8	2	2	933
65-69	93	238	94	37	14	9	3	1	-	489
70 & Over	65	242	112	43	24	16	18	5	2	527
w/o DOB	29	17	5	-	-	-	-	-	-	51
Total	3,233	7,247	1,965	1,055	467	200	71	12	4	14,254
Average Age										46.06
Average Service										3.99

For inactives without a birth date on record, we assumed an average age of 46.1.

EXHIBIT E
STATISTICS ON EMPLOYEE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 50	1	\$ 27,456	6	\$ 71,568
50-54	153	9,240,492	114	5,432,904
55-59	800	42,640,512	700	27,312,000
60-64	1,383	67,677,348	1,805	56,017,464
65-69	1,425	63,798,312	2,266	64,399,344
70-74	1,346	57,010,176	2,261	60,791,184
75-79	1,124	46,025,724	2,027	52,079,088
80-84	852	35,228,916	1,396	34,621,608
85-89	585	24,118,548	949	21,220,008
90-94	230	8,508,468	499	10,632,828
95-99	52	1,560,804	126	2,344,380
100 & over	3	63,540	10	199,008
Totals	7,954	\$ 355,900,296	12,159	\$ 335,121,384

EXHIBIT F
PART I – STATISTICS ON SURVIVING SPOUSE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -
30-34	-	-	-	-
35-39	1	9,600	1	9,600
40-44	-	-	12	119,520
45-49	8	78,048	34	459,240
50-54	18	215,124	73	960,936
55-59	44	504,036	153	2,230,476
60-64	32	371,376	222	3,272,280
65-69	99	1,135,896	298	4,457,688
70-74	100	1,143,264	396	5,770,260
75-79	141	1,681,872	515	7,698,948
80-84	114	1,332,768	588	8,467,344
85-89	131	1,431,684	655	8,639,376
90-94	67	722,676	350	3,989,892
95-99	15	148,008	126	1,393,140
100 & over	1	9,600	13	129,012
Totals	771	\$ 8,783,952	3,436	\$ 47,597,712

EXHIBIT F
PART II - STATISTICS ON REVERSIONARY ANNUITANTS
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	1	\$ 2,616
30-34	-	-	1	1,092
35-39	-	-	1	2,784
40-44	-	-	3	4,896
45-49	-	-	1	696
50-54	1	744	1	4,368
55-59	1	18,864	7	53,472
60-64	-	-	6	29,808
65-69	1	3,216	1	3,552
70-74	1	4,440	8	49,116
75-79	-	-	16	102,792
80-84	-	-	23	124,980
85-89	-	-	37	151,476
90-94	-	-	16	65,244
95-99	-	-	11	34,824
100 & over	-	-	1	1,272
Totals	4	\$ 27,264	134	\$ 632,988

EXHIBIT G
PART I – HEALTH INSURANCE COVERAGE – ALL PLAN MEMBERS
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

<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	-	-	-	-	-	0.00%
40-49	1	1	2	5	7	28.57%
50-59	502	306	808	959	1,767	45.73%
60-69	1,824	903	2,727	4,152	6,879	39.64%
70-79	2,066	882	2,948	3,810	6,758	43.62%
80-89	1,430	509	1,939	1,843	3,782	51.27%
90 & Over	453	74	527	393	920	57.28%
Total	6,276	2,675	8,951	11,162	20,113	44.50%
Spouse Annuitants						
Under 30	-	-	-	-	-	0.00%
30-39	-	-	-	2	2	0.00%
40-49	6	2	8	46	54	14.81%
50-59	47	12	59	229	288	20.49%
60-69	185	5	190	461	651	29.19%
70-79	418	4	422	730	1,152	36.63%
80-89	705	2	707	781	1,488	47.51%
90 & Over	265	2	267	305	572	46.68%
Total	1,626	27	1,653	2,554	4,207	39.29%

EXHIBIT G
PART II – HEALTH INSURANCE COVERAGE – CITY PLAN MEMBERS
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

<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	-	-	-	-	-	0.00%
40-49	1	1	2	4	6	33.33%
50-59	490	303	793	445	1,238	64.05%
60-69	1,719	865	2,584	1,389	3,973	65.04%
70-79	1,756	831	2,587	861	3,448	75.03%
80-89	1,036	456	1,492	456	1,948	76.59%
90 & Over	278	59	337	115	452	74.56%
Total	5,280	2,515	7,795	3,270	11,065	70.45%
Spouse Annuitants						
Under 30	-	-	-	-	-	0.00%
30-39	-	-	-	-	-	0.00%
40-49	6	2	8	28	36	22.22%
50-59	47	12	59	122	181	32.60%
60-69	180	5	185	231	416	44.47%
70-79	401	4	405	309	714	56.72%
80-89	613	2	615	337	952	64.60%
90 & Over	213	1	214	166	380	56.32%
Total	1,460	26	1,486	1,193	2,679	55.47%

EXHIBIT G
PART III – HEALTH INSURANCE COVERAGE – BOARD OF EDUCATION
MEMBERS
CLASSIFIED BY AGE AS OF DECEMBER 31, 2013

Age	Single Coverage	Family Coverage	Total Covered	Total Not Covered	Total Annuitants	% Covered Annuitants
Employee Annuitants						
30-39	-	-	-	-	-	0.00%
40-49	-	-	-	1	1	0.00%
50-59	10	1	11	513	524	2.10%
60-69	103	36	139	2,762	2,901	4.79%
70-79	309	49	358	2,948	3,306	10.83%
80-89	393	53	446	1,387	1,833	24.33%
90 & Over	175	15	190	278	468	40.60%
Total	990	154	1,144	7,889	9,033	12.66%
Spouse Annuitants						
Under 30	-	-	-	-	-	0.00%
30-39	-	-	-	2	2	0.00%
40-49	-	-	-	18	18	0.00%
50-59	-	-	-	107	107	0.00%
60-69	4	-	4	230	234	1.71%
70-79	17	-	17	421	438	3.88%
80-89	90	-	90	444	534	16.85%
90 & Over	52	1	53	139	192	27.60%
Total	163	1	164	1,361	1,525	10.75%

EXHIBIT H
HISTORY OF ACTIVE PARTICIPATING MEMBER VALUATION DATA

Year Ended	Members in Service	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase	Actuarial Salary Assumption	CPI Chicago ¹
2004	33,267	(5.98)%	\$1,303,127,528	(6.62)%	\$39,172	(0.68)%	5.00 %	2.20 %
2005	33,743	1.43 %	1,407,323,058	8.00 %	41,707	6.47 %	4.50 %	3.59 %
2006	33,429	(0.93)%	1,475,877,378	4.87 %	44,150	5.86 %	4.50 %	0.71 %
2007	34,885	4.36 %	1,564,458,835	6.00 %	44,846	1.58 %	4.50 %	4.73 %
2008	32,563	(6.66)%	1,543,976,553	(1.31)%	47,415	5.73 %	4.50 %	(0.58)%
2009	31,586	(3.00)%	1,551,973,348	0.52 %	49,135	3.63 %	4.50 %	2.54 %
2010	30,726	(2.72)%	1,541,388,065	(0.68)%	50,166	2.10 %	4.50 %	1.23 %
2011	31,976	4.07 %	1,605,993,339	4.19 %	50,225	0.12 %	4.00 %	2.06 %
2012	31,326	(2.03)%	1,590,793,702	(0.95)%	50,782	1.11 %	4.00 %	1.68 %
2013	30,647	(2.17)%	1,580,288,709	(0.66)%	51,564	1.54 %	4.00 %	0.51 %
Average Increase (Decrease) for the Last five years		(1.21)%		0.47 %		1.69 %	4.20 %	1.60 %

¹ CPI-Chicago as of the valuation date.

EXHIBIT I
NEW ANNUITIES GRANTED DURING 2013

	Male Annuitants	Female Annuitants	Surviving Spouses of Deceased Employees	Surviving Spouses of Deceased Annuitants
Number Retired / Deceased ^{1,2,3,4,5}	456	774	33	219
Average Age Attained	62.2	63.4	58.6	76.6
Average Length of Service	24.6	23.0	17.7	N/A
Average Annual Salary (4 out of 10)	\$ 74,208	\$ 54,801	N/A	N/A
Total Annual Annuity	\$ 18,226,008	\$ 20,122,068	\$ 535,860	\$ 3,959,052
Average Annual Annuity	\$ 39,969	\$ 25,998	\$ 16,238	\$ 18,078
Total Actuarial Liability	\$ 254,187,157	\$ 276,474,650	\$ 5,722,951	\$ 29,195,018
Average Liability	\$ 557,428	\$ 357,202	\$ 173,423	\$ 133,311

¹Does not include nine employee annuitants and two widow annuitants no longer on annuity at the end of 2013. Also does not include 15 new reversionary annuitants.

²Includes one new deferred employee annuitant.

³Does not include two employee annuitants and one widow annuitant whose annuities were reinstated.

⁴Does not include one employee annuitant who had returned to work and then returned to employee annuitant status.

⁵Does not include one employee annuitant who was a deferred employee annuitant last year.

EXHIBIT J
NEW RECIPROCAL ANNUITIES GRANTED DURING 2013

	Reciprocal	
	Male Annuitants	Female Annuitants
Number Retired	64	72
Average Age Attained	62.1	62.4
Average Municipal Service	11.5	9.7
Average Total Service	24.7	24.8
Average Annual Salary Last Fund [4 out of 10]	\$ 86,933	\$ 82,291
Total Annual Annuity	\$ 1,496,616	\$ 1,348,284
Average Annual Annuity	\$ 23,385	\$ 18,726
Total Liability (7.5% RP2000)	\$ 21,177,113	\$ 19,082,564
Average Liability	\$ 330,892	\$ 265,036

EXHIBIT K
HISTORY OF AVERAGE PENSION BENEFIT PAYMENTS TO NEW RETIREES

Retirement Effective Dates	Years of Service						Total
	10-14	15-19	20-24	25-29	30 & Over		
2004	Average Monthly Benefit at Retirement	\$ 911	\$ 1,631	\$ 2,237	\$ 2,776	\$ 3,767	\$ 3,005
	Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A
	Number of Active Recipients	137	210	473	583	1,408	2,811
2005	Average Monthly Benefit at Retirement	\$ 1,067	\$ 1,250	\$ 1,578	\$ 2,177	\$ 3,269	\$ 2,394
	Average Final Average Salary	\$ 2,955	\$ 2,799	\$ 3,110	\$ 3,298	\$ 4,095	\$ 3,565
	Number of Active Recipients	56	54	51	65	219	445
2006	Average Monthly Benefit at Retirement	\$ 1,141	\$ 1,286	\$ 1,577	\$ 2,416	\$ 3,610	\$ 2,451
	Average Final Average Salary	\$ 3,471	\$ 2,927	\$ 3,076	\$ 3,716	\$ 4,555	\$ 3,804
	Number of Active Recipients	53	60	95	73	194	475
2007	Average Monthly Benefit at Retirement	\$ 1,198	\$ 1,381	\$ 2,029	\$ 2,658	\$ 3,919	\$ 2,800
	Average Final Average Salary	\$ 3,548	\$ 3,075	\$ 3,796	\$ 2,811	\$ 4,939	\$ 4,242
	Number of Active Recipients	54	69	94	70	229	516
2008	Average Monthly Benefit at Retirement	\$ 1,293	\$ 1,630	\$ 2,031	\$ 2,765	\$ 4,129	\$ 2,847
	Average Final Average Salary	\$ 3,980	\$ 3,565	\$ 3,981	\$ 4,199	\$ 5,285	\$ 4,491
	Number of Active Recipients	60	65	106	63	206	500
2009	Average Monthly Benefit at Retirement	\$ 1,407	\$ 1,790	\$ 2,275	\$ 3,255	\$ 4,082	\$ 2,969
	Average Final Average Salary	\$ 4,664	\$ 4,148	\$ 4,406	\$ 5,005	\$ 5,209	\$ 4,794
	Number of Active Recipients	57	75	153	92	231	608
2010	Average Monthly Benefit at Retirement	\$ 1,334	\$ 1,835	\$ 2,215	\$ 3,208	\$ 4,354	\$ 3,129
	Average Final Average Salary	\$ 4,418	\$ 4,311	\$ 4,278	\$ 4,945	\$ 5,590	\$ 4,933
	Number of Active Recipients	60	77	169	132	287	725
2011	Average Monthly Benefit at Retirement	\$ 1,350	\$ 1,981	\$ 2,432	\$ 3,459	\$ 4,696	\$ 3,361
	Average Final Average Salary	\$ 4,261	\$ 4,506	\$ 4,661	\$ 5,265	\$ 6,046	\$ 5,257
	Number of Active Recipients	66	88	193	185	311	843
2012	Average Monthly Benefit at Retirement	\$ 1,295	\$ 2,014	\$ 2,391	\$ 3,362	\$ 4,506	\$ 3,230
	Average Final Average Salary	\$ 4,400	\$ 4,893	\$ 4,533	\$ 5,094	\$ 5,737	\$ 5,125
	Number of Active Recipients	93	132	274	254	418	1,171
2013	Average Monthly Benefit at Retirement	\$ 1,304	\$ 1,998	\$ 2,348	\$ 3,259	\$ 4,446	\$ 3,065
	Average Final Average Salary	\$ 4,456	\$ 4,890	\$ 4,314	\$ 4,953	\$ 5,668	\$ 5,030
	Number of Active Recipients	104	106	204	216	290	920

*This schedule excludes reciprocal annuities, money purchase annuities and minimum annuities.
N/A – not available*

EXHIBIT L
HISTORY OF RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

Year Ended	Annuitants				Disability		Compensation	Reciprocal	
	Employee	Spouse	Child	Reversionary ²	Ordinary	Duty	Annuitants ¹	Employee	Spouse
2004	16,109	4,087	201		294	132	2	2,144	385
2005	16,027	4,094	204		304	158	2	2,194	373
2006	15,926	4,075	193		330	193	2	2,257	376
2007	15,899	4,042	178		304	209	2	2,299	368
2008	15,804	4,018	174		266	192	2	2,369	360
2009	15,838	4,008	167		306	220	2	2,407	356
2010	15,961	3,982	173		304	246	2	2,477	364
2011	16,230	3,910	164	129	346	264	2	2,583	364
2012	16,874	3,864	149	129	280	250	2	2,740	361
2013	17,320	3,844	141	138	227	213	2	2,793	363

¹ Compensation annuitants also included with spouse annuitants.

² Prior to December 31, 2011, reversionary annuitants were included with spouse annuitants.

EXHIBIT M
HISTORY OF AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Year Ended	Average Annual Benefit	Average Current Age of Retirees	Average Benefit at Retirement Current Year	Average Age at Retirement Current Year	Average Years Service at Retirement Current Year
2004	\$ 25,451	71.0	\$ 35,222	59.6	27.94
2005	26,178	71.8	22,753	63.5	24.44
2006	27,028	72.1	23,757	63.1	24.05
2007	27,960	72.4	26,910	63.1	24.60
2008	28,928	72.6	27,750	62.4	24.30
2009	29,960	72.8	29,843	62.9	23.90
2010	31,046	72.8	31,290	62.2	24.25
2011	32,269	72.7	34,513	62.1	24.86
2012	33,423	72.6	33,508	62.7	24.81
2013	34,357	72.6	31,177	63.0	23.55

EXHIBIT N
HISTORY OF ANNUITIES 2004-2013

Employee Annuitants (Male and Female)			
Year End	Number of Annuitants	Total Annuities	Average Annuities
2004	18,253	\$ 464,549,712	\$ 25,451
2005	18,221	476,988,948	26,178
2006	18,183	491,452,740	27,028
2007	18,198	508,815,996	27,960
2008	18,173	525,707,352	28,928
2009	18,245	546,628,095	29,960
2010	18,438	572,425,992	31,046
2011	18,813	607,077,636	32,269
2012	19,614	655,556,736	33,423
2013	20,113	691,021,680	34,357
Surviving Spouse and Reversionary Annuities			
Year End	Number of Annuitants	Total Annuities	Average Annuities
2004	4,472	\$ 49,294,488	\$ 11,023
2005	4,467	50,078,232	11,211
2006	4,451	50,672,592	11,385
2007	4,410	51,107,748	11,589
2008	4,378	51,954,588	11,867
2009	4,364	52,884,192	12,118
2010	4,346	53,920,752	12,407
2011	4,403	54,594,060	12,399
2012	4,354	55,544,340	12,757
2013	4,345	57,041,916	13,128

EXHIBIT O
HISTORY OF RETIREES AND BENEFICIARIES
ADDED TO PAYROLLS 2004-2013

Year	Added to Payroll		Removed from Payroll		Payroll End of Year		Average Annual Benefit	Increase in Average Benefit	
	No.	Ann. Benefits ¹	No.	Ann. Benefits	No.	Ann. Benefits			
Employee Annuitants (Male and Female)									
2004 ²	3,133	\$ 127,180,562	733	\$ 14,182,304	18,253	\$ 464,549,712	\$ 25,451	14.77%	
2005	698	27,479,544	730	15,040,308	18,221	476,988,948	26,178	2.86%	
2006	713	30,424,920	751	15,961,128	18,183	491,452,740	27,028	3.25%	
2007	769	34,450,704	754	17,087,448	18,198	508,815,996	27,960	3.45%	
2008	743	34,658,424	768	17,767,068	18,173	525,707,352	28,928	3.46%	
2009	840	39,821,463	768	18,900,720	18,245	546,628,095	29,960	3.57%	
2010	1,008	46,836,109	815	21,038,211	18,438	572,425,992	31,046	3.62%	
2011	1,149	55,405,692	774	20,754,048	18,813	607,077,636	32,269	3.94%	
2012	1,559	68,828,940	758	20,349,840	19,614	655,556,736	33,423	3.58%	
2013	1,242	57,147,576	743	21,682,632	20,113	691,021,680	34,357	2.79%	
Surviving Spouse and Reversionary Annuities (Not Including Compensation)									
2004	273	\$ 3,456,012	302	\$ 2,958,431	4,472	\$ 49,294,488	\$ 11,023	1.68%	
2005	255	3,408,036	260	2,624,292	4,467	50,078,232	11,211	1.70%	
2006	265	3,498,720	281	2,904,360	4,451	50,672,592	11,385	1.55%	
2007	247	3,464,400	288	3,029,244	4,410	51,107,748	11,589	1.79%	
2008	260	3,989,592	260	3,142,752	4,378	51,954,588	11,867	2.40%	
2009	266	3,869,064	280	2,939,460	4,364	52,884,192	12,118	2.12%	
2010	269	4,329,156	287	3,292,596	4,346	53,920,752	12,407	2.38%	
2011 ³	362	4,152,804	241	3,479,496	4,403	54,594,060	12,399	-0.06%	
2012	237	4,168,092	286	3,217,812	4,354	55,544,340	12,757	2.89%	
2013	270	4,593,708	279	3,096,132	4,345	57,041,916	13,128	2.91%	

¹Annual benefits added to payroll include post-retirement increase amounts starting in 2004.

²Early retirement incentive offered to employees.

³Number added in 2011 includes 121 reversionary annuitants that are also surviving spouses.

EXHIBIT P
SCHEDULE OF RETIRED MEMBERS
BY AMOUNT AND TYPE OF BENEFIT AS OF DECEMBER 31, 2013

Amount of Monthly Benefit	Number of Employee Annuitants	Number of Spouse Annuitants	Number of Reversionary Annuitants	Number of Child Annuitants	Total Number of Annuitants
Deferred	3	-	-	-	3
\$1-\$250	321	86	40	141	588
251 - 500	426	66	57	-	549
501 - 750	365	84	27	-	476
751 - 1,000	1,120	2,449	9	-	3,578
1,001 - 1,250	1,478	364	2	-	1,844
1,251 - 1,500	2,672	305	1	-	2,978
1,501 - 1,750	996	255	1	-	1,252
1,751 - 2,000	1,030	200	1	-	1,231
2,001 - 2,250	1,090	125	-	-	1,215
2,251 - 2,500	1,075	104	-	-	1,179
2,501 - 2,750	896	77	-	-	973
2,751 - 3,000	785	45	-	-	830
3,001 - 3,250	693	19	-	-	712
3,251 - 3,500	702	16	-	-	718
3,501 - 3,750	605	7	-	-	612
3,751 - 4,000	640	2	-	-	642
4,001 - 4,250	558	2	-	-	560
4,251 - 4,500	550	-	-	-	550
4,501 - 4,750	610	1	-	-	611
4,751 - 5,000	472	-	-	-	472
5,001 - 5,250	448	-	-	-	448
5,251 - 5,500	407	-	-	-	407
5,501 - 5,750	403	-	-	-	403
5,751 - 6,000	368	-	-	-	368
Over \$6,000	1,403	-	-	-	1,403
Totals	20,116	4,207	138	141	24,602

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013**

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013**

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 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.

Experience gains (losses) decrease (increase) the UAAL and thus are amortized as part of the UAAL.

CURRENT ACTUARIAL ASSUMPTIONS

Demographic Assumptions

Post-Retirement Mortality: RP2000 Mortality Table, sex distinct, projected to the year 2010. The mortality table used is a static table and provides an estimated margin of 9 percent for future mortality improvements. (Adopted 2010)

Pre-Retirement Mortality: Post-Retirement mortality with a multiplier of 0.85 for males and 0.70 for females. (Adopted 2010)

Disability: Disability cost valued as a term cost of 0.75 percent of payroll. (Adopted 2005)

RATE OF RETIREMENT – TIER 1 MEMBERS:

Service	Age and Service-Based Rates of Retirement							
	50 - 54	55 - 59	60 - 64	65-66	67	68-69	70-79	80+
10-11		0%	12%	30%	30%	15%	45%	100%
12-19		0%	10%	15%	10%	10%	45%	100%
20-24		6%	10%	15%	10%	10%	45%	100%
25-29		12%	12%	20%	20%	20%	45%	100%
30	25%	20%	20%	20%	20%	20%	45%	100%
31-32	20%	20%	20%	20%	20%	20%	45%	100%
33-34	30%	30%	30%	30%	30%	30%	45%	100%
35-39	30%	30%	30%	45%	45%	45%	45%	100%
40+	100%	100%	100%	100%	100%	100%	100%	100%

Rates of retirement adopted 2010.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

RATE OF RETIREMENT – TIER 2 MEMBERS:

Age-Based Rates of Retirement

<u>Age</u>	<u>Rate</u>
62	40.00%
63–69	20.00%
70–79	45.00%
80 +	100.00%

RATE OF TERMINATION:

<u>Service Beg. of Year</u>	<u>Rate</u>	<u>Service Beg. of Year</u>	<u>Rate</u>
0	15.00%	16	2.80%
1	15.00%	17	2.50%
2	12.00%	18	2.30%
3	9.00%	19	2.10%
4	8.00%	20	1.90%
5	7.00%	21	1.80%
6	6.50%	22	1.70%
7	5.25%	23	1.60%
8	5.00%	24	1.50%
9	4.75%	25	1.40%
10	4.25%	26	1.30%
11	4.00%	27	1.20%
12	4.00%	28	1.10%
13	3.60%	29	1.00%
14	3.30%	30	0.90%
15	3.00%		

Rates of termination adopted 2010.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

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. Pension investment return and discount rate adopted 2012 and OPEB discount rate adopted 2005.

Future Salary Increases: The following illustrative annual rates of salary increases were used:

<u>Service</u>	<u>Salary Scale</u>
1	8.25%
2	7.75%
3	7.25%
4-5	6.75%
6	6.50%
7	6.00%
8	5.50%
9	5.25%
10-25	5.00%
26+	4.50%

Adopted 2010.

Payroll Growth: Total payroll is assumed to increase by 4.00% each year. Adopted 2010.

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. Adopted 1999.

Other Assumptions

Actuarial Cost Method: Entry age normal cost method, under which the normal cost as a percentage of pay for each employee remains level from entry age to retirement, and the accrued liability represents the fund which would now be on hand if all past normal costs had actually been paid, and all current assumptions had been realized.

Amortization Method: Pension: 30-Year Level Dollar amortization of the unfunded liability.
OPEB: 3-Year Level Dollar amortization of the unfunded liability.

Marital Status: It is assumed that 85 percent of 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. Adopted 1999.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

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.
Reciprocal Service:	No assumption for reciprocal service.
Required Ultimate Multiple:	The actuarial requirements (adjusted for tax levy loss) less expected employee contributions divided by the actual employee contributions made in the second prior year.
Loss in Tax Levy:	4.00 percent overall loss on tax levy is assumed.
Group Health Insurance:	<p>Due to P. A. 98-0043 effective June 28, 2013, it is assumed for valuation purposes that the health insurance supplement in effect prior to June 30, 2013, will end on December 31, 2016, for all employee annuitants (and their future surviving spouses). The amount of the Plan 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.</p> <p>It is assumed that 50 percent of future retirees will elect to receive the health insurance supplement at retirement. (Adopted 2011)</p>

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2013 (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.

Normal Cost Plus
Amortization
Method:

GASB #25 and #43 require a maximum 30-year amortization of the unfunded liability. We have calculated the cost of amortizing the existing unfunded liability. The GASB #25 ARC is based on a 30-year amortization period. Because of P. A. 98-0043, the amortization factor used to calculate the fiscal year 2014 GASB #43 ARC was changed to a three year closed period.

Both of these cost methods, the normal cost plus interest method and the normal cost plus 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, 2013 (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 fully 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. The results are given in the following table:

Actuarial Assets with Various Amortization Methods	Required 2014 Tax Levy	Required Multiple	Unfunded Liability Will	Portion Applicable to Unfunded Liability
1. Normal Cost Plus Interest Only	N/A	5.83	Remain Constant	\$609,190,547
2. Normal Cost Plus 30-Year Level Dollar Amortization ^a	N/A	6.53	Decrease	\$696,003,584
3. Normal Cost Plus 30-Year Level % of Payroll ^b	N/A	4.52	Increase	\$459,940,048
4. Present Law	\$162,594,400	1.25		

^a Three-year closed-period level dollar amortization for postretirement healthcare benefits because benefits cease after 2016.

^b Three year closed-period level percent of payroll amortization for postretirement healthcare benefits because benefits cease after 2016.

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 PLAN AS
OF DECEMBER 31, 2013**

**SUMMARY OF PROVISIONS OF THE PLAN
AS OF DECEMBER 31, 2013**

PLAN DESCRIPTION

Any employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance or any person employed by the Municipal Employees' Annuity and Benefit Fund of Chicago (Plan) who is not participating in any other pension plan or retirement system is covered by the Plan which is a defined benefit single employer pension plan with a defined contribution 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, and Article 5/8) and may be amended only by the Illinois legislature. The City of Chicago accounts for the plan as a pension trust fund. The payroll for employees covered by the Municipal Plan for the year ended December 31, 2013, was \$1,580,288,709 and includes City of Chicago payroll and Board of Education payroll. At December 31, 2013, the Municipal Plan membership consisted of:

Retiree, surviving spouse and child annuitants currently receiving benefits	24,599
Terminated inactive employees entitled to benefits or a refund of contributions but not yet receiving them	14,254
Current employees (includes 440 disabilities)	
Vested	16,441
Non-vested	<u>14,206</u>
Total	30,647

The Municipal Plan 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 2.40 percent per year of service times the final average salary (highest average annual salary for any four 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 one percent for each month the employee is under age 60 if the employee has less than 25 years of service. The annuity is not reduced if the employee is age 50 with at least 30 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 withdraw from service 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 not 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 PROVISIONS OF THE PLAN
AS OF DECEMBER 31, 2013 (CONT'D)**

PLAN DESCRIPTION (CONT'D)

Covered employees are required to contribute 8.50 percent of their salary to the Municipal Plan. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest (3.00 percent or 4.00 percent depending on when an employee became a participant).

The City of Chicago is required by state statutes to contribute the remaining amounts necessary to finance the requirements of the Plan. 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 Plan made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 1.25 annually. The total amount of contributions by the employees shall not include contributions for service credit purchases under Section 8-138.4 for purposes of establishing the tax levy amount.

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 plan.

“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).

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

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013**

“Pension plan” or “Plan” means the Municipal Employees’ Annuity and Benefit Fund of Chicago established under Article 8 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.

MEMBERS

Persons appointed under civil service who are employed by the City and Board of Education of Chicago (other than teachers); persons employed by the Retirement Board; temporary and non-career service employees who have a total of at least one year of service and have four consecutive months of service immediately prior to filing written application with the Retirement Board; aldermen and other officials of the City and the Board of Education of Chicago who shall, while in office, file written application with the Retirement Board. Beginning January 1, 1984, temporary and non-career service employees will automatically be members. Aldermen and other officials of the City and the Board of Education of Chicago will still file written application with the Retirement Board. Current and former employees of the Chicago Housing Authority and the Public Building Commission who have service in the Plan or who reinstate service in this Plan, may elect to participate in this Plan with respect to their employment with the Chicago Housing Authority or the Public Building Commission under certain conditions.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

SERVICE

For all purposes except minimum annuity and ordinary disability credit, service in four months in any calendar year constitutes one year of service credit.

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 Ordinary Disability credit, the exact number of days, months and years is used.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (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 25 years of service.

The employee will receive a minimum annuity of \$850 per month if the employee withdraws 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, 2013 (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 for a spouse when added to the spouse's 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.

Reciprocal Annuity

Under reciprocal retirement, an employee can receive an annuity based on combined service credits in two or more governmental units in Illinois to whose pension funds he or she has contributed.

Automatic Increase in Annuity

An employee annuitant is entitled to receive an increase of 3.00 percent of the currently payable annuity. 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.*

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

Elected City Officer's Optional Plan

An alternative plan for elected officials of 3.00 percent of the Final Salary for the first eight years, 4.00 percent for the next four years and 5.00 percent thereafter, subject to the maximum 80 percent, is available. The elected official must contribute an additional 3.00 percent of salary to receive these benefits. This plan also includes alternative widow and disability benefit formulas. This plan became effective upon approval from the IRS on September 17, 1991.

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

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.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

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.

Child's Annuity

A child's annuity is provided for an unmarried child of a deceased employee who is under the age of 18, if the child was 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.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

DISABILITIES

Duty Disability Benefits

Any employee who becomes disabled as the result of an injury incurred in the performance of any act of duty has 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 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 benefits 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, 1981, while the employee is receiving duty disability benefits, are not refundable to the employee and will be used for annuity purposes only.

Ordinary Disability Benefits

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 provided the employee is not then in receipt of salary. Length of time on disability is limited to a maximum of 25 percent of the employee's total service or five years, whichever occurs first.

The Plan contributes salary deductions for annuity purposes for the ordinary disability benefit. Such amounts contributed by the Plan after December 31, 2000, while the employee is receiving ordinary disability benefits, are not refundable to the employee and will be used for annuity purposes only.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (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 beginning July 1, 2008, and until such time as the city no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first.

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 beginning July 1, 2008, and until such time as the city no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first.

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 accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.

To Estate

Amounts contributed by an employee, excluding the 0.50 percent deductions for annuity increase, that have not been paid out as annuity, are refundable to his or her estate, with interest either to the date of retirement or death, if the employee died in service.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

Refund in Lieu of Annuity

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

Spouses' Annuity Contributions

If unmarried at the time of retirement, the employee is entitled to a refund, with interest, of contributions made for the spouse's annuity.

Disability Deductions

The employee's pension deductions paid by the city while the employee is receiving duty disability benefits are no longer refunded to the employee if the duty disability was granted after December 31, 1981, or if the ordinary disability was granted after December 31, 2000. These deductions are now used only for annuity purposes.

DEDUCTIONS AND CONTRIBUTIONS

Covered employees are required to contribute 8.50 percent of their salary to the Plan.

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 Plan. The tax will produce an amount that does not exceed the amount of contributions by the employees to the Plan made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 1.25 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 8-138.4 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 and 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.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2013 (CONT'D)**

TAX SHELTER OF EMPLOYEE SALARY DEDUCTIONS

Beginning January 1, 1982, the City employee salary deductions were designated for income tax purposes as made by the employer. The W-2 salary is therefore reduced by the amount of contributions. For pension purposes gross wages remain 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. Beginning September 20, 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 20, 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. 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.

HISTORICAL INFORMATION

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013

1979 Session

SB 964

- Disability benefit for chronic alcoholism, pregnancy or childbirth.

HB 1023

- Reciprocal Act: changes proportionate pension credits under the "alternative formula."

HB 2012

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

1980 Session

HB 3635

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

Spring 1981 Session

SB 21

- Actuarial Reporting Standards.

SB 851

- Authorizes investments in conventional mortgage pass-through securities.

SB 879

- Financial statement required by Department of Insurance within six months and actuarial statement within nine months; \$100 penalty per day if late.

HB 212

- Eliminates refund of City contributions made while an employee is receiving duty disability benefits.

HB 213

- \$200 refund in lieu of annuity.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

HB 215

- Authorizes securities lending.

Spring 1982 Session

SB 1147

- Minimum reporting and actuarial information for 1984.

SB 1180

- Board of Education may incur an obligation to "pick up" employee contributions. These contributions may be paid by a special Pension Contribution Liability Tax. If levied, no payment is required until actual collection of the tax.

SB 1452

- Provides that an active member of the General Assembly who was employed by the City of Chicago by temporary appointment or in an exempt position, and could have elected to participate in the Plan but did not so elect, may establish credit for such service by making the required contribution.

SB 1579

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

HB 740

- Pension credit may be established for services rendered for a transportation system operated by a public utility prior to the establishment of the CTA.

HB 2286

- Allows persons who withdrew from service or became eligible for survivors' benefits in 1981 and who receive a monthly annuity between \$100 and \$200 to elect a refund in lieu of annuity.

Spring 1983 Session

SB22

- Delegation of investment authority restrictions.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

HB 380

- Maximum survivor annuity from \$400 to \$500; 10 percent increase in duty disability benefit January 1 of the sixth year.

HB 514

- 10.00 percent prudent person investment category.

HB 637

- Allows an active member of the General Assembly to establish credit in this plan for time for which he or she could have elected to participate with interest at 6.00 percent and to transfer credits to the Park Fund.

HB 1144

- Revises provision allowing a person who withdrew from service or began receiving a widow's annuity in 1981 to elect to receive a refund in lieu of annuity by extending the deadline for election by one year to March 1, 1984, and by raising the amount subject to refund to \$250 per month.
- 3.00 percent post-retirement annuity increase for those who qualify.
- Mandatory coverage for all employees in temporary positions.
- Reversionary annuity revisions – table of factors.
- Credit for Executive Director of Chicago Land Clearance Commission or Chicago Dwellings Association or for service as administrator of Illinois – Indiana Bi-State Commission – if certain contributions are made before April 1, 1984.

Federal Law and Regulation or Supreme Court Decision

- For an employee under the age of 70 who commences disability on or after attainment of age 60 in service, the ordinary disability benefit payments shall not exceed in the aggregate throughout the employee's service a period equal to 1.4 of the total service rendered prior to the date of the disability but no more than five years or age 70, whichever is earlier. The duty disability payments shall be payable for a period of five years or age 70, whichever occurs first.
- For 3.00 percent annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, widows' single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity, not depending upon sex).

1984 Session

- Illinois Public Employees' Pension Laws Commission abolished.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

1985 Session

HB 561

- 1.80, 2.00, 2.20, 2.40 percent benefit accrual rate for those born before January 1, 1936, and retiring after July 18, 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 after July 18, 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 (retroactive).

1986 Session

HB 2630

- Beginning for retirement or death in service on or after January 23, 1987, the spouse dollar cap is eliminated.
- Beginning for retirement on or after January 1, 1987, the first annuity increase will begin on the first annuity payment date following the first anniversary of retirement or age 60 if later.

1987 Session

HB 2715

- 1.80, 2.00, 2.20, 2.40 percent benefit accrual rates for those born on or after January 1, 1936, and retiring on or after January 1, 1988.
- Reduction in an 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- Minimum employee annuity of \$250 and minimum spouse of \$200 under certain conditions.
- Elimination of cap on maximum widow's annuity for spouses of certain retired employees with repayment of any "excess spouse" refund.
- Change amount of children's benefits to \$120 or \$150, effective January 1, 1988.
- Provides for certain "Good Government" initiatives.

1988 Session

- No legislative changes.

1989 Session

SB 95

- Signed August 23, 1989. Changed the amount of plan 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.

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.
- Allow for local labor officials on a leave of absence from the Plan to contribute for their service as a local labor official.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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 employee's 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.
- Disability benefit retroactive one year from application; duty disability deductions in lieu for heart attack or stroke.
- An alternative plan for elected officials of 3.00 percent of salary for the first eight years, 4.00 percent for the next four years and 5.00 percent thereafter, subject to a maximum of 80 percent, is available. The elected official must contribute an additional 3.00 percent of salary to receive these benefits. This plan also includes alternative widow and disability benefit formulas. This plan will become effective upon approval from the IRS.
- 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

1991 Session

HB 971

- Signed November 19, 1991. Eligibility for the alternative plan for elected officials was extended to persons who hold office as a City officer on April 30, 1991, until 30 days after the date the plan takes effect, notwithstanding the ending of his term of office prior to that effective date.

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 plan, five in a Reciprocal plan and up to five purchased under ERI).
 - Requires age 55 or older.
 - Requires an election form to be filed before June 1, 1993.
 - 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.

1993 Session

- No legislative changes.

1994 Session

- No legislative changes.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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 Members before 1996.
- The Plan 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 Members with benefits in excess of the Code Section 415 limits.
 - Early retirement reduction does not apply to certain survivor and disability benefits.
 - The definition of compensation now includes elective deferrals.
 - Taxation of distributions:
 - \$5,000 death benefit exclusion was repealed for deaths after August 20, 1996.
 - Five-year averaging for lump sum distributions was repealed effective January 1, 2000.
 - Annuity payments will be taxed according to a simplified general rule, which uses investment and age as of annuity starting date for annuities, which start on or after November 19, 1996.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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.

HB 313

- Approved June 27, 1997. For withdrawals from service occurring on or after June 27, 1997, an employee (or surviving 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 surviving spouse of a retiree 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 spouse's age under 55 at the time of employee's death.
- 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 Municipal 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 Municipal 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- 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 plan supplement remains \$45 and \$75 for Medicare eligible and non-Medicare eligible annuitants respectively.
- Spouses of employees dying in service after age 50 on or after June 27, 1997, 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.
- Spouses of employees dying after retirement on or after June 27, 1997, will be eligible to receive 50 percent of the employee's annuity at death. 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 surviving 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.
- Service paid under Section 8-230 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 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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 Municipal 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.
- 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 Municipal 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 1.25 for 1999 and beyond.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- Money deposited under 5/8-173(f) may be used by the plan for any of the purposes for which the proceeds of the tax levied by the city under this section may be used.
- An employee or former employee may pay and receive credit for all periods of full-time employment by the Public Building Commission as long as they are not receiving credit for the same service from another retirement system. Employee must pay employee and employer contributions based on the salary received from the Public Building Commission for employment. Repayment must be made before annuity begins.
- Annuitants may authorize a portion of their annuity to be withheld for payment of dues to the labor organization by which they were represented. A minimum of 25 annuitants must choose an organization for it to be included in this plan.

HB 1612

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

1999 Session

- No Changes.

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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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.
- 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 percent of final average salary for each year of service. The employee and the spouse must have been married for ten years.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- 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 Plan. These contributions are not refundable.
- The pension plan subsidy for retiree health insurance was extended through June 30, 2003. For annuitants (older than child annuitants) taking the employer-provided plan, the subsidy is \$75 per month if the annuitant is not eligible for Medicare, and \$45 per month if the annuitant is eligible for Medicare.
- Current and former Chicago Housing Authority employees who have service in this Plan or who reinstate service in this Plan may elect to participate in this Plan with respect to their employment with the Chicago Housing Authority under certain conditions. Contributions can be made for past service as well as current service.
- Current and former Public Building Commission employees who have service in this Plan or who reinstate service in this Plan may elect to participate in this Plan with respect to their employment with the Public Building Commission under certain conditions. Contributions can be made for past service as well as current service.
- An employee with 10 years of service in this Plan may establish service credit for up to seven years of full-time employment by the Illinois Housing Development Authority.
- The City Clerk and City Treasurer may elect to establish alternative credits in the Aldermanic Plan.
- Chicago aldermen may receive an annuity at age 55 with 10 years of service or age 60 with eight years of service.
- An alderman in service on June 1, 1995, can make payments for prior service up to 30 days after the effective date, even though he might be out of service or retired.
- A member of the Plan who has service in Police Fund may apply to Police to transfer his credits and service to Municipal under certain conditions. This must be done within 90 days of the effective date. Employee and employer contributions will be transferred.

2003 Session

SB 1701

- Effective July 1, 2003.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013

(CONT'D)

- The healthcare benefits were extended and 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 extended and 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 re-enter 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 ten 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- Allows Board members to continue until the end of their terms without forfeiting the benefits provided by the early retirement incentive.
- 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).
- 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.
- Municipality credits earned in this Fund shall be transferred to the Firemen's Annuity and Benefit Fund of Chicago with 11.00 percent interest compounded annually to the date of the transfer for former paramedics who are now covered under the Firemen's Annuity and Benefit Fund.
- 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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).

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.

HB 227

- Approved August 22, 2005.
- Provides a benefit to a spouse married to the employee after retirement under certain conditions.

2006 Session

- No Changes.

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. Makes changes in the severability provisions applicable to the amendatory Act.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

SB 1380

- Approved August 28, 2007.
- Amends the Illinois Municipal Retirement Fund (IMRF) and Chicago Municipal Articles of the Illinois Pension Code. Allows a sheriff's law enforcement employee under the IMRF Article to transfer service credit under the Chicago Municipal Article to the IMRF.

2008 Session

- No Changes.

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.

HB 2557

- 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- 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.
- 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 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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

SB 1705

- Approved August 25, 2009.
- Provides the Municipal fund will send city contributions to the Fire fund for a fireman who was employed by the Chicago Fire Department and participated in the Municipal fund, terminated that service, and received a refund, if the employee establishes the service under the Fire fund.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

- 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.
- 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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.
 - 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.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013 (CONT'D)

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 Municipal. 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 on current salary with the union.

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.

2013 Session

Public Act 98-0043 (HB 1584)

- Approved and effective June 28, 2013.

LEGISLATIVE CHANGES IN PLAN PROVISIONS 1979 THROUGH 2013
(CONT'D)

- Changes the duration of health insurance supplement payments to eligible employee annuitants to “Beginning July 1, 2008, and until such time as the city no longer provides a health care plan for such annuitants or December 31, 2016, whichever comes first.”

Public Act 98-0433 (HB 2620)

- Approved and effective August 16, 2013.
- Allows for an additional exception to the RFP process for obtaining investment services for “contracts for follow-on funds with the same fund sponsor through close-end funds.”

EXHIBIT Q

HISTORY OF RECOMMENDED EMPLOYER MULTIPLES AND TAXES LEVIED

Year of Report	Statutory Multiple	Normal Cost Plus Interest	Normal Cost Plus 30-Year Amortization ⁵	Normal Cost Plus 30-Year % of Salary Amortization ⁵	Tax Levy Year	City		Park	Total Tax Levy
1984	1.69	1.95	2.04	1.46	1984	\$ 71,736,000	\$ 54,000	\$ 71,790,000	
1985 ^{1,2}	1.69	1.98	2.08	1.48	1985	73,215,000	50,000	73,265,000	
1986 ^{1,2}	1.69	1.77	1.84	1.34	1986	81,059,000	45,000	81,104,000	
1987 ^{1,2}	1.69	1.83	1.90	1.40	1987	90,799,000	45,000	90,844,000	
1988	1.69	1.80	1.87	1.39	1988	97,051,000	39,000	97,090,000	
1989 ^{1,2}	1.69	1.44	1.49	1.08	1989	101,532,000	37,000	101,569,000	
1990 ^{1,2}	1.69	1.75	1.80	1.31	1990	107,000,000	30,000	107,030,000	
1991 ²	1.69	1.65	1.70	1.24	1991	114,530,000	26,000	114,556,000	
1992	1.69	1.70	1.75	1.29	1992	123,173,000	27,000	123,200,000	
1993 ²	1.69	1.90	1.96	1.44	1993	137,373,000	27,000	137,400,000	
1994	1.69	1.78	1.84	1.32	1994	139,618,000	24,000	139,642,000	
1995	1.69	1.81	1.87	1.38	1995	162,433,000	13,000	162,446,000	
1996	1.69	1.71	1.75	1.34	1996	156,985,000	5,700	156,990,700	
1997 ^{1,2,3}	1.69	1.16	1.19	0.92	1997	159,874,300	10,000	159,884,300	
1998 ^{1,2}	1.25	1.73	1.77	1.38	1998	159,083,000	5,900	159,088,900	
1999 ^{1,4}	1.25	0.87	0.89	0.68	1999	122,717,400	4,600	122,722,000	
2000	1.25	0.80	0.81	0.67	2000	142,421,600	2,400	142,424,000	
2001	1.25	0.80	0.82	0.65	2001	135,624,600	0	135,624,600	
2002 ²	1.25	1.32	1.35	0.97	2002	136,980,000	0	136,980,000	
2003 ²	1.25	1.51	1.56	1.08	2003	146,613,000	0	146,613,000	
2004 ²	1.25	2.16	2.23	1.50	2004	158,865,000	0	158,865,000	
2005 ¹	1.25	2.45	2.55	1.71	2005	159,780,300	0	159,780,300	
2006	1.25	2.78	3.02	2.12	2006	159,566,900	0	159,566,900	
2007	1.25	2.74	2.97	2.09	2007	152,183,300	0	152,183,300	
2008	1.25	3.06	3.33	2.31	2008	161,599,900	0	161,599,900	
2009	1.25	3.44	3.76	2.56	2009	163,672,100	0	163,672,100	
2010 ¹	1.25	4.51	4.92	3.48	2010	168,681,500	0	168,681,500	
2011 ¹	1.25	4.91	5.37	3.77	2011	161,296,200	0	161,296,200	
2012 ¹	1.25	5.79	6.41	4.45	2012	164,168,800	0	164,168,800	
2013 ²	1.25	5.83	6.53	4.52	2013	162,743,400	0	162,743,400	

¹Change in actuarial assumptions.

²Change in benefits.

³Change in asset valuation method to GASB.

⁴Change in actuary.

⁵40-year amortization for years prior to 2006. 30-year amortization for 2006 and after.

EXHIBIT R
ANNUAL REQUIRED CONTRIBUTIONS OF EMPLOYER
AND TREND INFORMATION

Year	Annual Required Contribution (ARC) of the Employer¹	Required Statutory Basis²	Actual³	Percent of ARC Contributed
2004	\$ 198,199,001	\$ 152,510,400	\$ 153,919,476	77.66%
2005	285,291,350	153,389,000	155,067,116	54.35%
2006	325,913,986	153,184,000	157,062,769	48.19%
2007	366,410,212	146,096,000	148,137,050	40.43%
2008	384,169,836	155,136,000	155,832,612	40.56%
2009	436,475,587	157,125,216	157,697,608	36.13%
2010	506,902,840	161,934,240	164,302,004	32.41%
2011	634,559,144	154,844,352	156,525,374	24.67%
2012	705,454,416	157,602,048	158,380,709	22.45%
2013	834,398,482	156,233,664	157,704,971	18.90%

¹ Under 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.

² Tax levy after 4.00 percent loss.

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

ARC and contributions include pension and OPEB.

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 Beginning of Year
2004	72.01%	189.19 %	11.03%
2005	68.46%	207.33 %	11.90%
2006	67.16%	215.68 %	11.16%
2007	67.64%	210.69 %	10.04%
2008	62.89%	254.95 %	9.96%
2009	56.95%	306.61 %	10.21%
2010	49.81%	392.43 %	10.59%
2011	44.57%	429.88 %	10.15%
2012	37.20%	538.36 %	9.86%
2013	36.91%	553.21 %	9.91%

Actuarial accrued liabilities and contributions include pension and OPEB.

50-YEAR PROJECTIONS

EXHIBIT S

50-YEAR PROJECTIONS

Municipal Employees' Annuity and Benefit Fund of Chicago
Actuarial Valuation Projection Results as of December 31, 2013 - PA 98-0043

Baseline (\$ in Thousands)																			
Year	Present Value of Benefits	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Funded Ratio	Capped Payroll	Annual Required Contribution	ARC as % of Pay ¹	Statutory Contribution (City Multiple)	Statutory Contribution (Additional)	Total Statutory Contribution	Statutory Contribution % of Pay ¹	Total Normal Cost	Total Employee Contribution	Applicable Employee Contribution	Benefits ²	Contribution Multiple	
2013	\$ 15,999,979	\$ 13,856,493	\$ 5,421,676	\$ 5,114,208	\$ 8,742,285	36.91%	\$ 1,580,289	\$ 834,398	52.80%	\$ 162,743	\$ -	\$ 162,743	10.30%	\$ 265,458	\$ 131,532	\$ 129,559	\$ 779,004	1.25	
2014	16,496,922	14,349,780	5,277,262	5,054,163	9,295,617	35.22%	1,632,032	848,864	52.01%	162,595	-	162,595	9.96%	253,748	136,985	134,930	817,504	1.25	
2015	16,989,463	14,839,369	5,083,153	4,896,415	9,942,954	33.00%	1,687,417	893,796	52.97%	163,986	-	163,986	9.72%	256,842	141,470	139,348	860,584	1.25	
2016	17,483,463	15,327,674	4,840,709	4,767,673	10,560,001	31.11%	1,744,031	947,020	54.30%	168,661	-	168,661	9.67%	260,612	146,271	144,077	902,223	1.25	
2017	17,991,369	15,825,754	4,556,587	4,556,587	11,269,167	28.79%	1,802,036	986,883	54.76%	174,185	-	174,185	9.67%	264,483	151,178	148,911	934,865	1.25	
2018	18,501,010	16,321,706	4,216,630	4,216,630	12,105,076	25.83%	1,861,175	1,043,847	56.09%	180,096	-	180,096	9.68%	268,339	156,207	153,863	978,626	1.25	
2019	19,010,087	16,812,419	3,813,863	3,813,863	12,998,556	22.68%	1,921,852	1,111,018	57.81%	186,138	-	186,138	9.69%	272,140	161,333	158,913	1,025,292	1.25	
2020	19,516,214	17,294,764	3,341,074	3,341,074	13,953,690	19.32%	1,983,423	1,182,723	59.63%	192,329	-	192,329	9.70%	275,901	166,593	164,094	1,074,637	1.25	
2021	20,013,644	17,764,813	2,790,792	2,790,792	14,974,021	15.71%	2,046,201	1,259,213	61.54%	198,641	-	198,641	9.71%	279,491	171,930	169,351	1,126,309	1.25	
2022	20,501,830	18,221,972	2,157,759	2,157,759	16,064,213	11.84%	2,110,066	1,341,002	63.55%	205,117	-	205,117	9.72%	283,150	177,372	174,711	1,177,700	1.25	
2023	20,978,308	18,663,225	1,433,805	1,433,805	17,229,420	7.68%	2,174,426	1,428,437	65.69%	211,688	-	211,688	9.74%	286,836	182,908	180,164	1,231,164	1.25	
2024	21,443,021	19,100,401	625,361	625,361	18,475,040	3.27%	2,240,158	1,521,837	67.93%	218,389	-	218,389	9.75%	290,401	188,487	185,659	1,272,016	1.25	
2025	21,893,843	19,520,031	-	-	19,520,031	0.00%	2,306,826	1,621,714	70.30%	225,205	267,286	492,491	21.35%	293,985	194,184	191,272	1,325,374	2.73	
2026	22,329,862	19,920,862	-	-	19,920,862	0.00%	2,374,965	1,705,133	71.80%	232,074	956,093	1,188,167	50.03%	297,596	199,963	196,964	1,378,586	6.40	
2027	22,748,515	20,301,655	-	-	20,301,655	0.00%	2,444,653	1,735,851	71.01%	239,090	996,579	1,235,669	50.55%	301,304	205,870	202,782	1,431,709	6.46	
2028	23,150,880	20,662,053	-	-	20,662,053	0.00%	2,515,980	1,764,956	70.15%	246,205	1,035,858	1,282,063	50.96%	305,165	211,911	208,732	1,483,849	6.51	
2029	23,534,333	21,000,200	-	-	21,000,200	0.00%	2,585,957	1,792,387	69.31%	253,477	1,075,177	1,328,655	51.38%	309,157	218,093	214,822	1,536,319	6.55	
2030	23,897,926	21,314,482	-	-	21,314,482	0.00%	2,658,008	1,817,787	68.39%	260,915	1,114,068	1,374,983	51.73%	312,833	224,159	220,797	1,588,401	6.59	
2031	24,242,247	21,605,340	-	-	21,605,340	0.00%	2,732,980	1,841,294	67.37%	268,528	1,150,722	1,419,249	51.93%	316,737	230,405	226,949	1,638,590	6.61	
2032	24,568,262	21,873,923	-	-	21,873,923	0.00%	2,810,754	1,863,021	66.28%	275,996	1,184,832	1,460,829	51.97%	321,017	236,904	233,350	1,686,337	6.62	
2033	24,876,518	22,121,835	-	-	22,121,835	0.00%	2,889,991	1,883,059	65.16%	283,686	1,215,445	1,499,131	51.87%	325,657	243,646	239,991	1,731,039	6.61	
2034	25,169,372	22,351,597	-	-	22,351,597	0.00%	2,971,666	1,901,524	63.99%	291,688	1,241,904	1,533,592	51.61%	330,533	250,514	246,756	1,772,016	6.57	
2035	25,449,201	22,565,830	-	-	22,565,830	0.00%	3,055,686	1,918,662	62.79%	299,989	1,264,370	1,564,358	51.19%	335,763	257,594	253,730	1,809,500	6.52	
2036	25,719,090	22,767,429	-	-	22,767,429	0.00%	3,141,961	1,934,724	61.58%	308,445	1,283,076	1,591,521	50.65%	341,377	264,877	260,904	1,843,572	6.45	
2037	25,981,889	22,959,361	-	-	22,959,361	0.00%	3,230,703	1,949,925	60.36%	317,163	1,297,943	1,615,105	49.99%	347,344	272,356	268,270	1,874,250	6.37	
2038	26,240,522	23,144,642	-	-	23,144,642	0.00%	3,322,127	1,964,491	59.13%	326,130	1,309,140	1,635,270	49.22%	353,667	280,048	275,847	1,901,711	6.27	
2039	26,498,632	23,326,807	-	-	23,326,807	0.00%	3,416,087	1,978,756	57.92%	335,338	1,316,570	1,651,908	48.36%	360,448	287,973	283,653	1,925,865	6.16	
2040	26,759,410	23,509,518	-	-	23,509,518	0.00%	3,512,899	1,992,926	56.73%	344,809	1,320,070	1,664,879	47.39%	367,594	296,118	291,676	1,946,561	6.04	
2041	27,026,300	23,697,441	-	-	23,697,441	0.00%	3,613,305	2,007,399	55.56%	354,567	1,318,866	1,673,433	46.31%	375,228	304,510	299,942	1,963,073	5.90	
2042	27,305,036	23,896,518	-	-	23,896,518	0.00%	3,716,826	2,022,704	54.42%	364,595	1,312,586	1,677,181	45.12%	383,552	313,213	308,515	1,975,079	5.75	
2043	27,600,839	24,112,064	-	-	24,112,064	0.00%	3,823,439	2,039,222	53.33%	374,928	1,302,116	1,677,044	43.86%	392,427	322,187	317,354	1,983,456	5.59	
2044	27,918,515	24,349,237	-	-	24,349,237	0.00%	3,933,323	2,057,370	52.31%	385,644	1,287,821	1,673,465	42.55%	401,832	331,428	326,457	1,988,646	5.42	
2045	28,263,643	24,613,213	-	-	24,613,213	0.00%	4,045,765	2,077,604	51.35%	396,693	1,270,366	1,667,059	41.21%	411,817	340,954	335,839	1,991,277	5.25	
2046	28,640,156	24,907,891	-	-	24,907,891	0.00%	4,160,643	2,100,288	50.48%	408,071	1,251,159	1,659,231	39.88%	422,264	350,700	345,440	1,992,694	5.08	
2047	29,052,152	25,236,574	-	-	25,236,574	0.00%	4,277,233	2,125,717	49.70%	419,799	1,231,201	1,651,000	38.60%	433,141	360,658	355,248	1,993,904	4.92	
2048	29,502,168	25,601,580	-	-	25,601,580	0.00%	4,395,699	2,154,135	49.01%	431,800	1,211,538	1,643,338	37.39%	444,361	370,765	365,203	1,995,816	4.76	
2049	29,992,096	26,004,496	-	-	26,004,496	0.00%	4,515,679	2,185,712	48.40%	444,061	1,193,052	1,637,112	36.25%	455,919	381,034	375,318	1,999,310	4.61	
2050	30,523,548	26,445,774	-	-	26,445,774	0.00%	4,636,930	2,220,513	47.89%	456,504	1,177,155	1,633,659	35.23%	467,724	391,434	385,563	2,005,692	4.47	
2051	31,095,752	26,925,142	-	-	26,925,142	0.00%	4,760,387	2,258,620	47.45%	469,148	1,164,149	1,633,296	34.31%	479,797	401,945	395,915	2,015,258	4.35	
2052	31,705,784	27,441,514	-	-	27,441,514	0.00%	4,882,574	2,299,998	47.11%	481,953	1,154,495	1,636,448	33.52%	492,205	412,646	406,457	2,028,512	4.24	
2053	32,351,352	27,993,369	-	-	27,993,369	0.00%	5,004,275	2,344,464	46.85%	494,894	1,148,673	1,643,567	32.84%	504,568	423,238	416,889	2,045,605	4.15	
2054	33,032,409	28,579,982	-	-	28,579,982	0.00%	5,125,439	2,391,867	46.67%	508,071	1,146,089	1,654,160	32.27%	516,924	433,787	427,280	2,066,111	4.07	
2055	33,746,925	29,199,541	-	-	29,199,541	0.00%	5,246,074	2,442,168	46.55%	521,111	1,147,884	1,668,996	31.81%	529,289	444,290	437,626	2,090,795	4.00	
2056	34,493,278	29,850,265	-	-	29,850,265	0.00%	5,366,345	2,495,214	46.50%	534,101	1,153,910	1,688,010	31.46%	541,659	454,747	447,926	2,119,592	3.95	
2057	35,269,742	30,530,475	-	-	30,530,475	0.00%	5,486,384	2,550,858	46.49%	547,032	1,163,893	1,710,925	31.18%	554,047	465,173	458,195	2,152,237	3.91	
2058	36,074,870	31,238,609	-	-	31,238,609	0.00%	5,606,193	2,608,961	46.54%	559,907	1,177,638	1,737,546	30.99%	566,460	475,578	468,444	2,188,548	3.88	
2059	36,907,040	31,973,111	-	-	31,973,111	0.00%	5,725,952	2,669,397	46.62%	572,744	1,194,965	1,767,709	30.87%	578,903	485,964	478,674	2,228,359	3.86	
2060	37,764,540	32,732,269	-	-	32,732,269	0.00%	5,845,720	2,732,035	46.74%	585,555	1,215,913	1,801,468	30.82%	591,386	496,345	488,899	2,271,740	3.85	
2061	38,645,674	33,514,472	-	-	33,514,472	0.00%	5,965,608	2,796,730	46.88%	598,343	1,240,236	1,838,579	30.82%	603,909	506,727	499,126	2,318,450	3.84	
2062	39,548,925	34,318,165	-	-	34,318,165	0.00%	6,085,703	2,863,347	47.05%	611,124	1,267,770	1,878,894	30.87%	616,479	517,119	509,362	2,368,352	3.84	

¹ Based on percent of capped pay.

² Excluded administrative expenses.

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 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 and City financial reports.

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

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

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

This exhibit shows a 10-year summary of annual pension cost, percentage of annual pension cost contributed that year and NPO at the end of the year.

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

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: Annual OPEB Cost and Contributions Made for GASB #45

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. 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]
2004	\$ 6,343,076,159	\$ 8,808,500,944	\$ 2,465,424,785	72.01%	\$ 1,303,127,528	189.19%
2005 ¹	6,332,378,676	9,250,211,817	2,917,833,141	68.46%	1,407,323,058	207.33%
2006 ²	6,509,145,626	9,476,118,446	2,966,972,820	68.69%	1,475,877,378	201.03%
2007	6,890,462,918	9,968,746,844	3,078,283,926	69.12%	1,564,458,835	196.76%
2008	6,669,501,770	10,383,157,695	3,713,655,925	64.23%	1,543,976,553	240.53%
2009	6,295,788,191	10,830,119,369	4,534,331,178	58.13%	1,551,973,348	292.17%
2010	6,003,389,605	11,828,665,658	5,825,276,053	50.75%	1,541,388,065	377.92%
2011	5,552,291,417	12,292,930,124	6,740,638,707	45.17%	1,605,993,339	419.72%
2012	5,073,320,275	13,475,376,963	8,402,056,688	37.65%	1,590,793,702	528.17%
2013	5,114,207,803	13,828,920,032	8,714,712,229	36.98%	1,580,288,709	551.46%

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

	2008	2009	2010	2011	2012	2013
1. Contribution Multiplier	1.25	1.25	1.25	1.25	1.25	1.25
2. Payroll (beginning of year)	\$ 1,564,458,835	\$ 1,543,976,553	\$ 1,551,973,348	\$ 1,541,388,065	\$ 1,605,993,339	\$ 1,590,793,702
3. City of Chicago Contribution, Net of Reserve for Loss in Tax Collection	\$ 146,803,250	\$ 148,046,490	\$ 154,752,320	\$ 147,009,321	\$ 148,858,655	\$ 148,196,884
4. City of Chicago Contribution as a Percent of Covered Payroll	9.38%	9.59%	9.97%	9.54%	9.27%	9.32%
5. Employee Contributions	\$ 137,748,907	\$ 130,980,605	\$ 133,299,542	\$ 132,596,417	\$ 130,266,293	\$ 131,532,173
6. Employee Contributions as a Percent of Covered Payroll	8.80%	8.48%	8.59%	8.60%	8.11%	8.27%
7. Current Year Normal Cost	\$ 223,760,036	\$ 220,838,788	\$ 221,696,647	\$ 237,451,437	\$ 243,538,511	\$ 260,928,789
8. Normal Cost as a Percent of Covered Payroll	14.30%	14.30%	14.28%	15.41%	15.16%	16.40%
9. Level Dollar Amortization of the Unfunded Liability	\$ 253,181,537	\$ 305,439,374	\$ 372,937,964	\$ 479,115,112	\$ 554,401,515	\$ 661,779,091
10. Level Dollar Amortization as a Percent of Covered Payroll	16.18%	19.78%	24.03%	31.08%	34.52%	41.60%
11. Interest Adjustment for Semi-Monthly Payment	\$ 19,383,708	\$ 21,388,830	\$ 24,166,951	\$ 29,122,470	\$ 32,429,625	\$ 35,210,107
12. Actuarially Determined Contribution (ADC) ¹ (NC + level dollar amort. + interest adjustment)	\$ 496,325,281	\$ 547,666,992	\$ 618,801,562	\$ 7,456,879,019	\$ 830,369,651	\$ 957,917,987
13. ADC as a Percent of Covered Payroll	31.73%	35.47%	39.87%	48.38%	51.70%	60.22%
14. Annual Required Contribution (ARC) ¹ (ADC - estimated employee contributions)	\$ 360,387,176	\$ 413,508,622	\$ 483,948,339	\$ 611,755,567	\$ 690,822,553	\$ 820,022,689
15. ARC as a Percent of Covered Payroll	23.04%	26.78%	31.18%	39.69%	43.02%	51.55%

¹ ADC 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 2013, City contributions to fund pension benefits totaled \$148,196,884 or 9.32 percent of beginning of year payroll. In addition, employee contributions were \$131,532,173, or 8.27 percent of beginning of year payroll. The Annual Required Contribution (ARC) was equal to \$820,022,689; therefore, there was a deficit of contributions of \$671,825,805 or 42.23 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, 2013
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 ^a	7.50 percent per year
Projected Base Salary Increases ^a	4.00 percent per year
^a Includes Inflation at:	3.00 percent per year
Post Retirement Benefit Increases	3.00 percent 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>2012 ¹</u>	<u>2013 ¹</u>
Payable to Retirees and Beneficiaries	\$ 7,544,657,062	\$ 7,915,272,293
Current Employees:		
Accumulated Employee Contributions Including Statutory Interest	1,724,021,890	1,763,193,047
Payable to Vested and Non-Vested Employees (not split)	4,206,698,011	4,150,454,692
Total Actuarial Accrued Liability	\$ 13,475,376,963	\$ 13,828,920,032
Net Plan Actuarial Assets	5,073,320,275	5,114,207,803
Unfunded AAL (assets in excess of AAL)	\$ 8,402,056,688	\$ 8,714,712,229
Percent Funded	37.65%	36.98%
Unfunded AAL as Percent of Payroll	528.17%	551.46%
Payroll	\$ 1,590,793,702	\$ 1,580,288,709

¹ Excludes liability for health insurance supplement.

EXHIBIT A-5
HISTORY OF ANNUAL PENSION COST AND CONTRIBUTIONS
MADE FOR GASB #27 FROM 2009 – 2013

Year Ending December 31:	2009	2010	2011	2012	2013
Contribution Rates					
Plan Members:	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	1.25	1.25	1.25	1.25	1.25
Annual Pension Cost					
Annual Required Contribution (ARC)	\$ 413,508,622	\$ 483,948,339	\$ 611,755,567	\$ 690,822,553	\$ 820,022,689
Interest on NPO	33,216,561	54,378,874	80,592,332	117,590,890	150,640,971
Adjustment to ARC	(34,149,790)	(55,906,664)	(82,856,597)	(120,894,641)	(158,201,019)
Annual Pension Cost	\$ 412,575,393	\$ 482,420,549	\$ 609,491,302	\$ 687,518,802	\$ 812,462,641
Employer Contributions	\$ 148,046,490	\$ 154,752,320	\$ 147,009,321	\$ 148,858,655	\$ 148,196,884
Net Pension Obligations (NPO)					
NPO at Beginning of Year	\$ 415,207,017	\$ 679,735,920	\$ 1,007,404,149	\$ 1,469,886,130	\$ 2,008,546,277
Increase/(Decrease) in NPO	264,528,903	327,668,229	462,481,981	538,660,147	664,265,757
NPO at End of Year	\$ 679,735,920	\$ 1,007,404,149	\$ 1,469,886,130	\$ 2,008,546,277	\$ 2,672,812,034

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

EXHIBIT A-5 (CONT'D)
HISTORY OF ANNUAL PENSION COST AND CONTRIBUTIONS
MADE FOR GASB #27 FROM 2003 - 2008

Year Ending December 31:	2003	2004	2005	2006	2007	2008
Contribution Rates						
Plan Members:	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	1.25	1.25	1.25	1.25	1.25	1.25
Annual Pension Cost						
Annual Required Contribution (ARC)	\$ 158,614,805	\$ 198,199,001	\$ 285,291,350	\$ 325,913,986	\$ 343,123,106	\$ 360,387,176
Interest on NPO	(28,702,083)	(27,431,029)	(23,953,176)	(13,591,568)	(115,434)	16,166,183
Adjustment to ARC	27,858,348	26,624,658	23,249,042	13,192,027	118,677	(16,620,376)
Annual Pension Cost	\$ 157,771,070	\$ 197,392,630	\$ 284,587,216	\$ 325,514,445	\$ 343,126,349	\$ 359,932,983
Employer Contributions	\$ 141,882,893	\$ 153,919,476	\$ 155,067,116	\$ 157,062,769	\$ 139,606,140	\$ 146,803,250
Net Pension Obligations (NPO)						
NPO at Beginning of Year	\$ (358,776,033)	\$ (342,887,856)	\$ (299,414,701)	\$ (169,894,601)	\$ (1,442,925)	\$ 202,077,284
Increase/(Decrease) in NPO	15,888,177	43,473,155	129,520,100	168,451,676	203,520,209	213,129,733
NPO at End of Year	\$ (342,887,856)	\$ (299,414,701)	\$ (169,894,601)	\$ (1,442,925)	\$ 202,077,284	\$ 415,207,017

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

EXHIBIT A-5 (CONT'D)
HISTORY OF ANNUAL PENSION COST AND CONTRIBUTIONS
MADE FOR GASB #27 FROM 1997 - 2002

Year Ending December 31:	1997	1998	1999	2000	2001	2002
Contribution Rates						
Plan Members:	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:	1.69	1.25	1.25	1.25	1.25	1.25
Annual Pension Cost						
Annual Required Contribution (ARC)	\$ 100,278,969	\$ 108,174,346	\$ 157,514,076	\$ 93,016,467	\$ 83,526,133	\$ 92,711,870
Interest on NPO	(11,923,863)	(16,832,011)	(20,863,197)	(18,001,235)	(21,697,440)	(25,581,562)
Adjustment to ARC	12,024,406	16,832,011	20,249,897	18,954,128	21,059,616	24,829,559
Annual Pension Cost	\$ 100,379,512	\$ 108,174,346	\$ 156,900,776	\$ 93,969,360	\$ 82,888,309	\$ 91,959,867
Employer Contributions	\$ 156,832,216	\$ 158,564,165	\$ 121,126,249	\$ 140,171,920	\$ 131,439,834	\$ 130,966,381
Net Pension Obligations (NPO)						
NPO at Beginning of Year	\$ (149,048,289)	\$ (210,400,142)	\$ (260,789,961)	\$ (225,015,434)	\$ (271,217,994)	\$ (319,769,519)
Increase/(Decrease) in NPO	(61,351,853)	(50,389,819)	35,774,527	(46,202,560)	(48,551,525)	(39,006,514)
NPO at End of Year	\$ (210,400,142)	\$ (260,789,961)	\$ (225,015,434)	\$ (271,217,994)	\$ (319,769,519)	\$ (358,776,033)

EXHIBIT A-6
PENSION COST SUMMARY FOR GASB #27

Year Ended December 31	Annual Pension Cost	% of Annual Pension Cost Contributed	Net Pension Obligation
2004	\$ 197,392,630	77.98%	\$ (299,414,701)
2005	284,587,216	54.49%	(169,894,601)
2006	325,514,445	48.25%	(1,442,925)
2007	343,126,349	40.69%	202,077,284
2008	359,932,983	40.79%	415,207,017
2009	412,575,393	35.88%	679,735,920
2010	482,420,549	32.08%	1,007,404,149
2011	609,491,302	24.12%	1,469,886,130
2012	687,518,802	21.65%	2,008,546,277
2013	812,462,641	18.24%	2,672,812,034

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	\$ 88,977,737	\$ 97,968,692	\$ 102,508,633	\$ 97,096,679	\$ 112,142,424	\$ 118,648,314	\$ 127,216,909	\$ 128,073,255	\$ 130,280,273	\$ 139,953,559
40 Year Amortization	64,525,862	63,861,328	64,292,258	55,269,863	76,643,717	73,815,385	73,466,733	77,661,767	88,576,205	75,832,286
Total ADC	\$ 153,503,599	\$ 161,830,020	\$ 166,800,891	\$ 152,366,542	\$ 188,786,141	\$ 192,463,699	\$ 200,683,642	\$ 205,735,022	\$ 218,856,478	\$ 215,785,845
Interest on NPO	-	439,828	855,310	947,637	(946,630)	(1,271,063)	(2,131,133)	(5,214,560)	(6,759,558)	(9,388,909)
Adjustment to ADC	-	(448,998)	(862,522)	(955,628)	954,612	1,281,780	2,149,103	5,258,530	6,816,555	9,468,078
Annual Pension Cost	\$ 153,503,599	\$ 161,820,849	\$ 166,793,679	\$ 152,358,552	\$ 188,794,123	\$ 192,474,417	\$ 200,701,611	\$ 205,778,991	\$ 218,913,475	\$ 215,865,014
Contributions for Year										
Employer Contributions	\$ 86,928,550	\$ 92,913,800	\$ 97,196,000	\$ 102,422,150	\$ 110,807,484	\$ 119,851,582	\$ 133,957,499	\$ 137,076,271	\$ 159,275,835	\$ 152,556,327
Employee Contributions	60,710,680	64,080,041	68,443,590	73,614,748	82,042,041	83,373,713	105,286,953	88,015,188	92,504,531	94,995,616
Total Contributions	\$ 147,639,230	\$ 156,993,841	\$ 165,639,590	\$ 176,036,898	\$ 192,849,525	\$ 203,225,295	\$ 239,244,452	\$ 225,091,459	\$ 251,780,366	\$ 247,551,943
Net Pension Obligations (NPO)										
NPO at Beginning of Year	\$ -	\$ 5,864,369	\$ 10,691,377	\$ 11,845,466	\$ (11,832,880)	\$ (15,888,282)	\$ (26,639,160)	\$ (65,182,001)	\$ (84,494,469)	\$ (117,361,360)
Annual Pension Cost	153,503,599	161,820,849	166,793,679	152,358,552	188,794,123	192,474,417	200,701,611	205,778,991	218,913,475	215,865,014
Total Contributions	(147,639,230)	(156,993,841)	(165,639,590)	(176,036,898)	(192,849,525)	(203,225,295)	(239,244,452)	(225,091,459)	(251,780,366)	(247,551,943)
NPO at End of Year	\$ 5,864,369	\$ 10,691,377	\$ 11,845,466	\$ (11,832,880)	\$ (15,888,282)	\$ (26,639,160)	\$ (65,182,001)	\$ (84,494,469)	\$ (117,361,360)	\$ (149,048,289)

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]
2006	\$ -	\$ 216,201,037	\$ 216,201,037	0.00%	\$ 1,475,877,378	14.65%
2007	-	217,868,343	217,868,343	0.00%	1,564,458,835	13.93%
2008	-	222,691,036	222,691,036	0.00%	1,543,976,553	14.42%
2009	-	224,173,231	224,173,231	0.00%	1,551,973,348	14.44%
2010	-	223,564,218	223,564,218	0.00%	1,541,388,065	14.50%
2011	-	163,241,898	163,241,898	0.00%	1,605,993,339	10.16%
2012	-	162,083,083	162,083,083	0.00%	1,590,793,702	10.19%
2013 ¹	-	27,573,334	27,573,334	0.00%	1,580,288,709	1.74%

¹ Entry age actuarial accrued liability for fiscal year 2013 was determined based on the provisions of P. A. 98-0043.

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

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
1. Payroll (beginning of year)	\$1,564,458,835	\$1,543,976,553	\$1,551,973,348	\$1,541,388,065	\$1,605,993,339	\$1,590,793,702
2. Current Year Normal Cost	10,446,202	9,365,607	9,266,349	9,154,612	4,711,272	4,529,064
3. Normal Cost as a Percent of Covered Payroll	0.67%	0.61%	0.60%	0.59%	0.29%	0.28%
4. 30-Year Level Dollar Amortization of the Unfunded Liability	12,799,305	13,082,628	13,169,704	13,133,926	9,590,117	9,522,039
5. 30-Year Level Dollar Amortization as a Percent of Covered Payroll	0.82%	0.85%	0.85%	0.85%	0.60%	0.60%
6. Interest Adjustment for Semi-Monthly Payment	537,153	518,730	518,448	515,039	330,474	324,690
7. Actuarially Determined Contribution (ADC) (NC + 30-year level dollar + interest adjustment)	23,782,660	22,966,965	22,954,501	22,803,577	14,631,863	14,375,793
8. ADC as a Percent of Covered Payroll	1.52%	1.49%	1.48%	1.48%	0.91%	0.90%
9. Annual Required Contribution (ARC) (ADC - estimated employee contributions)	23,782,660	22,966,965	22,954,501	22,803,577	14,631,863	14,375,793
10. ARC as a Percent of Covered Payroll	1.52%	1.49%	1.48%	1.48%	0.91%	0.90%
11. City of Chicago Contribution	9,029,362	9,651,118	9,549,684	9,516,053	9,522,054	9,508,087
12. City of Chicago Contribution as a Percent of Covered Payroll	0.58%	0.63%	0.62%	0.62%	0.59%	0.60%
13. Percentage of ARC Contributed	37.97%	42.02%	41.60%	41.73%	65.08%	66.14%

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	2013
Annual OPEB Cost							
Annual Required Contribution (ARC)	\$ 23,287,106	\$ 23,782,660	\$ 22,966,965	\$ 22,954,501	\$ 22,803,577	\$ 14,631,863	\$ 14,375,793
Interest on NOO	-	664,029	1,318,798	1,899,881	2,476,978	3,040,863	3,228,999
Adjustment to ARC	-	(866,895)	(1,721,702)	(2,480,311)	(3,233,716)	(3,969,873)	(4,215,487)
Annual OPEB Cost	\$ 23,287,106	\$ 23,579,794	\$ 22,564,061	\$ 22,374,071	\$ 22,046,839	\$ 13,702,853	\$ 13,389,305
Employer Contributions	\$ 8,530,910	\$ 9,029,362	\$ 9,651,118	\$ 9,549,684	\$ 9,516,053	\$ 9,522,054	\$ 9,508,087
Net OPEB Obligations (NOO)							
NOO at Beginning of Year	\$ -	\$ 14,756,196	\$ 29,306,628	\$ 42,219,571	\$ 55,043,958	\$ 67,574,744	\$ 71,755,543
Increase/(Decrease) in NOO	14,756,196	14,550,432	12,912,943	12,824,387	12,530,786	4,180,799	3,881,218
NOO at End of Year	\$ 14,756,196	\$ 29,306,628	\$ 42,219,571	\$ 55,043,958	\$ 67,574,744	\$ 71,755,543	\$ 75,636,761

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	\$ 23,287,106	36.63%	\$ 14,756,196
2008	23,579,794	38.29%	29,306,628
2009	22,564,061	42.77%	42,219,571
2010	22,374,071	42.68%	55,043,958
2011	22,046,839	43.16%	67,574,744
2012	13,702,853	69.49%	71,755,543
2013	13,389,305	71.01%	75,636,761

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

Valuation Date	December 31, 2013
Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	No Assets (Pay-as-you-go)
Amortization Method	Level dollar
Remaining Amortization Period	30 year open-period before January 1, 2014, and 3 years closed-period after December 31, 2013
Actuarial Assumptions:	
OPEB Investment Rate of Return ^a	4.50 percent per year
Projected Base Salary Increases ^a	4.00 percent per year
^a Includes Inflation at:	3.00 percent per year
Healthcare Cost Trend Rate	0.00 percent ¹

Actuarial Accrued Liability (AAL)

	December 31, 2012 ²	December 31, 2013 ^{2,3}
Payable to Retirees and Beneficiaries	\$ 88,388,157	\$ 23,578,656
Current Employees:		
Accumulated Employee Contributions		
Including Statutory Interest	-	-
Payable to Vested and Non-Vested		
Employees (not split)	73,694,926	3,994,678
Total Actuarial Accrued Liability	\$ 162,083,083	\$ 27,573,334
Net Plan Actuarial Assets	-	-
Unfunded AAL (assets in excess of AAL)	\$ 162,083,083	\$ 27,573,334
Percent Funded	0.00 %	0.00 %
Unfunded AAL as Percent of Payroll	10.19 %	1.74 %
Payroll	\$ 1,590,793,702	\$ 1,580,288,709

¹ Trend not applicable - Fixed dollar subsidy.

² Actuarial Accrued Liability for OPEB.

³ Actuarial Accrued Liability was determined based on the provisions of P. A. 98-0043.