

**LABORERS' AND RETIREMENT BOARD EMPLOYEES'
ANNUITY AND BENEFIT FUND OF CHICAGO**
ACTUARIAL VALUATION REPORT
FOR THE YEAR ENDING DECEMBER 31, 2014
APRIL 2015

April 7, 2015

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

Subject: Actuarial Certification

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2014. An actuarial valuation of the Fund is performed annually. The valuation has been performed to measure the funding status of the Fund. It includes disclosure information required under Governmental Accounting Standards Board (GASB) Statement No. 27, Statement No. 43 and Statement No. 45. The assumptions and methods used were recommended by the actuary and approved by the Board. The assumptions and methods meet the parameters set for the disclosure presented in the financial section by GASB Statement No. 27, GASB Statement No. 43 and GASB Statement No. 45. Disclosure information required under GASB Statement No. 67 will be provided in a separate report.

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

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

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

- Schedule of Funding Progress
- Schedule of Employer Contributions

This valuation is based upon:

- a. **Data Relative to the Members of the Fund** – Data utilized for active members and persons receiving benefits from the Fund was provided by the Fund's staff. We have tested this data for reasonableness; however, we have not audited the data.
- b. **Asset Values** – The values of assets of the Fund were provided by the Fund's staff. An actuarial value of assets was used to develop actuarial results for GASB Statement No. 27.

- c. **Actuarial Method** – The actuarial method utilized by the Fund is the Entry-Age Normal Actuarial Cost Method. The objective of this method is to recognize the costs of Fund benefits over the entire career of each member as a level percentage of compensation. Any Unfunded Actuarial Accrued Liability (UAAL) under this method is separately amortized. All actuarial gains and losses under this method are reflected in the UAAL.
- d. **Actuarial Assumptions** – The same actuarial assumptions as last year were used for this valuation. The current actuarial assumptions were first adopted for use with the December 31, 2012, valuation report.
- e. **Plan Provision** – The valuation is based on provisions in effect as of December 31, 2014.

The funding objective is to provide employer and employee contributions sufficient to provide the benefits of the Fund when due. Pursuant to Public Act 98-0641, effective June 9, 2014, the funding policy was amended to increase the employer contribution multiple to 1.60 in tax levy year 2015, 1.90 in tax levy year 2016, 2.20 in tax levy year 2017, 2.50 in tax levy year 2018 and 2.80 in tax levy year 2019. On and after tax levy year 2020, the employer contribution equals the sum of the net employer normal cost plus a level percent of payroll amortization of the unfunded liability needed to attain a 90 percent funded ratio by 2055 on an open group basis. After 2055, the employer contribution equals the amount necessary to maintain the 90 percent funded ratio. While the new statutory funding policy is an improvement, it does not comply with generally accepted actuarial standards for the funding of retirement systems and therefore, we recommend strengthening the policy.

The most recent actuarial valuation of the Fund on the State reporting basis indicates that a ratio of 5.48 (rather than 1.60) is needed to adequately finance the Fund in Fiscal Year 2015 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 nine years and are again expected to be less than the ARC for 2015.

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

	<u>December 31, 2013</u>	<u>December 31, 2014</u>	<u>% Change</u>
ACTUARIAL VALUES			
Actuarial Values			
Actuarial Liability	\$ 2,390,573,128	\$ 2,111,704,119	(11.67)%
Assets - Actuarial Value	1,354,260,531	1,357,451,362	0.24 %
Unfunded Liability (Surplus)	1,036,312,597	754,252,757	(27.22)%
Funded Ratio	56.65%	64.28%	13.47 %
Annual Required Contribution (ARC)	\$ 108,538,602	\$ 82,252,473	(24.22)%
Market Values			
Actuarial Liability	\$ 2,390,573,128	\$ 2,111,704,119	(11.67)%
Assets - Market Value	1,457,672,608	1,388,092,890	(4.77)%
Unfunded Liability	932,900,520	723,611,229	(22.43)%
Funded Ratio	60.98%	65.73%	7.80 %
Book Values			
Actuarial Liability	\$ 2,390,573,128	\$ 2,111,704,119	(11.67)%
Assets - Book Value	1,199,272,217	1,207,953,753	0.72 %
Unfunded Liability (Surplus)	1,191,300,911	903,750,366	(24.14)%
Funded Ratio	50.17%	57.20%	14.03 %

Actuarial Liability includes both pension and OPEB.

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2013</u>	<u>December 31, 2014</u>	<u>% Change</u>
Assets			
Market Value - Beginning of Year	\$1,371,077,046	\$1,457,672,608	6.32 %
Income			
Investment Income	207,344,105	53,393,517	(74.25)%
Employer Contributions & Misc.	14,100,639	14,520,515	2.98 %
Employee Contributions	<u>16,392,800</u>	<u>16,359,082</u>	(0.21)%
Subtotal	237,837,544	84,273,114	(64.57)%
Outgo (Refunds, Benefits & Expenses)	<u>151,241,982</u>	<u>153,852,832</u>	1.73 %
Net Change	<u>86,595,562</u>	<u>(69,579,718)</u>	(180.35)%
Market Value - End of Year	\$1,457,672,608	\$1,388,092,890	(4.77)%
Book Value - Beginning of Year	\$1,214,919,910	\$1,199,272,217	(1.29)%
Income			
Investment Income	105,100,850	131,654,771	25.27 %
Employer Contributions & Misc.	14,100,639	14,520,515	2.98 %
Employee Contributions	<u>16,392,800</u>	<u>16,359,082</u>	(0.21)%
Subtotal	135,594,289	162,534,368	19.87 %
Outgo (Refunds, Benefits & Expenses)	<u>151,241,982</u>	<u>153,852,832</u>	1.73 %
Net Change	<u>(15,647,693)</u>	<u>8,681,536</u>	155.48 %
Book Value - End of Year	\$1,199,272,217	\$1,207,953,753	0.72 %
Actuarial Value - Beginning of Year	\$1,315,913,597	\$1,354,260,531	2.91 %
Income			
Investment Income	159,095,477	126,164,066	(20.70)%
Employer Contributions & Misc.	14,100,639	14,520,515	2.98 %
Employee Contributions	<u>16,392,800</u>	<u>16,359,082</u>	(0.21)%
Subtotal	189,588,916	157,043,663	(17.17)%
Outgo (Refunds, Benefits & Expense)	<u>151,241,982</u>	<u>153,852,832</u>	1.73 %
Net Change	<u>38,346,934</u>	<u>3,190,831</u>	(91.68)%
Actuarial Value - End of Year	\$1,354,260,531	\$1,357,451,362	0.24 %

SUMMARY OF ACTUARIAL VALUATION (CONT'D)

	<u>December 31, 2013</u>	<u>December 31, 2014</u>	<u>% Change</u>
Members			
Actives ¹	2,844	2,837	(0.25)%
Inactives	1,432	1,449	1.19 %
Retirees	2,727	2,690	(1.36)%
Survivors	1,165	1,156	(0.77)%
Reversionary Annuitants ²	24	26	8.33 %
Disabilities	224	216	(3.57)%
Children	38	30	(21.05)%
Payroll Data			
Valuation Payroll	\$ 200,351,820	\$ 202,673,014	1.16 %
Average Salary	\$ 70,447	\$ 71,439	1.41 %

¹Active participants include disabled employees.

²Includes 21 Reversionary Annuitants as of December 31, 2013, and 23 Reversionary Annuitants as of December 31, 2014, that are also Survivors.

DISCUSSION OF VALUATION RESULTS

This report sets forth the results of the actuarial valuation of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2014. The purposes of this valuation are:

1. To develop the minimum actuarially determined contribution for 2015.
2. To develop the annual required contribution (ARC) under GASB #27 and GASB #43.
3. To develop the annual pension cost under GASB #27 and the annual OPEB cost under GASB #45.
4. To review the funding status of the Fund.

The Fund's actuarial valuation for GASB #67 financial reporting purposes will be provided in a separate report.

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

For Fund and City financial reports, the funding status is measured using liabilities under the Entry Age Normal funding method and the Actuarial Value of Assets. The Actuarial Value of Assets is determined by annually spreading the difference between expected and actual investment earnings over a five-year period.

Actuarial Obligations of the Fund

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

1. Retired Lives:

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

2. Active Lives:

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

DISCUSSION OF VALUATION RESULTS (CONT'D)

retires. The actuarial reserve (amount of assets needed now) is the present value of future benefits less the present value of future normal costs to be paid.

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

3. Actuarial Balance:

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

Summary of Results

The annual required contribution (ARC) under GASB #27 for the year ending December 31, 2015, is \$79.85 million, which is for pension benefits only. This amount is net of estimated employee contributions of \$18.58 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, 2015, is \$2.4 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 as of December 31, 2013, because benefits will no longer be paid after December 31, 2016. As of December 31, 2014, the remaining amortization period used to calculate the GASB #43 ARC is two years.

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

DISCUSSION OF VALUATION RESULTS (CONT'D)

finance the payment of benefits. The investment return assumption of 4.50 percent reflects the fact that OPEB liabilities are considered to be funded on a pay-as-you-go basis. That is, the health insurance supplement is financed with current contributions, and no separate healthcare asset account exists to pay the health insurance supplement.

Beginning with the December 31, 2006, actuarial valuation, GASB #27 requires the use of a maximum of 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 discount rate will become an important liability for users of the Fund's financial information.

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. The measurements required under GASB Statement #67 are provided in a separate report.

The Unfunded Actuarial Accrued Liability based on the Actuarial Value of Assets decreased from \$1,036.31 million to \$754.25 million during the year, resulting in a change in funding ratio from 56.7 percent to 64.3 percent. The decrease in the Unfunded Actuarial Accrued Liability is mainly attributable to changes to the provisions of the Fund through Public Act 98-0641, which provides changes to the funding policy and new benefit provisions for current, inactive, and retired members, and to favorable investment return on the actuarial value of assets due to the recognition of investments gains. These gains were partially offset by employer contributions that were less than normal cost plus interests on the Unfunded Actuarial Accrued Liability. A more thorough examination of these and other factors can be found in the Reconciliation of Unfunded Actuarial Accrued Liability (gain/loss analysis) in Table 2 and the Reconciliation of Funded Ratio in Table 2A.

Based on the Market Value of Assets, the Unfunded Actuarial Accrued Liability decreased from \$932.90 million to \$723.61 million, and the funded ratio increased from 61.0 percent to 65.7 percent.

As a result of the new funding policy, 50-year projections are provided in this report. These projections show that the funded ratio is projected to decline from 64.3 percent in 2015 to 54.7 percent in 2033 and then increase gradually to 90.0 percent in 2055.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Plan Membership

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

	December 31, 2013	December 31, 2014
Active Members¹		
Number	2,844	2,837
Vested	2,162	2,051
Non-vested	682	786
Average Age	47.4	47.3
Average Service	15.6	15.5
Average Annual Salary	\$70,447	\$71,439
Inactive Members		
Number	1,432	1,449
Average Age	56.3	57.0
Average Service	2.1	2.2
Retirees		
Number	2,727	2,690
Average Age	69.8	69.8
Average Annual Benefit	\$44,264	\$45,968
Surviving Spouses		
Number	1,165	1,156
Average Age	77.3	77.5
Average Annual Benefit	\$13,403	\$14,020
Reversionary Annuitants²		
Number	24	26
Average Age	70.8	72.2
Average Annual Benefit	\$5,952	\$5,763
Children		
	38	30
Total Members	8,230	8,188

¹Active members include disabled employees.

²Includes 21 Reversionary Annuitants as of December 31, 2013, and 23 Reversionary Annuitants as of December 31, 2014, that are also Survivors.

Total participants receiving benefits under the Fund, including disability, surviving spouses, reversionary annuitants and children, decreased 1.44 percent during 2014, from 4,178 to 4,118, Total expenditures for benefits increased from \$144 million in 2013 to \$148 million during 2014, or 2.78 percent.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Changes in Provisions of the Fund

The following Public Acts were passed in 2014 by the 98th General Assembly that made changes to the Fund Provisions.

P. A. 98-0641 (SB 1922), approved June 9, 2014

P. A. 98-1022 (SB 452), approved August 22, 2014

Public Act 98-0641 effective June 9, 2014, provides changes to the funding policy and new benefit provisions for current, inactive, and retired members. This change in the Fund provisions decreased the actuarial liability by \$317.9 million.

Public Act 98-1022 effective August 22, 2014, provides various requirements for investment managers and consultants and declares it is the public policy of the State to encourage use of minority investment managers. This does not directly impact the liabilities of the Fund as of the valuation date.

A detailed description of the provisions in the Public Act passed in 2014 can be found in the Historic Information section of this report.

Discussion of Actuarial Assumptions

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

There are two general types of actuarial assumptions:

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

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

The actuarial assumptions used for this report are based on the results of the experience study performed for the period January 1, 2004, through December 31, 2011.

DISCUSSION OF VALUATION RESULTS (CONT'D)

Experience Analysis

The Fund had an investment loss in 2014 of \$51.4 million relative to the 7.50 percent expected rate of return, on a market value basis. The gain on an actuarial basis relative to the 7.50 percent expected rate of return was \$29.1 million due to the recognition of deferred investment gains from 2010, 2012 and 2013.

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 \$10.4 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 \$87.8 million. Contributions lower than Normal Cost plus interest have increased the Unfunded Actuarial Accrued Liability for the past 11 years.

The changes in the Fund Provisions due to Public Act 98-0641 decreased the Unfunded Actuarial Accrued Liability by \$317.9 million, or 15.1 percent of the liabilities at December 31, 2014. There was an additional gain of \$12.5 million from all other factors, including actual retirement, termination, disability, mortality experience and data changes. This is about 0.59 percent of the liabilities at December 31, 2014, which is a reasonable variation.

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

Funding Analysis

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

Conclusion

When measured using the Actuarial Value of Assets, which smoothes gains and losses over a five-year period, the funding ratio increased from 56.7 percent in 2013 to 64.3 percent in 2014. On a market value basis the funded ratio increased from 61.0 percent in 2013 to 65.7 percent in 2014. The funding ratio using the Actuarial Value of Assets is expected to increase slightly toward the funding ratio using the market value of assets. There are deferred asset gains that will be recognized in the Actuarial Value of Assets in the next four years. However, contributions continue to be insufficient to adequately finance the plan, and will result in further decreases in the funding ratio. Under the current funding policy, the funded ratio is projected to decline from 64.3 percent in 2015 to 54.7 percent in 2033 and then increase gradually to 90.0 percent in 2055.

The current statutory funding policy tends to back-load and defer contributions, thus we would advise strengthening the current statutory funding policy. Examples of methods to strengthen the current funding policy include:

1. Increasing the 90 percent funding target to 100 percent,
2. Reducing the projection period needed to reach the funding target, and,
3. Separating the financing of benefits for members hired before and after December 31, 2010.

DISCUSSION OF VALUATION RESULTS (CONT'D)

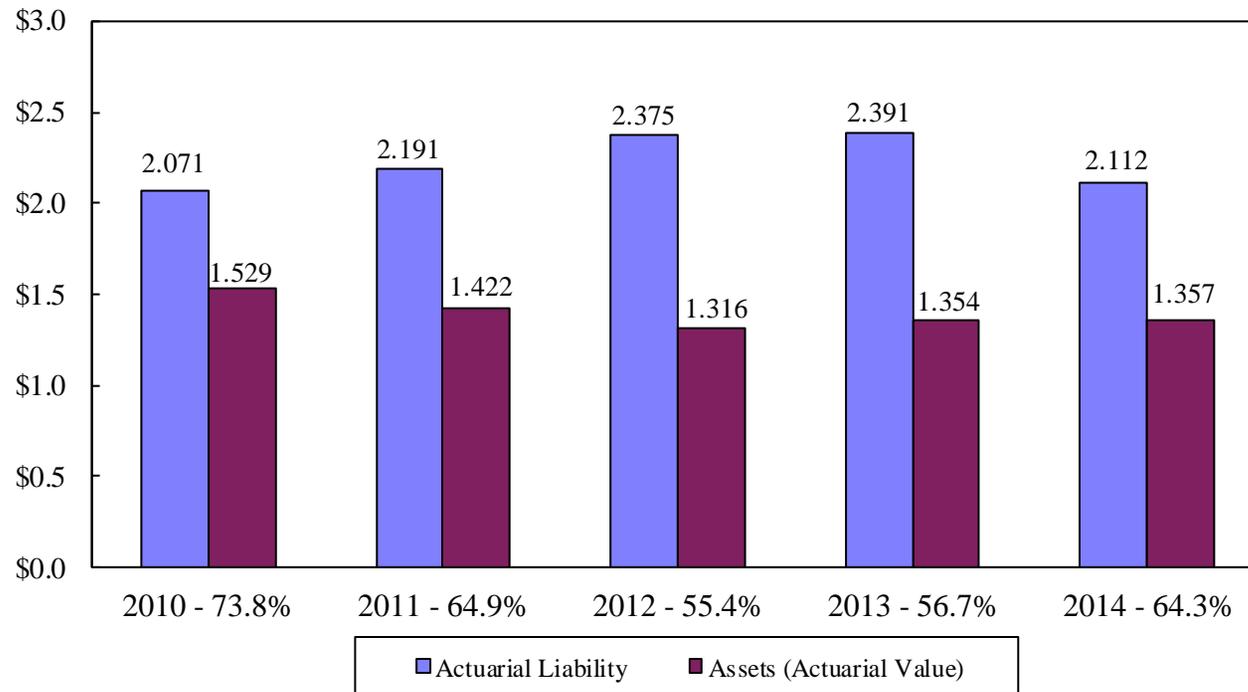
Also, the statutory funding policy could be strengthened by changing to an Actuarially Determined Contribution (ADC) based funding approach with an appropriate amortization policy for each respective tiered benefit structure.

In 2014, the Society of Actuaries Blue Ribbon Panel on Public Pension Plan Funding and Conference of Consulting Actuaries Public Plans Community both issued reports on public plan funding. Some of the common elements in those reports are to:

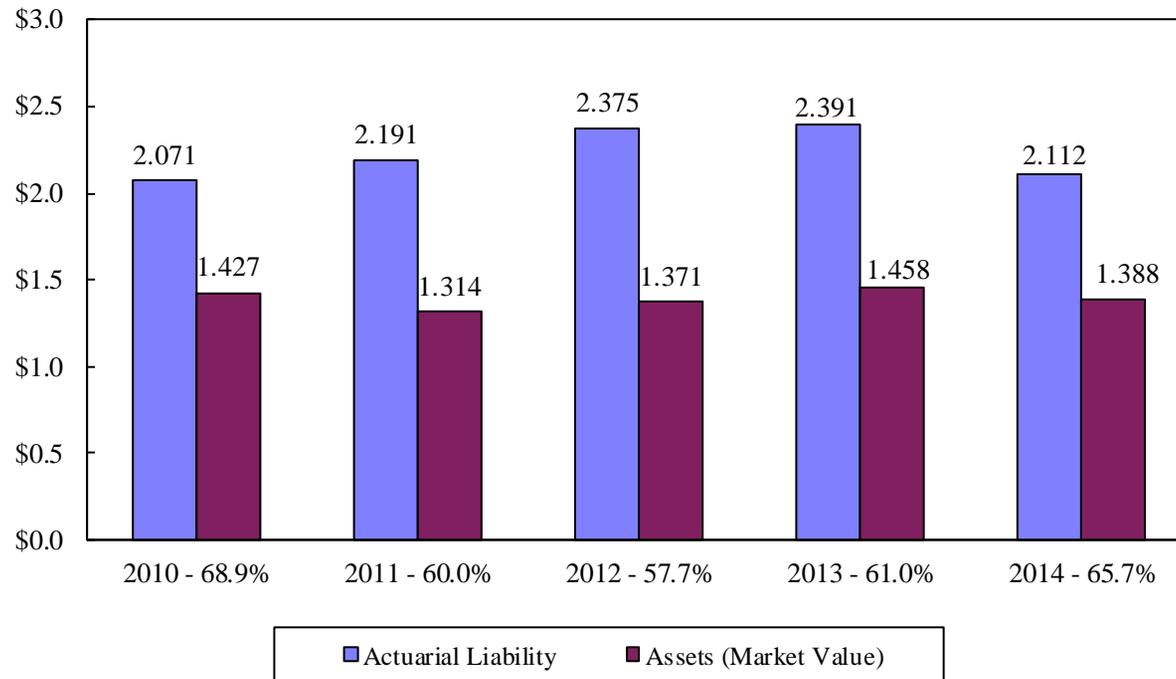
1. Establish a Funding Policy using Actuarially Determined Contributions.
2. Target 100 percent funded.
3. Shorten the amortization period to 15 to 20 years to avoid negative amortization of the unfunded actuarial accrued liability.

Finally, we strongly recommend that stress testing be performed and we will work with the Fund on developing specific stress testing scenarios.

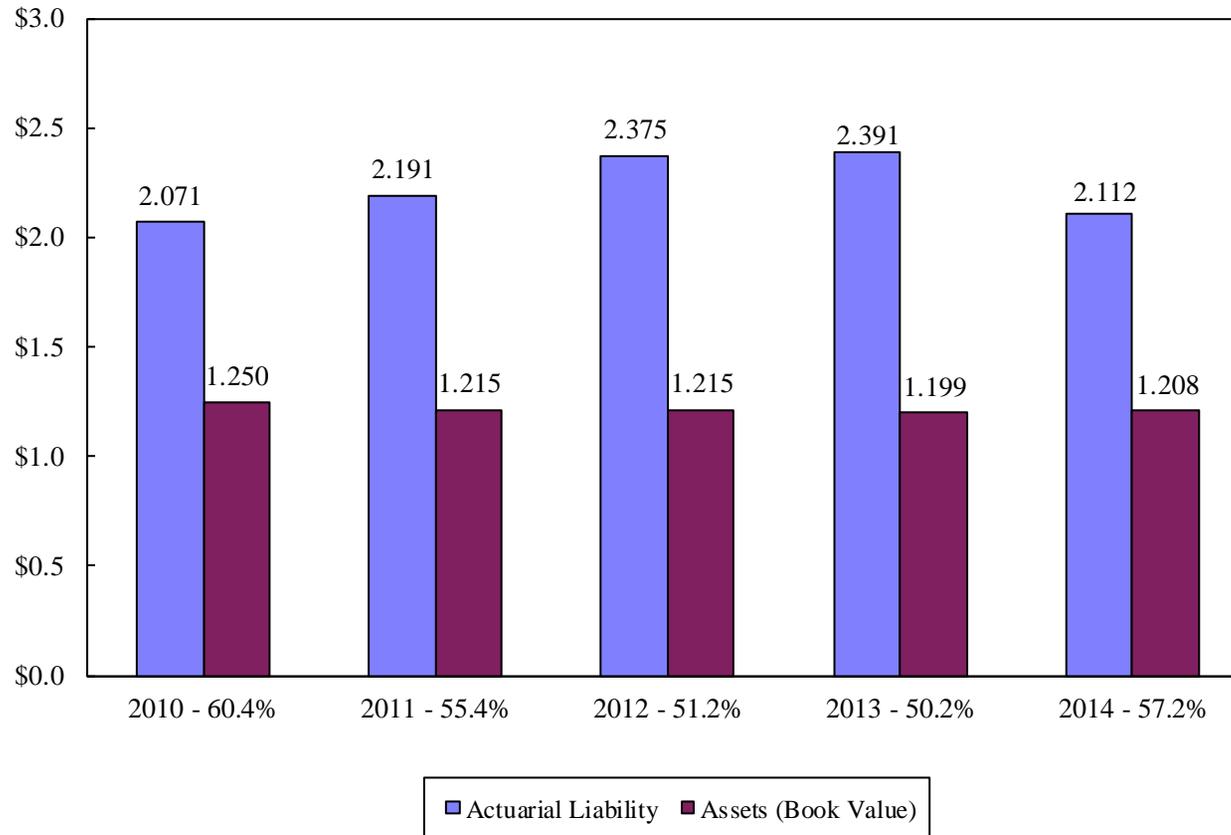
**COMPONENTS OF FUNDING RATIO
BASED ON ACTUARIAL VALUE
(\$ IN BILLIONS)**



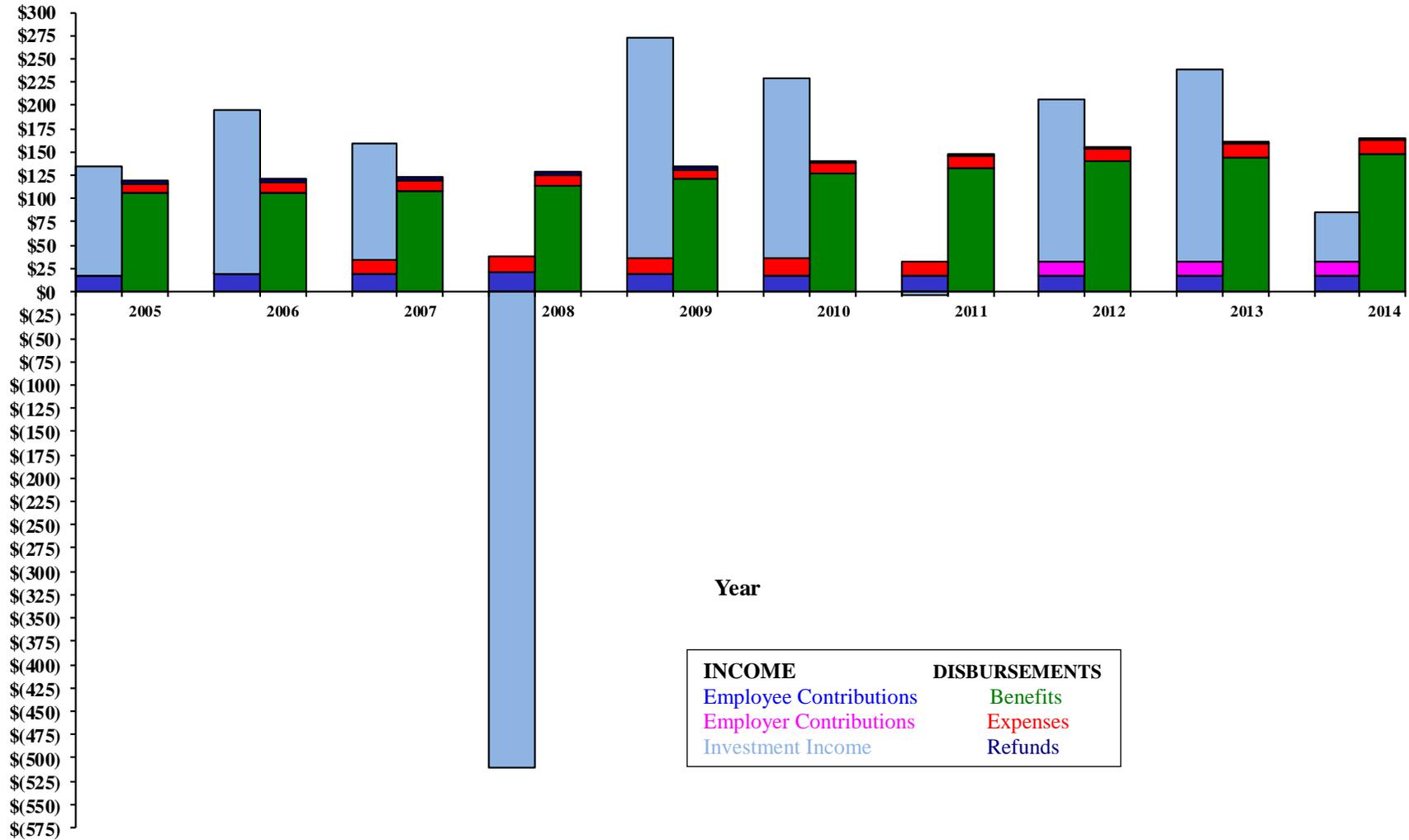
**COMPONENTS OF FUNDING RATIO
BASED ON MARKET VALUE
(\$ IN BILLIONS)**



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



SUMMARY OF INCOME AND DISBURSEMENTS (\$ IN MILLIONS)



ACTUARIAL COMPUTATIONS

TABLE 1
DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION
UNDER GASB #27 FOR 2015

	2014	2015
(1) Normal Cost ¹	\$ 37,763,575	\$ 35,766,149
(2) Actuarial Accrued Liability (AAL) ¹	2,383,499,431	2,107,110,741
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	1,354,260,531	1,357,451,362
(b) UAAL [2-3(a)]	1,029,238,900	749,659,379
(4) Amortization (30-Year Level \$) Payable at BOY	81,066,911	59,046,127
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	4,534,516	3,617,993
(b) Total Minimum Contribution [1+4+5(a); but not less than zero]	123,365,002	98,430,269
(c) Total Minimum Contribution (Percent of Pay)	61.57%	48.57%
(6) Estimated Member Contributions	17,346,277	18,579,434
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 106,018,725	\$ 79,850,835
(b) Annual Required Contribution (Percent of Pay)	52.92%	39.40%
(8) Estimated City Contribution ^{2, 3}	12,067,943	21,689,167
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a)-8)]	93,950,782	58,161,668
(b) as a Percentage of Pay	46.89 %	28.70 %
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8]	\$ 93,950,782	\$ 58,161,668
(b) as a Percentage of Pay	46.89 %	28.70 %

¹ Excludes health insurance supplement.

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

³ Estimated City Contribution in 2014 includes four percent tax levy loss.

TABLE 1A
DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION
UNDER GASB #43 FOR 2015

	<u>2014</u>	<u>2015</u>
(1) Normal Cost ¹	\$ 549	\$ 168
(2) Actuarial Accrued Liability (AAL) ¹	7,073,697	4,593,378
(3) Unfunded AAL (UAAL)		
(a) Actuarial Value of Assets	-	-
(b) UAAL [2-3(a)]	7,073,697	4,593,378
(4) Amortization (Level \$) Payable at BOY ³	2,462,414	2,347,227
(5) Minimum Actuarially Calculated Contribution		
(a) Interest Adjustment for Semi-monthly Payment	56,914	54,243
(b) Total Minimum Contribution [1+4+5(a)]; but not less than zero	2,519,877	2,401,638
(c) Total Minimum Contribution (Percent of Pay)	1.26%	1.18%
(6) Estimated Member Contributions	-	-
(7) Annual Required Contribution (ARC)		
(a) Annual Required Contribution [5(b)-6]	\$ 2,519,877	\$ 2,401,638
(b) Annual Required Contribution (Percent of Pay)	1.26%	1.18%
(8) Estimated City Contribution ²	2,403,577	2,329,833
(9) City Contribution Deficiency/(Excess)		
(a) in Dollars [(7(a))-8]	116,300	71,805
(b) as a Percentage of Pay	0.06%	0.04%
(10) Combined City/Member Contributions Deficiency/(Excess)		
(a) in Dollars [5(b)-6-8]	\$ 116,300	\$ 71,805
(b) as a Percentage of Pay	0.06%	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 For fiscal year 2014, the amortization period is three years and for fiscal year 2015, the amortization period is two years.

TABLE 1B
DEVELOPMENT OF CITY CONTRIBUTION REQUIREMENTS

	<u>Fiscal Year 2015</u>	<u>Fiscal Year 2016</u>	<u>Projected Fiscal Year 2017</u>	<u>Projected Fiscal Year 2018</u>	<u>Projected Fiscal Year 2019</u>	<u>Projected Fiscal Year 2020¹</u>
Preliminary Determination of City Contribution						
Applicable Members' Contribution, Two Years Prior	\$ 15,011,863	\$ 15,018,953	\$ 17,167,397	\$ 18,511,892	\$ 20,034,348	\$ 21,677,273
Statutory Contribution Multiple	1.60	1.90	2.20	2.50	2.80	3.16
Statutory City Contribution	24,019,000	28,536,000	37,768,300	46,279,700	56,096,200	68,520,500
GASB #27 and #43 Annual Required Contribution (ARC)	82,252,473	N/A	N/A	N/A	N/A	N/A
Actuarial Liability at Valuation Date	2,390,573,128	2,111,704,119	2,145,052,113	2,175,622,123	2,208,990,817	2,241,152,298
Actuarial Value of Assets at Valuation Date	1,354,260,531	1,357,451,362	1,335,720,550	1,340,789,559	1,335,778,886	1,314,693,433
Funded Ratio	56.65%	64.28%	62.27%	61.63%	60.47%	58.66%

¹ Contributions beginning in tax levy year 2020 are based on the net employer normal cost plus a level percent of payroll amortization of the unfunded actuarial liability needed to attain a 90 percent funded ratio by 2055 on an open group basis.

Pursuant to Public Act 98-0641, the fiscal year 2015 tax levy, payable in fiscal year 2016, is 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 1.60. The multiple increases to 1.90 for the fiscal year 2016 tax levy, 2.20 for the fiscal year 2017 tax levy, 2.50 for fiscal year 2018 tax levy and 2.80 for fiscal year 2019 tax levy. Member contributions in fiscal years 2015, 2016, 2017 and 2018 reflect contribution rates of 9.0, 9.5, 10.0 and 10.5 percent, respectively.

TABLE 1C
ACTIVE ACCRUED LIABILITY AND NORMAL COST BY TIER

	<u>Tier 1 Members</u>	<u>Tier 2 Members</u> ²	<u>Total</u>
(1) Count	2,371	466	2,837
(2) Payroll	\$ 176,139,971	\$ 26,533,043	\$ 202,673,014
(3) Average Payroll	\$ 74,289	\$ 56,938	\$ 71,439
(4) Actuarial Accrued Liability (AAL) ¹	\$ 720,091,016	\$ 5,644,399	\$ 725,735,415
(5) Normal Cost ¹	\$ 31,824,048	\$ 3,942,269	\$ 35,766,317
(6) Normal Cost as a Percent of Pay	18.1%	14.9%	17.6%
(7) Member Contributions as a Percent of Pay ³	9.0%	9.0%	9.0%
(8) Net Employer Normal Cost as a Percent of Pay	9.1%	5.9%	8.6%

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 who began participating on or after January 1, 2011.

³ Pursuant to P. A. 98-0641, member contributions for FY 2015 reflect a 9.0 percent contribution rate.

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

	2010	2011	2012	2013	2014
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
Beginning of Year	\$416,135,443	\$541,982,320	\$768,767,413	\$1,058,929,034	\$1,036,312,597
(Gains) Losses During the Year Attributable to:					
Contributions Less Than (in Excess of) Normal Cost plus Interest	32,836,243	44,792,683	63,344,488	90,011,595	87,798,075
(Gain) Loss on Investment Return on the Actuarial Value of Assets	97,274,017	115,961,584	99,757,018	(64,848,168)	(29,122,655)
(Gain) Loss from Salary Changes	(19,309,030)	(17,752,499)	(11,246,150)	(12,859,999)	(10,377,473)
(Gain) Loss from Retirement, Termination, & Mortality	14,391,903	18,062,145	7,410,741	(4,749,315)	(12,446,485)
(Gain) Loss from Data Corrections and Unexpected Service Changes	653,745	964,087	505,176	182,938	(30,347)
Change in Methodology	-	-	-	-	-
Change in Assumptions	-	64,757,093	130,390,348	-	-
Plan Amendments	-	-	-	(30,353,488)	(317,880,955)
Net Increase (Decrease) in UAAL	125,846,878	226,785,092	290,161,621	(22,616,437)	(282,059,840)
Unfunded (Overfunded) Actuarial Accrued Liability (UAAL)					
End of Year	\$541,982,320	\$768,767,413	\$1,058,929,034	\$1,036,312,597	\$754,252,757

TABLE 2A
RECONCILIATION OF FUNDED RATIO

	2010	2011	2012	2013	2014
Funded Ratio Beginning of Year	79.37%	73.83%	64.92%	55.41%	56.65%
Expected Increase if All Assumptions Realized	0.58%	0.67%	0.88%	1.16%	1.09%
Expected Funded Ratio	79.95%	74.50%	65.80%	56.57%	57.74%
Gains (Losses) During the Year Attributable to:					
Contributions in Excess of (Less Than) Normal Cost plus Interest	-1.58%	-2.11%	-2.82%	-3.69%	-3.58%
Gain (Loss) on Investment Return on the Smoothed Value of Assets	-4.69%	-5.46%	-4.44%	2.66%	1.19%
Gain (Loss) from Salary Changes	0.70%	0.57%	0.30%	0.29%	0.24%
Gain (Loss) from Retirement, Termination, & Mortality	-0.52%	-0.58%	-0.20%	0.11%	0.28%
Gain (Loss) from Data Corrections	-0.03%	-0.03%	-0.01%	0.00%	0.00%
Change in Methodology	0.00%	0.00%	0.00%	0.00%	0.00%
Change in Assumptions	0.00%	-1.97%	-3.22%	0.00%	0.00%
Plan Amendments	0.00%	0.00%	0.00%	0.71%	8.41%
Total Gains (Losses) During the Year	-6.12%	-9.58%	-10.39%	0.08%	6.54%
Funded Ratio End of Year	73.83%	64.92%	55.41%	56.65%	64.28%

TABLE 3
SUMMARY OF BASIC ACTUARIAL VALUES

	APV of Projected Benefits	2015 Normal Cost
(1) Values for Active and Inactive Members		
(a) Retirement	\$ 872,973,636	\$ 21,247,628
(b) Termination - Vested	42,352,385	3,143,532
(c) Termination - Non-Vested	5,255,084	1,849,638
(d) Death	13,996,620	648,590
(e) Inactive Vested and Non-Vested	21,649,844	-
(f) Health Insurance	406,642	168
(g) Disability	-	5,066,825
(h) Expenses of Administration	-	3,809,935
Total for Active and Inactive Members	\$ 956,634,211	\$ 35,766,317
(2) Values for Members in Payment Status	\$ 1,364,252,443	\$ -
(3) Grand Totals	\$ 2,320,886,654	\$ 35,766,317
Actuarial Present Value of Future Compensation		\$ 1,664,594,942

TABLE 4 50-YEAR PROJECTIONS

Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2014 Based on the Provisions of Public Act 98-0641 (\$ in Thousands)																
PYE 12/31	Present Value of Benefits	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Funded Ratio	Capped Payroll	Total Statutory Contribution ²	Statutory Contribution % of Pay ¹	Total Normal Cost	Total Employee Contribution	Applicable Employee Contribution	Benefits	Administrative Expenses	Contribution Multiple	
2014	\$ 2,320,887	\$ 2,111,704	\$ 1,388,093	\$ 1,357,451	\$ 754,253	64.28%	\$ 202,673	\$ 14,521	7.16%	\$ 37,764	\$ 16,359	\$ 15,019	\$ 150,018	\$ 3,835	1.00	
2015	2,358,698	2,145,052	1,363,097	1,335,721	809,331	62.27%	207,043	14,472	6.99%	35,766	18,579	17,167	153,619	3,950	1.00	
2016	2,392,533	2,175,622	1,342,036	1,340,790	834,832	61.63%	212,867	24,019	11.28%	36,110	20,035	18,512	158,899	4,069	1.60	
2017	2,429,307	2,208,991	1,325,498	1,335,779	873,212	60.47%	219,356	28,536	13.01%	36,703	21,682	20,034	159,056	4,191	1.90	
2018	2,465,238	2,241,152	1,314,693	1,314,693	926,459	58.66%	226,261	37,768	16.69%	37,384	23,460	21,677	163,215	4,317	2.20	
2019	2,502,228	2,273,671	1,311,023	1,311,023	962,648	57.66%	233,622	46,280	19.81%	38,115	25,351	23,424	165,825	4,446	2.50	
2020	2,538,162	2,304,497	1,313,146	1,313,146	991,351	56.98%	241,350	56,096	23.24%	38,889	26,176	24,186	170,480	4,579	2.80	
2021	2,572,279	2,333,490	1,324,203	1,324,203	1,009,287	56.75%	249,657	68,520	27.45%	39,689	27,042	24,987	175,170	4,717	3.16	
2022	2,604,517	2,360,554	1,333,970	1,333,970	1,026,584	56.51%	258,347	70,398	27.25%	40,552	27,972	25,847	179,880	4,858	3.01	
2023	2,635,293	2,385,406	1,342,241	1,342,241	1,043,165	56.27%	267,179	72,308	27.06%	41,459	28,946	26,746	184,766	5,004	2.99	
2024	2,663,467	2,407,534	1,348,670	1,348,670	1,058,864	56.02%	276,485	74,296	26.87%	42,354	29,936	27,661	189,970	5,154	2.97	
2025	2,692,076	2,429,710	1,356,183	1,356,183	1,073,527	55.82%	286,179	76,371	26.69%	43,303	30,978	28,624	192,353	5,309	2.95	
2026	2,718,789	2,449,606	1,362,569	1,362,569	1,087,037	55.62%	296,041	78,462	26.50%	44,272	32,064	29,628	197,001	5,468	2.93	
2027	2,742,681	2,466,633	1,367,354	1,367,354	1,099,279	55.43%	306,043	80,560	26.32%	45,237	33,169	30,649	202,045	5,632	2.91	
2028	2,763,584	2,480,723	1,370,612	1,370,612	1,110,111	55.25%	316,226	82,695	26.15%	46,214	34,290	31,684	206,952	5,801	2.89	
2029	2,781,774	2,491,848	1,372,411	1,372,411	1,119,437	55.08%	326,389	84,830	25.99%	47,216	35,431	32,738	211,696	5,975	2.86	
2030	2,796,681	2,500,071	1,372,908	1,372,908	1,127,163	54.91%	336,455	86,915	25.83%	48,187	36,570	33,790	216,127	6,154	2.84	
2031	2,808,814	2,505,962	1,372,824	1,372,824	1,133,138	54.78%	346,663	89,060	25.69%	49,174	37,698	34,833	219,810	6,339	2.81	
2032	2,818,662	2,510,086	1,372,877	1,372,877	1,137,209	54.69%	356,967	91,245	25.56%	50,197	38,841	35,889	222,812	6,529	2.79	
2033	2,826,692	2,513,040	1,373,840	1,373,840	1,139,200	54.67%	367,419	93,475	25.44%	51,243	39,996	36,956	225,126	6,725	2.77	
2034	2,833,595	2,515,720	1,376,709	1,376,709	1,139,011	54.72%	377,628	95,647	25.33%	52,301	41,167	38,038	226,500	6,927	2.75	
2035	2,840,552	2,518,676	1,381,940	1,381,940	1,136,736	54.87%	386,731	97,562	25.23%	53,323	42,311	39,095	227,279	7,135	2.72	
2036	2,847,835	2,522,349	1,390,066	1,390,066	1,132,283	55.11%	395,531	99,442	25.14%	54,253	43,331	40,038	227,551	7,349	2.69	
2037	2,856,173	2,527,430	1,401,875	1,401,875	1,125,555	55.47%	404,051	101,274	25.06%	55,165	44,317	40,949	227,184	7,569	2.66	
2038	2,866,351	2,534,183	1,417,752	1,417,752	1,116,431	55.95%	412,347	103,084	25.00%	56,073	45,271	41,831	226,653	7,796	2.64	

¹ Based on capped pay.

² Represents contributions expected to be deposited in the Fund. Reflects four percent tax levy loss in tax year 2014 and no tax levy loss on and after tax year 2015.

TABLE 4 (CONT'D)
50-YEAR PROJECTIONS

Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago Actuarial Valuation Projection Results as of December 31, 2014 Based on the Provisions of Public Act 98-0641 (\$ in Thousands)																
PYE 12/31	Present Value of Benefits	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Funded Ratio	Capped Payroll	Total Statutory Contribution ²	Statutory Contribution % of Pay ¹	Total Normal Cost	Total Employee Contribution	Applicable Employee Contribution	Benefits	Administrative Expenses	Contribution Multiple	
2039	\$ 2,878,237	\$ 2,542,950	\$ 1,438,244	\$ 1,438,244	\$ 1,104,706	56.56%	\$ 420,756	\$ 104,922	24.94%	\$ 56,958	\$ 46,201	\$ 42,690	\$ 225,884	\$ 8,030	2.62	
2040	2,892,639	2,554,422	1,464,246	1,464,246	1,090,176	57.32%	429,199	106,793	24.88%	57,881	47,143	43,560	224,624	8,271	2.61	
2041	2,910,297	2,569,282	1,496,680	1,496,680	1,072,602	58.25%	437,786	108,725	24.84%	58,838	48,089	44,434	222,931	8,519	2.60	
2042	2,931,754	2,588,026	1,536,278	1,536,278	1,051,748	59.36%	446,399	110,675	24.79%	59,822	49,051	45,323	221,025	8,775	2.59	
2043	2,957,554	2,611,051	1,583,718	1,583,718	1,027,333	60.65%	455,173	112,687	24.76%	60,835	50,016	46,215	219,038	9,038	2.59	
2044	2,987,970	2,638,668	1,639,604	1,639,604	999,064	62.14%	464,066	114,739	24.72%	61,881	50,999	47,123	217,088	9,309	2.58	
2045	3,023,305	2,670,978	1,704,332	1,704,332	966,646	63.81%	472,981	116,815	24.70%	62,958	51,996	48,044	215,397	9,588	2.58	
2046	3,063,424	2,708,042	1,778,314	1,778,314	929,728	65.67%	482,077	118,948	24.67%	64,054	52,995	48,967	213,998	9,876	2.57	
2047	3,108,519	2,750,019	1,862,083	1,862,083	887,936	67.71%	491,337	121,135	24.65%	65,188	54,014	49,909	212,820	10,172	2.57	
2048	3,158,870	2,796,836	1,955,972	1,955,972	840,864	69.94%	500,783	123,379	24.64%	66,355	55,051	50,867	212,094	10,477	2.57	
2049	3,214,030	2,848,351	2,060,281	2,060,281	788,070	72.33%	510,416	125,681	24.62%	67,559	56,109	51,845	211,882	10,792	2.57	
2050	3,273,884	2,904,375	2,175,288	2,175,288	729,087	74.90%	520,236	128,039	24.61%	68,800	57,189	52,842	212,223	11,115	2.57	
2051	3,338,691	2,964,222	2,300,810	2,300,810	663,412	77.62%	530,213	130,445	24.60%	70,073	58,289	53,859	213,574	11,449	2.56	
2052	3,406,853	3,027,302	2,436,805	2,436,805	590,497	80.49%	540,407	132,935	24.60%	71,399	59,407	54,892	215,817	11,792	2.56	
2053	3,477,867	3,093,123	2,583,277	2,583,277	509,846	83.52%	550,405	135,362	24.59%	72,730	60,549	55,947	218,763	12,146	2.56	
2054	3,550,879	3,161,545	2,740,553	2,740,553	420,992	86.68%	559,890	137,664	24.59%	74,031	61,669	56,982	221,999	12,510	2.56	
2055	3,626,980	3,232,293	2,908,944	2,908,944	323,349	90.00%	569,263	139,954	24.59%	75,286	62,732	57,964	225,632	12,886	2.55	
2056	3,704,555	3,304,595	2,974,136	2,974,136	330,459	90.00%	578,619	39,369	6.80%	76,553	56,534	52,238	230,177	13,272	0.70	
2057	3,783,645	3,378,233	3,040,410	3,040,410	337,823	90.00%	587,954	40,015	6.81%	77,811	57,463	53,096	235,026	13,671	0.70	
2058	3,863,945	3,452,916	3,107,624	3,107,624	345,292	90.00%	597,342	40,844	6.84%	79,088	58,391	53,953	240,259	14,081	0.70	
2059	3,945,189	3,528,380	3,175,542	3,175,542	352,838	90.00%	606,775	41,726	6.88%	80,390	59,323	54,814	245,834	14,503	0.80	
2060	4,027,148	3,604,410	3,243,969	3,243,969	360,441	90.00%	616,316	42,654	6.92%	81,715	60,260	55,680	251,686	14,938	0.80	
2061	4,109,579	3,680,797	3,312,717	3,312,717	368,080	90.00%	625,888	43,623	6.97%	83,066	61,207	56,555	257,795	15,386	0.81	
2062	4,192,264	3,757,326	3,381,594	3,381,594	375,732	90.00%	635,561	44,637	7.02%	84,441	62,158	57,434	264,147	15,848	0.81	
2063	4,275,038	3,833,796	3,450,417	3,450,417	383,379	90.00%	645,335	45,693	7.08%	85,847	63,118	58,321	270,722	16,323	0.82	

¹ Based on capped pay.

² Represents contributions expected to be deposited in the Fund. Reflects four percent tax levy loss in tax year 2014 and no tax levy loss on and after tax year 2015.

TABLE 5
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 Contributions	Retirees and Beneficiaries	Active and Inactive Members (ER Financed Portion)		(1)	(2)	(3)
2005 ²	\$ 224,180,889	\$ 1,023,899,580	\$ 494,220,019	\$ 1,635,595,437	100.00%	100.00%	78.41%
2006	237,321,146	1,046,426,600	525,488,397	1,664,058,080	100.00%	100.00%	72.37%
2007	247,854,869	1,074,580,007	527,271,642	1,757,710,948	100.00%	100.00%	82.55%
2008	254,588,537	1,129,920,171	572,879,125	1,698,427,008	100.00%	100.00%	54.80%
2009	254,604,734	1,203,586,162	559,296,180	1,601,351,633	100.00%	100.00%	25.60%
2010	254,138,112	1,281,511,698	535,736,023	1,529,403,512	100.00%	99.51%	0.00%
2011 ²	251,243,991	1,403,258,511	536,679,260	1,422,414,349	100.00%	83.46%	0.00%
2012 ²	253,449,161	1,519,775,727	601,617,743	1,315,913,597	100.00%	69.91%	0.00%
2013 ¹	258,837,708	1,537,553,531	594,181,889	1,354,260,531	100.00%	71.24%	0.00%
2014 ¹	264,822,986	1,364,252,443	482,628,690	1,357,451,362	100.00%	80.09%	0.00%

¹ Change in benefits.

² Change in actuarial assumptions.

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

Due to the inadequacy of funding, the current assets are only sufficient to cover active and inactive member contributions and 80 percent of retiree liabilities. The present value of employer financed benefits for active and inactive members is completely unfunded.

TABLE 6
STATUTORY RESERVES AS OF DECEMBER 31, 2014

	New in 2014			Continuing from 2013			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	\$ 22,065,868	\$ 43,146,031	\$ 65,211,899	\$ 280,040,485	\$ 897,355,773	\$ 1,177,396,258	\$ 302,106,353	\$ 940,501,804	\$ 1,242,608,157
Future Surviving Spouses	\$ 5,480,831	\$ 3,275,212	\$ 8,756,043	\$ 76,090,303	\$ 90,931,131	\$ 167,021,434	\$ 81,571,134	\$ 94,206,343	\$ 175,777,477
Spouses ²	\$ 6,163,945	\$ 3,939,756	\$ 10,103,701	\$ 54,137,818	\$ 44,597,386	\$ 98,735,204	\$ 60,301,763	\$ 48,537,142	\$ 108,838,905
Annual Benefits									
Retirees	\$ 1,904,835	\$ 2,937,153	\$ 4,841,988	\$ 30,224,527	\$ 88,586,273	\$ 118,810,800	\$ 32,129,362	\$ 91,523,426	\$ 123,652,788
Future Surviving Spouses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spouses ²	\$ 713,415	\$ 619,641	\$ 1,333,056	\$ 7,682,879	\$ 7,341,478	\$ 15,024,357	\$ 8,396,294	\$ 7,961,119	\$ 16,357,413

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. Statutory Reserves were determined based on the provisions of P. A. 98-0641.

²Surviving spouses also include reversionary annuitants.

TABLE 7
STATE REPORTING DISCLOSURE

	<u>2013</u>	<u>2014</u>
APV of Credited Projected Benefits		
Payable to Retirees and Beneficiaries	\$ 1,537,553,531	\$ 1,364,252,443
Current Active and Inactive Employees:		
Accumulated Employee Contributions	258,837,708	264,822,986
Payable to Vested and Non- Vested Employees	390,309,220	318,150,049
Total APV	<u>\$ 2,186,700,459</u>	<u>\$ 1,947,225,478</u>
Net Assets Available for Benefits, Actuarial Value	<u>\$ 1,354,260,531</u>	<u>\$ 1,357,451,362</u>
Unfunded AAL (AAL in excess of assets)	\$ 832,439,928	\$ 589,774,116
Percent Funded	61.93 %	69.71 %
Unfunded AAL as Percent of Payroll	415.49%	291.00%
Payroll	\$ 200,351,820	\$ 202,673,014

TABLE 8
ACTUARIAL RESERVE LIABILITIES
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

Accrued Liabilities for Active and Inactive Participants ¹	\$ 747,451,676
Reserves For:	
Service Retirement Pension	\$ 1,105,362,933
Future Widows of Current Retirees	129,853,330
Surviving Spouse Pension	124,556,399
Health Insurance Supplement	4,187,596
Children Annuitants	292,185

Total Accrued Liabilities	\$ 2,111,704,119
Unfunded Actuarial Liabilities (Surplus)	754,252,757
Actuarial Net Assets	\$ 1,357,451,362

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

ASSETS OF THE PLAN

ASSETS OF THE PLAN

The book value of plan assets, net of accounts payable, increased from \$1.20 billion as of December 31, 2013, to \$1.21 as of December 31, 2014, and the market value of plan assets decreased from \$1.46 billion as of December 31, 2013, to \$1.39 billion as of December 31, 2014. Table 9 details the development of asset values during 2014 and Table 10 shows the development of the actuarial value of assets as of December 31, 2014.

TABLE 9
RECONCILIATION OF ASSET VALUES
AS OF DECEMBER 31, 2014

	<u>Market Value</u>	<u>Book Value</u>
(1) Value of Assets as of 12/31/2013	\$ 1,457,672,608	\$ 1,199,272,217
(2) Income for Plan Year:		
(a) Member Contributions	\$ 16,359,082	\$ 16,359,082
(b) City Contributions & Miscellaneous	14,520,515	14,520,515
(c) Investment Income Net of Expenses	52,931,150	131,192,404
(d) Income from Securities Lending	462,367	462,367
(e) Total Income	<u>\$ 84,273,114</u>	<u>\$ 162,534,368</u>
(3) Disbursements for Plan Year:		
(a) Benefit Payments - Pension	\$ 145,586,268	\$ 145,586,268
(b) Benefit Payments - Health Insurance Supplement	2,359,700	2,359,700
(c) Refunds and Rollovers	2,071,694	2,071,694
(d) Administration	3,835,170	3,835,170
(e) Total Disbursements	<u>\$ 153,852,832</u>	<u>\$ 153,852,832</u>
(4) Value of Assets as of 12/31/2014	\$ 1,388,092,890	\$ 1,207,953,753
(5) Estimated Rate of Return in 2014:		
(a) Gross (Investment Expense of \$10,304,870)	4.56%	12.48%
(b) Net of Investment Expense	3.82%	11.57%

TABLE 10
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
AS OF DECEMBER 31, 2014

Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Year Ending December 31	2014	2015	2016	2017	2018
Beginning of Year:					
(1) Market Value of Assets	\$ 1,457,672,608				
(2) Actuarial Value of Assets	1,354,260,531				
End of Year:					
(3) Market Value of Assets	1,388,092,890				
(4) Contributions and Disbursements					
(4a) City Contributions & Misc.	14,520,515				
(4b) Member Contributions	16,359,082				
(4c) Benefit Payouts & Refunds	(150,017,662)				
(4d) Administrative Expenses	(3,835,170)				
(4e) Net of Contributions and Disbursements	(122,973,235)				
(5) Total Investment Income					
=(3)-(1)-(4e)	53,393,517				
(6) Projected Rate of Return	7.50%				
(7) Projected Investment Income					
=(1)x(6)+([1+(6)] ⁿ -1)x(4e)	104,797,317				
(8) Investment Income in Excess of Projected Income	(51,403,800)				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	(10,280,760)				
(9b) From One Year Ago	21,808,279	\$ (10,280,760)			
(9c) From Two Years Ago	14,602,250	21,808,279	\$ (10,280,760)		
(9d) From Three Years Ago	(22,864,771)	14,602,250	21,808,279	\$ (10,280,760)	
(9e) From Four Years Ago	18,101,751	(22,864,772)	14,602,252	21,808,281	\$ (10,280,760)
(9f) Total Recognized Investment Gain	21,366,749	3,264,997	26,129,771	11,527,521	(10,280,760)
(10) Change in Actuarial Value of Assets					
=(4e)+(7)+(9f)	3,190,831				
End of Year:					
(3) Market Value of Assets	\$ 1,388,092,890				
(11) Actuarial Value of Assets					
=(2)+(10)	\$ 1,357,451,362				

PLAN MEMBER DATA

EXHIBIT A
SUMMARY OF CHANGES IN ACTIVE AND INACTIVE PARTICIPANTS
FOR THE YEAR ENDING DECEMBER 31, 2014

Active Participants ¹	Number at Beginning of Year	New	Inactive to Active	Total Increases	Decreases	Number at End of Year
Males	2,314	124	8	132	136	2,310
Females	530	31	0	31	34	527
Active Total	2,844	155	8	163	170	2,837
Inactive Participants	Number at Beginning of Year	New	Active to Inactive	Total Increases	Decreases	Number at End of Year
Males	1,273	6	48	54	42	1,285
Females	159	-	13	13	8	164
Inactive Total	1,432	6	61	67	50	1,449
Total - Actives and Inactives	4,276	161	69	230	220	4,286

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

EXHIBIT B
SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES
FOR THE YEAR ENDING DECEMBER 31, 2014

Annuitants and Beneficiaries	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Employee Annuitants	2,727	102	139	2,690
Surviving Spouse Annuitants	1,165	60	69	1,156
Reversionary Annuitants ¹	24	2	-	26
Child Annuitants	38	2	10	30
Annuitant Totals	3,954	166	218	3,902
Actives Receiving Disability				
Ordinary Disability Benefit	50	82	79	53
Duty Disability Benefit	174	231	242	163
Disability Totals	224	313	321	216
Totals	4,178	479	539	4,118

¹ Includes 21 Reversionary Annuitants as of December 31, 2013, and 23 Reversionary Annuitants as of December 31, 2014, that are also Survivors.

EXHIBIT C
PART I – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE MALE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2014

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	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20-24	14	38	-	-	-	-	-	-	-	-	52
	\$ 649,224	\$ 2,150,350	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,799,574
25-29	11	73	13	-	-	-	-	-	-	-	97
	\$ 534,178	\$ 4,174,005	\$ 976,730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,684,913
30-34	7	82	34	26	7	-	-	-	-	-	156
	\$ 338,650	\$ 5,000,294	\$ 2,478,283	\$ 2,052,691	\$ 521,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,391,250
35-39	6	53	32	39	104	9	-	-	-	-	243
	\$ 337,564	\$ 3,336,418	\$ 2,221,407	\$ 2,795,235	\$ 7,772,174	\$ 738,920	\$ -	\$ -	\$ -	\$ -	\$ 17,201,718
40-44	5	41	29	61	126	65	4	-	-	-	331
	\$ 245,212	\$ 2,645,699	\$ 2,089,651	\$ 4,359,621	\$ 9,247,041	\$ 5,073,636	\$ 313,072	\$ -	\$ -	\$ -	\$ 23,973,932
45-49	3	43	15	63	112	129	33	6	-	-	404
	\$ 128,544	\$ 2,702,039	\$ 1,088,011	\$ 4,627,880	\$ 8,346,662	\$ 10,107,203	\$ 2,559,206	\$ 491,472	\$ -	\$ -	\$ 30,051,017
50-54	2	13	25	45	123	108	77	50	3	-	446
	\$ 86,944	\$ 800,172	\$ 1,733,313	\$ 3,265,520	\$ 8,801,161	\$ 8,480,121	\$ 6,094,080	\$ 4,241,212	\$ 247,188	\$ -	\$ 33,749,711
55-59	2	19	23	35	93	76	45	37	22	-	352
	\$ 90,522	\$ 1,258,863	\$ 1,617,974	\$ 2,460,198	\$ 6,649,367	\$ 5,811,453	\$ 3,518,930	\$ 3,201,804	\$ 1,768,678	\$ -	\$ 26,377,789
60-64	-	2	7	16	30	39	20	18	10	-	142
	\$ -	\$ 117,624	\$ 487,637	\$ 1,135,164	\$ 2,130,825	\$ 3,011,251	\$ 1,371,432	\$ 1,461,358	\$ 769,802	\$ -	\$ 10,485,093
65-69	1	1	2	8	19	12	4	6	7	-	60
	\$ 43,098	\$ 79,040	\$ 141,940	\$ 561,111	\$ 1,352,439	\$ 891,698	\$ 303,077	\$ 478,038	\$ 592,531	\$ -	\$ 4,442,972
70 & Over	1	-	-	4	6	6	1	6	3	-	27
	\$ 43,098	\$ -	\$ -	\$ 203,461	\$ 444,352	\$ 447,097	\$ 71,781	\$ 433,535	\$ 262,760	\$ -	\$ 1,906,084
Total	52	365	180	297	620	444	184	123	45	-	2,310
	\$ 2,497,034	\$ 22,264,504	\$ 12,834,946	\$ 21,460,881	\$ 45,265,353	\$ 34,561,379	\$ 14,231,578	\$ 10,307,419	\$ 3,640,959	\$ -	\$ 167,064,053

EXHIBIT C
PART II – TOTAL LIVES AND ANNUAL SALARIES OF ACTIVE FEMALE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2014

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	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20-24	1	12	-	-	-	-	-	-	-	-	13
	\$ 47,424	\$ 512,722	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 560,146
25-29	3	19	8	-	-	-	-	-	-	-	30
	\$ 123,178	\$ 1,015,351	\$ 521,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,659,869
30-34	3	10	15	2	1	-	-	-	-	-	31
	\$ 147,402	\$ 516,301	\$ 1,094,854	\$ 150,010	\$ 70,970	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,979,537
35-39	3	14	17	11	32	-	-	-	-	-	77
	\$ 156,242	\$ 784,383	\$ 1,312,643	\$ 766,280	\$ 2,262,611	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,282,159
40-44	2	13	14	15	29	9	1	-	-	-	83
	\$ 82,618	\$ 642,561	\$ 975,191	\$ 1,038,695	\$ 2,024,820	\$ 636,320	\$ 67,330	\$ -	\$ -	\$ -	\$ 5,467,535
45-49	-	10	11	17	35	13	7	-	-	-	93
	\$ -	\$ 474,504	\$ 812,388	\$ 1,205,970	\$ 2,461,599	\$ 959,380	\$ 546,558	\$ -	\$ -	\$ -	\$ 6,460,399
50-54	1	4	16	13	24	19	14	4	-	-	95
	\$ 43,098	\$ 202,260	\$ 1,057,758	\$ 913,430	\$ 1,595,579	\$ 1,476,135	\$ 1,116,464	\$ 321,800	\$ -	\$ -	\$ 6,726,524
55-59	1	4	6	13	20	13	8	2	-	-	67
	\$ 51,938	\$ 280,152	\$ 438,320	\$ 887,408	\$ 1,355,059	\$ 941,723	\$ 609,408	\$ 176,392	\$ -	\$ -	\$ 4,740,400
60-64	-	1	1	1	9	7	4	1	-	-	24
	\$ -	\$ 59,197	\$ 70,970	\$ 70,970	\$ 666,504	\$ 517,251	\$ 310,688	\$ 42,536	\$ -	\$ -	\$ 1,738,116
65-69	-	-	-	2	4	1	3	-	-	-	10
	\$ -	\$ -	\$ -	\$ 141,940	\$ 279,742	\$ 87,228	\$ 224,176	\$ -	\$ -	\$ -	\$ 733,086
70 & Over	-	-	-	1	2	1	-	-	-	-	4
	\$ -	\$ -	\$ -	\$ 75,296	\$ 122,846	\$ 63,048	\$ -	\$ -	\$ -	\$ -	\$ 261,190
Total	14	87	88	75	156	63	37	7	-	-	527
	\$ 651,900	\$ 4,487,431	\$ 6,283,464	\$ 5,249,999	\$ 10,839,730	\$ 4,681,085	\$ 2,874,624	\$ 540,728	\$ -	\$ -	\$ 35,608,961

EXHIBIT C
PART III – TOTAL LIVES AND ANNUAL SALARIES OF ALL ACTIVE PARTICIPANTS CLASSIFIED BY
AGE AND YEARS OF SERVICE AS OF DECEMBER 31, 2014

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	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20-24	15	50	-	-	-	-	-	-	-	-	65
	\$ 696,648	\$ 2,663,072	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,359,720
25-29	14	92	21	-	-	-	-	-	-	-	127
	\$ 657,356	\$ 5,189,356	\$ 1,498,070	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,344,782
30-34	10	92	49	28	8	-	-	-	-	-	187
	\$ 486,052	\$ 5,516,595	\$ 3,573,137	\$ 2,202,701	\$ 592,302	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,370,787
35-39	9	67	49	50	136	9	-	-	-	-	320
	\$ 493,806	\$ 4,120,801	\$ 3,534,050	\$ 3,561,515	\$ 10,034,785	\$ 738,920	\$ -	\$ -	\$ -	\$ -	\$ 22,483,877
40-44	7	54	43	76	155	74	5	-	-	-	414
	\$ 327,830	\$ 3,288,260	\$ 3,064,842	\$ 5,398,316	\$ 11,271,861	\$ 5,709,956	\$ 380,402	\$ -	\$ -	\$ -	\$ 29,441,467
45-49	3	53	26	80	147	142	40	6	-	-	497
	\$ 128,544	\$ 3,176,543	\$ 1,900,399	\$ 5,833,850	\$ 10,808,261	\$ 11,066,583	\$ 3,105,764	\$ 491,472	\$ -	\$ -	\$ 36,511,416
50-54	3	17	41	58	147	127	91	54	3	-	541
	\$ 130,042	\$ 1,002,432	\$ 2,791,071	\$ 4,178,950	\$ 10,396,740	\$ 9,956,256	\$ 7,210,544	\$ 4,563,012	\$ 247,188	\$ -	\$ 40,476,235
55-59	3	23	29	48	113	89	53	39	22	-	419
	\$ 142,460	\$ 1,539,015	\$ 2,056,294	\$ 3,347,606	\$ 8,004,426	\$ 6,753,176	\$ 4,128,338	\$ 3,378,196	\$ 1,768,678	\$ -	\$ 31,118,189
60-64	-	3	8	17	39	46	24	19	10	-	166
	\$ -	\$ 176,821	\$ 558,607	\$ 1,206,134	\$ 2,797,329	\$ 3,528,502	\$ 1,682,120	\$ 1,503,894	\$ 769,802	\$ -	\$ 12,223,209
65-69	1	1	2	10	23	13	7	6	7	-	70
	\$ 43,098	\$ 79,040	\$ 141,940	\$ 703,051	\$ 1,632,181	\$ 978,926	\$ 527,253	\$ 478,038	\$ 592,531	\$ -	\$ 5,176,058
70 & Over	1	-	-	5	8	7	1	6	3	-	31
	\$ 43,098	\$ -	\$ -	\$ 278,757	\$ 567,198	\$ 510,145	\$ 71,781	\$ 433,535	\$ 262,760	\$ -	\$ 2,167,274
Total	66	452	268	372	776	507	221	130	45	2,837	
	\$ 3,148,934	\$ 26,751,935	\$ 19,118,410	\$ 26,710,880	\$ 56,105,083	\$ 39,242,464	\$ 17,106,202	\$ 10,848,147	\$ 3,640,959	\$ 202,673,014	

EXHIBIT D
PART I – AGE AND SERVICE DISTRIBUTION FOR INACTIVES – MALES
AS OF DECEMBER 31, 2014

(Males Only)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	3	-	-	-	-	-	-	-	-	3
25-29	10	8	-	-	-	-	-	-	-	18
30-34	11	16	1	-	-	-	-	-	-	28
35-39	23	24	8	10	-	-	-	-	-	65
40-44	40	24	5	4	2	1	-	-	-	76
45-49	51	21	10	5	4	3	-	-	-	94
50-54	200	43	4	4	8	4	8	-	-	271
55-59	198	61	8	1	6	1	-	-	-	275
60-64	121	43	5	2	3	1	-	-	-	175
65-69	53	26	9	4	1	1	-	1	-	95
70 & Over	92	63	7	7	6	2	5	1	-	183
w/o DOB	1	1	-	-	-	-	-	-	-	2
Total	803	330	57	37	30	13	13	2	0	1,285
Average Age										57.84
Average Service										2.15

For inactives without a birthdate on record, we assumed an average age of 57.00.

EXHIBIT D
PART II – AGE AND SERVICE DISTRIBUTION FOR INACTIVES – FEMALES
AS OF DECEMBER 31, 2014

(Females Only)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	2	1	-	-	-	-	-	-	-	3
25-29	3	3	-	-	-	-	-	-	-	6
30-34	3	6	-	-	-	-	-	-	-	9
35-39	14	20	-	-	-	-	-	-	-	34
40-44	10	10	1	1	-	-	-	-	-	22
45-49	8	7	-	2	1	-	-	-	-	18
50-54	10	5	2	5	1	1	-	-	-	24
55-59	10	1	3	2	-	-	-	-	-	16
60-64	10	1	-	1	-	1	-	-	-	13
65-69	-	2	-	-	-	-	-	-	-	2
70 & Over	6	3	5	2	1	-	-	-	-	17
w/o DOB	-	-	-	-	-	-	-	-	-	0
Total	76	59	11	13	3	2	0	0	0	164
Average Age										50.39
Average Service										2.82

For inactives without a birthdate on record, we assumed an average age of 57.00.

EXHIBIT D
PART III – AGE AND SERVICE DISTRIBUTION FOR INACTIVES – TOTAL
AS OF DECEMBER 31, 2014

(Males and Females Combined)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	-	-	-	-	-	-	-	-	-	0
20-24	5	1	-	-	-	-	-	-	-	6
25-29	13	11	-	-	-	-	-	-	-	24
30-34	14	22	1	-	-	-	-	-	-	37
35-39	37	44	8	10	-	-	-	-	-	99
40-44	50	34	6	5	2	1	-	-	-	98
45-49	59	28	10	7	5	3	-	-	-	112
50-54	210	48	6	9	9	5	8	-	-	295
55-59	208	62	11	3	6	1	-	-	-	291
60-64	131	44	5	3	3	2	-	-	-	188
65-69	53	28	9	4	1	1	-	1	-	97
70 & Over	98	66	12	9	7	2	5	1	-	200
w/o DOB	1	1	-	-	-	-	-	-	-	2
Total	879	389	68	50	33	15	13	2	0	1,449
Average Age										57.00
Average Service										2.22

For inactives without a birthdate on record, we assumed an average age of 57.00.

EXHIBIT E
STATISTICS ON EMPLOYEE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2014

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 50	2	\$ 7,476	-	\$ -
50-54	101	6,118,152	2	117,468
55-59	380	20,989,188	14	532,740
60-64	520	26,549,712	28	933,696
65-69	435	20,938,824	29	868,740
70-74	369	16,847,352	22	516,564
75-79	285	12,632,004	17	467,976
80-84	186	7,283,640	26	690,588
85-89	124	4,693,080	31	660,540
90-94	53	1,638,768	30	505,224
95-99	9	228,408	17	287,472
100 & over	-	-	10	145,176
Totals	2,464	\$ 117,926,604	226	\$ 5,726,184
Average Age	68.98		78.83	

EXHIBIT F
PART I – STATISTICS ON SURVIVING SPOUSE ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2014

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -
30-34	-	-	1	9,600
35-39	-	-	2	19,200
40-44	1	14,232	2	27,660
45-49	-	-	8	107,880
50-54	2	17,184	37	534,168
55-59	3	30,300	55	915,384
60-64	2	12,936	84	1,413,840
65-69	1	10,068	97	1,496,172
70-74	-	-	130	2,010,444
75-79	1	9,600	187	2,856,492
80-84	1	9,600	186	2,614,224
85-89	8	82,608	189	2,349,948
90-94	3	34,080	106	1,155,372
95-99	1	10,476	45	427,704
100 & over	-	-	4	38,400
Totals	23	\$ 231,084	1,133	\$ 15,976,488
Average Age	76.33		77.56	

EXHIBIT F
PART II – STATISTICS ON REVERSIONARY ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2014

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -
30-34	1	774	-	-
35-39	-	-	-	-
40-44	-	-	-	-
45-49	1	601	-	-
50-54	-	-	-	-
55-59	1	1,500	-	-
60-64	-	-	4	42,923
65-69	-	-	4	14,802
70-74	-	-	4	34,896
75-79	-	-	3	14,688
80-84	-	-	2	11,676
85 & Over	-	-	6	27,981
Totals	3	\$ 2,875	23	\$ 146,966
Average Age	46.99		75.52	

EXHIBIT F
PART III – STATISTICS ON CHILDREN ANNUITIES
CLASSIFIED BY AGE AS OF DECEMBER 31, 2014

Age	Male		Female	
	No.	Annual Payments	No.	Annual Payments
Under 6	-	\$ -	-	\$ -
6	1	3,000	-	-
7	-	-	-	-
8	1	3,000	-	-
9	1	2,640	-	-
10	3	8,280	-	-
11	1	3,000	1	2,640
12	2	5,280	2	5,280
13	1	3,000	-	-
14	2	5,280	3	8,280
15	5	13,560	2	6,000
16	-	-	1	2,640
17	1	2,640	3	7,920
Totals	18	\$ 49,680	12	\$ 32,760
Average Age	12.84		14.99	

EXHIBIT G
PART I – NUMBER OF REFUND PAYMENTS MADE DURING 2014
TO MALE EMPLOYEES

Age at Date of Valuation	Length of Service at Date of Refund						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	Between 5 and Over	
Under 20	-	-	-	-	-	-	-
20 to 24	-	1	-	-	-	-	1
25 to 29	1	2	1	-	-	-	4
30 to 34	1	-	-	-	-	1	2
35 to 39	-	-	-	-	-	1	1
40 to 44	-	-	-	-	-	3	3
45 to 49	-	1	-	-	-	2	3
50 to 54	-	-	-	-	-	2	2
55 to 59	-	1	-	1	-	2	4
60 & Over	-	-	-	-	-	1	1
Totals	2	5	1	1	-	12	21

PART II – NUMBER OF REFUND PAYMENTS MADE DURING 2014
TO FEMALE EMPLOYEES

Age at Date of Valuation	Length of Service at Date of Refund						Total
	Under 1 Year	Between 1 and 2	Between 2 and 3	Between 3 and 4	Between 4 and 5	Between 5 and Over	
Under 20	-	-	-	-	-	-	-
20 to 24	-	-	-	-	-	-	-
25 to 29	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-
35 to 39	-	1	1	-	-	-	2
40 to 44	-	-	-	-	-	1	1
45 to 49	-	1	-	-	-	1	2
50 to 54	-	-	-	1	-	-	1
55 to 59	-	1	1	-	-	-	2
60 & Over	-	-	-	-	-	-	-
Totals	-	3	2	1	-	2	8

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

EXHIBIT H
HEALTH INSURANCE COVERAGE
CLASSIFIED BY AGE AS OF DECEMBER 31, 2014

<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	-	-	-	2	2	0.00%
50-59	183	145	328	169	497	66.00%
60-69	370	353	723	289	1,012	71.44%
70-79	248	290	538	155	693	77.63%
80-89	180	88	268	99	367	73.02%
90 & Over	60	14	74	45	119	62.18%
Total	1,041	890	1,931	759	2,690	71.78%
Spouse Annuitants						
30-39	-	1	1	2	3	33.33%
40-49	-	2	2	9	11	18.18%
50-59	21	5	26	71	97	26.80%
60-69	71	2	73	111	184	39.67%
70-79	184	1	185	133	318	58.18%
80-89	243	1	244	140	384	63.54%
90 & Over	88	-	88	71	159	55.35%
Total	607	12	619	537	1,156	53.55%

EXHIBIT I
PART I – MALE PARTICIPANTS RECEIVING DUTY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2014

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
Attained	Annual		Annual		Annual		Annual		Annual		Annual		Annual	
Age	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
Under 30	-	\$ -	1	\$ 57,720	-	\$ -	-	\$ -	-	\$ -	-	\$ -	1	\$ 57,720
30 to 34	-	-	1	32,274	2	87,485	-	-	2	111,228	-	-	5	230,987
35 to 39	-	-	-	-	1	52,182	5	249,865	2	96,907	1	69,186	9	468,140
40 to 44	-	-	-	-	1	28,720	3	170,664	4	230,646	7	418,602	15	848,632
45 to 49	-	-	-	-	-	-	7	379,095	4	214,344	12	685,854	23	1,279,293
50 to 54	-	-	-	-	-	-	4	207,043	9	468,905	17	947,902	30	1,623,850
55 to 59	-	-	-	-	2	101,135	2	97,422	8	397,222	13	706,009	25	1,301,788
60 & Over	-	-	-	-	-	-	-	-	6	314,137	6	303,826	12	617,963
Totals	-	\$ -	2	\$ 89,994	6	\$ 269,522	21	\$ 1,104,089	35	\$ 1,833,389	56	\$ 3,131,379	120	\$ 6,428,373

PART II – FEMALE PARTICIPANTS RECEIVING DUTY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2014

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
Attained	Annual		Annual		Annual		Annual		Annual		Annual		Annual	
Age	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments	No.	Payments
Under 30	-	\$ -	1	\$ 31,387	-	\$ -	-	\$ -	-	\$ -	-	\$ -	1	\$ 31,387
30 to 34	-	-	-	-	-	-	-	-	1	53,227	-	-	1	53,227
35 to 39	-	-	-	-	-	-	1	47,861	1	53,227	-	-	2	101,088
40 to 44	-	-	1	30,420	3	146,749	5	249,724	4	200,241	-	-	13	627,134
45 to 49	-	-	1	32,274	-	-	3	159,245	1	51,152	-	-	5	242,671
50 to 54	-	-	-	-	2	81,978	3	166,218	4	196,185	2	138,207	11	582,588
55 to 59	-	-	-	-	-	-	3	161,850	3	150,851	2	90,542	8	403,243
60 & Over	-	-	-	-	-	-	1	56,472	-	-	1	56,472	2	112,944
Totals	-	\$ -	3	\$ 94,081	5	\$ 228,727	16	\$ 841,370	14	\$ 704,883	5	\$ 285,221	43	\$ 2,154,282

Benefit payments are annual amount before Workers' Compensation offset.

EXHIBIT I (CONT'D)
PART III – MALE PARTICIPANTS RECEIVING ORDINARY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2014

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
Attained Age	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	-	1	27,528	1	19,365	1	40,456	3	87,349
45 to 49	-	-	-	-	-	-	-	-	2	57,439	3	117,121	5	174,560
50 to 54	-	-	-	-	-	-	-	-	6	212,930	4	140,868	10	353,798
55 to 59	-	-	-	-	-	-	-	-	2	73,268	3	120,588	5	193,856
60 & Over	-	-	-	-	-	-	-	-	4	146,027	8	291,294	12	437,321
Totals	-	\$ -	-	\$ -	-	\$ -	1	\$ 27,528	15	\$ 509,029	19	\$ 710,327	35	\$ 1,246,884

PART IV – FEMALE PARTICIPANTS RECEIVING ORDINARY DISABILITY
CLASSIFIED BY AGE AND LENGTH OF SERVICE AS OF DECEMBER 31, 2014

Service:	Under 1 Year		1 to 4		5 to 9		10 to 14		15 to 19		20 & Over		Total	
Attained Age	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments	No.	Annual Payments
Under 30	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
30 to 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	1	39,520	-	-	-	-	-	-	1	39,520
40 to 44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45 to 49	-	-	-	-	-	-	1	35,485	1	22,686	1	35,485	3	93,656
50 to 54	-	-	-	-	-	-	-	-	-	-	2	73,965	2	73,965
55 to 59	-	-	-	-	-	-	2	65,860	2	53,528	2	67,392	6	186,780
60 & Over	-	-	-	-	1	35,485	-	-	4	126,183	1	38,480	6	200,148
Totals	-	\$ -	-	\$ -	2	\$ 75,005	3	\$ 101,345	7	\$ 202,397	6	\$ 215,322	18	\$ 594,069

EXHIBIT J
HISTORY OF AVERAGE ANNUAL SALARIES

Year Ended	Members in Service	Percent Increase	Annual Salaries	Percent Increase	Average Salary	Percent Increase	Actuarial Salary Assumption	CPI Chicago ¹
2005	3,141	0.19 %	\$182,809,397	6.61 %	\$58,201	6.41 %	4.50 %	3.59 %
2006	3,215	2.36 %	193,176,272	5.67 %	60,086	3.24 %	4.50 %	0.71 %
2007	3,138	(2.40)%	192,847,482	(0.17)%	61,456	2.28 %	4.50 %	4.73 %
2008	3,325	5.96 %	216,744,211	12.39 %	65,186	6.07 %	4.50 %	(0.58)%
2009	3,124	(6.05)%	208,626,493	(3.75)%	66,782	2.45 %	4.50 %	2.54 %
2010	2,956	(5.38)%	199,863,410	(4.20)%	67,613	1.24 %	4.50 %	1.23 %
2011	2,852	(3.52)%	195,238,332	(2.31)%	68,457	1.25 %	4.50 %	2.06 %
2012	2,865	0.46 %	198,789,741	1.82 %	69,386	1.36 %	4.50 %	1.68 %
2013	2,844	(0.73)%	200,351,820	0.79 %	70,447	1.53 %	3.75 %	0.51 %
2014	2,837	(0.25)%	202,673,014	1.16 %	71,439	1.41 %	3.75 %	1.48 %
Average Increase (Decrease) for the Last Five Years		(1.91)%		(0.58)%		1.36 %	4.20 %	1.39 %

¹ CPI-Chicago as of the valuation date.

EXHIBIT K
PART I – NEW ANNUITIES GRANTED DURING 2014

	Male Annuitants	Female Annuitants	Spouse of Deceased Employees	Spouse of Deceased Annuitants
Number Retired/Deceased ¹	85	16	5	54
Average Age Attained	60.4	61.6	59.1	74.8
Average Length of Service	28.9	22.3	21.6	N/A
Total Annual Final Salary	\$ 6,657,246	\$ 1,100,104	\$ 349,507	N/A
Average Annual Final Salary	\$ 78,321	\$ 68,756	\$ 69,901	N/A
Total Annual Annuity	\$ 4,278,060	\$ 563,928	\$ 95,160	\$ 1,230,912
Average Annual Annuity	\$ 50,330	\$ 35,246	\$ 19,032	\$ 22,795
Total Actuarial Liability	\$ 51,910,757	\$ 7,038,243	\$ 1,047,040	\$ 10,060,271
Average Actuarial Liability	\$ 610,715	\$ 439,890	\$ 209,408	\$ 186,301
Total Contributed by EE ²	\$ 8,501,599	\$ 1,115,290	\$ 426,652	N/A
Average Contribution	\$ 100,019	\$ 69,706	\$ 85,330	N/A
Liability/Contributions	6.11	6.31	2.45	N/A
Liability/Final Pay	7.80	6.40	3.00	N/A
Expected Future Lifetime (yrs.)	20.90	24.87	27.20	15.13
Payback Period (yrs.)	1.9873	1.9777	4.4835	N/A
Replacement Ratio ³	64.26 %	51.26 %	27.23 %	N/A

¹ Does not include one new retiree and one new survivor who were no longer on annuity at the end of the year.

² Includes "Pickup."

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

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

	Years of Credited Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+		
2009										
Avg Monthly Annuity	\$ 431	\$ 1,081	\$ 1,366	\$ 1,905	\$ 2,653	\$ 3,429	\$ 4,384	\$ 5,005	\$ 3,707	
Avg Monthly FAS	\$ 5,981	\$ 6,697	\$ 4,922	\$ 4,487	\$ 5,284	\$ 5,286	\$ 5,718	\$ 6,257	\$ 5,553	
Number of Retirees	1	3	10	16	12	26	77	24	169	
2010										
Avg Monthly Annuity	\$ 497	\$ 794	\$ 1,293	\$ 1,819	\$ 2,684	\$ 3,995	\$ 4,865	\$ 5,895	\$ 4,002	
Avg Monthly FAS	\$ 6,094	\$ 5,592	\$ 4,409	\$ 5,153	\$ 5,499	\$ 6,089	\$ 6,347	\$ 7,369	\$ 6,113	
Number of Retirees	4	4	7	14	18	19	81	16	163	
2011										
Avg Monthly Annuity	\$ 355	\$ -	\$ 1,701	\$ 1,941	\$ 2,790	\$ 3,665	\$ 5,013	\$ 5,411	\$ 4,107	
Avg Monthly FAS	\$ 7,085	\$ -	\$ 5,923	\$ 5,048	\$ 5,397	\$ 5,734	\$ 6,609	\$ 6,772	\$ 6,326	
Number of Retirees	8	-	12	6	13	22	86	16	163	
2012										
Avg Monthly Annuity	\$ 258	\$ 636	\$ 1,256	\$ 2,512	\$ 2,705	\$ 3,833	\$ 5,013	\$ 5,730	\$ 3,824	
Avg Monthly FAS	\$ 4,613	\$ 5,519	\$ 4,895	\$ 5,716	\$ 5,258	\$ 6,004	\$ 6,580	\$ 7,162	\$ 6,085	
Number of Retirees	4	6	9	9	22	17	54	15	136	
2013										
Avg Monthly Annuity	\$ 364	\$ 745	\$ 1,653	\$ 2,517	\$ 2,710	\$ 3,726	\$ 4,853	\$ 4,566	\$ 3,575	
Avg Monthly FAS	\$ 7,849	\$ 6,176	\$ 5,380	\$ 5,962	\$ 5,312	\$ 5,701	\$ 6,339	\$ 5,711	\$ 5,895	
Number of Retirees	3	3	9	9	19	20	34	15	112	
2014										
Avg Monthly Annuity	\$ 314	\$ 635	\$ 1,067	\$ 2,557	\$ 3,065	\$ 3,612	\$ 5,469	\$ 5,568	\$ 3,991	
Avg Monthly FAS	\$ 5,938	\$ 5,293	\$ 3,384	\$ 6,374	\$ 5,876	\$ 5,545	\$ 7,051	\$ 6,866	\$ 6,313	
Number of Retirees	5	1	2	9	21	19	38	7	102	

EXHIBIT L
NEW RECIPROCAL ANNUITIES GRANTED DURING 2014

	Reciprocal	
	Male	Female
	Annuitants	Annuitants
Number Retired	10	1
Average Age Attained	62.3	73.3
Number with Spouses	6	1
Average Spouse Age	62.3	66.4
Percentage with Spouse	60.00%	100.00%
Total Annual Annuity	\$ 220,020	\$ 7,620
Average Annual Annuity	\$ 22,002	\$ 7,620
Total Liability (7.5% RP 2000)	\$ 2,478,970	\$ 84,885
Average Liability	\$ 247,897	\$ 84,885

EXHIBIT M
HISTORY OF RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

Years	Annuitants				Disability		Compensation	Reciprocal	
	Employee	Spouse	Child	Reversionary ³	Ordinary	Duty	Annuitants ²	Employee	Spouse
2005 ¹	2,489	1,301	52		56	120	1	248	66
2006 ¹	2,432	1,265	52		42	129	1	251	70
2007 ¹	2,388	1,254	45		58	118	1	256	62
2008 ¹	2,380	1,236	47		61	145	1	266	62
2009	2,413	1,210	41		62	188	1	270	62
2010	2,429	1,197	39		44	184	1	273	58
2011 ¹	2,438	1,158	38		54	190	1	283	63
2012	2,448	1,122	35	22	60	195	1	289	60
2013	2,433	1,102	38	24	50	174	1	294	63
2014	2,394	1,092	30	26	53	163	1	296	64

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

² Compensation Annuitant is also included as a Spouse Annuitant.

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

EXHIBIT N
HISTORY OF AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Year Ended	Average Annual Benefit	Average Current Age of Retirees	Average Annual Benefit at Retirement Current Year	Average Age at Retirement Current Year	Average Years Service at Retirement Current Year
2005	\$30,492	70.8	\$39,105	57.0	30.44
2006	31,664	70.9	38,015	56.6	28.87
2007	33,242	70.9	42,234	57.0	29.82
2008	35,037	70.7	44,496	56.3	30.11
2009	36,868	70.3	44,581	57.8	29.29
2010	38,962	70.0	48,489	58.2	29.09
2011	41,056	69.6	49,135	58.0	29.54
2012	42,688	69.6	46,231	58.6	28.16
2013	44,264	69.8	42,895	60.5	27.94
2014	45,968	69.8	47,940	60.5	27.89

EXHIBIT O
SURVIVING SPOUSES RECEIVING BENEFITS AS OF DECEMBER 31, 2014
BY AGE AND YEARS IN PAY STATUS

Attained Age	Number of Years in Pay Status						Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Over	
Under 30	-	-	-	-	-	-	-
30 to 34	-	2	-	-	-	-	2
35 to 39	-	-	1	-	1	-	2
40 to 44	-	3	-	-	-	-	3
45 to 49	1	2	3	2	-	1	9
50 to 54	4	12	11	7	2	3	39
55 to 59	4	14	19	10	7	5	59
60 to 64	4	25	22	26	9	4	90
65 to 69	8	21	22	17	18	16	102
70 to 74	5	29	36	23	16	25	134
75 to 79	11	25	44	36	34	41	191
80 to 84	7	36	39	28	31	48	189
85 & Over	7	29	38	63	55	170	362
Totals	51	198	235	212	173	313	1,182

Includes 23 Reversionary Annuitants that are also Spouse Annuitants.

EXHIBIT P
HISTORY OF ANNUITIES 2005 – 2014

Employee Annuitants (Male and Female)			
Year Ended	Number of Annuitants	Total Annuities	Average Annuities
2005	2,737	\$ 83,457,267	\$ 30,492
2006	2,683	84,953,928	31,664
2007	2,644	87,891,144	33,242
2008	2,646	92,708,484	35,037
2009	2,683	98,915,980	36,868
2010	2,702	105,275,352	38,962
2011	2,721	111,712,416	41,056
2012	2,737	116,835,786	42,688
2013	2,727	120,707,652	44,264
2014	2,690	123,652,788	45,968
Surviving Spouse and Reversionary Annuitants			
Year Ended	Number of Annuitants	Total Annuities	Average Annuities
2005 ¹	1,367	\$ 14,913,483	\$ 10,910
2006 ¹	1,335	15,003,432	11,239
2007 ¹	1,316	15,164,628	11,523
2008 ¹	1,298	15,281,964	11,773
2009	1,272	15,375,816	12,088
2010	1,255	15,605,676	12,435
2011 ¹	1,221	15,583,920	12,763
2012 ²	1,204	15,579,660	12,940
2013 ³	1,189	15,757,533	13,253
2014 ⁴	1,182	16,357,413	13,839

¹Includes one Reversionary Annuitant.

²Includes 20 Reversionary Annuitants that are also Spouse Annuitants.

³Includes 21 Reversionary Annuitants that are also Spouse Annuitants.

⁴Includes 23 Reversionary Annuitants that are also Spouse Annuitants.

EXHIBIT Q
SCHEDULE OF RETIRED MEMBERS
BY AMOUNT AND TYPE OF BENEFIT AS OF DECEMBER 31, 2014

Amount of Monthly Benefit	Number of Employee Annuitants	Number of Spouse Annuitants	Number of Reversionary Annuitants ¹	Number of Child Annuitants	Total Number of Annuitants
\$ 1 - 250	37	20	7	30	94
251 - 500	34	5	10	-	49
501 - 750	32	10	5	-	47
751 - 1,000	30	628	1	-	659
1,001 - 1,250	34	116	2	-	152
1,251 - 1,500	158	112	-	-	270
1,501 - 1,750	69	73	-	-	142
1,751 - 2,000	65	81	1	-	147
2,001 - 2,250	73	46	-	-	119
2,251 - 2,500	94	29	-	-	123
2,501 - 2,750	88	16	-	-	104
2,751 - 3,000	88	6	-	-	94
3,001 - 3,250	85	8	-	-	93
3,251 - 3,500	125	1	-	-	126
3,501 - 3,750	126	3	-	-	129
3,751 - 4,000	172	-	-	-	172
4,001 - 4,250	213	1	-	-	214
4,251 - 4,500	215	-	-	-	215
4,501 - 4,750	208	-	-	-	208
4,751 - 5,000	179	-	-	-	179
5,001 - 5,250	114	1	-	-	115
5,251 - 5,500	72	-	-	-	72
5,501 - 5,750	75	-	-	-	75
5,751 - 6,000	67	-	-	-	67
6,001 - 6,250	53	-	-	-	53
6,251 - 6,500	45	-	-	-	45
6,501 - 6,750	34	-	-	-	34
6,751 - 7,000	26	-	-	-	26
7,001 - 7,250	17	-	-	-	17
7,251 - 7,500	21	-	-	-	21
Over \$7,500	41	-	-	-	41
Totals	2,690	1,156	26	30	3,902

¹Includes 23 reversionary annuitants that are also spouse annuitants.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014**

ACTUARIAL METHODS AND ASSUMPTIONS

AS OF DECEMBER 31, 2014

ACTUARIAL COST METHOD

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

To the extent that current assets and future Normal Costs do not support participants' expected future benefits, an Unfunded Actuarial Accrued Liability ("UAAL") develops. The UAAL is generally amortized over a defined period of time (e.g., 30 years). The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL.

Estimated annual administrative expenses are added to the normal cost.

CURRENT ACTUARIAL ASSUMPTIONS

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

Demographic Assumptions

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

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

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

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

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

RATE OF RETIREMENT:

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

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

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

<u>Attained Age</u>	<u>Years of Service</u>	
	10-39	40+
60-66	24 %	100 %
67-69	40	100
70-79	40	100
80+	100	100

Retirement rates at ages 60 and 61 for Tier 2 members added as a result of new eligibility conditions under Public Act 98-0641.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

RATE OF TERMINATION:

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

¹Based on service at beginning of valuation year.

Economic Assumptions

Investment Return Rate

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

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

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

¹Based on projected service at end of valuation year.

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

Expenses: Administrative expenses included in the first year normal cost are based on the previous years' administrative expenses increased by 3.0 percent and discounted to the beginning of the year. Future administrative expenses are assumed to increase at the assumed inflation assumption of 3.0 percent.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

Projection Assumptions

Population: The active population is assumed to remain stable at the December 31, 2014, level.

New Entrant Profile: New entrants in the projection are assumed to have the following characteristics:

	Before Pay Cap	After Pay Cap
Average Age:	34.41	34.41
Average Salary:	\$ 58,673	\$ 58,627
Minimum Salary:	\$ 12,442	\$ 12,442
Maximum Salary:	\$128,558	\$111,572

New entrant characteristics are based upon current members that have been hired in the last ten years. Approximately 75 percent of new entrants are assumed to be male.

Individual member new entrant uncapped pay at hire date is assumed to increase by 3.75 percent over the individual member new entrant pay during the prior period.

New entrant pay is calculated explicitly each year for each individual new entrant and is tested against the pensionable pay cap in the applicable year.

Individual new entrant pay once hired is assumed to increase in accordance with the salary increase assumptions used in the actuarial valuation until the pensionable pay cap is reached. Thereafter, pay increases at the same rate as the pay cap.

P.A. 96-0889 and P.A. 96-1490 Assumptions: Capped (pensionable pay) was \$110,631.26 for fiscal year 2014 and \$111,571.63 for fiscal year 2015 and increases at ½ CPI thereafter.

Employee and employer contributions and benefits are based on capped pay.

The annual increase in the Consumer Price Index-U is assumed to be 3.0 percent for all years.

Disability Payments in Lieu are assumed to reduce the applicable members' contributions used in the determination of the City's contribution when based on the multiple by 7.6 percent.

Other Assumptions

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

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

Disability:	Liability for disability benefits is recognized as a one-year term cost of 2.50 percent of pay added to the normal cost.
Reciprocal Service:	No assumption for reciprocal service.
Benefit Service:	Exact fractional years of service are used to determine the amount of benefit payable.
Decrement Timing:	All decrements are assumed to occur mid-year.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Turnover decrements do not operate after member reaches retirement eligibility for a minimum annuity formula benefit.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.
Pay Increase Timing:	Middle of (fiscal) year.
Group Health Insurance:	<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 Fund paid health insurance from July 1, 2008, until December 31, 2016, 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 75 percent of future retirees will elect to receive the health insurance supplement at retirement, first adopted for the valuation as of December 31, 2011.</p>
Loss in Tax Levy:	No loss on tax levy is assumed.

**ACTUARIAL METHODS AND ASSUMPTIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

THREE METHODS OF FINANCING UNFUNDED LIABILITY

Normal Cost

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

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

Normal Cost Plus

Amortization

Method:

GASB #27 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 #27 ARC is based on a 30-year amortization period. The GASB #43 ARC is based on a two-year amortization 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, 2014 (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 #27 and GASB #43. Note that if this amount is recomputed each year with the same “open” amortization period, the unfunded liability will never be amortized.

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

Actuarial Assets with Various Amortization Methods	Required 2015 Tax Levy	Required Multiple	Unfunded Liability Will	Portion Applicable to Unfunded Liability
1. Normal Cost Plus Interest Only	N/A	4.87	Remain Constant	\$52,499,618
2. Normal Cost Plus 30-Year Level Dollar Amortization ^a	N/A	5.48	Decrease	\$61,393,354
3. Normal Cost Plus 30-Year Level % of Payroll ^b	N/A	4.05	Increase	\$42,209,218
4. Present Law	24,019,000	1.60		

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

^b Two-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 FUND
AS OF DECEMBER 31, 2014**

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014**

PLAN DESCRIPTION

Any employee of the City of Chicago or the Board of Education employed under the provisions of the municipal personnel ordinance as labor service or any person employed by a retirement board of any annuity and benefit fund in the city is covered by the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Laborers' Plan) which is a defined benefit single employer pension plan with a money purchase minimum. Although this is a single employer plan, the defined benefits, as well as the employer and employee contribution levels, are mandated in Illinois Compiled Statutes (Chapter 40, Pensions, Article 5/11) and may be amended only by the Illinois legislature. The City of Chicago accounts for the plan as a pension trust fund. The City of Chicago payroll for employees covered by the Laborers' Plan for the year ended December 31, 2014, was \$202,673,014. At December 31, 2014, the Laborers' Plan membership consisted of:

Retiree, surviving spouse, reversionary annuitant and child annuitants currently receiving benefits	3,902
Terminated inactive employees entitled to benefits or a refund of contributions but not yet receiving them	1,449
Current employees (includes 216 disabilities)	2,837

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

Increases in annuity for members hired before January 1, 2011, are equal to the lesser of 3 percent or one-half the annual unadjusted percentage increase (but not less than zero) in the Consumer Price Index-U for the 12 months ending with the September preceding each November 1 of the participant's last annual annuity amount prior to January 1, 2015, or if the participant was not yet receiving an annuity on that date, then this calculation is based on the originally granted annual annuity amount.

The minimum annual increase to eligible participants with an annual annuity amount at the time of the increase of less than \$22,000, is 1.0 percent of the participant's last annual annuity amount prior to January 1, 2015, or if the participant was not yet receiving an annuity on that date, then 1.0 percent of the originally granted annual annuity amount.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

PLAN DESCRIPTION (CONT'D)

Except for participants eligible for the minimum annual increase, no annual increases will be paid in years 2017, 2019, and 2025.

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.

All covered employees are required to contribute a portion of their salary to the Laborers' Plan. The covered employee contributes 9.0 percent in fiscal year 2015, 9.5 percent in fiscal year 2016, 10.0 percent in fiscal year 2017, 10.5 percent in fiscal year 2018 and 11.0 percent in fiscal year 2019 and thereafter. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with 3.00 percent interest.

The City of Chicago is required by state statutes to contribute the remaining amounts necessary to finance the requirements of the Fund. In payment years prior to 2021, it is required to levy a tax at a rate not more than a multiple of 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. Beginning in payment year 2021, the City's contributions are based on the net employer normal cost plus a level percent of payroll amortization of the unfunded actuarial liability needed to attain a 90 percent funded ratio by 2055 on an open group basis.

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

DEFINITIONS

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

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

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

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

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

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

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

“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 fund, or a beneficiary thereof.

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

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

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

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

1. Interest only on the unfunded accrued liability;
2. The level annual amount required to amortize the unfunded accrued liability over a period not exceeding 30 years (40 years for pension unfunded accrued liability prior to 2007); and
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.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

PARTICIPANTS

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

SERVICE

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

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.

Minimum Annuity Formula

Maximum is 80 percent of final average salary.

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

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

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

Participants that first became members on or after January 1, 2011, are first eligible for an unreduced annuity benefit upon attainment of age 65 with 10 years of service. Members are first eligible to begin receiving a reduced annuity benefit upon attainment of age 60 with 10 years of service. The annuity is discounted 0.50 percent for each full month the employee is younger than age 65. 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.

Reversionary Annuity

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

Automatic Increase in Annuity

The annual increase payable to eligible participants is equal to the lesser of 3 percent or one-half the annual unadjusted percentage increase (but not less than zero) in the consumer price index-u for the 12 months ending with the September preceding each November 1 of the participant's last annual annuity amount prior to January 1, 2015, or if the participant was not yet receiving an annuity on that date, then this calculation is based on the originally granted annual annuity amount.

The minimum annual increase to eligible participants with an annual annuity amount at the time of the increase of less than \$22,000, is equal to 1.0 percent of the participant's last annual annuity amount prior to January 1, 2015, or if the participant was not yet receiving an annuity on that date, then 1.0 percent the originally granted annual annuity amount.

Except for participants eligible for the minimum annual increase, no annual increases will be paid in years 2017, 2019, and 2025.

This increase begins in January of the year of the first payment date following the earlier of:

- 1.) The later of the fourth anniversary of retirement and age 54, and
- 2.) The later of the second anniversary of retirement and age 61.

Increases apply only to life annuities.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

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). No annual increases will be paid in 2025.

This increase begins on January 1 of the year of the first payment date following the later of:

- 1.) Attainment of age 66, and*
- 2.) The second anniversary of the annuity start date.*

SPOUSE ANNUITY

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

Money Purchase Formula

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

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, 2014 (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 unmarried children of a deceased employee who are under the age of 18, if the child was conceived or born before the withdrawal from service. The annuity is \$220 per month while the spouse of the deceased employee is alive and \$250 per month if the spouse is deceased.

Family Maximum

Non-Duty Death: 60 percent of final monthly salary.
Duty Death: 70 percent of final monthly salary.

DISABILITIES

Duty Disability Benefits

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

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

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

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

Ordinary Disability Benefit

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

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

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.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

The Board of Education health benefit plan referred to above and the pension fund's payments to the Board of Education for such plan are not and shall not be construed to be pension or retirement benefits for the purposes of Section 5 of Article XIII of the Illinois Constitution of 1970.

REFUNDS

To Employees

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

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

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

For participants that first became members on or after January 1, 2011, an employee who resigns before age 62 without regard to length of service or with less than 10 years of service regardless of age is entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.

To Spouses

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

Remaining Amounts

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

DEDUCTIONS AND CONTRIBUTIONS

Covered employees are required to contribute the following rates to the pension fund:

- Beginning January 1, 2015, and prior to January 1, 2016 — 9.0 percent of salary
- Beginning January 1, 2016, and prior to January 1, 2017 — 9.5 percent of salary
- Beginning January 1, 2017, and prior to January 1, 2018 — 10.0 percent of salary
- Beginning January 1, 2018, and prior to January 1, 2019 — 10.5 percent of salary
- Beginning January 1, 2019, and thereafter — 11.0 percent of salary

Beginning with the first pay period on or after the date when the funded ratio of the Fund is first determined to have reached the 90 percent funding goal set forth in subsection (a-5) of Section 11-169 of the Illinois Pension Code, and each pay period thereafter for as long as the Fund maintains a funding ratio of 90 percent or more, employee contributions shall be 9.75 percent of salary.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

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.

Beginning in payment year 2016, the City's required annual contribution to the Fund shall be the lesser of

- i. (I) For payment years 2016 through 2055, the annual amount determined by the Fund to be equal to the greater of \$0, or the sum of (1) the City's portion of the projected normal cost for that fiscal year, plus (2) an amount determined on a level percentage of applicable employee payroll basis that is sufficient to bring the total actuarial liabilities of the Fund up to 90 percent of the total actuarial liabilities of the Fund by the end of 2055. (II) For payment years after 2055, the annual amount determined by the Fund to be equal to the amount, if any, needed to bring the total actuarial assets of the Fund up to 90 percent of the total actuarial liabilities of the Fund as of the end of the year. In making the determinations under both (I) and (II), the actuarial calculations shall be determined under the entry age normal actuarial cost method, and any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal annual amounts over the 5-year period following the fiscal year;

Or

- ii. For payment year 2016, 1.60 times the total amount of contributions made by or on behalf of employees to the Fund for annuity purposes in the calendar year 2013; for payment year 2017, 1.90 times the total amount of contributions made by or on behalf of employees to the Fund for annuity purposes in the calendar year 2014; for payment year 2018, 2.20 times the total amount of contributions made by or on behalf of employees to the Fund for annuity purposes in the calendar year 2015; for payment year 2019, 2.50 times the total amount of contributions made by or on behalf of employees to the Fund for annuity purposes in the calendar year 2016; for payment year 2020, 2.80 times the total amount of contributions made by or on behalf of employees to the Fund for annuity purposes in the calendar year 2017.

However, beginning in the earlier of payment year 2021 or the first payment year in which the annual contribution amount calculated under subdivision (i) is less than the contribution amount calculated under subdivision (ii), and in each year thereafter, the City's required annual contribution to the Fund shall be determined under subdivision (i).

If the City does not make the statutorily required contributions, then the State, starting in payment year 2016, could withhold State grants to the City, and directly deposit the withheld funds in the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago. The withheld funds are limited to 33 percent of total State grants to the City in payment year 2016, 67 percent in payment year 2017, and 100 percent on and after payment year 2018.

**SUMMARY OF
PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS
AS OF DECEMBER 31, 2014 (CONT'D)**

TAX SHELTER OF EMPLOYEE SALARY DEDUCTIONS

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

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

SALARY AND COLA DEVELOPMENT FOR MEMBERS HIRED ON OR AFTER JANUARY 1, 2011; COLA DEVELOPMENT FOR TIER I PLAN MEMBERS BEGINNING JANUARY 1, 2015

Calendar Year	CPI-U	1/2 CPI-U	COLA	Maximum Annual Pensionable Earnings
2011				\$106,800.00
2012	3.90%	1.95%	1.95%	\$108,882.60
2013	2.00%	1.00%	1.00%	\$109,971.43
2014	1.20%	0.60%	0.60%	\$110,631.26
2015	1.70%	0.85%	0.85%	\$111,571.63

HISTORICAL INFORMATION

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014

1984 Session

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

1985 Session

HB 398

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

1986 Session

HB 2630

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

1987 Session

HB 2715

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

1988 Session

- No changes.

1989 Session

SB 95

- Signed August 23, 1989. Changed the amount of fund paid health insurance "supplement" from January 1, 1988, until December 31, 1992, to \$65 per month for each annuitant not qualified to receive Medicare benefits (and \$35 if qualified) and from January 1, 1993, until December 31, 1997, the amounts are \$75 and \$45, respectively. Widows will now be supplemented and employee annuitants will no longer be required to meet the age 65 and 15 years of service requirements. The City will be required to pay 50 percent of the aggregated cost of health care claims for the retired group under all health care plans offered by the City. A procedure was established for the City to determine, with the help of an independent actuary, the aggregate cost of claims and premiums for each calendar year from 1989 through 1997 for the retired group.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

HB 332

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

1990 Session

SB 136

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

SB 1951

- Signed January 14, 1991. Beginning for withdrawals on or after January 1, 1991, annuity payments will be made as of the first day of the calendar month during the annuity payment period.
- 2.20 percent benefit accrual rate for employees retiring on or after July 1, 1990.
- No discount for employee age less than 60 if employee has at least 30 years of service and retires on or after July 1, 1990.
- Minimum employee annuity of \$350 and minimum spouse of \$300 under certain conditions.
- Spouses and widows of employees retiring or dying in service on or after July 1, 1990, with 20 or more years of service at age 55 or over will be eligible for half of the employees' annuity discounted 0.25 percent for each month the spouse or widow is less than 55.
- Retroactive eligibility for 35 years no discount and spouse and widow annuities computed as half of employee annuity.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- Refund in lieu of \$300 annuity.
- Disability benefit retroactive one year from application; duty disability deductions in lieu for heart attack or stroke; 10 percent increase in duty disability benefit January 1 of the sixth year.
- Collateral for securities lending expanded.
- Fractional payment for refund repayment and temporary service authorized. Credit established by fractional payment shall be earliest service for which credit may be established.

1991 Session

- No changes.

1992 Session

SB 1650

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

1993 Session

- No changes.

1994 Session

- No changes.

1995 Session

SB 114

- Approved July 14, 1995.
- The amount of earnings that may be taken into account by any retirement system is limited to the maximum dollar limitation specified in Section 401(a)(17) of the Internal Revenue Code, except for persons who became participants before 1996.
- The Fund is authorized to make certain involuntary distributions required by Section 401(a)(9) of the Internal Revenue Code.

SB 424

- Approved July 7, 1995.
- The Pension Laws Commission was created as a legislative support services agency.

1996 Session

SBJPA

- On August 20, 1996, the Small Business Job Protection Act was signed by President Clinton.
- Treatment of governmental plans under Code Section 415:
 - Rule limiting annual benefit to 100 percent of the average of the highest three-year compensation no longer applies.
 - Excess benefit plans are permitted to provide participants with benefits in excess of the Code Section 415 limits.
 - Early retirement reduction does not apply to certain survivor and disability benefits.
 - The definition of compensation now includes elective deferrals.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- Taxation of distributions:
 - \$5,000 death benefit exclusion was repealed for deaths after August 20, 1996.
 - Five-year averaging for lump sum distributions was repealed effective January 1, 2000.
 - Annuity payments will be taxed according to a simplified general rule which uses investment and age as of annuity starting date for annuities which start on or after November 19, 1996.

1997 Session

HB 15

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

HB 313

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

HB 1641

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

1998 Session

HB 3515

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

HB 1612

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

1999 Session

- No Change.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

2000 Session

HB 1583

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

2001 Session

EGTRRA

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

2002 Session

SB 314

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

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

HB 5168

- Effective June 28, 2002.
- For the eligible spouse of an employee who dies in service on or after August 28, 2002, with at least 10 years of service, the annuity is no less than 50 percent of the minimum formula annuity the employee would have been entitled to based on service and salary to the date of death without regard to age eligibility requirements. This is equal to 2.40 of final average salary for each year of service. The employee and the spouse must have been married for ten years.
- For children of employees who die in service on or after June 28, 2002, there is no service requirement for eligibility for children's annuity.
- The definition of "child" now includes any child adopted before employee withdraws from service and at least one year prior to the date any benefit for the child accrues. Previously the adoption also had to take place before the employee attained age 55.
- For ordinary disability benefits paid on or after January 1, 2001, the ordinary disability benefit is 50 percent of the employee's salary at the date of disability with the amounts ordinarily contributed by the employee for annuity purposes contributed by the Fund. These contributions are not refundable.
- The pension fund supplement for retiree health insurance was extended through June 30, 2003. For annuitants (other than child annuitants) taking the employer-provided plan, the supplement is \$75 per month if the annuitant is not eligible for Medicare and \$45 per month if the annuitant is eligible for Medicare.

2003 Session

SB 1701

- Effective July 1, 2003.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

2004 Session

HB 600

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

2005 Session

SB 23

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

SB 253

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

EXHIBIT R
LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

SB 1446

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

2006 Session

- No Change.

2007 Session

HB 49

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

SB 1169

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

2008 Session

- No Change.

2009 Session

SB 2520

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

award or other payment under the Workers' Compensation Act or the Workers' Occupational Diseases Act. Makes other changes concerning disability benefits.

HB 2257

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

SB 364

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- Requires approval for travel or education mission expense of a Trustee by a majority of the Board prior to the mission.

SB 1440

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

2010 Session

Public Act 96-0889 (SB 1946)

- Approved April 14, 2010.
- Establishes a new tier of benefits for participants that first become members on or after the effective date of January 1, 2011.
 - Final average compensation is based on the average of the highest consecutive eight years within the last ten years of service.
 - Establishes a cap on final average salary of \$106,800, as automatically increased by the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
 - Increases eligibility for a retirement annuity:
 - Age 67 with 10 years of service for an unreduced benefit.
 - Age 62 with 10 years of service for a reduced benefit. Reduction is one-half percent for each full month that retirement precedes age 67.
 - Changes provisions for automatic increases in annuity:
 - Increases begin in the year following the later of the first anniversary of the annuity start date and attainment of age 67
 - Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
 - Increases are based on the amount of the originally granted benefit (not compounded).
 - Changes benefits provided to surviving spouses:
 - Surviving spouse annuity is equal to $66 \frac{2}{3}$ 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

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- Increases are equal to the lesser of 3 percent or one-half of the annual increase in the Consumer Price Index-U during the preceding 12-months
- Increases are based on the amount of the originally granted benefit (not compounded).
- Establishes that members that are receiving a retirement annuity and accept a full-time position under the same Article or another Article established under the Illinois Compiled Statutes, would have their benefits suspended during employment. Their benefits would be recalculated, if applicable, upon termination of employment.

Public Act 96-1490 (SB 550)

- Approved December 30, 2010.
- Amends certain provisions established in SB1946 that apply to participants that first become members on or after January 1, 2011:
 - Establishes the period for calculating the annual unadjusted percentage increase in the Consumer Price Index-U as the 12-month period ending with September for purposes of capping salary and calculating the automatic increase in annuity percentage.
 - Establishes that the salary cap of \$106,800 applies for all purposes under the Code, including the calculation of benefits and employee contributions.
 - Establishes that the survivor's annuity is calculated with no reduction due to age.
 - Establishes that members who withdraw before age 62, or with less than 10 years of service, regardless of age, are entitled to all salary deductions for retirement annuity and spouse annuity accumulated with interest to date of resignation, plus the 0.50 percent deducted for annuity increase purposes without interest.
 - Establishes that increases in annuity for employee annuitants commence on January 1.

2011 Session

Public Act 97-0530 (SB 1672)

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

Public Act 97-0609 (SB 1831)

- Approved August 26, 2011.
- Applies to those members hired on or after January 1, 2012.
 - Provides that if a new hire is receiving a retirement annuity or pension and accepts a contractual position to provide services to a governmental entity from which he or she has retired, then that person's annuity or pension will be suspended during that contractual service.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- 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.

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.

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- “Any pension plan established by the local labor organization” is defined as any pension plan in which the member can receive credit as a result of his membership in the local labor organization. This is a declaration of existing law.
- Salary used for calculation of final average salary must be a salary paid by an employer, not by the union. This is a declaration of existing law.
- Minimum annuity section 11-134 is changed to add to the final average salary the product of (1) final average salary, (2) the average percentage increase in the CPI during the leave of absence, and (3) the number of years of leave of absence. This does not seem to deal with a situation where the employee may have been on leave within the last 10 years but is last with Laborers. It also only amends paragraph (f-1) which applies to those members who go on annuity on or after the attainment of age 60.
- Does not change that contributions are based current salary with the union.

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 (SB 1584)

- Approved and effective June 28, 2013.
- 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.”

2014 Session

Public Act 98-0641 (SB 1922)

- Approved and effective June 9, 2014.
- Implements a funding policy designed to achieve 90% funded ratio by 2055

EXHIBIT R

LEGISLATIVE CHANGES 1984 THROUGH 2014 (CONT'D)

- Provides for incrementally increased employer contribution multiple which eventually converts to actuarial based funding.
- Caps the current pension levy at the full required city contribution amount.
- Creates payment obligation to the fund, provides enforcement.
- Provides for incrementally increased employee contributions.
- Tier 1: Ties annual increase in retirement annuity to inflation, subject to 3% cap, delays initial annual increase by one year, and eliminates annual increases in 2017, 2019 and 2025 for most annuitants.
- Tier 2: Reduces minimum retirement age by 2 years, delays the initial annual increase by one year, and eliminates the annual increases in 2025.

Public Act 98-1022 (HB 452)

- Approved and effective August 22, 2014.
- Requires investment managers and consultants entering into a contract to disclose information on use of vendors owned by minorities, females and persons with disabilities.
- Requires minority consideration to be “within the bounds of financial and fiduciary prudence.”
- Defines “minority investment managers” and requires funds to adopt a policy to increase goals for utilization. Requires annual review.
- Declares it is the public policy of the State to encourage use of minority investment managers.

EXHIBIT S

HISTORY OF RECOMMENDED EMPLOYER MULTIPLES AND TAXES LEVIED

Year of Report	Statutory Multiple	Normal Cost Plus Interest	Normal Cost Plus 30-Year Amortization ¹²	Normal Cost Plus 30-Year % of Salary Amortization ¹²	Tax Levy Year	Normal Cost		Total Tax Levy
						City	Park	
1984	1.37	1.58	2.04	1.30	1984	\$15,606,000	\$32,000	\$15,638,000
1985 ²	1.37	1.60	2.08	1.33	1985	15,618,000	29,000	15,647,000
1986 ¹	1.37	0.99	1.84	0.94	1986	15,373,000	25,000	15,398,000
1987 ¹	1.37	1.13	1.90	1.03	1987	15,260,000	21,000	15,281,000
1988	1.37	1.03	1.87	0.98	1988	15,380,000	20,000	15,400,000
1989 ^{1,2}	1.37	0.56	1.49	0.56	1989	15,442,000	14,000	15,456,000
1990 ^{1,2}	1.37	1.01	1.80	0.93	1990	15,261,000	12,000	15,273,000
1991	1.37	0.93	1.70	0.90	1991	16,382,000	10,000	16,392,000
1992 ²	1.37	0.80	1.75	0.80	1992	16,835,000	11,000	16,846,000
1993 ²	1.37	0.83	1.96	0.83	1993	18,036,000	11,000	18,047,000
1994 ^{1,2}	1.37	0.64	1.84	0.64	1994	17,069,000	12,000	17,081,000
1995 ²	1.37	0.75	1.87	0.75	1995	18,726,000	9,500	18,735,500
1996	1.37	0.66	1.75	0.66	1996	20,037,300	6,900	20,044,200
1997 ^{1,2,3,4}	1.37	N/A	N/A	N/A	1997	19,645,400	4,300	19,649,700
1998 ^{1,2,4}	1.37	N/A	N/A	N/A	1998	19,757,000	4,600	19,761,600
1999 ^{1,4,5}	1.00	N/A	N/A	N/A	1999	14,676,000	1,898	14,677,898
2000 ⁴	1.00	N/A	N/A	N/A	2000 ⁶	0	0	0
2001 ⁴	1.00	N/A	N/A	N/A	2001 ⁷	0	0	0
2002 ^{2,4}	1.00	N/A	N/A	N/A	2002 ⁸	0	0	0
2003 ²	1.00	0.44	0.43	0.53	2003 ⁹	0	0	0
2004 ^{1,2}	1.00	0.67	0.67	0.63	2004 ¹⁰	0	0	0
2005 ¹	1.00	1.18	1.23	0.63	2005 ¹¹	0	0	0
2006	1.00	1.54	1.64	1.30	2006 ¹³	0	0	0
2007	1.00	1.12	1.19	0.99	2007	15,460,000	0	15,460,000
2008	1.00	1.98	2.12	1.60	2008	17,891,000	0	17,891,000
2009	1.00	2.54	2.76	1.97	2009	17,545,800	0	17,545,800
2010	1.00	3.57	3.89	2.71	2010	18,239,700	0	18,239,700
2011 ¹	1.00	4.95	5.41	3.67	2011 ¹	15,635,700	0	15,635,700
2012 ¹	1.00	6.78	7.48	5.44	2012 ¹	14,898,700	0	14,898,700
2013 ²	1.00	6.42	7.20	5.26	2013 ²	14,616,300	0	14,616,300
2014 ^{2,14}	1.60	4.87	5.48	4.05	2014 ²	15,074,500	0	15,074,500

¹ Change in actuarial assumptions.

² Change in benefits.

³ Change in asset valuation method to GASB.

⁴ No contribution is required under these valuation methods.

⁵ Change in actuary.

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

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

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

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

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

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

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

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

¹⁴ Statutory multiple applicable in tax levy year 2015.

EXHIBIT T
ANNUAL REQUIRED CONTRIBUTIONS OF EMPLOYER
AND TREND INFORMATION

Year	Annual Required Contribution (ARC) of the Employer¹	Required Statutory Basis²	Actual³	Percent of ARC Contributed
2005 ⁴	\$ 12,774,103	\$ 18,212,098	\$ 40,435	0.32%
2006 ⁴	21,142,739	16,505,724	106,270	0.50%
2007	25,293,490	14,840,698	15,458,982	61.12%
2008	21,216,989	17,175,360	17,580,428	82.86%
2009	37,199,049	16,843,872	17,189,811	46.21%
2010	50,274,041	17,510,112	17,938,810	35.68%
2011	60,801,575	15,010,272	15,358,602	25.26%
2012	80,636,419	14,302,752	14,414,835	17.88%
2013	109,290,128	14,031,648	14,100,639	12.90%
2014	108,538,602	14,471,520	14,520,515	13.38%

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

²Tax levy after 4.00 percent overall loss.

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

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

Year	Assets Available for Benefits as a % of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (Surplus) as a % of Covered Payroll End of Year	Employer Contribution as a % of Covered Payroll
2005	93.88%	58.37 %	0.02%
2006	91.98%	75.15 %	0.06%
2007	95.03%	47.70 %	8.02%
2008	86.77%	119.48 %	8.11%
2009	79.37%	199.46 %	8.24%
2010	73.83%	271.18 %	8.98%
2011	64.92%	393.76 %	7.87%
2012	55.41%	532.69 %	7.25%
2013	56.65%	517.25 %	7.04%
2014	64.28%	372.15 %	7.16%

Actuarial accrued liabilities and contributions include pension and OPEB.

EXHIBIT W
HISTORY OF RETIREES AND BENEFICIARIES
ADDED TO PAYROLLS 2005-2014

Year	Added to Payroll		Removed from Payroll		Payroll End of Year		Average	Increase in	
	No.	Ann. Benefits ¹	No.	Ann. Benefits	No.	Ann. Benefits	Annual Benefit	Average Benefit	
Employee Annuitants (Male and Female)									
2005	55	\$ 3,997,885	154	\$ 3,287,338	2,737	\$ 83,457,267	\$ 30,492	4.51%	
2006	79	4,971,772	133	3,475,111	2,683	84,953,928	31,664	3.84%	
2007	95	6,301,188	134	3,363,972	2,644	87,891,144	33,242	4.98%	
2008	120	7,756,776	118	2,939,436	2,646	92,708,484	35,037	5.40%	
2009	169	9,882,832	132	3,675,336	2,683	98,915,980	36,868	5.22%	
2010	163	10,367,852	144	4,008,480	2,702	105,275,352	38,962	5.68%	
2011	163	10,624,236	144	4,187,172	2,721	111,712,416	41,056	5.37%	
2012	136	9,154,278	120	4,030,908	2,737	116,835,786	42,688	3.97%	
2013	112	7,904,208	122	4,032,342	2,727	120,707,652	44,264	3.69%	
2014	102	8,125,860	139	5,180,724	2,690	123,652,788	45,968	3.85%	
Surviving Spouse and Reversionary Annuitants									
2005 ²	84	\$ 1,108,608	96	\$ 950,157	1,367	\$ 14,913,483	\$ 10,910	1.96%	
2006 ²	69	1,052,875	101	962,926	1,335	15,003,432	11,239	3.01%	
2007 ²	68	1,007,856	87	846,660	1,316	15,164,628	11,523	2.53%	
2008 ²	64	972,408	82	855,072	1,298	15,281,964	11,773	2.17%	
2009	49	866,592	75	772,740	1,272	15,375,816	12,088	2.67%	
2010	57	1,000,668	74	770,808	1,255	15,605,676	12,435	2.87%	
2011 ²	57	1,000,152	91	1,021,908	1,221	15,583,920	12,763	2.64%	
2012 ³	74	1,028,112	91	1,032,372	1,204	15,579,660	12,940	1.39%	
2013 ⁴	51	908,433	66	730,560	1,189	15,757,533	13,253	2.42%	
2014 ⁵	62	1,333,056	69	733,176	1,182	16,357,413	13,839	4.42%	

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

² Includes one Reversionary Annuitant.

³ Number added in 2012 includes 20 Reversionary Annuitants that are also Surviving Spouses.

⁴ Number added in 2013 includes 1 Reversionary Annuitant that is also a Surviving Spouses.

⁵ Number added in 2014 includes 2 Reversionary Annuitants that are also Surviving Spouses.

GASB EXHIBITS

Auditor's Note – This information is subject to review by the Fund's auditor. Please let us know if the Fund's auditor recommends any changes.

The measurements required under GASB Statement No. 67 are provided in a separate report.

EXHIBIT A-1

GASB #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 #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 #27.

This report includes the following exhibits with information required to be reported under GASB #27, #43 and #45. Effective with fiscal year ending December 31, 2014, GASB #67—Financial Reporting for Pension Plans is replacing GASB #25 for pension plan financial reporting requirements. GASB #68—Accounting and Financial Reporting for Pensions is replacing GASB #27 for employer financial reporting effective with fiscal year ending December 31, 2015. Therefore, the information presented in this report is based on the current GASB #27 requirements. Pension plan financial reporting under GASB #67 will be provided in a separate report. **This information is subject to review by the Fund’s auditor. Please let us know if the Fund’s auditor recommends any changes.**

Exhibit A-2: Schedule of Funding Progress for GASB #27

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 #27

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

Exhibit A-4: Supplementary Information for GASB #27

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

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

This exhibit shows the components of annual pension cost (ARC, interest on the Net Pension Obligation (NPO), and the adjustment to the ARC), increase or decrease in the NPO and the NPO at the end of the year for years 1997-2014. The exhibit also includes the dollar amount of City contributions made.

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

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

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

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

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

Exhibit A-8: Schedule of Funding Progress for GASB #43

This exhibit shows a history of funding progress under GASB #43. The funding progress is a comparison of Actuarial Value of Assets with the Actuarial Accrued Liability (AAL), and a comparison of the Unfunded AAL (UAAL) with payroll.

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

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

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

This exhibit shows the components of annual OPEB cost (ARC, interest on the Net OPEB Obligation (NOO) and the adjustment to the ARC), increase or decrease in the NOO and the NOO at the end of the year for year 2014. 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 PROGRESSION FOR GASB #27

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]
2005 ¹	\$ 1,635,595,437	\$ 1,742,300,488	\$ 106,705,051	93.88 %	\$ 182,809,397	58.37 %
2006 ²	1,664,058,080	1,767,682,490	103,624,410	94.14 %	193,176,272	53.64 %
2007	1,757,710,948	1,808,295,354	50,584,406	97.20 %	192,847,482	26.23 %
2008	1,698,427,008	1,915,324,017	216,897,009	88.68 %	216,744,211	100.07 %
2009	1,601,351,633	1,975,748,829	374,397,196	81.05 %	208,626,493	179.46 %
2010	1,529,403,512	2,030,024,556	500,621,044	75.34 %	199,863,410	250.48 %
2011	1,422,414,349	2,152,853,902	730,439,553	66.07 %	195,238,332	374.13 %
2012	1,315,913,597	2,336,189,276	1,020,275,679	56.33 %	198,789,741	513.24 %
2013	1,354,260,531	2,383,499,431	1,029,238,900	56.82 %	200,351,820	513.72 %
2014	1,357,451,362	2,107,110,741	749,659,379	64.42 %	202,673,014	369.89 %

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 #27

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
1. Contribution Multiplier	1.00	1.00	1.00	1.00	1.00	1.00
2. Payroll (beginning of year)	\$216,744,211	\$208,626,493	\$199,863,410	\$195,238,332	\$198,789,741	\$200,351,820
3. City of Chicago Contribution, Net of Reserve for Loss in Tax Collection	14,626,771	15,351,944	12,778,697	11,852,905	11,583,051	12,160,815
4. City of Chicago Contribution as a Percent of Covered Payroll	6.75%	7.36%	6.39%	6.07%	5.83%	6.07%
5. Employee Contributions	17,538,297	16,319,992	16,068,655	16,559,017	16,392,800	16,359,082
6. Employee Contributions as a Percent of Covered Payroll	8.09%	7.82%	8.04%	8.48%	8.25%	8.17%
7. Current Year Normal Cost	32,466,860	31,468,846	30,535,687	30,762,167	38,513,323	37,763,575
8. Normal Cost as a Percent of Covered Payroll	14.98%	15.08%	15.28%	15.76%	19.37%	18.85%
9. Level Dollar Amortization of the Unfunded Liability	17,839,264	30,793,280	41,174,891	60,076,917	80,360,933	81,066,911
10. Level Dollar Amortization as a Percent of Covered Payroll	8.23%	14.76%	20.60%	30.77%	40.43%	40.46%
11. Interest Adjustment for Semi-Monthly Payment	2,044,525	2,530,438	2,914,438	3,691,853	4,536,187	4,534,516
12. Actuarially Determined Contribution (ADC) ¹ (NC + level dollar amort. + interest adjustment)	52,350,649	64,792,564	74,625,016	94,530,937	123,410,443	123,365,002
13. ADC as a Percent of Covered Payroll	24.15%	31.06%	37.34%	48.42%	62.08%	61.57%
14. Annual Required Contribution (ARC) ¹ (ADC - estimated employee contributions)	33,517,429	46,664,704	57,258,593	77,566,394	106,199,410	106,018,725
15. ARC as a Percent of Covered Payroll	15.46%	22.37%	28.65%	39.73%	53.42%	52.92%

¹ADC and ARC amounts cannot be less than zero.

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

The amortization period used for determining level dollar amortization payments of the unfunded liability was 30 years.

In the year 2014, City contributions and miscellaneous income to fund pension benefits totaled \$12,160,815 or 6.07 percent of beginning of year payroll. In addition, employee contributions were \$16,359,082 or 8.17 percent of beginning of year payroll. The Annual Required Contribution (ARC) was equal to \$106,018,725; therefore, there was a deficit of contributions and miscellaneous income of \$93,857,910 or 46.85 percent of beginning of year payroll.

EXHIBIT A-4
SUPPLEMENTARY INFORMATION FOR
GASB #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, 2014
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	7.5%, December 31, 2014
Projected Base Salary Increases	3.75% per year
Includes Inflation at:	3.0% per year
Post Retirement Benefit Increases	The lesser of 3.0% or 1/2 of CPI (simple) per year, applied to the annuity in effect as of December 31, 2014, with a minimum of 1% per year for total annuities less than \$22,000. Increases are paused in fiscal years 2017, 2019, and 2025, with exception for total annuities less than \$22,000. Beginning at the earlier of
	1) the later of the 1st of January of the year after the second anniversary of retirement and age 61
	2) the later of the 1st of January of the year after the fourth anniversary of retirement and age 54

Actuarial Accrued Liability (AAL)

	<u>December 31, 2013</u> ¹	<u>December 31, 2014</u> ¹
Payable to Retirees and Beneficiaries	\$ 1,531,203,068	\$ 1,360,064,847
Current Employees:		
Accumulated Employee Contributions		
Including Statutory Interest	258,837,708	264,822,986
Payable to Vested and Non-Vested Employees (not split)	<u>593,458,655</u>	<u>482,222,908</u>
Total Actuarial Accrued Liability	\$ 2,383,499,431	\$ 2,107,110,741
Net Plan Actuarial Assets	<u>1,354,260,531</u>	<u>1,357,451,362</u>
Unfunded AAL (assets in excess of AAL)	\$ 1,029,238,900	\$ 749,659,379
Percent Funded	56.82 %	64.42 %
Unfunded AAL as Percent of Payroll	513.72 %	369.89 %
Payroll	\$ 200,351,820	\$ 202,673,014

¹ Excludes liability for health insurance supplement.

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

Year Ending December 31:	2006	2007	2008	2009	2010	2011	2012	2013	2014
Contribution Rates									
Plan Members:	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	9.0%
City: Proceeds from a tax levy not more than an amount equal to the total amount of contributions by the employees to the Fund made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by: ¹	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Annual Pension Cost									
Annual Required Contribution (ARC)	\$ 21,142,739	\$ 21,725,805	\$ 17,652,023	\$ 33,517,429	\$ 46,664,704	\$ 57,258,593	\$ 77,566,394	\$ 106,199,410	\$ 106,018,725
Interest on NPO	(20,650,015)	(19,015,660)	(18,295,347)	(18,060,689)	(16,508,842)	(13,966,716)	(10,376,932)	(4,777,997)	2,336,214
Adjustment to ARC	20,042,981	19,549,910	18,809,360	18,568,109	16,972,663	14,359,115	10,668,475	5,017,785	(2,453,459)
Annual Pension Cost	\$ 20,535,705	\$ 22,260,055	\$ 18,166,036	\$ 34,024,849	\$ 47,128,525	\$ 57,650,992	\$ 77,857,937	\$ 106,439,198	\$ 105,901,480
Employer Contributions ²	\$ 106,270	\$ 13,256,147	\$ 15,232,804	\$ 14,626,771	\$ 15,351,944	\$ 12,778,697	\$ 11,852,905	\$ 11,583,051	\$ 12,160,815
Net Pension Obligations (NPO)									
NPO at Beginning of Year	\$ (258,125,184)	\$ (237,695,749)	\$ (228,691,841)	\$ (225,758,609)	\$ (206,360,531)	\$ (174,583,950)	\$ (129,711,655)	\$ (63,706,623)	\$ 31,149,524
Increase/(Decrease) in NPO	20,429,435	9,003,908	2,933,232	19,398,078	31,776,581	44,872,295	66,005,032	94,856,147	93,740,665
NPO at End of Year	\$ (237,695,749)	\$ (228,691,841)	\$ (225,758,609)	\$ (206,360,531)	\$ (174,583,950)	\$ (129,711,655)	\$ (63,706,623)	\$ 31,149,524	\$ 124,890,189

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

² Provided by prior actuary for years before 1999.

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

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

Year Ending December 31:	1997	1998	1999	2000	2001	2002	2003	2004	2005
Contribution Rates									
Plan Members:	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
City: Proceeds from a tax levy not more than an amount equal to the total amount of contributions by the employees to the Fund made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by: ¹	1.37	1.37	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Annual Pension Cost									
Annual Required Contribution (ARC)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,513,018	\$ 12,774,103
Interest on NPO	(10,936,776)	(13,500,288)	(15,344,702)	(17,724,805)	(19,010,060)	(20,424,891)	(21,669,708)	(22,230,417)	(21,617,869)
Adjustment to ARC	10,936,776	13,500,288	-	2,342,460	1,984,628	4,947,535	15,027,772	21,576,925	20,982,384
Annual Pension Cost	\$ -	\$ -	\$ (15,344,702)	\$ (15,382,345)	\$ (17,025,432)	\$ (15,477,356)	\$ (6,641,936)	\$ 7,859,526	\$ 12,138,618
Employer Contributions ²	\$ 32,043,902	\$ 23,055,176	\$ 14,406,579	\$ 683,352 ³	\$ 659,946 ³	\$ 82,865 ³	\$ 366,920 ³	\$ 202,684 ³	\$ 40,435
Net Pension Obligations (NPO)									
NPO at Beginning of Year	\$ (136,709,698)	\$ (168,753,600)	\$ (191,808,776)	\$ (221,560,057)	\$ (237,625,754)	\$ (255,311,132)	\$ (270,871,353)	\$ (277,880,209)	\$ (270,223,367)
Increase/(Decrease) in NPO	(32,043,902)	(23,055,176)	(29,751,281)	(16,065,697)	(17,685,378)	(15,560,221)	(7,008,856)	7,656,842	12,098,183
NPO at End of Year	\$ (168,753,600)	\$ (191,808,776)	\$ (221,560,057)	\$ (237,625,754)	\$ (255,311,132)	\$ (270,871,353)	\$ (277,880,209)	\$ (270,223,367)	\$ (258,125,184)

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

² Provided by prior actuary for years before 1999.

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

EXHIBIT A-6
PENSION COST SUMMARY FOR GASB #27

Year Ended December 31	Annual Pension Cost	% of Annual Pension Cost Contributed	Net Pension Obligation
2009	\$ 34,024,849	42.99%	\$ (206,360,531)
2010	47,128,525	32.57%	(174,583,950)
2011	57,650,992	22.17%	(129,711,655)
2012	77,857,937	15.22%	(63,706,623)
2013	106,439,198	10.88%	31,149,524
2014	105,901,480	11.48%	124,890,189

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

Year Ending December	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Assumptions and Method										
Interest Rate	7.5%	7.5%	7.5%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Amortization Period (years)	40	40	40	40	40	40	40	40	40	40
Cost Method	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN	EAN
Annual Pension Cost										
Actuarially Determined Contribution (ADC)										
Normal Cost	\$ 18,826,921	\$ 20,008,465	\$ 19,803,585	\$ 17,819,965	\$ 20,777,427	\$ 21,637,649	\$ 20,261,167	\$ 21,316,661	\$ 20,451,183	\$ 21,340,898
40 Year Amortization	(693,500)	935,719	(151,802)	(3,030,467)	868,508	(925,113)	(5,449,447)	(7,246,462)	(7,571,950)	(13,950,958)
Total ADC	\$ 18,133,421	\$ 20,944,184	\$ 19,651,783	\$ 14,789,498	\$ 21,645,935	\$ 20,712,536	\$ 14,811,720	\$ 14,070,199	\$ 12,879,233	\$ 7,389,940
Interest on NPO	-	(628,987)	(1,146,199)	(1,796,270)	(2,998,697)	(3,639,511)	(4,348,031)	(5,806,534)	(7,176,840)	(8,775,457)
Adjustment to ADC	-	642,102	1,155,863	1,811,417	3,023,982	3,670,199	4,384,694	5,855,495	7,237,356	8,849,453
Annual Pension Cost	\$ 18,133,421	\$ 20,957,299	\$ 19,661,447	\$ 14,804,645	\$ 21,671,220	\$ 20,743,224	\$ 14,848,383	\$ 14,119,160	\$ 12,939,749	\$ 7,463,936
Contributions for Year										
Employer Contributions	\$ 14,745,709	\$ 15,157,663	\$ 15,257,738	\$ 17,029,493	\$ 15,989,678	\$ 16,574,721	\$ 17,734,532	\$ 16,954,732	\$ 18,311,622	\$ 19,623,717
Employee Contributions	11,774,209	11,740,621	12,529,606	12,805,486	13,691,711	13,025,003	15,345,146	14,293,250	14,610,842	14,856,703
Total Contributions	\$ 26,519,918	\$ 26,898,284	\$ 27,787,344	\$ 29,834,979	\$ 29,681,389	\$ 29,599,724	\$ 33,079,678	\$ 31,247,982	\$ 32,922,464	\$ 34,480,420
Net Pension Obligations (NPO)										
NPO at Beginning of Year	\$ -	\$ (8,386,497)	\$ (14,327,482)	\$ (22,453,379)	\$ (37,483,713)	\$ (45,493,882)	\$ (54,350,382)	\$ (72,581,677)	\$ (89,710,499)	\$ (109,693,214)
Annual Pension Cost	18,133,421	20,957,299	19,661,447	14,804,645	21,671,220	20,743,224	14,848,383	14,119,160	12,939,749	7,463,936
Total Contributions	(26,519,918)	(26,898,284)	(27,787,344)	(29,834,979)	(29,681,389)	(29,599,724)	(33,079,678)	(31,247,982)	(32,922,464)	(34,480,420)
NPO at End of Year	\$ (8,386,497)	\$ (14,327,482)	\$ (22,453,379)	\$ (37,483,713)	\$ (45,493,882)	\$ (54,350,382)	\$ (72,581,677)	\$ (89,710,499)	\$ (109,693,214)	\$ (136,709,698)

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b - a) / c]
2009	\$ -	\$ 41,738,247	\$ 41,738,247	0.00%	\$ 208,626,493	20.01%
2010	-	41,361,276	41,361,276	0.00%	199,863,410	20.69%
2011	-	38,327,860	38,327,860	0.00%	195,238,332	19.63%
2012	-	38,653,355	38,653,355	0.00%	198,789,741	19.44%
2013 ¹	-	7,073,697	7,073,697	0.00%	200,351,820	3.53%
2014 ¹	-	4,593,378	4,593,378	0.00%	202,673,014	2.27%

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

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014
1. Payroll (beginning of year)	\$182,809,397	\$193,176,272	\$192,847,482	\$216,744,211	\$208,626,493	\$199,863,410	\$195,238,332	\$198,789,741	\$200,351,820
2. Current Year Normal Cost	1,023,208	1,045,917	1,051,630	1,127,307	1,075,783	1,033,073	749,005	750,108	549
3. Normal Cost as a Percent of Covered Payroll	0.56%	0.54%	0.55%	0.52%	0.52%	0.52%	0.38%	0.38%	0.00%
4. 30-Year Level Dollar Amortization of the Unfunded Liability	2,439,744	2,441,189	2,432,818	2,471,160	2,452,034	2,429,888	2,251,681	2,270,803	2,462,414 ²
5. 30-Year Level Dollar Amortization as a Percent of Covered Payroll	1.33%	1.26%	1.26%	1.14%	1.18%	1.22%	1.15%	1.14%	1.23%
6. Interest Adjustment for Semi-Monthly Payment	80,021	80,579	80,518	83,153	81,520	80,021	69,339	69,807	56,914
7. Actuarially Determined Contribution (ADC) (NC + 30-year level dollar + interest adjustment)	3,542,974	3,567,685	3,564,966	3,681,620	3,609,337	3,542,982	3,070,025	3,090,718	2,519,877
8. ADC as a Percent of Covered Payroll	1.94%	1.85%	1.85%	1.70%	1.73%	1.77%	1.57%	1.55%	1.26%
9. Annual Required Contribution (ARC) (ADC - estimated employee contributions)	3,542,974	3,567,685	3,564,966	3,681,620	3,609,337	3,542,982	3,070,025	3,090,718	2,519,877
10. ARC as a Percent of Covered Payroll	1.94%	1.85%	1.85%	1.70%	1.73%	1.77%	1.57%	1.55%	1.26%
11. City of Chicago Contribution	0 ¹	2,202,835	2,347,624	2,563,040	2,586,866	2,579,905	2,561,930	2,517,588	2,359,700
12. City of Chicago Contribution as a Percent of Covered Payroll	0.00%	1.14%	1.22%	1.18%	1.24%	1.29%	1.31%	1.27%	1.18%
13. Percentage of ARC Contributed	0.00%	61.74%	65.85%	69.62%	71.67%	72.82%	83.45%	81.46%	93.64%

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

² Based on provisions of P. A. 98-0043, the amortization period for fiscal year 2014 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.

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	2014
Annual OPEB Cost								
Annual Required Contribution (ARC)	\$ 3,567,685	\$ 3,564,966	\$ 3,681,620	\$ 3,609,337	\$ 3,542,982	\$ 3,070,025	\$ 3,090,718	\$ 2,519,877 ¹
Interest on NOO	-	61,418	115,354	164,104	207,860	248,340	267,791	289,900
Adjustment to ARC	-	(80,182)	(150,596)	(214,240)	(271,362)	(324,211)	(349,603)	(2,242,591) ¹
Annual OPEB Cost	\$ 3,567,685	\$ 3,546,202	\$ 3,646,378	\$ 3,559,201	\$ 3,479,480	\$ 2,994,154	\$ 3,008,906	\$ 567,186
Employer Contributions	\$ 2,202,835	\$ 2,347,624	\$ 2,563,040	\$ 2,586,866	\$ 2,579,905	\$ 2,561,930	\$ 2,517,588	\$ 2,359,700
Net OPEB Obligations (NOO)								
NOO at Beginning of Year	\$ -	\$ 1,364,850	\$ 2,563,428	\$ 3,646,766	\$ 4,619,101	\$ 5,518,676	\$ 5,950,900	\$ 6,442,218
Increase/(Decrease) in NOO	1,364,850	1,198,578	1,083,338	972,335	899,575	432,224	491,318	(1,792,514)
NOO at End of Year	\$ 1,364,850	\$ 2,563,428	\$ 3,646,766	\$ 4,619,101	\$ 5,518,676	\$ 5,950,900	\$ 6,442,218	\$ 4,649,704

¹ The amortization period used to determine the ARC and the adjustment to ARC for fiscal year 2014 was changed from an 30-year open period to a three-year closed period to reflect the provisions of P. A. 98-0043.

EXHIBIT A-11
OPEB COST SUMMARY FOR GASB #45

Year Ended December 31	Annual OPEB Cost	% of Annual OPEB Cost Contributed	Net OPEB Obligation
2009	\$ 3,646,378	70.29%	\$ 3,646,766
2010	3,559,201	72.68%	4,619,101
2011	3,479,480	74.15%	5,518,676
2012	2,994,154	85.56%	5,950,900
2013	3,008,906	83.67%	6,442,218
2014	567,186	416.04%	4,649,704

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

Valuation Date	December 31, 2014
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 for Fiscal Years prior to 2014 and 3 year closed-period for Fiscal Years 2014 and beyond
Actuarial Assumptions:	
OPEB Investment Rate of Return	4.5%
Projected Base Salary Increases	3.75% per year
Includes Inflation at:	3.0% per year
Healthcare Cost Trend Rate	0% ¹

Actuarial Accrued Liability (AAL)

	<u>December 31, 2013</u> ^{2,3}	<u>December 31, 2014</u> ^{2,3}
Payable to Retirees and Beneficiaries	\$ 6,350,463	\$ 4,187,596
Current Employees:		
Accumulated Employee Contributions		
Including Statutory Interest	-	-
Payable to Vested and Non-Vested Employees (not split)	723,234	405,782
Total Actuarial Accrued Liability	\$ 7,073,697	\$ 4,593,378
Net Plan Actuarial Assets	-	-
Unfunded AAL (assets in excess of AAL)	\$ 7,073,697	\$ 4,593,378
Percent Funded	0.00 %	0.00 %
Unfunded AAL as Percent of Payroll	3.53 %	2.27 %
Payroll	\$ 200,351,820	\$ 202,673,014

¹Trend not applicable – Fixed dollar subsidy.

² Actuarial Accrued Liability for OPEB at Valuation Date.

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