Gabriel Roeder Smith & Company
Consultants & Actuaries

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

GASB STATEMENT NOS. 67 AND 68 ACCOUNTING AND FINANCIAL REPORTING FOR PENSIONS

DECEMBER 31, 2014

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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

Dear Members of the Board:

This report provides accounting and financial reporting information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 for the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF"). These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

GASB Statement No. 67 is the accounting standard that applies to the stand-alone financial reports issued by retirement systems, on behalf of fiscal years beginning after June 15, 2013. GASB Statement No. 68 establishes accounting and financial reporting for state and local government employers who provide their employees (including former employees) pension benefits through a trust, and applies to fiscal years beginning after June 15, 2014.

This report contains GASB Statement No. 67 reporting information applicable to the plan year ending December 31, 2014, and illustrative pro forma GASB No. 68 information for the fiscal year ending December 31, 2014. (Note: The plan sponsor does not need to formally adopt GASB No. 68 until fiscal year end December 31, 2015.)

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statement Nos. 67 and 68. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF") only in its entirety and only with the permission of LABF.

Our valuation and projections assume the sponsor will make the contributions required by state statute. To the extent the sponsor does not make the statutory required contribution the results contained in this report could be significantly different.

This report is based upon information, furnished to us by LABF, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If the understanding of this information is different, please let us know. This information was checked for internal consistency, but it was not otherwise audited.

This report complements the actuarial valuation report that was provided to LABF and should be considered in conjunction with that report. Please see the actuarial valuation report as of

December 31, 2014, for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, the information contained in this report is accurate and fairly represents the actuarial position of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago for GASB Statement Nos. 67 and 68 accounting purposes. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

The signing actuaries are independent of the plan sponsor.

Alex Rivera and Paul T. Wood are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

By Alex Rivera

Alex Rivera
F.S.A., E.A., M.A.A.A., F.C.A.

By Paul T Wood

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

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.

TABLE OF CONTENTS

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY
AS OF DECEMBER 31, 2014

		2014
Actuarial Valuation Date		December 31, 2014
Measurement Date of the Net Pension Liability		December 31, 2014
Employer's Fiscal Year Ending Date (Reporting Date)		December 31, 2014
Membership		
Number of		
- Retirees and Beneficiaries		3,902
- Inactive, Nonretired Members		1,449
- Active Members		2,837
- Total		8,188
Covered Payroll	$	202,673,014
Net Pension Liability		
Total Pension Liability	$	2,162,905,734
Plan Fiduciary Net Position		1,388,092,890
Net Pension Liability	$	774,812,844
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		64.18%
Net Pension Liability as a Percentage of Covered Payroll		382.30%
Development of the Single Discount Rate		
Single Discount Rate Beginning of Year		7.37%
Single Discount Rate End of Year		7.24%
Long-Term Expected Rate of Investment Return		7.50%
Long-Term Municipal Bond Rate Beginning of Year*		4.73%
Long-Term Municipal Bond Rate End of Year*		3.56%
Last year ending December 31 in the 2014 to 2113 projection period for which projected benefit payments are fully funded		2063
Total Pension Expense	$	(214,357,805)

Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ -	$ -
Changes in assumptions	20,111,286	-
Net difference between projected and actual earnings on pension plan investments	41,123,040	-
Total	$ 61,234,326	$ -

**Source: "State & local bonds" rate from Federal Reserve statistical release (H.15) as of December 31, 2014. The statistical release describes this rate as "Bond Buyer Index, general obligation, 20 years to maturity, mixed quality." In describing this index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.*

DISCUSSION

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability. Similarly, GASB Statement No. 68 establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose the net pension liability, pension expense, and other information associated with providing retirement benefits to their employees (and former employees) on their basic financial statements.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report and the retirement system and/or plan sponsor will be responsible for preparing and disclosing that information to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires state or local governments to recognize the net pension liability and the pension expense on their financial statements. The net pension liability is the difference between the total pension liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

The pension expense recognized each fiscal year is equal to the change in the net pension liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.

Pension plans that prepare their own, stand-alone financial statements are required to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position in accordance with GASB Statement No. 67. The *statement of fiduciary net position* presents the assets and liabilities of the pension plan at the end of the pension plan's reporting period. The *statement of changes in fiduciary net position* presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expenses, and net increase or decrease in the fiduciary net position.

Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows and inflows of resources related to pensions.

GASB Statement Nos. 67 and 68 require the notes of the financial statements for the employers and pension plans, to include certain additional information. The list of disclosure items should include:

- A description of benefits provided by the plan;
- The type of employees and number of members covered by the pension plan;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- The pension plan's fiduciary net position, net pension liability, and the pension plan's fiduciary net position as a percentage of the total pension liability;
- The net pension liability using a discount rate that is 1% higher and 1% lower than used to calculate the total pension liability and net pension liability for financial reporting purposes;
- Significant assumptions and methods used to calculate the total pension liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Retirement systems that issue stand-alone financial statements are required to disclose additional information in accordance with GASB Statement No. 67. This information includes:

- The composition of the pension plan's board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets;

Required Supplementary Information

GASB Statement No. 67 requires a 10-year fiscal history of:

- Sources of changes in the net pension liability;
- Information about the components of the net pension liability and related ratios, including the pension plan’s fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll; and
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan’s funding policy; and

These tables may be built prospectively as the information becomes available.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan’s fiduciary net position. In traditional actuarial terms, this will be the accrued liability less the market value of assets.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least once every two years. The net pension liability and pension expense should be measured as of the pension plan’s fiscal year end (measurement date) on a date that is within the employer’s prior fiscal year. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total pension liability shown in this report is based on an actuarial valuation performed as of December 31, 2014, and a measurement date of December 31, 2014.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan’s fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.56% (based on the weekly rate closest to but not later than the measurement date of the “state & local bonds” rate from Federal Reserve statistical release (H.15)); and the resulting Single Discount Rate is 7.24%.

Effective Date and Transition

GASB Statement Nos. 67 and 68 are effective for fiscal years beginning after June 15, 2013, and June 15, 2014 respectively, earlier application is encouraged by the GASB.

SECTION B

FINANCIAL STATEMENTS

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.

STATEMENTS OF FIDUCIARY NET POSITION
YEARS ENDED DECEMBER 31, 2014 AND 2013

	2014	2013
Assets		
Receivables		
Employer	$ 14,689,166	$ 14,386,681
Plan member	651,659	1,820,575
Due from Broker - net	5,366,415	-
Interest and dividends	1,843,650	2,100,844
Other receivables	2,651	19,008
Total receivables	22,553,541	18,327,108
Investments - at fair value		
Cash and short-term investments	49,892,805	38,385,421
Equities	739,791,534	810,420,216
Fixed income	250,010,117	253,277,809
Private equity	42,071,147	50,949,228
Real estate	45,735,296	44,320,319
Hedge funds	102,078,308	125,176,506
Global asset allocation funds	140,740,336	139,099,998
Subtotal	1,370,319,543	1,461,629,497
Forward currency contracts	786,734	-
Securities lending cash collateral	65,235,365	180,924,383
Total investments - fair value	1,436,341,642	1,642,553,880
Property and equipment	416,509	508,350
Total assets	1,459,311,692	1,661,389,338
Deferred outflows		
Accumulated decrease in fair value of hedging derivatives	-	92,340
Liabilities and net position		
Liabilities		
Due to brokers - net	-	17,640,460
Forward currency contracts	-	92,340
Refunds, professional fees payable and other liabilities	3,047,520	3,260,891
OPEB liability	2,149,183	1,890,996
Securities lending cash collateral	65,235,365	180,924,383
Total liabilities	70,432,068	203,809,070
Deferred inflows		
Accumulated increase in fair value of hedging derivatives	786,734	-
Net Position - Restricted for Pension Benefits	$ 1,388,092,890	$ 1,457,672,608

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
YEARS ENDED DECEMBER 31, 2014 AND 2013

	2014	2013
Additions		
Contributions		
Employer [1]	$ 12,160,815	$ 11,583,052
Plan member	16,359,082	16,392,800
Total contributions	28,519,897	27,975,852
Investment income		
Net appreciation in fair value of investments	40,042,434	191,114,881
Interest	5,618,937	6,986,564
Dividends	12,380,534	13,313,992
Private equity income - net	281,305	731,305
Real estate operating income - net	632,251	1,334,896
Hedge funds income - net	1,877,621	1,590,532
Global asset allocation fund income - net	2,402,938	2,012,912
	63,236,020	217,085,082
Less investment expenses	(10,304,870)	(10,365,891)
Investment income - net	52,931,150	206,719,191
Securities lending		
Income	138,031	453,663
Lender (borrower) rebates	405,816	281,205
Management fees	(81,480)	(109,954)
Securities lending income - net	462,367	624,914
Total additions	81,913,414	235,319,957
Deductions		
Benefits [1]	145,586,268	141,711,551
Refunds	2,071,694	2,879,207
Administrative and OPEB expenses	3,835,170	4,133,637
Total deductions	151,493,132	148,724,395
Net increase	(69,579,718)	86,595,562
Net Position - Restricted for Pension Benefits		
Beginning of year	1,457,672,608	1,371,077,046
End of year	$ 1,388,092,890	$ 1,457,672,608

[1] *Excludes amount paid for health insurance supplement.*

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

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.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS MULTIYEAR

Fiscal year ending December 31,	2014
Total Pension Liability	
Service Cost Including Pension Plan Administrative Expense	$ 38,523,054
Interest on the Total Pension Liability	174,071,491
Benefit Changes	(324,166,854)
Difference between Expected and Actual Experience	-
Assumption Changes	28,201,429
Benefit Payments	(145,586,268)
Refunds	(2,071,694)
Pension Plan Administrative Expense	(3,835,170)
Net Change in Total Pension Liability	(234,864,012)
Total Pension Liability - Beginning	2,397,769,745
Total Pension Liability - Ending (a)	$ 2,162,905,734
Plan Fiduciary Net Position	
Employer Contributions	$ 12,160,815
Employee Contributions	16,359,082
Pension Plan Net Investment Income	53,393,517
Benefit Payments	(145,586,268)
Refunds	(2,071,694)
Pension Plan Administrative Expense	(3,835,170)
Other	-
Net Change in Plan Fiduciary Net Position	(69,579,718)
Plan Fiduciary Net Position - Beginning	1,457,672,608
Plan Fiduciary Net Position - Ending (b)	$ 1,388,092,890
Net Pension Liability - Ending (a) - (b)	774,812,844
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	64.18 %
Covered Employee Payroll	$ 202,673,014
Net Pension Liability as a Percentage of Covered Employee Payroll	382.30 %

10 fiscal years will be built prospectively.

Please see the following page for additional notes relating to the Schedule of Changes in Net Pension Liability and Related Ratios.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
ADDITIONAL NOTES TO SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS MULTIYEAR

Beginning of year total pension liability for fiscal year 2014 uses a Single Discount Rate of 7.37% and the benefit provisions in effect as of the December 31, 2013, funding valuation. The Single Discount Rate of 7.37% was based on a long-term expected rate of return on pension plan investments of 7.50% used in the December 31, 2013, funding valuation and a long-term municipal bond rate as of December 26, 2013, of 4.73%.

End of year total pension liability for fiscal year 2014 uses a Single Discount Rate of 7.24% and the benefit provisions in effect as of the December 31, 2014, funding valuation. The Single Discount Rate of 7.24% was based on a long-term expected rate of return on pension plan investments of 7.50% used in the December 31, 2014, funding valuation and a long-term municipal bond rate as of December 31, 2014, of 3.56%.

The decrease in the total pension liability for fiscal year 2014 due to benefit changes is a result of the change in provisions pursuant to Public Act 98-0641, which was signed into law on June 9, 2014. This change was measured at the end of the year using a Single Discount Rate of 7.37%.

The increase in the total pension liability for fiscal year 2014 due to assumption changes includes the impact of the change in the Single Discount Rate from 7.37% to 7.24% based on the long-term expected rate of return on pension plan investments of 7.50% used in the December 31, 2014, funding valuation and the long-term municipal bond rate of 4.73% as of December 26, 2013, and 3.56% as of December 31, 2014, respectively. This change was measured at the end of the year using the benefit provisions in effect as of the December 31, 2014, funding valuation.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF THE NET PENSION LIABILITY MULTIYEAR

FY Ending December 31,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll*	Net Pension Liability as a % of Covered Payroll
2014	$2,162,905,734	$1,388,092,890	$ 774,812,844	64.18%	$ 202,673,014	382.30%

** Covered payroll shown is the amount in force as of the valuation date and likely differs from actual payroll paid during the fiscal year.*

10 fiscal years will be built prospectively.

SCHEDULE OF CONTRIBUTIONS MULTIYEAR
LAST 10 FISCAL YEARS

FY Ending December 31,	Actuarially Determined Contribution*	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll**	Actual Contribution as a % of Covered Payroll	Statutory Contribution***	Statutory Contribution Deficiency/(Excess)
2005	$ 12,774,103	$ 40,435	$ 12,733,668	$ 182,809,397	0.02%	$ 18,970,900	$ 18,930,465
2006	21,142,739	106,270	21,036,469	193,176,272	0.06%	17,193,400	17,087,130
2007	21,725,805	13,256,147	8,469,658	192,847,482	6.87%	13,256,165	18
2008	17,652,023	15,232,804	2,419,219	216,744,211	7.03%	15,543,376	310,572
2009	33,517,429	14,626,771	18,890,658	208,626,493	7.01%	14,982,660	355,889
2010	46,664,704	15,351,944	31,312,760	199,863,410	7.68%	15,652,734	300,790
2011	57,258,593	12,778,697	44,479,896	195,238,332	6.55%	13,055,795	277,098
2012	77,566,394	11,852,905	65,713,489	198,789,741	5.96%	12,336,770	483,865
2013	106,199,410	11,583,051	94,616,359	200,351,820	5.78%	12,098,712	515,661
2014	106,018,725	12,160,815	93,857,910	202,673,014	6.00%	12,714,800	553,985

** The LABF Statutory Funding does not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded liability using level dollar payments and a 30 year open amortization period.*

*** Covered payroll shown is the amount in force as of the valuation date and likely differs from actual payroll paid during the fiscal year.*

**** Excludes amounts paid for health insurance supplement beginning in 2006.*

NOTES TO SCHEDULE OF CONTRIBUTIONS

Valuation Date:	December 31, 2014
Notes	Actuarially determined contribution rates are calculated as of December 31, which is 12 months prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates as of the Valuation Date:

Actuarial Cost Method	Entry Age Normal
Amortization Method	The statutory contributions through payment year 2020 are based on a multiple of member contributions from the second prior year. The statutory contribution multiple is 1.60 in payment year 2016, 1.90 in payment year 2017, 2.20 in payment year 2018, 2.50 in payment year 2019 and 2.80 in payment year 2020. On and after payment year 2021, 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.
Remaining Amortization Period	Not Applicable. An amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution.
Asset Valuation Method	5 year smoothed market
Inflation	3.00 percent
Salary Increases	Salary increase rates based on age-related productivity and merit rates plus inflation.
Postretirement Benefit Increases	Post retirement benefit increases are equal to the lesser of 3.00 percent or one-half the annual unadjusted percentage increase (but no 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 originallly 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 1.00 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 1.00 percent of 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.
Investment Rate of Return	7.50 percent as of the December 31, 2014, valuation.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2012, valuation pursuant to an experience study of the period January 1, 2004, through December 31, 2011.
Mortality	RP2000 Combined Healthy mortality table, sex distinct, set forward one year for males and setback two years for females. No adjustment is made for post-disabled mortality.

Other Information:

Notes	Benefit changes as a result of Public Act 98-0641 were recognized in the Total Pension Liability as of December 31, 2014.

Methods and Assumptions Used for Accounting Purposes as of the Valuation Date:

Actuarial Cost Method:	Entry Age Normal
Discount Rate:	7.37 percent as of the December 31, 2013, valuation.
	7.24 percent as of the December 31, 2014, valuation.

SECTION D

NOTES TO FINANCIAL STATEMENTS

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.

Single Discount Rate

A Single Discount Rate of 7.24% was used to measure the total pension liability. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.50% and a municipal bond rate of 3.56%. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between statutory contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2063. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2063, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net pension liability to changes in the Single Discount Rate, the following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.24%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is 1-percentage-point lower or 1-percentage-point higher:

SENSITIVITY OF NET PENSION LIABILITY TO THE SINGLE DISCOUNT RATE ASSUMPTION

1% Decrease 6.24%	Current Single Discount Rate Assumption 7.24%	1% Increase 8.24%
$1,013,951,699	$774,812,844	$572,792,104

SUMMARY OF POPULATION STATISTICS

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3,902
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1,449
Active Plan Members	2,837
Total Plan Members	8,188

Additional information about the member data used is included in the December 31, 2014, actuarial valuation report.

SECTION E

GASB NO. 68 PRO FORMA PENSION EXPENSE

NET PENSION LIABILITY FOR FISCAL YEAR ENDING DECEMBER 31, 2014

A. Total Pension Liability		
1. Service Cost Including Pension Plan Administrative Expenses	$	38,523,054
2. Interest on the Total Pension Liability		174,071,491
3. Changes of Benefit Terms		(324,166,854)
4. Difference Between Expected and Actual Experience of the Total Pension Liability		-
5. Changes of Assumptions		28,201,429
6. Benefit Payments, Including Refunds of Employee Contributions		(147,657,962)
7. Pension Plan Administrative Expenses		(3,835,170)
8. Net Change in Total Pension Liability	$	(234,864,012)
9. Total Pension Liability – Beginning		2,397,769,745
10. Total Pension Liability – Ending	**$**	**2,162,905,734**
B. Plan Fiduciary Net Position		
1. Contributions – Employer	$	12,160,815
2. Contributions – Employee		16,359,082
3. Net Investment Income		53,393,517
4. Benefit Payments, Including Refunds of Employee Contributions		(147,657,962)
5. Pension Plan Administrative Expense		(3,835,170)
6. Other		-
7. Net Change in Plan Fiduciary Net Position	$	(69,579,718)
8. Plan Fiduciary Net Position – Beginning		1,457,672,608
9. Plan Fiduciary Net Position – Ending	**$**	**1,388,092,890**
C. Net Pension Liability	**$**	**774,812,844**
D. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability		**64.18%**
E. Covered-Employee Payroll	**$**	**202,673,014**
F. Net Pension Liability as a Percentage of Covered Employee Payroll		**382.30%**

PENSION EXPENSE
(PRO FORMA FOR FISCAL YEAR ENDING DECEMBER 31, 2014)

A. Expense		
1. Service Cost Including Pension Plan Administrative Expense	$	38,523,054
2. Interest on the Total Pension Liability		174,071,491
3. Current-Period Benefit Changes		(324,166,854)
4. Employee Contributions (made negative for addition here)		(16,359,082)
5. Projected Earnings on Plan Investments (made negative for addition here)		(104,797,317)
6. Other Changes in Plan Fiduciary Net Position		-
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		8,090,143
8. Recognition of Outflow (Inflow) of Resources due to Assets		10,280,760
9. Total Pension Expense	**$**	**(214,357,805)**
B. Reconciliation of Net Pension Liability		
1. Net Pension Liability Beginning of Year	**$**	**940,097,137**
2. Pension Expense		(214,357,805)
3. Employer Contributions (made negative for addition here)		(12,160,815)
4. Deferred Investment Experience (inflows)/outflows		41,123,040
5. Deferred Liability Experience (inflows)/outflows		-
6. Deferred Assumption Changes (inflows)/outflows		20,111,286
7. Net Pension Liability End of Year	**$**	**774,812,844**

SCHEDULE OF OUTFLOWS AND INFLOWS OF RESOURCES

A. Change in Outflows and (Inflows) of Resources during Current Plan Year

Experience (Gain)/Loss	Balance at Beginning of Year	Amortization Factor	Amortization	Balance at End of Year
1. Differences between expected and actual non-investment experience	$ -	3.4859	$ -	$ -
2. Assumption Changes	28,201,429	3.4859	8,090,143	20,111,286
3. Difference between expected and actual investment earnings	51,403,800	5.0000	10,280,760	41,123,040
4. Total	$ 79,605,229		$ 18,370,903	$ 61,234,326

B. Outflows and Inflows of Resources by Source to be recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows (Inflows) of Resources
1. Differences between expected and actual non-investment experience	$ -	$ -	$ -
2. Assumption Changes	8,090,143	-	8,090,143
3. Difference between expected and actual investment earnings	10,280,760	-	10,280,760
4. Total	$ 18,370,903	$ -	$ 18,370,903

C. Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows (Inflows) of Resources
1. Differences between expected and actual non-investment experience	$ -	$ -	$ -
2. Assumption Changes	20,111,286	-	20,111,286
3. Difference between expected and actual investment earnings	41,123,040	-	41,123,040
4. Total	$ 61,234,326	$ -	$ 61,234,326

D. Deferred Outflows and Deferred Inflows of Resources by Year to be recognized in Future Pension Expenses

Year Ending December 31	Net Deferred Outflows of Resources	Net Deferred Inflows of Resources
2015	$ 18,370,903	$ -
2016	18,370,903	-
2017	14,211,760	-
2018	10,280,760	-
2019	-	-
Thereafter	-	-
Total	$ 61,234,326	$ -

SECTION F

SUMMARY OF BENEFITS

PLAN DESCRIPTION (AS OF DECEMBER 31, 2014)

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 ¼ 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.

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.

“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.

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.

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.

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.
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.

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.

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.

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.

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

SECTION G

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

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.

RATE OF RETIREMENT:

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

Years of Service

Attained Age	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

Years of Service

Attained Age	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.

RATE OF TERMINATION:

Service[1]	Rate
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%

[1]*Based 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. The 7.50 percent assumption contains a 3.00 percent inflation assumption and a 4.50 percent real rate of return assumption for pension.

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

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

[1]*Based on projected service at end of valuation year.*

Asset Value: For funding purposes, the actuarial value of assets is smoothed by using a five-year phase-in of each year's unexpected investment gains and losses. For purposes of determining the total pension liability, the actuarial value of assets is equal to the market value.

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.

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.

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:	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. 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.
Loss in Tax Levy:	No loss on tax levy is assumed.

SECTION H

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement Nos. 67 and 68 include specific requirements for the discount rate that is used for the purpose of the measurement of the total pension liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses, and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required, as described in the following paragraph.

The S*ingle Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.56%; and the resulting Single Discount Rate is 7.24%.

The sponsor finances benefits using a funding policy defined in state statute. Sponsor contributions through payment year 2020 are based on a multiple of member contributions from the second prior year. The statutory contribution multiple is 1.60 for payment year 2016, 1.90 for payment year 2017, 2.20 for payment year 2018, 2.50 for payment year 2019, and 2.80 for payment year 2020. On and after payment year 2021, the statutory 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. The statutory contribution does not explicitly separate projected employer contributions between current plan members and future plan members.

For purposes of developing the Single Discount Rate, we have assumed the actuarial liability for future members will be fully financed, to the extent that assets are available, and any remaining asset will be assigned to current plan members. Based on this assignment of assets and employer contributions, plan assets assigned to current plan members are projected to be depleted by 2063.

The following tables show the assignment of assets and employer contributions and the projection of assets for current members as of the valuation date. Our projections assume the sponsor will make the required statutory contributions. The projections are based on the statutory funding projections performed during the December 31, 2014, actuarial valuation.

PROJECTION OF FUNDED STATUS AND ASSIGNMENT OF ASSETS

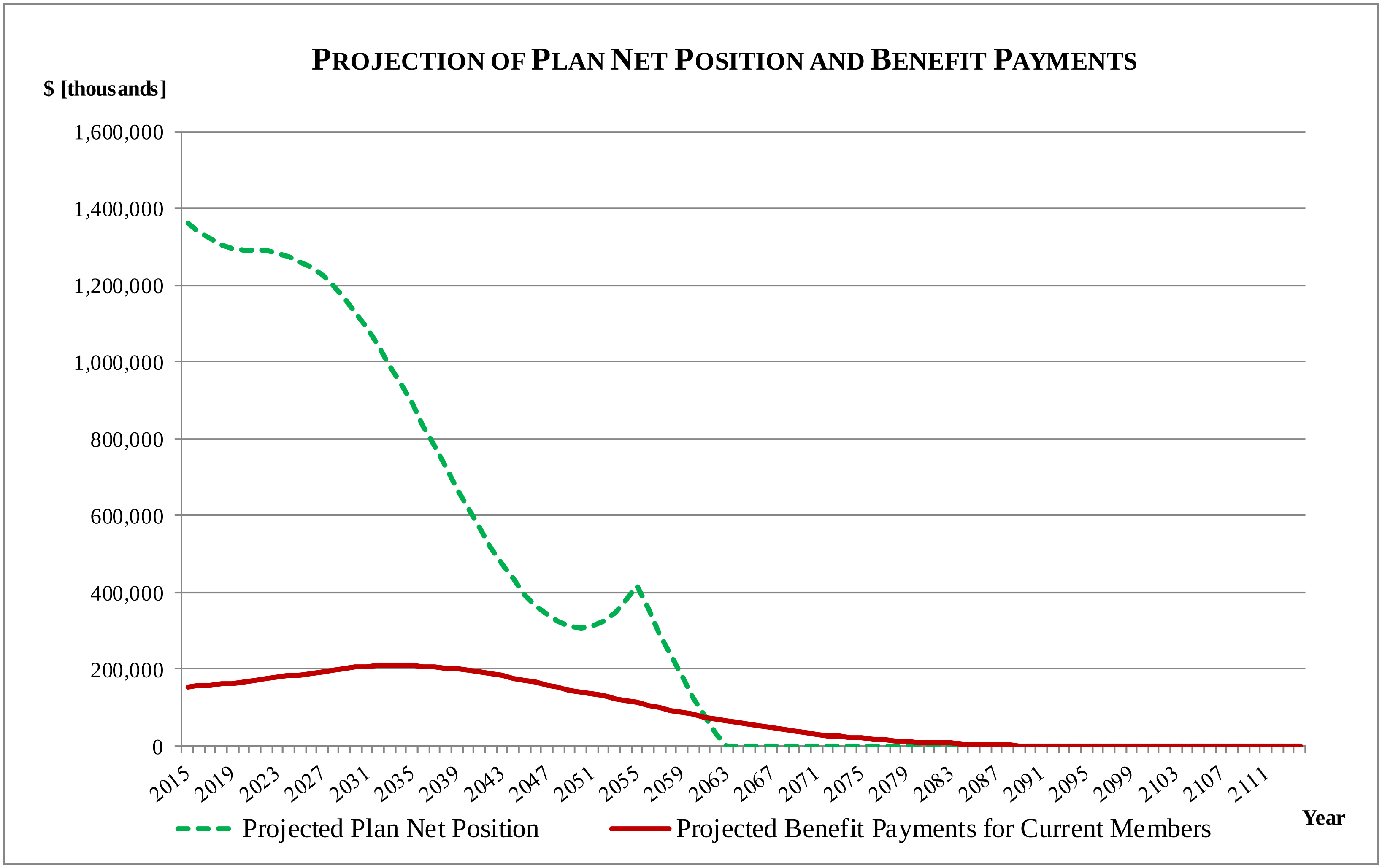
PYE 12/31	Open Group Actuarial Liability	Closed Group Actuarial Liability	Future Member Actuarial Liability	Open Group Assets	Future Member Assigned Assets	Closed Group Assigned Assets	Funded Ratio Current Members	Funded Ratio Future Members
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=min[(c),(d)]	(f)=(d)-(e)	(g)=(f)/(b)	(h)=(e)/(c)
2014	$ 2,107,110,739	$ 2,107,110,739	$ -	$ 1,388,092,890	$ -	$ 1,388,092,890	65.88%	0.00%
2015	2,142,637,537	2,142,637,537	-	1,363,097,079	-	1,363,097,079	63.62%	0.00%
2016	2,175,622,123	2,174,141,327	1,480,796	1,342,036,318	1,480,796	1,340,555,522	61.66%	100.00%
2017	2,208,990,817	2,204,625,596	4,365,220	1,325,498,126	4,365,220	1,321,132,906	59.93%	100.00%
2018	2,241,152,298	2,232,382,075	8,770,223	1,314,693,432	8,770,223	1,305,923,209	58.50%	100.00%
2019	2,273,671,326	2,258,865,135	14,806,190	1,311,023,270	14,806,190	1,296,217,080	57.38%	100.00%
2020	2,304,497,080	2,281,825,013	22,672,066	1,313,146,319	22,672,066	1,290,474,253	56.55%	100.00%
2021	2,333,489,699	2,300,979,758	32,509,941	1,324,203,740	32,509,941	1,291,693,799	56.14%	100.00%
2022	2,360,554,170	2,316,126,903	44,427,266	1,333,971,317	44,427,266	1,289,544,051	55.68%	100.00%
2023	2,385,406,252	2,326,865,840	58,540,413	1,342,244,043	58,540,413	1,283,703,630	55.17%	100.00%
2024	2,407,533,678	2,332,499,527	75,034,150	1,348,673,806	75,034,150	1,273,639,656	54.60%	100.00%
2025	2,429,709,778	2,335,109,065	94,600,713	1,356,188,121	94,600,713	1,261,587,409	54.03%	100.00%
2026	2,449,606,288	2,332,228,513	117,377,775	1,362,574,621	117,377,775	1,245,196,846	53.39%	100.00%
2027	2,466,632,564	2,323,072,525	143,560,039	1,367,361,710	143,560,039	1,223,801,672	52.68%	100.00%
2028	2,480,723,090	2,307,404,877	173,318,212	1,370,620,714	173,318,212	1,197,302,502	51.89%	100.00%
2029	2,491,848,070	2,285,028,972	206,819,098	1,372,421,831	206,819,098	1,165,602,733	51.01%	100.00%
2030	2,500,071,220	2,255,848,419	244,222,801	1,372,920,493	244,222,801	1,128,697,691	50.03%	100.00%
2031	2,505,962,403	2,220,360,029	285,602,374	1,372,838,984	285,602,374	1,087,236,610	48.97%	100.00%
2032	2,510,085,571	2,179,039,841	331,045,730	1,372,893,484	331,045,730	1,041,847,754	47.81%	100.00%
2033	2,513,040,059	2,132,368,830	380,671,229	1,373,859,456	380,671,229	993,188,227	46.58%	100.00%
2034	2,515,720,142	2,081,204,902	434,515,241	1,376,730,431	434,515,241	942,215,190	45.27%	100.00%
2035	2,518,676,358	2,026,141,491	492,534,867	1,381,965,002	492,534,867	889,430,136	43.90%	100.00%
2036	2,522,349,369	1,967,587,045	554,762,324	1,390,093,777	554,762,324	835,331,454	42.45%	100.00%
2037	2,527,430,051	1,906,203,573	621,226,477	1,401,906,555	621,226,477	780,680,078	40.95%	100.00%
2038	2,534,183,125	1,842,229,867	691,953,258	1,417,787,082	691,953,258	725,833,824	39.40%	100.00%
2039	2,542,949,507	1,775,933,768	767,015,739	1,438,283,017	767,015,739	671,267,277	37.80%	100.00%
2040	2,554,422,320	1,708,014,793	846,407,527	1,464,288,984	846,407,527	617,881,457	36.18%	100.00%
2041	2,569,281,755	1,639,155,940	930,125,814	1,496,727,600	930,125,814	566,601,786	34.57%	100.00%
2042	2,588,026,036	1,569,884,795	1,018,141,241	1,536,330,521	1,018,141,241	518,189,280	33.01%	100.00%
2043	2,611,051,160	1,500,649,321	1,110,401,839	1,583,775,977	1,110,401,839	473,374,138	31.54%	100.00%
2044	2,638,667,733	1,431,835,118	1,206,832,615	1,639,667,925	1,206,832,615	432,835,310	30.23%	100.00%
2045	2,670,978,031	1,363,628,345	1,307,349,685	1,704,401,956	1,307,349,685	397,052,271	29.12%	100.00%
2046	2,708,042,318	1,296,189,109	1,411,853,209	1,778,390,482	1,411,853,209	366,537,273	28.28%	100.00%
2047	2,750,019,350	1,229,832,149	1,520,187,201	1,862,166,495	1,520,187,201	341,979,294	27.81%	100.00%
2048	2,796,835,569	1,164,655,260	1,632,180,309	1,956,063,815	1,632,180,309	323,883,505	27.81%	100.00%
2049	2,848,350,653	1,100,745,498	1,747,605,155	2,060,380,588	1,747,605,155	312,775,433	28.41%	100.00%
2050	2,904,374,508	1,038,195,993	1,866,178,515	2,175,397,571	1,866,178,515	309,219,056	29.78%	100.00%
2051	2,964,222,055	976,630,317	1,987,591,738	2,300,929,104	1,987,591,738	313,337,366	32.08%	100.00%
2052	3,027,301,927	915,756,812	2,111,545,115	2,436,934,184	2,111,545,115	325,389,069	35.53%	100.00%
2053	3,093,122,563	855,582,373	2,237,540,191	2,583,418,551	2,237,540,191	345,878,360	40.43%	100.00%
2054	3,161,545,332	796,551,376	2,364,993,956	2,740,706,103	2,364,993,956	375,712,146	47.17%	100.00%
2055	3,232,293,077	739,558,032	2,492,735,045	2,909,110,456	2,492,735,045	416,375,411	56.30%	100.00%
2056	3,304,595,017	684,849,963	2,619,745,054	2,974,135,521	2,619,745,054	354,390,467	51.75%	100.00%
2057	3,378,233,188	632,444,890	2,745,788,298	3,040,409,876	2,745,788,298	294,621,578	46.58%	100.00%
2058	3,452,915,842	582,416,549	2,870,499,293	3,107,624,265	2,870,499,293	237,124,972	40.71%	100.00%
2059	3,528,380,013	534,825,841	2,993,554,173	3,175,542,019	2,993,554,173	181,987,847	34.03%	100.00%
2060	3,604,410,459	489,778,484	3,114,631,975	3,243,969,421	3,114,631,975	129,337,447	26.41%	100.00%
2061	3,680,797,029	447,295,625	3,233,501,404	3,312,717,335	3,233,501,404	79,215,931	17.71%	100.00%
2062	3,757,326,112	407,345,325	3,349,980,787	3,381,593,510	3,349,980,787	31,612,723	7.76%	100.00%
2063	3,833,796,315	369,886,599	3,463,909,716	3,450,416,693	3,450,416,693	-	0.00%	99.61%
2070	4,356,662,619	172,259,194	4,184,403,425	3,920,996,371	3,920,996,371	-	0.00%	93.71%
2080	5,076,519,470	40,950,121	5,035,569,349	4,568,867,553	4,568,867,553	-	0.00%	90.73%
2090	5,870,285,338	5,105,017	5,865,180,321	5,283,256,867	5,283,256,867	-	0.00%	90.08%
2100	6,810,987,224	256,119	6,810,731,105	6,129,888,630	6,129,888,630	-	0.00%	90.00%
2110	7,899,830,243	2,990	7,899,827,253	7,109,847,484	7,109,847,484	-	0.00%	90.00%
2113	8,256,665,504	449	8,256,665,055	7,430,999,284	7,430,999,284	-	0.00%	90.00%

CURRENT MEMBER PROJECTION OF ASSETS AND ASSIGNMENT OF EMPLOYER CONTRIBUTIONS

PYE 12/31	Assets (boy)	Member Contributions	Administrative Expenses	Benefit Payments	Assigned Employer/City Contribution	Income on Cash Flow	Income on Assigned Contribution	Total Investment Income	Assets (eoy)
2015	$ 1,388,092,890	$ 18,579,434	$ 3,950,225	$ 153,618,544	$ 14,471,559	$ 98,989,092	$ 532,873	$ 99,521,965	$ 1,363,097,079
2016	1,363,097,079	18,691,616	3,796,008	158,443,697	23,205,513	96,946,543	854,475	97,801,018	1,340,555,522
2017	1,340,555,522	18,947,012	3,662,130	158,097,702	27,108,994	95,283,001	998,209	96,281,210	1,321,132,906
2018	1,321,132,906	19,162,160	3,525,700	161,723,307	35,851,283	93,705,748	1,320,118	95,025,867	1,305,923,209
2019	1,305,923,209	19,266,034	3,378,835	163,696,876	43,982,441	92,501,583	1,619,524	94,121,107	1,296,217,080
2020	1,296,217,080	18,393,745	3,217,935	167,662,720	53,184,328	91,601,398	1,958,357	93,559,755	1,290,474,253
2021	1,290,474,253	17,447,282	3,043,260	171,545,450	64,969,371	90,999,297	2,392,307	93,391,603	1,291,693,799
2022	1,291,693,799	16,520,122	2,869,226	175,373,838	66,213,032	90,922,062	2,438,101	93,360,163	1,289,544,051
2023	1,289,544,051	15,595,382	2,696,035	179,302,575	67,489,222	90,588,493	2,485,093	93,073,586	1,283,703,630
2024	1,283,703,630	14,573,712	2,509,215	183,446,634	68,817,049	89,967,128	2,533,986	92,501,114	1,273,639,656
2025	1,273,639,656	13,556,664	2,323,213	185,219,516	70,231,308	89,116,448	2,586,062	91,702,510	1,261,587,409
2026	1,261,587,409	12,533,925	2,137,442	189,142,285	71,678,619	88,037,266	2,639,355	90,676,621	1,245,196,846
2027	1,245,196,846	11,465,960	1,946,887	193,381,368	73,153,871	86,619,574	2,693,677	89,313,250	1,223,801,672
2028	1,223,801,672	10,414,552	1,761,885	197,429,427	74,693,256	84,833,975	2,750,360	87,584,335	1,197,302,502
2029	1,197,302,502	9,399,000	1,585,042	201,258,719	76,262,208	82,674,652	2,808,132	85,482,784	1,165,602,733
2030	1,165,602,733	8,375,667	1,409,541	204,695,537	77,819,495	80,139,399	2,865,475	83,004,874	1,128,697,691
2031	1,128,697,691	7,445,886	1,252,047	207,303,413	79,475,002	77,247,057	2,926,434	80,173,490	1,087,236,610
2032	1,087,236,610	6,613,432	1,111,698	209,138,850	81,213,409	74,044,406	2,990,446	77,034,852	1,041,847,754
2033	1,041,847,754	5,857,423	984,879	210,203,496	83,035,998	70,577,871	3,057,557	73,635,428	993,188,227
2034	993,188,227	5,202,166	875,316	210,200,504	84,867,208	66,908,423	3,124,986	70,033,409	942,215,190
2035	942,215,190	4,677,470	788,726	209,491,052	86,535,404	63,095,437	3,186,412	66,281,850	889,430,136
2036	889,430,136	4,182,090	709,254	208,156,159	88,167,726	59,170,397	3,246,518	62,416,915	835,331,454
2037	835,331,454	3,751,453	640,727	206,027,463	89,781,380	55,178,045	3,305,936	58,483,981	780,680,078
2038	780,680,078	3,380,639	582,176	203,556,728	91,388,236	51,158,671	3,365,104	54,523,775	725,833,824
2039	725,833,824	2,997,004	520,898	200,627,521	93,018,543	47,141,192	3,425,135	50,566,327	671,267,277
2040	671,267,277	2,690,378	472,007	196,969,804	94,704,502	43,173,895	3,487,216	46,661,111	617,881,457
2041	617,881,457	2,437,592	431,822	192,621,051	96,461,440	39,322,261	3,551,910	42,874,170	566,601,786
2042	566,601,786	2,225,491	398,111	187,757,742	98,251,248	35,648,794	3,617,814	39,266,608	518,189,280
2043	518,189,280	2,048,441	370,150	182,484,359	100,098,547	32,206,543	3,685,835	35,892,378	473,374,138
2044	473,374,138	1,884,326	343,949	176,867,227	101,985,540	29,047,163	3,755,318	32,802,482	432,835,310
2045	432,835,310	1,740,727	320,998	171,130,690	103,888,975	26,213,540	3,825,407	30,038,947	397,052,271
2046	397,052,271	1,581,494	294,722	165,270,890	105,831,499	23,740,686	3,896,935	27,637,621	366,537,273
2047	366,537,273	1,438,456	270,898	159,190,795	107,823,425	21,671,553	3,970,281	25,641,835	341,979,294
2048	341,979,294	1,304,043	248,185	153,107,453	109,860,908	20,049,593	4,045,306	24,094,899	323,883,505
2049	323,883,505	1,138,083	218,890	146,998,965	111,937,620	18,912,304	4,121,775	23,034,078	312,775,433
2050	312,775,433	987,413	191,916	140,910,309	114,059,682	18,298,840	4,199,913	22,498,754	309,219,056
2051	309,219,056	833,892	163,789	135,281,849	116,215,997	18,234,746	4,279,313	22,514,060	313,337,366
2052	313,337,366	555,081	110,184	129,896,464	118,409,557	18,733,628	4,360,085	23,093,713	325,389,069
2053	325,389,069	310,212	62,228	124,577,639	120,553,801	19,826,105	4,439,040	24,265,145	345,878,360
2054	345,878,360	89,943	18,246	118,910,808	122,593,766	21,564,975	4,514,156	26,079,131	375,712,146
2055	375,712,146	-	-	112,588,940	124,630,402	24,032,653	4,589,149	28,621,802	416,375,411
2056	416,375,411	-	-	106,262,130	16,359,434	27,315,364	602,388	27,917,753	354,390,467
2057	354,390,467	-	-	100,083,537	16,801,963	22,894,002	618,683	23,512,685	294,621,578
2058	294,621,578	-	-	94,000,418	17,233,896	18,635,329	634,588	19,269,916	237,124,972
2059	237,124,972	-	-	88,030,486	17,698,748	14,542,908	651,704	15,194,613	181,987,847
2060	181,987,847	-	-	82,134,916	18,190,011	10,624,711	669,794	11,294,505	129,337,447
2061	129,337,447	-	-	76,402,932	18,705,641	6,886,995	688,780	7,575,775	79,215,931
2062	79,215,931	-	-	70,887,258	19,244,449	3,330,979	708,620	4,039,600	31,612,723
2063	31,612,723	-	-	65,594,307	32,817,539	(44,364)	1,208,410	1,164,046	0
2070	0	-	-	35,113,581	35,113,581	(1,292,955)	1,292,955	0	0
2080	0	-	-	10,700,605	10,700,605	(394,018)	394,018	0	0
2090	0	-	-	1,844,820	1,844,820	(67,930)	67,930	0	0
2100	0	-	-	129,836	129,836	(4,781)	4,781	0	0
2110	0	-	-	2,440	2,440	(90)	90	0	0
2113	0	-	-	493	493	(18)	18	0	0

DEVELOPMENT OF SINGLE DISCOUNT RATE

PYE 12/31	Benefit Payments	Discount Rate	Discounted Benefit Payment	Single Discount Rate	Discounted Benefit Payment
2015	$ 153,618,544	7.50%	$ 148,162,880	7.24%	$ 148,339,198
2016	158,443,697	7.50%	142,155,043	7.24%	142,663,151
2017	158,097,702	7.50%	131,948,482	7.24%	132,735,462
2018	161,723,307	7.50%	125,557,595	7.24%	126,607,253
2019	163,696,876	7.50%	118,223,089	7.24%	119,495,328
2020	167,662,720	7.50%	112,639,303	7.24%	114,122,587
2021	171,545,450	7.50%	107,207,257	7.24%	108,877,682
2022	175,373,838	7.50%	101,953,309	7.24%	103,788,452
2023	179,302,575	7.50%	96,964,906	7.24%	98,945,333
2024	183,446,634	7.50%	92,284,622	7.24%	94,393,720
2025	185,219,516	7.50%	86,675,802	7.24%	88,867,847
2026	189,142,285	7.50%	82,336,290	7.24%	84,619,628
2027	193,381,368	7.50%	78,308,486	7.24%	80,671,786
2028	197,429,427	7.50%	74,369,972	7.24%	76,796,865
2029	201,258,719	7.50%	70,523,194	7.24%	72,997,985
2030	204,695,537	7.50%	66,723,248	7.24%	69,229,167
2031	207,303,413	7.50%	62,858,902	7.24%	65,375,007
2032	209,138,850	7.50%	58,991,113	7.24%	61,498,508
2033	210,203,496	7.50%	55,154,804	7.24%	57,636,070
2034	210,200,504	7.50%	51,306,064	7.24%	53,741,866
2035	209,491,052	7.50%	47,565,488	7.24%	49,942,356
2036	208,156,159	7.50%	43,965,021	7.24%	46,271,905
2037	206,027,463	7.50%	40,479,456	7.24%	42,704,908
2038	203,556,728	7.50%	37,203,736	7.24%	39,342,568
2039	200,627,521	7.50%	34,110,111	7.24%	36,156,993
2040	196,969,804	7.50%	31,151,848	7.24%	33,099,850
2041	192,621,051	7.50%	28,338,669	7.24%	30,182,463
2042	187,757,742	7.50%	25,695,974	7.24%	27,433,003
2043	182,484,359	7.50%	23,231,883	7.24%	24,861,407
2044	176,867,227	7.50%	20,945,835	7.24%	22,468,392
2045	171,130,690	7.50%	18,852,534	7.24%	20,271,089
2046	165,270,890	7.50%	16,936,737	7.24%	18,254,507
2047	159,190,795	7.50%	15,175,495	7.24%	16,395,183
2048	153,107,453	7.50%	13,577,280	7.24%	14,703,449
2049	146,998,965	7.50%	12,126,131	7.24%	13,163,207
2050	140,910,309	7.50%	10,812,902	7.24%	11,765,619
2051	135,281,849	7.50%	9,656,741	7.24%	10,532,612
2052	129,896,464	7.50%	8,625,413	7.24%	9,430,147
2053	124,577,639	7.50%	7,695,099	7.24%	8,433,072
2054	118,910,808	7.50%	6,832,616	7.24%	7,505,707
2055	112,588,940	7.50%	6,018,010	7.24%	6,626,597
2056	106,262,130	7.50%	5,283,567	7.24%	5,831,737
2057	100,083,537	7.50%	4,629,168	7.24%	5,121,611
2058	94,000,418	7.50%	4,044,470	7.24%	4,485,370
2059	88,030,486	7.50%	3,523,355	7.24%	3,916,753
2060	82,134,916	7.50%	3,058,037	7.24%	3,407,575
2061	76,402,932	7.50%	2,646,162	7.24%	2,955,645
2062	70,887,258	7.50%	2,283,842	7.24%	2,557,025
2063	65,594,307	7.50%	1,965,874	7.24%	2,206,264
2064	60,529,608	3.56%	10,714,250	7.24%	1,898,383
2070	35,113,581	3.56%	5,038,680	7.24%	723,833
2080	10,700,605	3.56%	1,082,255	7.24%	109,602
2090	1,844,820	3.56%	131,509	7.24%	9,389
2100	129,836	3.56%	6,523	7.24%	328
2110	2,440	3.56%	86	7.24%	3
2111	1,485	3.56%	51	7.24%	2
2112	874	3.56%	29	7.24%	1
2113	493	3.56%	16	7.24%	1
Total Present Value			**$ 2,433,597,983**		**$ 2,433,597,983**


PROJECTION OF PLAN NET POSITION AND BENEFIT PAYMENTS
$ [thousands]
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
2015
2019
2023
2027
2031
2035
2039
2043
2047
2051
2055
2059
2063
2067
2071
2075
2079
2083
2087
2091
2095
2099
2103
2107
2111
Year
Projected Plan Net Position
Projected Benefit Payments for Current Members

SECTION I

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

GLOSSARY OF TERMS

Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered-Employee Payroll	The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.
Deferred Retirement Option Program (DROP)	A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.
Deferred Inflows and Outflows	The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.
Discount Rate	For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: 1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and 2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

GLOSSARY OF TERMS

Entry Age Actuarial Cost Method (EAN) The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

GASB The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Fiduciary Net Position The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.

Long-Term Expected Rate of Return The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

Money-Weighted Rate of Return The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Multiple-Employer Defined Benefit Pension Plan A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

Municipal Bond Rate The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

Net Pension Liability (NPL) The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.

Non-Employer Contribution Entities Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contribution entities.

Normal Cost The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.

GLOSSARY OF TERMS

Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
Total Pension Expense	The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year: 1. Service Cost 2. Interest on the Total Pension Liability 3. Current-Period Benefit Changes 4. Employee Contributions (made negative for addition here) 5. Projected Earnings on Plan Investments (made negative for addition here) 6. Pension Plan Administrative Expense 7. Other Changes in Plan Fiduciary Net Position 8. Recognition of Outflow (Inflow) of Resources due to Liabilities 9. Recognition of Outflow (Inflow) of Resources due to Assets
Total Pension Liability (TPL)	The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
Unfunded Actuarial Accrued Liability (UAAL)	The UAAL is the difference between actuarial accrued liability and valuation assets.
Valuation Assets	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 67 and 68, the valuation assets are equal to the market value of assets.