GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

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

DECEMBER 31, 2014

GRS
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May 1, 2015

The Retirement Board of the
Policemen's Annuity And Benefit Fund
City of Chicago
221 North LaSalle Street, Suite 1626
Chicago, IL 60601-1404

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 Policemen's Annuity and Benefit Fund Of Chicago ("PABF"). 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 Policemen's Annuity and Benefit Fund Of Chicago ("PABF") only in its entirety and only with the permission of PABF.

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 PABF, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries and financial data. This information was checked for internal consistency, but it was not otherwise audited.

This report complements the actuarial valuation report that was provided to PABF 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.

This report is based on the statutes in effect as of December 31, 2014, and does not consider any pending legislative changes as of the release date of the report. Upon Board approval, GRS may reissue the report or provide a supplemental report to reflect substantive statutory changes.

To the best of our knowledge, the information contained in this report is accurate and fairly represents the actuarial position of the Policemen's 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 **Lance Weiss** 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 yours,

Alex Rivera

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

Lance J. Weiss

Lance Weiss, E.A., M.A.A.A., F.C.A.
Senior Consultant

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.

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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	13,230
- Inactive, Nonretired Members	630
- Active Members	12,020
- Total	25,880
Covered Payroll	$ 1,074,333,318
Net Pension Liability	
Total Pension Liability	$ 11,773,430,559
Plan Fiduciary Net Position	3,062,014,322
Net Pension Liability	$ 8,711,416,237
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	26.01%
Net Pension Liability as a Percentage of Covered Payroll	810.87%
Development of the Single Discount Rate	
Single Discount Rate Beginning of Year	7.56%
Single Discount Rate End of Year	7.15%
Long-Term Expected Rate of Investment Return Beginning of Year	7.75%
Long-Term Expected Rate of Investment Return End of Year	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	$ 815,755,916

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	696,918,907	-
Net difference between projected and actual earnings on pension plan investments	45,206,429	-
Total	$ 742,125,336	$ -

*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; and
- 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.

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) a 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 7.15%.

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	$ 184,457,332	$ 190,071,158
Plan member	4,739,959	4,513,521
Due from Broker - net	117,341,100	146,643,193
Interest and dividends	6,099,084	7,027,508
Other receivables	-	-
Total receivables	312,637,475	348,255,380
Investments - at fair value		
Cash and short-term investments	135,835,676	187,366,819
Equities	1,493,568,427	1,605,626,610
Fixed income	911,238,422	864,243,200
Venture Capital	182,463,748	185,569,567
Real estate	94,281,030	119,140,823
Hedge funds	100,368,762	95,941,758
Infrastructure	36,538,895	35,538,660
Subtotal	2,954,294,960	3,093,427,437
Forward currency contracts	16,059,481	3,845,772
Securities lending cash collateral	288,542,319	271,856,279
Total investments - fair value	3,258,896,760	3,369,129,488
Total assets	3,571,534,235	3,717,384,868
Liabilities and net position		
Liabilities		
Due to brokers - net	214,140,603	173,235,185
Refunds, professional fees payable and other liabilities	4,756,524	5,312,489
OPEB liability	2,080,467	1,780,361
Securities lending cash collateral	288,542,319	271,856,279
Total liabilities	509,519,913	452,184,314
Net Position - Restricted for Pension Benefits	$ 3,062,014,322	$ 3,265,200,554

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

	2014	2013
Additions		
Contributions		
Employer [1]	$ 177,417,827	$ 179,041,930
Plan member	95,675,538	93,328,944
Other	740,305	479,328
Total contributions	273,833,670	272,850,202
Investment income		
Net appreciation in fair value of investments	136,126,859	364,545,293
Interest	19,452,054	20,352,113
Dividends	31,592,777	32,815,167
Real estate operating income - net	3,547,612	5,327,641
	190,719,302	423,040,214
Less investment expenses	(9,983,702)	(8,673,346)
Investment income - net	180,735,600	414,366,868
Securities lending		
Income	984,565	936,295
Lender (borrower) rebates	429,565	221,980
Management fees	(248,437)	(231,531)
Securities lending income - net	1,165,693	926,744
Total additions	455,734,963	688,143,814
Deductions		
Benefits [1]	645,688,934	623,991,964
Refunds	8,991,636	8,087,018
Administrative and OPEB expenses	4,240,625	4,297,512
Total deductions	658,921,195	636,376,494
Net increase	(203,186,232)	51,767,320
Net Position - Restricted for Pension Benefits		
Beginning of year	3,265,200,554	3,213,433,234
End of year	$ 3,062,014,322	$ 3,265,200,554

[1] *Excludes $9,657,123 paid for health insurance supplement in 2014 and $9,487,310 paid in 2013.*

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	$ 199,435,084
Interest on the Total Pension Liability	791,693,017
Benefit Changes	-
Difference between Expected and Actual Experience	-
Assumption Changes	845,070,287
Benefit Payments	(645,688,934)
Refunds	(8,991,636)
Pension Plan Administrative Expense	(4,240,625)
Net Change in Total Pension Liability	1,177,277,193
Total Pension Liability - Beginning	10,596,153,366
Total Pension Liability - Ending (a)	$ 11,773,430,559
Plan Fiduciary Net Position	
Employer Contributions	$ 177,417,827
Employee Contributions	95,675,538
Pension Plan Net Investment Income	181,901,293
Benefit Payments	(645,688,934)
Refunds	(8,991,636)
Pension Plan Administrative Expense	(4,240,625)
Other	740,305
Net Change in Plan Fiduciary Net Position	(203,186,232)
Plan Fiduciary Net Position - Beginning	3,265,200,554
Plan Fiduciary Net Position - Ending (b)	$ 3,062,014,322
Net Pension Liability - Ending (a) - (b)	8,711,416,237
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	26.01 %
Covered Employee Payroll	$ 1,074,333,318
Net Pension Liability as a Percentage of Covered Employee Payroll	810.87 %

Notes to Schedule:

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 7.56% and the benefit provisions in effect as of the December 31, 2013, funding valuation. The Single Discount Rate of 7.56% was based on a long-term expected rate of return on pension plan investments of 7.75% 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 7.15% and the benefit provisions in effect as of the December 31, 2014, funding valuation. The Single Discount Rate of 7.15% 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 increase in total pension liability for fiscal year end 2014 reflects the change in assumption resulting from the Experience Study for the period January 1, 2009, through December 31, 2013, and the change in the Single Discount Rate from 7.56% as of December 31, 2013, to 7.15% as of December 31, 2014.

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	$ 11,773,430,559	$ 3,062,014,322	$ 8,711,416,237	26.01%	$ 1,074,333,318	810.87%

** 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	$ 238,423,459	$ 178,278,371	$ 60,145,088	$ 948,973,732	18.79%	$ 159,633,000	$ (18,645,371)
2006	262,657,025	150,717,705	111,939,321	1,012,983,634	14.88%	157,591,000	6,873,296
2007	312,726,608	170,598,268	142,128,341	1,038,957,026	16.42%	170,112,293	(485,975)
2008	318,234,870	172,835,805	145,399,065	1,023,580,667	16.89%	175,080,814	2,245,009
2009	339,488,187	172,043,784	167,444,403	1,011,205,359	17.01%	177,333,569	5,289,785
2010	363,624,570	174,500,507	189,124,063	1,048,084,301	16.65%	177,060,837	2,560,330
2011	402,751,961	174,034,600	228,717,361	1,034,403,526	16.82%	176,068,606	2,034,006
2012	431,010,173	197,885,552	233,124,621	1,015,170,686	19.49%	204,329,314	6,443,762
2013	474,177,604	179,521,259	294,656,345	1,015,426,128	17.68%	182,716,690	3,195,431
2014	491,651,208	178,158,132	313,493,076	1,074,333,318	16.58%	178,773,877	615,745

** The PABF 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	Projected Unit Credit
Amortization Method	Prior to 2015, the total City contribution is generated by a tax equal to double the contributions by the policemen to the Fund two years prior to the year of the tax levy. Beginning in tax levy year 2015, the Statutory Contributions are equal to a level percentage of pay contribution determined so that the Plan attains a 90% funded ratio by the end of 2040 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 %
Salary Increases	Salary increase rates based on age-related productivity and merit rates plus inflation.
Postretirement Benefit Increases	A retiree born before January 1, 1955, with at least 20 years of service or receiving a mandatory retirement minimum annuity, receives an increase of 3.00% of the original annuity, starting on the first of the month following the first anniversary of his retirement or the first of the month following attainment of age 55, whichever is later, and shall not be subject to a 30% maximum increase. For retirees born after January 1, 1955, automatic increases are 1.5% of the original annuity, commencing at age 60, or the first anniversary of retirement, if later, to a maximum of 30%. For participants that first became members on or after January 1, 2011, increases are equal to the lesser of 3.00% and 50% of CPI-U of the original benefit, commencing at age 60.
Investment Rate of Return	7.50% 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, 2014, valuation pursuant to an experience study of the period January 1, 2009, through December 31, 2013.
Mortality	Post-Retirement Healthy mortality rates: Sex distinct Retirement Plans 2014 Healthy Annuitant mortality table weighted 108% for males and 97% for females. Pre-Retirement mortality rates: Sex distinct Retirement Plans 2014 Total Employee mortality table weighted 85% for males and 115% for females. Disabled Mortality: Sex distinct Retirement Plans 2014 Healthy Annuitant mortality table weighted 115% for males and 115% for females.

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

Actuarial Cost Method:	Entry Age Normal
Discount Rate:	7.56% as of the December 31, 2013, valuation. 7.15% 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 7.15% 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 7.15%, 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 6.15%	Current Single Discount Rate Assumption 7.15%	1% Increase 8.15%
$10,123,094,063	$8,711,416,237	$7,524,223,623

SUMMARY OF POPULATION STATISTICS

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	13,230
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	630
Active Plan Members	12,020
Total Plan Members	25,880

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	$	199,435,084
2. Interest on the Total Pension Liability		791,693,017
3. Changes of Benefit Terms		0
4. Difference Between Expected and Actual Experience of the Total Pension Liability		-
5. Changes of Assumptions		845,070,287
6. Benefit Payments, Including Refunds of Employee Contributions		(654,680,570)
7. Pension Plan Administrative Expenses		(4,240,625)
8. Net Change in Total Pension Liability	$	1,177,277,193
9. Total Pension Liability – Beginning		10,596,153,366
10. Total Pension Liability – Ending	**$**	**11,773,430,559**
B. Plan Fiduciary Net Position		
1. Contributions – Employer	$	177,417,827
2. Contributions – Employee		95,675,538
3. Net Investment Income		181,901,293
4. Benefit Payments, Including Refunds of Employee Contributions		(654,680,570)
5. Pension Plan Administrative Expense		(4,240,625)
6. Other		740,305
7. Net Change in Plan Fiduciary Net Position	$	(203,186,232)
8. Plan Fiduciary Net Position – Beginning		3,265,200,554
9. Plan Fiduciary Net Position – Ending	**$**	**3,062,014,322**
C. Net Pension Liability	**$**	**8,711,416,237**
D. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability		**26.01%**
E. Covered-Employee Payroll	**$**	**1,074,333,318**
F. Net Pension Liability as a Percentage of Covered Employee Payroll		**810.87%**

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

A. Expense		
1. Service Cost Including Pension Plan Administrative Expense	$	199,435,084
2. Interest on the Total Pension Liability		791,693,017
3. Current-Period Benefit Changes		-
4. Employee Contributions (made negative for addition here)		(95,675,538)
5. Projected Earnings on Plan Investments (made negative for addition here)		(238,409,329)
6. Other Changes in Plan Fiduciary Net Position		(740,305)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		148,151,380
8. Recognition of Outflow (Inflow) of Resources due to Assets		11,301,607
9. Total Pension Expense	**$**	**815,755,916**
B. Reconciliation of Net Pension Liability		
1. Net Pension Liability Beginning of Year	**$**	**7,330,952,812**
2. Pension Expense		815,755,916
3. Employer Contributions (made negative for addition here)		(177,417,827)
4. Deferred Investment Experience (inflows)/outflows		45,206,429
5. Deferred Liability Experience (inflows)/outflows		-
6. Deferred Assumption Changes (inflows)/outflows		696,918,907
7. Net Pension Liability End of Year	**$**	**8,711,416,237**

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	$ -	5.7041	$ -	$ -
2. Assumption Changes	845,070,287	5.7041	148,151,380	696,918,907
3. Difference between expected and actual investment earnings	56,508,036	5.0000	11,301,607	45,206,429
4. Total	$ 901,578,323		$ 159,452,987	$ 742,125,336

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	148,151,380	-	148,151,380
3. Difference between expected and actual investment earnings	11,301,607	-	11,301,607
4. Total	$ 159,452,987	$ -	$ 159,452,987

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	696,918,907	-	696,918,907
3. Difference between expected and actual investment earnings	45,206,429	-	45,206,429
4. Total	$ 742,125,336	$ -	$ 742,125,336

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	$ 159,452,987	$ -
2016	159,452,987	-
2017	159,452,987	-
2018	159,452,987	-
2019	104,313,387	-
Thereafter	-	-
Total	$ 742,125,335	$ -

SECTION F

SUMMARY OF BENEFITS

PLAN DESCRIPTION (AS OF DECEMBER 31, 2014)

PARTICIPANTS

An employee in the police department of the City of Chicago appointed and sworn or designated by law as a peace officer with the title of policeman, policewoman, chief surgeon, police surgeon, police dog catcher, police kennelman, police matron and members of the police force of the police department.

SERVICE

In computing service rendered by a police officer, the following periods shall be counted, in addition to all periods during which he performed the duties of his position, as periods of service for annuity purposes only: All periods of (a) vacation; (b) leave of absence with pay; (c) military service; (d) disability for which the police officer receives disability benefit. The calculation of service is based on a day-to-day basis for most purposes. For the purpose of calculating benefits under the Dominant Formula, one-year of Service is credited for a year in any portion of which a police officer is compensated.

RETIREMENT

Eligibility

Attainment of age 50 with at least 10 years of service.

For participants that first became members on or after January 1, 2011, attainment of age 55 with at least 10 years of service. Participants may retire at attainment of age 50 with 10 years of service with a reduced benefit.

Mandatory

Effective in plan year 2003, retirement is mandatory for a participant who has attained age 63.

Accumulation Annuity

At age 50 or more, with 10 or more years of service, the employee is entitled to an annuity based on the sums accumulated for age and service annuity plus 1/10 of the sum accumulated from the contributions by the City for the age and service annuity for each completed year of service after the first 10 years. At age 50 or more with 20 or more years, the employee is entitled to an annuity based on all sums accumulated.

PLAN DESCRIPTION (CONT'D)

Formula Minimum Annuity

While there are several alternative formulas available with 20 or more years of service, the Dominant Formula is 50% of highest average salary (including duty availability pay) in 48 consecutive months within the last 10 years of service plus 2.5% for each year or fraction of service over 20 years, limited to 75% of average salary.

Mandatory Retirement Minimum Annuity

A police officer who is required to withdraw from service due to attainment of mandatory retirement age who has less than 20 years of service credit may elect to receive an annuity equal to 30% of average salary for the first 10 years of service, plus 2% of average salary for each completed year of service in excess of 10, to a maximum of 48% of average salary. This benefit qualifies for post retirement increases.

Post-Retirement Increase

A retiree born before January 1, 1955, with at least 20 years of service or receiving a mandatory retirement minimum annuity, receives an increase of 3% of the original annuity, starting on the first of the month following the first anniversary of his retirement or the first of the month following attainment of age 55, whichever is later, and shall not be subject to a 30% maximum increase. For retirees born after January 1, 1955, automatic increases are 1.5% of the original annuity, commencing at age 60, or the first anniversary of retirement, if later, to a maximum of 30%.

For participants that first became members on or after January 1, 2011, increases are equal to the lesser of 3.00% and 50% of CPI-U of the original benefit, commencing at age 60.

PLAN DESCRIPTION (CONT'D)

Minimum Annuity	The benefit of any retiree who retired from the service before January 1, 1986, at age 50 or over with at least 20 years of service, or due to termination of disability is not less than $1,050 per month. *For participants that first became members on or after January 1, 2011, the member is entitled to an annuity based on an accrual rate of 2.5% of the final average salary for each fraction of service. Maximum is 75% of the final average salary. 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% 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.* *For participants that first became members on or after January 1, 2011, who retire after age 50 but before age 55 is attained, the member is entitled to an annuity based on an accrual rate of 2.5% of the final average salary for each fraction of service, reduced by one half of one percent per month for retirement prior to age 55, subject to a maximum benefit of 75%.*
Reversionary Annuity	A member, prior to retirement, may elect to reduce his own annuity, and provide a reversionary annuity, to begin upon the officer's death, for the officer's spouse.

SURVIVOR INCOME BENEFITS PAYABLE ON DEATH

Death in Service (Non-Duty):	Generally, a money-purchase benefit is provided, based on total salary deductions and City contributions. However, if a policeman dies in service after December 31, 1985, with at least 1.5 years of service, the widow's annuity is the greater of (a) 30% of the annual maximum salary attached to the classified civil service position of a first class patrolman at the time of his death (without dollar limit) or (b) 50% of the benefit accrued by the policeman at date of death. The lifetime benefit is payable until death.

PLAN DESCRIPTION (CONT'D)

Death in Service (Duty Related)

Compensation Annuity 75% of the member's salary attached to the civil service position that would ordinarily have been paid to such member as though in active discharge of his duties at the time of death payable until the date the policeman would have attained age 63.

Supplemental Annuity Payable for life and is equal to the difference between the money purchase annuity for the spouse and an amount equal to 75% of the annual salary (including all salary increases and longevity raises) the police officer would have been receiving when he attained age 63 if the police officer had continued in service at the same rank last held in the department.

Death after Retirement If a police officer retires on or after January 1, 1986, and subsequently dies, the widow's annuity is 40% before 1988 and 50% on and after January 1, 1988, of the retired policeman's annuity at the time of death (without dollar limit).

Maximum Annuity $500 a month (after discount for age difference) under both the accumulation method and the old formula method. There is no dollar limit on the 30%, 40% or 50% benefit.

Minimum Annuity Any spouse is entitled to a minimum annuity of $1,000 a month.

For participants that first became members on or after January 1, 2011, widow benefits are equal to 66-2/3% of the officer's earned annuity at the date of death. Automatic increases to the annuity are equal to the lesser of 3.00% and 50% of CPI-U, commencing when the survivor reaches age 60, and applied to the original granted retirement annuity.

CHILDREN'S ANNUITIES

Eligibility Payable at death of the policeman to all unmarried children less than 18 years of age.

Benefit 10% of the annual maximum salary of a first class patrolman during widow (widower) life, 15% otherwise.

PLAN DESCRIPTION (CONT'D)

Payable Until	Age 18. If the child is disabled, benefit is payable for life or as long as such disablement exists.
Family Maximum	60% (non-duty death) or 100% (duty death) of the salary that would ordinarily been paid to the policeman, if he had been in the active discharge of his duties.
Parent's Annuities	
Eligibility	Payable to a dependent parent at the death of a policeman who is in either active service, or receiving a disability benefit, or on leave of absence, or in receipt of an annuity granted after 20 years of service, or waiting to start receiving an annuity granted for 20 years of service. The benefit is only payable if there are no surviving spouses or children eligible for benefits.
Benefit	18% of the current salary attached to the rank at separation from service.
Payable until	Death of the dependent parent.

DUTY DISABILITY BENEFIT

Eligibility	Disabling condition incurred in the performance of duty.
Benefit	75% of salary at the time the disability is allowed plus $100.00 per month for each unmarried child less than age 18, (total amount of child's benefits shall not exceed 25% of salary). Beginning January 1, 2000, after 7 years of payment, the benefit shall not be less than 60% of the current salary attached to the rank held by the policemen at the time of disability. Payable to employee's age 63 or by operation of law, whichever is later. Salary deductions are contributed by the City.

OCCUPATIONAL DISEASE DISABILITY BENEFIT

Eligibility	Heart attack or any disability heart disease after 10 years of service.

PLAN DESCRIPTION (CONT'D)

Benefit 65% of salary attached to the rank held by the police officer at the time of his or her removal from the police department payroll with a minimum after 10 years of 50% of the current salary attached to the rank. Each natural or legally adopted unmarried child of the officer under the age of 18 is entitled to a benefit of $100 per month. This benefit is not terminated at age 18 if the child is then dependent by reason of physical or mental disability. Salary deductions are contributed by the City.

ORDINARY DISABILITY BENEFIT

Eligibility Disabling condition other than duty or occupational related.

Benefit 50% of salary at the time of injury, payable for a period not more than 25% of service (excluding any previous disability time) rendered prior to injury, nor more than 5 years. Disability shall cease at age 63. Salary deductions are contributed by the City.

DEATH BENEFIT

Eligibility Payable upon the death of a police officer whose death occurs while in active service; on authorized leave of absence; within 60 days of receipt of salary; while receiving duty or ordinary disability benefit; occurring within 60 days of termination of such benefit; or occurring on retirement while in receipt of annuity and separation was effective after 20 years of service. This benefit is payable to beneficiaries or, if none, to estate.

Benefit

Death in Service:

AGE AT DEATH	BENEFIT
49 and under	$12,000
50-62	$12,000 less $400 for each year by which age at death exceeds 49

Death after Retirement:

AGE AT DEATH	BENEFIT
50 and over	$6,000

If death results from injury incurred in performance of duty before retirement on annuity, the benefit payable is $12,000 regardless of the attained age.

PLAN DESCRIPTION (CONT'D)

GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PROGRAM	The pension fund shall provide payments in the amount of $95 per month for non-Medicare eligible city annuitants and $65 per month for Medicare eligible city annuitants through December 31, 2016.

REFUNDS

Policemen	Without regard to service and under age 50, or with less than 10 years of service and under age 57 at withdrawal: a refund of all salary deductions together with 1.5% simple interest until the date of withdrawal.
For Spouse's Annuity	Upon retirement an unmarried policeman will receive a refund of contributions for spouse's annuity, accumulated at 3% compounded annually.
Of Remaining Amounts	If at death of a retired policeman the total member contributions paid while active exceed the total retirement benefits paid to date of death, the difference is payable.

CONTRIBUTIONS

Salary Deductions	Employee	7 %	
	Spouse	1½%	
	Annuity Increase	½%	
		9 %	
City Contributions [1]	Employee	9-5/7%	
	Spouse	2%	
	Annuity Increase	½%	Unallocated
		12-3/14%	

[1] *Credited to Participant's Accumulation Annuity and Widow's Annuity Account*

In addition to the above contributions, a contribution is made to support the Death Benefit. Policemen contribute $2.50 per month. City contributes a total of $224,000 for all policemen.

PLAN DESCRIPTION (CONT'D)

Prior to 2015, the total City contribution is generated by a tax equal to double the contributions by the policemen to the Fund two years prior to the year of the tax levy.

Starting in tax levy year 2015, employer contributions combined with member contributions and other fund revenue must be equal to the amount, as a level percentage of payroll, that is sufficient to produce 90% funding by the end of fiscal year 2040.

"PICK UP" OF EMPLOYEE SALARY DEDUCTIONS

Beginning January 1, 1982, the employee contributions were "picked up" by the employer. The W-2 salary is therefore reduced by the amount of contribution. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is received. For the purpose of benefits, refunds or contributions, these contributions will be treated as employee contributions.

SALARY CAP AND COLA DEVELOPMENT FOR MEMBERS HIRED ON OR AFTER JANUARY 1, 2011

Year Ending	CPI-U	½ CPI-U	COLA	Maximum Annual Pensionable Earnings
2011			3.00%	$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

I. ACTUARIAL COST METHOD

An Actuarial Cost Method is a set of techniques used by the actuary to develop contribution levels under a retirement plan. The Actuarial Cost Method used in this valuation for statutory funding and State reporting purposes is the Projected Unit Credit cost method. The Actuarial Cost Method used for GASB accounting purposes is the Entry-Age Normal cost method.

Under the Projected Unit Credit Cost Method, each participant's projected benefit is allocated in proportion to service as of the valuation date. The Actuarial Accrued Liability is the present value of the portion of benefits allocated for periods of service as of the valuation date. The Normal Cost is the present value of the benefits allocated for service during the current plan year.

Under the Entry Age Normal Cost Method, each participant's projected benefit is allocated on a level percent of pay basis from entry age to assumed exit age. The Actuarial Accrued Liability is the portion of the present value associated with pay prior to the valuation date. The Normal Cost is the portion of the present value associated with pay during the current plan year.

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 fixed period of time (e.g., 30 years) from the date incurred. At a minimum, interest on UAAL should be funded. The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL.

II. CURRENT ACTUARIAL ASSUMPTIONS

The current actuarial assumptions were adopted and became effective December 31, 2014, and were based on an experience study for the period January 1, 2009, to December 31, 2013.

A. Demographic Assumptions

Mortality:	**Pre-Retirement mortality rates:** Sex distinct Retirement Plans 2014 Total Employee mortality table weighted 85% for males and 115% for females. **Post-Retirement Healthy mortality rates:** Sex distinct Retirement Plans 2014 Healthy Annuitant mortality table weighted 108% for males and 97% for females. When compared to observed experience, the recommended rates include a 23% margin for future mortality improvements.
Disabled Mortality:	Sex distinct Retirement Plans 2014 Healthy Annuitant mortality table weighted 115% for males and 115% for females.

Rate of Disability: Rates at which members are assumed to become disabled under the provisions of the Fund. Sample rates assumed are as follows:

ATTAINED AGE	RATE
22	.0003
27	.0007
32	.0007
37	.0020
42	.0030
47	.0040
52	.0050
57	.0060
62	.0060

The assumed distribution of disability types is assumed to be as follows:

Duty Disability	55%
Occupational Disease Disability	10%
Ordinary Disability	35%

Rate of Retirement: Rates at which members are assumed to retire under the provisions of the Fund. The rates assumed are as follows:

For members hired before January 1, 2011:

ATTAINED AGE	RATE [1]
50	.05
51	.05
52	.05
53	.05
54	.05
55	.19
56	.19
57	.19
58	.25
59	.25
60	.25
61	.30
62	.30
63	1.00

[1] *Only for members eligible for a formula annuity.*

For members hired on or after January 1, 2011:

Attained Age	Rate [1]
50	.02
51	.02
52	.02
53	.02
54	.03
55	.21
56	.21
57	.21
58	.27
59	.27
60	.25
61	.30
62	.30
63	1.00

[1] *Only for members eligible for a formula annuity.*

Turnover Rates: The following sample rates exemplify the table:

Years of Service	Rate
0	0.030
1	0.028
2	0.020
3	0.015
4-5	0.010
6-10	0.009
11	0.008
12	0.007
13-24	0.006

B. Economic Assumptions

Investment Return Rate: 7.50% per annum for pensions effective as of December 31, 2014, and 4.50% for OPEB effective as of December 31, 2005.

General Inflation: The 7.50% Investment Return Rate assumption contains a 3.00% inflation assumption and a 4.50% real rate of return assumption for pension.

Future Salary Increases: Assumed rates of individual salary increase at 3.75% per year, plus an additional percentage based on the following service scale:

COMPLETED YEARS OF SERVICE*	SCALE
1	0.3625
2	0.0325
3	0.0325
4	0.0325
5	0.0225
6-9	0.0000
10	0.0225
11-14	0.0000
15	0.0225
16-19	0.0000
20	0.0225
21-24	0.0000
25	0.0225
26-29	0.0000
30	0.0225
Over 30	0.0000

* *Includes increases at 12 and 18 months of service.*

Asset Value: For Book-value of Assets, bonds are at amortized value and stocks are at cost.

For statutory funding and GASB #25 and #27 reporting, the actuarial value of assets is smoothed by recognizing each year's difference between actual and expected investment return at the rate of 20% per year over a five-year period.

The actuarial value of assets was marked to the market value as of January 1, 2012, and is smoothed by using a five-year phase-in of each year's unexpected investment gains and losses.

C. Other Assumptions

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

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 Plan paid health insurance from July 1, 2008, until June 30, 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 widows of retirees are assumed to be eligible for Medicare, as well as widow annuitants that are currently receiving a health insurance supplement.

The projections under the provisions of P.A. 96-1495 were based on the following assumptions and methods:

Population: Active members who terminate, retire, become disabled or die during the year are replaced by new entrants such that the number of active members remains level during the projection period based on the most recent actuarial valuation. The number of active members as of the valuation at December 31, 2014, is 12,020.

New Entrant Profile:

(1) The entry age of future new entrants, which is summarized below, is based on the profile of current active members hired over the last five years with one or more years of service as of December 31, 2014. These members were hired from January 1, 2010, through December 31, 2013.

Entry Age	Number
20 to 25	21
25 to 30	669
30 to 35	338
35 to 40	156
40 to 45	3

(2) Approximately 80% of the new entrants are assumed to be male.

(3) Based on the most recent employment contract, new entrants were assumed to earn $46,206 for the plan year ending December 31, 2014. This amount includes pay provided for duty availability pay. The new entrant pay for members hired after 2014 is assumed to increase by the wage inflation assumption of 3.75%.

(4) Pay for a specific new entrant is assumed to increase in the future by the wage inflation and the service based increases disclosed in this actuarial valuation.

(5) The projections assume a pay cap of $110,631 for plan year 2014, increasing by 1.5% per year after plan year 2014. The annual increase of 1.5% per year is based on 50% of the CPI-U increase which is assumed to be 3.0% per year.

Administrative Expenses: Statutory funding projections include an explicit administrative expense assumption of $4,241,000 for plan year end December 31, 2014, increased by 3.0% per year.

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 7.15%.

The sponsor finances benefits using a funding policy defined in state statute. Sponsor contributions are equal to a level percentage of pay contribution determined so that the Plan attains a 90% funded ratio by the end of 2040 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

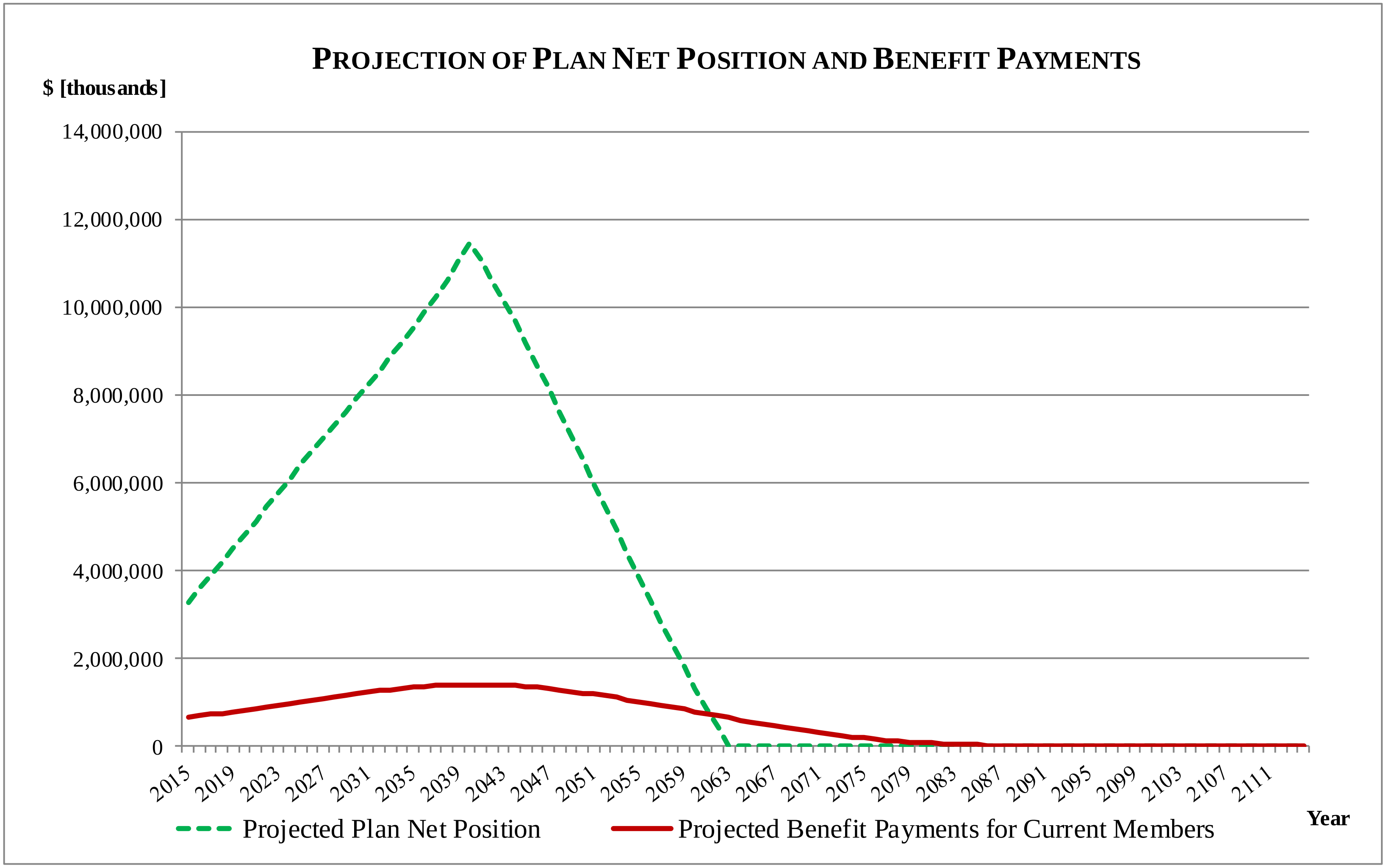
PYE 12/31	Open Group Actuarial Liability	Closed Group Actuarial Liability	Future Member Actuarial Liability	Open Group Assets	Future Member Assigned Assets	Closed Group Assigned Assets	Funded Ratio Current Members	Funded Ratio Future Members
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=min[(c),(d)]	(f)=(d)-(e)	(g)=(f)/(b)	(h)=(e)/(c)
2014	$ 11,334,799,005	$ 11,334,799,005	$ -	$ 3,062,014,322	$ -	$ 3,062,014,322	27.01%	0.00%
2015	11,711,618,818	11,711,412,525	206,293	3,278,524,753	206,293	3,278,318,460	27.99%	0.00%
2016	12,093,711,272	12,087,691,977	6,019,295	3,572,978,862	6,019,295	3,566,959,567	29.51%	100.00%
2017	12,478,729,759	12,460,538,565	18,191,194	3,889,364,011	18,191,194	3,871,172,817	31.07%	100.00%
2018	12,865,264,938	12,827,398,753	37,866,185	4,219,011,499	37,866,185	4,181,145,314	32.60%	100.00%
2019	13,250,761,354	13,184,355,290	66,406,064	4,560,317,474	66,406,064	4,493,911,409	34.09%	100.00%
2020	13,634,027,258	13,528,799,946	105,227,312	4,914,565,599	105,227,312	4,809,338,287	35.55%	100.00%
2021	14,014,009,106	13,858,454,255	155,554,851	5,281,950,685	155,554,851	5,126,395,834	36.99%	100.00%
2022	14,389,785,474	14,171,079,262	218,706,212	5,663,586,049	218,706,212	5,444,879,837	38.42%	100.00%
2023	14,759,815,791	14,463,742,605	296,073,186	6,059,763,197	296,073,186	5,763,690,010	39.85%	100.00%
2024	15,122,216,330	14,732,959,754	389,256,576	6,470,260,462	389,256,576	6,081,003,886	41.27%	100.00%
2025	15,475,154,377	14,974,776,937	500,377,440	6,895,984,193	500,377,440	6,395,606,753	42.71%	100.00%
2026	15,816,297,188	15,184,832,723	631,464,465	7,337,187,915	631,464,465	6,705,723,450	44.16%	100.00%
2027	16,144,393,526	15,359,828,698	784,564,828	7,795,755,504	784,564,828	7,011,190,676	45.65%	100.00%
2028	16,459,104,855	15,497,332,770	961,772,085	8,273,985,754	961,772,085	7,312,213,669	47.18%	100.00%
2029	16,761,536,452	15,596,431,410	1,165,105,042	8,777,064,282	1,165,105,042	7,611,959,239	48.81%	100.00%
2030	17,053,167,693	15,656,291,141	1,396,876,552	9,311,290,660	1,396,876,552	7,914,414,108	50.55%	100.00%
2031	17,335,269,102	15,675,942,312	1,659,326,790	9,882,459,649	1,659,326,790	8,223,132,860	52.46%	100.00%
2032	17,608,408,267	15,654,602,277	1,953,805,990	10,492,841,374	1,953,805,990	8,539,035,384	54.55%	100.00%
2033	17,871,920,232	15,591,112,870	2,280,807,362	11,140,747,907	2,280,807,362	8,859,940,545	56.83%	100.00%
2034	18,126,036,656	15,485,344,368	2,640,692,288	11,825,203,432	2,640,692,288	9,184,511,144	59.31%	100.00%
2035	18,373,206,529	15,338,752,533	3,034,453,996	12,551,459,575	3,034,453,996	9,517,005,579	62.05%	100.00%
2036	18,615,455,985	15,152,537,967	3,462,918,018	13,323,887,934	3,462,918,018	9,860,969,917	65.08%	100.00%
2037	18,854,888,865	14,928,054,646	3,926,834,219	14,148,325,733	3,926,834,219	10,221,491,514	68.47%	100.00%
2038	19,093,231,168	14,666,583,634	4,426,647,534	15,030,205,476	4,426,647,534	10,603,557,942	72.30%	100.00%
2039	19,331,643,856	14,369,230,549	4,962,413,307	15,974,829,517	4,962,413,307	11,012,416,210	76.64%	100.00%
2040	19,570,857,739	14,037,243,667	5,533,614,072	16,987,488,445	5,533,614,072	11,453,874,373	81.60%	100.00%
2041	19,812,033,807	13,672,835,594	6,139,198,213	17,183,640,642	6,139,198,213	11,044,442,428	80.78%	100.00%
2042	20,056,538,674	13,279,049,618	6,777,489,056	17,384,732,881	6,777,489,056	10,607,243,825	79.88%	100.00%
2043	20,304,867,010	12,858,692,166	7,446,174,844	17,591,620,439	7,446,174,844	10,145,445,595	78.90%	100.00%
2044	20,557,864,014	12,415,681,261	8,142,182,753	17,804,956,022	8,142,182,753	9,662,773,269	77.83%	100.00%
2045	20,815,406,895	11,953,679,035	8,861,727,860	18,024,375,925	8,861,727,860	9,162,648,066	76.65%	100.00%
2046	21,077,251,374	11,476,447,103	9,600,804,271	18,249,364,956	9,600,804,271	8,648,560,685	75.36%	100.00%
2047	21,343,269,819	10,987,637,512	10,355,632,307	18,479,420,411	10,355,632,307	8,123,788,105	73.94%	100.00%
2048	21,613,404,715	10,490,579,131	11,122,825,584	18,714,180,440	11,122,825,584	7,591,354,855	72.36%	100.00%
2049	21,887,589,323	9,988,397,323	11,899,192,000	18,953,231,831	11,899,192,000	7,054,039,831	70.62%	100.00%
2050	22,165,227,399	9,483,359,552	12,681,867,847	19,195,668,227	12,681,867,847	6,513,800,380	68.69%	100.00%
2051	22,445,648,033	8,977,404,247	13,468,243,786	19,440,602,524	13,468,243,786	5,972,358,738	66.53%	100.00%
2052	22,728,507,764	8,472,454,391	14,256,053,373	19,687,439,404	14,256,053,373	5,431,386,031	64.11%	100.00%
2053	23,013,658,374	7,970,404,393	15,043,253,981	19,935,813,257	15,043,253,981	4,892,559,276	61.38%	100.00%
2054	23,301,218,481	7,473,037,896	15,828,180,585	20,185,614,153	15,828,180,585	4,357,433,568	58.31%	100.00%
2055	23,591,705,446	6,982,092,791	16,609,612,655	20,437,130,035	16,609,612,655	3,827,517,380	54.82%	100.00%
2056	23,885,869,281	6,499,354,725	17,386,514,556	20,690,956,769	17,386,514,556	3,304,442,212	50.84%	100.00%
2057	24,184,703,167	6,026,629,263	18,158,073,904	20,947,956,229	18,158,073,904	2,789,882,325	46.29%	100.00%
2058	24,489,421,531	5,565,710,981	18,923,710,550	21,209,234,697	18,923,710,550	2,285,524,148	41.06%	100.00%
2059	24,801,373,821	5,118,357,094	19,683,016,727	21,476,093,211	19,683,016,727	1,793,076,484	35.03%	100.00%
2060	25,121,962,544	4,686,278,837	20,435,683,707	21,749,967,573	20,435,683,707	1,314,283,866	28.05%	100.00%
2061	25,452,607,689	4,271,076,208	21,181,531,481	22,032,323,397	21,181,531,481	850,791,916	19.92%	100.00%
2062	25,794,629,921	3,874,207,716	21,920,422,205	22,324,591,516	21,920,422,205	404,169,311	10.43%	100.00%
2063	26,149,164,540	3,496,928,333	22,652,236,207	22,628,075,030	22,628,075,030	-	0.00%	99.89%

CURRENT MEMBER PROJECTION OF ASSETS AND ASSIGNMENT OF EMPLOYER CONTRIBUTIONS

PYE 12/31	Assets (boy)	Member Contributions	Administrative Expenses	Benefit Payments	Income on Assets and Cash Flow	Assigned Sponsor Contribution	Assets (eoy)
2014	$ 3,265,200,554	$ 95,675,538	$ 4,240,625	$ 664,337,693	$ 181,901,293	$ 187,815,255	$ 3,062,014,322
2015	3,062,014,322	98,846,851	4,367,844	672,045,390	201,213,488	592,657,033	3,278,318,460
2016	3,278,318,460	105,754,646	4,398,541	698,373,315	212,474,997	673,183,320	3,566,959,567
2017	3,566,959,567	105,326,700	4,392,083	718,368,661	231,820,231	689,827,062	3,871,172,817
2018	3,871,172,817	104,557,435	4,378,020	748,950,865	253,161,732	705,582,216	4,181,145,314
2019	4,181,145,314	103,157,196	4,339,975	781,634,592	274,852,560	720,730,906	4,493,911,409
2020	4,493,911,409	101,451,573	4,281,869	815,550,285	296,708,719	737,098,740	4,809,338,287
2021	4,809,338,287	99,348,439	4,208,554	850,079,322	318,704,293	753,292,691	5,126,395,834
2022	5,126,395,834	96,977,233	4,121,439	885,164,889	340,795,661	769,997,437	5,444,879,837
2023	5,444,879,837	94,297,467	4,020,930	921,284,207	362,935,240	786,882,604	5,763,690,010
2024	5,763,690,010	91,153,964	3,904,681	958,476,198	385,039,814	803,500,977	6,081,003,886
2025	6,081,003,886	87,781,656	3,771,880	997,365,426	406,966,992	820,991,525	6,395,606,753
2026	6,395,606,753	83,823,131	3,617,142	1,037,362,911	428,612,459	838,661,160	6,705,723,450
2027	6,705,723,450	79,468,133	3,443,666	1,077,460,786	449,900,408	857,003,138	7,011,190,676
2028	7,011,190,676	74,676,304	3,256,596	1,116,585,466	470,846,947	875,341,804	7,312,213,669
2029	7,312,213,669	69,797,829	3,056,768	1,153,801,637	491,527,787	895,278,359	7,611,959,239
2030	7,611,959,239	65,023,547	2,852,623	1,189,243,963	512,151,355	917,376,552	7,914,414,108
2031	7,914,414,108	60,118,663	2,642,113	1,222,589,272	533,009,125	940,822,348	8,223,132,860
2032	8,223,132,860	55,283,617	2,431,685	1,254,037,079	554,383,168	962,704,503	8,539,035,384
2033	8,539,035,384	50,314,317	2,222,656	1,283,470,970	576,395,274	979,889,196	8,859,940,545
2034	8,859,940,545	45,285,634	2,022,922	1,309,999,674	598,977,504	992,330,057	9,184,511,144
2035	9,184,511,144	40,436,451	1,831,059	1,332,475,228	622,081,581	1,004,282,691	9,517,005,579
2036	9,517,005,579	35,771,557	1,644,846	1,351,308,859	645,930,030	1,015,216,455	9,860,969,917
2037	9,860,969,917	31,222,714	1,460,492	1,366,289,751	670,804,417	1,026,244,709	10,221,491,514
2038	10,221,491,514	26,877,716	1,280,417	1,377,722,066	697,056,793	1,037,134,402	10,603,557,942
2039	10,603,557,942	22,678,901	1,100,849	1,385,788,366	725,057,009	1,048,011,573	11,012,416,210
2040	11,012,416,210	18,769,505	927,371	1,390,688,143	755,193,884	1,059,110,288	11,453,874,373
2041	11,453,874,373	15,112,149	760,945	1,391,486,601	787,931,523	179,771,929	11,044,442,428
2042	11,044,442,428	11,936,513	612,560	1,387,967,727	774,179,630	165,265,541	10,607,243,825
2043	10,607,243,825	9,113,839	476,269	1,380,332,031	741,851,394	168,044,836	10,145,445,595
2044	10,145,445,595	6,750,100	358,948	1,367,860,750	707,539,494	171,257,778	9,662,773,269
2045	9,662,773,269	4,843,202	261,958	1,351,030,943	671,830,247	174,494,249	9,162,648,066
2046	9,162,648,066	3,328,365	183,095	1,329,871,276	634,984,784	177,653,841	8,648,560,685
2047	8,648,560,685	2,227,641	124,551	1,304,807,904	597,251,882	180,680,352	8,123,788,105
2048	8,123,788,105	1,418,392	80,599	1,276,176,875	558,861,717	183,544,115	7,591,354,855
2049	7,591,354,855	898,635	51,822	1,244,410,070	520,025,704	186,222,530	7,054,039,831
2050	7,054,039,831	556,377	32,533	1,210,366,052	480,917,165	188,685,591	6,513,800,380
2051	6,513,800,380	314,169	18,626	1,174,390,347	441,668,057	190,985,105	5,972,358,738
2052	5,972,358,738	159,957	9,615	1,136,617,317	402,401,177	193,093,091	5,431,386,031
2053	5,431,386,031	77,038	4,695	1,097,183,445	363,236,785	195,047,562	4,892,559,276
2054	4,892,559,276	37,968	2,346	1,056,299,417	324,291,215	196,846,870	4,357,433,568
2055	4,357,433,568	12,830	804	1,014,097,240	285,675,232	198,493,794	3,827,517,380
2056	3,827,517,380	3,153	200	970,657,059	247,499,019	200,079,920	3,304,442,212
2057	3,304,442,212	-	-	926,076,997	209,879,251	201,637,858	2,789,882,325
2058	2,789,882,325	-	-	880,493,872	172,935,716	203,199,978	2,285,524,148
2059	2,285,524,148	-	-	834,070,028	136,788,186	204,834,178	1,793,076,484
2060	1,793,076,484	-	-	786,976,921	101,557,200	206,627,103	1,314,283,866
2061	1,314,283,866	-	-	739,445,625	67,363,420	208,590,255	850,791,916
2062	850,791,916	-	-	691,728,339	34,320,759	210,784,976	404,169,311
2063	404,169,311	-	-	644,126,879	2,534,574	237,422,993	-

DEVELOPMENT OF SINGLE DISCOUNT RATE

PYE 12/31	Benefit Payments	Discount Rate	Discounted Benefit Payment	Single Discount Rate	Discounted Benefit Payment
2015	$ 672,045,390	7.50%	$ 648,178,131	7.15%	$ 649,249,377
2016	698,373,315	7.50%	626,577,709	7.15%	629,689,487
2017	718,368,661	7.50%	599,551,118	7.15%	604,521,921
2018	748,950,865	7.50%	581,465,165	7.15%	588,225,536
2019	781,634,592	7.50%	564,502,256	7.15%	572,954,571
2020	815,550,285	7.50%	547,903,646	7.15%	557,947,109
2021	850,079,322	7.50%	531,256,717	7.15%	542,784,717
2022	885,164,889	7.50%	514,589,235	7.15%	527,494,831
2023	921,284,207	7.50%	498,220,600	7.15%	512,405,198
2024	958,476,198	7.50%	482,170,818	7.15%	497,538,970
2025	997,365,426	7.50%	466,729,697	7.15%	483,198,915
2026	1,037,362,911	7.50%	451,578,626	7.15%	469,059,815
2027	1,077,460,786	7.50%	436,310,505	7.15%	454,699,896
2028	1,116,585,466	7.50%	420,608,169	7.15%	439,785,821
2029	1,153,801,637	7.50%	404,304,355	7.15%	424,137,111
2030	1,189,243,963	7.50%	387,649,974	7.15%	408,011,073
2031	1,222,589,272	7.50%	370,715,650	7.15%	391,478,076
2032	1,254,037,079	7.50%	353,722,148	7.15%	374,768,528
2033	1,283,470,970	7.50%	336,766,948	7.15%	357,984,857
2034	1,309,999,674	7.50%	319,746,747	7.15%	341,016,713
2035	1,332,475,228	7.50%	302,541,967	7.15%	323,734,877
2036	1,351,308,859	7.50%	285,412,272	7.15%	306,415,578
2037	1,366,289,751	7.50%	268,443,174	7.15%	289,151,133
2038	1,377,722,066	7.50%	251,804,046	7.15%	272,125,708
2039	1,385,788,366	7.50%	235,607,731	7.15%	255,464,607
2040	1,390,688,143	7.50%	219,944,909	7.15%	239,270,662
2041	1,391,486,601	7.50%	204,717,385	7.15%	223,441,891
2042	1,387,967,727	7.50%	189,953,194	7.15%	208,013,159
2043	1,380,332,031	7.50%	175,728,554	7.15%	193,072,703
2044	1,367,860,750	7.50%	161,991,487	7.15%	178,568,590
2045	1,351,030,943	7.50%	148,835,708	7.15%	164,609,293
2046	1,329,871,276	7.50%	136,283,407	7.15%	151,225,326
2047	1,304,807,904	7.50%	124,385,997	7.15%	138,480,101
2048	1,276,176,875	7.50%	113,168,958	7.15%	126,408,866
2049	1,244,410,070	7.50%	102,652,966	7.15%	115,041,902
2050	1,210,366,052	7.50%	92,878,727	7.15%	104,432,371
2051	1,174,390,347	7.50%	83,830,784	7.15%	94,570,732
2052	1,136,617,317	7.50%	75,473,912	7.15%	85,424,887
2053	1,097,183,445	7.50%	67,772,479	7.15%	76,961,808
2054	1,056,299,417	7.50%	60,694,970	7.15%	69,152,666
2055	1,014,097,240	7.50%	54,204,682	7.15%	61,962,276
2056	970,657,059	7.50%	48,263,026	7.15%	55,352,781
2057	926,076,997	7.50%	42,833,875	7.15%	49,288,613
2058	880,493,872	7.50%	37,884,202	7.15%	43,737,274
2059	834,070,028	7.50%	33,383,038	7.15%	38,668,182
2060	786,976,921	7.50%	29,300,624	7.15%	34,051,724
2061	739,445,625	7.50%	25,610,181	7.15%	29,861,335
2062	691,728,339	7.50%	22,286,071	7.15%	26,071,404
2063	644,126,879	7.50%	19,304,604	7.15%	22,658,239
2070	339,227,314	3.56%	48,677,974	7.15%	7,360,827
2080	75,545,771	3.56%	7,640,670	7.15%	822,062
2090	5,729,014	3.56%	408,395	7.15%	31,263
2100	84,380	3.56%	4,240	7.15%	231
2110	159	3.56%	6	7.15%	0
2113	12	3.56%	0	7.15%	0
Total Present Value			**$ 13,924,963,144**		**$ 13,924,963,144**


PROJECTION OF PLAN NET POSITION AND BENEFIT PAYMENTS
$ [thousands]
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
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

Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
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.
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 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 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 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.

Amortization Payment The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

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 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.

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.

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.