

**GENERAL ASSEMBLY RETIREMENT SYSTEM OF
ILLINOIS**

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

JUNE 30, 2015



October 27, 2015

The Board of Trustees
General Assembly Retirement System of Illinois
Springfield, IL

Dear Board Members:

This report provides accounting and financial reporting information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statements Nos. 67 and 68 for the General Assembly Retirement System of Illinois (“GARS”). These calculations have been made on a basis that is consistent with our understanding of these Statements.

GASB Statement No. 67 is the accounting standard that applies to the stand-alone financial reports issued by retirement systems. 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.

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 Statements 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 Statements Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the General Assembly Retirement System of Illinois (“GARS”) only in its entirety and only with the permission of GARS.

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 GARS 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 GARS and should be considered in conjunction with that report. Please see the actuarial valuation report as of June 30, 2015, 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 with this report is accurate and fairly represents the actuarial position of the General Assembly Retirement System of Illinois. 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 Board of Trustees
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The signing actuaries are independent of the plan sponsor.

Alex Rivera, David Kausch 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 

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Auditor's Note – This information is intended to assist in preparation of the financial statements of the General Assembly Retirement System of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

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SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

AS OF JUNE 30, 2015

	2015	
Actuarial Valuation Date	June 30, 2015	
Measurement Date of the Net Pension Liability	June 30, 2015	
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2015	
Membership		
Number of		
- Retirees and Beneficiaries	424	
- Inactive, Nonretired Members	75	
- Active Members	145	
- Total	644	
Covered Payroll	\$ 11,609,403	
Net Pension Liability		
Total Pension Liability	\$ 333,336,936	
Plan Fiduciary Net Position	54,574,264	
Net Pension Liability	\$ 278,762,672	
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	16.37 %	
Net Pension Liability as a Percentage of Covered Payroll	2,401.18 %	
Development of the Single Discount Rate		
Single Discount Rate Beginning of Year	5.11 %	
Single Discount Rate End of Year	6.91 %	
Long-Term Expected Rate of Investment Return	7.00 %	
Long-Term Municipal Bond Rate Beginning of Year*	4.29 %	
Long-Term Municipal Bond Rate End of Year*	3.80 %	
Last year ending June 30 in the 2015 to 2114 projection period for which projected benefit payments are fully funded	2066	
Total Pension Expense	\$ (5,570,809)	
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	\$ 1,448,467	\$ -
Changes in Assumptions	-	43,183,268
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	1,225,922	-
Total	\$ 2,674,389	\$ 43,183,268

*Source: "State & local bonds" rate from Federal Reserve statistical release (H.15) as of June 25, 2015. 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).

Paragraph 57 of GASB Statement No. 68 states, "Contributions to the pension plan from the employer subsequent to the measurement date of the collective net pension liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions." The information contained in this report does not incorporate any contributions made to GARS subsequent to the measurement date of June 30, 2015.

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 Statements 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 percent higher and 1 percent 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 percent, receivables and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

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
- A comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least 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 June 30, 2015, and a measurement date of June 30, 2015.

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 7.00 percent; the municipal bond rate is 3.80 percent (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 6.91percent.

The GASB Statements Nos. 67 and 68 Single Discount Rate increased from 5.11 percent as of June 30, 2014, to 6.91 percent as of June 30, 2015. The key reason for the increase was due to the membership projection assumption used to determine projected statutory contributions. The valuation as of June 30, 2014, assumed a constant number of active members in the future. The valuation as of June 30, 2015, assumed 50 percent of future eligible active members would elect not to participate in the plan. The reduction in future entrants and future payroll increased the sponsor's contributions and extended the projected year that the plan's fiduciary net position would be available to pay benefits for current members, from 2030 to 2066. Please refer to the funding valuation for additional details on the development of the statutory funding contribution.

Effective Date and Transition

GASB Statements 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 intended to assist in preparation of the financial statements of the General Assembly Retirement System of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

PENSION EXPENSE UNDER GASB STATEMENT NO. 68
FISCAL YEAR ENDED JUNE 30, 2015

A. Expense

1. Service Cost Including Pension Plan Administrative Expense	\$	5,957,132
2. Interest on the Total Pension Liability		19,911,100
3. Current-Period Benefit Changes		-
4. Employee Contributions (made negative for addition here)		(1,487,346)
5. Projected Earnings on Plan Investments (made negative for addition here)		(3,820,319)
6. Other Changes in Plan Fiduciary Net Position		-
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		(26,437,857)
8. Recognition of Outflow (Inflow) of Resources due to Assets		306,481
9. Total Pension Expense	\$	(5,570,809)

B. Reconciliation of Net Pension Liability

1. Net Pension Liability Beginning of Year	\$	340,713,301
2. Pension Expense		(5,570,809)
3. Employer Contributions (made negative for addition here)		(15,870,941)
4. Deferred Investment Experience (Inflows)/Outflows		1,225,922
5. Deferred Liability Experience (Inflows)/Outflows		1,448,467
6. Deferred Assumption Changes (Inflows)/Outflows		(43,183,268)
7. Net Pension Liability End of Year	\$	278,762,672

STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT PERIOD
FISCAL YEAR ENDED JUNE 30, 2015

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	\$ 2,366,032	2.5786	\$ 917,565	\$ 1,448,467
2. Assumption Changes	(70,538,690)	2.5786	(27,355,422)	(43,183,268)
3. Difference Between Expected and Actual Investment Earnings	1,532,403	5.0000	306,481	1,225,922
4. Total	\$ (66,640,255)		\$ (26,131,376)	\$ (40,508,879)

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	\$ 917,565	\$ -	\$ 917,565
2. Assumption Changes	-	27,355,422	(27,355,422)
3. Difference Between Expected and Actual Investment Earnings	306,481	-	306,481
4. Total	\$ 1,224,046	\$ 27,355,422	\$ (26,131,376)

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	\$ 1,448,467	\$ -	\$ 1,448,467
2. Assumption Changes	-	43,183,268	(43,183,268)
3. Difference Between Expected and Actual Investment Earnings	1,225,922	-	1,225,922
4. Total	\$ 2,674,389	\$ 43,183,268	\$ (40,508,879)

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

Year Ending June 30	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows (Inflows) of Resources
2016	\$ 1,224,046	\$ 27,355,422	\$ (26,131,376)
2017	837,381	15,827,846	(14,990,465)
2018	306,481	-	306,481
2019	306,481	-	306,481
2020	-	-	-
Thereafter	-	-	-
Total	\$ 2,674,389	\$ 43,183,268	\$ (40,508,879)

STATEMENT OF FIDUCIARY NET POSITION
YEARS ENDED JUNE 30, 2015 AND 2014

	2015	2014
Assets		
Cash	\$ 4,904,253	\$ 4,767,584
Receivables		
Contributions:		
Participants	\$ 63	\$ 63
Employing state agencies	658,709	577,370
Other Accounts	8,518	12,445
Total Receivables	\$ 667,290	\$ 589,878
Investments		
Held in the Illinois State Board of Investment		
Commingled Fund at fair value	\$ 49,165,676	\$ 51,549,374
Securities lending collateral with State Treasurer	2,174,000	2,269,000
Total Investments	\$ 51,339,676	\$ 53,818,374
Property and equipment, net of accumulated depreciation	\$ 9,118	\$ 3,187
Total Assets	\$ 56,920,337	\$ 59,179,023
Liabilities		
Payables		
Benefits payable	\$ 1,823	\$ 16,294
Refunds payable	38,627	5,210
Administrative expenses payable	36,918	27,520
Participants' deferred service credit accounts	-	-
Due to State of Illinois	94,705	71,539
Securities lending collateral with State Treasurer	2,174,000	2,269,000
Total Liabilities	\$ 2,346,073	\$ 2,389,563
Net Position Restricted for Pensions	\$ 54,574,264	\$ 56,789,460

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
YEARS ENDED JUNE 30, 2015 AND 2014

	2015	2014
Additions		
Contributions		
Participants	\$ 1,487,346	\$ 1,502,605
Employing state agencies and appropriations	15,870,941	13,956,669
Total Contributions	\$ 17,358,287	\$ 15,459,274
Investment Income		
Net investments income	\$ 1,497,169	\$ 1,357,215
Interest earned on cash balances	21,614	17,838
Net appreciation in fair value of investments	769,133	6,988,375
Net Investment Income	\$ 2,287,916	\$ 8,363,428
Total Additions	\$ 19,646,203	\$ 23,822,702
Deductions		
Benefits		
Retirement annuities	\$ 17,663,009	\$ 17,218,504
Survivors' annuities	3,611,940	3,581,998
Disability benefits	-	-
Lump-sum benefits	-	-
Total Benefits	\$ 21,274,949	\$ 20,800,502
Refunds	191,755	245,133
Administrative	394,695	334,628
Total Deductions	\$ 21,861,399	\$ 21,380,263
Net Increase in Net Position	\$ (2,215,196)	\$ 2,442,439
Net Position Restricted for Pensions		
Beginning of Year	\$ 56,789,460	\$ 54,347,021
End of Year	\$ 54,574,264	\$ 56,789,460

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Auditor's Note – This information is intended to assist in preparation of the financial statements of the General Assembly Retirement System of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

**SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
CURRENT PERIOD**

FISCAL YEAR ENDED JUNE 30, 2015

A. Total Pension Liability

1. Service Cost Including Pension Plan Administrative Expense	\$	5,957,132
2. Interest on the Total Pension Liability		19,911,100
3. Changes of Benefit Terms		-
4. Difference Between Expected and Actual Experience of the Total Pension Liability		2,366,032
5. Changes of Assumptions		(70,538,690)
6. Benefit Payments, Including Refunds of Employee Contributions		(21,466,704)
7. Pension Plan Administrative Expense		(394,695)
8. Net Change in Total Pension Liability	\$	(64,165,825)
9. Total Pension Liability – Beginning		397,502,761
10. Total Pension Liability – Ending	\$	333,336,936

B. Plan Fiduciary Net Position

1. Contributions – Employer	\$	15,870,941
2. Contributions – Employee		1,487,346
3. Net Investment Income		2,287,916
4. Benefit Payments, Including Refunds of Employee Contributions		(21,466,704)
5. Pension Plan Administrative Expense		(394,695)
6. Other		-
7. Net Change in Plan Fiduciary Net Position	\$	(2,215,196)
8. Plan Fiduciary Net Position – Beginning		56,789,460
9. Plan Fiduciary Net Position – Ending	\$	54,574,264

C. Net Pension Liability

\$ **278,762,672**

**D. Plan Fiduciary Net Position as a Percentage
of the Total Pension Liability**

16.37%

E. Covered-Employee Payroll

\$ **11,609,403**

**F. Net Pension Liability as a Percentage
of Covered Employee Payroll**

2401.18%

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

Fiscal year ending June 30,	<u>2015</u>	<u>2014</u>
Total Pension Liability		
Service Cost Including Pension Plan Administrative Expense	\$ 5,957,132	\$ 5,383,133
Interest on the Total Pension Liability	19,911,100	20,110,452
Benefit Changes	-	-
Difference between Expected and Actual Experience	2,366,032	12,389,130
Assumption Changes	(70,538,690)	-
Benefit Payments	(21,274,949)	(20,800,502)
Refunds	(191,755)	(245,133)
Pension Plan Administrative Expense	(394,695)	(334,628)
Net Change in Total Pension Liability	<u>(64,165,825)</u>	<u>16,502,452</u>
Total Pension Liability - Beginning	<u>397,502,761</u>	<u>381,000,309</u>
Total Pension Liability - Ending (a)	<u>\$ 333,336,936</u>	<u>\$ 397,502,761</u>
Plan Fiduciary Net Position		
Employer Contributions	\$ 15,870,941	\$ 13,956,669
Employee Contributions	1,487,346	1,502,605
Pension Plan Net Investment Income	2,287,916	8,363,428
Benefit Payments	(21,274,949)	(20,800,502)
Refunds	(191,755)	(245,133)
Pension Plan Administrative Expense	(394,695)	(334,628)
Other	-	-
Net Change in Plan Fiduciary Net Position	<u>(2,215,196)</u>	<u>2,442,439</u>
Plan Fiduciary Net Position - Beginning	<u>56,789,460</u>	<u>54,347,021</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 54,574,264</u>	<u>\$ 56,789,460</u>
Net Pension Liability - Ending (a) - (b)	<u>278,762,672</u>	<u>340,713,301</u>
Plan Fiduciary Net Position as a Percentage		
of Total Pension Liability	16.37 %	14.29 %
Covered Employee Payroll	\$ 11,609,403	\$ 12,777,821
Net Pension Liability as a Percentage		
of Covered Employee Payroll	2,401.18 %	2,666.44 %

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 THE SCHEDULE OF CHANGES IN NET PENSION LIABILITY
AND RELATED RATIOS MULTIYEAR

End of year Total Pension Liability for fiscal year 2014 uses a Single Discount Rate of 5.11 percent. The Single Discount Rate of 5.11 percent was based on a long-term expected rate of return on pension plan investments of 7.00 percent used in the June 30, 2014, funding valuation and a long-term municipal bond rate as of June 26, 2014, of 4.29 percent.

Difference between actual and expected experience includes impact of the change in the Single Discount Rate from 5.39 percent to 5.11 percent based on the long-term expected rate of return on pension plan investments of 7.00 percent used in the June 30, 2014, funding valuation and the long-term municipal bond rate of 4.63 percent as of June 27, 2013, and 4.29 percent as of June 26, 2014, respectively. This change was measured as of June 30, 2014.

Beginning of year Total Pension Liability for fiscal year 2015 uses a Single Discount Rate of 5.11 percent, which was based on a long-term expected rate of return on pension plan investments of 7.00 percent used in the June 30, 2014, funding valuation and a long-term municipal bond rate as of June 26, 2014, of 4.29 percent.

End of year Total Pension Liability for fiscal year 2015 uses a Single Discount Rate of 6.91 percent which was based on a long-term expected rate of return on pension plan investments of 7.00 percent used in the June 30, 2015, funding valuation and a long-term municipal bond rate as of June 25, 2015, of 3.80 percent.

The increase in the Total Pension Liability for fiscal year 2015 due to assumption changes includes changing the assumption of future members eligible to participate in the pension system from 100 percent to 50 percent and the change in the long-term municipal bond rate of 4.29 percent as of June 26, 2014, and 3.80 percent as of June 25, 2015, respectively. As a result of these assumption changes the Single Discount Rate increased from 5.11 percent to 6.91 percent based on the long-term expected rate of return on pension plan investments of 7.00 percent used in the June 30, 2015. This change was measured at the end of the year.

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

FY Ending June 30,	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	\$ 397,502,761	\$ 56,789,460	\$ 340,713,301	14.29 %	\$ 12,777,821	2,666.44 %
2015	333,336,936	54,574,264	278,762,672	16.37 %	11,609,403	2,401.18 %

* Covered payroll 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

<u>Fiscal Year</u>	<u>Actuarially Determined Contribution*</u>	<u>Actual Contribution**</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll***</u>	<u>Actual Contribution as a % of Covered Payroll</u>	<u>Statutory Contribution</u>	<u>Statutory Contribution Deficiency/(Excess)</u>
7/1/05 - 6/30/06	\$ 8,593,196	\$ 4,175,390	\$ 4,417,806	\$ 12,739,000	32.78%	\$ 4,157,000	\$ (18,390)
7/1/06 - 6/30/07	10,125,503	5,470,429	4,655,074	12,701,000	43.07%	5,220,300	(250,129)
7/1/07 - 6/30/08	10,672,535	6,809,800	3,862,735	12,871,000	52.91%	6,809,800	-
7/1/08 - 6/30/09	11,129,440	8,856,422	2,273,018	14,728,000	60.13%	8,847,000	(9,422)
7/1/09 - 6/30/10	12,064,078	10,411,274	1,652,804	14,775,000	70.47%	10,454,000	42,726
7/1/10 - 6/30/11	13,086,199	11,433,614	1,652,585	15,188,000	75.28%	11,039,000	(394,614)
7/1/11 - 6/30/12	13,365,820	10,502,000	2,863,820	15,275,000	68.75%	10,502,000	-
7/1/12 - 6/30/13	17,064,640	14,150,000	2,914,640	14,902,000	94.95%	14,150,000	-
7/1/13 - 6/30/14	17,110,135	13,956,669	3,153,466	12,777,821	109.23%	13,856,000	(100,669)
7/1/14 - 6/30/15	16,900,876	15,870,941	1,029,935	11,609,403	136.71%	15,809,000	(61,941)

* The GARS Statutory Funding may 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 actuarial accrued liability as a level percentage of total payroll. The amortization period for fiscal years prior to 2007 is 40 years and the amortization period for fiscal years 2007 and beyond is 30 years.

** The actual contributions for FYE 6/30/2006 through 6/30/2014 were obtained from the System's comprehensive annual financial reports. The actual contribution for FYE 6/30/2015 was provided by the System.

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

NOTES TO SCHEDULE OF CONTRIBUTIONS

Valuation Date:	June 30, 2015
Notes	Actuarially determined contribution rates are calculated as of June 30, which is 12 months prior to the beginning of the fiscal year in which the contributions will be made.
Methods and Assumptions Used to Determine Contribution Rates:	
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Statutory Contributions — The Statutory Contribution is equal to the level percentage of pay contributions determined so that the Plan attains a 90 percent funded ratio by the end of 2045. An amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution. Actuarially Determined Contributions — The Actuarially Determined Contribution is equal to the employer's normal cost plus a level percent of uncapped payroll amortization of the unfunded accrued liability. The amortization period for fiscal years prior to 2007 is an open-period 40 years and the amortization period for fiscal years 2007 and beyond is an open-period 30 years. The Board has adopted a policy to calculate the ADC for financial reporting purposes, effective for the valuation as of June 30, 2015. Under this policy, the ADC for FYE 2017 is calculated as the employer's normal cost plus a 20-year level percent of capped payroll closed-period amortization of the unfunded accrued liability as of June 30, 2015.
Asset Valuation Method	5 year smoothed market
Inflation	3.00 percent
Salary Increases	A salary increase assumption of 3.50 percent per annum, compounded annually, was used. This 3.50 percent salary increase assumption includes an inflation component of 3.00 percent per annum, a productivity component of 0.40 percent per annum, and a merit/promotion component of 0.10 percent per annum. Furthermore, salaries were assumed to remain at their current rate for fiscal year 2016.
Postretirement Benefit Increases	Postretirement benefit increases of 3.00 percent, compounded, for Tier 1 and 3.00 percent or the annual change in the Consumer Price Index, whichever is less, compounded, for Tier 2.
Investment Rate of Return	7.00 percent as of the June 30, 2015, valuation.
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Combined Healthy Mortality Table, sex distinct, projected to 2015 (static table) setback 3 years for males and 2 years for females.
Other Information:	
Notes	The statutory contribution for fiscal year ending June 30, 2015, was determined based on the results of the June 30, 2013, valuation. Similarly, the statutory contributions for fiscal years ending June 30, 2016 and June 30, 2017, were determined based on the results of the valuations performed two years prior. All other contributions are projected using current assumptions.
Methods and Assumptions Used for Accounting Purposes as of the Valuation Date:	
Actuarial Cost Method	Entry Age Normal
Discount Rate	5.11 percent as of the June 30, 2014, valuation. 6.91 percent as of the June 30, 2015, valuation.
Asset Valuation Method	Market value

SCHEDULE OF INVESTMENT RETURNS MULTIYEAR

FY Ending June 30,	Annual Return¹
2014	18.12%
2015	3.24%

¹ Annual money-weighted rate of return, net of investment expenses.

The annual money-weighted rate of returns, net of investment expenses for fiscal years ending June 30, 2014, and June 30, 2015, were provided by the System.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the General Assembly Retirement System of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined based on information provided by the Illinois State Board of Investments (ISBI) in conjunction with its investment consultant, Marquette Associates, Inc. ISBI and Marquette Associates, Inc. provided the simulated average 10-year annualized geometric return for each major asset class. These real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2015, these best estimates are summarized in the following table:

ASSET ALLOCATION

Asset Class	Target Allocation	10-Year Simulated Real Rate of Return
Domestic Equity	30.00%	5.69 %
International Equity	20.00%	6.23 %
Fixed Income Plus Cash	20.00%	1.62 %
Private Equity	5.00%	10.10 %
Real Estate	10.00%	5.50 %
InfraStructure	5.00%	6.00 %
Hedge Funds	10.00%	4.00 %
Total	100.00%	5.03 %

The figures in the above table were supplied by the Illinois State Board of Investments in conjunction with its investment consultant, Marquette Associates, Inc. Gabriel, Roeder, Smith & Company does not provide investment advice.

Single Discount Rate

A Single Discount Rate of 6.91 percent 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 7.00 percent and a municipal bond rate of 3.80 percent. 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 actuarially determined 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 2066. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2066, 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 6.91 percent, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

**SENSITIVITY OF NET PENSION LIABILITY
TO THE SINGLE DISCOUNT RATE ASSUMPTION**

1% Decrease	Current Single Discount Rate Assumption	1% Increase
5.91%	6.91%	7.91%
\$ 315,165,353	\$ 278,762,672	\$ 248,033,875

SUMMARY OF POPULATION STATISTICS

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	424
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	75
Active Plan Members	145
Total Plan Members	<u>644</u>

Additional information about the member data used is included in the June 30, 2015, actuarial valuation report.

SECTION E

SUMMARY OF BENEFITS

Summary of Retirement System Plan Provisions (As of June 30, 2015)

1. **Participation.** A person eligible for membership must participate in the system as a condition of employment unless an "Election Not to Participate" is filed within 24 months from the date of assuming office.
2. **Member Contributions.** All members of the system are required to contribute to the system the following percentage of their salaries:

Retirement Annuity	8.5%
Automatic Annuity Increase	1.0
Survivor's Annuity	<u>2.0</u>
Total	11.5%

3. **Retirement Annuity – Eligibility.** A member who has at least 8 years of creditable service is entitled to a retirement annuity upon attainment of age 55. A member with at least 4 years of service but less than 8 years of service is entitled to a retirement annuity upon attainment of age 62.

A member with at least 8 years of service who becomes disabled while in service is entitled to a retirement annuity regardless of age.

4. **Retirement Annuity – Amount.** The retirement annuity is determined according to the following formula based upon the member's final rate of salary:
 - 3.0% for each of the first 4 years of service, plus
 - 3.5% for each of the next 2 years of service, plus
 - 4.0% for each of the next 2 years of service, plus
 - 4.5% for each of the next 4 years of service, plus
 - 5.0% for each year of service in excess of 12

The maximum retirement annuity is 85% of the final rate of salary.

5. **Automatic Increase In Retirement Annuity.** (a) Annual automatic increases of 3% of the current amount of retirement annuity are provided. The initial increase is effective in the month of January or July of the year next following the year in which the first anniversary of retirement occurs, but in no event prior to attainment of age 60.

- (b) Beginning January 1, 1990, for persons who become participants prior to August 8, 2003 and who remain in service after attaining 20 years of creditable service, 3% annual automatic increases begin to accrue on January 1 next following the date the participant attains age 55 or completes 20 years of creditable service, whichever occurs later. For any person who has service credit for the entire period from January 15, 1969 through December 31, 1992, the increases shall accrue from age 50 instead of age 55. However, such increases shall not become payable until the January 1 or July 1 next following the first anniversary of retirement, or the first of the month following attainment of age 60, whichever occurs later.

6. Survivor's Annuity – Eligibility. A surviving spouse without children is eligible for survivor benefits at age 50 or over provided marriage to the member had been in effect for at least 1 year immediately prior to the member's death.

A surviving spouse with unmarried eligible children is eligible for a survivor's annuity benefit at any age provided the above marriage requirements have been met. When all children are disqualified because of death, marriage or attainment of age 18 or age 22 in the case of a fulltime student, the spouse's benefit is suspended if the spouse is under age 50 until the attainment of such age.

An unmarried eligible child under age 18 or under age 22 and a full-time student or over age 18 and disabled may qualify for the survivor's annuity if there is no surviving spouse or if the spouse dies. Legally adopted children are eligible for survivor benefits on the same basis as other children.

If the member dies in service as a member, the member must have at least 2 years of service credit for survivor's annuity eligibility. If death occurs after termination of service but before retirement, the deceased member must have at least 4 years of service credit for survivor's annuity eligibility.

7. Survivor's Annuity – Amount. (a) A surviving spouse is entitled to a survivor's annuity of $66 \frac{2}{3}\%$ of the amount of retirement annuity to which the member was entitled on the date of death, without regard to whether the member had attained age 55 as of the time of death, subject to a minimum payment of 10% of salary.

(b) If a surviving spouse has in his or her care eligible children, the survivor's annuity shall be the greater of the following:

(1) $66 \frac{2}{3}\%$ of the amount of retirement annuity to which the member was entitled on the date of death, or (2) 30% of the member's salary increased by 10% of salary on account of each eligible child, subject to a total payment for the surviving spouse and children of 50% of salary. If only unmarried children survive, each such child shall be entitled to an annuity of 20% of salary, subject to a maximum total payment for all children of 50% of salary.

(c) Upon the death of a member after termination of service, or upon the death of an annuitant, the maximum total payment to a surviving spouse and eligible children, or eligible children alone if there is no surviving spouse, shall be 75% of the retirement annuity to which the member or annuitant was entitled.

(d) Survivor's annuities are subject to annual automatic increases of 3% of the current amount of annuity.

(e) The minimum survivor's annuity provided by the system is \$300 per month.

(f) In the case of a proportional survivor's annuity under the Retirement Systems Reciprocal Act, if the amount payable by the system on January 1, 1993, is less than \$300 per month, the amount shall be increased as of that date by \$2 per month for each full year elapsed since the annuity began.

8. Refund of Contributions. Upon termination of service, a member is entitled to a refund of his total contributions without interest.

A member who has no eligible survivor's annuity beneficiaries, or is unmarried at the time of retirement, is entitled to a refund of his or her contributions for the survivor's annuity.

9. Retirement System Reciprocal Act. According to the provisions of the Retirement System Reciprocal Act provided in Illinois Compiled statutes 40 ILCS 5/20, a member who has pension credit in two or more participating systems may be entitled to a proportional retirement annuity if his or her combined pension credit satisfies the longest minimum retirement eligibility requirement of any such system.

In calculating the proportional retirement annuity, the earnings credits under all participating systems shall be considered in determining final average salary.

Persons Who First Become Participants On or After January 1, 2011

The following changes to the above provisions apply to persons who first become participants on or after January 1, 2011:

1. The highest salary for annuity purposes is equal to the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest by the number of months in that period.
2. Required contributions shall not exceed the contributions that would be due on the highest salary for annuity purposes.
3. For 2011, the final average salary is limited to the Social Security wage base of \$106,800. Limitations for future years shall automatically be increased or decreased, as applicable, by a percentage change in the Consumer Price Index-U during the preceding 12-month calendar year.
4. A participant is eligible to retire with unreduced benefits after attainment of age 67 with at least 8 years of service credit. However, a participant may elect to retire at age 62 with at least 8 years of service credit and receive a retirement annuity reduced by one-half of 1% for each month that his or her age is under 67.
5. The annual retirement annuity provided is equal to 3% of the participant's final average salary for each year of service. The maximum retirement annuity payable shall be 60% of the participant's final average salary.
6. Automatic annual increases are provided in the retirement annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers, whichever is less. Such increases are payable in the January or July next following the first anniversary of retirement, and in the same month of each year thereafter.

7. Automatic annual increases are provided in the survivor annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers, whichever is less. Such increases are payable (1) on each January 1 occurring on or after the commencement of the annuity if the deceased member died while receiving a retirement annuity, or (2) in other cases, on each January 1 occurring on or after the first anniversary of the commencement of the annuity.
8. The retirement annuity being paid is suspended when an annuitant accepts full time employment in a position covered under the General Assembly Retirement System or any other Article of the Illinois Pension Code. Upon termination of the employment, the retirement annuity shall resume and, if appropriate, be recalculated.
9. Salary and COLA development for members hired on or after January 1, 2011, are shown in the table below:

Year Ending	CPI-U	COLA	Maximum Annual Pensionable Earnings
2011		3.00%	\$106,800.00
2012	3.90%	3.00%	\$110,004.00
2013	2.00%	2.00%	\$112,204.08
2014	1.20%	1.20%	\$113,550.53
2015	1.70%	1.70%	\$115,480.89

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Valuation Methods — Calculation of the Total Pension Liability

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Valuation Methods — Calculation of the Statutory Contributions, Actuarial Cost Method as Mandated by 40 ILCS 5/2-124, Adopted June 30, 1989

The projected unit credit normal cost method is used. Under this method, the projected pension at retirement age is first calculated and the value thereof at the individual member's current or attained age is determined. The normal cost for the member for the current year is equal to the value so determined divided by the member's projected service at retirement. The normal cost for the plan for the year is the sum of the individual normal costs.

The actuarial liability at any point in time is the value of the projected pensions at that time less the value of future normal costs.

For ancillary benefits for active members, in particular death and survivor benefits, termination benefits, and the postretirement increases, the same procedure as outlined above is followed.

Estimated annual administrative expenses are added to the normal cost.

For valuation purposes, as well as projection purposes, an actuarial value of assets is used.

Appropriation Requirements Under P.A. 88-0593

The law governing the System under P.A. 88-0593 provides that:

For fiscal years 2011 through 2045, the minimum contribution to the System for each fiscal year shall be an amount determined to be sufficient to cause the total assets of the System to equal 90 percent of the total actuarial liabilities of the System by the end of fiscal year 2045. In making these determinations, the required contribution shall be calculated each year as a level-percentage-of-payroll over the years remaining to and including fiscal year 2045 and shall be determined under the projected unit credit actuarial cost method. For fiscal years 1997 through 2010, the minimum contribution to the System, as a percentage of the payroll, shall be increased in equal annual increments so that by fiscal year 2010, the contribution rate is at the same level as the contribution rate for fiscal years 2011 through 2045.

Actuarial Assumptions Adopted June 30, 2013

Actuarial assumptions are set by the Board of Trustees. Additional information regarding the rationale for the assumptions may be found in the experience review of the General Assembly Retirement System for the five-year period ending June 30, 2012. All actuarial assumptions are expectations of future experience, not market measures.

Mortality

Post-Retirement Mortality

RP-2000 Combined Healthy Mortality Table, sex distinct, projected to 2015 (static table) setback 3 years for males and 2 years for females. The mortality table used is a static table with the provision for future mortality improvement in the projection to 2015 which is in sync with the next scheduled experience study.

Pre-Retirement Mortality

Based on a percentage of 85 percent for males and 70 percent for females of post-retirement mortality.

Interest

7.00 percent per annum, compounded annually, net of investment expenses.

General Inflation

3.00 percent per annum, compounded annually.

This assumption serves as the basis for the determination of Tier Two pay cap growth and annual increases that are equal to the lesser of 3.0 percent or the annual change in the consumer price index-u during the preceding 12-month calendar year.

Marriage Assumption

75.0 percent of active and retired participants are assumed to be married.

Termination

Rates of withdrawal are assumed to be equal to 0.04 for all ages 20 through 65.

It is assumed that terminated employees will not be rehired. The rates apply only to employees who have not fulfilled the service requirement necessary for retirement at any given age.

Salary Increases

A salary increase assumption of 3.50 percent per annum, compounded annually, was used. This 3.50 percent salary increase assumption includes an inflation component of 3.00 percent per annum, a productivity component of 0.40 percent per annum, and a merit/promotion component of 0.10 percent per annum. Furthermore, salaries were assumed to remain at their current rate for fiscal year 2016.

Inactive Member Pay Increases

Ten percent load on inactive vested liabilities to reflect increases in inactive members' pay due to current participation in a reciprocal retirement system.

Disability

No assumption for disability.

Population Projection

For purposes of determining annual appropriation as a percent of total covered payroll, the size of the active group is projected to decrease from 145 members as of the valuation date, to 75 members in 2045 and ultimately reach 73 members in 2051, due to the assumption that 50 percent of future members will elect to opt out of the pension system. New entrants are assumed to enter with an average age and average pay as disclosed below. The new entrant profile is based on the averages for all current active members. The average increase in uncapped payroll for the projection period is 3.5 percent per annum.

New Entrant Profile			
Age Group	No.	Uncapped Salary	Capped Salary
Under 20			
20-24			
25-29	10	\$ 810,810	\$ 810,810
30-34	22	1,888,084	1,826,836
35-39	28	2,309,787	2,309,787
40-44	25	1,937,646	1,937,646
45-49	21	1,734,358	1,693,298
50-54	16	1,226,499	1,226,499
55-59	13	1,003,205	1,003,205
60-64	1	78,163	78,163
65-69			
70 & Over			
Total	136	\$ 10,988,552	\$ 10,886,244
Avg. Salary		\$ 80,798	\$ 80,046
Avg. Age			42.54
Percent Male			72.06%

Retirement

Employees are assumed to retire in accordance with the rates shown below. The rates apply only to employees who have fulfilled the service requirement necessary for retirement at any given age.

Retirement Rates	
Age	Male & Female
55	10.00%
56 - 79	8.50%
80	100.00%

Assets

The Plan Fiduciary Net Position is used for GASB reporting purposes. The asset method used to project contributions is prescribed by statute. A description of this method can be found in the June 30, 2015, actuarial valuation report.

Expenses

As estimated and advised by GARS staff, based on current expenses and are expected to increase in relation to the projected capped payroll.

Spouse's Age

The female spouse is assumed to be four years younger than the male spouse.

Decrement Timing

All decrements are assumed to occur beginning of 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.

Eligibility Testing

Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.

Assumptions as a Result of Public Act 96-0889

Members hired after December 31, 2010, are assumed to make contributions on salary up to the final average compensation cap in a given year until this plan provision or administrative procedure is clarified.

State contributions, expressed as a percentage of pay, are calculated based upon capped pay.

Retirement rates for tier two members to account for the change in retirement age, as follows:

Retirement Rates	
Age	Male & Female
62	40.00%
63	15.00%
64	20.00%
65	25.00%
66	30.00%
67	40.00%
68 - 79	5.00%
80	100.00%

Projection Methodology Adopted June 30, 2005, and Amended June 30, 2009

Appropriation Requirements Under P.A. 93-0002, P.A. 94-0004, and P.A. 96-0043

State Contributions under P.A. 93-0002

In general, for each year during the life of the GOB program, the state contributions to the System are to be calculated as follows:

1. Calculation of the contribution maximum
 - a. A projection of contributions will be made from the valuation date to June 30, 2045. Such projection will be based on hypothetical asset values determined using the following assumptions:
 - i) That the System had received no portion of the general obligation bond proceeds in excess of the scheduled contributions for the remainder of fiscal 2003 and for the entirety of 2004,
 - ii) That hypothetical state contributions had been made each fiscal year from 2005 through the valuation date, based on the funding process in place prior to P.A. 93-0002 (without regard to prior state minimum requirements),
 - iii) That the actual amounts of member contributions and the actual cash outflows (benefit payments, refunds and administrative expenses) for each year prior to the valuation date were realized, and
 - iv) That the hypothetical fund earned returns in each prior fiscal year equal to the rate of total return actually earned by the retirement fund in that year.
 - b. The hypothetical asset values developed in a., above, will not exceed the actual assets of the fund.
 - c. A projection of maximum contributions for each year of the GOB program will be performed each year, by reducing the contributions produced in a., above, by the respective amount of debt service allocated to the System for each year.
2. Calculation of the contribution with GOB proceeds
 - a. The basic projection of state contributions from the valuation date through June 30, 2045, will be made, taking into account all assets of the System, including the GOB proceeds.
 - b. State contribution rates (expressed as a percentage of covered pay), in the pattern required by the funding sections of the statutes, are calculated.
 - c. In those projections, the dollars of state contributions which are added to assets each year during the GOB program are limited by the contribution maximum. Because the bonds are to be liquidated by the end of fiscal 2033, there is no contribution maximum thereafter.

State Contributions under P.A. 94-0004

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/2-124:

(c) Notwithstanding any other provision of this Article, the total required State contribution for fiscal year 2006 is \$4,157,000.

Notwithstanding any other provision of this Article, the total required State contribution for fiscal year 2007 is \$5,220,300.

For each State fiscal years 2008 through 2010, the State contribution to the System, as a percentage of the applicable employee payroll, shall be increased in equal annual increments from the required State contribution for State fiscal year 2007, so that by State fiscal year 2011, the State is contributing at a rate otherwise required under this Section.

State Contributions under P.A. 96-0043

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/2-124:

(d) For purposes of determining the required State contribution to the System, the value of the System's assets shall be equal to the actuarial value of the System's assets, which shall be calculated as follows:

As of June 30, 2008, the actuarial value of the System's assets shall be equal to the market value of the assets as of that date. In determining the actuarial value of the System's assets for fiscal years after June 30, 2008, 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 that fiscal year.

(e) For purposes of determining the required State contribution to the system for a particular year, the actuarial value of assets shall be assumed to earn a rate of return equal to the system's actuarially assumed rate of return.

SECTION G

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statements Nos. 67 and 68 includes a specific requirement 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 municipal bond rate is required, as described in the following paragraph.

The Single 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 7.00 percent; the municipal bond rate is 3.80 percent; and the resulting Single Discount Rate is 6.91 percent.

The sponsor finances benefits using a funding policy defined in state statute. Sponsor contributions are calculated as a level percentage of payroll contributions needed to attain a funded status of 90 percent in 2045 under the Projected Unit Credit cost method. After 2045, the sponsor makes a contribution such that the funded status remains at 90 percent. 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 projected actuarial liabilities on an Entry Age Normal basis, and compared against projected market value of assets. 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 2066.

The tables in this section provide background for the development of the Single Discount Rate.

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 June 30, 2015, actuarial valuation.

Total administrative expenses are assumed to increase at the same rate of payroll increases. Total administrative expenses are allocated between current and future hires by total payroll.

PROJECTION OF FUNDED STATUS AND ASSIGNMENT OF ASSETS

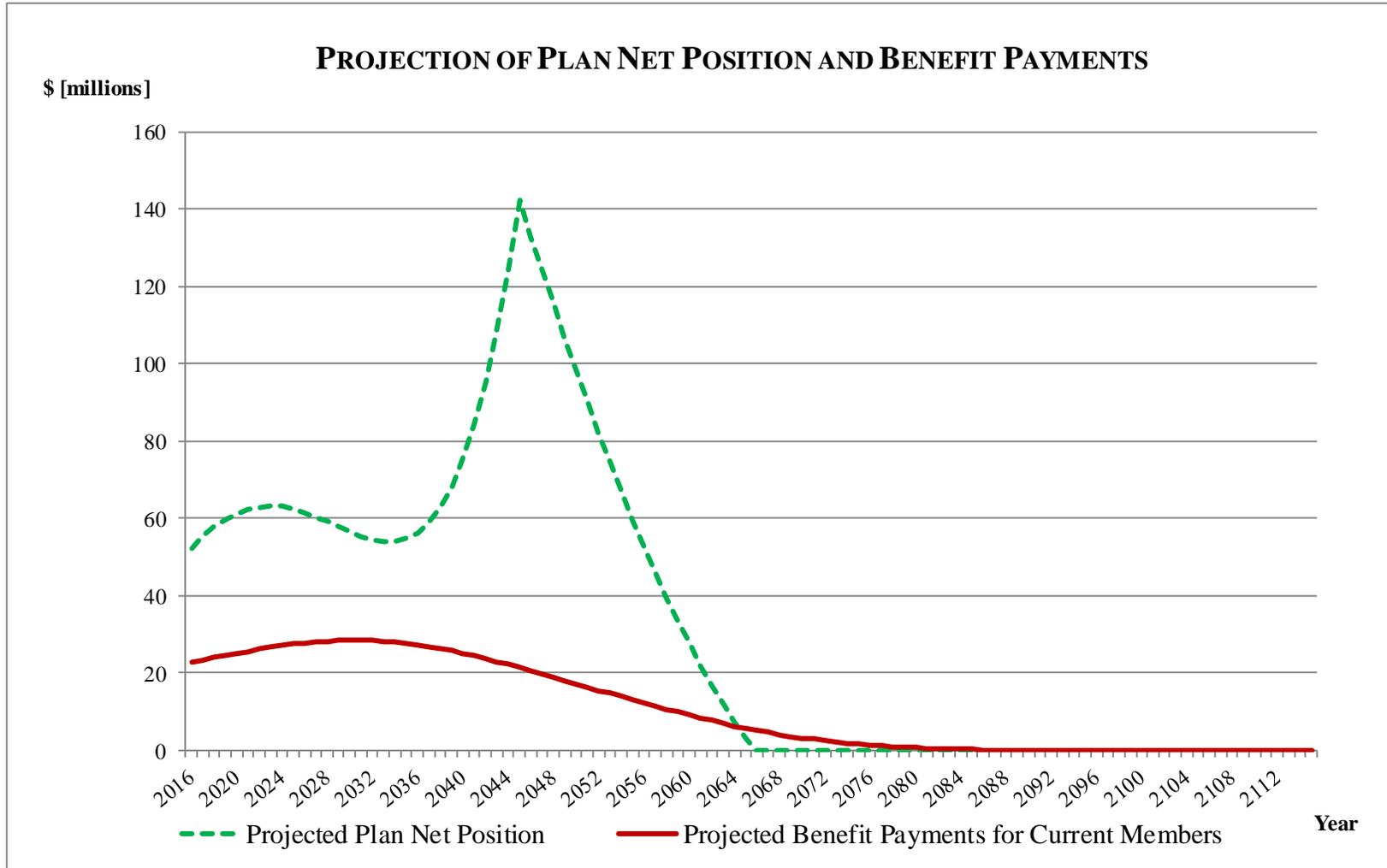
PYE 6/30	Open Group EAN Actuarial Liability	Closed Group EAN Actuarial Liability	Future Member EAN Actuarial Liability	Open Group Assets	Future Member Assigned Assets	Closed Group Assigned Assets	Funded Ratio Current Members	Funded Ratio Future Members
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=min[(c),(d)]	(f)=(d)-(e)	(g)=(f)/(b)	(h)=(e)/(c)
2015	\$ 330,356,987	\$ 330,356,987	\$ -	\$ 54,574,264	\$ -	\$ 54,574,264	16.52%	0.00%
2016	333,076,998	333,076,999	-	52,454,663	-	52,454,663	15.75%	0.00%
2017	335,333,086	335,275,329	57,758	55,417,812	57,758	55,360,055	16.51%	100.00%
2018	337,024,610	336,837,239	187,370	57,991,147	187,370	57,803,777	17.16%	100.00%
2019	338,131,854	337,751,987	379,867	60,085,631	379,867	59,705,764	17.68%	100.00%
2020	338,681,119	338,041,593	639,526	61,783,955	639,526	61,144,430	18.09%	100.00%
2021	338,648,249	337,659,853	988,396	63,376,389	988,396	62,387,994	18.48%	100.00%
2022	337,976,640	336,549,521	1,427,119	64,363,277	1,427,119	62,936,159	18.70%	100.00%
2023	336,757,918	334,795,152	1,962,766	65,229,745	1,962,766	63,266,978	18.90%	100.00%
2024	334,875,023	332,274,202	2,600,821	65,662,198	2,600,821	63,061,377	18.98%	100.00%
2025	332,366,454	329,029,908	3,336,546	65,723,149	3,336,546	62,386,603	18.96%	100.00%
2026	329,332,831	325,130,514	4,202,316	65,688,867	4,202,316	61,486,551	18.91%	100.00%
2027	325,782,706	320,595,425	5,187,281	65,567,473	5,187,281	60,380,193	18.83%	100.00%
2028	321,736,773	315,425,760	6,311,012	65,613,054	6,311,012	59,302,042	18.80%	100.00%
2029	317,062,284	309,507,385	7,554,899	65,516,458	7,554,899	57,961,559	18.73%	100.00%
2030	311,956,470	302,998,819	8,957,651	65,562,795	8,957,651	56,605,144	18.68%	100.00%
2031	306,495,113	295,974,989	10,520,124	65,866,297	10,520,124	55,346,173	18.70%	100.00%
2032	300,739,702	288,501,953	12,237,749	66,627,146	12,237,749	54,389,397	18.85%	100.00%
2033	294,638,806	280,519,543	14,119,263	67,977,896	14,119,263	53,858,633	19.20%	100.00%
2034	288,196,459	272,021,467	16,174,992	70,141,676	16,174,992	53,966,684	19.84%	100.00%
2035	281,584,894	263,179,287	18,405,607	73,110,395	18,405,607	54,704,788	20.79%	100.00%
2036	274,874,220	254,062,513	20,811,707	77,016,124	20,811,707	56,204,416	22.12%	100.00%
2037	268,051,887	244,640,081	23,411,806	82,223,192	23,411,806	58,811,386	24.04%	100.00%
2038	261,209,873	234,994,158	26,215,715	88,914,129	26,215,715	62,698,414	26.68%	100.00%
2039	254,480,882	225,264,387	29,216,495	97,323,608	29,216,495	68,107,113	30.23%	100.00%
2040	247,843,280	215,440,888	32,402,391	107,571,790	32,402,391	75,169,399	34.89%	100.00%
2041	241,429,414	205,636,840	35,792,573	119,906,136	35,792,573	84,113,562	40.90%	100.00%
2042	235,195,138	195,820,636	39,374,502	134,436,909	39,374,502	95,062,406	48.55%	100.00%
2043	229,181,268	186,026,152	43,155,116	151,337,674	43,155,116	108,182,558	58.15%	100.00%
2044	223,458,225	176,329,457	47,128,767	170,842,452	47,128,767	123,713,684	70.16%	100.00%
2045	217,973,521	166,654,961	51,318,561	193,477,222	51,318,561	142,158,661	85.30%	100.00%
2046	212,881,802	157,194,782	55,687,020	188,802,163	55,687,020	133,115,143	84.68%	100.00%
2047	208,151,820	147,898,816	60,253,004	184,443,400	60,253,004	124,190,396	83.97%	100.00%
2048	203,794,613	138,771,445	65,023,168	180,413,892	65,023,168	115,390,724	83.15%	100.00%
2049	199,836,576	129,885,464	69,951,113	176,746,494	69,951,113	106,795,381	82.22%	100.00%
2050	196,325,464	121,249,488	75,075,976	173,474,551	75,075,976	98,398,575	81.15%	100.00%
2051	193,254,953	112,865,776	80,389,178	170,593,986	80,389,178	90,204,808	79.92%	100.00%
2052	190,608,773	104,769,637	85,839,136	168,098,237	85,839,136	82,259,100	78.51%	100.00%
2053	188,361,203	96,903,257	91,457,946	165,954,351	91,457,946	74,496,405	76.88%	100.00%
2054	186,501,431	89,257,858	97,243,573	164,152,951	97,243,573	66,909,378	74.96%	100.00%
2055	185,095,560	81,905,042	103,190,518	162,753,797	103,190,518	59,563,279	72.72%	100.00%
2056	184,204,121	74,913,690	109,290,432	161,812,824	109,290,432	52,522,393	70.11%	100.00%
2057	183,834,379	68,296,874	115,537,505	161,337,752	115,537,505	45,800,246	67.06%	100.00%
2058	183,975,994	62,048,308	121,927,687	161,318,777	121,927,687	39,391,091	63.48%	100.00%
2059	184,609,991	56,145,365	128,464,626	161,736,601	128,464,626	33,271,975	59.26%	100.00%
2060	185,758,911	50,607,127	135,151,784	162,612,442	135,151,784	27,460,657	54.26%	100.00%
2061	187,433,106	45,453,471	141,979,636	163,956,392	141,979,636	21,976,756	48.35%	100.00%
2062	189,626,180	40,671,452	148,954,728	165,761,653	148,954,728	16,806,925	41.32%	100.00%
2063	192,325,444	36,245,832	156,079,612	168,016,373	156,079,612	11,936,761	32.93%	100.00%
2064	195,534,437	32,179,490	163,354,947	170,723,970	163,354,947	7,369,023	22.90%	100.00%
2065	199,248,304	28,466,547	170,781,757	173,880,342	170,781,757	3,098,585	10.89%	100.00%
2066	203,446,328	25,083,744	178,362,584	177,466,810	177,466,810	-	0.00%	99.50%
2067	208,121,061	22,014,232	186,106,829	181,475,505	181,475,505	-	0.00%	97.51%
2068	213,259,677	19,241,228	194,018,449	185,894,460	185,894,460	-	0.00%	95.81%
2069	218,853,131	16,747,893	202,105,238	190,716,042	190,716,042	-	0.00%	94.36%
2070	224,887,273	14,514,733	210,372,540	195,927,238	195,927,238	-	0.00%	93.13%

CURRENT MEMBER PROJECTION OF ASSETS AND ASSIGNMENT OF EMPLOYER CONTRIBUTIONS

PYE 6/30	Assets (bo)	Member Contributions	Administrative Expenses	Benefit Payments	Assigned Employer Contribution	Income on Cash Flow	Income on Assigned Contribution	Total Investment Income	Assets (eo)
2016	\$ 54,574,264	\$ 1,458,866	\$ 414,000	\$ 22,860,086	\$ 16,073,000	\$ 3,069,579	\$ 553,040	\$ 3,622,620	\$ 52,454,663
2017	52,454,663	1,240,153	351,933	23,324,063	21,694,903	2,899,853	746,479	3,646,332	55,360,055
2018	55,360,055	1,198,706	340,171	23,990,118	21,747,718	3,079,291	748,296	3,827,588	57,803,777
2019	57,803,777	1,164,380	330,430	24,617,290	21,710,388	3,227,926	747,012	3,974,938	59,705,764
2020	59,705,764	1,127,721	320,027	25,171,246	21,713,981	3,341,101	747,136	4,088,237	61,144,430
2021	61,144,430	1,087,365	308,575	25,679,383	21,965,053	3,423,329	755,774	4,179,104	62,387,994
2022	62,387,994	1,027,434	291,567	26,244,372	21,816,545	3,489,462	750,665	4,240,126	62,936,159
2023	62,936,159	985,956	279,797	26,654,619	22,009,287	3,512,695	757,297	4,269,992	63,266,978
2024	63,266,978	932,350	264,584	27,153,868	22,005,966	3,517,354	757,182	4,274,536	63,061,377
2025	63,061,377	886,225	251,495	27,538,619	21,984,098	3,488,586	756,430	4,245,016	62,386,603
2026	62,386,603	834,077	236,696	27,832,574	22,143,282	3,429,952	761,907	4,191,859	61,486,551
2027	61,486,551	791,280	224,551	28,070,913	22,273,737	3,357,693	766,396	4,124,089	60,380,193
2028	60,380,193	750,085	212,861	28,271,054	22,605,521	3,272,347	777,812	4,050,158	59,302,042
2029	59,302,042	712,448	202,180	28,519,560	22,700,337	3,187,398	781,074	3,968,472	57,961,559
2030	57,961,559	664,368	188,536	28,579,002	22,869,526	3,090,334	786,896	3,877,230	56,605,144
2031	56,605,144	620,917	176,205	28,546,582	23,054,219	2,995,430	793,251	3,788,680	55,346,173
2032	55,346,173	583,300	165,530	28,410,150	23,322,069	2,911,069	802,467	3,713,536	54,389,397
2033	54,389,397	543,203	154,151	28,292,705	23,709,930	2,847,148	815,812	3,662,960	53,858,633
2034	53,858,633	498,080	141,346	28,152,449	24,255,474	2,813,708	834,583	3,648,292	53,966,684
2035	53,966,684	456,429	129,526	27,823,715	24,558,356	2,831,556	845,005	3,676,561	54,704,788
2036	54,704,788	417,108	118,368	27,414,940	24,863,987	2,896,320	855,521	3,751,841	56,204,416
2037	56,204,416	383,463	108,820	27,007,930	25,450,099	3,014,469	875,688	3,890,157	58,811,386
2038	58,811,386	346,976	98,465	26,520,842	26,050,205	3,212,817	896,337	4,109,154	62,698,414
2039	62,698,414	317,044	89,972	25,895,107	26,653,922	3,505,702	917,109	4,422,811	68,107,113
2040	68,107,113	294,669	83,622	25,258,288	27,265,696	3,905,671	938,159	4,843,831	75,169,399
2041	75,169,399	260,392	73,895	24,520,499	27,893,820	4,424,573	959,772	5,384,344	84,113,562
2042	84,113,562	235,869	66,935	23,799,976	28,523,594	5,074,851	981,441	6,056,292	95,062,406
2043	95,062,406	206,174	58,508	23,058,471	29,161,515	5,866,052	1,003,391	6,869,443	108,182,558
2044	108,182,558	178,927	50,776	22,250,845	29,816,319	6,811,580	1,025,921	7,837,502	123,713,684
2045	123,713,684	156,562	44,429	21,522,419	30,869,821	7,923,272	1,062,170	8,985,442	142,158,661
2046	142,158,661	135,302	38,396	20,639,883	2,180,180	9,244,263	75,016	9,319,278	133,115,143
2047	133,115,143	125,350	35,572	19,795,324	2,069,559	8,640,031	71,209	8,711,240	124,190,396
2048	124,190,396	106,090	30,106	18,981,416	1,994,311	8,042,829	68,620	8,111,449	115,390,724
2049	115,390,724	91,748	26,037	18,103,279	1,919,467	7,456,713	66,045	7,522,758	106,795,381
2050	106,795,381	75,358	21,385	17,239,462	1,840,981	6,884,358	63,345	6,947,702	98,398,575
2051	98,398,575	62,629	17,773	16,387,965	1,763,111	6,325,566	60,665	6,386,231	90,204,808
2052	90,204,808	50,298	14,274	15,530,874	1,709,144	5,781,189	58,808	5,839,997	82,259,100
2053	82,259,100	42,307	12,006	14,748,448	1,647,066	5,251,714	56,672	5,308,387	74,496,405
2054	74,496,405	33,888	9,617	13,983,960	1,583,745	4,734,423	54,494	4,788,916	66,909,378
2055	66,909,378	24,673	7,002	13,180,618	1,533,343	4,230,745	52,759	4,283,505	59,563,279
2056	59,563,279	22,210	6,303	12,330,867	1,477,538	3,745,696	50,839	3,796,535	52,522,393
2057	52,522,393	20,347	5,774	11,493,849	1,426,460	3,281,588	49,082	3,330,670	45,800,246
2058	45,800,246	19,231	5,458	10,685,684	1,376,571	2,838,818	47,365	2,886,183	39,391,091
2059	39,391,091	15,534	4,408	9,917,330	1,324,976	2,416,523	45,590	2,462,113	33,271,975
2060	33,271,975	9,912	2,813	9,164,012	1,287,334	2,013,967	44,295	2,058,261	27,460,657
2061	27,460,657	8,817	2,502	8,415,796	1,249,688	1,632,892	42,999	1,675,892	21,976,756
2062	21,976,756	7,191	2,041	7,704,300	1,214,083	1,273,460	41,774	1,315,235	16,806,925
2063	16,806,925	5,244	1,488	7,032,961	1,183,690	934,624	40,728	975,352	11,936,761
2064	11,936,761	3,555	1,009	6,386,062	1,159,936	615,929	39,911	655,840	7,369,023
2065	7,369,023	3,408	967	5,769,141	1,139,639	317,411	39,213	356,623	3,098,585
2066	3,098,585	3,257	924	5,197,787	1,990,254	38,135	68,481	106,616	-
2067	-	1,762	500	4,665,263	4,664,001	(160,479)	160,479	-	-
2068	-	575	163	4,170,501	4,170,089	(143,485)	143,485	-	-
2069	-	-	-	3,712,482	3,712,482	(127,739)	127,739	-	-
2070	-	-	-	3,292,233	3,292,233	(113,279)	113,279	-	-

DEVELOPMENT OF SINGLE DISCOUNT RATE

PYE 6/30	Benefit Payments	Discount Rate	Discounted Benefit Payment	Single Discount Rate	Discounted Benefit Payment
2016	\$ 22,860,086	7.00%	\$ 22,099,679	6.91%	\$ 22,109,026
2017	23,324,063	7.00%	21,073,105	6.91%	21,099,854
2018	23,990,118	7.00%	20,256,898	6.91%	20,299,771
2019	24,617,290	7.00%	19,426,610	6.91%	19,484,196
2020	25,171,246	7.00%	18,564,263	6.91%	18,635,046
2021	25,679,383	7.00%	17,700,022	6.91%	17,782,542
2022	26,244,372	7.00%	16,906,030	6.91%	16,999,219
2023	26,654,619	7.00%	16,047,011	6.91%	16,149,116
2024	27,153,868	7.00%	15,278,109	6.91%	15,388,330
2025	27,538,619	7.00%	14,480,924	6.91%	14,597,734
2026	27,832,574	7.00%	13,678,035	6.91%	13,800,034
2027	28,070,913	7.00%	12,892,677	6.91%	13,018,676
2028	28,271,054	7.00%	12,135,140	6.91%	12,264,103
2029	28,519,560	7.00%	11,440,943	6.91%	11,572,312
2030	28,579,002	7.00%	10,714,756	6.91%	10,846,956
2031	28,546,582	7.00%	10,002,431	6.91%	10,134,409
2032	28,410,150	7.00%	9,303,389	6.91%	9,434,119
2033	28,292,705	7.00%	8,658,813	6.91%	8,787,914
2034	28,152,449	7.00%	8,052,232	6.91%	8,179,203
2035	27,823,715	7.00%	7,437,577	6.91%	7,561,247
2036	27,414,940	7.00%	6,848,885	6.91%	6,968,657
2037	27,007,930	7.00%	6,305,798	6.91%	6,421,502
2038	26,520,842	7.00%	5,786,984	6.91%	5,898,154
2039	25,895,107	7.00%	5,280,790	6.91%	5,386,790
2040	25,258,288	7.00%	4,813,948	6.91%	4,914,731
2041	24,520,499	7.00%	4,367,601	6.91%	4,462,812
2042	23,799,976	7.00%	3,961,926	6.91%	4,051,719
2043	23,058,471	7.00%	3,587,374	6.91%	3,671,782
2044	22,250,845	7.00%	3,235,257	6.91%	3,314,182
2045	21,522,419	7.00%	2,924,621	6.91%	2,998,503
2046	20,639,883	7.00%	2,621,211	6.91%	2,689,701
2047	19,795,324	7.00%	2,349,490	6.91%	2,412,920
2048	18,981,416	7.00%	2,105,503	6.91%	2,164,175
2049	18,103,279	7.00%	1,876,725	6.91%	1,930,655
2050	17,239,462	7.00%	1,670,257	6.91%	1,719,707
2051	16,387,965	7.00%	1,483,887	6.91%	1,529,112
2052	15,530,874	7.00%	1,314,280	6.91%	1,355,482
2053	14,748,448	7.00%	1,166,419	6.91%	1,204,003
2054	13,983,960	7.00%	1,033,605	6.91%	1,067,813
2055	13,180,618	7.00%	910,493	6.91%	941,422
2056	12,330,867	7.00%	796,069	6.91%	823,807
2057	11,493,849	7.00%	693,488	6.91%	718,259
2058	10,685,684	7.00%	602,548	6.91%	624,599
2059	9,917,330	7.00%	522,637	6.91%	542,222
2060	9,164,012	7.00%	451,344	6.91%	468,653
2061	8,415,796	7.00%	387,377	6.91%	402,573
2062	7,704,300	7.00%	331,427	6.91%	344,720
2063	7,032,961	7.00%	282,754	6.91%	294,344
2064	6,386,062	7.00%	239,950	6.91%	249,996
2065	5,769,141	7.00%	202,588	6.91%	211,249
2066	5,197,787	7.00%	286,454	6.91%	178,027
2067	4,665,263	3.80%	683,459	6.91%	149,461
2068	4,170,501	3.80%	588,609	6.91%	124,975
2069	3,712,482	3.80%	504,784	6.91%	104,060
2070	3,292,233	3.80%	431,256	6.91%	86,316
2080	769,714	3.80%	69,438	6.91%	10,346
2090	92,864	3.80%	5,770	6.91%	640
2100	5,460	3.80%	234	6.91%	19
2110	68	3.80%	2	6.91%	0
2111	36	3.80%	1	6.91%	0
2112	18	3.80%	0	6.91%	0
2113	11	3.80%	0	6.91%	0
2114	7	3.80%	0	6.91%	0
Total Present Value			\$ 358,940,274		\$ 358,940,274



SECTION H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

<i>Accrued Service</i>	Service credited under the system which was rendered before the date of the actuarial valuation.
<i>Actuarial Accrued Liability (AAL)</i>	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."
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	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.
<i>Actuarial Gain (Loss)</i>	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.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Valuation Date</i>	The date as of which an actuarial valuation is performed.
<i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i>	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.

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<i>Amortization Method</i>	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).
<i>Amortization Payment</i>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<i>Cost-of-Living Adjustments</i>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i>	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.
<i>Covered-Employee Payroll</i>	The payroll of employees that are provided with pensions through the pension plan.
<i>Deferred Inflows and Outflows</i>	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.
<i>Deferred Retirement Option Program (DROP)</i>	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.
<i>Discount Rate</i>	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: <ol style="list-style-type: none">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; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

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<i>Entry Age Actuarial Cost Method (EAN)</i>	The EAN is a cost 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.
<i>Fiduciary Net Position</i>	The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.
<i>GASB</i>	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
<i>Long-Term Expected Rate of Return</i>	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.
<i>Money-Weighted Rate of Return</i>	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.
<i>Multiple-Employer Defined Benefit Pension Plan</i>	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<i>Municipal Bond Rate</i>	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.
<i>Net Pension Liability (NPL)</i>	The NPL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan.
<i>Non-Employer Contributing Entities</i>	Non-employer contributing 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 contributing entities.
<i>Normal Cost</i>	The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.

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<i>Other Postemployment Benefits (OPEB)</i>	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.
<i>Real Rate of Return</i>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<i>Service Cost</i>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
<i>Total Pension Expense</i>	<p>The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:</p> <ol style="list-style-type: none"> 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
<i>Total Pension Liability (TPL)</i>	The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	The UAAL is the difference between actuarial accrued liability and valuation assets.
<i>Valuation Assets</i>	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.