GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

GENERAL ASSEMBLY RETIREMENT SYSTEM OF ILLINOIS

GASB STATEMENT NO. 67 PLAN REPORTING AND ACCOUNTING SCHEDULES

JUNE 30, 2014

GRS
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October 30, 2014

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

Dear Board Members:

This report provides information required by the Retirement System in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans."

Our actuarial calculations for this report were prepared for the purpose of complying with the requirements of GASB No. 67. These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB No. 67. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB No. 67 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.

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. If your understanding of this information is different, please let us know. This information was checked for internal consistency, but it was not otherwise audited.

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

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera

Alex Rivera, FSA, EA, MAAA
Senior Consultant

Paul T Wood

Paul T. Wood, ASA, MAAA
Consultant

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

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SECTION A

EXECUTIVE SUMMARY

Executive Summary
as of June 30, 2014

		2014
Actuarial Valuation Date		June 30, 2014
Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date)		June 30, 2014
Membership		
Number of		
- Retirees and Beneficiaries		421
- Inactive, Nonretired Members		74
- Active Members		158
- Total		653
Covered Payroll	$	12,777,821
Net Pension Liability		
Total Pension Liability	$	397,502,761
Plan Fiduciary Net Position		56,789,460
Net Pension Liability	$	340,713,301
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		14.29%
Net Pension Liability as a Percentage of Covered Payroll		2666.44%
Development of the Single Discount Rate		
Single Discount Rate		5.11%
Long-Term Expected Rate of Return		7.00%
Long-Term Municipal Bond Rate		4.29%
Last year ending June 30 in the 2015 to 2114 projection period for which projected benefit payments are fully funded		2030

Long-term Municipal Bond Rate is based on the weekly rate of the 20-Year Bond Buyer Index as published by the Federal Reserve closest to but not later than the measurement date.

DISCUSSION

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans," replaces the requirements of Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans," and Statement No. 50, "Pension Disclosures." Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability of employers and non-employer contributing entities for benefits provided through the pension plan.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. 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 your internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

Statement No. 67 requires defined benefit pension plans to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position.

The *statement of fiduciary net position* presents the following items as of the end of the pension plan's reporting period, such as:

- Assets;
- Deferred inflows and outflows of resources;
- Liabilities; and
- Fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The *statement of changes in fiduciary net position* presents the following for the plan's reporting period:

- Additions, such as contributions and investment income;
- Deductions, such as benefit payments and expenses; and
- Net increase or decrease in the fiduciary net position (the difference between additions and deductions).

Notes to Financial Statements

Statement No. 67 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- A description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs;
- The number and classes of employees covered by the benefit terms;
- The composition of the pension plan's board and the authority under which benefit terms may be amended;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- A description of how fair value is determined;
- Concentrations of investments greater than or equal to 5%;
- Annual money-weighted rate of return on pension plan investments;
- The portion of the present value of benefits to be provided through the pension plan to current active and inactive plan members;
- The pension plan's fiduciary net position;
- The net pension liability;
- The pension plan's fiduciary net position as a percentage of the total pension liability;
- 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.

Required Supplementary Information

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;
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy; and
- The annual money-weighted rate of return on pension plan investments for each year.

While the first two tables may be built prospectively as the information becomes available, sufficient information is currently available for the third and fourth tables.

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 actuarial terms, this will be 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).

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the pension plan's fiscal year end.

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2014, and a measurement date of June 30, 2014.

Single Discount Rate

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

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 4.29% (based on the weekly rate closest to but not later than the measurement date of the 20-Year Bond Buyer Index as published by the Federal Reserve); and the resulting single discount rate is 5.11%.

Effective Date and Transition

GASB Statement No. 67 is effective for a pension plan's fiscal years beginning after June 15, 2013; however, earlier application is encouraged by the GASB. For GARS, GASB Statement No. 67 is therefore effective for fiscal year July 1, 2013, through June 30, 2014.

SECTION B

FINANCIAL STATEMENTS

Statement of Fiduciary Net Position
as of June 30, 2014

		2014
Assets		
Cash	$	4,767,584
Receivables		
Contributions:		
Participants	$	63
Employer - GRF Fund		577,370
Other Accounts		12,445
Total Receivables	$	589,878
Investments		
Held in the Illinois State Board of Investment		
Commingled Fund at fair value	$	51,549,374
Securities lending collateral with State Treasurer		2,269,000
Total Investments	$	53,818,374
Property and equipment, net of accumulated depreciation	$	3,187
Total Assets	$	59,179,023
Liabilities		
Payables		
Benefits payable	$	16,294
Refunds payable		5,210
Adminstrative expenses payable		27,520
Participants' deferred service credit accounts		-
Due to Judges' Retirment System of Illinois		71,539
Securities lending collateral with State Treasurer		2,269,000
Total Liabilities	$	2,389,563
Net Position Restricted for Pensions	$	56,789,460

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2014

		2014
Additions		
Contributions		
Participants	$	1,502,605
Employing state agencies and appropriations		13,956,669
Total Contributions	$	15,459,274
Investment Income		
Net investments income	$	1,357,215
Interest earned on cash balances		17,838
Net appreciation in fair value of investments		6,988,375
Net Investment Income	$	8,363,428
Total Additions	$	23,822,702
Deductions		
Benefits		
Retirement annuities	$	17,218,504
Survivors' annuities		3,581,998
Disability benefits		-
Lump-sum benefits		-
Total Benefits	$	20,800,502
Refunds		245,133
Administrative		334,628
Total Deductions	$	21,380,263
Net Increase in Net Position	$	2,442,439
Net Position Restricted for Pensions		
Beginning of Year	$	54,347,021
End of Year	$	56,789,460

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Fiscal year ending June 30,	2014
Total Pension Liability	
Service Cost Including Pension Plan Administrative Expense	$ 5,383,133
Interest on the Total Pension Liability	20,110,452
Benefit Changes	-
Difference between Expected and Actual Experience	12,389,130
Assumption Changes	-
Benefit Payments	(20,800,502)
Refunds	(245,133)
Pension Plan Administrative Expense	(334,628)
Net Change in Total Pension Liability	16,502,452
Total Pension Liability - Beginning	381,000,309
Total Pension Liability - Ending (a)	$ 397,502,761
Plan Fiduciary Net Position	
Employer Contributions	$ 13,956,669
Employee Contributions	1,502,605
Pension Plan Net Investment Income	8,363,428
Benefit Payments	(20,800,502)
Refunds	(245,133)
Pension Plan Administrative Expense	(334,628)
Other	-
Net Change in Plan Fiduciary Net Position	2,442,439
Plan Fiduciary Net Position - Beginning	54,347,021
Plan Fiduciary Net Position - Ending (b)	$ 56,789,460
Net Pension Liability - Ending (a) - (b)	340,713,301
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	14.29 %
Covered Employee Payroll	$ 12,777,821
Net Pension Liability as a Percentage of Covered Employee Payroll	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

Beginning of year Total Pension Liability for fiscal year 2014 uses a single discount rate of 5.39%. The single discount rate of 5.39% was based on a long-term expected rate of return on pension plan investments of 7.00% used in the June 30, 2013, funding valuation and a long-term municipal bond rate as of June 27, 2013, of 4.63%.

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

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

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	2666.44%

**Covered payroll shown is the amount in force as of the actuarial 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

Fiscal Year	Actuarially Determined Contribution*	Actual Contribution**	Contribution Deficiency (Excess)	Covered Payroll***	Actual Contribution as a % of Covered Payroll	Statutory Contribution	Statutory Contribution Deficiency/(Excess)
7/1/04 - 6/30/05	$ 8,302,564	$ 4,675,000	$ 3,627,564	$ 12,851,000	36.38%	$ 4,674,000	$ 1,000
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

**The GARS Statutory Funding Policy 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 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 6/30/2005 through 6/30/2012 were obtained from the comprehensive annual financial report. The actual contribution for FYE 6/30/2013 through 6/30/2014 was provided by the System.*

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

Notes to Schedule of Contributions

Valuation Date:	June 30, 2014
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 as of the Valuation Date:

Actuarial Cost Method	Projected Unit Credit
Amortization Method	The Statutory Contributions is equal to the level percentage of pay contributions determined so that the Plan attains a 90% funded ratio by the end of 2045.
Remaining Amortization Period	Not Applicable. An amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution.
Asset Valuation Method	5 year smoothed market
Inflation	3.00 percent
Salary Increases	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 2015. 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, 2014, 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	Benefit changes as a result of Public Act 98-0599 were not recognized in the Total Pension Liability as of June 30, 2014. The statutory contribution for fiscal year ending June 30, 2014, was determined based on the results of the June 30, 2012, valuation. Similarly, the statutory contributions for fiscal years ending June 30, 2015 and June 30, 2016, 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 Valuation Date:

Actuarial Cost Method	Entry Age Normal
Discount Rate	5.39 percent as of June 30, 2013, valuation. 5.11 percent as of June 30, 2014, valuation.

Schedule of Investment Returns Multiyear
Last 10 Fiscal Years

FY Ending June 30,	Annual Return[1]
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	

[1] *Annual money-weighted rate of return, net of investment expenses*

To be calculated by GARS.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Long-Term Expected Return on Plan Assets

The long-term expected real 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 returns are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage. For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2014, the10-year simulated real rates of return 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%

Single Discount Rate

A single discount rate of 5.11% 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% and a municipal bond rate of 4.29%. 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 2030. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2030, 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 5.11%, 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 4.11%	Current Single Discount Rate Assumption 5.11%	1% Increase 6.11%
$390,590,041	$340,713,301	$299,185,957

Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	421
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	74
Active Plan Members	158
Total Plan Members	653

Additional information about the member data used is included in the June 30, 2014, actuarial valuation report.

SECTION E

SUMMARY OF BENEFITS

Summary of Retirement System Plan Provisions (As of June 30, 2014)

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	2.0
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 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 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.

<u>Persons Who First Become Participants On or After January 1, 2011</u>

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. According to the Public Pension Division of the Illinois Department of Insurance, the annual salary limitation for 2014 is $113,550.53.

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

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;

(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 Adopted June 30, 1989, by Statute

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

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.

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 2015.

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 assumed to remain level at the number of actives as of the valuation date. 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.	Salary
Under 20		
20-24		
25-29	11	$ 852,839
30-34	25	2,001,423
35-39	29	2,431,073
40-44	26	1,999,562
45-49	25	1,973,044
50-54	21	1,688,089
55-59	15	1,167,270
60-64	4	302,325
65-69		
70 & Over		
Total	156	$ 12,415,625
Avg. Salary		$ 79,587
Avg. Age		42.54
Percent Male		69.23%

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, 2014, 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. Expenses are included in the service cost.

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

Appropriation Requirements Under P.A. 93-0002 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. 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 Statement No. 67 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%; the municipal bond rate is 4.29%; and the resulting single discount rate is 5.11%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Total employer contributions are calculated based on the System's funding policy of level percentage of payroll contributions needed to attain a funded status of 90% in 2045 under the Projected Unit Credit cost method. Normal Cost contributions calculated under the Entry Age Normal cost method for future hires are not included (nor are their liabilities).

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.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Single Discount Rate Development
Projection of Contributions Ending June 30, 2014

Year Ended	Payroll for Current Employees	Contributions from Current Employees	Service Cost and Expense Contributions	UAL Contributions	Total Contributions	Admin Expenses
2014	$ 12,777,821					
2015	11,833,994	$ 1,488,116	$ 2,591,335	$ 13,217,663	$ 17,297,114	$ 386,500
2016	11,487,085	1,360,909	2,388,803	13,624,136	17,373,849	353,461
2017	11,066,457	1,321,015	2,305,466	14,073,097	17,699,577	343,100
2018	10,707,408	1,272,643	2,205,473	14,641,048	18,119,163	330,536
2019	10,283,238	1,231,352	2,119,904	15,166,733	18,517,989	319,812
2020	9,879,338	1,182,572	2,022,371	15,769,962	18,974,906	307,143
2021	9,341,433	1,136,124	1,929,103	16,441,236	19,506,463	295,079
2022	8,870,728	1,074,265	1,809,990	17,164,740	20,048,995	279,013
2023	8,406,864	1,020,134	1,706,710	17,896,805	20,623,649	264,954
2024	7,905,429	966,789	1,608,232	18,642,052	21,217,074	251,099
2025	7,356,158	909,124	1,498,386	19,424,385	21,831,895	236,122
2026	6,863,087	845,958	1,370,780	20,231,325	22,448,063	219,716
2027	6,410,076	789,255	1,261,170	21,076,317	23,126,742	204,989
2028	6,050,907	737,159	1,158,958	21,935,243	23,831,360	191,458
2029	5,554,409	695,854	1,076,447	22,807,878	24,580,180	180,730
2030	5,185,874	638,757	970,403	23,693,882	25,303,042	165,901
2031	4,846,745	596,376	894,717	24,637,150	26,128,242	154,893
2032	4,497,493	557,376	830,265	25,603,639	26,991,279	144,764
2033	4,116,026	517,212	765,121	26,604,072	27,886,406	134,333
2034	3,774,793	473,343	697,040	27,645,889	28,816,272	122,939
2035	3,442,214	434,101	631,882	28,713,751	29,779,734	112,747
2036	3,087,685	395,855	572,247	29,822,110	30,790,212	102,813
2037	2,784,434	355,084	504,228	30,952,614	31,811,926	92,224
2038	2,535,719	320,210	445,883	32,130,238	32,896,331	83,166
2039	2,337,391	291,608	403,933	33,330,300	34,025,841	75,738
2040	2,103,124	268,800	364,134	34,565,203	35,198,137	69,814
2041	1,890,320	241,859	324,764	35,846,402	36,413,025	62,817
2042	1,638,039	217,387	283,061	37,163,151	37,663,598	56,461
2043	1,421,477	188,374	236,823	38,527,152	38,952,350	48,925
2044	1,239,213	163,470	202,735	39,935,835	40,302,040	42,457
2045	1,072,034	142,509	169,491	41,382,419	41,694,419	37,013
2046	977,981	123,284	135,806	2,075,392	2,334,482	32,020
2047	813,377	112,468	119,941	2,011,378	2,243,786	29,211
2048	703,365	93,538	89,427	1,991,052	2,174,017	24,294
2049	552,226	80,887	79,288	1,933,528	2,093,703	21,008
2050	465,987	63,506	61,536	1,902,068	2,027,111	16,494
2051	369,089	53,588	50,938	1,859,985	1,964,512	13,918
2052	313,660	42,445	37,569	1,833,224	1,913,238	11,024
2053	255,435	36,071	32,455	1,805,205	1,873,731	9,368
2054	190,050	29,375	27,039	1,779,560	1,835,975	7,629
2055	174,234	21,856	17,763	1,767,518	1,807,137	5,676
2056	158,266	20,037	16,300	1,745,638	1,781,975	5,204
2057	148,813	18,201	14,995	1,729,831	1,763,026	4,727
2058	117,128	17,114	13,853	1,714,404	1,745,371	4,445
2059	74,648	13,470	11,082	1,705,043	1,729,595	3,498
2060	65,599	8,585	4,243	1,710,660	1,723,487	2,230
2061	51,971	7,544	3,762	1,712,542	1,723,848	1,959
2062	36,755	5,977	3,393	1,717,675	1,727,045	1,552
2063	22,491	4,227	1,549	1,730,363	1,736,139	1,098
2064	21,544	2,586	(307)	1,751,898	1,754,178	672

Single Discount Rate Development
Projection of Plan Fiduciary Net Position Ending June 30, 2014

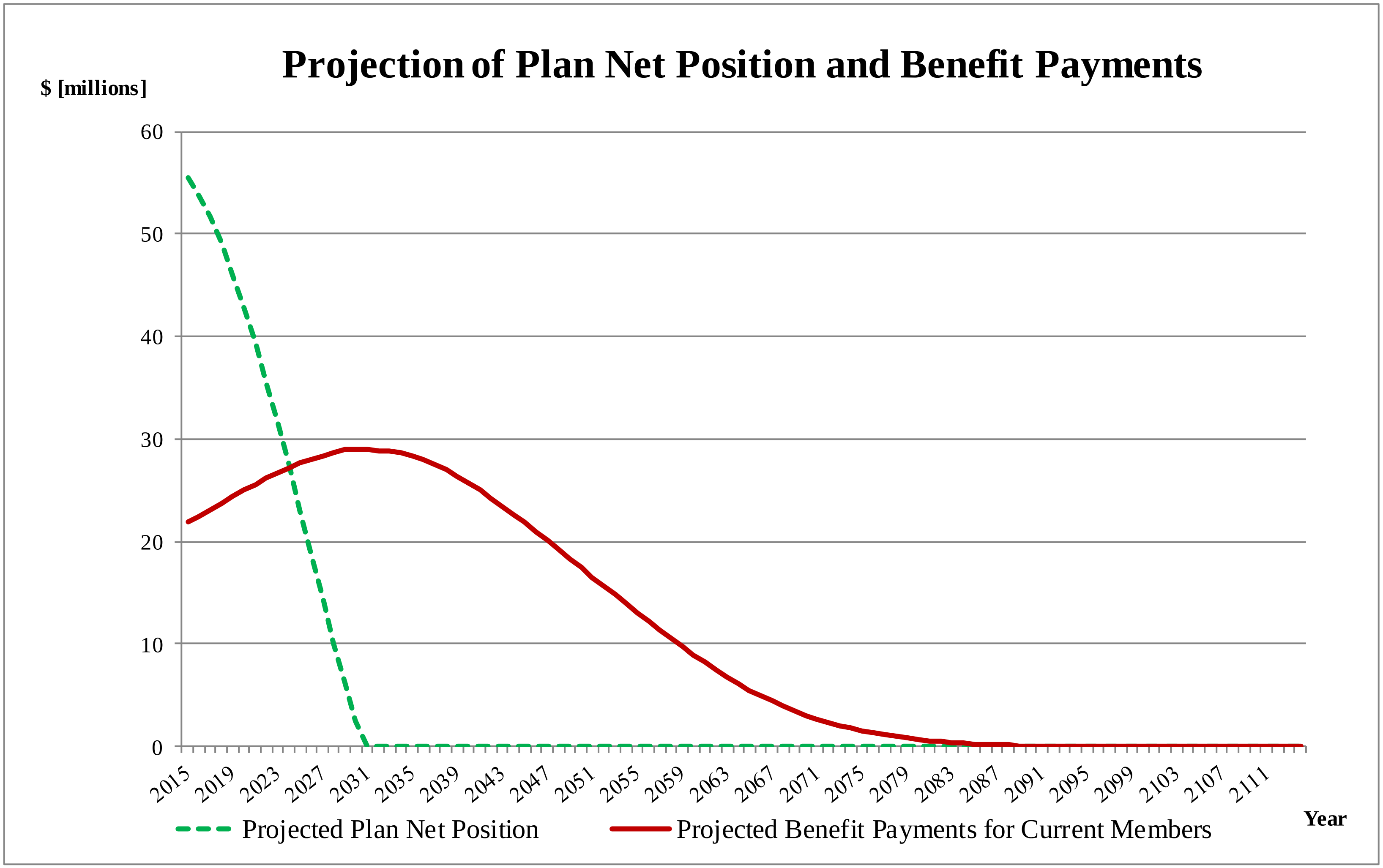
Year Ended	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.00%
	(a)	(b)	(c)	(d)	(e)
2015	$ 56,789,460	$ 17,297,114	$ 21,978,832	$ 386,500	$ 3,800,875
2016	55,522,117	17,373,849	22,456,723	353,461	3,699,494
2017	53,785,275	17,699,577	23,063,149	343,100	3,568,614
2018	51,647,218	18,119,163	23,754,456	330,536	3,410,033
2019	49,091,422	18,517,989	24,368,080	319,812	3,224,105
2020	46,145,624	18,974,906	24,964,436	307,143	3,013,537
2021	42,862,488	19,506,463	25,482,193	295,079	2,784,608
2022	39,376,287	20,048,995	26,150,329	279,013	2,536,805
2023	35,532,745	20,623,649	26,594,956	264,954	2,272,715
2024	31,569,199	21,217,074	27,155,540	251,099	1,996,873
2025	27,376,507	21,831,895	27,641,240	236,122	1,708,343
2026	23,039,384	22,448,063	28,063,180	219,716	1,411,992
2027	18,616,542	23,126,742	28,394,233	204,989	1,114,861
2028	14,258,923	23,831,360	28,636,787	191,458	826,192
2029	10,088,230	24,580,180	28,925,464	180,730	550,445
2030	6,112,659	25,303,042	29,008,226	165,901	294,690
2031	2,536,265	26,128,242	28,997,025	154,893	73,500
2032	-	26,991,279	28,867,878	144,764	-
2033	-	27,886,406	28,755,101	134,333	-
2034	-	28,816,272	28,608,168	122,939	-
2035	-	29,779,734	28,281,025	112,747	-
2036	-	30,790,212	27,925,640	102,813	-
2037	-	31,811,926	27,536,311	92,224	-
2038	-	32,896,331	27,029,916	83,166	-
2039	-	34,025,841	26,388,295	75,738	-
2040	-	35,198,137	25,705,969	69,814	-
2041	-	36,413,025	24,963,360	62,817	-
2042	-	37,663,598	24,233,864	56,461	-
2043	-	38,952,350	23,462,778	48,925	-
2044	-	40,302,040	22,629,425	42,457	-
2045	-	41,694,419	21,825,820	37,013	-
2046	-	2,334,482	20,909,811	32,020	-
2047	-	2,243,786	20,046,228	29,211	-
2048	-	2,174,017	19,197,232	24,294	-
2049	-	2,093,703	18,298,275	21,008	-
2050	-	2,027,111	17,399,590	16,494	-
2051	-	1,964,512	16,508,891	13,918	-
2052	-	1,913,238	15,610,705	11,024	-
2053	-	1,873,731	14,773,423	9,368	-
2054	-	1,835,975	13,963,654	7,629	-
2055	-	1,807,137	13,090,081	5,676	-
2056	-	1,781,975	12,207,835	5,204	-
2057	-	1,763,026	11,340,130	4,727	-
2058	-	1,745,371	10,507,324	4,445	-
2059	-	1,729,595	9,718,036	3,498	-
2060	-	1,723,487	8,941,102	2,230	-
2061	-	1,723,848	8,172,919	1,959	-
2062	-	1,727,045	7,443,550	1,552	-
2063	-	1,736,139	6,758,653	1,098	-
2064	-	1,754,178	6,103,161	672	-

Single Discount Rate Development
Present Values of Projected Benefits Ending June 30, 2014

Year Ended	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)
2015	$ 56,789,460	$ 21,978,832	$ 21,978,832	$ -	$ 21,247,738	$ -
2016	55,522,117	22,456,723	22,456,723	-	20,289,471	-
2017	53,785,275	23,063,149	23,063,149	-	19,474,179	-
2018	51,647,218	23,754,456	23,754,456	-	18,745,709	-
2019	49,091,422	24,368,080	24,368,080	-	17,971,913	-
2020	46,145,624	24,964,436	24,964,436	-	17,207,231	-
2021	42,862,488	25,482,193	25,482,193	-	16,415,052	-
2022	39,376,287	26,150,329	26,150,329	-	15,743,411	-
2023	35,532,745	26,594,956	26,594,956	-	14,963,637	-
2024	31,569,199	27,155,540	27,155,540	-	14,279,485	-
2025	27,376,507	27,641,240	27,641,240	-	13,584,006	-
2026	23,039,384	28,063,180	28,063,180	-	12,889,125	-
2027	18,616,542	28,394,233	28,394,233	-	12,188,013	-
2028	14,258,923	28,636,787	28,636,787	-	11,487,970	-
2029	10,088,230	28,925,464	28,925,464	-	10,844,651	-
2030	6,112,659	29,008,226	29,008,226	-	10,164,186	-
2031	2,536,265	28,997,025	28,664,507	332,519	9,386,683	166,269
2032	-	28,867,878	-	28,867,878	-	13,841,023
2033	-	28,755,101	-	28,755,101	-	13,219,820
2034	-	28,608,168	-	28,608,168	-	12,611,247
2035	-	28,281,025	-	28,281,025	-	11,954,199
2036	-	27,925,640	-	27,925,640	-	11,318,419
2037	-	27,536,311	-	27,536,311	-	10,701,527
2038	-	27,029,916	-	27,029,916	-	10,072,610
2039	-	26,388,295	-	26,388,295	-	9,429,007
2040	-	25,705,969	-	25,705,969	-	8,807,364
2041	-	24,963,360	-	24,963,360	-	8,201,104
2042	-	24,233,864	-	24,233,864	-	7,633,950
2043	-	23,462,778	-	23,462,778	-	7,087,016
2044	-	22,629,425	-	22,629,425	-	6,554,127
2045	-	21,825,820	-	21,825,820	-	6,061,348
2046	-	20,909,811	-	20,909,811	-	5,568,088
2047	-	20,046,228	-	20,046,228	-	5,118,538
2048	-	19,197,232	-	19,197,232	-	4,700,123
2049	-	18,298,275	-	18,298,275	-	4,295,741
2050	-	17,399,590	-	17,399,590	-	3,916,736
2051	-	16,508,891	-	16,508,891	-	3,563,367
2052	-	15,610,705	-	15,610,705	-	3,230,892
2053	-	14,773,423	-	14,773,423	-	2,931,828
2054	-	13,963,654	-	13,963,654	-	2,657,136
2055	-	13,090,081	-	13,090,081	-	2,388,440
2056	-	12,207,835	-	12,207,835	-	2,135,836
2057	-	11,340,130	-	11,340,130	-	1,902,412
2058	-	10,507,324	-	10,507,324	-	1,690,192
2059	-	9,718,036	-	9,718,036	-	1,498,925
2060	-	8,941,102	-	8,941,102	-	1,322,360
2061	-	8,172,919	-	8,172,919	-	1,159,026
2062	-	7,443,550	-	7,443,550	-	1,012,170
2063	-	6,758,653	-	6,758,653	-	881,233
2064	-	6,103,161	-	6,103,161	-	763,032

Single Discount Rate Development
PVs of Projected Benefits Ending June 30, 2014 (continued)

Year Ended	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)
2065	$ -	$ 5,481,438	$ -	$ 5,481,438	$ -	$ 657,113
2066	-	4,907,893	-	4,907,893	-	564,154
2067	-	4,377,664	-	4,377,664	-	482,506
2068	-	3,886,118	-	3,886,118	-	410,708
2069	-	3,436,334	-	3,436,334	-	348,233
2070	-	3,026,519	-	3,026,519	-	294,087
2071	-	2,654,953	-	2,654,953	-	247,369
2072	-	2,319,403	-	2,319,403	-	207,216
2073	-	2,016,833	-	2,016,833	-	172,772
2074	-	1,745,335	-	1,745,335	-	143,364
2075	-	1,502,786	-	1,502,786	-	118,363
2076	-	1,287,379	-	1,287,379	-	97,226
2077	-	1,096,387	-	1,096,387	-	79,396
2078	-	927,707	-	927,707	-	64,417
2079	-	779,782	-	779,782	-	51,918
2080	-	650,819	-	650,819	-	41,549
2081	-	538,997	-	538,997	-	32,995
2082	-	442,477	-	442,477	-	25,972
2083	-	359,963	-	359,963	-	20,260
2084	-	290,216	-	290,216	-	15,662
2085	-	231,732	-	231,732	-	11,992
2086	-	183,124	-	183,124	-	9,086
2087	-	143,160	-	143,160	-	6,811
2088	-	110,808	-	110,808	-	5,055
2089	-	84,862	-	84,862	-	3,712
2090	-	64,368	-	64,368	-	2,700
2091	-	48,291	-	48,291	-	1,942
2092	-	35,928	-	35,928	-	1,386
2093	-	26,469	-	26,469	-	979
2094	-	19,322	-	19,322	-	685
2095	-	13,960	-	13,960	-	475
2096	-	9,993	-	9,993	-	326
2097	-	7,068	-	7,068	-	221
2098	-	4,903	-	4,903	-	147
2099	-	3,358	-	3,358	-	97
2100	-	2,278	-	2,278	-	63
2101	-	1,522	-	1,522	-	40
2102	-	978	-	978	-	25
2103	-	616	-	616	-	15
2104	-	391	-	391	-	9
2105	-	240	-	240	-	5
2106	-	147	-	147	-	3
2107	-	79	-	79	-	2
2108	-	48	-	48	-	1
2109	-	30	-	30	-	1
2110	-	11	-	11	-	0
2111	-	-	-	-	-	-
2112	-	-	-	-	-	-
2113	-	-	-	-	-	-
2114	-	-	-	-	-	-
				Totals	$ 256,882,459	$ 192,516,165


Projection of Plan Net Position and Benefit Payments
$ [millions]
60
50
40
30
20
10
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 H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

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

GLOSSARY OF TERMS

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

GLOSSARY OF TERMS

Entry Age Actuarial Cost Method (EAN)	The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.
GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Fiduciary Net Position	The fiduciary net position is the value of the assets of the trust.
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 statement 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 the GASB Statement No. 67, the valuation asset is equal to the market value of assets.