GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS

GASB STATEMENT NO. 67 PLAN REPORTING AND ACCOUNTING SCHEDULES

JUNE 30, 2014

GRS
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October 31, 2014

Board of Trustees
State Employees' 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 State Employees' Retirement System of Illinois ("SERS") only in its entirety and only with the permission of SERS.

This report is based upon information, furnished to us by SERS, 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 State Employees' 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, 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,

Gabriel, Roeder, Smith & Company

Alex Rivera	David T Kausch	Paul T Wood
Alex Rivera, FSA, EA, MAAA	David Kausch, FSA, EA, MAAA	Paul T. Wood, ASA, MAAA
Senior Consultant	Senior Consultant	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		66,609
- Inactive, Nonretired Members		24,404
- Active Members		62,844
- Total		153,857
Covered Payroll	$	4,416,152,691
Net Pension Liability		
Total Pension Liability	$	41,685,086,183
Plan Fiduciary Net Position		14,581,566,241
Net Pension Liability	$	27,103,519,942
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		34.98%
Net Pension Liability as a Percentage of Covered Payroll		613.74%
Development of the Single Discount Rate		
Single Discount Rate		7.09%
Long-Term Expected Rate of Return		7.25%
Long-Term Municipal Bond Rate		4.29%
Last year ending June 30 in the 2014 to 2113 projection period for which projected benefit payments are fully funded		2065

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 based on the plan's funding policy to the actuarially determined contributions; 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 7.25%; 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 7.09%.

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 SERS, 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	$	200,752,173
Receivables		
Contributions:		
Participants	$	17,207,484
Employing state agencies		79,511,794
Other Accounts		4,682,423
Total Receivables	$	101,401,701
Investments		
Held in the Illinois State Board of Investment		
Commingled Fund at fair value	$	14,286,499,013
Securities lending collateral with State Treasurer		84,013,000
Total Investments	$	14,370,512,013
Property and equipment, net of accumulated depreciation	$	4,122,801
Total Assets	$	14,676,788,688
Liabilities		
Payables		
Benefits payable	$	5,106,425
Refunds payable		674,361
Adminstrative expenses payable		1,714,067
Participants' deferred service credit accounts		118,146
Due to State of Illinois		3,596,448
Securities lending collateral with State Treasurer		84,013,000
Total Liabilities	$	95,222,447
Net Position Restricted for Pensions	$	14,581,566,241

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

		2014
Additions		
Contributions		
Participants	$	269,232,241
Employing state agencies and appropriations		1,699,447,826
Total Contributions	$	1,968,680,067
Investment Income		
Net investments income	$	358,688,813
Interest earned on cash balances		698,856
Net appreciation in fair value of investments		1,809,958,589
Net Investment Income	$	2,169,346,258
Total Additions	$	4,138,026,325
Deductions		
Benefits		
Retirement annuities	$	1,720,825,103
Survivors' annuities		114,177,228
Disability benefits		64,782,236
Lump-sum benefits		17,278,072
Total Benefits	$	1,917,062,639
Refunds		23,082,814
Administrative		16,615,105
Total Deductions	$	1,956,760,558
Net Increase in Net Position	$	2,181,265,767
Net Position Restricted for Pensions		
Beginning of Year	$	12,400,300,474
End of Year	$	14,581,566,241

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	$ 776,487,959
Interest on the Total Pension Liability	2,754,121,665
Benefit Changes	-
Difference between Expected and Actual Experience	150,997,067
Assumption Changes	3,142,466,514
Benefit Payments	(1,917,062,639)
Refunds	(23,082,814)
Pension Plan Administrative Expense	(16,615,105)
Net Change in Total Pension Liability	4,867,312,648
Total Pension Liability - Beginning	36,817,773,535
Total Pension Liability - Ending (a)	$ 41,685,086,183
Plan Fiduciary Net Position	
Employer Contributions	$ 1,699,447,826
Employee Contributions	269,232,241
Pension Plan Net Investment Income	2,169,346,258
Benefit Payments	(1,917,062,639)
Refunds	(23,082,814)
Pension Plan Administrative Expense	(16,615,105)
Other	-
Net Change in Plan Fiduciary Net Position	2,181,265,767
Plan Fiduciary Net Position - Beginning	12,400,300,474
Plan Fiduciary Net Position - Ending (b)	$ 14,581,566,241
Net Pension Liability - Ending (a) - (b)	27,103,519,942
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	34.98 %
Covered Employee Payroll	$ 4,416,152,691
Net Pension Liability as a Percentage of Covered Employee Payroll	613.74 %

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 7.60% and the actuarial assumptions used in the June 30, 2013, funding valuation. The single discount rate of 7.60% was based on a long-term expected rate of return on pension plan investments of 7.75% used in the June 30, 2013, funding valuation and a long-term municipal bond rate as of June 27, 2013, of 4.63%.

Effective with the funding valuation as of June 30, 2014, the long-term expected rate of return on pension plan investments was changed from 7.75% to 7.25%.

End of year Total Pension Liability for fiscal year 2014 uses a single discount rate of 7.09% and the actuarial assumptions used in the June 30, 2014, funding valuation. The single discount rate of 7.09% was based on a long-term expected rate of return on pension plan investments of 7.25% 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 7.12% to 7.09% based on the long-term expected rate of return on pension plan investments of 7.25% 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.

The increase in the Total Pension Liability for fiscal year 2014 due to assumption changes includes the impact of the change in assumptions used in the June 30, 2014, funding valuation, which were determined as part of an experience review for the years July 1, 2009, to June 30, 2013, as well as the change in discount rate from 7.60% to 7.09%.

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	$ 41,685,086,183	$ 14,581,566,241	$ 27,103,519,942	34.98%	$ 4,416,152,691	613.74%

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

10 fiscal years will be built prospectively.

Schedule of Contributions Multiyear
Last 10 Fiscal Years

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	$ 727,428,010	$ 427,434,612	$ 299,993,398	$ 3,475,528,000	12.30%	$ 425,682,669	$ 1,751,943
7/1/05 - 6/30/06	672,555,569	210,499,791	462,055,778	3,572,541,000	5.89%	207,814,710	2,685,081
7/1/06 - 6/30/07	823,802,760	358,786,650	465,016,110	3,762,000,000	9.54%	361,039,140	(2,252,490)
7/1/07 - 6/30/08	986,410,891	587,732,407	398,678,484	3,967,704,000	14.81%	576,626,422	11,105,985
7/1/08 - 6/30/09	1,003,432,849	774,910,344	228,522,505	4,027,263,000	19.24%	769,851,595	5,058,749
7/1/09 - 6/30/10	1,177,313,343	1,095,545,856	81,767,487	4,119,360,892	26.60%	1,168,951,040	(73,405,184)
7/1/10 - 6/30/11	1,289,002,005	1,127,886,796	161,115,209	4,211,186,269	26.78%	1,102,783,348	25,103,448
7/1/11 - 6/30/12	1,614,834,808	1,391,416,375	223,418,433	4,329,083,716	32.14%	1,396,216,080	(4,799,705)
7/1/12 - 6/30/13	1,741,286,416	1,531,932,137	209,354,279	4,236,191,257	36.16%	1,529,942,834	1,989,303
7/1/13 - 6/30/14	1,956,841,419	1,699,447,826	257,393,593	4,416,152,691	38.48%	1,697,348,287	2,099,539

* *The SERS Statutory Funding does not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded 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 2006 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 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	Salary increase rates based on age-related productivity and merit rates plus inflation. Postretirement benefit increases of 3.00 percent, compounded, for Tier 1 and 3.00 percent or one-half of the annual increase in the Consumer Price Index, whichever is less, simple, for Tier 2.
Investment Rate of Return	7.25 percent as of the June 30, 2014, valuation.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2014, valuation pursuant to an experience study of the period July 1, 2009, to June 30, 2013.
Mortality	105 percent of the RP2014 Healthy Annuitant mortality table, sex distinct

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 the Valuation Date:

Actuarial Cost Method	Entry Age Normal
Disocunt Rate	7.60 percent as of the June 30, 2013, valuation. 7.09 percent as of the 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 SERS.

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, the 10-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 7.09% 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 7.25% 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 statutory contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2065. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2065, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.09%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

1% Decrease 6.09%	Current Single Discount Rate Assumption 7.09%	1% Increase 8.09%
$32,657,135,216	$27,103,519,942	$22,490,814,991

Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	66,609
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	24,404
Active Plan Members	62,844
Total Plan Members	153,857

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)

Purpose

The State Employees' Retirement System of Illinois, a State Agency, provides an orderly means whereby aged or disabled employees may be retired from active service without prejudice or hardship and enables the employees to accumulate reserves for old age, disability, death and termination of employment.

Administration

Responsibility for the operation of the System and the direction of its policies is vested in a Board of Trustees of seven members. The administration of the detailed affairs of the System is the responsibility of the Executive Secretary who is appointed by the Board of Trustees. Administrative policies and procedures are designed to ensure an accurate accounting of funds of the System and prompt payment of claims for benefits within the applicable statute.

Membership

All persons entering State service on or after January 1, 1984, become members upon completion of six months of continuous service except that, beginning July 1, 1991, employees in police positions become members on their first day of employment. Persons entering State service from January 1, 1972, to January 1, 1984, became members on their first day of employment. Excluded from membership are: any employee whose position is subject to membership under another State-supported system, any person who becomes an employee after June 30, 1979, as a public service employment program participant under the federal CETA program, or any enrollee of the Young Adult Conservation Corps. Prior to January 1, 1984, emergency and temporary employees were excluded from membership. Persons appointed by the Governor with the advice and consent of the Senate may elect to become members of the System. Other exceptions are identified in State law.

Membership Service

Membership service includes all service rendered while a member of the System for which credit is allowable. Persons entering service on or after January 1, 1984, or after July 1, 1982, in the case of emergency or temporary employees, may also receive membership service credit for periods of employment prior to membership by making contributions for such periods.

Member Contributions

Members are required to contribute a percentage of salary as their share of meeting the cost of the various benefits. Contribution rates are as shown below:

- Members covered by Social Security - 4.0 percent of Salary.
- Members not covered by Social Security - 8.0 percent of Salary.
- Members covered by Social Security who are serving in a position in which service toward the Alternative Retirement Annuity may be earned - 8.5 percent of Salary.
- Members not covered by Social Security who are serving in a position in which service toward the Alternative Retirement Annuity may be earned - 12.5 percent of Salary.

Members covered by Social Security also pay the current Social Security tax rate.

Credit for regular interest each fiscal year on a member's individual contribution account is computed on the accumulated balance in the account at the beginning of each fiscal year.

Retirement Pension

Qualification of Member

Upon termination of State service, a member is eligible for a pension at age 60 with at least eight years of pension credit or at any age with 35 or more years of credit.

General formula members are eligible for a retirement annuity if the sum of the member's age plus years (and whole months) of pension credit equals or exceeds 85. General formula members between ages 55 and 60 with at least 25 years of pension credit are eligible for a retirement annuity reduced by one-half of 1 percent for each month the member is under age 60. Certain positions in the Department of Corrections were placed under the general formula effective July 1, 2005.

Members serving in a position in which service toward the Alternative Retirement Annuity may be earned are eligible to receive the alternative retirement annuity at age 50 with at least 25 years of pension credit or at age 55 with at least 20 years of pension credit in such a position. Security employees of the Department of Human Services were placed under the alternative formula effective January 1, 2001. Certain members of the Department of Transportation and the Toll Highway Authority were placed under the alternative formula effective August 1, 2001.

Amount of Pension

The pension is based on the member's final average compensation and the number of years of pension credit that has been established.

Final Average Compensation is the average of the highest 48 consecutive months in the last 10 years. All employees whose benefit is calculated under the alternative formula will have their benefit based on the greater of (i) the salary rate in effect on their last day of service, provided the last day salary does not exceed 115 percent of the average monthly compensation received by the member for the last 24 months of service, or (ii) the average monthly compensation for the last 48 months prior to retirement.

The general formula for members retiring on or after January 1, 1998, (regardless of termination date) is as follows:

- 1.67 percent of final average salary per year of credited service for members covered by Social Security.

- 2.20 percent of final average salary per year of credited service for members not covered by Social Security.

The alternative formula for members retiring on or after January 1, 2001 (regardless of termination date) is as follows:

- 2.50 percent of final average salary per year of credited service for members covered by Social Security.

- 3.00 percent of final average salary per year of credited service for members not covered by Social Security.

The maximum pension payable is 75 percent of final average compensation for general formula members and 80 percent of final average compensation for alternative formula members.

Optional Forms of Payment

Reversionary Annuity—A member may elect to receive a smaller pension during his lifetime in order to provide a spouse or a designated dependent with a lifetime income. That payment would be in addition to any other benefit payable by the System.

Level Income—A member who contributes to Social Security as a State employee may elect to have his pension payments increased before Social Security Normal Retirement Age and reduced thereafter. To be eligible for this election the member must have established eligibility for a Social Security pension.

Annual Increases in Pension

Postretirement increases of 3.0 percent of the current pension (i.e., increases are compounded) are granted to members effective each January 1 occurring on or after the first anniversary of the pension.

Survivors Annuity

Qualification of Survivor

If death occurs while in State employment, the member must have established at least 18 months of pension credit. If death occurs after termination of State service and the member was not receiving a retirement pension, the member must have established at least eight years of pension credit.

An eligible spouse qualifies at age 50 or at any age if there is, in the care of the spouse, any unmarried children of the member under age 18 (age 22 if full-time student); unmarried children under age 18 (age 22 if full-time student) qualify if no spouse survives; dependent parents at age 50 qualify if neither an eligible spouse nor children survive the member.

Amount of Payment

If the member's death occurs before retirement, the named beneficiary receives a lump sum refund of all of the member's pension contributions plus interest, excluding contributions for widows and survivors benefits. A single lump sum payment of $1,000 is also made immediately to the survivor beneficiary of the member.

An eligible spouse receives a monthly annuity equal to 30 percent of the member's final average compensation subject to a maximum of $400. If children of the member are under the care of the spouse, the annuity is increased for each child, subject to a monthly maximum of $600 or 80 percent of final average compensation. If only eligible children survive, the monthly annuity may not exceed the lesser of $600 or 80 percent of final average compensation. The maximum combined monthly payment to parents may not exceed $400. If the member's death occurs after retirement or after termination of State employment but before the member receives a pension, the monthly benefit is further limited to 80 percent of the pension received or earned by the member. Monthly benefits payable to survivors of a member who was covered by Social Security as a State employee are reduced by one-half of the Social Security benefits for which the survivors are eligible. For benefits granted on or after January 1, 1992, the reduction may not exceed 50 percent of the amount of survivors annuity otherwise payable. If death of the member occurs on or after January 1, 1984, the minimum total survivors annuity benefit payable (before any reduction for Social Security benefits) is equal to 50 percent of the member's earned pension without regard to the member's age at death. Any member who retires on or after July 1, 2009, will have the option at the time of retirement to remove the offset provision. In exchange for the removal, SERS will reduce the member’s retirement annuity by 3.825 percent.

Duration of Payment

The monthly annuity payable to a spouse continues for his/her lifetime without regard to remarriage. The monthly annuity to children terminates upon death, marriage or attainment of age 18 (age 22 if full-time student). However, the monthly annuity will continue for a child who at age 18, is physically or mentally disabled and unable to accept gainful employment.

Annual Increases in Annuity

If the member's death occurs before retirement, increases of 3.0 percent of the current annuity are granted to survivors effective each January 1 occurring on or after the first anniversary of the annuity (i.e., increases are compounded). If the member's death occurs after retirement, the initial 3.0 percent increase applies on the January 1 on or after the survivor annuity begins.

Widow's Annuity Option

The widow of a male member who was a participant in the System prior to July 19, 1961, may have the option of taking a Widow's Annuity rather than the Survivor's Annuity.

Qualification of Widow

An eligible widow receives a Widow's Annuity if she is age 50 or over or has in her care any of the member's unmarried children under age 18. If she is not age 50 and has no such children in her care, she becomes eligible at age 50.

Amount of Payment

The Widow's Annuity consists of a lump sum payment of $500, plus a monthly annuity equal to 50 percent of the pension earned or received by the member at the date of death. If the widow has in her care eligible children of the member, the monthly annuity is increased because of each child, subject to a maximum payment equal to 66-2/3 percent of the earned pension. Monthly benefits payable to a widow of a member who was covered by Social Security as a State employee are reduced by one-half of the amount of benefits she is entitled to as a widow from Social Security (reduced by one-half of the amount of benefits she is entitled to based on her own Primary Insurance Amount). For benefits granted on or after January 1, 1992, the reduction may not exceed 50 percent of the amount of widow's annuity otherwise payable. Any member who retires on or after July 1, 2009, will have the option at the time of retirement to remove the offset provision. In exchange for the removal, SERS will reduce the member’s retirement annuity by 3.825 percent.

Duration of Payment

The monthly payment to the widow continues for her lifetime whether or not she remarries. If the amount of benefit was increased because of eligible children, it is adjusted downward as these children's benefits are terminated (death, marriage or attainment of age 18 or 22).

Annual Increases in Annuity

If the member's death occurs before retirement, increases of 3.0 percent of the current annuity are granted to widows effective each January 1 occurring on or after the first anniversary of the annuity (i.e., increases are compounded). If the member's death occurs after retirement, the initial 3.0 percent increase applies on the January 1 on or after the widow's annuity begins.

Occupational Death Benefit

Qualification of Survivors

If a member's death results from an injury on the job or a job related cause, the spouse may be eligible for an Occupational Death benefit. If only unmarried children under age 18 (age 22 if full-time student) survive, they would be eligible for the benefit. If neither a spouse nor eligible children survive, a dependent father or mother would be eligible.

Amount and Duration of Payment

The nominated beneficiary receives a lump sum payment consisting of all contributions made by the member plus interest credited to his account.

A surviving spouse is entitled to a monthly benefit equal to 50 percent of the member's final average compensation. The benefit is payable for the remaining lifetime of the spouse without regard to remarriage. If children under age 18 (age 22 if full-time student) also survive, the annuity is increased by 15 percent of such average because of each child, subject to a maximum of 75 percent. If there is no spouse, or if the spouse dies before all children have attained age 18 (age 22 if full-time student), each child receives a monthly allowance of 15 percent of final average compensation.

The combined payment to children may not exceed 50 percent of the member's final average compensation. Payments to or on account of children terminate upon their death, marriage or attainment of age 18 (age 22 if full-time student).

If there is no spouse or eligible children, a benefit of 25 percent of final average compensation is payable to each surviving dependent parent for life.

Annual Increases in Annuity

Increases of 3.0 percent of the current annuity are granted effective each January 1 occurring on or after the first anniversary of the annuity (i.e., increases are compounded).

Reductions

The monthly benefit is reduced by any payments awarded under the Workmen's Compensation or Occupational Diseases Acts.

Other Death Benefits

If the survivor beneficiaries of the member do not qualify for any of the previously described death benefits, one of the following benefits is payable to the nominated beneficiary on file with the System at the date of death.

Before Retirement

If the member's death occurred while in State service the benefit consists of: (1) a refund of all contributions plus interest credited to the member's account; and (2) a payment equal to one month's salary for each full year of pension credit not to exceed six month's salary. The minimum payment is equal to one month's salary.

If the member had terminated State service but not yet qualified for a pension, the benefit consists of a refund of all of the member's contributions to the System plus the interest credited to the member's account.

After Retirement

The benefit consists of a lump sum payment equal to the excess of contributions plus interest credited to the member's account over the total amount of pension payments made to the member. The minimum payment is $500.00.

Non-Occupational Disability Benefits

Qualification and Amount of Payment

Available to any member who has established at least one and one-half years of creditable service and who has been granted a disability leave of absence by his employing agency. The benefit is 50 percent of the member's final average compensation plus a credit to the member's account of service and contributions. It begins on the 31st day of absence from service on account of disability.

If the member has Social Security coverage as a State employee, the benefit payable by the System is reduced by the amount of any disability payment to which he is entitled under Social Security.

Duration of Payment

The member is eligible for the monthly benefit until the occurrence of any of the following events: (1) disability ceases; (2) resumption of gainful employment; (3) payments are made for a period of time equal to one-half of the service credit established as of the date disability began; or (4) attainment of age 65 if the benefit commences prior to age 60, or payment for 5 years if benefit commences after age 60.

If termination of the benefit is due to the member receiving benefits for a period of time equal to one-half of the service credit established at the date of disability, he shall be eligible for a retirement annuity if he has attained age 55 and has 15 years of service, or if he has attained age 50 and has 20 years of service.

Annual Increases in Annuity

A onetime increase of 7.0 percent of the original annuity is granted to members on the January 1 following the fourth anniversary of the annuity. Increases of 3.0 percent of the current annuity are then granted to members each January 1 following the 7.0 percent increase (i.e., the 3.0 percent increases are compounded).

Occupational Disability Benefit

Qualification and Amount of Payment

Provided for any member who becomes disabled as the direct result of injury or diseases arising out of and in the course of State employment.

The benefit is 75 percent of final average compensation plus a credit to the member's account of service and contributions. The cash benefit is reduced by any payment received under the Workmen's Compensation or Occupational Diseases Acts.

Duration of Payment

Monthly benefits are payable until the occurrence of any of the following events: (1) disability ceases; (2) resumption of gainful employment; or (3) attainment of age 65 if the benefit commences prior to age 60, or payment for 5 years if the benefit commences after age 60.

If termination of the benefit is due to the member having attained age 65 or having received benefits for five years after age 60, the member is entitled to a retirement pension based upon service credit established as of that date.

Annual Increases in Annuity

A one-time increase of 7.0 percent of the original annuity is granted to members on the January 1 following the fourth anniversary of the annuity. Increases of 3.0 percent of the current annuity are then granted to members each January 1 following the 7.0 percent increase (i.e., the 3.0 percent increases are compounded).

Temporary Disability Benefit

A member who is initially denied Workers' Compensation benefits and is appealing the denial may receive payment at the non-occupational rate, 50 percent of pay, providing all eligibility requirements for the non-occupational benefit are met, until the determination is made.

Separation Benefits

Upon termination of State employment by resignation, discharge, dismissal, or layoff, a member may obtain a refund of the contributions made to the System. By accepting a refund, a member forfeits all accrued rights and benefits in the System for himself and his beneficiaries.

Provisions Applicable to Members Hired after December 31, 2010, as a result of Public Act 96-0889

Final Average Compensation

Based on last eight years of service and may not exceed $106,800, as automatically increased by the lesser of 3 percent or one-half of the annual increase in the consumer price index-u during the preceding 12-month calendar year.

Retirement Eligibility – All Members Except State policemen, fire fighters in the fire protection service of a department, or security employees of the Department of Corrections or the Department of Juvenile Justice

Normal retirement – 67 years old with 10 years of service.

Early Retirement – 62 years old with 10 years of service with a 6.0 percent per year reduction in benefit for each year age is under 67.

Retirement Eligibility – State policemen, fire fighters in the fire protection service of a department, or security employees of the Department of Corrections or the Department of Juvenile Justice

Normal retirement – 60 years old with 20 years of service.

Annual Increases in Annuity

Annual increases begin at the later of the first anniversary of retirement or age 67. The annual increases are equal to the lesser of 3.0 percent or one-half of the annual increase in the consumer price index-u during the preceding 12-month calendar year and are not compounded.

Survivor Benefits

Benefit equal to 66.67 percent of the earned retirement benefit at death. Survivor benefits are increased by the lesser of 3.0 percent or one-half of the annual increase in the consumer price index-u during the preceding 12-month calendar year and are not compounded.

Miscellaneous

State policeman, a fire fighter in the fire protection service of a department, or a security employee of the Department of Corrections or the Department of Juvenile are still eligible for Alternate formula benefits as defined in section 14-110 of the Illinois Pension Code.

Salary and COLA Development for Members Hired on or After January 1, 2011

Year Ending	CPI-U	1/2 CPI-U	COLA	Maximum Annual Pensionable Earnings
2011			3.00%	$106,800.00
2012	3.90%	1.95%	1.95%	$108,882.60
2013	2.00%	1.00%	1.00%	$109,971.43
2014	1.20%	0.60%	0.60%	$110,631.26

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 Adopted June 30, 2014

Mortality

Post-Retirement Mortality

105 percent of the RP2014 Healthy Annuitant mortality table, sex distinct. No adjustment is made for post-disabled mortality. While a fully generational mortality table was considered as part of the most recent experience study, the mortality table used is a static table and provides an estimated margin of 20 percent for future mortality improvement.

Pre-Retirement Mortality, including terminated vested members prior to attaining age 50

Based on a percentage of 90 percent for males and 110 percent for females of the RP2014 Total Employee mortality table. Five percent of deaths among active employees are assumed to be in the performance of their duty.

Interest

7.25 percent per annum, compounded annually, net of investment expense.

General Inflation

3.00 percent per annum, compounded annually.

Marriage Assumption

85.0 percent of active male participants and 65.0 percent of active female participants are assumed to be married. Actual marital status at benefit commencement is used for retirees.

Social Security Offset for Survivor Benefits

No offset assumption for male surviving spouses because it is assumed their own PIA is as great as their spouses' PIA. Sixty percent of married male members are assumed to have a dual income household. For the dual income household, it is assumed the offset at age 60 is 45.0 percent of the original survivor benefit. It is assumed the offset at age 62 is 10.0 percent of the original survivor benefit. Furthermore, it is assumed that 50 percent of retirees on or after July 1, 2009, will elect to remove the offset provision. In exchange for the removal, the member's retirement annuity is reduced by 3.825 percent monthly as mandated by Statutes.

Termination

Illustrative rates of withdrawal from the plan are as follows:

Service Based Withdrawal				
	Regular Formula Employees		Alternate Formula Employees	
Service (Beginning of Year)	Males	Females	Males	Females
0	0.2300	0.2300	0.0325	0.0600
1	0.1200	0.1200	0.0325	0.0450
2	0.0950	0.0850	0.0325	0.0450
3	0.0700	0.0650	0.0200	0.0400
4	0.0625	0.0500	0.0175	0.0300
5	0.0425	0.0475	0.0175	0.0300
6	0.0425	0.0350	0.0175	0.0300
7	0.0350	0.0350	0.0175	0.0200
8	0.0300	0.0300	0.0150	0.0200
9	0.0250	0.0250	0.0150	0.0200
10	0.0250	0.0250	0.0150	0.0200
11	0.0200	0.0200	0.0125	0.0175
12	0.0200	0.0200	0.0125	0.0175
13	0.0200	0.0200	0.0100	0.0150
14	0.0150	0.0150	0.0100	0.0150
15	0.0150	0.0150	0.0100	0.0150
16	0.0150	0.0150	0.0100	0.0150
17	0.0150	0.0150	0.0100	0.0150
18	0.0150	0.0150	0.0100	0.0150
19	0.0150	0.0150	0.0100	0.0150
20	0.0150	0.0100	0.0100	0.0150
21	0.0150	0.0100	0.0100	0.0150
22	0.0150	0.0100	0.0100	0.0150
23	0.0150	0.0100	0.0100	0.0150
24	0.0150	0.0100	0.0100	0.0150
25	0.0150	0.0100	0.0100	0.0150
26	0.0150	0.0100	0.0100	0.0150
27	0.0150	0.0100	0.0100	0.0150
28	0.0150	0.0100	0.0100	0.0150
29	0.0150	0.0100	0.0100	0.0150
30+	0.0150	0.0100	0.0100	0.0150

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

Illustrative rates of increase per individual employee per annum, compounded annually:

Age	Annual Increase
25	7.92%
30	6.45%
35	5.55%
40	5.22%
45	4.83%
50	4.51%
55	4.30%
60	4.10%
65	3.72%
70	3.50%

These increases include a component for inflation of 3.0 percent per annum.

Disability

Because members who receive disability benefits typically spend less than one year on disability, they are considered active members. Therefore a load of 1.63 percent of pay on the normal cost is applied to reflect the near-term cash flow. This assumption is based on 110 percent of the most recent disability benefit payment information as a percent of payroll and will be updated at each valuation date as experience emerges.

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 an average pay as disclosed below. New entrants are assumed to have the same demographic profile as new entrants in the 15 years prior to the valuation date. The average increase in uncapped payroll for the projection period is 3.5 percent per annum.

	New Entrant Benefit Groups													
Age Group	New Entrants Eligible for Regular Formula Benefits that are Covered by Social Security		New Entrants Eligible for Regular Formula Benefits that are not Covered by Social Security		New Entrants in Postions Formerly Eligible for Alternate Formula Benefits that are Covered by Social Security that are now Eligible for Regular Formula Benefits		New Entrants Eligible for Alternate Formula Benefits that are Covered by Social Security		New Entrants in Postions Formerly Eligible for Alternate Formula Benefits that are Covered by Social Security that are now Eligible for Regular Formula Benefits		New Entrants Eligible for Alternate Formula Benefits that are not Covered by Social Security		Total	
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
Under 20	97	2,938,393			11	526,038	23	1,012,785			1	36,684	132	4,513,900
20-24	2,240	87,655,113	8	294,269	442	22,466,925	1,032	51,188,357	59	3,347,145	260	15,359,006	4,041	180,310,815
25-29	3,642	165,376,585	23	1,156,937	568	30,522,854	1,235	65,701,065	117	7,269,226	390	23,534,952	5,975	293,561,619
30-34	3,141	157,821,736	24	1,267,052	481	28,522,007	856	49,632,449	82	5,251,346	169	11,074,334	4,753	253,568,924
35-39	2,840	148,895,792	14	681,212	427	25,853,842	629	38,113,444	49	3,260,917	47	3,143,122	4,006	219,948,329
40-44	2,799	152,993,652	20	1,104,247	388	23,923,409	469	29,576,244	26	1,695,610	8	504,071	3,710	209,797,233
45-49	2,377	132,688,486	13	737,034	329	20,689,787	330	21,599,705	13	815,786	5	347,765	3,067	176,878,563
50-54	1,911	107,199,526	11	586,975	246	16,242,542	170	11,652,962	14	1,052,000	1	21,307	2,353	136,755,312
55-59	1,157	64,492,603	16	983,901	138	9,186,077	60	4,074,142	8	611,643			1,379	79,348,366
60-64	408	21,771,708	4	288,140	44	2,736,313	19	1,454,434	3	227,255			478	26,477,850
65-69	34	2,224,565			5	277,821	1	77,637					40	2,580,023
70 & Over														
Total	20,646	$ 1,044,058,159	133	$ 7,099,767	3,079	$ 180,947,615	4,824	$ 274,083,224	371	$ 23,530,928	881	$ 54,021,241	29,934	$ 1,583,740,934
Avg. Salary		$ 50,570		$ 53,382		$ 58,768		$ 56,817		$ 63,426		$ 61,318		$ 52,908
Avg. Age		37.62		39.61		36.33		32.22		32.27		27.46		36.26

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 for Regular Formula Employees		
	Males	Females
50	15.00%	25.00%
51	15.00%	25.00%
52	25.00%	30.00%
53	25.00%	25.00%
54	20.00%	20.00%
55	17.50%	16.00%
56	17.50%	16.00%
57	15.00%	16.00%
58	15.00%	16.00%
59	15.00%	16.00%
60	10.00%	16.00%
61	10.00%	12.50%
62	20.00%	20.00%
63	17.50%	17.50%
64	15.00%	17.50%
65	20.00%	25.00%
66	25.00%	20.00%
67	20.00%	20.00%
68	20.00%	20.00%
69	17.50%	20.00%
70	17.50%	20.00%
71	17.50%	15.00%
72	15.00%	20.00%
73	17.50%	20.00%
74	20.00%	20.00%
75	100.00%	100.00%

Early Retirement Rates for Regular Formula Employees		
Age	Males	Females
55	4.50%	4.50%
56	6.00%	4.00%
57	5.00%	7.00%
58	7.50%	9.50%
59	9.50%	12.00%

Retirement Rates for Alternate Formula Employees				
	Eligible for Alternate Formula Benefits Only		Eligible for Regular Formula Benefits Only	
Age	Males	Females	Males	Females
50	60.00%	40.00%	N/A	N/A
51	45.00%	40.00%	N/A	N/A
52	45.00%	35.00%	N/A	N/A
53	40.00%	30.00%	N/A	N/A
54	40.00%	25.00%	N/A	N/A
55	35.00%	30.00%	N/A	N/A
56	35.00%	25.00%	N/A	N/A
57	27.50%	20.00%	N/A	N/A
58	30.00%	20.00%	N/A	N/A
59	25.00%	25.00%	N/A	N/A
60	30.00%	30.00%	5.00%	8.00%
61	25.00%	20.00%	5.00%	8.00%
62	45.00%	45.00%	10.00%	8.00%
63	40.00%	35.00%	10.00%	12.50%
64	30.00%	40.00%	10.00%	12.50%
65	55.00%	40.00%	20.00%	17.50%
66	50.00%	60.00%	20.00%	15.00%
67	50.00%	50.00%	20.00%	40.00%
68	30.00%	15.00%	17.50%	30.00%
69	35.00%	35.00%	17.50%	20.00%
70	50.00%	60.00%	17.50%	25.00%
71	30.00%	50.00%	17.50%	30.00%
72	100.00%	100.00%	100.00%	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 SERS 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 three years younger than the male spouse.

Children

It is assumed that married members have 2.2 children, one year apart in age.

The age of the youngest child of a deceased employee at his date of death is assumed to be as follows:

Age at Death of Employee	Age of Youngest Child	Age at Death of Employee	Age of Youngest Child
20	2	40	6
25	3	45	8
30	4	50	10
35	5	55	12
		60	14

Overtime and Shift Differentials

Reported earnings include base pay alone. It is assumed that overtime and shift differentials will increase total payroll by 3.5 percent over reported earnings.

Load for Inactive Members Eligible for Deferred Vested Pension Benefits

Load of 15 percent to the liability attributable to inactive members eligible for deferred vested pension benefits for increase in final average salary due to participation in a reciprocal system after termination.

Missing Data

If year-to-date earnings were not available, then the monthly pay rate is used. If both year-to-date earnings and the monthly pay rate are not available, the annual rate of pay is assumed to be the rate of pay for the population as a whole on the valuation date. For members with less than a year of service, the annual rate of pay is based on the greater of year-to-date earnings or annualized pay rate. If a birth date was not available, the member was assumed to be age 35.

Decrement Timing

All decrements are assumed to occur mid-year.

Decrement Relativity

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Decrement Operation

Disability and 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 Adopted June 30, 2014

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.

Members hired after December 31, 2010, eligible for the regular formula benefits will retire according to the following age-based retirement rates:

Retirement Rates for Regular Formula Employees			
Age	Employees Eligible For Normal Retirement	Age	Employees Eligible For Early Retirement
67	50.00%	62	30.00%
68	35.00%	63	15.00%
69	35.00%	64	15.00%
70	35.00%	65	15.00%
71	20.00%	66	15.00%
72	20.00%		
73	20.00%		
74	20.00%		
75	100.00%		

Members hired after December 31, 2010, eligible for the alternate formula benefits will retire according to the following age-based retirement rates:

Retirement Rates for Alternate Formula Employees		
Age	Males	Females
60	50.00%	50.00%
61	25.00%	20.00%
62	45.00%	45.00%
63	40.00%	35.00%
64	30.00%	40.00%
65	55.00%	40.00%
66	50.00%	60.00%
67	50.00%	50.00%
68	30.00%	15.00%
69	35.00%	35.00%
70	50.00%	60.00%
71	30.00%	50.00%
72	100.00%	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 5/14-108.3 (f)-(g):

> (f) The System shall determine the amount of the increase in the present value of future benefits resulting from the granting of early retirement incentives under this Section and shall report that amount to the Governor and the Commission on Government Forecasting and Accountability on or after the effective date of this amendatory Act of the 93rd General Assembly and on or before November 15, 2004. Beginning with State fiscal year 2008, the increase reported under this subsection (f) shall be included in the calculation of the required State contribution under Section 14-131.
>
> (g) In addition to the contributions otherwise required under this Article, the State shall appropriate and pay to the System an amount equal to $70,000,000 in State fiscal years 2004 and 2005.

State Contributions under P.A. 96-0043

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/14-131:

> (g) 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 five-year period following that fiscal year.
>
> (h) 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.

Following the above legislation we have calculated the required contribution and the results are shown in the summary section of this report.

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 7.25%; the municipal bond rate is 4.29%; and the resulting single discount rate is 7.09%.

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 statutory 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. After 2045, the State makes a contribution such that the funded status remains at 90%. 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	$ 4,416,152,691					
2015	4,379,940,710	$ 238,441,961	$ 590,909,587	$ 1,157,520,413	$ 1,986,871,961	$ 21,054,348
2016	4,257,193,014	242,584,612	566,778,200	1,461,939,688	2,271,302,501	21,345,997
2017	4,134,573,726	236,189,923	550,487,197	1,485,693,575	2,272,370,695	20,747,776
2018	4,014,352,224	229,615,575	533,993,569	1,524,604,305	2,288,213,449	20,150,181
2019	3,885,210,252	223,182,380	516,368,477	1,556,717,591	2,296,268,447	19,564,272
2020	3,754,908,753	215,987,312	497,905,346	1,593,963,645	2,307,856,303	18,934,888
2021	3,615,002,380	208,684,696	478,178,354	1,650,595,612	2,337,458,661	18,299,853
2022	3,463,133,043	200,640,909	456,339,106	1,710,382,177	2,367,362,192	17,618,008
2023	3,309,950,051	191,560,250	433,538,500	1,771,746,272	2,396,845,022	16,877,860
2024	3,143,561,535	182,382,721	409,016,958	1,833,015,572	2,424,415,251	16,131,311
2025	2,977,039,884	172,111,598	383,374,047	1,897,398,952	2,452,884,597	15,320,403
2026	2,813,698,417	161,621,236	357,934,387	1,969,859,956	2,489,415,579	14,508,846
2027	2,646,003,768	151,346,888	332,112,760	2,046,337,234	2,529,796,882	13,712,788
2028	2,493,602,058	140,709,896	307,987,058	2,118,863,230	2,567,560,183	12,895,514
2029	2,344,917,342	131,369,778	285,453,342	2,196,630,880	2,613,454,000	12,152,772
2030	2,200,579,384	122,380,084	264,048,146	2,271,668,790	2,658,097,020	11,428,145
2031	2,055,628,815	113,901,016	243,121,806	2,349,816,503	2,706,839,324	10,724,703
2032	1,909,541,206	105,373,256	221,936,455	2,435,484,275	2,762,793,987	10,018,274
2033	1,771,546,016	96,572,031	201,902,397	2,525,981,970	2,824,456,399	9,306,304
2034	1,636,702,258	88,547,507	182,829,297	2,821,661,159	3,093,037,963	8,633,774
2035	1,503,261,311	80,756,647	163,917,171	2,914,565,798	3,159,239,616	7,976,601
2036	1,366,213,612	73,010,356	144,397,984	3,008,111,780	3,225,520,120	7,326,266
2037	1,240,231,243	64,909,225	125,918,554	3,099,915,855	3,290,743,635	6,658,353
2038	1,122,429,030	57,736,716	109,182,105	3,191,981,112	3,358,899,932	6,044,368
2039	1,015,357,610	51,212,180	94,327,047	3,283,745,336	3,429,284,564	5,470,249
2040	917,114,205	45,531,593	81,220,026	3,375,634,675	3,502,386,293	4,948,428
2041	828,099,561	40,488,063	69,867,520	3,467,207,771	3,577,563,354	4,469,631
2042	748,932,710	36,132,473	60,332,714	3,558,712,980	3,655,178,167	4,035,811
2043	678,473,660	32,459,543	52,287,279	3,650,571,019	3,735,317,841	3,649,984
2044	613,807,579	29,261,580	45,368,131	3,742,689,128	3,817,318,839	3,306,597
2045	554,116,737	26,358,075	39,351,777	3,834,599,975	3,900,309,827	2,991,441
2046	497,234,802	23,686,801	34,024,531	552,594,082	610,305,415	2,700,533
2047	443,600,278	21,144,539	29,317,772	563,689,770	614,152,082	2,423,314
2048	392,500,422	18,773,794	25,118,882	572,764,858	616,657,535	2,161,922
2049	342,520,369	16,487,490	21,360,626	581,475,626	619,323,743	1,912,883
2050	295,206,211	14,270,901	17,997,470	589,722,469	621,990,841	1,669,301
2051	250,471,191	12,219,466	14,982,893	597,503,248	624,705,608	1,438,711
2052	208,666,363	10,311,546	12,308,485	604,661,269	627,281,300	1,220,692
2053	170,941,549	8,556,347	9,970,851	611,186,966	629,714,164	1,016,952
2054	137,395,975	6,983,451	7,963,657	617,159,147	632,106,254	833,098
2055	108,156,431	5,597,510	6,244,335	622,594,469	634,436,314	669,610
2056	83,066,159	4,395,876	4,796,905	627,498,171	636,690,953	527,109
2057	61,978,606	3,370,040	3,602,768	631,888,416	638,861,224	404,830
2058	45,165,104	2,510,975	2,646,695	635,874,596	641,032,267	302,058
2059	32,549,931	1,826,460	1,915,092	639,584,567	643,326,120	220,116
2060	22,980,807	1,315,638	1,353,554	643,122,702	645,791,894	158,635
2061	15,802,684	928,151	927,708	646,557,649	648,413,509	111,999
2062	10,386,260	637,710	608,999	649,965,786	651,212,495	77,016
2063	6,578,548	418,923	379,648	653,441,731	654,240,302	50,618
2064	4,159,615	265,059	233,288	657,075,178	657,573,524	32,061

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

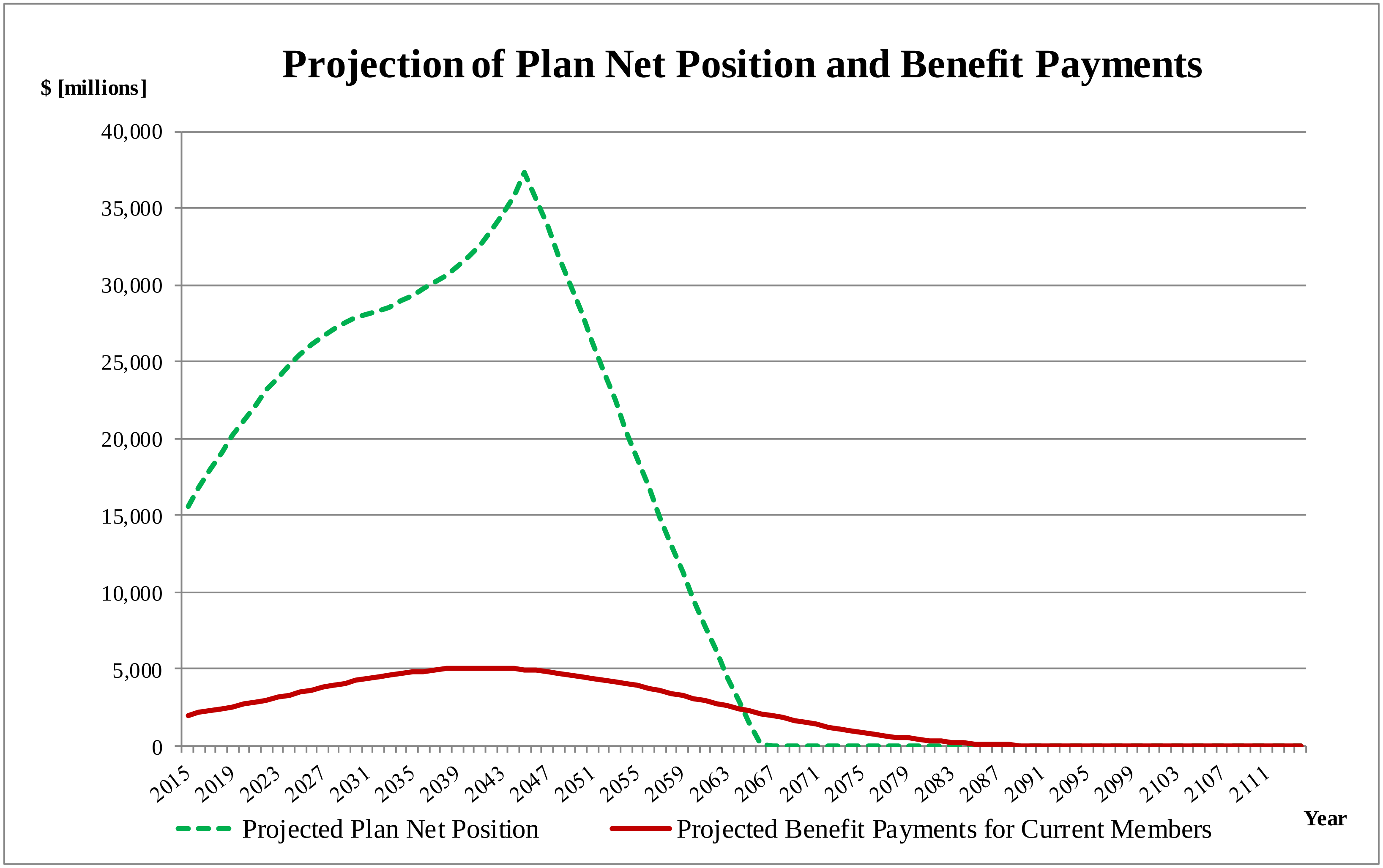
Year Ended	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.25%
	(a)	(b)	(c)	(d)	(e)
2015	$ 14,581,566,241	$ 1,986,871,961	$ 2,029,351,292	$ 21,054,348	$ 1,054,900,752
2016	15,572,933,314	2,271,302,501	2,160,887,411	21,345,997	1,132,209,929
2017	16,794,212,335	2,272,370,695	2,292,247,160	20,747,776	1,216,133,531
2018	17,969,721,625	2,288,213,449	2,428,028,814	20,150,181	1,297,107,524
2019	19,106,863,603	2,296,268,447	2,567,252,712	19,564,272	1,374,899,505
2020	20,191,214,571	2,307,856,303	2,712,234,895	18,934,888	1,448,786,426
2021	21,216,687,517	2,337,458,661	2,860,462,437	18,299,853	1,518,930,905
2022	22,194,314,793	2,367,362,192	3,013,696,889	17,618,008	1,585,440,643
2023	23,115,802,732	2,396,845,022	3,171,749,472	16,877,860	1,647,695,770
2024	23,971,716,192	2,424,415,251	3,332,484,103	16,131,311	1,705,033,334
2025	24,752,549,362	2,452,884,597	3,491,505,155	15,320,403	1,757,022,922
2026	25,455,631,323	2,489,415,579	3,652,773,364	14,508,846	1,803,582,657
2027	26,081,347,349	2,529,796,882	3,811,987,330	13,712,788	1,844,743,106
2028	26,630,187,219	2,567,560,183	3,964,439,396	12,895,514	1,880,478,377
2029	27,100,890,868	2,613,454,000	4,107,846,959	12,152,772	1,911,157,818
2030	27,505,502,956	2,658,097,020	4,243,408,575	11,428,145	1,937,279,868
2031	27,846,043,124	2,706,839,324	4,371,927,315	10,724,703	1,959,152,786
2032	28,129,383,216	2,762,793,987	4,494,445,905	10,018,274	1,977,349,378
2033	28,365,062,401	2,824,456,399	4,606,920,793	9,306,304	1,992,651,751
2034	28,565,943,454	3,093,037,963	4,707,677,741	8,633,774	2,013,216,781
2035	28,955,886,684	3,159,239,616	4,798,559,836	7,976,601	2,040,632,058
2036	29,349,221,921	3,225,520,120	4,881,425,212	7,326,266	2,068,581,342
2037	29,754,571,905	3,290,743,635	4,952,597,005	6,658,353	2,097,781,152
2038	30,183,841,333	3,358,899,932	5,008,347,114	6,044,368	2,129,366,909
2039	30,657,716,693	3,429,284,564	5,048,352,239	5,470,249	2,164,825,309
2040	31,198,004,077	3,502,386,293	5,072,563,601	4,948,428	2,205,755,997
2041	31,828,634,339	3,577,563,354	5,080,521,921	4,469,631	2,253,887,790
2042	32,575,093,932	3,655,178,167	5,072,035,514	4,035,811	2,311,088,122
2043	33,465,288,897	3,735,317,841	5,047,798,457	3,649,984	2,379,358,455
2044	34,528,516,751	3,817,318,839	5,009,397,333	3,306,597	2,460,742,917
2045	35,793,874,578	3,900,309,827	4,958,455,502	2,991,441	2,557,262,703
2046	37,290,000,164	610,305,415	4,896,043,480	2,700,533	2,550,789,017
2047	35,552,350,583	614,152,082	4,822,872,905	2,423,314	2,427,562,323
2048	33,768,768,769	616,657,535	4,739,534,197	2,161,922	2,301,319,356
2049	31,945,049,540	619,323,743	4,646,792,488	1,912,883	2,172,506,607
2050	30,088,174,520	621,990,841	4,545,006,038	1,669,301	2,041,612,036
2051	28,205,102,057	624,705,608	4,434,278,412	1,438,711	1,909,137,832
2052	26,303,228,373	627,281,300	4,314,811,564	1,220,692	1,775,606,393
2053	24,390,083,810	629,714,164	4,187,356,476	1,016,952	1,641,536,726
2054	22,472,961,271	632,106,254	4,052,852,852	833,098	1,507,427,535
2055	20,558,809,110	634,436,314	3,912,012,617	669,610	1,373,756,445
2056	18,654,319,641	636,690,953	3,765,378,835	527,109	1,240,988,807
2057	16,766,093,458	638,861,224	3,613,488,865	404,830	1,109,583,737
2058	14,900,644,724	641,032,267	3,456,965,373	302,058	979,994,390
2059	13,064,403,951	643,326,120	3,296,458,543	220,116	852,668,122
2060	11,263,719,533	645,791,894	3,132,930,305	158,635	728,032,694
2061	9,504,455,182	648,413,509	2,967,498,386	111,999	606,473,044
2062	7,791,731,351	651,212,495	2,801,147,709	77,016	488,326,206
2063	6,130,045,326	654,240,302	2,634,740,961	50,618	373,889,449
2064	4,523,383,498	657,573,524	2,469,011,356	32,061	263,428,429

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	$ 14,581,566,241	$ 2,029,351,292	$ 2,029,351,292	$ -	$ 1,959,560,073	$ -
2016	15,572,933,314	2,160,887,411	2,160,887,411	-	1,945,522,188	-
2017	16,794,212,335	2,292,247,160	2,292,247,160	-	1,924,279,668	-
2018	17,969,721,625	2,428,028,814	2,428,028,814	-	1,900,479,911	-
2019	19,106,863,603	2,567,252,712	2,567,252,712	-	1,873,616,781	-
2020	20,191,214,571	2,712,234,895	2,712,234,895	-	1,845,619,391	-
2021	21,216,687,517	2,860,462,437	2,860,462,437	-	1,814,904,567	-
2022	22,194,314,793	3,013,696,889	3,013,696,889	-	1,782,870,559	-
2023	23,115,802,732	3,171,749,472	3,171,749,472	-	1,749,531,712	-
2024	23,971,716,192	3,332,484,103	3,332,484,103	-	1,713,932,556	-
2025	24,752,549,362	3,491,505,155	3,491,505,155	-	1,674,329,884	-
2026	25,455,631,323	3,652,773,364	3,652,773,364	-	1,633,254,139	-
2027	26,081,347,349	3,811,987,330	3,811,987,330	-	1,589,224,266	-
2028	26,630,187,219	3,964,439,396	3,964,439,396	-	1,541,055,294	-
2029	27,100,890,868	4,107,846,959	4,107,846,959	-	1,488,858,391	-
2030	27,505,502,956	4,243,408,575	4,243,408,575	-	1,434,024,880	-
2031	27,846,043,124	4,371,927,315	4,371,927,315	-	1,377,582,030	-
2032	28,129,383,216	4,494,445,905	4,494,445,905	-	1,320,454,353	-
2033	28,365,062,401	4,606,920,793	4,606,920,793	-	1,262,003,849	-
2034	28,565,943,454	4,707,677,741	4,707,677,741	-	1,202,428,771	-
2035	28,955,886,684	4,798,559,836	4,798,559,836	-	1,142,789,515	-
2036	29,349,221,921	4,881,425,212	4,881,425,212	-	1,083,938,573	-
2037	29,754,571,905	4,952,597,005	4,952,597,005	-	1,025,400,964	-
2038	30,183,841,333	5,008,347,114	5,008,347,114	-	966,847,215	-
2039	30,657,716,693	5,048,352,239	5,048,352,239	-	908,690,062	-
2040	31,198,004,077	5,072,563,601	5,072,563,601	-	851,326,847	-
2041	31,828,634,339	5,080,521,921	5,080,521,921	-	795,023,300	-
2042	32,575,093,932	5,072,035,514	5,072,035,514	-	740,042,246	-
2043	33,465,288,897	5,047,798,457	5,047,798,457	-	686,718,792	-
2044	34,528,516,751	5,009,397,333	5,009,397,333	-	635,426,181	-
2045	35,793,874,578	4,958,455,502	4,958,455,502	-	586,446,966	-
2046	37,290,000,164	4,896,043,480	4,896,043,480	-	539,921,086	-
2047	35,552,350,583	4,822,872,905	4,822,872,905	-	495,899,350	-
2048	33,768,768,769	4,739,534,197	4,739,534,197	-	454,387,193	-
2049	31,945,049,540	4,646,792,488	4,646,792,488	-	415,380,781	-
2050	30,088,174,520	4,545,006,038	4,545,006,038	-	378,817,719	-
2051	28,205,102,057	4,434,278,412	4,434,278,412	-	344,604,922	-
2052	26,303,228,373	4,314,811,564	4,314,811,564	-	312,653,325	-
2053	24,390,083,810	4,187,356,476	4,187,356,476	-	282,907,103	-
2054	22,472,961,271	4,052,852,852	4,052,852,852	-	255,309,780	-
2055	20,558,809,110	3,912,012,617	3,912,012,617	-	229,778,591	-
2056	18,654,319,641	3,765,378,835	3,765,378,835	-	206,215,208	-
2057	16,766,093,458	3,613,488,865	3,613,488,865	-	184,519,145	-
2058	14,900,644,724	3,456,965,373	3,456,965,373	-	164,593,410	-
2059	13,064,403,951	3,296,458,543	3,296,458,543	-	146,341,577	-
2060	11,263,719,533	3,132,930,305	3,132,930,305	-	129,680,162	-
2061	9,504,455,182	2,967,498,386	2,967,498,386	-	114,529,141	-
2062	7,791,731,351	2,801,147,709	2,801,147,709	-	100,800,856	-
2063	6,130,045,326	2,634,740,961	2,634,740,961	-	88,403,372	-
2064	4,523,383,498	2,469,011,356	2,469,011,356	-	77,242,566	-

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	$ 2,975,342,035	$ 2,304,800,794	$ 2,304,800,794	$ -	$ 67,231,020	$ -
2066	1,488,964,957	2,142,961,308	2,142,961,308	-	58,284,535	-
2067	66,675,439	1,984,184,175	736,573,463	1,247,610,712	18,679,179	137,511,511
2068	-	1,829,128,486	-	1,829,128,486	-	193,313,197
2069	-	1,678,422,266	-	1,678,422,266	-	170,088,854
2070	-	1,532,618,397	-	1,532,618,397	-	148,924,445
2071	-	1,392,208,747	-	1,392,208,747	-	129,716,029
2072	-	1,257,649,791	-	1,257,649,791	-	112,358,606
2073	-	1,129,374,114	-	1,129,374,114	-	96,747,953
2074	-	1,007,776,061	-	1,007,776,061	-	82,779,981
2075	-	893,187,073	-	893,187,073	-	70,349,505
2076	-	785,887,966	-	785,887,966	-	59,352,168
2077	-	686,105,087	-	686,105,087	-	49,684,843
2078	-	594,006,734	-	594,006,734	-	41,246,014
2079	-	509,695,740	-	509,695,740	-	33,935,867
2080	-	433,201,778	-	433,201,778	-	27,656,391
2081	-	364,473,151	-	364,473,151	-	22,311,469
2082	-	303,369,750	-	303,369,750	-	17,807,060
2083	-	249,659,326	-	249,659,326	-	14,051,577
2084	-	203,016,818	-	203,016,818	-	10,956,368
2085	-	163,030,148	-	163,030,148	-	8,436,453
2086	-	129,212,432	-	129,212,432	-	6,411,410
2087	-	101,017,609	-	101,017,609	-	4,806,221
2088	-	77,859,400	-	77,859,400	-	3,552,017
2089	-	59,131,810	-	59,131,810	-	2,586,678
2090	-	44,229,635	-	44,229,635	-	1,855,205
2091	-	32,567,539	-	32,567,539	-	1,309,848
2092	-	23,596,337	-	23,596,337	-	909,993
2093	-	16,815,564	-	16,815,564	-	621,816
2094	-	11,781,819	-	11,781,819	-	417,754
2095	-	8,112,970	-	8,112,970	-	275,832
2096	-	5,488,470	-	5,488,470	-	178,926
2097	-	3,646,431	-	3,646,431	-	113,985
2098	-	2,378,348	-	2,378,348	-	71,287
2099	-	1,522,369	-	1,522,369	-	43,754
2100	-	955,973	-	955,973	-	26,345
2101	-	588,702	-	588,702	-	15,556
2102	-	355,399	-	355,399	-	9,005
2103	-	210,252	-	210,252	-	5,108
2104	-	121,840	-	121,840	-	2,838
2105	-	69,133	-	69,133	-	1,544
2106	-	38,395	-	38,395	-	822
2107	-	20,870	-	20,870	-	429
2108	-	11,094	-	11,094	-	218
2109	-	5,751	-	5,751	-	109
2110	-	2,912	-	2,912	-	53
2111	-	1,434	-	1,434	-	25
2112	-	682	-	682	-	11
2113	-	315	-	315	-	5
2114	-	-	-	-	-	-
				Totals	$ 47,522,363,949	$ 1,450,445,089



Projection of Plan Net Position and Benefit Payments
$ [millions]
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
2015
2019
2023
2027
2031
2035
2039
2043
2047
2051
2055
2059
2063
2067
2071
2075
2079
2083
2087
2091
2095
2099
2103
2107
2111
Year
Projected Plan Net Position
Projected Benefit Payments for Current Members

SECTION 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 Inflows and Outflows The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.

Deferred Retirement Option Program (DROP) A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.

Discount Rate For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period and;
2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

GLOSSARY OF TERMS

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

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

Fiduciary Net Position The fiduciary net position is the 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.