

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS
ANNUAL ACTUARIAL VALUATION AS OF JUNE 30, 2015



October 16, 2015

Board of Trustees
State Employees' Retirement System of Illinois
Springfield, IL

Re: State Employees' Retirement System Actuarial Valuation as of June 30, 2015

Dear Board Members:

The results of the June 30, 2015, Annual Actuarial Valuation of the State Employees' Retirement System ("SERS" or "System") are presented in this report. The purposes of the valuation were to measure the System's funding status and to determine the employer contribution rate for the fiscal year beginning July 1, 2016, and ending June 30, 2017.

The valuation was based upon information furnished by SERS staff concerning System benefits, financial transactions, and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data.

The contribution rate has been determined under Illinois statutes, in particular under 40 ILCS Section 5/14-131. Due to the court ruling recent pension reform unconstitutional, this valuation does not reflect the provisions of Public Act 98-0599. This valuation also provides historical information through fiscal year 2014 as required by the Governmental Accounting Standards Board ("GASB") Statements Nos. 25 and 27. Information required by GASB Statements Nos. 67 and 68 is provided in a separate report. The System's current contribution rate determined under the statutory funding policy may not conform to the Actuarial Standards of Practice. Therefore, the Board adopted an actuarial funding policy to be used to calculate the Actuarial Determined Contribution ("ADC") under GASB Statements Nos. 67 and 68 for financial reporting purposes.

Although the statutory contribution requirements were met, the statutory funding method generates a contribution requirement that is less than a reasonable actuarially determined contribution. Meeting the statutory requirement does not mean that the undersigned agree that adequate actuarial funding has been achieved. We recommend the adherence to a funding policy, such as the Board policy used to calculate the ADC under GASB Statements Nos. 67 and 68, that funds the normal cost of the plan as well as an amortization payment that seeks to pay off any unfunded accrued liability over a closed period of 25 years.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of SERS as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Alex Rivera, David Kausch and Paul Wood are Members of the American Academy of Actuaries and are independent of the plan sponsor and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company



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Additional Disclosures Required by Actuarial Standards of Practice

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

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SECTION A
INTRODUCTION

Introduction

The law governing the State Employees' Retirement System ("SERS" or "System") requires the Actuary, as the technical advisor to the Board of Trustees to:

“...make an annual valuation of the liabilities and reserves of the System, make an annual determination of the amount of contributions required from the State under this Article, and certify the results thereof to the board. (40 ILCS Section 5/14 - 138(c)).”

Gabriel, Roeder, Smith & Company has been retained by the Board of Trustees to perform an actuarial valuation as of June 30, 2015. In this report, we present the results of the valuation and the appropriation requirements under Public Act 88-0593, Public Act 93-0002, Public Act 93-0839, Public Act 94-0004, and Public Act 96-0043 for fiscal year ending June 30, 2017. Effective with fiscal year ending June 30, 2014, GASB Statement No. 67 replaced GASB Statement No. 25 for pension plan financial reporting requirements. Effective with fiscal year ending June 30, 2015, GASB Statement No. 68 is replacing GASB Statement No. 27 for employer financial reporting. Information required by GASB Statements Nos. 67 and 68 is provided in a separate report. This report also provides historical information through June 30, 2014, as required by GASB Statements Nos. 25 and 27.

The valuation was completed based upon membership and financial data provided by the administrative staff of the System. The actuarial assumptions used were based on an experience review for the four-year period ending June 30, 2013, and were adopted for use commencing with the June 30, 2014, valuation. The cost method used to determine the benefit liabilities is the Projected Unit Credit Cost Method. For valuation purposes, as well as projection purposes, actuarial value of assets are based on a 5-year smoothing method.

Changes Since Last Valuation

Legislative Changes

The following Public Act was passed in fiscal year 2015 that affected SERS.

Public Act 98-1117 – Effective August 26, 2014, provides guidelines to implement a participant's correct benefit amount in the event of the System mistakenly setting an incorrect benefit amount, requires adopted actuarial tables to be used to determine all benefits payable by the System, and states that upon plan termination, a participant's interest in the pension fund will be non-forfeitable.

This valuation reflects the provisions of Public Act 98-1117.

Public Act 99-0232 was passed in fiscal year 2016, became effective August 3, 2015, and provides that the five state retirement systems shall conduct an actuarial experience study at least once every

three years, as opposed to the prior law which required such studies to occur at least once every five years.

On November 21, 2014, Public Act 98-0599 was ruled unconstitutional and void in its entirety by the Circuit Court. Thus, this valuation does not reflect the provisions of Public Act 98-0599.

A summary of the plan provisions are included in Section G of this report.

Assumptions and Methods

The assumptions and methods used are consistent with those used in the previous valuation and are based on the experience study of the State Employees' Retirement System performed for the period from July 1, 2009, to June 30, 2013. There were no changes to the assumptions or methods for the valuation as of June 30, 2015.

On the following page is a summary of the key valuation results for the current and prior plan years.

Key Valuation Results

Valuation Date:	June 30, 2015	June 30, 2014
Fiscal Year Ending:	June 30, 2017	June 30, 2016
Estimated Statutory Contributions:		
• Annual Amount	\$ 2,014,461,000	\$ 2,044,877,000
• Percentage of Projected Capped Payroll for Fiscal Year	42.805%	43.880%
Actuarial Determined Contribution* (ADC):		
• Annual Amount	\$ 2,388,509,050	\$ 2,196,833,656
• Percentage of Projected Capped Payroll for Fiscal Year	50.753%	47.141%
Membership		
• Number of		
- Active Members	63,273	62,844
- Members Receiving Payments	67,954	66,609
- Members Eligible for Deferred Benefits	232	225
- Total	131,459	129,678
• Covered Payroll	\$ 4,453,683,664	\$ 4,416,152,691
• Annualized Benefit Payments	\$ 2,069,298,446	\$ 1,948,949,432
Assets		
• Market Value of Assets (MVA)	\$ 15,258,866,572	\$ 14,581,566,241
• Actuarial Value of Assets (AVA)	\$ 14,741,736,065	\$ 13,315,612,735
• Return on MVA	4.67%	17.49%
• Return on AVA	10.74%	12.00%
• Ratio – AVA to MVA	96.61%	91.32%
Actuarial Information		
• Normal Cost Amount	\$ 654,616,726	\$ 686,207,638
• Actuarial Accrued Liability (AAL)	\$ 40,743,410,217	\$ 39,526,844,967
• Unfunded Actuarial Accrued Liability (UAAL)	\$ 26,001,674,152	\$ 26,211,232,232
• Funded Ratio based on AVA	36.18%	33.69%
• UAAL as % of Covered Payroll	583.82%	593.53%
• Funded Ratio based on MVA	37.45%	36.89%

**For fiscal year ending June 30, 2016, the Annual Required Contribution (ARC) under GASB Statements Nos. 25 and 27 was determined based on a 30-year level percent of capped payroll amortization policy. The ARC is no longer applicable to the current accounting requirements found in GASB Statements Nos. 67 and 68. Thus, the Board adopted a recommended policy used to develop the Actuarially Determined Contribution (ADC) as defined in GASB Statements Nos. 67 and 68 for fiscal years ending on and after June 30, 2017. The policy adopted by the Board calculates the ADC as the Normal Cost plus a 25-year level percent of capped payroll closed-period amortization of the Unfunded Accrued Liability as of June 30, 2015. The ADC is used for financial reporting purposes only.*

Appropriation Requirements Under P.A. 88-0593, P.A. 93-0002, P.A. 93-0839, P.A. 94-0004 and P.A. 96-0043

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.

The above calculation provides the basis for calculating the appropriation requirements under P.A. 93-0002. For fiscal years 2005 and later, the contributions under P.A. 93-0002 start with a calculation of the contribution based upon the hypothetical asset value which assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003 (Table 4a). This contribution is then reduced by the debt service beginning in fiscal year 2005 to produce the maximum contribution. For fiscal years 2006 and 2007, the maximum contribution is equal to the contribution amounts stated in P.A. 94-0004 for each respective year. The contribution amounts stated in P.A. 94-0004 are \$203,783,900 for fiscal year 2006 and \$344,164,400 for fiscal year 2007. A second projection is performed to develop the P.A. 88-0593 formula rate, which includes the GOB deposit. The lower of this formula rate with the GOB assets included and the maximum contribution is the required state appropriation (Table 4b).

Pursuant to Public Act 96-0043, \$723,703,100 of the total required State contribution for fiscal year 2010 will be paid from the proceeds of a GOB sale.

Pursuant to Public Act 96-0043, for the calculation of the fiscal year 2011 contribution and beyond, the value of the System's assets shall be equal to the actuarial value of the System's assets. 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. Furthermore, for purposes of determining the required State contribution to the System for a particular year, the projected actuarial value of assets shall be assumed to earn a rate of return equal to the System's actuarially assumed rate of return.

The following tables outline the reconciliation of the market value of assets and the development of the hypothetical asset value as of June 30, 2015. Also, the tables show the development of the actuarial value of assets under both the market value and the hypothetical value of assets.

Market Value of Asset Reconciliation and the Development of the Actuarial Value of Assets based upon the Market Value of Assets

1. Market Value of Assets 6/30/2014	\$ 14,581,566,241
2. Actual State Contribution Amount	1,804,319,356
3. Employee Contribution Amount	266,139,156
4. Benefit Payouts & Refunds	(2,057,987,410)
5. Administrative Expenses	(16,547,823)
6. Investment Income	681,377,052
7. Market Value of Assets 6/30/2015	15,258,866,572
8. Expected Investment Return at 7.25%	1,057,018,357
9. Investment Gain/(Loss) Current Year	(375,641,305)
10. Deferred Investment Gains and (Losses) All Years	517,130,507
11. Actuarial Value of Assets 6/30/2015 (7. - 10.)	14,741,736,065

Development of the Hypothetical Value of Assets and the Development of the Actuarial Value of Assets based upon the Hypothetical Value of Assets

The hypothetical asset value assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003.

1. Hypothetical Value of Assets 6/30/2014	\$ 13,012,128,199
2. State Contribution Amount ¹	1,915,465,449
3. Employee Contribution Amount	266,139,156
4. Benefit Payouts & Refunds	(2,057,987,410)
5. Administrative Expenses	(16,547,823)
6. Investment Income ²	610,137,931
7. Hypothetical Value of Assets 6/30/2015	13,729,335,502
8. Expected Investment Return at 7.25%	947,192,651
9. Investment Gain/(Loss) Current Year	(337,054,720)
10. Deferred Investment Gains and (Losses) All Years	457,883,847
11. Hypothetical Actuarial Value of Assets 6/30/2015 (7. - 10.)	13,271,451,655

¹Represents 43.009 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2013, valuation and is based upon the hypothetical asset value which assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003.

²Investment income assumes hypothetical value of assets earns the Fund's actual rate of return for fiscal year 2015 of 4.67 percent.

The development of the actuarial smoothed value of assets with GOB proceeds and the hypothetical smoothed value of assets without GOB proceeds are provided in each respective historical valuation report since the GOB proceeds were deposited into the trust.

The fiscal year ending June 30, 2016, certified contribution and projected future year required State contribution rates and amounts assuming deferred investments gains and losses are recognized in the assets are as follows:

Fiscal Year Ending June 30,	Base Contribution	Debt Service Contribution	Total Contribution	Assumed Payroll (billions)	Total Required Contribution
2016	43.880%	1.718%	45.598%	\$4.660	\$2,124,938,000
2017	42.805%	1.763%	44.568%	4.706	2,097,430,000
2018	42.585%	1.774%	44.359%	4.830	2,142,659,000
2019	42.181%	1.780%	43.961%	4.958	2,179,658,000
2020	41.879%	1.848%	43.727%	5.087	2,224,209,000
2021	41.900%	1.905%	43.805%	5.220	2,286,776,000
2022	41.837%	1.951%	43.788%	5.356	2,345,270,000
2023	41.787%	1.988%	43.775%	5.494	2,405,092,000
2024	41.667%	2.077%	43.744%	5.639	2,466,651,000
2025	41.569%	2.149%	43.718%	5.787	2,529,885,000
2026	41.571%	2.147%	43.718%	5.943	2,597,967,000

For fiscal years 2017 through 2033, the base contribution is limited by the maximum contribution determined under the assumption that the proceeds of the GOB sale were not deposited; therefore, the contribution rate is not level as a percent of pay.

Pursuant to Public Act 96-0043, the fiscal year 2017 contribution rate is calculated assuming the actuarial value of assets as of July 1, 2015, earns a rate of return equal to the System's actuarially assumed rate of return.

The contributions for fiscal years 2018 and beyond, as presented above, are developed in Tables 4c and 4d in this report. In those projections, the actuarial valuations as of June 30 for years 2016 through 2019 have been projected as though a valuation in each of those years was performed. At each projected valuation, an additional 20 percent of the investment gains and losses are recognized. The market value of assets at June 30, 2015, is assumed to have a rate of return equal to the valuation interest rate going forward. Therefore, the actuarial value of assets is calculated by adjusting the market value at each respective valuation date by the remaining percentage of the investment gains and losses. The actuarial value of assets converges to market value in 2019, when all remaining investment gains and losses have been recognized. Because the deferred asset gains and losses are incorporated into the projections, the projections found in Tables 4c and 4d do not show a stable contribution rate until the impact of the five-year asset smoothing has been fully realized.

Method of Calculation for Appropriation Requirements

The results are based on the projected unit credit actuarial cost method, the data provided and assumptions used for the June 30, 2015, actuarial valuation. In order to determine projected contribution rates and amounts, the following additional assumptions were used:

- Projected annualized payroll of \$4,660,200,000 for fiscal year 2016. This amount was provided by the System.
- Total employer contributions of \$2,044,877,000 (including no payments from the unclaimed property fund) for fiscal year 2016, as provided by the System.
- Administrative expenses of \$20,909,555 for fiscal year 2016, as provided by the System.
- New entrants whose average age is 36.31 and average pay is \$52,667 (2015 dollars). These values are based on the average age and average pay of new entrants over the last 15 years.
- The active member population is assumed to remain level at 63,273 for all years of the 30-year projection.
- Projected benefits for members hired on or after January 1, 2011, are based on the new provisions established in P.A. 96-0889.

The average increase in total uncapped payroll for the 30-year projection period is approximately 3.5 percent per year. It is important to note that benefits for new hires are based on capped payroll which is ultimately projected to grow at 1.5 percent per year. All results in this valuation assume that State contributions will be made on capped pay.

To determine the contribution rates, the expected 2016 appropriation was converted to a percentage of the expected 2016 payroll. An amortization schedule was then determined on the assumption that:

- The ratio of total assets to total actuarial liabilities will be 90 percent by June 30, 2045.
- The actuarial value of assets shall be assumed to earn a rate of return equal to the System's actuarially assumed rate of return.
- The contribution rates for fiscal years 2010 through 2033 will not be uniform, but the rate for any one of these years will be the minimum of: the difference between the "without-GOB" contribution and the debt service, and the underlying formula rate as determined by Public Act 88-0593.
- The contribution rate for fiscal year 2016 will be 43.880 percent based on the certification of the June 30, 2014, valuation results issued on October 24, 2014.
- The contribution rates for fiscal years 2034 through 2045 will be a uniform percentage of capped payroll.

Finally, the certified FY 2017 contribution rate will be applied to actual FY 2017 capped payroll.

GASB: Financial Accounting Information

In an effort to enhance the understandability and usefulness of the pension information that is included in the financial reports of pension plans for state and local governments, the Governmental Accounting Standards Board (“GASB”) has issued Statement No. 25—Financial Reporting for Defined Benefit Pension Plans and Statement No. 27—Accounting for Pensions by State and Local Governmental Employers. Effective with fiscal year ending June 30, 2014, Statement No. 67—Financial Reporting for Pension Plans replaced Statement No. 25 for pension plan financial reporting requirements. Statement No. 68—Accounting and Financial Reporting for Pensions is replacing Statement No. 27 for employer financial reporting effective with fiscal year ending June 30, 2015.

Pension plan financial reporting under GASB Statements Nos. 67 and No. 68 is provided in a separate report. Historical information through fiscal year ending June 30, 2014, required under GASB Statements Nos. 25 and 27 can be found in Section D.

The term Annual Required Contribution (“ARC”) is no longer in the GASB Statements. However, under GASB Statements Nos. 67 and 68 the Actuarial Determined Contribution (“ADC”) is defined as:

A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with the Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

The ADC is presented in the financial statements as Required Supplementary Information and is compared to actual contributions to the System that are calculated under the current statutory funding policy that provides a 90 percent funded ratio in 2045. The current funding policy may not conform to the Actuarial Standards of Practice; therefore, the Board has adopted a policy to calculate the ADC for financial reporting purposes. Under this policy, the ADC is calculated as the Normal Cost plus a 25-year level percent of capped payroll closed-period amortization of the Unfunded Accrued Liability as of June 30, 2015.

The ARC and ADC for fiscal years 2016 and 2017, respectively, as well as the statutory contribution for fiscal years 2016 and 2017 are shown on the following page as a percentage of payroll. The ARC percentage and statutory contribution for 2016 are based on the results of the June 30, 2014, valuation. The dollar amount of the ARC and ADC for 2016 and 2017, respectively, and the statutory contribution for 2016 and 2017 will be the product of the actual payroll for 2016 and 2017 and the percentages shown.

	Fiscal Year 2017	Fiscal Year 2016 ¹
1. Employer normal cost	\$ 654,616,726	\$ 686,207,638
2. Initial amount to amortize the unfunded liability over a 25-year closed period as a level percentage of capped payroll	<u>\$ 1,733,892,324</u>	<u>\$ 1,510,626,018</u>
3. ADC [(1) + (2)]	\$ 2,388,509,050	\$ 2,196,833,656
4. ADC as a percentage of projected capped payroll	50.753%	47.141%
5. Estimated statutory contribution	\$ 2,014,461,000	\$ 2,044,877,000
6. Estimated statutory contribution as a percentage of projected capped payroll	42.805%	43.880%
7. Estimated statutory contribution as a percentage of ADC [(5) ÷ (3)]	84.340%	93.083%

¹Fiscal year 2016 ARC is determined as the Employer Normal Cost plus a 30-year level percent of capped payroll open-period amortization of the Unfunded Accrued Liability.

The significant provisions of GASB Statements Nos. 67 and 68 include:

1. Recognizing the entire Net Pension Liability (similar to the Unfunded Actuarial Liability) on the balance sheet. The Net Pension Liability is comparable to the Net Pension Obligation which was recognized under GASB Statement No. 27.
2. Use of a single equivalent discount rate based on 7.25 percent for the projected benefits for all current members that can be paid from current assets and projected investment return, future employee contributions from current members, and future employer contributions attributable to current members, and a municipal bond rate for the portion of the projected benefits after assets are depleted. The applicable municipal bond rate for fiscal year end 2015 is 3.80 percent.
3. Use of market value of assets to calculate the Net Pension Liability.
4. Elimination of the Annual Pension Cost and replacing it with the Pension Expense, which is determined under a much shorter amortization period than 30 years.

Due to the single equivalent discount rate and shorter amortization periods required under GASB Statements Nos. 67 and 68, the liabilities and pension expense will be higher and more volatile than under the current standards. The measurements required under GASB Statements Nos. 67 and 68 are provided in a separate report.

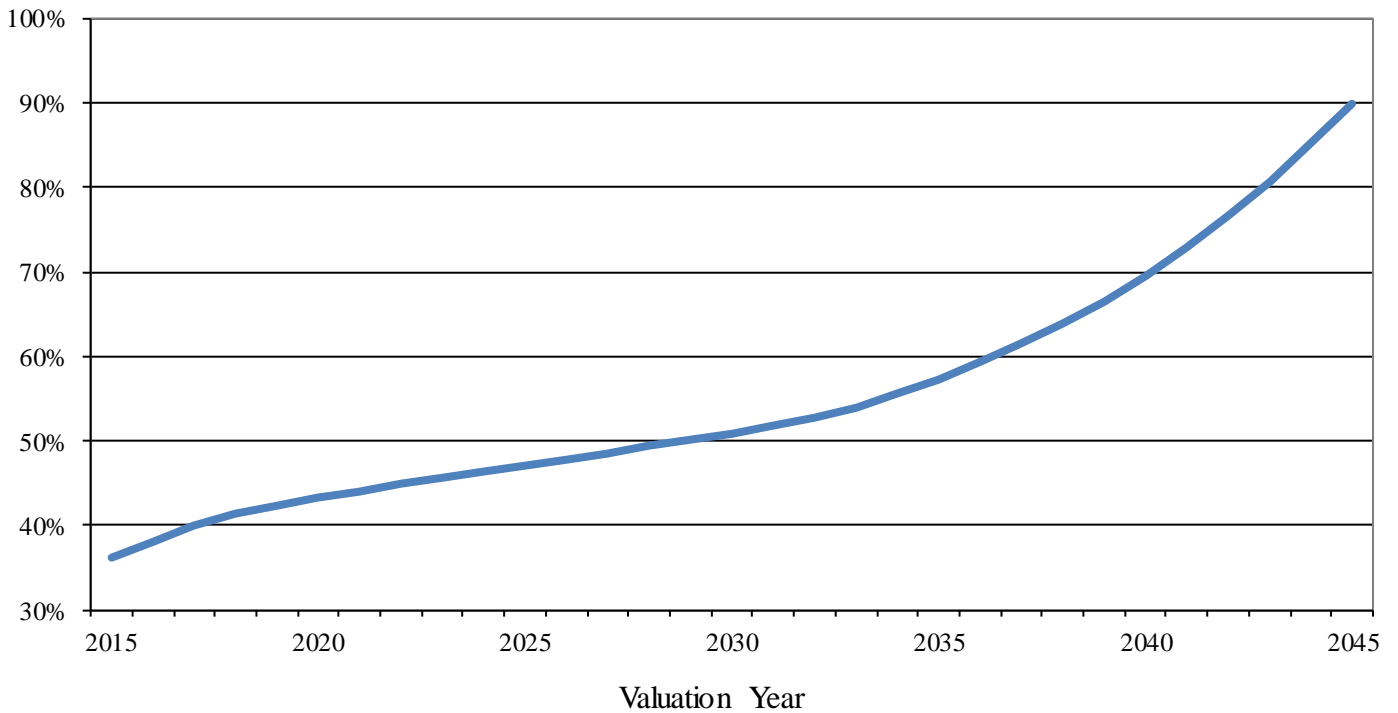
Observations on Actuarial Funding and Statutory Funding

GASB Statements Nos. 25, 27, 67 and 68 provide guidance for retirement plans and plan sponsors on the development of an annual expense requirement to be reported in their annual financial statements. Under the rules established by GASB Statements Nos. 25 and 27, this expense requirement is based on the Annual Required Contribution (“ARC”). The ARC is the sum of the normal cost and amortization of the unfunded accrued liability and represents the annual employer contributions that are projected to finance benefits for current plan members over a period not to exceed 30 years. GASB Statements Nos. 67 and 68, which replace GASB Statements Nos. 25 and 27, no longer use the ARC. However, measuring the Statutory Contribution against a policy such as the ARC helps evaluate the funding adequacy of the current Statutory funding method. Thus, the Board adopted a policy to calculate the Actuarial Determined Contribution (“ADC”). Under this policy, the ADC is calculated as the Normal Cost plus a 25-year level percent of capped payroll closed-period amortization of the Unfunded Accrued Liability as of June 30, 2015.

A key objective of the ADC is to accrue costs over the working lifetime of plan members to ensure that benefit obligations are satisfied and intergenerational equity is promoted. Although the ADC is solely an accounting provision, in certain circumstances it could represent a reasonable annual funding target and therefore is used by some plan sponsors as their de facto funding requirement. Given there is no requirement that the accounting provision for pension expense must equal the annual funding requirement, some plan sponsors adopt funding policies that differ from the ADC. However, a funding policy that differs significantly from the ADC approach could result in a potential “back-loading,” meaning contributions are deferred to the future. Back-loading could result in an underfunding of the system.

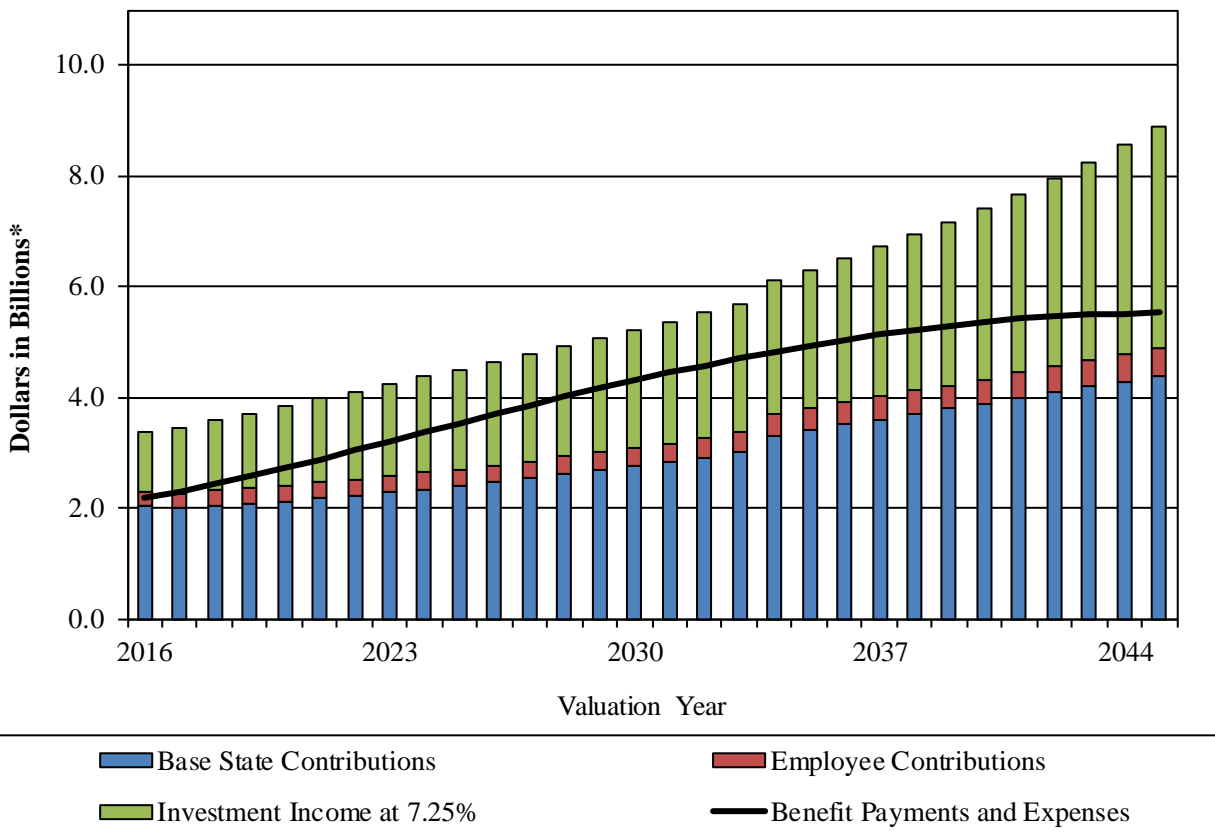
The statutory funding policy adopted for SERS provides for level percent of pay funding that produces a funding target of 90 percent by 2045, assuming an open group projection. The following graph shows the projected funded ratio. A key observation is that the funded ratio does not grow markedly until after 2033. That is, a majority of the funding occurs between 2034 and 2045. This illustrates how significantly the current funding policy defers contributions into the future.

Funded Ratio



The following graph compares the projected benefits and expenses against employer contributions, employee contributions and investment income. Beginning in 2018, benefits exceed State and employee contributions. From 2018 to 2033, the percentage of investment income needed to pay ongoing benefits increases from approximately 9.7 percent to 57.5 percent. This implies that a lower level of investment income is projected to be available for potential asset growth. After 2033, the percentage of investment income needed to pay ongoing benefits is projected to decrease from approximately 47.0 percent in 2034 to 16.0 percent in 2045, which is projected to cause assets to grow at a higher rate.

Comparison of Cash Flows



**Future dollar amounts are based on assumed inflationary increases.*

The provisions of P.A. 96-0043 develop an actuarial value of assets based on five-year smoothing that does not recognize deferred investment gains and losses in the projection of assets used to develop the statutory contribution. This policy has a tendency to defer contributions when plan assets experience a loss.

Given that SERS funded ratio at June 30, 2015, is only 37 percent on a market value of assets basis, and because the current statutory policy tends to back-load and defer contributions, we would advise strengthening the current statutory funding policy. The Board has taken steps to strengthen the current statutory funding policy by adopting a lower assumed rate of return and more

conservative assumptions. Examples of other methods to strengthen the current funding policy include:

1. Increasing the 90 percent funding target to 100 percent;
2. Reducing the projection period needed to reach the funding target; and
3. Separating the financing of benefits for members hired before and after December 31, 2010.

Also, the statutory contribution policy could also be strengthened by changing to an ADC based funding approach with an appropriate amortization policy for each respective tiered benefit structure.

In 2014, the Society of Actuaries Blue Ribbon Panel on Public Pension Plan Funding and the Conference of Consulting Actuaries Public Plans Community both issued reports on public plan funding. Some of the common elements in those reports are to:

1. Establish a Funding Policy using Actuarially Determined Contributions.
2. Target 100 percent funded.
3. Shorten the amortization period to 15 to 20 years to avoid negative amortization of the unfunded actuarial accrued liability.

At the April 21, 2015, Board meeting, the Board adopted a policy, for purposes of financial reporting under GASB Statements Nos. 67 and 68, which provides for the annual payment of SERS' normal cost and amortizing the unfunded liability over 25 years as a level percent of capped payroll.

Finally, we strongly recommend that stress testing be performed and we will work with the System on developing specific stress testing scenarios.

SECTION B
FUNDING RESULTS

Results of Actuarial Valuation as of June 30, 2015

1	Number of Members	
	a. Active	63,273
	b. Inactive:	
	i. Eligible for deferred vested pension benefits (3,856 based on SERS service alone. An additional 324 are eligible when reciprocal service is added to SERS service).	4,180
	ii. Eligible for return of contributions only	21,128
	c. Current Benefit Recipients:	
	i. Retirement annuities	54,802
	ii. Survivor annuities	10,889
	iii. Disability annuities	2,263
	d. Eligible for Deferred Benefits:	
	i. Retirement annuities	83
	ii. Survivor annuities	149
	e. Total	<u>156,767</u>
2	Covered Payroll as of Valuation Date	\$ 4,453,683,664
3	Annualized Benefit Payments Currently Being Made	
	a. Retirement (Includes those eligible for deferred benefits)	\$ 1,882,378,204
	b. Survivor (Includes those eligible for deferred benefits)	131,795,959
	c. Disability	<u>55,124,284</u>
	d. Total	\$ <u>2,069,298,446</u>
4	Actuarial Liability—Annuitants	
	a. Current Benefit Recipients:	
	i. Retirement annuities	\$ 24,324,233,100
	ii. Survivor annuities	1,345,213,022
	iii. Disability annuities	482,628,902
	b. Eligible for Deferred Benefits:	
	i. Retirement annuities	9,138,712
	ii. Survivor annuities	<u>9,520,904</u>
	c. Total	\$ <u>26,170,734,640</u>

Table 1
(Continued)

5	Actuarial Liability—Inactive Members		
	a. Eligible for Deferred Vested Pension Benefits	\$	588,747,835
	b. Eligible for Return of Contributions Only		36,698,493
	c. Total	\$	625,446,328
		Normal	Actuarial
		Cost	Liability
6	Active Members		
	a. Pension Benefits	\$	561,430,751
	b. Cost-of-Living Adjustments		203,416,214
	c. Death Benefits		
	i. Occupational	\$	1,371,359
	ii. Non-occupational		10,338,820
	iii. Refund		9,798,947
	iv. Total	\$	21,509,126
	d. Disability		
	i. Occupational	\$	10,555,256
	ii. Non-occupational		59,813,118
	iii. Total	\$	70,368,374
	e. Withdrawal		31,086,350
	f. Expenses		20,909,555
	g. Total	\$	908,720,370
			\$
			40,743,410,217
7	Total Actuarial Liability (4 + 5 + 6)		\$
8	Market Value of Assets (MVA)		\$
9	Unfunded Actuarial Liability Based on MVA (7 – 8)		\$
10	Funded Percentage Based on MVA (8 ÷ 7)		37.45%
11	Actuarial Value of Assets (AVA)		\$
12	Unfunded Actuarial Liability Based on AVA (7 – 11)		\$
13	Funded Percentage Based on AVA (11 ÷ 7) ¹		36.18%
14	Total Normal Cost	\$	908,720,370
15	Employee Contributions	\$	254,103,644
16	Annual Employer Normal Cost	\$	654,616,726
	(% payroll)		14.70%

¹ The funded status measure is appropriate for assessing the need for future contributions. The funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Analysis of Change in Unfunded Accrued Actuarial Liability

In addition to the expected change in the unfunded accrued actuarial liability, changes in membership demographics, and fund assets have affected the valuation results. The decrease in the unfunded accrued actuarial liability (UAAL) of \$209,558,080 was due to the following:

1	UAAL at 06/30/2014	\$ 26,211,232,232
2	Contributions	
	a. Contributions due	
	i interest on 1)	\$ 1,900,314,337
	ii members contributions	266,139,156
	iii employer normal cost	686,207,638
	iv interest on ii and iii	33,918,554
	v total due	<u>\$ 2,886,579,685</u>
	b. Contributions paid	
	i member contributions	\$ 266,139,156
	ii state agencies	1,804,319,356
	iii interest on i and ii	73,740,951
	iv total paid	<u>\$ 2,144,199,463</u>
	c. Expected increase in UAAL	\$ 742,380,222
3	Expected UAAL at 06/30/2015	\$ 26,953,612,454
4	(Gains)/Losses	
	a. investment income	\$ (464,963,323)
	b. salary increases	(289,320,641)
	b. demographic	(197,654,338)
	d. total	<u>\$ (951,938,302)</u>
5	Plan Provision Changes	\$ -
6	Assumption Changes	\$ -
7	Total Change in UAAL	\$ (209,558,080)
8	UAAL at 06/30/2015	\$ 26,001,674,152

Analysis of Financial Gains and Losses in Unfunded Accrued Actuarial Liability for Fiscal Year Ending June 30, 2015

	Activity	(Gain) Loss	% of 06/30/2014 AAL
1	Actuarial (Gain)/Loss		
	a. Retirements	\$ (11,598,561)	-0.02%
	b. Incidence of Disability	-	0.00%
	c. In-Service Mortality	2,059,843	0.01%
	d. Retiree Mortality and Benefit Changes	(165,539,337)	-0.42%
	e. Salary Increases	(289,320,641)	-0.73%
	f. Terminations	(61,536,378)	-0.16%
	g. Investment	(464,963,323)	-1.18%
	h. New Entrant Liability	59,061,493	0.15%
	i. Other	(20,101,398)	-0.05%
	j. Total Actuarial (Gain)/Loss	\$ (951,938,302)	-2.40%
2	Plan Provision Changes	\$ -	0.00%
3	Assumption Changes	\$ -	0.00%
4	Contribution (Excess)/Shortfall	\$ 742,380,222	1.88%
5	Total Financial (Gain)/Loss	\$ (209,558,080)	-0.52%

30-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 94-0004, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.25%
(All Dollar Amounts in Millions)

Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				State Contribution		Total Expenses
							Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	
2016	63,273	42,390	14,479	27,911	34.16%	4,660	909	254	655	14.06%	2,154	46.22%	2,171
2017	63,273	44,024	15,610	28,414	35.46%	4,706	914	255	659	14.00%	2,127	45.20%	2,304
2018	63,273	45,640	16,745	28,895	36.69%	4,830	920	261	659	13.64%	2,183	45.20%	2,441
2019	63,273	47,233	17,882	29,351	37.86%	4,958	925	267	658	13.27%	2,241	45.20%	2,583
2020	63,273	48,790	19,014	29,776	38.97%	5,087	928	273	655	12.88%	2,299	45.20%	2,731
2021	63,273	50,305	20,139	30,166	40.03%	5,220	930	279	651	12.47%	2,360	45.20%	2,883
2022	63,273	51,765	21,253	30,512	41.06%	5,356	929	285	644	12.02%	2,421	45.20%	3,040
2023	63,273	53,163	22,352	30,811	42.04%	5,494	927	291	636	11.58%	2,483	45.20%	3,201
2024	63,273	54,489	23,436	31,053	43.01%	5,639	923	297	626	11.10%	2,549	45.20%	3,364
2025	63,273	55,732	24,501	31,231	43.96%	5,787	917	303	614	10.61%	2,616	45.20%	3,531
2026	63,273	56,892	25,556	31,336	44.92%	5,943	911	310	601	10.11%	2,686	45.20%	3,692
2027	63,273	57,960	26,601	31,359	45.90%	6,106	905	317	588	9.63%	2,760	45.20%	3,857
2028	63,273	58,938	27,642	31,296	46.90%	6,273	902	324	578	9.21%	2,836	45.20%	4,016
2029	63,273	59,831	28,695	31,136	47.96%	6,454	903	332	571	8.85%	2,917	45.20%	4,167
2030	63,273	60,642	29,773	30,869	49.10%	6,644	907	340	567	8.53%	3,003	45.20%	4,312

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 94-0004, Public Act 96-0043
Maximum Contribution Calculation: Without GOB Proceeds
Rate of Return on Assets = 7.25%
(All Dollar Amounts in Millions)

Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				State Contribution		Total Expenses
							Total	Employee Cont.	Percent Balance of Pay	Percent of Pay	Amount	Percent of Pay	
2031	63,273	61,373	30,887	30,486	50.33%	6,842	911	350	561	8.20%	3,093	45.20%	4,451
2032	63,273	62,022	32,047	29,975	51.67%	7,044	916	359	557	7.91%	3,184	45.20%	4,586
2033	63,273	62,593	33,265	29,328	53.14%	7,249	922	368	554	7.64%	3,276	45.20%	4,712
2034	63,273	63,094	34,559	28,535	54.77%	7,459	930	378	552	7.40%	3,372	45.20%	4,829
2035	63,273	63,526	35,943	27,583	56.58%	7,673	939	388	551	7.18%	3,468	45.20%	4,939
2036	63,273	63,888	37,429	26,459	58.59%	7,887	947	398	549	6.96%	3,565	45.20%	5,044
2037	63,273	64,186	39,032	25,154	60.81%	8,099	956	408	548	6.77%	3,661	45.20%	5,141
2038	63,273	64,428	40,774	23,654	63.29%	8,314	968	419	549	6.60%	3,758	45.20%	5,227
2039	63,273	64,625	42,677	21,948	66.04%	8,532	982	429	553	6.48%	3,856	45.20%	5,302
2040	63,273	64,788	44,765	20,023	69.09%	8,751	999	440	559	6.39%	3,956	45.20%	5,367
2041	63,273	64,927	47,065	17,862	72.49%	8,973	1,019	451	568	6.33%	4,056	45.20%	5,420
2042	63,273	65,057	49,604	15,453	76.25%	9,196	1,042	462	580	6.31%	4,157	45.20%	5,462
2043	63,273	65,190	52,413	12,777	80.40%	9,423	1,067	473	594	6.30%	4,259	45.20%	5,494
2044	63,273	65,337	55,519	9,818	84.97%	9,652	1,095	485	610	6.32%	4,363	45.20%	5,517
2045	63,273	65,504	58,951	6,553	90.00%	9,881	1,123	497	626	6.34%	4,466	45.20%	5,535

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities**State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 94-0004, Public Act 96-0043****Rate of Return on Assets = 7.25%***(All Dollar Amounts in Millions)*

Plan Year End	Number 6/30	Actuarial Active Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				Required State Contribution						
							Employee Total	Cont.	Balance	Percent of Pay	(a) Without GOB Cont.	(b) Debt Service	(c)=(a)-(b) Maximum Cont.	(d) Formula Rate With GOB	Minimum of (c) and (d) Required Cont.	Percent of Pay	Total Expenses
2016	63,273	42,390	15,943	26,447	37.61%	4,660	909	254	655	14.06%	2,154	109	2,045	2,045	2,045	43.88%	2,171
2017	63,273	44,024	17,064	26,960	38.76%	4,706	914	255	659	14.00%	2,127	113	2,014	2,142	2,014	42.81%	2,304
2018	63,273	45,640	18,184	27,456	39.84%	4,830	920	261	659	13.64%	2,183	116	2,067	2,198	2,067	42.79%	2,441
2019	63,273	47,233	19,300	27,933	40.86%	4,958	925	267	658	13.27%	2,241	120	2,121	2,257	2,121	42.78%	2,583
2020	63,273	48,790	20,403	28,387	41.82%	5,087	928	273	655	12.88%	2,299	128	2,171	2,315	2,171	42.69%	2,731
2021	63,273	50,305	21,489	28,816	42.72%	5,220	930	279	651	12.47%	2,360	135	2,225	2,376	2,225	42.61%	2,883
2022	63,273	51,765	22,553	29,212	43.57%	5,356	929	285	644	12.02%	2,421	142	2,279	2,438	2,279	42.55%	3,040
2023	63,273	53,163	23,593	29,570	44.38%	5,494	927	291	636	11.58%	2,483	148	2,335	2,500	2,335	42.50%	3,201
2024	63,273	54,489	24,602	29,887	45.15%	5,639	923	297	626	11.10%	2,549	159	2,390	2,566	2,390	42.38%	3,364
2025	63,273	55,732	25,577	30,155	45.89%	5,787	917	303	614	10.61%	2,616	169	2,447	2,634	2,447	42.28%	3,531
2026	63,273	56,892	26,531	30,361	46.63%	5,943	911	310	601	10.11%	2,686	173	2,513	2,705	2,513	42.28%	3,692
2027	63,273	57,960	27,462	30,498	47.38%	6,106	905	317	588	9.63%	2,760	178	2,582	2,779	2,582	42.30%	3,857
2028	63,273	58,938	28,374	30,564	48.14%	6,273	902	324	578	9.21%	2,836	186	2,650	2,855	2,650	42.24%	4,016
2029	63,273	59,831	29,281	30,550	48.94%	6,454	903	332	571	8.85%	2,917	193	2,724	2,937	2,724	42.21%	4,167
2030	63,273	60,642	30,189	30,453	49.78%	6,644	907	340	567	8.53%	3,003	204	2,799	3,024	2,799	42.12%	4,312

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 94-0004, Public Act 96-0043
Rate of Return on Assets = 7.25%
(All Dollar Amounts in Millions)

Plan Year End	Actuarial Number	Actuarial Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				Required State Contribution						
							Employee Total	Cont.	Balance	Percent of Pay	(a) Without GOB Cont.	(b) Debt Service	(c)=(a)-(b) Maximum Cont.	(d) Rate With GOB	Minimum of (c) and (d) Required Cont.	Percent of Pay	Total Expenses
2031	63,273	61,373	31,111	30,262	50.69%	6,842	911	350	561	8.20%	3,093	215	2,878	3,114	2,878	42.06%	4,451
2032	63,273	62,022	32,059	29,963	51.69%	7,044	916	359	557	7.91%	3,184	220	2,964	3,206	2,964	42.08%	4,586
2033	63,273	62,593	33,051	29,542	52.80%	7,249	922	368	554	7.64%	3,276	219	3,057	3,299	3,057	42.18%	4,712
2034	63,273	63,094	34,353	28,741	54.45%	7,459	930	378	552	7.40%	3,372	0	N/A	3,395	3,395	45.51%	4,829
2035	63,273	63,526	35,747	27,779	56.27%	7,673	939	388	551	7.18%	3,468	0	N/A	3,492	3,492	45.51%	4,939
2036	63,273	63,888	37,245	26,643	58.30%	7,887	947	398	549	6.96%	3,565	0	N/A	3,589	3,589	45.51%	5,044
2037	63,273	64,186	38,861	25,325	60.54%	8,099	956	408	548	6.77%	3,661	0	N/A	3,686	3,686	45.51%	5,141
2038	63,273	64,428	40,617	23,811	63.04%	8,314	968	419	549	6.60%	3,758	0	N/A	3,784	3,784	45.51%	5,227
2039	63,273	64,625	42,536	22,089	65.82%	8,532	982	429	553	6.48%	3,856	0	N/A	3,883	3,883	45.51%	5,302
2040	63,273	64,788	44,642	20,146	68.90%	8,751	999	440	559	6.39%	3,956	0	N/A	3,983	3,983	45.51%	5,367
2041	63,273	64,927	46,961	17,966	72.33%	8,973	1,019	451	568	6.33%	4,056	0	N/A	4,084	4,084	45.51%	5,420
2042	63,273	65,057	49,523	15,534	76.12%	9,196	1,042	462	580	6.31%	4,157	0	N/A	4,185	4,185	45.51%	5,462
2043	63,273	65,190	52,356	12,834	80.31%	9,423	1,067	473	594	6.30%	4,259	0	N/A	4,289	4,289	45.51%	5,494
2044	63,273	65,337	55,489	9,848	84.93%	9,652	1,095	485	610	6.32%	4,363	0	N/A	4,393	4,393	45.51%	5,517
2045	63,273	65,504	58,951	6,553	90.00%	9,881	1,123	497	626	6.34%	4,466	0	N/A	4,497	4,497	45.51%	5,535

Normal cost rate includes administrative expenses.
 State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
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30-Year Projection of Costs and Liabilities**State Contribution Based on Public Act 88-0593, Public Act 94-0004, Public Act 96-0043****Maximum Contribution Calculation: Without GOB Proceeds****Rate of Return on Assets = 7.25%****Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets***(All Dollar Amounts in Millions)*

Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				State Contribution		Total Expenses
							Total	Employee Cont.	Percent Balance	Percent of Pay	Amount	Percent of Pay	
2016	63,273	42,390	14,627	27,763	34.51%	4,660	909	254	655	14.06%	2,154	46.22%	2,171
2017	63,273	44,024	16,057	27,967	36.47%	4,706	914	255	659	14.00%	2,127	45.20%	2,304
2018	63,273	45,640	17,367	28,273	38.05%	4,830	920	261	659	13.64%	2,173	44.99%	2,441
2019	63,273	47,233	18,446	28,787	39.05%	4,958	925	267	658	13.27%	2,211	44.59%	2,583
2020	63,273	48,790	19,576	29,214	40.12%	5,087	928	273	655	12.88%	2,258	44.39%	2,731
2021	63,273	50,305	20,703	29,602	41.15%	5,220	930	279	651	12.47%	2,322	44.49%	2,883
2022	63,273	51,765	21,819	29,946	42.15%	5,356	929	285	644	12.02%	2,383	44.49%	3,040
2023	63,273	53,163	22,918	30,245	43.11%	5,494	927	291	636	11.58%	2,444	44.49%	3,201
2024	63,273	54,489	24,002	30,487	44.05%	5,639	923	297	626	11.10%	2,509	44.49%	3,364
2025	63,273	55,732	25,065	30,667	44.97%	5,787	917	303	614	10.61%	2,574	44.49%	3,531
2026	63,273	56,892	26,117	30,775	45.91%	5,943	911	310	601	10.11%	2,644	44.49%	3,692
2027	63,273	57,960	27,158	30,802	46.86%	6,106	905	317	588	9.63%	2,716	44.49%	3,857
2028	63,273	58,938	28,193	30,745	47.84%	6,273	902	324	578	9.21%	2,791	44.49%	4,016
2029	63,273	59,831	29,239	30,592	48.87%	6,454	903	332	571	8.85%	2,871	44.49%	4,167
2030	63,273	60,642	30,307	30,335	49.98%	6,644	907	340	567	8.53%	2,956	44.49%	4,312

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities**State Contribution Based on Public Act 88-0593, Public Act 94-0004, Public Act 96-0043****Maximum Contribution Calculation: Without GOB Proceeds****Rate of Return on Assets = 7.25%****Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets***(All Dollar Amounts in Millions)*

Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost				State Contribution		Total Expenses
							Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	
2031	63,273	61,373	31,409	29,964	51.18%	6,842	911	350	561	8.20%	3,044	44.49%	4,451
2032	63,273	62,022	32,555	29,467	52.49%	7,044	916	359	557	7.91%	3,134	44.49%	4,586
2033	63,273	62,593	33,756	28,837	53.93%	7,249	922	368	554	7.64%	3,225	44.49%	4,712
2034	63,273	63,094	35,030	28,064	55.52%	7,459	930	378	552	7.40%	3,319	44.49%	4,829
2035	63,273	63,526	36,392	27,134	57.29%	7,673	939	388	551	7.18%	3,413	44.49%	4,939
2036	63,273	63,888	37,853	26,035	59.25%	7,887	947	398	549	6.96%	3,509	44.49%	5,044
2037	63,273	64,186	39,427	24,759	61.43%	8,099	956	408	548	6.77%	3,603	44.49%	5,141
2038	63,273	64,428	41,136	23,292	63.85%	8,314	968	419	549	6.60%	3,699	44.49%	5,227
2039	63,273	64,625	43,002	21,623	66.54%	8,532	982	429	553	6.48%	3,796	44.49%	5,302
2040	63,273	64,788	45,050	19,738	69.53%	8,751	999	440	559	6.39%	3,893	44.49%	5,367
2041	63,273	64,927	47,304	17,623	72.86%	8,973	1,019	451	568	6.33%	3,992	44.49%	5,420
2042	63,273	65,057	49,792	15,265	76.54%	9,196	1,042	462	580	6.31%	4,091	44.49%	5,462
2043	63,273	65,190	52,545	12,645	80.60%	9,423	1,067	473	594	6.30%	4,192	44.49%	5,494
2044	63,273	65,337	55,590	9,747	85.08%	9,652	1,095	485	610	6.32%	4,294	44.49%	5,517
2045	63,273	65,504	58,954	6,550	90.00%	9,881	1,123	497	626	6.34%	4,396	44.49%	5,535

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities**State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 94-0004, Public Act 96-0043****Rate of Return on Assets = 7.25%****Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets***(All Dollar Amounts in Millions)*

Plan Year End Number	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Annual Normal Cost					Required State Contribution						
						Employee Total	Cont.	Balance	Percent of Pay	(a) Without GOB Cont.	(b) Debt Service	(c)=(a)-(b) Maximum Cont.	(d) Rate With Formula GOB	Minimum of (c) and (d) Required Cont.	Percent of Pay	Total Expenses	
2016	63,273	42,390	16,109	26,281	38.00%	4,660	909	254	655	14.06%	2,154	109	2,045	2,045	2,045	43.88%	2,171
2017	63,273	44,024	17,567	26,457	39.90%	4,706	914	255	659	14.00%	2,127	113	2,014	2,142	2,014	42.81%	2,304
2018	63,273	45,640	18,886	26,754	41.38%	4,830	920	261	659	13.64%	2,173	116	2,057	2,184	2,057	42.58%	2,441
2019	63,273	47,233	19,943	27,290	42.22%	4,958	925	267	658	13.27%	2,211	120	2,091	2,214	2,091	42.18%	2,583
2020	63,273	48,790	21,049	27,741	43.14%	5,087	928	273	655	12.88%	2,258	128	2,130	2,257	2,130	41.88%	2,731
2021	63,273	50,305	22,143	28,162	44.02%	5,220	930	279	651	12.47%	2,322	135	2,187	2,323	2,187	41.90%	2,883
2022	63,273	51,765	23,216	28,549	44.85%	5,356	929	285	644	12.02%	2,383	142	2,241	2,383	2,241	41.84%	3,040
2023	63,273	53,163	24,263	28,900	45.64%	5,494	927	291	636	11.58%	2,444	148	2,296	2,445	2,296	41.79%	3,201
2024	63,273	54,489	25,279	29,210	46.39%	5,639	923	297	626	11.10%	2,509	159	2,350	2,509	2,350	41.67%	3,364
2025	63,273	55,732	26,260	29,472	47.12%	5,787	917	303	614	10.61%	2,574	169	2,405	2,575	2,405	41.57%	3,531
2026	63,273	56,892	27,220	29,672	47.85%	5,943	911	310	601	10.11%	2,644	174	2,470	2,644	2,470	41.57%	3,692
2027	63,273	57,960	28,156	29,804	48.58%	6,106	905	317	588	9.63%	2,716	177	2,539	2,717	2,539	41.58%	3,857
2028	63,273	58,938	29,072	29,866	49.33%	6,273	902	324	578	9.21%	2,791	186	2,605	2,791	2,605	41.53%	4,016
2029	63,273	59,831	29,982	29,849	50.11%	6,454	903	332	571	8.85%	2,871	193	2,678	2,872	2,678	41.50%	4,167
2030	63,273	60,642	30,892	29,750	50.94%	6,644	907	340	567	8.53%	2,956	205	2,751	2,956	2,751	41.41%	4,312

Normal cost rate includes administrative expenses.

State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.

Total expenses shown include benefit payments, refunds and administrative expenses.

Actuarial accrued liability and assets are measured at Plan Year End.

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

30-Year Projection of Costs and Liabilities
State Contribution Based on Public Act 88-0593, Public Act 93-0002, Public Act 94-0004, Public Act 96-0043
Rate of Return on Assets = 7.25%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets
(All Dollar Amounts in Millions)

Plan	Actuarial	Actuarial					Annual Normal Cost		Required State Contribution								
							Employee	Percent	(a)	(b)	(c)=(a)-(b)	(d)	Minimum of (c) and (d)		Total		
Year End	Number	Accrued	Unfunded	Funded	Total	Total	Cont.	Balance	of Pay	Without	Debt	Maximum	Rate With	Required		Percent	Expenses
6/30	Active	Liability	Assets	Liability	Ratio	Payroll				GOB	Service	Cont.	GOB	Cont.	of Pay		
2031	63,273	61,373	31,814	29,559	51.84%	6,842	911	350	561	8.20%	3,044	215	2,829	3,044	2,829	41.35%	4,451
2032	63,273	62,022	32,762	29,260	52.82%	7,044	916	359	557	7.91%	3,134	220	2,914	3,134	2,914	41.37%	4,586
2033	63,273	62,593	33,751	28,842	53.92%	7,249	922	368	554	7.64%	3,225	219	3,006	3,225	3,006	41.47%	4,712
2034	63,273	63,094	35,026	28,068	55.51%	7,459	930	378	552	7.40%	3,319	0	N/A	3,319	3,319	44.49%	4,829
2035	63,273	63,526	36,388	27,138	57.28%	7,673	939	388	551	7.18%	3,413	0	N/A	3,414	3,414	44.49%	4,939
2036	63,273	63,888	37,849	26,039	59.24%	7,887	947	398	549	6.96%	3,509	0	N/A	3,509	3,509	44.49%	5,044
2037	63,273	64,186	39,423	24,763	61.42%	8,099	956	408	548	6.77%	3,603	0	N/A	3,603	3,603	44.49%	5,141
2038	63,273	64,428	41,132	23,296	63.84%	8,314	968	419	549	6.60%	3,699	0	N/A	3,699	3,699	44.49%	5,227
2039	63,273	64,625	42,999	21,626	66.54%	8,532	982	429	553	6.48%	3,796	0	N/A	3,796	3,796	44.49%	5,302
2040	63,273	64,788	45,046	19,742	69.53%	8,751	999	440	559	6.39%	3,893	0	N/A	3,894	3,894	44.49%	5,367
2041	63,273	64,927	47,300	17,627	72.85%	8,973	1,019	451	568	6.33%	3,992	0	N/A	3,992	3,992	44.49%	5,420
2042	63,273	65,057	49,789	15,268	76.53%	9,196	1,042	462	580	6.31%	4,091	0	N/A	4,092	4,092	44.49%	5,462
2043	63,273	65,190	52,542	12,648	80.60%	9,423	1,067	473	594	6.30%	4,192	0	N/A	4,193	4,193	44.49%	5,494
2044	63,273	65,337	55,588	9,749	85.08%	9,652	1,095	485	610	6.32%	4,294	0	N/A	4,294	4,294	44.49%	5,517
2045	63,273	65,504	58,953	6,551	90.00%	9,881	1,123	497	626	6.34%	4,396	0	N/A	4,396	4,396	44.49%	5,535

Normal cost rate includes administrative expenses.
 State contribution based on the requirements of Public Act 88-0593, as amended by Public Act 90-0065, Public Act 93-0002, Public Act 94-0004, and Public Act 96-0043.
 Total expenses shown include benefit payments, refunds and administrative expenses.
 Actuarial accrued liability and assets are measured at Plan Year End.
 Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.

SECTION C
FUND ASSETS

State Employees' Retirement System of Illinois
Statement of Fiduciary Net Position
Years ended June 30, 2015 and 2014

Assets	2015	2014
Cash	\$ 170,646,589	\$ 200,752,173
Receivables:		
Contributions:		
Participants	\$ 14,152,324	\$ 17,207,484
Employing state agencies	109,810,082	79,511,794
Other accounts	4,784,680	4,682,423
	<u>\$ 128,747,086</u>	<u>\$ 101,401,701</u>
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	\$ 14,967,254,053	\$ 14,286,499,013
Securities lending collateral with State Treasurer	<u>64,779,000</u>	<u>84,013,000</u>
Property and equipment, net of accumulated depreciation	\$ 5,272,553	\$ 4,122,801
 Total Assets	 <u>\$ 15,336,699,281</u>	 <u>\$ 14,676,788,688</u>
 Liabilities		
Benefits payable	\$ 5,847,397	\$ 5,106,425
Refunds payable	1,055,043	674,361
Administrative expenses payable	2,171,343	1,714,067
Participants' deferred service credit accounts	266,753	118,146
Due to State of Illinois	3,713,173	3,596,448
Securities lending collateral with State Treasurer	<u>64,779,000</u>	<u>84,013,000</u>
 Total Liabilities	 <u>\$ 77,832,709</u>	 <u>\$ 95,222,447</u>
 Net assets held in trust for pension benefits	 <u>\$ 15,258,866,572</u>	 <u>\$ 14,581,566,241</u>

State Employees' Retirement System of Illinois
Statement of Changes in Fiduciary Net Position
Years ended June 30, 2015 and 2014

	2015	2014
Additions:		
Contributions:		
Participants	\$ 266,139,156	\$ 269,232,241
Employing state agencies and appropriations	1,804,319,356	1,699,447,826
Total Contributions revenue	\$ 2,070,458,512	\$ 1,968,680,067
Investments income:		
Net investments income	\$ 440,457,817	\$ 358,688,813
Interest earned on cash balances	622,012	698,856
Net appreciation in fair value of investments	240,297,223	1,809,958,589
Total Investments income	\$ 681,377,052	\$ 2,169,346,258
Total Additions	\$ 2,751,835,564	\$ 4,138,026,325
Deductions:		
Benefits:		
Retirement annuities	\$ 1,833,999,371	\$ 1,720,825,103
Survivors' annuities	121,930,337	114,177,228
Disability benefits	63,929,747	64,782,236
Lump-sum benefits	14,998,980	17,278,072
Total Benefits	\$ 2,034,858,435	\$ 1,917,062,639
Refunds	23,128,975	23,082,814
Administrative	16,547,823	16,615,105
Total Deductions	\$ 2,074,535,233	\$ 1,956,760,558
Net increase	\$ 677,300,331	\$ 2,181,265,767
Net assets held in trust for pension benefits:		
Beginning of year	\$ 14,581,566,241	\$ 12,400,300,474
End of year	\$ 15,258,866,572	\$ 14,581,566,241

State Employees' Retirement System of Illinois
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS - ACTUAL ASSETS

Year Ending June 30	2015	2016	2017	2018	2019
Beginning of Year:					
(1) Market Value of Assets	\$ 14,581,566,241				
(2) Actuarial Value of Assets	13,315,612,735				
End of Year:					
(3) Market Value of Assets	15,258,866,572				
(4) Contributions and Disbursements					
(4a) Actual State Contribution Amount	1,804,319,356				
(4b) Employee Contribution Amount	266,139,156				
(4c) Benefit Payouts & Refunds	(2,057,987,410)				
(4d) Administrative Expenses	(16,547,823)				
(4e) Net of Contributions and Disbursements	(4,076,721)				
(5) Total Investment Income					
=(3)-(1)-(4e)	681,377,052				
(6) Projected Rate of Return		7.25%			
(7) Projected Investment Income					
=(1)x(6)+([1+(6)]^5-1)x(4e)	1,057,018,357				
(8) Investment Income in Excess of Projected Income	(375,641,305)				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	\$ (75,128,261)				
(9b) From One Year Ago	241,573,942	\$ (75,128,261)			
(9c) From Two Years Ago	130,825,664	241,573,942	\$ (75,128,261)		
(9d) From Three Years Ago	(168,729,601)	130,825,664	241,573,942	\$ (75,128,261)	
(9e) From Four Years Ago	244,639,950	(168,729,599)	130,825,662	241,573,940	\$ (75,128,261)
(9f) Total Recognized Investment Gain	373,181,694	128,541,746	297,271,343	166,445,679	(75,128,261)
(10) Change in Actuarial Value of Assets					
=(4e)+(7)+(9f)	\$ 1,426,123,330				
End of Year:					
(3) Market Value of Assets	\$ 15,258,866,572				
(11) Actuarial Value of Assets					
=(2)+(10)	\$ 14,741,736,065				

State Employees' Retirement System of Illinois
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS - HYPOTHETICAL ASSETS

Year Ending June 30	2015	2016	2017	2018	2019
Beginning of Year:					
(1) Hypothetical Value of Assets	\$ 13,012,128,199				
(2) Hypothetical Actuarial Value of Assets	11,890,589,104				
End of Year:					
(3) Hypothetical Value of Assets	13,729,335,502				
(4) Contributions and Disbursements					
(4a) State Contribution Amount ¹	1,915,465,449				
(4b) Employee Contribution Amount	266,139,156				
(4c) Benefit Payouts & Refunds	(2,057,987,410)				
(4d) Administrative Expenses	(16,547,823)				
(4e) Net of Contributions and Disbursements	107,069,372				
(5) Total Investment Income ²					
=(3)-(1)-(4e)	610,137,931				
(6) Projected Rate of Return					
	7.25%				
(7) Projected Investment Income					
=(1)x(6)+([1+(6)] ^{.5} -1)x(4e)	947,192,651				
(8) Investment Income in Excess of Projected Income					
	(337,054,720)				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	\$ (67,410,944)				
(9b) From One Year Ago	214,666,481	\$ (67,410,944)			
(9c) From Two Years Ago	115,217,817	214,666,481	\$ (67,410,944)		
(9d) From Three Years Ago	(146,907,452)	115,217,817	214,666,481	\$ (67,410,944)	
(9e) From Four Years Ago	211,034,626	(146,907,452)	115,217,817	214,666,479	\$ (67,410,944)
(9f) Total Recognized Investment Gain	326,600,528	115,565,902	262,473,354	147,255,535	(67,410,944)
(10) Change in Hypothetical Actuarial Value of Assets					
=(4e)+(7)+(9f)	\$ 1,380,862,551				
End of Year:					
(3) Hypothetical Market Value of Assets	\$ 13,729,335,502				
(11) Hypothetical Actuarial Value of Assets					
=(2)+(10)	\$ 13,271,451,655				

¹ Represents 43.009 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2013, valuation and is based upon the hypothetical asset value which assumes no infusion from the proceeds of the GOB sale that were deposited July 1, 2003.

² Investment income assumes hypothetical value of assets earns the Fund's actual rate of return for fiscal year 2015 of 4.67 percent.

SECTION D

HISTORICAL ACCOUNTING DISCLOSURES

The measurements required under GASB Statements Nos. 67 and 68 are provided in a separate report.

GASB Disclosure

Prior to fiscal year ending June 30, 2014, the accounting policies of the State of Illinois relative to its retirement systems were based on the terms of GASB Statements Nos. 25 and 27. Effective with fiscal year ending June 30, 2014, GASB Statement No. 67 replaced GASB Statement No. 25 for pension plan financial reporting. Effective with fiscal year ending June 30, 2015, GASB Statement No. 68 is replacing GASB Statement No. 27 for employer financial reporting. A separate report containing the information required by GASB Statements Nos. 67 and 68 has been provided to the System. Table Five below and Table Six on page 33 provide historical GASB Statements Nos. 25 and 27 information. Historical information regarding GASB Statements Nos. 25 and 27 will no longer be provided in valuation reports subsequent to June 30, 2015.

Table 5

Historical Financial Accounting Information in Accordance with GASB Statement No. 27

A. Historical Schedule of Funding Progress

	<u>6/30/2014</u>	<u>6/30/2013</u>	<u>6/30/2012</u>
1 Actuarial Value of Assets	\$ 13,315,612,735	\$ 11,877,418,896	\$ 11,477,264,329
2 Actuarial Accrued Liability (AAL)	39,526,844,967	34,720,764,557	33,091,186,194
3 Unfunded AAL (UAAL) [(2) - (1)]	26,211,232,232	22,843,345,661	21,613,921,865
4 Funded Ratio [(1) ÷ (2)]	33.69%	34.21%	34.68%
5 Covered Payroll	4,416,152,691	4,236,191,257	4,329,083,716
6 UAAL as a Percentage of Covered Payroll	593.53%	539.24%	499.27%

B. Historical Schedule of Employer Contributions for the Fiscal Year End

	<u>6/30/2014</u>	<u>6/30/2013</u>	<u>6/30/2012</u>
1 Annual Required Contribution (ARC) per GASB			
(a) Percentage of payroll	44.311%	41.105%	37.302%
(b) Covered payroll for fiscal year	\$4,416,152,691	\$4,236,191,257	\$4,329,083,716
(c) ARC for fiscal year	1,956,841,419	1,741,286,416	1,614,834,808
2 Total Employer Contribution	1,699,447,826	1,531,932,137	1,391,416,375
3 Percentage of ARC Contributed [(2) ÷ (1)]	86.85%	87.98%	86.16%
4 Annual Contribution Required per State Statute			
(a) Percentage of payroll	38.435%	36.116%	32.252%
(b) Covered payroll for fiscal year	4,416,152,691	4,236,191,257	4,329,083,716
(c) Total required contribution	1,697,348,287	1,529,942,834	1,396,216,080
5 Employer Contribution	1,699,447,826	1,531,932,137	1,391,416,375
6 Percentage of (4) Contributed [(5) ÷ (4)]	100.12%	100.13%	99.66%

C. Notes to Required Schedules

1. The cost method used to determine the ARC is the Projected Unit Credit Cost Method. The ARC (as percentage of payroll) for each fiscal year was determined as of the valuation two years prior, based on the assumptions then in effect.
2. The assets are shown at actuarial value.
3. Economic assumptions include an inflation rate of 3.0 percent; an investment return rate of 8.50 percent prior to the June 30, 2010, valuation, 7.75 percent for the valuations as of June 30, 2010, through June 30, 2013, and 7.25 percent thereafter; salary increase rates based on age-related productivity and merit rates plus inflation; and postretirement benefit increases of 3.0 percent.
4. The amortization method is an open 30-year period, level percent of projected capped payroll.

Historical Development of Net Pension Obligation in Accordance with GASB Statement No. 27 (Date of Transition is July 1, 1996)

Applicable Actuarial Valuation						
Fiscal Year	As-of Date	Investment Assumption	Annual Required Contribution*	Actual Contribution**	Amortization Years	Amortization Factor
(1)	(2)	(3)	(4)	(5)	(6)	(7)
7/1/87 - 6/30/88	6/30/1986	8.00%	\$ 186,935,353	\$ 99,990,922	40	11.92461333
7/1/88 - 6/30/89	6/30/1987	8.00%	179,420,448	98,471,993	40	11.92461333
7/1/89 - 6/30/90	6/30/1988	8.00%	184,689,149	107,938,094	40	11.92461333
7/1/90 - 6/30/91	6/30/1989	8.00%	191,296,277	115,979,568	40	11.92461333
7/1/91 - 6/30/92	6/30/1990	8.00%	208,717,019	98,532,783	40	11.92461333
7/1/92 - 6/30/93	6/30/1991	8.00%	227,588,508	114,413,597	40	11.92461333
7/1/93 - 6/30/94	6/30/1992	8.00%	277,518,586	127,649,961	40	11.92461333
7/1/94 - 6/30/95	6/30/1993	8.00%	306,006,674	136,589,471	40	11.92461333
7/1/95 - 6/30/96	6/30/1994	8.00%	335,219,027	146,397,934	40	11.92461333
7/1/96 - 6/30/97	6/30/1995	8.00%	211,125,012	158,179,514	40	19.84983174
7/1/97 - 6/30/98	6/30/1996	8.00%	206,725,718	200,741,736	40	19.53100753
7/1/98 - 6/30/99	6/30/1997	8.50%	319,746,993	315,525,007	40	15.55212396
7/1/99 - 6/30/00	6/30/1998	8.50%	299,081,856	340,872,521	40	15.38193387
7/1/00 - 6/30/01	6/30/1999	8.50%	294,351,538	366,028,937	40	15.17924930
7/1/01 - 6/30/02	6/30/2000	8.50%	306,509,801	386,116,583	40	15.53675931
7/1/02 - 6/30/03	6/30/2001	8.50%	449,348,585	396,067,236	40	16.01251393
7/1/03 - 6/30/04	6/30/2002	8.50%	576,219,951	1,864,673,411	40	20.17751836
7/1/04 - 6/30/05	6/30/2003	8.50%	727,428,010	427,434,612	40	19.34057660
7/1/05 - 6/30/06	6/30/2004	8.50%	672,555,569	210,499,791	40	18.52371012
7/1/06 - 6/30/07	6/30/2005	8.50%	823,802,760	358,786,650	30	14.85458369
7/1/07 - 6/30/08	6/30/2006	8.50%	986,410,891	587,732,407	30	14.91835797
7/1/08 - 6/30/09	6/30/2007	8.50%	1,003,432,849	774,910,344	30	15.42654344
7/1/09 - 6/30/10	6/30/2008	8.50%	1,177,313,343	1,095,545,856	30	15.47602451
7/1/10 - 6/30/11	6/30/2009	8.50%	1,289,002,005	1,127,886,796	30	15.20158584
7/1/11 - 6/30/12	6/30/2010	7.75%	1,614,834,808	1,391,416,375	30	16.12498455
7/1/12 - 6/30/13	6/30/2011	7.75%	1,741,286,416	1,531,932,137	30	16.53311210
7/1/13 - 6/30/14	6/30/2012	7.75%	1,956,841,419	1,699,447,826	30	15.69401240
Fiscal Year	Beginning of Year NPO	Interest on NPO	Amortization of NPO	Annual Pension Cost (APC)***	Increase in NPO	End of Year NPO
(1)	(8)	(9)	(10)	(4 + 9 - 10)	(11 - 5)	(8 + 12)
7/1/87 - 6/30/88	\$ 0	\$ 0	\$ 0	\$186,935,353	\$ 86,944,431	\$ 86,944,431
7/1/88 - 6/30/89	86,944,431	6,955,554	7,291,174	179,084,828	80,612,835	167,557,267
7/1/89 - 6/30/90	167,557,267	13,404,581	14,051,379	184,042,351	76,104,257	243,661,524
7/1/90 - 6/30/91	243,661,524	19,492,922	20,433,495	190,355,705	74,376,137	318,037,660
7/1/91 - 6/30/92	318,037,660	25,443,013	26,670,690	207,489,343	108,956,560	426,994,220
7/1/92 - 6/30/93	426,994,220	34,159,538	35,807,804	225,940,241	111,526,644	538,520,864
7/1/93 - 6/30/94	538,520,864	43,081,669	45,160,447	275,439,808	147,789,847	686,310,711
7/1/94 - 6/30/95	686,310,711	54,904,857	57,554,127	303,357,404	166,767,933	853,078,644
7/1/95 - 6/30/96	853,078,644	68,246,292	71,539,313	331,926,005	185,528,071	1,038,606,716
7/1/96 - 6/30/97	1,038,606,716	83,088,537	86,323,200	378,249,205	214,890,349	1,253,507,065
7/1/97 - 6/30/98	1,122,317,551	89,785,404	93,060,677	411,230,882	239,047,750	1,361,564,801
7/1/98 - 6/30/99	1,160,623,565	98,653,003	102,913,680	449,880,485	264,372,018	1,426,005,813
7/1/99 - 6/30/00	1,188,870,576	101,053,999	105,907,678	470,784,164	282,845,796	1,471,626,614
7/1/00 - 6/30/01	1,170,843,851	99,521,727	103,443,405	447,340,759	264,418,175	1,405,255,684
7/1/01 - 6/30/02	1,121,553,676	95,332,062	99,625,677	417,728,082	245,128,594	1,341,682,270
7/1/02 - 6/30/03	1,065,091,851	90,532,807	94,565,484	393,162,597	230,635,175	1,275,727,451
7/1/03 - 6/30/04	1,142,389,790	97,103,132	101,216,616	412,379,213	249,166,121	1,394,895,613
7/1/04 - 6/30/05	(105,577,500)	(8,974,088)	(9,451,688)	392,927,525	240,191,433	1,304,703,925
7/1/05 - 6/30/06	190,900,670	16,226,557	17,397,127	375,530,400	258,133,273	1,276,837,173
7/1/06 - 6/30/07	658,877,258	56,004,567	58,572,125	434,102,275	315,528,148	1,392,360,423
7/1/07 - 6/30/08	1,135,542,787	96,521,137	100,472,274	534,574,549	411,603,895	1,544,178,444
7/1/08 - 6/30/09	1,554,625,265	132,143,148	133,476,322	668,050,871	523,577,747	1,811,628,118
7/1/09 - 6/30/10	1,814,514,923	154,233,768	155,790,090	823,840,961	668,050,871	2,132,371,812
7/1/10 - 6/30/11	1,933,269,341	164,327,894	166,017,984	989,858,845	823,840,961	2,306,219,803
7/1/11 - 6/30/12	2,131,536,940	165,194,113	166,888,227	1,156,047,062	989,858,845	2,506,106,029
7/1/12 - 6/30/13	2,387,961,022	185,066,979	187,945,958	1,343,993,021	1,156,047,062	2,734,043,083
7/1/13 - 6/30/14	2,637,947,221	204,440,910	206,486,820	1,550,479,841	1,343,993,021	2,940,542,862

* The annual required contributions for FYE 6/30/1988 through 6/30/1996 were determined based on the APB8 percentages provided by the System. Thereafter, the annual required contribution was obtained by adding the normal cost and an amortization over the period disclosed in column (6) (constant percent of payroll) of the UAAL (AAL - MVA) at the valuation date shown in column (2). The resulting percentage of payroll is applied to the actual covered payroll for the applicable fiscal year.

** The actual contributions for FYE 6/30/1988 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.

*** APC = (4) + [(8)*(3)] - [(8)/(7)]

SECTION E
PARTICIPANT DATA

Active Age and Service Distribution June 30, 2015

Age Group	Years of Service									Total	Percentage of Total	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Up			
Under 20	149	26									175	
20-24	629	842	23								1,494	2%
25-29	581	2,879	712	5							4,177	7%
30-34	429	2,624	1,733	473	28						5,287	8%
35-39	318	1,888	1,440	1,626	998	18					6,288	10%
40-44	367	1,552	1,134	1,460	2,500	750	39				7,802	12%
45-49	435	1,377	1,058	1,314	2,036	2,047	1,377	104			9,748	15%
50-54	411	1,172	952	1,227	1,655	1,757	2,123	1,008	83		10,388	17%
55-59	329	999	817	991	1,484	1,192	1,487	855	667		8,821	14%
60-64	271	537	640	755	1,049	797	809	484	673		6,015	10%
65-69	176	165	263	332	403	269	289	121	249		2,267	4%
70 & Over	45	50	76	120	158	113	89	52	108		811	1%
Total	4,140	14,111	8,848	8,303	10,311	6,943	6,213	2,624	1,780		63,273	100%
Percentage of Total	7%	22%	14%	13%	16%	11%	10%	4%	3%		100%	

Retirees and Beneficiaries by Type of Benefit Being Paid June 30, 2015

<u>Type of Benefit Being Paid</u>	<u>Count</u>	<u>Monthly Payment</u>	<u>Annual Payment</u>	<u>Average Annual Payment</u>
Retirement Annuity	54,802	\$ 156,817,828.04	\$ 1,881,813,936.48	\$ 34,338.42
Survivors	10,103	10,038,407.30	120,460,887.60	11,923.28
Widows	66	60,528.64	726,343.68	11,005.21
Occupational Death	55	58,526.94	702,323.28	12,769.51
QILDRO	646	749,866.28	8,998,395.36	13,929.40
Reversionary Annuity	19	50,154.08	601,848.96	31,676.26
Non-Occupational Disability	1,171	2,472,411.02	29,668,932.24	25,336.41
Occupational Disability	616	1,579,485.70	18,953,828.40	30,769.20
Temporary Disability	380	314,055.38	3,768,664.56	9,917.54
Total Temporary Disability - Occupational	96	227,738.24	2,732,858.88	28,467.28
Eligible for Deferred Retirement Annuity	83	47,022.26	564,267.12	6,798.40
Eligible for Deferred Survivor Annuity	149	25,513.32	306,159.84	2,054.76
Total	68,186	\$ 172,441,537.20	\$ 2,069,298,446.40	\$ 30,347.85

SECTION F

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods and Assumptions

Actuarial Cost Method as Mandated by 40 ILCS 5/14-131, Adopted June 30, 1989

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

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

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

Estimated annual administrative expenses are added to the normal cost.

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

Actuarial Assumptions Adopted June 30, 2014

Actuarial assumptions are set by the Board of Trustees. Additional information regarding the rationale for the assumptions may be found in the experience study report of the State Employees' Retirement System for the period from July 1, 2009, to June 30, 2013. All actuarial assumptions are expectations of future experience, not market measures.

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 based on the experience study report of the State Employees' Retirement System for the period from July 1, 2009, to June 30, 2013.

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 expenses.

General Inflation

3.00 percent per annum, compounded annually.

This assumption serves as the basis for the determination of Tier Two annual increases that 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

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				
Service (Beginning of Year)	Regular Formula Employees		Alternate Formula Employees	
	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.

415(b) and 401(a)(17) Limits

No explicit assumption is made with respect to these items.

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.

Age Group	New Entrant Benefit Groups												Total	
	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 Positions Formerly Eligible for Alternate Formula Benefits that are Covered by Social Security		New Entrants Eligible for Alternate Formula Benefits that are Covered by Social Security		New Entrants in Positions Formerly Eligible for Alternate Formula Benefits that are not Covered by Social Security		New Entrants Eligible for Alternate Formula Benefits that are not Covered by Social Security			
	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary
Under 20	80	2,358,446			14	690,023	17	780,785			1	36,934	112	3,866,188
20-24	2,182	85,476,855	8	289,273	587	29,624,728	843	42,684,464	218	13,929,071	73	4,422,404	3,911	176,426,795
25-29	3,788	171,209,790	28	1,507,166	814	42,939,907	1,016	55,143,162	355	23,295,236	129	8,107,343	6,130	302,202,604
30-34	3,359	166,218,047	27	1,519,642	571	32,634,270	766	44,917,258	169	11,839,114	60	4,055,243	4,952	261,183,574
35-39	2,912	152,253,060	8	409,630	454	26,583,379	563	34,534,786	73	5,046,495	17	1,209,947	4,027	220,037,297
40-44	2,856	154,770,274	15	827,662	431	25,834,477	417	26,931,594	29	2,125,886	2	125,244	3,750	210,615,137
45-49	2,350	129,772,966	12	726,104	317	19,072,924	285	19,364,613	14	906,632	3	214,488	2,981	170,057,727
50-54	1,962	108,959,941	7	433,206	231	14,816,904	155	10,787,405	11	798,398	1	50,964	2,367	135,846,818
55-59	1,234	67,843,687	10	644,644	137	8,846,704	53	3,537,563	8	593,711			1,442	81,466,309
60-64	432	22,392,766	3	223,522	44	2,863,177	15	1,148,446	3	234,394			497	26,862,305
65-69	38	2,264,329			4	261,762	1	77,852					43	2,603,943
70 & Over														
Total	21,193	\$ 1,063,520,161	118	\$ 6,580,849	3,604	\$ 204,168,255	4,131	\$ 239,907,928	880	\$ 58,768,937	286	\$ 18,222,567	30,212	\$ 1,591,168,697
Avg. Salary		\$ 50,183		\$ 55,770		\$ 56,650		\$ 58,075		\$ 66,783		\$ 63,715		\$ 52,667
Avg. Age		37.69		37.57		34.95		32.52		29.21		27.83		36.31
Percent Male		43%		73%		78%		75%		91%		84%		53%

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				
Age	Eligible for Alternate Formula Benefits Only		Eligible for Regular Formula Benefits Only	
	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

Assets available for benefits are used as described on page 46. The asset valuation method is prescribed by statute, and does not appear to allow a corridor, therefore, a corridor has not been established.

Expenses

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

Spouse's Age

The female spouse is assumed to be 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
PLAN PROVISIONS

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

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 $66\frac{2}{3}$ 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
2015	1.70%	0.85%	0.85%	\$111,571.63

SECTION H

GLOSSARY

Glossary

<i>Actuarial Accrued Liability</i> (“AAL”)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<i>Actuarial Cost Method</i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of future Normal Costs and the Actuarial Accrued Liability.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value</i> (“APV”)	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i>Actuarial Present Value of Future Benefits</i> (“APVFB”)	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i>Actuarial Valuation</i>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 25, such as the Funded Ratio and the Annual Required Contribution (“ARC”).
<i>Actuarial Value of Assets</i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (“ARC”).

Glossary (cont'd)

Amortization Method

A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

Amortization Payment

That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Amortization Period

The period used in calculating the Amortization Payment.

Annual Required Contribution ("ARC")

The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB No. 25. The ARC consists of the Employer Normal Cost and Amortization Payment.

Closed Amortization Period

A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

Employer Normal Cost

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single Amortization Period

For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Experience Gain/Loss

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience; e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience; i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

Glossary (cont'd)

<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 25 and GASB No. 27</i>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
<i>GASB No. 67 and GASB No. 68</i>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68, which replaces Statement No. 27 effective with the fiscal year ending June 30, 2015, sets the accounting rules for the employers that sponsor or contribute to public retirement systems. Statement No. 67, which replaces Statement No. 25 effective with fiscal year ending June 30, 2014, sets the rules for the systems themselves.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

SECTION I

ADDITIONAL PROJECTION DETAILS

30-Year Projection of Actuarial Accrued Liability
(All Dollar Amounts in Millions)

Valuation Date June 30	Current Inactives		Actives			Grand Totals		
	Retirees & Beneficiaries	Deferreds	Tier 1	Current Tier 2	Future Tier 2	Current Retirees, Beneficiaries, & Deferreds	Actives	Total
2015	\$25,688.11	\$625.45	\$14,350.32	\$79.54	\$0.00	\$26,313.55	\$14,429.86	\$40,743.41
2016	25,478.20	656.04	16,135.42	120.22	0.00	26,134.24	16,255.64	42,389.88
2017	25,224.36	684.92	17,935.46	163.55	15.44	25,909.27	18,114.46	44,023.73
2018	24,925.94	712.09	19,744.62	210.83	47.00	25,638.03	20,002.45	45,640.48
2019	24,582.45	737.53	21,552.80	263.66	96.08	25,319.99	21,912.53	47,232.52
2020	24,193.56	760.18	23,348.07	322.89	165.22	24,953.74	23,836.18	48,789.92
2021	23,759.10	779.85	25,119.66	389.18	256.83	24,538.95	25,765.67	50,304.63
2022	23,279.15	796.40	26,852.67	462.99	374.05	24,075.55	27,689.70	51,765.25
2023	22,754.02	809.95	28,534.86	544.06	520.30	23,563.97	29,599.22	53,163.18
2024	22,184.34	820.80	30,152.65	630.31	700.92	23,005.14	31,483.88	54,489.02
2025	21,571.10	828.72	31,690.66	721.13	920.11	22,399.81	33,331.91	55,731.73
2026	20,915.62	839.16	33,139.31	816.57	1,181.54	21,754.78	35,137.43	56,892.21
2027	20,219.70	846.88	34,488.11	917.23	1,488.26	21,066.58	36,893.60	57,960.18
2028	19,485.55	852.09	35,732.73	1,023.53	1,843.83	20,337.64	38,600.09	58,937.73
2029	18,715.75	854.59	36,873.37	1,135.99	2,251.02	19,570.34	40,260.39	59,830.73
2030	17,913.42	854.38	37,905.81	1,254.94	2,713.47	18,767.80	41,874.22	60,642.02
2031	17,082.25	851.60	38,823.64	1,380.63	3,234.95	17,933.85	43,439.22	61,373.07
2032	16,226.39	846.19	39,616.87	1,513.11	3,819.62	17,072.59	44,949.60	62,022.18
2033	15,350.43	838.29	40,280.64	1,652.32	4,471.74	16,188.72	46,404.70	62,593.42
2034	14,459.38	827.95	40,812.80	1,798.32	5,195.20	15,287.33	47,806.32	63,093.65
2035	13,558.64	815.19	41,206.66	1,950.77	5,994.41	14,373.83	49,151.83	63,525.66
2036	12,653.87	799.84	41,453.02	2,109.48	6,872.05	13,453.72	50,434.55	63,888.27
2037	11,751.01	782.03	41,548.45	2,274.41	7,829.77	12,533.04	51,652.62	64,185.66
2038	10,856.07	761.97	41,495.53	2,445.29	8,869.20	11,618.04	52,810.03	64,428.07
2039	9,975.09	739.61	41,296.68	2,621.80	9,992.01	10,714.70	53,910.50	64,625.20
2040	9,113.97	715.00	40,955.59	2,803.28	11,199.68	9,828.97	54,958.55	64,787.52
2041	8,278.35	688.42	40,478.30	2,988.84	12,493.34	8,966.77	55,960.47	64,927.25
2042	7,473.48	660.02	39,873.00	3,177.01	13,873.86	8,133.49	56,923.86	65,057.36
2043	6,704.10	629.99	39,147.96	3,366.56	15,341.74	7,334.09	57,856.26	65,190.35
2044	5,974.36	598.55	38,311.04	3,555.72	16,896.97	6,572.91	58,763.73	65,336.64
2045	5,287.72	565.96	37,369.83	3,742.01	18,538.87	5,853.68	59,650.70	65,504.38

30-Year Projection of the Present Value of Future Benefits
(All Dollar Amounts in Millions)

Valuation Date June 30	Current Inactives		Actives			Grand Totals		
	Retirees & Beneficiaries	Deferreds	Tier 1	Current Tier 2	Future Tier 2	Current Retirees, Beneficiaries, & Deferreds	Actives	Total
2015	\$25,688.11	\$625.45	\$21,730.13	\$925.29	\$0.00	\$26,313.55	\$22,655.42	\$48,968.97
2016	25,478.20	656.04	23,166.13	970.34	312.86	26,134.24	24,449.33	50,583.57
2017	25,224.36	684.92	24,607.27	1,019.91	658.48	25,909.27	26,285.67	52,194.94
2018	24,925.94	712.09	26,047.22	1,073.50	1,036.12	25,638.03	28,156.83	53,794.86
2019	24,582.45	737.53	27,478.22	1,131.88	1,454.80	25,319.99	30,064.90	55,384.89
2020	24,193.56	760.18	28,891.29	1,195.37	1,907.32	24,953.74	31,993.99	56,947.73
2021	23,759.10	779.85	30,278.20	1,264.32	2,401.38	24,538.95	33,943.89	58,482.84
2022	23,279.15	796.40	31,628.52	1,339.19	2,940.24	24,075.55	35,907.95	59,983.50
2023	22,754.02	809.95	32,933.26	1,419.96	3,516.51	23,563.97	37,869.73	61,433.69
2024	22,184.34	820.80	34,182.11	1,504.79	4,145.77	23,005.14	39,832.67	62,837.81
2025	21,571.10	828.72	35,364.06	1,593.42	4,823.53	22,399.81	41,781.01	64,180.83
2026	20,915.62	839.16	36,471.55	1,685.93	5,546.58	21,754.78	43,704.06	65,458.85
2027	20,219.70	846.88	37,496.41	1,782.53	6,323.51	21,066.58	45,602.45	66,669.03
2028	19,485.55	852.09	38,434.28	1,883.40	7,133.34	20,337.64	47,451.03	67,788.67
2029	18,715.75	854.59	39,282.97	1,988.76	7,994.24	19,570.34	49,265.96	68,836.30
2030	17,913.42	854.38	40,037.86	2,098.67	8,905.79	18,767.80	51,042.32	69,810.12
2031	17,082.25	851.60	40,693.05	2,213.23	9,873.60	17,933.85	52,779.88	70,713.73
2032	16,226.39	846.19	41,241.11	2,332.40	10,899.68	17,072.59	54,473.20	71,545.78
2033	15,350.43	838.29	41,677.93	2,456.11	11,976.78	16,188.72	56,110.82	72,299.54
2034	14,459.38	827.95	42,000.76	2,584.30	13,116.54	15,287.33	57,701.60	72,988.93
2035	13,558.64	815.19	42,204.54	2,716.63	14,327.50	14,373.83	59,248.66	73,622.49
2036	12,653.87	799.84	42,282.87	2,852.92	15,616.96	13,453.72	60,752.75	74,206.47
2037	11,751.01	782.03	42,233.00	2,993.01	16,971.50	12,533.04	62,197.50	74,730.54
2038	10,856.07	761.97	42,055.66	3,136.59	18,392.92	11,618.04	63,585.17	75,203.22
2039	9,975.09	739.61	41,751.94	3,283.27	19,882.98	10,714.70	64,918.18	75,632.88
2040	9,113.97	715.00	41,323.86	3,432.36	21,442.75	9,828.97	66,198.97	76,027.93
2041	8,278.35	688.42	40,775.33	3,583.06	23,072.40	8,966.77	67,430.79	76,397.56
2042	7,473.48	660.02	40,111.81	3,734.15	24,773.89	8,133.49	68,619.85	76,753.34
2043	6,704.10	629.99	39,339.12	3,884.50	26,548.62	7,334.09	69,772.24	77,106.34
2044	5,974.36	598.55	38,463.25	4,032.56	28,400.80	6,572.91	70,896.61	77,469.52
2045	5,287.72	565.96	37,490.24	4,176.24	30,330.35	5,853.68	71,996.83	77,850.50

30-Year Projection of the Benefit Payments Including Administrative Expenses and Disability Payments
(All Dollar Amounts in Millions)

Valuation Date June 30	Current Inactives		Actives			Grand Totals		
	Retirees & Beneficiaries	Deferreds	Tier 1	Current Tier 2	Future Tier 2	Current Retirees, Beneficiaries, & Deferreds	Actives	Total
2015	\$2,001.03	\$14.24	\$134.64	\$21.27	\$0.00	\$2,015.27	\$155.92	\$2,171.18
2016	2,028.76	18.05	230.20	20.06	6.81	2,046.80	257.07	2,303.88
2017	2,054.03	21.71	332.25	19.66	13.48	2,075.74	365.39	2,441.12
2018	2,076.65	25.28	441.68	18.77	20.47	2,101.94	480.93	2,582.87
2019	2,096.45	29.76	559.19	17.93	27.69	2,126.21	604.81	2,731.02
2020	2,113.23	34.22	683.37	17.11	35.17	2,147.45	735.66	2,883.11
2021	2,126.74	38.61	815.79	16.21	42.96	2,165.35	874.97	3,040.32
2022	2,136.77	42.67	954.33	15.76	51.24	2,179.44	1,021.34	3,200.78
2023	2,143.02	46.23	1,099.65	17.49	57.83	2,189.25	1,174.98	3,364.23
2024	2,145.21	49.81	1,251.67	19.76	64.87	2,195.02	1,336.30	3,531.32
2025	2,143.05	47.93	1,406.31	22.22	72.61	2,190.98	1,501.15	3,692.13
2026	2,136.23	51.29	1,563.63	24.75	81.12	2,187.52	1,669.50	3,857.02
2027	2,124.42	54.25	1,719.38	27.39	90.66	2,178.67	1,837.43	4,016.09
2028	2,107.44	57.24	1,871.16	30.12	101.04	2,164.68	2,002.33	4,167.00
2029	2,084.97	60.03	2,021.14	33.09	112.47	2,145.00	2,166.70	4,311.70
2030	2,056.65	62.49	2,170.25	36.30	125.12	2,119.14	2,331.68	4,450.82
2031	2,022.30	64.84	2,319.57	39.87	139.02	2,087.14	2,498.47	4,585.60
2032	1,981.79	66.87	2,465.36	43.83	154.40	2,048.66	2,663.59	4,712.25
2033	1,935.04	68.67	2,606.01	48.16	171.33	2,003.71	2,825.50	4,829.21
2034	1,882.03	70.28	2,743.56	53.14	189.98	1,952.31	2,986.68	4,938.99
2035	1,822.84	71.89	2,878.96	58.57	211.88	1,894.73	3,149.42	5,044.15
2036	1,757.67	73.20	3,008.24	64.46	237.92	1,830.87	3,310.62	5,141.49
2037	1,686.81	74.11	3,127.83	70.89	267.73	1,760.92	3,466.44	5,227.37
2038	1,610.68	74.94	3,237.46	77.95	301.46	1,685.62	3,616.87	5,302.49
2039	1,529.83	75.54	3,336.27	85.88	339.38	1,605.37	3,761.53	5,366.90
2040	1,444.92	75.72	3,422.61	94.77	381.85	1,520.64	3,899.23	5,419.87
2041	1,356.73	75.62	3,495.25	104.95	429.19	1,432.35	4,029.38	5,461.73
2042	1,266.11	75.20	3,554.21	116.23	481.76	1,341.31	4,152.20	5,493.51
2043	1,173.97	74.46	3,599.75	128.98	540.01	1,248.44	4,268.74	5,517.18
2044	1,081.27	73.37	3,632.23	143.57	604.64	1,154.65	4,380.44	5,535.09
2045	988.97	71.96	3,651.56	160.38	676.12	1,060.93	4,488.06	5,549.00

Table 10

30-Year Projection of Active Population, Payroll, Employee Contributions, and Normal Costs

(All Dollar Amounts in Millions)

Valuation Date	Tier 1 Active Members				Current Tier 2 Active Members				Future Tier 2 Active Members			
	Population	Covered Payroll	Employee Contributions	Normal Cost	Population	Covered Payroll	Employee Contributions	Normal Cost	Population	Covered Payroll	Employee Contributions	Normal Cost
2015	49,433	\$3,934.36	\$223.75	\$853.74	13,840	\$725.80	\$30.36	\$54.98	0	\$0.00	\$0.00	\$0.00
2016	45,838	3,751.44	213.97	838.76	12,178	670.19	28.10	53.49	5,257	284.51	13.40	21.72
2017	42,576	3,638.97	208.00	823.58	11,206	653.95	27.45	53.86	9,491	537.35	25.68	42.87
2018	39,490	3,523.68	201.89	805.43	10,511	648.75	27.26	55.03	13,273	785.73	37.93	64.57
2019	36,472	3,395.53	194.82	783.88	9,976	649.94	27.33	56.67	16,824	1,041.11	50.74	87.73
2020	33,605	3,263.92	187.52	759.52	9,551	655.67	27.59	58.52	20,117	1,300.77	63.88	112.07
2021	30,835	3,122.18	179.45	730.66	9,178	662.80	27.91	60.23	23,260	1,570.98	77.71	138.16
2022	28,148	2,969.95	170.40	698.82	8,826	669.29	28.20	61.63	26,299	1,854.97	92.40	166.28
2023	25,626	2,816.76	161.27	664.17	8,494	675.47	28.48	62.70	29,153	2,146.61	107.48	195.82
2024	23,200	2,654.09	151.19	625.91	8,147	679.31	28.66	63.33	31,926	2,453.43	123.53	227.46
2025	20,911	2,489.18	140.80	586.58	7,775	680.48	28.73	63.90	34,587	2,772.90	140.27	260.63
2026	18,787	2,325.94	130.54	546.07	7,465	684.02	28.89	64.77	37,021	3,095.62	157.26	294.58
2027	16,777	2,158.45	119.92	506.80	7,180	687.57	29.05	65.82	39,315	3,427.35	174.78	329.81
2028	15,000	2,005.63	110.56	471.04	6,924	691.69	29.23	67.07	41,349	3,756.75	191.93	365.15
2029	13,366	1,857.34	101.62	436.69	6,691	696.17	29.42	68.42	43,215	4,090.22	209.29	401.43
2030	11,866	1,713.84	93.20	402.86	6,469	699.69	29.57	69.81	44,938	4,428.59	226.79	438.70
2031	10,463	1,570.28	84.75	367.61	6,257	702.37	29.68	71.14	46,553	4,771.72	244.55	477.12
2032	9,158	1,426.31	76.00	332.86	6,041	702.46	29.69	72.33	48,075	5,119.75	262.63	516.69
2033	7,988	1,291.50	68.09	299.95	5,830	701.17	29.63	73.47	49,455	5,466.81	280.46	556.86
2034	6,911	1,159.79	60.39	266.71	5,622	698.61	29.53	74.44	50,740	5,814.32	298.33	598.00
2035	5,914	1,029.25	52.68	232.11	5,411	693.83	29.28	75.26	51,948	6,163.95	316.42	639.70
2036	4,986	897.91	44.79	198.40	5,209	688.22	29.03	76.03	53,078	6,512.42	334.45	681.61
2037	4,181	779.04	37.92	168.07	5,005	680.58	28.70	76.67	54,086	6,854.58	351.98	723.28
2038	3,472	669.16	31.71	140.48	4,807	671.93	28.33	77.20	54,994	7,190.69	369.08	764.75
2039	2,856	569.51	26.25	115.87	4,606	661.14	27.88	77.57	55,810	7,520.76	385.74	806.00
2040	2,325	479.26	21.50	94.56	4,410	649.10	27.37	77.70	56,538	7,844.23	401.96	846.98
2041	1,883	401.16	17.59	77.01	4,204	633.94	26.73	77.41	57,187	8,161.34	417.72	887.61
2042	1,516	334.71	14.46	62.73	3,989	615.75	25.95	76.85	57,768	8,472.51	433.05	927.90
2043	1,215	278.03	11.87	51.00	3,780	596.59	25.14	75.96	58,278	8,776.92	447.98	967.72
2044	970	230.07	9.74	41.35	3,558	573.57	24.15	74.52	58,745	9,076.90	462.63	1,007.18
2045	770	189.31	7.95	33.35	3,331	547.92	23.05	72.48	59,172	9,372.44	477.02	1,046.23

Total payroll is capped for members hired after December 31, 2010, as defined in Public Act 96-0889.