

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS ANNUAL ACTUARIAL VALUATION AS OF JUNE 30, 2013





October 29, 2013

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

Re: State Employees' Retirement System Actuarial Valuation as of July 1, 2013

Dear Board Members:

The results of the June 30, 2013, 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, 2014, and ending June 30, 2015.

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 statues, in particular under 40 ILCS Section 5/14-131. The System's current contribution rate does not meet the requirements for amortizing the unfunded liability under GASB Statement No. 25. We advise strengthening the current statutory funding policy.

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.

The undersigned actuaries 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

Alex Rivera, FSA, EA, MAAA

alex Rivera

Senior Consultant

David Kausch, FSA, EA, MAAA

David Touset

Senior Consultant

Paul T. Wood, ASA, MAAA

Consultant

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.

	Table of Contents	Page
	fication Letter	
Section	on A - Introduction	1
	Introduction Charges Since Lest Veluction	1
	Changes Since Last Valuation	2
	Key Valuation Results	3
	Appropriation Requirements Under P.A. 88-0593, P.A. 93-0002, P.A. 93-0839, P.A. 94-0004, and P.A. 96-0043	3
	Method of Calculation for Appropriation Requirements	7
	GASB: Financial Accounting Information	8
	Observations on Actuarial Funding and Statutory Funding	11
Section	on B - Funding Results	
Table	s	
1	Results of Actuarial Valuation as of June 30, 2013	14
2	Analysis of Change in Unfunded Accrued Actuarial Liability	16
3	Analysis of Experience Gains and Losses in Unfunded Actuarial Liability for Fiscal Year Ending June 30, 2013	17
4a	32-year Projection under P.A. 88-0593, P.A. 94-0004, and P.A. 96-0043	18
4b	32-year Projection under P.A. 88-0593, P.A. 93-0002, P.A. 94-0004, and P.A. 96-0043	20
4c	32-year Projection under P.A. 88-0593, P.A. 94-0004, and P.A. 96-0043 with recognition of deferred gains and losses in the actuarial value of assets	22
4d	32-year Projection under P.A. 88-0593, P.A. 93-0002, P.A. 94-0004, and P.A. 96-0043 with recognition of deferred gains and losses in the actuarial value of assets	24
Section	on C - Fund Assets	
	Statement of Plan Net Assets	26
	Statement of Changes in Plan Net Assets	27
	Development of the Actuarial Value of Assets - Actual Assets	28
	Development of the Actuarial Value of Assets - Hypothetical Assets	29
Section	on D - Accounting Disclosures	
Table	s	
5	Financial Accounting Information in Accordance with GASB Statement No. 25	30
6	Development of Net Pension Obligation in Accordance with GASB Statement No. 27	31
Section	on E - Participant Data	
	Active Age and Service Distribution	33
	Retirees and Beneficiaries by Type of Benefit Being Paid	34
Section	on F - Actuarial Methods and Assumptions	35
Section	on G - Plan Provisions	46
Section	on H - Glossary	57
Section	on I - Additional Projection Details	
	32-year Projection of Actuarial Accrued Liability	60
	32-year Projection of the Present Value of Future Benefits	61
	32-year Projection of Active Population, Payroll, Employee Contributions, and Normal Costs	62



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, 2013. 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, 2014. For purposes of disclosure, this report also includes the annual required contribution and schedule of funding progress as required by GASB Statement No. 25 and the development of the net pension obligation in accordance with GASB Statement No. 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 five-year period ending June 30, 2010, and were adopted for use commencing with the June 30, 2011, 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 Acts were passed in fiscal year 2013 that affected SERS.

Public Act 98-0024 - Effective June 19, 2013

Public Act 98-0449 - Effective August 16, 2013

These Public Acts did not have a material impact on the valuation as of June 30, 2013.

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, 2005, to June 30, 2010. There were no changes to the assumptions or methods for the valuation as of June 30, 2013.

Following is a summary of the key valuation results for the current and prior plan years.

Key Valuation Results

Valuation Date:	June 30, 2013	June 30, 2012		
Fiscal Year Ending:	June 30, 2015	June 30, 2014		
Estimated Statutory Contributions:				
 Annual Amount 	\$1,748,430,000	\$1,662,667,000		
 Percentage of Covered Payroll 	40.472%	38.435%		
Annual Required Contribution (ARC):				
 Annual Amount 	\$1,983,988,983	\$1,916,849,287		
 Percentage of Covered Payroll 	45.925%	44.311%		
Membership				
• Number of				
- Active Members	61,545	62,729		
- Members Receiving Payments	65,050	62,788		
- Members Eligible for Deferred Benefits	247	265		
- Total	126,842	125,782		
 Covered Payroll 	\$4,236,191,257	\$4,329,083,716		
 Annualized Benefit Payments 	\$1,824,694,624	\$1,687,717,429		
Assets				
 Market Value of Assets (MVA) 	\$12,400,300,474	\$10,960,687,824		
 Actuarial Value of Assets (AVA) 	\$11,877,418,896	\$11,477,264,329		
• Return on MVA	13.74%	0.05%		
• Return on AVA	4.03%	2.99%		
 Ratio – AVA to MVA 	95.78%	104.71%		
Actuarial Information				
 Normal Cost Amount 	\$551,051,796	\$554,408,091		
 Actuarial Accrued Liability (AAL) 	\$34,720,764,557	\$33,091,186,194		
Unfunded Actuarial Accrued Liability (UAAL)	\$22,843,345,661	\$21,613,921,865		
 Funded Ratio based on AVA 	34.21%	34.68%		
 UAAL as % of Covered Payroll 	539.24%	499.27%		
Funded Ratio based on MVA	35.71%	33.12%		

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, 2013. 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 6/30/2012	\$ 10,960,687,824
2. Actual State Contribution Amount	1,531,932,137
3. Employee Contribution Amount	248,169,706
4. Benefit Payouts & Refunds	(1,824,256,057)
5. Administrative Expenses	(17,471,327)
6. Investment Income	1,501,238,191
7. Market Value of Assets 6/30/2013	12,400,300,474
8. Expected Investment Return at 7.75%	847,109,873
9. Investment Gain/(Loss) Current Year	654,128,318
10. Deferred Investment Gains and (Losses) All Years	522,881,578
11. Actuarial Value of Assets 6/30/2013 (7 10.)	11,877,418,896

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 6/30/2012	\$ 9,596,573,696
2. State Contribution Amount ¹	1,637,626,816
3. Employee Contribution Amount	248,169,706
4. Benefit Payouts & Refunds	(1,824,256,057)
5. Administrative Expenses	(17,471,327)
6. Investment Income ²	1,321,499,364
7. Hypothetical Value of Assets 6/30/2013	10,962,142,198
8. Expected Investment Return at 7.75%	745,410,277
9. Investment Gain/(Loss) Current Year	576,089,087
10. Deferred Investment Gains and (Losses) All Years	456,351,756
11. Hypothetical Actuarial Value of Assets 6/30/2013 (7 10.)	10,505,790,442

¹Represents 38.658 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2011, 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 2013 of 13.74 percent.

The fiscal year ending June 30, 2014, 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
2014	38.435%	1.877%	40.312%	\$4.326	\$1,743,865,000
2015	40.472%	1.867%	42.339%	4.320	1,829,086,000
2016	40.240%	1.789%	42.029%	4.475	1,880,717,000
2017	39.946%	1.792%	41.738%	4.630	1,932,394,000
2018	39.984%	1.791%	41.775%	4.784	1,998,673,000
2019	39.815%	1.785%	41.600%	4.944	2,056,566,000
2020	39.738%	1.842%	41.580%	5.104	2,122,330,000
2021	39.677%	1.887%	41.564%	5.270	2,190,564,000
2022	39.631%	1.921%	41.552%	5.441	2,260,903,000
2023	39.595%	1.947%	41.542%	5.610	2,330,572,000
2024	39.492%	2.023%	41.515%	5.789	2,403,227,000

For fiscal years 2015 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 2015 contribution rate is calculated assuming the actuarial value of assets as of July 1, 2013, earns a rate of return equal to the System's actuarially assumed rate of return.

The contributions for fiscal years 2016 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 2014 through 2017 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, 2013, 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 2017, 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, 2013, actuarial valuation. In order to determine projected contribution rates and amounts, the following additional assumptions were used:

- Projected annualized payroll of \$4,325,900,000 for fiscal year 2014. This amount was provided by the System.
- Total employer contributions of \$1,662,667,000 (including no payments from the unclaimed property fund) for fiscal year 2014, as provided by the System.
- Administrative expenses of \$21,389,985 for fiscal year 2014, as provided by the System.
- New entrants whose average age is 36.19 and average pay is \$49,421 (2013 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 61,545 for all years of the 32-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 32-year projection period is approximately 4.0 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 2014 appropriation was converted to a percentage of the expected 2014 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 2014 will be 38.435 percent (based on the certification of the June 30, 2012, valuation results issued on October 22, 2012).
- The contribution rates for fiscal years 2034 through 2045 will be a uniform percentage of 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.

GASB Statement No. 25 establishes a financial reporting framework for defined benefit plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and contribution patterns.

- The Schedule of Funding Progress includes information about the actuarially determined funded status from a long-term ongoing plan perspective and the progress made toward accumulating sufficient assets. For SERS, the liabilities are developed based on the Projected Unit Credit Cost Method. The assets are shown as an actuarial value as described on page 44. The funded ratio has decreased from 34.68 percent as of June 30, 2012, to 34.21 percent as of June 30, 2013. This decrease is primarily due to the recognition of asset losses from fiscal year 2012 and higher than expected retirements.
- The Schedule of Employer Contributions provides information about the annual required contribution ("ARC") and the percentage of the ARC that was actually contributed. For SERS, the ARC for fiscal year 2013 is equal to the employer normal cost plus a 30-year level-percentage-of-payroll amortization of the unfunded actuarial liability. For fiscal year 2013, State contributions of \$1,531,932,137 were approximately 88 percent of the ARC. The ARC for fiscal years 2014 and 2015 is greater than the employer contribution required by State statute.

The annual required contribution as well as the statutory contribution for fiscal years 2014 and 2015 are shown on the following page as a percentage of payroll. The ARC percentage and statutory contribution for 2014 are based on the results of the June 30, 2012, valuation. The dollar amount of the ARC and the statutory contribution for 2014 will be the product of the actual payroll for 2014 and the percentages shown.

	Fiscal Year 2015	Fiscal Year 2014
Employer normal cost	\$551,051,796	\$554,408,091
2. Initial amount to amortize the unfunded liability over 30 years as a level percentage of capped payroll	1,432,937,187	1,362,441,196
3. ARC [(1) + (2)]	\$1,983,988,983	\$1,916,849,287
4. ARC as a percentage of payroll	45.925%	44.311%
5. Estimated statutory contribution	\$1,748,430,000	\$1,662,667,000
6. Estimated statutory contribution as a percentage of payroll	40.472%	38.435%
7. Estimated statutory contribution as a percentage of ARC $[(5) \div (3)]$	88.127%	86.740%

GASB Statement No. 27 establishes standards for the measurement, recognition, and disclosure of pension expense and related liabilities. Annual pension cost is measured and disclosed on the accrual basis of accounting. In general, the annual pension cost is equal to the ARC with adjustments for past under-contributions or over-contributions. These adjustments are based on the net pension obligation (NPO) that represents the cumulative difference between the annual pension cost and the actual contribution to the plan. The first adjustment is equal to interest on the NPO, which is added to the ARC. The second adjustment is an amortization of the NPO, which is deducted from the ARC. This amortization is over an open 30-year period for fiscal year 2013 (i.e., the 30-year period is restarted each fiscal year).

These Statements were adopted by SERS (and the State of Illinois) for the 1997 fiscal year. A transition pension liability (asset) was developed under Statement No. 27 equal to the cumulative difference between the actuarially determined funding requirement and the actual amount contributed for fiscal years 1988 through 1996. As of the adoption date, all outstanding pension liabilities (assets) were adjusted to equal the transition NPO. The NPO as of June 30, 2012, of \$2,387,961,022 has increased to \$2,637,947,221 as of June 30, 2013, due to the 2013 APC of \$1,781,918,336 and actual 2013 employer contributions of \$1,531,932,137.

The GASB Statement Nos. 25 and 27 information is presented in draft form for review by the auditor. Please let us know if there are any changes so that we may maintain consistency with the State's financial statements.

Effective with Fiscal Year Ending June 30, 2014, GASB No. 67 is replacing GASB No. 25 for pension plan financial reporting requirements. GASB No. 68 is replacing GASB No. 27 for employer financial reporting effective with fiscal year ending June 30, 2015. The discount rate used for GASB Nos. 67 and 68 reporting purposes will produce a single equivalent discount rate based on 7.75 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 example 4.00 percent) for the portion of the projected benefits after assets are depleted. We believe

that the liability based on the GASB single equivalent discount rate will become an important liability for users of the systems financial information..

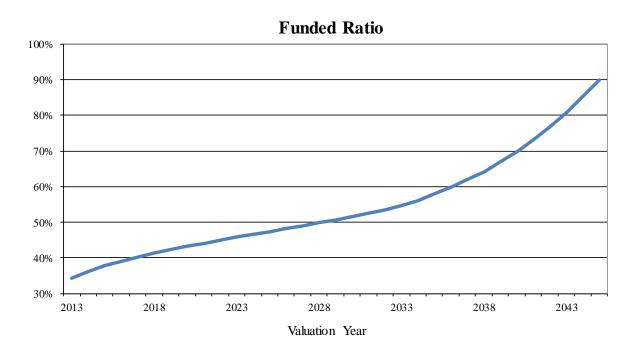
Due to the single equivalent discount rate and shorter amortization periods required under GASB Nos. 67 and 68, the liabilities and pension expense will be much higher and more volatile than under the current standards. A measurement of the single equivalent discount rate, liability and pension expense has not yet been performed.

Observations on Actuarial Funding and Statutory Funding

GASB Statements Nos. 25 and 27 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 GASB rules, this expense requirement is called 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.

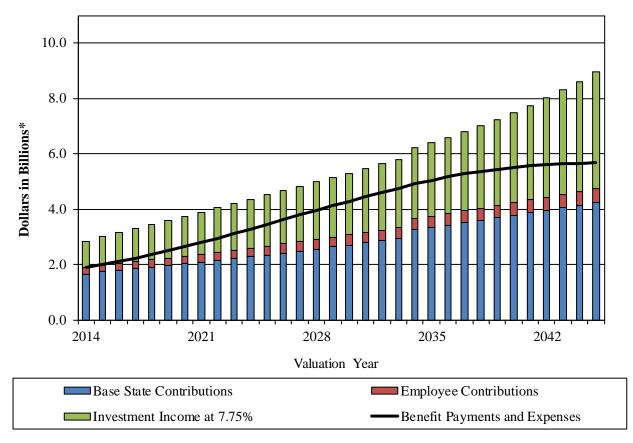
A key objective of the ARC is to accrue costs over the working lifetime of plan members to ensure that benefit obligations are satisfied and intergenerational equity is promoted. Although the ARC is solely an accounting provision, in certain circumstances it could represent a reasonable annual funding 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 ARC. However, a funding policy that differs significantly from the ARC 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 is projected to remain level, then increase at a moderate rate for the next 22 years and does not grow markedly until after 2033. This illustrates how significantly the current funding policy defers contributions into the future.



The following graph compares the projected benefits and expenses against employer contributions, employee contributions, and investment income. Beginning in 2015, benefits exceed State and employee contributions. From 2015 to 2033, the percentage of investment income needed to pay ongoing benefits increases from approximately 1.0 percent to 57.0 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 48.9 percent in 2034 to 22.0 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, 2013, is only 36 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. Reducing the projection period needed to reach 90 percent funding,
- 2. Increasing the 90 percent funding target, and
- 3. Separating the financing of benefits for members hired before and after December 31, 2010.

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

SECTION B

FUNDING RESULTS

Results of Actuarial Valuation as of June 30, 2013

a. Active b. Inactive: i. Eligible for deferred vested pension benefits (4,128 based on SERS service alone. An additional 248 are eligible when reciprocal service is added to SERS service). ii. Eligible for return of contributions only c. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities d. Eligible for Deferred Benefits: i. Retirement annuities iii. Survivor annuities a. Retirement a. Current Benefit Payments Currently Being Made a. Retirement a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities iii. Disability annuities iii. Survivor annuities	1	Number of Members	
i. Eligible for deferred vested pension benefits (4,128 based on SERS service alone. An additional 248 are eligible when reciprocal service is added to SERS service). ii. Eligible for return of contributions only c. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities 4.2387 d. Eligible for Deferred Benefits: i. Retirement annuities ii. Survivor annuities ii. Survivor annuities iii. Survivor annuities iiii. Survivor annuities iii. Survivo		a. Active	61,545
based on SERS service alone. An additional 248 are eligible when reciprocal service is added to SERS service). ii. Eligible for return of contributions only c. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities iii. Survivor annuities a. Retirement b. Survivor iii. Survivor annuities iiii. Survivor annuities iii. Survivor annuities iii. Survivor annuities iii. Surviv		b. Inactive:	
eligible when reciprocal service is added to SERS service). 4,376 ii. Eligible for return of contributions only 19,608 c. Current Benefit Recipients: i. Retirement annuities 51,994 ii. Survivor annuities 10,669 iii. Disability annuities 2,387 d. Eligible for Deferred Benefits: i. Retirement annuities 96 ii. Survivor annuities 151 e. Total 150,826 2		i. Eligible for deferred vested pension benefits (4,128	
ii. Eligible for return of contributions only 19,608 c. Current Benefit Recipients:		based on SERS service alone. An additional 248 are	
c. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities d. Eligible for Deferred Benefits: i. Retirement annuities ii. Survivor annuities iii. Survivor annuities a. Retirement b. Survivor c. Disability c. Disability d. Total 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii.		eligible when reciprocal service is added to SERS service).	4,376
i. Retirement annuities 51,994 ii. Survivor annuities 10,669 iii. Disability annuities 2,387 d. Eligible for Deferred Benefits:		ii. Eligible for return of contributions only	19,608
ii. Survivor annuities 10.669 iii. Disability annuities 2,387 d. Eligible for Deferred Benefits:		c. Current Benefit Recipients:	
iii. Disability annuities 2,387 d. Eligible for Deferred Benefits:		i. Retirement annuities	51,994
d. Eligible for Deferred Benefits: i. Retirement annuities 96 ii. Survivor annuities 151 e. Total Covered Payroll Annualized Benefit Payments Currently Being Made a. Retirement b. Survivor c. Disability d. Total Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities b. Eligible for Deferred Benefits: i. Retirement annuities ii. Retirement annuities ii. Retirement annuities iii. Disability annuities iii. Disability annuities iii. Retirement annuities iii. Survivor annuities		ii. Survivor annuities	10,669
i. Retirement annuities 96 ii. Survivor annuities 151 e. Total 150,826 2 Covered Payroll \$4,236,191,257 3 Annualized Benefit Payments Currently Being Made a. Retirement \$1,655,286,179 b. Survivor 116,401,571 c. Disability 53,006,873 d. Total 53,006,873 d. Total \$1,824,694,624 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities \$20,547,950,302 ii. Survivor annuities \$1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		iii. Disability annuities	2,387
ii. Survivor annuities 151 e. Total 150,826 2 Covered Payroll \$4,236,191,257 3 Annualized Benefit Payments Currently Being Made		d. Eligible for Deferred Benefits:	
e. Total 150,826 Covered Payroll \$4,236,191,257 Annualized Benefit Payments Currently Being Made a. Retirement \$1,655,286,179 b. Survivor 116,401,571 c. Disability 53,006,873 d. Total \$1,824,694,624 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities \$1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		i. Retirement annuities	96
2 Covered Payroll \$4,236,191,257 3 Annualized Benefit Payments Currently Being Made		ii. Survivor annuities	151
Annualized Benefit Payments Currently Being Made a. Retirement b. Survivor c. Disability d. Total Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities 51,118,925,564 iii. Disability annuities 520,547,950,302 ii. Survivor annuities 520,547,950,302		e. Total	150,826
a. Retirement \$1,655,286,179 b. Survivor \$116,401,571 c. Disability \$53,006,873 d. Total \$1,824,694,624 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities \$1,118,925,564 iii. Disability annuities \$1,118,925,564 iii. Disability annuities \$419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities \$8,153,163 ii. Survivor annuities \$8,524,216	2	Covered Payroll	\$4,236,191,257
b. Survivor c. Disability d. Total 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities 53,006,873 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities 520,547,950,302 iii. Survivor annuities 1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216	3	Annualized Benefit Payments Currently Being Made	
c. Disability d. Total 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities ii. Survivor annuities iii. Disability annuities 53,006,873 \$1,824,694,624 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities 520,547,950,302 ii. Survivor annuities 1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		a. Retirement	\$1,655,286,179
d. Total \$1,824,694,624 4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities \$1,118,925,564 iii. Disability annuities \$419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities \$8,153,163 ii. Survivor annuities \$8,524,216		b. Survivor	116,401,571
4 Actuarial Liability—Annuitants a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities \$1,118,925,564 iii. Disability annuities \$419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities \$8,153,163 ii. Survivor annuities \$8,524,216		c. Disability	53,006,873
a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities 1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		d. Total	\$1,824,694,624
a. Current Benefit Recipients: i. Retirement annuities \$20,547,950,302 ii. Survivor annuities 1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216	4	Actuarial Liability—Annuitants	
i. Retirement annuities \$20,547,950,302 ii. Survivor annuities 1,118,925,564 iii. Disability annuities 419,283,907 b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		a. Current Benefit Recipients:	
ii. Survivor annuities iii. Disability annuities b. Eligible for Deferred Benefits: i. Retirement annuities ii. Survivor annuities 3,153,163 ii. Survivor annuities 8,524,216		-	\$20,547,950,302
iii. Disability annuities b. Eligible for Deferred Benefits: i. Retirement annuities ii. Survivor annuities 419,283,907 8,153,163 8,524,216		ii. Survivor annuities	
b. Eligible for Deferred Benefits: i. Retirement annuities 8,153,163 ii. Survivor annuities 8,524,216		iii. Disability annuities	
i. Retirement annuities8,153,163ii. Survivor annuities8,524,216			, ,
ii. Survivor annuities 8,524,216			8,153,163

5	Actuarial Liability—Inactive Members a. Eligible for Deferred Vested Pension Benefits b. Eligible for Return of Contributions Only c. Total	_	\$454,454,809 31,477,673 \$485,932,482
	c. Total		φ403,732,402
		Normal Cost	Actuarial Liability
6	Active Members		** *** *** ** *
	a. Pension Benefits	\$507,190,526	\$8,615,811,633
	b. Cost-of-Living Adjustments	172,735,273	3,052,423,268
	c. Death Benefits	¢1 540 521	\$16 5 27 647
	i. Occupationalii. Non-occupational	\$1,548,531 13,615,841	\$16,527,647 168,477,747
	ii. Refund	8,855,113	30,710,004
	iv. Total	\$24,019,485	\$215,715,398
	d. Disability	\$24,019,463	φ213,/13,396
	i. Occupational	\$6,354,287	\$0
	ii. Non-occupational	36,007,626	0
	iii. Total	\$42,361,913	\$0
	e. Withdrawal	24,572,992	248,044,624
	f. Expenses	21,389,985	0
	g. Total	\$792,270,174	\$12,131,994,923
7	Total Actuarial Liability (4 + 5 + 6)		\$34,720,764,557
8	Market Value of Assets (MVA)		\$12,400,300,474
9	Unfunded Actuarial Liability Based on MVA (7 – 8)		\$22,320,464,083
10	Funded Percentage Based on MVA (8 ÷ 7)		35.71%
11	Actuarial Value of Assets (AVA)		\$11,877,418,896
12	Unfunded Actuarial Liability Based on AVA (7 – 11)		\$22,843,345,661
13	Funded Percentage Based on AVA (11 ÷ 7)		34.21%
14	Total Normal Cost	\$792,270,174	
15	Employee Contributions	\$241,218,378	
16	Annual Employer Normal Cost (% payroll)	\$551,051,796 13.01%	

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 increase in the unfunded accrued actuarial liability (UAAL) of \$1,229,423,796 was due to the following:

1	UAAL at 06/30/2012	\$ 21,613,921,865
2	Contributions	
	a. Contributions due	
	i interest on 1)	\$ 1,675,078,945
	ii members contributions	248,169,706
	iii employer normal cost	554,408,091
	iv interest on ii and iii	 30,519,606
	v total due	\$ 2,508,176,348
	b. Contributions paid	
	i member contributions	\$ 248,169,706
	ii state agencies	1,531,932,137
	iii interest on i and ii	67,691,888
	iv total paid	\$ 1,847,793,731
	c. Expected increase in UAAL	\$ 660,382,617
3	Expected UAAL at 06/30/2013	\$ 22,274,304,482
4	(Gains)/Losses	
	a. investment income	\$ 425,364,445
	b. demographic	 143,676,734
	c. total	\$ 569,041,179
5	Plan Provision Changes	\$ -
6	Assumption Changes	\$ -
7	Total Change in UAAL	\$ 1,229,423,796
8	UAAL at 06/30/2013	\$ 22,843,345,661

Analysis of Financial Gains and Losses in Unfunded Accrued Actuarial Liability for Fiscal Year Ending June 30, 2013

	Activity	 (Gain) Loss	% of 06/30/2012 AAL
1	Actuarial (Gain)/Loss		
	a. Retirements ^a	\$ 146,145,866	0.45%
	b. Incidence of Disability	(468,000)	0.00%
	c. In-Service Mortality	1,145,077	0.00%
	d. Retiree Mortality	(82,038,140)	-0.25%
	e. Salary Increases	(145,924,336)	-0.44%
	f. Terminations	200,081,399	0.60%
	g. Investment	425,364,445	1.29%
	h. New Entrant Liability	45,406,847	0.14%
	i. Other	(20,671,979)	-0.06%
	j. Total Actuarial (Gain)/Loss	\$ 569,041,179	1.73%
2	Plan Provision Changes	\$ -	0.00%
3	Assumption Changes	\$ -	0.00%
4	Contribution (Excess)/Shortfall	\$ 660,382,617	2.00%
5	Total Financial (Gain)/Loss	\$ 1,229,423,796	3.73%

^a During the plan year ending June 30, 2013, the system experienced a retirement loss of approximately 0.45% of beginning of year liabilities. During the prior three plan years, the system also experienced retirement losses of approximately 1.27%, 0.91%, and 0.81% of beginning of year liabilities. We will continue to monitor the retirement experience and make recommended changes to the retirement assumption during the next scheduled experience study.

Ctata Cantalbutian

32-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 = 7.75%

(All Dollar Amounts in Millions)

						Annual Normal Cost			State Co	<u>ntribution</u>		
	Actuarial											
Number	Accrued		Unfunded		Total		Employee	<u>:</u>	Percent		Percent	Total
Active	Liability	Assets	Liability	Funded Ratio	Payroll	Total	Cont.	Balance	of Pay	Amount	of Pay	Expenses
61,545	36,245	11,454	24,791	31.60%	4,326	792	241	551	12.74%	1,773	40.98%	1,885
61,545	37,825	12,447	25,378	32.91%	4,320	809	241	568	13.15%	1,858	43.01%	1,997
61,545	39,423	13,475	25,948	34.18%	4,475	825	249	576	12.87%	1,925	43.01%	2,112
61,545	41,035	14,533	26,502	35.42%	4,630	840	257	583	12.59%	1,991	43.01%	2,235
61,545	42,650	15,614	27,036	36.61%	4,784	854	265	589	12.31%	2,058	43.01%	2,366
61,545	44,263	16,717	27,546	37.77%	4,944	867	273	594	12.01%	2,126	43.01%	2,502
61,545	45,861	17,836	28,025	38.89%	5,104	878	281	597	11.70%	2,195	43.01%	2,646
61,545	47,439	18,970	28,469	39.99%	5,270	887	290	597	11.33%	2,267	43.01%	2,796
61,545	48,981	20,114	28,867	41.06%	5,441	893	298	595	10.94%	2,340	43.01%	2,953
61,545	50,477	21,260	29,217	42.12%	5,610	898	306	592	10.55%	2,413	43.01%	3,117
61,545	51,919	22,410	29,509	43.16%	5,789	900	315	585	10.11%	2,490	43.01%	3,284
61,545	53,291	23,554	29,737	44.20%	5,963	900	323	577	9.68%	2,565	43.01%	3,458
61,545	54,588	24,696	29,892	45.24%	6,141	899	331	568	9.25%	2,641	43.01%	3,631
61,545	55,804	25,837	29,967	46.30%	6,324	898	339	559	8.84%	2,720	43.01%	3,803
61,545	56,939	26,984	29,955	47.39%	6,510	898	347	551	8.46%	2,800	43.01%	3,972
61,545	57,994	28,147	29,847	48.53%	6,706	900	356	544	8.11%	2,884	43.01%	4,135
61,545	58,969	29,333	29,636	49.74%	6,902	903	365	538	7.79%	2,969	43.01%	4,293
	61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545 61,545	Number Active Accrued Liability 61,545 36,245 61,545 37,825 61,545 39,423 61,545 41,035 61,545 42,650 61,545 42,650 61,545 45,861 61,545 47,439 61,545 48,981 61,545 50,477 61,545 51,919 61,545 53,291 61,545 55,804 61,545 56,939 61,545 57,994	Number Active Accrued Liability Assets 61,545 36,245 11,454 61,545 37,825 12,447 61,545 39,423 13,475 61,545 41,035 14,533 61,545 42,650 15,614 61,545 42,650 15,614 61,545 45,861 17,836 61,545 47,439 18,970 61,545 48,981 20,114 61,545 50,477 21,260 61,545 51,919 22,410 61,545 53,291 23,554 61,545 54,588 24,696 61,545 55,804 25,837 61,545 56,939 26,984 61,545 57,994 28,147	Number Active Accrued Liability Assets Unfunded Liability 61,545 36,245 11,454 24,791 61,545 37,825 12,447 25,378 61,545 39,423 13,475 25,948 61,545 41,035 14,533 26,502 61,545 42,650 15,614 27,036 61,545 44,263 16,717 27,546 61,545 45,861 17,836 28,025 61,545 47,439 18,970 28,469 61,545 48,981 20,114 28,867 61,545 50,477 21,260 29,217 61,545 51,919 22,410 29,509 61,545 53,291 23,554 29,737 61,545 54,588 24,696 29,892 61,545 55,804 25,837 29,967 61,545 56,939 26,984 29,955 61,545 57,994 28,147 29,847	Number Active Accrued Liability Unfunded Liability Funded Ratio 61,545 36,245 11,454 24,791 31.60% 61,545 37,825 12,447 25,378 32.91% 61,545 39,423 13,475 25,948 34.18% 61,545 41,035 14,533 26,502 35.42% 61,545 42,650 15,614 27,036 36.61% 61,545 44,263 16,717 27,546 37.77% 61,545 45,861 17,836 28,025 38.89% 61,545 47,439 18,970 28,469 39.99% 61,545 48,981 20,114 28,867 41.06% 61,545 50,477 21,260 29,217 42.12% 61,545 51,919 22,410 29,509 43.16% 61,545 54,588 24,696 29,892 45.24% 61,545 54,588 24,696 29,892 45.24% 61,545 55,804 25,837	Number Active Accrued Liability Unfunded Liability Funded Ratio Total Payroll 61,545 36,245 11,454 24,791 31.60% 4,326 61,545 37,825 12,447 25,378 32.91% 4,320 61,545 39,423 13,475 25,948 34.18% 4,475 61,545 41,035 14,533 26,502 35.42% 4,630 61,545 42,650 15,614 27,036 36.61% 4,784 61,545 44,263 16,717 27,546 37.77% 4,944 61,545 45,861 17,836 28,025 38.89% 5,104 61,545 47,439 18,970 28,469 39.99% 5,270 61,545 48,981 20,114 28,867 41.06% 5,441 61,545 50,477 21,260 29,217 42.12% 5,610 61,545 53,291 23,554 29,737 44.20% 5,963 61,545 54,588 24,696	Number Active Accrued Liability Unfunded Liability Funded Ratio Total Payroll Total Total 61,545 36,245 11,454 24,791 31.60% 4,326 792 61,545 37,825 12,447 25,378 32.91% 4,320 809 61,545 39,423 13,475 25,948 34.18% 4,475 825 61,545 41,035 14,533 26,502 35.42% 4,630 840 61,545 42,650 15,614 27,036 36.61% 4,784 854 61,545 44,263 16,717 27,546 37.77% 4,944 867 61,545 45,861 17,836 28,025 38.89% 5,104 878 61,545 47,439 18,970 28,469 39.99% 5,270 887 61,545 50,477 21,260 29,217 42.12% 5,610 898 61,545 51,919 22,410 29,509 43.16% 5,789 900	Number Active Accrued Liability Assets Unfunded Liability Funded Ratio Payroll Employee Total Cont. 61,545 36,245 11,454 24,791 31.60% 4,326 792 241 61,545 37,825 12,447 25,378 32.91% 4,320 809 241 61,545 39,423 13,475 25,948 34.18% 4,475 825 249 61,545 41,035 14,533 26,502 35.42% 4,630 840 257 61,545 42,650 15,614 27,036 36.61% 4,784 854 265 61,545 44,263 16,717 27,546 37.77% 4,944 867 273 61,545 45,861 17,836 28,025 38.89% 5,104 878 281 61,545 47,439 18,970 28,469 39.99% 5,270 887 290 61,545 50,477 21,260 29,217 42.12% 5,610 898	Number Active Accrued Liability Assets Unfunded Liability Funded Ratio Total Payroll Employee Total Cont. Balance 61,545 36,245 11,454 24,791 31.60% 4,326 792 241 551 61,545 37,825 12,447 25,378 32.91% 4,320 809 241 568 61,545 39,423 13,475 25,948 34.18% 4,475 825 249 576 61,545 41,035 14,533 26,502 35.42% 4,630 840 257 583 61,545 42,650 15,614 27,036 36.61% 4,784 854 265 589 61,545 44,263 16,717 27,546 37.77% 4,944 867 273 594 61,545 45,861 17,836 28,025 38.89% 5,104 878 281 597 61,545 47,439 18,970 28,469 39.99% 5,270 887 290	Number Active Accrued Liability Assets Unfunded Liability Total Funded Ratio Total Payroll Employee Total Cont. Balance of Payrol 61,545 36,245 11,454 24,791 31.60% 4,326 792 241 551 12.74% 61,545 37,825 12,447 25,378 32.91% 4,320 809 241 568 13.15% 61,545 39,423 13,475 25,948 34.18% 4,475 825 249 576 12.87% 61,545 41,035 14,533 26,502 35.42% 4,630 840 257 583 12.59% 61,545 42,650 15,614 27,036 36.61% 4,784 854 265 589 12.31% 61,545 44,263 16,717 27,546 37.77% 4,944 867 273 594 12.01% 61,545 47,439 18,970 28,469 39.99% 5,270 887 290 597 11.33%	Number Active Accrued Liability Assets Unfunded Liability Total Funded Ratio Total Payroll Employee Payroll Percent Payroll Percent Payroll Amount 61,545 36,245 11,454 24,791 31.60% 4,326 792 241 551 12,74% 1,773 61,545 37,825 12,447 25,378 32,91% 4,320 809 241 568 13,15% 1,858 61,545 39,423 13,475 25,948 34,18% 4,475 825 249 576 12,87% 1,925 61,545 41,035 14,533 26,502 35,42% 4,630 840 257 583 12,59% 1,991 61,545 42,650 15,614 27,036 36,61% 4,784 854 265 589 12,31% 2,058 61,545 44,263 16,717 27,546 37,77% 4,944 867 273 594 12,01% 2,126 61,545 47,439 18,970<	Number Active Accrued Liability Assets Unfunded Liability Total Funded Ratio Total Payroll Employee Cont. Balance of Pay Amount Percent Amount 61,545 36,245 11,454 24,791 31.60% 4,326 792 241 551 12.74% 1,773 40.98% 61,545 37,825 12,447 25,378 32.91% 4,320 809 241 568 13.15% 1,858 43.01% 61,545 39,423 13,475 25,948 34.18% 4,475 825 249 576 12.87% 1,925 43.01% 61,545 41,035 14,533 26,502 35.42% 4,630 840 257 583 12.59% 1,991 43.01% 61,545 42,650 15,614 27,036 36.61% 4,784 854 265 589 12.31% 2,058 43.01% 61,545 44,263 16,717 27,546 37.77% 4,944 867 273 594 12.01

Amusal Namual Cost

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.

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

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

32-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 = 7.75%

(All Dollar Amounts in Millions)

								Annual Normal Cost			State Contribution		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
0/30	TICHTC	Littomity	1135043	Liability	Tunucu Kano	Tayron	10001	Conti	Dalance	orray	Timount	orray	Lapenses
2031	61,545	59,865	30,554	29,311	51.04%	7,104	907	375	532	7.49%	3,055	43.01%	4,445
2032	61,545	60,680	31,816	28,864	52.43%	7,306	910	384	526	7.20%	3,142	43.01%	4,592
2033	61,545	61,391	33,114	28,277	53.94%	7,511	906	394	512	6.82%	3,230	43.01%	4,749
2034	61,545	61,980	34,429	27,551	55.55%	7,690	899	399	500	6.50%	3,307	43.01%	4,912
2035	61,545	62,467	35,794	26,673	57.30%	7,878	897	406	491	6.23%	3,388	43.01%	5,050
2036	61,545	62,868	37,240	25,628	59.24%	8,080	898	415	483	5.98%	3,475	43.01%	5,169
2037	61,545	63,191	38,787	24,404	61.38%	8,282	901	424	477	5.76%	3,562	43.01%	5,275
2038	61,545	63,449	40,461	22,988	63.77%	8,489	907	434	473	5.57%	3,651	43.01%	5,368
2039	61,545	63,653	42,285	21,368	66.43%	8,698	917	444	473	5.44%	3,741	43.01%	5,448
2040	61,545	63,814	44,287	19,527	69.40%	8,910	929	454	475	5.33%	3,832	43.01%	5,515
2041	61,545	63,944	46,493	17,451	72.71%	9,123	943	465	478	5.24%	3,924	43.01%	5,570
2042	61,545	64,056	48,932	15,124	76.39%	9,338	961	476	485	5.19%	4,016	43.01%	5,613
2043	61,545	64,165	51,638	12,527	80.48%	9,558	982	487	495	5.18%	4,111	43.01%	5,644
2044	61,545	64,282	54,642	9,640	85.00%	9,778	1,004	498	506	5.17%	4,206	43.01%	5,666
2045	61,545	64,415	57,972	6,443	90.00%	10,000	1,028	510	518	5.18%	4,301	43.01%	5,681

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.

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

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

32-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 = 7.75%

(All Dollar Amounts in Millions)

								Annual N	ormal Cos	st	Required State Contribution						
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of	(c) and (d)	
Plan		Actuarial									Withou	t		Formula			
Year End	Number	Accrued		Unfunded	Funded	Total]	Employee	9	Percent	GOB	Debt	Maximum	Rate With	Required	Percent	Total
6/30	Active	Liability	Assets	Liability	Ratio	Payroll	Total	Cont.	Balance	of Pay	Cont.	Service	Cont.	GOB	Cont.	of Pay	Expenses
2014	61,545	36,245	12,818	23,427	35.36%	4,326	792	241	551	12.74%	1,773	110	1,663	1,663	1,663	38.44%	1,885
2015	61,545	37,825	13,803	24,022	36.49%	4,320	809	241	568	13.15%	1,858	110	1,748	1,887	1,748	40.47%	1,997
2016	61,545	39,423	14,823	24,600	37.60%	4,475	825	249	576	12.87%	1,925	109	1,816	1,954	1,816	40.58%	2,112
2017	61,545	41,035	15,867	25,168	38.67%	4,630	840	257	583	12.59%	1,991	112	1,879	2,022	1,879	40.57%	2,235
2018	61,545	42,650	16,931	25,719	39.70%	4,784	854	265	589	12.31%	2,058	117	1,941	2,089	1,941	40.58%	2,366
2019	61,545	44,263	18,012	26,251	40.69%	4,944	867	273	594	12.01%	2,126	120	2,006	2,159	2,006	40.58%	2,502
2020	61,545	45,861	19,099	26,762	41.65%	5,104	878	281	597	11.70%	2,195	127	2,068	2,229	2,068	40.51%	2,646
2021	61,545	47,439	20,191	27,248	42.56%	5,270	887	290	597	11.33%	2,267	135	2,132	2,302	2,132	40.45%	2,796
2022	61,545	48,981	21,281	27,700	43.45%	5,441	893	298	595	10.94%	2,340	142	2,198	2,376	2,198	40.40%	2,953
2023	61,545	50,477	22,364	28,113	44.31%	5,610	898	306	592	10.55%	2,413	149	2,264	2,450	2,264	40.36%	3,117
2024	61,545	51,919	23,434	28,485	45.14%	5,789	900	315	585	10.11%	2,490	159	2,331	2,528	2,331	40.26%	3,284
2025	61,545	53,291	24,483	28,808	45.94%	5,963	900	323	577	9.68%	2,565	169	2,396	2,604	2,396	40.18%	3,458
2026	61,545	54,588	25,516	29,072	46.74%	6,141	899	331	568	9.25%	2,641	173	2,468	2,682	2,468	40.19%	3,631
2027	61,545	55,804	26,537	29,267	47.55%	6,324	898	339	559	8.84%	2,720	177	2,543	2,762	2,543	40.21%	3,803
2028	61,545	56,939	27,546	29,393	48.38%	6,510	898	347	551	8.46%	2,800	186	2,614	2,843	2,614	40.16%	3,972
2029	61,545	57,994	28,552	29,442	49.23%	6,706	900	356	544	8.11%	2,884	193	2,691	2,929	2,691	40.13%	4,135
2030	61,545	58,969	29,558	29,411	50.12%	6,902	903	365	538	7.79%	2,969	205	2,764	3,014	2,764	40.05%	4,293

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.

32-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 = 7.75%

(All Dollar Amounts in Millions)

								Annual N	ormal Cos	st	Required State Contribution					-	
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of	(c) and (d)	ı
Plan		Actuarial									Without	;		Formula			
Year End	l Number	Accrued		Unfunded	Funded	Total]	Employee	<u>)</u>	Percent	GOB	Debt	Maximum	Rate With	Required	Percent	Total
6/30	Active	Liability	Assets	Liability	Ratio	Payroll	Total	Cont.	Balance	of Pay	Cont.	Service	Cont.	GOB	Cont.	of Pay	Expenses
2031	61,545	59,865	30,572	29,293	51.07%	7,104	907	375	532	7.49%	3,055	214	2,841	3,102	2,841	39.99%	4,445
2032	61,545	60,680			52.09%	7,306	910	384	526	7.20%	3,142	219	2,923	3,191	2,923	40.00%	4,592
2033	61,545	61,391	32,662	28,729	53.20%	7,511	906	394	512	6.82%	3,230	219	3,011	3,280	3,011	40.09%	4,749
2034	61,545	61,980	33,995	27,985	54.85%	7,690	899	399	500	6.50%	3,307	0	N/A	3,358	3,358	43.67%	4,912
2035	61,545	62,467	35,380	27,087	56.64%	7,878	897	406	491	6.23%	3,388	0	N/A	3,440	3,440	43.67%	5,050
2036	61,545	62,868	36,850	26,018	58.61%	8,080	898	415	483	5.98%	3,475	0	N/A	3,528	3,528	43.67%	5,169
2037	61,545	63,191	38,424	24,767	60.81%	8,282	901	424	477	5.76%	3,562	0	N/A	3,617	3,617	43.67%	5,275
2038	61,545	63,449	40,128	23,321	63.24%	8,489	907	434	473	5.57%	3,651	0	N/A	3,707	3,707	43.67%	5,368
2039	61,545	63,653	41,987	21,666	65.96%	8,698	917	444	473	5.44%	3,741	0	N/A	3,798	3,798	43.67%	5,448
2040	61,545	63,814	44,026	19,788	68.99%	8,910	929	454	475	5.33%	3,832	0	N/A	3,891	3,891	43.67%	5,515
2041	61,545	63,944	46,275	17,669	72.37%	9,123	943	465	478	5.24%	3,924	0	N/A	3,984	3,984	43.67%	5,570
2042	61,545	64,056	48,762	15,294	76.12%	9,338	961	476	485	5.19%	4,016	0	N/A	4,078	4,078	43.67%	5,613
2043	61,545	64,165	51,520	12,645	80.29%	9,558	982	487	495	5.18%	4,111	0	N/A	4,174	4,174	43.67%	5,644
2044	61,545	64,282	54,581	9,701	84.91%	9,778	1,004	498	506	5.17%	4,206	0	N/A	4,270	4,270	43.67%	5,666
2045	61,545	64,415	57,976	6,439	90.00%	10,000	1,028	510	518	5.18%	4,301	0	N/A	4,367	4,367	43.67%	5,681

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.

32-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 = 7.75%

Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

								Annual No	rmal Cost		State Co	ntribution	
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	Total	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2014	61,545	36,245	11,683	24,562	32.23%	4,326	792	241	551	12.74%	1,773	40.98%	1,885
2015	61,545	37,825	12,894	24,931	34.09%	4,320	809	241	568	13.15%	1,858	43.01%	1,997
2016	61,545	39,423	13,915	25,508	35.30%	4,475	825	249	576	12.87%	1,909	42.66%	2,112
2017	61,545	41,035	15,101	25,934	36.80%	4,630	840	257	583	12.59%	1,962	42.38%	2,235
2018	61,545	42,650	16,196	26,454	37.97%	4,784	854	265	589	12.31%	2,029	42.41%	2,366
2019	61,545	44,263	17,306	26,957	39.10%	4,944	867	273	594	12.01%	2,088	42.24%	2,502
2020	61,545	45,861	18,430	27,431	40.19%	5,104	878	281	597	11.70%	2,156	42.24%	2,646
2021	61,545	47,439	19,568	27,871	41.25%	5,270	887	290	597	11.33%	2,226	42.24%	2,796
2022	61,545	48,981	20,714	28,267	42.29%	5,441	893	298	595	10.94%	2,298	42.24%	2,953
2023	61,545	50,477	21,862	28,615	43.31%	5,610	898	306	592	10.55%	2,370	42.24%	3,117
2024	61,545	51,919	23,012	28,907	44.32%	5,789	900	315	585	10.11%	2,445	42.24%	3,284
2025	61,545	53,291	24,156	29,135	45.33%	5,963	900	323	577	9.68%	2,519	42.24%	3,458
2026	61,545	54,588	25,295	29,293	46.34%	6,141	899	331	568	9.25%	2,594	42.24%	3,631
2027	61,545	55,804	26,433	29,371	47.37%	6,324	898	339	559	8.84%	2,671	42.24%	3,803
2028	61,545	56,939	27,573	29,366	48.43%	6,510	898	347	551	8.46%	2,750	42.24%	3,972
2029	61,545	57,994	28,729	29,265	49.54%	6,706	900	356	544	8.11%	2,833	42.24%	4,135
2030	61,545	58,969	29,905	29,064	50.71%	6,902	903	365	538	7.79%	2,915	42.24%	4,293

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.

32-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 = 7.75%

Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost				State Co		
Plan Year End 6/30	Number Active	Actuarial Accrued Liability	Assets	Unfunded Liability	Funded Ratio	Total Payroll	<u>Total</u>	Employee Cont.	Balance	Percent of Pay	Amount	Percent of Pay	Total Expenses
2031	61,545	59,865	31,113	28,752	51.97%	7,104	907	375	532	7.49%	3,001	42.24%	4,445
2032	61,545	60,680	32,360	28,320	53.33%	7,306	910	384	526	7.20%	3,086	42.24%	4,592
2033	61,545	61,391	33,640	27,751	54.80%	7,511	906	394	512	6.82%	3,173	42.24%	4,749
2034	61,545	61,980	34,935	27,045	56.36%	7,690	899	399	500	6.50%	3,248	42.24%	4,912
2035	61,545	62,467	36,276	26,191	58.07%	7,878	897	406	491	6.23%	3,328	42.24%	5,050
2036	61,545	62,868	37,695	25,173	59.96%	8,080	898	415	483	5.98%	3,413	42.24%	5,169
2037	61,545	63,191	39,212	23,979	62.05%	8,282	901	424	477	5.76%	3,498	42.24%	5,275
2038	61,545	63,449	40,851	22,598	64.38%	8,489	907	434	473	5.57%	3,586	42.24%	5,368
2039	61,545	63,653	42,636	21,017	66.98%	8,698	917	444	473	5.44%	3,674	42.24%	5,448
2040	61,545	63,814	44,594	19,220	69.88%	8,910	929	454	475	5.33%	3,763	42.24%	5,515
2041	61,545	63,944	46,751	17,193	73.11%	9,123	943	465	478	5.24%	3,854	42.24%	5,570
2042	61,545	64,056	49,136	14,920	76.71%	9,338	961	476	485	5.19%	3,945	42.24%	5,613
2043	61,545	64,165	51,782	12,383	80.70%	9,558	982	487	495	5.18%	4,037	42.24%	5,644
2044	61,545	64,282	54,718	9,564	85.12%	9,778	1,004	498	506	5.17%	4,130	42.24%	5,666
2045	61,545	64,415	57,975	6,440	90.00%	10,000	1,028	510	518	5.18%	4,224	42.24%	5,681

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.

32-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 = 7.75%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

							Annual Normal Cost Required State Contribution					_					
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of	(c) and (d)
Plan		Actuarial									Withou	t		Formula			
Year End	Number	Accrued		Unfunded	Funded	Total]	Employee	;	Percent	GOB	Debt	Maximum	Rate With	Required	Percent	Total
6/30	Active	Liability	Assets	Liability	Ratio	Payroll	Total	Cont.	Balance	of Pay	Cont.	Service	Cont.	GOB	Cont.	of Pay	Expenses
							•										
2014	61,545	36,245	13,081	23,164	36.09%	4,326	792	241	551	12.74%	1,773	110	1,663	1,663	1,663	38.44%	1,885
2015	61,545	37,825	14,317	23,508	37.85%	4,320	809	241	568	13.15%	1,858	110	1,748	1,887	1,748	40.47%	1,997
2016	61,545	39,423	15,330	24,093	38.89%	4,475	825	249	576	12.87%	1,909	108	1,801	1,929	1,801	40.24%	2,112
2017	61,545	41,035	16,525	24,510	40.27%	4,630	840	257	583	12.59%	1,962	113	1,849	1,975	1,849	39.95%	2,235
2018	61,545	42,650	17,611	25,039	41.29%	4,784	854	265	589	12.31%	2,029	116	1,913	2,044	1,913	39.98%	2,366
2019	61,545	44,263	18,705	25,558	42.26%	4,944	867	273	594	12.01%	2,088	120	1,968	2,099	1,968	39.82%	2,502
2020	61,545	45,861	19,805	26,056	43.18%	5,104	878	281	597	11.70%	2,156	128	2,028	2,168	2,028	39.74%	2,646
2021	61,545	47,439	20,909	26,530	44.08%	5,270	887	290	597	11.33%	2,226	135	2,091	2,238	2,091	39.68%	2,796
2022	61,545	48,981	22,012	26,969	44.94%	5,441	893	298	595	10.94%	2,298	142	2,156	2,311	2,156	39.63%	2,953
2023	61,545	50,477	23,106	27,371	45.78%	5,610	898	306	592	10.55%	2,370	149	2,221	2,383	2,221	39.60%	3,117
2024	61,545	51,919	24,188	27,731	46.59%	5,789	900	315	585	10.11%	2,445	159	2,286	2,458	2,286	39.49%	3,284
2025	61,545	53,291	25,247	28,044	47.38%	5,963	900	323	577	9.68%	2,519	169	2,350	2,532	2,350	39.41%	3,458
2026	61,545	54,588	26,291	28,297	48.16%	6,141	899	331	568	9.25%	2,594	174	2,420	2,608	2,420	39.42%	3,631
2027	61,545	55,804	27,322	28,482	48.96%	6,324	898	339	559	8.84%	2,671	177	2,494	2,686	2,494	39.44%	3,803
2028	61,545	56,939	28,339	28,600	49.77%	6,510	898	347	551	8.46%	2,750	186	2,564	2,765	2,564	39.39%	3,972
2029	61,545	57,994	29,353	28,641	50.61%	6,706	900	356	544	8.11%	2,833	193	2,640	2,848	2,640	39.36%	4,135
2030	61,545	58,969	30,366	28,603	51.49%	6,902	903	365	538	7.79%	2,915	204	2,711	2,931	2,711	39.28%	4,293

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.

32-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 = 7.75%
Phase-In of Deferred Asset Gains and Losses Recognized in the Projected Actuarial Value of Assets

(All Dollar Amounts in Millions)

								Annual N	ormal Cos	st	Required State Contribution					_	
											(a)	(b)	(c)=(a)-(b)	(d)	Minimum of	(c) and (d)
Plan		Actuarial									Without	t		Formula			
Year End	l Number	Accrued		Unfunded	Funded	Total]	Employee		Percent	GOB	Debt	Maximum	Rate With	Required	Percent	Total
6/30	Active	Liability	Assets	Liability	Ratio	Payroll	Total	Cont.	Balance	of Pay	Cont.	Service	Cont.	GOB	Cont.	of Pay	Expenses
2031	61,545	59,865	31,387	28,478	52.43%	7,104	907	375	532	7.49%	3,001	215	2,786	3,017	2,786	39.22%	4,445
2032	61,545	60,680	32,427	28,253	53.44%	7,306	910	384	526	7.20%	3,086	219	2,867	3,103	2,867	39.24%	4,592
2033	61,545	61,391	33,485	27,906	54.54%	7,511	906	394	512	6.82%	3,173	219	2,954	3,190	2,954	39.33%	4,749
2034	61,545	61,980	34,786	27,194	56.12%	7,690	899	399	500	6.50%	3,248	0	N/A	3,266	3,266	42.47%	4,912
2035	61,545	62,467	36,134	26,333	57.84%	7,878	897	406	491	6.23%	3,328	0	N/A	3,346	3,346	42.47%	5,050
2036	61,545	62,868	37,561	25,307	59.75%	8,080	898	415	483	5.98%	3,413	0	N/A	3,431	3,431	42.47%	5,169
2037	61,545	63,191	39,086	24,105	61.85%	8,282	901	424	477	5.76%	3,498	0	N/A	3,517	3,517	42.47%	5,275
2038	61,545	63,449	40,736	22,713	64.20%	8,489	907	434	473	5.57%	3,586	0	N/A	3,605	3,605	42.47%	5,368
2039	61,545	63,653	42,533	21,120	66.82%	8,698	917	444	473	5.44%	3,674	0	N/A	3,694	3,694	42.47%	5,448
2040	61,545	63,814	44,504	19,310	69.74%	8,910	929	454	475	5.33%	3,763	0	N/A	3,784	3,784	42.47%	5,515
2041	61,545	63,944	46,675	17,269	72.99%	9,123	943	465	478	5.24%	3,854	0	N/A	3,874	3,874	42.47%	5,570
2042	61,545	64,056	49,076	14,980	76.61%	9,338	961	476	485	5.19%	3,945	0	N/A	3,966	3,966	42.47%	5,613
2043	61,545	64,165	51,740	12,425	80.64%	9,558	982	487	495	5.18%	4,037	0	N/A	4,059	4,059	42.47%	5,644
2044	61,545	64,282	54,696	9,586	85.09%	9,778	1,004	498	506	5.17%	4,130	0	N/A	4,153	4,153	42.47%	5,666
2045	61,545	64,415	57,975	6,440	90.00%	10,000	1,028	510	518	5.18%	4,224	0	N/A	4,247	4,247	42.47%	5,681

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.

SECTION C

FUND ASSETS

State Employees' Retirement System of Illinois Statement of Plan Net Assets

Years ended June 30, 2013 and 2012

		2013		2012
Assets				
Cash	\$	146,354,061	\$	133,959,043
Receivables:				
Contributions:				
Participants	\$	14,151,628	\$	15,059,723
Employing state agencies		124,910,925		139,273,104
Other accounts		6,378,048		6,474,247
	\$	145,440,601	\$	160,807,074
Investments - held in the Illinois State Board of				
Investment Commingled Fund at fair value	\$	12,176,459,191	\$	10,675,772,261
Securities lending collateral with State Treasurer		113,169,000		72,867,000
C		· · · · · · · · · · · · · · · · · · ·		
Property and equipment, net of accumulated				
depreciation	\$	2,792,664	\$	2,723,398
Total Assets	\$	12,584,215,517	\$	11,046,128,776
Liabilities				
Benefits payable	\$	5,562,404	\$	6,184,894
Refunds payable	·	345,475	·	818,593
Administrative expenses payable		1,598,700		1,539,489
Participants' deferred service credit accounts		197,697		129,753
Due to State of Illinois		63,041,767		3,901,223
Securities lending collateral with State Treasurer		113,169,000		72,867,000
Total Liabilities	\$	183,915,043	\$	85,440,952
Net assets held in trust for pension benefits	\$	12,400,300,474	\$	10,960,687,824

State Employees' Retirement System of Illinois Statement of Changes in Plan Net Assets Years ended June 30, 2013 and 2012

	2013	2012
Additions:		
Contributions:		
Participants	\$ 248,169,706	\$ 259,122,881
Employing state agencies and appropriations	 1,531,932,137	 1,391,416,375
Total Contributions revenue	\$ 1,780,101,843	\$ 1,650,539,256
Investments income:		
Net investments income	\$ 315,686,279	\$ 253,906,644
Interest earned on cash balances	551,261	687,112
Net appreciation in fair value of investments	 1,185,000,651	 (248,618,387)
Total Investments income	\$ 1,501,238,191	\$ 5,975,369
Total Additions	\$ 3,281,340,034	\$ 1,656,514,625
Deductions:		
Benefits:		
Retirement annuities	\$ 1,614,596,770	\$ 1,454,910,158
Survivors' annuities	107,533,834	101,136,325
Disability benefits	59,882,478	56,098,869
Lump-sum benefits	 17,952,573	 15,228,249
Total Benefits	\$ 1,799,965,655	\$ 1,627,373,601
Refunds	24,290,402	23,500,325
Administrative	 17,471,327	 15,705,561
Total Deductions	\$ 1,841,727,384	\$ 1,666,579,487
Net increase	\$ 1,439,612,650	\$ (10,064,862)
Net assets held in trust for pension benefits:	 	
Beginning of year	\$ 10,960,687,824	\$ 10,970,752,686
End of year	\$ 12,400,300,474	\$ 10,960,687,824

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

Year Ending June 30	2013		2014	2015		2016	2017
Beginning of Year:							
(1) Market Value of Assets	\$ 10,96	0,687,824					
(2) Actuarial Value of Assets	11,47	7,264,329					
End of Year:							
(3) Market Value of Assets	12,40	0,300,474					
(4) Contributions and Disbursements							
(4a) Actual State Contribution Amount	1,53	1,932,137					
(4b) Employee Contribution Amount	24	8,169,706					
(4c) Benefit Payouts & Refunds	(1,82	4,256,057)					
(4d) Administrative Expenses	(1	7,471,327)					
(4e) Net of Contributions and Disbursements	(6	51,625,541)					
(5) Total Investment Income							
=(3)-(1)-(4e)	1,50	1,238,191					
(6) Projected Rate of Return		7.75%					
(7) Projected Investment Income							
$=(1)x(6)+([1+(6)]^{5}-1)x(4e)$	84	7,109,873					
(8) Investment Income in							
Excess of Projected Income	65	4,128,318					
(9) Excess Investment Income Recognized							
This Year (5-year recognition)							
(9a) From This Year	13	0,825,664					
(9b) From One Year Ago	(16	(8,729,601) \$	130,825,664				
(9c) From Two Years Ago	24	4,639,950	(168,729,601) \$	130,825,66	4		
(9d) From Three Years Ago	1	6,487,825	244,639,950	(168,729,60	1) \$	130,825,664	
(9e) From Four Years Ago	(60	8,553,603)	16,487,825	244,639,95	0	(168,729,599) \$	130,825,662
(9f) Total Recognized Investment Gain	(38	5,329,765)	223,223,838	206,736,01	3	(37,903,935)	130,825,662
(10) Change in Actuarial Value of Assets							
=(4e)+(7)+(9f)	40	0,154,567					
End of Year:							
(3) Market Value of Assets	12,400	,300,474					
(11) Actuarial Value of Assets							
=(2)+(10)	11,877	,418,896					

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

Year Ending June 30	2013	2014	2015	2016	2017
Beginning of Year:					
(1) Hypothetical Value of Assets \$	9,596,573,696				
(2) Hypothetical Actuarial Value of Assets	10,037,155,854				
End of Year:					
(3) Hypothetical Value of Assets	10,962,142,198				
(4) Contributions and Disbursements					
(4a) State Contribution Amount ¹	1,637,626,816				
(4b) Employee Contribution Amount	248,169,706				
(4c) Benefit Payouts & Refunds	(1,824,256,057)				
(4d) Administrative Expenses	(17,471,327)				
(4e) Net of Contributions and Disbursements	44,069,138				
(5) Total Investment Income ²					
=(3)-(1)-(4e)	1,321,499,364				
(6) Projected Rate of Return	7.75%				
(7) Projected Investment Income					
$=(1)x(6)+([1+(6)]^{5}-1)x(4e)$	745,410,277				
(8) Investment Income in					
Excess of Projected Income	576,089,087				
(9) Excess Investment Income Recognized					
This Year (5-year recognition)					
(9a) From This Year	115,217,817				
(9b) From One Year Ago	(146,907,451) \$	115,217,817			
(9c) From Two Years Ago	211,034,626	(146,907,450) \$	115,217,817		
(9d) From Three Years Ago	14,133,591	211,034,626	(146,907,450) \$	115,217,818	
(9e) From Four Years Ago	(514,323,410)	14,133,591	211,034,626	(146,907,450) \$	115,217,818
(9f) Total Recognized Investment Gain	(320,844,827)	193,478,584	179,344,993	(31,689,632)	115,217,818
(10) Change in Hypothetical Actuarial Value of Assets					
=(4e)+(7)+(9f)	468,634,588				
End of Year:					
(3) Hypothetical Market Value of Assets	10,962,142,198				
(11) Hypothetical Actuarial Value of Assets					
=(2)+(10)	10,505,790,442				

¹ Represents 38.658 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2011, 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 2013 of 13.74%.

SECTION D

ACCOUNTING DISCLOSURES

This information is presented in draft form for review by the auditor. Please let us know if there are any changes so that we may maintain consistency with the State's financial statements.

Financial Accounting Information in Accordance with GASB Statement No. 25

A. Schedule of Funding Progress

	6/30/2013	<u>6/30/2012</u>	<u>6/30/2011</u>
1 Actuarial Value of Assets	\$ 11,877,418,896	\$ 11,477,264,329	\$ 11,159,836,617
2 Actuarial Accrued Liability (AAL)	34,720,764,557	33,091,186,194	31,395,007,782
3 Unfunded AAL (UAAL) [(2) - (1)]	22,843,345,661	21,613,921,865	20,235,171,165
4 Funded Ratio $[(1) \div (2)]$	34.21%	34.68%	35.55%
5 Covered Payroll	4,236,191,257	4,329,083,716	4,211,186,269
6 UAAL as a Percentage of Covered Payroll	539.24%	499.27%	480.51%

B. Schedule of Employer Contributions for the Fiscal Year End

	6/30/2013	6/30/2012	6/30/2011
1 Annual Required Contribution (ARC) per GASB 25			
(a) Percentage of payroll	41.105%	37.302%	30.609%
(b) Covered payroll for fiscal year	\$4,236,191,257	\$4,329,083,716	\$4,211,186,269
(c) ARC for fiscal year	1,741,286,416	1,614,834,808	1,289,002,005
2 Total Employer Contribution	1,531,932,137	1,391,416,375	1,127,886,796
3 Percentage of ARC Contributed $[(2) \div (1)]$	87.98%	86.16%	87.50%
4 Annual Contribution Required per State Statute			
(a) Percentage of payroll	36.116%	32.252%	26.187%
(b) Covered payroll for fiscal year	4,236,191,257	4,329,083,716	4,211,186,269
(c) Total required contribution	1,529,942,834	1,396,216,080	1,102,783,348
5 Employer Contribution	1,531,932,137	1,391,416,375	1,127,886,796
6 Percentage of (4) Contributed $[(5) \div (4)]$	100.13%	99.66%	102.28%

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 the 2013 fiscal year was determined as of June 30, 2011, 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, and 7.75 percent after; 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.

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

	Applicable Actuarial Valuation					
	As-of	Investment	Annual Required	Actual	Amortiz	ration
Fiscal Year	Date	Assumption	Contribution*	Contribution**	Years	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
	Beginning			Annual Pension	Increase	End of
	of Year	Interest on	Amortization	Cost (APC)***	in NPO	Year NPO
Fiscal Year	NPO	NPO	of NPO	(4 + 9 - 10)	(11 - 5)	(8 + 12)
(1)	(8)	(9)	(10)	(11)	(12)	(13)
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	52,323,200	241,890,349	83,710,835	1,122,317,551
7/1/97 - 6/30/98	1,122,317,551	89,785,404	57,463,372	239,047,750	38,306,014	1,160,623,565
7/1/98 - 6/30/99	1,160,623,565	98,653,003	74,627,978	343,772,018	28,247,011	1,188,870,576
7/1/99 - 6/30/00	1,188,870,576	101,053,999	77,290,059	322,845,796	(18,026,725)	1,170,843,851
7/1/00 - 6/30/01	1,170,843,851	99,521,727	77,134,503	316,738,762	(49,290,175)	1,121,553,676
7/1/01 - 6/30/02	1,121,553,676	95,332,062	72,187,105	329,654,758	(56,461,825)	1,065,091,851
7/1/02 - 6/30/03	1,065,091,851	90,532,807	66,516,217	473,365,175	77,297,939	1,142,389,790
7/1/03 - 6/30/04	1,142,389,790	97,103,132	56,616,962	616,706,121	(1,247,967,290)	(105,577,500)
7/1/04 - 6/30/05	(105,577,500)	(8,974,088)	(5,458,860)	723,912,782	296,478,170	190,900,670
7/1/05 - 6/30/06	190,900,670	16,226,557	10,305,747	678,476,379	467,976,588	658,877,258
7/1/06 - 6/30/07	658,877,258	56,004,567	44,355,148	835,452,179	476,665,529	1,135,542,787
7/1/07 - 6/30/08	1,135,542,787	96,521,137	76,117,143	1,006,814,885	419,082,478	1,554,625,265
7/1/07 - 6/30/08	1,554,625,265	132,143,148	100,775,995	1,034,800,002	259,889,658	1,814,514,923
7/1/09 - 6/30/10	1,814,514,923	154,233,768	117,246,837	1,214,300,274	118,754,418	1,933,269,341
7/1/10 - 6/30/11	1,933,269,341	164,327,894	127,175,504			
7/1/10 - 6/30/11			132,188,464	1,326,154,395	198,267,599 256,424,082	2,131,536,940
//1/11 - 0/30/12	2,131,536,940	165,194,113	134,100,404	1,647,840,457	230,424,082	2,387,961,022
7/1/12 - 6/30/13	2,387,961,022	185,066,979	144,435,059	1,781,918,336	249,986,199	2,637,947,221

^{*} 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 was provided by the System.

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

SECTION E PARTICIPANT DATA

Active Age and Service Distribution June 30, 2013

Age	Years of Service				_	Percentage					
Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Up	Total	of Total
Under 20	138	29								167	
20-24	540	642	6							1,188	2%
25-29	422	2,269	422	7						3,120	5%
30-34	390	1,839	1,515	741	29					4,514	7%
35-39	294	1,206	1,234	2,294	815	12				5,855	10%
40-44	426	1,147	1,146	2,284	2,268	889	37			8,197	13%
45-49	458	955	1,046	1,707	1,801	2,390	1,412	111		9,880	16%
50-54	417	876	964	1,620	1,583	2,033	2,131	984	114	10,722	17%
55-59	357	718	844	1,322	1,307	1,463	1,476	951	580	9,018	15%
60-64	302	405	648	944	930	904	782	472	566	5,953	10%
65-69	171	168	271	437	332	309	204	104	198	2,194	4%
70 & Over	35	46	62	150	146	104	67	29	98	737	1%
Total	3,950	10,300	8,158	11,506	9,211	8,104	6,109	2,651	1,556	61,545	100%
Percentage of											
Total	6%	17%	13%	19%	15%	13%	10%	4%	3%	100%	

Retirees and Beneficiaries by Type of Benefit Being Paid June 30, 2013

Type of Benefit Being Paid	Count	Monthly <u>Payment</u>		Annual <u>Payment</u>	Average Annual Payment
Retirement Annuity	51,994	\$ 137,896,317.67	\$	1,654,755,812.04	\$ 31,825.90
Survivors	9,970	8,921,833.26		107,061,999.12	10,738.42
Widows	91	75,900.34		910,804.08	10,008.84
Occupational Death	57	51,699.74		620,396.88	10,884.16
QILDRO	536	591,804.37		7,101,652.44	13,249.35
Reversionary Annuity	15	37,856.41		454,276.92	30,285.13
Non-Occupational Disability	1,246	2,394,852.39		28,738,228.68	23,064.39
Occupational Disability	626	1,455,406.54		17,464,878.48	27,899.17
Temporary Disability	399	312,465.85		3,749,590.20	9,397.47
Total Temporary Disability - Occupational	116	254,514.67		3,054,176.04	26,329.10
Eligible for Deferred Retirement Annuity	96	44,197.25		530,367.00	5,524.66
Eligible for Deferred Survivor Annuity	151	21,036.82		252,441.84	1,671.80
Total	65,297	\$ 152,057,885.31	\$:	1,824,694,623.72	\$ 27,944.54

SECTION F ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods and Assumptions

Actuarial Cost Method 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, 2011

Mortality

Post-Retirement Mortality

RP2000 Combined Healthy mortality table, sex distinct, with rates projected to 2015 with scale aa. No adjustment is made for post-disabled mortality. The mortality table used is a static table with the provision for future mortality improvement in the projection to 2015 which is in sync with the next scheduled experience study.

Pre-Retirement Mortality

Based on a percentage of 85 percent for males and 70 percent for females of post-retirement mortality. Five percent of deaths among active employees are assumed to be in the performance of their duty.

Interest

7.75 percent per annum, compounded annually.

General Inflation

3.00 percent per annum, compounded annually.

Marriage Assumption

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

Social Security Offset for Survivor Benefits

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

Termination

Illustrative rates of withdrawal from the plan are as follows:

	Service Based Withdrawal						
	General Formula Employees Alternate Formula						
Service (Beginning							
of Year)	Males	Females	Males	Females			
0	0.1800	0.1700	0.0400	0.0775			
1	0.1200	0.1100	0.0250	0.0475			
2	0.0600	0.0850	0.0250	0.0450			
3	0.0550	0.0700	0.0250	0.0300			
4	0.0500	0.0550	0.0250	0.0300			
5	0.0450	0.0500	0.0250	0.0300			
6	0.0350	0.0400	0.0150	0.0300			
7	0.0300	0.0350	0.0150	0.0300			
8	0.0300	0.0250	0.0150	0.0300			
9	0.0250	0.0250	0.0150	0.0200			
10	0.0200	0.0250	0.0150	0.0200			
11	0.0200	0.0200	0.0100	0.0175			
12	0.0200	0.0200	0.0100	0.0175			
13	0.0200	0.0200	0.0100	0.0175			
14	0.0150	0.0150	0.0100	0.0175			
15	0.0150	0.0150	0.0100	0.0100			
16	0.0150	0.0150	0.0075	0.0100			
17	0.0125	0.0150	0.0075	0.0100			
18	0.0125	0.0150	0.0075	0.0100			
19	0.0125	0.0100	0.0075	0.0100			
20	0.0100	0.0100	0.0075	0.0100			
21	0.0100	0.0075	0.0050	0.0100			
22	0.0100	0.0075	0.0050	0.0100			
23	0.0100	0.0075	0.0050	0.0100			
24	0.0100	0.0075	0.0050	0.0100			
25	0.0100	0.0075	0.0050	0.0100			
26	0.0100	0.0075	0.0050	0.0100			
27	0.0100	0.0075	0.0050	0.0100			
28	0.0100	0.0075	0.0050	0.0100			
29	0.0100	0.0075	0.0050	0.0100			
30+	0.0100	0.0075	0.0050	0.0100			

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	8.87%
30	7.25%
35	6.47%
40	5.87%
45	5.41%
50	5.02%
55	4.72%
60	4.44%
65	4.23%
70	4.00%

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 1.00 percent of pay on the normal cost is applied to reflect the near-term cash flow.

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 payroll for the projection period is 4.0 percent per annum.

New Entrant Benefit Group	Average Age	Average Pay (2013 Dollars)
New entrants eligible for Regular Formula Benefits that are covered by Social Security.	37.48	\$48,014
New entrants eligible for Regular Formula Benefits that are not covered By Social Security.	37.32	\$47,341
New entrants in positions formerly eligible for Alternate Formula Benefits that are covered by Social Security that are now eligible for Regular Formula Benefits.	38.29	\$55,015
New entrants eligible for Alternate Formula Benefits that are covered by Social Security	32.05	\$49,367
New entrants in positions formerly eligible for Alternate Formula Benefits that are not covered by Social Security that are now eligible for Regular Formula Benefits.	28.54	\$61,141
New entrants eligible for Alternate Formula Benefits that are not covered by Social Security	28.74	\$39,242

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 Rat	Retirement Rates for General Formula Employees					
	Males	Females				
50	5.00%	5.00%				
51	5.00%	5.00%				
52	15.00%	15.00%				
53	12.00%	15.00%				
54	15.00%	15.00%				
55	12.00%	13.00%				
56	10.00%	13.00%				
57	10.00%	13.00%				
58	10.00%	13.00%				
59	10.00%	13.00%				
60	10.00%	13.00%				
61	10.00%	10.00%				
62	15.00%	17.50%				
63	12.50%	15.00%				
64	12.50%	15.00%				
65	20.00%	25.00%				
66	20.00%	20.00%				
67	12.50%	20.00%				
68	12.50%	15.00%				
69	12.50%	15.00%				
70	100.00%	100.00%				

Early Retirement Rates for General Formula Employees					
Age	Males	Females			
55	5.50%	6.00%			
56	6.00%	6.00%			
57	7.50%	8.00%			
58	9.00%	8.00%			
59	12.00%	18.00%			

Retirement Rates for Alternate Formula Employees					
Age	Males	Females			
50	50.00%	50.00%			
51	35.00%	25.00%			
52	35.00%	40.00%			
53	35.00%	40.00%			
54	35.00%	30.00%			
55	35.00%	30.00%			
56	20.00%	25.00%			
57	20.00%	25.00%			
58	20.00%	25.00%			
59	20.00%	20.00%			
60	30.00%	20.00%			
61	30.00%	30.00%			
62	45.00%	40.00%			
63	30.00%	25.00%			
64	30.00%	25.00%			
65	50.00%	40.00%			
66	20.00%	40.00%			
67	30.00%	40.00%			
68	50.00%	40.00%			
69	50.00%	40.00%			
70	100.00%	100.00%			

Assets

Assets available for benefits are used as described on page 44 of the most recent valuation report.

Expenses

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

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.

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. 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 by the Board on July 12, 2010)

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

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

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

A go	Members Eligible For Normal Retirement	A go	Members Eligible For Early Retirement		
Age	Kenrement	Age	Kenrement		
67	50.0%	62	30.0%		
68	75.0	63	34.0		
69	90.0	64	38.0		
70	100.0	65	42.0		
		66	46.0		

Members hired after December 31, 2010, eligible for the alternate formula benefits will retire according to the age-based retirement rates used in the most recent valuation as follows:

Age	Male Members Eligible For Normal Retirement	Female Members Eligible For Normal Retirement		
60	35.0%	20.0%		
61	37.0	15.0		
62	38.0	25.0		
63	40.0	40.0		
64	41.0	40.0		
65	80.0	55.0		
66	40.0	55.0		
67	55.0	45.0		
68	55.0	45.0		
69	40.0	45.0		
70	100.0	100.0		

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 (As of June 30, 2013)

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

<u>Reversionary Annuity</u>—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.

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

Annual Increases in Pension

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

Survivors Annuity

Qualification of Survivor

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

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

Amount of Payment

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

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

Duration of Payment

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

Annual Increases in Annuity

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

Widow's Annuity Option

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

Qualification of Widow

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

Amount of Payment

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

Duration of Payment

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

Annual Increases in Annuity

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

Occupational Death Benefit

Qualification of Survivors

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

Amount and Duration of Payment

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

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

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

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

Annual Increases in Annuity

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

Reductions

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

Other Death Benefits

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

Before Retirement

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

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

After Retirement

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

Non-Occupational Disability Benefits

Qualification and Amount of Payment

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

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

Duration of Payment

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

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

Annual Increases in Annuity

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

Occupational Disability Benefit

Qualification and Amount of Payment

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

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

Duration of Payment

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

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

Annual Increases in Annuity

A one-time increase of 7.0 percent of the original annuity is granted to members on the January 1 following the fourth anniversary of the annuity. Increases of 3.0 percent of the current annuity are

then granted to members each January 1 following the 7.0 percent increase (i.e., the 3.0 percent increases are compounded).

Temporary Disability Benefit

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

Separation Benefits

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

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

Final Average Compensation

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

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

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

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

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

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

Annual Increases in Annuity

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

Survivor Benefits

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

Miscellaneous

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

SECTION H

GLOSSARY

Glossary

Actuarial Accrued Liability ("AAL")

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

Actuarial Assumptions

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.

Actuarial Cost Method

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.

Actuarial Equivalent

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value ("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.

Actuarial Present Value of Future Benefits ("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.

Actuarial Valuation

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").

Actuarial Value of Assets

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 Paymethod, 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 Paymethod, 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)

Funded Ratio The ratio of the Actuarial Value of Assets to the Actuarial Accrued

Liability.

GASB Governmental Accounting Standards Board.

GASB No. 25 and GASB No. 27 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.

Normal Cost The annual cost assigned, under the Actuarial Cost Method, to the

current plan year.

Open Amortization Period 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.

Unfunded Actuarial Accrued Liability

The difference between the Actuarial Accrued Liability and

Actuarial Value of Assets.

Valuation Date 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

32-Year Projection of Actuarial Accrued Liability

(All Dollar Amounts in Millions)

	Current Inactives		Actives			Grand Totals		
Valuation Date June 30	Retirees & Beneficiaries	Deferreds	Tier 1	Current Tier 2	Future Tier 2	Current Retirees, Beneficiaries, & Deferreds	Actives	Total
								•
2013	\$21,683.55	\$485.93	\$12,532.33	\$18.95	\$0.00	\$22,169.49	\$12,551.28	\$34,720.76
2014	21,535.38	482.75	14,189.77	31.88	5.71	22,018.13	14,227.36	36,245.49
2015	21,347.77	509.77	15,898.38	45.61	23.14	21,857.54	15,967.13	37,824.67
2016	21,120.36	534.95	17,654.52	60.42	53.18	21,655.31	17,768.13	39,423.43
2017	20,852.76	558.75	19,448.79	76.56	97.75	21,411.50	19,623.10	41,034.61
2018	20,544.69	581.11	21,270.99	94.38	158.94	21,125.81	21,524.32	42,650.12
2019	20,195.98	601.93	23,110.82	114.97	239.18	20,797.91	23,464.97	44,262.89
2020	19,806.62	620.59	24,954.42	138.68	341.10	20,427.21	25,434.20	45,861.41
2021	19,376.81	636.93	26,791.95	164.90	467.95	20,013.74	27,424.80	47,438.54
2022	18,906.99	650.77	28,606.14	192.15	625.11	19,557.76	29,423.40	48,981.16
2023	18,397.92	662.32	30,381.52	220.13	815.61	19,060.23	31,417.26	50,477.49
2024	17,850.67	671.80	32,104.74	249.30	1,042.66	18,522.48	33,396.70	51,919.18
2025	17,266.73	678.84	33,755.77	280.17	1,309.06	17,945.57	35,345.00	53,290.58
2026	16,647.96	683.73	35,325.55	313.00	1,618.00	17,331.70	37,256.55	54,588.25
2027	15,996.63	686.28	36,800.41	347.94	1,972.99	16,682.91	39,121.34	55,804.25
2028	15,315.49	686.72	38,173.97	385.11	2,377.54	16,002.21	40,936.62	56,938.83
2029	14,607.79	684.79	39,441.15	424.59	2,835.30	15,292.58	42,701.04	57,993.62
2030	13,877.22	680.59	40,594.17	466.47	3,350.15	14,557.81	44,410.79	58,968.60
2031	13,127.90	674.18	41,625.96	510.80	3,926.06	13,802.07	46,062.82	59,864.89
2032	12,364.30	665.51	42,525.51	557.65	4,567.27	13,029.81	47,650.43	60,680.24
2033	11,591.28	654.67	43,260.12	607.04	5,278.33	12,245.95	49,145.49	61,391.44
2034	10,813.96	641.72	43,802.47	658.88	6,062.96	11,455.68	50,524.31	61,979.99
2035	10,037.68	626.73	44,166.52	713.21	6,922.76	10,664.41	51,802.49	62,466.90
2036	9,267.91	609.64	44,360.04	770.03	7,860.02	9,877.55	52,990.09	62,867.64
2037	8,510.15	590.64	44,383.95	829.27	8,877.12	9,100.78	54,090.34	63,191.13
2038	7,769.77	569.93	44,242.41	891.00	9,976.10	8,339.70	55,109.50	63,449.20
2039	7,051.90	547.63	43,939.44	955.04	11,158.84	7,599.53	56,053.31	63,652.84
2040	6,361.31	523.87	43,480.40	1,021.22	12,426.92	6,885.18	56,928.53	63,813.71
2041	5,702.26	498.85	42,871.74	1,089.28	13,781.61	6,201.11	57,742.62	63,943.73
2042	5,078.40	472.77	42,123.05	1,158.56	15,223.56	5,551.17	58,505.17	64,056.34
2043	4,492.74	445.87	41,245.38	1,228.34	16,752.90	4,938.62	59,226.63	64,165.25
2044	3,947.57	418.39	40,249.15	1,297.65	18,369.34	4,365.96	59,916.14	64,282.10
2045	3,444.42	390.58	39,143.64	1,365.19	20,071.59	3,835.00	60,580.43	64,415.42

32-Year Projection of the Present Value of Future Benefits

(All Dollar Amounts in Millions)

	Current Inactives		Actives			Grand Totals		
Valuation Date	Retirees					Current Retirees, Beneficiaries,		
June 30	& Beneficiaries	Deferreds	Tier 1	Current Tier 2	Future Tier 2	& Deferreds	Actives	Total
2013	\$21,683.55	\$485.93	\$19,562.23	\$221.74	\$0.00	\$22,169.49	\$19,783.97	\$41,953.46
2014	21,535.38	482.75	21,024.41	236.80	185.34	22,018.13	21,446.55	43,464.68
2015	21,347.77	509.77	22,516.32	252.96	388.71	21,857.54	23,157.98	45,015.52
2016	21,120.36	534.95	24,035.80	270.17	620.93	21,655.31	24,926.90	46,582.21
2017	20,852.76	558.75	25,575.17	288.49	886.65	21,411.50	26,750.31	48,161.82
2018	20,544.69	581.11	27,125.83	308.15	1,185.52	21,125.81	28,619.49	49,745.30
2019	20,195.98	601.93	28,679.23	330.10	1,523.07	20,797.91	30,532.39	51,330.30
2020	19,806.62	620.59	30,224.64	354.61	1,897.61	20,427.21	32,476.86	52,904.07
2021	19,376.81	636.93	31,753.66	381.30	2,315.35	20,013.74	34,450.31	54,464.04
2022	18,906.99	650.77	33,252.59	409.13	2,779.06	19,557.76	36,440.79	55,998.55
2023	18,397.92	662.32	34,709.51	437.99	3,281.16	19,060.23	38,428.66	57,488.90
2024	17,850.67	671.80	36,112.43	468.12	3,836.62	18,522.48	40,417.16	58,939.64
2025	17,266.73	678.84	37,447.90	499.79	4,439.03	17,945.57	42,386.71	60,332.28
2026	16,647.96	683.73	38,706.77	533.11	5,085.76	17,331.70	44,325.64	61,657.34
2027	15,996.63	686.28	39,879.56	568.18	5,786.20	16,682.91	46,233.94	62,916.85
2028	15,315.49	686.72	40,959.18	605.03	6,527.43	16,002.21	48,091.64	64,093.85
2029	14,607.79	684.79	41,939.76	643.72	7,324.49	15,292.58	49,907.97	65,200.55
2030	13,877.22	680.59	42,814.07	684.27	8,171.42	14,557.81	51,669.77	66,227.58
2031	13,127.90	674.18	43,575.54	726.69	9,077.76	13,802.07	53,379.99	67,182.07
2032	12,364.30	665.51	44,215.44	770.97	10,040.73	13,029.81	55,027.15	68,056.95
2033	11,591.28	654.67	44,710.46	817.10	11,086.42	12,245.95	56,613.98	68,859.93
2034	10,813.96	641.72	45,040.53	864.98	12,192.88	11,455.68	58,098.39	69,554.07
2035	10,037.68	626.73	45,215.55	914.60	13,359.66	10,664.41	59,489.81	70,154.22
2036	9,267.91	609.64	45,241.70	965.89	14,597.10	9,877.55	60,804.69	70,682.24
2037	8,510.15	590.64	45,119.63	1,018.78	15,899.00	9,100.78	62,037.42	71,138.20
2038	7,769.77	569.93	44,851.76	1,073.25	17,269.61	8,339.70	63,194.62	71,534.32
2039	7,051.90	547.63	44,440.74	1,129.10	18,709.63	7,599.53	64,279.46	71,878.99
2040	6,361.31	523.87	43,890.31	1,186.10	20,221.60	6,885.18	65,298.02	72,183.20
2041	5,702.26	498.85	43,205.38	1,243.98	21,806.76	6,201.11	66,256.12	72,457.23
2042	5,078.40	472.77	42,393.23	1,302.15	23,465.38	5,551.17	67,160.76	72,711.93
2043	4,492.74	445.87	41,462.59	1,359.96	25,198.50	4,938.62	68,021.05	72,959.66
2044	3,947.57	418.39	40,422.08	1,416.56	27,008.12	4,365.96	68,846.75	73,212.71
2045	3,444.42	390.58	39,279.70	1,470.86	28,894.17	3,835.00	69,644.72	73,479.72

32-Year Projection of Active Population, Payroll, Employee Contributions, and Normal Costs (All Dollar Amounts in Millions)

Valuation Tier 1 Active Members **Current Tier 2 Active Members Future Tier 2 Active Members** Date Covered **Employee** Covered **Employee** Covered **Employee** Contributions Normal Cost Population June 30 **Population Payroll Payroll Contributions Normal Cost Population** Payroll **Contributions Normal Cost** 2013 \$4,086.61 \$231.32 \$239.31 \$9.89 0 \$0.00 \$0.00 \$0.00 55,273 \$775.65 6,272 \$16.62 2014 51,769 3,884.07 221.41 779.03 5,523 221.03 9.10 16.45 4,253 214.99 10.09 13.27 2015 48,841 3,850.39 220.26 779.88 5,079 218.65 9.06 16.46 7,625 405.77 19.32 28.42 3,807.92 10,779 2016 45,997 218.56 779.22 4,769 219.04 9.11 16.82 602.86 29.01 44.29 2017 43.150 3,748.15 215.93 775.37 4.515 220.81 9.21 17.34 13,879 815.42 39.53 61.70 2018 40,367 3,679.19 212.84 768.16 4,309 224.03 9.37 17.97 16,869 1,040.45 50.75 80.66 2019 37,592 228.50 9.58 19,812 1,282.43 62.94 101.48 3,593.27 208.65 757.45 4,141 18.65 2020 34,916 3,499.94 203.94 743.71 4,004 233.91 9.74 19.11 22,625 1,536.49 75.96 124.03 2021 9.77 90.04 32,300 3.395.40 198.38 725.33 3.833 235.92 19.10 25,412 1.809.82 148.61 2022 175.17 29,746 3.275.46 191.46 703.74 3,642 235.18 9.75 18.88 28,157 2.099.51 105.07 2023 27.343 3,152.81 184.46 678.83 3,410 234.87 9.79 18.85 30,793 2,401.14 120.58 202.66 2024 24,977 3,013.21 175.96 649.51 3,268 237.04 9.89 19.10 33,301 2,712.70 136.95 231.39 2025 22,718 2,866.56 166.89 618.47 3,145 239.46 10.00 19.47 35,682 3,034.57 153.93 261.31 2026 20,623 2,719.87 157.83 585.56 3,037 242.08 10.10 19.91 37,885 3,361.97 171.24 292.14 2027 18,604 2,563.57 147.97 552.94 2,937 244.40 10.19 20.37 40,004 3,701.81 189.24 324.32 2028 2,416.75 139.00 20.84 41.916 4.043.09 207.13 357.09 16,787 521.62 2.842 246.29 10.26 2029 15.050 2,262.99 129.59 490.40 2,751 247.71 10.32 21.32 43,745 4.391.34 225.45 390.99 2030 13,464 2,115.31 120.74 459.25 2,662 248.67 10.36 21.81 45,420 4,740.01 243.77 425.62 2031 11,958 1,962.60 111.51 426.56 2,577 249.37 10.38 22.31 47,009 5,094.25 262.46 461.34 2032 10,570 1,810.37 102.12 385.56 2,494 249.57 10.38 22.79 48,481 5,450.82 281.26 497.95 2033 8,879 1.589.94 87.04 338.75 2,411 249.05 10.35 23.23 50,254 5,850.62 301.67 536.93 2034 7,485 1.399.02 74.44 297.35 2,329 248.05 10.31 23.65 51,731 6,231.08 321.14 575.79 2035 6,379 1,242.82 64.78 259.70 2,250 246.80 10.24 24.05 52,916 6,590.05 339.77 613.93 2036 5,390 1,093.16 55.48 224.29 2.170 244.65 10.15 24.42 53,985 6,943.81 358.24 652.16 2037 4,537 957.79 192.29 2,093 242.38 10.05 24.79 54,915 7,288.59 376.17 690.21 47.41 2038 3,784 831.41 40.10 239.53 9.92 55,745 393.68 728.17 163.28 2,017 25.11 7,626.93 2039 9.77 3,136 716.70 33.74 137.32 1,939 235.88 25.40 56,470 7,957.02 410.65 765.93 2040 2,576 611.51 28.11 114.27 1,863 232.11 9.59 25.63 57,106 8,279.31 427.16 803.46 9.35 2041 2,096 517.12 23.28 94.72 1.781 227.06 25.70 57,668 8,594.11 443.17 840.68 2042 1,701 436.78 19.36 78.54 1,692 220.61 9.06 25.61 58,152 8,900.12 458.62 877.50 2043 1,376 367.39 65.06 25.32 58,569 9,197.83 913.84 16.08 1,601 213.12 8.72 473.61 2044 1,107 203.90 9,487.91 488.13 308.11 13.34 53.62 1,501 8.30 24.78 58,936 949.66 2045 881 254.63 10.92 43.84 1,396 193.29 7.81 23.97 59,268 9,771.20 502.26 984.97

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