Gabriel Roeder Smith & Company
Consultants & Actuaries

# STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS

## ANNUAL ACTUARIAL VALUATION AS OF JUNE 30, 2014

GRS

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December 15, 2014

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

**Re: State Employees' Retirement System Actuarial Valuation as of June 30, 2014**

Dear Board Members:

The results of the June 30, 2014, 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, 2015, and ending June 30, 2016.

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. Due to the court injunction of recent pension reform, this valuation does not reflect the provisions of Public Act 98-0599. The System's current contribution rate does not meet the requirements for amortizing the unfunded liability under GASB Statement No. 27.

Although the statutory contribution requirements were met, the statutory funding method generates a contribution requirement that is less than a reasonable actuarially determined contribution. Meeting the statutory requirement does not mean that the undersigned agree that adequate actuarial funding has been achieved. We recommend the development and adherence to a funding policy that funds the normal cost of the plan as well as an amortization payment that would seek to pay off any unfunded accrued liability for a period at least as long as 15 years and no longer than 30 years.

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

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

Respectfully submitted,

**Gabriel, Roeder, Smith & Company**

Alex Rivera    David T Kausch    Paul T Wood

| | | |
|---|---|---|
| Alex Rivera, FSA, EA, MAAA | David Kausch, FSA, EA, MAAA | Paul T. Wood, ASA, MAAA |
| Senior Consultant | Senior Consultant | Consultant |

## Additional Disclosures Required by Actuarial Standards of Practice

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

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

The signing actuaries are independent of the plan sponsor.

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# SECTION A

## INTRODUCTION

# Introduction

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

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

Gabriel, Roeder, Smith & Company has been retained by the Board of Trustees to perform an actuarial valuation as of June 30, 2014. 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, 2016. Effective with fiscal year ending June 30, 2014, GASB Statement No. 67 is replacing GASB Statement No. 25 for pension plan financial reporting requirements. Information required by GASB Statement No. 67 is provided in a separate report. For purposes of plan sponsor financial reporting, this report also includes the annual required contribution, schedule of funding progress 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 four-year period ending June 30, 2013, and were adopted for use commencing with the June 30, 2014, valuation. The cost method used to determine the benefit liabilities is the Projected Unit Credit Cost Method. For valuation purposes, as well as projection purposes, actuarial value of assets are based on a 5-year smoothing method.

# Changes Since Last Valuation

## Legislative Changes

The following Public Acts were passed in fiscal year 2014 that affected SERS.

Public Act 98-0235 – Effective August 9, 2013

Public Act 98-0449 – Effective August 16, 2013

Public Acts 98-0235 and 98-0449 did not have a material impact on the valuation as of June 30, 2014.

Public Act 98-0599 – Effective June 1, 2014, provides changes to the funding policy and new benefit provisions for current, inactive and retired Tier 1 members. Due to the court injunction of recent pension reform, this valuation does not reflect the provisions of Public Act 98-0599.

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

## Assumptions and Methods

An experience study of the State Employees' Retirement System for the period from July 1, 2009, to June 30, 2013, was performed. The primary purpose of the study was to compare the demographic and economic experience against the actuarial assumptions used in the valuations. The study was based on the information used to perform the valuations for the period from July 1, 2009, to June 30, 2013.

Following is a summary of the key findings and recommendations, as approved by the Board:

- **Price inflation**: Maintain the rate of price inflation of 3.00 percent.
- **Investment return**: The investment return assumption, net of investment expenses, compounded annually, was decreased from 7.75 percent to 7.25 percent effective with the actuarial valuation as of June 30, 2014. This reflects an underlying inflation assumption of 3.00 percent.
- **Payroll growth assumption**: The payroll growth assumption was decreased from 4.00 percent to 3.50 percent, which reflects an underlying general or price inflation assumption of 3.00 percent.
- **Salary increase**: Salary experience for the period from July 1, 2009, to June 30, 2013, was reviewed. Salary increases between valuations were determined and an average annual salary increase was calculated. As a result, the salary increase assumption was lowered from its current level.
- **Normal retirement rates:** For members eligible for Regular Formula benefits, the overall rates were increased to better reflect observed experience. For members eligible for Alternate Formula benefits, the overall rates were increased to better reflect observed experience. Furthermore, for members in Alternate Formula positions, rates were developed to recognize and account for retirement under Regular Formula eligibility and benefit provisions.
- **Turnover rates:** Maintain the current service-based only rate structure. For members eligible for Regular Formula benefits, the new rates increase the expected turnover and for members eligible for Alternate Formula benefits, the new rates also increase expected turnover.
- **Mortality rates:** The mortality table was updated from the RP2000 Mortality table projected to 2015 to 105 percent of the RP2014 Healthy Annuitant Mortality table for the post-retirement mortality assumption. The pre-retirement mortality assumption is based on a percent of the RP2014 Total Employee mortality table. The percent of the table is 90 percent for males and 110 percent for females.
- **Disability rates:** The load of 1.00 percent of pay on the normal cost was increased to 1.63 percent of pay to reflect the near-term cash flow. This assumption is based on 110 percent of the most recently available disability payments as a percent of payroll and will be updated at each valuation as experience emerges.
- **Cost Method**: The actuarial cost method is Projected Unit Credit, which is required to be used by statute.

- **Amortization Method**: No change to the 30-year open level percent of pay amortization method used to calculate the Annual Required Contribution for Governmental Accounting Standards Board (GASB) accounting purposes. The funding policy is defined by statute and does not directly amortize the unfunded actuarial liability and consequently, does not comply with GASB. Under this amortization method, the unfunded actuarial accrued liability is expected to increase in nominal dollars for the next ten to 15 years.
- **Asset Smoothing Method**: The asset smoothing method is defined by statute. Gains and losses (the difference between the actual investment return and the expected investment return) are smoothed in over a five-year period at a rate of 20 percent per year. There is currently no asset corridor. An asset corridor limits the amount that the actuarial (smoothed) value of assets can deviate from the market value of assets. The asset valuation method is prescribed by statute, and does not appear to allow a corridor. We believe an asset corridor would be reasonable provided it complied with State statues.
- **Dependent assumptions**: The current assumption on marital status that varies by sex for active members and the assumption that males are three years older than their spouses was maintained. We have also updated the data field used to determine the marital status of retirees effectively lowering the assumed marriage percent.
- **Decrement Timing**: Decrement timing of middle of the year was maintained.
- **Assumptions as a result of Public Act 96-0889**: Retirement rates for members hired on or after January 1, 2011, were modified slightly. The assumptions will be monitored more closely as more members are hired and become eligible for Tier Two benefits.
- **Load for Inactive Members Eligible for Deferred Vested Pension Benefits**: An assumption was added to the valuation to account for the increase in liability that has been observed when a member transitions from inactive to retiree. A load of 15 percent to the liability attributable to inactive members eligible for deferred vested pension benefits was added.

The cost impact of the assumption changes was measured as of the June 30, 2013, valuation. Based on that valuation, the change in assumptions increased the unfunded actuarial liability at June 30, 2013, by $2.758 billion, decreased the funded ratio at June 30, 2013, from 34.21 percent to 31.69 percent on an actuarial value of assets basis and increased the contribution rate for fiscal year 2015 from 40.472 percent to 44.892 percent. The June 30, 2013, valuation was not re-certified based on this measurement.

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

# Key Valuation Results

| Valuation Date: | June 30, 2014 | June 30, 2013 |
|---|---|---|
| Fiscal Year Ending: | June 30, 2016 | June 30, 2015 |
| Estimated Statutory Contributions: | | |
| • Annual Amount | $2,044,877,000 | $1,748,430,000 |
| • Percentage of Covered Payroll | 43.880% | 40.472% |
| Annual Required Contribution* (ARC): | | |
| • Annual Amount | $2,196,833,656 | $1,983,988,983 |
| • Percentage of Covered Payroll | 47.141% | 45.925% |
| Membership | | |
| • Number of | | |
| - Active Members | 62,844 | 61,545 |
| - Members Receiving Payments | 66,609 | 65,050 |
| - Members Eligible for Deferred Benefits | 225 | 247 |
| - Total | 129,678 | 126,842 |
| • Covered Payroll | $4,416,152,691 | $4,236,191,257 |
| • Annualized Benefit Payments | $1,948,949,432 | $1,824,694,624 |
| Assets | | |
| • Market Value of Assets (MVA) | $14,581,566,241 | $12,400,300,474 |
| • Actuarial Value of Assets (AVA) | $13,315,612,735 | $11,877,418,896 |
| • Return on MVA | 17.49% | 13.74% |
| • Return on AVA | 12.00% | 4.03% |
| • Ratio – AVA to MVA | 91.32% | 95.78% |
| Actuarial Information | | |
| • Normal Cost Amount | $686,207,638 | $551,051,796 |
| • Actuarial Accrued Liability (AAL) | $39,526,844,967 | $34,720,764,557 |
| • Unfunded Actuarial Accrued Liability (UAAL) | $26,211,232,232 | $22,843,345,661 |
| • Funded Ratio based on AVA | 33.69% | 34.21% |
| • UAAL as % of Covered Payroll | 593.53% | 539.24% |
| • Funded Ratio based on MVA | 36.89% | 35.71% |

**The ARC is based on a 30-year level percent of capped payroll amortization policy. The term ARC is no longer in the GASB Statements. We recommend developing an Actuarially Determined Contribution (ADC) in future years based on a Funding Policy adopted by the Board.*

# 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, 2014. 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 6/30/2013 | $ 12,400,300,474 |
| 2. Actual State Contribution Amount | 1,699,447,826 |
| 3. Employee Contribution Amount | 269,232,241 |
| 4. Benefit Payouts & Refunds | (1,940,145,453) |
| 5. Administrative Expenses | (16,615,105) |
| 6. Investment Income | 2,169,346,258 |
| 7. Market Value of Assets 6/30/2014 | 14,581,566,241 |
| 8. Expected Investment Return at 7.75% | 961,476,550 |
| 9. Investment Gain/(Loss) Current Year | 1,207,869,708 |
| 10. Deferred Investment Gains and (Losses) All Years | 1,265,953,506 |
| 11. Actuarial Value of Assets 6/30/2014 (7. - 10.) | 13,315,612,735 |

**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 6/30/2013 | $ 10,962,142,198 |
| 2. | State Contribution Amount[1] | 1,809,960,181 |
| 3. | Employee Contribution Amount | 269,232,241 |
| 4. | Benefit Payouts & Refunds | (1,940,145,453) |
| 5. | Administrative Expenses | (16,615,105) |
| 6. | Investment Income[2] | 1,927,554,137 |
| 7. | Hypothetical Value of Assets 6/30/2014 | 13,012,128,199 |
| 8. | Expected Investment Return at 7.75% | 854,221,734 |
| 9. | Investment Gain/(Loss) Current Year | 1,073,332,403 |
| 10. | Deferred Investment Gains and (Losses) All Years | 1,121,539,095 |
| 11. | Hypothetical Actuarial Value of Assets 6/30/2014 (7. - 10.) | 11,890,589,104 |

[1]*Represents 40.985 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2012, 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 2014 of 17.49 percent.*

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

The fiscal year ending June 30, 2015, 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 |
|---|---|---|---|---|---|
| 2015 | 40.472% | 1.867% | 42.339% | $4.320 | $1,829,086,000 |
| 2016 | 43.880% | 1.718% | 45.598% | 4.660 | 2,124,938,000 |
| 2017 | 43.205% | 1.733% | 44.938% | 4.786 | 2,150,509,000 |
| 2018 | 42.869% | 1.745% | 44.614% | 4.911 | 2,191,178,000 |
| 2019 | 42.361% | 1.750% | 44.111% | 5.042 | 2,223,987,000 |
| 2020 | 41.961% | 1.817% | 43.778% | 5.174 | 2,265,004,000 |
| 2021 | 41.887% | 1.872% | 43.759% | 5.312 | 2,324,335,000 |
| 2022 | 41.826% | 1.917% | 43.743% | 5.453 | 2,385,122,000 |
| 2023 | 41.778% | 1.952% | 43.730% | 5.596 | 2,446,990,000 |
| 2024 | 41.661% | 2.038% | 43.699% | 5.745 | 2,510,702,000 |
| 2025 | 41.567% | 2.108% | 43.675% | 5.900 | 2,576,678,000 |

For fiscal years 2016 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 2016 contribution rate is calculated assuming the actuarial value of assets as of July 1, 2014, earns a rate of return equal to the System's actuarially assumed rate of return.

The contributions for fiscal years 2017 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 2015 through 2018 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, 2014, 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 2018, 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, 2014, actuarial valuation. In order to determine projected contribution rates and amounts, the following additional assumptions were used:

- Projected annualized payroll of $4,320,100,000 for fiscal year 2015. This amount was provided by the System.
- Total employer contributions of $1,748,430,000 (including no payments from the unclaimed property fund) for fiscal year 2015, as provided by the System.
- Administrative expenses of $21,054,348 for fiscal year 2015, as provided by the System.
- New entrants whose average age is 36.26 and average pay is $52,908 (2014 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 62,844 for all years of the 31-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 31-year projection period is approximately 3.5 percent per year. It is important to note that benefits for new hires are based on capped payroll which is ultimately projected to grow at 1.5 percent per year. All results in this valuation assume that State contributions will be made on capped pay.

To determine the contribution rates, the expected 2015 appropriation was converted to a percentage of the expected 2015 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 2015 will be 40.472 percent based on the certification of the June 30, 2013, valuation results issued on October 29, 2013.
- The contribution rates for fiscal years 2034 through 2045 will be a uniform percentage of capped payroll.

Finally, the certified FY 2016 contribution rate will be applied to actual FY 2016 capped payroll.

# GASB: Financial Accounting Information

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

Pension plan financial reporting under GASB Statement No. 67 will be provided in a separate report. The following items are used for the plan sponsor's' financial reporting under GASB Statement No. 27.

- 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 47. The funded ratio has decreased from 34.21 percent as of June 30, 2013, to 33.69 percent as of June 30, 2014. This decrease is primarily due to the change in the actuarial assumptions as a result of the most recent experience study.

- 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 2014 is equal to the employer normal cost plus a 30-year level-percentage-of-payroll amortization of the unfunded actuarial liability. For fiscal year 2014, State contributions of $1,699,447,826 were approximately 86.8 percent of the ARC. The ARC for fiscal years 2015 and 2016 is greater than the employer contribution required by State statute.

The annual required contribution as well as the statutory contribution for fiscal years 2015 and 2016 are shown on the following page as a percentage of payroll. The ARC percentage and statutory contribution for 2015 are based on the results of the June 30, 2013, valuation. The dollar amount of the ARC and the statutory contribution for 2015 and 2016 will be the product of the actual payroll for 2015 and 2016 and the percentages shown.

| | Fiscal Year 2016 | Fiscal Year 2015 |
|---|---|---|
| 1. Employer normal cost | $686,207,638 | $551,051,796 |
| 2. Initial amount to amortize the unfunded liability over 30 years as a level percentage of capped payroll | 1,510,626,018 | 1,432,937,187 |
| 3. ARC [(1) + (2)] | $2,196,833,656 | $1,983,988,983 |
| 4. ARC as a percentage of payroll | 47.141% | 45.925% |
| 5. Estimated statutory contribution | $2,044,877,000 | $1,748,430,000 |
| 6. Estimated statutory contribution as a percentage of payroll | 43.880% | 40.472% |
| 7. Estimated statutory contribution as a percentage of ARC [(5) ÷ (3)] | 93.083% | 88.127% |

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 2014 (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, 2013, of $2,637,947,221 has increased to $2,931,695,504 as of June 30, 2014, due to the 2014 APC of $1,993,196,109 and actual 2014 employer contributions of $1,699,447,826.

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.

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 7.25 percent for the projected benefits for all current members that can be paid from current assets and projected investment return, future employee contributions from current members, and future employer contributions attributable to current members, and a municipal bond rate as of June 26, 2014, of 4.29 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.

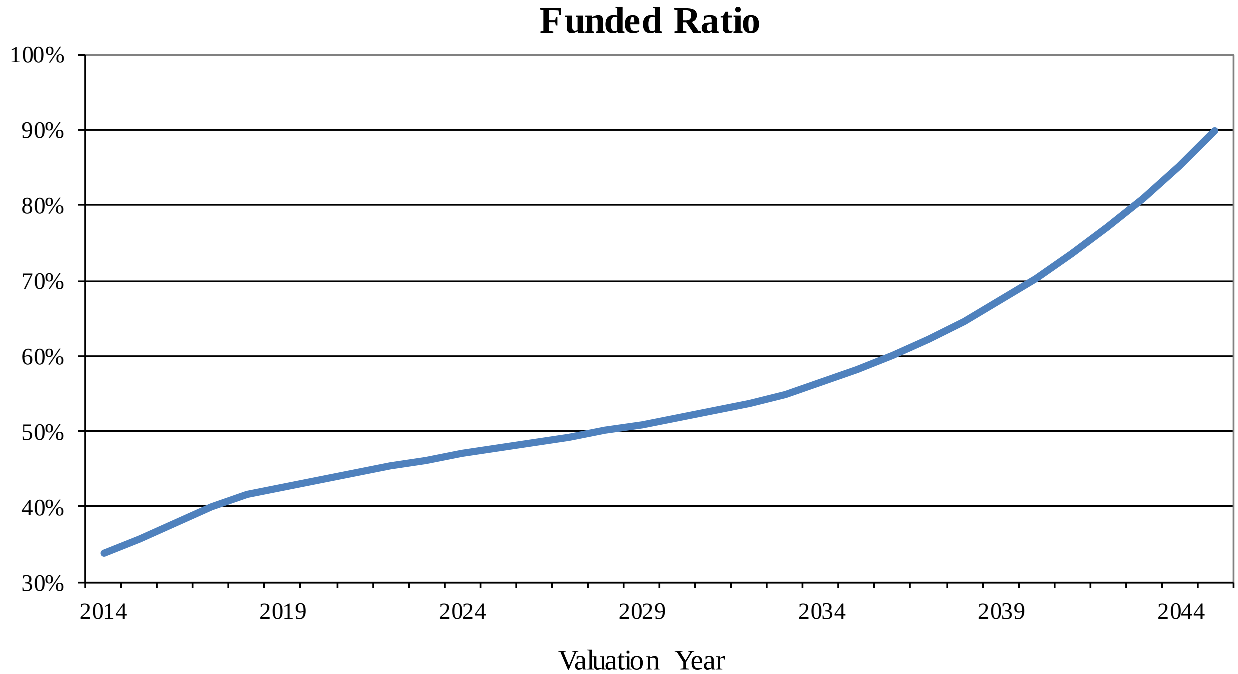
Due to the single equivalent discount rate and shorter amortization periods required under GASB Nos. 67 and 68, the liabilities and pension expense will be higher and more volatile than under the current standards.  The measurements required under GASB Statement No. 67 are provided in a separate report.

## Observations on Actuarial Funding and Statutory Funding

GASB Statements Nos. 25, 27, 67 and 68 provide guidance for retirement plans and plan sponsors on the development of an annual expense requirement to be reported in their annual financial statements. Under the rules established by GASB Statements Nos. 25 and 27, this expense requirement is 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. GASB Statements Nos. 67 and 68, which replace GASB Statements Nos. 25 and 27, no longer use the ARC. However, measuring the Statutory Contribution against a funding policy such as the ARC helps evaluate the funding adequacy of the current Statutory funding method.

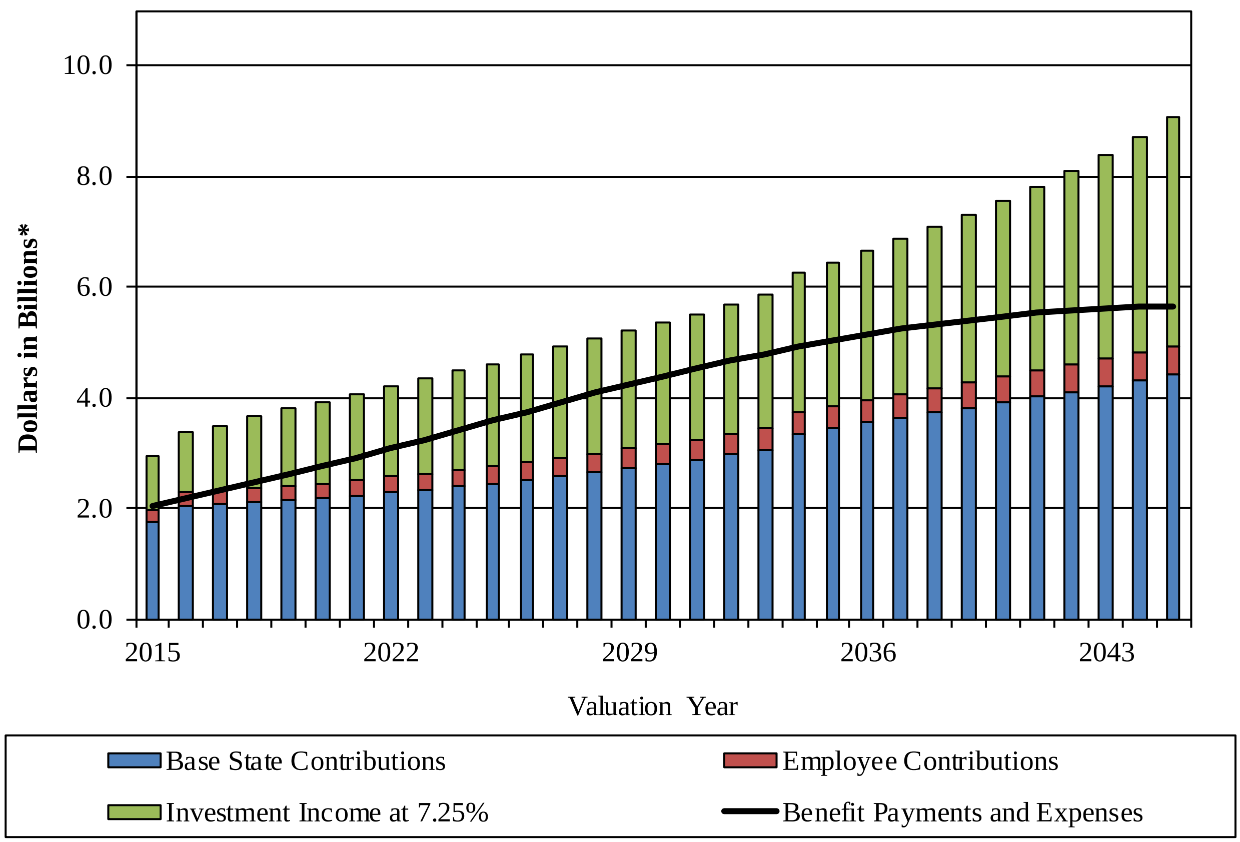
A key objective of the ARC is to accrue costs over the working lifetime of plan members to ensure that benefit obligations are satisfied and intergenerational equity is promoted. Although the ARC is solely an accounting provision, in certain circumstances it could represent a reasonable annual funding 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 does not grow markedly until after 2033. That is, a majority of the funding occurs between 2034 and 2045. This illustrates how significantly the current funding policy defers contributions into the future.



The following graph compares the projected benefits and expenses against employer contributions, employee contributions and investment income. Beginning in 2018, benefits exceed State and employee contributions. From 2018 to 2033, the percentage of investment income needed to pay ongoing benefits increases from approximately 7.5 percent to 56.1 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 46.7 percent in 2034 to 18.0 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, 2014, is only 37 percent on a market value of assets basis, and because the current statutory policy tends to back-load and defer contributions, we would advise strengthening the current statutory funding policy. The Board has taken steps to strengthen the current statutory funding policy by adopting a lower assumed rate of return and more conservative assumptions. Examples of other methods to strengthen the current funding policy include:

1. Increasing the 90 percent funding target to 100 percent,

2. Reducing the projection period needed to reach the funding target, and,

3. Separating the financing of benefits for members hired before and after December 31, 2010.

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

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

1. Establish a Funding Policy using Actuarially Determined Contributions.

2. Target 100 percent funded.

3. Shorten the amortization period to 15 to 20 years to avoid negative amortization of the unfunded actuarial accrued liability.

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

# SECTION B

## FUNDING RESULTS

Table 1

# Results of Actuarial Valuation as of June 30, 2014

| | | |
|---|---|---|
| 1 | Number of Members | |
| | a. Active | 62,844 |
| | b. Inactive: | |
| | i. Eligible for deferred vested pension benefits (3,880 based on SERS service alone. An additional 298 are eligible when reciprocal service is added to SERS service). | 4,178 |
| | ii. Eligible for return of contributions only | 20,001 |
| | c. Current Benefit Recipients: | |
| | i. Retirement annuities | 53,478 |
| | ii. Survivor annuities | 10,819 |
| | iii. Disability annuities | 2,312 |
| | d. Eligible for Deferred Benefits: | |
| | i. Retirement annuities | 78 |
| | ii. Survivor annuities | 147 |
| | e. Total | 153,857 |
| 2 | Covered Payroll | $4,416,152,691 |
| 3 | Annualized Benefit Payments Currently Being Made | |
| | a. Retirement | $1,771,379,117 |
| | b. Survivor | 124,138,926 |
| | c. Disability | 53,431,389 |
| | d. Total | $1,948,949,432 |
| 4 | Actuarial Liability—Annuitants | |
| | a. Current Benefit Recipients: | |
| | i. Retirement annuities | $23,038,434,643 |
| | ii. Survivor annuities | 1,268,546,160 |
| | iii. Disability annuities | 480,134,486 |
| | b. Eligible for Deferred Benefits: | |
| | i. Retirement annuities | 7,713,098 |
| | ii. Survivor annuities | 9,084,883 |
| | c. Total | $24,803,913,270 |

| | | Normal Cost | Actuarial Liability |
|---|---|---|---|
| 5 | Actuarial Liability—Inactive Members | | |
| | a. Eligible for Deferred Vested Pension Benefits | | $560,188,012 |
| | b. Eligible for Return of Contributions Only | | 32,863,103 |
| | c. Total | | $593,051,115 |
| 6 | Active Members | | |
| | a. Pension Benefits | $571,416,817 | $9,850,841,157 |
| | b. Cost-of-Living Adjustments | 208,546,979 | 3,773,949,159 |
| | c. Death Benefits | | |
| | i. Occupational | $1,408,899 | $15,067,982 |
| | ii. Non-occupational | 11,225,743 | 143,606,899 |
| | iii. Refund | 9,194,351 | 25,813,292 |
| | iv. Total | $21,828,993 | $184,488,173 |
| | d. Disability | | |
| | i. Occupational | $10,562,639 | $0 |
| | ii. Non-occupational | 59,854,956 | 0 |
| | iii. Total | $70,417,595 | $0 |
| | e. Withdrawal | 31,384,867 | 320,602,093 |
| | f. Expenses | 21,054,348 | 0 |
| | g. Total | $924,649,599 | $14,129,880,582 |
| 7 | Total Actuarial Liability (4 + 5 + 6) | | $39,526,844,967 |
| 8 | Market Value of Assets (MVA) | | $14,581,566,241 |
| 9 | Unfunded Actuarial Liability Based on MVA (7 – 8) | | $24,945,278,726 |
| 10 | Funded Percentage Based on MVA (8 ÷ 7) | | 36.89% |
| 11 | Actuarial Value of Assets (AVA) | | $13,315,612,735 |
| 12 | Unfunded Actuarial Liability Based on AVA (7 – 11) | | $26,211,232,232 |
| 13 | Funded Percentage Based on AVA (11 ÷ 7) | | 33.69% |
| 14 | Total Normal Cost | $924,649,599 | |
| 15 | Employee Contributions | $238,441,961 | |
| 16 | Annual Employer Normal Cost | $686,207,638 | |
| | (% payroll) | 15.54% | |

# 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 $3,367,886,571 was due to the following:

| | | | | | |
|---|---|---|---|---|---|
| 1 | UAAL at 06/30/2013 | | | $ | 22,843,345,661 |
| 2 | Contributions | | | | |
| | a. | Contributions due | | | |
| | | i | interest on 1) | $ | 1,770,359,289 |
| | | ii | members contributions | | 269,232,241 |
| | | iii | employer normal cost | | 551,051,796 |
| | | iv | interest on ii and iii | | 31,192,920 |
| | | v | total due | $ | 2,621,836,246 |
| | b. | Contributions paid | | | |
| | | i | member contributions | $ | 269,232,241 |
| | | ii | state agencies | | 1,699,447,826 |
| | | iii | interest on i and ii | | 74,862,947 |
| | | iv | total paid | $ | 2,043,543,014 |
| | c. | Expected increase in UAAL | | $ | 578,293,232 |
| 3 | Expected UAAL at 06/30/2014 | | | $ | 23,421,638,893 |
| 4 | (Gains)/Losses | | | | |
| | a. investment income | | | $ | (505,321,103) |
| | b. salary increases | | | | 356,142,591 |
| | b. demographic | | | | 23,508,555 |
| | d. total | | | $ | (125,669,957) |
| 5 | Plan Provision Changes | | | $ | - |
| 6 | Assumption Changes | | | $ | 2,915,263,296 |
| 7 | Total Change in UAAL | | | $ | 3,367,886,571 |
| 8 | UAAL at 06/30/2014 | | | $ | 26,211,232,232 |

# Analysis of Financial Gains and Losses in Unfunded Accrued Actuarial Liability for Fiscal Year Ending June 30, 2014

| | Activity | | (Gain) Loss | % of 06/30/2013 AAL |
|---|---|---|---|---|
| 1 | Actuarial (Gain)/Loss | | | |
| | a. Retirements [a] | $ | 104,001,883 | 0.31% |
| | b. Incidence of Disability | | (2,107,903) | -0.01% |
| | c. In-Service Mortality | | 802,805 | 0.00% |
| | d. Retiree Mortality and Benefit Changes | | (149,405,657) | -0.43% |
| | e. Salary Increases [b] | | 356,142,591 | 1.03% |
| | f. Terminations | | (2,690,950) | -0.01% |
| | g. Investment | | (505,321,103) | -1.46% |
| | h. New Entrant Liability | | 53,737,403 | 0.15% |
| | i. Other | | 19,170,974 | 0.06% |
| | j. Total Actuarial (Gain)/Loss | $ | (125,669,957) | -0.36% |
| 2 | Plan Provision Changes | $ | - | 0.00% |
| 3 | Assumption Changes | $ | 2,915,263,296 | 8.40% |
| 4 | Contribution (Excess)/Shortfall | $ | 578,293,232 | 1.67% |
| 5 | Total Financial (Gain)/Loss | $ | 3,367,886,571 | 9.71% |

[a] *During the plan year ending June 30, 2014, the system experienced a retirement loss of approximately 0.31 percent of beginning of year liabilities. This loss was measured using the assumptions in effect as of the previous valuation. Subsequently, an experience study was performed and the assumptions pertaining to the retirement decrement were updated. If the retirement gain/loss for plan year ending June 30, 2014, was measured using the updated assumptions, the loss would have been approximately $12 million or 0.03 percent of beginning of year liabilities.*

[b] *The salary loss is attributable to higher than expected pay increases for continuing active members and is not a result of large pay increases in the year of retirement.*

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

| | | | | | | | 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 |
| 2015 | 62,844 | 41,227 | 12,800 | 28,427 | 31.05% | 4,320 | 925 | 238 | 687 | 15.90% | 1,858 | 43.01% | 2,050 |
| 2016 | 62,844 | 42,919 | 13,957 | 28,962 | 32.52% | 4,660 | 937 | 256 | 681 | 14.61% | 2,154 | 46.22% | 2,189 |
| 2017 | 62,844 | 44,599 | 15,120 | 29,479 | 33.90% | 4,786 | 944 | 262 | 682 | 14.25% | 2,212 | 46.22% | 2,327 |
| 2018 | 62,844 | 46,259 | 16,287 | 29,972 | 35.21% | 4,911 | 951 | 268 | 683 | 13.91% | 2,270 | 46.22% | 2,470 |
| 2019 | 62,844 | 47,893 | 17,455 | 30,438 | 36.45% | 5,042 | 956 | 274 | 682 | 13.53% | 2,330 | 46.22% | 2,616 |
| 2020 | 62,844 | 49,493 | 18,620 | 30,873 | 37.62% | 5,174 | 960 | 280 | 680 | 13.14% | 2,391 | 46.22% | 2,768 |
| 2021 | 62,844 | 51,049 | 19,781 | 31,268 | 38.75% | 5,312 | 962 | 287 | 675 | 12.71% | 2,455 | 46.22% | 2,924 |
| 2022 | 62,844 | 52,551 | 20,933 | 31,618 | 39.83% | 5,453 | 962 | 293 | 669 | 12.27% | 2,520 | 46.22% | 3,086 |
| 2023 | 62,844 | 53,990 | 22,073 | 31,917 | 40.88% | 5,596 | 961 | 300 | 661 | 11.81% | 2,586 | 46.22% | 3,250 |
| 2024 | 62,844 | 55,357 | 23,201 | 32,156 | 41.91% | 5,745 | 958 | 307 | 651 | 11.33% | 2,655 | 46.22% | 3,418 |
| 2025 | 62,844 | 56,646 | 24,319 | 32,327 | 42.93% | 5,900 | 954 | 313 | 641 | 10.86% | 2,727 | 46.22% | 3,584 |
| 2026 | 62,844 | 57,849 | 25,427 | 32,422 | 43.95% | 6,061 | 950 | 321 | 629 | 10.38% | 2,801 | 46.22% | 3,754 |
| 2027 | 62,844 | 58,960 | 26,530 | 32,430 | 45.00% | 6,229 | 946 | 328 | 618 | 9.92% | 2,879 | 46.22% | 3,923 |
| 2028 | 62,844 | 59,981 | 27,635 | 32,346 | 46.07% | 6,403 | 944 | 336 | 608 | 9.50% | 2,959 | 46.22% | 4,086 |
| 2029 | 62,844 | 60,919 | 28,758 | 32,161 | 47.21% | 6,590 | 947 | 345 | 602 | 9.14% | 3,045 | 46.22% | 4,241 |
| 2030 | 62,844 | 61,775 | 29,910 | 31,865 | 48.42% | 6,782 | 952 | 354 | 598 | 8.82% | 3,134 | 46.22% | 4,389 |

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.

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

| | | | | | | | 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 |
| 2031 | 62,844 | 62,553 | 31,103 | 31,450 | 49.72% | 6,980 | 958 | 364 | 594 | 8.51% | 3,226 | 46.22% | 4,531 |
| 2032 | 62,844 | 63,250 | 32,346 | 30,904 | 51.14% | 7,181 | 964 | 374 | 590 | 8.22% | 3,319 | 46.22% | 4,670 |
| 2033 | 62,844 | 63,871 | 33,652 | 30,219 | 52.69% | 7,384 | 971 | 383 | 588 | 7.96% | 3,412 | 46.22% | 4,799 |
| 2034 | 62,844 | 64,424 | 35,038 | 29,386 | 54.39% | 7,591 | 981 | 394 | 587 | 7.73% | 3,508 | 46.22% | 4,919 |
| 2035 | 62,844 | 64,910 | 36,520 | 28,390 | 56.26% | 7,802 | 991 | 404 | 587 | 7.52% | 3,605 | 46.22% | 5,032 |
| 2036 | 62,844 | 65,328 | 38,107 | 27,221 | 58.33% | 8,012 | 1,000 | 415 | 585 | 7.30% | 3,703 | 46.22% | 5,141 |
| 2037 | 62,844 | 65,681 | 39,814 | 25,867 | 60.62% | 8,220 | 1,010 | 425 | 585 | 7.12% | 3,799 | 46.22% | 5,243 |
| 2038 | 62,844 | 65,979 | 41,663 | 24,316 | 63.15% | 8,431 | 1,023 | 436 | 587 | 6.96% | 3,896 | 46.22% | 5,333 |
| 2039 | 62,844 | 66,233 | 43,678 | 22,555 | 65.95% | 8,644 | 1,039 | 446 | 593 | 6.86% | 3,995 | 46.22% | 5,412 |
| 2040 | 62,844 | 66,455 | 45,883 | 20,572 | 69.04% | 8,859 | 1,057 | 457 | 600 | 6.77% | 4,094 | 46.22% | 5,480 |
| 2041 | 62,844 | 66,656 | 48,306 | 18,350 | 72.47% | 9,077 | 1,078 | 469 | 609 | 6.71% | 4,195 | 46.22% | 5,536 |
| 2042 | 62,844 | 66,850 | 50,974 | 15,876 | 76.25% | 9,297 | 1,102 | 480 | 622 | 6.69% | 4,296 | 46.22% | 5,582 |
| 2043 | 62,844 | 67,048 | 53,918 | 13,130 | 80.42% | 9,519 | 1,129 | 492 | 637 | 6.69% | 4,399 | 46.22% | 5,617 |
| 2044 | 62,844 | 67,262 | 57,166 | 10,096 | 84.99% | 9,743 | 1,157 | 503 | 654 | 6.71% | 4,503 | 46.22% | 5,645 |
| 2045 | 62,844 | 67,498 | 60,746 | 6,752 | 90.00% | 9,968 | 1,187 | 515 | 672 | 6.74% | 4,607 | 46.22% | 5,667 |

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.

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

| | | | | | | | Annual Normal Cost | | | | Required State Contribution | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | (a) | (b) | (c)=(a)-(b) | (d) | Minimum of (c) and (d) | | |
| Plan Year End 6/30 | Number Active | Actuarial Accrued Liability | Assets | Unfunded Liability | Funded Ratio | Total Payroll | Total | Employee Cont. | Balance | Percent of Pay | Without GOB Cont. | Debt Service | Maximum Cont. | Formula Rate With GOB | Required Cont. | Percent of Pay | Total Expenses |
| 2015 | 62,844 | 41,227 | 14,215 | 27,012 | 34.48% | 4,320 | 925 | 238 | 687 | 15.90% | 1,858 | 110 | 1,748 | 1,748 | 1,748 | 40.47% | 2,050 |
| 2016 | 62,844 | 42,919 | 15,361 | 27,558 | 35.79% | 4,660 | 937 | 256 | 681 | 14.61% | 2,154 | 109 | 2,045 | 2,181 | 2,045 | 43.88% | 2,189 |
| 2017 | 62,844 | 44,599 | 16,510 | 28,089 | 37.02% | 4,786 | 944 | 262 | 682 | 14.25% | 2,212 | 113 | 2,099 | 2,240 | 2,099 | 43.86% | 2,327 |
| 2018 | 62,844 | 46,259 | 17,657 | 28,602 | 38.17% | 4,911 | 951 | 268 | 683 | 13.91% | 2,270 | 117 | 2,153 | 2,299 | 2,153 | 43.84% | 2,470 |
| 2019 | 62,844 | 47,893 | 18,800 | 29,093 | 39.25% | 5,042 | 956 | 274 | 682 | 13.53% | 2,330 | 120 | 2,210 | 2,360 | 2,210 | 43.84% | 2,616 |
| 2020 | 62,844 | 49,493 | 19,931 | 29,562 | 40.27% | 5,174 | 960 | 280 | 680 | 13.14% | 2,391 | 128 | 2,263 | 2,422 | 2,263 | 43.75% | 2,768 |
| 2021 | 62,844 | 51,049 | 21,046 | 30,003 | 41.23% | 5,312 | 962 | 287 | 675 | 12.71% | 2,455 | 135 | 2,320 | 2,486 | 2,320 | 43.67% | 2,924 |
| 2022 | 62,844 | 52,551 | 22,143 | 30,408 | 42.14% | 5,453 | 962 | 293 | 669 | 12.27% | 2,520 | 142 | 2,378 | 2,552 | 2,378 | 43.61% | 3,086 |
| 2023 | 62,844 | 53,990 | 23,217 | 30,773 | 43.00% | 5,596 | 961 | 300 | 661 | 11.81% | 2,586 | 148 | 2,438 | 2,619 | 2,438 | 43.56% | 3,250 |
| 2024 | 62,844 | 55,357 | 24,263 | 31,094 | 43.83% | 5,745 | 958 | 307 | 651 | 11.33% | 2,655 | 159 | 2,496 | 2,689 | 2,496 | 43.45% | 3,418 |
| 2025 | 62,844 | 56,646 | 25,283 | 31,363 | 44.63% | 5,900 | 954 | 313 | 641 | 10.86% | 2,727 | 169 | 2,558 | 2,761 | 2,558 | 43.35% | 3,584 |
| 2026 | 62,844 | 57,849 | 26,282 | 31,567 | 45.43% | 6,061 | 950 | 321 | 629 | 10.38% | 2,801 | 173 | 2,628 | 2,837 | 2,628 | 43.35% | 3,754 |
| 2027 | 62,844 | 58,960 | 27,263 | 31,697 | 46.24% | 6,229 | 946 | 328 | 618 | 9.92% | 2,879 | 177 | 2,702 | 2,916 | 2,702 | 43.37% | 3,923 |
| 2028 | 62,844 | 59,981 | 28,229 | 31,752 | 47.06% | 6,403 | 944 | 336 | 608 | 9.50% | 2,959 | 185 | 2,774 | 2,997 | 2,774 | 43.32% | 4,086 |
| 2029 | 62,844 | 60,919 | 29,195 | 31,724 | 47.92% | 6,590 | 947 | 345 | 602 | 9.14% | 3,045 | 192 | 2,853 | 3,084 | 2,853 | 43.29% | 4,241 |
| 2030 | 62,844 | 61,775 | 30,167 | 31,608 | 48.83% | 6,782 | 952 | 354 | 598 | 8.82% | 3,134 | 204 | 2,930 | 3,174 | 2,930 | 43.20% | 4,389 |

Normal cost rate includes administrative expenses.
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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.

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

| | | | | | | | Annual Normal Cost | | | | Required State Contribution | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | (a) | (b) | (c)=(a)-(b) | (d) | Minimum of (c) and (d) | | |
| Plan Year End 6/30 | Number Active | Actuarial Accrued Liability | Assets | Unfunded Liability | Funded Ratio | Total Payroll | Total | Employee Cont. | Balance | Percent of Pay | Without GOB Cont. | Debt Service | Maximum Cont. | Formula Rate With GOB | Required Cont. | Percent of Pay | Total Expenses |
| 2031 | 62,844 | 62,553 | 31,156 | 31,397 | 49.81% | 6,980 | 958 | 364 | 594 | 8.51% | 3,226 | 215 | 3,011 | 3,267 | 3,011 | 43.14% | 4,531 |
| 2032 | 62,844 | 63,250 | 32,176 | 31,074 | 50.87% | 7,181 | 964 | 374 | 590 | 8.22% | 3,319 | 220 | 3,099 | 3,361 | 3,099 | 43.16% | 4,670 |
| 2033 | 62,844 | 63,871 | 33,242 | 30,629 | 52.05% | 7,384 | 971 | 383 | 588 | 7.96% | 3,412 | 219 | 3,193 | 3,456 | 3,193 | 43.25% | 4,799 |
| 2034 | 62,844 | 64,424 | 34,646 | 29,778 | 53.78% | 7,591 | 981 | 394 | 587 | 7.73% | 3,508 | 0 | N/A | 3,553 | 3,553 | 46.80% | 4,919 |
| 2035 | 62,844 | 64,910 | 36,146 | 28,764 | 55.69% | 7,802 | 991 | 404 | 587 | 7.52% | 3,605 | 0 | N/A | 3,652 | 3,652 | 46.80% | 5,032 |
| 2036 | 62,844 | 65,328 | 37,755 | 27,573 | 57.79% | 8,012 | 1,000 | 415 | 585 | 7.30% | 3,703 | 0 | N/A | 3,750 | 3,750 | 46.80% | 5,141 |
| 2037 | 62,844 | 65,681 | 39,487 | 26,194 | 60.12% | 8,220 | 1,010 | 425 | 585 | 7.12% | 3,799 | 0 | N/A | 3,847 | 3,847 | 46.80% | 5,243 |
| 2038 | 62,844 | 65,979 | 41,364 | 24,615 | 62.69% | 8,431 | 1,023 | 436 | 587 | 6.96% | 3,896 | 0 | N/A | 3,946 | 3,946 | 46.80% | 5,333 |
| 2039 | 62,844 | 66,233 | 43,410 | 22,823 | 65.54% | 8,644 | 1,039 | 446 | 593 | 6.86% | 3,995 | 0 | N/A | 4,046 | 4,046 | 46.80% | 5,412 |
| 2040 | 62,844 | 66,455 | 45,651 | 20,804 | 68.69% | 8,859 | 1,057 | 457 | 600 | 6.77% | 4,094 | 0 | N/A | 4,147 | 4,147 | 46.80% | 5,480 |
| 2041 | 62,844 | 66,656 | 48,112 | 18,544 | 72.18% | 9,077 | 1,078 | 469 | 609 | 6.71% | 4,195 | 0 | N/A | 4,248 | 4,248 | 46.80% | 5,536 |
| 2042 | 62,844 | 66,850 | 50,823 | 16,027 | 76.03% | 9,297 | 1,102 | 480 | 622 | 6.69% | 4,296 | 0 | N/A | 4,351 | 4,351 | 46.80% | 5,582 |
| 2043 | 62,844 | 67,048 | 53,814 | 13,234 | 80.26% | 9,519 | 1,129 | 492 | 637 | 6.69% | 4,399 | 0 | N/A | 4,455 | 4,455 | 46.80% | 5,617 |
| 2044 | 62,844 | 67,262 | 57,114 | 10,148 | 84.91% | 9,743 | 1,157 | 503 | 654 | 6.71% | 4,503 | 0 | N/A | 4,560 | 4,560 | 46.80% | 5,645 |
| 2045 | 62,844 | 67,498 | 60,751 | 6,747 | 90.00% | 9,968 | 1,187 | 515 | 672 | 6.74% | 4,607 | 0 | N/A | 4,666 | 4,666 | 46.80% | 5,667 |

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

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

| | | | | | | | 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 |
| 2015 | 62,844 | 41,227 | 13,276 | 27,951 | 32.20% | 4,320 | 925 | 238 | 687 | 15.90% | 1,858 | 43.01% | 2,050 |
| 2016 | 62,844 | 42,919 | 14,702 | 28,217 | 34.26% | 4,660 | 937 | 256 | 681 | 14.61% | 2,154 | 46.22% | 2,189 |
| 2017 | 62,844 | 44,599 | 16,257 | 28,342 | 36.45% | 4,786 | 944 | 262 | 682 | 14.25% | 2,180 | 45.55% | 2,327 |
| 2018 | 62,844 | 46,259 | 17,686 | 28,573 | 38.23% | 4,911 | 951 | 268 | 683 | 13.91% | 2,222 | 45.25% | 2,470 |
| 2019 | 62,844 | 47,893 | 18,879 | 29,014 | 39.42% | 5,042 | 956 | 274 | 682 | 13.53% | 2,256 | 44.74% | 2,616 |
| 2020 | 62,844 | 49,493 | 20,052 | 29,441 | 40.51% | 5,174 | 960 | 280 | 680 | 13.14% | 2,299 | 44.43% | 2,768 |
| 2021 | 62,844 | 51,049 | 21,218 | 29,831 | 41.56% | 5,312 | 962 | 287 | 675 | 12.71% | 2,360 | 44.43% | 2,924 |
| 2022 | 62,844 | 52,551 | 22,373 | 30,178 | 42.57% | 5,453 | 962 | 293 | 669 | 12.27% | 2,423 | 44.43% | 3,086 |
| 2023 | 62,844 | 53,990 | 23,515 | 30,475 | 43.55% | 5,596 | 961 | 300 | 661 | 11.81% | 2,486 | 44.43% | 3,250 |
| 2024 | 62,844 | 55,357 | 24,641 | 30,716 | 44.51% | 5,745 | 958 | 307 | 651 | 11.33% | 2,553 | 44.43% | 3,418 |
| 2025 | 62,844 | 56,646 | 25,755 | 30,891 | 45.47% | 5,900 | 954 | 313 | 641 | 10.86% | 2,621 | 44.43% | 3,584 |
| 2026 | 62,844 | 57,849 | 26,855 | 30,994 | 46.42% | 6,061 | 950 | 321 | 629 | 10.38% | 2,693 | 44.43% | 3,754 |
| 2027 | 62,844 | 58,960 | 27,946 | 31,014 | 47.40% | 6,229 | 946 | 328 | 618 | 9.92% | 2,768 | 44.43% | 3,923 |
| 2028 | 62,844 | 59,981 | 29,035 | 30,946 | 48.41% | 6,403 | 944 | 336 | 608 | 9.50% | 2,845 | 44.43% | 4,086 |
| 2029 | 62,844 | 60,919 | 30,138 | 30,781 | 49.47% | 6,590 | 947 | 345 | 602 | 9.14% | 2,928 | 44.43% | 4,241 |
| 2030 | 62,844 | 61,775 | 31,265 | 30,510 | 50.61% | 6,782 | 952 | 354 | 598 | 8.82% | 3,013 | 44.43% | 4,389 |

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.

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

*(All Dollar Amounts in Millions)*

| | | | | | | | 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 |
| 2031 | 62,844 | 62,553 | 32,427 | 30,126 | 51.84% | 6,980 | 958 | 364 | 594 | 8.51% | 3,101 | 44.43% | 4,531 |
| 2032 | 62,844 | 63,250 | 33,633 | 29,617 | 53.17% | 7,181 | 964 | 374 | 590 | 8.22% | 3,191 | 44.44% | 4,670 |
| 2033 | 62,844 | 63,871 | 34,896 | 28,975 | 54.64% | 7,384 | 971 | 383 | 588 | 7.96% | 3,281 | 44.43% | 4,799 |
| 2034 | 62,844 | 64,424 | 36,233 | 28,191 | 56.24% | 7,591 | 981 | 394 | 587 | 7.73% | 3,373 | 44.43% | 4,919 |
| 2035 | 62,844 | 64,910 | 37,657 | 27,253 | 58.01% | 7,802 | 991 | 404 | 587 | 7.52% | 3,466 | 44.43% | 5,032 |
| 2036 | 62,844 | 65,328 | 39,178 | 26,150 | 59.97% | 8,012 | 1,000 | 415 | 585 | 7.30% | 3,560 | 44.43% | 5,141 |
| 2037 | 62,844 | 65,681 | 40,811 | 24,870 | 62.14% | 8,220 | 1,010 | 425 | 585 | 7.12% | 3,652 | 44.43% | 5,243 |
| 2038 | 62,844 | 65,979 | 42,577 | 23,402 | 64.53% | 8,431 | 1,023 | 436 | 587 | 6.96% | 3,746 | 44.43% | 5,333 |
| 2039 | 62,844 | 66,233 | 44,498 | 21,735 | 67.18% | 8,644 | 1,039 | 446 | 593 | 6.86% | 3,840 | 44.43% | 5,412 |
| 2040 | 62,844 | 66,455 | 46,600 | 19,855 | 70.12% | 8,859 | 1,057 | 457 | 600 | 6.77% | 3,936 | 44.43% | 5,480 |
| 2041 | 62,844 | 66,656 | 48,906 | 17,750 | 73.37% | 9,077 | 1,078 | 469 | 609 | 6.71% | 4,033 | 44.43% | 5,536 |
| 2042 | 62,844 | 66,850 | 51,447 | 15,403 | 76.96% | 9,297 | 1,102 | 480 | 622 | 6.69% | 4,131 | 44.43% | 5,582 |
| 2043 | 62,844 | 67,048 | 54,249 | 12,799 | 80.91% | 9,519 | 1,129 | 492 | 637 | 6.69% | 4,229 | 44.43% | 5,617 |
| 2044 | 62,844 | 67,262 | 57,341 | 9,921 | 85.25% | 9,743 | 1,157 | 503 | 654 | 6.71% | 4,329 | 44.43% | 5,645 |
| 2045 | 62,844 | 67,498 | 60,749 | 6,749 | 90.00% | 9,968 | 1,187 | 515 | 672 | 6.74% | 4,429 | 44.43% | 5,667 |

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.

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

*(All Dollar Amounts in Millions)*

| | | | | | | | Annual Normal Cost | | | | Required State Contribution | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | (a) | (b) | (c)=(a)-(b) | (d) | Minimum of (c) and (d) | | |
| Plan Year End 6/30 | Number Active | Actuarial Accrued Liability | Assets | Unfunded Liability | Funded Ratio | Total Payroll | Total | Employee Cont. | Balance | Percent of Pay | Without GOB Cont. | Debt Service | Maximum Cont. | Formula Rate With GOB | Required Cont. | Percent of Pay | Total Expenses |
| 2015 | 62,844 | 41,227 | 14,755 | 26,472 | 35.79% | 4,320 | 925 | 238 | 687 | 15.90% | 1,858 | 110 | 1,748 | 1,748 | 1,748 | 40.47% | 2,050 |
| 2016 | 62,844 | 42,919 | 16,203 | 26,716 | 37.75% | 4,660 | 937 | 256 | 681 | 14.61% | 2,154 | 109 | 2,045 | 2,181 | 2,045 | 43.88% | 2,189 |
| 2017 | 62,844 | 44,599 | 17,798 | 26,801 | 39.91% | 4,786 | 944 | 262 | 682 | 14.25% | 2,180 | 112 | 2,068 | 2,193 | 2,068 | 43.21% | 2,327 |
| 2018 | 62,844 | 46,259 | 19,247 | 27,012 | 41.61% | 4,911 | 951 | 268 | 683 | 13.91% | 2,222 | 117 | 2,105 | 2,228 | 2,105 | 42.87% | 2,470 |
| 2019 | 62,844 | 47,893 | 20,429 | 27,464 | 42.66% | 5,042 | 956 | 274 | 682 | 13.53% | 2,256 | 120 | 2,136 | 2,252 | 2,136 | 42.36% | 2,616 |
| 2020 | 62,844 | 49,493 | 21,582 | 27,911 | 43.61% | 5,174 | 960 | 280 | 680 | 13.14% | 2,299 | 128 | 2,171 | 2,289 | 2,171 | 41.96% | 2,768 |
| 2021 | 62,844 | 51,049 | 22,719 | 28,330 | 44.50% | 5,312 | 962 | 287 | 675 | 12.71% | 2,360 | 135 | 2,225 | 2,350 | 2,225 | 41.89% | 2,924 |
| 2022 | 62,844 | 52,551 | 23,836 | 28,715 | 45.36% | 5,453 | 962 | 293 | 669 | 12.27% | 2,423 | 142 | 2,281 | 2,412 | 2,281 | 41.83% | 3,086 |
| 2023 | 62,844 | 53,990 | 24,930 | 29,060 | 46.18% | 5,596 | 961 | 300 | 661 | 11.81% | 2,486 | 148 | 2,338 | 2,475 | 2,338 | 41.78% | 3,250 |
| 2024 | 62,844 | 55,357 | 25,994 | 29,363 | 46.96% | 5,745 | 958 | 307 | 651 | 11.33% | 2,553 | 159 | 2,394 | 2,542 | 2,394 | 41.66% | 3,418 |
| 2025 | 62,844 | 56,646 | 27,031 | 29,615 | 47.72% | 5,900 | 954 | 313 | 641 | 10.86% | 2,621 | 169 | 2,452 | 2,610 | 2,452 | 41.57% | 3,584 |
| 2026 | 62,844 | 57,849 | 28,044 | 29,805 | 48.48% | 6,061 | 950 | 321 | 629 | 10.38% | 2,693 | 174 | 2,519 | 2,681 | 2,519 | 41.57% | 3,754 |
| 2027 | 62,844 | 58,960 | 29,038 | 29,922 | 49.25% | 6,229 | 946 | 328 | 618 | 9.92% | 2,768 | 178 | 2,590 | 2,755 | 2,590 | 41.58% | 3,923 |
| 2028 | 62,844 | 59,981 | 30,014 | 29,967 | 50.04% | 6,403 | 944 | 336 | 608 | 9.50% | 2,845 | 186 | 2,659 | 2,832 | 2,659 | 41.53% | 4,086 |
| 2029 | 62,844 | 60,919 | 30,988 | 29,931 | 50.87% | 6,590 | 947 | 345 | 602 | 9.14% | 2,928 | 193 | 2,735 | 2,915 | 2,735 | 41.50% | 4,241 |
| 2030 | 62,844 | 61,775 | 31,965 | 29,810 | 51.74% | 6,782 | 952 | 354 | 598 | 8.82% | 3,013 | 204 | 2,809 | 3,000 | 2,809 | 41.42% | 4,389 |

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

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

*(All Dollar Amounts in Millions)*

| | | | | | | | Annual Normal Cost | | | | Required State Contribution | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | (a) | (b) | (c)=(a)-(b) | (d) | Minimum of (c) and (d) | | |
| Plan Year End 6/30 | Number Active | Actuarial Accrued Liability | Assets | Unfunded Liability | Funded Ratio | Total Payroll | Total | Employee Cont. | Balance | Percent of Pay | Without GOB Cont. | Debt Service | Maximum Cont. | Formula Rate With GOB | Required Cont. | Percent of Pay | Total Expenses |
| 2031 | 62,844 | 62,553 | 32,955 | 29,598 | 52.68% | 6,980 | 958 | 364 | 594 | 8.51% | 3,101 | 215 | 2,886 | 3,088 | 2,886 | 41.35% | 4,531 |
| 2032 | 62,844 | 63,250 | 33,972 | 29,278 | 53.71% | 7,181 | 964 | 374 | 590 | 8.22% | 3,191 | 220 | 2,971 | 3,177 | 2,971 | 41.37% | 4,670 |
| 2033 | 62,844 | 63,871 | 35,033 | 28,838 | 54.85% | 7,384 | 971 | 383 | 588 | 7.96% | 3,281 | 219 | 3,062 | 3,266 | 3,062 | 41.47% | 4,799 |
| 2034 | 62,844 | 64,424 | 36,364 | 28,060 | 56.44% | 7,591 | 981 | 394 | 587 | 7.73% | 3,373 | 0 | N/A | 3,358 | 3,358 | 44.24% | 4,919 |
| 2035 | 62,844 | 64,910 | 37,782 | 27,128 | 58.21% | 7,802 | 991 | 404 | 587 | 7.52% | 3,466 | 0 | N/A | 3,451 | 3,451 | 44.24% | 5,032 |
| 2036 | 62,844 | 65,328 | 39,296 | 26,032 | 60.15% | 8,012 | 1,000 | 415 | 585 | 7.30% | 3,560 | 0 | N/A | 3,544 | 3,544 | 44.24% | 5,141 |
| 2037 | 62,844 | 65,681 | 40,921 | 24,760 | 62.30% | 8,220 | 1,010 | 425 | 585 | 7.12% | 3,652 | 0 | N/A | 3,636 | 3,636 | 44.24% | 5,243 |
| 2038 | 62,844 | 65,979 | 42,678 | 23,301 | 64.68% | 8,431 | 1,023 | 436 | 587 | 6.96% | 3,746 | 0 | N/A | 3,729 | 3,729 | 44.24% | 5,333 |
| 2039 | 62,844 | 66,233 | 44,589 | 21,644 | 67.32% | 8,644 | 1,039 | 446 | 593 | 6.86% | 3,840 | 0 | N/A | 3,824 | 3,824 | 44.24% | 5,412 |
| 2040 | 62,844 | 66,455 | 46,679 | 19,776 | 70.24% | 8,859 | 1,057 | 457 | 600 | 6.77% | 3,936 | 0 | N/A | 3,919 | 3,919 | 44.24% | 5,480 |
| 2041 | 62,844 | 66,656 | 48,973 | 17,683 | 73.47% | 9,077 | 1,078 | 469 | 609 | 6.71% | 4,033 | 0 | N/A | 4,015 | 4,015 | 44.24% | 5,536 |
| 2042 | 62,844 | 66,850 | 51,499 | 15,351 | 77.04% | 9,297 | 1,102 | 480 | 622 | 6.69% | 4,131 | 0 | N/A | 4,112 | 4,112 | 44.24% | 5,582 |
| 2043 | 62,844 | 67,048 | 54,286 | 12,762 | 80.97% | 9,519 | 1,129 | 492 | 637 | 6.69% | 4,229 | 0 | N/A | 4,211 | 4,211 | 44.24% | 5,617 |
| 2044 | 62,844 | 67,262 | 57,361 | 9,901 | 85.28% | 9,743 | 1,157 | 503 | 654 | 6.71% | 4,329 | 0 | N/A | 4,310 | 4,310 | 44.24% | 5,645 |
| 2045 | 62,844 | 67,498 | 60,750 | 6,748 | 90.00% | 9,968 | 1,187 | 515 | 672 | 6.74% | 4,429 | 0 | N/A | 4,409 | 4,409 | 44.24% | 5,667 |

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

# SECTION C

## FUND ASSETS

**State Employees' Retirement System of Illinois**

**Statement of Fiduciary Net Position**

**Years ended June 30, 2014 and 2013**

| | 2014 | 2013 |
|---|---|---|
| Assets | | |
| Cash | $ 200,752,173 | $ 146,354,061 |
| Receivables: | | |
| Contributions: | | |
| Participants | $ 17,207,484 | $ 14,151,628 |
| Employing state agencies | 79,511,794 | 124,910,925 |
| Other accounts | 4,682,423 | 6,378,048 |
| | $ 101,401,701 | $ 145,440,601 |
| Investments - held in the Illinois State Board of Investment Commingled Fund at fair value | $ 14,286,499,013 | $ 12,176,459,191 |
| Securities lending collateral with State Treasurer | 84,013,000 | 113,169,000 |
| Property and equipment, net of accumulated depreciation | $ 4,122,801 | $ 2,792,664 |
| Total Assets | $ 14,676,788,688 | $ 12,584,215,517 |
| Liabilities | | |
| Benefits payable | $ 5,106,425 | $ 5,562,404 |
| Refunds payable | 674,361 | 345,475 |
| Administrative expenses payable | 1,714,067 | 1,598,700 |
| Participants' deferred service credit accounts | 118,146 | 197,697 |
| Due to State of Illinois | 3,596,448 | 63,041,767 |
| Securities lending collateral with State Treasurer | 84,013,000 | 113,169,000 |
| Total Liabilities | $ 95,222,447 | $ 183,915,043 |
| Net assets held in trust for pension benefits | $ 14,581,566,241 | $ 12,400,300,474 |

**State Employees' Retirement System of Illinois**
**Statement of Changes in Fiduciary Net Position**
**Years ended June 30, 2014 and 2013**

| | 2014 | 2013 |
|---|---|---|
| Additions: | | |
| Contributions: | | |
| Participants | $ 269,232,241 | $ 248,169,706 |
| Employing state agencies and appropriations | 1,699,447,826 | 1,531,932,137 |
| Total Contributions revenue | $ 1,968,680,067 | $ 1,780,101,843 |
| Investments income: | | |
| Net investments income | $ 358,688,813 | $ 315,686,279 |
| Interest earned on cash balances | 698,856 | 551,261 |
| Net appreciation in fair value of investments | 1,809,958,589 | 1,185,000,651 |
| Total Investments income | $ 2,169,346,258 | $ 1,501,238,191 |
| Total Additions | $ 4,138,026,325 | $ 3,281,340,034 |
| Deductions: | | |
| Benefits: | | |
| Retirement annuities | $ 1,720,825,103 | $ 1,614,596,770 |
| Survivors' annuities | 114,177,228 | 107,533,834 |
| Disability benefits | 64,782,236 | 59,882,478 |
| Lump-sum benefits | 17,278,072 | 17,952,573 |
| Total Benefits | $ 1,917,062,639 | $ 1,799,965,655 |
| Refunds | 23,082,814 | 24,290,402 |
| Administrative | 16,615,105 | 17,471,327 |
| Total Deductions | $ 1,956,760,558 | $ 1,841,727,384 |
| Net increase | $ 2,181,265,767 | $ 1,439,612,650 |
| Net assets held in trust for pension benefits: | | |
| Beginning of year | $ 12,400,300,474 | $ 10,960,687,824 |
| End of year | $ 14,581,566,241 | $ 12,400,300,474 |

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

| Year Ending June 30 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Beginning of Year: | | | | | |
| (1) Market Value of Assets | $ 12,400,300,474 | | | | |
| (2) Actuarial Value of Assets | 11,877,418,896 | | | | |
| End of Year: | | | | | |
| (3) Market Value of Assets | 14,581,566,241 | | | | |
| (4) Contributions and Disbursements | | | | | |
| (4a) Actual State Contribution Amount | 1,699,447,826 | | | | |
| (4b) Employee Contribution Amount | 269,232,241 | | | | |
| (4c) Benefit Payouts & Refunds | (1,940,145,453) | | | | |
| (4d) Administrative Expenses | (16,615,105) | | | | |
| (4e) Net of Contributions and Disbursements | 11,919,509 | | | | |
| (5) Total Investment Income | | | | | |
| =(3)-(1)-(4e) | 2,169,346,258 | | | | |
| (6) Projected Rate of Return | 7.75% | | | | |
| (7) Projected Investment Income | | | | | |
| =(1)x(6)+([1+(6)]^.5-1)x(4e) | 961,476,550 | | | | |
| (8) Investment Income in | | | | | |
| Excess of Projected Income | 1,207,869,708 | | | | |
| (9) Excess Investment Income Recognized | | | | | |
| This Year (5-year recognition) | | | | | |
| (9a) From This Year | 241,573,942 | | | | |
| (9b) From One Year Ago | 130,825,664 | $ 241,573,942 | | | |
| (9c) From Two Years Ago | (168,729,601) | 130,825,664 | $ 241,573,942 | | |
| (9d) From Three Years Ago | 244,639,950 | (168,729,601) | 130,825,664 | $ 241,573,942 | |
| (9e) From Four Years Ago | 16,487,825 | 244,639,950 | (168,729,599) | 130,825,662 | $ 241,573,940 |
| (9f) Total Recognized Investment Gain | 464,797,780 | 448,309,955 | 203,670,007 | 372,399,604 | 241,573,940 |
| (10) Change in Actuarial Value of Assets | | | | | |
| =(4e)+(7)+(9f) | 1,438,193,839 | | | | |
| End of Year: | | | | | |
| **(3) Market Value of Assets** | **14,581,566,241** | | | | |
| **(11) Actuarial Value of Assets** | | | | | |
| **=(2)+(10)** | **13,315,612,735** | | | | |

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

| Year Ending June 30 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Beginning of Year: | | | | | |
| (1) Hypothetical Value of Assets | $ 10,962,142,198 | | | | |
| (2) Hypothetical Actuarial Value of Assets | 10,505,790,442 | | | | |
| End of Year: | | | | | |
| (3) Hypothetical Value of Assets | 13,012,128,199 | | | | |
| (4) Contributions and Disbursements | | | | | |
| (4a) State Contribution Amount[1] | 1,809,960,181 | | | | |
| (4b) Employee Contribution Amount | 269,232,241 | | | | |
| (4c) Benefit Payouts & Refunds | (1,940,145,453) | | | | |
| (4d) Administrative Expenses | (16,615,105) | | | | |
| (4e) Net of Contributions and Disbursements | 122,431,864 | | | | |
| (5) Total Investment Income[2] =(3)-(1)-(4e) | 1,927,554,137 | | | | |
| (6) Projected Rate of Return | 7.75% | | | | |
| (7) Projected Investment Income =(1)x(6)+([1+(6)]^.5-1)x(4e) | 854,221,734 | | | | |
| (8) Investment Income in Excess of Projected Income | 1,073,332,403 | | | | |
| (9) Excess Investment Income Recognized This Year (5-year recognition) | | | | | |
| (9a) From This Year | 214,666,481 | | | | |
| (9b) From One Year Ago | 115,217,817 | $ 214,666,481 | | | |
| (9c) From Two Years Ago | (146,907,451) | 115,217,817 | $ 214,666,481 | | |
| (9d) From Three Years Ago | 211,034,626 | (146,907,450) | 115,217,817 | $ 214,666,481 | |
| (9e) From Four Years Ago | 14,133,591 | 211,034,626 | (146,907,450) | 115,217,818 | $ 214,666,479 |
| (9f) Total Recognized Investment Gain | 408,145,064 | 394,011,474 | 182,976,848 | 329,884,299 | 214,666,479 |
| (10) Change in Hypothetical Actuarial Value of Assets =(4e)+(7)+(9f) | 1,384,798,662 | | | | |
| End of Year: | | | | | |
| **(3) Hypothetical Market Value of Assets** | **13,012,128,199** | | | | |
| **(11) Hypothetical Actuarial Value of Assets =(2)+(10)** | **11,890,589,104** | | | | |

[1] *Represents 40.985 percent of payroll for the basic contribution. This rate was determined as part of the June 30, 2012, 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 2014 of 17.49%.*

# 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.**

**The measurements required under GASB Statement No. 67 are provided in a separate report.**

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

## A. Schedule of Funding Progress

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

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

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

## C. Notes to Required Schedules

1. The cost method used to determine the ARC is the Projected Unit Credit Cost Method. The ARC (as percentage of payroll) for the 2014 fiscal year was determined as of June 30, 2012, based on the assumptions then in effect.
2. The assets are shown at actuarial value.
3. Economic assumptions include an inflation rate of 3.0 percent; an investment return rate of 8.50 percent prior to the June 30, 2010, valuation, 7.75 percent for the valuations as of June 30, 2010, through June 30, 2013, and 7.25 percent thereafter; salary increase rates based on age-related productivity and merit rates plus inflation; and postretirement benefit increases of 3.0 percent.
4. The amortization method is an open 30-year period, level percent of projected capped payroll.

# 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 | Amortization | |
| 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 |
| 7/1/13 - 6/30/14 | 6/30/2012 | 7.75% | 1,956,841,419 | 1,699,447,826 | 30 | 15.69401240 |

| | 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 |
| 7/1/08 - 6/30/09 | 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 | 1,326,154,395 | 198,267,599 | 2,131,536,940 |
| 7/1/11 - 6/30/12 | 2,131,536,940 | 165,194,113 | 132,188,464 | 1,647,840,457 | 256,424,082 | 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 |
| 7/1/13 - 6/30/14 | 2,637,947,221 | 204,440,910 | 168,086,220 | 1,993,196,109 | 293,748,283 | 2,931,695,504 |

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

** The actual contributions for FYE 6/30/1988 through 6/30/2012 were obtained from the comprehensive annual financial report. The actual contribution for FYE 6/30/2013 through 6/30/2014 was provided by the System.

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

# SECTION E

## PARTICIPANT DATA

# Active Age and Service Distribution
# June 30, 2014

| 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 | 166 | 20 | | | | | | | | 186 | |
| 20-24 | 609 | 714 | 4 | | | | | | | 1,327 | 2% |
| 25-29 | 619 | 2,649 | 447 | 9 | | | | | | 3,724 | 6% |
| 30-34 | 477 | 2,389 | 1,399 | 658 | 30 | | | | | 4,953 | 8% |
| 35-39 | 390 | 1,544 | 1,180 | 1,955 | 973 | 22 | | | | 6,064 | 10% |
| 40-44 | 458 | 1,375 | 1,051 | 1,892 | 2,510 | 739 | 56 | | | 8,081 | 13% |
| 45-49 | 540 | 1,200 | 937 | 1,531 | 1,885 | 2,207 | 1,325 | 115 | | 9,740 | 15% |
| 50-54 | 458 | 1,057 | 878 | 1,477 | 1,651 | 1,920 | 2,145 | 976 | 101 | 10,663 | 17% |
| 55-59 | 379 | 891 | 789 | 1,207 | 1,385 | 1,361 | 1,547 | 888 | 583 | 9,030 | 14% |
| 60-64 | 297 | 486 | 594 | 902 | 969 | 851 | 802 | 467 | 631 | 5,999 | 10% |
| 65-69 | 184 | 196 | 253 | 420 | 378 | 296 | 254 | 111 | 215 | 2,307 | 4% |
| 70 & Over | 38 | 46 | 62 | 142 | 151 | 123 | 73 | 33 | 102 | 770 | 1% |
| Total | 4,615 | 12,567 | 7,594 | 10,193 | 9,932 | 7,519 | 6,202 | 2,590 | 1,632 | 62,844 | 100% |
| Percentage of Total | 7% | 20% | 12% | 16% | 16% | 12% | 10% | 4% | 3% | 100% | |

# Retirees and Beneficiaries by Type of Benefit Being Paid
# June 30, 2014

| Type of Benefit Being Paid | Count | Monthly Payment | Annual Payment | Average Annual Payment |
|---|---|---|---|---|
| Retirement Annuity | 53,478 | $ 147,575,191.75 | $ 1,770,902,301.00 | $ 33,114.59 |
| Survivors | 10,073 | 9,481,535.76 | 113,778,429.12 | 11,295.39 |
| Widows | 81 | 69,021.54 | 828,258.48 | 10,225.41 |
| Occupational Death | 56 | 56,480.59 | 677,767.08 | 12,102.98 |
| QILDRO | 592 | 671,609.18 | 8,059,310.16 | 13,613.70 |
| Reversionary Annuity | 17 | 43,268.71 | 519,224.52 | 30,542.62 |
| Non-Occupational Disability | 1,174 | 2,388,282.80 | 28,659,393.60 | 24,411.75 |
| Occupational Disability | 618 | 1,498,686.21 | 17,984,234.52 | 29,100.70 |
| Temporary Disability | 419 | 340,499.78 | 4,085,997.36 | 9,751.78 |
| Total Temporary Disability - Occupational | 101 | 225,146.93 | 2,701,763.16 | 26,750.13 |
| Eligible for Deferred Retirement Annuity | 78 | 39,734.68 | 476,816.16 | 6,113.03 |
| Eligible for Deferred Survivor Annuity | 147 | 22,994.74 | 275,936.88 | 1,877.12 |
| **Total** | **66,834** | **$ 162,412,452.67** | **$ 1,948,949,432.04** | **$ 29,161.05** |

# SECTION F

## Actuarial Methods and Assumptions

# Actuarial Methods and Assumptions

## Actuarial Cost Method Adopted June 30, 1989, by Statute

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

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

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

Estimated annual administrative expenses are added to the normal cost.

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

# Actuarial Assumptions Adopted June 30, 2014

Actuarial assumptions are set by the Board of Trustees. Additional information regarding the rationale for the assumptions may be found in the experience study report of the State Employees' Retirement System for the period from July 1, 2009, to June 30, 2013.

## Mortality

*Post-Retirement Mortality*

105 percent of the RP2014 Healthy Annuitant mortality table, sex distinct. No adjustment is made for post-disabled mortality. While a fully generational mortality table was considered as part of the most recent experience study, the mortality table used is a static table and provides an estimated margin of 20 percent for future mortality improvement based on the experience study report of the State Employees' Retirement System for the period from July 1, 2009, to June 30, 2013.

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

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

## Interest

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

## General Inflation

3.00 percent per annum, compounded annually.

This assumption serves as the basis for the determination of Tier Two annual increases that are equal to the lesser of 3.0 percent or one-half of the annual increase in the consumer price index-u during the preceding 12-month calendar year and are not compounded

## Marriage Assumption

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

## Social Security Offset for Survivor Benefits

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

## Termination

Illustrative rates of withdrawal from the plan are as follows:

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

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

## Salary Increases

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

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

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

## Disability

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

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

No explicit assumption is made with respect to these items.

## Population Projection

For purposes of determining annual appropriation as a percent of total covered payroll, the size of the active group is assumed to remain level at the number of actives as of the valuation date. New entrants are assumed to enter with an average age and an average pay as disclosed below. New entrants are assumed to have the same demographic profile as new entrants in the 15 years prior to the valuation date. The average increase in uncapped payroll for the projection period is 3.5 percent per annum.

| | New Entrant Benefit Groups | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age Group | New Entrants Eligible for Regular Formula Benefits that are Covered by Social Security | | New Entrants Eligible for Regular Formula Benefits that are not Covered by Social Security | | New Entrants in Positions Formerly Eligible for Alternate Formula Benefits that are Covered by Social Security that are now Eligible for Regular Formula Benefits | | New Entrants Eligible for Alternate Formula Benefits that are Covered by Social Security | | New Entrants in Positions Formerly Eligible for Alternate Formula Benefits that are Covered by Social Security that are now Eligible for Regular Formula Benefits | | New Entrants Eligible for Alternate Formula Benefits that are not Covered by Social Security | | Total | |
| | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| Under 20 | 97 | 2,938,393 | | | 11 | 526,038 | 23 | 1,012,785 | | | 1 | 36,684 | 132 | 4,513,900 |
| 20-24 | 2,240 | 87,655,113 | 8 | 294,269 | 442 | 22,466,925 | 1,032 | 51,188,357 | 59 | 3,347,145 | 260 | 15,359,006 | 4,041 | 180,310,815 |
| 25-29 | 3,642 | 165,376,585 | 23 | 1,156,937 | 568 | 30,522,854 | 1,235 | 65,701,065 | 117 | 7,269,226 | 390 | 23,534,952 | 5,975 | 293,561,619 |
| 30-34 | 3,141 | 157,821,736 | 24 | 1,267,052 | 481 | 28,522,007 | 856 | 49,632,449 | 82 | 5,251,346 | 169 | 11,074,334 | 4,753 | 253,568,924 |
| 35-39 | 2,840 | 148,895,792 | 14 | 681,212 | 427 | 25,853,842 | 629 | 38,113,444 | 49 | 3,260,917 | 47 | 3,143,122 | 4,006 | 219,948,329 |
| 40-44 | 2,799 | 152,993,652 | 20 | 1,104,247 | 388 | 23,923,409 | 469 | 29,576,244 | 26 | 1,695,610 | 8 | 504,071 | 3,710 | 209,797,233 |
| 45-49 | 2,377 | 132,688,486 | 13 | 737,034 | 329 | 20,689,787 | 330 | 21,599,705 | 13 | 815,786 | 5 | 347,765 | 3,067 | 176,878,563 |
| 50-54 | 1,911 | 107,199,526 | 11 | 586,975 | 246 | 16,242,542 | 170 | 11,652,962 | 14 | 1,052,000 | 1 | 21,307 | 2,353 | 136,755,312 |
| 55-59 | 1,157 | 64,492,603 | 16 | 983,901 | 138 | 9,186,077 | 60 | 4,074,142 | 8 | 611,643 | | | 1,379 | 79,348,366 |
| 60-64 | 408 | 21,771,708 | 4 | 288,140 | 44 | 2,736,313 | 19 | 1,454,434 | 3 | 227,255 | | | 478 | 26,477,850 |
| 65-69 | 34 | 2,224,565 | | | 5 | 277,821 | 1 | 77,637 | | | | | 40 | 2,580,023 |
| 70 & Over | | | | | | | | | | | | | | |
| Total | 20,646 | $ 1,044,058,159 | 133 | $ 7,099,767 | 3,079 | $ 180,947,615 | 4,824 | $ 274,083,224 | 371 | $ 23,530,928 | 881 | $ 54,021,241 | 29,934 | $ 1,583,740,934 |
| Avg. Salary | | $ 50,570 | | $ 53,382 | | $ 58,768 | | $ 56,817 | | $ 63,426 | | $ 61,318 | | $ 52,908 |
| Avg. Age | | 37.62 | | 39.61 | | 36.33 | | 32.22 | | 32.27 | | 27.46 | | 36.26 |
| Percent Male | | 44% | | 59% | | 81% | | 75% | | 93% | | 88% | | 54% |

## Retirement

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

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

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

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

## Assets

Assets available for benefits are used as described on page 47. The asset valuation method is prescribed by statute, and does not appear to allow a corridor, therefore, a corridor has not been established.

## Expenses

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

## Spouse's Age

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

## Children

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

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

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

## Overtime and Shift Differentials

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

## Load for Inactive Members Eligible for Deferred Vested Pension Benefits

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

## Missing Data

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

## Decrement Timing

All decrements are assumed to occur mid-year.

## Decrement Relativity

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

## Decrement Operation

Disability and turnover decrements do not operate after member reaches retirement eligibility.

## Eligibility Testing

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

## Assumptions as a result of Public Act 96-0889 Adopted June 30, 2014

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

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

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

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

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

| Retirement Rates for Alternate Formula Employees | | |
|---|---|---|
| Age | Males | Females |
| 60 | 50.00% | 50.00% |
| 61 | 25.00% | 20.00% |
| 62 | 45.00% | 45.00% |
| 63 | 40.00% | 35.00% |
| 64 | 30.00% | 40.00% |
| 65 | 55.00% | 40.00% |
| 66 | 50.00% | 60.00% |
| 67 | 50.00% | 50.00% |
| 68 | 30.00% | 15.00% |
| 69 | 35.00% | 35.00% |
| 70 | 50.00% | 60.00% |
| 71 | 30.00% | 50.00% |
| 72 | 100.00% | 100.00% |

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

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

### State Contributions under P.A. 93-0002

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

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

**State Contributions under P.A. 94-0004**

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/14-108.3 (f)-(g):

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

**State Contributions under P.A. 96-0043**

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

> (g) For purposes of determining the required State contribution to the System, the value of the System's assets shall be equal to the actuarial value of the System's assets, which shall be calculated as follows:
>
> > As of June 30, 2008, the actuarial value of the System's assets shall be equal to the market value of the assets as of that date. In determining the actuarial value of the System's assets for fiscal years after June 30, 2008, any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal annual amounts over the five-year period following that fiscal year.
>
> (h) For purposes of determining the required State contribution to the System for a particular year, the actuarial value of assets shall be assumed to earn a rate of return equal to the System's actuarially assumed rate of return.

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

# SECTION G

## PLAN PROVISIONS

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

## Purpose

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

## Administration

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

## Membership

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

## Membership Service

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

## Member Contributions

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

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

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

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

## Retirement Pension

### *Qualification of Member*

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

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

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

***Amount of Pension***

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

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

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

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

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

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

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

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

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

### *Optional Forms of Payment*

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

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

### *Annual Increases in Pension*

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

## Survivors Annuity

### *Qualification of Survivor*

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

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

***Amount of Payment***

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

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

***Duration of Payment***

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

### *Annual Increases in Annuity*

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

## Widow's Annuity Option

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

### *Qualification of Widow*

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

### *Amount of Payment*

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

### *Duration of Payment*

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

### *Annual Increases in Annuity*

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

## Occupational Death Benefit

### *Qualification of Survivors*

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

### *Amount and Duration of Payment*

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

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

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

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

### *Annual Increases in Annuity*

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

### *Reductions*

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

## Other Death Benefits

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

### *Before Retirement*

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

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

### *After Retirement*

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

## Non-Occupational Disability Benefits

### *Qualification and Amount of Payment*

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

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

### *Duration of Payment*

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

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

### *Annual Increases in Annuity*

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

## Occupational Disability Benefit

### *Qualification and Amount of Payment*

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

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

### *Duration of Payment*

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

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

### *Annual Increases in Annuity*

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

### *Temporary Disability Benefit*

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

## Separation Benefits

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

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

### *Final Average Compensation*

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

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

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

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

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

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

### *Annual Increases in Annuity*

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

### *Survivor Benefits*

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

### *Miscellaneous*

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

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

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

# SECTION 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 Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

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

***Amortization Period*** The period used in calculating the Amortization Payment.

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

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

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

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

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

## Glossary (cont'd)

| | |
|---|---|
| ***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. |
| ***GASB No. 67 and GASB No. 68*** | These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68, which replaces Statement No. 27 effective with the fiscal year ending June 30, 2015, sets the accounting rules for the employers that sponsor or contribute to public retirement systems. Statement No. 67, which replaces Statement No. 25 effective with fiscal year ending June 30, 2014, sets the rules for the systems themselves. |
| ***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

Table 7

## 31-Year Projection of Actuarial Accrued Liability

*(All Dollar Amounts in Millions)*

| Valuation Date June 30 | Current Inactives: Retirees & Beneficiaries | Current Inactives: Deferreds | Actives: Tier 1 | Actives: Current Tier 2 | Actives: Future Tier 2 | Grand Totals: Current Retirees, Beneficiaries, & Deferreds | Grand Totals: Actives | Grand Totals: Total |
|---|---|---|---|---|---|---|---|---|
| 2014 | $24,323.78 | $593.07 | $14,563.44 | $46.56 | $0.00 | $24,916.85 | $14,609.99 | $39,526.84 |
| 2015 | 24,136.97 | 622.92 | 16,390.90 | 75.92 | 0.00 | 24,759.89 | 16,466.82 | 41,226.71 |
| 2016 | 23,909.38 | 650.50 | 18,236.36 | 106.80 | 15.94 | 24,559.88 | 18,359.10 | 42,918.99 |
| 2017 | 23,640.34 | 676.45 | 20,093.18 | 140.19 | 48.48 | 24,316.79 | 20,281.85 | 44,598.65 |
| 2018 | 23,329.30 | 700.61 | 21,952.97 | 176.72 | 99.35 | 24,029.91 | 22,229.04 | 46,258.95 |
| 2019 | 22,975.85 | 722.84 | 23,806.30 | 217.74 | 170.74 | 23,698.69 | 24,194.77 | 47,893.46 |
| 2020 | 22,579.76 | 742.41 | 25,641.09 | 263.88 | 265.47 | 23,322.17 | 26,170.45 | 49,492.62 |
| 2021 | 22,141.01 | 759.26 | 27,446.65 | 315.61 | 386.41 | 22,900.27 | 28,148.67 | 51,048.94 |
| 2022 | 21,659.79 | 773.14 | 29,207.63 | 373.28 | 536.90 | 22,432.93 | 30,117.81 | 52,550.74 |
| 2023 | 21,136.54 | 784.15 | 30,911.25 | 434.71 | 723.21 | 21,920.68 | 32,069.17 | 53,989.85 |
| 2024 | 20,572.05 | 792.50 | 32,544.00 | 499.31 | 949.05 | 21,364.55 | 33,992.36 | 55,356.91 |
| 2025 | 19,967.43 | 802.64 | 34,090.34 | 566.90 | 1,218.66 | 20,770.07 | 35,875.90 | 56,645.97 |
| 2026 | 19,324.13 | 810.43 | 35,540.62 | 637.91 | 1,535.45 | 20,134.57 | 37,713.99 | 57,848.55 |
| 2027 | 18,644.04 | 815.67 | 36,884.34 | 712.69 | 1,902.84 | 19,459.71 | 39,499.86 | 58,959.57 |
| 2028 | 17,929.37 | 818.47 | 38,116.96 | 791.55 | 2,324.70 | 18,747.84 | 41,233.20 | 59,981.04 |
| 2029 | 17,182.82 | 818.57 | 39,238.22 | 874.85 | 2,804.12 | 18,001.39 | 42,917.18 | 60,918.57 |
| 2030 | 16,407.64 | 816.20 | 40,243.78 | 962.78 | 3,344.96 | 17,223.84 | 44,551.52 | 61,775.37 |
| 2031 | 15,607.53 | 811.36 | 41,127.49 | 1,055.46 | 3,951.10 | 16,418.89 | 46,134.04 | 62,552.93 |
| 2032 | 14,786.58 | 803.86 | 41,879.79 | 1,152.91 | 4,626.96 | 15,590.44 | 47,659.67 | 63,250.11 |
| 2033 | 13,949.34 | 793.89 | 42,496.20 | 1,255.04 | 5,376.97 | 14,743.23 | 49,128.21 | 63,871.45 |
| 2034 | 13,100.71 | 781.54 | 42,975.11 | 1,361.70 | 6,205.12 | 13,882.25 | 50,541.92 | 64,424.17 |
| 2035 | 12,245.94 | 766.87 | 43,310.65 | 1,472.93 | 7,114.08 | 13,012.81 | 51,897.66 | 64,910.47 |
| 2036 | 11,390.54 | 749.81 | 43,493.34 | 1,588.85 | 8,105.48 | 12,140.35 | 53,187.67 | 65,328.02 |
| 2037 | 10,540.17 | 730.53 | 43,519.06 | 1,709.26 | 9,181.75 | 11,270.70 | 54,410.07 | 65,680.77 |
| 2038 | 9,700.59 | 709.14 | 43,390.60 | 1,833.91 | 10,344.54 | 10,409.73 | 55,569.05 | 65,978.78 |
| 2039 | 8,877.48 | 685.76 | 43,111.84 | 1,962.36 | 11,595.46 | 9,563.24 | 56,669.66 | 66,232.90 |
| 2040 | 8,076.38 | 660.41 | 42,687.84 | 2,094.09 | 12,935.83 | 8,736.79 | 57,717.75 | 66,454.54 |
| 2041 | 7,302.49 | 633.35 | 42,125.02 | 2,228.28 | 14,366.63 | 7,935.85 | 58,719.93 | 66,655.77 |
| 2042 | 6,560.61 | 604.71 | 41,431.91 | 2,363.91 | 15,888.37 | 7,165.33 | 59,684.20 | 66,849.52 |
| 2043 | 5,854.99 | 574.74 | 40,617.37 | 2,499.88 | 17,501.16 | 6,429.72 | 60,618.41 | 67,048.14 |
| 2044 | 5,189.24 | 543.65 | 39,689.95 | 2,634.48 | 19,204.51 | 5,732.89 | 61,528.93 | 67,261.82 |
| 2045 | 4,566.29 | 511.69 | 38,657.91 | 2,765.43 | 20,997.16 | 5,077.99 | 62,420.49 | 67,498.48 |

Table 8

**31-Year Projection of the Present Value of Future Benefits**

*(All Dollar Amounts in Millions)*

| Valuation Date June 30 | Current Inactives: Retirees & Beneficiaries | Current Inactives: Deferreds | Actives: Tier 1 | Actives: Current Tier 2 | Actives: Future Tier 2 | Grand Totals: Current Retirees, Beneficiaries, & Deferreds | Grand Totals: Actives | Grand Totals: Total |
|---|---|---|---|---|---|---|---|---|
| 2014 | $24,323.78 | $593.07 | $22,431.50 | $659.54 | $0.00 | $24,916.85 | $23,091.04 | $48,007.90 |
| 2015 | 24,136.97 | 622.92 | 23,913.20 | 691.95 | 324.65 | 24,759.89 | 24,929.80 | 49,689.69 |
| 2016 | 23,909.38 | 650.50 | 25,397.36 | 726.80 | 680.13 | 24,559.88 | 26,804.30 | 51,364.18 |
| 2017 | 23,640.34 | 676.45 | 26,882.14 | 764.33 | 1,073.90 | 24,316.79 | 28,720.37 | 53,037.16 |
| 2018 | 23,329.30 | 700.61 | 28,360.76 | 804.56 | 1,501.34 | 24,029.91 | 30,666.67 | 54,696.57 |
| 2019 | 22,975.85 | 722.84 | 29,825.84 | 848.41 | 1,972.82 | 23,698.69 | 32,647.07 | 56,345.76 |
| 2020 | 22,579.76 | 742.41 | 31,268.14 | 896.22 | 2,480.66 | 23,322.17 | 34,645.02 | 57,967.19 |
| 2021 | 22,141.01 | 759.26 | 32,679.38 | 948.36 | 3,034.32 | 22,900.27 | 36,662.06 | 59,562.33 |
| 2022 | 21,659.79 | 773.14 | 34,048.72 | 1,005.37 | 3,638.52 | 22,432.93 | 38,692.61 | 61,125.54 |
| 2023 | 21,136.54 | 784.15 | 35,366.64 | 1,065.31 | 4,284.50 | 21,920.68 | 40,716.44 | 62,637.13 |
| 2024 | 20,572.05 | 792.50 | 36,622.85 | 1,127.92 | 4,991.69 | 21,364.55 | 42,742.46 | 64,107.01 |
| 2025 | 19,967.43 | 802.64 | 37,806.22 | 1,193.17 | 5,750.50 | 20,770.07 | 44,749.89 | 65,519.95 |
| 2026 | 19,324.13 | 810.43 | 38,909.07 | 1,261.21 | 6,558.88 | 20,134.57 | 46,729.16 | 66,863.72 |
| 2027 | 18,644.04 | 815.67 | 39,923.11 | 1,332.17 | 7,425.79 | 19,459.71 | 48,681.07 | 68,140.78 |
| 2028 | 17,929.37 | 818.47 | 40,843.82 | 1,406.18 | 8,329.13 | 18,747.84 | 50,579.13 | 69,326.97 |
| 2029 | 17,182.82 | 818.57 | 41,668.69 | 1,483.36 | 9,284.72 | 18,001.39 | 52,436.77 | 70,438.16 |
| 2030 | 16,407.64 | 816.20 | 42,393.07 | 1,563.78 | 10,290.07 | 17,223.84 | 54,246.92 | 71,470.76 |
| 2031 | 15,607.53 | 811.36 | 43,011.22 | 1,647.44 | 11,356.50 | 16,418.89 | 56,015.16 | 72,434.05 |
| 2032 | 14,786.58 | 803.86 | 43,516.01 | 1,734.32 | 12,485.14 | 15,590.44 | 57,735.47 | 73,325.92 |
| 2033 | 13,949.34 | 793.89 | 43,903.53 | 1,824.33 | 13,666.84 | 14,743.23 | 59,394.70 | 74,137.94 |
| 2034 | 13,100.71 | 781.54 | 44,171.43 | 1,917.29 | 14,914.94 | 13,882.25 | 61,003.66 | 74,885.91 |
| 2035 | 12,245.94 | 766.87 | 44,315.16 | 2,013.16 | 16,242.80 | 13,012.81 | 62,571.12 | 75,583.93 |
| 2036 | 11,390.54 | 749.81 | 44,328.23 | 2,111.92 | 17,654.44 | 12,140.35 | 64,094.59 | 76,234.94 |
| 2037 | 10,540.17 | 730.53 | 44,207.65 | 2,213.36 | 19,131.31 | 11,270.70 | 65,552.32 | 76,823.01 |
| 2038 | 9,700.59 | 709.14 | 43,954.44 | 2,317.20 | 20,678.35 | 10,409.73 | 66,949.98 | 77,359.71 |
| 2039 | 8,877.48 | 685.76 | 43,570.72 | 2,422.99 | 22,294.32 | 9,563.24 | 68,288.02 | 77,851.27 |
| 2040 | 8,076.38 | 660.41 | 43,059.49 | 2,530.19 | 23,982.10 | 8,736.79 | 69,571.78 | 78,308.57 |
| 2041 | 7,302.49 | 633.35 | 42,425.09 | 2,638.11 | 25,743.00 | 7,935.85 | 70,806.20 | 78,742.05 |
| 2042 | 6,560.61 | 604.71 | 41,673.42 | 2,745.87 | 27,578.24 | 7,165.33 | 71,997.53 | 79,162.86 |
| 2043 | 5,854.99 | 574.74 | 40,810.93 | 2,852.49 | 29,490.12 | 6,429.72 | 73,153.54 | 79,583.26 |
| 2044 | 5,189.24 | 543.65 | 39,844.27 | 2,956.50 | 31,481.86 | 5,732.89 | 74,282.64 | 80,015.53 |
| 2045 | 4,566.29 | 511.69 | 38,780.19 | 3,056.03 | 33,553.33 | 5,077.99 | 75,389.54 | 80,467.53 |

Table 9

## 31-Year Projection of the Benefit Payments Including Administrative Expenses and Disability Payments

*(All Dollar Amounts in Millions)*

| Valuation Date June 30 | Current Inactives: Retirees & Beneficiaries | Current Inactives: Deferreds | Actives: Tier 1 | Actives: Current Tier 2 | Actives: Future Tier 2 | Grand Totals: Current Retirees, Beneficiaries, & Deferreds | Grand Totals: Actives | Grand Totals: Total |
|---|---|---|---|---|---|---|---|---|
| 2014 | $1,883.21 | $12.70 | $139.62 | $14.88 | $0.00 | $1,895.91 | $154.49 | $2,050.41 |
| 2015 | 1,909.51 | 16.97 | 240.97 | 14.79 | 7.13 | 1,926.48 | 262.88 | 2,189.37 |
| 2016 | 1,933.61 | 20.48 | 344.27 | 14.64 | 14.05 | 1,954.09 | 372.96 | 2,327.05 |
| 2017 | 1,955.32 | 24.03 | 454.16 | 14.66 | 21.46 | 1,979.36 | 490.28 | 2,469.64 |
| 2018 | 1,974.50 | 27.58 | 570.74 | 13.99 | 29.05 | 2,002.08 | 613.78 | 2,615.87 |
| 2019 | 1,990.93 | 31.70 | 695.32 | 13.22 | 37.13 | 2,022.63 | 745.67 | 2,768.30 |
| 2020 | 2,004.39 | 35.70 | 826.27 | 12.40 | 45.55 | 2,040.10 | 884.21 | 2,924.31 |
| 2021 | 2,014.69 | 39.76 | 965.53 | 11.34 | 54.55 | 2,054.44 | 1,031.42 | 3,085.86 |
| 2022 | 2,021.59 | 43.49 | 1,111.04 | 12.51 | 61.71 | 2,065.08 | 1,185.26 | 3,250.34 |
| 2023 | 2,024.77 | 46.83 | 1,262.89 | 14.12 | 69.22 | 2,071.60 | 1,346.23 | 3,417.83 |
| 2024 | 2,024.01 | 45.69 | 1,421.17 | 15.96 | 77.52 | 2,069.70 | 1,514.65 | 3,584.35 |
| 2025 | 2,019.02 | 48.66 | 1,581.77 | 17.83 | 86.75 | 2,067.69 | 1,686.34 | 3,754.03 |
| 2026 | 2,009.52 | 51.68 | 1,744.73 | 19.77 | 96.89 | 2,061.20 | 1,861.39 | 3,922.59 |
| 2027 | 1,995.30 | 54.40 | 1,905.84 | 21.80 | 108.23 | 2,049.70 | 2,035.87 | 4,085.57 |
| 2028 | 1,976.05 | 57.20 | 2,062.84 | 23.91 | 120.57 | 2,033.25 | 2,207.32 | 4,240.57 |
| 2029 | 1,951.43 | 59.59 | 2,217.62 | 26.20 | 134.04 | 2,011.02 | 2,377.85 | 4,388.87 |
| 2030 | 1,921.24 | 61.82 | 2,370.90 | 28.69 | 148.82 | 1,983.06 | 2,548.42 | 4,531.47 |
| 2031 | 1,885.34 | 64.04 | 2,523.64 | 31.44 | 165.07 | 1,949.38 | 2,720.15 | 4,669.53 |
| 2032 | 1,843.61 | 65.90 | 2,672.22 | 34.50 | 182.97 | 1,909.51 | 2,889.68 | 4,799.19 |
| 2033 | 1,795.99 | 67.51 | 2,814.86 | 37.95 | 202.66 | 1,863.50 | 3,055.47 | 4,918.97 |
| 2034 | 1,742.51 | 68.87 | 2,953.50 | 41.65 | 225.50 | 1,811.38 | 3,220.65 | 5,032.03 |
| 2035 | 1,683.28 | 70.16 | 3,089.74 | 45.57 | 252.60 | 1,753.44 | 3,387.91 | 5,141.35 |
| 2036 | 1,618.54 | 71.11 | 3,219.71 | 49.90 | 283.75 | 1,689.65 | 3,553.36 | 5,243.01 |
| 2037 | 1,548.59 | 71.79 | 3,339.33 | 54.68 | 318.89 | 1,620.38 | 3,712.90 | 5,333.28 |
| 2038 | 1,473.90 | 72.23 | 3,447.63 | 60.07 | 358.30 | 1,546.13 | 3,866.00 | 5,412.13 |
| 2039 | 1,395.04 | 72.48 | 3,543.89 | 66.11 | 402.23 | 1,467.52 | 4,012.22 | 5,479.74 |
| 2040 | 1,312.67 | 72.36 | 3,627.03 | 72.92 | 451.12 | 1,385.03 | 4,151.08 | 5,536.11 |
| 2041 | 1,227.59 | 71.99 | 3,695.86 | 80.63 | 505.43 | 1,299.58 | 4,281.92 | 5,581.50 |
| 2042 | 1,140.64 | 71.28 | 3,750.25 | 89.28 | 565.53 | 1,211.92 | 4,405.05 | 5,616.98 |
| 2043 | 1,052.74 | 70.25 | 3,790.44 | 99.27 | 631.93 | 1,122.99 | 4,521.65 | 5,644.64 |
| 2044 | 964.80 | 68.92 | 3,816.86 | 110.87 | 705.41 | 1,033.72 | 4,633.14 | 5,666.86 |
| 2045 | 877.75 | 67.27 | 3,829.48 | 124.24 | 786.46 | 945.03 | 4,740.17 | 5,685.20 |

Table 10

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

*(All Dollar Amounts in Millions)*

| Valuation Date June 30 | Tier 1 Active Members Population | Tier 1 Covered Payroll | Tier 1 Employee Contributions | Tier 1 Normal Cost | Current Tier 2 Active Members Population | Current Tier 2 Covered Payroll | Current Tier 2 Employee Contributions | Current Tier 2 Normal Cost | Future Tier 2 Active Members Population | Future Tier 2 Covered Payroll | Future Tier 2 Employee Contributions | Future Tier 2 Normal Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2014 | 52,593 | $3,836.26 | $217.96 | $884.70 | 10,251 | $483.84 | $20.48 | $39.97 | 0 | $0.00 | $0.00 | $0.00 |
| 2015 | 48,813 | 3,909.32 | 222.57 | 875.49 | 8,872 | 470.62 | 20.01 | 39.29 | 5,159 | 280.22 | 13.43 | 22.52 |
| 2016 | 45,435 | 3,800.58 | 216.72 | 860.55 | 8,111 | 456.61 | 19.47 | 39.41 | 9,299 | 528.31 | 25.67 | 44.36 |
| 2017 | 42,188 | 3,683.20 | 210.32 | 843.34 | 7,575 | 451.38 | 19.30 | 40.12 | 13,081 | 776.84 | 38.15 | 67.18 |
| 2018 | 39,111 | 3,562.98 | 203.85 | 823.48 | 7,173 | 451.37 | 19.33 | 41.22 | 16,561 | 1,027.44 | 50.82 | 91.03 |
| 2019 | 36,107 | 3,430.71 | 196.49 | 800.41 | 6,852 | 454.50 | 19.50 | 42.54 | 19,886 | 1,288.63 | 64.22 | 116.66 |
| 2020 | 33,246 | 3,294.80 | 188.92 | 774.68 | 6,591 | 460.11 | 19.76 | 43.87 | 23,007 | 1,556.77 | 78.06 | 143.73 |
| 2021 | 30,483 | 3,149.44 | 180.62 | 744.49 | 6,345 | 465.56 | 20.02 | 44.94 | 26,016 | 1,837.58 | 92.69 | 172.82 |
| 2022 | 27,810 | 2,993.35 | 171.33 | 711.34 | 6,104 | 469.79 | 20.23 | 45.69 | 28,930 | 2,132.55 | 108.27 | 204.03 |
| 2023 | 25,313 | 2,837.16 | 161.99 | 675.50 | 5,865 | 472.79 | 20.40 | 46.07 | 31,666 | 2,435.50 | 124.26 | 236.65 |
| 2024 | 22,904 | 2,671.06 | 151.68 | 636.02 | 5,581 | 472.51 | 20.43 | 46.27 | 34,359 | 2,756.10 | 141.37 | 271.43 |
| 2025 | 20,634 | 2,503.43 | 141.11 | 595.63 | 5,342 | 473.61 | 20.52 | 46.71 | 36,868 | 3,083.70 | 158.99 | 307.33 |
| 2026 | 18,534 | 2,337.97 | 130.71 | 554.15 | 5,135 | 475.73 | 20.64 | 47.32 | 39,174 | 3,415.47 | 176.88 | 344.15 |
| 2027 | 16,549 | 2,168.38 | 119.95 | 513.91 | 4,940 | 477.63 | 20.76 | 48.05 | 41,355 | 3,756.97 | 195.36 | 382.38 |
| 2028 | 14,792 | 2,013.62 | 110.48 | 477.10 | 4,767 | 479.98 | 20.89 | 48.93 | 43,285 | 4,096.14 | 213.46 | 420.75 |
| 2029 | 13,173 | 1,862.69 | 101.37 | 441.66 | 4,609 | 482.22 | 21.01 | 49.86 | 45,062 | 4,437.00 | 231.66 | 459.98 |
| 2030 | 11,690 | 1,717.31 | 92.83 | 406.89 | 4,454 | 483.27 | 21.07 | 50.78 | 46,700 | 4,779.16 | 249.81 | 499.94 |
| 2031 | 10,301 | 1,572.00 | 84.27 | 370.88 | 4,305 | 483.63 | 21.10 | 51.65 | 48,238 | 5,125.58 | 268.24 | 541.08 |
| 2032 | 9,010 | 1,427.11 | 75.51 | 335.56 | 4,154 | 482.43 | 21.06 | 52.41 | 49,679 | 5,474.01 | 286.87 | 583.26 |
| 2033 | 7,855 | 1,291.55 | 67.59 | 302.28 | 4,004 | 480.00 | 20.96 | 53.08 | 50,985 | 5,819.54 | 305.19 | 625.90 |
| 2034 | 6,796 | 1,159.93 | 59.95 | 268.96 | 3,857 | 476.77 | 20.80 | 53.73 | 52,192 | 6,164.88 | 323.50 | 668.80 |
| 2035 | 5,821 | 1,029.90 | 52.35 | 234.12 | 3,718 | 473.36 | 20.66 | 54.38 | 53,305 | 6,508.30 | 341.70 | 711.87 |
| 2036 | 4,905 | 897.73 | 44.45 | 199.71 | 3,577 | 468.48 | 20.46 | 54.94 | 54,362 | 6,853.42 | 360.05 | 755.57 |
| 2037 | 4,106 | 777.30 | 37.51 | 168.66 | 3,440 | 462.93 | 20.22 | 55.39 | 55,298 | 7,190.37 | 377.80 | 798.90 |
| 2038 | 3,401 | 666.28 | 31.29 | 140.82 | 3,302 | 456.15 | 19.92 | 55.71 | 56,141 | 7,521.22 | 395.11 | 842.02 |
| 2039 | 2,799 | 567.04 | 25.95 | 116.36 | 3,164 | 448.32 | 19.59 | 55.92 | 56,881 | 7,843.98 | 411.84 | 884.74 |
| 2040 | 2,281 | 477.47 | 21.30 | 95.14 | 3,029 | 439.65 | 19.19 | 55.91 | 57,534 | 8,159.60 | 428.10 | 927.12 |
| 2041 | 1,848 | 399.80 | 17.45 | 77.56 | 2,883 | 428.30 | 18.68 | 55.60 | 58,113 | 8,468.45 | 443.88 | 969.08 |
| 2042 | 1,489 | 333.53 | 14.35 | 63.21 | 2,735 | 415.41 | 18.11 | 55.08 | 58,620 | 8,770.19 | 459.17 | 1,010.56 |
| 2043 | 1,194 | 277.06 | 11.79 | 51.43 | 2,588 | 401.41 | 17.47 | 54.23 | 59,063 | 9,064.89 | 474.06 | 1,051.51 |
| 2044 | 953 | 229.35 | 9.67 | 41.75 | 2,430 | 384.46 | 16.69 | 52.89 | 59,461 | 9,354.27 | 488.64 | 1,091.97 |
| 2045 | 757 | 188.87 | 7.91 | 33.72 | 2,266 | 365.24 | 15.78 | 51.04 | 59,821 | 9,638.54 | 502.92 | 1,131.89 |

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