Illinois State Retirement Systems

Financial Condition as of June 30, 2013

Commission on Government Forecasting & Accountability

March 2014

Commission on Government Forecasting and Accountability

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Executive Summary

This report examines the financial status of the five State-funded retirement systems. The following is a summary of the findings:

- P.A. 98-0599 (SB 1) requires the State to make contributions to the State retirement systems such that the total assets of the systems will equal 100% of their total actuarial liabilities before Fiscal Year 2045. SURS is projected to reach 100% funding in FY 2037. TRS, SERS, and GRS are projected to be fully funded in FY 2039. JRS' funding schedule was unaffected by P.A. 98-0599 and is projected to reach 90% funding in 2045.

- From FY 2001 through FY 2013, the combined unfunded liabilities of the systems increased by $75.5 billion based upon the market value of assets. The main factors for this increase in unfunded liabilities were actuarially insufficient employer contributions, lower-than-assumed investment returns in 5 years, and benefit increases, along with other miscellaneous actuarial factors.

- The discussion of the financial condition of the State retirement systems centers on the funded ratio, or net assets divided by accrued liabilities. A system with a 100% funded ratio is fully funded because its assets are sufficient to pay all benefits earned by employees. Based upon the market value of assets, the funded ratio of the State retirement systems combined was 41.1% as of June 30, 2013.

- Projections of the future financial condition of the State retirement systems provide valuable information on the effect that past funding has had on the retirement systems' financial position. The funding projections shown in the appendices of this report were prepared by the systems' actuaries and by CGFA's actuary based on the provisions of P.A. 98-0599 (SB 1).

- The retirement systems' actuaries have projected a reduction of accrued liabilities of $20.9 billion in FY 2014, and $23.7 billion in FY 2015 as result of SB 1. Reductions in State contributions for FY 2016 are $1.2 billion and the reductions through FY 2045 were found to be $144.9 billion.

- COGFA's actuary has projected a reduction of accrued liabilities in the amount of $21.1 billion and $23.7 billion for FY 2014 and FY 2015, respectively, as result of SB 1. Reductions in State contributions are estimated to be $1.2 billion for FY 2016 and $137.4 billion through FY 2045.

- Each of the 5 state retirement systems provided a certification of the required state contribution for FY 2015. These certification letters are displayed in the appendices.

- The first section in this report discusses in detail the characteristics of the 2 tier retirement system enacted by P.A. 96-0889 and P.A. 96-1495, then moves on to pension reform of the State systems enacted by P.A. 98-0599. The projections located in the appendices section of this book all reflect the changes made by P.A. 98-0599 (SB 1).

FY 2014 Pension Appropriation by Fund
P.A. 98-0017 (HB 206)
($ Millions)

System	GRF	Other State Funds	Total
TRS	$3,438.6	$0.0	$3,438.6
SURS	$1,311.8	$198.0	$1,509.8
* SERS	$1,097.4	$646.5	$1,743.9
GARS	$13.9	$0.0	$13.9
JRS	$126.8	$0.0	$126.8
Total	**$5,988.5**	**$844.5**	**$6,833.0**

*** SERS total appropriation includes $81.2 million in 2003 POB debt service. Approximately $51.2 million of this amount comes from GRF, whereas $30.0 million is paid from other non-GRF state funds.**

FY 2015 Estimated Pension Appropriation
($ Millions)

System	GRF	Other State Funds	Total*
TRS	3,412.9	$0.0	$3,412.9
SURS	1,341.7	$202.5	$1,544.2
SERS	1,188.9	$640.2	$1,829.1
GARS	15.8	$0.0	$15.8
JRS	134.0	$0.0	$134.0
Total	**$6,093.3**	**$842.7**	**$6,936.0**

*** The amounts shown above in the "Total" column reflect the systems' final FY 2015 certification pursuant to P.A. 97-0694, the State Actuary Law. This chart is meant to be an estimate only insofar as the FY 2015 appropriation by fund is concerned. The SERS "Other State Funds" amount is based upon an assumption that 65% of SERS' total annual appropriation comes from GRF, while 35% comes from other State funds. The SURS "Other State Funds" amount assumes that SURS will receive an FY 2015 appropriation from the State Pension Fund commensurate with the amount that was received by the system in FY 2014. SURS' historical appropriation from the State Pension Fund varies widely from year to year.**

Total FY 2015 Pension Appropriation: $6,936.0 Million

Total FY 2014 Pension Appropriation: $6,833.0 Million

Total Increase, FY 15 over FY 14: $103.0 Million

Note- the "Total 2015 Pension Appropriation reflects the preliminary certified amounts submitted by the State systems pursuant to P.A. 97-0694, the State Actuary Law

I. Public Act 96-0889 (SB 1946), Public Act 96-1495 (SB 3538), and Public Act 98-0599 (SB 1)

Two-Tier Pension Reform for the State Systems, IMRF, and Chicago Funds
Public Act 96-0889
Senate Bill 1946 – Cullerton (Madigan)

I. Overview of Key Provisions of Public Act 96-0889 (SB 1946)

Effective Date

• January 1, 2011

Systems Impacted

• IMRF, Chicago Municipal, Cook County, Cook County Forest Preserve, Chicago Laborers, Chicago Park District, Metropolitan Water, SERS, SURS, TRS, Chicago Teachers (Judges and GA separate; CTA, Police, and Fire excluded)

Retirement Eligibility – Except State Policemen, Firefighters, and Correctional Guards

• Normal Retirement: 67 years old with 10 years of service
• Early Retirement: 62 years old with 10 years of service with a 6% per year reduction in benefits for each year age is under 67
• Annuity based on highest 8 years out of last 10 years of service
• Annual Final Average Salary may not exceed $106,800, as automatically increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year

Retirement Eligibility – State Policemen, Firefighters, and Correctional Guards

• Normal Retirement: 60 years old with 20 years of service
• State Policemen, Firefighters, DOC Guards are still eligible for Alternative Formula

Annual Increases in Annuity

• Increases begin at the later of the first anniversary of retirement or at age 67
• Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable
• Increase not compounded

Survivor Benefits

• 66.7% of the earned retirement benefit at death
• Increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
• Increases not compounded

"Double Dipping" Prohibited

• Prohibition on simultaneously collecting a pension and a salary with public employer.

Chicago Teachers' Extension of Funding Plan
- Contributions specified in Fiscal Years 2011 – 2014
- New Goal: CTPF must reach 90% by 2059 (currently 2045)

Retirement Eligibility – Judges and General Assembly
- Normal Retirement: 67 years old with 8 years of service
- Early Retirement: 62 years old with 8 years of service

Change in Benefit Formula – Judges and General Assembly
- 3% of Final Average Salary for each year of service
- Maximum annuity 60% of Final Average Salary
- Retirement annuity based on highest 8 out of final 10 years of service

Annual Increase in Annuity – Judges and General Assembly
- Increases begin after attainment of age 67
- Increases equal to the lesser of 3% or the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases compounded

Annual Increase in Survivor's Annuity – Judges and General Assembly
- 66.7% of the earned retirement benefit at death
- Increases equal to the lesser of 3% or the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases compounded

Police and Fire Pension Reform - Downstate, IMRF, and Chicago
P.A. 96-1495
SB 3538 – Link (McCarthy)

Effective Date

- January 1, 2011

Systems Impacted

- Downstate Police, Downstate Fire, Chicago Police, Chicago Fire, IMRF (SLEP)

Creation of a Two Tier System for Firefighters and Police Officers

- Benefits for current police officers and firefighters have not changed.
- Changes only apply to police officers and firefighters hired on or after January 1, 2011.
- Normal Retirement: 55 years old with 10 years of service.
- Early Retirement: 50 years old with 10 years of service, but penalty of ½% for each month that the police officer or firefighter is younger than 55 years.
- Retirement Pension based upon 2.5% of Final Average Salary for a maximum of 75%.
- Annuity based on highest 8 years out of last 10 years of service.
- Annual Final Average Salary may not exceed $106,800, as automatically increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year.

Annual Increases in Annuity

- Increases begin at age 60 either on the January 1st after police officer/firefighter retires or the first anniversary of pension starting date, whichever is later.
- Increases equal to the lesser of 3% of one-half the annual increase in the CPI-U during the preceding 12-month calendar year; if increase in CPI is zero or if there is a decrease in CPI, then no COLA is payable.
- Increase not compounded

Survivor Benefits

- 66.7% of the earned retirement benefit at death
- Increased by the lesser of 3% or one-half of the annual increase in the CPI-U during the preceding 12-month calendar year
- Increases not compounded

Municipal Funding Provisions

- Pension funds must be 90% funded by Fiscal Year 2040
- Annual Municipal contributions will be calculated as level percentage of payroll under Projected Unit Credit Actuarial Cost Method.
- Comptroller is authorized to redirect municipal monies directly to pension funds if municipal contributions are insufficient.
- Future pension fund studies are authorized to review the condition of pension funds and potential investment pooling.

IL State Systems Pension Reform
P.A. 98-0599
SB 1 – Raoul – Rodogno (Madigan - Durkin)

Effective Date

- June 1, 2014

Systems Impacted

- Teachers' Retirement System, State Employees' Retirement System, State Universities Retirement System, General Assembly Retirement System

Funding Schedule

- Starting FY 2015, State contributions will be made according to a 30-year annual required contribution (ARC) funding plan with a goal of achieving 100% funded status by the end of FY 2044.
  - The Projected Unit Credit cost method previously used will continue to be used through FY 2015. Beginning FY 2016, Entry Age Normal cost method shall be used every year thereafter.
  - Beginning FY 2016, supplemental contributions of 10% of the reduction in employer contributions for that year will be allocated to the Pension Stabilization Fund until each system is fully funded.
  - Beginning FY 2019, the State shall allocate $364 million to the Pension Stabilization fund and $1 Billion every year thereafter until each system is 100% funded.
  - The retirement systems will be empowered to seek writs of mandamus to force the State to make the annual required pension contributions.

Retirement Eligibility

- For Tier 1 employees age 45 or younger on June 1, 2014, the eligible retirement age is increased on a graduated scale. For every year a member is under 46, the retirement age will be increased by 4 months (up to a 60 month/5 year increase for members under age 32 on June 1, 2014.) The incremental increase in retirement age applies to all formulas and the Rule of 85.

Pensionable Salary

- The amount of salary used to calculate an employee's pension for each Tier 1 member will be the greatest of the following:
  1. The Tier 2 salary cap ($110,631 for 2014). This cap is adjusted annually by the lesser of 3% or ½ of the previous year's CPI.
  2. For a member covered by an individual contract or collective bargaining agreement (CBA) that is in effect prior to June 1, 2014, the member's salary on the day the contract or CBA expires. A contract cannot be amended or extended to increase the cap.
  3. For a member not covered by an individual contract or CBA (merit comp employees), the annualized salary on June 1, 2014.
- After June 30th, 2014 employee contributions are reduced by 1% of salary.

A member will only be required to make employee contributions on compensation up to the applicable annual salary cap but not above the cap. Only compensation up to the applicable annual salary cap will be included in the calculation of the member's Average Final Compensation at retirement.

Annual Increases in Annuity

- Calculated as the lesser of
    1. 3% of the annuitant's pension; or
    2. \$30 per year of service credit, or \$24 per year of service credit if the member is coordinated with Social Security.
    (Whether coordinated with Social Security or not, this number will increase with the CPI-U annually. This increase is not compounded.)
- Cost of living adjustments will be reduced to 0% for certain years depending on the employee's age on June 30th, 2014:
    - If over 50, only the 2nd COLA is affected.
    - If under 50 but over 47, the 2nd, 4th, and 6th COLA's are affected.
    - If under 47 and over 44, the 2nd, 4th, 6th, and 8th COLA's are affected.
    - If under 44, the 2nd, 4th, 6th, 8th, and 10th COLA's are affected.

Voluntary Defined-Contribution Plan

- All active Tier 1 members are eligible.
    - Within any given system, only 5% of members may irrevocably opt-in.
- Employee contributions remain the same in each system.
- Employer Contributions:
    - Must be equal for each member within a system, may differ between systems
    - Must be no more than that year's Normal Cost of the Defined Benefit Plan as presented as a percent of salary.
    - Must be a minimum of 3% in each system except TRS where the minimum is 0%.

Fiscal Impact of P.A. 98-0599 (SB 1)
COGFA and System Actuarial Projections
FY 2014 - FY 2045
($ in Millions)

Reduction in Projections	Segal Total	Segal SERS	Segal SURS	Segal TRS
Reduction in FY 2014 Accrued Liabilities	$21,079.6	$3,470.1	$4,475.2	$13,134.3
Reduction in FY 2015 Accrued Liabilities	$23,722.8	$3,986.5	$4,959.6	$14,766.7
Reduction in FY 2016 State Contributions	$1,182.8	$184.9	$188.9	$809.0
Reduction in FY 2016 - FY 2045 Cumulative Contributions	**$137,410.2**	$29,918.6	$28,993.8	$78,497.7
Reduction in Projections	System Total	System SERS	System SURS	Segal TRS
Reduction in FY 2014 Accrued Liabilities	$20,902.2	$3,497.0	$4,205.2	$13,200.0
Reduction in FY 2015 Accrued Liabilities	$23,719.1	$3,971.3	$4,717.9	$15,030.0
Reduction in FY 2016 State Contributions	$1,163.4	$104.0	$199.4	$860.0
Reduction in FY 2016 - FY 2045 Cumulative Contributions	**$144,922.8**	$30,303.0	$29,279.8	$85,340.0
Difference in Projections	Segal Total vs. System Total	Segal SERS vs. System SERS	Segal SURS vs. System	Segal TRS vs. System TRS
Reduction in FY 2016 - FY 2045 Cumulative Contributions Change as a	**5.47%**	1.28%	0.99%	8.72%
Reduction in FY 2016 - FY 2045 Cumulative Contributions Change as *All projections based from 2013 valuations.	**$7,512.6**	$384.4	$286.0	$6,842.3

Compiled by: Commission on Government Forecasting and Accountability

NOTE: The chart above shows reduction in liabilities and contributions found by the System and COGFA actuaries regarding SB 1.

II. Pension Legislation History

86th General Assembly (1989 – 1991)

Compounded Annual Cost of Living Adjustments (P.A. 86-0273)

Public Act 86-1273, which took effect on August 23, 1989, provided for compounded 3% annual cost of living adjustments (COLA's) beginning January 1, 1990 for annuitants in all five of the State-funded retirement systems (TRS, SERS, SURS, JRS and GARS). Prior to the enactment of P.A. 86-0273, annual COLA's had been calculated on a simple non-compounded basis.

88th General Assembly (1993 – 1995)

Funding Plan for State-Funded Retirement Systems (P. A. 88-0593)

Public Act 88-0593 implemented a funding plan for the five State retirement systems that requires the State to make contributions as a level percent of payroll in fiscal years 2011 through 2045, following a phase in which began in fiscal year 1996. The contributions are required to be sufficient, when added to employee contributions, investment income, and other income, to bring the total assets of the systems to 90% of the actuarial liabilities by fiscal year 2045. Each system is required to certify the amount necessary for the next fiscal year by November 15 of the current fiscal year, for inclusion in the Governor's budget.

Note – the funding plan implemented by P.A. 88-0593 was changed by P.A. 98-0599 (SB 1). See Section I for a summary of the funding and benefit provisions of SB 1.

90th General Assembly (1997 – 1999)

SERS Formula Increase (P.A. 90-0065)

P.A. 90-0065 (HB 0110) implemented a flat rate formula for SERS Regular Formula members covered by Social Security of 1.67% for all years of service. Regular Formula members not covered by Social Security moved to a flat rate formula of 2.2% for all years of service. The Act applied to all members retiring on or after January 1, 1998.

TRS Formula Increase (P.A. 90-0582)

P.A. 90-0582 implemented a retirement formula increase for members of the Teachers' Retirement System. The Act provided that active teachers would earn creditable service on or after July 1, 1998 at a rate of 2.2% of final average salary for each year of service. The Act also allowed teachers to make contributions to TRS in order to upgrade past service earned prior to the implementation of the flat-rate formula.

Creation of Self-Managed Plan in SURS (P.A. 90-0448)

P.A. 90-0448 gave members of the State Universities Retirement System the option to enroll in a Self-Managed Plan (SMP) in which participants are able to choose from a variety of investment options ranging from mutual funds to annuity contracts. Members who choose the SMP become vested after earning 5 years of service credit.

91st General Assembly (1999 – 2001)

"Rule of 85" for SERS (P.A. 91-0927)

P.A. 91-0927 created a "Rule of 85" for the State Employees' Retirement System, wherein an employee is eligible to retire when the employee's age plus service credit equals 85 years.

92nd General Assembly (2001 – 2003)

SERS Alternative Formula Increase (P.A. 92-0014)

P.A. 92-0014 changed the retirement formula for alternative formula employees to 2.5% for each year of service for members coordinated with Social Security and 3.0% for each year of service for non-coordinated members. The Act increased the maximum retirement annuity for alternative formula employees to 80% of final average salary.

Addition of Highway Maintenance Workers to the SERS Alternative Formula (P.A 92-0257)

P.A 92-0257 added state highway maintenance workers to the alternative formula under SERS. Specifically, the Act included persons employed on a full-time basis by the Illinois Department of Transportation in the position of highway maintainer, highway maintenance lead worker, heavy construction equipment operator, and other job titles. The Act also added several positions within the Illinois State Toll Highway Authority such as equipment operator/laborer, welders, sign makers/hangers, and other job titles.

SERS Early Retirement Incentive (Public Act 92-0566)

Public Act 92-0566 created the 2002 Early Retirement Incentive for certain SERS and TRS members. The ERI allowed members to purchase up to five years of service credit and age enhancement. Eligible members were then required to leave employment between July 1, 2002 and December 31, 2002. Over 11,000 members took advantage of the ERI, and a majority of the participants were eligible to receive benefits immediately following termination.

93rd General Assembly (2003 – 2005)

Pension Obligation Bond (P.A. 93-0002)

Public Act 93-0002 amended the General Obligation Bond Act to increase bond authorization by $10 billion. These general obligation bonds were designated as a pension funding series. The State used a portion of the bond proceeds to pay part of the FY 2003 State contribution and all of the FY 2004 State contributions to the retirement systems. Of the $10 billion, $7.3 billion was used to reduce the unfunded liabilities of the State-funded retirement systems.

Along with the $10 billion increase in bond authorization, Public Act 93-0002 included a provision requiring State contributions to the retirement systems to be reduced by the amount of the debt service (the amount of principal and interest payments) on the bonds. The legislation set the maximum annual employer contribution to each system at the amount that would have been contributed without the bond issuance, minus the total debt service payments for the fiscal year. Effectively, the reduction in retirement contributions is used to pay the debt service on the bonds.

FY 2006 – FY 2007 "Pension Holiday" (P.A. 94-0004)

Public Act 94-0004 temporarily deviated from the funding plan created in 1994 by Public Act 88-0593. The Act set the State contribution levels for FY 2006 and FY 2007, rather than requiring the State to make contributions based on actuarial calculations set forth under P.A. 88-0593. In addition, the separate funding of the liability created by the 2002 SERS Early Retirement Incentive was eliminated. The following table provides a comparison of the FY 2006 certified contributions and FY 2007 contributions with the State contributions that were required by Public Act 94-0004.

TABLE 1

Public Act 88-0593 Contributions vs.
Public Act 94-0004 Contributions
(in Millions $)

	FY 2006			FY 2007		
System	PA 88-0593	PA 94-0004	Difference	PA 88-0593	PA 94-0004	Difference
TRS	$1,058.5	$534.6	$523.9	$1,233.1	$735.5	$497.6
SERS	690.3	203.8	486.5	832.0	344.2	487.8
SURS	324.9	166.6	158.3	391.9	252.1	139.8
JRS	38.0	29.2	8.8	44.5	35.2	9.3
GARS	5.5	4.2	1.3	6.3	5.2	1.1

SERS Alternative Formula Changes (P.A. 94-0004)

Prior to the enactment of P.A. 94-0004, all employees of the Department of Corrections were covered by the SERS alternative formula. Public Act 94-0004 provides that for employees entering service after July 1, 2005, only Department of Corrections employees who are headquartered at a correctional facility, parole officers, members of an apprehension unit, members of an intelligence unit, and DOC investigators will be covered by the alternative formula. New employees included in other groups currently covered by the alternative formula will continue to be eligible for the SERS alternative formula.

SURS Money Purchase Retirement Option Changes (P.A. 94-0004)

Public Act 94-0004 eliminated the money purchase formula for employees who became members of SURS after July 1, 2005. Beginning in FY 2006, the Act requires the Comptroller (rather than the SURS Board of Trustees) to determine the interest rate to be used when crediting interest to the accounts of current employees.

Salary Increase Payments For Teachers and State University Personnel (P.A. 94-0004)
Public Act 94-0004 provided a mechanism by which the liability associated with salary increases above a certain level may be shifted to the employer (school districts and universities) providing those salary increases. The Act provides that during the years used to determine final average salary, the employer must pay to TRS or SURS an amount equal to the present value of the increase in benefits resulting from salary increases above 6%. The employer contribution required by Public Act 94-0004 must be paid in a lump sum within 30 days of the receipt of the bill from the retirement system. The Act specifies that the retirement system must calculate the contribution amount using the same actuarial assumptions and tables used for the most recent actuarial valuation.

The salary increase payment provision for TRS and SURS contained in Public Act 94-0004 does not apply to salaries paid under contracts or collective bargaining agreements entered into, amended, or renewed before the effective date of the Act (June 1, 2005).

Teacher Sick Leave Service Credit (P.A. 94-0004)
Prior to the enactment of P.A. 94-0004, members of TRS could establish up to 2 years of service credit for unused and uncompensated sick leave without making contributions. Public Act 94-0004 provides that if days granted by an employer are in excess of the normal annual sick leave allotment, the employer is required to contribute to TRS the normal cost of the benefits associated with this excess sick leave.

Retention of "Pipeline" Early Retirement Option in TRS (P.A. 94-0004)
An Early Retirement Option for members of TRS was created in 1980 and, prior to 2005, had been extended every 5 years since its inception. (Public Act 91-0017 extended the TRS ERO option until June 30, 2005). If an employee exercised the ERO option (i.e. retires before age 60 with less than 34 years of service) employee and employer contributions were required to avoid discount. The employee contribution was 7% of salary for each year less than age 60 or 35 years of service (whichever is less) and the employer contribution was 20% of salary for each year less than age 60. Public Act 92-0582 removed the employee contribution for members with 34 years of service and Public Act 91-0017 removed the employer contribution requirement for employees who retire with 34 years of service.

Public Act 94-0004 allowed TRS members to participate in the "pipeline" ERO if the member retired between June 30, 2005 and July 1, 2007.

New Early Retirement Option in TRS (P.A. 94-0004)
Public Act 94-0004 creates a new ERO effective July 1, 2005. If an employee exercises the new ERO option (retires before age 60) employee and employer contributions are required to avoid discount. The employee contribution is 11.5% of salary for each year less than age 60 or 35 years of service (whichever is less) and the employer contribution is 23.5% of salary for each year less than age 60. In addition, all active TRS members are required to contribute 0.4% of salary towards the cost of ERO. This contribution would be refunded, without interest, if the member does not utilize the ERO, if the member takes a refund from TRS, if the member dies, or if the ERO is discontinued.

By June 30, 2012 (and every 5 years thereafter), TRS is required to review the System's ERO experience to determine if the required contributions adequately fund the ERO. The TRS Board of Trustees must submit the results to the Commission on Government Forecasting and Accountability, who must then recommend to the General Assembly (by February 1, 2013) if the required ERO contributions should be adjusted. If the General Assembly does not adjust the required contributions as recommended, the ERO would be terminated at the end of that fiscal year.

Extension of Early Retirement Option for Chicago Teachers (P.A. 94-0004)
Public Act 91-0017 extended the Early Retirement Option in the Chicago Teachers' Pension Fund until June 30, 2005. If an employee exercises that option by retiring before age 60 with less than 34 years of service, employee and employer contributions are required to avoid a reduction in annuity. The employee contribution is 7% of salary for each month less than age 60 or 35 years of service (whichever is less), and the employer contribution is 20% of salary for each year less than age 60. No employee or employer contributions are required for members with 34 years of service. Currently, each employer has the authority to determine whether it should provide an ERO for its employees.

Public Act 94-0004 extends the ERO option to June 30, 2010. The Act also specifies that the employer may not limit the number of ERO participants to less than 200 (rather than 30% of eligible members). The Act also allows the employer and collective bargaining agent to agree to set the limit higher than 200, and to base the allocation for participation on a basis other than seniority.

Application of New Benefits (P.A. 94-0004)
Public Act 94-0004 requires every new benefit increase to identify and provide for additional funding at least sufficient to fund the resulting annual increase in cost as it accrues to the System. Unless the funding inadequacy is corrected by the General Assembly, the benefit increase would expire at the end of the fiscal year. In addition, Public Act 94-0004 provides that all benefit increases will expire 5 years after the effective date of the increase, unless an earlier date is specified in the legislation that provides the benefit increase. This provision does not apply to the Chicago Teachers' Pension Fund.

Exemptions to 6% End-of-Career Salary Increase Cap (P.A. 94-1057)
P.A. 94-1057 amended both the Downstate Teachers' and State Universities' Articles of the Pension Code to exempt the employer (the university or the school district) from paying the increased contribution associated with certain salary increases above 6% granted during the employee's final average salary period. The Act applies to specifically enumerated salary increases granted between June 1, 2005 and July 1, 2011 as follows:

- Salary increases paid to teachers or university employees who are ten or more years away from retirement.
- Salary increases that result when a teacher is transferred from one employer to another as a result of school consolidation.
- Salary increases paid to teachers or university employees that are earned as a result of summer school or overload work. (Overload work must be for the sole purpose of

academic instruction in excess of the standard number of instruction hours, and the overload pay must be necessary for the educational mission).

- Salary increases due to promotion for which a teacher is required to hold a certificate or supervisory endorsement issued by the State Teacher Certification Board. The certification must be different than what was required for the teacher's previous position, and the position must have existed and been filled by a member for no less than one complete academic year.
- Salary increase due to promotion for which a university employee moves to a higher classification under the State Universities Civil Service System, promotion to a tenure-track faculty position, or promotion to a position recommended on a promotional list created by the Illinois Community College Board.
- Payments to a teacher from the State Board of Education or the State of Illinois over which the school district does not have discretion.
- Salary increases granted to teachers or university employees under the aforementioned conditions after July 1, 2011, but before July 1, 2014, pursuant to a contract or collective bargaining agreement entered into on or after June 1, 2005, but before July 1, 2011.

P.A. 94-1057 also requires both SURS and TRS to file a report with the Governor and General Assembly by January 1, 2007 outlining the number of recalculations performed by school districts or universities, the dollar amount by which each school district or university's contribution was changed due to the recalculation, and the total amount received from each school district or university as a result of P.A. 94-0004. The Act also requires both SURS and TRS to provide an estimate of the increase in state contributions resulting from the aforementioned end-of-career salary increase exemptions.

96th General Assembly (2009 – 2011)

Pension Obligation Notes for FY 2010 / Introduction of Asset Smoothing (P.A. 96-0043)

P.A. 96-0043 mandated the issuance of new pension bonds totaling $3.466 billion. The bond sale proceeds, net of sales expenses, were used as a portion of the FY 2010 State contributions to the various State pension systems. Specifically, the Act establishes the FY 2010 State pension contributions as follows: (1) TRS - $2,089,268,000, (2) SERS - $723,703,100, (3) SURS - $702,514,000, (4) JRS - $78,832,000, (5) GARS - $10,454,000. The FY 2010 total inflows into each of the 5 systems from all sources will be equal to the GRF portion of the certified amounts for each system.

P.A. 96-0043 also establishes that as of June 30, 2008, the actuarial value of each system's assets will be equal to their market value In determining the actuarial value of the systems' assets for fiscal years after June 30, 2008, any unexpected gains or losses from investment returns incurred in a fiscal year will be recognized in equal annual amounts over the 5 year period following that fiscal year. An unexpected gain or loss will be defined as any deviation from the forecasted return on invested assets.

P.A. 96-0043 contains a statement of legislative intent that all of the operating funds freed up by the bond sale should be used to fund programs and services provided by community-based human services providers to ensure the State continues assisting the most vulnerable citizens.

Calculation of Final Average Salary for Annuity Purposes - General Assembly Retirement System (P.A. 96-0207)

P.A. 96-0207 provides that for participants who become a member of GARS on or after August 10th, 2009 (the effective date of the Act), retirement annuities will be based on the 48 consecutive months of service within the last 120 months of service in which the total compensation was the highest, or by dividing the total period of service, if less than 48 months, by the number of months of service in that period.

Calculation of Final Average Salary for Annuity Purposes - Judges Retirement System (P.A. 96-0207)

P.A. 96-0207 provides that for participants who become members of JRS on or after August 10th, 2009 (the effective date of the Act), retirement annuities will be calculated by dividing the total salary of the participant during the period of the 48 consecutive months of service within the last 120 months of service in which the total compensation was the highest, or the total period of service, if less than 48 months, by the number of months of service in that period.

Illinois Governmental Ethics Act (P.A. 96-0006)

Currently, elected officials and members of certain boards and commissions are required to file verified written statements of economic interests. Public Act 096-0006 amends the Illinois Governmental Ethics Act to add that members of the board of any retirement system, pension fund or investment board established under the Illinois Pension Code will be required to file verified written statements of economic interests only if they are not already required to file such a statement.

Creation of Investment Working Group (P.A. 96-0006)

Public Act 096-0006 amends the State Treasurer Act to add a new Section titled, "working group; peer cost comparison." The Treasurer shall convene a working group consisting of representatives from the retirement systems, pension funds, and investment board created under the Illinois Pension Code, persons that provide investment services, and members of the financial industry. The working group shall review the performance of investment managers and consultants providing investment services for the retirement systems, pension funds, and investment board created under the Illinois Pension Code. The group shall develop uniform standards for comparing the costs of investment services and make recommendations to the retirement systems, pension funds, and investment board. The working group shall draft a report, and the Treasurer must submit such report, to the Governor and the General Assembly by January 1, 2011.

Expansion of Fiduciary Duties (P.A. 96-0006)

Currently, the Illinois Pension Code defines a fiduciary as someone who exercises discretionary authority or discretionary control respecting management of the pension fund or retirement system. Those who render investment advice for a fee or other compensation are acting in a fiduciary capacity pursuant to current law. Public Act 096-0006 amends the Illinois Pension Code to stipulate that rendering advice with respect to the selection of fiduciaries in and of itself constitutes a fiduciary duty.

Requirements for Consultants (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to add a new Section concerning consultants. The new Section states that "consultant" means any person or entity retained or employed by the board of a retirement system, pension fund, or investment board to make recommendations in developing an investment strategy, assist with finding appropriate investment advisers, or monitoring the board's investments.

Reporting Requirements for Emerging Investment Managers (P.A. 96-0006)
Public Act 096-0006 requires that each retirement system, pension fund, and investment board, except for Downstate Police and Downstate Fire pension funds, shall submit a report to the Governor and the General Assembly by January 1 of each year. The report shall include all of the adopted policies, including the names and addresses of the emerging investment managers used, percentage of the assets under the investment control of emerging investment managers, the actions it has undertaken to increase the use of emerging investment managers, including encouraging other investment managers to use emerging investment managers as subcontractors when the opportunity arises, and also including specific actions undertaken to increase the use of minority broker-dealers.

Prohibited Transactions (P.A. 96-0006)
Public Act 096-0006 amends the Pension Code to require that a board member, employee, or consultant with respect to a retirement system, pension fund, or investment board shall not knowingly cause or advise the system, fund, or board to engage in an investment transaction with an investment adviser when the board member, employee, consultant, or their spouse (i) has any direct interest in the income, gains, or profits of the investment adviser through which the investment transaction is made or (ii) has a relationship with that investment adviser that would result in a pecuniary benefit to the board member, employee, consultant, or spouse of such board member, employee, or consultant as a result of the investment transaction. Public Act 096-0006 clarifies that a consultant includes an employee or agent of a consulting firm who has greater than 7.5% ownership of the consulting firm. Any violation of this provision constitutes a Class 4 felony.

Selection and Appointment of Investment Advisors and Consultants (P.A. 96-0006)
Public Act 096-0006 creates a new section in the Pension Code concerning investment services for all retirement systems, pension funds, and investment boards, except Downstate Police and Fire pension funds. Pursuant to this new Section, all contracts for investment services shall be awarded by the board using a competitive process that is substantially similar to the process required for the procurement of professional and artistic services under Article 35 of the Illinois Procurement Code. The Act states that each board of trustees shall implement this policy by June 2, 2009.

Limitations on Investment Consulting Contracts (P.A. 96-0006)
Public Act 096-0006 states that notwithstanding any other provision of law, a retirement system, pension fund, or investment board shall not enter into a contract with a consultant that exceeds 5 years in duration. The Act provides that no contract to provide consulting services may be renewed or extended. At the end of the term of a contract, however, the consultant is eligible to compete for a new contract. No retirement system, pension fund, or investment board shall attempt to avoid or contravene these restrictions by any means.

Disclosure of Fees and Commissions by Consultants (P.A. 96-0006)
P.A. 96-0006 provides that by June 2, 2009, each investment adviser or consultant currently providing services or subject to an existing contract for the provision of services must disclose to the board of trustees all direct and indirect fees, commissions, penalties, and other compensation paid by or on behalf of the investment adviser or consultant in connection with the provision of those services and shall update that disclosure promptly after a modification of those payments or an additional payment.

Investment Transparency (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to create an additional section concerning investment transparency. The purpose of this new section is to provide for transparency in the investment of retirement or pension fund assets and require the reporting of full and complete information regarding investments by pension funds, retirement systems, and investment boards. A retirement system, pension fund, or investment board subject to the Pension Code and any committees established by such system, fund, or board must comply with the Open Meetings Act.

Ethics Training (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to create a new Section concerning ethics training. All board members of a retirement system, pension fund, or investment board created under this Code must attend ethics training of at least 8 hours per year. The training shall incorporate the following areas: ethics, fiduciary duty, and investment issues and any other curriculum that the board of the retirement system, pension fund, or investment board establishes as being important.

Prohibition on Gifts (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to clarify that no trustee or employee of a retirement system, pension fund, or investment board created under the Illinois Pension Code shall intentionally solicit or accept any gift from any prohibited source.

No Monetary Gain on Investments (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to create a new section stating that no member or employee of the board of trustees of any retirement system, pension fund, or investment board or any spouse of such member or employee shall knowingly have any direct interest in the income, gains, or profits of any investments made on behalf of a retirement system, pension fund, or investment board for which such person is a member or employee, nor receive any pay or emolument for services in connection with any investment.

Fraud (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to create a new Section concerning fraud. Any person who knowingly makes any false statement or falsifies or permits to be falsified any record of a retirement system or pension fund created under this Code or the Illinois State Board of Investment in an attempt to defraud the retirement system, pension fund, or the Illinois State Board of Investment is guilty of a Class 3 felony.

Contingent and Placement Fees Prohibited (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to create a new section concerning the prohibiting of contingent and placement fees. No person or entity shall retain a person or entity to attempt to influence the outcome of an investment decision of or the procurement of investment advice or services of a retirement system, pension fund, or investment board for compensation, contingent in whole or in part upon the decision or procurement. Any person

who violates this provision is guilty of a business offense and shall be fined not more than $10,000. In addition, any person convicted of a violation of this provision is prohibited for a period of 3 years from conducting such activities.

Approval of Travel or Educational Mission (P.A. 96-0006)
Public Act 096-0006 creates a new Section concerning travel and educational missions. The expenses for travel or educational missions of a board member of a retirement system, pension fund, or investment board must be approved by a majority of the board prior to the travel or educational mission.

Changes to SERS Board of Directors (P.A. 96-0006)
Public Act 96-0006 states that notwithstanding any provision of current law, the term of office of each trustee of the board appointed by the Governor who is sitting on the board is terminated on that effective date of the Act (April 3rd, 2009). Beginning on the 90th day after the effective date of this Act (July 2, 2009), the board shall consist of 13 trustees as follows:

(i) the Comptroller, who shall be the Chairperson;

(ii) six persons appointed by the Governor with the advice and consent of the Senate who may not be members of the system or hold an elective State office and who shall serve for a term of 5 years, except that the terms of the initial appointees under this Act shall be 3 for a term of 3 years and 3 for a term of 5 years;

(iii) four active participants of the system having at least 8 years of creditable service, to be elected from the contributing members of the system;

(iv) two annuitants of the system who have been annuitants for at least one full year, to be elected from and by the annuitants of the system.

Changes to SURS Board of Trustees (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to add that the terms of all trustees holding office on the effective date of this Act (April 3, 2009) shall terminate on that effective date. The Governor shall make nominations for appointment within 60 days after the effective date of this Act (June 2, 2009). A trustee sitting on the board on April 3, 2009 may not hold over in office for more than 90 days after that effective date. In addition to this, Public Act 096-0006 states that beginning on the 90th day after the effective date of this Act (July 2, 2009), the Board of Trustees shall be constituted as follows:

(i) The Chairperson of the board of Higher Education, who shall act as chairperson of the Board.

(ii) Four trustees appointed by the Governor with the advice and consent of the Senate who may not be members of the system or hold an elective State office and who shall serve for a term of 6 years, except that the terms of the initial appointees shall be 2 for a term of 3 years and 2 for a term of 6 years.

(iii) Four active participants of the system to be elected from the contributing membership of the system by the contributing members, no more than 2 of which may be from any of the University of Illinois campuses, who shall serve for a term of 6 years, except that the terms of the initial elected shall be 2 for a term of 3 years and 2 for a term of 6 years.

(iv) Two annuitants of the system who have been annuitants for at least one full year, to be elected from and by the annuitants of the system, no more than one of which may be from any of the University of Illinois campuses, who shall serve for a term of 6 years, except that the terms of the initial elected shall be 1 for a term of 3 years and 1 for a term of 6 years.

Termination of TRS Executive Director (P.A. 96-0006)
Public Act 096-0006 amends the Illinois Pension Code to add that the secretary and chief executive officer of the Teachers' Retirement System, known as the Executive Director, holding that position on April 1, 2009 is terminated on July 1, 2009, by operation of law, and shall thereafter no longer hold that position or any other employment with the system. The board is directed to take whatever action is necessary to effectuate this termination.

Changes to the TRS Board of Trustees (P.A. 96-0006)
Public Act 096-0006 amends the Pension Code to change the composition of the TRS board of trustees. The board shall consist of 13 members, 6 of whom shall be appointed by the governor; 4 active teachers elected by the contributing members, and 2 annuitant members elected by the annuitants of the system. The Superintendent of Education is an ex-officio member who serves as president of the board.

Issuance of Pension Obligation Bonds for FY 2011 (P.A. 96-1497)
Public Act 96-1497 mandated the issuance of new pension bonds totaling $4.096 billion. The bond sale proceeds, net of expenses, were used as a portion of the FY 2011 State contributions to the five State systems. The actual bond sale proceeds, net of expenses, were $3.7 billion. Public Act 96-1497 also required the Boards of Trustees of the State Systems to recertify to the Governor the amount of required State contributions for FY 2011 using the assumption that the second tier of benefits implemented by P.A. 96-0889 had been in effect on June 30, 2009.

97th General Assembly (2011 – 2013)

Anti-Fraud Provisions (P.A. 97-0651)
P.A. 97-0651 provides that any reasonable suspicion of a false statement by any appointed or elected commissioners, trustees, directors, board members, or employees of a retirement system or pension fund governed by the Pension Code or the State Board of Investment shall be immediately referred to the board of trustees of the pension fund or the State Board of Investment. The Act also states that the board shall immediately notify the State's Attorney of the jurisdiction where any alleged fraudulent activity occurred.

Pension Credit for Employees of Statewide Teacher Organizations – SURS and TRS (P.A. 97-0651)
Prior to the enactment of P.A. 97-0651, members of SURS and TRS were allowed to earn pensionable service credit while working for a statewide teacher organization or national teacher organization under certain conditions. P.A. 97-0651 specifies that such service credit can only be earned if the individual first became a full-time employee of the teacher organization and becomes a participant before the effective date of this amendatory Act (January 5th, 2012). This provision effectively prohibits members of SURS and TRS from earning this type of service credit after January 5th, 2012.

Repeal of Optional TRS Service Credit Provision of P.A. 94-1111 (P.A. 97-0651)
P.A. 94-1111, which became effective on February 27th, 2007, allowed certain employees of statewide teacher organizations to establish service credit in TRS for periods of employment prior to becoming certified as a teacher if certain conditions were met before the effective date of the Act. P.A. 97-0651 repeals this provision.

Payment for Reciprocal Service in GARS (P.A. 97-0967)
P.A. 97-0967 amends the GARS and the General Provisions Articles of the Illinois Pension Code. In cases where a GARS participant's final average salary in a retirement fund governed under the Retirement Systems Reciprocal Act is used to calculate a GARS pension, and in cases where the final average salary in a reciprocal system is higher than the final salary for annuity purposes in GARS, then the employer of the participant in the reciprocal system must pay to GARS the increased cost that is attributable to the higher level of compensation.

Creation of the State Actuary (P.A. 97-0694)
P.A. 97-0694 amends the Illinois State Auditing Act to permit the Auditor General to contract with or hire an actuary to serve as the State Actuary. The Act allows the Auditor General to select the State Actuary without engaging in a competitive procurement process. The State Actuary will have the responsibility for conducting reviews of the actuarial practices of the State retirement systems and identifying recommended changes in actuarial assumptions that the boards of the systems must consider before finalizing their certifications of the required annual State contributions.

98th General Assembly (2013 – 2014)

Temporary Extension of the TRS Early Retirement Option (ERO) (P.A. 98-0042)
Currently, TRS members who do not use the modified Early Retirement Option (ERO) under P.A. 94-0004 who retire with less than 35 years of service see a reduction of 6% per year for every year they are under the age of 60. By utilizing ERO, teachers who are between the ages of 55 and 60 who have at least 20 but less than 35 years of service may retire without a discounted annuity by paying a specified amount to TRS. School district contributions are also required for a member to retire under ERO. P.A. 94-0004, which became effective on July 1, 2005, set the member ERO contribution rate at 11.5% multiplied by the lesser of the number of years of partial years of service under 35 years, or the number of years or partial years the teacher is shy of age 60. The school district ERO contribution rate is currently set at 23.5% multiplied by each year or partial year that the teacher's age is less than 60.

P.A. 94-0004 required COGFA to make a recommendation to the General Assembly by February 1, 2013 on any proportional adjustments to member and employer contribution rates. In accordance with TRS' experience study by Buck Consultants, COGFA's actuary, Sandor Goldstein, conducted a review of Buck's recommended revision to member and employer ERO contribution rates. Mr. Goldstein found the revised rates (14.4% for members and 29.3% for employers) to be sufficient to fund 100% of the ERO benefit. COGFA's recommendation was transmitted to the General Assembly on January 10th.

SB 1366 extends the ERO at the employee and employer rates recommended by COGFA for members who retire on or after July 1, 2013 and before July 1, 2016.

III. Current Combined Financial Condition Of The State Retirement Systems

STATE RETIREMENT SYSTEMS, COMBINED

The following section of the report looks at historical information regarding the financial condition of the State funded retirement systems. These systems include the Teachers' Retirement System, State Employees' Retirement System, State Universities' Retirement System, Judges' Retirement System, and General Assembly Retirement System. We will begin by examining the five systems together and then take a snapshot of each system's position and outlook as of June 30, 2013. This section of the report covers the period from FY 1996 to FY 2013.

Over the last 18 years, the State of Illinois has appropriated $45.9 billion to the five retirement systems. Of that amount, $7.3 billion was from the sale of $10 billion in pension obligation bonds. The Teachers' Retirement System has received by far the largest amount of contributions, totaling $24.3 billion. The Judges' and General Assembly Retirement Systems have received the smallest amount of contributions, as they have far fewer participants. The effect these appropriations have had on the unfunded liabilities of the five systems is discussed in greater detail in the following section.

TABLE 2

Summary of Appropriations Authorized
State Retirement Systems
FY 1996 - FY 2013
($ in Millions)

Fiscal Years	TRS	SURS	SERS	JRS	GARS	Total
1996	330.8	123.9	144.0	13.0	2.6	614.3
1997	386.1	159.5	159.1	14.6	3.0	722.3
1998	467.9	201.6	168.1	16.7	3.4	857.7
1999	573.5	215.4	305.9	20.5	4.0	1,119.3
2000	640.1	224.6	325.7	23.5	4.4	1,218.3
2001	724.9	232.6	341.9	26.4	4.8	1,330.6
2002	815.4	240.4	364.7	29.8	5.2	1,455.5
2003	930.1	269.6	405.5	33.6	5.6	1,644.4
***2004**	5,362.0	1,743.7	1,864.7	178.5	32.9	9,181.8
2005	907.0	270.0	498.6	32.0	4.7	1,712.3
2006	534.6	166.6	203.8	29.2	4.2	938.4
2007	738.0	252.0	344.1	35.2	5.2	1,374.5
2008	1,041.3	340.3	551.6	46.9	6.8	1,986.9
2009	1,451.8	450.2	757.2	60.0	8.8	2,728.0
2010	2,080.7	700.2	1,169.0	78.5	10.4	4,038.8
2011	2,170.9	776.5	1,219.7	62.7	11.4	4,241.2
2012	2,406.5	980.5	1,450.8	63.6	10.5	4,911.9
2013	2,703.5	1,402.8	1,659.6	88.2	14.2	5,868.3
Totals	24,265.1	8,750.4	11,934.0	852.9	142.1	45,944.5

**FY 2004 State appropriations authorized include $7.3 Billion in proceeds from the sale of pension obligation bonds.*

Based upon the actuarial value of assets, the total unfunded liabilities of the State systems totaled $100.5 billion on June 30, 2013, led by the Teachers' Retirement System (TRS) whose unfunded liabilities amounted to $55.7 billion. As the largest of the State systems, TRS accounts for over half of the total assets and liabilities of the five State systems combined. Table 3 below provides a summary of the financial condition of each of the five State retirement systems, showing their respective liabilities and assets as well as their accumulated unfunded liabilities and funded ratios. This table includes Asset Smoothing effects.

TABLE 3

Summary of Financial Condition
State Retirement Systems Combined
Assets at Actuarial Value / With Asset Smoothing
Public Act 96-0043
FY 2013
($ in Millions)

System	Accrued Liability	Actuarial Assets	Unfunded Liability	Funded Ratio
TRS	$93,887.0	$38,155.2	$55,731.8	40.6%
SERS	$34,720.8	$11,877.4	$22,843.4	34.2%
SURS	$34,373.1	$14,262.6	$20,110.5	41.5%
JRS	$2,156.8	$610.2	$1,546.6	28.3%
GARS	$320.5	$51.8	$268.7	16.2%
TOTAL	$165,458.2	$64,957.2	$100,501.0	39.3%

However, a much more realistic valuation of the true financial position of the various retirement systems would be based upon the MARKET value of the assets, as shown in Table 4 on the following page. Based upon this more realistic value of the assets, the unfunded liabilities of the State systems totaled $97.5 billion on June 30, 2013. Teachers' Retirement System (TRS), whose unfunded liabilities amounted to $54 billion, would again represent over 50% of the combined total unfunded balance. Table 4 on the following page provides a summary of the financial condition of each of the five State retirement systems, showing their respective liabilities and assets as well as their accumulated unfunded liabilities and funded ratios. No Asset Smoothing effects are included in these numbers.

TABLE 4

Summary of Financial Condition State Retirement Systems Combined Assets at Market Value / **Without Asset Smoothing** FY 2013 ($ in Millions)				
System	Accrued Liability	Market Assets	Unfunded Liability	Funded Ratio
TRS	$93,887.0	$39,858.8	$54,028.2	42.5%
SERS	$34,720.8	$12,400.3	$22,320.5	35.7%
SURS	$34,373.1	$15,037.1	$19,336.0	43.7%
JRS	$2,156.8	$643.3	$1,513.5	29.8%
GARS	$320.5	$54.3	$266.2	17.0%
TOTAL	$165,458.2	$67,993.8	$97,464.4	41.1%

The funded ratios for each of the five State retirement systems may be compared to the aggregate funded ratio of 41.1% for the five systems. Although the Judges' Retirement System and the General Assembly Retirement System have the poorest funded ratios, these two systems are much smaller and their unfunded liabilities are thus more manageable than the three larger systems.

CHART 1

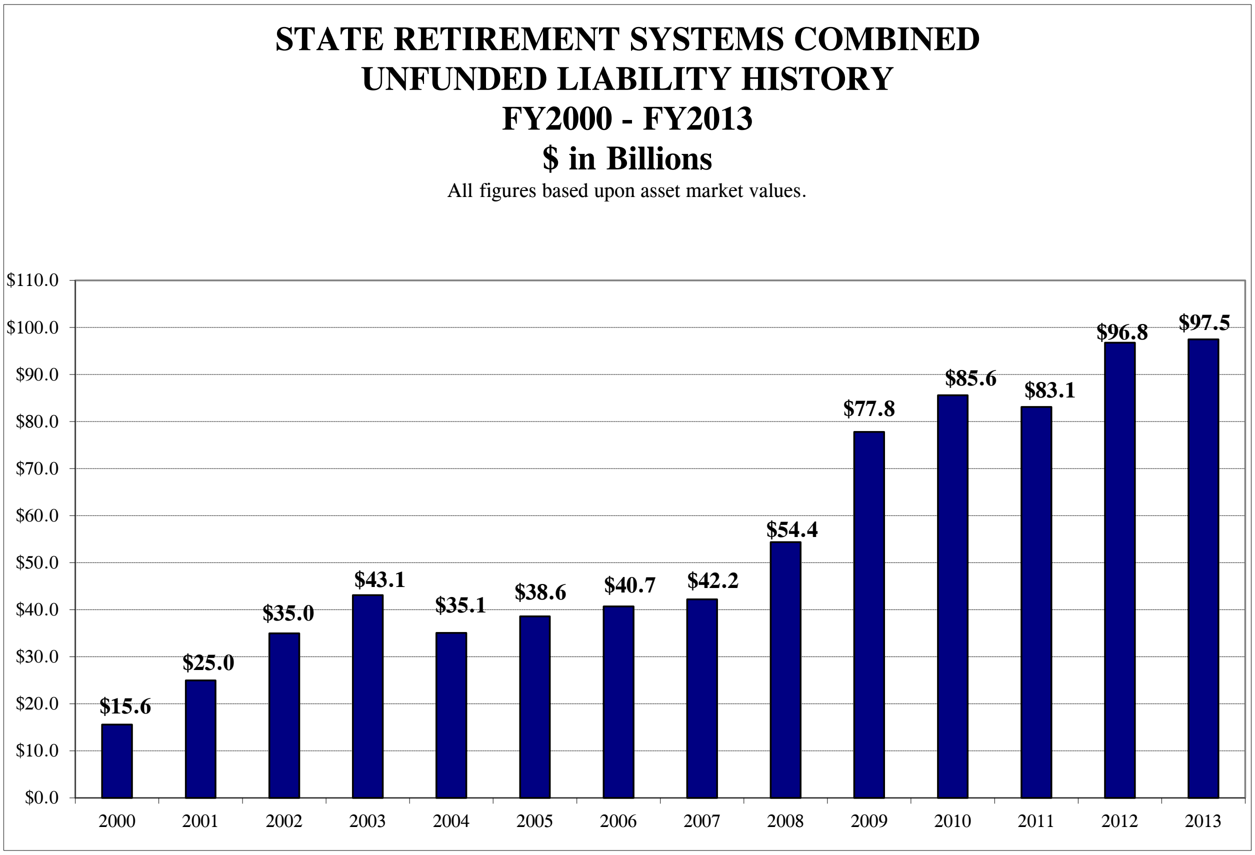
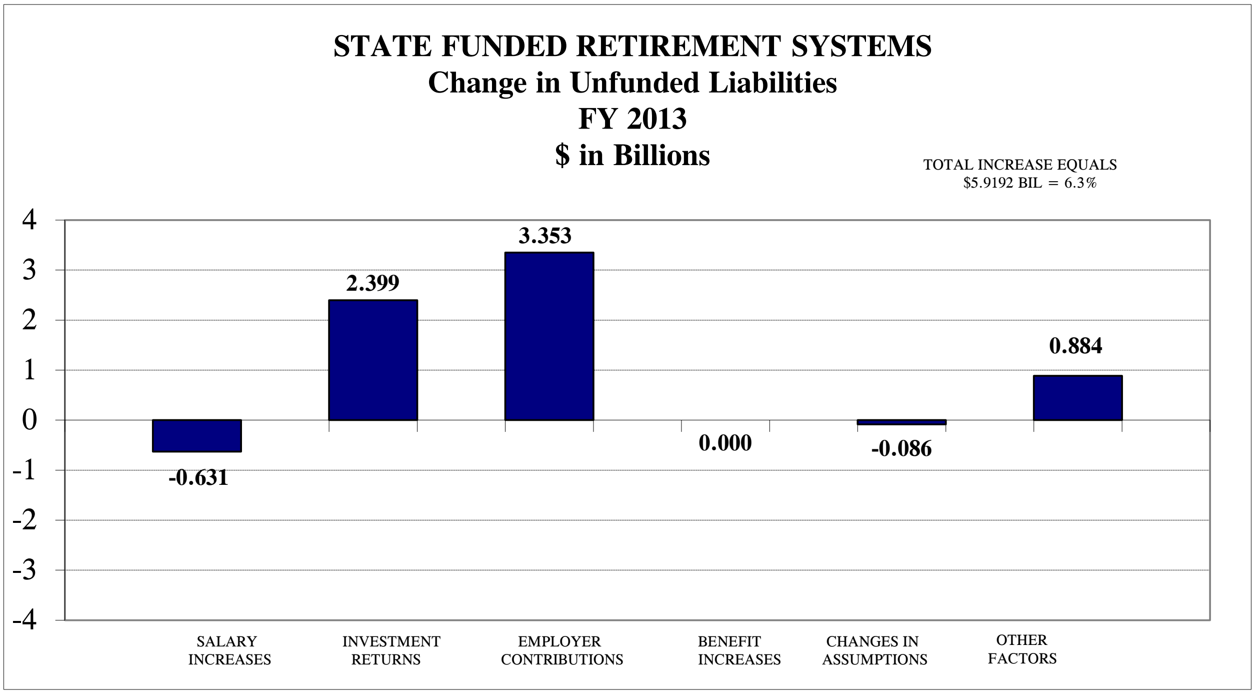


Chart 1 is based upon calculations using the market value of assets for all years, including FY 2013. The full effects of the large investment losses during FY 2009 and investment gains for FY 2011 are therefore reflected in the bars for these years. These extremely large investment losses are the main reason for the significant jump in unfunded liabilities during FY 2009. The asset smoothing approach, required by Public Act 96-0043, only recognizes 20% of the FY 2009 investment losses during the current year. Chart 1 above recognizes 100% of the FY 2009 investment losses in FY 2009, and is therefore a much more realistic representation of the retirement systems' true financial condition. In FY 2013, the market value of investment returns were above the actuarially-assumed rate for all systems. This helped control the growth of unfunded liabilities to a certain degree, however they still rose primarily due to insufficient contributions made by the State.

All of the numbers appearing in the rest of the report, unless otherwise noted, are based upon asset market values as this approach gives the most accurate representation of the true financial position of the retirement funds. As mentioned previously, one way of appraising the financial health of a retirement system is by determining its unfunded liabilities. The following chart shows how six factors affected the combined unfunded actuarial liabilities of the five State systems during FY 2013. All of the factors shown as positive amounts represent increases in the unfunded liability total.

CHART 2



NOTE: This chart is based upon asset actuarial values, i.e., WITH asset smoothing.

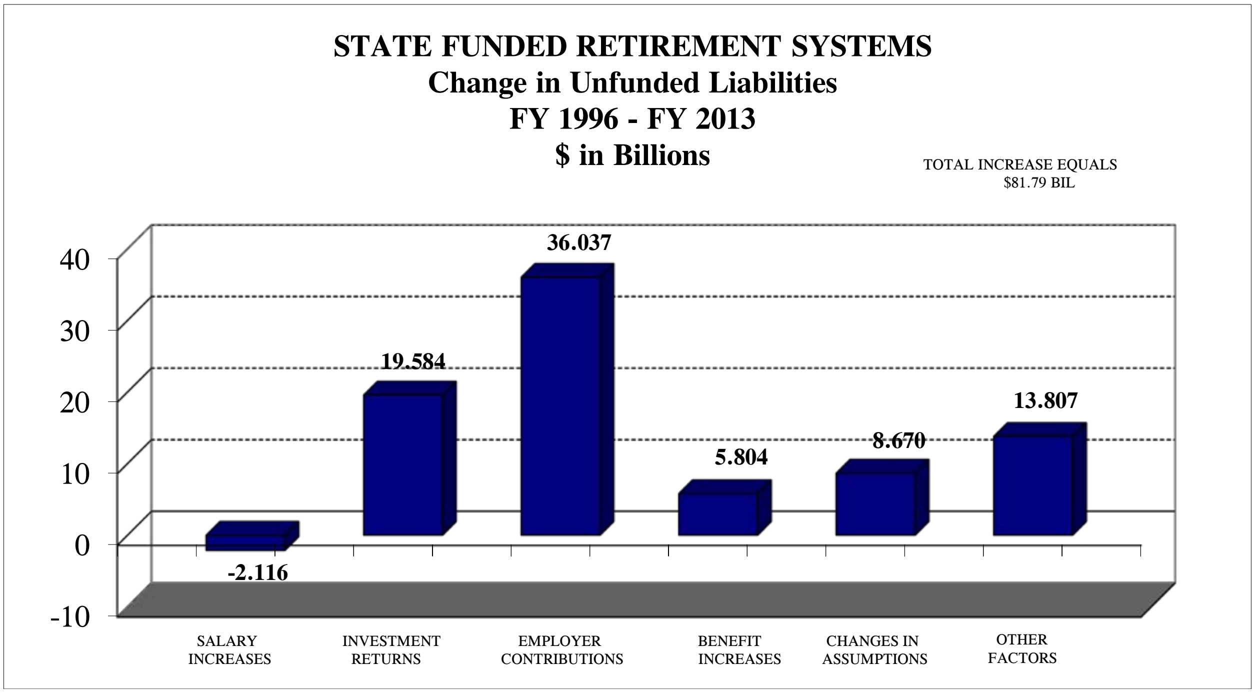
During FY 2013 the total unfunded liabilities utilizing the actuarial value of assets increased to $100.5 billion from $94.6 billion in FY 2013. This equates an increase in unfunded liabilities of 6.3% over FY 2013, due primarily to actuarially insufficient State contribution amounts and the lingering effects of the investment losses caused by the 2008 financial crisis. In FY 2013, market value investment returns for all five State systems were above the actuarially-assumed rates of return, as shown below:

- TRS- 12.7%
- SERS- 13.7%
- SURS- 12.5%
- JRS- 13.4%
- GARS- 12.9%

While all systems earned positive returns on a market value basis, the asset smoothing approach, required by Public Act 96-0043, only recognizes 20% of the FY 2013 investment returns. The historically large investment losses in FY 2009 are still being recognized in the smoothed value of assets. Hence, the reconciliation of the unfunded liability from FY 2000 –

FY 2013 reflects investment revenues that are lower than the actual investment revenues realized by the systems in FY 2013. It should be noted that FY 2013 is the last fiscal year in which the large investment losses from FY 2009 will be recognized under asset smoothing. More details on the annual changes in unfunded liabilities of the State systems are shown in Appendix M.

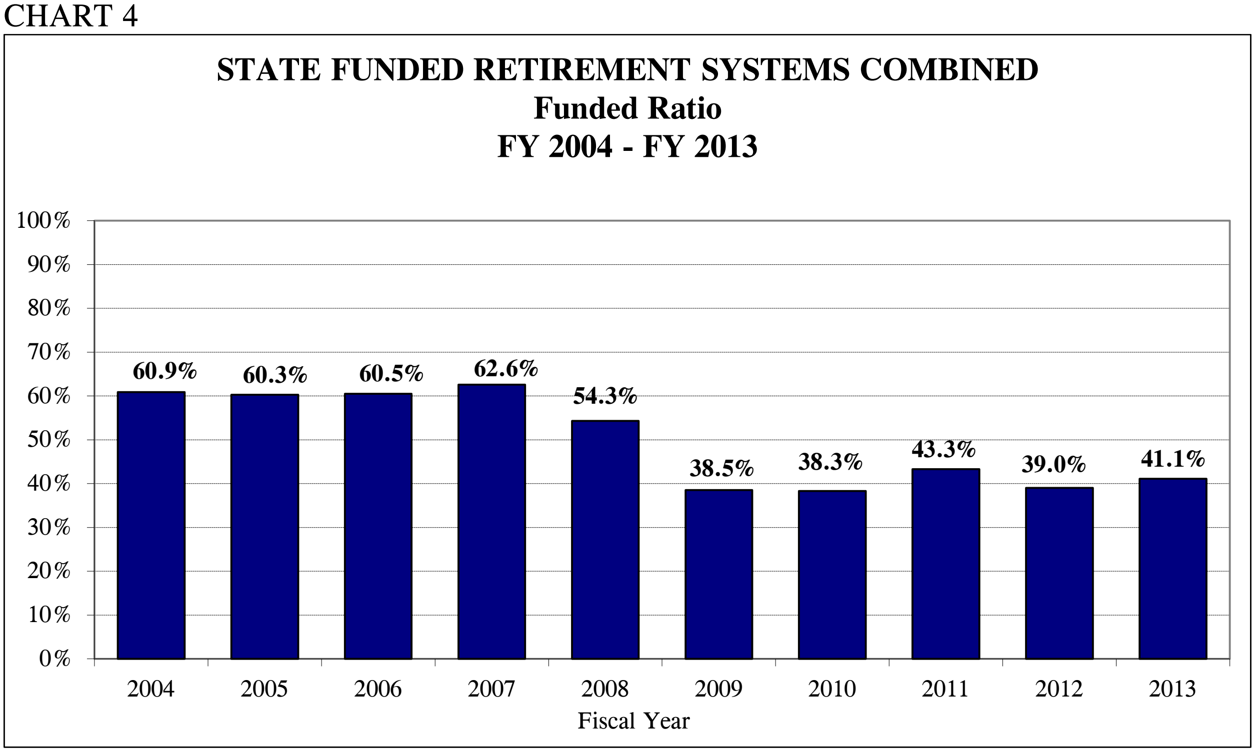
CHART 3



Note: This chart is based upon actuarial asset values, i.e., WITH asset smoothing.

The above chart provides an analysis of the causative factors for the increase in unfunded liabilities since FY 1996. The largest factor was the insufficient employer contributions which caused a $36 billion unfunded increase during the period under review. Investment returns at a rate lower than the actuarial assumption caused an additional increase of $19.6 billion.

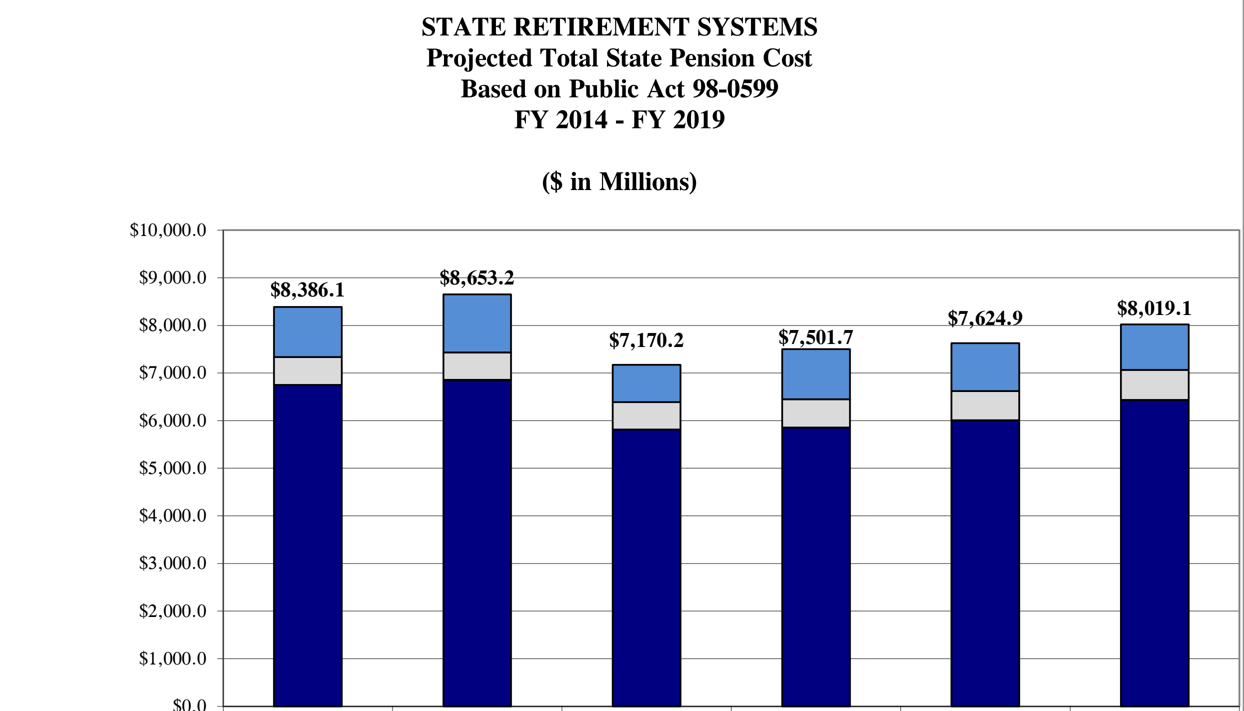
CHART 4



NOTE: The above FY2013 figure is based upon asset market value without asset smoothing.

All of the previously mentioned factors influence the funded ratio, the most commonly recognized measure of a retirement system's financial health. The funded ratio at any single point in time is less important than the trend over time. In FY 2003, the funded ratio declined as investment returns continued to be lower-than-assumed (by $2.1 billion). Investments began to bounce back in FY 2004, helping to increase the funded ratio. In addition, in 2003 the State sold $10 billion in pension obligation bonds and used part of the proceeds to pay all of the contributions for FY 2004. The bond sale generated $7.3 billion to reduce unfunded liabilities of the state-funded retirement systems. The funded ratio remained relatively stable through FY 2006 before increasing in FY 2007. Despite insufficient employer contributions, higher-than-expected investment returns led to this improvement. In FY 2008 and FY 2009 the funded ratio fell significantly due to much lower than expected investment revenues and insufficient employer contributions. The funded ratio remained essentially unchanged during FY 2010. In FY 2011 the combined funded ratio improved slightly as a result of improved investment returns. The FY 2011 funded ratio gains were reversed during FY 2012 due to insufficient State contributions. In FY 2013 the funded ratio slightly improved as a result of above-average investment returns

CHART 5



	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
2010/11 Debt Service	$1,051.6	$1,219.3	$781.9	$1,052.2	$1,003.9	$952.9
2003 POB Debt Service	$582.5	$578.6	$574.5	$595.2	$614.7	$633.2
Regular Contribution	$6,752.0	$6,855.3	$5,813.8	$5,854.3	$6,006.3	$6,433.0

Chart 5 reflects the total pension related expenditures by showing State contribution projections reflecting P.A. 98-0599 (SB 1) and all related debt service requirements for the period under review. State contributions for FY 2014 and FY 2015 have already been certified, as per the certification letters located in the appendices of this report. If P.A. 98-0599 is upheld by the courts, the total State pension contribution for FY 2016 is expected to be reduced by $1,163.4 million. Total savings through FY 2019 attributable to P.A. 98-0599 are estimated to be $5 billion.

Pubic Act 93-0002 authorized the 2003 issuance of the pension obligation bonds and established the resulting debt service requirements shown in Appendix N. Public Act 96-0043 authorized the 2010 issuance of the pension obligation notes and established the resulting debt service requirements shown in Appendix P. Public Act 96-1497 authorized the 2011 issuance of additional pension obligation notes and the actual proceeds established the resulting debt service requirements shown in Appendix P.

TABLE 5

ALL FOUR SYSTEMS AFFECTED BY SB 1 Reduction in State Contributions Attributable to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in Millions)			
Fiscal Year	State Contribution Based on Pre-SB 1 Baseline	State Contribution based on SB 1 (P.A. 98-0599)	Annual Savings
2014	$ 6,616.6	$ 6,616.6	$ -
2015	6,709.2	6,709.2	-
2016	6,842.9	5,679.8	1,163.2
2017	6,987.5	5,720.4	1,267.2
2018	7,258.7	5,871.5	1,387.2
2019	7,475.5	6,298.1	1,177.4
2020	7,728.8	7,013.0	715.8
2021	7,996.4	7,172.6	823.8
2022	8,267.1	7,335.7	931.5
2023	8,559.4	7,509.0	1,050.4
2024	8,842.4	7,683.6	1,158.8
2025	9,135.8	7,871.4	1,264.4
2026	9,456.5	8,052.3	1,404.1
2027	9,782.2	8,255.4	1,526.8
2028	10,105.4	8,450.6	1,654.9
2029	10,444.3	8,660.5	1,783.8
2030	10,753.3	8,882.7	1,870.6
2031	11,068.6	9,107.0	1,961.7
2032	11,407.6	9,325.6	2,082.0
2033	11,760.6	9,548.2	2,212.5
2034	12,730.5	9,840.9	2,889.6
2035	13,042.9	10,060.2	2,982.7
2036	13,351.6	10,285.3	3,066.3
2037	13,652.7	9,358.5	4,294.3
2038	13,957.6	8,767.7	5,189.9
2039	14,255.6	1,182.4	13,073.1
2040	14,546.3	546.1	14,000.2
2041	14,830.3	554.0	14,276.2
2042	15,128.9	561.1	14,567.7
2043	15,420.5	570.4	14,850.1
2044	15,724.8	578.9	15,145.8
2045	16,040.2	587.7	15,452.6
Totals	349,880.6	204,656.3	**145,224.4**

TABLE 6

ALL FIVE STATE RETIREMENT SYSTEMS COMBINED Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by CoGFA Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	2,762.2	14.4%	106.1	0.6%	2,868.3	15.0%
2015	2,117.2	10.7%	178.8	0.9%	2,296.1	11.7%
2016	2,070.2	10.2%	248.6	1.2%	2,318.8	11.5%
2017	2,021.5	9.7%	318.5	1.5%	2,340.1	11.3%
2018	1,966.8	9.2%	391.0	1.8%	2,357.8	11.0%
2019	1,910.6	8.7%	464.8	2.1%	2,375.4	10.8%
2020	1,850.6	8.2%	541.9	2.4%	2,392.5	10.6%
2021	1,788.2	7.7%	622.5	2.7%	2,410.6	10.3%
2022	1,727.7	7.2%	705.1	2.9%	2,432.9	10.1%
2023	1,659.9	6.7%	792.9	3.2%	2,452.7	9.9%
2024	1,589.0	6.2%	881.8	3.5%	2,470.8	9.7%
2025	1,519.7	5.8%	976.7	3.7%	2,496.4	9.5%
2026	1,443.8	5.3%	1,072.7	4.0%	2,516.5	9.3%
2027	1,377.7	4.9%	1,173.2	4.2%	2,550.9	9.1%
2028	1,300.0	4.5%	1,276.4	4.4%	2,576.5	8.9%
2029	1,225.9	4.1%	1,386.1	4.7%	2,612.0	8.8%
2030	1,153.6	3.8%	1,492.8	4.9%	2,646.4	8.6%
2031	1,083.6	3.4%	1,605.1	5.1%	2,688.8	8.5%
2032	1,009.3	3.1%	1,715.2	5.3%	2,724.5	8.4%
2033	931.4	2.8%	1,832.8	5.5%	2,764.1	8.3%
2034	854.6	2.5%	1,944.7	5.7%	2,799.2	8.1%
2035	775.6	2.2%	2,063.5	5.8%	2,839.1	8.0%
2036	703.8	1.9%	2,173.3	6.0%	2,877.1	7.9%
2037	632.5	1.7%	2,289.6	6.1%	2,922.1	7.8%
2038	562.2	1.5%	2,397.3	6.3%	2,959.6	7.7%
2039	506.0	1.3%	2,505.5	6.4%	3,011.5	7.7%
2040	445.2	1.1%	2,615.3	6.5%	3,060.6	7.6%
2041	383.2	0.9%	2,724.4	6.6%	3,107.6	7.5%
2042	323.4	0.8%	2,831.2	6.7%	3,154.6	7.4%
2043	278.8	0.6%	2,928.8	6.8%	3,207.6	7.4%
2044	241.0	0.5%	3,019.5	6.8%	3,260.5	7.4%
2045	211.7	0.5%	3,103.1	6.8%	3,314.9	7.3%

CHART 6

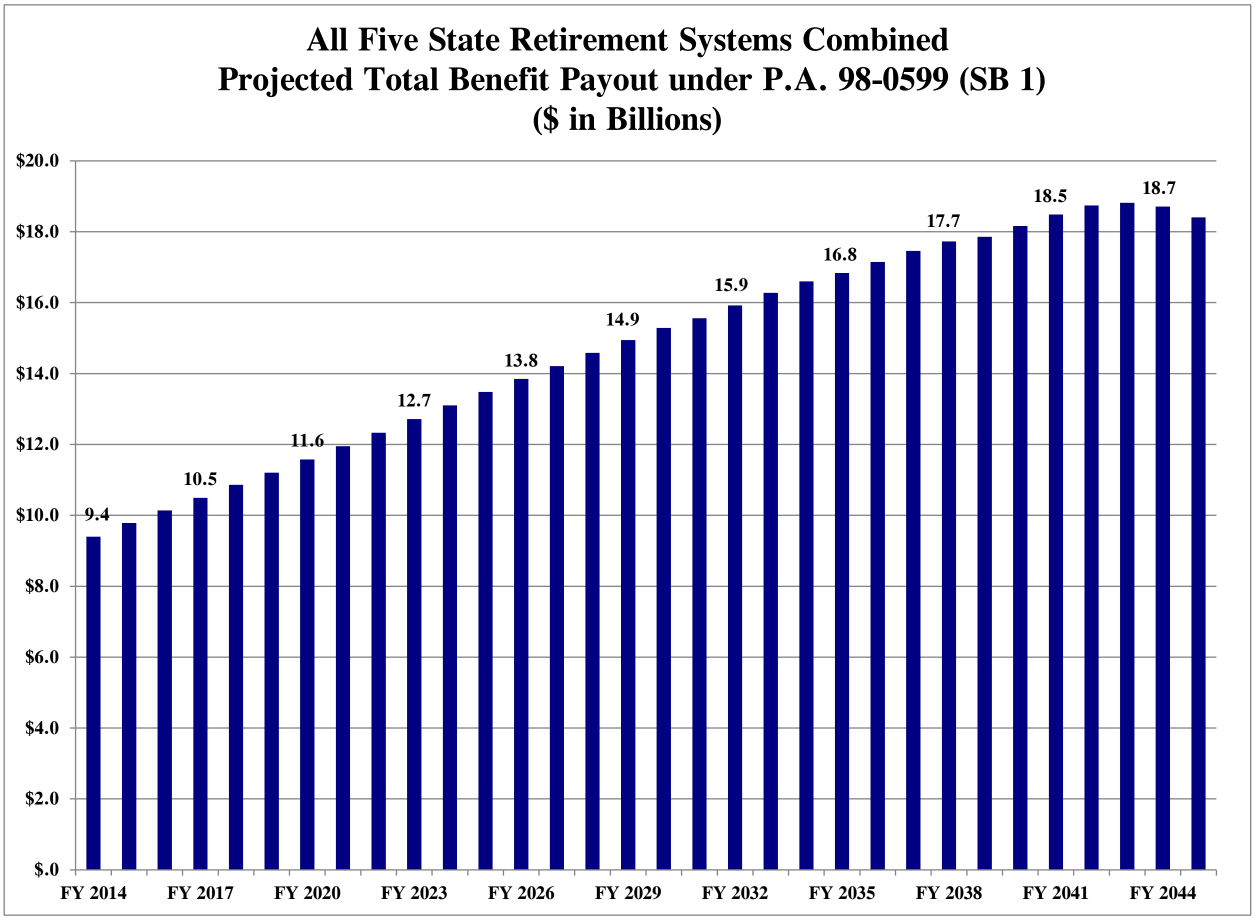


Chart 6 shows the projected total retirement benefits to be paid to annuitants.

IV. The Teachers' Retirement System

- Plan Summary
- FY 2013 Change in Unfunded Liabilities
- Funded Ratio History
- Active Member Headcount
- Average Active Member Salaries
- Retiree Headcount
- Average Retirement Annuities
- Unfunded History
- Rate of Return on Investments
- Annual Investment Revenue
- Total Payout
- Annual Changes in Unfunded
- Changes in Net Assets
- Investment Return History
- Reduction in State Contributions
- Tier 1 & Tier 2 Normal Cost Projections

Teachers Retirement System
Defined Benefit Plan Summary

Retirement Age

- Age 62 with 5 years of service credit.
- Age 60 with 10 years of service credit.
- Age 55 with 20 years of service credit (discounted annuity or Early Retirement Option)
- Age 55 with 35 years of service credit.
- "Rule of 85" for TRS members who are employees of the State of Illinois.

Retirement Formula

- 2.2% of final average salary for each year of service credit earned after June 30, 1998 (prior years under graduated formula can be upgraded).

Maximum Annuity

- 75% of final average salary.

Salary Used to Calculate Pension

- Average of the four highest consecutive annual salary rates within the last 10 years of service.

Annual COLA

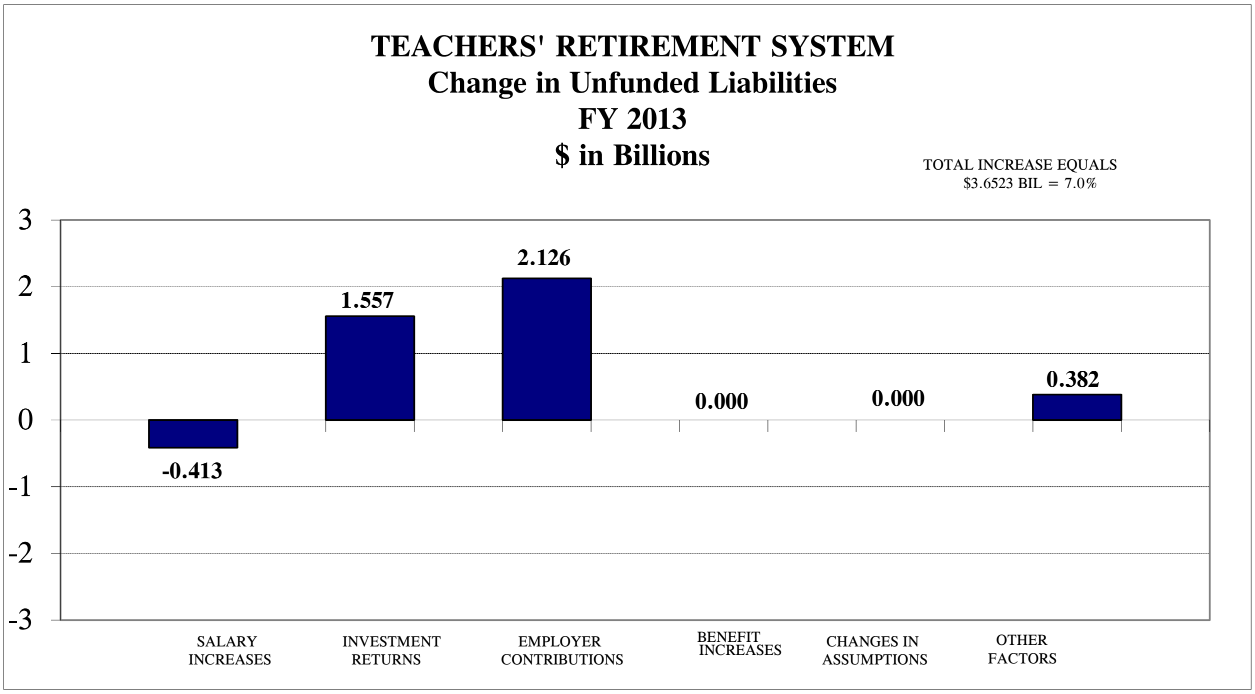
- 3% compounded.

Employee Contributions

- 9.4% of salary.

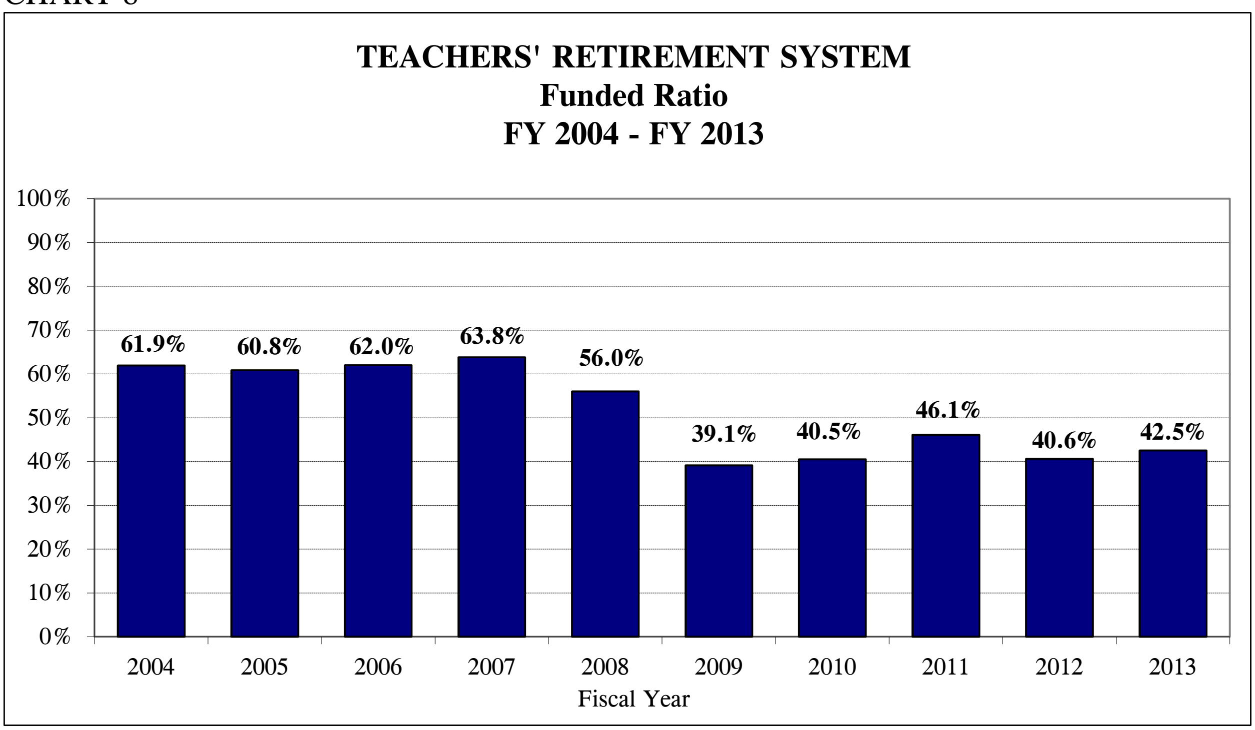
The benefits shown do not reflect P.A. 98-0599 (SB 1), or P.A. 96-0899 (2 Tier Act of 2011). Please refer to Section I earlier in this report for details.

CHART 7



NOTE: The above chart is based upon asset actuarial values.

CHART 8



NOTE: The above FY 2013 figure is based upon asset market values without asset smoothing.

CHART 9

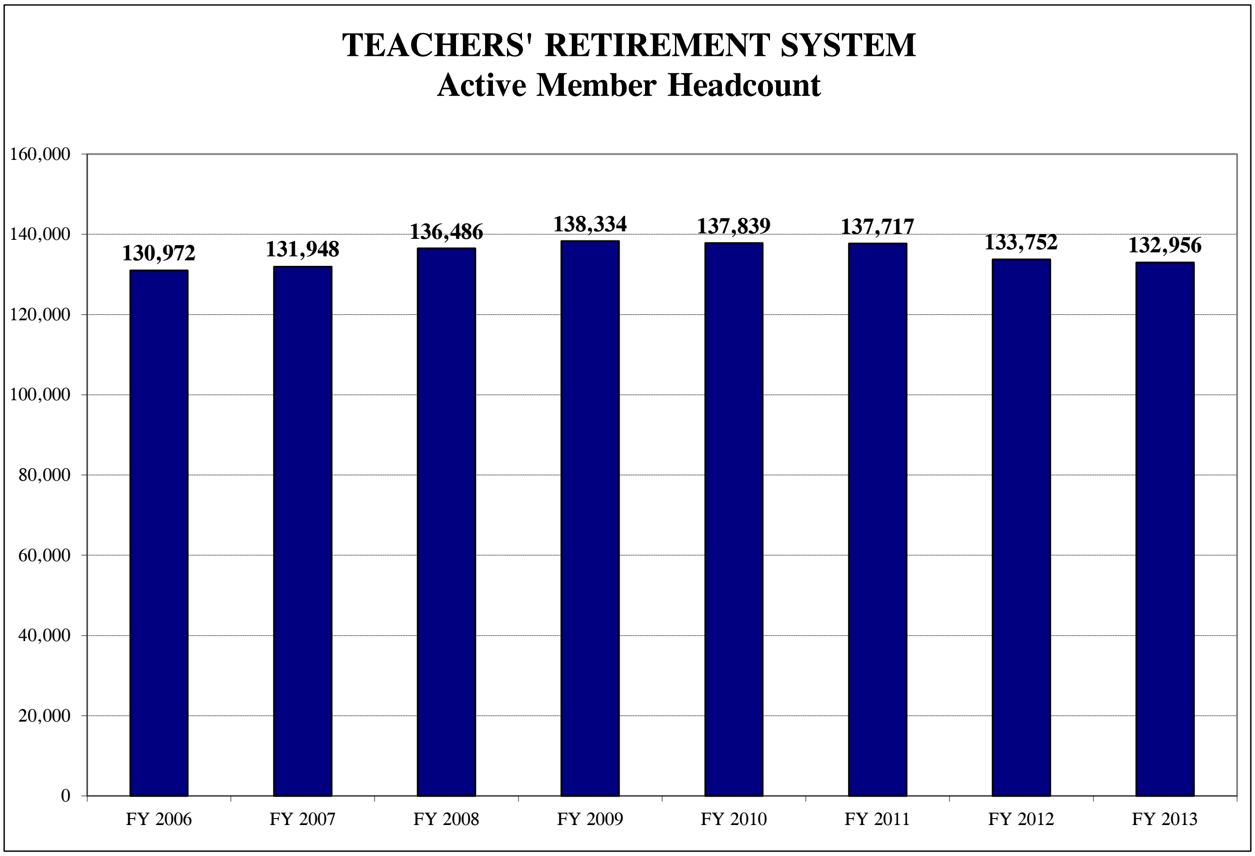


CHART10

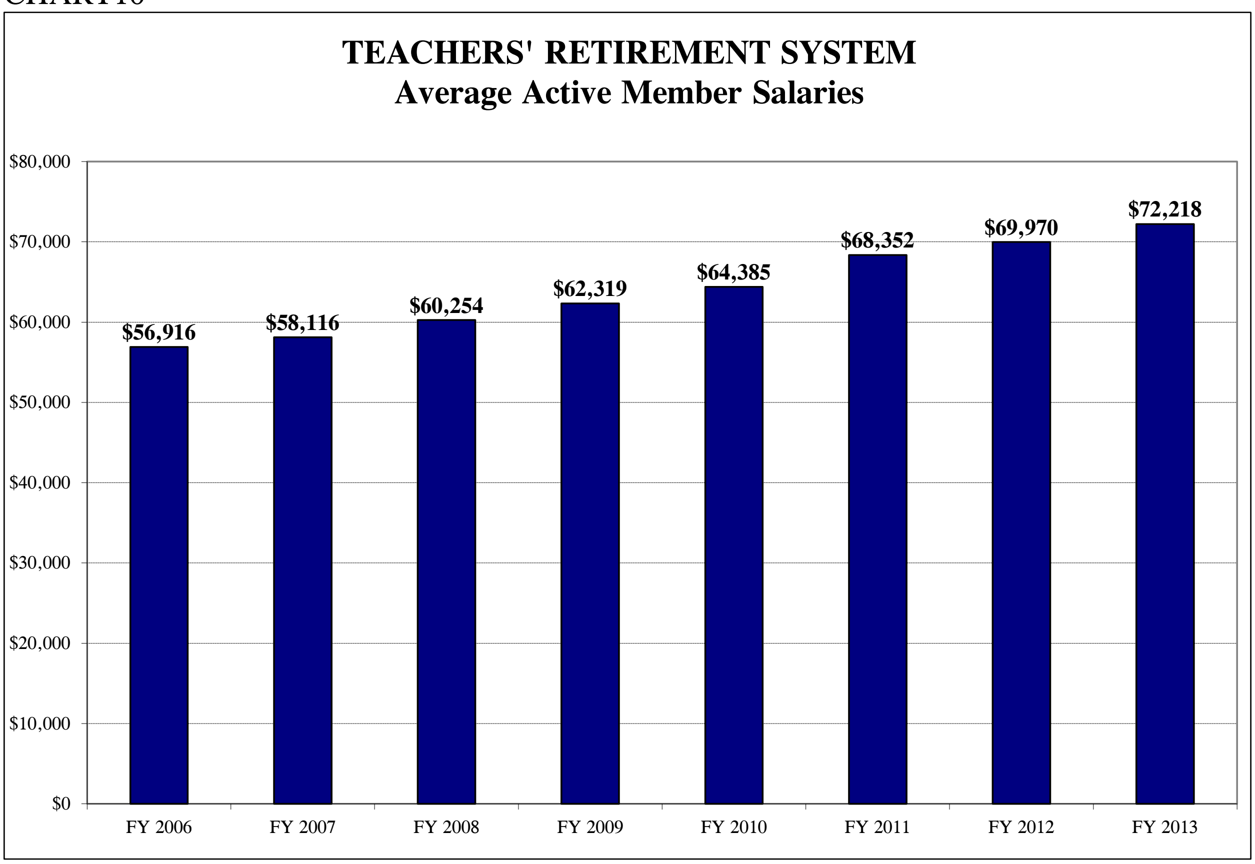


CHART 11

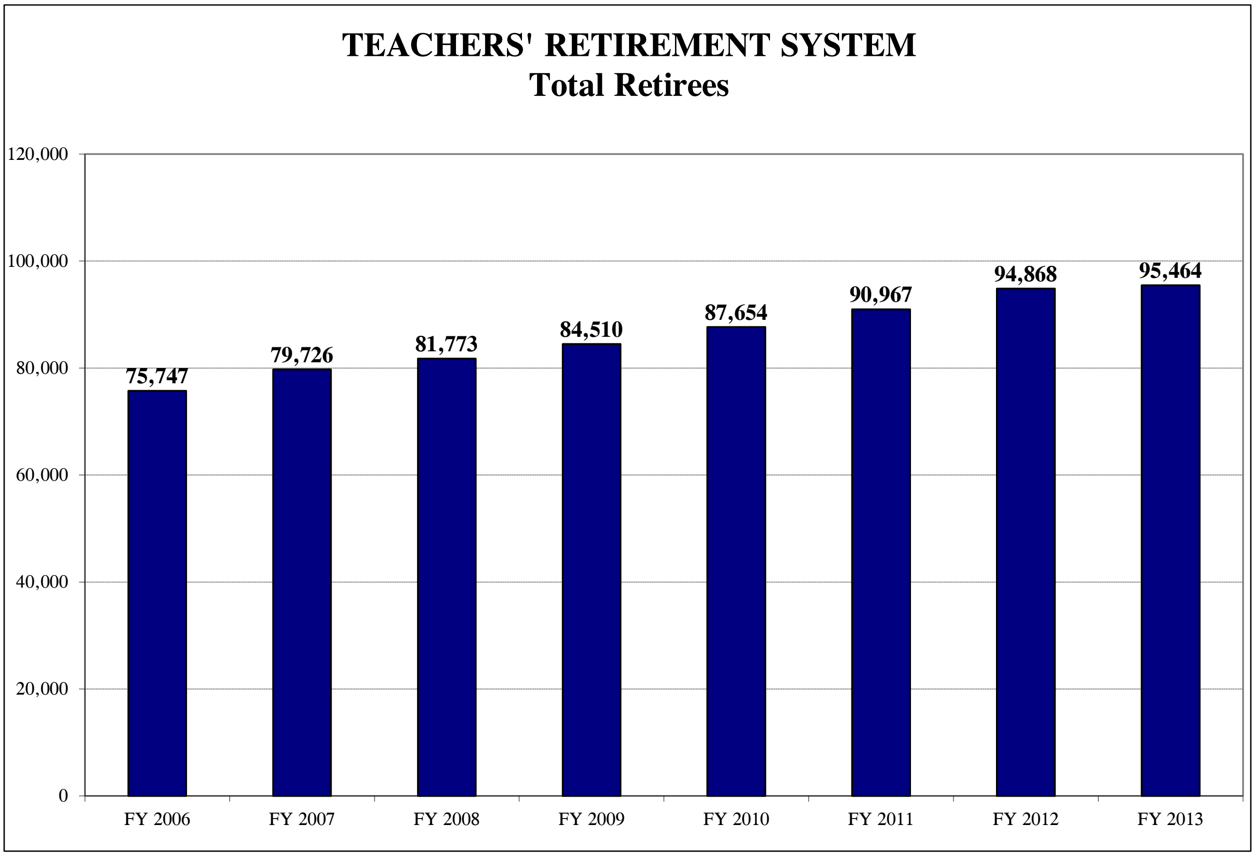
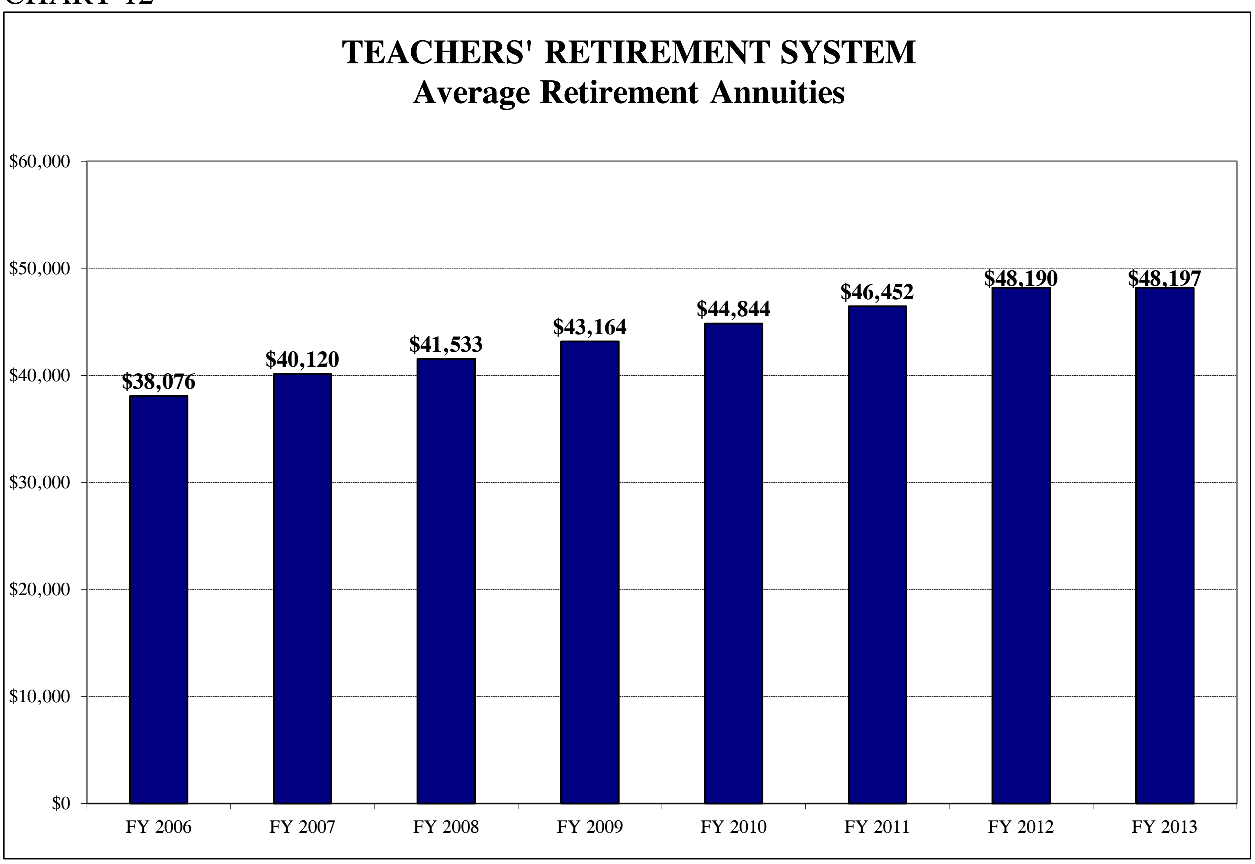


CHART 12



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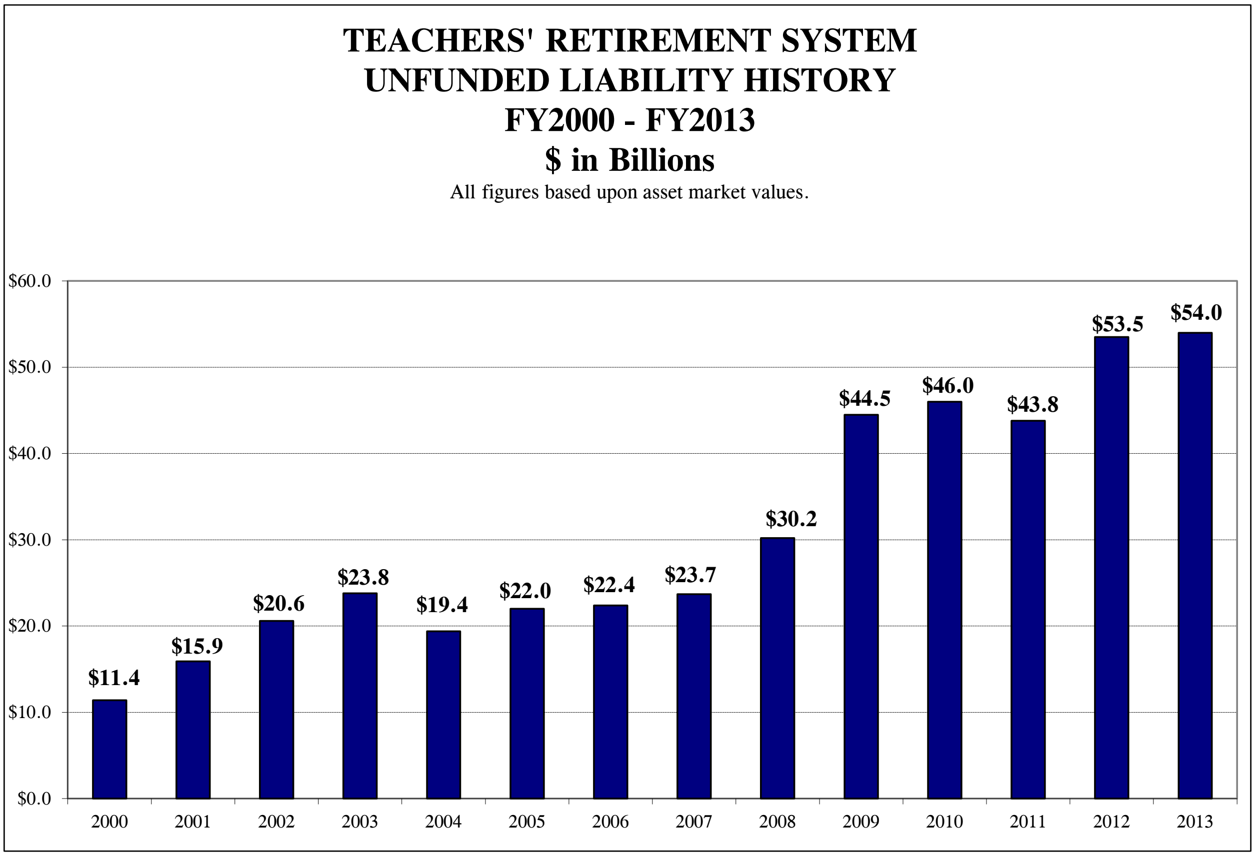


CHART 14

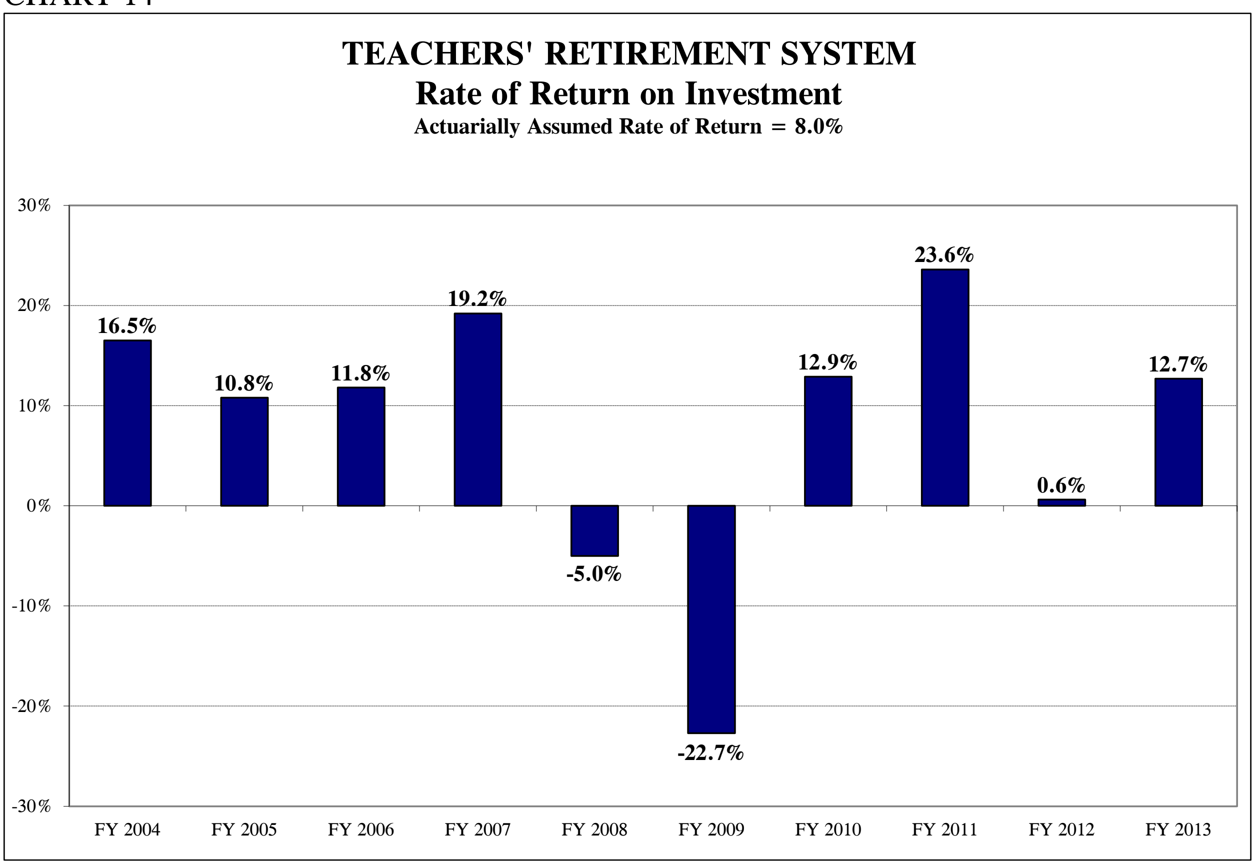


CHART 15

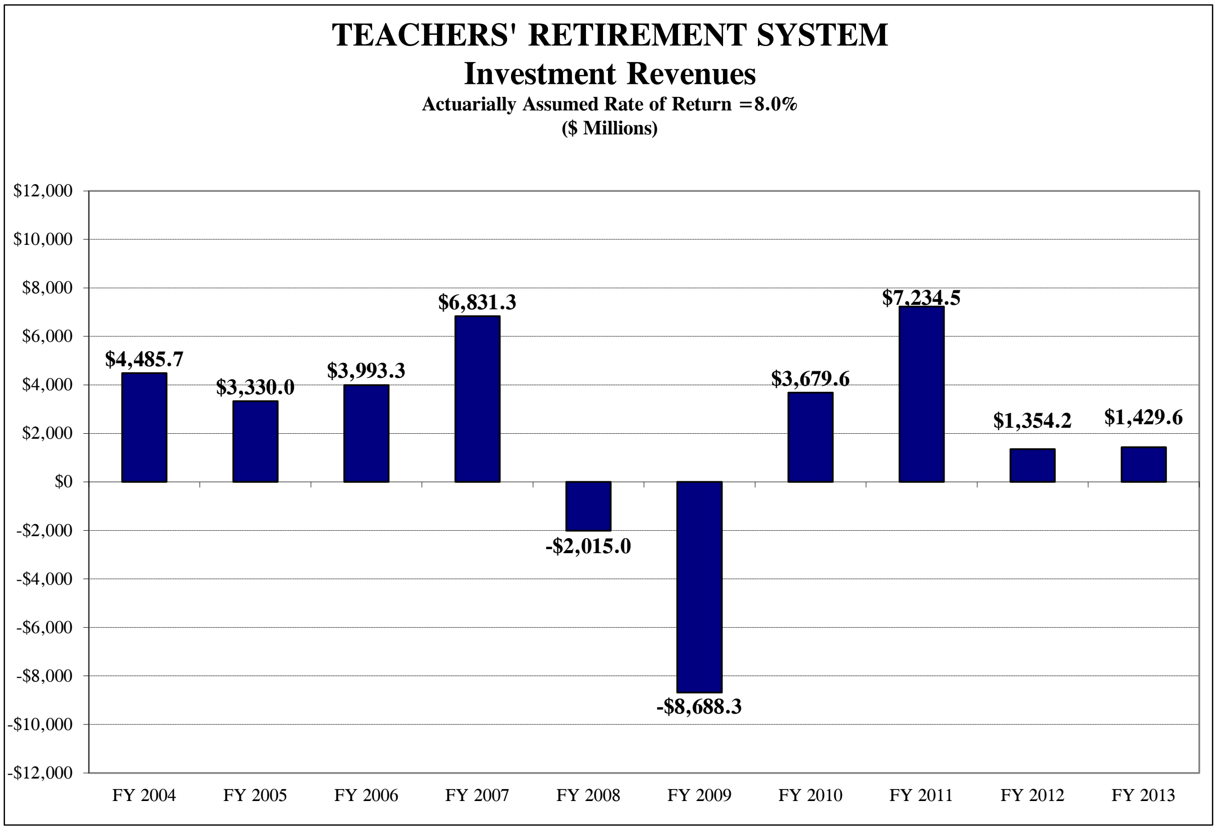


CHART 16

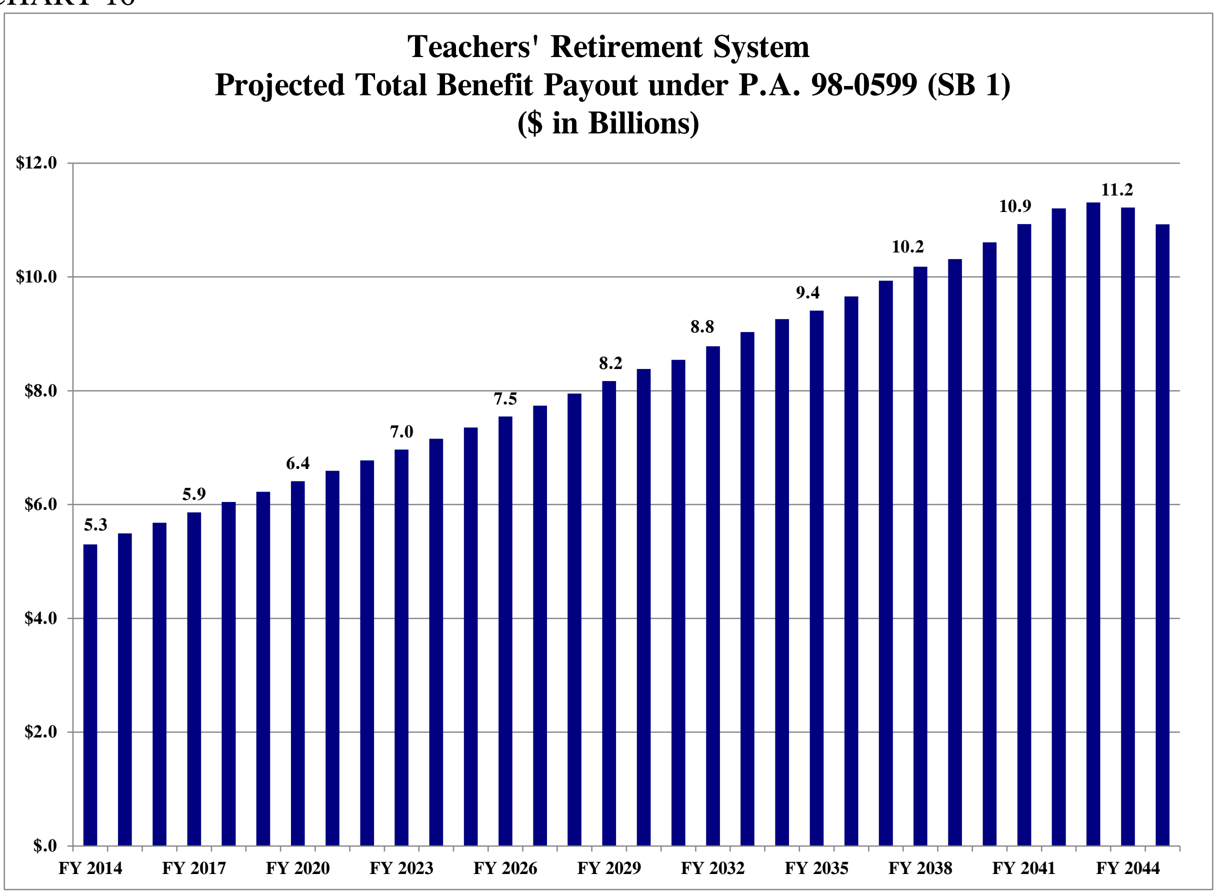


TABLE 7

TEACHERS' RETIREMENT SYSTEM
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

YEAR ENDED	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N.C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ACTUARIAL ASSUMPTIONS	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABIILITY FROM PREVIOUS YEAR
6/30/1996	$400,399,000	($577,281,000)	$965,961,000	$17,772,000	$0	$166,531,000	$973,382,000
6/30/1997	(59,062,000)	(830,936,000)	992,390,000	0	(2,944,771,000)	88,773,000	(2,753,606,000)
6/30/1998	(46,017,000)	(1,417,747,000)	776,189,000	1,000,300,000	0	71,152,000	383,877,000
6/30/1999	44,030,000	(389,014,000)	677,408,000	33,870,000	125,223,000	533,933,000	1,025,450,000
6/30/2000	(33,403,000)	(450,361,000)	723,606,000	0	0	197,345,000	437,187,000
6/30/2001	(10,310,000)	3,089,765,000	733,877,000	0	0	632,729,000	4,446,061,000
6/30/2002	4,934,000	2,696,199,000	1,074,422,000	0	694,736,000	360,047,000	4,830,338,000
6/30/2003	171,802,000	827,434,000	1,415,610,000	53,850,000	0	658,524,000	3,127,220,000
6/30/2004	217,255,000	(2,168,876,000)	(2,811,516,000)	0	0	357,250,000	(4,405,887,000)
6/30/2005	236,687,000	(682,294,000)	1,299,840,000	0	26,425,000	1,706,431,000	2,587,089,000
6/30/2006	68,398,000	(1,159,525,000)	1,913,368,000	0	0	(400,028,000)	422,213,000
6/30/2007	149,682,000	(3,785,653,000)	1,739,187,000	0	2,410,756,000	813,081,000	1,327,053,000
6/30/2008	(153,987,000)	5,514,988,000	1,529,701,000	0	0	(428,135,000)	6,462,567,000
6/30/2009	(29,162,000)	2,373,683,000	1,782,855,000	0	0	672,134,000	4,799,510,000
6/30/2010	(210,220,000)	2,929,300,000	1,572,250,000	0	0	561,570,000	4,852,900,000
6/30/2011	(545,612,000)	1,718,405,000	1,913,647,000	0	0	589,446,000	3,675,886,000
6/30/2012	(1,211,160,000)	1,806,150,000	2,710,710,000	0	4,624,970,000	618,880,000	8,549,550,000
6/30/2013	(412,776,000)	1,557,219,000	2,125,732,000	0	0	382,074,000	3,652,249,000
TOTALS	($1,418,522,000)	$11,051,456,000	$21,135,237,000	$1,105,792,000	$4,937,339,000	$7,581,737,000	$44,393,039,000

NOTE: All of the calculations in this table are based upon asset actuarial values,i.e., WITH Asset Smoothing.

TABLE 8

TEACHERS' RETIREMENT SYSTEM
Changes in Net Assets
($ in millions)

Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
State of Illinois	2,702.3	2,406.4	2,170.9	2,080.7	1,451.6	1,041.1	737.7	534.3
Pension Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	921.4	917.7	909.6	899.4	876.2	865.4	826.2	799.0
School Districts	86.9	92.5	89.1	97.1	99.4	88.3	83.4	99.3
Federal	68.9	62.3	66	74.4	52.9	42.4	32.5	24.3
Net Investment Income	1,429.6	224.1	7,234.5	3,679.6	-8,688.3	-2,015.0	6,831.3	3,993.3
Total Asset Additions (A)	5,209.1	3,703.0	10,470.1	6,831.2	-6,208.2	22.2	8,511.1	5,450.2
Deductions from Assets								
Benefits	4,881.4	4,553.8	4,228.2	3,927.8	3,653.7	3,424.0	3,111.8	2,877.2
Refunds	97.7	84.6	76.6	60.3	53.7	60.3	59.7	58.0
Subsidy Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	22.6	19.0	17.8	17.0	17.4	16.6	15.2	15.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	5,001.7	4,657.4	4,322.6	4,005.1	3,724.8	3,500.9	3,186.7	2,950.5
Change in Net Assets (A-B=C)	207.4	-954.4	6,147.5	2,826.1	-9,933.0	-3,478.7	5,324.4	2,499.7

TABLE 9

TEACHERS' RETIREMENT SYSTEM Historical Investment Revenues ($ in Millions)			
Fiscal Year	Market Value of Assets at Year End	Net Investment Revenue	Rate of Return Earned
2004	31,544.7	4,485.7	16.5%
2005	34,085.2	3,330.0	10.8%
2006	36,584.9	3,993.3	11.8%
2007	41,909.3	6,831.3	19.2%
2008	38,430.7	-2,015.0	-5.0%
2009	28,961.4	-8,688.3	-22.7%
2010	31,323.8	3,679.6	12.9%
2011	37,471.3	7,234.5	23.6%
2012	36,516.8	1,354.2	0.6%
2013	39,858.8	1,429.6	12.7%

2004 - 2013 Asset Values are Market Values.

TABLE 10

TEACHERS' RETIREMENT SYSTEM Reduction in State Contributions Attributable to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in Millions)			
Fiscal Year	State Contribution Based on Pre-SB 1 Baseline	State Contribution based on SB 1 (P.A. 98-0599)	Annual Savings
2014	$ 3,440.0	$ 3,440.0	$ -
2015	3,410.0	3,410.0	-
2016	3,490.0	2,630.0	860.0
2017	3,570.0	2,650.0	920.0
2018	3,730.0	2,750.0	980.0
2019	3,860.0	2,990.0	870.0
2020	4,010.0	3,400.0	610.0
2021	4,170.0	3,500.0	670.0
2022	4,330.0	3,600.0	730.0
2023	4,510.0	3,710.0	800.0
2024	4,680.0	3,820.0	860.0
2025	4,860.0	3,940.0	920.0
2026	5,060.0	4,050.0	1,010.0
2027	5,260.0	4,180.0	1,080.0
2028	5,460.0	4,300.0	1,160.0
2029	5,670.0	4,430.0	1,240.0
2030	5,860.0	4,570.0	1,290.0
2031	6,050.0	4,710.0	1,340.0
2032	6,250.0	4,840.0	1,410.0
2033	6,450.0	4,970.0	1,480.0
2034	7,040.0	5,150.0	1,890.0
2035	7,210.0	5,280.0	1,930.0
2036	7,370.0	5,410.0	1,960.0
2037	7,520.0	5,530.0	1,990.0
2038	7,670.0	5,660.0	2,010.0
2039	7,810.0	0	7,810.0
2040	7,940.0	0	7,940.0
2041	8,060.0	0	8,060.0
2042	8,190.0	0	8,190.0
2043	8,310.0	0	8,310.0
2044	8,440.0	0	8,440.0
2045	8,580.0	0	8,580.0
Totals	188,260.0	102,920.0	**85,340.0**

TABLE 11

TEACHERS RETIREMENT SYSTEM Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by CoGFA Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	1,582.3	15.3%	51.2	0.5%	1,633.5	15.8%
2015	1,111.3	10.4%	86.4	0.8%	1,197.7	11.2%
2016	1,091.2	9.9%	121.4	1.1%	1,212.6	11.0%
2017	1,073.1	9.5%	156.2	1.4%	1,229.3	10.9%
2018	1,055.5	9.1%	191.3	1.6%	1,246.8	10.7%
2019	1,036.8	8.6%	227.0	1.9%	1,263.8	10.5%
2020	1,017.9	8.2%	264.2	2.1%	1,282.1	10.3%
2021	998.2	7.8%	303.1	2.4%	1,301.3	10.1%
2022	976.5	7.3%	343.9	2.6%	1,320.4	9.9%
2023	953.6	6.9%	386.7	2.8%	1,340.3	9.7%
2024	928.9	6.5%	432.1	3.0%	1,361.0	9.6%
2025	900.9	6.1%	480.0	3.3%	1,380.9	9.4%
2026	870.0	5.7%	530.7	3.5%	1,400.7	9.2%
2027	841.3	5.4%	582.8	3.7%	1,424.1	9.1%
2028	807.4	5.0%	638.3	3.9%	1,445.7	8.9%
2029	769.3	4.6%	696.7	4.1%	1,466.0	8.7%
2030	728.5	4.2%	756.9	4.4%	1,485.4	8.6%
2031	690.5	3.9%	816.1	4.6%	1,506.6	8.4%
2032	648.8	3.5%	876.1	4.7%	1,524.9	8.3%
2033	603.4	3.2%	936.7	4.9%	1,540.1	8.1%
2034	555.8	2.8%	997.5	5.1%	1,553.3	7.9%
2035	515.7	2.6%	1,054.3	5.2%	1,570.0	7.8%
2036	472.5	2.3%	1,111.4	5.4%	1,583.9	7.7%
2037	427.3	2.0%	1,168.6	5.5%	1,595.9	7.5%
2038	380.9	1.8%	1,225.6	5.6%	1,606.5	7.4%
2039	344.0	1.5%	1,278.4	5.7%	1,622.4	7.3%
2040	303.9	1.3%	1,331.5	5.8%	1,635.4	7.2%
2041	263.3	1.1%	1,384.3	5.9%	1,647.6	7.0%
2042	223.5	0.9%	1,436.2	6.0%	1,659.7	6.9%
2043	195.5	0.8%	1,481.6	6.1%	1,677.1	6.9%
2044	177.2	0.7%	1,519.5	6.1%	1,696.7	6.8%
2045	167.1	0.7%	1,548.9	6.1%	1,716.0	6.7%

V. The State Employees' Retirement System

- **Plan Summaries**
- **FY 2013 Change in Unfunded Liabilities**
- **Funded Ratio History**
- **Active Member Headcount**
- **Average Active Member Salaries**
- **Retiree Headcount**
- **Average Retirement Annuities**
- **Unfunded History**
- **Rate of Return on Investments**
- **Annual Investment Revenue**
- **Total Payout**
- **Annual Changes in Unfunded**
- **Changes in Net Assets**
- **Investment Return History**
- **Reduction in State Contributions**
- **Tier 1 & Tier 2 Normal Cost Projections**

State Employees' Retirement System
Regular Formula - Plan Summary

Retirement Age

- "Rule of 85" – retirement when member's age plus years of service equals 85.
- Age 60 with 8 years of service credit.
- Age 55 with at least 25 years of service (reduced one-half of one percent for each month the member is under age 60).

Retirement Formula

- 1.67% of final average salary for each year of service for members covered by Social Security.
- 2.2% of final average salary for each year of service credit for members not covered by Social Security.

Maximum Annuity

- 75% of final average salary.

Salary Used to Calculate Pension

- Highest 48 consecutive months of service within the last 120 months of service.

Annual COLA

- 3% compounded

Employee Contributions

- 4.0% of salary for members covered by Social Security.
- 8.0% of salary for members not covered by Social Security.

The benefits shown do not reflect P.A. 98-0599 (SB 1), or P.A. 96-0899 (2 Tier Act of 2011). Please refer to Section I earlier in this report for details.

State Employees' Retirement System
Alternative Formula - Plan Summary

Retirement Age

- Age 55 with at least 20 years of service.
- Age 50 with at least 25 years of service.

Retirement Formula

- 2.5% of final average salary for each year of service for members covered by Social Security.
- 3.0% of final average salary for each year of service credit for members not covered by Social Security.

Maximum Annuity

- 80% of final average salary.

Salary Used to Calculate Pension

- Rate of pay on the last day of employment, or the average of the last 48 months of compensation, whichever is greater.
- Salary capped at Tier II cap level. This salary cap rises annually at an increase that is equal to one-half of the annual rate of inflation in the previous year.

Annual COLA

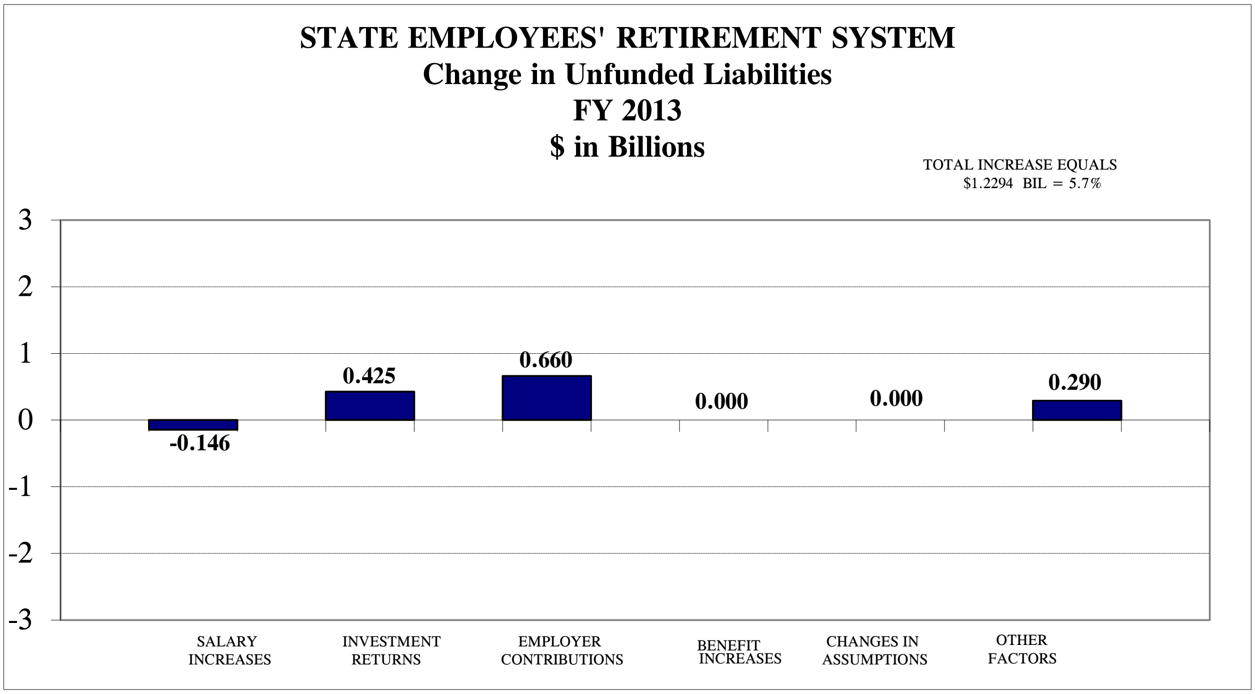
- 3% compounded.

Employee Contributions

- 8.5% of salary for members covered by Social Security. Applies to Security Employees of the Department of Corrections and Department of Human Services, Air Pilots and State Highway Maintenance Workers.
- 12.5% of salary for members not covered by Social Security. Applies to State Police, Special Agents, Firefighters, Secretary of State Investigators, Conservation Police Officers, Department of Revenue Investigators, Central Management Services Police Officers, Mental Health Police Officers, Dangerous Drug Investigators, Attorney General Investigators, Controlled Substance Inspectors, States Attorneys Appellate Prosecutors Investigators, Commerce Commission Police Officers and Arson Investigators.

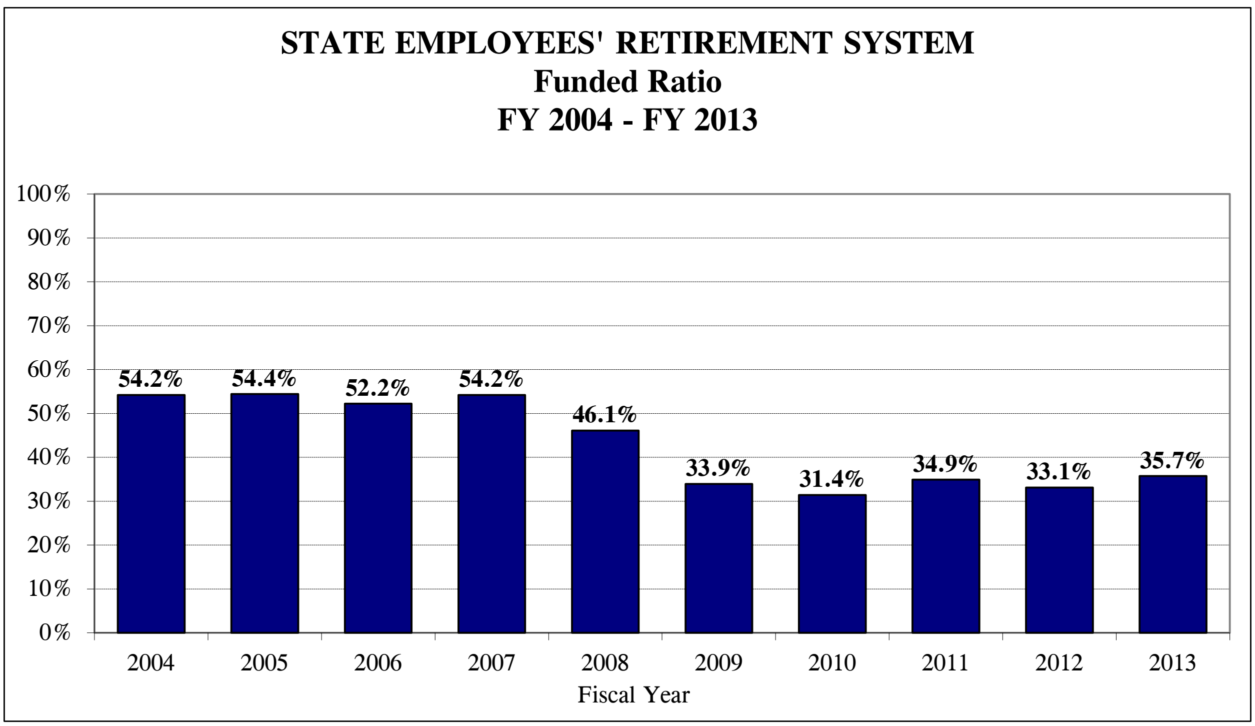
The benefits shown do not reflect P.A. 98-0599. Please refer to Section I earlier in this report for details.

CHART 17



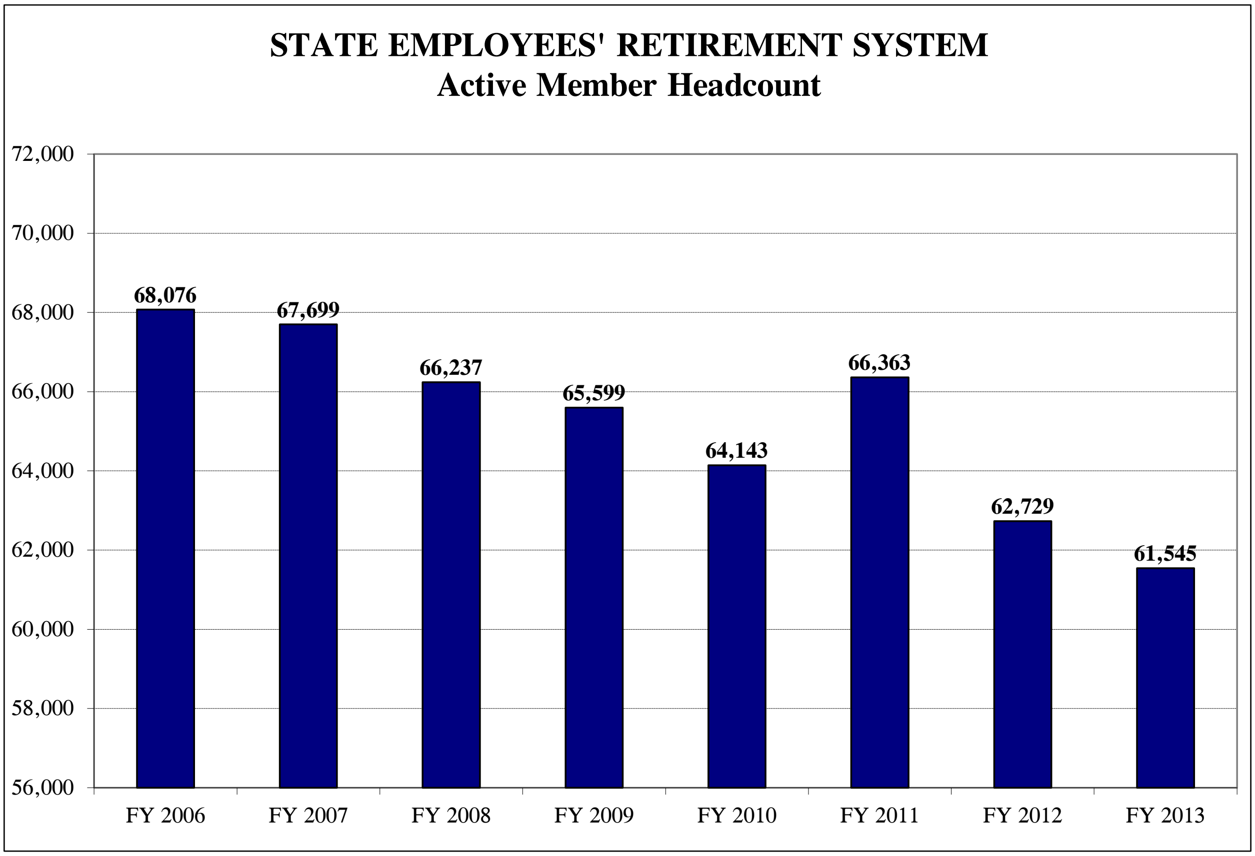
NOTE: The above chart is based upon asset actuarial values.

CHART 18



NOTE: The above FY 2013 figure is based upon asset market values without asset smoothing.

CHART 19



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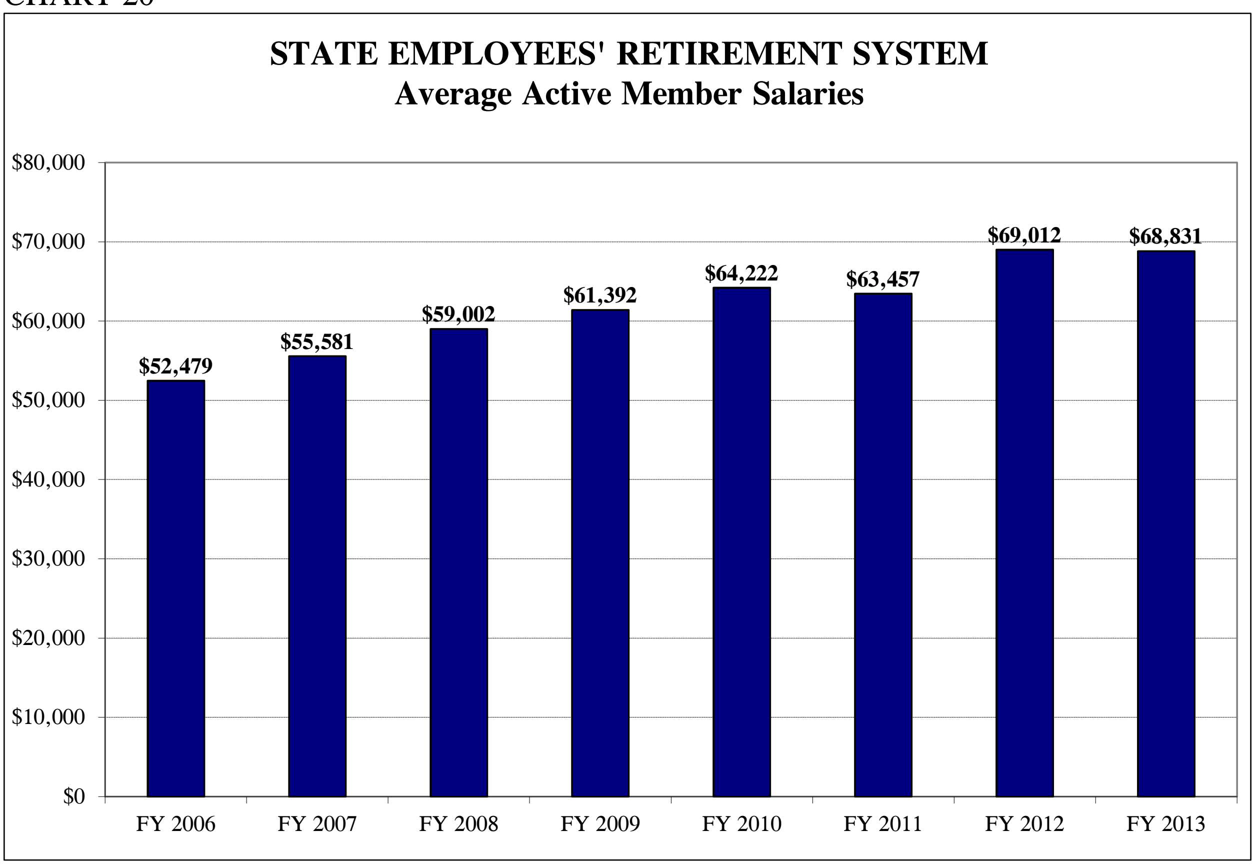

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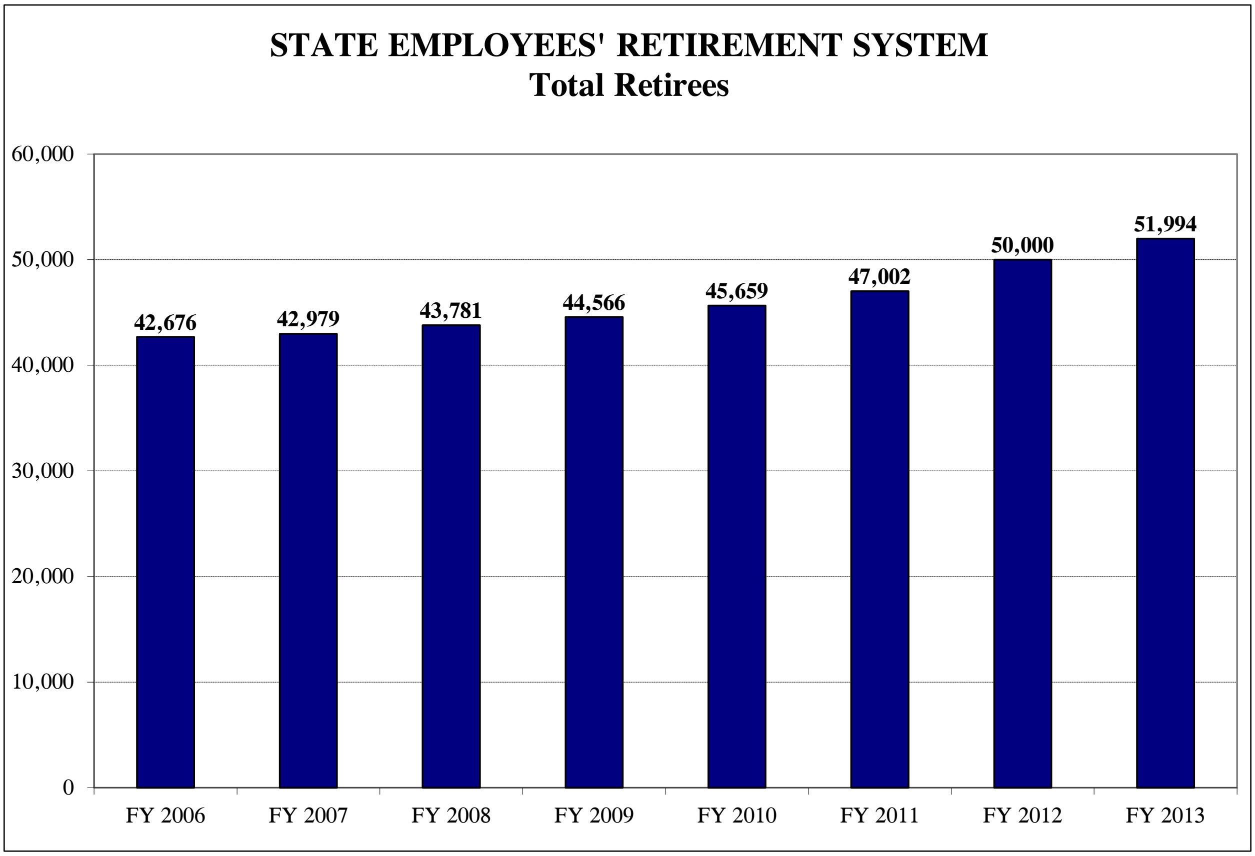

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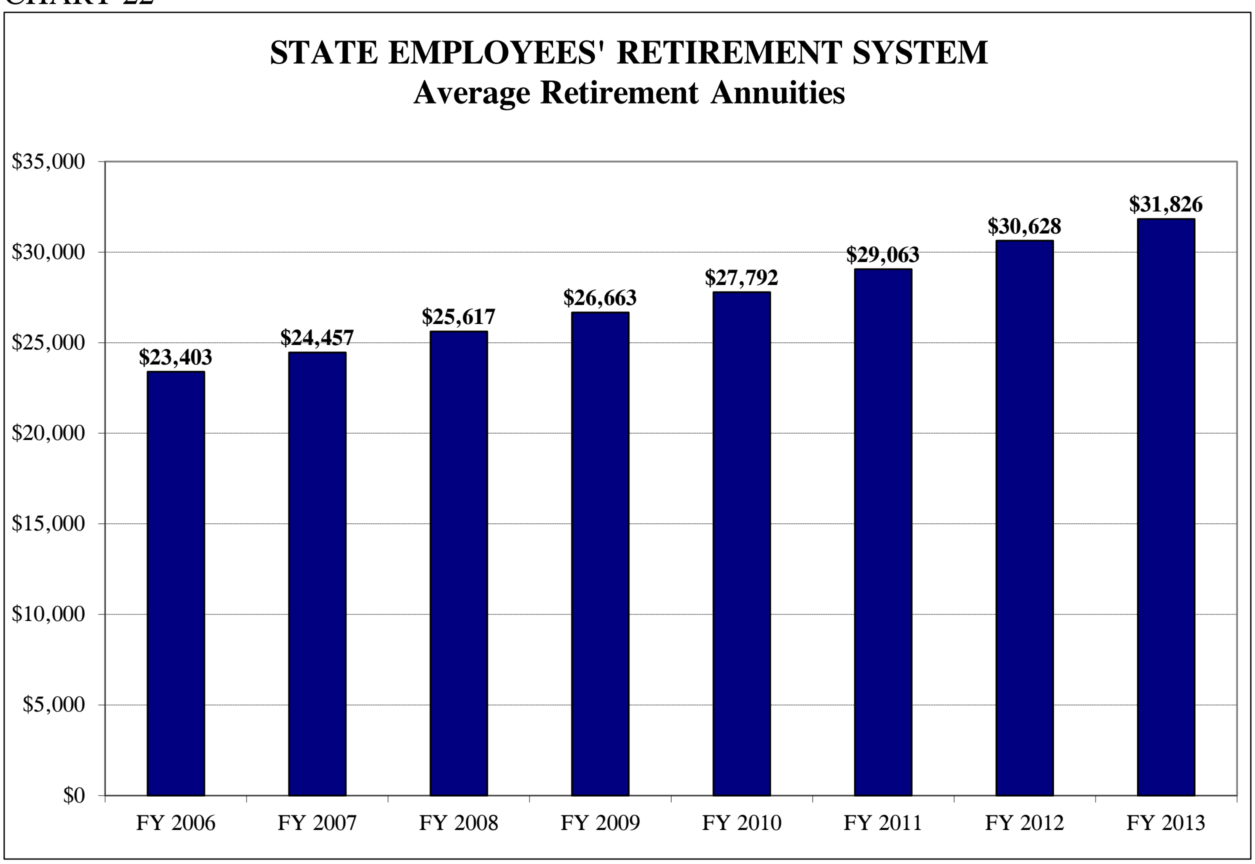

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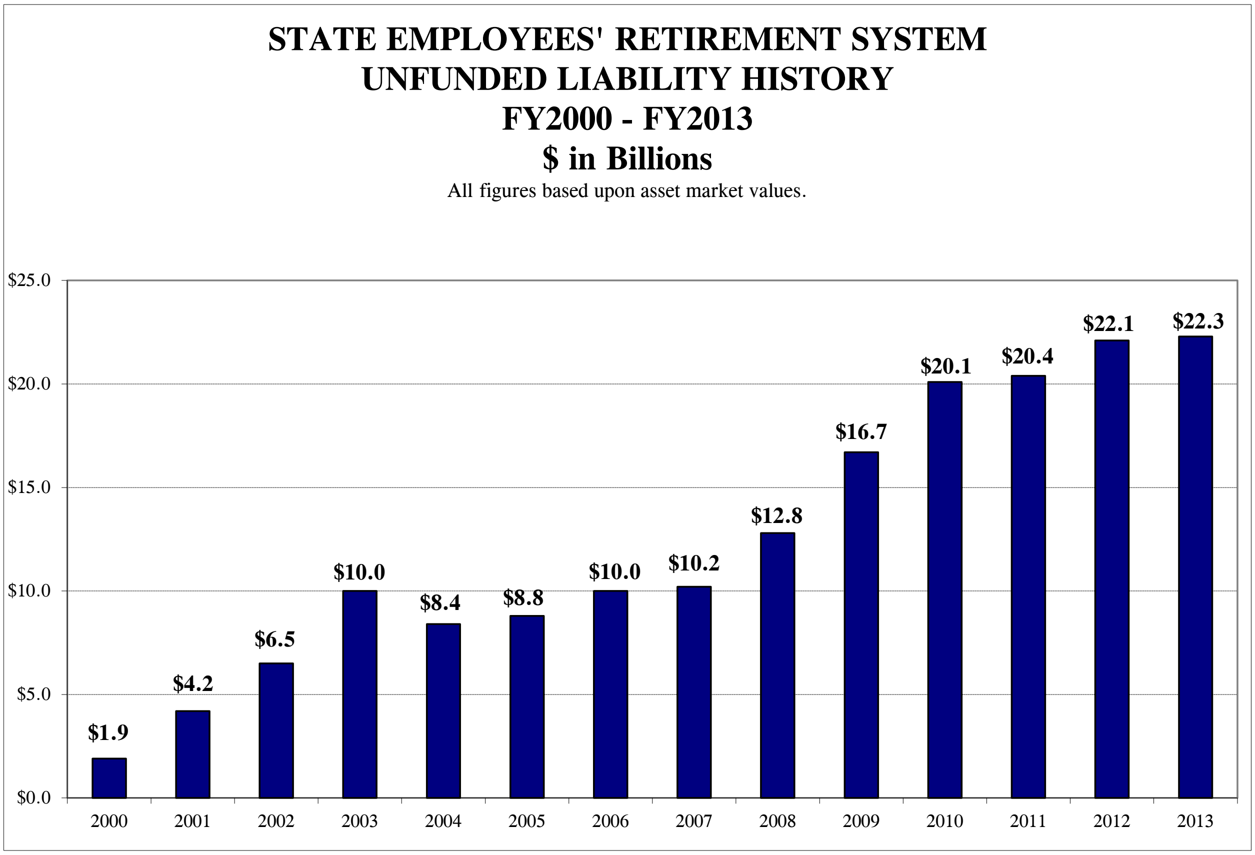

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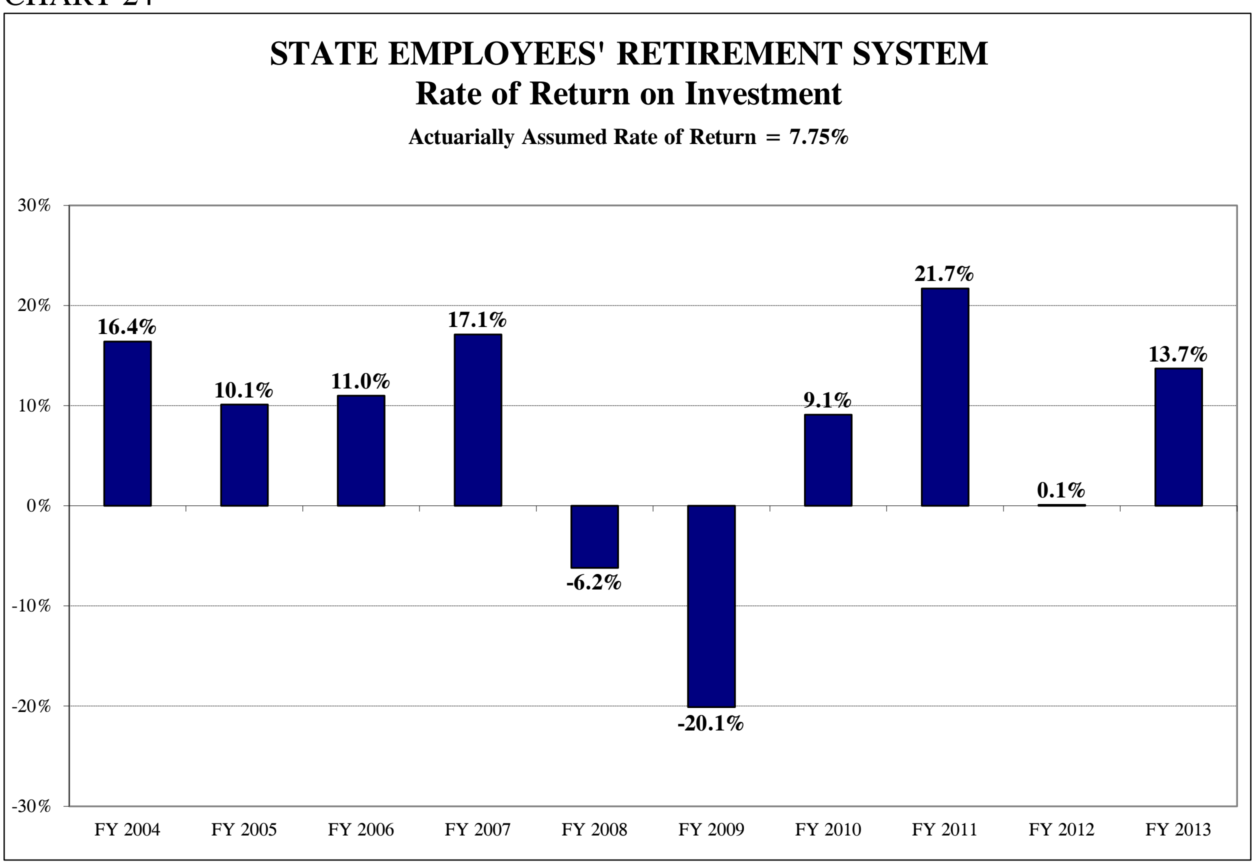

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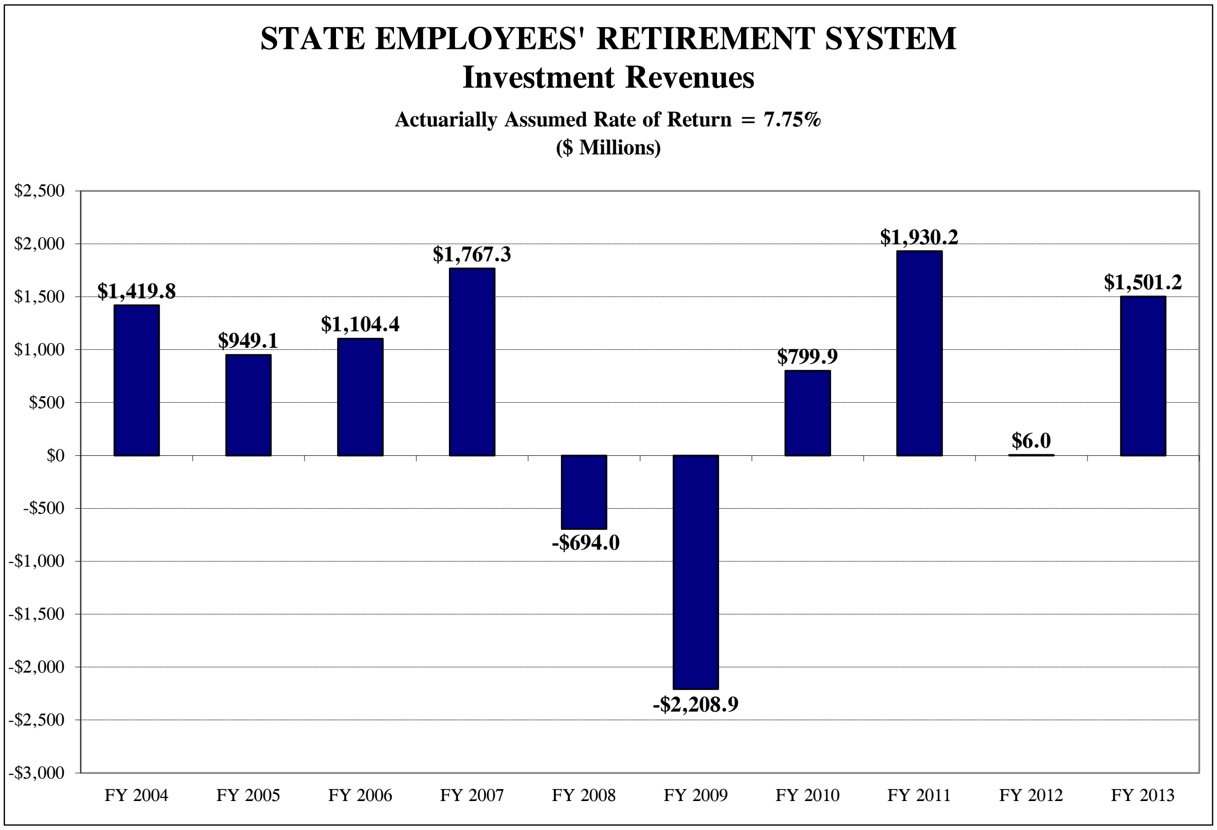


CHART 26

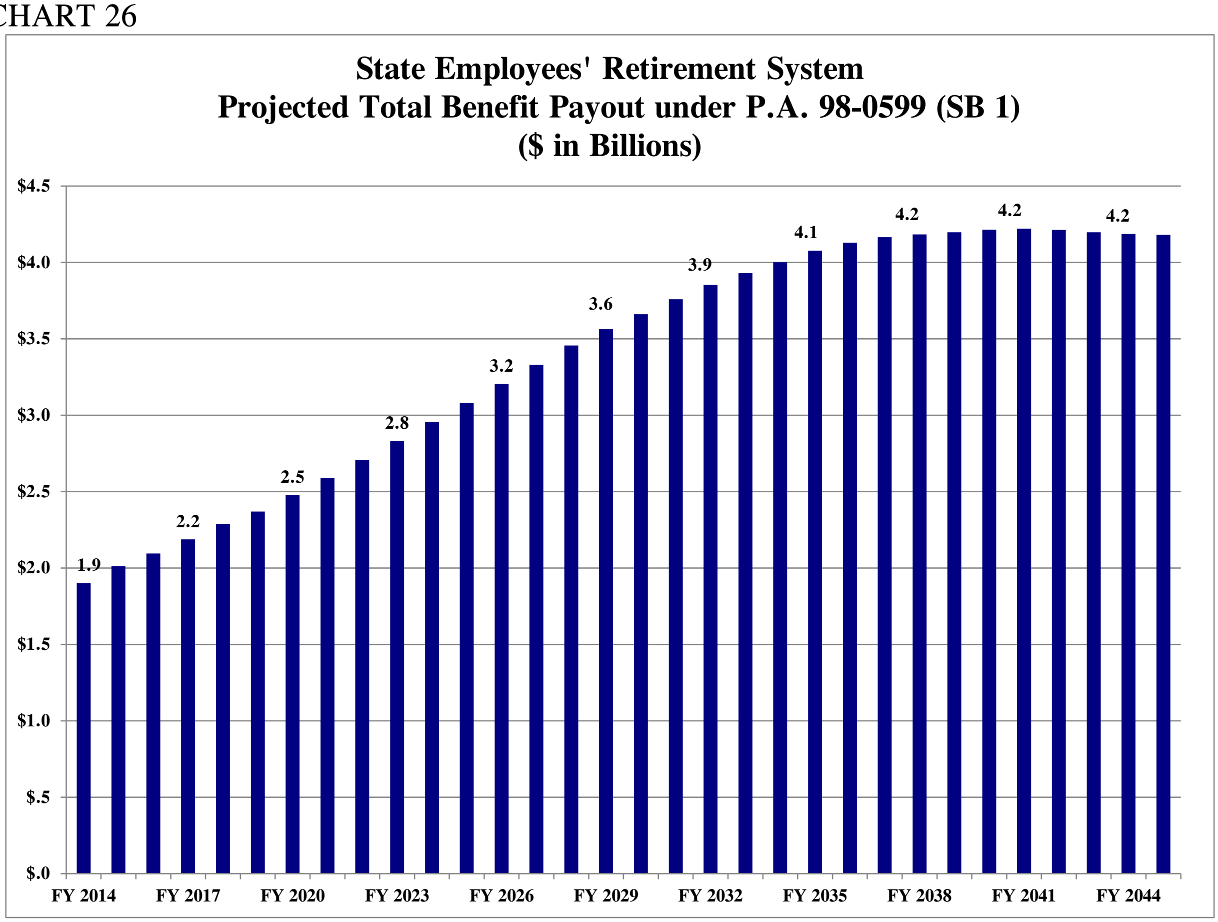


TABLE 12

STATE EMPLOYEES' RETIREMENT SYSTEM
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

YEAR ENDED	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N.C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ACTUARIAL ASSUMPTIONS	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABIILITY FROM PREVIOUS YEAR
6/30/1996	($63,804,332)	($251,369,719)	$196,620,212	$0	$0	$47,104,123	($71,449,716)
6/30/1997	(65,121,542)	(541,583,072)	121,668,957	0	(379,894,379)	152,898,511	(712,031,525)
6/30/1998	(62,013,427)	(568,807,725)	9,431,057	1,249,883,128	0	148,729,225	777,222,258
6/30/1999	(12,536,220)	(307,064,512)	21,020,544	0	0	32,949,396	(265,630,792)
6/30/2000	14,642,937	(252,699,421)	(21,811,201)	0	0	250,182,926	(9,684,759)
6/30/2001	(8,000,000)	1,368,815,911	(29,398,605)	652,110,224	0	309,964,003	2,293,491,533
6/30/2002	52,000,000	1,247,268,792	186,860,538	171,100,000	168,144,000	496,199,643	2,321,572,973
6/30/2003	(28,282,435)	629,483,966	404,526,925	2,371,173,094	0	97,815,307	3,474,716,857
6/30/2004	(22,316,647)	(679,743,495)	(944,135,304)	0	0	6,804,783	(1,639,390,663)
6/30/2005	(166,479,933)	(123,132,472)	503,532,346	0	0	144,142,000	358,061,941
6/30/2006	33,070,000	(250,686,000)	772,374,000	0	710,976,000	(101,544,000)	1,164,190,000
6/30/2007	98,239,312	(878,435,107)	816,648,269	0	0	190,866,392	227,318,866
6/30/2008	207,247,739	1,690,697,791	615,695,516	0	0	130,264,860	2,643,905,906
6/30/2009	(70,364,604)	608,553,603	662,751,770	0	0	251,538,179	1,452,478,948
6/30/2010	(84,030,000)	894,330,000	470,040,000	0	2,606,330,000	162,930,000	4,049,600,000
6/30/2011	(116,457,671)	483,803,315	749,926,844	0	554,815,304	215,159,241	1,887,247,033
6/30/2012	(57,658,148)	530,809,433	715,357,450	0	0	190,241,965	1,378,750,700
6/30/2013	(145,924,336)	425,364,445	660,382,617	0	0	289,600,870	1,229,423,596
TOTALS	($497,789,307)	$4,025,605,733	$5,911,491,935	$4,444,266,446	$3,660,370,925	$3,015,847,424	$20,559,793,156

NOTE: All of the calculations in this table are based upon asset actuarial values,i.e., WITH Asset Smoothing.

TABLE 13

STATE EMPLOYEES' RETIREMENT SYSTEM
Changes in Net Assets
($ in Millions)

Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
State of Illinois	1,531.9	1,391.4	1,127.9	1,095.5	774.9	587.7	358.8	210.5
Pension Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	248.2	259.1	254.2	246.2	242.2	250.0	224.7	214.1
Net Investment Income	1,501.2	6.0	1,930.2	799.9	-2,208.9	-680.8	1,779.9	1,104.4
Total Asset Additions (A)	3,281.3	1,656.5	3,312.3	2,141.6	-1,191.8	156.9	2,363.4	1,529.0
Deductions from Assets								
Benefits	1,799.9	1,627.4	1,492.1	1,390.6	1,300.2	1,214.1	1,161.5	1,110.6
Refunds	24.3	23.5	37.6	15.3	14.8	16.8	14.1	13.4
Subsidy Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	17.5	15.7	13.7	11.7	10.7	9.5	8.8	8.1
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	1,841.7	1,666.6	1,543.4	1,417.6	1,325.7	1,240.4	1,184.4	1,132.1
Change in Net Assets (A-B=C)	1,439.6	-10.1	1,768.9	724.0	-2,517.5	-1,083.5	1,179.0	396.9

TABLE 14

STATE EMPLOYEES' RETIREMENT SYSTEM Historical Investment Revenues ($ in Millions)			
Fiscal Year	Market Value of Assets at Year End	Net Investment Revenue	Rate of Return Earned
2004	9,840.0	1,419.8	16.4%
2005	10,271.3	949.1	10.1%
2006	10,654.9	1,104.4	11.0%
2007	11,810.1	1,767.3	17.1%
2008	10,654.0	-694.2	-6.2%
2009	8,565.7	-2,208.9	-20.1%
2010	9,201.8	799.9	9.1%
2011	10,970.8	1,930.2	21.7%
2012	10,960.7	6.0	0.1%
2013	12,400.3	1,501.2	13.7%
2004 - 2013 Asset Values are Market Values.			

NOTE: SERS investment management is provided by the Illinois State Board of Investment.

TABLE 15

STATE EMPLOYEES' RETIREMENT SYSTEM Reduction in State Contributions Attributable to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in Millions)			
Fiscal Year	State Contribution Based on Pre-SB 1 Baseline	State Contribution based on SB 1 (P.A. 98-0599)	Annual Savings
2014	$ 1,663.0	$ 1,663.0	$ -
2015	1,748.0	1,748.0	-
2016	1,801.0	1,697.0	104.0
2017	1,849.0	1,737.0	112.0
2018	1,913.0	1,765.0	148.0
2019	1,968.0	1,874.0	94.0
2020	2,028.0	2,041.0	(13.0)
2021	2,091.0	2,077.0	14.0
2022	2,156.0	2,115.0	41.0
2023	2,221.0	2,152.0	69.0
2024	2,286.0	2,189.0	97.0
2025	2,350.0	2,228.0	122.0
2026	2,420.0	2,269.0	151.0
2027	2,494.0	2,311.0	183.0
2028	2,564.0	2,354.0	210.0
2029	2,640.0	2,401.0	239.0
2030	2,711.0	2,450.0	261.0
2031	2,786.0	2,500.0	286.0
2032	2,867.0	2,553.0	314.0
2033	2,954.0	2,609.0	345.0
2034	3,266.0	2,685.0	581.0
2035	3,346.0	2,738.0	608.0
2036	3,431.0	2,797.0	634.0
2037	3,517.0	2,859.0	658.0
2038	3,605.0	2,923.0	682.0
2039	3,694.0	1,015.0	2,679.0
2040	3,784.0	385.0	3,399.0
2041	3,874.0	391.0	3,483.0
2042	3,966.0	396.0	3,570.0
2043	4,059.0	403.0	3,656.0
2044	4,153.0	409.0	3,744.0
2045	4,247.0	415.0	3,832.0
Totals	90,452.0	60,149.0	**30,303.0**

TABLE 16

STATE EMPLOYEES' RETIREMENT SYSTEM Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by CoGFA Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	656.8	14.3%	17.3	0.7%	674.1	15.0%
2015	501.9	12.7%	35.4	1.2%	537.3	14.0%
2016	496.9	12.1%	51.6	1.6%	548.5	13.7%
2017	491.0	11.4%	68.3	2.0%	559.3	13.5%
2018	480.6	10.8%	87.2	2.4%	567.8	13.2%
2019	469.4	10.1%	107.0	2.9%	576.4	13.0%
2020	456.4	9.4%	128.2	3.3%	584.6	12.7%
2021	440.5	8.7%	151.2	3.7%	591.7	12.4%
2022	426.7	8.0%	174.3	4.2%	601.0	12.2%
2023	406.3	7.3%	200.3	4.6%	606.6	11.9%
2024	382.0	6.7%	224.8	5.0%	606.8	11.7%
2025	361.5	6.0%	252.4	5.4%	613.9	11.4%
2026	335.6	5.4%	278.2	5.8%	613.8	11.2%
2027	313.7	4.8%	306.9	6.2%	620.6	11.0%
2028	284.4	4.3%	334.7	6.5%	619.1	10.8%
2029	260.9	3.8%	365.7	6.8%	626.6	10.6%
2030	240.2	3.3%	391.5	7.2%	631.7	10.5%
2031	218.4	2.9%	423.3	7.5%	641.7	10.3%
2032	195.1	2.5%	451.3	7.7%	646.4	10.2%
2033	173.5	2.0%	485.1	8.0%	658.6	10.0%
2034	155.6	1.6%	512.1	8.2%	667.7	9.9%
2035	127.6	1.3%	549.4	8.5%	677.0	9.8%
2036	108.7	1.1%	577.0	8.6%	685.7	9.7%
2037	93.5	0.9%	609.6	8.7%	703.1	9.7%
2038	80.1	0.7%	634.2	8.9%	714.3	9.6%
2039	69.9	0.6%	663.5	9.0%	733.4	9.6%
2040	57.6	0.5%	693.6	9.0%	751.2	9.5%
2041	46.9	0.3%	722.1	9.1%	769.0	9.5%
2042	38.1	0.3%	748.8	9.2%	786.9	9.4%
2043	32.1	0.2%	772.9	9.2%	805.0	9.4%
2044	25.2	0.1%	796.7	9.2%	821.9	9.4%
2045	18.3	0.1%	820.8	9.2%	839.1	9.3%

VI. The State Universities Retirement System

State Universities Retirement System
Traditional Defined Benefit Formula Plan Summary

Retirement Age

- Age 62 with at least 5 years of service.
- Age 60 with at least 8 years of service.
- Any age with 30 years of service.

Retirement Formula

- 2.2% of final average salary for each year of service.

Maximum Annuity

- 80% of final average salary.

Salary Used to Calculate Pension

- For hourly employees and those who receive an annual salary in installments during 12 months of each academic year, the 48 consecutive calendar-month period ending with the last day of final termination of employment or the 4 consecutive academic years of service in which the employee's earnings were the highest, whichever is greater.
- For all other employees, the average annual earnings during the 4 consecutive academic years of service which his or her earnings were the highest.

Annual COLA

- 3% compounded

Employee Contributions

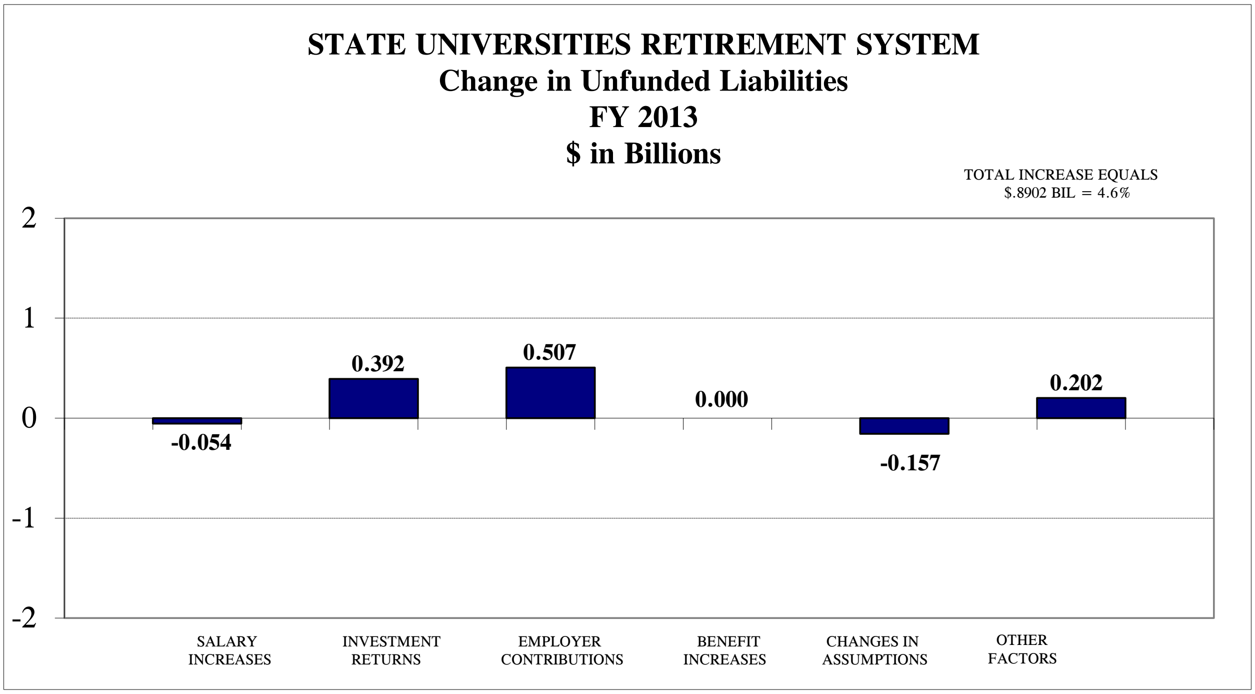
- 8.0% of salary.

Self-Managed Plan (SMP)

All SURS employees have the option to place 8.0% of their earnings into a SMP retirement account. The State of Illinois will subsequently add an additional 7.6% of employee earnings into their account. This SMP is a defined contribution plan where the employee decides how their account balance will be invested, selecting from a variety of mutual funds, stable value funds and variable annuities. The employee is solely responsible for the ultimate balance in the account, and the State of Illinois bears no responsibility for the outcome of the employee investment decisions.

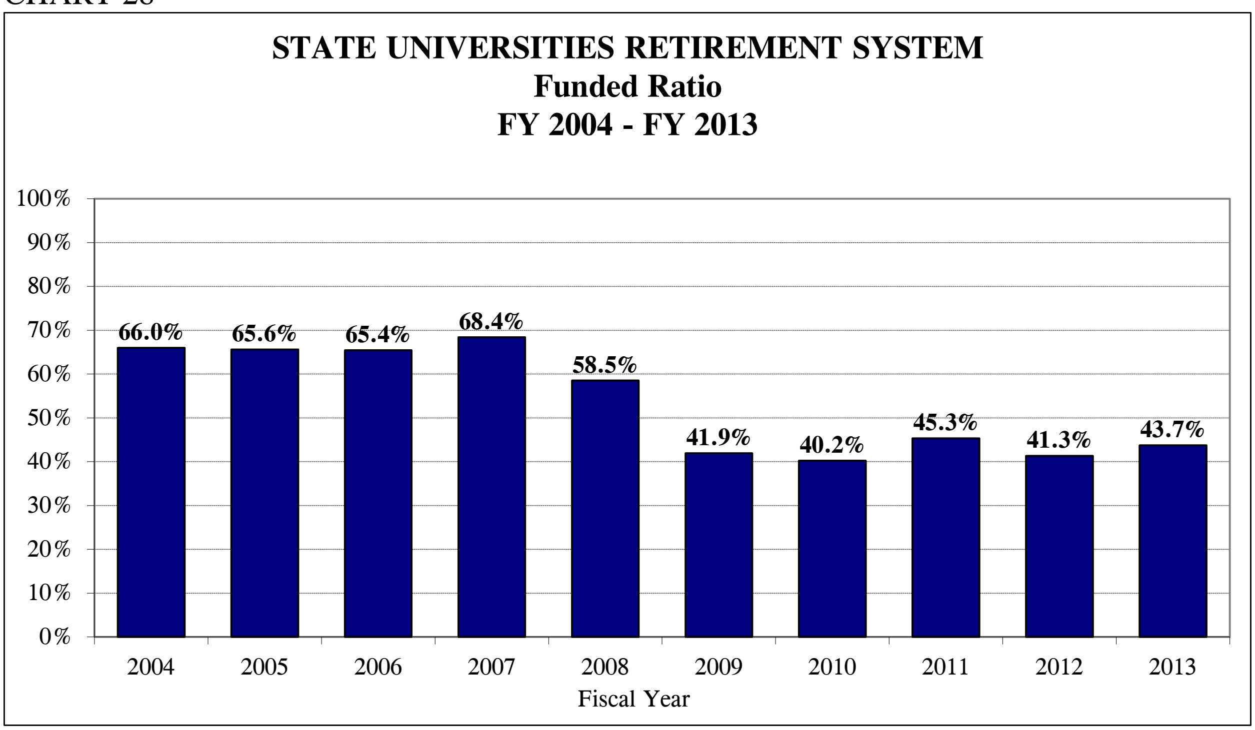
The benefits shown do not reflect P.A. 98-0599 (SB 1), or P.A. 96-0899 (2 Tier Act of 2011). Please refer to Section I earlier in this report for details.

CHART 27



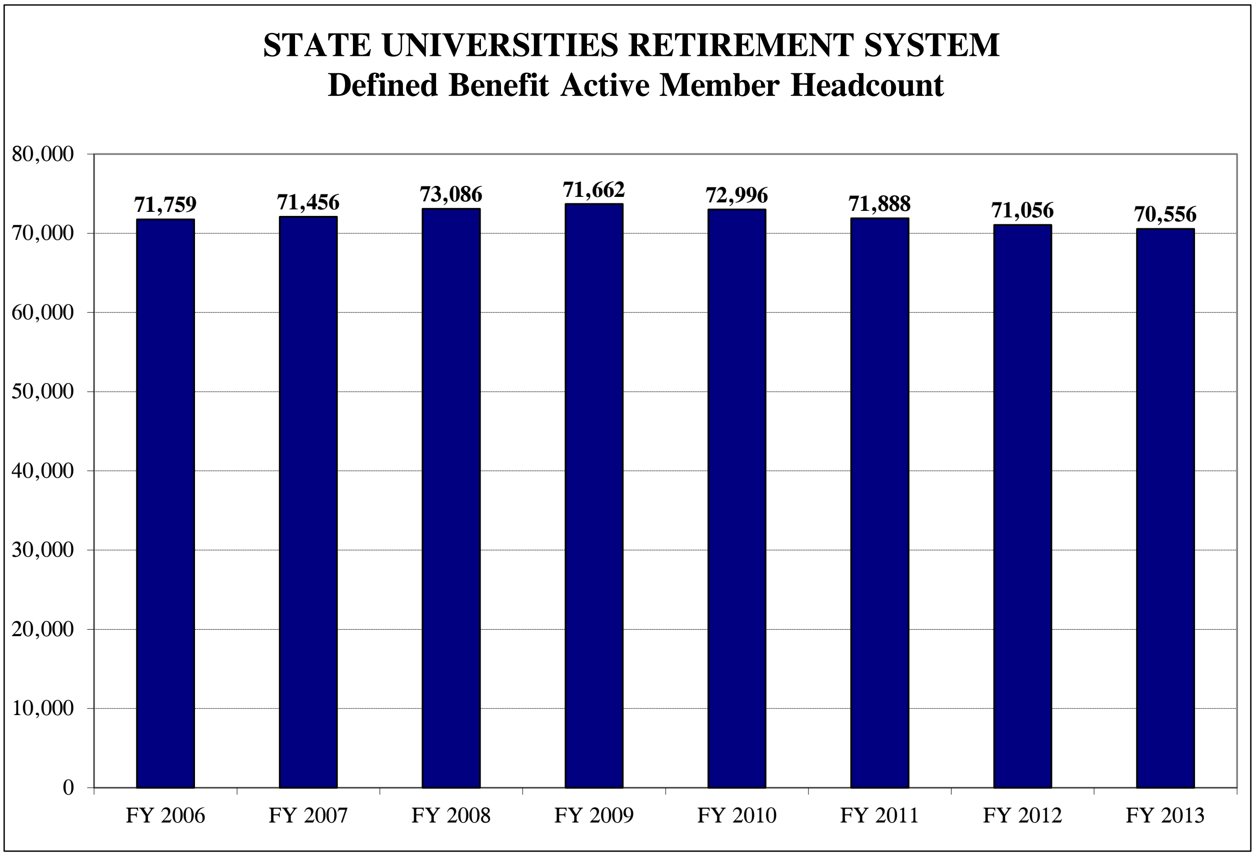
NOTE: The above chart is based upon asset actuarial values.

CHART 28



NOTE: The above FY 2013 figure is based upon asset market values without asset smoothing.

CHART 29



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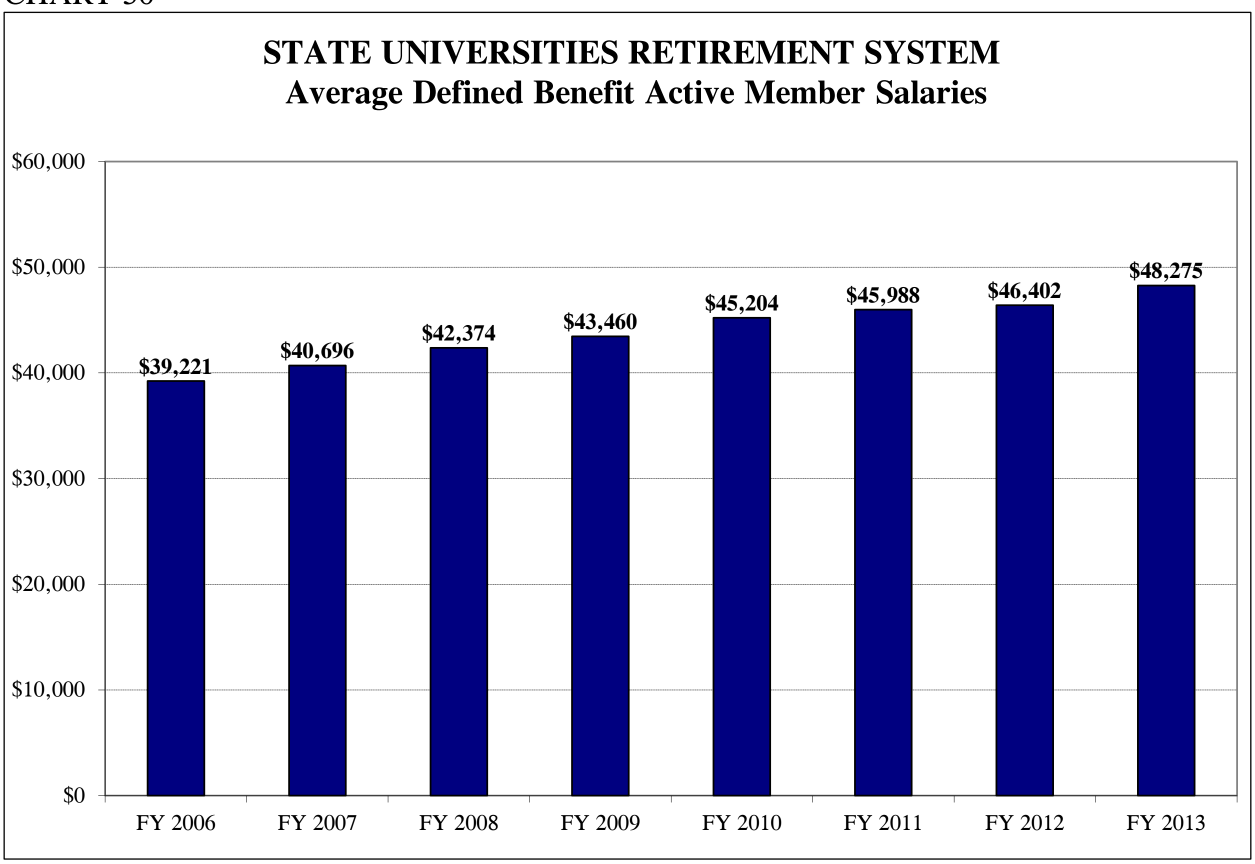

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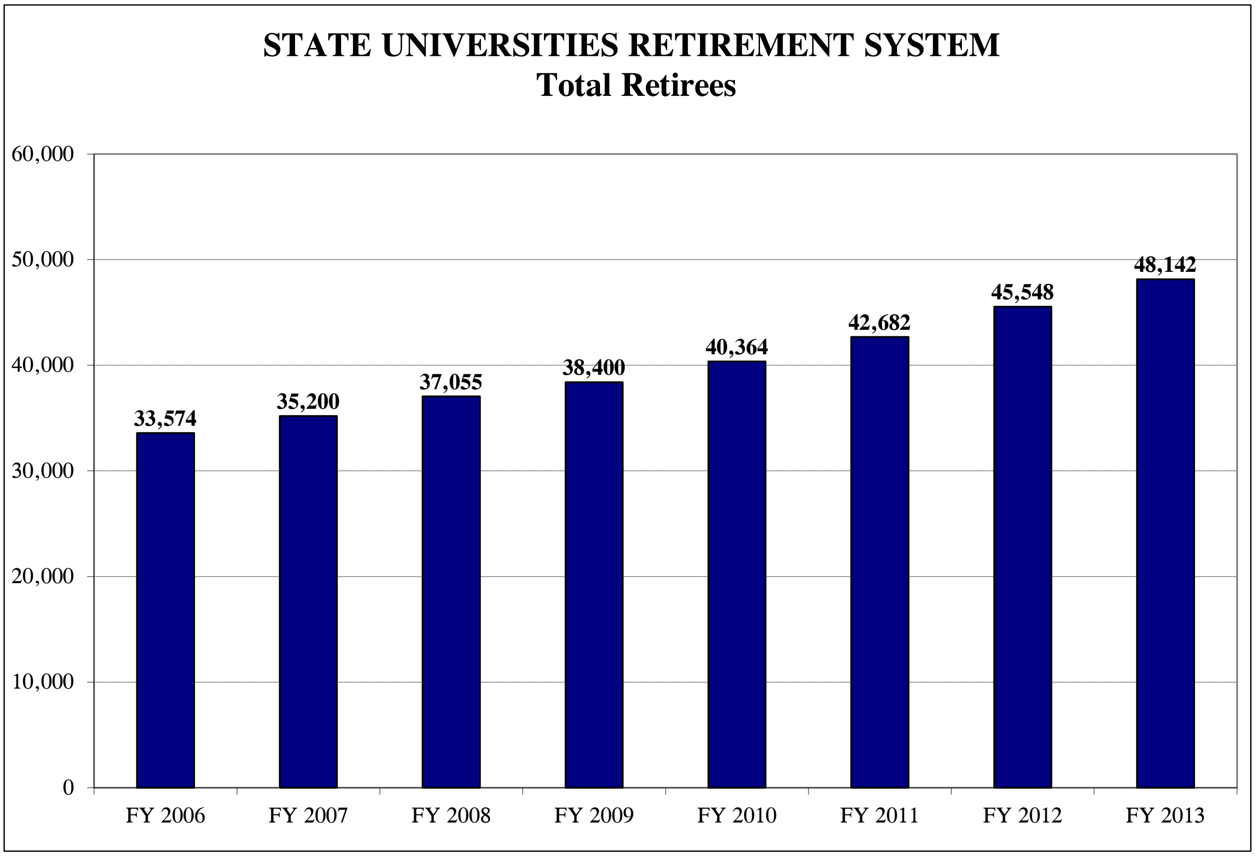

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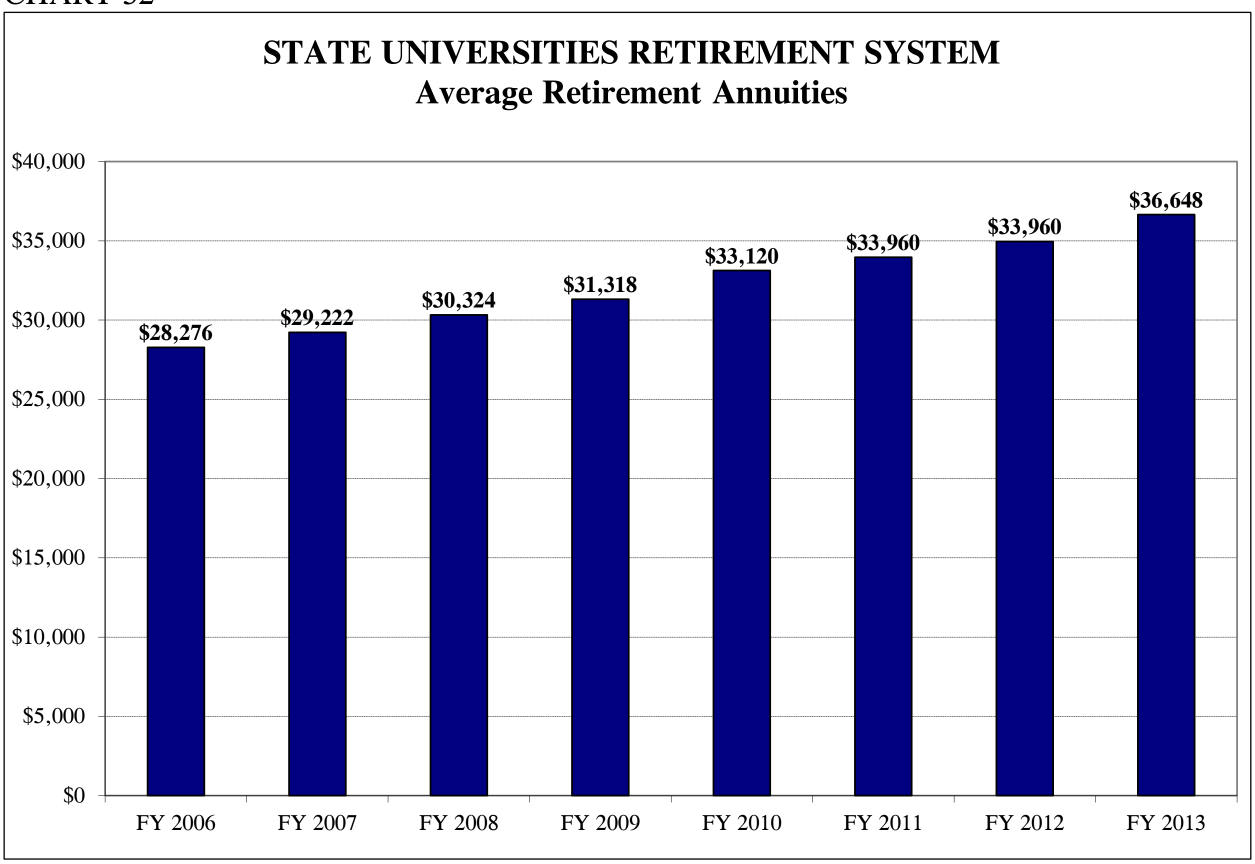

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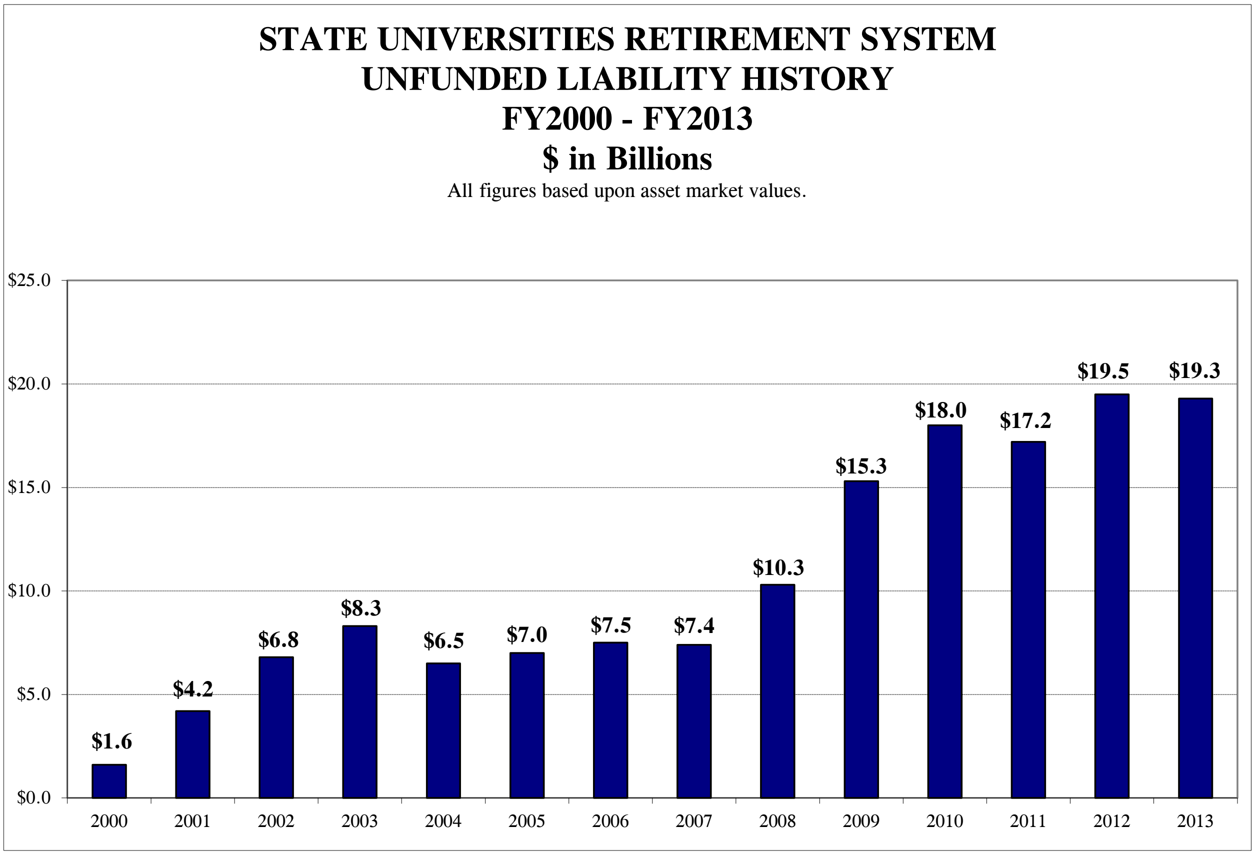

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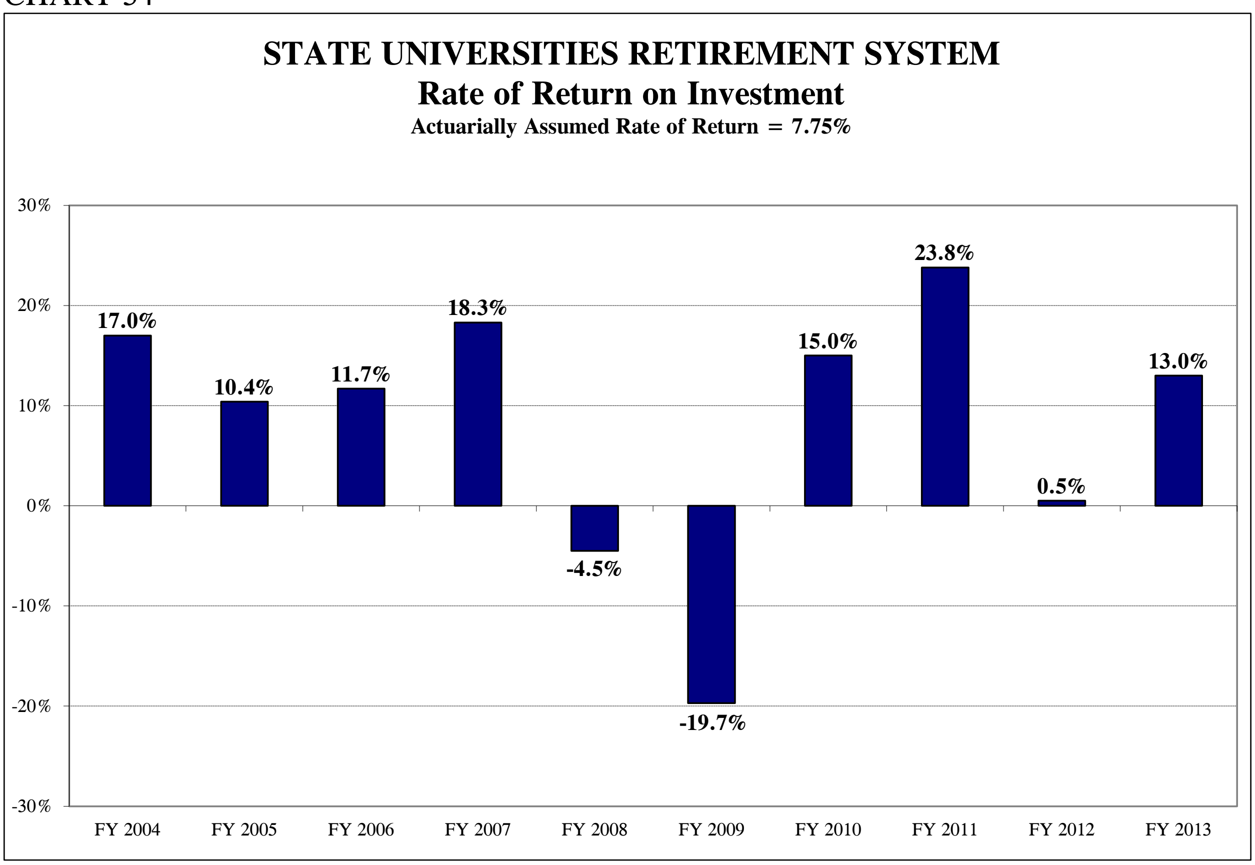
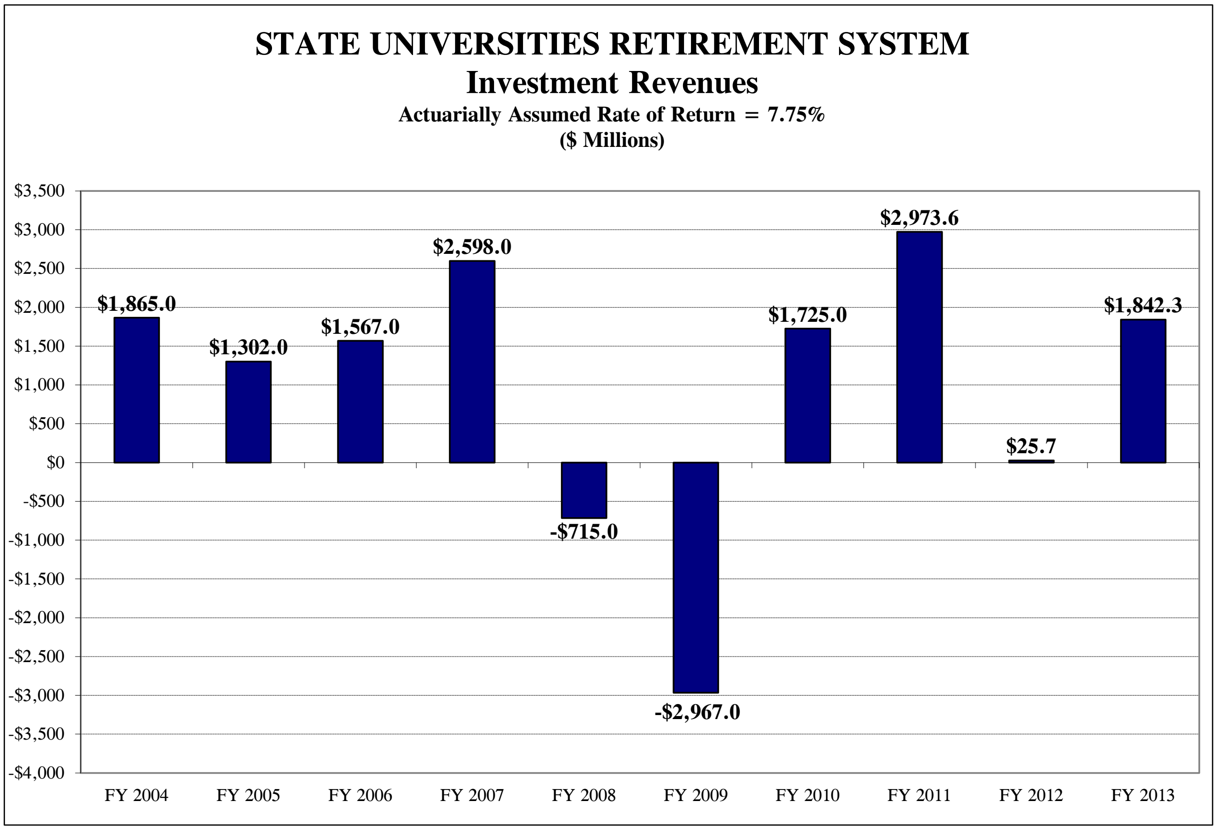


CHART 35



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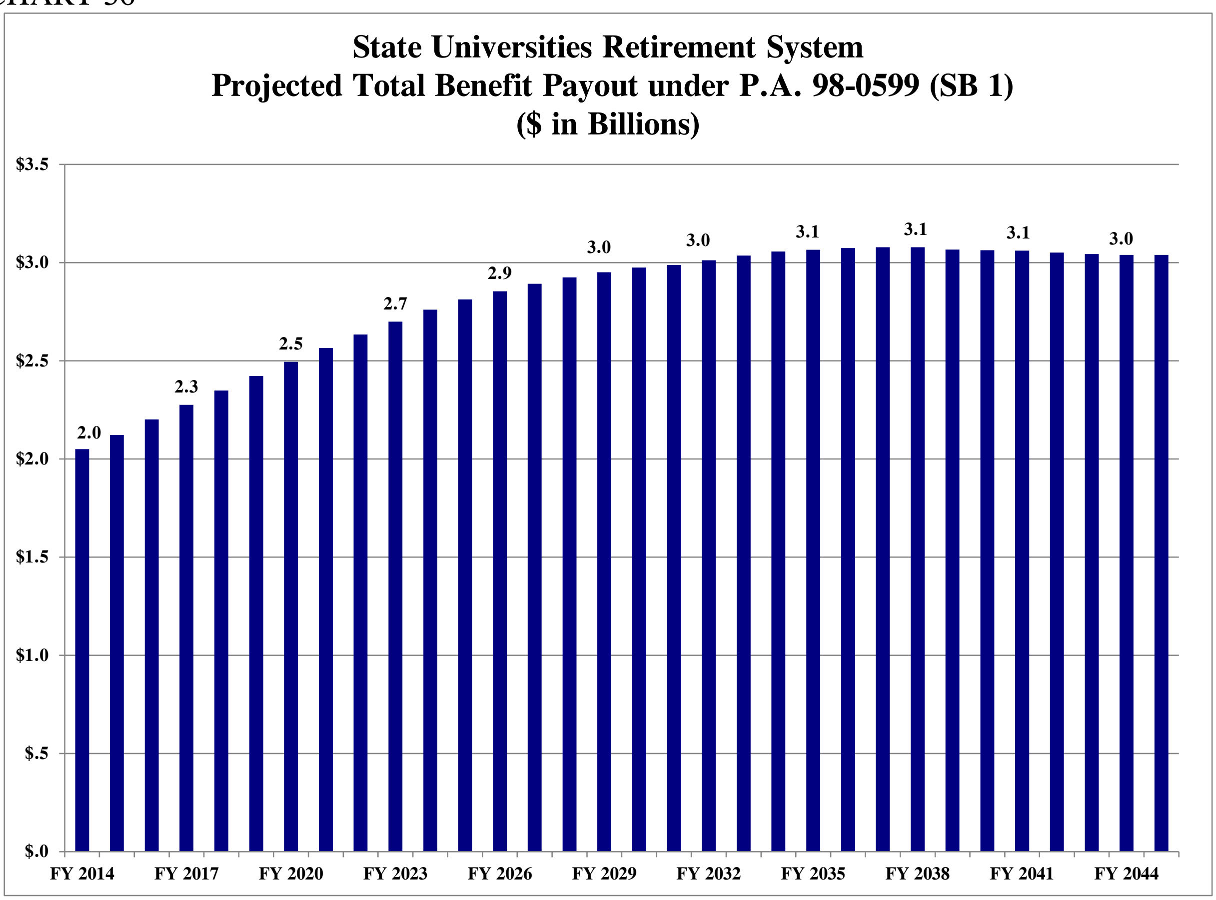


TABLE 17

STATE UNIVERSITIES RETIREMENT SYSTEM
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

YEAR ENDED	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N.C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ACTUARIAL ASSUMPTIONS	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABILITY FROM PREVIOUS YEAR
6/30/1996	($70,535,000)	($105,383,000)	$456,044,000	$0	$0	$86,823,000	$366,949,000
6/30/1997	(44,026,000)	(312,322,000)	424,816,000	179,117,000	(3,342,395,000)	198,529,000	(2,896,281,000)
6/30/1998	5,238,000	(765,736,000)	158,840,000	0	0	48,075,000	(553,583,000)
6/30/1999	44,300,000	(273,300,000)	271,300,000	0	0	190,800,000	233,100,000
6/30/2000	171,500,000	(587,500,000)	306,700,000	0	0	(130,949,000)	(240,249,000)
6/30/2001	70,300,000	2,068,500,000	301,000,000	0	0	107,131,000	2,546,931,000
6/30/2002	90,800,000	1,568,700,000	430,800,000	63,000,000	485,300,000	38,744,000	2,677,344,000
6/30/2003	10,300,000	583,000,000	558,500,000	0	0	319,300,000	1,471,100,000
6/30/2004	(62,900,000)	(950,500,000)	(822,700,000)	0	0	17,893,000	(1,818,207,000)
6/30/2005	(19,400,000)	(218,000,000)	574,300,000	0	0	170,520,000	507,420,000
6/30/2006	28,600,000	(414,100,000)	734,900,000	0	0	164,900,000	514,300,000
6/30/2007	67,000,000	(1,342,000,000)	707,200,000	0	324,400,000	105,900,000	(137,500,000)
6/30/2008	30,600,000	2,004,400,000	590,900,000	0	0	329,100,000	2,955,000,000
6/30/2009	(1,300,000)	812,300,000	738,700,000	0	0	153,200,000	1,702,900,000
6/30/2010	(113,100,000)	940,500,000	667,500,000	0	2,413,900,000	210,800,000	4,119,600,000
6/30/2011	(172,300,000)	430,000,000	930,200,000	0	(24,900,000)	251,800,000	1,414,800,000
6/30/2012	(4,000,000)	476,700,000	797,800,000	0	0	381,200,000	1,651,700,000
6/30/2013	(53,600,000)	391,800,000	506,700,000	0	(157,000,000)	202,300,000	890,200,000
TOTALS	$ (22,523,000)	$ 4,307,059,000	$ 8,333,500,000	$ 242,117,000	$ (300,695,000)	$ 2,846,066,000	$ 15,405,524,000

TABLE 18

STATE UNIVERSITIES RETIREMENT SYSTEM
Changes in Net Assets
($ in Millions)

Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
State of Illinois	1,408.8	989.8	776.6	700.2	445.6	340.3	252.1	166.7
Pension Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	305.1	312.4	309.9	323.6	322.1	310.1	304.0	292.4
Federal	41.9	41.9	41.9	39.5	44.2	43.6	42.4	43.0
Net Investment Income	1,842.3	25.7	2,973.6	1,725.3	-2,967.1	-714.8	2,597.8	1,566.8
Total Asset Additions (A)	3,598.1	1,369.8	4,102.0	2,788.6	-2,155.2	-20.8	3,196.3	2,068.9
Deductions from Assets								
Benefits	1,934.1	1,748.7	1,622.5	1,483.7	1,376.7	1,279.2	1,180.6	1,086.6
Refunds	101.6	94.2	73.9	57.5	51.4	54.9	53.4	51.4
Subsidy Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	13.9	13.5	12.6	12.5	12.9	12.1	11.7	12.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Asset Deductions (B)	2,049.6	1,856.4	1,709.0	1,553.7	1,441.0	1,346.2	1,245.7	1,150.2
Change in Net Assets (A-B=C)	1,548.5	-486.6	2,393.0	1,234.9	-3,596.2	-1,367.0	1,950.6	918.7

TABLE 19

STATE UNIVERSITIES RETIREMENT SYSTEM Historical Investment Revenues ($ in Millions)			
Fiscal Year	Market Value of Assets at Year End	Net Investment Revenue	Rate of Return Earned
2004	12,839.2	1,865.3	17.0%
2005	13,280.1	1,302.0	10.4%
2006	14,045.4	1,566.8	11.7%
2007	16,283.8	2,597.8	18.3%
2008	15,202.7	-714.8	-4.5%
2009	11,292.0	-2,967.1	-19.7%
2010	12,163.9	1,725.3	15.0%
2011	14,274.0	2,973.6	23.8%
2012	13,705.1	25.7	0.1%
2013	15,037.1	1,842.3	12.5%

2004 - 2013 Asset Values are Market Values.

TABLE 20

STATE UNIVERSITIES RETIREMENT SYSTEM Reduction in State Contributions Attributable to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in Millions)			
Fiscal Year	State Contribution Based on Pre-SB 1 Baseline	State Contribution based on SB 1 (P.A. 98-0599)	Annual Savings
2014	$ 1,499.7	$ 1,499.7	$ -
2015	1,535.4	1,535.4	-
2016	1,536.2	1,336.8	199.4
2017	1,552.3	1,317.3	235.0
2018	1,598.8	1,340.0	258.8
2019	1,630.0	1,416.3	213.7
2020	1,672.6	1,552.0	120.6
2021	1,716.5	1,575.2	141.3
2022	1,761.5	1,599.8	161.7
2023	1,808.0	1,625.7	182.3
2024	1,855.3	1,652.9	202.4
2025	1,903.9	1,681.2	222.7
2026	1,953.7	1,710.7	243.0
2027	2,004.6	1,741.3	263.3
2028	2,056.9	1,773.0	283.9
2029	2,108.9	1,805.5	303.4
2030	2,156.0	1,838.2	317.8
2031	2,205.4	1,872.0	333.4
2032	2,262.3	1,907.1	355.2
2033	2,327.2	1,943.2	384.0
2034	2,394.0	1,979.5	414.5
2035	2,455.2	2,015.3	439.9
2036	2,517.8	2,050.9	466.9
2037	2,581.7	941.6	1640.1
2038	2,647.3	156.3	2491.0
2039	2,715.0	157.9	2557.1
2040	2,784.4	159.7	2624.7
2041	2,857.0	161.6	2695.4
2042	2,932.2	163.7	2768.5
2043	3,009.4	166.0	2843.4
2044	3,088.1	168.5	2919.6
2045	3,168.0	171.2	2996.8
Totals	70,295.3	41,015.5	**29,279.8**

TABLE 21

STATE UNIVERSITIES RETIREMENT SYSTEM Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by CoGFA Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	464.7	10.7%	34.8	0.8%	499.5	11.5%
2015	448.3	10.2%	53.3	1.2%	501.6	11.4%
2016	429.5	9.6%	70.9	1.6%	500.4	11.2%
2017	408.2	8.9%	88.2	1.9%	496.4	10.8%
2018	384.7	8.2%	105.5	2.3%	490.2	10.5%
2019	361.9	7.6%	122.7	2.6%	484.6	10.1%
2020	337.6	6.9%	140.2	2.9%	477.8	9.8%
2021	314.2	6.3%	157.7	3.1%	471.9	9.4%
2022	292.6	5.7%	175.3	3.4%	467.9	9.1%
2023	271.2	5.1%	193.1	3.7%	464.3	8.8%
2024	252.5	4.7%	211.0	3.9%	463.5	8.6%
2025	234.8	4.2%	229.3	4.1%	464.1	8.3%
2026	218.6	3.8%	247.7	4.3%	466.3	8.2%
2027	205.8	3.5%	266.3	4.5%	472.1	8.1%
2028	193.7	3.2%	285.1	4.7%	478.8	8.0%
2029	183.4	3.0%	304.3	4.9%	487.7	7.9%
2030	174.5	2.7%	324.0	5.1%	498.5	7.8%
2031	166.0	2.5%	344.3	5.3%	510.3	7.8%
2032	158.1	2.4%	365.4	5.4%	523.5	7.8%
2033	148.4	2.2%	387.6	5.6%	536.0	7.8%
2034	138.1	2.0%	410.7	5.8%	548.8	7.8%
2035	128.1	1.8%	434.5	6.0%	562.6	7.7%
2036	119.1	1.6%	458.7	6.1%	577.8	7.7%
2037	108.9	1.4%	484.2	6.3%	593.1	7.7%
2038	98.9	1.3%	509.4	6.5%	608.3	7.7%
2039	90.2	1.1%	534.5	6.6%	624.7	7.7%
2040	82.2	1.0%	560.2	6.7%	642.4	7.7%
2041	71.8	0.8%	587.0	6.9%	658.8	7.7%
2042	60.8	0.7%	614.3	7.0%	675.1	7.7%
2043	50.4	0.6%	641.4	7.1%	691.8	7.7%
2044	38.0	0.4%	669.4	7.2%	707.4	7.7%
2045	25.9	0.3%	698.5	7.4%	724.4	7.6%

VII. The Judges' Retirement System

- Plan Summary
- FY 2013 Change in Unfunded Liabilities
- Funded Ratio History
- Active Member Headcount
- Average Active Member Salaries
- Retiree Headcount
- Average Retirement Annuities
- Unfunded History
- Rate of Return on Investments
- Annual Investment Revenue
- Total Payout
- Annual Changes in Unfunded
- Changes in Net Assets
- Investment Return History
- Tier 1 & Tier 2 Normal Cost Projections

Judges' Retirement System
Plan Summary

Retirement Age

- Age 60 with 10 years of service.
- Age 62 with 6 years of service.
- Age 55 with 10 years of service (reduced ½ of 1% for each month under 60).

Retirement Formula

- 3.5% of final salary for each of the first 10 years of service, plus
- 5% of final salary for each year of service in excess of 10 years.

Maximum Annuity

- 85% of final salary.

Salary Used to Calculate Pension

- Salary on last day of service.

Annual COLA

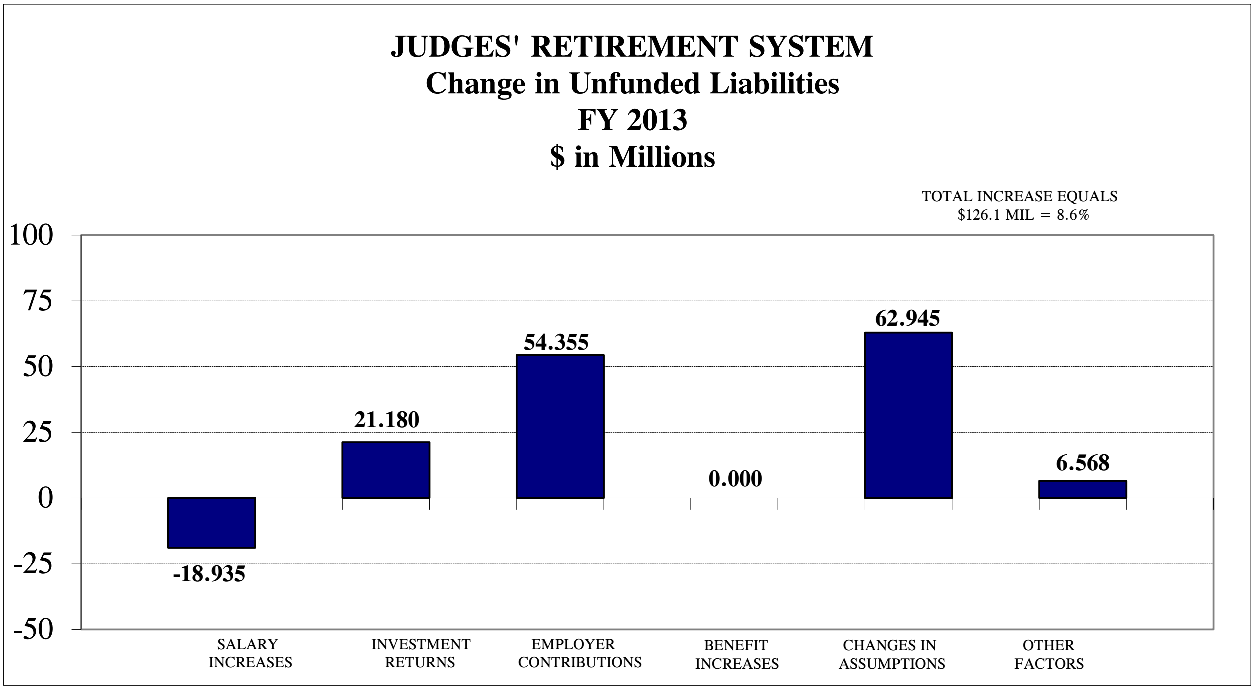
- 3% compounded.

Employee Contributions

- 11.0% of salary.

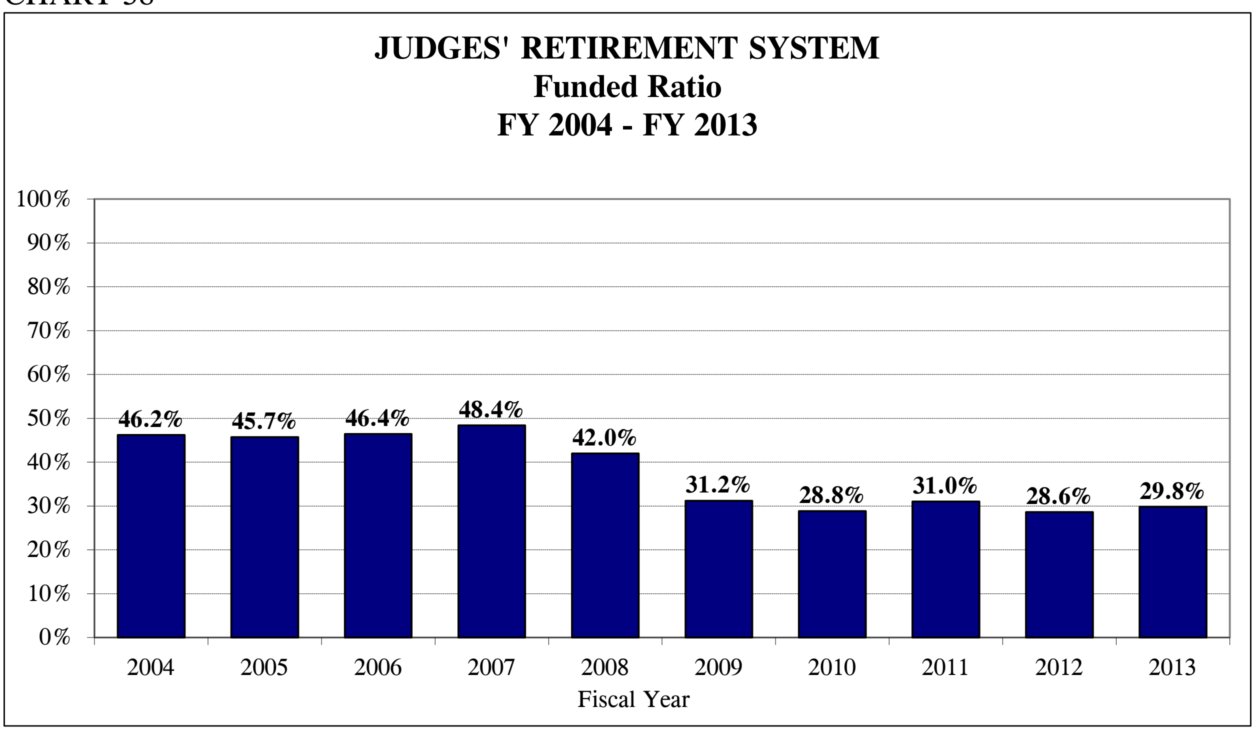
The details of retirement plans applicable to personnel beginning employment on or after January 1, 2011, please refer to Section I earlier in this report.

CHART 37



NOTE: The above chart is based upon asset actuarial values.

CHART 38



NOTE: The above FY 2013 figure is based upon asset market values without asset smoothing.

CHART 39

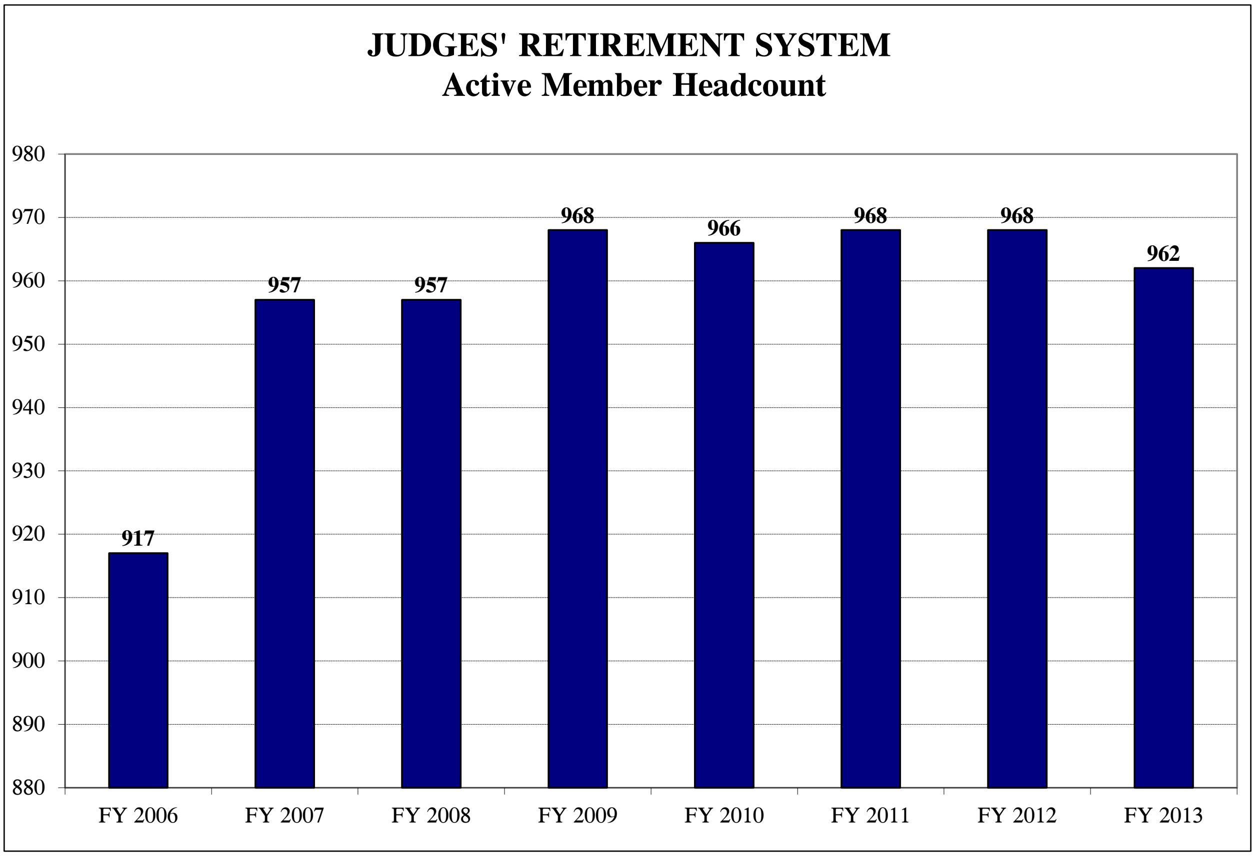


CHART 40

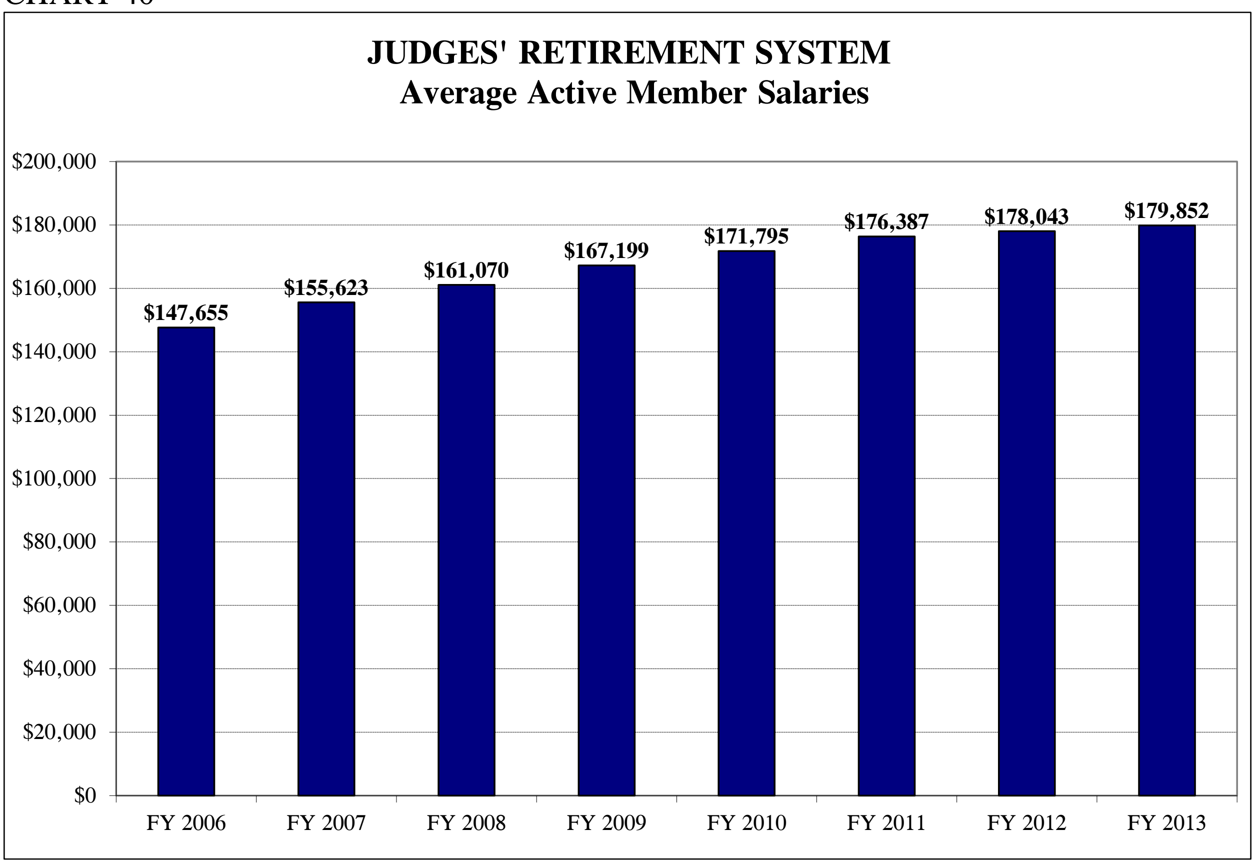


CHART 41

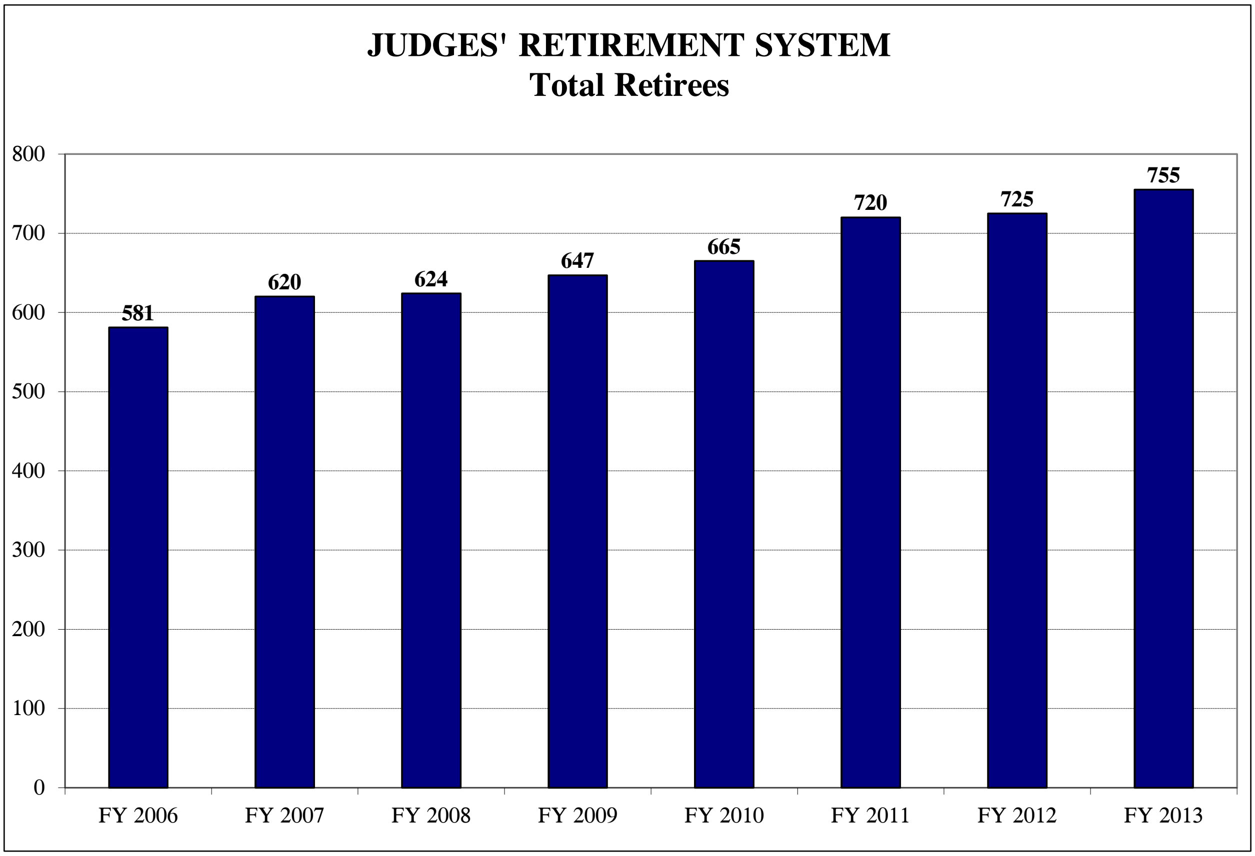


CHART 42

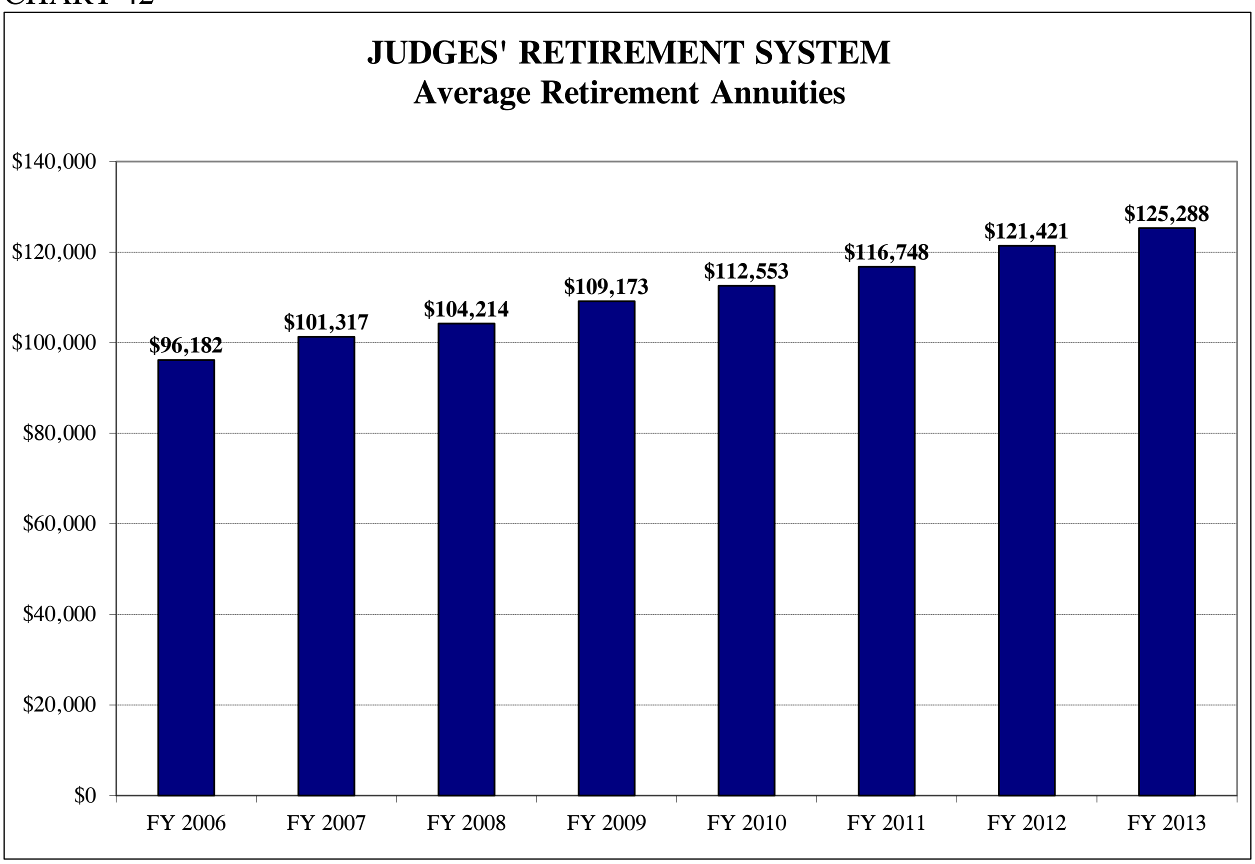


CHART 43

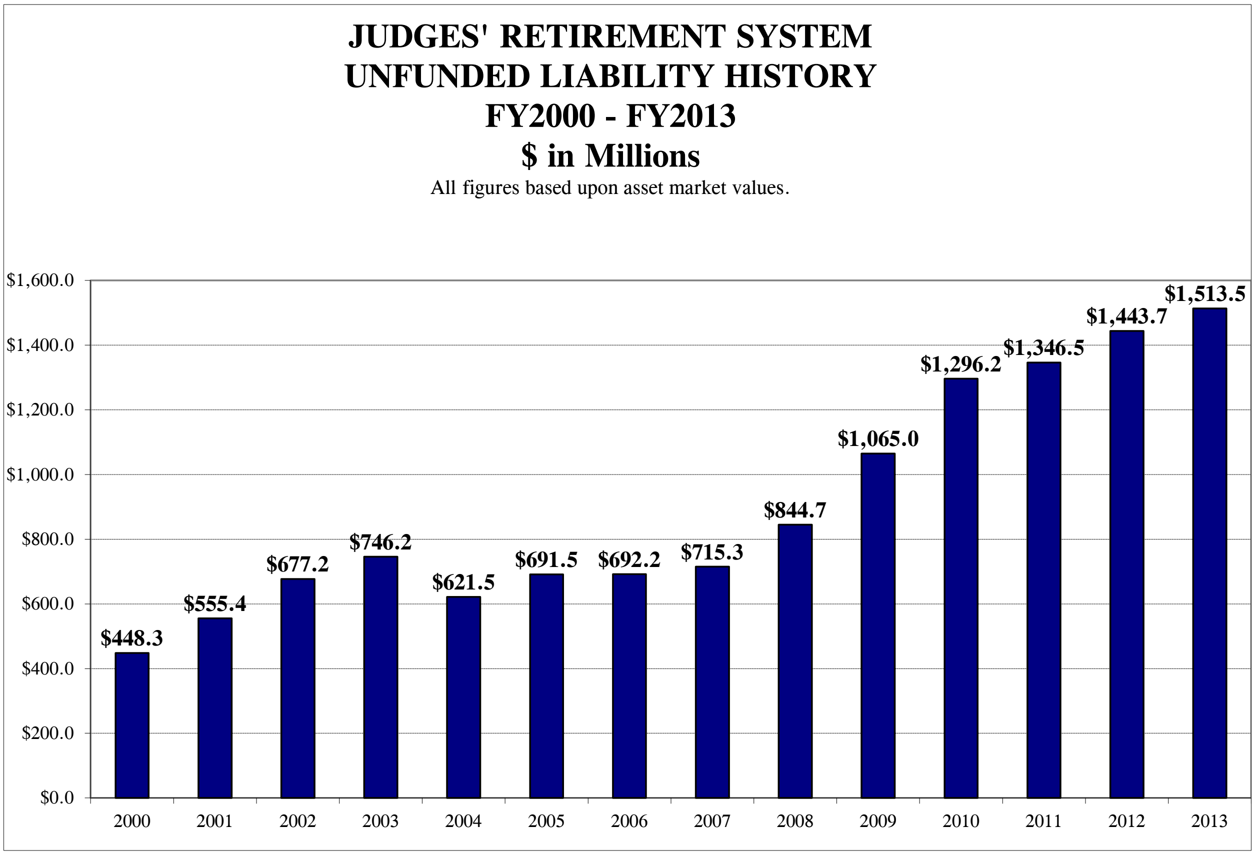


CHART 44

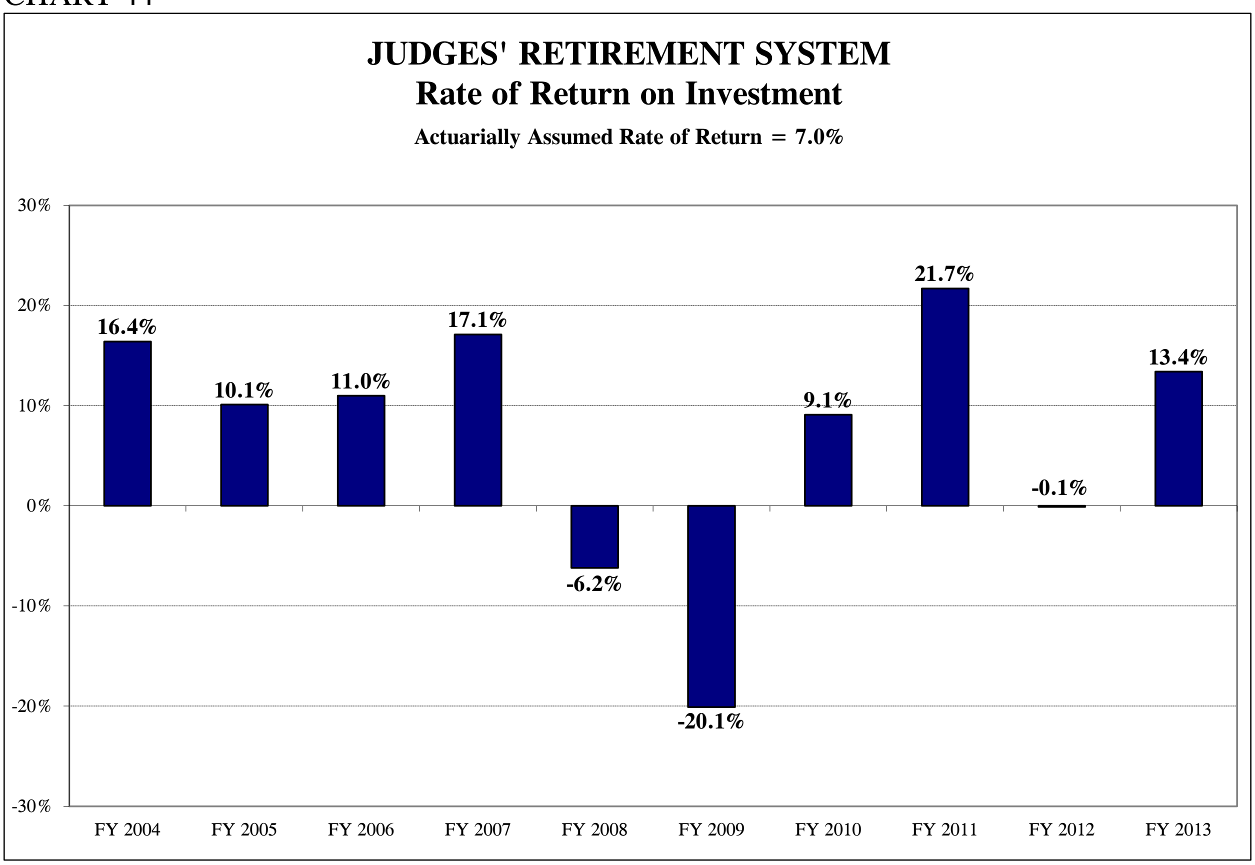


CHART 45

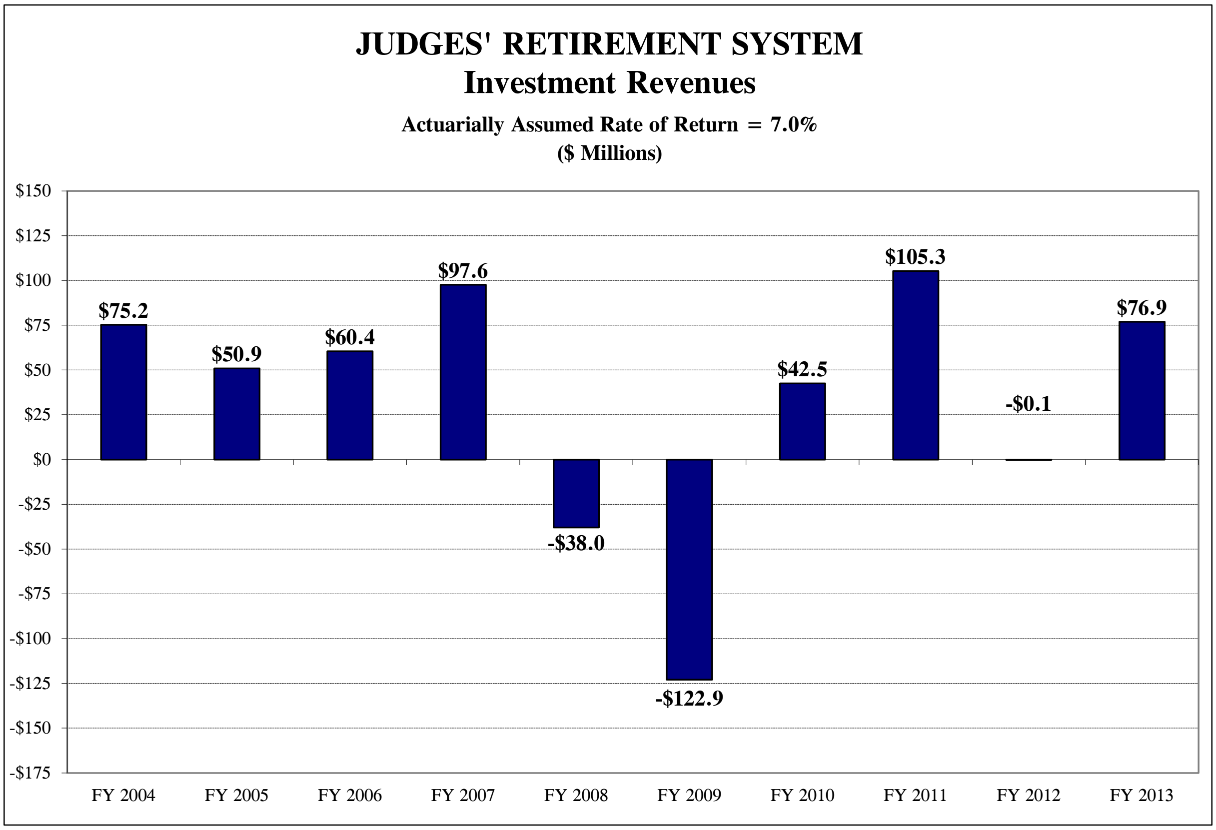


CHART 46

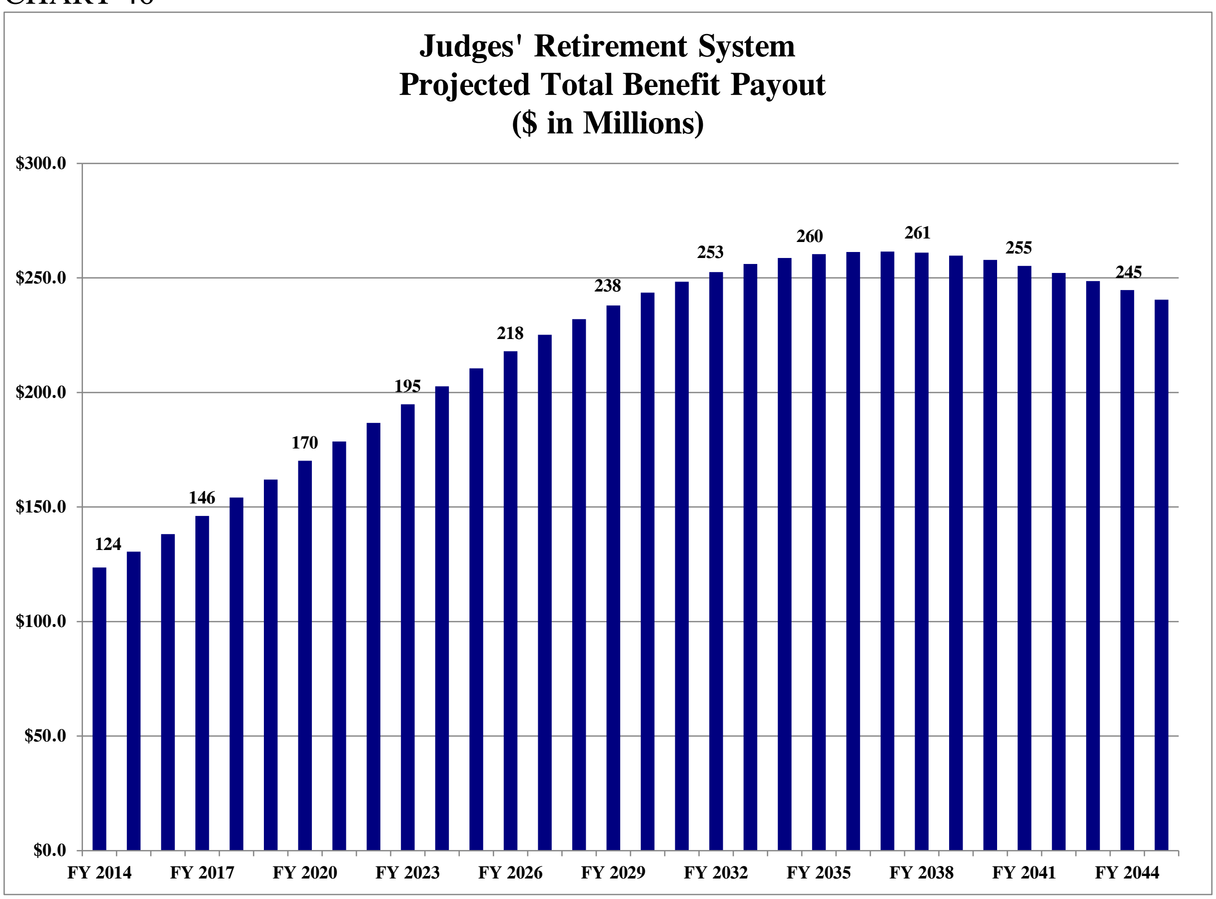


TABLE 22

JUDGES' RETIREMENT SYSTEM CHANGES IN UNFUNDED LIABILITY FY 1996 - FY 2013							
YEAR ENDED	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N.C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ACTUARIAL ASSUMPTIONS	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABIILITY FROM PREVIOUS YEAR
6/30/1996	$9,999,484	($13,671,404)	$24,518,236	$0	$0	$14,931,343	$35,777,659
6/30/1997	(7,658,092)	(28,145,182)	27,156,529	0	37,922,093	15,264,216	44,539,564
6/30/1998	(10,160,914)	(30,497,137)	34,123,085	0	0	7,218,733	683,767
6/30/1999	456,439	(16,539,663)	32,504,330	0	0	8,821,168	25,242,274
6/30/2000	2,215,672	(14,134,561)	33,196,266	2,848,501	0	8,268,502	32,394,380
6/30/2001	(7,464,258)	61,790,163	35,767,996	0	0	17,044,333	107,138,234
6/30/2002	(11,821,953)	54,489,350	42,170,792	0	28,381,924	8,609,434	121,829,547
6/30/2003	(26,392,926)	27,183,676	49,293,246	0	0	18,906,930	68,990,926
6/30/2004	6,291,883	(36,709,772)	(92,295,242)	0	0	(1,952,146)	(124,665,277)
6/30/2005	(15,087,614)	(8,899,756)	46,427,305	0	0	27,509,646	49,949,581
6/30/2006	(18,612,759)	(17,213,516)	55,344,402	0	(11,189,825)	12,319,701	20,648,003
6/30/2007	(3,952,822)	(51,310,984)	50,305,409	0	0	28,046,308	23,087,911
6/30/2008	(8,834,671)	90,806,378	42,511,153	0	0	4,924,005	129,406,865
6/30/2009	(6,661,210)	33,322,668	40,870,123	0	0	19,481,669	87,013,250
6/30/2010	(14,290,000)	48,210,000	30,640,000	0	188,890,000	14,350,000	267,800,000
6/30/2011	(17,743,557)	31,451,544	66,647,892	0	15,622,518	42,442,760	138,421,157
6/30/2012	(19,671,785)	27,522,701	75,313,560	0	0	(611,876)	82,552,600
6/30/2013	18,934,843	21,180,779	54,355,269	0	62,945,069	6,567,839	126,114,113
TOTALS	$ (130,454,240)	$ 178,835,284	$ 648,850,351	$ 2,848,501	$ 322,571,779	$ 252,142,565	$ 1,236,924,554

TABLE 23

JUDGES' RETIREMENT SYSTEM Changes in Net Assets ($ in Millions)								
Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
State of Illinois	88.2	63.7	62.7	78.5	60.0	47.0	35.2	29.2
Pension Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	16.4	16.4	16.7	16.0	15.8	15.4	14.2	13.6
Net Investment Income	76.9	-0.1	105.3	42.5	-122.7	-38.0	98.2	60.4
Total Asset Additions (A)	181.5	80.0	184.7	137.0	-46.9	24.4	147.6	103.2
Deductions from Assets								
Benefits	113.6	106.6	100.7	91.6	85.8	80.5	75.6	69.0
Refunds	1.7	0.6	0.7	0.5	0.4	0.8	0.6	0.8
Subsidy Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	0.8	0.8	0.6	0.5	0.6	0.5	0.5	0.4
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	116.1	108.0	102.0	92.6	86.8	81.8	76.7	70.2
Change in Net Assets (A-B=C)	65.4	-28.0	82.7	44.4	-133.7	-57.4	70.9	33.0

TABLE 24

JUDGES' RETIREMENT SYSTEM Historical Investment Revenues ($ in Millions)			
Fiscal Year	Market Value of Assets at Year End	Net Investment Revenue	Rate of Return Earned
2004	321.4	0.5	0.3%
2005	550.4	75.2	16.4%
2006	582.6	50.9	10.1%
2007	658.2	60.4	11.0%
2008	589.2	97.6	17.1%
2009	483.5	-38.0	-6.2%
2010	523.3	-122.7	-20.1%
2011	606.0	42.5	9.1%
2012	578.0	-0.1	-0.1%
2013	643.3	76.9	13.4%

2004 - 2013 Asset Values are Market Values.

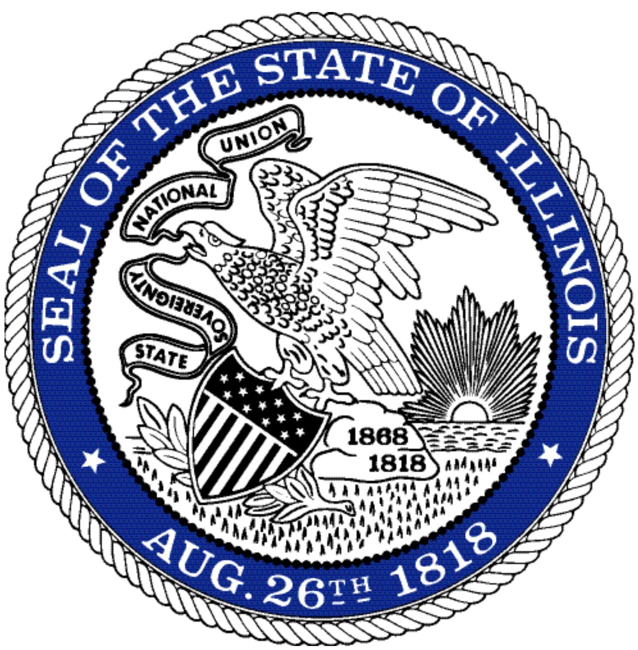
Note: JRS investment management is provided by the Illinois State Board of Investment.

TABLE 25

JUDGES RETIREMENT SYSTEM Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	55.7	33.3%	2.2	1.3%	57.9	34.6%
2015	53.3	31.5%	3.0	1.8%	56.3	33.3%
2016	50.2	29.4%	3.9	2.3%	54.1	31.7%
2017	47.0	27.3%	4.8	2.8%	51.8	30.1%
2018	43.9	25.4%	5.8	3.4%	49.7	28.7%
2019	40.5	23.2%	6.8	3.9%	47.2	27.1%
2020	36.8	21.0%	7.8	4.4%	44.6	25.4%
2021	33.4	19.0%	8.8	5.0%	42.3	24.0%
2022	30.2	17.1%	9.8	5.5%	40.1	22.6%
2023	27.2	15.2%	10.8	6.0%	38.0	21.2%
2024	24.1	13.4%	11.8	6.5%	35.9	19.9%
2025	21.1	11.6%	12.8	7.0%	33.9	18.6%
2026	18.3	10.0%	13.7	7.5%	32.1	17.4%
2027	15.7	8.4%	14.7	7.9%	30.4	16.3%
2028	13.5	7.2%	15.6	8.3%	29.1	15.4%
2029	11.4	6.0%	16.5	8.6%	28.0	14.6%
2030	9.6	4.9%	17.4	9.0%	27.0	13.9%
2031	8.0	4.0%	18.3	9.3%	26.3	13.3%
2032	6.6	3.3%	19.2	9.5%	25.8	12.8%
2033	5.4	2.6%	20.1	9.8%	25.5	12.4%
2034	4.5	2.1%	20.9	10.0%	25.4	12.1%
2035	3.7	1.7%	21.8	10.1%	25.5	11.9%
2036	3.0	1.4%	22.6	10.3%	25.6	11.7%
2037	2.5	1.1%	23.4	10.4%	25.9	11.5%
2038	2.0	0.9%	24.3	10.5%	26.3	11.4%
2039	1.6	0.7%	25.1	10.6%	26.7	11.3%
2040	1.3	0.5%	26.0	10.7%	27.3	11.2%
2041	1.0	0.4%	26.8	10.7%	27.8	11.1%
2042	0.8	0.3%	27.7	10.8%	28.5	11.1%
2043	0.6	0.2%	28.6	10.8%	29.2	11.1%
2044	0.4	0.2%	29.5	10.9%	30.0	11.0%
2045	0.3	0.1%	30.5	10.9%	30.8	11.0%

VIII. The General Assembly Retirement System

- Plan Summary
- FY 2013 Change in Unfunded Liabilities
- Funded Ratio History
- Active Member Headcount
- Average Active Member Salaries
- Retiree Headcount
- Average Retirement Annuities
- Unfunded History
- Rate of Return on Investments
- Annual Investment Revenue
- Total Payout
- Annual Changes in Unfunded
- Changes in Net Assets
- Investment Return History
- Reduction in State Contributions
- Tier 1 & Tier 2 Normal Cost Projections



General Assembly Retirement System
Plan Summary

Retirement Age

- Age 55 with 8 years of service.
- Age 62 with at least 4 years of service.

Retirement Formula

- 3.0% of final salary for each of the first 4 years of service, plus
- 3.5% of final salary for each of the next 2 years of service, plus
- 4.0% of final salary for each of the next 2 years of service, plus
- 4.5% of final salary for each of the next 4 years of service, plus
- 5.0% of final salary for each year of service in excess of 12 years

Maximum Annuity

- 85% of final salary.

Salary Used to Calculate Pension

- Salary on last day of service.

Annual COLA

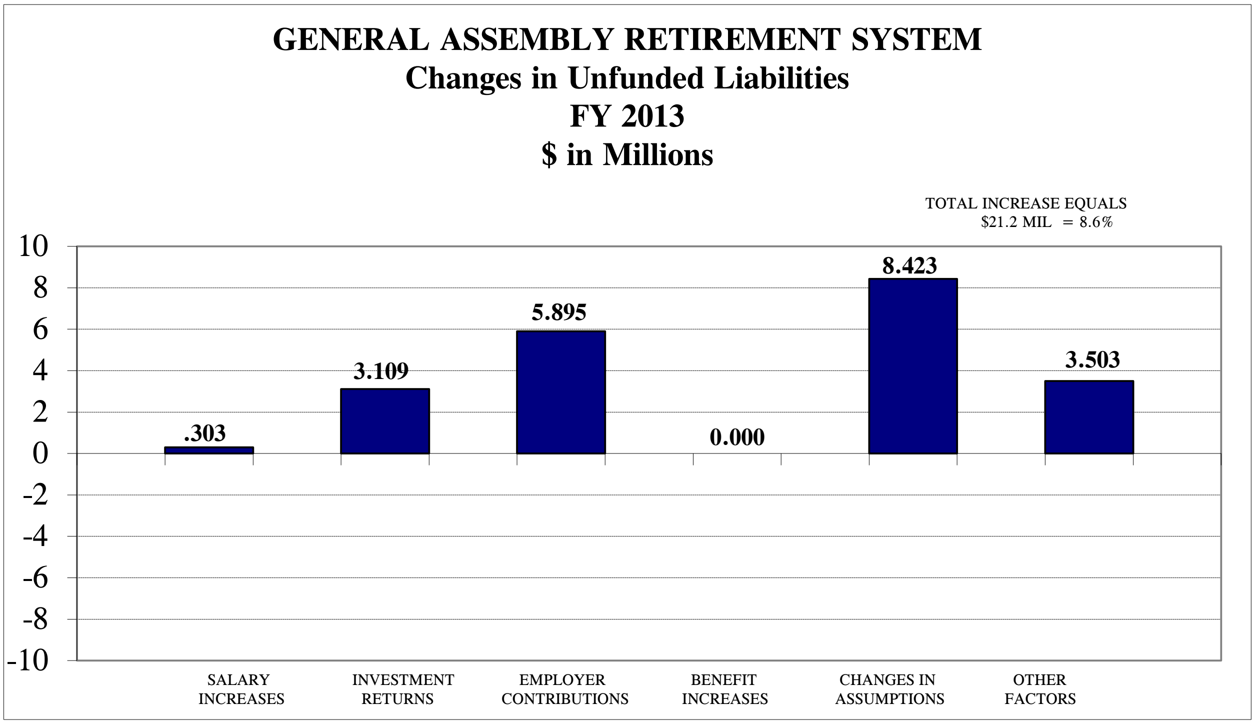
- 3% compounded

Employee Contributions

- 11.5% of salary.

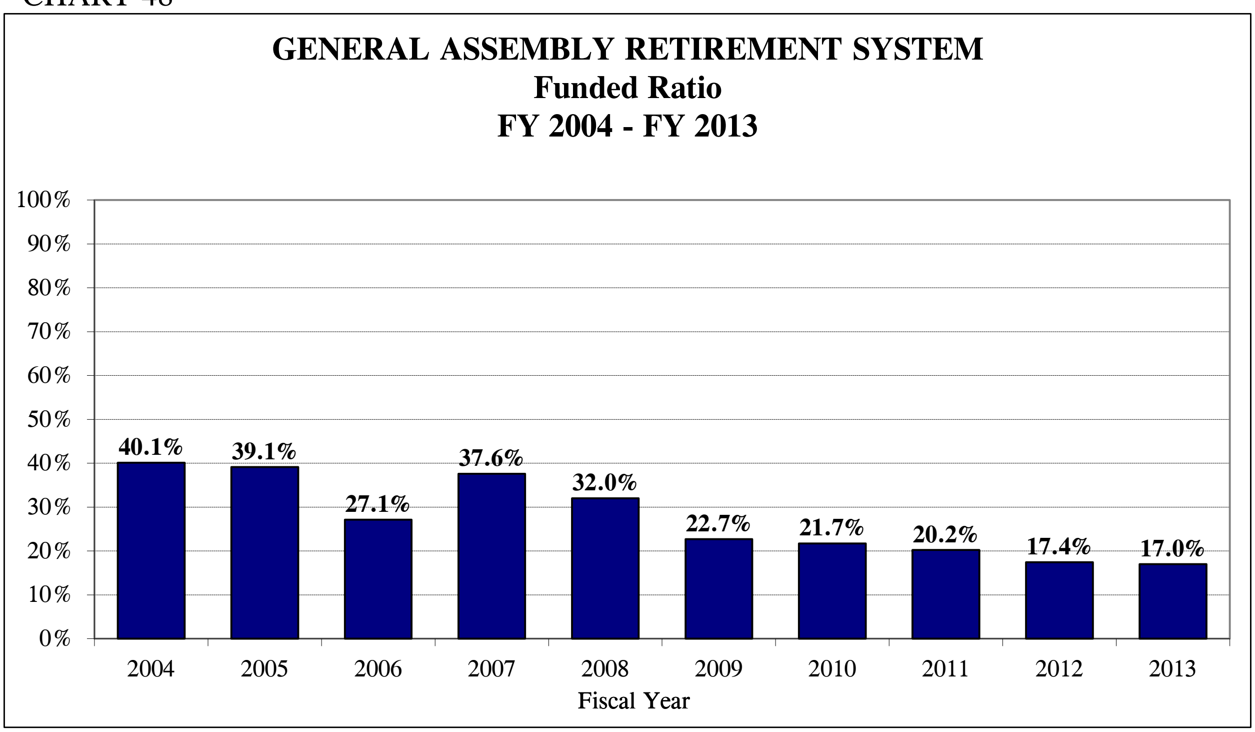
The benefits shown do not reflect P.A. 98-0599 (SB 1), or P.A. 96-0899 (2 Tier Act of 2011). Please refer to Section I earlier in this report for details.

CHART 47



NOTE: The above chart is based upon asset actuarial values.

CHART 48



NOTE: The above FY 2013 figure is based upon asset market values without asset smoothing.

CHART 49

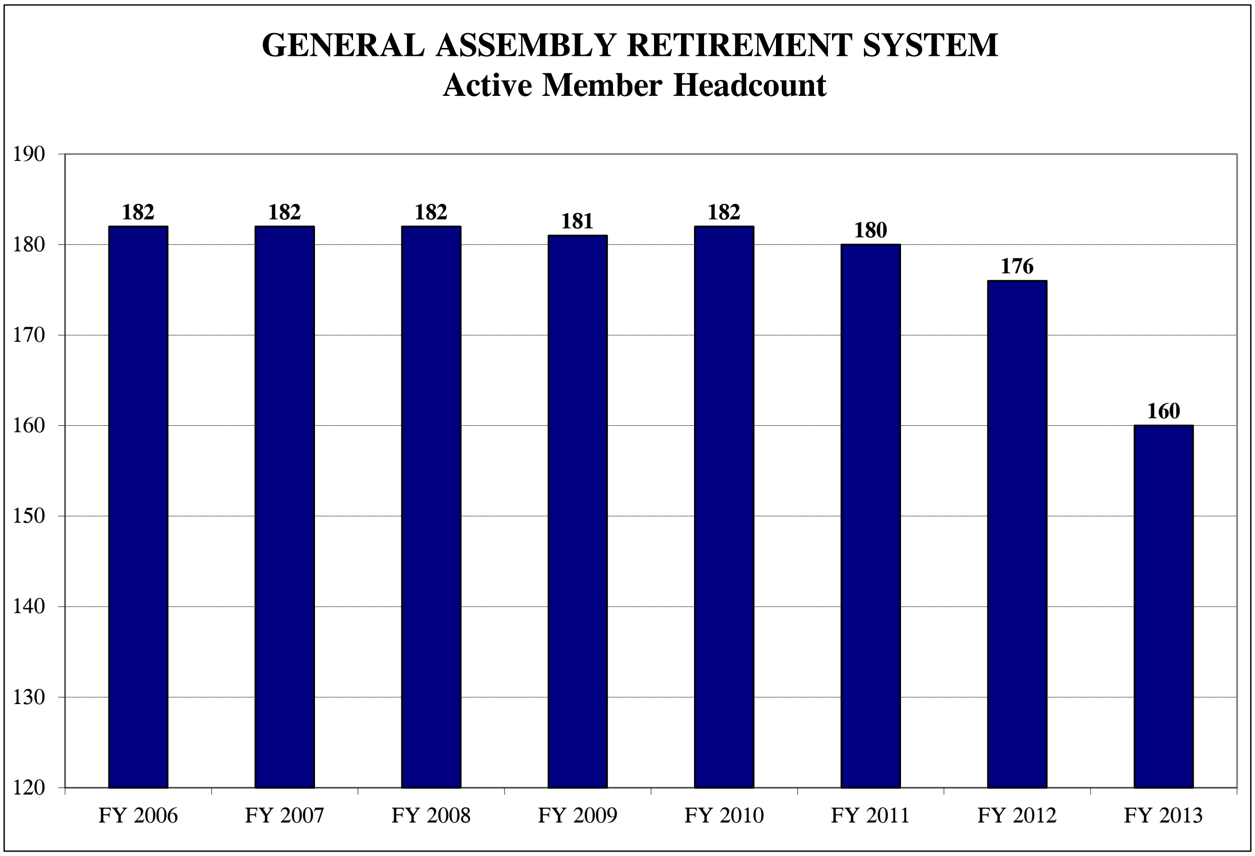


CHART 50

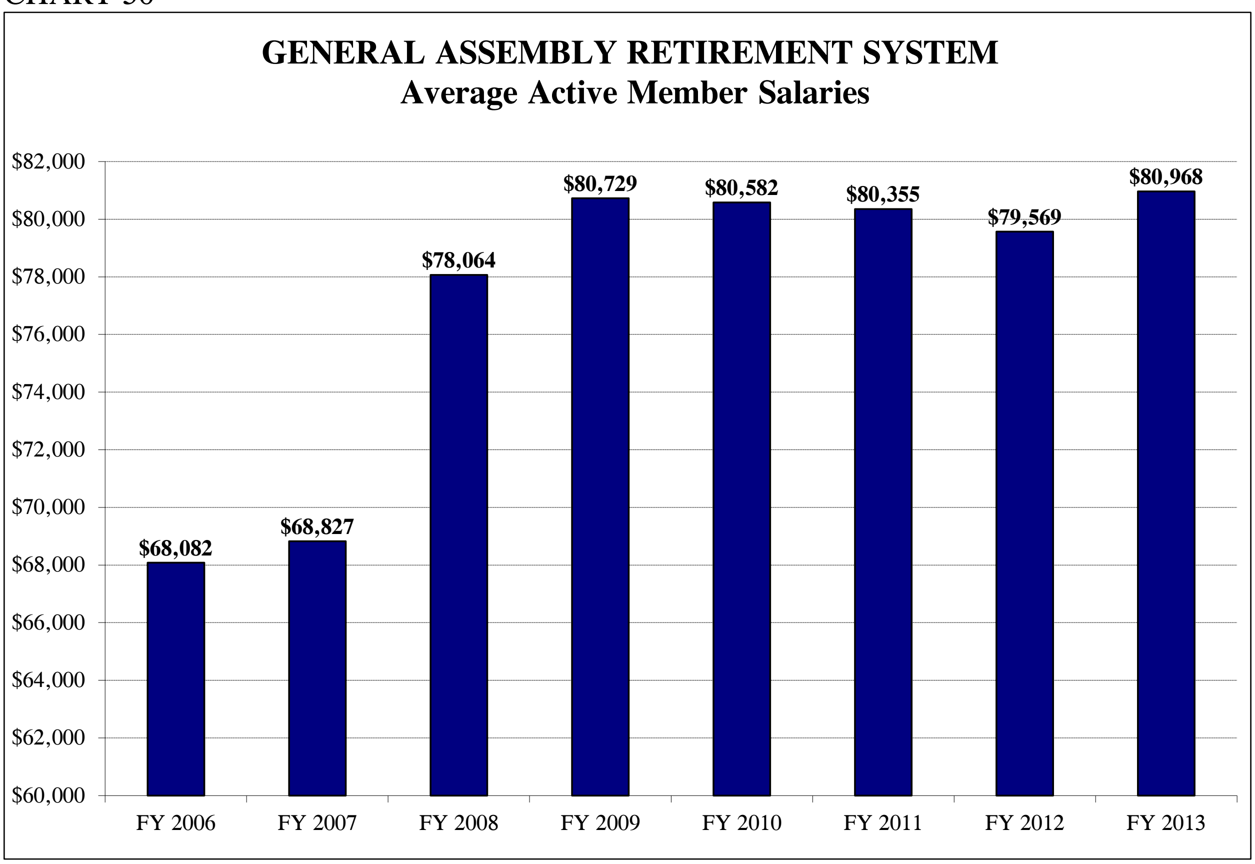


CHART 51

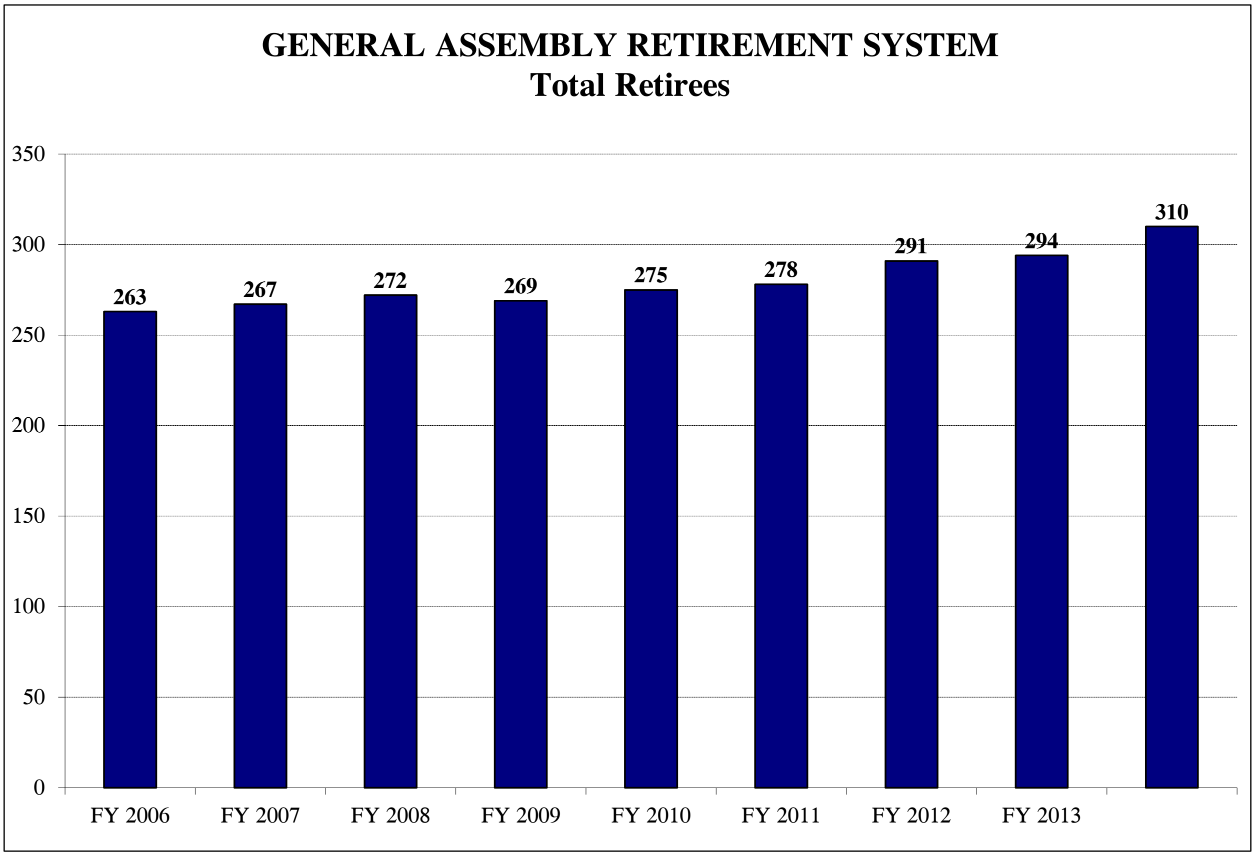


CHART 52

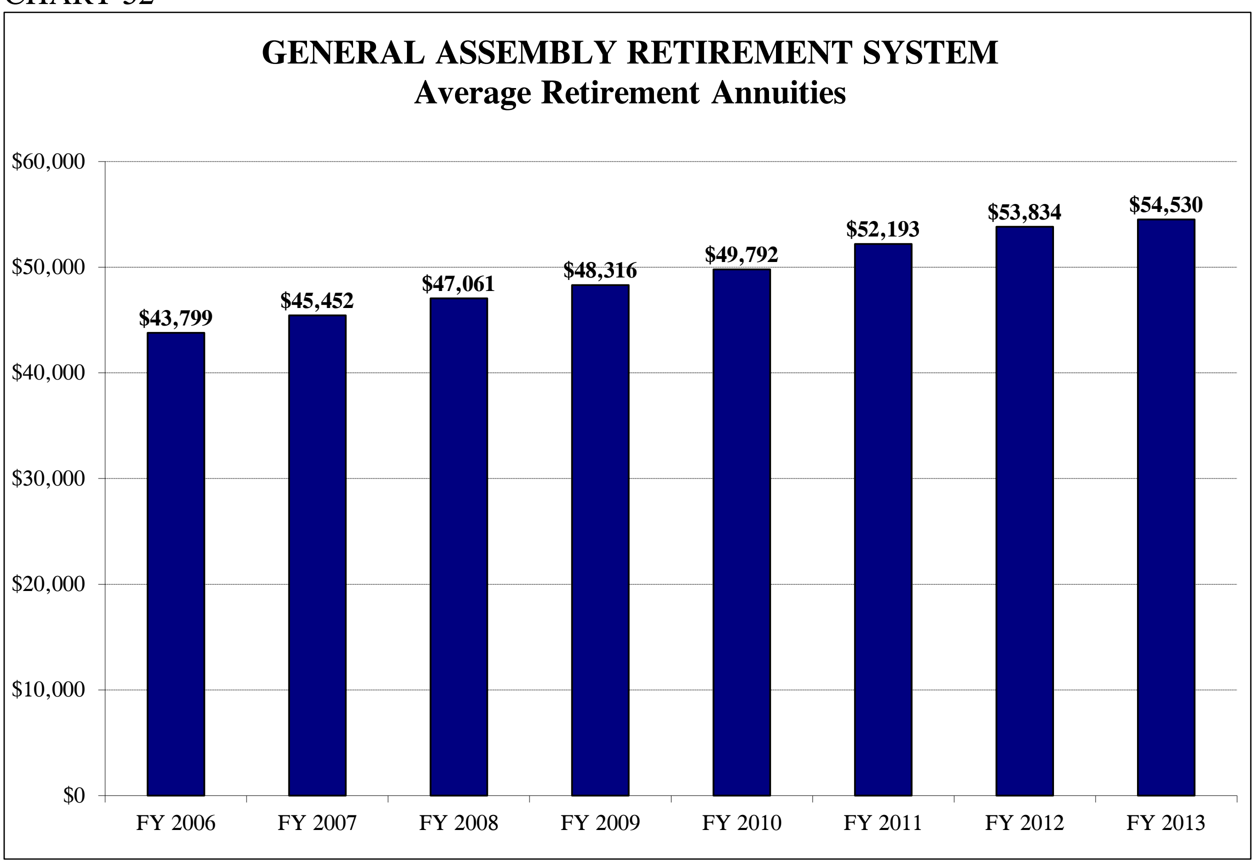


CHART 53

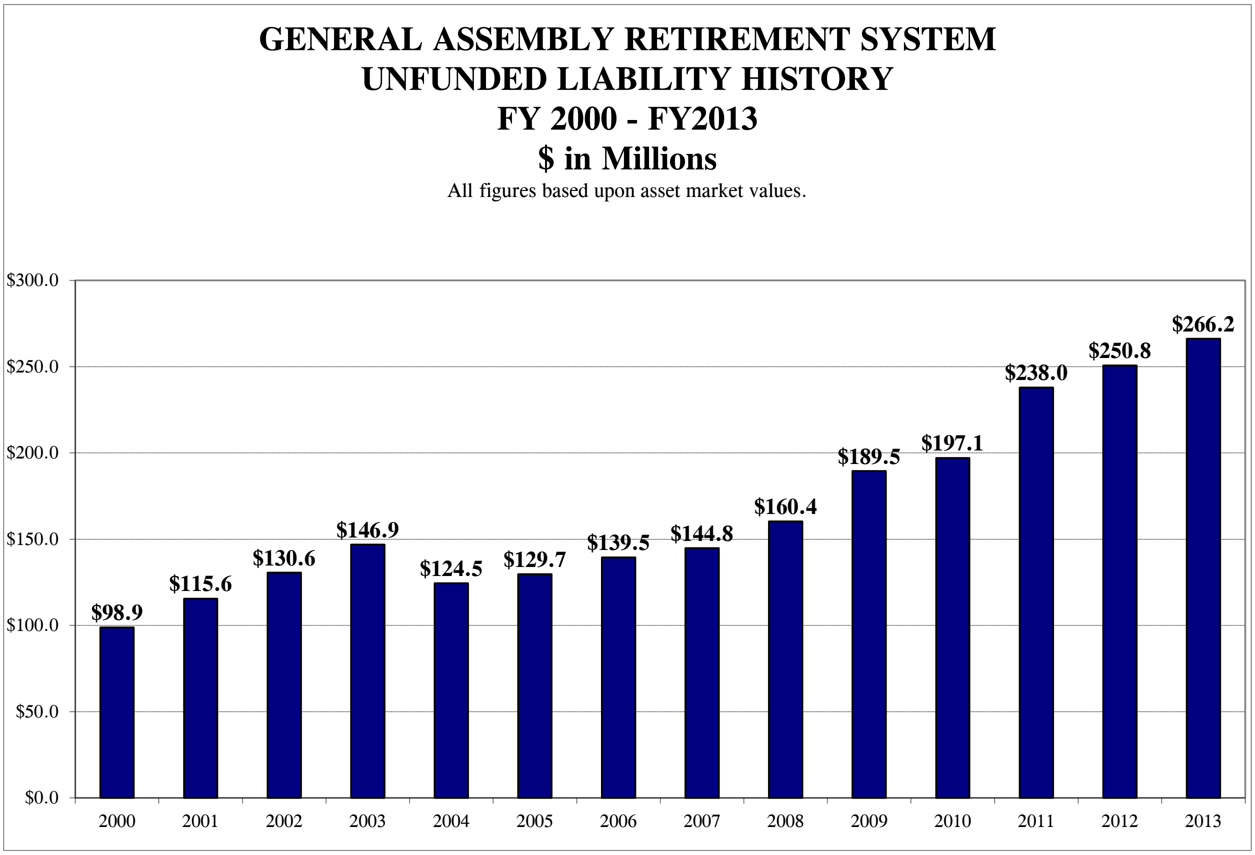


CHART 54

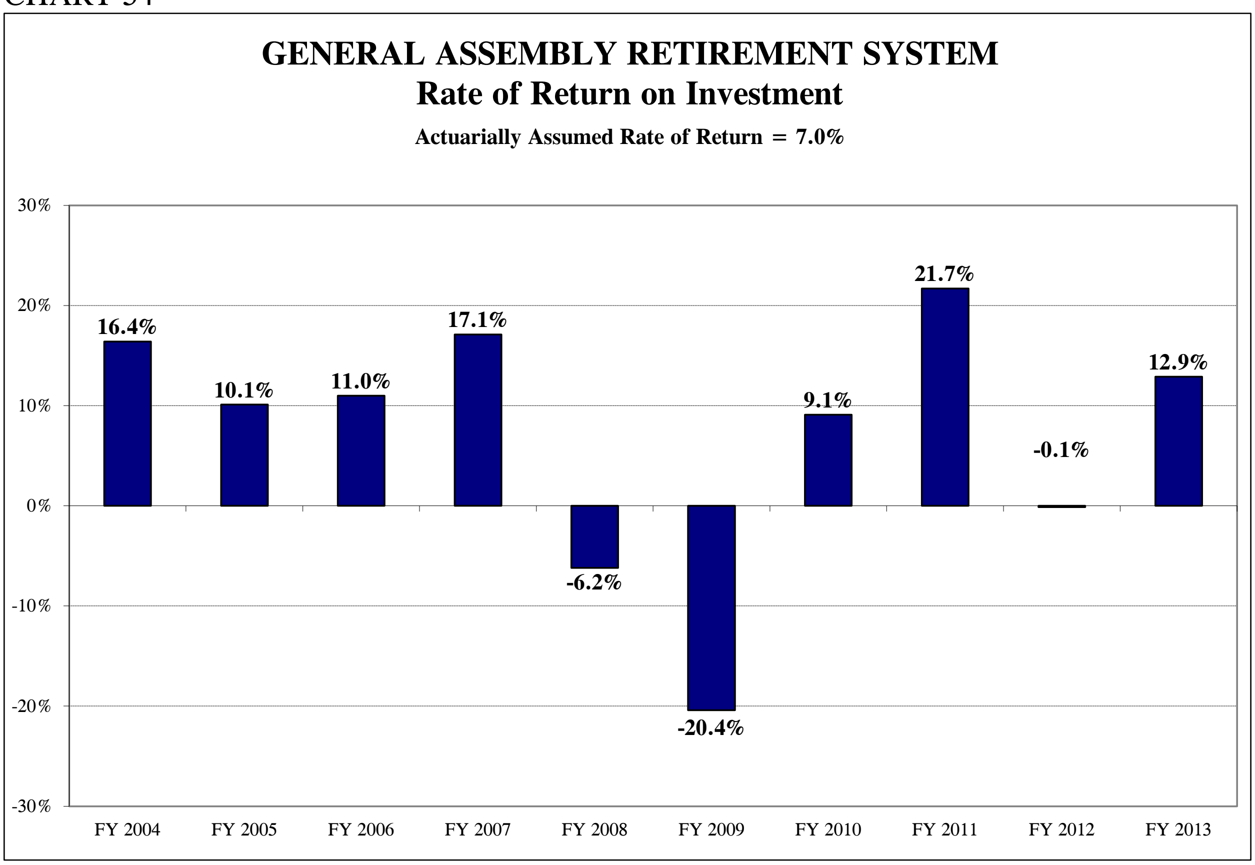


CHART 55

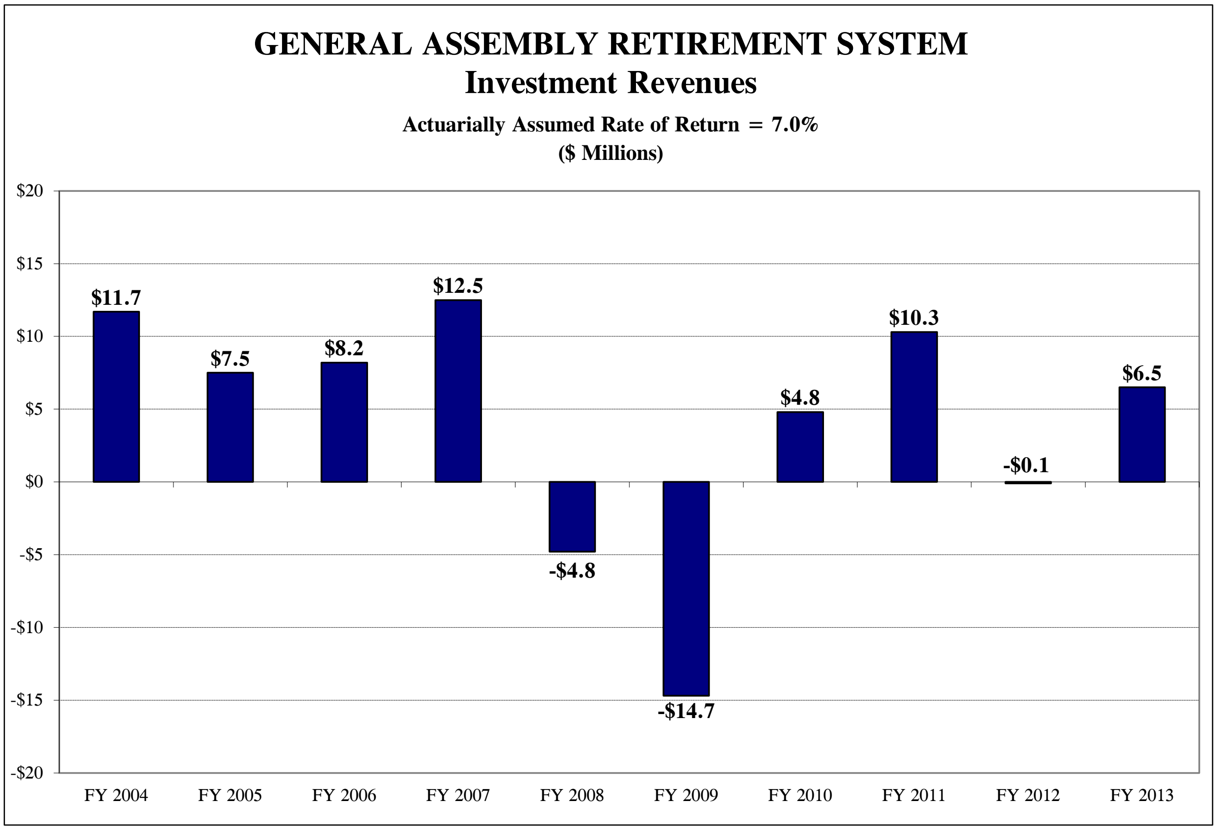


CHART 56

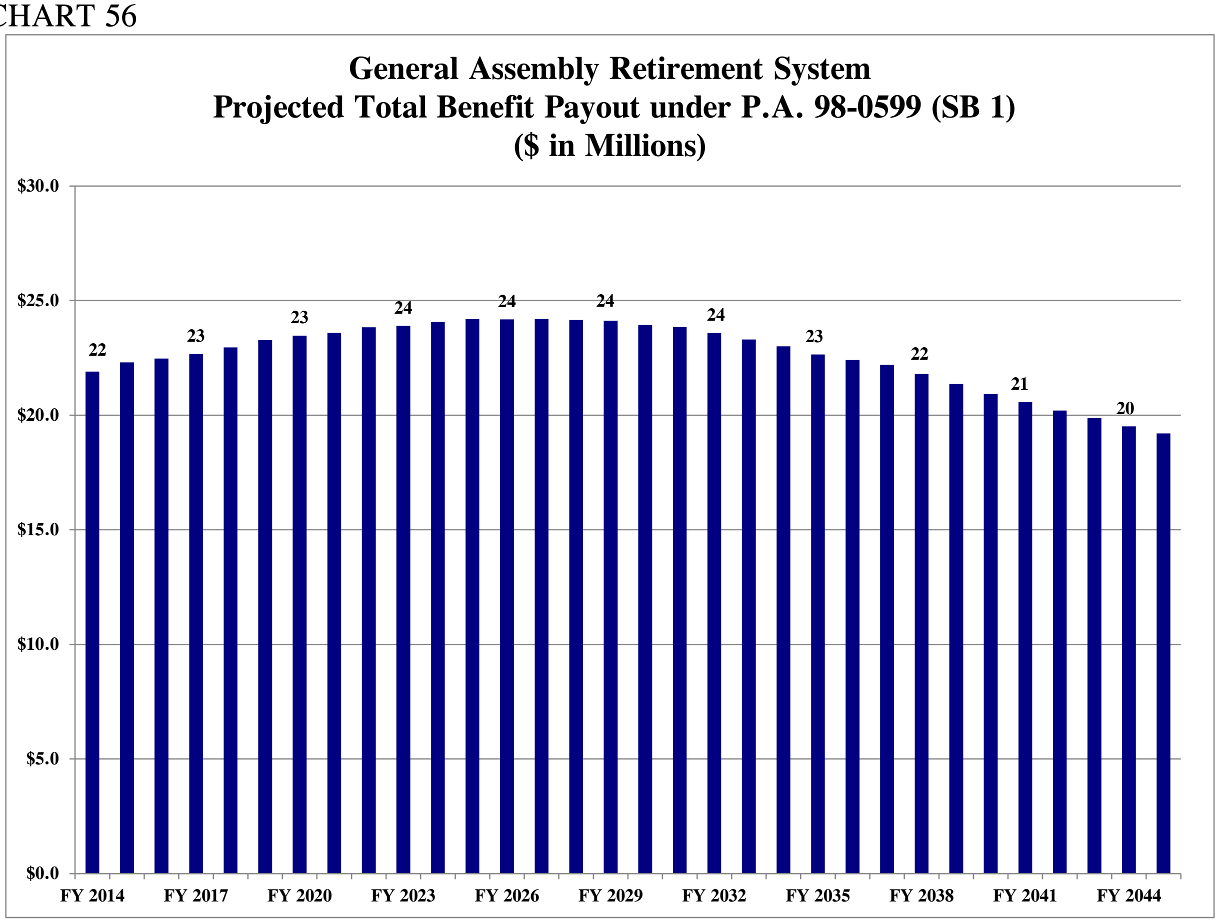


TABLE 26

GENERAL ASSEMBLY RETIREMENT SYSTEM
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

YEAR ENDED	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N.C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ACTUARIAL ASSUMPTIONS	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABIILITY FROM PREVIOUS YEAR
6/30/1996	$1,926,843	($2,564,790)	$5,271,809	$0	$0	$1,441,644	$6,075,506
6/30/1997	1,298,457	(5,057,646)	5,529,869	0	(136,881)	753,138	2,386,937
6/30/1998	(233,098)	(5,394,158)	5,710,203	0	0	460,957	543,904
6/30/1999	846,137	(2,808,175)	5,298,511	0	0	3,030,916	6,367,389
6/30/2000	(431,214)	(2,371,993)	5,576,440	0	0	2,079,991	4,853,224
6/30/2001	(555,323)	10,135,725	5,803,227	0	0	1,273,197	16,656,826
6/30/2002	(1,520,756)	8,713,370	6,741,725	0	1,211,951	(162,610)	14,983,680
6/30/2003	(1,793,094)	4,391,493	7,217,512	0	0	6,485,877	16,301,788
6/30/2004	(2,633,642)	(5,927,446)	(19,174,182)	0	0	5,286,195	(22,449,075)
6/30/2005	(645,631)	(1,288,918)	7,445,358	0	0	(262,887)	5,247,922
6/30/2006	(3,113,674)	(1,566,794)	8,528,558	0	4,786,991	1,190,775	9,825,856
6/30/2007	3,962,835	(6,733,144)	7,670,304	0	0	373,350	5,273,345
6/30/2008	(2,217,940)	11,400,154	7,073,235	0	0	(613,134)	15,642,315
6/30/2009	1,737,809	3,991,729	6,172,942	0	0	1,380,596	13,283,076
6/30/2010	(2,450,000)	5,710,000	5,670,000	2,140,000	0	830,000	11,900,000
6/30/2011	(1,718,437)	3,577,042	5,621,165	0	35,809,167	6,405,797	49,694,734
6/30/2012	(1,912,815)	3,662,246	8,818,897	0	0	1,563,530	12,131,858
6/30/2013	302,952	3,109,095	5,894,756	0	8,423,005	3,502,950	21,232,758
TOTALS	$ (9,150,591)	$ 20,977,790	$ 90,870,329	$ 2,140,000	$ 50,094,233	$ 35,020,282	$ 189,952,043

TABLE 27

GENERAL ASSEMBLY RETIREMENT SYSTEM
Changes in Net Assets
($ in Millions)

Fiscal Years	2013	2012	2011	2010	2009	2008	2007	2006
Additions to Assets								
State of Illinois	14.1	10.5	11.4	10.4	8.9	6.8	5.4	4.2
Pension Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	1.5	1.6	2.0	1.7	1.7	1.8	1.7	1.4
Net Investment Income	6.5	-0.1	10.3	4.8	-14.7	-4.7	13.0	8.2
Total Asset Additions (A)	22.1	12.0	23.7	16.9	-4.1	3.9	20.1	13.8
Deductions from Assets								
Benefits	20.1	19.3	17.6	16.8	15.8	15.3	14.7	14.1
Refunds	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.2
Subsidy Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Expenses	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Asset Deductions (B)	20.5	19.7	18.0	17.3	16.2	15.7	15.2	14.6
Change in Net Assets (A-B=C)	1.6	-7.7	5.7	-0.4	-20.3	-11.8	4.9	-0.8

TABLE 28

GENERAL ASSEMBLY RETIREMENT SYSTEM Historical Investment Revenues ($ in Millions)			
Fiscal Year	Market Value of Assets at Year End	Net Investment Revenue	Rate of Return Earned
2004	81.3	11.7	16.4%
2005	80.8	7.5	10.1%
2006	79.0	8.2	11.0%
2007	83.9	12.5	17.1%
2008	71.9	-4.8	-6.2%
2009	55.6	-14.7	-20.1%
2010	54.7	4.8	9.1%
2011	60.4	10.3	11.7%
2012	52.7	-0.1	-0.1%
2013	54.3	6.5	12.9%

2004 - 2013 Asset Values are Market Values.

NOTE: GARS investment management is provided by the Illinois State Board of Investment.

TABLE 29

GENERAL ASSEMBLY RETIREMENT SYSTEM Reduction in State Contributions Attributable to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in Millions)			
Fiscal Year	State Contribution Based on Pre-SB 1 Baseline	State Contribution based on SB 1 (P.A. 98-0599)	Annual Savings
2014	$ 13.9	$ 13.9	$ -
2015	15.8	15.8	-
2016	15.7	16.0	-0.3
2017	16.2	16.1	0.2
2018	16.9	16.5	0.4
2019	17.5	17.8	-0.3
2020	18.2	20.0	-1.8
2021	18.9	20.4	-1.6
2022	19.6	20.9	-1.3
2023	20.4	21.3	-0.9
2024	21.1	21.7	-0.6
2025	21.9	22.2	-0.3
2026	22.8	22.6	0.1
2027	23.6	23.1	0.5
2028	24.5	23.6	1.0
2029	25.4	24.0	1.4
2030	26.3	24.5	1.8
2031	27.2	25.0	2.3
2032	28.3	25.5	2.8
2033	29.4	26.0	3.5
2034	30.5	26.4	4.1
2035	31.7	26.9	4.8
2036	32.8	27.4	5.4
2037	34.0	27.9	6.2
2038	35.3	28.4	6.9
2039	36.6	9.5	27.0
2040	37.9	1.4	36.5
2041	39.3	1.4	37.8
2042	40.7	1.4	39.2
2043	42.1	1.4	40.7
2044	43.7	1.4	42.2
2045	45.2	1.5	43.8
Totals	873.3	571.8	**301.6**

TABLE 30

GENERAL ASSEMBLY RETIREMENT SYSTEM Projected Normal Costs Due to SB 1 (P.A. 98-0599) Projections Provided by Retirement System Actuaries Using FY 2013 Data ($ in millions)						
Fiscal Year	Tier 1 Normal Cost	Tier 1 Normal Cost as a % of Payroll	Tier 2 Normal Cost	Tier 2 Normal Cost as a % of Payroll	Total Normal Cost	Total Normal Cost as a % of Payroll
2014	2.7	20.8%	0.6	4.6%	3.3	25.4%
2015	2.5	19.0%	0.7	5.7%	3.2	24.6%
2016	2.4	17.6%	0.9	6.5%	3.2	24.1%
2017	2.2	16.1%	1.0	7.4%	3.3	23.5%
2018	2.1	14.9%	1.2	8.1%	3.3	23.0%
2019	2.0	13.7%	1.3	8.9%	3.4	22.5%
2020	1.9	12.5%	1.5	9.5%	3.4	22.1%
2021	1.8	11.3%	1.6	10.2%	3.5	21.5%
2022	1.7	10.3%	1.8	10.8%	3.5	21.1%
2023	1.6	9.4%	1.9	11.3%	3.5	20.7%
2024	1.5	8.5%	2.1	11.9%	3.6	20.3%
2025	1.4	7.4%	2.3	12.4%	3.6	19.9%
2026	1.2	6.6%	2.4	12.9%	3.7	19.5%
2027	1.1	5.8%	2.6	13.3%	3.7	19.2%
2028	1.0	5.2%	2.7	13.7%	3.7	18.9%
2029	0.9	4.5%	2.8	14.0%	3.8	18.6%
2030	0.8	4.1%	3.0	14.3%	3.8	18.3%
2031	0.8	3.6%	3.1	14.5%	3.9	18.1%
2032	0.7	3.2%	3.2	14.7%	3.9	17.9%
2033	0.6	2.8%	3.3	14.9%	4.0	17.7%
2034	0.6	2.5%	3.4	15.0%	4.0	17.5%
2035	0.5	2.2%	3.5	15.2%	4.0	17.3%
2036	0.4	1.9%	3.6	15.3%	4.1	17.2%
2037	0.4	1.5%	3.8	15.5%	4.1	17.0%
2038	0.3	1.4%	3.8	15.5%	4.2	16.9%
2039	0.3	1.2%	3.9	15.6%	4.2	16.8%
2040	0.3	1.0%	4.0	15.7%	4.3	16.7%
2041	0.2	0.9%	4.1	15.8%	4.3	16.6%
2042	0.2	0.7%	4.2	15.8%	4.4	16.5%
2043	0.2	0.6%	4.3	15.9%	4.5	16.5%
2044	0.1	0.4%	4.4	16.0%	4.5	16.4%
2045	0.1	0.3%	4.5	16.0%	4.6	16.3%

Appendices

APPENDIX A

FUNDING PROJECTIONS FOR THE STATE RETIREMENT SYSTEMS
All Five Systems Combined
System Projections Based on Public Act 98-0599 (Senate Bill 1)
($ in millions)

Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	19,387.8	6,833.0	35.2%	1,548.9	151,289.6	71,034.2	80,255.4	47.0%
2015	**19,750.3**	**6,936.0**	**35.1%**	**1,425.5**	**155,381.7**	**76,432.2**	**78,949.6**	**49.2%**
2016	20,115.8	5,813.7	28.9%	1,470.3	159,419.3	79,194.7	80,224.6	49.7%
2017	20,661.5	5,854.2	28.3%	1,523.9	163,405.2	82,874.6	80,530.6	50.7%
2018	21,224.7	6,006.3	28.3%	1,568.4	167,295.4	85,991.5	81,303.9	51.4%
2019	21,825.7	6,433.0	29.5%	1,623.6	171,121.0	89,429.3	81,691.8	52.3%
2020	22,469.8	7,148.8	31.8%	1,669.3	174,841.4	93,514.4	81,327.0	53.5%
2021	23,162.0	7,309.2	31.6%	1,726.0	178,468.3	97,739.8	80,728.5	54.8%
2022	23,891.5	7,472.9	31.3%	1,793.2	181,988.0	102,124.1	79,863.9	56.1%
2023	24,623.4	7,647.2	31.1%	1,860.4	185,400.4	106,695.6	78,704.8	57.5%
2024	25,362.2	7,823.0	30.8%	1,928.7	188,689.6	111,489.9	77,199.6	59.1%
2025	26,136.6	8,011.9	30.7%	1,977.4	191,865.4	116,458.9	75,406.5	60.7%
2026	26,932.8	8,193.9	30.4%	2,057.0	194,937.9	121,746.9	73,191.0	62.5%
2027	27,760.8	8,398.3	30.3%	2,136.7	197,893.9	127,375.8	70,518.1	64.4%
2028	28,619.6	8,594.5	30.0%	2,216.7	200,735.5	133,368.0	67,367.5	66.4%
2029	29,535.7	8,805.8	29.8%	2,268.7	203,504.9	139,745.7	63,759.2	68.7%
2030	30,449.8	9,029.3	29.7%	2,361.5	206,180.6	146,605.8	59,574.8	71.1%
2031	31,363.8	9,255.2	29.5%	2,454.3	208,837.6	154,091.0	54,746.6	73.8%
2032	32,285.0	9,476.2	29.4%	2,538.1	211,405.7	162,192.9	49,212.8	76.7%
2033	33,247.2	9,702.1	29.2%	2,583.1	213,878.4	170,821.4	43,057.0	79.9%
2034	34,184.8	10,001.3	29.3%	2,676.2	216,310.1	180,257.9	36,052.2	83.3%
2035	35,124.7	10,223.9	29.1%	2,760.6	218,774.9	190,571.6	28,203.2	87.1%
2036	36,077.1	10,452.7	29.0%	2,846.6	221,236.5	201,786.9	19,449.6	91.2%
2037	37,085.7	9,529.8	25.7%	2,893.5	223,721.8	212,682.3	11,039.5	95.1%
2038	38,079.1	8,943.2	23.5%	2,991.1	226,274.9	223,760.9	2,514.1	98.9%
2039	39,068.9	1,362.5	3.5%	3,068.5	229,003.9	227,958.4	1,045.5	99.5%
2040	40,043.6	730.8	1.8%	3,156.0	231,796.8	231,590.9	205.8	99.9%
2041	41,098.1	743.6	1.8%	3,213.8	234,677.1	235,353.0	-675.8	100.3%
2042	42,094.7	755.9	1.8%	3,301.6	237,698.1	239,358.6	-1,660.5	100.7%
2043	43,130.9	770.5	1.8%	3,379.5	241,010.7	243,769.8	-2,759.1	101.1%
2044	44,111.4	784.7	1.8%	3,467.5	244,474.0	248,437.0	-3,963.0	101.6%
2045	45,072.9	799.2	1.8%	3,545.5	248,094.0	253,407.4	-5,313.3	102.1%

* Pursuant to P.A. 93-0589, the FY 2015 State Contribution includes $80.7 million for debt service for the 2003 Pension Obligation Bonds authorized by P.A. 93-0002. State contribution amounts shown for FY 2016 - 2045 do not include projected debt service as these amounts are not known until the annual SERS preliminary certification letters are issued pursuant to P.A. 97-0694 (State Actuary Law).

* State Contributions include Fortner and additional supplemental payments.

*According to projections made by System actuaries, SURS will reach fully funded status in 2037, TRS in 2038, and SERS in 2039.

APPENDIX B

FUNDING PROJECTIONS FOR THE TEACHERS RETIREMENT SYSTEM System Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 8.00% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	10,329.4	3,438.6	33.3%	1,000.0	84,670.0	41,680.0	42,990.0	49.2%
2015	**10,647.1**	**3,412.9**	**32.1%**	**940.0**	**86,900.0**	**44,670.0**	**42,230.0**	**51.4%**
2016	10,974.9	2,630.0	24.0%	970.0	89,110.0	45,940.0	43,170.0	51.6%
2017	11,301.1	2,650.0	23.4%	1,010.0	91,320.0	47,770.0	43,550.0	52.3%
2018	11,639.3	2,750.0	23.6%	1,040.0	93,500.0	49,320.0	44,180.0	52.7%
2019	12,004.4	2,990.0	24.9%	1,080.0	95,690.0	51,070.0	44,620.0	53.4%
2020	12,403.6	3,400.0	27.4%	1,110.0	97,860.0	53,220.0	44,640.0	54.4%
2021	12,837.4	3,500.0	27.3%	1,150.0	100,020.0	55,490.0	44,530.0	55.5%
2022	13,299.4	3,600.0	27.1%	1,200.0	102,170.0	57,900.0	44,270.0	56.7%
2023	13,760.8	3,710.0	27.0%	1,250.0	104,320.0	60,480.0	43,840.0	58.0%
2024	14,214.7	3,820.0	26.9%	1,300.0	106,450.0	63,250.0	43,200.0	59.4%
2025	14,694.6	3,940.0	26.8%	1,330.0	108,570.0	66,150.0	42,420.0	60.9%
2026	15,183.2	4,050.0	26.7%	1,390.0	110,690.0	69,310.0	41,380.0	62.6%
2027	15,695.7	4,180.0	26.6%	1,450.0	112,800.0	72,740.0	40,060.0	64.5%
2028	16,228.6	4,300.0	26.5%	1,510.0	114,890.0	76,440.0	38,450.0	66.5%
2029	16,794.5	4,430.0	26.4%	1,540.0	116,940.0	80,350.0	36,590.0	68.7%
2030	17,352.4	4,570.0	26.3%	1,610.0	118,970.0	84,590.0	34,380.0	71.1%
2031	17,901.2	4,710.0	26.3%	1,680.0	121,040.0	89,270.0	31,770.0	73.8%
2032	18,445.3	4,840.0	26.2%	1,740.0	123,070.0	94,350.0	28,720.0	76.7%
2033	19,013.7	4,970.0	26.1%	1,760.0	125,070.0	99,720.0	25,350.0	79.7%
2034	19,557.7	5,150.0	26.3%	1,830.0	127,090.0	105,620.0	21,470.0	83.1%
2035	20,091.3	5,280.0	26.3%	1,890.0	129,170.0	112,090.0	17,080.0	86.8%
2036	20,621.3	5,410.0	26.2%	1,950.0	131,250.0	119,100.0	12,150.0	90.7%
2037	21,192.9	5,530.0	26.1%	1,970.0	133,340.0	126,570.0	6,770.0	94.9%
2038	21,739.6	5,660.0	26.0%	2,040.0	135,470.0	134,710.0	760.0	99.4%
2039	22,276.2	-	0.0%	2,090.0	137,730.0	137,730.0	-	100.0%
2040	22,805.7	-	0.0%	2,150.0	140,000.0	140,740.0	-740.0	100.5%
2041	23,374.8	-	0.0%	2,180.0	142,300.0	143,810.0	-1,510.0	101.1%
2042	23,918.5	-	0.0%	2,240.0	144,670.0	147,040.0	-2,370.0	101.6%
2043	24,444.7	-	0.0%	2,290.0	147,240.0	150,570.0	-3,330.0	102.3%
2044	24,951.1	-	0.0%	2,350.0	149,860.0	154,240.0	-4,380.0	102.9%
2045	25,452.1	-	0.0%	2,400.0	152,530.0	158,090.0	-5,560.0	103.6%

* Pursuant to TRS' final FY 2015 certification letter dated January 15, 2014, the FY 2015 required State Contribution includes $1 million payable from the Guaranteed Minimum Annuity Reserve.

* State Contributions include Fortner and additional supplemental payments.

APPENDIX C

FUNDING PROJECTIONS FOR THE STATE EMPLOYEES RETIREMENT SYSTEM System Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 7.75% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	4,536.7	1,743.9	38.4%	241.2	32,746.9	13,082.1	19,665.0	40.0%
2015	**4,519.6**	**1,829.1**	**40.5%**	**201.8**	**33,853.1**	**14,278.8**	**19,574.0**	**42.2%**
2016	4,474.0	1,697.0	37.9%	210.1	34,952.8	15,163.9	19,789.0	43.4%
2017	4,598.9	1,737.0	37.8%	217.0	36,037.9	16,232.2	19,806.0	45.0%
2018	4,721.8	1,765.0	37.4%	223.9	37,101.3	17,167.9	19,933.0	46.3%
2019	4,848.6	1,874.0	38.7%	231.3	38,136.5	18,182.6	19,953.0	47.7%
2020	4,978.0	2,041.0	41.0%	238.7	39,137.6	19,338.0	19,800.0	49.4%
2021	5,114.5	2,077.0	40.6%	246.5	40,101.1	20,508.3	19,593.0	51.1%
2022	5,254.7	2,115.0	40.3%	254.5	41,015.2	21,689.7	19,325.0	52.9%
2023	5,390.8	2,152.0	39.9%	262.1	41,871.9	22,877.8	18,994.0	54.6%
2024	5,536.2	2,189.0	39.5%	270.2	42,669.7	24,076.7	18,593.0	56.4%
2025	5,685.1	2,228.0	39.2%	278.4	43,406.9	25,291.1	18,116.0	58.3%
2026	5,840.4	2,269.0	38.9%	286.9	44,080.0	26,525.7	17,554.0	60.2%
2027	5,999.5	2,311.0	38.5%	295.5	44,682.5	27,782.3	16,900.0	62.2%
2028	6,163.9	2,354.0	38.2%	304.2	45,224.5	29,075.1	16,149.0	64.3%
2029	6,346.8	2,401.0	37.8%	314.1	45,715.6	30,425.7	15,290.0	66.6%
2030	6,529.9	2,450.0	37.5%	324.2	46,153.1	31,842.4	14,311.0	69.0%
2031	6,716.8	2,500.0	37.2%	334.3	46,540.0	33,337.2	13,203.0	71.6%
2032	6,913.1	2,553.0	36.9%	345.0	46,886.4	34,930.5	11,955.0	74.5%
2033	7,118.7	2,609.0	36.7%	356.4	47,177.1	36,632.5	10,544.0	77.7%
2034	7,318.1	2,685.0	36.7%	365.6	47,410.1	38,464.6	8,945.0	81.1%
2035	7,524.0	2,738.0	36.4%	375.7	47,606.8	40,435.6	7,171.0	84.9%
2036	7,741.5	2,797.0	36.1%	387.4	47,785.5	42,582.7	5,203.0	89.1%
2037	7,968.2	2,859.0	35.9%	399.7	47,963.6	44,940.2	3,024.0	93.7%
2038	8,199.2	2,923.0	35.7%	412.5	48,150.0	47,538.0	612.0	98.7%
2039	8,430.2	1,015.0	12.0%	425.0	48,350.5	48,350.5	-	100.0%
2040	8,651.7	385.0	4.5%	437.6	48,572.4	48,572.4	-	100.0%
2041	8,906.6	391.0	4.4%	450.4	48,822.0	48,822.0	-	100.0%
2042	9,124.4	396.0	4.3%	463.1	49,108.8	49,108.8	-	100.0%
2043	9,393.9	403.0	4.3%	475.8	49,443.3	49,443.3	-	100.0%
2044	9,623.5	409.0	4.3%	488.5	49,833.3	49,833.3	-	100.0%
2045	9,834.1	415.0	4.2%	501.1	50,285.4	50,285.4	-	100.0%

* State Contributions include Fortner and additional supplemental payments.

APPENDIX D

FUNDING PROJECTIONS FOR THE STATE UNIVERSITIES RETIREMENT SYSTEM System Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 7.75% ($ in millions)								
Fiscal Year	Annual Payroll**	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	4,336.1	1,509.8	34.8%	290.0	31,351.5	15,533.1	15,818.4	49.5%
2015	**4,403.1**	**1,544.2**	**35.1%**	**266.1**	**32,024.3**	**16,662.1**	**15,362.2**	**52.0%**
2016	4,484.7	1,336.8	29.8%	272.5	32,672.5	17,205.6	15,466.9	52.7%
2017	4,577.3	1,317.3	28.8%	279.6	33,288.2	17,918.2	15,370.0	53.8%
2018	4,677.8	1,340.0	28.6%	287.1	33,864.9	18,491.3	15,373.6	54.6%
2019	4,785.2	1,416.3	29.6%	294.9	34,400.3	19,109.0	15,291.3	55.5%
2020	4,899.0	1,552.0	31.7%	303.1	34,890.4	19,835.1	15,055.3	56.8%
2021	5,019.4	1,575.2	31.4%	311.8	35,341.5	20,570.1	14,771.4	58.2%
2022	5,145.4	1,599.8	31.1%	320.8	35,751.6	21,316.7	14,435.0	59.6%
2023	5,278.0	1,625.7	30.8%	330.3	36,118.5	22,077.4	14,041.1	61.1%
2024	5,415.5	1,652.9	30.5%	340.1	36,448.1	22,863.4	13,584.7	62.7%
2025	5,558.9	1,681.2	30.2%	350.4	36,742.5	23,682.3	13,060.2	64.5%
2026	5,708.9	1,710.7	30.0%	361.0	37,004.8	24,543.2	12,461.6	66.3%
2027	5,862.9	1,741.3	29.7%	372.0	37,238.7	25,456.1	11,782.6	68.4%
2028	6,021.6	1,773.0	29.4%	383.4	37,445.8	26,429.5	11,016.3	70.6%
2029	6,186.0	1,805.5	29.2%	395.2	37,678.4	27,522.9	10,155.5	73.0%
2030	6,355.9	1,838.2	28.9%	407.3	37,897.2	28,704.2	9,193.0	75.7%
2031	6,530.4	1,872.0	28.7%	419.8	38,113.8	29,993.3	8,120.4	78.7%
2032	6,707.4	1,907.1	28.4%	432.1	38,327.2	31,399.2	6,928.0	81.9%
2033	6,891.4	1,943.2	28.2%	444.8	38,535.7	32,930.1	5,605.6	85.5%
2034	7,081.1	1,979.5	28.0%	457.8	38,744.8	34,601.5	4,143.3	89.3%
2035	7,276.7	2,015.3	27.7%	471.2	38,966.5	36,435.4	2,531.1	93.5%
2036	7,476.3	2,050.9	27.4%	484.7	39,205.3	38,447.4	757.9	98.1%
2037	7,681.1	941.6	12.3%	498.4	39,460.4	39,460.4	-	100.0%
2038	7,891.0	156.3	2.0%	512.3	39,735.8	39,735.8	-	100.0%
2039	8,106.9	157.9	1.9%	526.4	40,043.1	40,043.1	-	100.0%
2040	8,324.2	159.7	1.9%	540.3	40,382.2	40,382.2	-	100.0%
2041	8,547.9	161.6	1.9%	554.5	40,749.5	40,749.5	-	100.0%
2042	8,775.9	163.7	1.9%	568.6	41,148.3	41,148.3	-	100.0%
2043	9,009.1	166.0	1.8%	582.9	41,588.2	41,588.2	-	100.0%
2044	9,245.8	168.5	1.8%	597.2	42,069.6	42,069.6	-	100.0%
2045	9,487.8	171.2	1.8%	611.7	42,591.7	42,591.7	-	100.0%

* State Contribution Only - Excludes Estimated $42 Million In Federal Funds in All Years Shown. State Contributions include Fortner and additional supplemental payments.

** Payroll projections include SMP payroll - 15% of new SURS members are assumed to enter SMP

APPENDIX E

FUNDING PROJECTIONS FOR THE JUDGES RETIREMENT SYSTEM System Projections Based on Laws in Effect on June 30, 2013 Actuarially Assumed Rate of Return: 7.00% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	171.2	126.8	74.1%	16.2	2,242.2	689.1	1,553.1	30.7%
2015	**167.6**	**134.0**	**80.0%**	**16.3**	**2,325.5**	**772.0**	**1,553.5**	**33.2%**
2016	169.2	134.0	79.2%	16.2	2,405.5	838.0	1,567.5	34.8%
2017	170.8	133.9	78.4%	15.9	2,481.2	908.3	1,572.9	36.6%
2018	171.9	134.8	78.4%	15.9	2,552.2	968.4	1,583.8	37.9%
2019	173.0	134.9	78.0%	15.9	2,618.5	1,024.6	1,593.9	39.1%
2020	174.2	135.8	78.0%	15.9	2,679.1	1,077.2	1,601.9	40.2%
2021	175.2	136.6	78.0%	16.1	2,733.0	1,125.8	1,607.3	41.2%
2022	176.0	137.3	78.0%	16.1	2,780.5	1,170.1	1,610.4	42.1%
2023	177.3	138.3	78.0%	16.2	2,821.4	1,210.2	1,611.2	42.9%
2024	178.7	139.4	78.0%	16.5	2,855.6	1,246.5	1,609.1	43.7%
2025	180.4	140.5	77.9%	16.7	2,882.5	1,278.6	1,604.0	44.4%
2026	182.1	141.6	77.7%	17.0	2,902.3	1,306.6	1,595.7	45.0%
2027	184.0	142.9	77.6%	17.1	2,915.0	1,330.6	1,584.4	45.6%
2028	186.2	143.9	77.3%	17.0	2,920.5	1,350.2	1,570.2	46.2%
2029	188.6	145.3	77.0%	17.2	2,919.4	1,366.7	1,552.8	46.8%
2030	191.4	146.6	76.6%	17.7	2,912.0	1,380.2	1,531.8	47.4%
2031	194.5	148.1	76.2%	17.9	2,898.9	1,391.7	1,507.3	48.0%
2032	197.9	150.7	76.1%	18.6	2,880.4	1,402.9	1,477.5	48.7%
2033	201.5	153.9	76.4%	19.4	2,856.9	1,415.5	1,441.4	49.5%
2034	205.6	160.3	78.0%	20.2	2,829.4	1,433.7	1,395.7	50.7%
2035	209.9	163.7	78.0%	21.0	2,798.6	1,455.8	1,342.8	52.0%
2036	214.7	167.4	78.0%	21.8	2,765.3	1,483.2	1,282.1	53.6%
2037	219.7	171.4	78.0%	22.7	2,730.0	1,517.1	1,212.8	55.6%
2038	225.1	175.6	78.0%	23.5	2,693.4	1,559.2	1,134.2	57.9%
2039	230.8	180.0	78.0%	24.3	2,656.6	1,611.1	1,045.5	60.6%
2040	236.8	184.7	78.0%	25.2	2,620.0	1,674.2	945.8	63.9%
2041	243.1	189.6	78.0%	26.0	2,584.6	1,750.4	834.2	67.7%
2042	249.7	194.8	78.0%	26.9	2,550.8	1,841.3	709.5	72.2%
2043	256.6	200.1	78.0%	27.7	2,519.6	1,948.8	570.9	77.3%
2044	263.8	205.8	78.0%	28.6	2,491.5	2,074.5	417.0	83.3%
2045	271.3	211.6	78.0%	29.5	2,467.1	2,220.5	246.7	90.0%

APPENDIX F

FUNDING PROJECTIONS FOR THE GENERAL ASSEMBLY RETIREMENT SYSTEM
System Projections Based on Public Act 98-0599 (Senate Bill 1)
Actuarially Assumed Rate of Return: 7.00%
($ in millions)

Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	14.5	13.9	95.5%	1.5	279.0	50.0	229.0	17.9%
2015	**12.9**	**15.8**	**122.2%**	**1.4**	**278.9**	**49.3**	**229.6**	**17.7%**
2016	12.9	16.0	123.3%	1.4	278.5	47.3	231.2	17.0%
2017	13.4	16.1	119.8%	1.5	277.9	45.9	232.0	16.5%
2018	13.9	16.5	118.5%	1.5	277.0	44.0	233.0	15.9%
2019	14.4	17.8	123.7%	1.6	275.8	43.1	232.7	15.6%
2020	14.9	20.0	133.6%	1.6	274.3	44.2	230.1	16.1%
2021	15.5	20.4	131.8%	1.7	272.7	45.7	226.9	16.8%
2022	16.0	20.8	130.1%	1.8	270.7	47.7	223.0	17.6%
2023	16.6	21.3	128.5%	1.8	268.6	50.2	218.4	18.7%
2024	17.1	21.7	127.0%	1.9	266.2	53.3	212.9	20.0%
2025	17.7	22.2	125.6%	2.0	263.5	57.0	206.6	21.6%
2026	18.2	22.6	124.4%	2.0	260.7	61.5	199.3	23.6%
2027	18.7	23.1	123.3%	2.1	257.8	66.8	191.0	25.9%
2028	19.3	23.6	122.3%	2.2	254.7	73.1	181.6	28.7%
2029	19.8	24.0	121.4%	2.2	251.5	80.4	171.1	32.0%
2030	20.3	24.5	120.6%	2.3	248.3	89.0	159.2	35.9%
2031	20.9	25.0	119.8%	2.4	245.0	98.9	146.1	40.4%
2032	21.4	25.5	119.3%	2.4	241.8	110.3	131.5	45.6%
2033	21.8	26.0	118.8%	2.5	238.7	123.3	115.4	51.7%
2034	22.3	26.4	118.3%	2.5	235.8	138.2	97.6	58.6%
2035	22.8	26.9	117.9%	2.6	233.0	154.9	78.1	66.5%
2036	23.3	27.4	117.5%	2.7	230.4	173.7	56.7	75.4%
2037	23.8	27.9	117.1%	2.7	227.9	194.5	33.4	85.4%
2038	24.3	28.3	116.8%	2.8	225.6	217.8	7.8	96.5%
2039	24.8	9.5	38.5%	2.8	223.7	223.7	-	100.0%
2040	25.2	1.4	5.7%	2.9	222.2	222.2	-	100.0%
2041	25.7	1.4	5.6%	2.9	221.0	221.0	-	100.0%
2042	26.2	1.4	5.5%	3.0	220.2	220.2	-	100.0%
2043	26.6	1.4	5.4%	3.1	219.6	219.6	-	100.0%
2044	27.1	1.4	5.3%	3.1	219.5	219.5	-	100.0%
2045	27.5	1.4	5.3%	3.2	219.8	219.8	-	100.0%

* State Contributions include Fortner and additional supplemental payments.

APPENDIX G

FUNDING PROJECTIONS FOR THE STATE RETIREMENT SYSTEMS All Five Systems Combined CoGFA Projections Based on Public Act 98-0599 (Senate Bill 1) ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	18,503.3	6,833.0	36.9%	1,556.9	151,076.1	71,029.8	80,046.3	47.0%
2015	**18,884.7**	**6,936.0**	**36.7%**	**1,416.1**	**155,288.0**	**76,337.4**	**78,950.5**	**49.2%**
2016	19,419.8	5,760.5	29.7%	1,464.2	159,487.1	79,048.7	80,438.3	49.6%
2017	19,975.4	5,897.8	29.5%	1,513.9	163,670.5	82,805.8	80,864.8	50.6%
2018	20,590.0	6,037.1	29.3%	1,564.6	167,823.3	86,021.8	81,801.6	51.3%
2019	21,225.3	6,514.7	30.7%	1,617.1	171,966.4	89,681.4	82,285.0	52.2%
2020	21,878.6	7,244.9	33.1%	1,671.1	176,066.6	94,054.5	82,012.1	53.4%
2021	22,553.7	7,408.1	32.8%	1,727.7	180,122.5	98,612.2	81,510.3	54.7%
2022	23,258.5	7,589.5	32.6%	1,786.3	184,129.6	103,388.5	80,741.1	56.1%
2023	23,976.4	7,777.1	32.4%	1,846.4	188,073.7	108,404.8	79,668.8	57.6%
2024	24,731.4	7,955.4	32.2%	1,909.6	191,950.1	113,671.6	78,278.6	59.2%
2025	25,515.2	8,158.3	32.0%	1,974.7	195,763.3	119,239.5	76,523.8	60.9%
2026	26,320.1	8,361.3	31.8%	2,042.0	199,522.7	125,158.0	74,364.7	62.7%
2027	27,186.1	8,584.0	31.6%	2,113.8	203,237.7	131,474.7	71,763.0	64.7%
2028	28,059.8	8,805.1	31.4%	2,186.4	206,886.6	138,195.1	68,691.4	66.8%
2029	28,964.3	9,040.4	31.2%	2,261.3	210,489.6	145,394.2	65,095.4	69.1%
2030	29,911.2	9,266.4	31.0%	2,339.4	214,063.2	153,125.8	60,937.4	71.5%
2031	30,868.7	9,513.5	30.8%	2,417.6	217,679.2	161,523.1	56,156.0	74.2%
2032	31,838.6	9,756.6	30.6%	2,496.6	221,245.8	170,540.1	50,705.8	77.1%
2033	32,791.1	9,998.0	30.5%	2,573.8	224,770.1	180,225.8	44,544.3	80.2%
2034	33,759.1	10,310.9	30.5%	2,651.3	228,278.1	190,738.1	37,540.0	83.6%
2035	34,732.9	10,554.5	30.4%	2,726.6	231,863.1	202,160.0	29,703.1	87.2%
2036	35,735.1	10,802.4	30.2%	2,805.7	235,452.0	214,488.3	20,963.6	91.1%
2037	36,752.4	9,626.9	26.2%	2,885.3	239,046.6	226,317.1	12,729.6	94.7%
2038	37,773.6	9,359.9	24.8%	2,965.1	242,693.9	238,602.6	4,091.3	98.3%
2039	38,836.4	3,311.6	8.5%	3,046.7	246,547.6	245,502.1	1,045.5	99.6%
2040	39,894.9	808.5	2.0%	3,128.0	250,443.4	250,097.9	345.5	99.9%
2041	40,938.9	827.2	2.0%	3,208.1	254,361.5	254,802.1	-440.6	100.2%
2042	41,988.3	846.1	2.0%	3,288.1	258,377.2	259,700.0	-1,322.8	100.5%
2043	43,054.3	866.0	2.0%	3,368.5	262,689.6	264,996.2	-2,306.6	100.9%
2044	44,075.1	884.7	2.0%	3,445.3	267,514.3	270,909.7	-3,395.4	101.3%
2045	45,054.8	904.5	2.0%	3,517.6	273,092.9	277,682.5	-4,589.6	101.7%

* Pursuant to P.A. 93-0589, the FY 2015 State Contribution includes $80.7 million for debt service for the 2003 Pension Obligation Bonds authorized by P.A. 93-0002. State contribution amounts shown for FY 2016 - 2045 do not include projected debt service as these amounts are not known until the annual SERS preliminary certification letters are issued pursuant to P.A. 97-0694 (State Actuary Law).

*According to projections made by System actuaries, SURS will reach fully funded status in 2037, followed by TRS and SERS in 2039.

* State Contributions include Fortner and additional supplemental payments.

Note: The JRS and GARS portions of these projections came from the retirement systems.

APPENDIX H

FUNDING PROJECTIONS FOR THE TEACHERS RETIREMENT SYSTEM
CoGFA Projections Based on Public Act 98-0599 (Senate Bill 1)
Actuarially Assumed Rate of Return: 8.00%
($ in millions)

Fiscal Year	Annual Payroll	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	9,707.6	3,438.6	35.4%	1,008.2	84,653.2	41,667.8	42,985.4	49.2%
2015	**9,870.7**	**3,412.9**	**34.6%**	**924.6**	**87,004.8**	**44,524.5**	**42,480.3**	**51.2%**
2016	10,194.4	2,564.6	25.2%	959.4	89,366.8	45,725.5	43,641.3	51.2%
2017	10,528.2	2,672.9	25.4%	995.6	91,746.6	47,592.8	44,153.8	51.9%
2018	10,926.9	2,757.8	25.2%	1,032.8	94,145.8	49,184.6	44,961.2	52.2%
2019	11,333.4	3,048.1	26.9%	1,070.8	96,566.6	51,057.0	45,509.6	52.9%
2020	11,757.2	3,473.5	29.5%	1,110.4	99,009.6	53,374.0	45,635.6	53.9%
2021	12,199.8	3,580.8	29.4%	1,151.8	101,478.0	55,843.1	45,634.9	55.0%
2022	12,656.5	3,701.4	29.2%	1,194.4	103,972.7	58,494.6	45,478.1	56.3%
2023	13,135.0	3,827.4	29.1%	1,239.1	106,494.0	61,352.6	45,141.4	57.6%
2024	13,633.3	3,948.1	29.0%	1,285.6	109,039.4	64,420.0	44,619.4	59.1%
2025	14,145.6	4,082.3	28.9%	1,333.4	111,603.9	67,724.8	43,879.1	60.7%
2026	14,676.6	4,220.9	28.8%	1,383.0	114,196.4	71,302.8	42,893.6	62.4%
2027	15,242.7	4,368.1	28.7%	1,435.8	116,820.3	75,182.1	41,638.2	64.4%
2028	15,821.2	4,518.3	28.6%	1,489.8	119,459.8	79,358.1	40,101.7	66.4%
2029	16,408.9	4,670.7	28.5%	1,544.6	122,102.4	83,856.6	38,245.8	68.7%
2030	17,005.4	4,815.3	28.3%	1,600.2	124,757.3	88,707.3	36,050.0	71.1%
2031	17,608.8	4,971.5	28.2%	1,656.4	127,479.5	94,006.9	33,472.6	73.7%
2032	18,198.9	5,124.5	28.2%	1,711.4	130,191.7	99,700.0	30,491.7	76.6%
2033	18,775.7	5,264.2	28.0%	1,765.1	132,877.0	105,787.8	27,089.2	79.6%
2034	19,344.3	5,452.0	28.2%	1,818.1	135,553.9	112,370.2	23,183.7	82.9%
2035	19,920.5	5,591.6	28.1%	1,871.8	138,307.0	119,521.5	18,785.5	86.4%
2036	20,485.5	5,738.6	28.0%	1,924.4	141,035.8	127,184.6	13,851.2	90.2%
2037	21,042.5	5,873.5	27.9%	1,976.2	143,709.4	135,366.9	8,342.5	94.2%
2038	21,593.2	6,007.0	27.8%	2,027.5	146,353.3	144,134.8	2,218.5	98.5%
2039	22,155.5	1755.2	7.9%	2,079.9	149,087.8	149,087.8	0.0	100.0%
2040	22,704.8	-	0.0%	2,131.0	151,749.4	152,349.7	-600.3	100.4%
2041	23,249.1	-	0.0%	2,181.7	154,301.2	155,576.0	-1,274.8	100.8%
2042	23,788.8	-	0.0%	2,232.1	156,783.6	158,815.9	-2,032.3	101.3%
2043	24,331.4	-	0.0%	2,282.8	159,376.4	162,253.9	-2,877.5	101.8%
2044	24,841.7	-	0.0%	2,330.5	162,291.2	166,103.6	-3,812.4	102.3%
2045	25,292.9	-	0.0%	2,372.8	165,763.8	170,600.1	-4,836.3	102.9%

* Pursuant to TRS' final FY 2015 certification letter dated January 15, 2014, the FY 2015 required State Contribution includes $1 million payable from the Guaranteed Minimum Annuity Reserve.

* State Contributions include Fortner and additional supplemental payments.

APPENDIX I

FUNDING PROJECTIONS FOR THE STATE EMPLOYEES RETIREMENT SYSTEM CoGFA Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 7.75% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	4,326.0	$1,743.9	40.3%	241.0	32,767.6	13,041.1	19,726.5	39.8%
2015	**4,407.2**	**1,829.1**	**41.5%**	**208.5**	**33,795.6**	**14,237.1**	**19,558.5**	**42.1%**
2016	4,538.0	1,658.2	36.5%	215.6	34,829.9	15,057.0	19,772.9	43.2%
2017	4,668.0	1,700.1	36.4%	222.6	35,859.6	16,065.9	19,793.7	44.8%
2018	4,790.1	1,732.3	36.2%	229.3	36,873.0	16,946.5	19,926.5	46.0%
2019	4,913.6	1,847.1	37.6%	236.3	37,891.2	17,938.1	19,953.1	47.3%
2020	5,037.1	2,019.8	40.1%	243.3	38,883.1	19,078.7	19,804.4	49.1%
2021	5,157.1	2,059.9	39.9%	250.3	39,844.5	20,241.0	19,603.5	50.8%
2022	5,286.5	2,104.0	39.8%	257.9	40,769.3	21,425.3	19,344.0	52.6%
2023	5,404.7	2,146.2	39.7%	264.7	41,640.9	22,620.6	19,020.3	54.3%
2024	5,528.8	2,183.2	39.5%	271.8	42,451.5	23,825.0	18,626.5	56.1%
2025	5,662.8	2,228.1	39.3%	279.3	43,203.4	25,047.4	18,156.0	58.0%
2026	5,794.4	2,266.9	39.1%	286.7	43,885.3	26,283.6	17,601.7	59.9%
2027	5,936.6	2,314.3	39.0%	294.5	44,495.4	27,540.2	16,955.2	61.9%
2028	6,074.4	2,353.7	38.7%	302.1	45,020.9	28,812.0	16,208.9	64.0%
2029	6,228.8	2,403.2	38.6%	310.5	45,484.5	30,131.1	15,353.4	66.2%
2030	6,405.9	2,449.1	38.2%	320.4	45,887.0	31,507.1	14,379.9	68.7%
2031	6,586.7	2,502.2	38.0%	330.1	46,230.9	32,953.3	13,277.6	71.3%
2032	6,778.6	2,550.7	37.6%	340.4	46,508.0	34,473.2	12,034.8	74.1%
2033	6,979.9	2,608.3	37.4%	351.2	46,739.4	36,100.6	10,638.8	77.2%
2034	7,206.2	2,685.4	37.3%	363.4	46,924.5	37,871.6	9,052.9	80.7%
2035	7,418.5	2,744.6	37.0%	371.7	47,055.7	39,770.7	7,285.0	84.5%
2036	7,658.1	2,800.3	36.6%	384.1	47,152.8	41,832.9	5,319.9	88.7%
2037	7,910.4	2,865.9	36.2%	397.2	47,239.0	44,098.1	3,140.9	93.4%
2038	8,170.4	2,924.9	35.8%	411.1	47,324.3	46,593.6	730.7	98.5%
2039	8,441.9	1,135.8	13.5%	424.7	47,422.1	47,422.1	-	100.0%
2040	8,704.1	384.0	4.4%	438.2	47,529.0	47,529.0	-	100.0%
2041	8,966.9	390.3	4.4%	451.7	47,656.7	47,656.7	-	100.0%
2042	9,232.5	396.6	4.3%	465.3	47,822.5	47,822.5	-	100.0%
2043	9,504.1	403.3	4.2%	478.7	48,036.7	48,036.7	-	100.0%
2044	9,766.3	408.9	4.2%	492.0	48,297.5	48,297.5	-	100.0%
2045	10,037.5	414.3	4.1%	505.6	48,602.9	48,602.9	-	100.0%

* State Contributions includes Fortner and additional supplemental payments.

APPENDIX J

FUNDING PROJECTIONS FOR THE STATE UNIVERSITIES RETIREMENT SYSTEM CoGFA Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 7.75% ($ in millions)								
Fiscal Year	Annual Payroll**	Total State Contribution*	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	$4,284.0	$1,509.8	35.2%	$290.0	31,134.1	15,581.9	15,552.2	50.0%
2015	**4,426.3**	**1,544.2**	**34.9%**	**265.4**	**31,883.2**	**16,754.5**	**15,128.6**	**52.5%**
2016	4,505.2	1,387.7	30.8%	271.6	32,606.4	17,381.0	15,225.4	53.3%
2017	4,595.0	1,374.9	29.9%	278.3	33,305.2	18,192.9	15,112.4	54.6%
2018	4,687.2	1,395.7	29.8%	285.1	33,975.3	18,878.3	15,097.1	55.6%
2019	4,790.9	1,466.7	30.6%	292.5	34,614.3	19,618.6	14,995.7	56.7%
2020	4,895.2	1,595.8	32.6%	299.9	35,220.5	20,480.4	14,740.1	58.1%
2021	5,006.2	1,610.4	32.2%	307.8	35,794.3	21,356.6	14,437.7	59.7%
2022	5,123.4	1,626.0	31.7%	316.1	36,336.4	22,250.9	14,085.5	61.2%
2023	5,242.8	1,643.9	31.4%	324.6	36,848.8	23,171.2	13,677.6	62.9%
2024	5,373.4	1,663.0	30.9%	333.8	37,337.5	24,126.8	13,210.7	64.6%
2025	5,508.8	1,685.2	30.6%	343.3	37,809.9	25,131.8	12,678.2	66.5%
2026	5,648.8	1,709.3	30.3%	353.3	38,278.0	26,203.6	12,074.4	68.5%
2027	5,804.0	1,735.6	29.9%	364.3	38,749.3	27,355.0	11,394.2	70.6%
2028	5,958.7	1,765.6	29.6%	375.3	39,230.7	28,601.7	10,629.0	72.9%
2029	6,118.2	1,797.2	29.4%	386.7	39,731.8	29,959.4	9,772.4	75.4%
2030	6,288.2	1,830.9	29.1%	398.8	40,258.6	31,442.2	8,816.4	78.1%
2031	6,457.8	1,866.7	28.9%	410.9	40,824.9	33,072.4	7,752.5	81.0%
2032	6,641.8	1,905.3	28.7%	423.8	41,424.0	34,853.7	6,570.3	84.1%
2033	6,812.1	1,945.6	28.6%	435.6	42,058.1	36,798.6	5,259.5	87.5%
2034	6,980.7	1,986.7	28.5%	447.1	42,734.6	38,924.5	3,810.1	91.1%
2035	7,161.2	2,027.7	28.3%	459.5	43,468.8	41,257.1	2,211.7	94.9%
2036	7,353.5	2,068.7	28.1%	472.7	44,267.7	43,814.0	453.7	99.0%
2037	7,556.0	688.2	9.1%	486.5	45,140.4	45,140.4	-	100.0%
2038	7,760.6	224.1	2.9%	500.2	46,097.2	46,097.2	-	100.0%
2039	7,983.4	231.1	2.9%	514.9	47,157.4	47,157.4	-	100.0%
2040	8,224.0	238.4	2.9%	530.8	48,322.8	48,322.8	-	100.0%
2041	8,454.1	245.9	2.9%	545.7	49,598.0	49,598.0	-	100.0%
2042	8,691.1	253.3	2.9%	560.8	51,000.1	51,000.1	-	100.0%
2043	8,935.6	261.1	2.9%	576.2	52,537.2	52,537.2	-	100.0%
2044	9,176.2	268.6	2.9%	591.1	54,214.5	54,214.5	-	100.0%
2045	9,425.6	277.2	2.9%	606.5	56,039.3	56,039.3	-	100.0%

* State Contribution Only - Excludes Estimated $42 Million In Federal Funds in All Years Shown. State Contributions include Fortner and additional supplemental payments.

** Payroll projections include SMP payroll - 15% of new SURS members are assumed to enter SMP

APPENDIX K

FUNDING PROJECTIONS FOR THE JUDGES RETIREMENT SYSTEM CoGFA Projections Based on Laws in Effect on June 30, 2013 Actuarially Assumed Rate of Return: 7.00% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	171.2	126.8	74.1%	16.2	2,242.2	689.1	1,553.1	30.7%
2015	**167.6**	**134.0**	**80.0%**	**16.3**	**2,325.5**	**772.0**	**1,553.5**	**33.2%**
2016	169.2	134.0	79.2%	16.2	2,405.5	838.0	1,567.5	34.8%
2017	170.8	133.9	78.4%	15.9	2,481.2	908.3	1,572.9	36.6%
2018	171.9	134.8	78.4%	15.9	2,552.2	968.4	1,583.8	37.9%
2019	173.0	134.9	78.0%	15.9	2,618.5	1,024.6	1,593.9	39.1%
2020	174.2	135.8	78.0%	15.9	2,679.1	1,077.2	1,601.9	40.2%
2021	175.2	136.6	78.0%	16.1	2,733.0	1,125.8	1,607.3	41.2%
2022	176.0	137.3	78.0%	16.1	2,780.5	1,170.1	1,610.4	42.1%
2023	177.3	138.3	78.0%	16.2	2,821.4	1,210.2	1,611.2	42.9%
2024	178.7	139.4	78.0%	16.5	2,855.6	1,246.5	1,609.1	43.7%
2025	180.4	140.5	77.9%	16.7	2,882.5	1,278.6	1,604.0	44.4%
2026	182.1	141.6	77.7%	17.0	2,902.3	1,306.6	1,595.7	45.0%
2027	184.0	142.9	77.6%	17.1	2,915.0	1,330.6	1,584.4	45.6%
2028	186.2	143.9	77.3%	17.0	2,920.5	1,350.2	1,570.2	46.2%
2029	188.6	145.3	77.0%	17.2	2,919.4	1,366.7	1,552.8	46.8%
2030	191.4	146.6	76.6%	17.7	2,912.0	1,380.2	1,531.8	47.4%
2031	194.5	148.1	76.2%	17.9	2,898.9	1,391.7	1,507.3	48.0%
2032	197.9	150.7	76.1%	18.6	2,880.4	1,402.9	1,477.5	48.7%
2033	201.5	153.9	76.4%	19.4	2,856.9	1,415.5	1,441.4	49.5%
2034	205.6	160.3	78.0%	20.2	2,829.4	1,433.7	1,395.7	50.7%
2035	209.9	163.7	78.0%	21.0	2,798.6	1,455.8	1,342.8	52.0%
2036	214.7	167.4	78.0%	21.8	2,765.3	1,483.2	1,282.1	53.6%
2037	219.7	171.4	78.0%	22.7	2,730.0	1,517.1	1,212.8	55.6%
2038	225.1	175.6	78.0%	23.5	2,693.4	1,559.2	1,134.2	57.9%
2039	230.8	180.0	78.0%	24.3	2,656.6	1,611.1	1,045.5	60.6%
2040	236.8	184.7	78.0%	25.2	2,620.0	1,674.2	945.8	63.9%
2041	243.1	189.6	78.0%	26.0	2,584.6	1,750.4	834.2	67.7%
2042	249.7	194.8	78.0%	26.9	2,550.8	1,841.3	709.5	72.2%
2043	256.6	200.1	78.0%	27.7	2,519.6	1,948.8	570.9	77.3%
2044	263.8	205.8	78.0%	28.6	2,491.5	2,074.5	417.0	83.3%
2045	271.3	211.6	78.0%	29.5	2,467.1	2,220.5	246.7	90.0%

APPENDIX L

FUNDING PROJECTIONS FOR THE GENERAL ASSEMBLY RETIREMENT SYSTEM CoGFA Projections Based on Public Act 98-0599 (Senate Bill 1) Actuarially Assumed Rate of Return: 7.00% ($ in millions)								
Fiscal Year	Annual Payroll	Total State Contribution	State Contribution as a % of Payroll	Total Employee Contribution	Accrued Liabilities	Actuarial Value of Assets	Unfunded Liabilities	Funded Ratio
2014	14.5	13.9	95.5%	1.5	279.0	50.0	229.0	17.9%
2015	**12.9**	**15.8**	**122.2%**	**1.4**	**278.9**	**49.3**	**229.6**	**17.7%**
2016	12.9	16.0	123.3%	1.4	278.5	47.3	231.2	17.0%
2017	13.4	16.1	119.8%	1.5	277.9	45.9	232.0	16.5%
2018	13.9	16.5	118.5%	1.5	277.0	44.0	233.0	15.9%
2019	14.4	17.8	123.7%	1.6	275.8	43.1	232.7	15.6%
2020	14.9	20.0	133.6%	1.6	274.3	44.2	230.1	16.1%
2021	15.5	20.4	131.8%	1.7	272.7	45.7	226.9	16.8%
2022	16.0	20.8	130.1%	1.8	270.7	47.7	223.0	17.6%
2023	16.6	21.3	128.5%	1.8	268.6	50.2	218.4	18.7%
2024	17.1	21.7	127.0%	1.9	266.2	53.3	212.9	20.0%
2025	17.7	22.2	125.6%	2.0	263.5	57.0	206.6	21.6%
2026	18.2	22.6	124.4%	2.0	260.7	61.5	199.3	23.6%
2027	18.7	23.1	123.3%	2.1	257.8	66.8	191.0	25.9%
2028	19.3	23.6	122.3%	2.2	254.7	73.1	181.6	28.7%
2029	19.8	24.0	121.4%	2.2	251.5	80.4	171.1	32.0%
2030	20.3	24.5	120.6%	2.3	248.3	89.0	159.2	35.9%
2031	20.9	25.0	119.8%	2.4	245.0	98.9	146.1	40.4%
2032	21.4	25.5	119.3%	2.4	241.8	110.3	131.5	45.6%
2033	21.8	26.0	118.8%	2.5	238.7	123.3	115.4	51.7%
2034	22.3	26.4	118.3%	2.5	235.8	138.2	97.6	58.6%
2035	22.8	26.9	117.9%	2.6	233.0	154.9	78.1	66.5%
2036	23.3	27.4	117.5%	2.7	230.4	173.7	56.7	75.4%
2037	23.8	27.9	117.1%	2.7	227.9	194.5	33.4	85.4%
2038	24.3	28.3	116.8%	2.8	225.6	217.8	7.8	96.5%
2039	24.8	9.5	38.5%	2.8	223.7	223.7	-	100.0%
2040	25.2	1.4	5.7%	2.9	222.2	222.2	-	100.0%
2041	25.7	1.4	5.6%	2.9	221.0	221.0	-	100.0%
2042	26.2	1.4	5.5%	3.0	220.2	220.2	-	100.0%
2043	26.6	1.4	5.4%	3.1	219.6	219.6	-	100.0%
2044	27.1	1.4	5.3%	3.1	219.5	219.5	-	100.0%
2045	27.5	1.4	5.3%	3.2	219.8	219.8	-	100.0%

* State Contributions include Fortner and additional supplemental payments.

APPENDIX M

STATE RETIREMENT SYSTEMS
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N. C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ASSUMPTIONS ACTUARIAL	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABILITY FROM PREVIOUS YR
TRS							
6/30/1996	400,399,000	(577,281,000)	965,961,000	17,772,000	0	166,531,000	973,382,000
6/30/1997	(59,062,000)	(830,936,000)	992,390,000	0	(2,944,771,000)	88,773,000	(2,753,606,000)
6/30/1998	(46,017,000)	(1,417,747,000)	776,189,000	1,000,300,000	0	71,152,000	383,877,000
6/30/1999	44,030,000	(389,014,000)	677,408,000	33,870,000	125,223,000	533,933,000	1,025,450,000
6/30/2000	(33,403,000)	(450,361,000)	723,606,000	0	0	197,345,000	437,187,000
6/30/2001	(10,310,000)	3,089,765,000	733,877,000	0	0	632,729,000	4,446,061,000
6/30/2002	4,934,000	2,696,199,000	1,074,422,000	0	694,736,000	360,047,000	4,830,338,000
6/30/2003	171,802,000	827,434,000	1,415,610,000	53,850,000	0	658,524,000	3,127,220,000
6/30/2004	217,255,000	(2,168,876,000)	(2,811,516,000)	0	0	357,250,000	(4,405,887,000)
6/30/2005	236,687,000	(682,294,000)	1,299,840,000	0	26,425,000	1,706,431,000	2,587,089,000
6/30/2006	68,398,000	(1,159,525,000)	1,913,368,000	0	0	(400,028,000)	422,213,000
6/30/2007	149,682,000	(3,785,653,000)	1,739,187,000	0	2,410,756,000	813,081,000	1,327,053,000
6/30/2008	(153,987,000)	5,514,988,000	1,529,701,000	0	0	(428,135,000)	6,462,567,000
6/30/2009	(29,162,000)	2,373,683,000	1,782,855,000	0	0	672,134,000	4,799,510,000
6/30/2010	(210,220,000)	2,929,300,000	1,572,250,000	0	0	561,570,000	4,852,900,000
6/30/2011	(545,612,000)	1,718,405,000	1,913,647,000	0	0	589,446,000	3,675,886,000
6/30/2012	(1,211,160,000)	1,806,150,000	2,710,710,000	0	4,624,970,000	618,880,000	8,549,550,000
6/30/2013	(412,776,000)	1,557,219,000	2,125,732,000	0	0	382,074,000	3,652,249,000
Total	(1,418,522,000)	11,051,456,000	21,135,237,000	1,105,792,000	4,937,339,000	7,581,737,000	44,393,039,000
SERS							
6/30/1996	(63,804,332)	(251,369,719)	196,620,212	0	0	47,104,123	(71,449,716)
6/30/1997	(65,121,542)	(541,583,072)	121,668,957	0	(379,894,379)	152,898,511	(712,031,525)
6/30/1998	(62,013,427)	(568,807,725)	9,431,057	1,249,883,128	0	148,729,225	777,222,258
6/30/1999	(12,536,220)	(307,064,512)	21,020,544	0	0	32,949,396	(265,630,792)
6/30/2000	14,642,937	(252,699,421)	(21,811,201)	0	0	250,182,926	(9,684,759)
6/30/2001	(8,000,000)	1,368,815,911	(29,398,605)	652,110,224	0	309,964,003	2,293,491,533
6/30/2002	52,000,000	1,247,268,792	186,860,538	171,100,000	168,144,000	496,199,643	2,321,572,973
6/30/2003	(28,282,435)	629,483,966	404,526,925	2,371,173,094	0	97,815,307	3,474,716,857
6/30/2004	(22,316,647)	(679,743,495)	(944,135,304)	0	0	6,804,793	(1,639,390,653)
6/30/2005	(166,479,933)	(123,132,472)	503,532,346	0	0	144,142,000	358,061,941
6/30/2006	33,070,000	(250,686,000)	772,374,000	0	710,976,000	(101,544,000)	1,164,190,000
6/30/2007	98,239,312	(878,435,107)	816,648,269	0	0	190,866,392	227,318,866
6/30/2008	207,247,739	1,690,697,791	615,695,516	0	0	130,264,860	2,643,905,906
6/30/2009	(70,364,604)	608,553,603	662,751,770	0	0	251,538,179	1,452,478,948
6/30/2010	(84,030,002)	894,330,007	470,040,010	0	2,606,329,995	162,930,002	4,049,600,012
6/30/2011	(116,457,671)	483,803,315	749,926,844	0	554,815,304	215,159,241	1,887,247,033
6/30/2012	(57,658,148)	530,809,433	715,357,450	0	0	190,241,965	1,378,750,700
6/30/2013	(145,924,336)	425,364,445	660,382,617	0	0	289,600,870	1,229,423,596
Total	(497,789,309)	4,025,605,740	5,911,491,945	4,444,266,446	3,660,370,920	3,015,847,436	20,559,793,178
SURS							
6/30/1996	(70,535,000)	(105,383,000)	456,044,000	0	0	86,823,000	366,949,000
6/30/1997	(44,026,000)	(312,322,000)	424,816,000	179,117,000	(3,342,395,000)	198,529,000	(2,896,281,000)
6/30/1998	5,238,000	(765,736,000)	158,840,000	0	0	48,075,000	(553,583,000)
6/30/1999	44,300,000	(273,300,000)	271,300,000	0	0	190,800,000	233,100,000
6/30/2000	171,500,000	(587,500,000)	306,700,000	0	0	(130,949,000)	(240,249,000)
6/30/2001	70,300,000	2,068,500,000	301,000,000	0	0	107,131,000	2,546,931,000
6/30/2002	90,800,000	1,568,700,000	430,800,000	63,000,000	485,300,000	38,744,000	2,677,344,000
6/30/2003	10,300,000	583,000,000	558,500,000	0	0	319,300,000	1,471,100,000
6/30/2004	(62,900,000)	(950,500,000)	(822,700,000)	0	0	17,893,000	(1,818,207,000)
6/30/2005	(19,400,000)	(218,000,000)	574,300,000	0	0	170,520,000	507,420,000
6/30/2006	28,600,000	(414,100,000)	734,900,000	0	0	164,900,000	514,300,000
6/30/2007	67,000,000	(1,342,000,000)	624,100,000	0	324,400,000	189,000,000	(137,500,000)
6/30/2008	30,600,000	2,004,400,000	590,900,000	0	0	329,100,000	2,955,000,000
6/30/2009	(1,300,000)	812,300,000	738,700,000	0	0	153,200,000	1,702,900,000
6/30/2010	(113,100,000)	940,500,000	667,500,000	0	2,413,900,000	210,800,000	4,119,600,000
6/30/2011	(172,300,000)	430,000,000	930,200,000	0	(24,900,000)	251,800,000	1,414,800,000
6/30/2012	(4,000,000)	476,700,000	797,800,000	0	0	381,200,000	1,651,700,000
6/30/2013	(53,600,000)	391,800,000	506,700,000	0	(157,000,000)	202,300,000	890,200,000
Total	(22,523,000)	4,307,059,000	8,250,400,000	242,117,000	(300,695,000)	2,929,166,000	15,405,524,000

APPENDIX M

STATE RETIREMENT SYSTEMS
CHANGES IN UNFUNDED LIABILITY
FY 1996 - FY 2013

	SALARY INCREASES	INVESTMENT RETURNS (HIGHER)/LOWER THAN ASSUMED	EMPLOYER CONTRIBUTIONS N. C. + INTEREST (HIGHER)/LOWER	BENEFIT INCREASES	CHANGES IN ASSUMPTIONS ACTUARIAL	OTHER FACTORS MISC.	TOTAL CHANGE IN UNFUNDED LIABILITY FROM PREVIOUS YR
JRS							
6/30/1996	9,999,484	(13,671,404)	24,518,236	0	0	14,931,343	35,777,659
6/30/1997	(7,658,092)	(28,145,182)	27,156,529	0	37,922,093	15,264,216	44,539,564
6/30/1998	(10,160,914)	(30,497,137)	34,123,085	0	0	7,218,733	683,767
6/30/1999	456,439	(16,539,663)	32,504,330	0	0	8,821,168	25,242,274
6/30/2000	2,215,672	(14,134,561)	33,196,266	2,848,501	0	8,268,502	32,394,380
6/30/2001	(7,464,258)	61,790,163	35,767,996	0	0	17,044,333	107,138,234
6/30/2002	(11,821,953)	54,489,350	42,170,792	0	28,381,924	8,609,434	121,829,547
6/30/2003	(26,392,926)	27,183,676	49,293,246	0	0	18,906,930	68,990,926
6/30/2004	6,291,883	(36,709,772)	(92,295,242)	0	0	(1,952,146)	(124,665,277)
6/30/2005	(15,087,614)	(8,899,756)	46,427,305	0	0	27,509,646	49,949,581
6/30/2006	(18,612,759)	(17,213,516)	55,344,402	0	(11,189,825)	12,319,701	20,648,003
6/30/2007	(3,952,822)	(51,310,984)	50,305,409	0	0	28,046,308	23,087,911
6/30/2008	(8,834,671)	90,806,378	42,511,153	0	0	4,924,005	129,406,865
6/30/2009	(6,661,210)	33,322,668	40,870,123	0	0	19,481,669	87,013,250
6/30/2010	(14,290,007)	48,210,010	30,640,985	0	188,890,107	14,350,002	267,801,097
6/30/2011	(17,743,557)	31,451,544	66,647,892	0	15,622,518	42,442,760	138,421,157
6/30/2012	(19,671,785)	27,522,701	75,313,560	0	0	(611,876)	82,552,600
6/30/2013	(18,934,843)	21,180,279	54,355,269	0	62,945,069	6,567,836	126,113,610
Total	(168,323,933)	178,834,794	648,851,336	2,848,501	322,571,886	252,142,564	1,236,925,148
GARS							
6/30/1996	1,926,843	(2,564,790)	5,271,809	0	0	1,441,644	6,075,506
6/30/1997	1,298,457	(5,057,646)	5,529,869	0	(136,881)	753,138	2,386,937
6/30/1998	(233,098)	(5,394,158)	5,710,203	0	0	460,957	543,904
6/30/1999	846,137	(2,808,175)	5,298,511	0	0	3,030,916	6,367,389
6/30/2000	(431,214)	(2,371,993)	5,576,440	0	0	2,079,991	4,853,224
6/30/2001	(555,323)	10,135,725	5,803,227	0	0	1,273,197	16,656,826
6/30/2002	(1,520,756)	8,713,370	6,741,725	0	1,211,951	(162,610)	14,983,680
6/30/2003	(1,793,094)	4,391,493	7,217,512	0	0	6,485,877	16,301,788
6/30/2004	(2,633,642)	(5,927,446)	(19,174,182)	0	0	5,286,195	(22,449,075)
6/30/2005	(645,631)	(1,288,918)	7,445,358	0	0	(262,887)	5,247,922
6/30/2006	(3,113,674)	(1,566,794)	8,528,558	0	4,786,991	1,190,775	9,825,856
6/30/2007	3,962,835	(6,733,144)	7,670,304	0	0	373,350	5,273,345
6/30/2008	(2,217,940)	11,400,154	7,073,235	0	0	(613,134)	15,642,315
6/30/2009	1,737,809	3,991,729	6,172,942	0	0	1,380,596	13,283,076
6/30/2010	(2,450,015)	5,710,003	5,669,975	2,140,009	0	830,022	11,899,994
6/30/2011	(1,718,437)	3,577,042	5,621,165	6,514,624	35,809,167	(108,827)	49,694,734
6/30/2012	(1,912,815)	3,662,246	8,818,897	0	0	1,563,530	12,131,858
6/30/2013	302,952	3,109,095	5,894,756	0	8,423,005	3,502,950	21,232,758
Total	(9,150,606)	20,977,793	90,870,304	8,654,633	50,094,233	28,505,680	189,952,037
COMBINED							
6/30/1996	277,985,995	(950,269,913)	1,648,415,257	17,772,000	0	316,831,110	1,310,734,449
6/30/1997	(174,569,177)	(1,718,043,900)	1,571,561,355	179,117,000	(6,629,275,167)	456,217,865	(6,314,992,024)
6/30/1998	(113,186,439)	(2,788,182,020)	984,293,345	2,250,183,128	0	275,635,915	608,743,929
6/30/1999	77,096,356	(988,726,350)	1,007,531,385	33,870,000	125,223,000	769,534,480	1,024,528,871
6/30/2000	154,524,395	(1,307,066,975)	1,047,267,505	2,848,501	0	326,927,419	224,500,845
6/30/2001	43,970,419	6,599,006,799	1,047,049,618	652,110,224	0	1,068,141,533	9,410,278,593
6/30/2002	134,391,291	5,575,370,512	1,740,995,055	234,100,000	1,377,773,875	903,437,467	9,966,068,200
6/30/2003	125,633,545	2,071,493,135	2,435,147,683	2,425,023,094	0	1,101,032,114	8,158,329,571
6/30/2004	135,696,594	(3,841,756,713)	(4,689,820,728)	0	0	385,281,842	(8,010,599,005)
6/30/2005	35,073,822	(1,033,615,146)	2,431,545,009	0	26,425,000	2,048,339,759	3,507,768,444
6/30/2006	108,341,567	(1,843,091,310)	3,484,514,960	0	704,573,166	(323,161,524)	2,131,176,859
6/30/2007	314,931,325	(6,064,132,235)	3,237,910,982	0	2,735,156,000	1,221,367,050	1,445,233,122
6/30/2008	72,808,128	9,312,292,323	2,785,880,904	0	0	35,540,731	12,206,522,086
6/30/2009	(105,750,005)	3,831,851,000	3,231,349,835	0	0	1,097,734,444	8,055,185,274
6/30/2010	(424,090,024)	4,818,050,020	2,746,100,970	2,140,009	5,209,120,102	950,480,026	13,301,801,103
6/30/2011	(853,831,665)	2,667,236,901	3,666,042,901	6,514,624	581,346,989	1,098,739,174	7,166,048,924
6/30/2012	(1,294,402,748)	2,844,844,380	4,307,999,907	0	4,624,970,000	1,191,273,619	11,674,685,158
6/30/2013	(630,932,227)	2,398,672,819	3,353,064,642	0	(85,631,926)	884,045,656	5,919,218,964
Total	(1,485,376,621)	17,185,260,508	32,683,785,943	5,803,678,580	8,755,312,965	12,923,353,024	75,866,014,399

APPENDIX N

2003 PENSION OBLIGATION BONDS (P.A. 93-0002) Debt Service Schedule & Allocation By Retirement System ($ in Millions)								
			Total Debt	Allocation By System				
FY	Principle	Interest	Service	TRS	SERS	JRS	GARS	SURS
2004	$0.0	$481.1	$481.1	$284.7	$91.1	$9.3	$1.8	$94.2
2005	$0.0	$496.2	$496.2	$293.6	$94.0	$9.6	$1.8	$97.1
2006	$0.0	$496.2	$496.2	$293.6	$94.0	$9.6	$1.8	$97.1
2007	$0.0	$496.2	$496.2	$293.6	$94.0	$9.6	$1.8	$97.1
2008	$50.0	$496.2	$546.2	$323.2	$103.5	$10.6	$2.0	$106.9
2009	$50.0	$495.0	$545.0	$322.5	$103.2	$10.6	$2.0	$106.7
2010	$50.0	$493.6	$543.6	$321.7	$103.0	$10.5	$2.0	$106.4
2011	$50.0	$491.9	$541.9	$320.7	$102.6	$10.5	$2.0	$106.1
2012	$100.0	$490.1	$590.1	$349.2	$111.8	$11.5	$2.2	$115.5
2013	$100.0	$486.4	$586.4	$347.0	$111.1	$11.4	$2.2	$114.8
2014	$100.0	$482.5	$582.5	$344.7	$110.3	$11.3	$2.1	$114.0
2015	$100.0	$478.6	$578.6	$342.4	$109.6	$11.2	$2.1	$113.2
2016	$100.0	$474.5	$574.5	$340.0	$108.8	$11.1	$2.1	$112.4
2017	$125.0	$470.2	$595.2	$352.2	$112.7	$11.6	$2.2	$116.5
2018	$150.0	$464.7	$614.7	$363.8	$116.4	$11.9	$2.3	$120.3
2019	$175.0	$458.2	$633.2	$374.7	$119.9	$12.3	$2.3	$123.9
2020	$225.0	$449.6	$674.6	$399.2	$127.8	$13.1	$2.5	$132.0
2021	$275.0	$438.4	$713.4	$422.2	$135.1	$13.8	$2.6	$139.6
2022	$325.0	$424.8	$749.8	$443.7	$142.0	$14.6	$2.8	$146.7
2023	$375.0	$408.7	$783.7	$463.8	$148.4	$15.2	$2.9	$153.4
2024	$450.0	$390.2	$840.2	$497.2	$159.2	$16.3	$3.1	$164.4
2025	$525.0	$367.2	$892.2	$528.0	$169.0	$17.3	$3.3	$174.6
2026	$575.0	$340.4	$915.4	$541.7	$173.4	$17.8	$3.4	$179.2
2027	$625.0	$311.1	$936.1	$554.0	$177.3	$18.2	$3.5	$183.2
2028	$700.0	$279.2	$979.2	$579.5	$185.5	$19.0	$3.6	$191.6
2029	$775.0	$243.5	$1,018.5	$602.7	$192.9	$19.8	$3.8	$199.3
2030	$875.0	$204.0	$1,079.0	$638.5	$204.4	$20.9	$4.0	$211.2
2031	$975.0	$159.4	$1,134.4	$671.3	$214.9	$22.0	$4.2	$222.0
2032	$1,050.0	$109.7	$1,159.7	$686.3	$219.7	$22.5	$4.3	$227.0
2033	$1,100.0	$56.1	$1,156.1	$684.1	$219.0	$22.4	$4.3	$226.3
TOTALS	$10,000.0	$11,933.9	$21,933.9	$12,979.9	$4,154.8	$425.7	$80.9	$4,292.7

APPENDIX O

FINANCIAL CONDITION OF THE STATE RETIREMENT SYSTEMS ($ in millions)						
Fiscal Year	TRS	SERS	SURS	JRS	GARS	Total
Assets @ Market Value						
1996	13,829.7	5,178.7	5,082.9	232.4	42.6	24,366.3
1997	17,393.1	6,048.0	8,376.3	314.6	56.7	32,188.7
1998	19,965.9	7,064.5	9,793.8	356.7	62.7	37,243.6
1999	22,237.7	7,986.4	10,762.2	389.8	66.9	41,443.0
2000	24,481.4	8,910.9	12,063.9	422.9	70.5	45,949.6
2001	23,315.6	8,276.7	10,753.3	381.7	62.0	42,789.3
2002	22,366.3	7,673.9	9,814.7	343.7	54.0	40,252.6
2003	23,124.8	7,502.1	9,714.5	330.1	50.0	40,721.5
2004	31,544.7	9,990.2	12,586.3	534.6	83.2	54,739.0
2005	34,085.2	10,494.1	13,350.3	564.9	83.3	58,577.8
2006	36,584.9	10,899.8	14,175.1	599.2	82.2	62,341.2
2007	41,909.3	12,078.9	15,985.7	670.1	87.2	70,731.2
2008	38,430.7	10,995.4	14,586.3	612.7	75.4	64,700.5
2009	28,531.3	8,565.8	11,033.0	483.5	55.6	48,669.2
2010	31,323.8	9,201.8	12,121.5	523.3	54.7	53,225.1
2011	37,471.3	10,970.8	14,274.0	606.0	60.4	63,382.5
2012	36,516.8	10,960.7	13,705.1	578.0	52.7	61,813.3
2013	39,858.8	12,400.3	15,037.1	643.3	54.3	67,993.8
Liabilities						
1996	26,141.8	7,390.9	10,155.0	577.8	127.4	44,392.9
1997	26,951.6	7,548.2	10,552.2	704.5	143.9	45,900.4
1998	29,908.2	9,341.9	11,416.1	747.3	150.4	51,563.9
1999	33,205.5	9,998.2	12,617.5	805.6	160.9	56,787.7
2000	35,886.4	10,912.9	13,679.0	871.2	169.4	61,518.9
2001	39,166.7	12,572.2	14,915.3	937.1	177.5	67,768.8
2002	43,047.7	14,291.0	16,654.0	1,020.8	184.6	75,198.1
2003	46,933.4	17,593.9	18,025.0	1,076.2	196.5	83,825.0
2004	50,947.5	18,442.6	19,078.6	1,156.1	207.6	89,832.4
2005	56,075.0	19,304.6	20,349.9	1,236.5	212.9	97,178.9
2006	58,996.9	20,874.5	21,688.9	1,291.4	221.7	103,073.4
2007	65,648.4	22,280.9	23,362.1	1,385.3	231.9	112,908.6
2008	68,632.4	23,841.3	24,917.7	1,457.3	235.8	119,084.5
2010	77,293.2	29,309.5	30,120.4	1,819.4	251.8	138,794.3
2010	77,293.2	29,309.5	30,120.4	1,819.4	251.8	138,794.3
2011	81,299.7	31,395.0	31,514.3	1,952.5	298.4	146,459.9
2012	90,024.9	33,091.2	33,170.2	2,021.7	303.5	158,611.5
2013	93,887.0	34,720.8	34,373.1	2,156.8	320.5	165,458.2

APPENDIX O

FINANCIAL CONDITION OF THE STATE RETIREMENT SYSTEMS ($ in millions)						
Fiscal Year	TRS	SERS	SURS	JRS	GARS	Total
Unfunded						
1996	12,312.1	2,212.2	5,072.1	345.4	84.8	20,026.6
1997	9,558.5	1,500.2	2,175.9	389.9	87.2	13,711.7
1998	9,942.3	2,277.4	1,622.3	390.6	87.7	14,320.3
1999	10,967.8	2,011.8	1,855.3	415.8	94.0	15,344.7
2000	11,405.0	2,002.0	1,615.1	448.3	98.9	15,569.3
2001	15,851.1	4,295.5	4,162.0	555.4	115.5	24,979.5
2002	20,681.4	6,617.1	6,839.3	677.1	130.6	34,945.5
2003	23,808.6	10,091.8	8,310.5	746.1	146.5	43,103.5
2004	19,402.8	8,452.4	6,492.3	621.5	124.4	35,093.4
2005	21,989.8	8,810.5	6,999.6	671.6	129.6	38,601.1
2006	22,412.0	9,974.7	7,513.8	692.2	139.5	40,732.2
2007	23,739.1	10,202.0	7,376.4	715.2	144.7	42,177.4
2008	30,201.7	12,845.9	10,331.4	844.6	160.4	54,384.0
2009	44,495.9	16,732.5	15,283.2	1,065.0	189.6	77,766.2
2010	45,969.4	20,107.6	17,998.9	1,296.2	197.1	85,569.2
2011	43,828.4	20,424.2	17,240.3	1,346.5	238.0	83,077.4
2012	53,508.1	22,130.5	19,465.1	1,443.7	250.8	96,798.2
2013	54,028.2	22,320.5	19,336.0	1,513.5	266.2	97,464.4
Funded Ratios						
1996	52.9%	70.1%	50.1%	40.2%	33.4%	54.9%
1997	64.5%	80.1%	79.4%	44.7%	39.4%	70.1%
1998	66.8%	75.6%	85.8%	47.7%	41.7%	72.2%
1999	67.0%	79.9%	85.3%	48.4%	41.6%	73.0%
2000	68.2%	81.7%	88.2%	48.5%	41.6%	74.7%
2001	59.5%	65.8%	72.1%	40.7%	34.9%	63.1%
2002	52.0%	53.7%	58.9%	33.7%	29.3%	53.5%
2003	49.3%	42.6%	53.9%	30.7%	25.4%	48.6%
2004	61.9%	54.2%	66.0%	46.2%	40.1%	60.9%
2005	60.8%	54.4%	65.6%	45.7%	39.1%	60.3%
2006	62.0%	52.2%	65.4%	46.4%	37.1%	60.5%
2007	63.8%	54.2%	68.4%	48.4%	37.6%	62.6%
2008	56.0%	46.1%	58.5%	42.0%	32.0%	54.3%
2009	39.1%	33.9%	41.9%	31.2%	22.7%	38.5%
2010	40.5%	31.4%	40.2%	28.8%	21.7%	38.3%
2011	46.1%	34.9%	45.3%	31.0%	20.2%	43.3%
2012	40.6%	33.1%	41.3%	28.6%	17.4%	39.0%
2013	42.5%	35.7%	43.7%	29.8%	17.0%	41.1%

APPENDIX P

COMBINED DEBT SERVICE OF 2003, 2010 and 2011 PENSION OBLIGATION BONDS AND NOTES												
	FY2003 $10 BILLION PENSION OB BONDS			FY 2010 $3.466 BILLION PENSION OB NOTES			FY 2011 $3.7 BILLION PENSION OB BONDS			COMBINED TOTALS		
Fiscal Year	**2003 Principal**	**2003 Interest**	**2003 POB Total**	**2010 Principal**	**2010 Interest**	**2010 PON Total**	**2011 Principal**	**2011 Interest**	**2011 POB Total**	**Total Principal**	**Total Interest**	**Grand Total**
FY 2004	$0	$481,038,333	**$481,038,333**							**$0**	**$481,038,333**	**$481,038,333**
FY 2005	0	496,200,000	**$496,200,000**							**$0**	**$496,200,000**	**$496,200,000**
FY 2006	0	496,200,000	**$496,200,000**							**$0**	**$496,200,000**	**$496,200,000**
FY 2007	0	496,200,000	**$496,200,000**							**$0**	**$496,200,000**	**$496,200,000**
FY 2008	50,000,000	496,200,000	**$546,200,000**							**$50,000,000**	**$496,200,000**	**$546,200,000**
FY 2009	50,000,000	494,950,000	**$544,950,000**							**$50,000,000**	**$494,950,000**	**$544,950,000**
FY 2010	50,000,000	493,550,000	**$543,550,000**							**$50,000,000**	**$493,550,000**	**$543,550,000**
FY 2011	50,000,000	491,900,000	**$541,900,000**	$693,200,000	$109,277,049	**$802,477,049**				**$743,200,000**	**$601,177,049**	**$1,344,377,049**
FY 2012	100,000,000	490,125,000	**$590,125,000**	$693,200,000	$101,061,628	**$794,261,628**		$194,500,800	**$194,500,800**	**$793,200,000**	**$785,687,428**	**$1,578,887,428**
FY 2013	100,000,000	486,375,000	**$586,375,000**	$693,200,000	$81,887,716	**$775,087,716**		$199,488,000	**$199,488,000**	**$793,200,000**	**$767,750,716**	**$1,560,950,716**
FY 2014	100,000,000	482,525,000	**$582,525,000**	$693,200,000	$58,866,544	**$752,066,544**	$100,000,000	$199,488,000	**$299,488,000**	**$893,200,000**	**$740,879,544**	**$1,634,079,544**
FY 2015	100,000,000	478,575,000	**$578,575,000**	$693,200,000	$30,646,372	**$723,846,372**	$300,000,000	$195,462,000	**$495,462,000**	**$1,093,200,000**	**$704,683,372**	**$1,797,883,372**
FY 2016	100,000,000	474,525,000	**$574,525,000**				$600,000,000	$181,929,000	**$781,929,000**	**$700,000,000**	**$656,454,000**	**$1,356,454,000**
FY 2017	125,000,000	470,175,000	**$595,175,000**				$900,000,000	$152,163,000	**$1,052,163,000**	**$1,025,000,000**	**$622,338,000**	**$1,647,338,000**
FY 2018	150,000,000	464,737,500	**$614,737,500**				$900,000,000	$103,878,000	**$1,003,878,000**	**$1,050,000,000**	**$568,615,500**	**$1,618,615,500**
FY 2019	175,000,000	458,212,500	**$633,212,500**				$900,000,000	$52,893,000	**$952,893,000**	**$1,075,000,000**	**$511,105,500**	**$1,586,105,500**
FY 2020	225,000,000	449,550,000	**$674,550,000**							**$225,000,000**	**$449,550,000**	**$674,550,000**
FY 2021	275,000,000	438,412,500	**$713,412,500**							**$275,000,000**	**$438,412,500**	**$713,412,500**
FY 2022	325,000,000	424,800,000	**$749,800,000**							**$325,000,000**	**$424,800,000**	**$749,800,000**
FY 2023	375,000,000	408,712,500	**$783,712,500**							**$375,000,000**	**$408,712,500**	**$783,712,500**
FY 2024	450,000,000	390,150,000	**$840,150,000**							**$450,000,000**	**$390,150,000**	**$840,150,000**
FY 2025	525,000,000	367,200,000	**$892,200,000**							**$525,000,000**	**$367,200,000**	**$892,200,000**
FY 2026	575,000,000	340,425,000	**$915,425,000**							**$575,000,000**	**$340,425,000**	**$915,425,000**
FY 2027	625,000,000	311,100,000	**$936,100,000**							**$625,000,000**	**$311,100,000**	**$936,100,000**
FY 2028	700,000,000	279,225,000	**$979,225,000**							**$700,000,000**	**$279,225,000**	**$979,225,000**
FY 2029	775,000,000	243,525,000	**$1,018,525,000**							**$775,000,000**	**$243,525,000**	**$1,018,525,000**
FY 2030	875,000,000	204,000,000	**$1,079,000,000**							**$875,000,000**	**$204,000,000**	**$1,079,000,000**
FY 2031	975,000,000	159,375,000	**$1,134,375,000**							**$975,000,000**	**$159,375,000**	**$1,134,375,000**
FY 2032	1,050,000,000	109,650,000	**$1,159,650,000**							**$1,050,000,000**	**$109,650,000**	**$1,159,650,000**
FY 2033	1,100,000,000	56,100,000	**$1,156,100,000**							**$1,100,000,000**	**$56,100,000**	**$1,156,100,000**
TOTAL	**$10,000,000,000**	**$11,933,713,333**	**$21,933,713,333**	**$3,466,000,000**	**$381,739,309**	**$3,847,739,309**	**$3,700,000,000**	**$1,279,801,800**	**$4,979,801,800**	**$17,166,000,000**	**$13,595,254,442**	**$30,761,254,442**

APPENDIX Q

SUMMARY OF TRS APPROPRIATIONS BY FUND: FY 1996 - 2014								
Fiscal Year		State Pension Fund	Common School Fund	Education Assistance Fund	Pension Notes 2010	General Revenue Fund	Min & Supp Reserves through FY 2000, then Min Only	Total
1996	*	$30,958,800	$293,317,200	-	-	-	$6,542,000	$330,818,000
1997		$31,403,500	$346,565,500	-	-	-	$8,179,000	$386,148,000
1998		$37,868,300	$422,570,700	-	-	-	$7,443,000	$467,882,000
1999	**	$54,310,700	$480,740,900	-	-	$32,016,000	$6,440,000	$573,507,600
2000		$55,600,000	$520,595,100	-	-	$57,843,900	$6,035,000	$640,074,000
2001		$57,180,000	$617,977,000	-	-	$44,200,000	$5,500,000	$724,857,000
2002		$58,600,000	$477,019,000	$275,000,000	-	-	$4,800,000	$815,419,000
2003		$63,455,000	$550,000,000	$300,000,000	-	$12,595,000	$4,000,000	$930,050,000
2004		$47,360,000	$575,000,000	$345,000,000	-	$60,889,000	$3,400,000	$1,031,649,000
2005		-	$422,763,000	$300,000,000	-	$181,165,000	$3,100,000	$907,028,000
2006		-	$531,827,700	-	-	-	$2,800,000	$534,627,700
2007		-	$735,514,500	-	-	-	$2,500,000	$738,014,500
2008		-	$1,039,195,000	-	-	-	$2,100,000	$1,041,295,000
2009		-	$1,449,889,000	-	-	-	$1,900,000	$1,451,789,000
2010		-	$834,862,000	-	$1,245,867,000	-	-	$2,080,729,000
2011		-	$110,000,000	$2,060,918,000	-	-	-	$2,170,918,000
2012		-	$2,405,172,000	$1,300,000	-	-	-	$2,406,472,000
2013		-	$2,702,278,000	$1,200,000	-	-	-	$2,703,478,000
2014		-	$3,437,478,000	$1,100,000	-	-	-	$3,438,578,000

* 1996 minimum benefit amount includes additional $2,200,000 due to minimum benefit increase enacted after certification submitted (increase effective January 1, 1996).

** 1999 includes $32,016,000 for state share of 2.2 formula enacted after original certification submitted and additional $9,695,600 in State Pensions Fund appropriations.

APPENDIX R

SUMMARY OF SURS APPROPRIATIONS BY FUND: FY 1996 - 2014						
Fiscal Year	State Pension Fund	Bond Issue Proceeds	Education Assistance Fund	General Revenue Fund	Common School Fund	Total
1996	$13,134,800	-	-	$110,776,200	-	$123,911,000
1997	$13,031,400	-	-	$146,515,600	-	$159,547,000
1998	$15,600,400	-	-	$186,023,600	-	$201,624,000
1999	$10,156,100	-	-	$205,268,900	-	$215,425,000
2000	$9,040,000	-	-	$215,547,000	-	$224,587,000
2001	$9,670,000	-	-	$222,934,000	-	$232,604,000
2002	$8,300,000	-	-	$232,124,000	-	$240,424,000
2003	$16,600,000	-	-	$252,986,000	-	$269,586,000
2004	$15,660,000	$1,431,994,224	-	$296,080,000	-	$1,743,734,224
2005	$222,630,000	-	-	$47,352,000	-	$269,982,000
2006	$80,000,000	-	-	$86,641,900	-	$166,641,900
2007	$134,235,922	-	$65,065,395	$52,762,783	-	$252,064,100
2008	$186,998,705	-	$153,321,295	-	-	$340,320,000
2009	$223,890,000	-	$150,072,000	$76,254,000	-	$450,216,000
2010	$139,000,000	$552,668,057	-	$8,542,833	-	$700,210,890
2011	$63,000,000	$713,478,354	-	-	-	$776,478,354
2012	$230,000,000	-	$750,485,000	-	-	$980,485,000
2013	$150,000,000	-	$1,252,800,000	-	-	$1,402,800,000
2014	$198,000,000	-	$1,311,766,000	-	-	$1,509,766,000

APPENDIX S

SUMMARY OF SERS APPROPRIATIONS BY FUND: FY 1996 - 2014							
Fiscal Year		State Pension Fund	Common School Fund	Education Assistance Fund	General Revenue Fund	Other State Funds	Total
1996	*	$8,823,800	-	-	$87,871,550	$47,315,450	$144,010,800
1997	*	$8,489,800	-	-	$97,874,400	$52,701,600	$159,065,800
1998	*	$9,208,400	-	-	$103,279,322	$55,611,943	$168,099,665
1999	*	$8,523,961	-	-	$193,289,330	$104,078,870	$305,892,161
2000	*	$12,720,000	-	-	$203,444,540	$109,547,060	$325,711,600
2001	*	$10,490,000	-	-	$215,437,325	$116,004,714	$341,932,039
2002	*	$10,290,000	-	-	$230,360,000	$124,040,000	$364,690,000
2003	*	$17,195,000	-	-	$252,383,300	$135,898,700	$405,477,000
2004	*	$15,150,000	-	-	$325,436,800	$175,235,200	$515,822,000
2005	*	-	-	-	$324,057,500	$174,492,500	$498,550,000
2006	*	-	-	-	$132,459,535	$71,324,365	$203,783,900
2007	*	-	-	-	$223,706,860	$120,457,540	$344,164,400
2008	*	-	-	-	$358,558,200	$193,069,800	$551,628,000
2009	*	-	-	-	$492,196,250	$265,028,750	$757,225,000
2010	*	-	-	-	$773,162,687	$395,788,354	$1,168,951,041
2011	*	-	-	-	$772,448,140	$447,275,486	$1,219,723,626
2012	*	-	-	-	$957,537,240	$493,276,760	$1,450,814,000
2013	*	-	-	-	$1,095,300,000	$564,300,000	$1,659,600,000
2014	*	-	-	-	$1,097,400,000	$646,500,000	$1,743,900,000

*Estimated GRF and Other State Funds based on annual certified State contributions are 65% GRF and 35% Other State Funds.

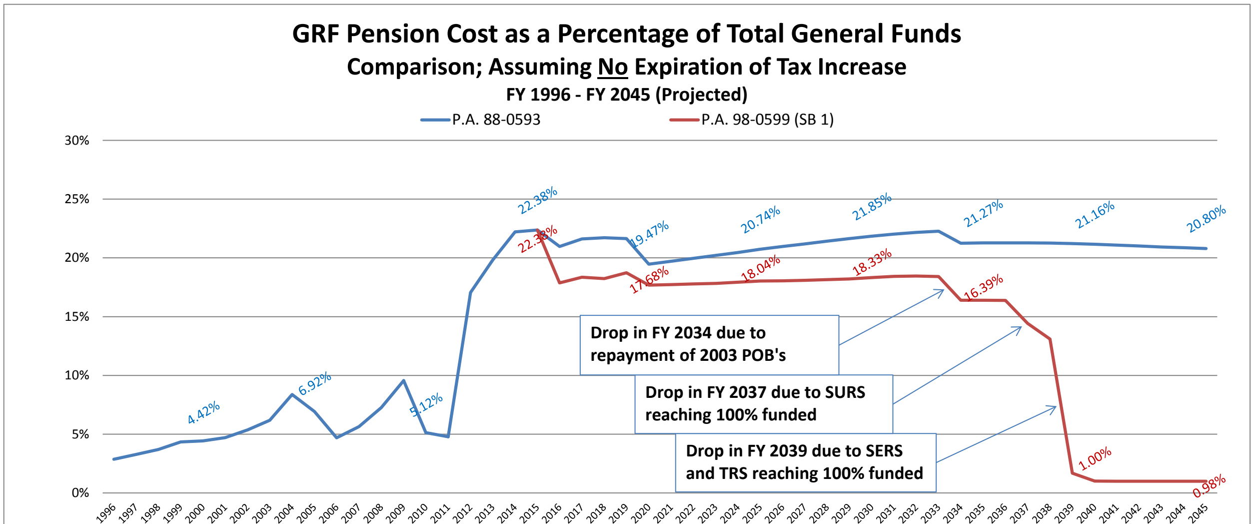
APPENDIX T

SUMMARY OF JRS APPROPRIATIONS BY FUND: FY 1996 - 2014						
Fiscal Year	State Pension Fund	Common School Fund	Education Assistance Fund	General Revenue Fund	Other State Funds	Total
1996	$861,000	-	-	$12,129,000	-	$12,990,000
1997	$857,400	-	-	$13,747,000	-	$14,604,400
1998	$1,062,200	-	-	$15,664,000	-	$16,726,200
1999	$2,215,716	-	-	$18,293,000	-	$20,508,716
2000	$2,160,000	-	-	$21,388,000	-	$23,548,000
2001	$2,170,000	-	-	$24,218,000	-	$26,388,000
2002	$2,300,000	-	-	$27,532,000	-	$29,832,000
2003	$2,225,000	-	-	$31,373,000	-	$33,598,000
2004	$609,769	-	-	$36,526,000	-	$37,135,769
2005	-	-	-	$31,991,000	-	$31,991,000
2006	-	-	-	$29,189,400	-	$29,189,400
2007	-	-	-	$35,236,800	-	$35,236,800
2008	-	-	-	$46,872,500	-	$46,872,500
2009	-	-	-	$59,983,000	-	$59,983,000
2010	-	-	-	$78,509,810	-	$78,509,810
2011	-	-	-	$62,699,460	-	$62,699,460
2012	-	-	-	$63,644,099	-	$63,644,099
2013	-	-	-	$88,210,000	-	$88,210,000
2014	-	-	-	$126,808,000	-	$126,808,000

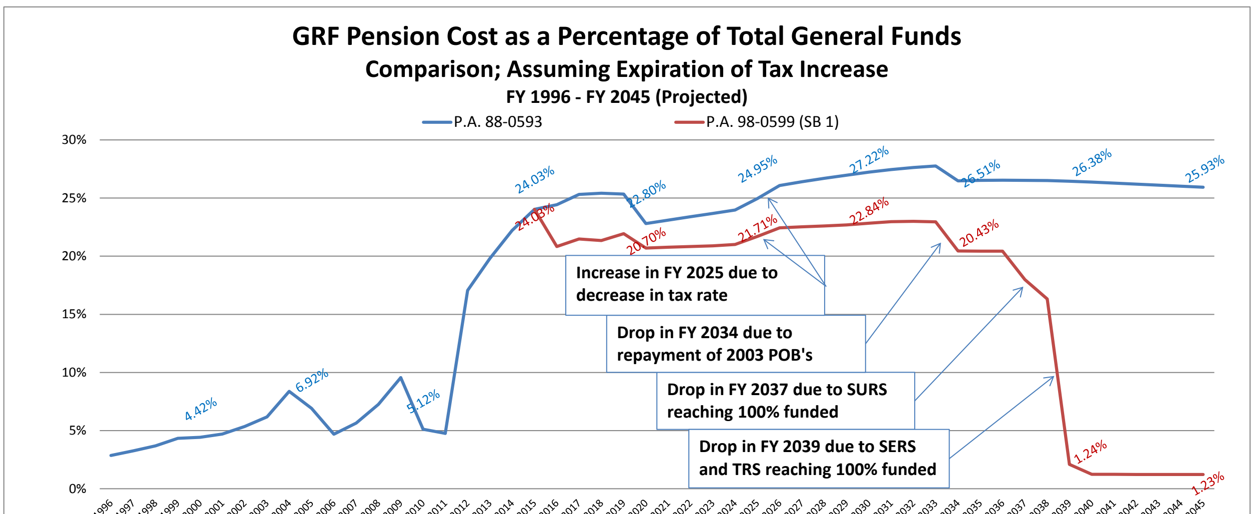
APPENDIX U

SUMMARY OF GARS APPROPRIATIONS BY FUND: FY 1996 - 2014						
Fiscal Year	**State Pension Fund**	**Common School Fund**	**Education Assistance Fund**	**General Revenue Fund**	**Other State Funds**	**Total**
1996	$221,600	-	-	$2,400,000	-	$2,621,600
1997	$217,900	-	-	$2,738,000	-	$2,955,900
1998	$260,700	-	-	$3,113,000	-	$3,373,700
1999	$494,718	-	-	$3,504,000	-	$3,998,718
2000	$480,000	-	-	$3,951,000	-	$4,431,000
2001	$490,000	-	-	$4,305,000	-	$4,795,000
2002	$510,000	-	-	$4,678,000	-	$5,188,000
2003	$465,000	-	-	$5,163,000	-	$5,628,000
2004	$300,000	-	-	$5,790,000	-	$6,090,000
2005		-	-	$4,674,000	-	$4,674,000
2006	-	-	-	$4,157,000	-	$4,157,000
2007	-	-	-	$5,220,300	-	$5,220,300
2008	-	-	-	$6,809,800	-	$6,809,800
2009	-	-	-	$8,847,000	-	$8,847,000
2010	-	-	-	$10,411,274	-	$10,411,274
2011	-	-	-	$11,443,614	-	$11,443,614
2012	-	-	-	$10,502,000	-	$10,502,000
2013	-	-	-	$14,150,000	-	$14,150,000
2014	-	-	-	$13,856,000	-	$13,856,000

APPENDIX V



Notes: **All future projections of State pension contributions come from the *__Retirement System Actuaries.__***
Only the *GRF portion of the regular pension appropriation plus pension bond debt service* is shown here.
GRF FY 2013-2016 projections provided by CoGFA's revenue staff; figures for FY 2017 - 2045 used an assumed growth rate of 2.3%.
Approximately 65% of SERS' total annual appropriation is assumed to come from GRF while the rest comes from other State Funds not shown here.
SURS projections do not include SMP contributions.
FY 2010 and FY 2011 amount do not reflect the pension bond/note proceeds pursuant to P.A. 96-0043 and P.A. 96-1497.
Projections including transfers pursuant to the PSA were not available for neither GARS nor JRS.
The projections depicted in this chart incorporate the revisions made by TRS' actuary on SB 1 projections pursuant to TRS' memo to the SB 1 Conference Committee dated August 26th, 2013.



Notes: **All future projections of State pension contributions come from the *__Retirement System Actuaries.__***
Only the *GRF portion of the regular pension appropriation plus pension bond debt service* is shown here.
GRF FY 2013-2016 projections provided by CoGFA's revenue staff; figures for FY 2017 - 2045 used an assumed growth rate of 2.3%.
Approximately 65% of SERS' total annual appropriation is assumed to come from GRF while the rest comes from other State Funds not shown here.
SURS projections do not include SMP contributions.
FY 2010 and FY 2011 amount do not reflect the pension bond/note proceeds pursuant to P.A. 96-0043 and P.A. 96-1497.
Projections including transfers pursuant to the PSA were not available for neither GARS nor JRS.
The projections depicted in this chart incorporate the revisions made by TRS' actuary on SB 1 projections pursuant to TRS' memo to the SB 1 Conference Committee dated August 26th, 2013.

APPENDIX W

Teachers' Retirement System of the State of Illinois
2815 West Washington Street | P.O. Box 19253 | Springfield, Illinois 62794-9253
Richard W. Ingram, Executive Director
http://trs.illinois.gov
(800) 877-7896 | for the hearing impaired: (866) 326-0087

October 31, 2013

The Honorable Pat Quinn, Governor
Senator John Cullerton, President of the Senate
Senator Christine Radogno, Minority Leader
Representative Michael Madigan, Speaker of the House
Representative Jim Durkin, Minority Leader
Mr. Gene Kalwarski, Cheiron, State Actuary

RE: Proposed Certification of FY 2015 TRS State Contribution Requirement

In accordance with 40 ILCS 5/16-158 (a-1), please find with this letter a resolution adopted by the System's board of trustees during its regular board meeting on October 25, 2013. The resolution accepts the results of the June 30, 2013 actuarial valuation and certifies the proposed total normal cost and employer normal cost rates for FY 2015. It also certifies three amounts for the proposed FY 2015 state contribution to TRS.

The first state contribution is the amount required under the current statutory funding plan. The other two are consistent with a TRS board resolution dated March 30, 2012 (and amended April 30, 2012) stating that the board will certify funding requirements based on sound actuarial principles and standards. The second state contribution is a minimum contribution calculated under generally accepted actuarial standards, covering the cost of benefits earned during the year (normal cost) and amortizing all of the unfunded liability over an open 30-year period. The third state contribution covers the annual cost of benefits and interest accruing on the pension debt.

- Under current law, the proposed FY 2015 state contribution is **$3,412,878,000.**
- Under generally accepted actuarial standards, the proposed minimal state contribution is **$4,062,168,000.**
- Under the employer's normal cost plus interest approach, the proposed state contribution is **$5,091,537,000**.

We will submit our final FY 2015 certification on or before January 15, 2014 after it is reviewed by the state actuary. Please direct questions to me or Kathleen Farney, Director of Research (217/753-0970).

Sincerely,

Richard W. Ingram
Executive Director

Enc. (3)
1. Certification of TRS board resolution on proposed FY 2015 funding amount & Exhibit A
2. TRS board resolution on actuarial standards and benefit changes, 3/30/12 (amended 4/30/12)
3. June 30, 2013 actuarial valuation report for the Teachers' Retirement System of the State of Illinois, Buck Consultants (includes state normal cost for FY 2015)

APPENDIX X

State Universities Retirement System of Illinois
Serving Illinois Community Colleges and Universities
1901 Fox Drive • Champaign, IL 61820-7333
(217) 378-8800 • (217) 378-9889 (FAX)

To:	Board of Trustees
From:	Phyllis L. Walker, Chief Financial Officer
Date:	October 8, 2013
Re:	Proposed State Contribution for Fiscal Year 2015

Overview

The proposed State contribution for fiscal year 2015 will be certified at $1,544,200,000.

Section 15-165 (a-5) of the Illinois Pension Code requires the SURS Board of Trustees each year to certify to the State Actuary, Governor and the General Assembly by November 1 the proposed State contribution for the following fiscal year which begins July 1.

The State contribution calculated by Gabriel, Roeder, Smith & Company for Fiscal Year 2015 is $1,588,200,000.[1] The contribution is 35.87% of the $4.4 billion, the assumed payroll Fiscal Year 2015. The estimated trust or federal funds is projected to be $44,000,000 for Fiscal Year 2015.[2] **The State contribution is reduced by the projected trust or federal funds. Therefore, the net State contribution for Fiscal Year 2015 will be certified at $1,544,200,000 (includes $52,800,000 Self-Managed Plan (SMP) State contribution).**

Section 15-155, which governs the development of Employer/State contribution to SURS, provides that:

(a) The State of Illinois shall make contributions by appropriations of amounts which, together with the other employer contributions from trust, federal, and other funds, employee contributions, income from investments, and other income of this System, will be sufficient to meet the cost of maintaining and administering the System on a 90% funded basis in accordance with actuarial recommendations.

The Board shall determine the amount of State contributions required for each fiscal year on the basis of the actuarial tables and other assumptions adopted by the Board and the recommendations of the actuary, using the formula in subsection (a-1).

(a-1) For State fiscal years 2012 through 2045, the minimum contribution to the System to be made by the State for each fiscal year shall be an amount determined by the System to be sufficient to bring the total assets of the System up to 90% of the total actuarial liabilities of the System by the end of State fiscal year 2045. In making these determinations, the required State 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.

[1]This is the gross State contribution. The appropriated State Contribution will be this amount less amounts estimated to be received directly from the colleges and universities from "trust or federal" funds.

[2]See table attached.

APPENDIX Y

GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

20 North Clark Street
Suite 2400
Chicago, IL 60602-5111

312.456.9800 phone
312.456.9801 fax
www.gabrielroeder.com

October 29, 2013

Board of Trustees and Executive Secretary
State Employees' Retirement System of Illinois
P. O. Box 19255
2101 S. Veterans Parkway
Springfield, Illinois 62794-9255

Re: Actuarial Certification

At your request, we have performed the annual actuarial valuation of the assets and liabilities of the State Employees' Retirement System of Illinois ("SERS") as of June 30, 2013. This valuation has been performed to measure the funding status of the Fund and determine the employer statutory contribution rate for the year beginning July 1, 2014, and ending June 30, 2015. In addition, it includes disclosure information required under GASB Statement No. 25 and Statement No. 27.

The required statutory contribution rate has been determined under the Projected Unit Credit Cost Method, providing for a 90 percent funding of total actuarial liabilities by fiscal year 2045 as required by 40 ILCS Section 5/14-131(e). Contribution rates are determined according to P.A. 93-0589 reflecting the infusion of the proceeds from the sale of general obligation bonds. The total rate includes a portion of the debt service due to the sale of the general obligation bonds per P.A. 93-0589. The applicable portion of the debt service includes the amount necessary to pay all principal and interest for State fiscal year 2015 on the general obligation bonds except portions reserved under Section 7.2(c) of the General Obligation Bond Act. Additionally, this amount is decreased by the amount set aside in the capitalized interest fund on the understanding this was the legislative intent. The contribution rates reflect the impact of P.A. 96-0889, which created a second tier for members of SERS hired after December 31, 2010.

The required statutory contribution rates and amounts for fiscal year beginning July 1, 2014, as determined in the June 30, 2013, actuarial valuation are shown below.

	Preliminary	Debt Service	Total
Required Rate	40.472%	1.867%	42.339%
Required Contribution	1,748,430,000	80,656,000	1,829,086,000

Based on the provisions of P.A. 97-0694, the required statutory contribution for the fiscal year beginning July 1, 2014, is submitted to the state actuary, governor, and General Assembly. Under the act, the state actuary is required to review the assumptions and methods used to perform the actuarial valuation and develop the required statutory contributions. The final certification of the required statutory contribution is due by January 15, 2014.

The system's current funding plan does not meet the requirements for amortizing the unfunded liability provided under GASB Statement No. 25. In all other respects, the assumptions and methods used to develop the normal cost and actuarial accrued liability meet the requirements of GASB Statement No. 25. We advise strengthening the current funding policy.

Pursuant to P.A. 96-0043, for purposes of determining statutory contribution rates for fiscal year 2014 an actuarial value of the System's assets was used. The actuarial value of assets is assumed to earn a rate of return equal to the System's actuarially assumed rate of return. The liabilities have been valued based on financial and employee data, which is supplied by the administrative staff of the System and verified by the System's auditor. We did not audit this data, but have reviewed the statistical support and concluded that the data is reasonable and consistent with the prior year's data.

For the actuarial valuation as of June 30, 2013, the assumed rate of return used to discount liabilities and project assets was 7.75 percent.

In our opinion, the calculations also comply with the requirements of Illinois state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board except as noted above. All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of SERS as of June 30, 2013. We prepared the accompanying Summary of Actuarial Cost Method and Major Actuarial Assumptions, but the SERS staff prepared the other supporting schedules in this section and the trend tables in the financial section, based on information supplied in our report.

This actuarial certification is provided to the Board of Trustees in conjunction with the SERS actuarial valuation as of June 30, 2013. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2013, which is available on the SERS website, and is an integral part of this certification.

The undersigned are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera David T Kausch Paul T Wood

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

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Gabriel Roeder Smith & Company

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312.456.9800 phone
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www.gabrielroeder.com

October 25, 2013

Board of Trustees and Executive Secretary
Judges' Retirement System of Illinois
P. O. Box 19255
2101 S. Veterans Parkway
Springfield, Illinois 62794-9255

Re: Actuarial Certification

At your request, we have performed the annual actuarial valuation of the assets and liabilities of the Judges' Retirement System of Illinois ("JRS") as of June 30, 2013. This valuation has been performed to measure the funding status of the System and determine the employer statutory contribution rate for the year beginning July 1, 2014, and ending June 30, 2015. In addition, it includes disclosure information required under GASB Statement No. 25 and Statement No. 27.

The required statutory contribution rate has been determined under the Projected Unit Credit Cost Method, providing for a 90 percent funding of total actuarial liabilities by fiscal year 2045 as required by 40 ILCS Section 5/18-131(c). Contribution rates are determined according to P.A. 93-0589 reflecting the infusion of the proceeds from the sale of general obligation bonds. The contribution rates reflect the impact of P.A. 96-0889, which created a second tier for members of JRS hired after December 31, 2010.

The required statutory contribution rates and amounts for fiscal year beginning July 1, 2014, as determined in the June 30, 2013, actuarial valuation are shown below.

	Total
Required Rate	79.961%
Required Contribution	133,982,000

Based on the provisions of P.A. 97-0694, the required statutory contribution for the fiscal year beginning July 1, 2014, is submitted to the state actuary, governor, and General Assembly. Under the act, the state actuary is required to review the assumptions and methods used to perform the actuarial valuation and develop the required statutory contributions. The final certification of the required statutory contribution is due by January 15, 2014.

The system's current funding plan satisfies the requirements for amortizing the unfunded liability provided under GASB Statement No. 25 for the fiscal year ending June 30, 2015. The assumptions and methods used to develop the normal cost and actuarial accrued liability meet the requirements of GASB Statement No. 25.

Pursuant to P.A. 96-0043, for purposes of determining the statutory contribution rate, an actuarial value of the System's assets was used. The actuarial value of assets is assumed to earn a rate of return equal to the System's actuarially assumed rate of return.

The liabilities have been valued based on financial and employee data, which is supplied by the administrative staff of the System and verified by the System's auditor. We did not audit this data, but have reviewed the statistical support and concluded that the data is reasonable and consistent with the prior year's data.

For the actuarial valuation as of June 30, 2013, the assumed rate of return used to discount liabilities and project assets was 7.0 percent.

This valuation assumes that the plan sponsor will be able to make future contributions on a timely basis. Failure to receive employer contributions on a timely basis could jeopardize the sustainability of the fund. We did not perform an analysis of the ability of the plan sponsor to make future contributions.

In our opinion, the calculations also comply with the requirements of Illinois state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of JRS as of June 30, 2013. We prepared the accompanying Summary of Actuarial Cost Method and Major Actuarial Assumptions, but the JRS staff prepared the other supporting schedules in this section and the trend tables in the financial section, based on information supplied in our report.

This actuarial certification is provided to the Board of Trustees in conjunction with the JRS actuarial valuation as of June 30, 2013. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2013, which is available on the JRS website, and is an integral part of this certification.

The undersigned are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera   David T Kausch   Paul T Wood

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

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October 23, 2013

Board of Trustees and Executive Secretary
General Assembly Retirement System of Illinois
P. O. Box 19255
2101 S. Veterans Parkway
Springfield, Illinois 62794-9255

Re: Actuarial Certification

At your request, we have performed the annual actuarial valuation of the assets and liabilities of the General Assembly Retirement System of Illinois ("GARS") as of June 30, 2013. This valuation has been performed to measure the funding status of the System and determine the employer statutory contribution rate for the year beginning July 1, 2014, and ending June 30, 2015. In addition, it includes disclosure information required under GASB Statement No. 25 and Statement No. 27.

The required statutory contribution rate has been determined under the Projected Unit Credit Cost Method, providing for a 90 percent funding of total actuarial liabilities by fiscal year 2045 as required by 40 ILCS Section 5/2-124(c). Contribution rates are determined according to P.A. 93-0589 reflecting the infusion of the proceeds from the sale of general obligation bonds. The contribution rates reflect the impact of P.A. 96-0889, which created a second tier for members of GARS hired after December 31, 2010.

The required statutory contribution rates and amounts for fiscal year beginning July 1, 2014, as determined in the June 30, 2013, actuarial valuation are shown below.

	Total
Required Rate	122.170%
Required Contribution	15,809,000

Based on the provisions of P.A. 97-0694, the required statutory contribution for the fiscal year beginning July 1, 2014, is submitted to the state actuary, governor, and General Assembly. Under the act, the state actuary is required to review the assumptions and methods used to perform the actuarial valuation and develop the required statutory contributions. The final certification of the required statutory contribution is due by January 15, 2014.

The system's current funding plan does not meet the requirements for amortizing the unfunded liability provided under GASB Statement No. 25. In all other respects, the assumptions and methods used to develop the normal cost and actuarial accrued liability meet the requirements of GASB Statement No. 25. We advise strengthening the current funding policy.

Pursuant to P.A. 96-0043, for purposes of determining the statutory contribution rate, an actuarial value of the System's assets was used. The actuarial value of assets is assumed to earn a rate of return equal to the System's actuarially assumed rate of return.

The liabilities have been valued based on financial and employee data, which is supplied by the administrative staff of the System and verified by the System's auditor. We did not audit this data, but have reviewed the statistical support and concluded that the data is reasonable and consistent with the prior year's data.

For the actuarial valuation as of June 30, 2013, the assumed rate of return used to discount liabilities and project assets was 7.0 percent.

This valuation assumes that the plan sponsor will be able to make future contributions on a timely basis. Failure to receive employer contributions on a timely basis could jeopardize the sustainability of the fund. We did not perform an analysis of the ability of the plan sponsor to make future contributions.

In our opinion, the calculations also comply with the requirements of Illinois state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board except as noted above. All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of GARS as of June 30, 2013. We prepared the accompanying Summary of Actuarial Cost Method and Major Actuarial Assumptions, but the GARS staff prepared the other supporting schedules in this section and the trend tables in the financial section, based on information supplied in our report.

This actuarial certification is provided to the Board of Trustees in conjunction with the GARS actuarial valuation as of June 30, 2013. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2013, which is available on the GARS website, and is an integral part of this certification.

The undersigned are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera David T. Kausch Paul T. Wood

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

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Teachers' Retirement System of the State of Illinois
2815 West Washington Street | P.O. Box 19253 | Springfield, Illinois 62794-9253
Richard W. Ingram, Executive Director
http://trs.illinois.gov
(800) 877-7896 | for the hearing impaired: (866) 326-0087

January 15, 2014

The Honorable Pat Quinn, Governor
Senator John Cullerton, President of the Senate
Senator Christine Radogno, Minority Leader
Representative Michael Madigan, Speaker of the House
Representative Jim Durkin, Minority Leader

RE: Final Certification of FY 2015 TRS State Contribution Requirement

In accordance with 40 ILCS 5/16-158 (a-5), TRS is submitting its final state funding requirement for FY 2015. Pursuant to the attached resolution adopted by the trustees on December 6, 2013, there are no changes from the preliminary funding requirements submitted October 31, 2013.

The resolution also confirms the board's acceptance of the 2013 valuation results and normal cost for FY 2015. The state actuary required no additional analyses to be run this year but did have a number of suggestions for improved disclosure this year. Many of those suggestions are included in the revised June 30, 2013 valuation report which we are enclosing with this certification.

Three state funding amounts are being certified. None of them reflect the changes contained in Public Act 98-0599, as the funding changes will become effective in FY 2016.

The first state contribution is the amount required under the statutory funding plan in effect before Pubic Act 98-0599. The other two are consistent with a TRS board resolution dated March 30, 2012 (and amended April 30, 2012) stating that the board will certify funding requirements based on sound actuarial principles and standards. The second state contribution is a minimum contribution calculated under generally accepted actuarial standards, covering the cost of benefits earned during the year (normal cost) and amortizing all of the unfunded liability over an open 30-year period. The third state contribution covers the annual cost of benefits and interest accruing on the pension debt.

- Under the statutory funding plan, the required FY 2015 state contribution is **$3,412,878,000.**
- Under generally accepted actuarial standards, the minimum state contribution is **$4,062,168,000.**
- Under the employer's normal cost plus interest approach, the state contribution is **$5,091,537,000.**

We are also submitting a revised actuarial report including many of the suggestions from the state actuary. Please direct questions to me or to Kathleen Farney, Director of Research (217/753-0970).

Sincerely,

Richard W. Ingram
Executive Director

State Universities Retirement System of Illinois

Serving Illinois Community Colleges and Universities

P.O. Box 2710 • Champaign, IL 61825-2710
(217) 378-8855 • (217) 378-9801 (fax)

William E. Mabe
Executive Director

January 13, 2014

The Honorable Pat Quinn
Governor of the State of Illinois
207 Statehouse
Springfield, Illinois 62706

Re: Certification of Required State Contribution to the
State Universities Retirement System for State Fiscal Year 2015

Dear Governor Quinn:

As required by 40 ILCS 5/15-165, the Board of Trustees of the State Universities Retirement System has certified the required State contribution for State fiscal year 2015 for the purposes of the System.

The Board hereby certifies that $1,544,200,000 is the total net required State contribution for State fiscal year 2015. An official certification is enclosed. A copy of the actuarial recommendation upon which the certification is based is also enclosed, as required by Section 15-165.

Please note that the Fiscal Year 2015 contributions are based on the current 7.75% present investment return assumption. In addition, the projected normal cost for the Fiscal Year 2015 is $399,900,000 and the projected State cost for the self-managed plan for Fiscal Year 2015 is $52,800,000.

As further required by the recent amendments to Section 15-165, the State Actuary has reviewed all of the actuarial assumptions used in the State Universities Retirement System's 2013 actuarial valuation. The State Actuary has concluded that the assumptions are reasonable and no changes are needed for the June 30, 2013 valuation. Additionally, the State Actuary has verified the arithmetic used in the calculations made by the State Universities Retirement System's actuary to develop the required State contribution.

On a go forward basis the most significant comment was the recommendation by the State Actuary is a reduction in the discount rate (assumed rate of return) from the current 7.75% to 7.25% or lower for the June 30, 2014 valuation.

We agree with the State Actuary's recommendation the need to review the discount rate to determine if further reduction is required for the June 30, 2014 valuation. The Board will take the recommendation to lower the discount rate to 7.25% or lower under advisement and make a final decision regarding the discount rate after they have had the opportunity to understand the financial impact of pension reform, perform an asset liability study, and conduct an economic study. Any decision regarding the discount rate prior to the June 30, 2014 evaluation would appear to be premature without fully understanding the financial impact of pension reform to both revenue (funding) and expense (benefits).

Additionally, the State Actuary made certain additional recommendations with respect to the State Universities Retirement Systems 2013 actuarial valuation report and future valuation reports. The Board of Trustees has accepted those additional proposed recommendations and further notes that the State Actuary's recommended changes have limited if any financial impact on the required State contribution amount.

Sincerely,

William E. Mabe
Executive Director

Encl: Certification
Actuarial Valuation Report
State Actuary's Report

cc: The Honorable Judy Baar Topinka, Comptroller
Mr. Jerry Stermer, Director, Office of Management and Budget
Mr. Alan Phillips, Executive Director, Illinois Board of Higher Education
Mr. Dan R. Long, Executive Director, COGFA
Mr. Daniel A. Hankiewicz, Pension Manager, COGFA
Senate President John Cullerton
Speaker Michael Madigan
Mr. Tim Nuding, Senate Republican Staff
Mr. Timothy Mapes, House Democratic Staff
Ms. Christine Radogno, Senate Minority Leader
Mr. Jim Durkin, House Minority Leader
Mr. Joe Butcher, Illinois Office of the Auditor General

APPENDIX DD

STATE RETIREMENT SYSTEMS

- State Employees' Retirement System of Illinois
- General Assembly Retirement System
- Judges' Retirement System of Illinois

Internet: http://www.srs.illinois.gov E-Mail: sers@srs.illinois.gov

2101 South Veterans Parkway, P.O. Box 19255, Springfield, Illinois 62974-9255

January 15, 2014

The Honorable Pat Quinn
Governor
207 Statehouse
Springfield, IL 62706

Dear Governor Quinn:

Pursuant to Public Act 97-694, at a meeting held on January 14, 2014, the Board of Trustees of the State Employees' Retirement System certified a State contribution for FY 2015 of $1,829,086,000, or 42.339% of payroll. This contribution level is based on provisions contained in Public Act 88-0593, as amended. The FY 2015 certification includes $551,051,796 for the employer's portion of expected normal cost, $80,656,000 for debt service on the 2003 pension obligation bonds, and $1,197,378,204 for the amortization of the unfunded liabilities.

Attached is the FY 2013 actuarial valuation along with the certification letter prepared by the System's actuaries.

Very truly yours,

Timothy Blair

Timothy Blair
Executive Secretary

cc: Governor Pat Quinn, Chicago Office
Jerome Stermer, Director, Governor's Office of Management & Budget
Cory Burris, Governor's Office of Management & Budget
Dan Long, Director, Commission on Government Forecasting & Accountability
Dan Hankiewicz, Commission on Government Forecasting & Accountability
Senate President John Cullerton
Republican Leader Christine Radogno
Speaker of the House Michael Madigan
Republican Leader Jim Durkin
Noe Chaimongkol, Office of Senate President
Jessica Basham, Speaker's Office
Joe Scully, House Republican Staff
Kim Fowler, Senate Republican Staff
Kristin Richards, Senate President's Office
Lari Dierks, House Democratic Staff
Judy Baar Topinka, Comptroller

APPENDIX EE

STATE RETIREMENT SYSTEMS
• State Employees' Retirement System of Illinois
• General Assembly Retirement System
• Judges' Retirement System of Illinois
Internet: http://www.srs.illinois.gov E-Mail: sers@srs.illinois.gov
2101 South Veterans Parkway, P.O. Box 19255, Springfield, Illinois 62974-9255

January 15, 2014

The Honorable Pat Quinn
Governor
207 Statehouse
Springfield, IL 62706

Dear Governor Quinn:

Pursuant to Public Act 97-694, at a meeting held on January 9, 2014, the Board of Trustees of the Judges Retirement System certified a State contribution for FY 2015 of $133,982,000, or 79.961% of payroll. This contribution level is based on provisions contained in Public Act 88-0593, as amended. The FY 2015 certification includes $43,953,283 for the employer's portion of expected normal and $90,028,717 for amortization of the unfunded liabilities.

Attached is the FY 2013 actuarial valuation along with the certification letter prepared by the System's actuaries.

Very truly yours,

Timothy Blair

Timothy Blair
Executive Secretary

cc: Governor Pat Quinn, Chicago Office
Jerome Stermer, Director, Governor's Office of Management & Budget
Cory Burris, Governor's Office of Management & Budget
Dan Long, Director, Commission on Government Forecasting & Accountability
Dan Hankiewicz, Commission on Government Forecasting & Accountability
Senate President John Cullerton
Republican Leader Christine Radogno
Speaker of the House Michael Madigan
Republican Leader Jim Durkin
Noe Chaimongkol, Office of Senate President
Jessica Basham, Speaker's Office
Joe Scully, House Republican Staff
Kim Fowler, Senate Republican Staff
Kristin Richards, Senate President's Office
Lari Dierks, House Democratic Staff
Judy Baar Topinka, Comptroller

SRS STATE RETIREMENT SYSTEMS
• State Employees' Retirement System of Illinois
• General Assembly Retirement System
• Judges' Retirement System of Illinois
Internet: http://www.srs.illinois.gov E-Mail: sers@srs.illinois.gov
2101 South Veterans Parkway, P.O. Box 19255, Springfield, Illinois 62974-9255

January 15, 2014

The Honorable Pat Quinn
Governor
207 Statehouse
Springfield, IL 62706

Dear Governor Quinn:

Pursuant to Public Act 97-694, at a meeting held on January 10, 2014, the Board of Trustees of the General Assembly Retirement System certified a State contribution for FY 2015 of $15,809,000, or 122.170% of payroll. This contribution level is based on provisions contained in Public Act 88-0593, as amended. The FY 2015 certification includes $2,546,870 for the employer's portion of expected normal cost and $13,262,130 for the amortization of the unfunded liabilities.

Attached is the FY 2013 actuarial valuation along with the certification letter prepared by the System's actuaries.

Very truly yours,

Timothy Blair

Timothy Blair
Executive Secretary

TB

cc: Governor Pat Quinn, Chicago Office
Jerome Stermer, Director, Governor's Office of Management & Budget
Cory Burris, Governor's Office of Management & Budget
Dan Long, Director, Commission on Government Forecasting & Accountability
Dan Hankiewicz, Commission on Government Forecasting & Accountability
Senate President John Cullerton
Republican Leader Christine Radogno
Speaker of the House Michael Madigan
Republican Leader Jim Durkin
Noe Chaimongkol, Office of Senate President
Jessica Basham, Speaker's Office
Joe Scully, House Republican Staff
Kim Fowler, Senate Republican Staff
Kristin Richards, Senate President's Office
Lari Dierks, House Democratic Staff
Judy Baar Topinka, Comptroller

BACKGROUND

The Commission on Government Forecasting and Accountability (CGFA), a bipartisan, joint legislative commission, provides the General Assembly with information relevant to the Illinois economy, taxes and other sources of revenue and debt obligations of the State. The Commission's specific responsibilities include:

1) Preparation of annual revenue estimates with periodic updates;
2) Analysis of the fiscal impact of revenue bills;
3) Preparation of State debt impact notes on legislation which would appropriate bond funds or increase bond authorization;
4) Periodic assessment of capital facility plans;
5) Annual estimates of public pension funding requirements and preparation of pension impact notes;
6) Annual estimates of the liabilities of the State's group health insurance program and approval of contract renewals promulgated by the Department of Central Management Services;
7) Administration of the State Facility Closure Act.

The Commission also has a mandate to report to the General Assembly ". . . on economic trends in relation to long-range planning and budgeting; and to study and make such recommendations as it deems appropriate on local and regional economic and fiscal policies and on federal fiscal policy as it may affect Illinois. . . ." This results in several reports on various economic issues throughout the year.

The Commission publishes several reports each year. In addition to a "Monthly Briefing", the Commission publishes the "Revenue Estimate and Economic Outlook" which describes and projects economic conditions and their impact on State revenues. The "Legislative Capital Plan Analysis" examines the State's capital appropriations plan and debt position. "The Financial Conditions of the Illinois Public Retirement Systems" provides an overview of the funding condition of the State's retirement systems. Also published are an Annual Fiscal Year "Budget Summary"; "Report on the Liabilities of the State Employees' Group Insurance Program"; and "Report of the Cost and Savings of the State Employees' Early Retirement Incentive Program". The Commission also publishes each year special topic reports that have or could have an impact on the economic well-being of Illinois. All reports are available on the Commission's website.

These reports are available from:
Commission on Government Forecasting and Accountability
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http://cgfa.ilga.gov/