



## Commission on Government Forecasting and Accountability

### PENSION IMPACT NOTE *104<sup>th</sup> General Assembly*

BILL NO: **HB 2540 (Revised)**

April 2, 2025

SPONSOR (S): Kifowit

SYSTEM: All systems

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#### FISCAL IMPACT

**HB 2540 makes significant changes to the Illinois Pension Code, including modifications to the pension funding plan for the five State-funded systems and various changes to Tier 2 provisions.**

**The pension impact note has been updated to include a study by CGFA's actuary, Segal, analyzing the major provisions of HB 2540. Below is a topline summary of the impact on first-year contributions in FY 2027, and the cumulative impact through FY 2049 for the Big 3 State systems (TRS, SERS, and SURS) compared to current law.**

Increase in Estimated State Contributions under HB 2540 (\$ in Million)				
	TRS	SERS	SURS	Total
<b>FY 2027 (first year of implementation)</b>	<b>\$47</b>	<b>\$7</b>	<b>(\$53)</b>	<b>\$1</b>
<b>Through FY 2049</b>	<b>\$45,558</b>	<b>\$15,966</b>	<b>\$14,851</b>	<b>\$76,375</b>

**Please refer to Appendix I on page 12 of this note for the full study.**

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**SUBJECT MATTER:** HB 2540 revises the Illinois Pension Code by implementing a new State funding plan targeting 100% funding by FY 2049 and introducing a 20-year layered amortization for the five State systems. The bill reallocates 50% of bond debt service from prior pension bond laws to the Pension Stabilization Fund for extra pension payments from FY 2031 to FY

2041. The bill also modifies Tier 2 benefits, adjusting Final Average Salary calculations, normal retirement age, and early retirement penalties. Additionally, it removes the requirement for CGFA to review the 90% funding target. More detail is provided below.

COMMENT:

**State Funding Plan for the Five State Retirement Systems (TRS, SURS, SERS, JRS, and GARS) – Effective upon Becoming Law**

**Current Law**

- The State shall contribute to the five State retirement systems a minimum required amount such that the required contribution is sufficient to bring the funded ratio of each system up to **90% by the end of FY 2045**.
- The annual required State contribution shall be calculated as a level percentage of payroll over the years remaining to and including FY 2045 and shall be determined under **the projected unit credit** actuarial cost method.
- **The 5-year asset and assumption “smoothing” methods** shall be used in order to mitigate the impact of any unexpected events or changes that may increase or decrease the State contribution.
  - With asset smoothing, implemented by P.A. 96-0043, which became effective on July 15, 2009, any gains or losses from investment fluctuations would be recognized in an equal annual amount over a period of 5 years.
  - Similarly, assumption smoothing, implemented by P.A. 100-0023, which became effective on July 6, 2017, serves to spread out the impact of any change in actuarial assumptions over the 5 year-period.
- Beginning in FY 2046, the minimum State contribution shall be the amount required to maintain the funded ratio of each system at 90%.

**HB 2540**

- HB 2540 would modify the current State funding plan for the five State retirement systems starting in FY 2027.
  - The FY 2026 State contribution would still be determined under the current funding plan.
- Major changes in the State funding plan would include:
  - Changing the funding goal to achieve 100% funding by FY 2049;
  - Starting in FY 2036, implementing a 20-year layered-amortization approach when determining the minimum State contribution; and
  - Using the entry age normal cost method beginning in FY 2050.
- Details on the modified State funding plan, categorized by three separate time periods, are discussed as follows:
  - For FY 2027 through FY 2035:

- The minimum annual State contribution shall be determined by each system to be sufficient to achieve a **100%** funded ratio by the end of **FY 2049**. This contribution shall be calculated as a level percentage of payroll over the remaining years up to and including FY 2049, using the **projected unit credit** actuarial cost method.
  - **The 5-year Asset smoothing and assumption smoothing methods** shall continue to be used when determining the required State contribution, consistent with current law.
- For FY 2036 through FY 2049:
- Beginning in FY 2036, a layered-amortization approach for a period of 20 years would be used when determining the minimum annual State contribution.
    - The minimum annual State contribution shall be the amount estimated for the upcoming fiscal year **plus an actuarial “layering” component**, such that the funded ratio of each system equals 100% **20 years** after the fiscal year during which the contribution is made.
    - This adjustment shall be implemented in equal annual amounts over a 20-year period beginning in the fiscal year in which the current actuarial valuation is used to determine the required State contribution.
    - Thus, the 5-year asset smoothing and assumption smoothing methods shall sunset after FY 2035 and would be replaced with the 20-year layered-amortization approach, beginning in FY 2036.

Table 1 below provides a graphic illustration of how a “layered amortization” program functions. **The chart is for illustration purposes only, and is not an actuarial projection.** The chart assumes an unfunded liability is generated in each valuation year shown at left. If the unfunded liability does not increase in the valuation year shown, there would be no 20-year “amortization layer” attributable to that fiscal year.

## Table 1

Valuation Date June 30 (Fiscal Year)	Fiscal Year Contribution Determined	State	The Effect of the 20-Year Layered Amortization for Fiscal Year										
			2035	2036	2037	2038	2039	...	2055	2056	2057	2058	2059
2034	2036			Amortization Layer Based on the FY 2034 Valuation									
2035	2037				Amortization Layer Based on the FY 2035 Valuation								
2036	2038				Amortization Layer Based on the FY 2036 Valuation								
2037	2039						Amortization Layer Based on the FY 2037 Valuation						
The layering process would continue each year in a similar fashion, extending beyond the determination of FY 2049 State contribution.													

- When making these determinations, the annual required State contribution shall be calculated as a level percentage of payroll for the remaining years up to and including FY 2049, using **the projected unit credit** actuarial cost method.
- Beginning in FY 2050:
  - **The entry age normal** actuarial cost method shall be used instead of the projected unit credit actuarial cost method.
    - PUC and EAN are two methods of calculating a pension fund's normal cost. PUC backloads costs, causing normal costs to rise over time, while EAN spreads costs evenly for stable contributions. Public pensions favor EAN for long-term stability, while PUC can lead to escalating costs. Though total costs are the same under both, the timing of contributions impacts funding patterns and budget stability.
- Any additional State contributions made under the Budget Stabilization Act shall not be considered when determining the minimum State contribution under the modified State funding plan in HB 2540.

### *Change to the Tier 2 Final Average Salary (FAS) Calculation*

#### **Current Law**

Under current law, the Tier 2 Final Average Salary (FAS) is the average of the highest 8 consecutive annual salaries (or 96 consecutive monthly salaries) within the last 10 years (or 120 consecutive months). For Downstate police and firefighters as well as Chicago firefighters (excluding Chicago police), the Tier 2 FAS may instead be the average of the highest 48 consecutive monthly salaries within the last 60 months if this amount is greater than the 8-year average FAS.

#### **HB 2540**

- FAS equal to average of the highest 6 years (or 72 consecutive months) within the last 10 years (120 months);
- Maximum pensionable earnings shall not be less than the Social Security Wage Base; and
- No retroactive adjustment to contributions or benefits between January 1, 2011 and January 1, 2028

#### *Lower Tier 2 Retirement Age*

Under current law, Tier 2 members can retire at age 67 with 10 years of service for normal retirement, except for public safety officials, who have an earlier normal retirement age. These include:

- SERS Tier 2 Alternative formula: age 60 or age 55 with 20 years
- SURS Fire/Police: age 60

- Downstate Police and Fire: age 55
- Chicago Police and Fire: age 55 or mandatory retirement at age 63
- IMRF Sheriff's plan: age 55

HB 2540 would lower the non-public safety Tier 2 normal retirement age to age 65 from age 67 with 10 years of service for applicable pension funds.

### **No Early Retirement Reduction Penalty for Certain Tier 2 Members**

#### **Current Law**

Under current law, Tier 2 members are penalized for early retirement. If a Tier 2 member retires earlier than the normal retirement age, his or her benefit is reduced by 6% for each year under the normal retirement age, up to a maximum reduction of 30% (for retiring 5 years early). For example, the earliest retirement age for a SERS Tier 2 member under the regular formula is 62, instead of the normal retirement age of 67, and the member's benefit is permanently reduced by 30% (6% x 5 years).

Currently, the Tier 2 pensionable salary is capped, and members do not make contributions on salary above the cap. The Tier 2 salary cap started at \$106,800 in Calendar Year (CY) 2011.

- For most pension funds:
  - The salary cap increases annually by the lesser of 3% or **one-half** of the annual unadjusted percentage increase in the Consumer Price Index-U (CPI-U).
  - As a result, the Tier 2 pensionable salary is capped at \$127,283 in CY 2025.
- For GARS, JRS, and downstate police and firefighter pension funds:
  - The salary cap increases annually by the lesser of 3% or **100%** of the annual unadjusted CPI-U.
  - As a result, the Tier 2 pensionable salary cap is equal to \$141,408 in CY 2025.
- For the Cook County Pension Fund:
  - The Tier 2 salary cap has been set at the SSWB beginning January 1, 2024, pursuant to P.A. 103-0529. The Social Security Wage Base (SSWB) is \$176,100 in CY 2025.

### **HB 2540**

Under HB 2540, if a Tier 2 member has reached the Tier 2 salary cap and is within 5 years of the normal retirement age, the early retirement reduction penalty would be 0%, provided that the member still meets the service credit requirements for normal retirement.

### **Change to the Tier 2 Automatic Annual Increase**

#### **Current Law**

- All funds and systems except JRS & GARS have Tier 2 automatic annual increases that are non-compounded, and are calculated at the lesser of:
  - 3%; or

- ½ the annual unadjusted percentage increase (not less than zero) in the CPI-U.
  - If the increase in CPI-U is 0, no increase is payable.
- JRS & GARS Tier 2 automatic annual increases are compounded, and are calculated at the lesser of:
  - 3%; or
  - The annual unadjusted percentage increase in the CPI-U.
- Tier 2 COLAs are payable at the later of January 1 occurring either on or after the attainment of age 67 or the first anniversary of retirement, except for public safety officials, who start receiving increases at age 60.

### **HB 2540**

After the effective date of this bill, each Tier 2 annual increase (COLA) in a retirement annuity or supplemental annuity shall be a non-compounded 3% increase. (This legislation does not change the current Tier 2 COLA for GARS and JRS.) Along with the new formula, the starting date of Tier 2 COLAs would be the later of the following dates:

- For most pension funds:
  - 1) January 1 occurring on or after age 67, age 65 with at least 20 years of service, or January 1 occurring on or after the attainment of the full and unreduced retirement age; or
  - 2) The first anniversary of retirement
- For Downstate police and fire, Chicago police and fire, and IMRF sheriffs:
  - 1) January 1 occurring on or after age 60 or the attainment of the full and unreduced retirement age; or
  - 2) The first anniversary of retirement

*Please note that for the Chicago Fire Article, the language amending the Tier 2 COLA timing is identically added; however, the language for the non-compounded 3% COLA is not included. It is unclear whether this omission is a drafting error or the intent of this bill.*
- For IMRF regular plan:
  - 1) January 1 occurring on or after age 65, or the attainment of the full and unreduced retirement age; or
  - 2) The first anniversary of retirement

### **Placing Downstate Police & Fire and Chicago Police & Fire Articles Under the Ambit of the Retirement Systems Reciprocal Act**

### **Current Law**

Under current law, neither the Chicago Police and Chicago Fire, nor the Downstate Police and Downstate Firefighters' Articles of the Illinois Pension code are included under the Retirement Systems Reciprocal Act, although reciprocity exists between the funds within each respective article (e.g., members of Downstate police funds can utilize reciprocity with other Downstate

Police Funds, although this involves the transfer of service credits, whereas the Downstate Fire article has true reciprocity amongst fire pension funds).

The Retirement Systems Reciprocal Act allows for active employees to combine service credit earned from various participating systems to apply towards the minimum vesting requirements of the fund that they participate in currently or the fund that they last participated in before terminating active service. For example, a Tier 2 member in IMRF could utilize reciprocity and combine 4 years of prior service in SERS and 6 years in IMRF to meet the 10-year Tier 2 vesting requirement in IMRF.

### **HB 2540**

HB 2540 would place the Downstate Police, Downstate Fire, Chicago Police, and Chicago Fire Articles of the Illinois Pension Code under the ambit of the Reciprocal Act. The bill states that participation under the Reciprocal Act would only apply to members who have not yet begun receiving retirement annuities as of the effective date. In other words, retired members would not be entitled to a recalculation of their pensions based upon reciprocal service.

#### **Retirement Eligibility for Tier 2 Cook County Sheriff's Police Officers**

HB 2540 provides that a Tier 2 Cook County Pension Fund member who is a deputy sheriff and a member of the Cook County Police Department would be eligible to retire at age 55 with at least 20 years of service credit for service as a deputy sheriff. Also, under this bill, such Tier 2 members would receive automatic annual increases that are non-compounded and calculated at the lesser of 3% or one-half of the annual unadjusted percentage increase (not less than zero) in the CPI-U. This differs from the new 3% simple COLA applied to Tier 2 members under other funds under this bill. Furthermore, COLAs for these members would be payable on January 1 following the first anniversary of the annuity start date. Currently, the normal retirement eligibility for a Tier 2 Cook County Sheriff's police officer is age 67 with at least 20 years of service.

#### **Ensuring the Tier 1 Status across All Pension Funds – Effective upon Becoming Law**

HB 2540 would add a new provision to clarify a “once in Tier 1, always in Tier 1” standard for all Tier 1 members across all pension funds. This provision overrules any conflicting provisions in the Pension Code.

Under HB 2540, a member of a pension fund would be allowed to establish or regain service if the following conditions are met:

- Being active in any pension fund, regardless of which pension fund the service credit is re-established for;
- Paying the employee and employer contributions that would have been required, or in the case of refund, making refund payments, plus interest;
- Completing any required forms; and

- Meeting all the requirements within one year of the effective date of this bill, unless installment payments are allowed for paying the required contributions or refund payments.

A pension fund shall not be required to recalculate a final determined benefit unless a member has a pending action against a pension fund regarding a final determined benefit as of the effective date of this bill.

### **Accelerated Pension Benefits Payment Programs for GARS, CTPF, and JRS**

#### **Current Law**

- PA 100-0587 implemented an accelerated pension benefit payment in lieu of any pension benefit for SERS, SURS, & TRS (“Total Buyout”), as follows:
  - Inactive vested Tier 1 & Tier 2 members may elect to receive an accelerated pension payment equal to 60% of the present value of the member’s pension benefits in lieu of receiving a traditional retirement annuity.
- PA 100-0587 also established an accelerated pension benefit for a reduction in annual Tier 1 retirement annuity and survivor’s annuity increases in SERS, SURS, and TRS (“COLA Buyout”), as follows:
  - A member may elect to receive a lump sum payment equal to 70% of the difference of the present value of the Tier One 3% compounded COLA and the present value of a reduced COLA (simple 1.5%); and
  - Annual increases begin on the January 1 occurring on or after the attainment of age 67 or the first anniversary of retirement, whichever is later.
- If an eligible member returns to service, all benefits earned are based solely on service after returning; the accelerated payment may not be repaid and credit cannot be reinstated.
- PA 102-0718 extended the sunset date of the two buyout programs to June 30, 2026.

#### **HB 2540**

- HB 2540 establishes both a “Total Buyout” and “COLA Buyout” plan within GARS, JRS, and CTPF;
- The buyout plans mirror the existing plans in SERS, SURS, & TRS, except that:
  - Funding for the buyout programs will come from the General Revenue Fund and not from proceeds from the State Pension Obligation Acceleration Bonds, as is the case with the existing buyout programs.
- HB 2540 establishes January 1, 2031 as the sunset date for the GARS, JRS, and CTPF buyout programs.

#### **Estimated payment for SERS members under the Alternative Formula**

HB 2540 adds language to the SERS Alternative Formula provision that creates an “estimated payment” of a retirement annuity to commence no later than 30 days after:

- the member’s last day of employment, or;



- the date the member files for benefits, whichever is later.

The estimated payment shall be:

- the best estimate of SERS; and
- based on information that the System possesses at the time of the estimate.

In the event that a discrepancy exists between the “estimated payment” and the annuity a member is eligible to receive under statute, the System shall either pay or recover the difference within 6 months of the start of the affected annuity.

According to SERS, the Tier 1 Alternative Formula final average salary (FAS) calculation is a very complex exercise, without factoring in the various types of non-pensionable payments issued to employees during their final years of service. SERS asserts that there are often instances in which members have received non-pensionable compensation with the retirement contributions erroneously deducted by their payroll offices. The system maintains that substantial effort is required to sift through and rectify these errors before the proper annuity calculation can be made.

**Alternative Formula Eligibility and Applicable Service Credit Upgrade Provisions for Investigators/Security Employees of the Departments of Lottery and Human Services**

The current SERS retirement benefits for both Tier 1 & 2 Investigators for the Department of the Lottery are detailed in the chart found below:

<b>Current Law</b>						
<b>Employee</b>	<b>Tier</b>	<b>SS-Coordinated?</b>	<b>Contribution Rate</b>	<b>Multiplier</b>	<b>Full Retirement</b>	<b>Reduced Retirement</b>
<b>Investigator for the Dept. of Lottery</b>	1	No	8%	2.20%	Age 60 with 8 years of service credit OR Rule of 85	Ages 55-60 with 25-30 years (Reduced 1/2 of 1% every year under age 60)
<b>Investigator for the Dept. of Lottery</b>	2	No	8%	2.20%	Age 67 with 10 years service credit	Ages 62-67 with 10 years (Reduced 1/2 of 1% every year under age 67)
<b>HB 2540</b>						
<b>Investigator for the Dept. of Lottery</b>	1	No	12.5%	3.00%	Age 55 with 20 years of service OR Age 50 with 25 years of service	N/A
<b>Investigator for the Dept. of Lottery</b>	2	No	12.5%	3.00%	Age 55 with 20 years of service	N/A

HB 2540 amends the Illinois Pension Code to allow participation in the SERS Alternative Formula for investigators for the Department of the Lottery.

HB 2540 also allows a security employee of the Department of Human Services in the Alternative Formula to elect to convert up to 13 years of prior service credit as a security employee in the

Department of Human Services into service credit under the Alternative Formula. HB 2540 also allows a State highway maintenance worker in the Alternative Formula to elect to convert up to 8 years of prior service credit. In both cases, the employee is required to pay an amount equal to the difference between the employee contributions already made and those that would have been paid had their prior service been rendered under the Alternative Formula, plus interest thereon at the statutory service credit purchase rate (the “effective rate”) of 6%, compounded annually, from the date of service to the date of payment.

**Alternative Formula Participation for Certain Security Employees of the Department of Juvenile Justice**

Currently, in order for a security employee of the Department of Juvenile Justice to participate in the SERS alternative formula, the employee must be employed in a position at a DJJ facility and have involvement in areas such as training of delinquent youths, providing rehabilitative and vocational training, and assisting other personnel who perform these duties. Additionally, the employee must:

- Be over the age of 21; and
- Possess a high school diploma or equivalent and either:
  - A bachelor’s or advanced degree from an accredited college or university; or
  - 2 or more years of experience providing direct care to youth in the form of residential care, coaching, case management, or mentoring.

HB 2540 stipulates that the bachelor’s or advanced degree requirement shall no longer determine eligibility for the alternative formula for the above-mentioned positions at DJJ. Affected employees may convert their prior regular formula service to alternative formula service by paying the difference between the employee contributions for that period of service and the amounts that would have been contributed had the member been participating in the alternative formula from the date of service to the date of payment. The member is not required to pay the employer’s normal cost nor interest for the period of service they wish to upgrade.

**Additional Pension Stabilization Fund Payments – Effective upon Becoming Law**

HB 2540 would create additional payments to the Pension Stabilization Fund, made under the auspices of the Office of the Comptroller, as follows:

- **FY 2031: an additional \$175 million would be paid into the Pension Stabilization Fund.**
- **FY 2032 through 2034: \$250 million would be paid into the Pension Stabilization Fund.** This payment is equivalent to one half of the principal payments concluding in FY 2030 made by the state to pay off the \$6 billion Income Tax Proceed Bonds issued under PA 100-0023.
- **FY 2035 through 2041: \$750 million would be paid to the Pension Stabilization Fund in addition to any payments made towards achieving the goal of funding every pension system at 100% by 2049.** These payments are approximately equivalent to one half of the principal payments made under the Income Tax Proceed Bonds ending in FY

2030 and one half of the last principal payment made under the Pension Obligation Bonds issued under PA 93-0002 ending in FY 2033.

HB 2540 states that none of the aforementioned payments made to the Pension Stabilization Fund shall be used in actuarial calculations of required contributions to achieve the 100% funding goal at the end of FY 2049, as mentioned previously.

**CMS' Expenses Regarding the State Employees Deferred Compensation Plan**

HB 2540 provides that beginning July 1, 2028, the expenses of the State Employees Deferred Compensation Plan shall be borne by CMS.

**Commission on Government Forecasting and Accountability Analysis of 90% Funding Ratio – Effective upon Becoming Law**

Under current law, the Commission on Government Forecasting and Accountability (CGFA) is required to review and analyze the state's goal of 90% funding of actuarial liabilities by FY 2045, and make recommendations every five years as to the efficacy of this funding goal. CGFA's most recent analysis was published in November 2021. HB 2540 would eliminate this requirement.

JB:bs

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## Appendix I



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April 3, 2025

Via Email

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**Re: Actuarial Impact Study – House Bill 2540**

Dear Clayton:

As requested, we analyzed the impact of various benefit and contribution changes contained in House Bill 2540 (HB 2540) on projected costs of the Teachers' Retirement System (TRS), the State Employees' Retirement System (SERS), and the State Universities Retirement System (SURS). Due to limited data available, this analysis does not consider the impact of these changes for General Assembly Retirement System (GARS), Judges' Retirement System of Illinois (JRS), Chicago Teachers' Pension Fund (CTPF), Illinois Municipal Retirement Fund (IMRF), nor the Downstate or Chicago Police and Firefighters' Pension Funds.

The following table provides a high-level summary of the impact of the proposed changes outlined in HB 2540 on the increase in State contribution amounts through fiscal year ending June 30, 2049 for each System. Additional details are included later in the letter (NRA = Normal Retirement Age, ERF = Early Retirement Factor, COLA = Cost-of-Living Adjustment, FAS = Final Average Salary, and SSWB = Social Security Wage Base).

(\$ in millions)	TRS	SERS	SURS	Total
<b>Increase in Total State Contributions through FY 2049</b>				
Baseline	-	-	-	-
Step #1 – 100% Funded by FY 2049	\$29,214	\$9,298	\$9,315	\$47,827
Step #2 – Plus Tier 2 NRA Update	31,380	10,446	9,932	51,758
Step #3 – Plus Tier 2 ERF Update	33,133	10,598	10,045	53,776
Step #4 – Plus Tier 2 COLA Update	36,734	11,856	11,643	60,233
Step #5 – Plus Tier 2 FAS Update	37,257	12,159	11,974	61,390
Step #6 – Plus Tier 2 Salary Cap to SSWB	45,558	15,532	14,851	75,941
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	45,558	15,966	14,851	76,375

Scenarios in the table above are cumulative – all steps incorporate the changes of steps preceding them.

This analysis is based on the provisions of the respective Plans. The information contained in this document, as well as the accompanying exhibits, were prepared using actuarial assumptions and methods consistent with those employed in the actuarial valuations as of June 30, 2024, for TRS (dated January 14, 2025), SERS (dated December 27, 2024), and SURS (dated November 15, 2024), except as otherwise noted in this letter.

Clayton Klenke  
April 3, 2025  
Page 2

### Proposed Benefit and Contribution Changes

We analyzed the following proposed benefit and contribution changes per HB 2540, as summarized below. For this analysis, we determined the impact of each change stepwise (e.g., Step #2 builds off Step #1, Step #3 builds off Step #2, etc.). All changes are effective January 1, 2028, unless otherwise noted.

1. Modifies the Illinois Pension Code to include a new State funding plan with a goal of achieving 100% funding by FY 2049 and the implementation of a 20-year layered-amortization approach for any unfunded liabilities incurred from FY 2036 through FY 2049 under the projected unit credit actuarial cost method and after FY 2050 under the entry age normal actuarial cost method.
2. Lowers the unreduced and reduced retirement age requirements for non-public safety Tier 2 members from age 67 to age 65 and age 62 to age 60, respectively. There is no change to the service requirement (10 years of service).
3. Eliminates early retirement factors (i.e., no reduction for early retirement) for Tier 2 members who have reached their applicable maximum percentage of salary allowed and who are within 5 years of their applicable unreduced retirement age.
4. Changes the automatic annual cost-of-living adjustment (COLA) increases for Tier 2 members to 3% per year (increases are based on a member's original benefit amount at retirement), with the first increase payable on the later of the following dates: 1) January 1<sup>st</sup> occurring on or after age 67, age 65 with at least 20 years of service, or after the attainment of the unreduced retirement age; or 2) the first anniversary of retirement.
5. Revises the Tier 2 final average salary (FAS) definition from 8 consecutive years (or 96 consecutive months) to 6 consecutive years (or 72 consecutive months).
6. Updates the Tier 2 salary cap to be equal to the Social Security Wage Base (SSWB).
7. Allows participation in SERS Alternative Formula for Security Employees of the Department of Human Services and Investigators for the Department of the Lottery, as well as certain members of the Department of Juvenile Justice (due to expansion of Department of Juvenile Justice eligibility for creditable service by removing the bachelor's or advanced degree requirement).
8. Directs additional annual payments to the Pension Stabilization Fund (PSF) as follows:

Fiscal Years Ending June 30	Total Additional Payments to PSF
2031	\$175M
2032 – 2034	\$250M <sup>1</sup>
2035 – 2041	\$750M <sup>2</sup>

These payments are not used in determining statutory contributions to achieve the 100% funded goal by the end of FY 2049.

<sup>1</sup> Equivalent to one half of the principal payments concluding in FY2030 made by the state to pay off the Income Tax Proceed Bonds issues under PA 100-0023

<sup>2</sup> Equivalent to one half of the principal payments concluding in FY2030 made by the state to pay off the Income Tax Proceed Bonds issues under PA 100-0023 and one half of the last principal payment made under the Pension Obligation Bonds issued under PA 93-0002 ending in FY2033

Clayton Klenke  
April 3, 2025  
Page 3

### Proposed Benefit and Contribution Changes continued

The following proposed benefit changes contained in HB 2540 and summarized by CoGFA are not reflected in this analysis due to limited available data:

- Expands the existing pension buyout programs to GARS, JRS, and CTPF.
- Places Downstate Police and Firefighters' Articles of the Illinois Pension Code under the ambit of the Reciprocal Act, which affects reciprocity for vesting.
- Includes a new provision to clarify a "once in Tier 1, always in Tier 1" standard for all Tier 1 members across all pension funds.
- Creates an "estimated payment" requirement for members who retire under the SERS Alternative Formula to aid with commencing benefits in a timely manner.

### Actuarial Analysis

The analysis is based upon the census data and actuarial assumptions used in the June 30, 2024, actuarial valuations for TRS, SERS, and SURS. For purposes of this analysis, all changes are assumed to be effective as described in the above 'Proposed Benefit and Contribution Changes' section.

The following assumptions and methods are reflected in this analysis. The numbering below corresponds with the numbers in the previous section of this letter:

1. Upon attaining the 90% (Baseline) or 100% (HB 2540) target funded percentage, projected contributions are determined to maintain the applicable target funded percentage for all subsequent years, as needed.

All actuarial assumptions are assumed to materialize as expected in all future years. As a result, no new sources of unfunded liabilities are projected after FY 2036 and, therefore, this analysis does not attempt to include any impact resulting from the implementation of the 20-year layered amortization approach.

2. Assumed retirement rates are shifted by 2 years to be applicable at earlier retirement ages (e.g., the current assumed retirement rate at age 67 is now applicable at age 65) to reflect the proposed changes to unreduced and reduced retirement ages. No changes were made to the assumed ultimate retirement age.
3. Eligibility for unreduced early retirement is determined based on the assumed years of service needed to reach the maximum percentage of salary as summarized below:

	TRS	SERS	SURS
Benefit Formula (% of Final Average Salary per Year of Service)	2.20%	2.20% (1.67% if covered by Social Security)	2.20%
Maximum Benefit (Percentage of Salary)	75%	75%	80%
Assumed Years of Service to Reach Maximum Benefit	34	34 (45 if covered by Social Security)	36



Clayton Klenke  
April 3, 2025  
Page 4

#### Actuarial Analysis continued

Tier 2 members under the Alternative Formula or Tier 2 police / firefighters are not eligible for this unreduced early retirement provision.

To reflect the impact of the proposed change to unreduced early retirement eligibility, the assumed retirement rates are increased by 20 percentage points at each age the participant would be eligible for unreduced early retirement (e.g., if the assumed age 60 retirement rate is currently 15%, the rate would increase to 35% for members who attain unreduced early retirement eligibility at age 60).

4. No changes are made to the Tier 2 automatic COLA method (i.e., increases are applied to the original granted annuity benefit and the first increase percentage does not consider the number of years elapsed from date of retirement to the effective date of the initial increase).
5. No additional assumptions or methods implemented to value the change in FAS period.
6. In many instances, Tier 2 member data is reported to the Systems with the salary information limited to the current law applicable Tier 2 cap; as such, salary amounts over the cap may be unknown.

For Tier 2 participants whose earnings were reported at the current salary cap (i.e., actual earnings are not reported), their actual earnings are estimated for the Plan Year ended June 30, 2023 (for TRS) and the Plan Year ended June 30, 2024 (for SERS and SURS) to be 3/4<sup>th</sup> of the way between the applicable Tier 2 cap and SSWB. This analysis does not assume any retroactive recalculation of benefits.

The analysis reflects the known Tier 2 salary limitations and SSWB as summarized below:

Applicable Year	Tier 2 Salary Cap	SSWB
2023	\$119,892	\$160,200
2024	123,489	168,600
2025	125,774	176,100

The current Tier 2 salary cap is assumed to annually increase by ½ of the System's inflation assumption and the Social Security Wage Base is assumed to increase 4.00% per year (based on the ultimate rate of the Social Security Administration's intermediate projection assumption used in the 2024 OASDI Trustees Report).

7. The analysis assumes 100% of current and future Tier 1 and Tier 2 investigators for the Department of Lottery opt to participate in the SERS Alternative Formula as well as applicable current and future Tier 1 and Tier 2 members of the Department of Juvenile Justice (according to position codes received from CoGFA on October 1, 2024, identifying affected members).

The following actuarial assumptions are modified to value the impact for eligible Tier 2 members:

- The current age 60 retirement rate applicable for Tier 2 members eligible for Alternative Formula benefits (i.e., the age at first retirement eligibility under current provisions) is now assumed to apply at age 55; and,
- The assumed age 56-60 retirement rates are set to the same rates assumed for Tier 1 members eligible for Alternative Formula benefits.

Clayton Klenke  
April 3, 2025  
Page 5

### Actuarial Analysis continued

8. The assumed pro rata shares of the additional payments to the PSF allocated for each System are based on the projected unfunded actuarial accrued liability (UAAL) for FY 2031 through FY 2041 using the baseline projection included in each System's respective June 30, 2024, valuation report. As a result, the average allocation amounts of the additional payments to the PSF is as follows:

Fiscal Years Ending June 30	TRS	SERS	SURS	JRS	GARS	Total
2031	\$102.5M	\$36.2M	\$34.1M	\$1.9M	\$0.3M	\$175M
2032 – 2034	\$147.5M	\$51.1M	\$48.4M	\$2.6M	\$0.4M	\$250M
2035 – 2041	\$448.5M	\$150.3M	\$142.8M	\$7.4M	\$1.0M	\$750M

HB 2540 states that none of the additional payments made to the Pension Stabilization Fund should be considered in the actuarial calculations of required contributions to achieve the 100% funding goal by FY 2049. As such, the pro rata shares of the additional payments, in addition to the modified statutory contribution requirements under HB 2540, will result in a funded percentage over 100% by 2049, as shown in the table below:

	TRS	SERS	SURS	Total
Funded Percentage as of June 30, 2049				
Baseline <sup>1</sup>	90.0%	90.0%	90.0%	90.0%
Steps #1 through #7	100.0%	100.0%	100.0%	100.0%
Step #8 – Redirected FY31-FY41 Bond Payments	103.4%	103.8%	103.8%	103.5%

For consistency, the recognition of all proposed benefit and contribution changes (including the additional PSF payments) are first effective with the FY 2027 State contribution.

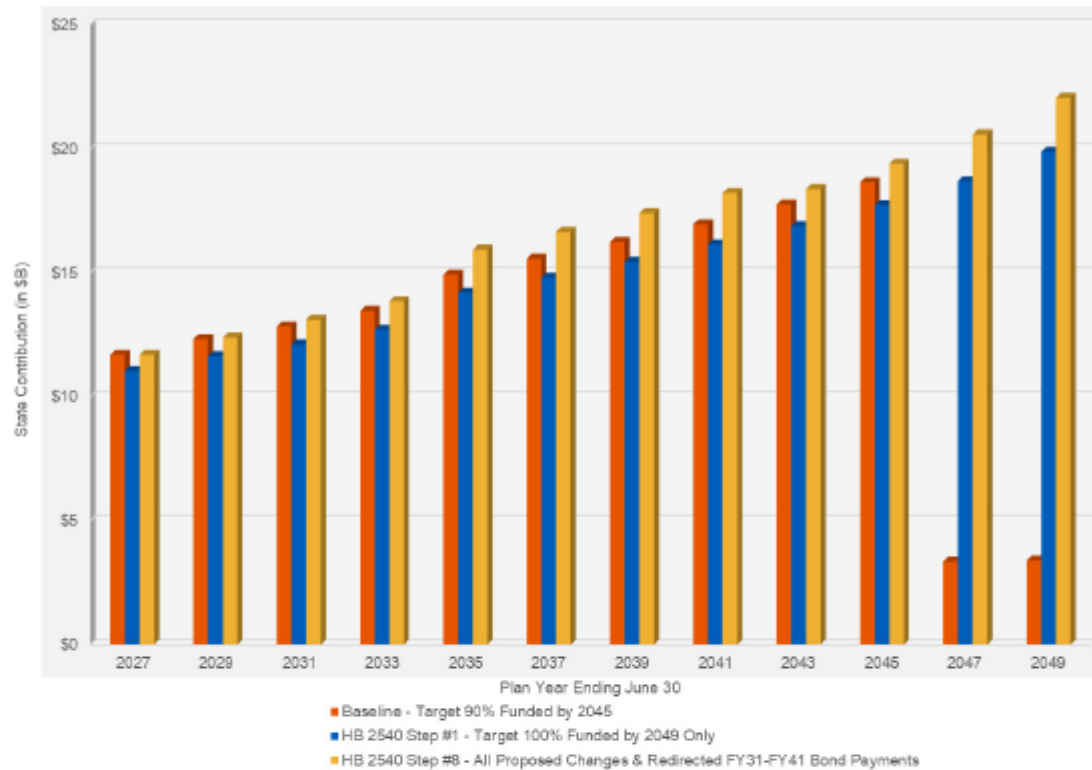
The following graphs and tables summarize the impact of the proposed changes on the System's actuarial accrued liability (AAL) and projected State contribution amounts through FY 2049. The attached exhibits show in greater detail the projected contributions, actuarial liabilities, actuarial assets, and funded position through 2049 reflecting the changes outlined above, including exhibits for Steps #7 and #8 which shows the total impact of the HB 2540 proposed changes for TRS, SERS, and SURS combined.

<sup>1</sup> Projected to achieve 90% funded status as of June 30, 2045, and maintain 90% funded in all future years.



Clayton Klenke  
April 3, 2025  
Page 6

**Projected Annual State Contributions (Every Other Year) – TRS, SERS, and SURS Combined**



By extending the funding target year through 2049 (even with an increase to the ultimate target percentage from 90% to 100% but prior to implementing the other proposed changes under HB 2540), the pattern of State contributions under Step #1 changes such that statutory contribution requirements decrease in the short-term, but, over the long-term, increase beyond what would have been required under a 2045 funding target year (and 90% target percentage). This is due to the statutory funding policy, which determines State contributions as a level percent of projected payroll through FY 2049. After reflecting all other proposed assumption changes per HB 2540, including the extending the funding target to 100% by FY 2049 and inclusion of the redirected bond payments under Step #8, State contribution requirements would increase in both the short-term and long-term.

This analysis has been prepared at your request and is not to be considered a recommendation by Segal. Numbers shown have been rounded to the nearest million.

The increases and costs shown in the tables below are based on comparisons to the Baseline results.

Clayton Klenke  
April 3, 2025  
Page 7

(\$ in millions)

**Summary of Results for All Systems**

	TRS	SERS	SURS	Total
<b>Projected AAL as of June 30, 2049</b>				
Baseline	\$218,981	\$66,335	\$59,279	\$344,595
Step #1 – 100% Funded by FY 2049	218,981	66,335	59,279	344,595
Step #2 – Plus Tier 2 NRA Update	224,436	66,675	59,619	350,730
Step #3 – Plus Tier 2 ERF Update	228,402	67,138	59,843	355,383
Step #4 – Plus Tier 2 COLA Update	236,455	69,883	62,808	369,146
Step #5 – Plus Tier 2 FAS Update	237,419	70,315	63,321	371,055
Step #6 – Plus Tier 2 Salary Cap to SSWB	253,925	76,080	69,197	399,202
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	253,925	75,298	69,197	398,420
<b>Increase in Projected AAL as of June 30, 2049</b>				
Baseline	-	-	-	-
Step #1 – 100% Funded by FY 2049	\$0	\$0	\$0	\$0
Step #2 – Plus Tier 2 NRA Update	5,455	340	340	6,135
Step #3 – Plus Tier 2 ERF Update	9,421	803	564	10,788
Step #4 – Plus Tier 2 COLA Update	17,474	3,548	3,529	24,551
Step #5 – Plus Tier 2 FAS Update	18,438	3,980	4,042	26,460
Step #6 – Plus Tier 2 Salary Cap to SSWB	34,944	9,745	9,918	54,607
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	34,944	8,963	9,918	53,825
<b>Estimated State Contributions for FYE 2027</b>				
Baseline	\$6,651	\$2,623	\$2,404	\$11,678
Step #1 – 100% Funded by FY 2049	6,297	2,493	2,244	11,034
Step #2 – Plus Tier 2 NRA Update	6,380	2,537	2,262	11,179
Step #3 – Plus Tier 2 ERF Update	6,440	2,542	2,265	11,247
Step #4 – Plus Tier 2 COLA Update	6,562	2,586	2,315	11,463
Step #5 – Plus Tier 2 FAS Update	6,579	2,596	2,326	11,501
Step #6 – Plus Tier 2 Salary Cap to SSWB	6,698	2,605	2,351	11,654
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	6,698	2,630	2,351	11,679
<b>Increase in Estimated State Contribution for FYE 2027</b>				
Baseline	-	-	-	-
Step #1 – 100% Funded by FY 2049	(\$354)	(\$130)	(\$160)	(\$644)
Step #2 – Plus Tier 2 NRA Update	(271)	(86)	(142)	(499)
Step #3 – Plus Tier 2 ERF Update	(211)	(81)	(139)	(431)
Step #4 – Plus Tier 2 COLA Update	(89)	(37)	(89)	(215)
Step #5 – Plus Tier 2 FAS Update	(72)	(27)	(78)	(177)
Step #6 – Plus Tier 2 Salary Cap to SSWB	47	(18)	(53)	(24)
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	47	7	(53)	1

Clayton Klenke  
April 3, 2025  
Page 8

(\$ in millions)

**Summary of Results for All Systems continued**

	TRS	SERS	SURS	Total
<b>Total State Contributions through FY 2049</b>				
Baseline	\$181,792	\$71,182	\$69,170	\$322,144
Step #1 – 100% Funded by FY 2049	211,006	80,480	78,485	369,971
Step #2 – Plus Tier 2 NRA Update	213,172	81,628	79,102	373,902
Step #3 – Plus Tier 2 ERF Update	214,925	81,780	79,215	375,920
Step #4 – Plus Tier 2 COLA Update	218,526	83,038	80,813	382,377
Step #5 – Plus Tier 2 FAS Update	219,049	83,341	81,144	383,534
Step #6 – Plus Tier 2 Salary Cap to SSWB	227,350	86,714	84,021	398,085
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	227,350	87,148	84,021	398,519
<b>Increase in Total State Contributions through FY 2049</b>				
Baseline	-	-	-	-
Step #1 – 100% Funded by FY 2049	\$29,214	\$9,298	\$9,315	\$47,827
Step #2 – Plus Tier 2 NRA Update	31,380	10,446	9,932	51,758
Step #3 – Plus Tier 2 ERF Update	33,133	10,598	10,045	53,776
Step #4 – Plus Tier 2 COLA Update	36,734	11,856	11,643	60,233
Step #5 – Plus Tier 2 FAS Update	37,257	12,159	11,974	61,390
Step #6 – Plus Tier 2 Salary Cap to SSWB	45,558	15,532	14,851	75,941
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	45,558	15,966	14,851	76,375
<b>Present Value of Total State Contributions through FYE 2049</b>				
Baseline	\$89,295	\$35,612	\$34,776	\$159,683
Step #1 – 100% Funded by FY 2049	93,322	36,908	36,004	166,234
Step #2 – Plus Tier 2 NRA Update	94,264	37,407	36,270	167,941
Step #3 – Plus Tier 2 ERF Update	94,998	37,472	36,319	168,789
Step #4 – Plus Tier 2 COLA Update	96,497	38,011	37,007	171,515
Step #5 – Plus Tier 2 FAS Update	96,715	38,141	37,150	172,006
Step #6 – Plus Tier 2 Salary Cap to SSWB	99,547	39,299	38,215	177,061
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	99,547	39,533	38,215	177,295
<b>Increase in Present Value of Total State Contributions through FYE 2049</b>				
Baseline	-	-	-	-
Step #1 – 100% Funded by FY 2049	\$4,027	\$1,296	\$1,228	\$6,551
Step #2 – Plus Tier 2 NRA Update	4,969	1,795	1,494	8,258
Step #3 – Plus Tier 2 ERF Update	5,703	1,860	1,543	9,106
Step #4 – Plus Tier 2 COLA Update	7,202	2,399	2,231	11,832
Step #5 – Plus Tier 2 FAS Update	7,420	2,529	2,374	12,323
Step #6 – Plus Tier 2 Salary Cap to SSWB	10,252	3,687	3,439	17,378
Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit	10,252	3,921	3,439	17,612

Clayton Klenke  
April 3, 2025  
Page 9

### Additional Commentary

In addition to modifying the funding goal to achieve 100% funding by FY 2049, HB 2540 also includes a provision, starting in FY 2036, to implement a 20-year layered amortization approach when determining the minimum State contribution. The implementation approach as explained in HB 2540 is unclear. The proposed statutory language indicates that amortization layers "...shall include an adjustment for differences between the unfunded liability reported in the current actuarial valuation and the unfunded liability reported in the previous year's actuarial valuation...". Unfunded liability changes from one year to the next in ways that are expected as well as unexpected; typically, changes in unfunded liability due to unexpected sources only are used for the basis of establishing amortization layers in a given year.

As noted above, this analysis does not attempt to include any impact resulting from the implementation of the 20-year layered amortization approach as all actuarial assumptions are assumed to materialize as expected in all future years (i.e., no future gains or losses due to demographic or economic experience).

### Comments about Projections

Projections, by their nature, are not a guarantee of future results. The modeled projections are intended to serve as estimates of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used.

The assumptions for this projection and analysis are based on those listed in the 2024 actuarial valuation report for TRS, SERS, and SURS (except as otherwise noted in this letter). As noted, the results of these projections are based on all assumptions materializing as expected, including the 7.00% investment return for TRS, the 6.75% investment return for SERS, and the 6.50% investment return for SURS. To the extent there is adverse experience, the projection scenarios would generate larger required State contributions. Given the relatively low funded status of the Systems, investment returns that are less than expected represent a significant risk to the magnitude of the State's required contributions. Additionally, if actual increases in the Social Security Wage Base are greater than assumed (4.00% per year), the State contribution requirements would increase over time, resulting in further back-loading on contributions leading up to the June 30, 2049, the 100% funded target date. Furthermore, the proposed changes outlined in HB 2540 could affect actual patterns of decrement (e.g., termination, retirement) compared to the current assumptions, which may result in larger (or smaller) required State contributions.

Actual experience may differ due to such variables as demographic experience, the economy, stock market performance, and the regulatory environment. The longer the projection period, the less predictable the projections become.



Clayton Klenke  
April 3, 2025  
Page 10

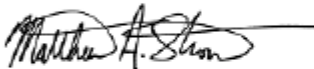
Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative, and client requirements. Deterministic cost projections are based on our proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility, and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuaries.

Segal is not a law firm and we cannot offer legal advice. Any party seeking a legal opinion should consult with appropriate legal counsel.

This analysis was performed under my supervision. I am a Member of the American Academy of Actuary and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries to render the actuarial opinion contained herein.

Please let us know if you have any questions.

Sincerely,



Matthew A. Strom, FSA, MAAA, EA  
Senior Vice President and Actuary

## Exhibit A – TRS Baseline

**Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024

Actuarially Assumed Rate of Return: 7.00%

(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
2024					\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,651.1	49.9%	1,224.5	166,707.5	82,601.2	84,106.3	49.5%
2028	13,681.0	6,883.2	50.3%	1,256.4	170,870.5	86,974.5	83,896.1	50.9%
2029	14,025.8	7,041.7	50.2%	1,288.1	175,037.2	91,312.7	83,724.5	52.2%
2030	14,367.9	7,185.9	50.0%	1,319.5	179,120.1	95,758.1	83,362.0	53.5%
2031	14,705.9	7,337.2	49.9%	1,350.5	183,098.5	100,316.7	82,781.8	54.8%
2032	15,038.7	7,503.5	49.9%	1,381.1	186,947.8	105,001.2	81,946.6	56.2%
2033	15,364.0	7,682.7	50.0%	1,411.0	190,638.8	109,821.8	80,817.0	57.6%
2034	15,679.7	8,450.0	53.9%	1,440.0	194,145.2	115,388.1	78,757.1	59.4%
2035	15,994.4	8,619.6	53.9%	1,468.9	197,444.0	121,131.7	76,312.3	61.3%
2036	16,305.5	8,787.3	53.9%	1,497.4	200,511.7	127,061.0	73,450.7	63.4%
2037	16,615.9	8,954.6	53.9%	1,526.0	203,328.6	133,192.4	70,136.2	65.5%
2038	16,930.9	9,124.4	53.9%	1,554.9	205,870.0	139,544.8	66,325.1	67.8%
2039	17,247.1	9,294.7	53.9%	1,583.9	208,120.0	146,146.0	61,974.0	70.2%
2040	17,571.6	9,469.6	53.9%	1,613.7	210,066.1	153,032.8	57,033.2	72.8%
2041	17,912.7	9,653.5	53.9%	1,645.0	211,712.8	160,261.7	51,451.1	75.7%
2042	18,276.9	9,849.7	53.9%	1,678.5	213,074.4	167,900.8	45,173.6	78.8%
2043	18,671.3	10,062.3	53.9%	1,714.7	214,180.4	176,038.3	38,142.1	82.2%
2044	19,099.6	10,293.1	53.9%	1,754.0	215,084.8	184,785.2	30,299.5	85.9%
2045	19,570.8	10,547.0	53.9%	1,797.3	215,857.1	194,271.4	21,585.7	90.0%
2046	20,095.3	1,438.6	7.2%	1,845.5	216,579.1	194,921.2	21,657.9	90.0%
2047	20,655.8	1,424.0	6.9%	1,897.0	217,313.3	195,582.0	21,731.3	90.0%
2048	21,238.7	1,418.3	6.7%	1,950.5	218,103.5	196,293.2	21,810.4	90.0%
2049	21,828.7	1,420.4	6.5%	2,004.7	218,980.7	197,082.6	21,898.1	90.0%
Total Through 2049		\$181,791.5		\$38,547.3				

## Exhibit B – SERS Baseline

**Funding Projections for the State Employees' Retirement System**  
 CoGFA Projections Based on Laws in Effect on June 30, 2024, Baseline  
 Actuarially Assumed Rate of Return: 6.75%  
 (\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
2024					\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,695.3	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,622.9	44.0%	322.9	58,799.4	28,905.4	29,894.0	49.2%
2028	6,055.1	2,702.4	44.6%	325.8	59,743.8	30,152.7	29,591.1	50.5%
2029	6,158.1	2,712.6	44.0%	329.3	60,614.6	31,238.6	29,376.0	51.5%
2030	6,267.0	2,740.6	43.7%	333.3	61,414.3	32,305.8	29,108.5	52.6%
2031	6,380.8	2,783.3	43.6%	337.7	62,143.5	33,374.1	28,769.4	53.7%
2032	6,500.0	2,834.6	43.6%	342.2	62,800.4	34,456.0	28,344.4	54.9%
2033	6,621.0	2,892.1	43.7%	346.6	63,384.5	35,563.0	27,821.5	56.1%
2034	6,748.2	3,164.0	46.9%	351.3	63,898.0	36,925.0	26,973.0	57.8%
2035	6,881.8	3,226.6	46.9%	356.2	64,345.1	38,348.6	25,996.6	59.6%
2036	7,018.9	3,290.9	46.9%	361.1	64,725.4	39,843.8	24,881.6	61.6%
2037	7,157.4	3,355.9	46.9%	366.0	65,042.3	41,422.5	23,619.8	63.7%
2038	7,304.0	3,424.6	46.9%	371.4	65,305.2	43,105.8	22,199.4	66.0%
2039	7,458.0	3,496.8	46.9%	377.1	65,518.9	44,911.3	20,607.6	68.5%
2040	7,618.2	3,571.9	46.9%	383.0	65,689.5	46,859.5	18,829.9	71.3%
2041	7,786.4	3,650.7	46.9%	389.3	65,824.3	48,973.1	16,851.2	74.4%
2042	7,960.9	3,732.6	46.9%	396.1	65,932.8	51,274.5	14,658.3	77.8%
2043	8,142.2	3,817.6	46.9%	403.0	66,022.9	53,788.2	12,234.7	81.5%
2044	8,330.1	3,905.7	46.9%	410.1	66,098.0	56,537.0	9,561.0	85.5%
2045	8,524.1	3,996.6	46.9%	417.4	66,161.9	59,545.7	6,616.2	90.0%
2046	8,724.8	952.1	10.9%	425.1	66,215.8	59,594.2	6,621.6	90.0%
2047	8,927.0	963.1	10.8%	432.8	66,267.8	59,641.0	6,626.8	90.0%
2048	9,130.6	964.8	10.6%	440.5	66,306.6	59,675.9	6,630.7	90.0%
2049	9,258.7	971.6	10.5%	444.4	66,334.5	59,701.1	6,633.5	90.0%
Total Through 2049		\$71,182.3		\$9,299.3				

## Exhibit C – SURS Baseline

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024

Actuarially Assumed Rate of Return: 6.50%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
2024					\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,404.3	38.5%	369.0	55,589.1	26,319.8	29,269.3	47.3%
2028	6,418.4	2,504.5	39.0%	375.5	56,220.6	27,126.6	29,094.0	48.3%
2029	6,599.5	2,571.4	39.0%	382.7	56,777.9	27,869.6	28,908.4	49.1%
2030	6,794.7	2,638.1	38.8%	390.3	57,263.8	28,628.3	28,635.5	50.0%
2031	6,978.2	2,707.2	38.8%	398.3	57,673.1	29,405.2	28,267.9	51.0%
2032	7,176.9	2,788.4	38.9%	406.6	58,010.9	30,223.5	27,787.4	52.1%
2033	7,383.8	2,878.6	39.0%	415.2	58,289.4	31,110.8	27,178.5	53.4%
2034	7,599.7	2,977.4	39.2%	424.4	58,509.1	32,083.4	26,425.7	54.8%
2035	7,821.8	3,067.0	39.2%	433.8	58,674.0	33,144.4	25,529.5	56.5%
2036	8,050.1	3,159.1	39.2%	443.6	58,784.7	34,306.5	24,478.1	58.4%
2037	8,282.3	3,252.8	39.3%	453.4	58,851.3	35,591.9	23,259.4	60.5%
2038	8,519.6	3,348.7	39.3%	463.4	58,872.1	37,011.4	21,860.7	62.9%
2039	8,762.9	3,447.0	39.3%	473.6	58,865.9	38,596.8	20,269.1	65.6%
2040	9,015.1	3,548.7	39.4%	484.3	58,829.9	40,359.0	18,470.9	68.6%
2041	9,273.8	3,653.1	39.4%	495.3	58,785.6	42,333.4	16,452.2	72.0%
2042	9,538.6	3,759.9	39.4%	506.7	58,736.7	44,538.4	14,198.3	75.8%
2043	9,809.2	3,868.9	39.4%	518.3	58,702.7	47,008.0	11,694.7	80.1%
2044	10,086.7	3,980.8	39.5%	530.3	58,688.1	49,763.7	8,924.4	84.8%
2045	10,367.9	4,094.1	39.5%	542.4	58,708.2	52,837.4	5,870.8	90.0%
2046	10,654.1	952.4	8.9%	554.4	58,762.9	52,886.6	5,876.3	90.0%
2047	10,941.8	963.9	8.8%	566.2	58,867.3	52,980.6	5,886.7	90.0%
2048	11,054.9	973.0	8.8%	563.6	59,004.2	53,103.8	5,900.4	90.0%
2049	12,143.1	995.9	8.2%	638.7	59,279.3	53,351.3	5,927.9	90.0%
Total Through 2049		\$69,170.4		\$11,542.0				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions



## Exhibit 1A – TRS Projection (Step #1 – 100% Funded by FY 2049)

**Funding Projections for the Teachers' Retirement System**  
Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049  
Actuarially Assumed Rate of Return: 7.00%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,296.7	(354.4)	(299.2)	47.2%	1,224.5	166,707.5	82,234.4	84,473.1	49.3%
2028	13,681.0	6,511.6	(371.7)	(293.3)	47.6%	1,256.4	170,870.5	86,197.3	84,673.2	50.4%
2029	14,025.8	6,663.2	(378.4)	(279.1)	47.5%	1,288.1	175,037.2	90,089.5	84,947.8	51.5%
2030	14,367.9	6,801.0	(384.9)	(265.3)	47.3%	1,319.5	179,120.1	94,050.8	85,069.3	52.5%
2031	14,705.9	6,943.2	(394.0)	(253.8)	47.2%	1,350.5	183,098.5	98,082.2	85,016.3	53.6%
2032	15,038.7	7,100.6	(402.9)	(242.6)	47.2%	1,381.1	186,947.8	102,193.3	84,754.5	54.7%
2033	15,364.0	7,271.1	(411.6)	(231.6)	47.3%	1,411.0	190,638.8	106,391.3	84,247.5	55.8%
2034	15,679.7	8,046.6	(403.5)	(212.2)	51.3%	1,440.0	194,145.2	111,299.9	82,845.3	57.3%
2035	15,994.4	8,208.1	(411.6)	(202.3)	51.3%	1,468.9	197,444.0	116,331.3	81,112.7	58.9%
2036	16,305.5	8,367.7	(419.6)	(192.7)	51.3%	1,497.4	200,511.7	121,490.3	79,021.3	60.6%
2037	16,615.9	8,527.0	(427.6)	(183.5)	51.3%	1,526.0	203,328.6	126,789.3	76,539.3	62.4%
2038	16,930.9	8,688.7	(435.7)	(174.8)	51.3%	1,554.9	205,870.0	132,242.6	73,627.4	64.2%
2039	17,247.1	8,850.9	(443.8)	(166.4)	51.3%	1,583.9	208,120.0	137,873.3	70,246.7	66.2%
2040	17,571.6	9,017.5	(452.1)	(158.4)	51.3%	1,613.7	210,066.1	143,713.0	66,353.0	68.4%
2041	17,912.7	9,192.5	(460.9)	(150.9)	51.3%	1,645.0	211,712.8	149,812.5	61,900.3	70.8%
2042	18,276.9	9,379.4	(470.3)	(143.9)	51.3%	1,678.5	213,074.4	156,233.3	56,841.1	73.3%
2043	18,671.3	9,581.8	(480.4)	(137.4)	51.3%	1,714.7	214,180.4	163,056.8	51,123.5	76.1%
2044	19,099.6	9,801.6	(491.5)	(131.4)	51.3%	1,754.0	215,084.8	170,386.5	44,698.3	79.2%
2045	19,570.8	10,043.4	(503.6)	(125.8)	51.3%	1,797.3	215,857.1	178,343.5	37,513.6	82.6%
2046	20,095.3	10,312.6	8,874.0	2,071.9	51.3%	1,845.5	216,579.1	187,068.9	29,510.2	86.4%
2047	20,655.8	10,600.2	9,176.3	2,002.3	51.3%	1,897.0	217,313.3	196,683.2	20,630.0	90.5%
2048	21,238.7	10,899.4	9,481.1	1,933.5	51.3%	1,950.5	218,103.5	207,290.5	10,813.0	95.0%
2049	21,828.7	11,202.2	9,781.8	1,864.3	51.3%	2,004.7	218,980.7	218,980.7	0.0	100.0%
Total Through 2049		\$211,006.1	\$29,214.7	\$4,027.4		\$38,547.3				

## Exhibit 1B – SERS Projection (Step #1 – 100% Funded by FY 2049)

## Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049

Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,493.4	(129.5)	(110.0)	41.8%	322.9	58,799.4	28,771.6	30,027.8	48.9%
2028	6,055.1	2,565.8	(136.6)	(108.7)	42.4%	325.8	59,743.8	29,868.7	29,875.1	50.0%
2029	6,158.1	2,575.1	(137.5)	(102.5)	41.8%	329.3	60,614.6	30,793.4	29,821.2	50.8%
2030	6,267.0	2,602.3	(138.3)	(96.6)	41.5%	333.3	61,414.3	31,687.7	29,726.6	51.6%
2031	6,380.8	2,642.5	(140.8)	(92.1)	41.4%	337.7	62,143.5	32,568.7	29,574.8	52.4%
2032	6,500.0	2,691.1	(143.4)	(87.9)	41.4%	342.2	62,800.4	33,448.1	29,352.3	53.3%
2033	6,621.0	2,746.0	(146.1)	(83.9)	41.5%	346.6	63,384.5	34,336.1	29,048.4	54.2%
2034	6,748.2	3,016.4	(147.6)	(79.4)	44.7%	351.3	63,898.0	35,462.8	28,435.2	55.5%
2035	6,881.8	3,076.1	(150.5)	(75.8)	44.7%	356.2	64,345.1	36,632.2	27,713.0	56.9%
2036	7,018.9	3,137.4	(153.5)	(72.4)	44.7%	361.1	64,725.4	37,852.9	26,872.5	58.5%
2037	7,157.4	3,199.3	(156.6)	(69.2)	44.7%	366.0	65,042.3	39,135.5	25,906.8	60.2%
2038	7,304.0	3,264.8	(159.8)	(66.1)	44.7%	371.4	65,305.2	40,499.3	24,805.9	62.0%
2039	7,458.0	3,333.7	(163.1)	(63.3)	44.7%	377.1	65,518.9	41,960.4	23,558.6	64.0%
2040	7,618.2	3,405.3	(166.6)	(60.5)	44.7%	383.0	65,689.5	43,537.2	22,152.2	66.3%
2041	7,786.4	3,480.4	(170.3)	(58.0)	44.7%	389.3	65,824.3	45,250.6	20,573.7	68.7%
2042	7,960.9	3,558.4	(174.1)	(55.5)	44.7%	396.1	65,932.8	47,120.8	18,812.0	71.5%
2043	8,142.2	3,639.5	(178.1)	(53.2)	44.7%	403.0	66,022.9	49,170.2	16,852.8	74.5%
2044	8,330.1	3,723.5	(182.2)	(51.0)	44.7%	410.1	66,098.0	51,418.9	14,679.1	77.8%
2045	8,524.1	3,810.2	(186.4)	(48.9)	44.7%	417.4	66,161.9	53,889.5	12,272.3	81.5%
2046	8,724.8	3,899.9	2,947.8	723.8	44.7%	425.1	66,215.8	56,602.0	9,613.8	85.5%
2047	8,927.0	3,990.3	3,027.1	696.2	44.7%	432.8	66,267.8	59,574.4	6,693.4	89.9%
2048	9,130.6	4,081.3	3,116.5	671.5	44.7%	440.5	66,306.6	62,824.8	3,481.8	94.7%
2049	9,258.7	4,138.5	3,166.9	639.2	44.7%	444.4	66,334.5	66,334.5	0.0	100.0%
Total Through 2049		\$80,479.5	\$9,297.3	\$1,295.7		\$9,299.3				

## Exhibit 1C – SURS Projection (Step #1 – 100% Funded by FY 2049)

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049

Actuarially Assumed Rate of Return: 6.50%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,243.5	(160.8)	(137.4)	35.9%	369.0	55,589.1	26,153.9	29,435.2	47.0%
2028	6,418.4	2,329.7	(174.7)	(140.2)	36.3%	375.5	56,220.6	26,769.6	29,451.0	47.6%
2029	6,599.5	2,392.4	(179.1)	(134.9)	36.3%	382.7	56,777.9	27,304.6	29,473.4	48.1%
2030	6,794.7	2,454.7	(183.4)	(129.7)	36.1%	390.3	57,263.8	27,837.2	29,426.6	48.6%
2031	6,978.2	2,518.8	(188.4)	(125.1)	36.1%	398.3	57,673.1	28,368.3	29,304.8	49.2%
2032	7,176.9	2,594.6	(193.8)	(120.8)	36.2%	406.6	58,010.9	28,919.3	29,091.6	49.9%
2033	7,383.8	2,679.3	(199.4)	(116.7)	36.3%	415.2	58,289.4	29,516.1	28,773.3	50.6%
2034	7,599.7	2,816.0	(161.4)	(88.7)	37.1%	424.4	58,509.1	30,218.4	28,290.7	51.6%
2035	7,821.8	2,900.9	(166.1)	(85.8)	37.1%	433.8	58,674.0	30,986.7	27,687.3	52.8%
2036	8,050.1	2,988.1	(171.0)	(82.9)	37.1%	443.6	58,784.7	31,832.1	26,952.5	54.2%
2037	8,282.3	3,076.9	(175.9)	(80.1)	37.2%	453.4	58,851.3	32,775.1	26,076.2	55.7%
2038	8,519.6	3,167.7	(181.0)	(77.3)	37.2%	463.4	58,872.1	33,824.8	25,047.3	57.5%
2039	8,762.9	3,260.8	(186.1)	(74.7)	37.2%	473.6	58,865.9	35,010.9	23,855.0	59.5%
2040	9,015.1	3,357.2	(191.5)	(72.1)	37.2%	484.3	58,829.9	36,342.4	22,487.5	61.8%
2041	9,273.8	3,456.1	(197.0)	(69.7)	37.3%	495.3	58,785.6	37,852.4	20,933.2	64.4%
2042	9,538.6	3,557.3	(202.6)	(67.3)	37.3%	506.7	58,736.7	39,557.1	19,179.6	67.3%
2043	9,809.2	3,660.6	(208.4)	(65.0)	37.3%	518.3	58,702.7	41,487.9	17,214.8	70.7%
2044	10,086.7	3,766.5	(214.3)	(62.8)	37.3%	530.3	58,688.1	43,663.6	15,024.4	74.4%
2045	10,367.9	3,873.9	(220.2)	(60.6)	37.4%	542.4	58,708.2	46,113.6	12,594.7	78.5%
2046	10,654.1	3,983.4	3,031.0	782.6	37.4%	554.4	58,762.9	48,853.6	9,909.2	83.1%
2047	10,941.8	4,093.7	3,129.9	758.9	37.4%	566.2	58,867.3	51,915.5	6,951.8	88.2%
2048	11,054.9	4,143.5	3,170.6	721.8	37.5%	563.6	59,004.2	55,241.4	3,762.8	93.6%
2049	12,143.1	4,534.1	3,538.1	756.3	37.3%	638.7	59,279.3	59,279.3	0.0	100.0%
Total Through 2049		\$78,484.9	\$9,314.5	\$1,227.8		\$11,542.0				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

## Exhibit 2A – TRS Projection (Step #2 – Plus Tier 2 NRA Update)

**Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049 and Update Tier 2 Retirement Eligibility

Actuarially Assumed Rate of Return: 7.00%

(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,379.6	(271.5)	(229.2)	47.8%	1,224.5	166,707.5	82,320.2	84,387.3	49.4%
2028	13,680.6	6,596.5	(286.8)	(226.3)	48.2%	1,256.4	170,900.8	86,384.1	84,516.7	50.5%
2029	14,024.4	6,749.8	(291.9)	(215.3)	48.1%	1,288.0	175,138.6	90,395.9	84,742.7	51.6%
2030	14,366.0	6,889.4	(296.6)	(204.4)	48.0%	1,319.3	179,305.3	94,488.8	84,816.5	52.7%
2031	14,703.1	7,033.3	(304.0)	(195.8)	47.8%	1,350.3	183,381.2	98,664.0	84,717.2	53.8%
2032	15,034.7	7,192.1	(311.4)	(187.5)	47.8%	1,380.7	187,342.9	102,931.8	84,411.1	54.9%
2033	15,358.5	7,363.9	(318.9)	(179.4)	47.9%	1,410.5	191,162.4	107,299.8	83,862.6	56.1%
2034	15,672.5	8,140.3	(309.8)	(162.9)	51.9%	1,439.3	194,812.9	112,390.0	82,422.8	57.7%
2035	15,985.5	8,302.9	(316.8)	(155.7)	51.9%	1,468.1	198,274.2	117,617.2	80,657.0	59.3%
2036	16,295.1	8,463.6	(323.6)	(148.6)	51.9%	1,496.5	201,524.3	122,986.7	78,537.6	61.0%
2037	16,603.5	8,623.8	(330.8)	(142.0)	51.9%	1,524.8	204,544.6	128,511.2	76,033.4	62.8%
2038	16,916.1	8,786.2	(338.1)	(135.6)	51.9%	1,553.5	207,311.7	134,205.5	73,106.1	64.7%
2039	17,228.8	8,948.6	(346.1)	(129.7)	51.9%	1,582.2	209,810.7	140,092.3	69,718.4	66.8%
2040	17,549.9	9,115.4	(354.3)	(124.1)	51.9%	1,611.7	212,031.2	146,204.1	65,827.1	69.0%
2041	17,888.1	9,291.1	(362.4)	(118.7)	51.9%	1,642.8	213,978.8	152,592.4	61,386.4	71.3%
2042	18,248.8	9,478.4	(371.3)	(113.6)	51.9%	1,675.9	215,667.6	159,318.0	56,349.6	73.9%
2043	18,638.9	9,681.0	(381.2)	(109.0)	51.9%	1,711.7	217,126.2	166,460.7	50,665.5	76.7%
2044	19,060.0	9,899.7	(393.3)	(105.1)	51.9%	1,750.4	218,404.1	174,118.6	44,285.5	79.7%
2045	19,522.2	10,139.8	(407.2)	(101.7)	51.9%	1,792.9	219,572.8	182,413.1	37,159.7	83.1%
2046	20,041.2	10,409.4	8,970.8	2,094.5	51.9%	1,840.5	220,715.3	191,487.9	29,227.4	86.8%
2047	20,596.3	10,697.7	9,273.7	2,023.6	51.9%	1,891.5	221,889.9	201,459.7	20,430.2	90.8%
2048	21,171.4	10,996.4	9,578.1	1,953.3	51.9%	1,944.3	223,127.9	212,420.7	10,707.2	95.2%
2049	21,745.1	11,294.4	9,874.0	1,881.9	51.9%	1,997.0	224,435.6	224,435.6	0.0	100.0%
Total Through 2049		\$213,172.4	\$31,380.6	\$4,968.7		\$38,497.0				

## Exhibit 2B – SERS Projection (Step #2 – Plus Tier 2 NRA Update)

**Funding Projections for the State Employees' Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049 and Update Tier 2 Retirement Eligibility  
Actuarially Assumed Rate of Return: 8.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,537.0	(85.9)	(73.0)	42.6%	322.9	58,799.4	28,816.6	29,982.8	49.0%
2028	6,053.8	2,609.4	(93.0)	(74.0)	43.1%	325.8	60,057.6	29,951.3	30,106.4	49.9%
2029	6,154.2	2,618.4	(94.2)	(70.2)	42.5%	329.1	60,940.2	30,899.5	30,040.7	50.7%
2030	6,262.2	2,646.0	(94.6)	(66.1)	42.3%	333.0	61,748.6	31,814.0	29,934.6	51.5%
2031	6,374.9	2,686.5	(96.8)	(63.3)	42.1%	337.3	62,483.2	32,711.9	29,771.3	52.4%
2032	6,492.7	2,735.3	(99.2)	(60.8)	42.1%	341.8	63,142.8	33,604.9	29,537.9	53.2%
2033	6,613.2	2,790.9	(101.2)	(58.1)	42.2%	346.2	63,727.3	34,504.2	29,223.0	54.1%
2034	6,740.1	3,062.0	(102.0)	(54.8)	45.4%	350.9	64,239.1	35,640.2	28,598.9	55.5%
2035	6,873.4	3,122.6	(104.0)	(52.4)	45.4%	355.8	64,682.9	36,817.1	27,865.8	56.9%
2036	7,010.2	3,184.7	(106.2)	(50.1)	45.4%	360.7	65,059.2	38,044.3	27,014.8	58.5%
2037	7,148.9	3,247.7	(108.1)	(47.8)	45.4%	365.6	65,373.5	39,334.3	26,039.3	60.2%
2038	7,296.0	3,314.6	(110.0)	(45.5)	45.4%	371.0	65,636.4	40,707.3	24,929.1	62.0%
2039	7,451.0	3,385.0	(111.8)	(43.4)	45.4%	376.7	65,851.8	42,179.6	23,672.2	64.1%
2040	7,610.0	3,457.3	(114.6)	(41.6)	45.4%	382.6	66,022.7	43,766.9	22,255.8	66.3%
2041	7,775.9	3,532.6	(118.2)	(40.2)	45.4%	388.8	66,157.9	45,490.4	20,667.5	68.8%
2042	7,949.7	3,611.6	(121.0)	(38.6)	45.4%	395.5	66,268.4	47,372.2	18,896.2	71.5%
2043	8,130.6	3,693.7	(123.8)	(37.0)	45.4%	402.4	66,363.1	49,435.7	16,927.4	74.5%
2044	8,318.5	3,779.1	(126.6)	(35.4)	45.4%	409.5	66,443.0	51,699.9	14,743.1	77.8%
2045	8,510.3	3,866.3	(130.4)	(34.2)	45.4%	416.8	66,507.9	54,183.4	12,324.6	81.5%
2046	8,707.7	3,955.9	3,003.8	737.5	45.4%	424.3	66,561.0	56,907.1	9,653.9	85.5%
2047	8,908.5	4,047.2	3,084.0	709.3	45.4%	431.9	66,612.0	59,891.3	6,720.7	89.9%
2048	9,111.1	4,139.2	3,174.4	683.9	45.4%	439.5	66,650.6	63,154.8	3,495.8	94.8%
2049	9,237.9	4,196.8	3,225.1	650.9	45.4%	443.4	66,675.3	66,675.3	0.0	100.0%
Total Through 2049		\$81,628.1	\$10,445.7	\$1,795.1		\$9,288.2				



## Exhibit 2C – SURS Projection (Step #2 – Plus Tier 2 NRA Update)

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility  
Actuarially Assumed Rate of Return: 6.50%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,261.7	(142.6)	(121.8)	36.2%	369.0	55,589.1	26,172.7	29,416.4	47.1%
2028	6,419.8	2,348.9	(155.5)	(124.8)	36.6%	375.6	56,285.9	26,809.0	29,476.9	47.6%
2029	6,602.3	2,412.7	(158.8)	(119.6)	36.5%	383.0	56,863.2	27,366.3	29,496.9	48.1%
2030	6,797.2	2,475.4	(162.7)	(115.1)	36.4%	390.5	57,369.7	27,921.8	29,447.8	48.7%
2031	6,980.2	2,539.8	(167.3)	(111.1)	36.4%	398.5	57,800.5	28,476.2	29,324.4	49.3%
2032	7,179.0	2,616.3	(172.1)	(107.3)	36.4%	406.7	58,161.8	29,051.8	29,110.0	49.9%
2033	7,386.6	2,701.8	(176.8)	(103.5)	36.6%	415.5	58,465.3	29,674.5	28,790.8	50.8%
2034	7,603.6	2,839.6	(137.8)	(75.8)	37.3%	424.7	58,710.0	30,402.7	28,307.3	51.8%
2035	7,826.9	2,925.6	(141.4)	(73.0)	37.4%	434.2	58,898.4	31,195.3	27,703.1	53.0%
2036	8,056.3	3,013.8	(145.3)	(70.4)	37.4%	444.1	59,034.4	32,066.3	26,968.1	54.3%
2037	8,290.5	3,104.0	(148.8)	(67.7)	37.4%	454.1	59,130.6	33,039.0	26,091.7	55.9%
2038	8,530.0	3,196.3	(152.4)	(65.1)	37.5%	464.2	59,179.4	34,116.7	25,062.7	57.6%
2039	8,774.4	3,290.5	(156.5)	(62.8)	37.5%	474.5	59,196.6	35,326.6	23,870.0	59.7%
2040	9,024.8	3,387.0	(161.7)	(60.9)	37.5%	485.1	59,182.4	36,680.1	22,502.2	62.0%
2041	9,281.1	3,485.8	(167.3)	(59.2)	37.6%	495.9	59,157.8	38,209.6	20,948.2	64.6%
2042	9,545.4	3,587.6	(172.3)	(57.2)	37.6%	507.2	59,124.1	39,929.2	19,194.9	67.5%
2043	9,815.5	3,691.5	(177.4)	(55.3)	37.6%	518.8	59,100.9	41,870.9	17,230.0	70.8%
2044	10,092.4	3,798.0	(182.8)	(53.5)	37.6%	530.7	59,091.6	44,053.0	15,038.6	74.6%
2045	10,370.1	3,905.0	(189.1)	(52.0)	37.7%	542.5	59,109.0	46,501.8	12,607.2	78.7%
2046	10,652.8	4,014.1	3,061.7	790.6	37.7%	554.3	59,159.7	49,239.7	9,920.0	83.2%
2047	10,939.6	4,125.0	3,161.1	766.4	37.7%	566.1	59,253.8	52,293.9	6,959.9	88.3%
2048	11,049.6	4,174.0	3,201.0	728.7	37.8%	563.2	59,369.7	55,601.3	3,768.5	93.7%
2049	12,151.2	4,572.4	3,576.5	764.5	37.6%	639.3	59,619.2	59,619.2	0.0	100.0%
Total Through 2049		\$79,102.0	\$9,931.7	\$1,494.1		\$11,549.7				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

## Exhibit 3A – TRS Projection (Step #3 – Plus Tier 2 ERF Update)

**Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
and Update Tier 2 Unreduced Retirement Age  
Actuarially Assumed Rate of Return: 7.00%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,439.7	(211.4)	(178.5)	48.3%	1,224.5	166,707.5	82,382.4	84,325.1	49.4%
2028	13,680.6	6,658.1	(225.1)	(177.6)	48.7%	1,256.4	170,918.7	86,514.8	84,403.9	50.6%
2029	14,024.4	6,813.0	(228.7)	(168.7)	48.6%	1,288.0	175,197.6	90,602.1	84,595.5	51.7%
2030	14,366.0	6,954.1	(231.8)	(159.8)	48.4%	1,319.3	179,412.3	94,777.3	84,635.0	52.8%
2031	14,703.1	7,099.5	(237.7)	(153.1)	48.3%	1,350.3	183,544.3	99,042.4	84,501.9	54.0%
2032	15,034.7	7,259.8	(243.7)	(146.7)	48.3%	1,380.7	187,570.9	103,408.0	84,162.9	55.1%
2033	15,358.5	7,433.1	(249.7)	(140.5)	48.4%	1,410.5	191,465.0	107,882.2	83,582.8	56.3%
2034	15,672.5	8,210.9	(239.2)	(125.8)	52.4%	1,439.3	195,201.2	113,087.8	82,113.4	57.9%
2035	15,985.5	8,374.9	(244.8)	(120.3)	52.4%	1,468.1	198,760.4	118,440.0	80,320.4	59.6%
2036	16,295.1	8,537.0	(250.2)	(114.9)	52.4%	1,496.5	202,121.8	123,944.9	78,176.9	61.3%
2037	16,603.5	8,698.6	(256.0)	(109.9)	52.4%	1,524.8	205,268.5	129,615.9	75,652.5	63.1%
2038	16,916.1	8,862.4	(261.9)	(105.1)	52.4%	1,553.5	208,178.3	135,468.6	72,709.7	65.1%
2039	17,228.8	9,026.3	(268.5)	(100.7)	52.4%	1,582.2	210,838.5	141,526.6	69,311.9	67.1%
2040	17,549.9	9,194.4	(275.2)	(96.4)	52.4%	1,611.7	213,240.3	147,823.5	65,416.8	69.3%
2041	17,888.1	9,371.7	(281.8)	(92.3)	52.4%	1,642.8	215,391.3	154,411.6	60,979.7	71.7%
2042	18,248.8	9,560.6	(289.1)	(88.5)	52.4%	1,675.9	217,308.1	161,353.1	55,955.0	74.3%
2043	18,638.9	9,765.0	(297.3)	(85.0)	52.4%	1,711.7	219,021.3	168,729.1	50,292.2	77.0%
2044	19,059.9	9,985.6	(307.5)	(82.2)	52.4%	1,750.4	220,583.1	176,638.9	43,944.2	80.1%
2045	19,522.1	10,227.7	(319.3)	(79.8)	52.4%	1,792.8	222,066.3	185,204.6	36,861.7	83.4%
2046	20,039.6	10,498.8	9,060.3	2,115.4	52.4%	1,840.4	223,552.3	194,567.3	28,985.0	87.0%
2047	20,591.0	10,787.7	9,363.7	2,043.2	52.4%	1,891.0	225,094.6	204,838.3	20,256.3	91.0%
2048	21,160.0	11,085.8	9,667.5	1,971.5	52.4%	1,943.3	226,715.6	216,100.9	10,614.6	95.3%
2049	21,724.1	11,381.3	9,961.0	1,898.5	52.4%	1,995.1	228,402.0	228,402.0	0.0	100.0%
Total Through 2049		\$214,925.1	\$33,133.6	\$5,702.8		\$38,493.4				

## Exhibit 3B – SERS Projection (Step #3 – Plus Tier 2 ERF Update)

## Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
and Update Tier 2 Unreduced Retirement Age  
Actuarially Assumed Rate of Return: 6.75%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,683.1	27,094.1	29,588.9	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,789.3	27,700.9	30,088.4	47.9%
2027	5,959.0	2,541.7	(81.2)	(69.0)	42.7%	322.9	58,818.8	28,821.5	29,997.4	49.0%
2028	6,054.1	2,614.4	(88.0)	(70.0)	43.2%	325.8	60,077.3	29,961.9	30,115.4	49.9%
2029	6,155.1	2,623.7	(88.9)	(66.3)	42.6%	329.2	60,967.5	30,917.3	30,050.3	50.7%
2030	6,263.3	2,651.4	(89.2)	(62.3)	42.3%	333.1	61,784.4	31,839.8	29,944.6	51.5%
2031	6,376.2	2,692.2	(91.2)	(59.6)	42.2%	337.4	62,528.5	32,746.8	29,781.7	52.4%
2032	6,494.2	2,741.1	(93.4)	(57.2)	42.2%	341.9	63,198.7	33,650.0	29,548.7	53.2%
2033	6,614.7	2,796.8	(95.3)	(54.7)	42.3%	346.3	63,794.7	34,560.4	29,234.3	54.2%
2034	6,741.6	3,068.1	(95.9)	(51.6)	45.5%	351.0	64,319.3	35,708.6	28,610.7	55.5%
2035	6,874.7	3,128.6	(98.0)	(49.3)	45.5%	355.9	64,776.8	36,898.7	27,878.1	57.0%
2036	7,011.5	3,190.9	(100.0)	(47.2)	45.5%	360.8	65,168.1	38,140.4	27,027.8	58.5%
2037	7,150.1	3,254.0	(101.9)	(45.0)	45.5%	365.7	65,498.6	39,445.8	26,052.7	60.2%
2038	7,297.1	3,320.9	(103.7)	(42.9)	45.5%	371.1	65,778.6	40,835.5	24,943.1	62.1%
2039	7,451.7	3,391.2	(105.6)	(40.9)	45.5%	376.7	66,012.8	42,325.8	23,686.9	64.1%
2040	7,611.1	3,463.8	(108.1)	(39.3)	45.5%	382.6	66,204.9	43,933.4	22,271.5	66.4%
2041	7,777.4	3,539.4	(111.3)	(37.9)	45.5%	388.9	66,363.4	45,679.3	20,684.2	68.8%
2042	7,951.4	3,618.7	(113.9)	(36.3)	45.5%	395.6	66,499.4	47,585.6	18,913.8	71.6%
2043	8,132.3	3,701.0	(116.6)	(34.8)	45.5%	402.5	66,621.5	49,675.5	16,946.0	74.6%
2044	8,320.0	3,786.4	(119.3)	(33.4)	45.5%	409.6	66,731.4	51,968.3	14,763.1	77.9%
2045	8,512.5	3,874.0	(122.7)	(32.1)	45.5%	416.9	66,830.1	54,483.8	12,346.3	81.5%
2046	8,710.6	3,964.1	3,012.0	739.5	45.5%	424.4	66,920.7	57,243.3	9,677.4	85.5%
2047	8,911.8	4,055.7	3,092.6	711.3	45.5%	432.1	67,003.3	60,266.4	6,736.9	89.9%
2048	9,114.5	4,148.0	3,183.2	685.8	45.5%	439.7	67,076.0	63,571.9	3,504.1	94.8%
2049	9,241.5	4,205.7	3,234.1	652.7	45.5%	443.6	67,138.2	67,138.2	0.0	100.0%
Total Through 2049		\$81,780.1	\$10,597.7	\$1,859.5		\$9,290.4				



## Exhibit 3C – SURS Projection (Step #3 – Plus Tier 2 ERF Update)

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility,  
and Update Tier 2 Unreduced Retirement Age  
Actuarially Assumed Rate of Return: 6.50%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,612.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,265.2	(139.0)	(118.8)	36.3%	369.0	55,589.1	26,176.3	29,412.8	47.1%
2028	6,419.8	2,352.6	(151.9)	(121.8)	36.6%	375.6	56,294.9	26,816.6	29,478.3	47.6%
2029	6,602.3	2,416.4	(155.0)	(116.8)	36.6%	383.0	56,874.9	27,378.3	29,496.6	48.1%
2030	6,797.2	2,479.3	(158.9)	(112.4)	36.5%	390.5	57,384.4	27,938.5	29,445.9	48.7%
2031	6,980.2	2,543.8	(163.4)	(108.5)	36.4%	398.5	57,818.8	28,498.1	29,320.8	49.3%
2032	7,179.0	2,620.3	(168.0)	(104.8)	36.5%	406.7	58,184.1	29,079.3	29,104.8	50.0%
2033	7,386.6	2,706.0	(172.6)	(101.1)	36.6%	415.5	58,492.2	29,708.1	28,784.1	50.8%
2034	7,603.6	2,843.9	(133.5)	(73.4)	37.4%	424.7	58,742.1	30,442.9	28,299.2	51.8%
2035	7,826.9	2,930.0	(137.0)	(70.7)	37.4%	434.2	58,936.3	31,242.7	27,693.6	53.0%
2036	8,056.3	3,018.4	(140.7)	(68.2)	37.5%	444.1	59,078.8	32,121.5	26,957.3	54.4%
2037	8,290.5	3,108.7	(144.1)	(65.6)	37.5%	454.1	59,182.4	33,102.5	26,079.8	55.9%
2038	8,530.0	3,201.1	(147.6)	(63.1)	37.5%	464.2	59,239.4	34,189.3	25,050.0	57.7%
2039	8,774.4	3,295.4	(151.5)	(60.8)	37.6%	474.5	59,265.7	35,409.1	23,856.6	59.7%
2040	9,024.8	3,392.1	(156.6)	(59.0)	37.6%	485.1	59,261.7	36,773.3	22,488.4	62.1%
2041	9,281.1	3,491.0	(162.0)	(57.3)	37.6%	495.9	59,248.4	38,314.2	20,934.2	64.7%
2042	9,545.4	3,593.0	(166.9)	(55.4)	37.6%	507.2	59,227.4	40,046.3	19,181.1	67.6%
2043	9,815.5	3,697.1	(171.9)	(53.6)	37.7%	518.8	59,218.1	42,001.3	17,216.8	70.9%
2044	10,092.3	3,803.7	(177.1)	(51.9)	37.7%	530.7	59,224.1	44,197.8	15,026.3	74.6%
2045	10,370.0	3,910.8	(183.3)	(50.4)	37.7%	542.5	59,258.3	46,661.8	12,596.5	78.7%
2046	10,652.8	4,020.1	3,067.7	792.1	37.7%	554.3	59,327.4	49,416.1	9,911.4	83.3%
2047	10,939.5	4,131.1	3,167.3	767.9	37.8%	566.1	59,441.0	52,487.1	6,953.9	88.3%
2048	11,049.4	4,180.2	3,207.2	730.2	37.8%	563.2	59,575.7	55,810.5	3,765.2	93.7%
2049	12,150.6	4,579.1	3,583.2	766.0	37.7%	639.3	59,843.1	59,843.1	0.0	100.0%
Total Through 2049		\$79,214.5	\$10,044.4	\$1,542.6		\$11,549.7				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

## Exhibit 4A – TRS Projection (Step #4 – Plus Tier 2 COLA Update)

**Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility  
 Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA  
 Actuarially Assumed Rate of Return: 7.00%  
 (\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	(Reduction)/ Increase In State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,561.7	(89.4)	(75.5)	49.2%	1,224.5	166,707.5	82,508.6	84,198.9	49.5%
2028	13,680.6	6,783.3	(100.0)	(78.9)	49.6%	1,256.4	170,955.5	86,780.2	84,175.2	50.8%
2029	14,024.4	6,941.3	(100.4)	(74.0)	49.5%	1,288.0	175,319.1	91,020.6	84,298.5	51.9%
2030	14,366.0	7,085.5	(100.4)	(69.2)	49.3%	1,319.3	179,634.0	95,363.0	84,271.0	53.1%
2031	14,703.1	7,234.0	(103.2)	(66.5)	49.2%	1,350.3	183,883.3	99,610.4	84,072.9	54.3%
2032	15,034.7	7,397.3	(106.2)	(63.9)	49.2%	1,380.7	188,046.1	104,374.2	83,671.9	55.5%
2033	15,358.5	7,573.6	(109.2)	(61.4)	49.3%	1,410.5	192,097.5	109,063.7	83,033.8	56.8%
2034	15,672.5	8,354.2	(95.8)	(50.4)	53.3%	1,439.3	196,013.9	114,502.7	81,511.2	58.4%
2035	15,985.5	8,521.1	(98.5)	(48.4)	53.3%	1,468.1	199,778.5	120,107.4	79,671.1	60.1%
2036	16,295.1	8,686.1	(101.2)	(46.5)	53.3%	1,496.5	203,373.0	125,885.3	77,487.6	61.9%
2037	16,603.5	8,850.5	(104.1)	(44.7)	53.3%	1,524.8	206,782.9	131,851.0	74,931.9	63.8%
2038	16,916.1	9,017.2	(107.2)	(43.0)	53.3%	1,553.5	209,988.8	138,021.5	71,967.3	65.7%
2039	17,228.8	9,183.9	(110.8)	(41.6)	53.3%	1,582.2	212,980.6	144,421.8	68,558.8	67.8%
2040	17,549.9	9,355.0	(114.6)	(40.2)	53.3%	1,611.7	215,752.5	151,087.0	64,665.6	70.0%
2041	17,888.1	9,535.3	(118.2)	(38.7)	53.3%	1,642.8	218,315.4	158,071.0	60,244.4	72.4%
2042	18,248.8	9,727.5	(122.2)	(37.4)	53.3%	1,675.9	220,688.6	165,438.0	55,250.6	75.0%
2043	18,638.9	9,935.5	(126.8)	(36.3)	53.3%	1,711.7	222,905.7	173,270.7	49,634.9	77.7%
2044	19,059.9	10,159.9	(133.1)	(35.6)	53.3%	1,750.4	225,021.8	181,670.7	43,351.1	80.7%
2045	19,522.1	10,406.3	(140.7)	(35.2)	53.3%	1,792.8	227,112.8	190,762.1	36,350.7	84.0%
2046	20,039.6	10,682.1	9,243.6	2,158.2	53.3%	1,840.4	229,262.4	200,688.1	28,574.4	87.5%
2047	20,591.0	10,976.1	9,552.1	2,084.3	53.3%	1,891.0	231,526.7	211,562.1	19,964.6	91.4%
2048	21,160.0	11,279.4	9,861.1	2,011.0	53.3%	1,943.3	233,928.7	223,468.6	10,460.1	95.5%
2049	21,724.1	11,580.1	10,159.7	1,936.3	53.3%	1,995.1	236,454.8	236,454.8	0.0	100.0%
Total Through 2049		\$218,526.0	\$36,734.5	\$7,202.4		\$38,493.4				

## Exhibit 4B – SERS Projection (Step #4 – Plus Tier 2 COLA Update)

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
Update Tier 2 Unreduced Retirement Age, and Update Tier 2 COLA  
Actuarially Assumed Rate of Return: 6.75%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,585.6	(37.3)	(31.7)	43.4%	322.9	58,799.4	28,866.8	29,932.6	49.1%
2028	6,054.1	2,659.0	(43.4)	(34.6)	43.9%	325.8	60,193.1	30,056.6	30,136.5	49.9%
2029	6,155.1	2,669.0	(43.6)	(32.5)	43.4%	329.2	61,117.8	31,065.8	30,052.0	50.8%
2030	6,263.3	2,697.6	(43.0)	(30.1)	43.1%	333.1	61,974.4	32,046.6	29,927.8	51.7%
2031	6,376.2	2,739.1	(44.2)	(28.9)	43.0%	337.4	62,764.0	33,016.6	29,747.4	52.6%
2032	6,494.2	2,789.0	(45.6)	(27.9)	42.9%	341.9	63,485.8	33,988.0	29,497.8	53.5%
2033	6,614.7	2,845.6	(46.6)	(26.7)	43.0%	346.3	64,140.2	34,972.0	29,168.1	54.5%
2034	6,741.6	3,117.7	(46.2)	(24.9)	46.2%	351.0	64,730.5	36,200.0	28,530.5	55.9%
2035	6,874.7	3,179.3	(47.3)	(23.8)	46.2%	355.9	65,261.2	37,475.9	27,785.3	57.4%
2036	7,011.5	3,242.5	(48.4)	(22.8)	46.2%	360.8	65,734.3	38,810.2	26,924.1	59.0%
2037	7,150.1	3,306.6	(49.2)	(21.7)	46.2%	365.7	66,155.5	40,215.5	25,940.1	60.8%
2038	7,297.1	3,374.6	(49.9)	(20.7)	46.2%	371.1	66,536.0	41,712.5	24,823.5	62.7%
2039	7,451.7	3,446.1	(50.7)	(19.6)	46.2%	376.7	66,880.8	43,318.3	23,562.5	64.8%
2040	7,611.1	3,519.9	(52.0)	(18.9)	46.2%	382.6	67,194.5	45,050.1	22,144.5	67.0%
2041	7,777.4	3,596.8	(54.0)	(18.4)	46.2%	388.9	67,486.6	46,929.6	20,557.0	69.5%
2042	7,951.4	3,677.2	(55.3)	(17.6)	46.2%	395.6	67,768.6	48,979.7	18,788.9	72.3%
2043	8,132.3	3,760.9	(56.7)	(16.9)	46.2%	402.5	68,050.0	51,224.1	16,825.9	75.3%
2044	8,320.0	3,847.7	(58.0)	(16.2)	46.2%	409.6	68,333.4	53,682.8	14,650.6	78.6%
2045	8,512.5	3,936.7	(59.9)	(15.7)	46.2%	416.9	68,620.7	56,376.6	12,244.1	82.2%
2046	8,710.6	4,028.3	3,076.2	755.3	46.2%	424.4	68,915.9	59,327.4	9,588.4	86.1%
2047	8,911.8	4,121.4	3,158.2	726.4	46.2%	432.1	69,229.1	62,555.8	6,673.3	90.4%
2048	9,114.5	4,215.1	3,250.3	700.3	46.2%	439.7	69,551.1	66,081.2	3,469.9	95.0%
2049	9,241.5	4,273.8	3,302.2	666.5	46.2%	443.6	69,882.5	69,882.5	0.0	100.0%
Total Through 2049		\$83,037.8	\$11,855.6	\$2,398.9		\$9,290.4				

## Exhibit 4C – SURS Projection (Step #4 – Plus Tier 2 COLA Update)

Funding Projections for the State Universities Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility, Update Tier 2 Unreduced Retirement Age, and Update Tier 2 COLA

Actuarially Assumed Rate of Return: 6.50%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	(Reduction)/ Increase In Present Value of State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,315.3	(89.0)	(76.1)	37.1%	369.0	55,589.1	26,228.0	29,361.2	47.2%
2028	6,419.8	2,404.0	(100.5)	(80.6)	37.4%	375.6	56,456.5	26,925.3	29,531.1	47.7%
2029	6,602.3	2,469.2	(102.2)	(77.0)	37.4%	383.0	57,082.3	27,549.8	29,532.5	48.3%
2030	6,797.2	2,533.7	(104.5)	(73.9)	37.3%	390.5	57,644.2	28,178.6	29,465.5	48.9%
2031	6,980.2	2,599.7	(107.5)	(71.4)	37.2%	398.5	58,137.7	28,812.6	29,325.1	49.6%
2032	7,179.0	2,677.8	(110.5)	(68.9)	37.3%	406.7	58,569.5	29,474.6	29,094.9	50.3%
2033	7,386.6	2,765.2	(113.5)	(66.4)	37.4%	415.5	58,951.7	30,190.7	28,761.0	51.2%
2034	7,603.6	2,904.8	(72.6)	(39.9)	38.2%	424.7	59,284.3	31,020.2	28,264.1	52.3%
2035	7,826.9	2,992.7	(74.4)	(38.4)	38.2%	434.2	59,569.4	31,921.4	27,648.1	53.6%
2036	8,056.3	3,082.9	(76.2)	(36.9)	38.3%	444.1	59,811.8	32,909.0	26,902.9	55.0%
2037	8,290.5	3,175.1	(77.8)	(35.4)	38.3%	454.1	60,025.0	34,006.8	26,018.2	56.7%
2038	8,530.0	3,269.4	(79.3)	(33.9)	38.3%	464.2	60,201.1	35,218.2	24,982.9	58.5%
2039	8,774.4	3,365.7	(81.3)	(32.6)	38.4%	474.5	60,358.4	36,572.5	23,785.9	60.6%
2040	9,024.8	3,464.4	(84.3)	(31.8)	38.4%	485.1	60,496.4	38,080.5	22,415.9	62.9%
2041	9,281.1	3,565.4	(87.7)	(31.0)	38.4%	495.9	60,634.6	39,772.8	20,861.9	65.6%
2042	9,545.4	3,669.4	(90.5)	(30.1)	38.4%	507.2	60,774.4	41,663.6	19,110.8	68.6%
2043	9,815.5	3,775.6	(93.3)	(29.1)	38.5%	518.8	60,937.5	43,786.9	17,150.6	71.9%
2044	10,092.3	3,884.5	(96.3)	(28.2)	38.5%	530.7	61,127.2	46,161.0	14,966.2	75.5%
2045	10,370.0	3,993.9	(100.3)	(27.6)	38.5%	542.5	61,353.9	48,809.5	12,544.4	79.6%
2046	10,652.8	4,105.4	3,153.0	814.2	38.5%	554.3	61,627.1	51,757.9	9,869.2	84.0%
2047	10,939.5	4,218.7	3,254.9	789.2	38.6%	566.1	61,950.8	55,027.1	6,923.7	88.8%
2048	11,049.4	4,268.7	3,295.7	750.3	38.6%	563.2	62,302.8	58,555.7	3,747.1	94.0%
2049	12,150.6	4,676.4	3,680.5	786.7	38.5%	639.3	62,808.4	62,808.4	0.0	100.0%
Total Through 2049		\$80,813.1	\$11,642.4	\$2,231.2		\$11,549.7				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

## Exhibit 5A – TRS Projection (Step #5 – Plus Tier 2 FAS Update)

Funding Projections for the Teachers' Retirement System

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility  
 Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, and Update Tier 2 FAS  
 Actuarially Assumed Rate of Return: 7.00%  
 (\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,579.4	(71.7)	(60.5)	49.3%	1,224.5	166,707.5	82,527.0	84,180.5	49.5%
2028	13,680.6	6,801.4	(81.8)	(64.5)	49.7%	1,256.4	170,961.7	86,818.7	84,143.0	50.8%
2029	14,024.4	6,959.9	(81.8)	(60.3)	49.6%	1,288.0	175,339.6	91,081.0	84,258.5	51.9%
2030	14,366.0	7,104.6	(81.3)	(56.1)	49.5%	1,319.3	179,671.1	95,447.4	84,223.7	53.1%
2031	14,703.1	7,253.5	(83.7)	(53.9)	49.3%	1,350.3	183,939.4	99,920.6	84,018.8	54.3%
2032	15,034.7	7,417.3	(86.2)	(51.9)	49.3%	1,380.7	188,124.0	104,512.4	83,611.7	55.6%
2033	15,358.5	7,594.0	(88.8)	(50.0)	49.4%	1,410.5	192,199.9	109,231.9	82,968.0	56.8%
2034	15,672.5	8,375.1	(75.0)	(39.4)	53.4%	1,439.3	196,143.9	114,703.1	81,440.8	58.5%
2035	15,985.5	8,542.3	(77.3)	(38.0)	53.4%	1,468.1	199,939.3	120,342.3	79,597.0	60.2%
2036	16,295.1	8,707.8	(79.5)	(36.5)	53.4%	1,496.5	203,567.9	126,157.1	77,410.8	62.0%
2037	16,603.5	8,872.6	(82.0)	(35.2)	53.4%	1,524.8	207,015.5	132,162.0	74,853.5	63.8%
2038	16,916.1	9,039.6	(84.7)	(34.0)	53.4%	1,553.5	210,262.6	138,374.1	71,888.5	65.8%
2039	17,228.8	9,206.7	(88.0)	(33.0)	53.4%	1,582.2	213,299.3	144,818.4	68,480.9	67.9%
2040	17,549.9	9,378.3	(91.3)	(32.0)	53.4%	1,611.7	216,120.1	151,530.1	64,590.0	70.1%
2041	17,888.1	9,559.1	(94.4)	(30.9)	53.4%	1,642.8	218,735.6	158,563.3	60,172.3	72.5%
2042	18,248.8	9,751.8	(97.9)	(30.0)	53.4%	1,675.9	221,165.4	165,981.8	55,183.7	75.0%
2043	18,638.9	9,960.3	(102.0)	(29.2)	53.4%	1,711.7	223,442.9	173,868.5	49,574.4	77.8%
2044	19,059.9	10,185.2	(107.8)	(28.8)	53.4%	1,750.4	225,623.0	182,324.8	43,298.2	80.8%
2045	19,522.1	10,432.2	(114.8)	(28.7)	53.4%	1,792.8	227,781.4	191,474.7	36,306.7	84.1%
2046	20,039.6	10,708.8	9,270.2	2,164.4	53.4%	1,840.4	230,001.6	201,461.4	28,540.3	87.6%
2047	20,591.0	11,003.4	9,579.4	2,090.3	53.4%	1,891.0	232,339.3	212,398.0	19,941.3	91.4%
2048	21,160.0	11,307.5	9,889.2	2,016.7	53.4%	1,943.3	234,816.8	224,368.6	10,448.3	95.6%
2049	21,724.1	11,608.9	10,188.6	1,941.8	53.4%	1,995.1	237,419.3	237,419.3	0.0	100.0%
Total Through 2049		\$219,048.8	\$37,257.4	\$7,420.3		\$38,493.4				



## Exhibit 5B – SERS Projection (Step #5 – Plus Tier 2 FAS Update)

**Funding Projections for the State Employees' Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility, Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, and Update Tier 2 FAS

Actuarially Assumed Rate of Return: 6.75%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,596.2	(26.7)	(22.7)	43.6%	322.9	58,799.4	28,877.8	29,921.6	49.1%
2028	6,054.1	2,669.7	(32.7)	(26.0)	44.1%	325.8	60,230.9	30,079.2	30,151.6	49.9%
2029	6,155.1	2,680.0	(32.6)	(24.3)	43.5%	329.2	61,165.0	31,100.6	30,064.4	50.8%
2030	6,263.3	2,708.7	(31.9)	(22.3)	43.2%	333.1	62,032.0	32,094.4	29,937.6	51.7%
2031	6,376.2	2,750.5	(32.9)	(21.5)	43.1%	337.4	62,832.8	33,078.1	29,754.7	52.6%
2032	6,494.2	2,800.5	(34.0)	(20.8)	43.1%	341.9	63,566.9	34,064.0	29,502.9	53.6%
2033	6,614.7	2,857.3	(34.8)	(20.0)	43.2%	346.3	64,234.8	35,063.5	29,171.3	54.6%
2034	6,741.6	3,129.7	(34.3)	(18.4)	46.4%	351.0	64,839.8	36,307.8	28,531.9	56.0%
2035	6,874.7	3,191.5	(35.1)	(17.7)	46.4%	355.9	65,386.3	37,600.9	27,785.4	57.5%
2036	7,011.5	3,255.0	(35.9)	(17.0)	46.4%	360.8	65,876.4	38,953.3	26,923.1	59.1%
2037	7,150.1	3,319.3	(36.5)	(16.1)	46.4%	365.7	66,315.6	40,377.3	25,938.3	60.9%
2038	7,297.1	3,387.6	(37.0)	(15.3)	46.4%	371.1	66,715.3	41,894.0	24,821.3	62.8%
2039	7,451.7	3,459.4	(37.4)	(14.5)	46.4%	376.7	67,080.4	43,520.3	23,560.1	64.9%
2040	7,611.1	3,533.4	(38.5)	(14.0)	46.4%	382.6	67,415.4	45,273.3	22,142.1	67.2%
2041	7,777.4	3,610.6	(40.2)	(13.7)	46.4%	388.9	67,729.5	47,174.7	20,554.8	69.7%
2042	7,951.4	3,691.4	(41.2)	(13.1)	46.4%	395.6	68,034.4	49,247.3	18,787.1	72.4%
2043	8,132.3	3,775.3	(42.2)	(12.6)	46.4%	402.5	68,339.4	51,514.8	16,824.7	75.4%
2044	8,320.0	3,862.5	(43.2)	(12.1)	46.4%	409.6	68,647.0	53,997.1	14,649.9	78.7%
2045	8,512.5	3,951.8	(44.8)	(11.7)	46.4%	416.9	68,958.6	56,714.7	12,243.9	82.2%
2046	8,710.6	4,043.8	3,091.7	759.1	46.4%	424.4	69,278.1	59,689.5	9,588.6	86.2%
2047	8,911.8	4,137.2	3,174.1	730.0	46.4%	432.1	69,615.5	62,941.8	6,673.7	90.4%
2048	9,114.5	4,231.3	3,266.5	703.8	46.4%	439.7	69,961.1	66,490.9	3,470.2	95.0%
2049	9,241.5	4,290.3	3,318.6	669.8	46.4%	443.6	70,315.4	70,315.4	0.0	100.0%
Total Through 2049		\$83,341.3	\$12,159.0	\$2,528.9		\$9,290.4				

## Exhibit 5C – SURS Projection (Step #5 – Plus Tier 2 FAS Update)

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility,  
Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, and Update Tier 2 FAS  
Actuarially Assumed Rate of Return: 6.50%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,612.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,325.6	(78.7)	(67.2)	37.2%	369.0	55,589.1	26,238.7	29,350.5	47.2%
2028	6,419.8	2,414.6	(89.8)	(72.1)	37.6%	375.6	56,495.1	26,947.6	29,547.4	47.7%
2029	6,602.3	2,480.2	(91.2)	(68.7)	37.6%	383.0	57,130.8	27,584.5	29,546.4	48.3%
2030	6,797.2	2,545.0	(93.2)	(65.9)	37.4%	390.5	57,703.9	28,226.8	29,477.1	48.9%
2031	6,980.2	2,611.3	(95.9)	(63.7)	37.4%	398.5	58,209.7	28,875.1	29,334.6	49.6%
2032	7,179.0	2,689.7	(98.6)	(61.5)	37.5%	406.7	58,655.0	29,552.4	29,102.6	50.4%
2033	7,386.6	2,777.4	(101.2)	(59.3)	37.6%	415.5	59,052.3	30,285.2	28,767.1	51.3%
2034	7,603.6	2,917.4	(60.0)	(33.0)	38.4%	424.7	59,400.8	31,131.9	28,268.9	52.4%
2035	7,826.9	3,005.6	(61.4)	(31.7)	38.4%	434.2	59,703.5	32,051.6	27,651.8	53.7%
2036	8,056.3	3,096.3	(62.8)	(30.5)	38.4%	444.1	59,965.2	33,059.2	26,906.0	55.1%
2037	8,290.5	3,188.8	(64.0)	(29.1)	38.5%	454.1	60,199.1	34,178.2	26,020.9	56.8%
2038	8,530.0	3,283.6	(65.1)	(27.8)	38.5%	464.2	60,397.7	35,412.1	24,985.5	58.6%
2039	8,774.4	3,380.2	(66.7)	(26.8)	38.5%	474.5	60,579.1	36,790.5	23,788.5	60.7%
2040	9,024.8	3,479.3	(69.4)	(26.1)	38.6%	485.1	60,742.1	38,323.3	22,418.8	63.1%
2041	9,281.1	3,580.8	(72.3)	(25.6)	38.6%	495.9	60,906.1	40,041.1	20,865.0	65.7%
2042	9,545.4	3,685.2	(74.7)	(24.8)	38.6%	507.2	61,074.1	41,959.8	19,114.3	68.7%
2043	9,815.5	3,791.9	(77.0)	(24.0)	38.6%	518.8	61,264.7	44,110.3	17,154.4	72.0%
2044	10,092.3	3,901.3	(79.5)	(23.3)	38.7%	530.7	61,483.7	46,513.5	14,970.2	75.7%
2045	10,370.0	4,011.1	(83.1)	(22.8)	38.7%	542.5	61,741.2	49,192.9	12,548.3	79.7%
2046	10,652.8	4,123.1	3,170.7	818.7	38.7%	554.3	62,043.6	52,170.8	9,872.8	84.1%
2047	10,939.5	4,236.9	3,273.0	793.6	38.7%	566.1	62,399.0	55,472.4	6,926.6	88.9%
2048	11,049.4	4,287.0	3,314.0	754.5	38.8%	563.2	62,782.2	59,033.6	3,748.6	94.0%
2049	12,150.6	4,696.5	3,700.6	791.1	38.7%	639.3	63,320.7	63,320.7	0.0	100.0%
Total Through 2049		\$81,144.0	\$11,973.7	\$2,374.0		\$11,549.7				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

## Exhibit 6A – TRS Projection (Step #6 – Plus Tier 2 Salary Cap to SSWB)

**Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility  
 Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, and Update Tier 2 Salary Cap to SSWB  
 Actuarially Assumed Rate of Return: 7.00%  
 (\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,983.0	6,495.5	0.0	0.0	50.0%	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,698.1	47.0	39.7	50.2%	1,224.5	166,707.5	82,649.9	84,057.6	49.6%
2028	13,696.8	6,931.2	48.0	37.9	50.6%	1,257.9	171,019.6	87,087.3	83,932.3	50.9%
2029	14,066.4	7,107.1	65.5	48.3	50.5%	1,291.8	175,533.3	91,527.5	84,005.8	52.1%
2030	14,419.6	7,261.5	75.5	52.1	50.4%	1,324.2	180,028.1	96,095.6	83,932.5	53.4%
2031	14,770.7	7,421.1	83.9	54.0	50.2%	1,356.5	184,490.8	100,797.4	83,693.4	54.6%
2032	15,118.9	7,596.9	93.4	56.2	50.2%	1,388.5	188,905.1	105,648.1	83,257.1	55.9%
2033	15,462.2	7,787.1	104.4	58.7	50.4%	1,420.0	193,250.9	110,660.9	82,590.0	57.3%
2034	15,798.6	8,584.4	134.4	70.7	54.3%	1,450.9	197,509.9	116,465.0	81,044.9	59.0%
2035	16,137.6	8,768.6	149.0	73.2	54.3%	1,482.0	201,671.2	122,480.7	79,190.5	60.7%
2036	16,476.4	8,952.7	165.4	76.0	54.3%	1,513.1	205,722.8	128,720.5	77,002.3	62.6%
2037	16,818.6	9,138.6	184.1	79.0	54.3%	1,544.6	209,657.3	135,205.2	74,452.1	64.5%
2038	17,169.5	9,329.3	205.0	82.2	54.3%	1,576.8	213,462.5	141,958.6	71,503.9	66.5%
2039	17,525.3	9,522.6	227.9	85.4	54.3%	1,609.5	217,136.5	149,012.8	68,123.7	68.6%
2040	17,894.5	9,723.2	253.6	88.9	54.3%	1,643.4	220,682.5	156,411.1	64,271.4	70.9%
2041	18,286.8	9,936.4	283.0	92.7	54.3%	1,679.4	224,120.1	164,216.3	59,903.7	73.3%
2042	18,708.7	10,165.7	316.0	96.7	54.3%	1,718.1	227,478.3	172,502.9	54,975.4	75.8%
2043	19,171.5	10,417.2	354.9	101.5	54.3%	1,760.7	230,800.0	181,367.0	49,433.0	78.6%
2044	19,677.1	10,691.9	398.8	106.6	54.3%	1,807.1	234,149.6	190,924.4	43,225.2	81.5%
2045	20,236.4	10,995.8	448.8	112.1	54.3%	1,858.4	237,611.7	201,314.3	36,297.4	84.7%
2046	20,865.3	11,337.5	9,898.9	2,311.2	54.3%	1,916.2	241,277.5	212,696.4	28,581.0	88.2%
2047	21,544.6	11,706.6	10,282.6	2,243.7	54.3%	1,978.6	245,208.5	225,201.0	20,007.5	91.8%
2048	22,256.7	12,093.6	10,675.2	2,177.0	54.3%	2,044.0	249,430.4	238,926.3	10,504.1	95.8%
2049	22,974.0	12,483.3	11,062.9	2,108.5	54.3%	2,109.9	253,925.3	253,925.3	0.0	100.0%
Total Through 2049		\$227,349.5	\$45,558.2	\$10,252.3		\$39,300.3				



## Exhibit 6B – SERS Projection (Step #6 – Plus Tier 2 Salary Cap to SSWB)

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, and Update Tier 2 Salary Cap to SSWB

Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,605.3	(17.6)	(15.0)	43.7%	322.9	58,799.4	28,887.2	29,912.2	49.1%
2028	6,084.5	2,692.2	(10.2)	(8.1)	44.2%	327.4	60,508.8	30,113.6	30,395.2	49.8%
2029	6,229.9	2,723.5	10.9	8.1	43.7%	333.2	61,520.6	31,185.0	30,335.7	50.7%
2030	6,353.7	2,759.9	19.3	13.5	43.4%	337.9	62,476.0	32,240.4	30,235.6	51.6%
2031	6,484.0	2,809.9	26.6	17.4	43.3%	343.1	63,377.1	33,298.9	30,078.2	52.5%
2032	6,620.9	2,869.0	34.5	21.1	43.3%	348.5	64,224.7	34,374.4	29,850.3	53.5%
2033	6,761.9	2,935.5	43.4	24.9	43.4%	354.0	65,020.4	35,479.8	29,540.5	54.6%
2034	6,910.8	3,218.5	54.5	29.3	46.6%	359.8	65,768.9	36,848.4	28,920.5	56.0%
2035	7,066.9	3,291.2	64.5	32.5	46.6%	365.8	66,476.0	38,285.5	28,190.6	57.6%
2036	7,228.3	3,366.3	75.4	35.6	46.6%	371.9	67,145.1	39,803.5	27,341.7	59.3%
2037	7,393.1	3,443.1	87.2	38.6	46.6%	378.1	67,783.4	41,416.7	26,366.7	61.1%
2038	7,567.7	3,524.4	99.8	41.3	46.6%	384.8	68,403.8	43,148.4	25,255.3	63.1%
2039	7,751.0	3,609.8	113.0	43.8	46.6%	391.9	69,012.1	45,017.3	23,994.8	65.2%
2040	7,939.6	3,697.6	125.7	45.7	46.6%	399.1	69,613.4	47,042.0	22,571.4	67.6%
2041	8,135.9	3,789.0	138.3	47.1	46.6%	406.8	70,218.2	49,246.0	20,972.1	70.1%
2042	8,341.0	3,884.5	152.0	48.4	46.6%	415.0	70,840.3	51,653.8	19,186.5	72.9%
2043	8,553.9	3,983.7	166.1	49.6	46.6%	423.4	71,490.8	54,290.9	17,199.8	75.9%
2044	8,774.7	4,086.5	180.9	50.6	46.6%	432.0	72,171.6	57,178.8	14,992.8	79.2%
2045	9,000.7	4,191.8	195.1	51.1	46.6%	440.8	72,882.9	60,338.8	12,544.1	82.8%
2046	9,232.3	4,299.6	3,347.6	821.9	46.6%	449.9	73,628.3	63,793.2	9,835.1	86.6%
2047	9,467.4	4,409.1	3,446.0	792.6	46.6%	459.0	74,415.5	67,562.4	6,853.1	90.8%
2048	9,705.5	4,520.0	3,555.2	766.0	46.6%	468.2	75,232.8	71,665.6	3,567.2	95.3%
2049	9,867.4	4,595.4	3,623.8	731.4	46.6%	473.6	76,079.5	76,079.5	0.0	100.0%
Total Through 2049		\$86,714.1	\$15,532.0	\$3,687.4		\$9,623.8				

## Exhibit 6C – SURS Projection (Step #6 – Plus Tier 2 Salary Cap to SSWB)

**Funding Projections for the State Universities Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility.

Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, and Update Tier 2 Salary Cap to SSWB

Actuarially Assumed Rate of Return: 6.50%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C Present Value of		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	(Reduction)/ Increase in State Contribution						
2024							\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,351.2	(53.1)	(45.4)	37.6%	369.0	55,589.1	26,265.0	29,324.1	47.2%
2028	6,446.4	2,450.7	(53.7)	(43.1)	38.0%	377.7	56,672.1	27,015.0	29,657.1	47.7%
2029	6,668.4	2,532.5	(38.9)	(29.3)	38.0%	388.2	57,367.7	27,715.3	29,652.4	48.3%
2030	6,876.2	2,603.2	(35.0)	(24.7)	37.9%	396.9	58,010.4	28,432.3	29,578.2	49.0%
2031	7,072.3	2,675.3	(31.9)	(21.2)	37.8%	405.9	58,597.4	29,167.3	29,430.1	49.8%
2032	7,284.2	2,759.7	(28.7)	(17.9)	37.9%	415.2	59,136.2	29,944.2	29,192.0	50.6%
2033	7,505.0	2,853.4	(25.3)	(14.8)	38.0%	425.0	59,640.4	30,789.9	28,850.5	51.6%
2034	7,735.4	3,001.4	24.0	13.2	38.8%	435.3	60,111.5	31,766.8	28,344.7	52.8%
2035	7,972.2	3,095.6	28.6	14.8	38.8%	445.9	60,554.1	32,833.0	27,721.1	54.2%
2036	8,216.0	3,192.7	33.6	16.3	38.9%	456.9	60,973.0	34,003.2	26,969.8	55.8%
2037	8,466.1	3,292.2	39.3	17.9	38.9%	468.1	61,384.5	35,303.7	26,080.7	57.5%
2038	8,722.8	3,394.3	45.6	19.5	38.9%	479.7	61,783.1	36,740.2	25,042.9	59.5%
2039	8,986.0	3,499.1	52.1	20.9	38.9%	491.5	62,189.4	38,344.4	23,845.1	61.7%
2040	9,257.4	3,607.1	58.3	22.0	39.0%	503.7	62,607.0	40,131.1	22,475.9	64.1%
2041	9,536.8	3,718.1	65.0	23.0	39.0%	516.4	63,056.8	42,132.7	20,924.2	66.8%
2042	9,827.3	3,833.4	73.5	24.4	39.0%	529.8	63,543.4	44,367.1	19,176.3	69.8%
2043	10,127.1	3,952.3	83.3	26.0	39.0%	543.8	64,089.3	46,870.2	17,219.1	73.1%
2044	10,437.5	4,075.2	94.5	27.7	39.0%	558.4	64,702.6	49,666.2	15,036.4	76.8%
2045	10,753.1	4,200.3	106.1	29.2	39.1%	573.2	65,395.9	52,782.3	12,613.5	80.7%
2046	11,078.5	4,329.2	3,376.8	872.0	39.1%	588.4	66,176.7	56,243.7	9,933.0	85.0%
2047	11,412.5	4,461.7	3,497.9	848.1	39.1%	603.9	67,060.4	60,084.5	6,975.8	89.6%
2048	11,566.6	4,528.6	3,555.6	809.5	39.2%	604.6	68,011.4	64,235.7	3,775.6	94.4%
2049	12,763.1	4,978.3	3,982.3	851.3	39.0%	688.3	69,196.7	69,196.7	0.0	100.0%
Total Through 2049		\$84,020.7	\$14,849.9	\$3,439.4		\$11,977.8				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

**Exhibit 7B – SERS Projection (Step #7 – Plus Members of Depts. of Human Services,  
Lottery, and Juvenile Justice under Alternative Benefit)**

**Funding Projections for the State Employees' Retirement System**

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB, and  
Update Alternative Formula Eligibility for Various Departments  
Actuarially Assumed Rate of Return: 6.75%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution						
2024							\$55,499.8	\$25,528.8	\$29,971.0	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$316.9	56,677.1	27,094.1	29,583.0	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	319.8	57,776.9	27,700.9	30,075.9	47.9%
2027	5,959.0	2,630.0	7.0	6.0	44.1%	322.9	58,799.4	28,912.6	29,886.8	49.2%
2028	6,084.2	2,717.3	14.9	11.8	44.7%	327.4	60,634.6	30,165.6	30,469.0	49.7%
2029	6,229.2	2,749.0	36.4	27.1	44.1%	333.1	61,670.3	31,263.6	30,406.6	50.7%
2030	6,353.1	2,786.0	45.4	31.7	43.9%	337.9	62,651.2	32,347.0	30,304.2	51.6%
2031	6,483.5	2,836.6	53.2	34.8	43.8%	343.1	63,579.6	33,434.6	30,145.0	52.6%
2032	6,620.2	2,896.1	61.5	37.7	43.7%	348.5	64,454.6	34,538.9	29,915.7	53.6%
2033	6,760.9	2,963.1	70.9	40.7	43.8%	353.9	65,278.1	35,673.1	29,604.9	54.6%
2034	6,909.2	3,246.3	82.3	44.3	47.0%	359.7	66,053.8	37,069.4	28,984.4	56.1%
2035	7,064.5	3,319.3	92.7	46.7	47.0%	365.7	66,787.0	38,532.8	28,254.2	57.7%
2036	7,224.2	3,394.3	103.4	48.8	47.0%	371.7	67,478.3	40,073.3	27,405.0	59.4%
2037	7,386.6	3,470.6	114.8	50.7	47.0%	377.8	68,134.1	41,704.5	26,429.6	61.2%
2038	7,557.8	3,551.1	126.5	52.4	47.0%	384.3	68,764.2	43,447.1	25,317.1	63.2%
2039	7,737.1	3,635.3	138.5	53.7	47.0%	391.2	69,373.1	45,318.6	24,054.5	65.3%
2040	7,920.5	3,721.5	149.6	54.4	47.0%	398.2	69,962.1	47,334.4	22,627.8	67.7%
2041	8,110.5	3,810.8	160.0	54.5	47.0%	405.6	70,538.8	49,515.4	21,023.4	70.2%
2042	8,308.7	3,903.9	171.3	54.6	47.0%	413.4	71,115.2	51,884.5	19,230.7	73.0%
2043	8,513.7	4,000.2	182.7	54.6	47.0%	421.4	71,695.7	54,461.6	17,234.1	76.0%
2044	8,723.2	4,098.7	193.0	54.0	47.0%	429.5	72,279.1	57,263.2	15,015.9	79.2%
2045	8,937.7	4,199.4	202.8	53.2	47.0%	437.7	72,863.2	60,307.5	12,555.7	82.8%
2046	9,158.1	4,303.0	3,350.9	822.7	47.0%	446.2	73,452.1	63,616.1	9,836.0	86.6%
2047	9,381.0	4,407.7	3,444.6	792.2	47.0%	454.8	74,054.8	67,207.9	6,846.9	90.8%
2048	9,607.5	4,514.1	3,549.4	764.7	47.0%	463.5	74,668.3	71,107.2	3,561.1	95.2%
2049	9,761.2	4,586.4	3,614.7	729.6	47.0%	468.5	75,297.7	75,297.7	0.0	100.0%
Total Through 2049		\$87,149.0	\$15,966.5	\$3,920.9		\$9,592.7				

**Combined Exhibit 7 – TRS, SERS, and SURS Projection (Step #7 – Plus Members of Depts. of Human Services, Lottery, and Juvenile Justice under Alternative Benefit)**

**Combined Funding Projections for the TRS, SERS, and SURS**

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility, Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB, and Update Alternative Formula Eligibility for Various Departments (SERS Only)  
Actuarially Assumed Rate of Return: 7.00% for TRS, 6.75% for SERS, and 6.50% for SURS  
(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll*	Total State Contribution**	Compared to Exhibits A+B+C		State Contribution as Percent of Payroll	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution						
2024							\$263,132.6	\$120,529.0	\$142,603.6	45.8%
2025	\$24,120.6	\$11,284.6	0.0	0.0	46.8%	\$1,816.7	269,216.2	127,712.3	141,503.9	47.4%
2026	\$24,943.6	\$11,458.0	0.0	0.0	45.9%	\$1,876.2	275,157.9	131,683.5	143,474.4	47.9%
2027	\$25,541.5	\$11,679.3	0.9	0.3	45.7%	\$1,916.4	281,096.0	137,827.5	143,268.5	49.0%
2028	\$26,227.4	\$12,099.2	9.2	6.6	46.1%	\$1,963.0	288,326.3	144,267.9	144,058.4	50.0%
2029	\$26,964.0	\$12,388.6	63.0	46.1	45.9%	\$2,013.1	294,571.3	150,506.4	144,064.9	51.1%
2030	\$27,648.9	\$12,650.7	85.9	59.1	45.8%	\$2,059.0	300,689.7	156,874.9	143,814.8	52.2%
2031	\$28,326.5	\$12,933.0	105.2	67.6	45.7%	\$2,105.5	306,667.8	163,399.3	143,268.5	53.3%
2032	\$29,023.3	\$13,252.7	126.2	76.0	45.7%	\$2,152.2	312,495.9	170,131.2	142,364.7	54.4%
2033	\$29,728.1	\$13,603.6	150.0	84.6	45.8%	\$2,198.9	318,169.4	177,123.9	141,045.5	55.7%
2034	\$30,443.2	\$14,832.1	240.7	128.2	48.7%	\$2,245.9	323,675.2	185,301.2	138,374.0	57.2%
2035	\$31,174.3	\$15,183.5	270.3	134.7	48.7%	\$2,293.6	329,012.3	193,846.5	135,165.8	58.9%
2036	\$31,916.6	\$15,539.7	302.4	141.1	48.7%	\$2,341.7	334,174.1	202,797.0	131,377.1	60.7%
2037	\$32,671.3	\$15,901.4	338.2	147.6	48.7%	\$2,390.5	339,175.9	212,213.4	126,962.5	62.6%
2038	\$33,450.1	\$16,274.7	377.1	154.1	48.7%	\$2,440.8	344,009.8	222,145.9	121,863.9	64.6%
2039	\$34,248.4	\$16,657.0	418.5	160.0	48.6%	\$2,492.2	348,699.0	232,675.8	116,023.2	66.7%
2040	\$35,072.4	\$17,051.8	461.5	165.3	48.6%	\$2,545.3	353,251.6	243,876.6	109,375.0	69.0%
2041	\$35,934.1	\$17,465.3	508.0	170.2	48.6%	\$2,601.4	357,715.7	255,864.4	101,851.3	71.5%
2042	\$36,844.7	\$17,903.0	560.8	175.7	48.6%	\$2,661.3	362,136.9	268,754.5	93,382.4	74.2%
2043	\$37,812.3	\$18,369.7	620.9	182.1	48.6%	\$2,725.9	366,585.0	282,698.8	83,886.2	77.1%
2044	\$38,837.8	\$18,865.8	686.3	188.3	48.6%	\$2,795.0	371,131.3	297,853.8	73,277.5	80.3%
2045	\$39,927.2	\$19,395.5	757.7	194.5	48.6%	\$2,869.3	375,870.8	314,404.1	61,466.7	83.6%
2046	\$41,101.9	\$19,969.7	16,626.6	4,005.9	48.6%	\$2,950.8	380,906.3	332,556.2	48,350.1	87.3%
2047	\$42,338.1	\$20,576.0	17,225.1	3,884.0	48.6%	\$3,037.3	386,323.7	352,493.4	33,830.3	91.2%
2048	\$43,430.8	\$21,136.3	17,780.2	3,751.2	48.7%	\$3,112.1	392,110.1	374,269.2	17,840.9	95.5%
2049	\$45,498.3	\$22,048.0	18,659.9	3,689.4	48.5%	\$3,266.7	398,419.7	398,419.7	0.0	100.0%
Total Through 2049		\$398,519.2	\$76,374.6	\$17,612.6		\$60,870.8				

\* Includes payroll from Retirement Savings Plan (RSP) for SURS

\*\* Includes RSP contributions for SURS

**Exhibit 8A – TRS Projection (Step #8 – Plus Redirected FY31-FY41 Bond Payments)****Funding Projections for the Teachers' Retirement System**

Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility  
 Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB, and  
 Redirect FY2031-FY2041 Bond Payments  
 Actuarially Assumed Rate of Return: 7.00%  
 (\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll	State Contribution	Compared to Exhibit A		State Contribution as Percent of Payroll	TRS Portion of Redirected Bond Payments	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution							
2024								\$154,325.2	\$70,687.6	\$83,637.6	45.8%
2025	\$12,542.5	\$6,203.6	0.0	0.0	49.5%	\$0.0	\$1,151.9	158,427.3	75,370.1	83,057.2	47.6%
2026	12,963.0	6,495.5	0.0	0.0	50.0%	0.0	1,192.3	162,496.1	78,408.4	84,087.6	48.3%
2027	13,334.0	6,698.1	47.0	39.7	50.2%	0.0	1,224.5	166,707.5	82,649.9	84,057.6	49.6%
2028	13,696.8	6,931.2	48.0	37.9	50.6%	0.0	1,257.9	171,019.6	87,087.3	83,932.3	50.9%
2029	14,066.4	7,107.1	65.5	48.3	50.5%	0.0	1,291.8	175,533.3	91,527.5	84,005.8	52.1%
2030	14,419.6	7,261.5	75.5	52.1	50.4%	0.0	1,324.2	180,028.1	96,095.6	83,932.5	53.4%
2031	14,770.7	7,421.1	83.9	54.0	50.2%	102.5	1,356.5	184,490.8	100,903.4	83,587.4	54.7%
2032	15,118.9	7,596.9	93.4	56.2	50.2%	147.0	1,388.5	188,905.1	105,913.6	82,991.5	56.1%
2033	15,462.2	7,787.1	104.4	58.7	50.4%	147.6	1,420.0	193,250.9	111,097.8	82,153.0	57.5%
2034	15,798.6	8,584.4	134.4	70.7	54.3%	147.9	1,450.9	197,509.9	117,085.7	80,424.2	59.3%
2035	16,137.6	8,768.6	149.0	73.2	54.3%	444.7	1,482.0	201,671.2	123,605.0	78,066.1	61.3%
2036	16,476.4	8,952.7	165.4	76.0	54.3%	445.7	1,513.1	205,722.8	130,384.8	75,338.0	63.4%
2037	16,818.6	9,138.6	184.1	79.0	54.3%	446.9	1,544.6	209,657.3	137,448.6	72,208.7	65.6%
2038	17,169.5	9,329.3	205.0	82.2	54.3%	448.1	1,576.8	213,462.5	144,822.8	68,639.6	67.8%
2039	17,525.3	9,522.6	227.9	85.4	54.3%	449.6	1,609.5	217,136.5	152,542.9	64,593.6	70.3%
2040	17,894.5	9,723.2	253.6	88.9	54.3%	451.3	1,643.4	220,682.5	160,655.3	60,027.2	72.8%
2041	18,286.8	9,936.4	283.0	92.7	54.3%	453.2	1,679.4	224,120.1	169,226.7	54,893.3	75.5%
2042	18,708.7	10,165.7	316.0	96.7	54.3%	0.0	1,718.1	227,478.3	177,864.0	49,614.3	78.2%
2043	19,171.5	10,417.2	354.9	101.5	54.3%	0.0	1,760.7	230,800.0	187,103.4	43,696.5	81.1%
2044	19,677.1	10,691.9	398.8	106.6	54.3%	0.0	1,807.1	234,149.6	197,062.4	37,087.2	84.2%
2045	20,236.4	10,995.8	448.8	112.1	54.3%	0.0	1,858.4	237,611.7	207,882.0	29,729.7	87.5%
2046	20,865.3	11,337.5	9,898.9	2,311.2	54.3%	0.0	1,916.2	241,277.5	219,723.8	21,553.7	91.1%
2047	21,544.6	11,706.6	10,282.6	2,243.7	54.3%	0.0	1,978.6	245,208.5	232,720.3	12,488.2	94.9%
2048	22,256.7	12,093.6	10,675.2	2,177.0	54.3%	0.0	2,044.0	249,430.4	246,972.0	2,458.5	99.0%
2049	22,974.0	12,483.3	11,062.9	2,108.5	54.3%	0.0	2,109.9	253,925.3	262,534.1	(8,608.9)	103.4%
Total Through 2049		\$227,349.5	\$45,558.2	\$10,252.3		\$3,684.5	\$39,300.3				



## Exhibit 8B – SERS Projection (Step #8 – Plus Redirected FY31-FY41 Bond Payments)

## Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility, Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB, Update Alternative Formula Eligibility for Various Departments, and Redirect FY2031-FY2041 Bond Payments  
Actuarially Assumed Rate of Return: 6.75%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total State Contribution	Compared to Exhibit B		State Contribution as Percent of Payroll	SERS Portion of Redirected Bond Payments	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution							
2024								\$55,499.8	\$25,528.8	\$29,971.00	46.0%
2025	\$5,765.6	\$2,813.0	\$0.0	\$0.0	48.8%	\$0.0	\$316.9	56,677.1	27,094.1	29,583.00	47.8%
2026	5,861.6	2,595.3	0.0	0.0	44.3%	0.0	319.8	57,776.9	27,700.9	30,075.90	47.9%
2027	5,959.0	2,630.0	7.0	6.0	44.1%	0.0	322.9	58,799.4	28,912.6	29,886.80	49.2%
2028	6,084.2	2,717.3	14.9	11.8	44.7%	0.0	327.4	60,634.6	30,165.6	30,469.00	49.7%
2029	6,229.2	2,749.0	36.4	27.1	44.1%	0.0	333.1	61,670.3	31,263.6	30,406.60	50.7%
2030	6,353.1	2,786.0	45.4	31.7	43.9%	0.0	337.9	62,651.2	32,347.0	30,304.20	51.6%
2031	6,483.5	2,836.6	53.2	34.8	43.8%	36.2	343.1	63,579.6	33,472.0	30,107.50	52.6%
2032	6,620.2	2,896.1	61.5	37.7	43.7%	51.4	348.5	64,454.6	34,632.0	29,822.60	53.7%
2033	6,760.9	2,963.1	70.9	40.7	43.8%	51.0	353.9	65,278.1	35,825.2	29,452.80	54.9%
2034	6,909.2	3,246.3	82.3	44.3	47.0%	50.9	359.7	66,053.8	37,284.3	28,769.50	56.4%
2035	7,064.5	3,319.3	92.7	46.7	47.0%	152.1	365.7	66,787.0	38,919.3	27,867.60	58.3%
2036	7,224.2	3,394.3	103.4	48.8	47.0%	151.5	371.7	67,478.3	40,642.5	26,835.80	60.2%
2037	7,386.6	3,470.6	114.8	50.7	47.0%	151.0	377.8	68,134.1	42,468.1	25,666.00	62.3%
2038	7,557.8	3,551.1	126.5	52.4	47.0%	150.4	384.3	68,764.2	44,417.6	24,346.60	64.6%
2039	7,737.1	3,635.3	138.5	53.7	47.0%	149.8	391.2	69,373.1	46,509.3	22,863.80	67.0%
2040	7,920.5	3,721.5	149.6	54.4	47.0%	149.1	398.2	69,962.1	48,759.6	21,202.60	69.7%
2041	8,110.5	3,810.8	160.0	54.5	47.0%	148.5	405.6	70,538.8	51,190.2	19,348.70	72.6%
2042	8,308.7	3,903.9	171.3	54.6	47.0%	0.0	413.4	71,115.2	53,672.3	17,442.90	75.5%
2043	8,513.7	4,000.2	182.7	54.6	47.0%	0.0	421.4	71,695.7	56,370.2	15,325.60	78.6%
2044	8,723.2	4,098.7	193.0	54.0	47.0%	0.0	429.5	72,279.1	59,300.5	12,978.50	82.0%
2045	8,937.7	4,199.4	202.8	53.2	47.0%	0.0	437.7	72,863.2	62,482.3	10,380.90	85.8%
2046	9,158.1	4,303.0	3,350.9	822.7	47.0%	0.0	446.2	73,452.1	65,937.7	7,514.30	89.8%
2047	9,381.0	4,407.7	3,444.6	792.2	47.0%	0.0	454.8	74,054.8	69,686.2	4,368.60	94.1%
2048	9,607.5	4,514.1	3,549.4	764.7	47.0%	0.0	463.5	74,668.3	73,752.9	915.40	98.8%
2049	9,761.2	4,586.4	3,614.7	729.6	47.0%	0.0	468.5	75,297.7	78,122.0	(2,824.30)	103.8%
Total Through 2049		\$87,149.0	\$15,966.5	\$3,920.9		\$1,241.9	\$9,592.7				



## Exhibit 8C – SURS Projection (Step #8 – Plus Redirected FY31-FY41 Bond Payments)

## Funding Projections for the State Universities Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2024, 100% Funded Target by FY2049 and Update Tier 2 Retirement Eligibility, Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB, and Redirected FY2031-FY2041 Bond Payments  
Actuarially Assumed Rate of Return: 6.50%  
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll*	Total State Contribution**	Compared to Exhibit C		State Contribution as Percent of Payroll	SURS Portion of Redirected Bond Payments	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase In State Contribution	Present Value of (Reduction)/ Increase In State Contribution							
2024								\$53,307.6	\$24,312.6	\$28,995.0	45.6%
2025	\$5,812.5	\$2,268.0	\$0.0	\$0.0	39.0%	\$0.0	\$347.9	54,111.8	25,248.1	28,863.7	46.7%
2026	6,099.0	2,367.2	0.0	0.0	38.8%	0.0	364.1	54,884.9	25,574.2	29,310.6	46.6%
2027	6,248.5	2,351.2	(53.1)	(45.4)	37.6%	0.0	369.0	55,589.1	26,265.0	29,324.1	47.2%
2028	6,446.4	2,450.7	(53.7)	(43.1)	38.0%	0.0	377.7	56,672.1	27,015.0	29,657.1	47.7%
2029	6,668.4	2,532.5	(38.9)	(29.3)	38.0%	0.0	388.2	57,367.7	27,715.3	29,652.4	48.3%
2030	6,876.2	2,603.2	(35.0)	(24.7)	37.9%	0.0	396.9	58,010.4	28,432.3	29,578.2	49.0%
2031	7,072.3	2,675.3	(31.9)	(21.2)	37.8%	34.3	405.9	58,597.4	29,202.7	29,394.7	49.8%
2032	7,284.2	2,759.7	(28.7)	(17.9)	37.9%	48.8	415.2	59,136.2	30,032.2	29,104.0	50.8%
2033	7,505.0	2,853.4	(25.3)	(14.8)	38.0%	48.6	425.0	59,640.4	30,933.8	28,706.6	51.9%
2034	7,735.4	3,001.4	24.0	13.2	38.8%	48.3	435.3	60,111.5	31,969.9	28,141.6	53.2%
2035	7,972.2	3,095.6	28.6	14.8	38.8%	144.8	445.9	60,554.1	33,198.8	27,355.3	54.8%
2036	8,216.0	3,192.7	33.6	16.3	38.9%	144.5	456.9	60,973.0	34,541.8	26,431.2	56.7%
2037	8,466.1	3,292.2	39.3	17.9	38.9%	144.1	468.1	61,384.5	36,026.1	25,358.3	58.7%
2038	8,722.8	3,394.3	45.6	19.5	38.9%	143.7	479.7	61,783.1	37,657.8	24,125.3	61.0%
2039	8,986.0	3,499.1	52.1	20.9	38.9%	143.1	491.5	62,189.4	39,469.3	22,720.1	63.5%
2040	9,257.4	3,607.1	58.3	22.0	39.0%	142.4	503.7	62,607.0	41,476.1	21,130.9	66.2%
2041	9,536.8	3,718.1	65.0	23.0	39.0%	141.5	516.4	63,056.8	43,711.2	19,345.7	69.3%
2042	9,827.3	3,833.4	73.5	24.4	39.0%	0.0	529.8	63,543.4	46,048.3	17,495.1	72.5%
2043	10,127.1	3,952.3	83.3	26.0	39.0%	0.0	543.8	64,089.3	48,660.6	15,428.7	75.9%
2044	10,437.5	4,075.2	94.5	27.7	39.0%	0.0	558.4	64,702.6	51,573.0	13,129.6	79.7%
2045	10,753.1	4,200.3	106.1	29.2	39.1%	0.0	573.2	65,395.9	54,813.1	10,582.8	83.8%
2046	11,078.5	4,329.2	3,376.8	872.0	39.1%	0.0	588.4	66,176.7	58,406.4	7,770.3	88.3%
2047	11,412.5	4,461.7	3,497.9	848.1	39.1%	0.0	603.9	67,060.4	62,387.8	4,672.5	93.0%
2048	11,566.6	4,528.6	3,555.6	809.5	39.2%	0.0	604.6	68,011.4	66,688.7	1,322.6	98.1%
2049	12,763.1	4,978.3	3,982.3	851.3	39.0%	0.0	688.3	69,196.7	71,809.1	(2,612.4)	103.8%
Total Through 2049		\$84,020.7	\$14,849.9	\$3,439.4		\$1,184.1	\$11,977.8				

\* Includes payroll from Retirement Savings Plan (RSP)

\*\* Includes RSP contributions

**Combined Exhibit 8 – TRS, SERS, and SURS Projection  
(Step #8 – Plus Redirected FY31-FY41 Bond Payments)**

**Combined Funding Projections for the TRS, SERS, and SURS**

CoGFA Projections Based on Laws in Effect on June 30, 2024, Target 100% Funded by FY2049, Update Tier 2 Retirement Eligibility,  
Update Tier 2 Unreduced Retirement Age, Update Tier 2 COLA, Update Tier 2 FAS, Update Tier 2 Salary Cap to SSWB,  
Update Alternative Formula Eligibility for Various Departments (SERS Only), and Redirect FY2031-FY2041 Bond Payments  
Actuarially Assumed Rate of Return: 7.00% for TRS, 6.75% for SERS, and 6.50% for SURS  
(\$ in millions)

Fiscal Year Ending 6/30	Annual State Payroll*	Total State Contribution**	Compared to Exhibits A+B+C		State Contribution as Percent of Payroll	Portion of Redirected Bond Payments for TRS, SERS, and SURS	Total Employee Contribution	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Liability	Funded Ratio
			(Reduction)/ Increase in State Contribution	Present Value of (Reduction)/ Increase in State Contribution							
2024								\$263,132.6	\$120,529.0	\$142,603.6	45.8%
2025	\$24,120.6	\$11,284.6	0.0	0.0	46.8%	\$0.0	\$1,816.7	269,216.2	127,712.3	141,503.9	47.4%
2026	24,943.6	11,458.0	0.0	0.0	45.9%	0.0	1,876.2	275,157.9	131,683.5	143,474.4	47.9%
2027	25,541.5	11,679.3	0.9	0.3	45.7%	0.0	1,916.4	281,096.0	137,827.5	143,268.5	49.0%
2028	26,227.4	12,099.2	9.2	6.6	46.1%	0.0	1,963.0	288,326.3	144,267.9	144,058.4	50.0%
2029	26,964.0	12,388.6	63.0	46.1	45.9%	0.0	2,013.1	294,571.3	150,506.4	144,064.9	51.1%
2030	27,648.9	12,650.7	85.9	59.1	45.8%	0.0	2,059.0	300,689.7	156,874.9	143,814.8	52.2%
2031	28,326.5	12,933.0	105.2	67.6	45.7%	173.0	2,105.5	306,667.8	163,578.1	143,089.7	53.3%
2032	29,023.3	13,252.7	126.2	76.0	45.7%	247.2	2,152.2	312,495.9	170,577.8	141,918.1	54.6%
2033	29,728.1	13,603.6	150.0	84.6	45.8%	247.3	2,198.9	318,169.4	177,856.8	140,312.6	55.9%
2034	30,443.2	14,832.1	240.7	128.2	48.7%	247.1	2,245.9	323,675.2	186,339.9	137,335.3	57.6%
2035	31,174.3	15,183.5	270.3	134.7	48.7%	741.5	2,293.6	329,012.3	195,723.1	133,289.2	59.5%
2036	31,916.6	15,539.7	302.4	141.1	48.7%	741.7	2,341.7	334,174.1	205,569.1	128,605.0	61.5%
2037	32,671.3	15,901.4	338.2	147.6	48.7%	741.9	2,390.5	339,175.9	215,942.8	123,233.1	63.7%
2038	33,450.1	16,274.7	377.1	154.1	48.7%	742.2	2,440.8	344,009.8	226,898.2	117,111.6	66.0%
2039	34,248.4	16,657.0	418.5	160.0	48.6%	742.5	2,492.2	348,699.0	238,521.5	110,177.5	68.4%
2040	35,072.4	17,051.8	461.5	165.3	48.6%	742.8	2,545.3	353,251.6	250,891.0	102,360.6	71.0%
2041	35,934.1	17,465.3	508.0	170.2	48.6%	743.2	2,601.4	357,715.7	264,128.1	93,587.6	73.8%
2042	36,844.7	17,903.0	560.8	175.7	48.6%	0.0	2,661.3	362,136.9	277,584.6	84,552.3	76.7%
2043	37,812.3	18,369.7	620.9	182.1	48.6%	0.0	2,725.9	366,585.0	292,134.2	74,450.8	79.7%
2044	38,837.8	18,865.8	686.3	188.3	48.6%	0.0	2,795.0	371,131.3	307,935.9	63,195.4	83.0%
2045	39,927.2	19,395.5	757.7	194.5	48.6%	0.0	2,869.3	375,870.8	325,177.4	50,693.4	86.5%
2046	41,101.9	19,969.7	16,626.6	4,005.9	48.6%	0.0	2,950.8	380,906.3	344,067.9	36,838.4	90.3%
2047	42,338.1	20,576.0	17,225.1	3,884.0	48.6%	0.0	3,037.3	386,323.7	364,794.3	21,529.4	94.4%
2048	43,430.8	21,136.3	17,780.2	3,751.2	48.7%	0.0	3,112.1	392,110.1	387,413.6	4,696.5	98.8%
2049	45,498.3	22,048.0	18,659.9	3,689.4	48.5%	0.0	3,266.7	398,419.7	412,465.2	(14,045.5)	103.5%
Total Through 2049		\$398,519.2	\$76,374.6	\$17,612.6		\$6,110.4	\$60,870.8				

\* Includes payroll from Retirement Savings Plan (RSP) for SURS

\*\* Includes RSP contributions for SURS