



Commission on Government Forecasting and Accountability

PENSION IMPACT NOTE *104th General Assembly*

BILL NO: **HB 2920**

February 25, 2025

SPONSOR (S): Stuart

SYSTEM: SURS

FISCAL IMPACT

HB 2920 seeks to create a Deferred Retirement Option Plan (DROP) for eligible members of the State Universities Retirement System (SURS). Multiple iterations of DROP frameworks have been proposed in recent years, with **HB 3765**, as amended by **HA 2**, from the 103rd General Assembly, being one of the latest iterations studied by CGFA's consulting actuaries. A flow-chart of the different iterations of DROP seen in the 103rd General Assembly can be found in Appendix I.

Analysis from those actuaries found that a major component of any fiscal impact expected from a DROP will stem from whether or not individual DROP accounts accrue interest during the period of participation. **HB 2920** includes no such interest accrual component. While **HB 3765**, as amended by **HA 2**, of the 103rd General Assembly, does not include an interest accrual component, the bill only allows participation by members within the DROP up to 3 years, where **HB 2920** allows participation by members within the DROP up to 5 years.

In the study provided by Segal Consulting, the impacts of the addition of a DROP to SERS and SURS were studied. The following graphic shows the impact of **HB 3765**, as amended by **HA 2**, from the 103rd General Assembly, on the first 5 years of the expected State contributions for SURS. The full study is available in Appendix II.

Impact of DROP on SURS' Total State Contribution (\$ in Millions				
Year	Baseline	DROP	Impact	Impact %
2024	\$ 2,186.0	\$ 2,186.0	\$ -	0.00%
2025	\$ 2,249.8	\$ 2,250.1	\$ 0.3	0.01%
2026	\$ 2,296.6	\$ 2,296.8	\$ 0.2	0.01%
2027	\$ 2,333.0	\$ 2,333.2	\$ 0.2	0.01%
2028	\$ 2,430.5	\$ 2,430.8	\$ 0.3	0.01%

SUBJECT MATTER: HB 2920 amends the General Provisions Article of the Illinois Pension Code to create a Deferred Retirement Option Plan (DROP) for eligible members of the State Universities Retirement System (SURS).

COMMENT:

DROP Explanation

- Deferred Retirement Option Plans (DROP) are designed to encourage continued employment past the eligible retirement age for a period of time (usually 3-5 years). Below is a summary of the salient features of DROP plans:
 - Workers continue to draw a salary but are considered retired (for annuity purposes);
 - The pension annuity amount the worker is entitled to receive starting on the date they are considered “retired” (DROP date) is credited to the member’s individual DROP account; and
 - Upon completion of the DROP period, the member’s DROP account balance is available in a lump-sum amount, which can be distributed in any of the following ways:
 - a one-time payment;
 - a payment plan over time;
 - a payment rolled into an IRA.

HB 2920 DROP Provisions

- Beginning January 1, 2026, a DROP plan will be made available for eligible members, regardless of Tier, of SURS. Eligible participants must:
 - be actively employed in a position covered under a collective bargaining agreement;
 - be eligible for a full, unreduced annuity under the terms of the System; and
 - not be in receipt of a retirement or disability annuity.

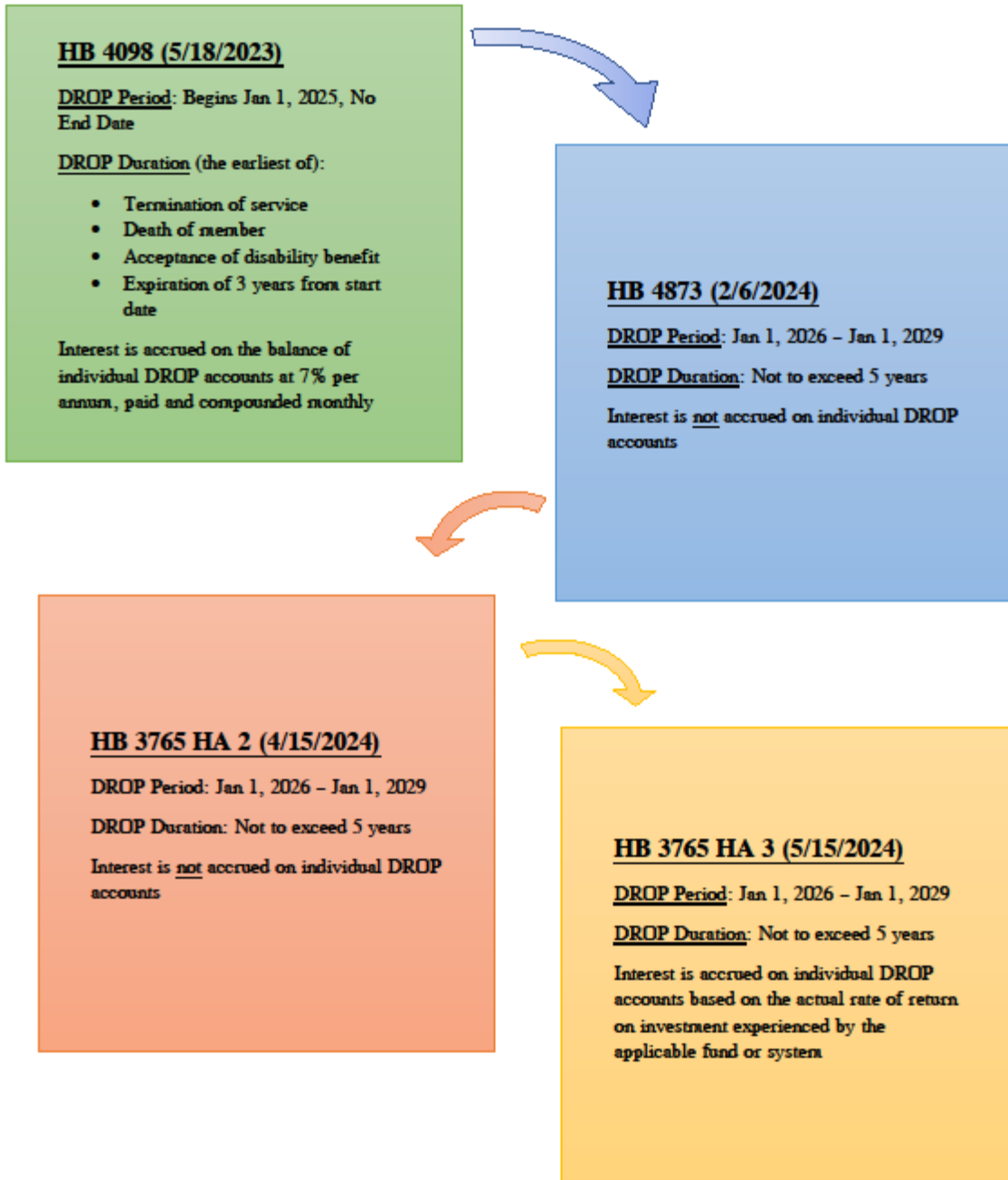
- The DROP duration is 5 years;
- Participation in the DROP shall continue until one of the following occurs:
 - Termination of service;
 - Death of member;
 - Disability for which the member receives a benefit; or
 - Expiration of 5 years from the date the member began participation.
- Individual DROP accounts shall consist of:
 - The monthly retirement annuity the participant would have been eligible to receive if the participant had terminated service on the date of participation in the DROP, as well as any increases or annuities due from a reciprocal fund the member would otherwise be eligible for;
 - Employee contributions paid by the participant during the DROP period; and
 - Any reductions due to State or federal law.
- Upon expiration or termination of the member's participation in the DROP, the member will receive the retirement annuity that they would have received had they retired on the date they entered the DROP with applicable automatic increases accrued during the DROP duration, paid to the member as a lump sum.
 - Expiration or termination of participation may not occur after January 1, 2034.
 - After termination or expiration of participation, members may not participate in employment in any way that would require active membership in the retirement system or fund.
- During participation in the DROP, a member remains eligible for death benefits and/or to apply for a disability benefit, as well as any health care benefits the member would be eligible for had they not entered the DROP.

ZH:bs

LRB104 11507 RPS 21596 b

Appendix I

Below is a summation of previous iterations of DROP bills from the 103rd GA.





November 7, 2024

Via Email

Clayton Klenke
 Executive Director
 Commission on Government Forecasting and Accountability (CoGFA)
 703 Stratton Office Bldg.
 Springfield, IL 62706

Re: Actuarial Impact Study – Pension Reform – HB 3765

Dear Clayton:

As requested, we have analyzed the impact to projected costs for the State Employees' Retirement System (SERS) and the State Universities Retirement System (SURS) as outlined in House Bill 3765 (HB 3765) and amended under House Floor Amendments No. 2 (HA 2) and No. 3 (HA 3). Due to limited data available, this analysis does not consider the impact of these changes for Downstate Police, Downstate Firefighters', Chicago Firefighters', Chicago Police, Illinois Municipal Retirement Fund (IMRF), or the Chicago Teachers' Pension Fund (CTPF).

The following table provides a high-level summary of the impact of the individual and combined proposed changes outlined in HB 3765 on the State contribution amounts through fiscal year ending June 30, 2045 for each System. Additional details are included later in the letter (DROP = Deferred Retirement Option Plan).

\$ in millions	SERS	SURS	Total
(Savings)/Cost on Total State Contributions through FYE 2045			
Baseline	-	-	-
DROP Implementation Under HA 2 (Without Interest)	\$19	\$6	\$25
DROP Implementation Under HA 3 (With Interest)	41	9	50
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	528	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	547	N/A	N/A
Combined Changes Under HA 3 (With Interest)	570	N/A	N/A

This analysis is based on the provisions of the respective Systems. 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 of the Systems as of June 30, 2023 (dated December 22, 2023 for SERS and November 7, 2023 for SURS), except as otherwise noted below.

Proposed Benefit Changes

We have analyzed the proposed benefit / provision changes per HB 3765, as summarized below. For this analysis, we have determined the impact of each change separately, as well as the total impact of all changes combined. Note that, due to constraints of available data, this analysis only considers the impact of benefit changes for the two Systems noted above, and, as such, some changes are not considered for this analysis (which are noted below).

1. Adds Deferred Retirement Option Plan (DROP) provisions to applicable Tier 1 and Tier 2 members of Downstate Police, Downstate Firefighters', Chicago Firefighters', Chicago Police, IMRF, CTPF, SERS, and SURS, effective January 1, 2026. Members must be actively employed as a police officer or firefighter, eligible to retire with a full and unreduced pension as determined by the pertinent system, and elect DROP participation no later than January 1, 2029. DROP duration is not to exceed five years. Individual DROP accounts consist of:
 - The retirement annuity that they would have received had the member retired the date they entered the DROP (including any automatic annual increases);
 - Employee contributions paid by the participant during the DROP period; and,
 - Auto increases that the participant would have been eligible to receive if the participant had terminated service upon entering the DROP.

Upon retirement, the member will begin receiving the retirement annuity they would have received had the member retired on the date they entered the DROP, including any anticipated COLA increases during the DROP period, plus the balance in the member's individual DROP account.

Under HA 2, no interest will be credited to individual DROP account balances.

Under HA 3, individual DROP accounts accrue interest based on the actual rate of investment return experienced by the applicable Fund or System.

[Downstate Police, Downstate Firefighters', Chicago Firefighters', Chicago Police, IMRF, and CTPF not included in this analysis]

2. Downstate Police, Downstate Firefighters', Chicago Police, and Chicago Firefighters' Articles of the Illinois Pension Code are placed under the ambit of the Reciprocal Act, which affects reciprocity for vesting.

[Not included in this analysis]

3. Amends Illinois Pension Code to allow participation in SERS Alternative Formula for Tier 1 and Tier 2 investigators for the Department of the Lottery as well as certain Tier 1 and Tier 2 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).

Actuarial Analysis

The analysis was based upon the census data and actuarial assumptions used in the June 30, 2023, actuarial valuations for SERS and SURS. For purposes of this analysis, all changes are assumed to be effective as described in the 'Proposed Benefit Changes' section.

The following assumptions and methods were implemented for the purpose of determining the impact of the benefit and/or provision changes under the various elements of HB 3765. The numbering below corresponds with the numbers under the 'Proposed Benefit Changes' section:

1. The DROP duration is assumed to be 5 years for all eligible participants. **90% of eligible Tier 1 and Tier 2 active members (employed as a police officers or firefighters in the SERS or SURS articles of the Pension Code) are assumed to participate in the DROP under HA 2.** As of June 30, 2023, there are approximately 630 (of a total active count of 61,651) and 180 (of a total active count of 71,121) total members that are projected to be eligible to participate in the DROP for SERS and SURS, respectively.

Under HA 3, individual DROP accounts are assumed to return 6.75% for SERS and 6.50% for SURS, on average, over the long-term, which takes into account the possibility of returns below zero. To model interest credited to DROP accounts (which we understand cannot be less than zero), we have estimated the interest crediting rate will be 200 basis points higher than the current investment return assumption (i.e., 8.75% for SERS and 8.50% for SURS). **100% of eligible Tier 1 and Tier 2 active members are assumed to participate in the DROP under HA 3.**

2. [Not included in this analysis]
3. The analysis assumes 100% of current Tier 1 and Tier 2 investigators for the Department of Lottery opt to participate in the SERS Alternative Formula as well as applicable 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.

The following tables summarize the impact of the proposed benefit changes on the System's actuarial accrued liability (AAL) and projected State contribution amounts through FY2045. The attached exhibits show in greater detail the projected contributions, actuarial liabilities, actuarial assets, funded position, and benefit payments through 2045 reflecting the changes outlined above.

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 and may not always sum exactly due to rounding.

Summary of Results for All Systems

\$ in millions	SERS	SURS	Total
AAL as of June 30, 2023			
Baseline	\$54,003	\$51,653	\$ 105,656
DROP Implementation Under HA 2 (Without Interest)	54,026	51,659	105,685
DROP Implementation Under HA 3 (With Interest)	54,043	51,662	105,705
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	54,104	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	54,127	N/A	N/A
Combined Changes Under HA 3 (With Interest)	54,145	N/A	N/A
(Decrease)/Increase in AAL as of June 30, 2023			
Baseline	-	-	-
DROP Implementation Under HA 2 (Without Interest)	\$23	\$6	\$29
DROP Implementation Under HA 3 (With Interest)	40	9	49
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	101	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	124	N/A	N/A
Combined Changes Under HA 3 (With Interest)	142	N/A	N/A
State Contribution for FYE 2026			
Baseline	\$2,596	\$2,297	\$4,893
DROP Implementation Under HA 2 (Without Interest)	2,597	2,297	4,894
DROP Implementation Under HA 3 (With Interest)	2,598	2,297	4,895
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	2,621	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	2,622	N/A	N/A
Combined Changes Under HA 3 (With Interest)	2,623	N/A	N/A
(Savings)/Cost on State Contribution for FYE 2026			
Baseline	-	-	-
DROP Implementation Under HA 2 (Without Interest)	\$1	\$-	\$1
DROP Implementation Under HA 3 (With Interest)	2	-	2
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	25	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	26	N/A	N/A
Combined Changes Under HA 3 (With Interest)	27	N/A	N/A
Total State Contributions through FYE 2045			
Baseline	\$70,633	\$65,025	\$135,658
DROP Implementation Under HA 2 (Without Interest)	70,652	65,031	135,683
DROP Implementation Under HA 3 (With Interest)	70,674	65,034	135,708
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	71,161	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	71,180	N/A	N/A
Combined Changes Under HA 3 (With Interest)	71,203	N/A	N/A
(Savings)/Cost on Total State Contributions through FYE 2045			
Baseline	-	-	-
DROP Implementation Under HA 2 (Without Interest)	\$19	\$6	\$25
DROP Implementation Under HA 3 (With Interest)	41	9	50
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	528	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	547	N/A	N/A
Combined Changes Under HA 3 (With Interest)	570	N/A	N/A

Summary of Results for All Systems (continued)

\$ in millions	SERS	SURS	Total
Present Value of Total State Contributions through FYE 2045			
Baseline	\$35,243	\$32,818	\$68,061
DROP Implementation Under HA 2 (Without Interest)	35,253	32,821	68,074
DROP Implementation Under HA 3 (With Interest)	35,263	32,823	68,086
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	35,516	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	35,525	N/A	N/A
Combined Changes Under HA 3 (With Interest)	35,536	N/A	N/A
(Savings)/Cost on Present Value of Total State Contributions through FYE 2045			
Baseline	-	-	-
DROP Implementation Under HA 2 (Without Interest)	\$10	\$3	\$13
DROP Implementation Under HA 3 (With Interest)	20	5	25
Members of Depts. of Lottery and Juvenile Justice Eligible for Alt. Formula	273	N/A	N/A
Combined Changes Under HA 2 (Without Interest)	282	N/A	N/A
Combined Changes Under HA 3 (With Interest)	293	N/A	N/A

Comments about DROPs

DROPs are often used as a workforce management tool (e.g., retaining certain employees at particular ages or service bands when replacing them can be difficult). They can be designed to be “expected cost neutral”, meaning that its implementation is not anticipated to increase the present value of costs to the System (compared to what would have been otherwise). The reality is that DROPs typically change employee behavior enough or add enough financial enhancements that result in additional costs when put into place.

Interest credited to DROP accounts may also add cost to a pension plan as anything credited over the current investment return assumption is potentially obligated to pay interest at a level that exceeds what was earned on plan assets during a given year. For example, in HA 3 described herein, interest is credited to the account at what the plan actually earns but cannot go below 0%. If the assets of the plan achieve a return of -3% on a market value basis in a year, plan assets in the trust adjust accordingly but DROP accounts do not lose any value, so effectively “earning” 3% higher than what the plan earned. DROP accounts will realize a higher return than all other plan assets, hence driving up costs for those benefits.

Accelerated payment of benefits plus proposed interest credited to DROP account balances are the main drivers of estimated State contribution increases shown above. Cash flows of the Systems should also be considered with scenarios projecting higher and/or earlier benefit payments than under the baseline scenarios. If the implementation of the DROP results in members entering the DROP sooner than they would otherwise be assumed to retire, it will cause benefit payments to start being made earlier than assumed under the original plan design. Depending on the amount of benefit payments (they may be slightly lower if taken earlier than assumed), this may increase the costs to a pension plan unless payments have an actuarial equivalence reduction.

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 2023 actuarial valuation report for 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 6.75% investment return for SERS and the 6.50% investment return for SURS as well as the 60% utilization assumption for HA 2 implementation and the 85% utilization assumption for HA 3 implementation. 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, the proposed changes outlined in HB 3765 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.

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,

A handwritten signature in black ink, appearing to read "Matthew A. Strom". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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

Funding Projections for the State Employees' Retirement System
 CoGFA Projections Based on Laws in Effect on June 30, 2023, 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
2023					\$54,002.7	\$24,072.1	\$29,930.6	44.6%
2024	\$5,139.9	\$2,583.8	50.3%	\$287.0	55,168.5	25,172.1	29,996.3	45.6%
2025	5,223.0	2,552.6	48.9%	289.6	56,261.7	26,268.1	29,993.6	46.7%
2026	5,307.3	2,596.4	48.9%	292.4	57,276.8	26,651.9	30,625.0	46.5%
2027	5,391.3	2,634.7	48.9%	295.1	58,206.7	27,635.7	30,571.0	47.5%
2028	5,477.0	2,726.0	49.8%	297.8	59,052.0	28,668.1	30,383.9	48.5%
2029	5,569.8	2,750.5	49.4%	301.1	59,816.7	29,669.5	30,147.2	49.6%
2030	5,668.3	2,791.0	49.2%	304.8	60,504.5	30,661.2	29,843.3	50.7%
2031	5,772.3	2,835.5	49.1%	309.0	61,115.5	31,652.4	29,463.1	51.8%
2032	5,881.3	2,888.2	49.1%	313.2	61,648.2	32,655.4	28,992.7	53.0%
2033	5,992.3	2,947.6	49.2%	317.4	62,105.6	33,684.9	28,420.6	54.2%
2034	6,110.1	3,211.4	52.6%	321.9	62,489.8	34,960.5	27,529.3	55.9%
2035	6,231.9	3,275.4	52.6%	326.4	62,806.4	36,300.0	26,506.4	57.8%
2036	6,356.1	3,340.7	52.6%	330.9	63,055.5	37,714.4	25,341.2	59.8%
2037	6,482.8	3,407.3	52.6%	335.5	63,241.7	39,217.0	24,024.7	62.0%
2038	6,617.2	3,477.9	52.6%	340.6	63,374.7	40,830.0	22,544.6	64.4%
2039	6,758.7	3,552.3	52.6%	345.9	63,461.0	42,573.5	20,887.4	67.1%
2040	6,906.3	3,629.8	52.6%	351.5	63,506.5	44,469.2	19,037.4	70.0%
2041	7,059.9	3,710.6	52.6%	357.5	63,520.2	46,540.8	16,979.3	73.3%
2042	7,220.5	3,795.0	52.6%	363.8	63,512.9	48,813.2	14,699.7	76.9%
2043	7,388.0	3,883.0	52.6%	370.4	63,493.7	51,313.1	12,180.6	80.8%
2044	7,561.7	3,974.3	52.6%	377.2	63,469.6	54,066.7	9,402.9	85.2%
2045	7,741.0	4,068.6	52.6%	384.4	63,442.7	57,098.5	6,344.3	90.0%
Total Through 2045		\$70,632.6		\$7,213.4				

Funding Projections for the State Universities Retirement System
 CoGFA Projections Based on Laws in Effect on June 30, 2023 - Baseline
 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
2023					\$51,652.5	\$23,381.2	\$28,271.2	45.3%
2024	\$5,382.1	\$2,186.0	40.6%	\$323.5	52,381.9	24,050.1	28,331.8	45.9%
2025	5,642.7	2,249.8	39.9%	338.1	53,083.3	24,918.7	28,164.6	46.9%
2026	5,760.0	2,296.6	39.9%	340.7	53,715.7	25,077.6	28,638.2	46.7%
2027	5,883.8	2,333.0	39.7%	344.0	54,280.0	25,654.4	28,625.6	47.3%
2028	6,029.3	2,430.5	40.3%	349.1	54,774.6	26,294.2	28,480.4	48.0%
2029	6,187.9	2,494.5	40.3%	355.2	55,194.5	26,940.1	28,254.5	48.8%
2030	6,349.8	2,555.8	40.2%	361.6	55,541.0	27,595.1	27,945.9	49.7%
2031	6,518.0	2,620.8	40.2%	368.2	55,810.7	28,264.8	27,545.9	50.6%
2032	6,691.6	2,694.0	40.3%	375.2	56,002.0	28,961.9	27,040.2	51.7%
2033	6,871.1	2,775.6	40.4%	382.4	56,131.9	29,717.3	26,414.6	52.9%
2034	7,058.0	2,878.6	40.8%	390.0	56,200.4	30,559.8	25,640.6	54.4%
2035	7,253.1	2,960.7	40.8%	398.0	56,217.6	31,487.4	24,730.2	56.0%
2036	7,450.5	3,043.7	40.9%	406.1	56,177.6	32,504.6	23,673.0	57.9%
2037	7,651.7	3,128.3	40.9%	414.3	56,089.5	33,631.7	22,457.8	60.0%
2038	7,858.8	3,215.4	40.9%	422.8	55,956.3	34,884.4	21,071.9	62.3%
2039	8,072.0	3,304.9	40.9%	431.6	55,793.7	36,290.9	19,502.8	65.0%
2040	8,294.0	3,398.1	41.0%	440.8	55,598.4	37,862.1	17,736.3	68.1%
2041	8,517.8	3,492.1	41.0%	450.1	55,389.9	39,629.2	15,760.8	71.5%
2042	8,749.7	3,589.3	41.0%	459.9	55,176.3	41,614.9	13,561.4	75.4%
2043	8,988.1	3,689.2	41.0%	470.1	54,978.5	43,855.3	11,123.2	79.8%
2044	9,233.5	3,791.9	41.1%	480.7	54,792.5	46,363.0	8,429.6	84.6%
2045	9,482.8	3,896.2	41.1%	491.4	54,635.9	49,172.3	5,463.6	90.0%
Total Through 2045		\$65,025.0		\$8,793.8				

* Includes payroll from Self Managed Plan (SMP)

Exhibit 1A – SERS Projection (DROP Implementation Under HA 2 [Without Interest] – 3-Year Offer)

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Implement DROP Under House Floor Amendment No. 2 (Without Interest)
Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total 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						
2023							\$54,025.7	\$24,072.1	\$29,953.6	44.6%
2024	\$5,139.9	\$2,583.8	\$0.0	\$0.0	50.3%	\$287.0	55,189.9	25,172.1	30,017.8	45.6%
2025	5,223.0	2,553.4	0.8	0.7	48.9%	289.6	56,281.7	26,268.9	30,012.9	46.7%
2026	5,307.3	2,597.2	0.8	0.7	48.9%	292.4	57,295.8	26,653.5	30,642.2	46.5%
2027	5,391.3	2,635.5	0.8	0.6	48.9%	295.1	58,224.8	27,638.4	30,586.4	47.5%
2028	5,477.0	2,726.8	0.8	0.6	49.8%	297.8	59,069.4	28,671.8	30,397.6	48.5%
2029	5,569.8	2,751.3	0.8	0.6	49.4%	301.1	59,833.6	29,674.2	30,159.4	49.6%
2030	5,668.3	2,791.9	0.8	0.6	49.3%	304.8	60,521.3	30,667.1	29,854.2	50.7%
2031	5,772.3	2,836.3	0.9	0.5	49.1%	309.0	61,132.4	31,659.6	29,472.8	51.8%
2032	5,881.3	2,889.1	0.9	0.5	49.1%	313.2	61,648.8	32,647.4	29,001.4	53.0%
2033	5,992.3	2,948.5	0.9	0.5	49.2%	317.4	62,092.5	33,664.0	28,428.4	54.2%
2034	6,110.1	3,212.3	0.9	0.5	52.6%	321.9	62,463.9	34,927.5	27,536.4	55.9%
2035	6,231.9	3,276.3	0.9	0.4	52.6%	326.4	62,780.8	36,267.8	26,513.0	57.8%
2036	6,356.1	3,341.6	0.9	0.4	52.6%	330.9	63,030.3	37,683.0	25,347.3	59.8%
2037	6,482.8	3,408.2	1.0	0.4	52.6%	335.5	63,216.9	39,186.7	24,030.2	62.0%
2038	6,617.2	3,478.9	1.0	0.4	52.6%	340.6	63,350.3	40,800.8	22,549.5	64.4%
2039	6,758.7	3,553.3	1.0	0.4	52.6%	345.9	63,437.2	42,545.6	20,891.6	67.1%
2040	6,906.3	3,630.9	1.0	0.4	52.6%	351.5	63,483.5	44,442.8	19,040.8	70.0%
2041	7,059.9	3,711.6	1.1	0.3	52.6%	357.5	63,497.9	46,516.1	16,981.9	73.3%
2042	7,220.5	3,796.0	1.1	0.3	52.6%	363.8	63,491.5	48,790.3	14,701.2	76.8%
2043	7,388.0	3,884.1	1.1	0.3	52.6%	370.4	63,473.3	51,292.2	12,181.1	80.8%
2044	7,561.7	3,975.4	1.1	0.3	52.6%	377.2	63,450.3	54,048.0	9,402.3	85.2%
2045	7,741.0	4,069.7	1.2	0.3	52.6%	384.4	63,424.7	57,082.3	6,342.5	90.0%
Total Through 2045		\$70,652.1	\$19.8	\$9.7		\$7,213.4				

Exhibit 1B – SURS Projection (DROP Implementation Under HA 2 [Without Interest] – 3-Year Offer)

Funding Projections for the State Universities Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Implement DROP Under House Floor Amendment No. 2 (Without Interest)
Actuarially Assumed Rate of Return: 6.50%

(\$ 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	(Reduction)/ Increase in State Contribution						
2023							\$51,659.5	\$23,381.2	\$28,278.2	45.3%
2024	\$5,382.1	\$2,186.0	\$0.0	\$0.0	40.6%	\$323.5	52,388.4	24,050.1	28,338.4	45.9%
2025	5,642.7	2,250.1	0.2	0.2	39.9%	338.1	53,089.5	24,918.9	28,170.5	46.9%
2026	5,760.0	2,296.8	0.2	0.2	39.9%	340.7	53,721.6	25,078.0	28,643.6	46.7%
2027	5,883.8	2,333.2	0.2	0.2	39.7%	344.0	54,285.6	25,655.1	28,630.5	47.3%
2028	6,029.3	2,430.8	0.2	0.2	40.3%	349.1	54,780.1	26,295.2	28,484.9	48.0%
2029	6,187.9	2,494.8	0.2	0.2	40.3%	355.2	55,199.9	26,941.4	28,258.6	48.8%
2030	6,349.8	2,556.0	0.2	0.2	40.3%	361.6	55,546.3	27,596.7	27,949.6	49.7%
2031	6,518.0	2,621.0	0.2	0.2	40.2%	368.2	55,816.1	28,266.8	27,549.3	50.6%
2032	6,691.6	2,694.3	0.3	0.1	40.3%	375.2	56,004.1	28,960.8	27,043.3	51.7%
2033	6,871.1	2,775.9	0.3	0.1	40.4%	382.4	56,131.3	29,713.8	26,417.5	52.9%
2034	7,058.0	2,878.9	0.3	0.1	40.8%	390.0	56,197.9	30,554.5	25,643.4	54.4%
2035	7,253.1	2,961.0	0.3	0.1	40.8%	398.0	56,215.5	31,482.6	24,732.9	56.0%
2036	7,450.5	3,043.9	0.3	0.1	40.9%	406.1	56,176.1	32,500.5	23,675.6	57.9%
2037	7,651.7	3,128.6	0.3	0.1	40.9%	414.3	56,088.6	33,628.4	22,460.2	60.0%
2038	7,858.8	3,215.7	0.3	0.1	40.9%	422.8	55,956.0	34,881.9	21,074.2	62.3%
2039	8,072.0	3,305.2	0.3	0.1	40.9%	431.6	55,794.1	36,289.2	19,504.9	65.0%
2040	8,294.0	3,398.4	0.3	0.1	41.0%	440.8	55,599.5	37,861.4	17,738.2	68.1%
2041	8,517.8	3,492.4	0.3	0.1	41.0%	450.1	55,391.9	39,629.5	15,762.5	71.5%
2042	8,749.7	3,589.7	0.3	0.1	41.0%	459.9	55,179.2	41,616.3	13,562.8	75.4%
2043	8,988.1	3,689.5	0.3	0.1	41.0%	470.1	54,982.4	43,858.0	11,124.4	79.8%
2044	9,233.5	3,792.2	0.4	0.1	41.1%	480.7	54,797.4	46,367.0	8,430.5	84.6%
2045	9,482.8	3,896.6	0.4	0.1	41.1%	491.4	54,641.9	49,177.8	5,464.2	90.0%
Total Through 2045		\$65,031.0	\$5.8	\$2.8		\$8,793.8				

* Includes payroll from Self Managed Plan (SMP)

Exhibit 2A – SERS Projection (DROP Implementation Under HA 3 [With Interest] – 3-Year Offer)

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Implement DROP Under House Floor Amendment No. 3 (With Interest)

Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total 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						
2023							\$54,043.2	\$24,072.1	\$29,971.1	44.5%
2024	\$5,139.9	\$2,583.8	\$0.0	\$0.0	50.3%	\$287.0	55,207.1	25,172.1	30,035.0	45.6%
2025	5,223.0	2,554.3	1.6	1.5	48.9%	289.6	56,298.8	26,269.8	30,029.1	46.7%
2026	5,307.3	2,598.1	1.7	1.4	49.0%	292.4	57,312.9	26,655.4	30,657.5	46.5%
2027	5,391.3	2,636.4	1.7	1.4	48.9%	295.1	58,242.0	27,641.3	30,600.7	47.5%
2028	5,477.0	2,727.7	1.7	1.3	49.8%	297.8	59,086.9	28,675.8	30,411.1	48.5%
2029	5,569.8	2,752.2	1.8	1.2	49.4%	301.1	59,851.6	29,679.5	30,172.1	49.6%
2030	5,668.3	2,792.8	1.8	1.2	49.3%	304.8	60,539.8	30,673.7	29,866.1	50.7%
2031	5,772.3	2,837.3	1.8	1.1	49.2%	309.0	61,151.7	31,667.7	29,484.0	51.8%
2032	5,881.3	2,890.1	1.9	1.1	49.1%	313.2	61,662.8	32,650.8	29,012.0	53.0%
2033	5,992.3	2,949.5	1.9	1.0	49.2%	317.4	62,102.0	33,663.4	28,438.5	54.2%
2034	6,110.1	3,213.3	1.9	1.0	52.6%	321.9	62,469.1	34,923.1	27,546.0	55.9%
2035	6,231.9	3,277.4	2.0	0.9	52.6%	326.4	62,786.7	36,264.4	26,522.3	57.8%
2036	6,356.1	3,342.7	2.0	0.9	52.6%	330.9	63,036.7	37,680.7	25,356.0	59.8%
2037	6,482.8	3,409.3	2.0	0.8	52.6%	335.5	63,224.0	39,185.6	24,038.4	62.0%
2038	6,617.2	3,480.0	2.1	0.8	52.6%	340.6	63,358.2	40,801.0	22,557.2	64.4%
2039	6,758.7	3,554.4	2.1	0.8	52.6%	345.9	63,445.9	42,547.3	20,898.6	67.1%
2040	6,906.3	3,632.0	2.2	0.7	52.6%	351.5	63,493.0	44,446.0	19,047.0	70.0%
2041	7,059.9	3,712.8	2.2	0.7	52.6%	357.5	63,508.3	46,521.0	16,987.4	73.3%
2042	7,220.5	3,797.2	2.3	0.7	52.6%	363.8	63,502.9	48,797.0	14,705.9	76.8%
2043	7,388.0	3,885.3	2.3	0.7	52.6%	370.4	63,485.7	51,300.9	12,184.8	80.8%
2044	7,561.7	3,976.7	2.4	0.6	52.6%	377.2	63,463.9	54,058.9	9,405.0	85.2%
2045	7,741.0	4,071.0	2.4	0.6	52.6%	384.4	63,439.4	57,095.5	6,343.9	90.0%
Total Through 2045		\$70,674.3	\$41.8	\$20.4		\$7,213.4				

Exhibit 2B – SURS Projection (DROP Implementation Under HA 3 [With Interest] – 3-Year Offer)

Funding Projections for the State Universities Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Implement DROP Under House Floor Amendment No. 3 (With Interest)

Actuarially Assumed Rate of Return: 6.50%

(\$ 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	(Reduction)/ Increase in State Contribution						
2023							\$51,661.5	\$23,381.2	\$28,280.3	45.3%
2024	\$5,382.1	\$2,186.0	\$0.0	\$0.0	40.6%	\$323.5	52,390.5	24,050.1	28,340.4	45.9%
2025	5,642.7	2,250.2	0.3	0.3	39.9%	338.1	53,091.6	24,919.1	28,172.5	46.9%
2026	5,760.0	2,296.9	0.3	0.3	39.9%	340.7	53,723.8	25,078.3	28,645.5	46.7%
2027	5,883.8	2,333.4	0.3	0.3	39.7%	344.0	54,287.9	25,655.5	28,632.3	47.3%
2028	6,029.3	2,430.9	0.4	0.3	40.3%	349.1	54,782.4	26,295.7	28,486.7	48.0%
2029	6,187.9	2,494.9	0.4	0.3	40.3%	355.2	55,202.3	26,942.1	28,260.3	48.8%
2030	6,349.8	2,556.1	0.4	0.2	40.3%	361.6	55,548.8	27,597.6	27,951.2	49.7%
2031	6,518.0	2,621.1	0.4	0.2	40.2%	368.2	55,818.8	28,267.9	27,550.8	50.6%
2032	6,691.6	2,694.4	0.4	0.2	40.3%	375.2	56,005.6	28,960.8	27,044.8	51.7%
2033	6,871.1	2,776.0	0.4	0.2	40.4%	382.4	56,131.9	29,712.9	26,419.0	52.9%
2034	7,058.0	2,879.1	0.4	0.2	40.8%	390.0	56,197.6	30,552.9	25,644.7	54.4%
2035	7,253.1	2,961.1	0.4	0.2	40.8%	398.0	56,215.3	31,481.1	24,734.2	56.0%
2036	7,450.5	3,044.1	0.4	0.2	40.9%	406.1	56,175.9	32,499.1	23,676.8	57.9%
2037	7,651.7	3,128.7	0.4	0.2	40.9%	414.3	56,088.6	33,627.2	22,461.4	60.0%
2038	7,858.8	3,215.8	0.5	0.2	40.9%	422.8	55,956.0	34,880.8	21,075.2	62.3%
2039	8,072.0	3,305.4	0.5	0.2	40.9%	431.6	55,794.2	36,288.3	19,505.9	65.0%
2040	8,294.0	3,398.6	0.5	0.2	41.0%	440.8	55,599.7	37,860.7	17,739.0	68.1%
2041	8,517.8	3,492.6	0.5	0.2	41.0%	450.1	55,392.2	39,629.0	15,763.2	71.5%
2042	8,749.7	3,589.8	0.5	0.2	41.0%	459.9	55,179.5	41,616.1	13,563.4	75.4%
2043	8,988.1	3,689.7	0.5	0.2	41.1%	470.1	54,982.8	43,858.0	11,124.8	79.8%
2044	9,233.5	3,792.4	0.5	0.1	41.1%	480.7	54,798.0	46,367.3	8,430.7	84.6%
2045	9,482.8	3,896.8	0.6	0.1	41.1%	491.4	54,642.6	49,178.4	5,464.3	90.0%
Total Through 2045		\$65,034.0	\$9.0	\$4.5		\$8,793.8				

* Includes payroll from Self Managed Plan (SMP)

Exhibit 3A – SERS Projection (Members of Depts. of Lottery and Juvenile Justice Eligible for Alternative Formula)

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Alternative Formula Eligibility for Departments of Lottery and Juvenile Justice
Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total 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 Present Value of State Contribution						
2023							\$54,104.3	\$24,072.1	\$30,032.1	44.5%
2024	\$5,139.9	\$2,583.8	\$0.0	\$0.0	50.3%	\$287.7	55,289.7	25,172.5	30,117.2	45.5%
2025	5,222.6	2,576.9	24.2	22.0	49.3%	290.1	56,403.7	26,293.1	30,110.6	46.6%
2026	5,306.8	2,621.0	24.5	20.8	49.4%	292.8	57,441.1	26,702.8	30,738.2	46.5%
2027	5,390.6	2,659.5	24.8	19.8	49.3%	295.4	58,394.8	27,713.9	30,680.9	47.5%
2028	5,476.2	2,751.3	25.3	18.8	50.2%	298.1	59,265.4	28,774.8	30,490.6	48.6%
2029	5,569.1	2,776.2	25.7	18.0	49.8%	301.4	60,056.8	29,805.8	30,251.1	49.6%
2030	5,667.7	2,817.2	26.2	17.1	49.7%	305.1	60,772.7	30,827.9	29,944.8	50.7%
2031	5,771.7	2,862.2	26.7	16.4	49.6%	309.2	61,413.0	31,850.4	29,562.5	51.9%
2032	5,880.4	2,915.4	27.1	15.6	49.6%	313.4	61,974.8	32,884.2	29,090.6	53.1%
2033	5,991.2	2,975.1	27.5	14.8	49.7%	317.5	62,461.5	33,944.1	28,517.3	54.3%
2034	6,108.5	3,239.1	27.7	14.0	53.0%	321.9	62,874.0	35,248.8	27,625.2	56.1%
2035	6,229.5	3,303.3	27.9	13.2	53.0%	326.5	63,218.0	36,616.2	26,601.8	57.9%
2036	6,352.4	3,368.5	27.8	12.3	53.0%	330.9	63,491.0	38,054.9	25,436.1	59.9%
2037	6,477.4	3,434.8	27.5	11.4	53.0%	335.4	63,696.7	39,578.0	24,118.7	62.1%
2038	6,609.5	3,504.8	26.9	10.4	53.0%	340.3	63,842.4	41,205.3	22,637.1	64.5%
2039	6,748.2	3,578.4	26.1	9.5	53.0%	345.5	63,933.5	42,956.3	20,977.2	67.2%
2040	6,892.7	3,655.0	25.2	8.6	53.0%	350.9	63,972.6	44,850.0	19,122.6	70.1%
2041	7,042.6	3,734.5	23.9	7.6	53.0%	356.7	63,965.7	46,908.0	17,057.8	73.3%
2042	7,199.6	3,817.7	22.7	6.8	53.0%	362.8	63,922.5	49,154.3	14,768.2	76.9%
2043	7,363.3	3,904.5	21.5	6.0	53.0%	369.2	63,847.0	51,611.7	12,235.3	80.8%
2044	7,532.3	3,994.1	19.8	5.2	53.0%	375.8	63,743.5	54,303.1	9,440.5	85.2%
2045	7,707.9	4,087.3	18.7	4.6	53.0%	382.8	63,615.7	57,254.1	6,361.6	90.0%
Total Through 2045		\$71,160.6	\$527.7	\$272.9		\$7,209.4				

Exhibit 4A – SERS Projection (Combined Changes Under HA 2 [Without Interest])

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Combined Changes Under House Floor Amendment No. 2 (Without Interest)
Actuarially Assumed Rate of Return: 6.75%

(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total 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 Present Value of State Contribution						
2023							\$54,127.3	\$24,072.1	\$30,055.1	44.5%
2024	\$5,139.9	\$2,583.8	\$0.0	\$0.0	50.3%	\$287.7	55,311.1	25,172.5	30,138.6	45.5%
2025	5,222.6	2,577.6	25.0	22.7	49.4%	290.1	56,423.8	26,293.9	30,129.9	46.6%
2026	5,306.8	2,621.8	25.3	21.5	49.4%	292.8	57,460.0	26,704.5	30,755.5	46.5%
2027	5,390.6	2,660.3	25.6	20.4	49.4%	295.4	58,412.8	27,716.5	30,696.3	47.4%
2028	5,476.2	2,752.1	26.1	19.4	50.3%	298.1	59,282.8	28,778.5	30,504.3	48.5%
2029	5,569.1	2,777.0	26.6	18.5	49.9%	301.4	60,073.8	29,810.5	30,263.3	49.6%
2030	5,667.7	2,818.1	27.1	17.7	49.7%	305.1	60,789.5	30,833.8	29,955.7	50.7%
2031	5,771.7	2,863.1	27.6	16.9	49.6%	309.2	61,429.9	31,857.7	29,572.2	51.9%
2032	5,880.4	2,916.2	28.0	16.1	49.6%	313.4	61,975.5	32,876.2	29,099.2	53.0%
2033	5,991.2	2,976.0	28.4	15.3	49.7%	317.5	62,448.3	33,923.2	28,525.1	54.3%
2034	6,108.5	3,240.0	28.6	14.4	53.0%	321.9	62,848.1	35,215.7	27,632.3	56.0%
2035	6,229.5	3,304.2	28.8	13.6	53.0%	326.5	63,192.4	36,583.9	26,608.5	57.9%
2036	6,352.4	3,369.4	28.7	12.7	53.0%	330.9	63,465.7	38,023.5	25,442.2	59.9%
2037	6,477.4	3,435.7	28.5	11.8	53.0%	335.4	63,671.9	39,547.6	24,124.2	62.1%
2038	6,609.5	3,505.8	27.8	10.8	53.0%	340.3	63,818.1	41,176.1	22,642.0	64.5%
2039	6,748.2	3,579.4	27.1	9.8	53.0%	345.5	63,909.7	42,928.4	20,981.3	67.2%
2040	6,892.7	3,656.0	26.2	8.9	53.0%	350.9	63,949.5	44,823.5	19,126.0	70.1%
2041	7,042.6	3,735.5	24.9	8.0	53.0%	356.7	63,943.4	46,883.1	17,060.3	73.3%
2042	7,199.6	3,818.8	23.8	7.1	53.0%	362.8	63,901.1	49,131.3	14,769.8	76.9%
2043	7,363.3	3,905.6	22.6	6.3	53.0%	369.2	63,826.6	51,590.8	12,235.8	80.8%
2044	7,532.3	3,995.3	20.9	5.5	53.0%	375.8	63,724.2	54,284.3	9,439.9	85.2%
2045	7,707.9	4,088.4	19.9	4.9	53.0%	382.8	63,597.6	57,237.8	6,359.8	90.0%
Total Through 2045		\$71,180.1	\$547.5	\$282.3		\$7,209.4				

Exhibit 5A – SERS Projection (Combined Changes Under HA 3 [With Interest])

Funding Projections for the State Employees' Retirement System

CoGFA Projections Based on Laws in Effect on June 30, 2023, Combined Changes Under House Floor Amendment No. 3 (With Interest)
Actuarially Assumed Rate of Return: 6.75%
(\$ in millions)

Fiscal Year Ending 6/30	Annual Payroll	Total 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						
2023							\$54,144.8	\$24,072.1	\$30,072.7	44.5%
2024	\$5,139.9	\$2,583.8	\$0.0	\$0.0	50.3%	\$287.7	55,328.3	25,172.5	30,155.8	45.5%
2025	5,222.6	2,578.5	25.9	23.5	49.4%	290.1	56,440.9	26,294.8	30,146.1	46.6%
2026	5,306.8	2,622.7	26.2	22.3	49.4%	292.8	57,477.1	26,706.4	30,770.7	46.5%
2027	5,390.6	2,661.2	26.5	21.1	49.4%	295.4	58,430.0	27,719.5	30,710.6	47.4%
2028	5,476.2	2,753.0	27.0	20.1	50.3%	298.1	59,300.3	28,782.5	30,517.8	48.5%
2029	5,569.1	2,778.0	27.5	19.2	49.9%	301.4	60,091.8	29,815.8	30,276.0	49.6%
2030	5,667.7	2,819.0	28.0	18.3	49.7%	305.1	60,808.1	30,840.5	29,967.6	50.7%
2031	5,771.7	2,864.0	28.6	17.5	49.6%	309.2	61,449.2	31,865.7	29,583.5	51.9%
2032	5,880.4	2,917.2	29.0	16.6	49.6%	313.4	61,989.4	32,879.6	29,109.9	53.0%
2033	5,991.2	2,977.0	29.4	15.8	49.7%	317.5	62,457.8	33,922.6	28,535.2	54.3%
2034	6,108.5	3,241.1	29.6	14.9	53.1%	321.9	62,853.3	35,211.4	27,641.9	56.0%
2035	6,229.5	3,305.3	29.9	14.1	53.1%	326.5	63,198.2	36,580.6	26,617.6	57.9%
2036	6,352.4	3,370.5	29.8	13.2	53.1%	330.9	63,472.1	38,021.2	25,450.9	59.9%
2037	6,477.4	3,436.8	29.5	12.2	53.1%	335.4	63,679.0	39,546.6	24,132.4	62.1%
2038	6,609.5	3,506.9	28.9	11.2	53.1%	340.3	63,825.9	41,176.3	22,649.6	64.5%
2039	6,748.2	3,580.5	28.2	10.2	53.1%	345.5	63,918.3	42,930.0	20,988.3	67.2%
2040	6,892.7	3,657.2	27.3	9.3	53.1%	350.9	63,958.9	44,826.7	19,132.2	70.1%
2041	7,042.6	3,736.7	26.1	8.3	53.1%	356.7	63,953.8	46,888.0	17,065.7	73.3%
2042	7,199.6	3,820.0	25.0	7.5	53.1%	362.8	63,912.4	49,138.0	14,774.4	76.9%
2043	7,363.3	3,906.9	23.9	6.7	53.1%	369.2	63,838.9	51,599.5	12,239.5	80.8%
2044	7,532.3	3,996.5	22.2	5.8	53.1%	375.8	63,737.7	54,295.2	9,442.5	85.2%
2045	7,707.9	4,089.7	21.1	5.2	53.1%	382.8	63,612.3	57,251.0	6,361.2	90.0%
Total Through 2045		\$71,202.5	\$569.6	\$293.0		\$7,209.4				