Connecticut Pension Stress Test
State Employees Retirement System (SERS) and Teacher Retirement System (TRS)

Pursuant to Title 4, Ch 50m, Sec 4-68ee of the Connecticut General Statutes, this report contains a stress test analysis for the Connecticut State Employees Retirement System (SERS) and the Teachers Retirement System (TRS). The analysis was prepared based on the results of the most recently published annual actuarial valuation for SERS (2023) and for TRS (2023).

The SERS results were rolled forward one year to account for the actual FY 2024 investment return of 11.52%, along with $514 million supplemental contribution scheduled for early FY 2025 ($335 million paid October 2024, and another 179 million scheduled to be paid in December 2024).

The TRS results were rolled forward one year to account for the actual investment return of 11.50% in FY 2024, as well as $420.1 million in supplemental contributions scheduled for early FY 2025 ($273.2 million paid October 2024, and another $146.9 million scheduled to be paid in December 2024).

The report is divided into four sections: 1) 24-year baseline projection 2) Stress test analysis 3) Sensitivity analysis and 4) budget impact analysis. Results are presented on a combined basis that includes both SERS and TRS to provide a wholistic view of pension funding and costs from a statewide perspective. Plan-specific results for the stress test are included as Exhibits 1-6.

Key Findings from the analysis include:

- Baseline contribution requirements are projected to remain stable at approximately $3.6 billion per year for the next 20 years until the Unfunded Liability is paid off in FY 2047. This combined result reflects modest contribution reductions for SERS over this time period and modest growth for TRS.
- Without the recent supplemental payments totaling $930 million, the annual contribution plateau would have occurred around $3.7 billion per year and cost the state an additional $2.1 billion over the projection period.
- Funding levels will continue to improve over time even when investments underperform if contributions are adjusted according to the funding policy. Maintaining baseline contribution patterns in an asset shock scenario, which includes a significant asset loss in FY 2025, instead of following the Actuarially Determined Contribution (ADC) would lead to slower funding recovery for both SERS and TRS and persistently low operating cash flow ratio for SERS.
- In the near term, the asset shock scenario causes contribution requirements to grow faster than projected revenues over the next 5 years, potentially leading to budget crowd out. Increases at TRS drive this growth, increasing approximately 10% per year on average from FY 27-30 under these scenarios.

Baseline Projections

The starting point for this risk assessment is a 24-Year baseline projection of combined SERS and TRS funding levels and required employer contributions under a scenario where all assumptions are met each year, including the 6.9% assumed rate of return on investments. As of June 30,2024, SERS was 52% funded on an actuarial value basis with a total Unfunded Liability of $20 billion while TRS was 60% funded with an Unfunded Liability of $16 billion.

The combined funded percentage increases by 3% in 2024 from the level in 2023 (see Figure 1), and the Unfunded Liability decreases by approximately $1.7 billion (see Figure 2). This is largely due to a combination of an investment return greater than the plans' assumed rate, and the State's additional contribution of $934 million. From there, the plans follow a steady path of paying down the Unfunded Liability until reaching full funding in FY 2047.

Employer required contributions are projected to be relatively level in dollar terms (see Figure 4) until the Unfunded Liability is eliminated in FY 2047. This will cause the projected required employer contributions to steadily decrease as a percentage of payroll.


Figure 1: SERS & TRS Funded Ratio
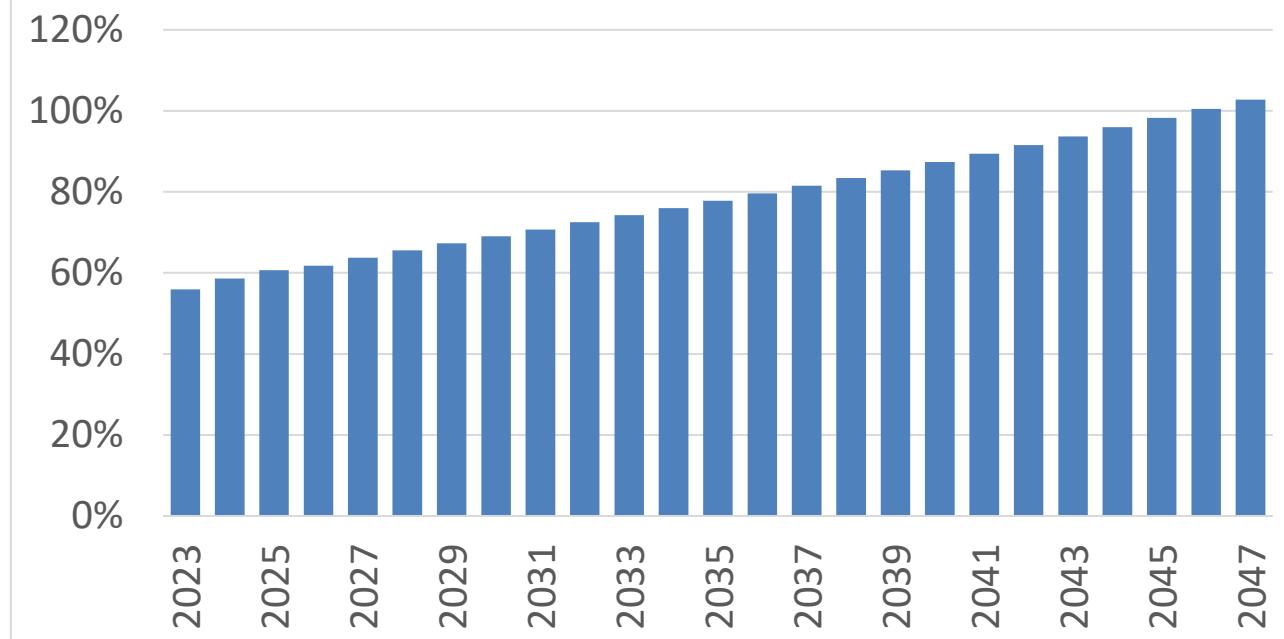
Figure 2: SERS & TRS Unfunded Liability
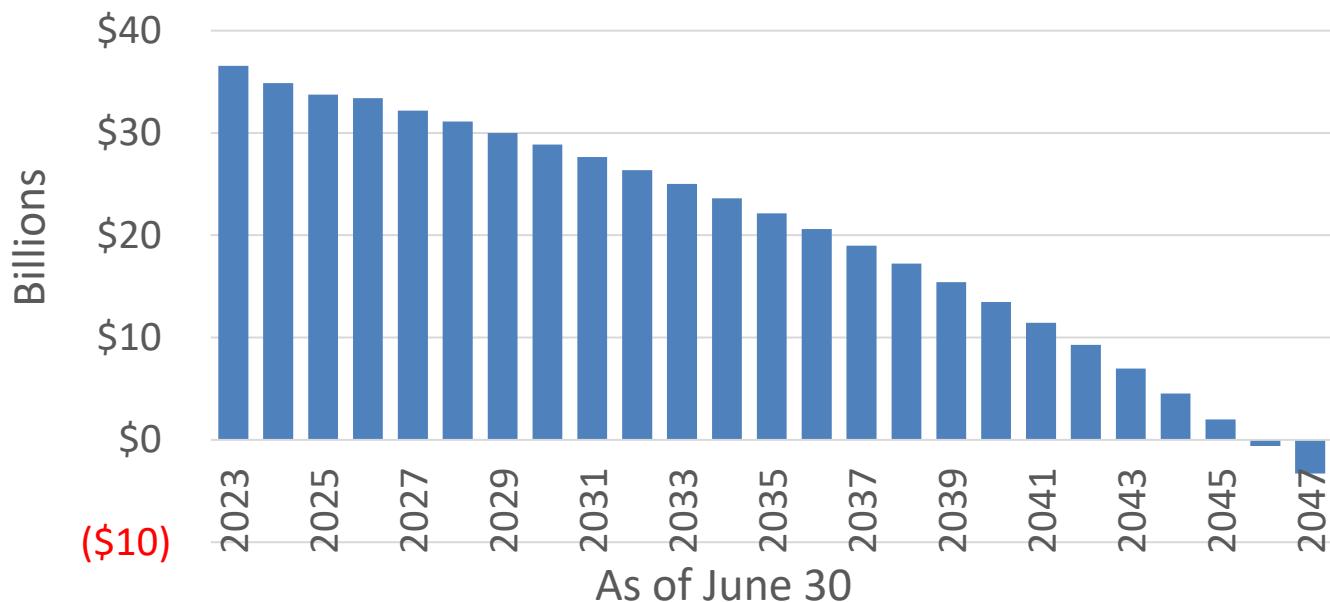
Figure 3: SERS & TRS Required Employer Contribution Rate
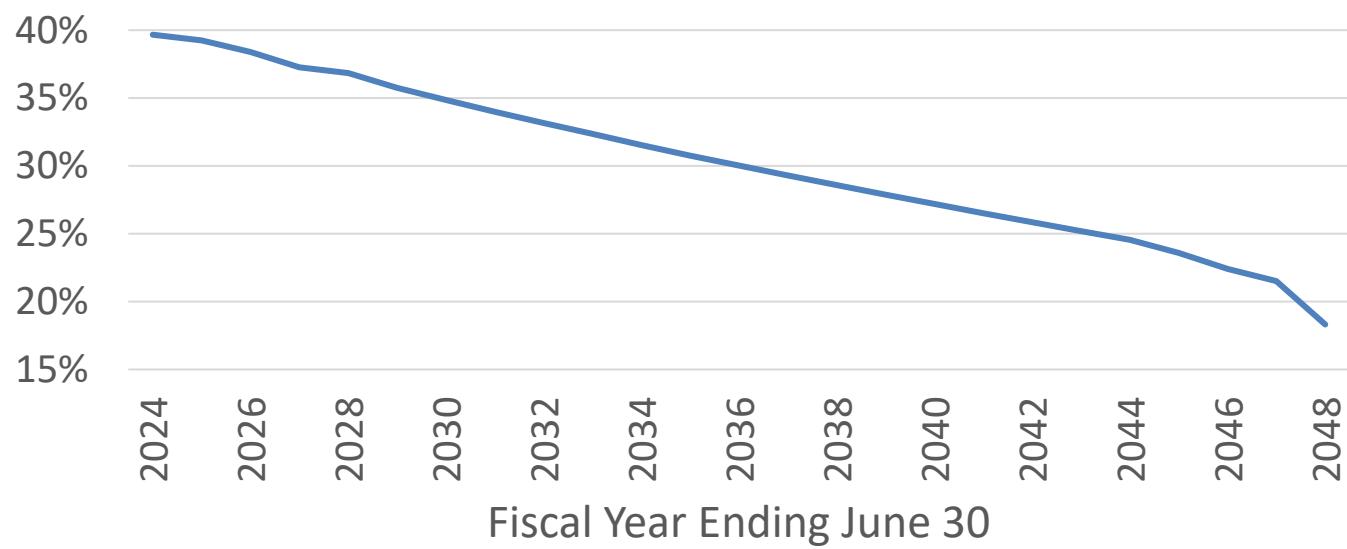
Figure 4: SERS & TRS Required Employer Contribution
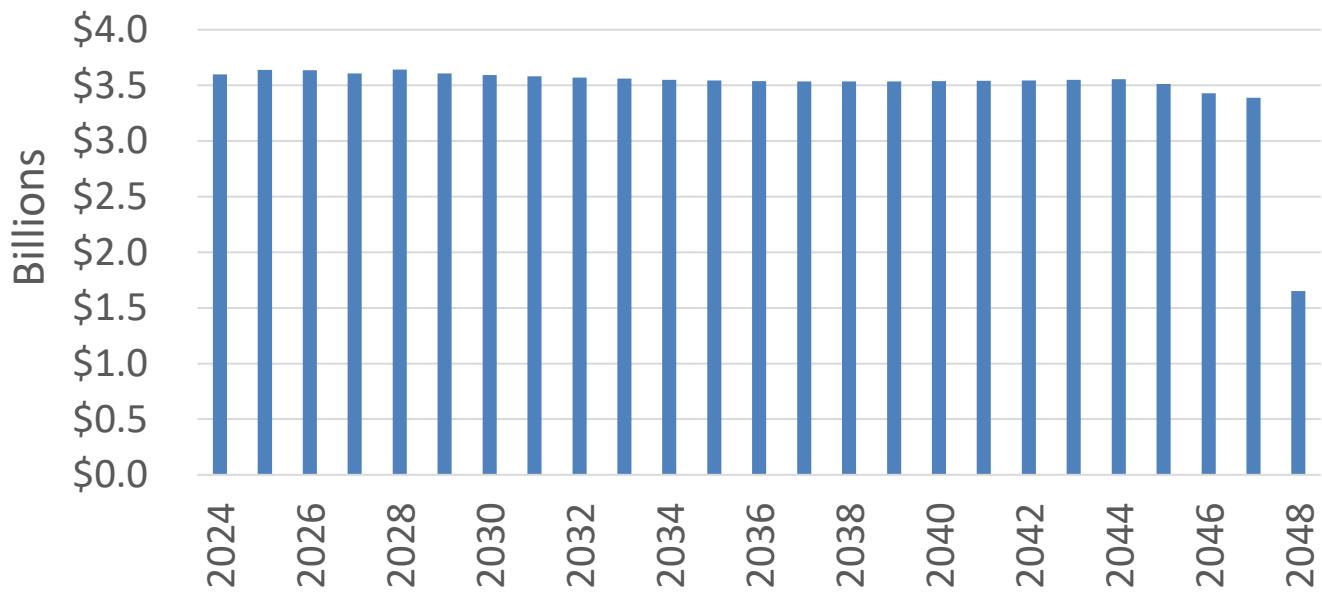
- As noted previously, these projections include the recent supplemental payments totaling more than $900 million. Had these additional payments not occurred, the annual contribution plateau would have occurred at a level of approximately $3.7 billion and cost the state an additional $2.1 billion over the projection period.

Stress Test Analysis

Traditionally, of all aspects of pension funding, investment returns have the largest impact on the plans funded percentage and contribution requirements. This impact is even more significant if the plan sponsor does not continue make the Actuarially Determined Contribution (ADC).

Scenario 1: Investment Returns Above and Below

Assumptions	Baseline	2% Above	2% Below
Investment Return	6.9%	8.9%	4.9%
Contribution Behavior	Full ADC	Full ADC	Full ADC

Scenario 1 analyzes the sensitivity of pension funding levels and employer contribution requirements to investment returns above and below the 6.9% assumed rate.

Figure 5: Funded Ratio - SERS & TRS
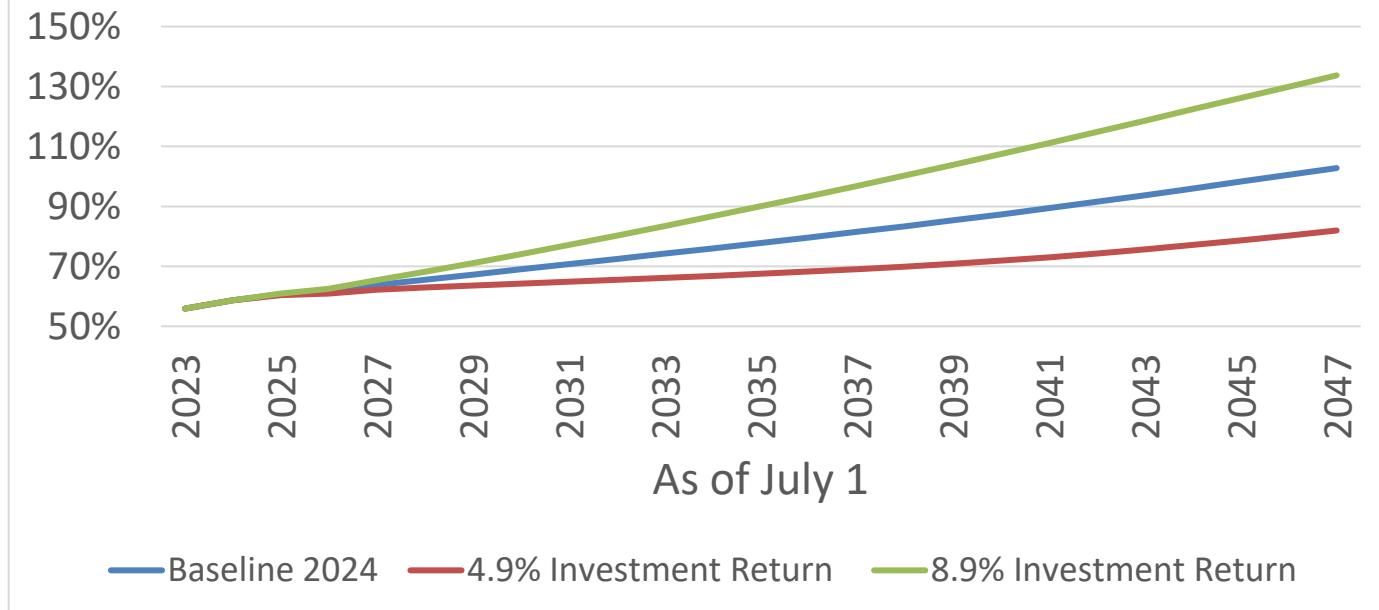
Figure 6: Unfunded Accrued Liability - SERS & TRS

Legend: Baseline 2024 — 4.9% Investment Return — 8.9% Investment Return
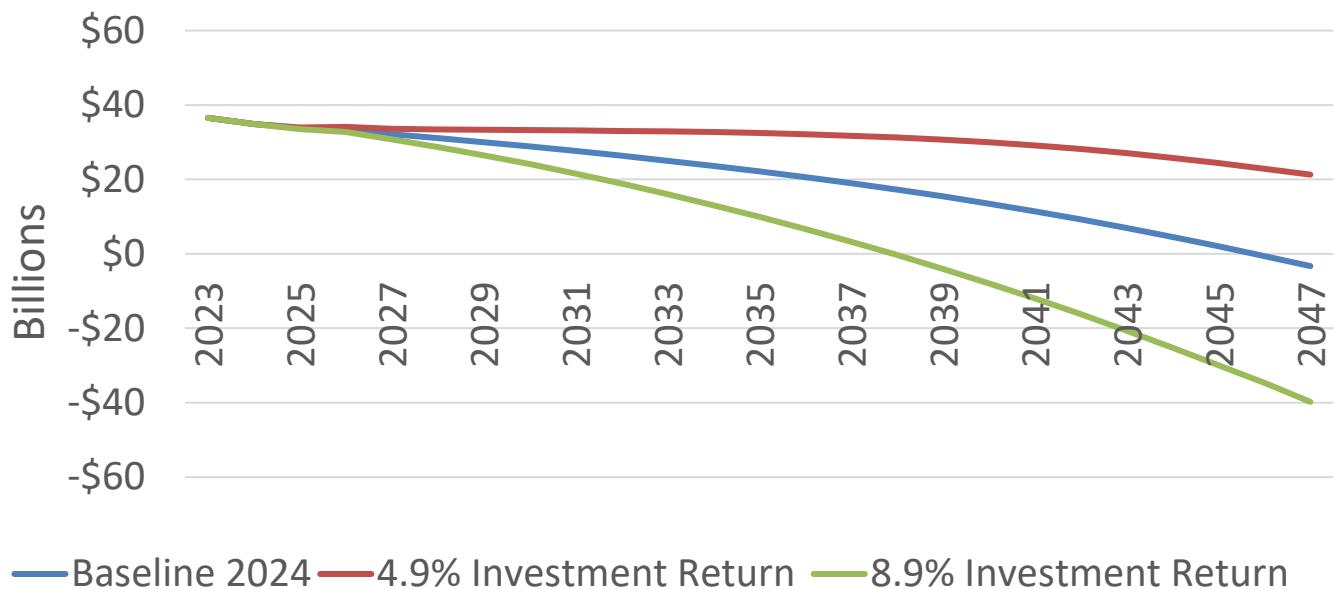
Combined funding levels improve under all three scenarios as asset levels rise when the State continues to make the ADC. The excess investment returns accelerate the full funding date by six years in the 2% Above scenario while funding peaks at 80% when returns fall short of the assumed rate (see Figure 5). This is true even though the ADC is lower under the 2% Above scenario, and higher under the 2% Below scenario, as shown in Figures 7 and 8.

Figure 7: Employer Contribution Rates - SERS & TRS

Fiscal Year Ending June 30

— Baseline   — 4.9% Investment Return   — 8.9% Investment Return
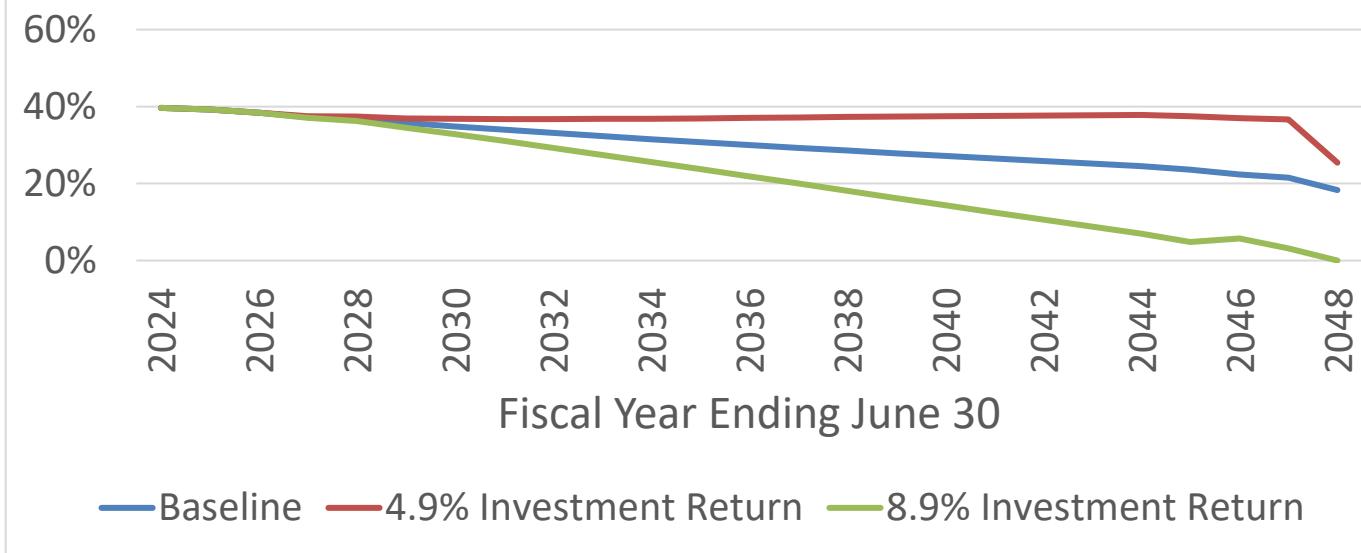
Figure 8: Employer Contribution - SERS & TRS

— Baseline Contribution   — 4.9% Contribution   — 8.9% Contribution
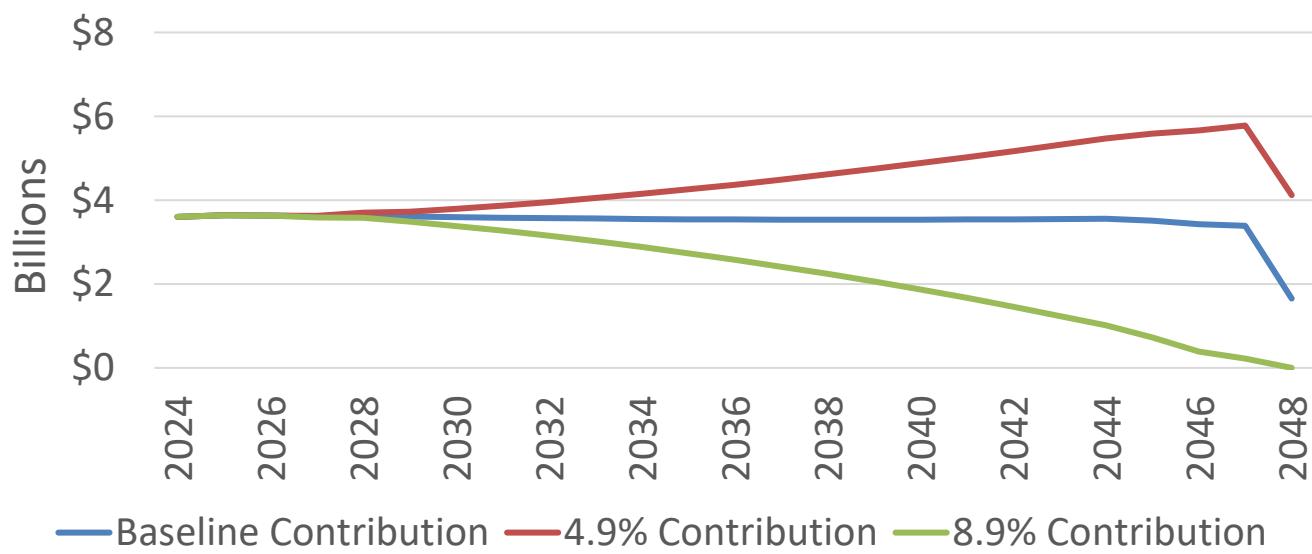
Required Employer Contribution decline in both dollar terms (see Figure 7) and as a percentage of pay (see Figure 8) under the 2% Above scenario. They are projected to increase dollar terms and hold relatively steady as a percentage of pay under the 2% Below scenario. In dollars over the projection period, these returns require total contributions that range from $58 billion in the 2% Above scenario to $107 billion in the 2% Below scenario.

Scenario 2: -20% Asset Shock

Assumptions	Baseline	2% Below	Asset Shock
Investment Return	6.9%	4.9%	FY 25: -20% FY 26: 10% FY 27-47: 6.9%
Contribution Behavior	Full ADC	Full ADC	Full ADC

Scenario 2 analyzes the impacts of a large investment loss and recovery period followed by expected returns over the long term.

Figure 9: Funded Ratio - SERS & TRS
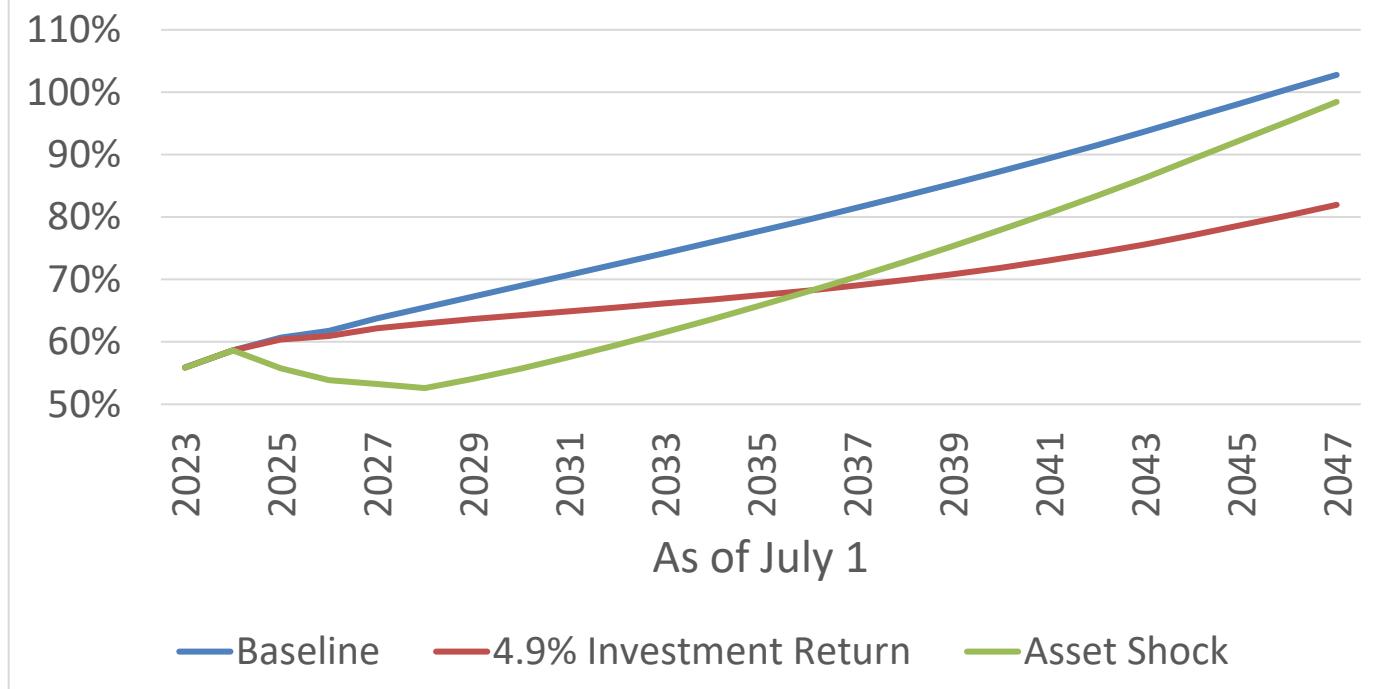
Figure 10: Unfunded Accrued Liability - SERS & TRS
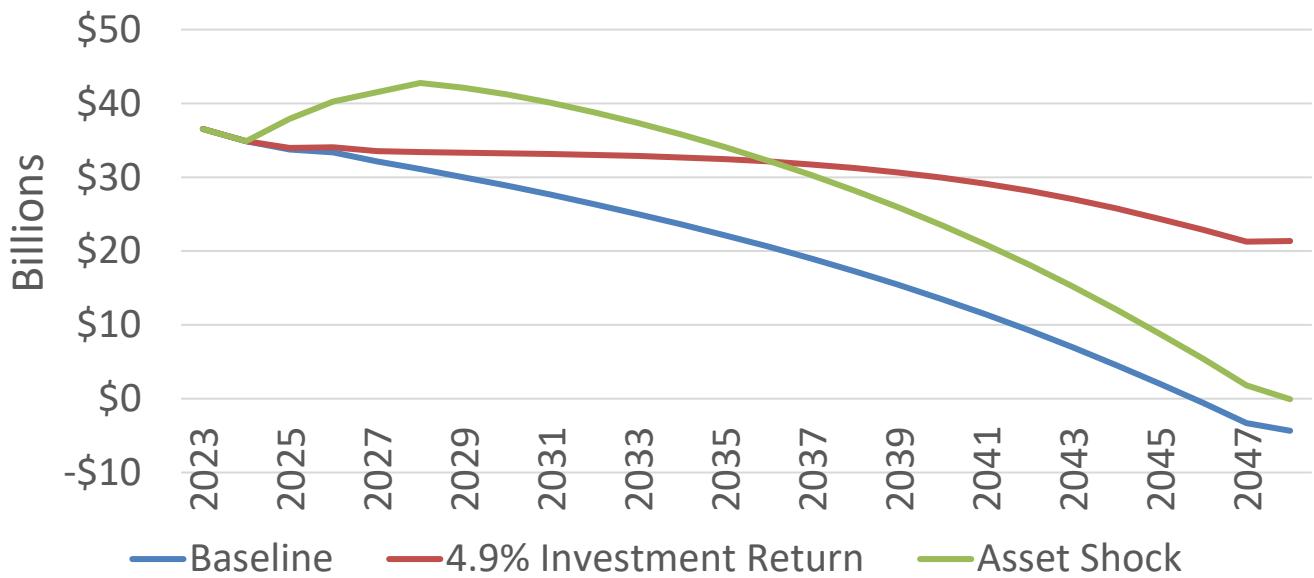
The initial asset loss in FY 2025 drives funding levels down to 53% by June 30, 2028, 13 percentage points below the baseline (see Figure 9). The impact of the loss is phased in over a 5-year period due to the asset smoothing method employed by the pension plans' actuary, and is offset slightly by the positive 10% return in FY 2026. Once the impact of the large asset loss is fully phased in, funding steadily improves as contribution requirements rise and asset levels recover.

Figure 11: Employer Contribution Rates - SERS & TRS

Fiscal Year Ending June 30

Baseline — 4.9% Investment Return — Asset Shock
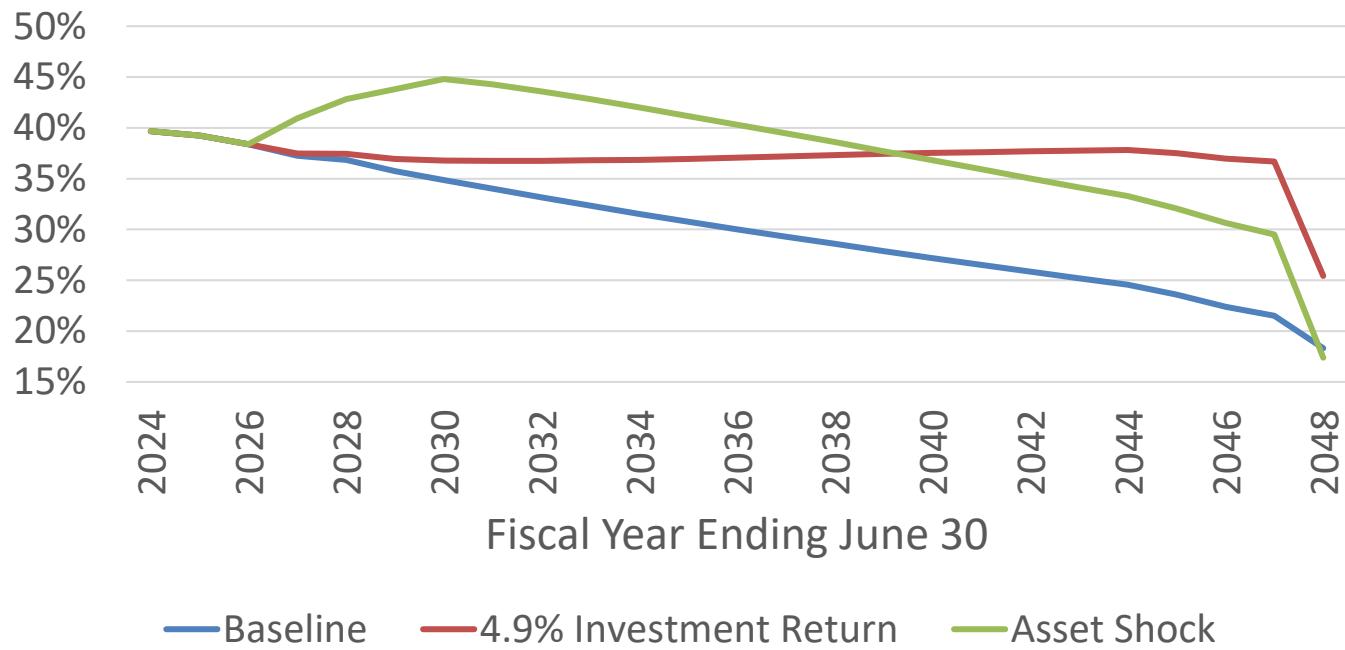
Figure 12: Employer Contribution - SERS & TRS
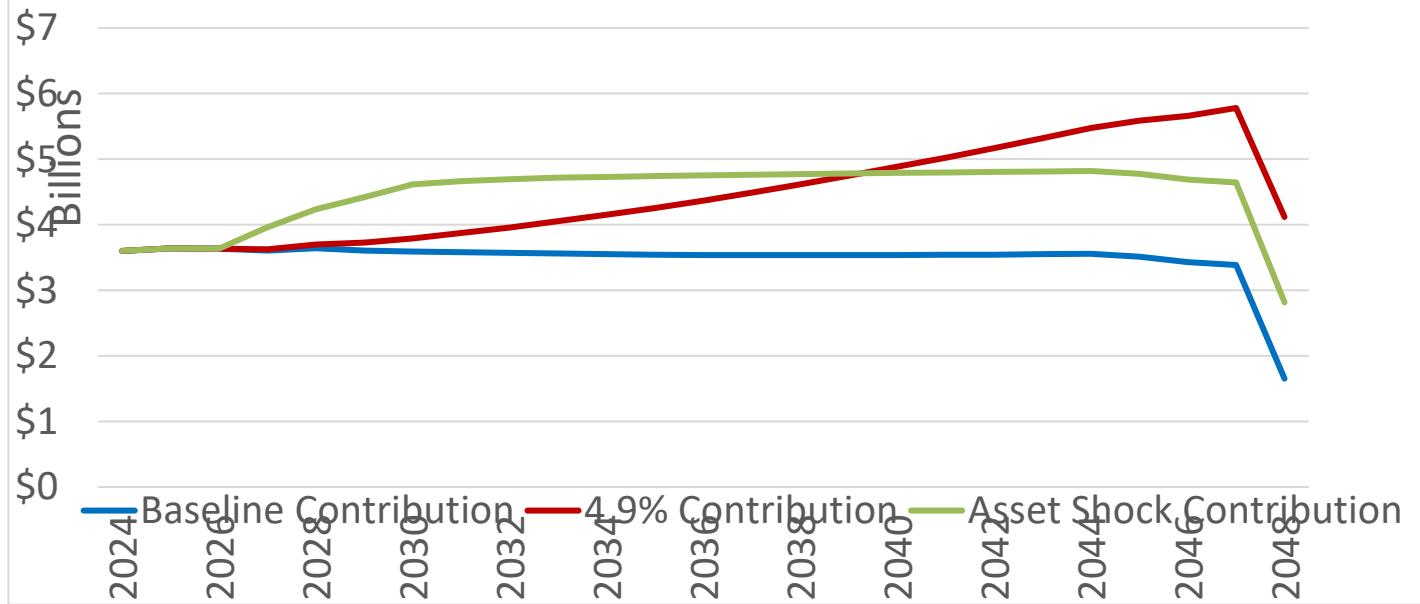
The asset shock causes contribution rates to rise from 45% of pay by FY 2030, an increase of 10% of pay over the baseline scenario, before declining back below 40% by FY 2037 (see Figure 11). Combined total contributions under the Asset Shock scenario over the full projection period are projected to be approximately $112 billion.

Scenario 3: Asset Shock with Contribution Risk

Assumptions		Asset Shock, Full ADC	Asset Shock, Partial ADC
Investment Return		FY 25: -20% FY 26: 10% FY 27-47: 4.9%	FY 25: -20% FY 26: 10% FY 27-47: 4.9%
Contribution Behavior		Full ADC	Baseline Contributions

Scenario 3 analyzes the impact on plan funding under an asset shock scenario if contributions are held constant at baseline levels instead of rising as required under the funding policy.

Figure 13: Funded Ratio - SERS & TRS
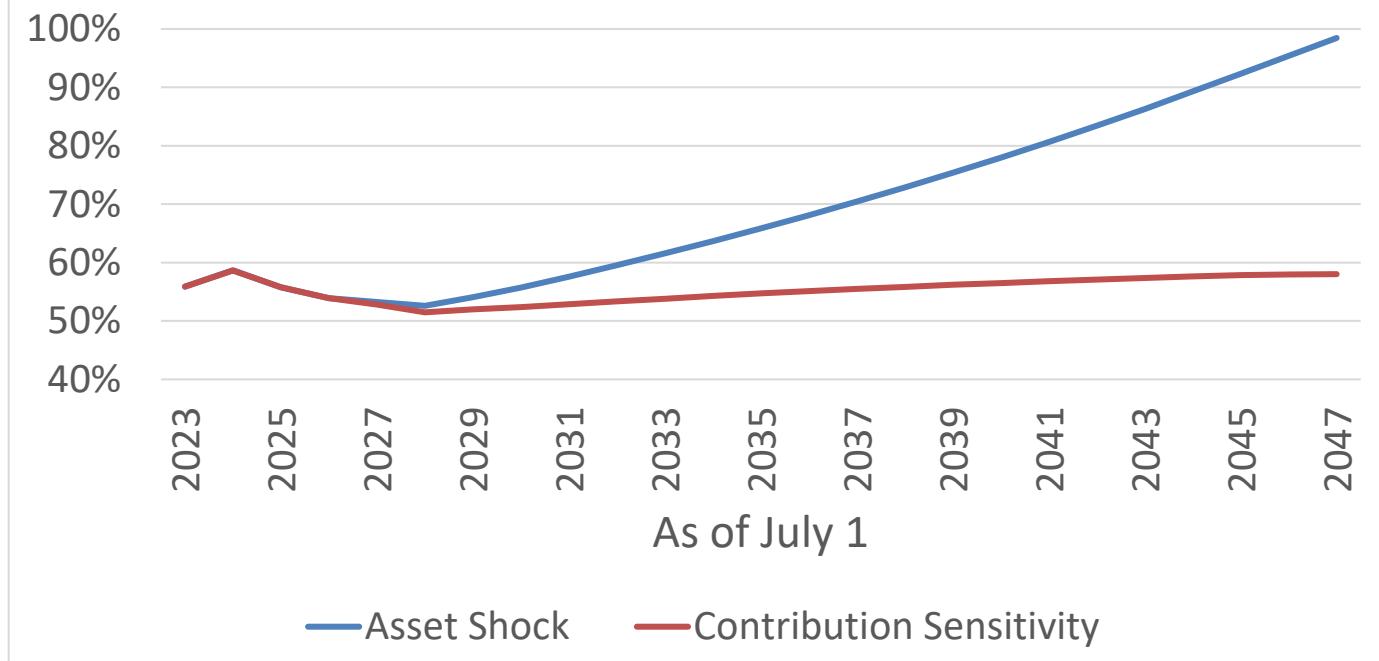
Figure 14: Unfunded Accrued Liability - SERS & TRS
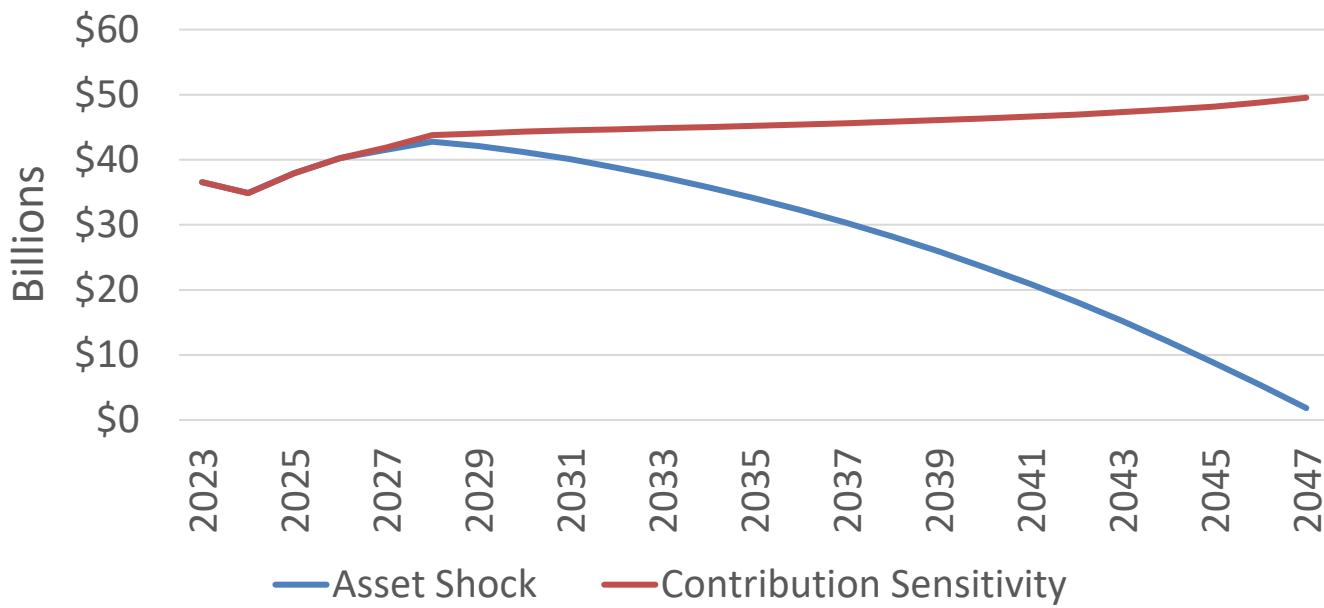
Figure 15: Employer Contribution Rates - SERS & TRS
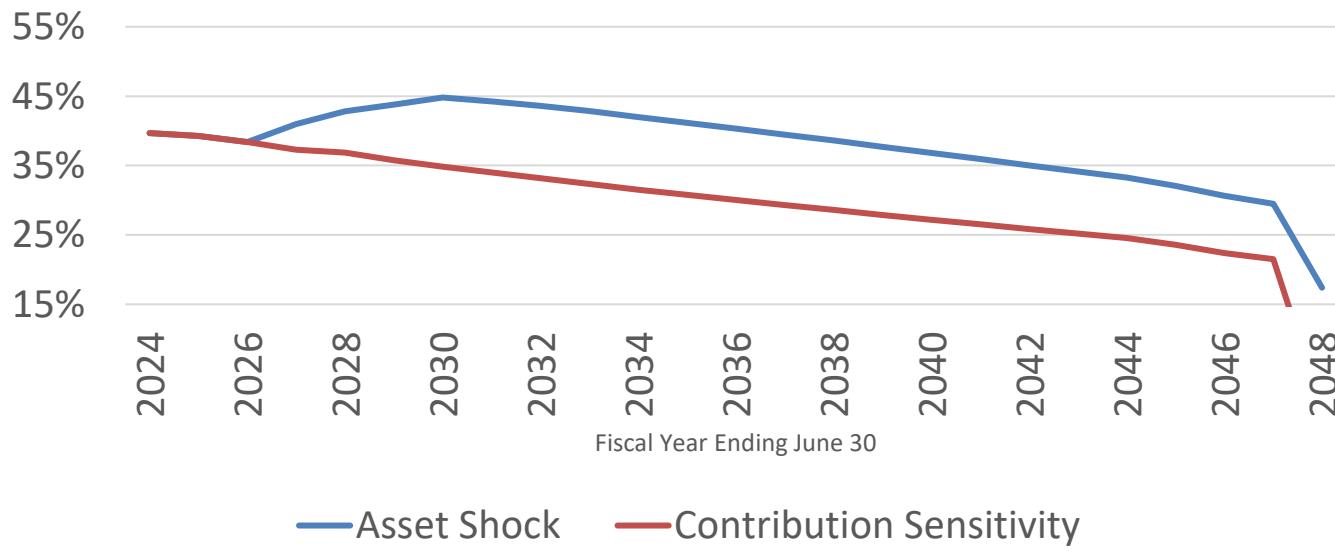
Figure 16: Employer Contributions - SERS & TRS
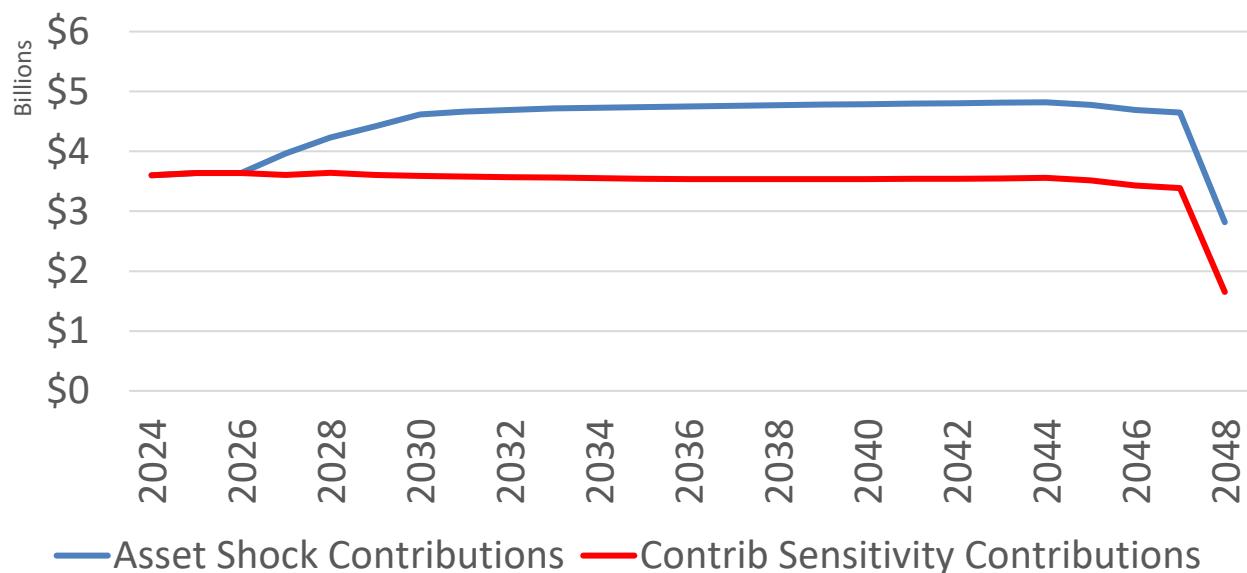
The funded ratio and asset levels grow at a much slower pace under the asset shock scenario if contributions do not rise above the baseline amounts, reaching just 58% funded by the end of the projection compared to nearly 100% if contributions adjust. This analysis demonstrates the importance of making full payments, as the additional contributions are necessary to achieve full funding. For SERS, full contributions also prevent the operating cash flow ratio from reaching -5% in FY 2031 and remaining at or below that level for more than a decade before improving toward the end of the projection period.

Scenario 4: High Retiree COLAs

Assumptions	Baseline	Max COLA
Annual COLA Amount	Plan Assumptions	FY 25-28: Maximum FY 29 – 47: Plan Assumptions
Investment Return	6.9%	6.9%
Contribution Behavior	Full ADC	Full ADC

Scenario 4 analyzes the impact of multiple years of retiree COLA benefits that exceed plan assumptions due to elevated levels of inflation. Retiree COLA benefits vary by plan and tier, but are generally tied to CPI with a cap as summarized below:

Table 1: SERS and TRS COLA Provisions

Plan	Tier	Plan Assumption	Maximum
SERS	Pre- 1980	3.25%	5%
	1980-1997	3%	3%
	1997-2011	2.6%	6%
	2011-2022	2.25%	7.5%
	Post 2022	1.95% 30-month COLA moratorium	7.5% 30-month COLA moratorium
TRS	Pre 1992	3%	5%
	1992-2007	2%	6%
	Post 2007	1.75%	5%

Figure 17: Funded Ratio - SERS & TRS
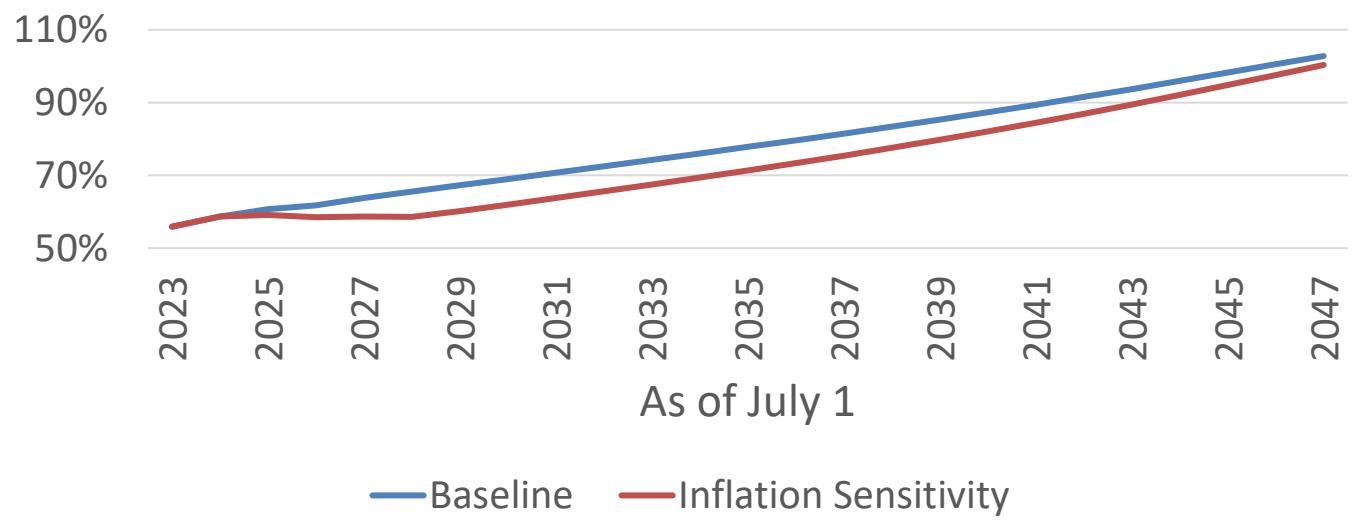
Figure 18: Unfunded Accrued Liability - SERS & TRS
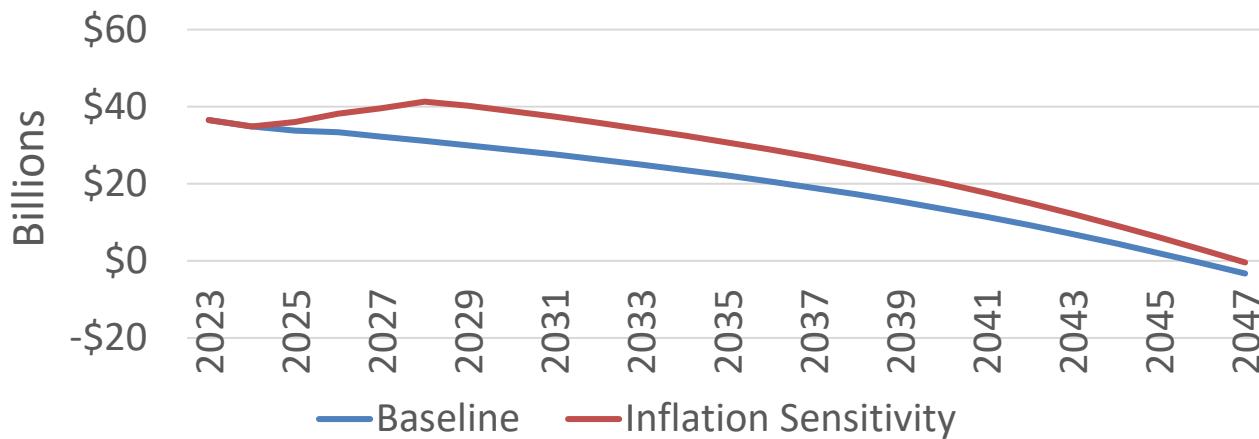
Four years of maximum COLAs benefits have three impacts on plan funding relative to the baseline. This higher level of retiree COLAs increases the actuarially accrued liability, raises benefit payments, and lowers dollar amount of investment income due to a smaller asset base. In combination, these factors cause the funding levels flat at around 59% through 2029 before rising over the next two decades and achieving parity with the baseline by 2047 (see Figure 17).

Figure 19: Employer Contribution Rates - SERS & TRS
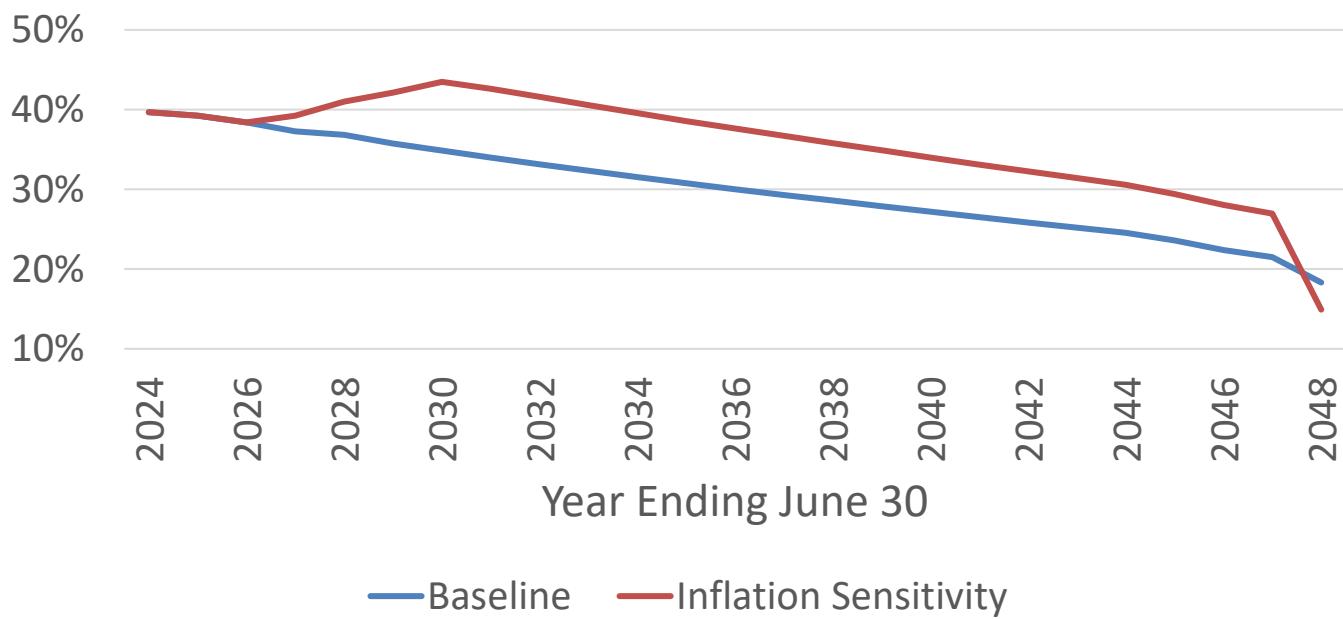
Figure 20: Employer Contributions - SERS & TRS
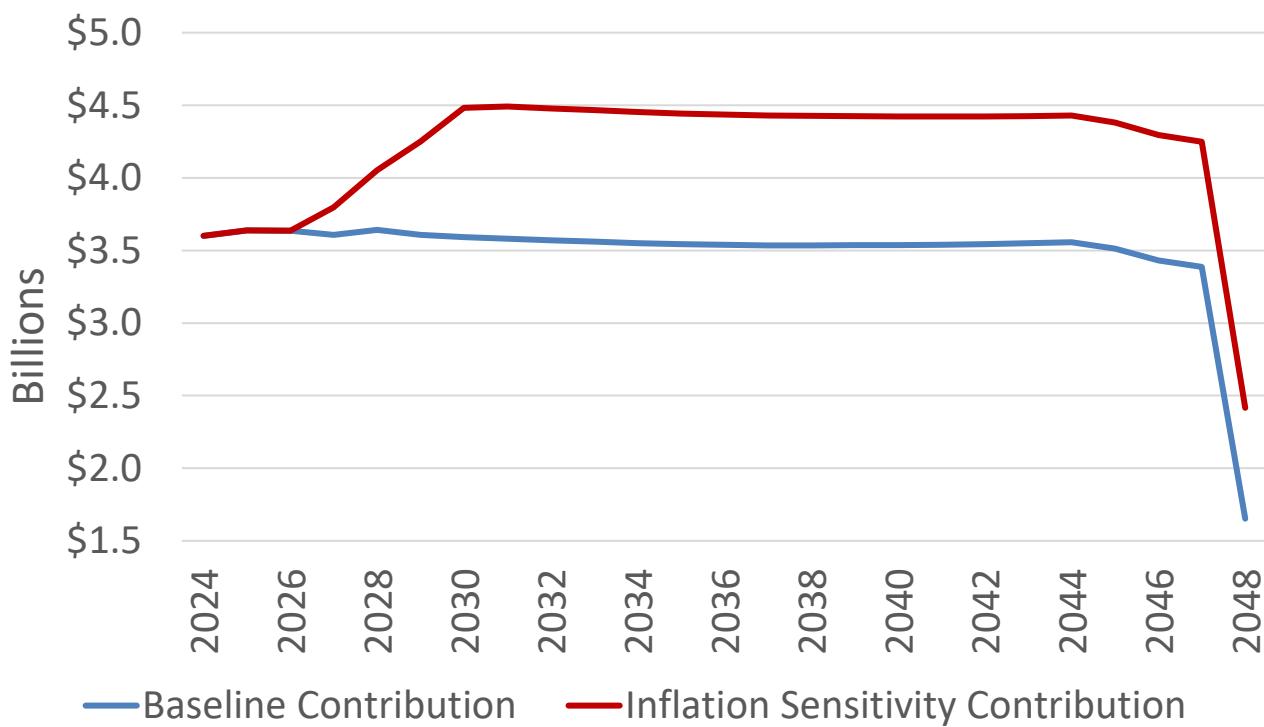
Lower funding levels cause contributions to rise above the baseline in a trajectory in a manner similar to that seen in the asset shock scenario, topping 43% of payroll in Fiscal Year 2028 before declining over the duration of the projection (see Figure 19).

Sensitivity Analysis

This analysis demonstrates how changes in the plan investment return assumption impact the reported liability and funded ratio. Assets and Liabilities are projected to June 30, 2024 as described earlier in this report. In addition to the three discount rates included in GASB 67, we also include a measure of the liability using an estimate of the Low Default Risk Obligation Measure (LDROM) outlined in the recently update ASOP No. 4. The LDROM rate of 5.35% is developed using the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of June 30, 2024.

Table 2: 2024 Net Pension Liability Sensitivity Analysis to Alternative Investment Return Assumptions

$ in Millions	Expected Returns (6.9%)	High Returns (7.9%)	Low Returns (5.9%)	LDROM (5.35%)
SERS				
Assets	$23,418	$23,418	$23,418	$23,418
Liability	$42,460	$38,306	$47,440	$50,607
Net Pension Liability	$19,042	$14,888	$24,022	$27,189
Funded Ratio	55%	61%	49%	46%
TRS				
Assets	$26,038	$26,038	$26,038	$26,038
Liability	$41,865	$37,394	$47,253	$50,691
Net Pension Liability	$15,827	$11,356	$21,215	$24,653
Funded Ratio	62%	70%	55%	51%

Budget Impact Analysis

For budget planning purposes it can be useful to take a closer look at the period of rising contribution rates under the asset shock scenario to understand how those translate to required annual payments. Figure 21 below compares annual employer contributions for SERS and TRS under baseline and asset shock from FY 2025-2030.

Figure 21: Employer Contributions - SERS and TRS
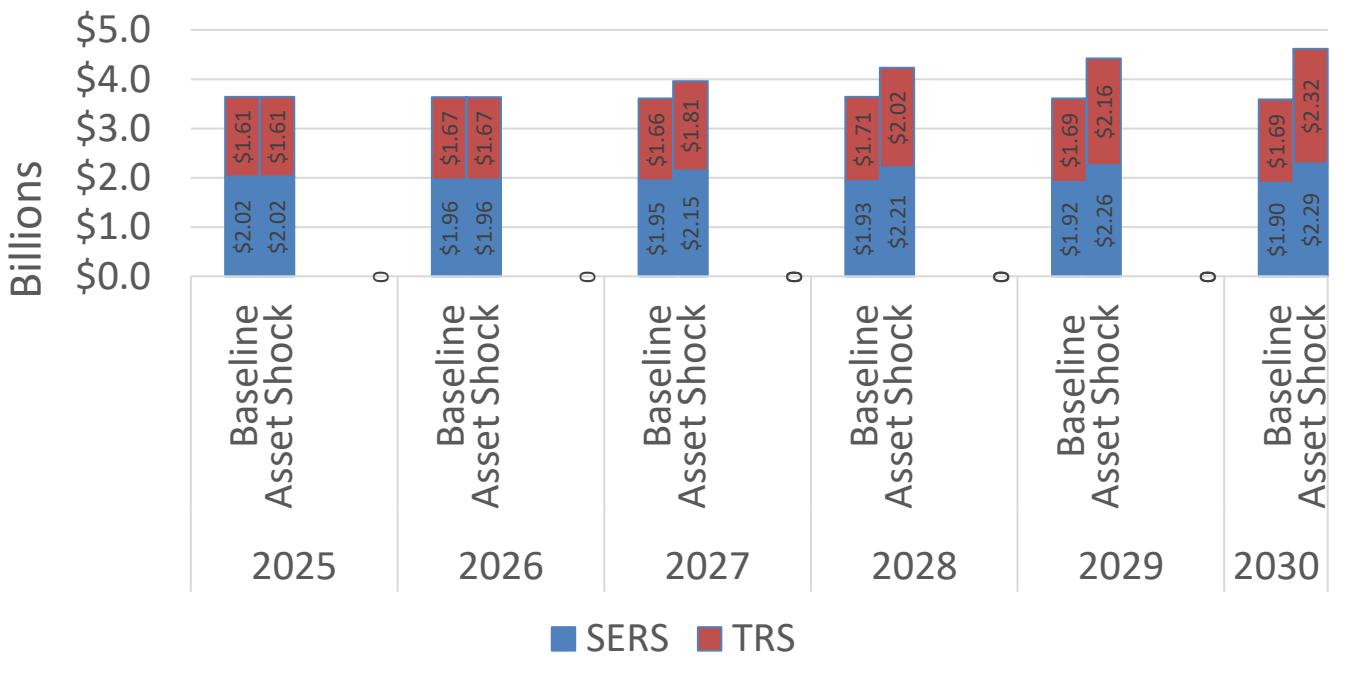
The combined contribution in the baseline totals $21.7 billion over 6 years with annual contributions of approximately $3.6 billion each year. On a year-to-year basis the contributions are steady throughout the period. SERS required contributions are projected to decrease slightly throughout the period, while TRS required contributions are projected to increase slightly.

In the asset shock the SERS payments jump by 10% in FY 2027 and then rises by approximately 2% to 3% per year through FY 2030 while the average annual contribution increase for TRS accelerates from 7% to 11%.

To provide perspective around the scale of these increases and potential impact to the Connecticut budget overall, table 3 presents the combined annual employer contribution as a

share of general fund revenue. General fund revenues for FY 2025-2028 reflect the projections included in the [2024 Fiscal Accountability Report](#) published by OPM in November 2024. To extend the projection two additional years, GovInvest applied the FY 28 annual growth rate of 3.1% to FY 2029.

Table 3: SERS & TRS Pension Costs Compared to General Fund Revenue

	GF Revenue (Dollars in Billions)	Contributions (Dollars in Billions)		Contributions (% of revenue)	
		Baseline	Asset Shock	Baseline	Asset Shock
FY 2025	$23.4	$3.64	$3.64	15.57%	15.57%
FY 2026	$23.9	$3.64	$3.64	15.24%	15.24%
FY 2027	$24.6	$3.61	$3.96	14.69%	16.12%
FY 2028	$25.3	$3.64	$4.23	14.37%	16.70%
FY 2029	$25.6	$3.61	$4.42	14.10%	17.27%

Source: *Connecticut OPM Fiscal Accountability Report FY 2022-2026 and GovInvest analysis.*
Note: *Assumes the 3.1% revenue growth in FY 2028 continues in FY 2029.*

As shown in Table 3, baseline pension contributions are decreasing slightly from around 15.5% of revenue down to 14.1% of revenue, while they grow from 15.5% to almost 17.3% of revenue under the asset shock scenario.

This highlights a risk of potential budget crowd as contributions would need to rise faster than revenue in order to pay down the additional unfunded liabilities resulting from the 20% loss.

Exhibit 1

24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System
Scenario: Baseline
Dollars in Billions

	SERS									TRS								
		Funding - Market Value				Employer Cost					Funding - Market Value				Employer Cost			
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2024	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$24.5	$16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2025	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ 1.6	47.6%	$ 5.0	$ 41.9	$26.0	$15.8	62.2%	$ 1.6	$ (2.5)	$ 2.0	32.2%
2026	$ 4.3	$ 43.0	$ 24.5	$ 18.4	57%	$ 2.0	$ (2.8)	$ 1.7	45.4%	$ 5.1	$ 42.9	$27.5	$15.3	64.2%	$ 1.7	$ (2.5)	$ 1.3	32.5%
2027	$ 4.4	$ 43.4	$ 25.6	$ 17.8	59%	$ 1.9	$ (2.9)	$ 1.8	44.2%	$ 5.3	$ 43.9	$28.3	$15.5	64.6%	$ 1.7	$ (2.6)	$ 2.2	31.5%
2028	$ 4.5	$ 43.8	$ 26.6	$ 17.2	61%	$ 1.9	$ (3.0)	$ 1.8	43.1%	$ 5.4	$ 44.9	$30.0	$14.9	66.8%	$ 1.7	$ (2.6)	$ 2.1	31.7%
2029	$ 4.6	$ 44.2	$ 27.6	$ 16.6	62%	$ 1.9	$ (3.1)	$ 1.9	42.1%	$ 5.5	$ 46.0	$31.5	$14.5	68.5%	$ 1.7	$ (2.7)	$ 2.2	30.6%
2030	$ 4.6	$ 44.5	$ 28.6	$ 16.0	64%	$ 1.9	$ (3.1)	$ 2.0	41.1%	$ 5.7	$ 47.1	$33.1	$14.0	70.2%	$ 1.7	$ (2.8)	$ 2.3	29.8%
2031	$ 4.7	$ 44.8	$ 29.5	$ 15.3	66%	$ 1.9	$ (3.2)	$ 2.0	40.1%	$ 5.8	$ 48.3	$34.7	$13.6	71.9%	$ 1.7	$ (2.9)	$ 2.4	29.0%
2032	$ 4.8	$ 45.1	$ 30.5	$ 14.6	68%	$ 1.9	$ (3.3)	$ 2.1	39.1%	$ 6.0	$ 49.4	$36.3	$13.1	73.5%	$ 1.7	$ (2.9)	$ 2.5	28.3%
2033	$ 4.9	$ 45.2	$ 31.4	$ 13.8	69%	$ 1.9	$ (3.3)	$ 2.1	38.2%	$ 6.1	$ 50.6	$38.0	$12.6	75.2%	$ 1.7	$ (3.0)	$ 2.6	27.6%
2034	$ 5.0	$ 45.4	$ 32.4	$ 13.0	71%	$ 1.9	$ (3.4)	$ 2.2	37.2%	$ 6.2	$ 51.8	$39.7	$12.0	76.8%	$ 1.7	$ (3.1)	$ 2.7	27.0%
2035	$ 5.1	$ 45.6	$ 33.4	$ 12.2	73%	$ 1.9	$ (3.4)	$ 2.3	36.2%	$ 6.4	$ 53.0	$41.5	$11.4	78.4%	$ 1.7	$ (3.2)	$ 2.9	26.4%
2036	$ 5.2	$ 45.7	$ 34.4	$ 11.3	75%	$ 1.9	$ (3.5)	$ 2.3	35.3%	$ 6.5	$ 54.2	$43.3	$10.8	80.0%	$ 1.7	$ (3.3)	$ 3.0	25.8%
2037	$ 5.4	$ 45.8	$ 35.4	$ 10.4	77%	$ 1.8	$ (3.5)	$ 2.4	34.4%	$ 6.7	$ 55.4	$45.2	$10.2	81.6%	$ 1.7	$ (3.4)	$ 3.1	25.2%
2038	$ 5.5	$ 45.9	$ 36.4	$ 9.4	79%	$ 1.8	$ (3.5)	$ 2.5	33.5%	$ 6.9	$ 56.6	$47.1	$ 9.5	83.2%	$ 1.7	$ (3.5)	$ 3.2	24.6%
2039	$ 5.6	$ 45.9	$ 37.5	$ 8.4	82%	$ 1.8	$ (3.5)	$ 2.5	32.7%	$ 7.0	$ 57.9	$49.0	$ 8.8	84.7%	$ 1.7	$ (3.5)	$ 3.4	24.1%
2040	$ 5.8	$ 46.0	$ 38.7	$ 7.3	84%	$ 1.8	$ (3.6)	$ 2.6	31.8%	$ 7.2	$ 59.2	$51.1	$ 8.1	86.3%	$ 1.7	$ (3.6)	$ 3.5	23.5%
2041	$ 5.9	$ 46.1	$ 39.9	$ 6.2	87%	$ 1.8	$ (3.6)	$ 2.7	30.9%	$ 7.4	$ 60.4	$53.1	$ 7.3	87.9%	$ 1.7	$ (3.7)	$ 3.6	23.0%
2042	$ 6.1	$ 46.2	$ 41.3	$ 5.0	89%	$ 1.8	$ (3.6)	$ 2.8	30.1%	$ 7.6	$ 61.8	$55.3	$ 6.5	89.5%	$ 1.7	$ (3.8)	$ 3.8	22.4%
2043	$ 6.3	$ 46.3	$ 42.7	$ 3.7	92%	$ 1.8	$ (3.6)	$ 2.9	29.3%	$ 7.8	$ 63.1	$57.5	$ 5.6	91.1%	$ 1.7	$ (3.9)	$ 3.9	21.9%
2044	$ 6.4	$ 46.5	$ 44.2	$ 2.3	95%	$ 1.8	$ (3.5)	$ 3.0	28.5%	$ 8.0	$ 64.4	$59.8	$ 4.7	92.7%	$ 1.7	$ (4.0)	$ 4.1	21.4%
2045	$ 6.6	$ 46.7	$ 45.9	$ 0.8	98%	$ 1.8	$ (3.5)	$ 3.1	27.0%	$ 8.3	$ 65.8	$62.1	$ 3.7	94.4%	$ 1.7	$ (4.1)	$ 4.3	20.9%
2046	$ 6.8	$ 47.0	$ 47.7	$ (0.7)	101%	$ 1.7	$ (3.5)	$ 3.2	24.9%	$ 8.5	$ 67.3	$64.6	$ 2.7	96.0%	$ 1.7	$ (4.2)	$ 4.4	20.4%
2047	$ 7.0	$ 47.3	$ 49.5	$ (2.2)	105%	$ 1.6	$ (3.5)	$ 3.4	23.5%	$ 8.8	$ 68.8	$67.2	$ 1.6	97.7%	$ 1.7	$ (4.3)	$ 4.6	19.9%

Exhibit 1

Funded Ratio

SERS — TRS

Unfunded Accrued Liability

Billions

SERS — TRS

Employer Contribution Rate
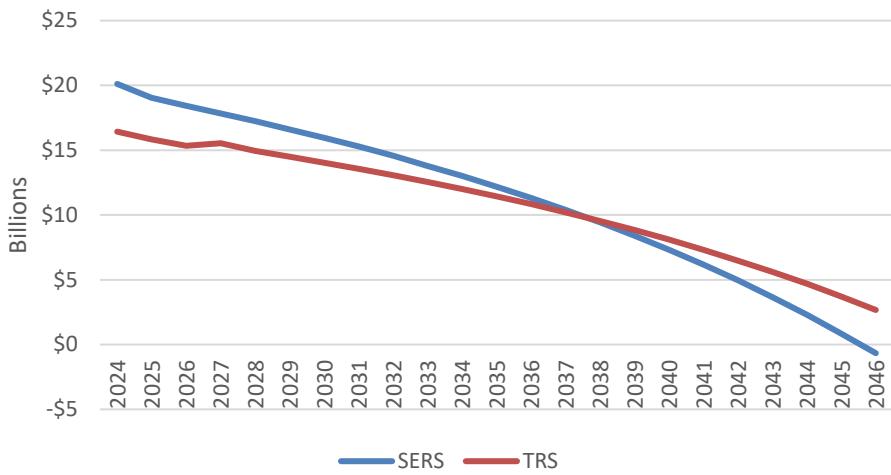
SERS — TRS
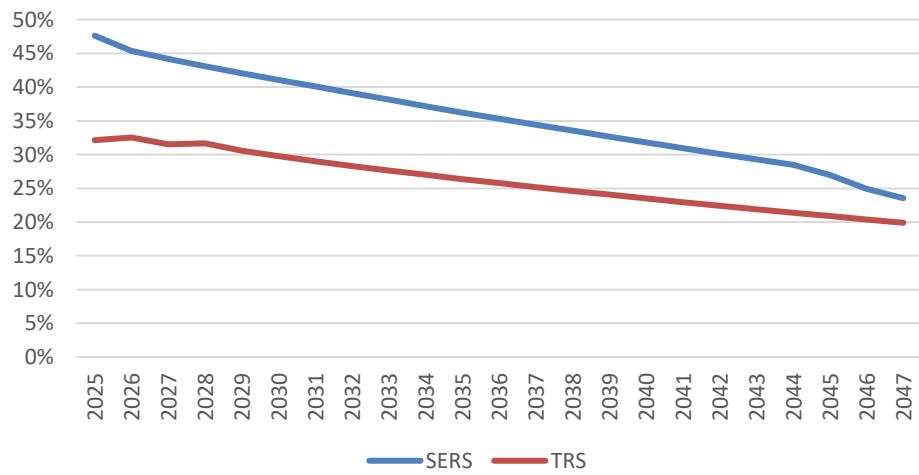
## Employer Contribution

Billions

SERS — TRS

Exhibit 2

24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System

Scenario: 2% Below

Dollars in Billions

		SERS									TRS							
		Funding - Market Value				Employer Cost					Funding - Market Value				Employer Cost			
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2024	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$ 24.5	$ 16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2025	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ 1.5	47.6%	$ 5.0	$ 41.9	$ 26.0	$ 15.8	62.2%	$ 1.6	$ (2.5)	$ 1.9	32.2%
2026	$ 4.3	$ 43.0	$ 24.4	$ 18.5	57%	$ 2.0	$ (2.8)	$ 1.5	45.4%	$ 5.1	$ 42.9	$ 27.4	$ 15.5	63.9%	$ 1.7	$ (2.5)	$ 1.0	32.5%
2027	$ 4.4	$ 43.4	$ 25.3	$ 18.1	58%	$ 2.0	$ (2.9)	$ 1.5	44.3%	$ 5.3	$ 43.9	$ 27.9	$ 16.0	63.6%	$ 1.7	$ (2.6)	$ 1.8	31.7%
2028	$ 4.5	$ 43.8	$ 26.1	$ 17.8	59%	$ 2.0	$ (3.0)	$ 1.5	43.6%	$ 5.4	$ 44.9	$ 29.2	$ 15.8	64.9%	$ 1.7	$ (2.6)	$ 1.4	32.3%
2029	$ 4.6	$ 44.2	$ 26.7	$ 17.5	60%	$ 2.0	$ (3.1)	$ 1.5	43.1%	$ 5.5	$ 46.0	$ 30.1	$ 15.9	65.4%	$ 1.8	$ (2.7)	$ 1.5	31.9%
2030	$ 4.6	$ 44.5	$ 27.3	$ 17.2	61%	$ 2.0	$ (3.1)	$ 1.5	42.7%	$ 5.7	$ 47.1	$ 31.0	$ 16.1	65.8%	$ 1.8	$ (2.8)	$ 1.5	32.0%
2031	$ 4.7	$ 44.8	$ 27.9	$ 16.9	62%	$ 2.0	$ (3.2)	$ 1.4	42.4%	$ 5.8	$ 48.3	$ 32.0	$ 16.3	66.2%	$ 1.9	$ (2.9)	$ 1.6	32.2%
2032	$ 4.8	$ 45.1	$ 28.4	$ 16.7	63%	$ 2.0	$ (3.3)	$ 1.4	42.1%	$ 6.0	$ 49.4	$ 32.9	$ 16.5	66.7%	$ 1.9	$ (2.9)	$ 1.6	32.4%
2033	$ 4.9	$ 45.2	$ 28.8	$ 16.4	64%	$ 2.1	$ (3.3)	$ 1.4	42.0%	$ 6.1	$ 50.6	$ 34.0	$ 16.6	67.1%	$ 2.0	$ (3.0)	$ 1.7	32.6%
2034	$ 5.0	$ 45.4	$ 29.3	$ 16.1	64%	$ 2.1	$ (3.4)	$ 1.4	41.8%	$ 6.2	$ 51.8	$ 35.0	$ 16.7	67.6%	$ 2.0	$ (3.1)	$ 1.7	32.9%
2035	$ 5.1	$ 45.6	$ 29.7	$ 15.8	65%	$ 2.1	$ (3.4)	$ 1.4	41.7%	$ 6.4	$ 53.0	$ 36.1	$ 16.8	68.2%	$ 2.1	$ (3.2)	$ 1.8	33.1%
2036	$ 5.2	$ 45.7	$ 30.1	$ 15.5	66%	$ 2.2	$ (3.5)	$ 1.4	41.7%	$ 6.5	$ 54.2	$ 37.2	$ 16.9	68.8%	$ 2.2	$ (3.3)	$ 1.8	33.4%
2037	$ 5.4	$ 45.8	$ 30.6	$ 15.2	67%	$ 2.2	$ (3.5)	$ 1.5	41.6%	$ 6.7	$ 55.4	$ 38.4	$ 17.0	69.4%	$ 2.3	$ (3.4)	$ 1.9	33.6%
2038	$ 5.5	$ 45.9	$ 31.1	$ 14.8	68%	$ 2.3	$ (3.5)	$ 1.5	41.6%	$ 6.9	$ 56.6	$ 39.6	$ 17.0	70.0%	$ 2.3	$ (3.5)	$ 1.9	33.9%
2039	$ 5.6	$ 45.9	$ 31.6	$ 14.3	69%	$ 2.3	$ (3.5)	$ 1.5	41.5%	$ 7.0	$ 57.9	$ 40.9	$ 16.9	70.7%	$ 2.4	$ (3.5)	$ 2.0	34.1%
2040	$ 5.8	$ 46.0	$ 32.2	$ 13.8	70%	$ 2.4	$ (3.6)	$ 1.5	41.5%	$ 7.2	$ 59.2	$ 42.3	$ 16.9	71.5%	$ 2.5	$ (3.6)	$ 2.1	34.4%
2041	$ 5.9	$ 46.1	$ 32.9	$ 13.2	71%	$ 2.5	$ (3.6)	$ 1.5	41.4%	$ 7.4	$ 60.4	$ 43.7	$ 16.8	72.3%	$ 2.6	$ (3.7)	$ 2.1	34.6%
2042	$ 6.1	$ 46.2	$ 33.7	$ 12.5	73%	$ 2.5	$ (3.6)	$ 1.6	41.3%	$ 7.6	$ 61.8	$ 45.2	$ 16.6	73.1%	$ 2.6	$ (3.8)	$ 2.2	34.8%
2043	$ 6.3	$ 46.3	$ 34.6	$ 11.8	75%	$ 2.6	$ (3.6)	$ 1.6	41.2%	$ 7.8	$ 63.1	$ 46.7	$ 16.4	74.1%	$ 2.7	$ (3.9)	$ 2.3	35.0%
2044	$ 6.4	$ 46.5	$ 35.6	$ 10.9	76%	$ 2.7	$ (3.5)	$ 1.7	41.1%	$ 8.0	$ 64.4	$ 48.4	$ 16.1	75.0%	$ 2.8	$ (4.0)	$ 2.4	35.1%
2045	$ 6.6	$ 46.7	$ 36.7	$ 10.0	79%	$ 2.7	$ (3.5)	$ 1.7	40.3%	$ 8.3	$ 65.8	$ 50.1	$ 15.7	76.1%	$ 2.9	$ (4.1)	$ 2.4	35.3%
2046	$ 6.8	$ 47.0	$ 38.0	$ 9.0	81%	$ 2.6	$ (3.5)	$ 1.8	38.9%	$ 8.5	$ 67.3	$ 51.9	$ 15.3	77.2%	$ 3.0	$ (4.2)	$ 2.5	35.4%
2047	$ 7.0	$ 47.3	$ 39.3	$ 8.0	83%	$ 2.7	$ (3.5)	$ 1.9	38.1%	$ 8.8	$ 68.8	$ 53.9	$ 14.8	78.4%	$ 3.1	$ (4.3)	$ 2.6	35.6%

Exhibit 2
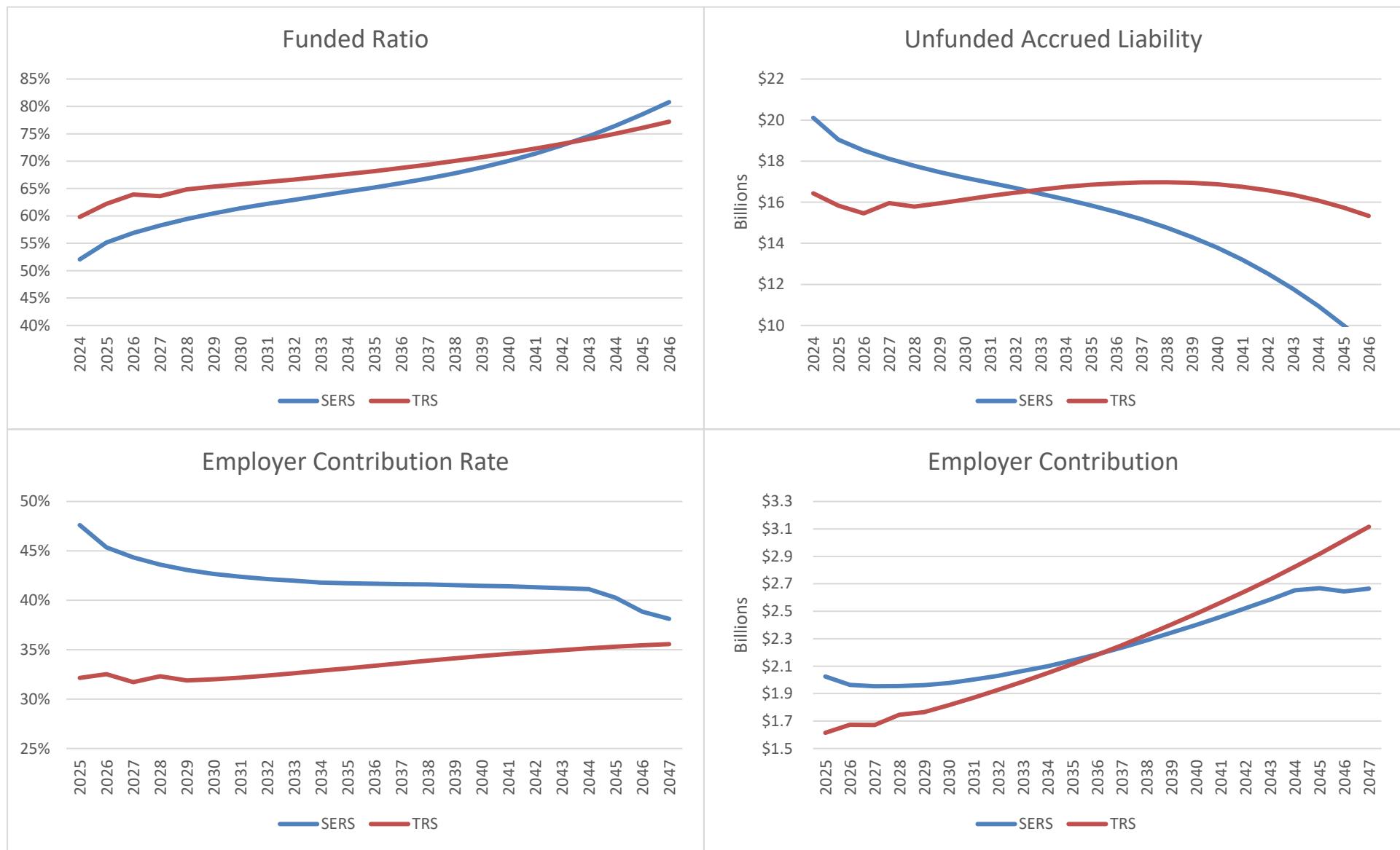
Exhibit 3

24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System

Scenario: 2% Above

Dollars in Billions

| | | SERS | | | | | | | | | TRS | | | | | | | |
| | | Funding - Market Value | | | | Employer Cost | | | | | Funding - Market Value | | | | Employer Cost | | | |
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2024	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$ 24.5	$ 16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2025	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ 1.7	47.6%	$ 5.0	$ 41.9	$ 26.0	$ 15.8	62.2%	$ 1.6	$ (2.5)	$ 2.1	32.2%
2026	$ 4.3	$ 43.0	$ 24.6	$ 18.3	57%	$ 2.0	$ (2.8)	$ 1.9	45.4%	$ 5.1	$ 42.9	$ 27.7	$ 15.2	64.5%	$ 1.7	$ (2.5)	$ 1.6	32.5%
2027	$ 4.4	$ 43.4	$ 25.9	$ 17.6	60%	$ 1.9	$ (2.9)	$ 2.0	44.0%	$ 5.3	$ 43.9	$ 28.8	$ 15.1	65.5%	$ 1.6	$ (2.6)	$ 2.7	31.3%
2028	$ 4.5	$ 43.8	$ 27.1	$ 16.7	62%	$ 1.9	$ (3.0)	$ 2.2	42.6%	$ 5.4	$ 44.9	$ 30.9	$ 14.1	68.7%	$ 1.7	$ (2.6)	$ 2.8	31.0%
2029	$ 4.6	$ 44.2	$ 28.5	$ 15.7	64%	$ 1.9	$ (3.1)	$ 2.4	41.0%	$ 5.5	$ 46.0	$ 33.0	$ 13.0	71.8%	$ 1.6	$ (2.7)	$ 3.0	29.2%
2030	$ 4.6	$ 44.5	$ 29.9	$ 14.7	67%	$ 1.8	$ (3.1)	$ 2.5	39.4%	$ 5.7	$ 47.1	$ 35.3	$ 11.8	74.9%	$ 1.6	$ (2.8)	$ 3.2	27.4%
2031	$ 4.7	$ 44.8	$ 31.3	$ 13.5	70%	$ 1.8	$ (3.2)	$ 2.7	37.7%	$ 5.8	$ 48.3	$ 37.6	$ 10.6	78.0%	$ 1.5	$ (2.9)	$ 3.4	25.7%
2032	$ 4.8	$ 45.1	$ 32.8	$ 12.2	73%	$ 1.7	$ (3.3)	$ 2.8	35.9%	$ 6.0	$ 49.4	$ 40.1	$ 9.3	81.1%	$ 1.4	$ (2.9)	$ 3.6	23.9%
2033	$ 4.9	$ 45.2	$ 34.4	$ 10.9	76%	$ 1.7	$ (3.3)	$ 3.0	34.0%	$ 6.1	$ 50.6	$ 42.6	$ 8.0	84.2%	$ 1.4	$ (3.0)	$ 3.8	22.2%
2034	$ 5.0	$ 45.4	$ 35.9	$ 9.5	79%	$ 1.6	$ (3.4)	$ 3.1	32.0%	$ 6.2	$ 51.8	$ 45.2	$ 6.6	87.2%	$ 1.3	$ (3.1)	$ 4.0	20.4%
2035	$ 5.1	$ 45.6	$ 37.6	$ 7.9	83%	$ 1.5	$ (3.4)	$ 3.3	30.0%	$ 6.4	$ 53.0	$ 47.8	$ 5.1	90.3%	$ 1.2	$ (3.2)	$ 4.3	18.7%
2036	$ 5.2	$ 45.7	$ 39.3	$ 6.3	86%	$ 1.5	$ (3.5)	$ 3.5	28.0%	$ 6.5	$ 54.2	$ 50.5	$ 3.6	93.3%	$ 1.1	$ (3.3)	$ 4.5	17.0%
2037	$ 5.4	$ 45.8	$ 41.1	$ 4.7	90%	$ 1.4	$ (3.5)	$ 3.7	26.0%	$ 6.7	$ 55.4	$ 53.4	$ 2.0	96.3%	$ 1.0	$ (3.4)	$ 4.8	15.2%
2038	$ 5.5	$ 45.9	$ 43.0	$ 2.9	94%	$ 1.3	$ (3.5)	$ 3.8	23.9%	$ 6.9	$ 56.6	$ 56.2	$ 0.4	99.3%	$ 0.9	$ (3.5)	$ 5.0	13.5%
2039	$ 5.6	$ 45.9	$ 44.9	$ 1.0	98%	$ 1.2	$ (3.5)	$ 4.0	21.9%	$ 7.0	$ 57.9	$ 59.2	$ (1.3)	102.3%	$ 0.8	$ (3.5)	$ 5.3	11.7%
2040	$ 5.8	$ 46.0	$ 46.9	$ (0.9)	102%	$ 1.1	$ (3.6)	$ 4.2	19.8%	$ 7.2	$ 59.2	$ 62.3	$ (3.1)	105.3%	$ 0.7	$ (3.6)	$ 5.6	10.0%
2041	$ 5.9	$ 46.1	$ 49.1	$ (2.9)	106%	$ 1.1	$ (3.6)	$ 4.4	17.7%	$ 7.4	$ 60.4	$ 65.4	$ (5.0)	108.2%	$ 0.6	$ (3.7)	$ 5.8	8.3%
2042	$ 6.1	$ 46.2	$ 51.3	$ (5.1)	111%	$ 1.0	$ (3.6)	$ 4.6	15.7%	$ 7.6	$ 61.8	$ 68.7	$ (6.9)	111.2%	$ 0.5	$ (3.8)	$ 6.1	6.6%
2043	$ 6.3	$ 46.3	$ 53.7	$ (7.3)	116%	$ 0.9	$ (3.6)	$ 4.8	13.7%	$ 7.8	$ 63.1	$ 72.0	$ (8.9)	114.1%	$ 0.4	$ (3.9)	$ 6.4	4.9%
2044	$ 6.4	$ 46.5	$ 56.2	$ (9.7)	121%	$ 0.8	$ (3.5)	$ 5.1	11.7%	$ 8.0	$ 64.4	$ 75.4	$ (11.0)	117.0%	$ 0.3	$ (4.0)	$ 6.7	3.2%
2045	$ 6.6	$ 46.7	$ 58.8	$ (12.1)	126%	$ 0.6	$ (3.5)	$ 5.3	9.0%	$ 8.3	$ 65.8	$ 78.9	$ (13.1)	119.9%	$ 0.1	$ (4.1)	$ 7.0	1.5%
2046	$ 6.8	$ 47.0	$ 61.6	$ (14.6)	131%	$ 0.4	$ (3.5)	$ 5.6	5.7%	$ -	$ 67.3	$ 82.6	$ (15.3)	122.7%	$ -	$ (4.2)	$ 7.3	0.0%
2047	$ 7.0	$ 47.3	$ 64.5	$ (17.1)	136%	$ 0.2	$ (3.5)	$ 5.8	3.1%	$ -	$ 68.8	$ 86.3	$ (17.6)	125.5%	$ -	$ (4.3)	$ 7.7	0.0%

Exhibit 3
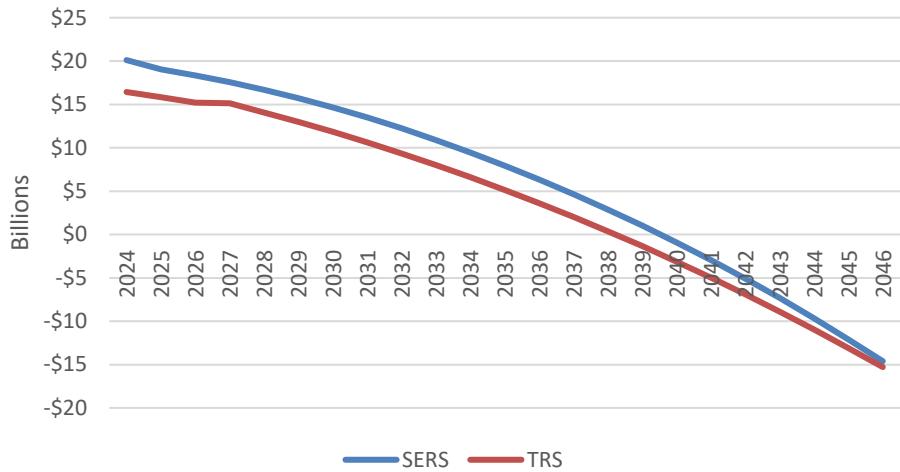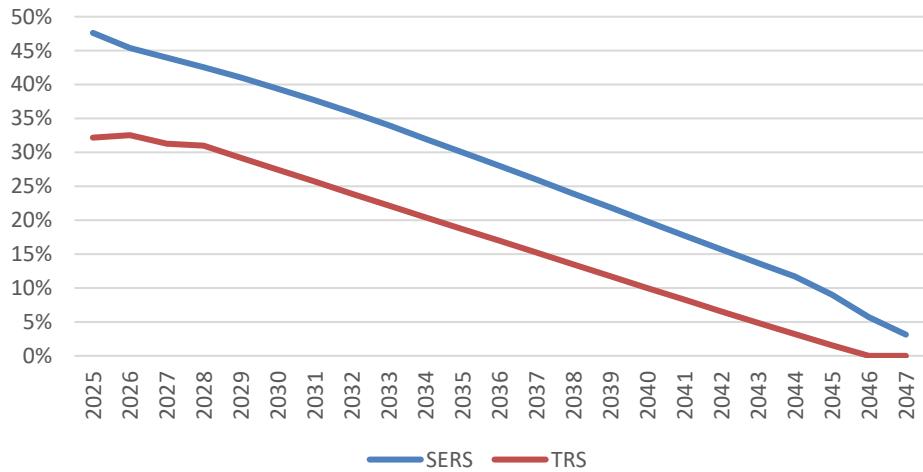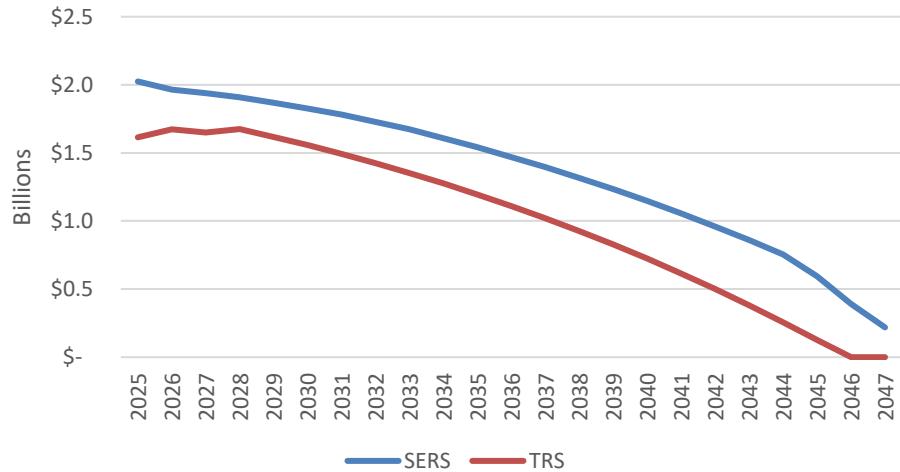
Exhibit 4

**24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System**

Scenario: Asset Shock

Dollars in Billions

		SERS										TRS							
		Funding - Market Value				Employer Cost					Funding - Market Value				Employer Cost			
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2024	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$ 24.5	$ 16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2025	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ (0.8)	47.6%	$ 5.0	$ 41.9	$ 26.0	$ 15.8	62.2%	$ 1.6	$ (2.5)	$ 0.2	32.2%
2026	$ 4.3	$ 43.0	$ 22.1	$ 20.9	51%	$ 2.0	$ (2.8)	$ 0.8	45.4%	$ 5.1	$ 42.9	$ 25.8	$ 17.1	60.1%	$ 1.7	$ (2.5)	$ (0.5)	32.5%
2027	$ 4.4	$ 43.4	$ 22.3	$ 21.1	51%	$ 2.2	$ (2.9)	$ 0.9	48.8%	$ 5.3	$ 43.9	$ 24.8	$ 19.1	56.4%	$ 1.8	$ (2.6)	$ 0.2	34.4%
2028	$ 4.5	$ 43.8	$ 22.7	$ 21.2	52%	$ 2.2	$ (3.0)	$ 1.1	49.4%	$ 5.4	$ 44.9	$ 24.6	$ 20.3	54.7%	$ 2.0	$ (2.6)	$ (0.1)	37.4%
2029	$ 4.6	$ 44.2	$ 23.2	$ 21.0	52%	$ 2.3	$ (3.1)	$ 1.2	49.5%	$ 5.5	$ 46.0	$ 24.3	$ 21.7	52.8%	$ 2.2	$ (2.7)	$ 1.7	39.1%
2030	$ 4.6	$ 44.5	$ 23.7	$ 20.8	53%	$ 2.3	$ (3.1)	$ 1.3	49.5%	$ 5.7	$ 47.1	$ 25.8	$ 21.3	54.8%	$ 2.3	$ (2.8)	$ 1.7	41.0%
2031	$ 4.7	$ 44.8	$ 24.4	$ 20.4	54%	$ 2.3	$ (3.2)	$ 1.4	49.2%	$ 5.8	$ 48.3	$ 27.5	$ 20.8	56.9%	$ 2.3	$ (2.9)	$ 1.9	40.2%
2032	$ 4.8	$ 45.1	$ 25.1	$ 19.9	56%	$ 2.4	$ (3.3)	$ 1.4	48.8%	$ 6.0	$ 49.4	$ 29.3	$ 20.1	59.2%	$ 2.3	$ (2.9)	$ 2.0	39.4%
2033	$ 4.9	$ 45.2	$ 25.9	$ 19.3	57%	$ 2.4	$ (3.3)	$ 1.5	48.3%	$ 6.1	$ 50.6	$ 31.1	$ 19.4	61.6%	$ 2.3	$ (3.0)	$ 2.2	38.4%
2034	$ 5.0	$ 45.4	$ 26.7	$ 18.7	59%	$ 2.4	$ (3.4)	$ 1.6	47.5%	$ 6.2	$ 51.8	$ 33.1	$ 18.7	63.9%	$ 2.3	$ (3.1)	$ 2.3	37.5%
2035	$ 5.1	$ 45.6	$ 27.7	$ 17.9	61%	$ 2.4	$ (3.4)	$ 1.7	46.8%	$ 6.4	$ 53.0	$ 35.0	$ 17.9	66.2%	$ 2.3	$ (3.2)	$ 2.4	36.6%
2036	$ 5.2	$ 45.7	$ 28.7	$ 17.0	63%	$ 2.4	$ (3.5)	$ 1.8	46.0%	$ 6.5	$ 54.2	$ 37.1	$ 17.1	68.5%	$ 2.3	$ (3.3)	$ 2.6	35.7%
2037	$ 5.4	$ 45.8	$ 29.7	$ 16.1	65%	$ 2.4	$ (3.5)	$ 1.9	45.2%	$ 6.7	$ 55.4	$ 39.2	$ 16.2	70.8%	$ 2.3	$ (3.4)	$ 2.7	34.9%
2038	$ 5.5	$ 45.9	$ 30.8	$ 15.0	67%	$ 2.4	$ (3.5)	$ 2.0	44.2%	$ 6.9	$ 56.6	$ 41.4	$ 15.3	73.0%	$ 2.3	$ (3.5)	$ 2.9	34.1%
2039	$ 5.6	$ 45.9	$ 32.1	$ 13.9	70%	$ 2.4	$ (3.5)	$ 2.1	43.3%	$ 7.0	$ 57.9	$ 43.6	$ 14.3	75.3%	$ 2.3	$ (3.5)	$ 3.0	33.2%
2040	$ 5.8	$ 46.0	$ 33.4	$ 12.7	73%	$ 2.4	$ (3.6)	$ 2.2	42.3%	$ 7.2	$ 59.2	$ 45.9	$ 13.3	77.6%	$ 2.3	$ (3.6)	$ 3.2	32.4%
2041	$ 5.9	$ 46.1	$ 34.8	$ 11.3	75%	$ 2.5	$ (3.6)	$ 2.3	41.3%	$ 7.4	$ 60.4	$ 48.3	$ 12.2	79.9%	$ 2.3	$ (3.7)	$ 3.3	31.6%
2042	$ 6.1	$ 46.2	$ 36.3	$ 9.9	79%	$ 2.5	$ (3.6)	$ 2.4	40.3%	$ 7.6	$ 61.8	$ 50.8	$ 11.0	82.2%	$ 2.3	$ (3.8)	$ 3.5	30.8%
2043	$ 6.3	$ 46.3	$ 38.0	$ 8.4	82%	$ 2.5	$ (3.6)	$ 2.5	39.2%	$ 7.8	$ 63.1	$ 53.3	$ 9.8	84.5%	$ 2.3	$ (3.9)	$ 3.7	30.1%
2044	$ 6.4	$ 46.5	$ 39.8	$ 6.7	86%	$ 2.5	$ (3.5)	$ 2.7	38.2%	$ 8.0	$ 64.4	$ 56.0	$ 8.5	86.8%	$ 2.4	$ (4.0)	$ 3.9	29.3%
2045	$ 6.6	$ 46.7	$ 41.8	$ 5.0	89%	$ 2.4	$ (3.5)	$ 2.8	36.5%	$ 8.3	$ 65.8	$ 58.7	$ 7.1	89.2%	$ 2.4	$ (4.1)	$ 4.0	28.5%
2046	$ 6.8	$ 47.0	$ 43.9	$ 3.1	93%	$ 2.3	$ (3.5)	$ 3.0	34.2%	$ 8.5	$ 67.3	$ 61.6	$ 5.7	91.6%	$ 2.4	$ (4.2)	$ 4.2	27.8%
2047	$ 7.0	$ 47.3	$ 46.1	$ 1.3	97%	$ 2.3	$ (3.5)	$ 3.1	32.6%	$ 8.8	$ 68.8	$ 64.6	$ 4.1	94.0%	$ 2.4	$ (4.3)	$ 4.5	27.0%

Exhibit 4

Funded Ratio

(chart showing SERS and TRS funded ratios from 2024 to 2046, y-axis 40% to 100%)

Unfunded Accrued Liability

(chart showing SERS and TRS unfunded accrued liability in Billions, from 2024 to 2046, y-axis $0 to $25)

Employer Contribution Rate

(chart showing SERS and TRS employer contribution rate from 2025 to 2047, y-axis 25% to 55%)

Employer Contribution

(chart showing SERS and TRS employer contribution from 2025 to 2047, y-axis $1.5 to $2.7)
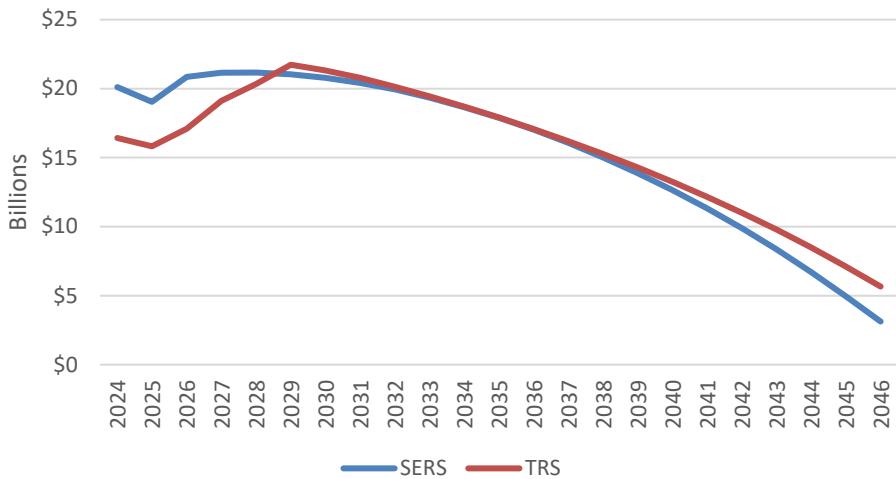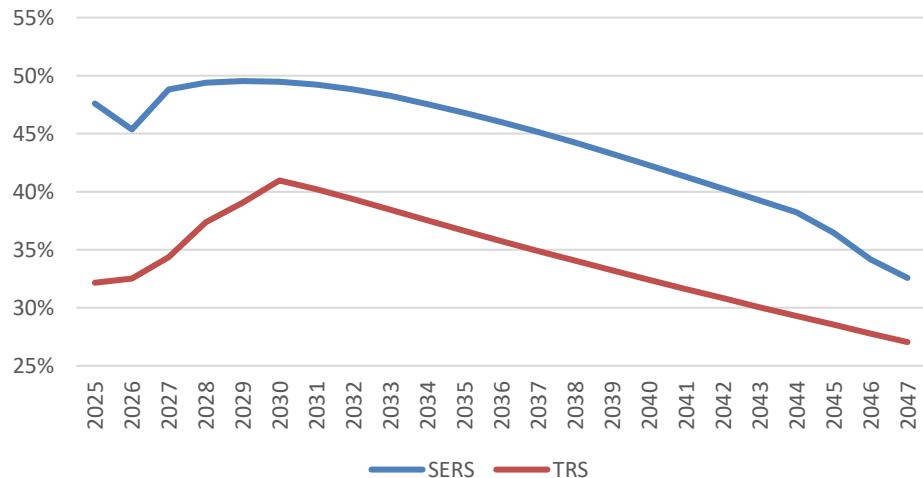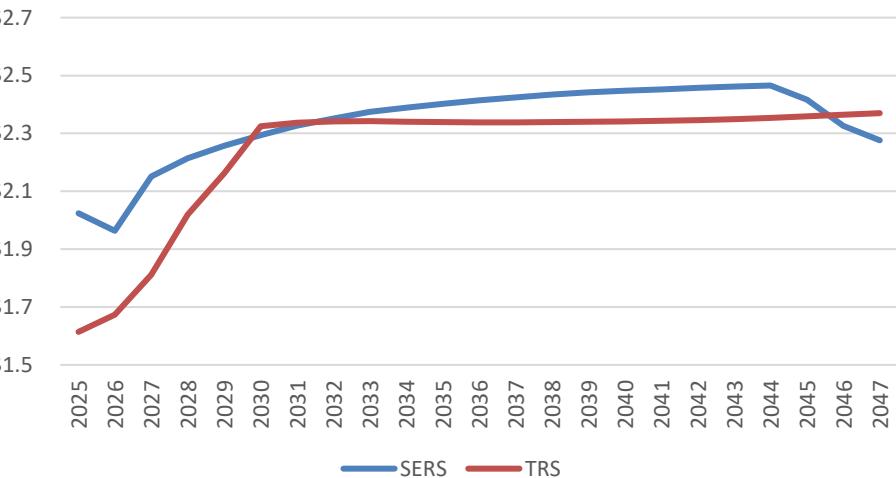
Exhibit 5

24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System

Scenario: Asset Shock, Partial ADC

Dollars in Billions

		SERS									TRS							
		Funding - Market Value				**Employer Cost**					**Funding - Market Value**				**Employer Cost**			
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2023	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$ 24.5	$ 16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2024	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ (0.8)	47.6%	$ 5.0	$ 41.9	$ 26.0	$ 15.8	62.2%	$ 1.6	$ (2.5)	$ 0.2	32.2%
2025	$ 4.3	$ 43.0	$ 22.1	$ 20.9	51%	$ 2.0	$ (2.8)	$ 0.8	45.4%	$ 5.1	$ 42.9	$ 25.8	$ 17.1	60.1%	$ 1.7	$ (2.5)	$ (0.5)	32.5%
2026	$ 4.4	$ 43.4	$ 22.3	$ 21.1	51%	$ 2.2	$ (2.9)	$ 0.9	48.8%	$ 5.3	$ 43.9	$ 24.8	$ 19.1	56.4%	$ 1.8	$ (2.6)	$ 0.2	34.4%
2027	$ 4.5	$ 43.8	$ 22.5	$ 21.4	51%	$ 2.2	$ (3.0)	$ 1.0	49.4%	$ 5.4	$ 44.9	$ 24.4	$ 20.5	54.4%	$ 2.0	$ (2.6)	$ (0.1)	37.4%
2028	$ 4.6	$ 44.2	$ 22.6	$ 21.6	51%	$ 2.3	$ (3.1)	$ 1.1	49.9%	$ 5.5	$ 46.0	$ 23.8	$ 22.2	51.7%	$ 2.2	$ (2.7)	$ 1.6	39.3%
2029	$ 4.6	$ 44.5	$ 22.8	$ 21.7	51%	$ 2.3	$ (3.1)	$ 1.2	50.4%	$ 5.7	$ 47.1	$ 24.8	$ 22.3	52.6%	$ 2.4	$ (2.8)	$ 1.6	41.7%
2030	$ 4.7	$ 44.8	$ 23.0	$ 21.8	51%	$ 2.4	$ (3.2)	$ 1.2	50.9%	$ 5.8	$ 48.3	$ 25.7	$ 22.5	53.4%	$ 2.4	$ (2.9)	$ 1.7	41.7%
2031	$ 4.8	$ 45.1	$ 23.2	$ 21.9	51%	$ 2.5	$ (3.3)	$ 1.3	51.3%	$ 6.0	$ 49.4	$ 26.7	$ 22.7	54.1%	$ 2.5	$ (2.9)	$ 1.8	41.9%
2032	$ 4.9	$ 45.2	$ 23.4	$ 21.9	52%	$ 2.5	$ (3.3)	$ 1.3	51.7%	$ 6.1	$ 50.6	$ 27.8	$ 22.8	54.9%	$ 2.6	$ (3.0)	$ 1.9	42.1%
2033	$ 5.0	$ 45.4	$ 23.5	$ 21.9	52%	$ 2.6	$ (3.4)	$ 1.4	52.0%	$ 6.2	$ 51.8	$ 28.8	$ 23.0	55.6%	$ 2.6	$ (3.1)	$ 2.0	42.3%
2034	$ 5.1	$ 45.6	$ 23.7	$ 21.9	52%	$ 2.7	$ (3.4)	$ 1.4	52.4%	$ 6.4	$ 53.0	$ 29.8	$ 23.2	56.2%	$ 2.7	$ (3.2)	$ 2.1	42.6%
2035	$ 5.2	$ 45.7	$ 23.8	$ 21.8	52%	$ 2.8	$ (3.5)	$ 1.5	52.8%	$ 6.5	$ 54.2	$ 30.8	$ 23.4	56.8%	$ 2.8	$ (3.3)	$ 2.1	43.0%
2036	$ 5.4	$ 45.8	$ 24.0	$ 21.8	52%	$ 2.9	$ (3.5)	$ 1.5	53.2%	$ 6.7	$ 55.4	$ 31.8	$ 23.6	57.4%	$ 2.9	$ (3.4)	$ 2.2	43.4%
2037	$ 5.5	$ 45.9	$ 24.1	$ 21.7	53%	$ 3.0	$ (3.5)	$ 1.5	53.7%	$ 6.9	$ 56.6	$ 32.7	$ 23.9	57.8%	$ 3.0	$ (3.5)	$ 2.3	44.0%
2038	$ 5.6	$ 45.9	$ 24.3	$ 21.7	53%	$ 3.1	$ (3.5)	$ 1.5	54.2%	$ 7.0	$ 57.9	$ 33.7	$ 24.2	58.2%	$ 3.1	$ (3.5)	$ 2.3	44.5%
2039	$ 5.8	$ 46.0	$ 24.4	$ 21.6	53%	$ 3.2	$ (3.6)	$ 1.6	54.8%	$ 7.2	$ 59.2	$ 34.7	$ 24.5	58.6%	$ 3.3	$ (3.6)	$ 2.4	45.2%
2040	$ 5.9	$ 46.1	$ 24.6	$ 21.5	53%	$ 3.3	$ (3.6)	$ 1.6	55.4%	$ 7.4	$ 60.4	$ 35.6	$ 24.8	58.9%	$ 3.4	$ (3.7)	$ 2.4	45.9%
2041	$ 6.1	$ 46.2	$ 24.8	$ 21.4	54%	$ 3.4	$ (3.6)	$ 1.6	56.0%	$ 7.6	$ 61.8	$ 36.6	$ 25.2	59.2%	$ 3.6	$ (3.8)	$ 2.5	46.7%
2042	$ 6.3	$ 46.3	$ 25.0	$ 21.3	54%	$ 3.6	$ (3.6)	$ 1.6	56.8%	$ 7.8	$ 63.1	$ 37.5	$ 25.6	59.4%	$ 3.7	$ (3.9)	$ 2.6	47.5%
2043	$ 6.4	$ 46.5	$ 25.3	$ 21.2	54%	$ 3.7	$ (3.5)	$ 1.7	57.6%	$ 8.0	$ 64.4	$ 38.4	$ 26.1	59.5%	$ 3.9	$ (4.0)	$ 2.6	48.5%
2044	$ 6.6	$ 46.7	$ 25.6	$ 21.1	55%	$ 3.8	$ (3.5)	$ 1.7	57.7%	$ 8.3	$ 65.8	$ 39.3	$ 26.6	59.6%	$ 4.1	$ (4.1)	$ 2.7	49.5%
2045	$ 6.8	$ 47.0	$ 26.0	$ 21.1	55%	$ 3.9	$ (3.5)	$ 1.7	57.4%	$ 8.5	$ 67.3	$ 40.2	$ 27.1	59.7%	$ 4.3	$ (4.2)	$ 2.7	50.6%
2046	$ 7.0	$ 47.3	$ 26.2	$ 21.1	55%	$ 4.0	$ (3.5)	$ 1.7	57.9%	$ 8.8	$ 68.8	$ 41.0	$ 27.7	59.7%	$ 4.5	$ (4.3)	$ 2.8	51.7%

Exhibit 5

Funded Ratio
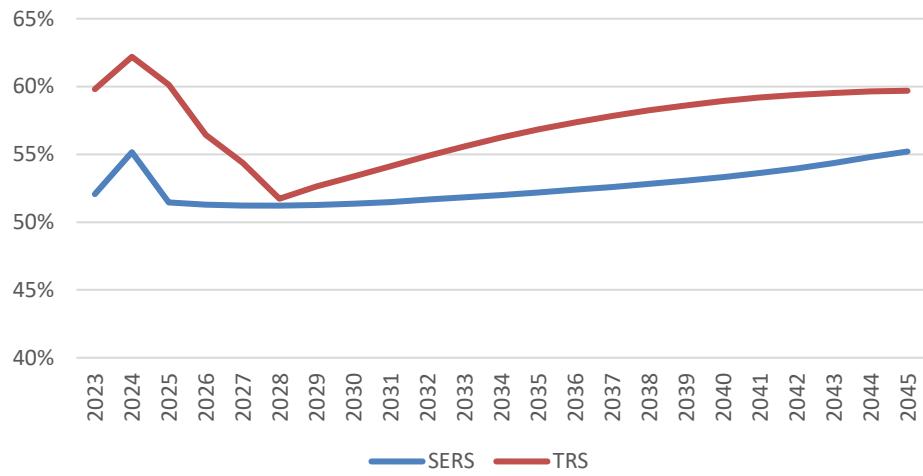
(SERS, TRS — 2023 to 2045; y-axis 40% to 65%)

Unfunded Accrued Liability

(Billions; SERS, TRS — 2023 to 2045; y-axis $15 to $29)

Employer Contribution Rate

(SERS, TRS — 2024 to 2046; y-axis 20% to 60%)

Employer Contribution

(Billions; SERS, TRS — 2024 to 2046; y-axis $1.5 to $5.0)
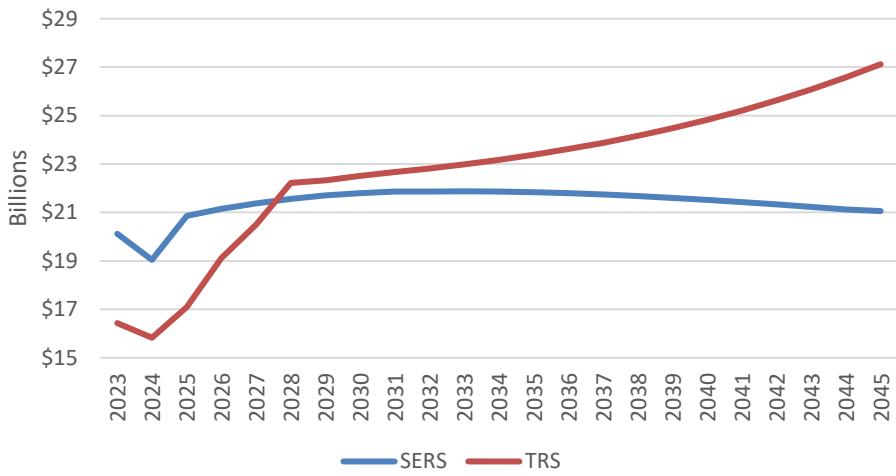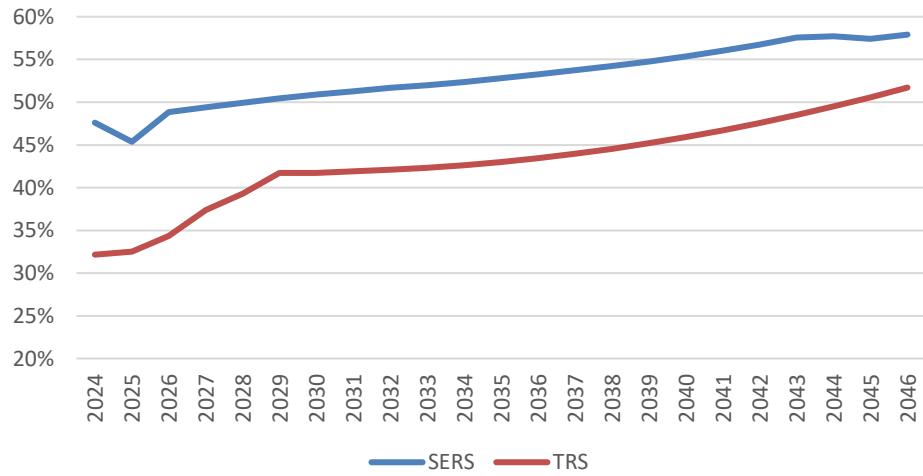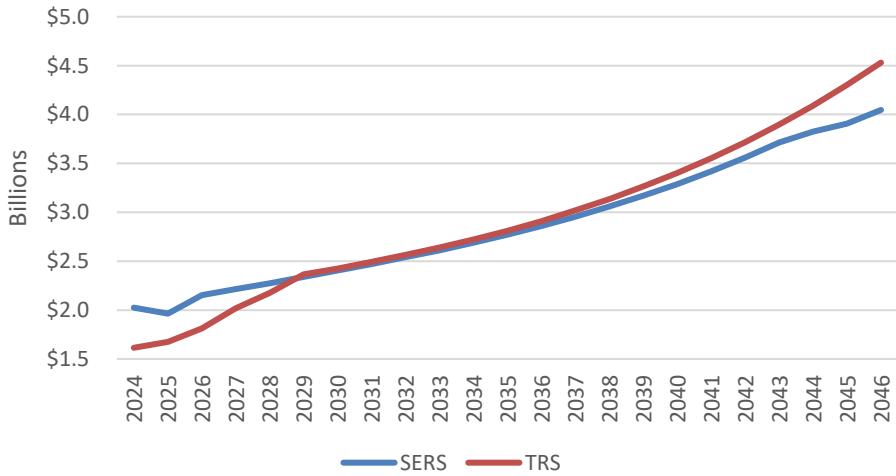
Exhibit 6

24-Year Projections: Connecticut State Employees Retirement System and Connecticut State Teachers' Retirement System

Scenario: 4 Years Max COLA

Dollars in Billions

|	SERS									TRS								
		Funding - Market Value				Employer Cost					Funding - Market Value				Employer Cost			
Fiscal Year	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage	Payroll	Liability	Assets	UAL	Funded Ratio	Total Contribution	Benefit Payment	Investment Return	Contribution Percentage
2024	$ 4.2	$ 42.0	$ 21.8	$ 20.1	52%	$ 2.0	$ (2.7)	$ 1.6	48.9%	$ 4.9	$ 40.9	$ 24.5	$ 16.4	59.8%	$ 1.6	$ (2.4)	$ 1.7	31.8%
2025	$ 4.3	$ 42.5	$ 23.4	$ 19.0	55%	$ 2.0	$ (2.8)	$ 1.6	47.6%	$ 5.0	$ 41.9	$ 26.0	$ 15.8	62.2%	$ 1.6	$ (2.5)	$ 2.0	32.2%
2026	$ 4.3	$ 44.3	$ 24.5	$ 19.7	55%	$ 2.0	$ (2.9)	$ 1.7	45.4%	$ 5.1	$ 43.8	$ 27.5	$ 16.3	62.9%	$ 1.7	$ (2.6)	$ 1.3	32.5%
2027	$ 4.4	$ 46.1	$ 25.5	$ 20.6	55%	$ 2.1	$ (3.1)	$ 1.8	46.7%	$ 5.3	$ 45.8	$ 28.2	$ 17.5	61.7%	$ 1.7	$ (2.8)	$ 2.2	33.0%
2028	$ 4.5	$ 48.0	$ 26.4	$ 21.6	55%	$ 2.2	$ (3.3)	$ 1.8	48.4%	$ 5.4	$ 47.8	$ 29.8	$ 18.0	62.3%	$ 1.9	$ (2.9)	$ 2.1	34.9%
2029	$ 4.6	$ 49.9	$ 27.3	$ 22.6	55%	$ 2.3	$ (3.5)	$ 1.9	50.3%	$ 5.5	$ 49.9	$ 31.2	$ 18.7	62.5%	$ 2.0	$ (3.1)	$ 2.2	35.4%
2030	$ 4.6	$ 50.1	$ 28.1	$ 22.0	56%	$ 2.4	$ (3.6)	$ 1.9	52.3%	$ 5.7	$ 50.9	$ 32.6	$ 18.3	64.1%	$ 2.1	$ (3.2)	$ 2.3	36.3%
2031	$ 4.7	$ 50.3	$ 29.1	$ 21.2	58%	$ 2.4	$ (3.7)	$ 2.0	51.4%	$ 5.8	$ 51.8	$ 34.1	$ 17.7	65.9%	$ 2.1	$ (3.2)	$ 2.4	35.5%
2032	$ 4.8	$ 50.4	$ 30.1	$ 20.3	60%	$ 2.4	$ (3.7)	$ 2.1	50.2%	$ 6.0	$ 52.8	$ 35.7	$ 17.1	67.6%	$ 2.1	$ (3.3)	$ 2.5	34.6%
2033	$ 4.9	$ 50.4	$ 31.0	$ 19.4	62%	$ 2.4	$ (3.8)	$ 2.1	49.0%	$ 6.1	$ 53.8	$ 37.4	$ 16.5	69.4%	$ 2.1	$ (3.4)	$ 2.6	33.8%
2034	$ 5.0	$ 50.5	$ 32.0	$ 18.4	63%	$ 2.4	$ (3.8)	$ 2.2	47.7%	$ 6.2	$ 54.9	$ 39.1	$ 15.8	71.2%	$ 2.1	$ (3.5)	$ 2.7	33.0%
2035	$ 5.1	$ 50.5	$ 33.0	$ 17.4	65%	$ 2.4	$ (3.9)	$ 2.2	46.5%	$ 6.4	$ 55.9	$ 40.8	$ 15.1	73.0%	$ 2.1	$ (3.5)	$ 2.8	32.2%
2036	$ 5.2	$ 50.4	$ 34.1	$ 16.4	68%	$ 2.4	$ (3.9)	$ 2.3	45.3%	$ 6.5	$ 56.9	$ 42.6	$ 14.4	74.8%	$ 2.1	$ (3.6)	$ 2.9	31.4%
2037	$ 5.4	$ 50.4	$ 35.1	$ 15.3	70%	$ 2.4	$ (4.0)	$ 2.4	44.2%	$ 6.7	$ 58.0	$ 44.4	$ 13.6	76.5%	$ 2.1	$ (3.7)	$ 3.1	30.7%
2038	$ 5.5	$ 50.3	$ 36.2	$ 14.1	72%	$ 2.4	$ (4.0)	$ 2.5	43.1%	$ 6.9	$ 59.1	$ 46.3	$ 12.8	78.4%	$ 2.1	$ (3.8)	$ 3.2	30.0%
2039	$ 5.6	$ 50.2	$ 37.3	$ 12.8	74%	$ 2.4	$ (4.0)	$ 2.5	41.9%	$ 7.0	$ 60.2	$ 48.2	$ 11.9	80.2%	$ 2.1	$ (3.8)	$ 3.3	29.3%
2040	$ 5.8	$ 50.1	$ 38.6	$ 11.5	77%	$ 2.4	$ (4.0)	$ 2.6	40.8%	$ 7.2	$ 61.3	$ 50.3	$ 11.0	82.0%	$ 2.1	$ (3.9)	$ 3.5	28.6%
2041	$ 5.9	$ 50.0	$ 39.9	$ 10.1	80%	$ 2.4	$ (4.0)	$ 2.7	39.7%	$ 7.4	$ 62.4	$ 52.4	$ 10.1	83.9%	$ 2.1	$ (4.0)	$ 3.6	27.9%
2042	$ 6.1	$ 49.9	$ 41.3	$ 8.6	83%	$ 2.4	$ (4.0)	$ 2.8	38.6%	$ 7.6	$ 63.6	$ 54.5	$ 9.0	85.8%	$ 2.1	$ (4.1)	$ 3.7	27.2%
2043	$ 6.3	$ 49.8	$ 42.8	$ 7.1	86%	$ 2.4	$ (4.0)	$ 2.9	37.5%	$ 7.8	$ 64.8	$ 56.8	$ 8.0	87.7%	$ 2.1	$ (4.2)	$ 3.9	26.5%
2044	$ 6.4	$ 49.8	$ 44.4	$ 5.4	89%	$ 2.3	$ (3.9)	$ 3.0	36.4%	$ 8.0	$ 66.0	$ 59.1	$ 6.8	89.6%	$ 2.1	$ (4.2)	$ 4.1	25.9%
2045	$ 6.6	$ 49.8	$ 46.2	$ 3.6	93%	$ 2.3	$ (3.9)	$ 3.1	34.7%	$ 8.3	$ 67.2	$ 61.6	$ 5.6	91.6%	$ 2.1	$ (4.3)	$ 4.2	25.2%
2046	$ 6.8	$ 49.9	$ 48.1	$ 1.8	96%	$ 2.2	$ (3.9)	$ 3.3	32.4%	$ 8.5	$ 68.5	$ 64.2	$ 4.3	93.7%	$ 2.1	$ (4.4)	$ 4.4	24.6%
2047	$ 7.0	$ 50.1	$ 50.1	$ (0.1)	100%	$ 2.1	$ (3.9)	$ 3.4	30.8%	$ 8.8	$ 69.9	$ 66.9	$ 3.0	95.7%	$ 2.1	$ (4.5)	$ 4.6	23.9%

Exhibit 6

Funded Ratio
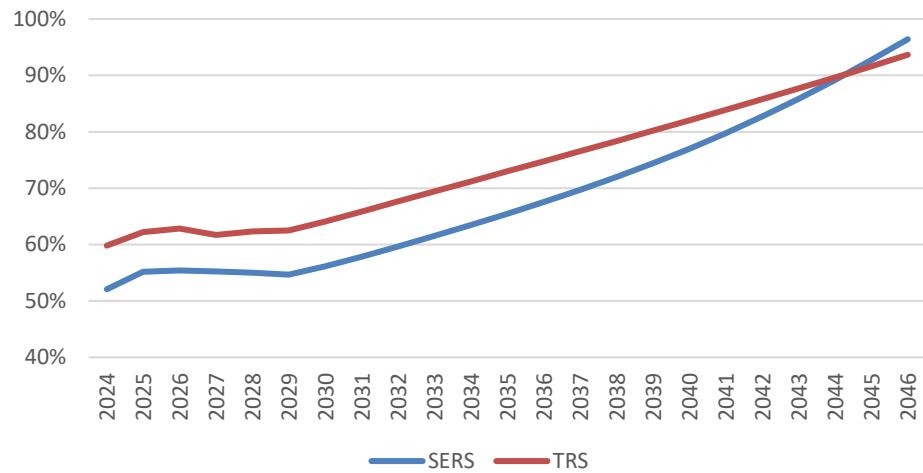
Unfunded Accrued Liability
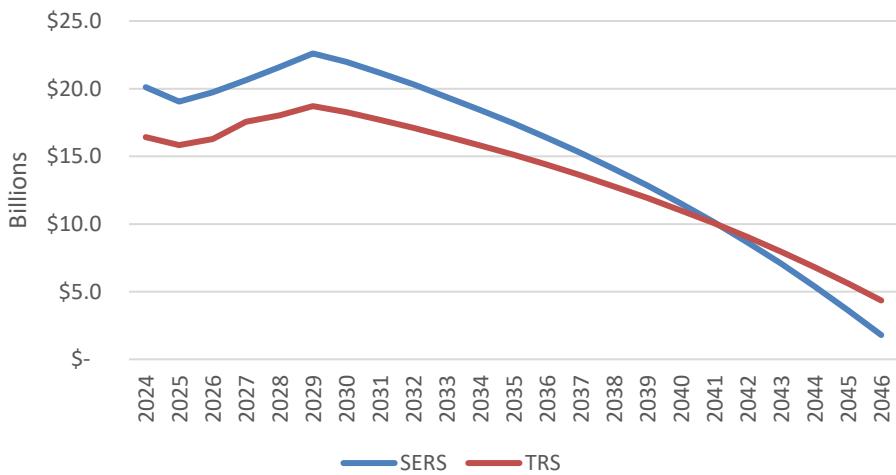
Employer Contribution Rate

Employer Contribution