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Overview and Analysis of the Pension and Retiree Healthcare Provisions of the 2017 SEBAC Agreement

The following is an overview and analysis of the pension and retiree healthcare provisions of the agreement reached between the State of Connecticut (State) and the State Employees Bargaining Agent Coalition (SEBAC) on March 23, 2017 and ratified by labor on July 17, 2017. The agreement, which according to state officials is estimated to generate budget savings of approximately $1.6 billion over the next two years, was also approved by the House on July 24, 2017 and the Senate on July 31, 2017.

Key Findings

- Projected savings from changes to pension benefits for workers, representing 29% of total savings, appear reasonable based on independent actuarial analysis. Going forward, Pew recommends that policymakers consider applying future cost savings to pay down the unfunded liability and help protect against unplanned costs in the future.
- The defined benefit/defined contribution (DB/DC) hybrid plan for new employees projects to substantially lower cost and risk for taxpayers over time. This is mainly the result of a “risk- managed” hybrid design that calls for a significant increase in employee contributions and, if investment returns fall short of expectations, additional contributions to bear part of the cost—generating present value savings over 30 years of $500 million to $1.5 billion depending on how investments perform.
- The cost reductions associated with transitioning to Medicare Advantage, 12% of total savings over the next two years, is the result of a well-documented procurement process, with pricing for the first two years guaranteed. However, the state continues to project high rates of health care cost growth after the initial two year period.

In exchange for their support on the Senate vote, several senators introduced a number of systemic reforms for consideration, including six related to pension and retirement benefits. These reforms, reproduced on page 10 in the appendix below, intersect with the policy recommendations included within this document. Notably, two of the suggested reforms focus on sustainability analysis, which aligns with our recommendation to commission an in-depth fiscal study to include 50-state comparative analysis and stress testing.

This analysis, conducted by The Pew Charitable Trusts' Public Sector Retirement Systems Project, is being provided at the request of policymakers in the state and does not constitute an endorsement of the SEBAC agreement or represent a comprehensive solution to the state's long-term fiscal challenges. Our analysis is based on the provisions documented in the 2017 SEBAC Agreement and the State's analysis over a five-year time horizon, with the understanding that the SEBAC agreement and certain benefit provisions will be extended to June 30, 2027.

Below are a summary of our SEBAC analysis, policy recommendations, and a series of exhibits that highlight our research.

Summary of Analysis

Summary of Savings: According to state officials, expected savings of $4.8 billion over five years are split between wage concessions (51%); adjustments to pension benefits (27%), including increased employee contributions; and changes to active/retiree health care benefits (22%). We note that wage concessions will also impact pension savings because the projected final average salary for current workers – the basis for pension benefit calculations – is projected to be approximately 10% lower than previously estimated.

Impact of Pension Changes for Current Workers: The estimated impacts to pension costs appear reasonable based on Pew's independent actuarial analysis using the state's pension plan assumptions. Based on this analysis, we estimate that 6% of total savings is the result of increasing employee contributions. The balance – 21% of total savings from pension benefit adjustments – is based on reducing the state's actuarial contributions to the State Employees Retirement System (SERS) as a result of lower projected benefit payments for current workers in retirement tied to wage concessions and reduced cost-of-living adjustment (COLA) benefits. The changes would reduce the current SERS liability, and unfunded liability, by about $1.5 billion—lowering the employer costs for current employees and retirees. The cost of new benefits for workers will go down, adding to the total savings estimates.

Projected Cost of the Hybrid Plan for New Workers: The defined benefit/defined contribution (DB/DC) hybrid plan for all new employees (Tier IV) can be expected to substantially lower cost and risk for taxpayers over time. Based on the plan assumption of 6.9% return on investment, the State's expected cost is 2.7% of pay. Pew conducted a sensitivity analysis and found that amount may increase to 4.2% if investments only return 5%. In comparison, the Tier III benefits, after accounting for changes under the new SEBAC agreement, have an expected employer cost of 4%, increasing to 7.7% if investments only deliver 5% returns. We estimate present value savings over 30 years of $500 million to $1.5 billion depending on how investments perform.

The cost of the Tier IV hybrid plan is lower due primarily to a significant increase in employee contributions as well as the reduction in the defined benefit. In addition, if returns fall short of expectations, employee contributions will go up to bear part of the cost—providing additional risk-management. Policymakers may also wish to consider adding provisions that incentivize workers to save more in their defined contribution accounts. The current mandatory savings rate of 2% of pay, including the employer match, is low compared to similar plans across the country.

Retiree Healthcare: The cost reductions associated with transitioning to Medicare Advantage – which accounts for over 90% of the retiree health care savings and more than half of total health care savings – is the result of a well-documented procurement process, with pricing for the first two years guaranteed.

Over 20 states have used Medicare Advantage for the purpose of providing health benefits to eligible retirees. For Connecticut, the switch is expected to save approximately $200 million over the next two years and reduce the overall retiree health care liability from $20.9 billion to $15.6 billion according to an actuarial analysis commissioned by the State. However, the state continues to project high rates of health care cost growth after the initial two year period.

Policy Recommendations

Pew recommends that the legislature consider additional policy measures to more fully evaluate and closely monitor the fiscal health of the state's retirement systems, based on initiatives that other states have recently adopted.

1. **Commission a 50-state comparative study of retirement benefits including an independent fiscal sustainability and actuarial assessment.**

   Rationale: A comprehensive analysis of retirement benefits and policies will help to ensure that Connecticut is in line with its peer states. Recently, both South Carolina and Virginia have requested similar analyses. Further, an independent fiscal assessment will assist policymakers in accurately evaluating the financial health of the state's retirement system. We note that this recommendation is in line with number 5 of the systemic reforms (reproduced in the appendix), calling for the creation of a Teachers' Retirement Viability Commission.

2. **Require stress test analysis of all retirement plans as part of regular reporting.**

   Rationale: Regularly producing sensitivity and stress test analyses, as defined by the specifications in the appendix, would inform policymakers on benefit costs and fiscal impacts using different investment return assumptions. In turn, this will help policymakers to plan for uncertainty, evaluate proposals, and underscore the importance of fully funding pension promises. The detailed analysis on the impact of the SEBAC proposal on Connecticut's state pension benefits included in this document below is based on stress test analysis created from an independent actuarial assessment. We note that this recommendation is in line with number 6 of the systemic reforms (reproduced in the appendix), which establishes a Pension Legacy Debt Commission. Specifically, comprehensive stress testing and sensitivity analysis would assist policymakers in creating strategies for managing legacy pension debt.

3. **Consider adding provisions that incentivize workers to save more in their defined contribution accounts.**

   Rationale: The current mandatory savings rate of 2% of pay, including the employer match, is low compared to similar plans across the country. In order to ensure workers are saving enough for retirement, the state should consider strategies to encourage workers to save more for retirement such as auto-escalation.

4. **Establish a policy to fully disclose alternative investment fees.**

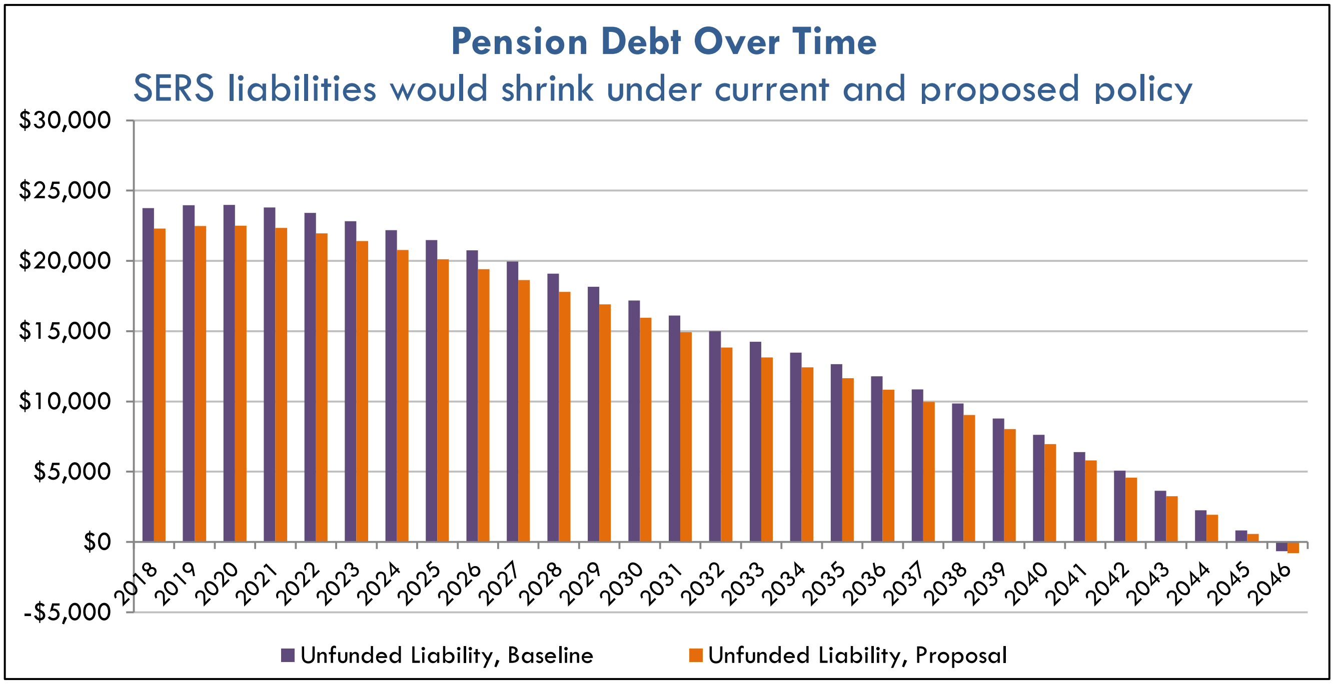
   Rationale: Unreported investment performance fees, including carried interest, have been estimated at over $4 billion annually nationwide, with six states recently adopting policies to fully disclose carried interest and other unreported fees. Full disclosure of alternative investment fees will increase transparency, help to control costs, and provide policymakers and stakeholders with clear information about the costs of the plan's investment management strategies.

Sensitivity and Stress Testing for Connecticut: Impact of SEBAC Agreement

The analysis below compares projected pension liabilities and costs for Connecticut SERS, before and after the proposed changes in the SEBAC agreement, based on independent actuarial modeling using the state's pension plan assumptions. Generally, we recommend presenting sensitivity analysis that looks at plan liabilities and costs assuming different rates of return on investments. Projections should cover key financial information over 5 to 30 years. Fiscal metrics include projecting assets, pension debt, employer payments, operating cash flow, and whether contributions to the pension plan are expected to pay down pension debt.

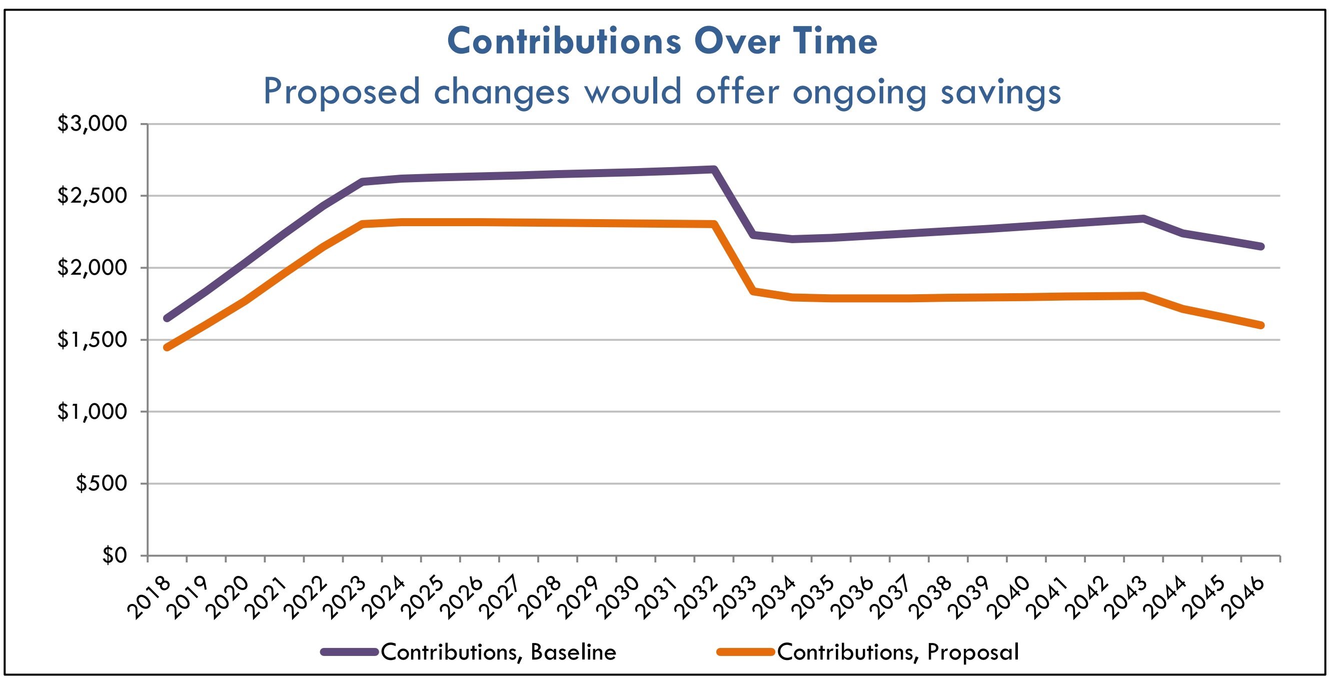
The output and visualizations below provide an example of the type of comprehensive information stress testing will provide for policymakers. Stress testing can be tailored to reflect current economic outlooks or unexpected market fluctuations to provide information on potential impacts to plans under extreme scenarios. Complete output from the stress test can be found in the appendix.

Figure 1: The state's pension debt is expected to decline over time as it is paid off following the new contribution policy. The proposed changes would immediately lower the unfunded liability by about $1.5 billion while maintaining the target date for full funding of 2046.



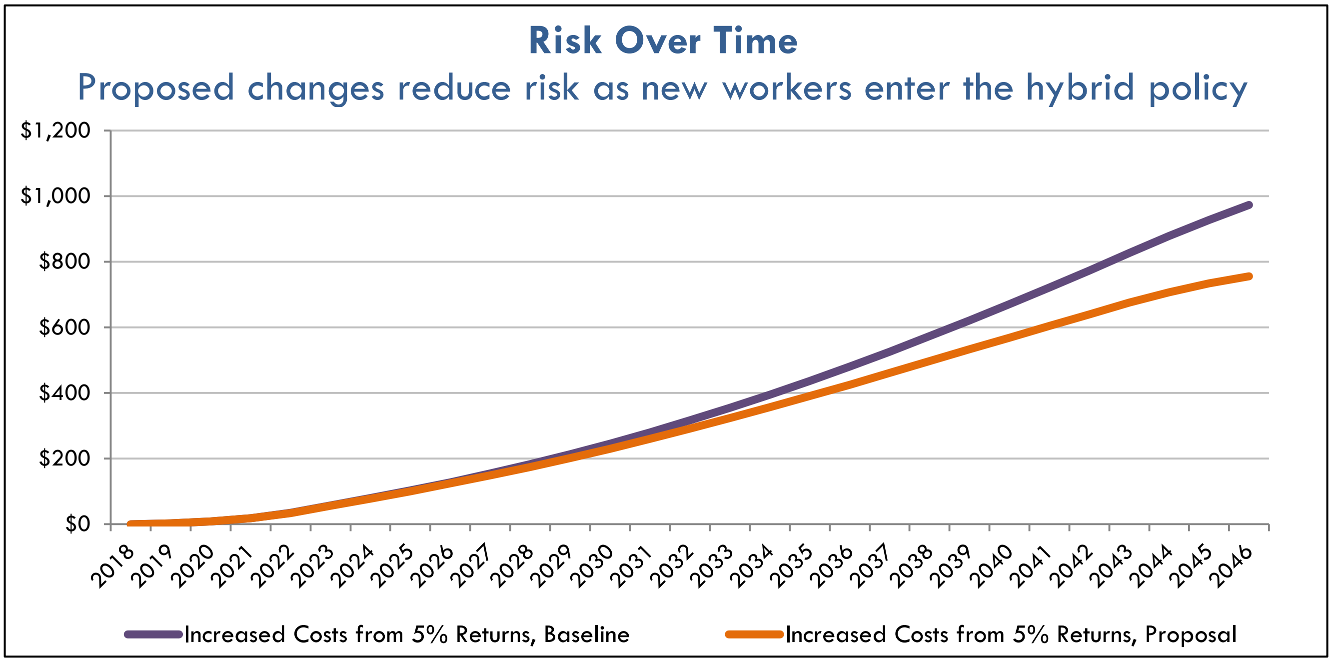
Note: Actuarial analysis of current policy and proposed changes using plan assumptions and actuarial methods.

Figure 2: Annual employer contributions are expected to rise to over $2.5 billion as Connecticut pays off its pension debt. The proposed changes would lower overall costs and have employees pick up a larger share of the contributions.



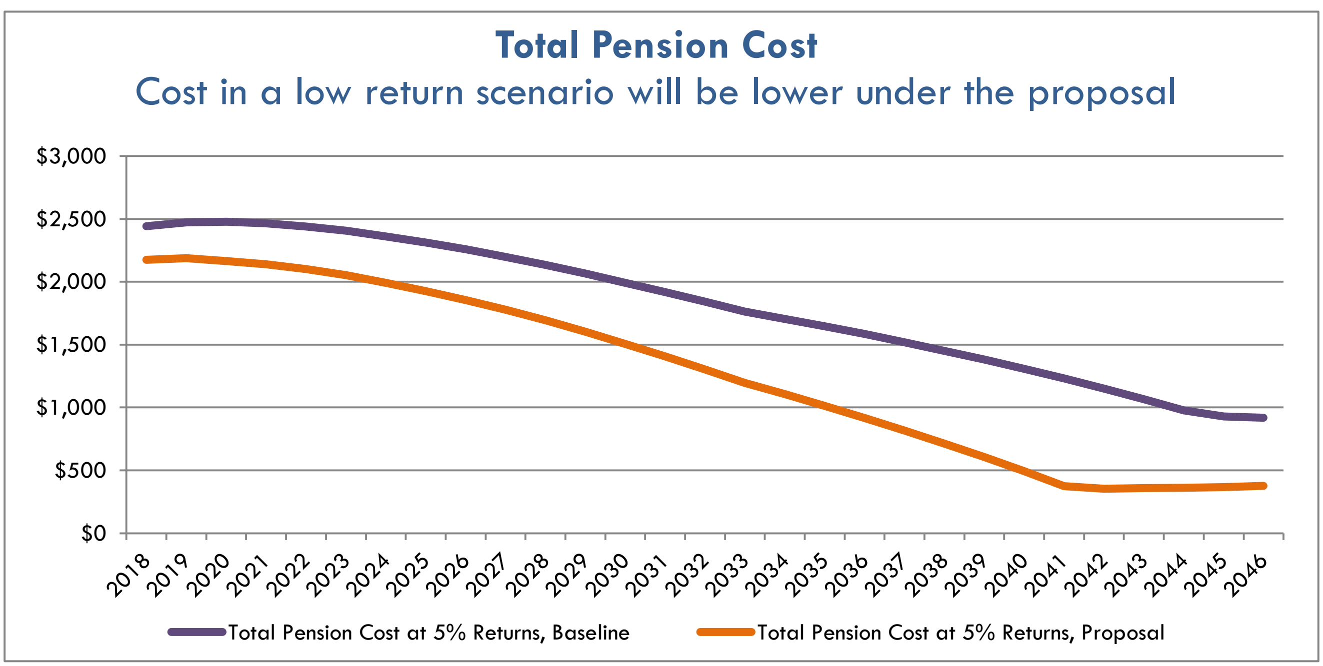
Note: Actuarial analysis of current policy and proposed changes using plan assumptions and actuarial methods.

Figure 3: The below chart shows how much employer costs will go up if plan investments deliver just 5 percent returns. For the current plan, the risk of investment shortfalls could add up to $1 billion in extra annual costs by 2046. The proposed changes would protect against over $200 million of that risk with risk management increasing over time as a larger share of liabilities are covered by employees in the new hybrid plan.



Note: Actuarial analysis of current policy and proposed changes using plan assumptions and actuarial methods. Data shows the increase in costs if returns are 5% instead of the assumed 6.9%.

Figure 4: Total pension cost, the combined budgetary cost of employer contributions and balance sheet impact from the change in pension debt, will be lower under the new plan both under current assumptions and a scenario where the assumed rate of return is just 5 percent.



Note: Actuarial analysis of current policy and proposed changes assuming actual returns are 5%. Total pension cost is the sum of the employer contributions and change in the unfunded liability.

Appendix

SYSTEMIC REFORMS AS PROPOSED BY SENATORS DOYLE HARTLEY SLOSSBERG

1. Define in statute the case law definition of "Impairment of Contract."
2. Define in statute under State of Connecticut arbitration statutes the state's "ability to pay."
3. After expiration of SEBAC in 2027, no COLAs for pensions negotiated in SEBAC but set by statute.
4. After expiration of SEBAC in 2027, overtime shall not be included in pension calculations except for mandatory overtime required for public health or safety purposes.
5. Create a Teacher's Retirement System Viability Commission to ensure the sustainability of the TRB.
6. Create a Pension Legacy Debt Commission to develop a liability asset management plan. Such plan shall include consideration of the UConn Health Center's future.
7. Vote on all union contracts.
8. Establish a cap on State of Connecticut bonding.
9. After expiration of SEBAC in 2027, no future SEBAC agreement shall extend longer than four (4) years.
10. Create mechanism for review and certification of 2017 SEBAC savings.
11. Create a Volatility Cap for capital gains income tax receipts [authored by Sen. Fonfara].
12. Create an Expenditure Cap based upon Consensus Revenue [authored by Sen. Fonfara].

Appendix 1

Connecticut SERS: 30 - Year Actuarial Data

Baseline Scenario at 6.9% Assumed Rate of Return

$MMs

		Pension Liability (Accrued Actuarial Liability)					Pension Assets (Market Value)						Net Amortization			Cash Flow/	Employer Contribution		
Fiscal Year	**Payroll**	**BOP**	**Service Cost**	**Interest**	**Benefit**	**EOP**	**BOP**	**Contribut.**	**Interest**	**Benefit**	**EOP**	**Debt**	**$**	**% Payroll**	**Funded %**	**Assets %**	**$**	**% Change**	**% Payroll**
6/30/2018	3,836	34,526	449	2,353	(1,914)	35,414	11,130	1,732	703	(1,914)	11,651	23,763	367	9.6%	32.9%	-1.6%	1,648	-	43%
6/30/2019	3,895	35,414	454	2,410	(2,004)	36,274	11,651	1,929	736	(2,004)	12,312	23,962	199	5.1%	33.9%	-0.6%	1,836	11.4%	47%
6/30/2020	3,965	36,274	457	2,467	(2,091)	37,107	12,312	2,129	779	(2,091)	13,128	23,978	16	0.4%	35.4%	0.3%	2,034	10.8%	51%
6/30/2021	4,030	37,107	460	2,523	(2,188)	37,902	13,128	2,335	832	(2,188)	14,107	23,795	(183)	-4.5%	37.2%	1.1%	2,236	10.0%	55%
6/30/2022	4,102	37,902	465	2,574	(2,281)	38,661	14,107	2,533	896	(2,281)	15,255	23,406	(389)	-9.5%	39.5%	1.8%	2,430	8.7%	59%
6/30/2023	4,174	38,661	469	2,625	(2,375)	39,379	15,255	2,704	972	(2,375)	16,556	22,823	(582)	-14.0%	42.0%	2.2%	2,598	6.9%	62%
6/30/2024	4,254	39,379	474	2,671	(2,466)	40,058	16,556	2,729	1,059	(2,466)	17,878	22,180	(643)	-15.1%	44.6%	1.6%	2,620	0.8%	62%
6/30/2025	4,335	40,058	479	2,717	(2,561)	40,693	17,878	2,741	1,147	(2,561)	19,205	21,489	(692)	-16.0%	47.2%	1.0%	2,628	0.3%	61%
6/30/2026	4,419	40,693	485	2,758	(2,657)	41,280	19,205	2,752	1,235	(2,657)	20,535	20,745	(743)	-16.8%	49.7%	0.5%	2,635	0.3%	60%
6/30/2027	4,510	41,280	492	2,796	(2,754)	41,813	20,535	2,763	1,323	(2,754)	21,867	19,946	(799)	-17.7%	52.3%	0.0%	2,643	0.3%	59%
6/30/2028	4,601	41,813	498	2,831	(2,855)	42,287	21,867	2,774	1,412	(2,855)	23,198	19,089	(857)	-18.6%	54.9%	-0.4%	2,650	0.3%	58%
6/30/2029	4,702	42,287	506	2,859	(2,949)	42,703	23,198	2,786	1,501	(2,949)	24,536	18,167	(922)	-19.6%	57.5%	-0.7%	2,658	0.3%	57%
6/30/2030	4,813	42,703	511	2,887	(3,038)	43,064	24,536	2,796	1,590	(3,038)	25,885	17,179	(988)	-20.5%	60.1%	-1.0%	2,665	0.3%	55%
6/30/2031	4,934	43,064	519	2,911	(3,119)	43,376	25,885	2,809	1,680	(3,119)	27,256	16,120	(1,059)	-21.5%	62.8%	-1.2%	2,674	0.3%	54%
6/30/2032	5,062	43,376	529	2,933	(3,197)	43,640	27,256	2,824	1,772	(3,197)	28,655	14,985	(1,135)	-22.4%	65.7%	-1.4%	2,684	0.4%	53%
6/30/2033	5,204	43,640	539	2,950	(3,263)	43,866	28,655	2,371	1,866	(3,263)	29,629	14,237	(748)	-14.4%	67.5%	-3.1%	2,227	-17.0%	43%
6/30/2034	5,354	43,866	551	2,967	(3,321)	44,064	29,629	2,348	1,932	(3,321)	30,589	13,475	(762)	-14.2%	69.4%	-3.3%	2,200	-1.2%	41%
6/30/2035	5,509	44,064	565	2,981	(3,375)	44,235	30,589	2,361	1,996	(3,375)	31,571	12,664	(811)	-14.7%	71.4%	-3.3%	2,208	0.4%	40%
6/30/2036	5,672	44,235	580	2,992	(3,424)	44,384	31,571	2,380	2,062	(3,424)	32,589	11,794	(870)	-15.3%	73.4%	-3.3%	2,223	0.7%	39%
6/30/2037	5,842	44,384	595	3,002	(3,466)	44,515	32,589	2,401	2,131	(3,466)	33,655	10,860	(935)	-16.0%	75.6%	-3.3%	2,238	0.7%	38%
6/30/2038	6,022	44,515	610	3,012	(3,503)	44,633	33,655	2,421	2,203	(3,503)	34,776	9,857	(1,002)	-16.6%	77.9%	-3.2%	2,254	0.7%	37%
6/30/2039	6,208	44,633	626	3,020	(3,534)	44,745	34,776	2,441	2,280	(3,534)	35,962	8,783	(1,075)	-17.3%	80.4%	-3.1%	2,271	0.7%	37%
6/30/2040	6,402	44,745	642	3,028	(3,562)	44,853	35,962	2,462	2,361	(3,562)	37,223	7,630	(1,152)	-18.0%	83.0%	-3.1%	2,288	0.7%	36%
6/30/2041	6,602	44,853	658	3,036	(3,587)	44,961	37,223	2,483	2,447	(3,587)	38,566	6,395	(1,235)	-18.7%	85.8%	-3.0%	2,305	0.8%	35%
6/30/2042	6,811	44,961	675	3,044	(3,607)	45,073	38,566	2,504	2,539	(3,607)	40,003	5,070	(1,325)	-19.4%	88.8%	-2.9%	2,323	0.8%	34%
6/30/2043	7,029	45,073	691	3,053	(3,623)	45,194	40,003	2,526	2,637	(3,623)	41,543	3,651	(1,420)	-20.2%	91.9%	-2.7%	2,341	0.8%	33%
6/30/2044	7,255	45,194	708	3,061	(3,637)	45,326	41,543	2,429	2,743	(3,637)	43,078	2,248	(1,403)	-19.3%	95.0%	-2.9%	2,240	-4.3%	31%
6/30/2045	7,489	45,326	724	3,076	(3,650)	45,476	43,078	2,388	2,849	(3,650)	44,664	812	(1,436)	-19.2%	98.2%	-2.9%	2,195	-2.0%	29%
6/30/2046	7,733	45,476	745	3,089	(3,661)	45,650	44,664	2,347	2,958	(3,661)	46,309	(659)	(1,471)	-19.0%	101.4%	-2.9%	2,148	-2.1%	28%
6/30/2047	7,965	45,650	768	3,101	(3,660)	45,860	46,309	768	3,071	(3,660)	46,488	(628)	30	0.4%	101.4%	-6.2%	563	-73.8%	7%

Source: The Pew Charitable Trusts and The Terry Group. Analysis is based on plan assumptions. Projected contributions and liabilities are within 5% of state estimates in most years. Inputs here are taken from both the SEBAC Report of the Actuary on the Valuation Prepared as of June 30, 2016 by Cavanaugh Macdonald as well as preliminary analysis provided by state officials.

Appendix 2

Connecticut SERS: 30 - Year Actuarial Data

SEBAC Agreement at 6.9% Assumed Rate of Return

$MMs

		Pension Liability (Accrued Actuarial Liability)					Pension Assets (Market Value)						Net Amortization			Cash Flow/	Employer Contribution		
Fiscal Year	Payroll	BOP	Service Cost	Interest	Benefit	EOP	BOP	Contribut.	Interest	Benefit	EOP	Debt	$	% Payroll	Funded %	Assets %	$	% Change	% Payroll
6/30/2018	3,609	33,074	397	2,234	(1,914)	33,791	11,130	1,582	703	(1,914)	11,501	22,290	(1,106)	-30.6%	34.0%	-3.0%	1,446	-	40%
6/30/2019	3,554	33,791	387	2,282	(2,004)	34,457	11,501	1,749	726	(2,004)	11,972	22,485	195	5.5%	34.7%	-2.2%	1,605	11.0%	45%
6/30/2020	3,615	34,457	379	2,332	(2,090)	35,078	11,972	1,931	755	(2,090)	12,568	22,510	25	0.7%	35.8%	-1.3%	1,770	10.3%	49%
6/30/2021	3,664	35,078	379	2,372	(2,186)	35,642	12,568	2,128	793	(2,186)	13,303	22,340	(170)	-4.6%	37.3%	-0.5%	1,961	10.8%	54%
6/30/2022	3,721	35,642	379	2,407	(2,279)	36,149	13,303	2,317	841	(2,279)	14,182	21,968	(372)	-10.0%	39.2%	0.3%	2,144	9.3%	58%
6/30/2023	3,788	36,149	377	2,441	(2,373)	36,594	14,182	2,481	898	(2,373)	15,188	21,407	(561)	-14.8%	41.5%	0.8%	2,303	7.4%	61%
6/30/2024	3,850	36,594	378	2,467	(2,463)	36,976	15,188	2,502	964	(2,463)	16,190	20,786	(621)	-16.1%	43.8%	0.3%	2,318	0.6%	60%
6/30/2025	3,918	36,976	378	2,492	(2,557)	37,289	16,190	2,507	1,030	(2,557)	17,170	20,119	(668)	-17.0%	46.0%	-0.3%	2,317	0.0%	59%
6/30/2026	3,987	37,289	379	2,510	(2,653)	37,525	17,170	2,512	1,095	(2,653)	18,124	19,401	(718)	-18.0%	48.3%	-0.8%	2,316	-0.1%	58%
6/30/2027	4,064	37,525	380	2,523	(2,750)	37,679	18,124	2,517	1,157	(2,750)	19,049	18,630	(771)	-19.0%	50.6%	-1.3%	2,314	-0.1%	57%
6/30/2028	4,141	37,679	381	2,531	(2,850)	37,742	19,049	2,522	1,218	(2,850)	19,939	17,804	(827)	-20.0%	52.8%	-1.7%	2,312	-0.1%	56%
6/30/2029	4,222	37,742	383	2,531	(2,944)	37,712	19,939	2,527	1,276	(2,944)	20,798	16,914	(890)	-21.1%	55.1%	-2.1%	2,311	0.0%	55%
6/30/2030	4,309	37,712	383	2,527	(3,031)	37,591	20,798	2,531	1,332	(3,031)	21,630	15,961	(953)	-22.1%	57.5%	-2.4%	2,308	-0.1%	54%
6/30/2031	4,395	37,591	384	2,516	(3,112)	37,379	21,630	2,536	1,387	(3,112)	22,441	14,938	(1,023)	-23.3%	60.0%	-2.7%	2,306	-0.1%	52%
6/30/2032	4,491	37,379	386	2,501	(3,188)	37,077	22,441	2,541	1,440	(3,188)	23,234	13,843	(1,095)	-24.4%	62.7%	-2.9%	2,305	-0.1%	51%
6/30/2033	4,598	37,077	388	2,478	(3,252)	36,692	23,234	2,080	1,493	(3,252)	23,555	13,137	(706)	-15.4%	64.2%	-5.0%	1,835	-20.4%	40%
6/30/2034	4,713	36,692	392	2,452	(3,307)	36,229	23,555	2,047	1,513	(3,307)	23,808	12,421	(717)	-15.2%	65.7%	-5.3%	1,795	-2.2%	38%
6/30/2035	4,836	36,229	397	2,420	(3,358)	35,687	23,808	2,049	1,529	(3,358)	24,028	11,659	(762)	-15.8%	67.3%	-5.5%	1,788	-0.4%	37%
6/30/2036	4,971	35,687	403	2,382	(3,404)	35,067	24,028	2,058	1,542	(3,404)	24,225	10,843	(816)	-16.4%	69.1%	-5.6%	1,788	0.0%	36%
6/30/2037	5,115	35,067	409	2,340	(3,442)	34,374	24,225	2,068	1,555	(3,442)	24,405	9,969	(874)	-17.1%	71.0%	-5.7%	1,788	0.0%	35%
6/30/2038	5,263	34,374	417	2,292	(3,475)	33,607	24,405	2,079	1,566	(3,475)	24,574	9,033	(936)	-17.8%	73.1%	-5.7%	1,791	0.2%	34%
6/30/2039	5,418	33,607	425	2,239	(3,502)	32,769	24,574	2,091	1,577	(3,502)	24,740	8,029	(1,003)	-18.5%	75.5%	-5.7%	1,794	0.2%	33%
6/30/2040	5,581	32,769	434	2,181	(3,525)	31,859	24,740	2,103	1,587	(3,525)	24,904	6,955	(1,075)	-19.3%	78.2%	-5.8%	1,797	0.2%	32%
6/30/2041	5,752	31,859	443	2,119	(3,545)	30,877	24,904	2,115	1,598	(3,545)	25,073	5,804	(1,151)	-20.0%	81.2%	-5.7%	1,800	0.2%	31%
6/30/2042	5,931	30,877	453	2,051	(3,560)	29,821	25,073	2,128	1,609	(3,560)	25,250	4,571	(1,233)	-20.8%	84.7%	-5.7%	1,803	0.2%	30%
6/30/2043	6,116	29,821	462	1,979	(3,570)	28,692	25,250	2,141	1,621	(3,570)	25,441	3,250	(1,321)	-21.6%	88.7%	-5.7%	1,806	0.2%	30%
6/30/2044	6,307	28,692	472	1,901	(3,578)	27,487	25,441	2,059	1,634	(3,578)	25,556	1,930	(1,320)	-20.9%	93.0%	-6.0%	1,713	-5.1%	27%
6/30/2045	6,506	27,487	481	1,824	(3,585)	26,206	25,556	2,015	1,642	(3,585)	25,628	578	(1,352)	-20.8%	97.8%	-6.1%	1,659	-3.2%	25%
6/30/2046	6,714	26,206	496	1,737	(3,590)	24,849	25,628	1,968	1,647	(3,590)	25,653	(804)	(1,382)	-20.6%	103.2%	-6.3%	1,601	-3.5%	24%
6/30/2047	6,930	24,849	511	1,645	(3,583)	23,422	25,653	511	1,648	(3,583)	24,229	(807)	(3)	0.0%	103.4%	-12.0%	132	-91.8%	2%

Source: The Pew Charitable Trusts and The Terry Group. Analysis is based on plan assumptions. Projected contributions and liabilities are within 5% of state estimates in most years. Inputs here are taken from both the SEBAC Report of the Actuary on the Valuation Prepared as of June 30, 2016 by Cavanaugh Macdonald as well as preliminary analysis provided by state officials.

Appendix 3

Connecticut SERS: 30 - Year Actuarial Data

Prior Baseline at 5% Assumed Rate of Return

$MMs

		Pension Liability (Accrued Actuarial Liability)					Pension Assets (Market Value)						Net Amortization			Cash Flow/	Employer Contribution		
Fiscal Year	Payroll	BOP	Service Cost	Interest	Benefit	EOP	BOP	Contrib.	Interest	Benefit	EOP	Debt	$	% Payroll	Funded %	Assets %	$	% Change	% Payroll
6/30/2018	3,836	43,193	449	2,576	(1,914)	44,304	10,945	1,732	500	(1,914)	11,263	33,041	-	-	25%	-2%	1,648	-	43%
6/30/2019	3,895	44,304	682	2,398	(2,004)	45,379	11,263	2,486	514	(2,004)	12,258	33,121	80	2%	27%	4%	2,393	45.2%	61%
6/30/2020	3,965	45,379	686	2,448	(2,091)	46,421	12,258	2,749	561	(2,091)	13,478	32,944	(177)	-4%	29%	5%	2,653	10.9%	67%
6/30/2021	4,030	46,421	691	2,493	(2,188)	47,416	13,478	2,957	620	(2,188)	14,866	32,550	(394)	-10%	31%	6%	2,858	7.7%	71%
6/30/2022	4,102	47,416	698	2,531	(2,281)	48,365	14,866	3,153	687	(2,281)	16,425	31,940	(610)	-15%	34%	6%	3,050	6.7%	74%
6/30/2023	4,174	48,365	704	2,570	(2,375)	49,264	16,425	3,325	763	(2,375)	18,137	31,127	(813)	-19%	37%	6%	3,219	5.5%	77%
6/30/2024	4,254	49,264	711	2,605	(2,466)	50,113	18,137	3,361	846	(2,466)	19,878	30,235	(891)	-21%	40%	5%	3,252	1.0%	76%
6/30/2025	4,335	50,113	718	2,637	(2,561)	50,908	19,878	3,386	931	(2,561)	21,634	29,274	(962)	-22%	42%	4%	3,273	0.7%	76%
6/30/2026	4,419	50,908	728	2,663	(2,657)	51,642	21,634	3,412	1,016	(2,657)	23,405	28,236	(1,037)	-23%	45%	3%	3,295	0.7%	75%
6/30/2027	4,510	51,642	738	2,683	(2,754)	52,309	23,405	3,437	1,102	(2,754)	25,191	27,119	(1,118)	-25%	48%	3%	3,317	0.6%	74%
6/30/2028	4,601	52,309	748	2,700	(2,855)	52,902	25,191	3,460	1,189	(2,855)	26,985	25,917	(1,202)	-26%	51%	2%	3,336	0.6%	73%
6/30/2029	4,702	52,902	759	2,710	(2,949)	53,422	26,985	3,484	1,276	(2,949)	28,797	24,625	(1,292)	-27%	54%	2%	3,356	0.6%	71%
6/30/2030	4,813	53,422	767	2,722	(3,038)	53,874	28,797	3,505	1,365	(3,038)	30,629	23,245	(1,380)	-29%	57%	2%	3,373	0.5%	70%
6/30/2031	4,934	53,874	779	2,730	(3,119)	54,264	30,629	3,527	1,454	(3,119)	32,492	21,772	(1,473)	-30%	60%	1%	3,392	0.6%	69%
6/30/2032	5,062	54,264	793	2,734	(3,197)	54,594	32,492	3,550	1,546	(3,197)	34,391	20,204	(1,568)	-31%	63%	1%	3,411	0.6%	67%
6/30/2033	5,204	54,594	809	2,737	(3,263)	54,878	34,391	3,156	1,639	(3,263)	35,923	18,955	(1,249)	-24%	65%	0%	3,012	-11.7%	58%
6/30/2034	5,354	54,878	827	2,741	(3,321)	55,125	35,923	3,151	1,714	(3,321)	37,468	17,657	(1,298)	-24%	68%	0%	3,003	-0.3%	56%
6/30/2035	5,509	55,125	848	2,741	(3,375)	55,339	37,468	3,174	1,790	(3,375)	39,057	16,282	(1,375)	-25%	71%	-1%	3,021	0.6%	55%
6/30/2036	5,672	55,339	871	2,739	(3,424)	55,525	39,057	3,202	1,868	(3,424)	40,703	14,822	(1,460)	-26%	73%	-1%	3,044	0.8%	54%
6/30/2037	5,842	55,525	893	2,737	(3,466)	55,689	40,703	3,229	1,950	(3,466)	42,415	13,274	(1,548)	-26%	76%	-1%	3,066	0.7%	52%
6/30/2038	6,022	55,689	916	2,736	(3,503)	55,837	42,415	3,254	2,034	(3,503)	44,200	11,637	(1,637)	-27%	79%	-1%	3,088	0.7%	51%
6/30/2039	6,208	55,837	939	2,735	(3,534)	55,977	44,200	3,280	2,123	(3,534)	46,068	9,909	(1,728)	-28%	82%	-1%	3,110	0.7%	50%
6/30/2040	6,402	55,977	963	2,734	(3,562)	56,112	46,068	3,305	2,215	(3,562)	48,027	8,086	(1,823)	-28%	86%	-1%	3,131	0.7%	49%
6/30/2041	6,602	56,112	988	2,734	(3,587)	56,247	48,027	3,330	2,313	(3,587)	50,083	6,164	(1,921)	-29%	89%	-1%	3,153	0.7%	48%
6/30/2042	6,811	56,247	1,012	2,735	(3,607)	56,387	50,083	3,355	2,415	(3,607)	52,246	4,141	(2,023)	-30%	93%	-1%	3,173	0.7%	47%
6/30/2043	7,029	56,387	1,037	2,737	(3,623)	56,538	52,246	3,379	2,523	(3,623)	54,525	2,013	(2,128)	-30%	96%	0%	3,194	0.6%	45%
6/30/2044	7,255	56,538	1,062	2,741	(3,637)	56,703	54,525	2,608	2,636	(3,637)	56,133	570	(1,443)	-20%	99%	-2%	2,419	-24.3%	33%
6/30/2045	7,489	56,703	1,086	2,752	(3,650)	56,892	56,133	2,433	2,717	(3,650)	57,633	(741)	(1,311)	-18%	101%	-2%	2,240	-7.4%	30%
6/30/2046	7,733	56,892	1,118	2,760	(3,661)	57,109	57,633	1,118	2,791	(3,661)	57,882	(773)	(32)	0%	101%	-4%	919	-59.0%	12%
6/30/2047	7,965	57,109	1,152	2,770	(3,660)	57,371	57,882	1,152	2,804	(3,660)	58,178	(807)	(34)	0%	101%	-4%	947	3.0%	12%

Source: The Pew Charitable Trusts and The Terry Group. Analysis is based on plan assumptions. Projected contributions and liabilities are within 5% of state estimates in most years. Inputs here are taken from both the SEBAC Report of the Actuary on the Valuation Prepared as of June 30, 2016 by Cavanaugh Macdonald as well as preliminary analysis provided by state officials.

Appendix 4

Connecticut SERS: 30 - Year Actuarial Data

SEBAC Agreement at 5% Assumed Rate of Return

$MMs

		Pension Liability (Accrued Actuarial Liability)					Pension Assets (Market Value)						Net Amortization			Cash Flow/	Employer Contribution		
Fiscal Year	Payroll	BOP	Service Cost	Interest	Benefit	EOP	BOP	Contribut.	Interest	Benefit	EOP	Debt	$	% Payroll	Funded %	Assets %	$	% Change	% Payroll
6/30/2018	3,609	33,074	397	2,234	(1,914)	33,791	10,945	1,582	500	(1,914)	11,113	22,678	(718)	-19.9%	32.9%	-3.0%	1,446	-	40%
6/30/2019	3,554	33,791	387	2,282	(2,004)	34,457	11,113	1,751	506	(2,004)	11,367	23,090	412	11.6%	33.0%	-2.3%	1,607	11.2%	45%
6/30/2020	3,615	34,457	379	2,332	(2,090)	35,078	11,367	1,939	517	(2,090)	11,732	23,346	256	7.1%	33.4%	-1.3%	1,778	10.6%	49%
6/30/2021	3,664	35,078	379	2,372	(2,186)	35,642	11,732	2,146	533	(2,186)	12,225	23,418	72	2.0%	34.3%	-0.3%	1,980	11.3%	54%
6/30/2022	3,721	35,642	379	2,407	(2,279)	36,149	12,225	2,351	555	(2,279)	12,852	23,297	(121)	-3.2%	35.6%	0.6%	2,179	10.1%	59%
6/30/2023	3,788	36,149	377	2,441	(2,373)	36,594	12,852	2,537	584	(2,373)	13,601	22,994	(303)	-8.0%	37.2%	1.3%	2,359	8.3%	62%
6/30/2024	3,850	36,594	378	2,467	(2,463)	36,976	13,601	2,580	619	(2,463)	14,336	22,640	(354)	-9.2%	38.8%	0.9%	2,396	1.5%	62%
6/30/2025	3,918	36,976	378	2,492	(2,557)	37,289	14,336	2,608	654	(2,557)	15,040	22,249	(391)	-10.0%	40.3%	0.4%	2,418	0.9%	62%
6/30/2026	3,987	37,289	379	2,510	(2,653)	37,525	15,040	2,636	686	(2,653)	15,710	21,815	(433)	-10.9%	41.9%	-0.1%	2,440	0.9%	61%
6/30/2027	4,064	37,525	380	2,523	(2,750)	37,679	15,710	2,666	718	(2,750)	16,344	21,335	(480)	-11.8%	43.4%	-0.5%	2,463	0.9%	61%
6/30/2028	4,141	37,679	381	2,531	(2,850)	37,742	16,344	2,696	747	(2,850)	16,937	20,805	(530)	-12.8%	44.9%	-0.9%	2,487	1.0%	60%
6/30/2029	4,222	37,742	383	2,531	(2,944)	37,712	16,937	2,729	774	(2,944)	17,497	20,215	(590)	-14.0%	46.4%	-1.3%	2,513	1.0%	60%
6/30/2030	4,309	37,712	383	2,527	(3,031)	37,591	17,497	2,761	800	(3,031)	18,027	19,564	(651)	-15.1%	48.0%	-1.5%	2,539	1.0%	59%
6/30/2031	4,395	37,591	384	2,516	(3,112)	37,379	18,027	2,796	824	(3,112)	18,535	18,844	(720)	-16.4%	49.6%	-1.8%	2,566	1.1%	58%
6/30/2032	4,491	37,379	386	2,501	(3,188)	37,077	18,535	2,832	848	(3,188)	19,027	18,050	(794)	-17.7%	51.3%	-1.9%	2,596	1.1%	58%
6/30/2033	4,598	37,077	388	2,478	(3,252)	36,692	19,027	2,403	871	(3,252)	19,049	17,643	(407)	-8.9%	51.9%	-4.5%	2,159	-16.8%	47%
6/30/2034	4,713	36,692	392	2,452	(3,307)	36,229	19,049	2,403	871	(3,307)	19,017	17,212	(431)	-9.1%	52.5%	-4.7%	2,151	-0.3%	46%
6/30/2035	4,836	36,229	397	2,420	(3,358)	35,687	19,017	2,439	868	(3,358)	18,966	16,721	(491)	-10.2%	53.1%	-4.8%	2,179	1.3%	45%
6/30/2036	4,971	35,687	403	2,382	(3,404)	35,067	18,966	2,483	864	(3,404)	18,909	16,158	(563)	-11.3%	53.9%	-4.9%	2,213	1.6%	45%
6/30/2037	5,115	35,067	409	2,340	(3,442)	34,374	18,909	2,528	860	(3,442)	18,856	15,518	(640)	-12.5%	54.9%	-4.8%	2,249	1.6%	44%
6/30/2038	5,263	34,374	417	2,292	(3,475)	33,607	18,856	2,576	857	(3,475)	18,814	14,794	(724)	-13.8%	56.0%	-4.8%	2,288	1.7%	43%
6/30/2039	5,418	33,607	425	2,239	(3,502)	32,769	18,814	2,624	854	(3,502)	18,789	13,980	(813)	-15.0%	57.3%	-4.7%	2,327	1.7%	43%
6/30/2040	5,581	32,769	434	2,181	(3,525)	31,859	18,789	2,671	852	(3,525)	18,787	13,072	(908)	-16.3%	59.0%	-4.5%	2,366	1.7%	42%
6/30/2041	5,752	31,859	443	2,119	(3,545)	30,877	18,787	2,719	852	(3,545)	18,814	12,063	(1,009)	-17.5%	60.9%	-4.4%	2,404	1.6%	42%
6/30/2042	5,931	30,877	453	2,051	(3,560)	29,821	18,814	2,768	853	(3,560)	18,874	10,946	(1,116)	-18.8%	63.3%	-4.2%	2,443	1.6%	41%
6/30/2043	6,116	29,821	462	1,979	(3,570)	28,692	18,874	2,816	856	(3,570)	18,976	9,716	(1,230)	-20.1%	66.1%	-4.0%	2,481	1.6%	41%
6/30/2044	6,307	28,692	472	1,901	(3,578)	27,487	18,976	2,765	860	(3,578)	19,024	8,463	(1,253)	-19.9%	69.2%	-4.3%	2,420	-2.5%	38%
6/30/2045	6,506	27,487	481	1,824	(3,585)	26,206	19,024	2,749	863	(3,585)	19,050	7,156	(1,307)	-20.1%	72.7%	-4.4%	2,393	-1.1%	37%
6/30/2046	6,714	26,206	496	1,737	(3,590)	24,849	19,050	2,724	864	(3,590)	19,048	5,801	(1,356)	-20.2%	76.7%	-4.5%	2,357	-1.5%	35%
6/30/2047	6,930	24,849	511	1,645	(3,583)	23,422	19,048	2,702	864	(3,583)	19,031	4,391	(1,410)	-20.3%	81.3%	-4.6%	2,323	-1.5%	34%

Source: The Pew Charitable Trusts and The Terry Group. Analysis is based on plan assumptions. Projected contributions and liabilities are within 5% of state estimates in most years. Inputs here are taken from both the SEBAC Report of the Actuary on the Valuation Prepared as of June 30, 2016 by Cavanaugh Macdonald as well as preliminary analysis provided by state officials.

Sample Legislative Language. The language below, taken from recently passed legislation in Virginia and Hawaii, provides a simple example of how stress testing and comprehensive fee disclosure might be implemented in Connecticut.

Virginia

1. § 1. The Virginia Retirement System (VRS) shall adopt a formal policy to:

1. Develop and regularly report sensitivity and stress test analyses. Such analyses and reporting shall include projections of benefit levels, pension costs, liabilities, and debt reduction under various economic and investment scenarios;

2. Improve investment transparency and reporting policy by (i) providing a clear and detailed online statement of investment policy; (ii) including one-year, three-year, five-year, and 10-year investment performance data in quarterly investment reports; (iii) including 20-year and 25-year investment performance data in annual investment reports; (iv) reporting net investment returns on a quarterly basis; and (v) reporting gross investment returns and returns by asset class on an annual basis; and

3. Regularly report investment performance and expenses such as external manager fees, carried interest fees, and investment department expenses for all asset classes, including private equity, public equity, fixed income, credit strategies, real assets, strategic opportunities, and other investments.

Hawaii

§88 - Stress test; annual report.

(a) The actuary shall conduct an annual stress test of the system.

(b) The board shall submit an annual report to the legislature, not later than twenty days prior to the convening of each regular session, on the results of the actuary's stress test.

(c) For the purposes of this section, a "stress test" shall address:

(1) Projections of assets, liabilities, pension debt, service costs, employee contributions, employer contributions, net amortization, benefit payments, payroll, and funded ratio for the system for each of the next thirty years based upon the then-current actuarial assumptions, including the assumed rate of return;

(2) Projections for the items listed in paragraph (1), assuming that investment returns are two percentage points lower than the assumed rate of return and that the State makes employer contributions:

(A) Based upon the then-current funding policy for the system; and
(B) That are held constant at the levels calculated for paragraph (1);

(3) Estimates of the items listed in paragraph (1), if there is a one year loss on planned investments of twenty per cent followed by a twenty-year period of investment returns

two percentage points below plan assumptions, with the following assumptions regarding contribution policy:

(A) Employer contributions are adjusted based upon current policy; and
(B) Employer contributions are held constant at the levels calculated for the baseline projections; and

(4) The estimated actuarially accrued liability, the total plan normal cost for all benefit tiers, and the employer normal cost for all benefit tiers, calculated using:

(A) A discount rate equal to the assumed rate of return; and
(B) The ten-year average of the yield of thirty-year treasury notes.

Glossary and Key Data Metrics

Amortize: Make scheduled payments to eliminate unfunded pension liabilities over a period of time.

Baseline projections: A 30-year projection of key fiscal indicators including liabilities, assets, funding levels, employer and employee contributions, and payroll based on plan assumptions and current policy.

Budgetary impact: Contributions as a share of payroll, total spending, revenue, and other measures.

Compound Annual Growth Rate (CAGR): Measures the return on an investment over a specified period of time longer than one year.

Cash flow analysis: Measures operating cash flow as calculated by totaling employer and employee contributions as well as additional inflows from other sources before subtracting benefit payments. For most public plans, this number will be negative, which highlights how actuarial funding and the maturity of plan demographics leaves pension funds dependent on investment returns to maintain asset levels.

Five-year funding policy outlook: We assess sustainability of current pension funding policies through sensitivity analysis of contributions and pension debt under varying economic conditions over a five-year time horizon.

Funding contribution data: Key data include assets, liabilities, and the unfunded actuarial accrued liability (UAAL). Other important information includes funding requirements as determined by the plan's actuary, broken out by normal cost and the cost of amortizing the unfunded liability; analysis of how the funding policy is projected to reduce pension debt over time; and review of whether plan sponsors have fully paid the actuarial required or determined contributions.

Funded ratio: The level of assets on hand in proportion to pension costs.

Net amortization: A contribution benchmark that measures the expected change in pension debt for a given year when plan assumptions are met and gives the estimated funding a plan needs in order to keep the net pension liability from growing.

Normal cost: The cost of benefits earned by employees in a given year.

Own source revenue (OSR): Revenues raised directly by state and local governments, excluding federal government funds and transfers. OSR is a standard benchmark for state budget capacity. General own-source revenue excludes intergovernmental transfers (all dollars received from federal and local governments as grants, shared taxes, or loans) as well as revenues from state-operated liquor stores, utilities, and social insurance trusts (including pension system trusts).

Stress testing: A 20-year projection of the same key fiscal indicators if actual returns differ from the assumed rate of return.

Total pension costs: Scale and growth of fiscal impact, including any increase in pension debt—Pew applies this to assess fiscal sustainability when performing stress test analysis. The calculation includes sum of the employer contribution and the change in the net pension liability for each year over a projection period, based on plan assumptions and contribution policy, for a given assumed rate of return on investments.

Unfunded actuarial accrued liability: The difference between the total value of pension benefits owed to current and retired employees or dependents and the plan assets on hand. This is an unfunded obligation for past service.

Exhibits

List of Exhibits

The following exhibits are based on Pew's 50 state research and state specific analysis:

- Summary of Near Term Savings from SEBAC Agreement (FY 2018-2019)
- Summary of Near Term Savings from SEBAC Agreement (FY 2018-2022)
- Pension Savings Over Five Years: State Projection vs. Independent Assessment
- 50 State Data on Hybrid Plans
- Sensitivity Analysis: Defined Benefit and Hybrid Plans
- Medicare Advantage Regional Comparison Trends
- Medicare Advantage Savings
- Policy Considerations
- Stress Testing and Fee Transparency Policy Adoption Trends
- Stress Testing: Visual Output

For further information, please contact Tim Dawson at tdawson@pewtrusts.org or David Draine at DDraine@pewtrusts.org.

Summary of Near Term Savings from SEBAC Agreement

Savings FY 2018 – FY 2019		
Wage Concessions and Attrition	50%	$0.8 billion
Adjustments to Pension Benefits and Contributions	29%	$0.4 billion
Changes to Employee and Retiree Health Care	21%	$0.3 billion

Source: Based on preliminary public data from 2017 SEBAC Agreement Savings Estimates. Note that wage concessions impact pension savings as it lower the final average salary for all current SERS employees and result in reduced pension benefits.

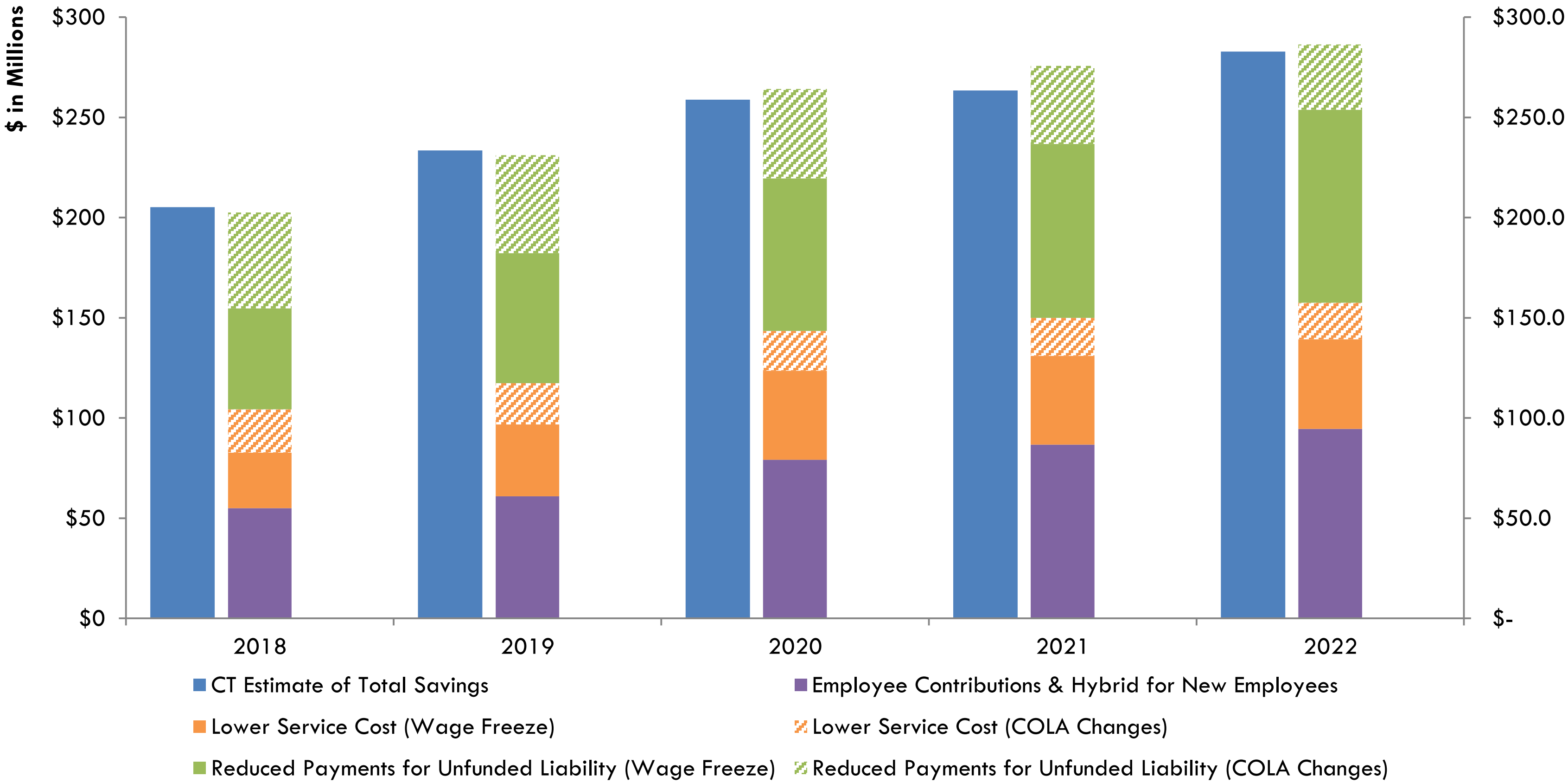
Summary of Near Term Savings from SEBAC Agreement

Savings FY 2018 – FY 2022		
Wage Concessions and Attrition	51%	$2.5 billion
Adjustments to Pension Benefits and Contributions	27%	$ 1.3 billion
Changes to Employee and Retiree Health Care	22%	$1.0 billion

Source: Based on preliminary public data from 2017 SEBAC Agreement Savings Estimates. Note that wage concessions impact pension savings as it lower the final average salary for all current SERS employees and result in reduced pension benefits.

Pension Savings of $1.3B Over 5 Years

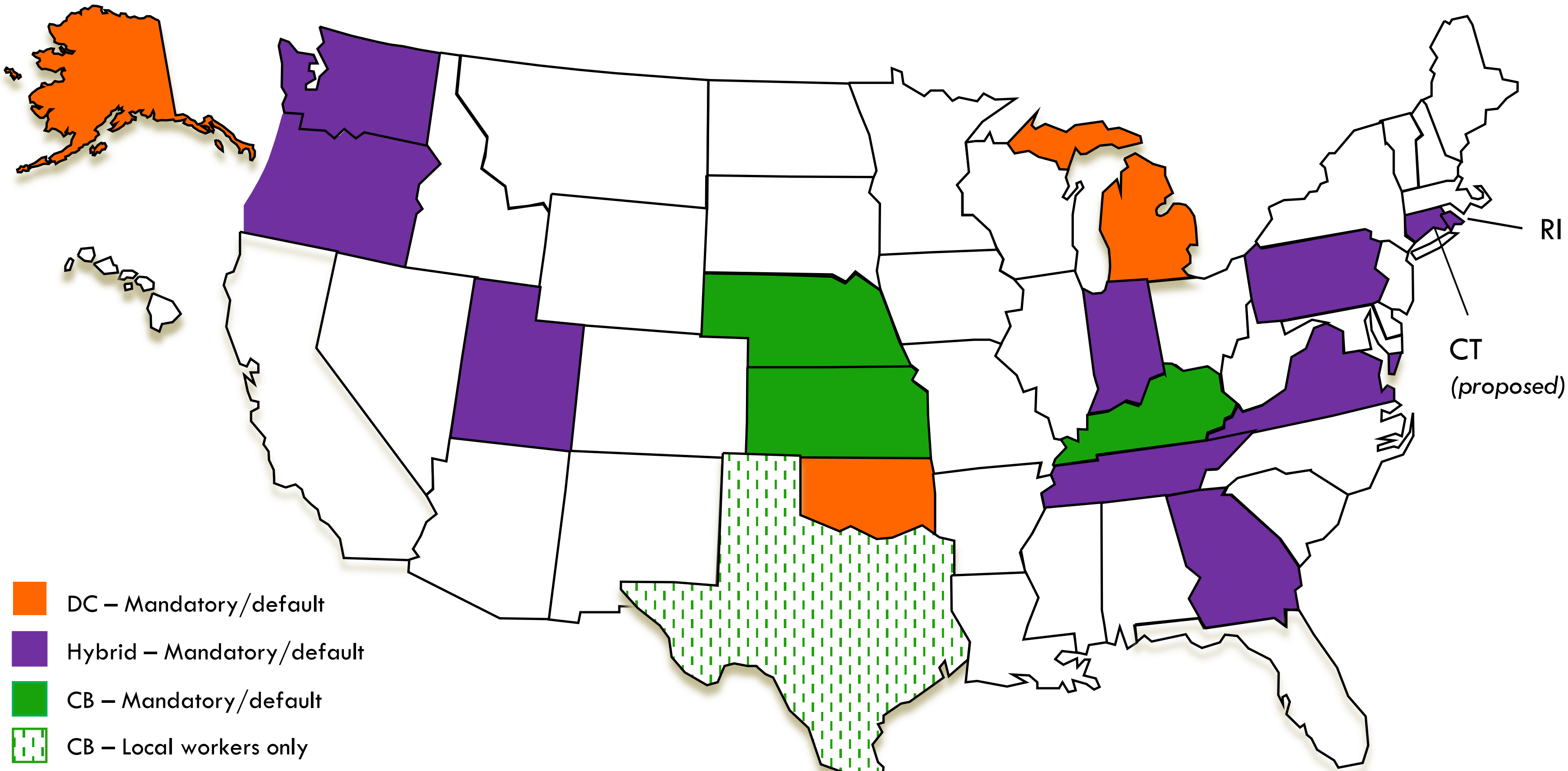
State Projection vs. Independent Assessment By Source



Note: We have included an additional $270 million in savings associated with lower staffing levels through attrition per the provisions documented in the 2017 SEBAC agreement.
Source: CT Estimate of Total Savings data (in blue) based on estimates from the state's consulting actuaries included in the 2017 SEBAC Agreement Savings Estimates. Pew worked with independent actuaries to recreate the state's numbers, broken down by source; these figures are presented in the rightmost column. Savings figures for the wage freeze and cap on COLA are broken down into the reduction in normal cost and the reduction in amortization payments due to a lower liability. The state's analysis did not include the impact of overtime due to data limitations.

50 State Data on Hybrid Plans

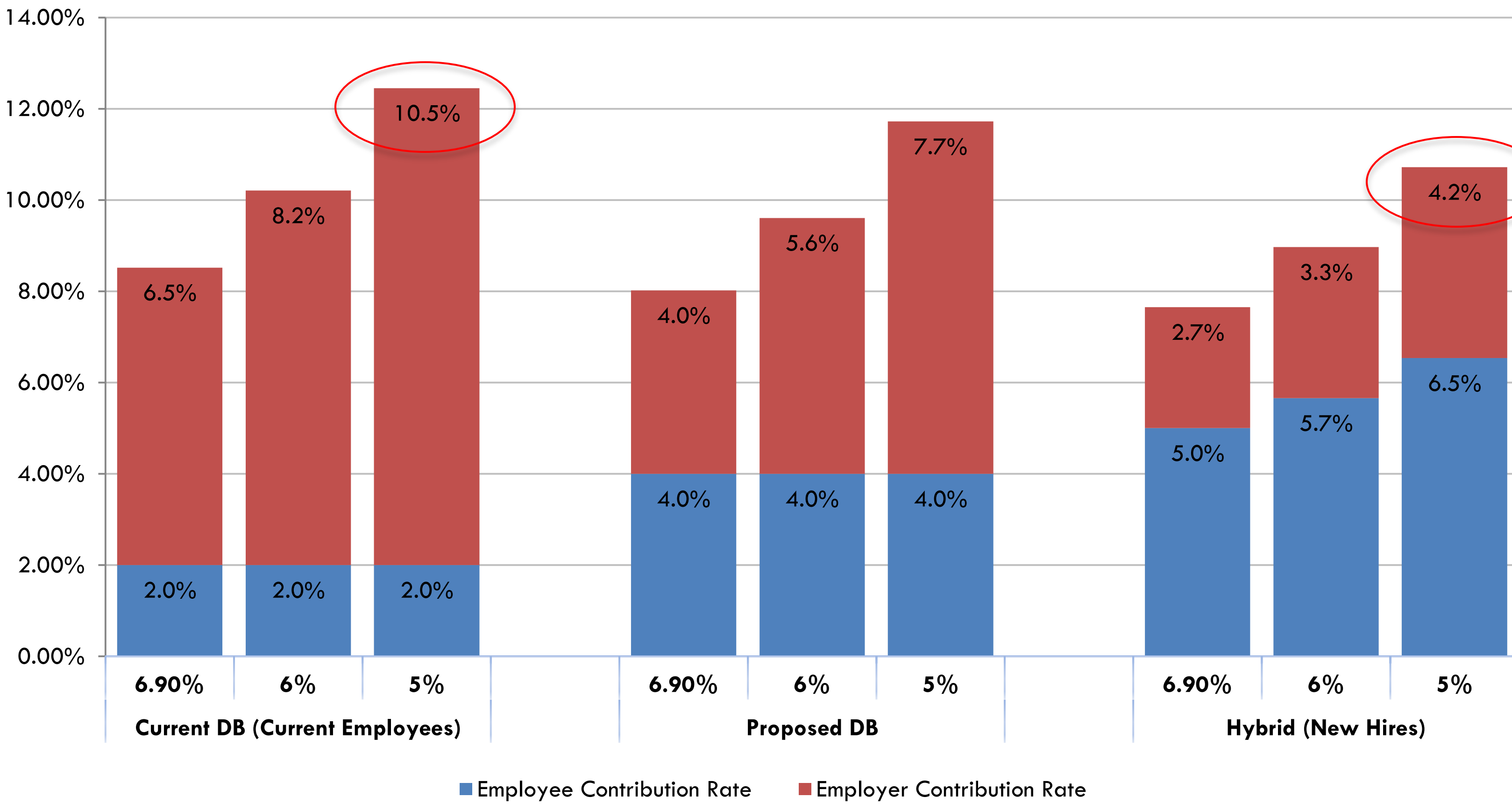
15 states currently have mandatory or default alternative plans for at least some workers



Notes: Data from NASRA and NCSL also make note of optional alternative states plans in the following states: Colorado (DC), Florida (DC), Montana (DC), North Dakota (DC), Ohio (DC and hybrid), and South Carolina (DC). In cases where a state has more than one alternative plan, the plan type with the greater number of participants is marked on the map. Texas provides a cash balance plan to over 400,000 local workers through the state's Texas Municipal Retirement System and Texas County and District Retirement System.

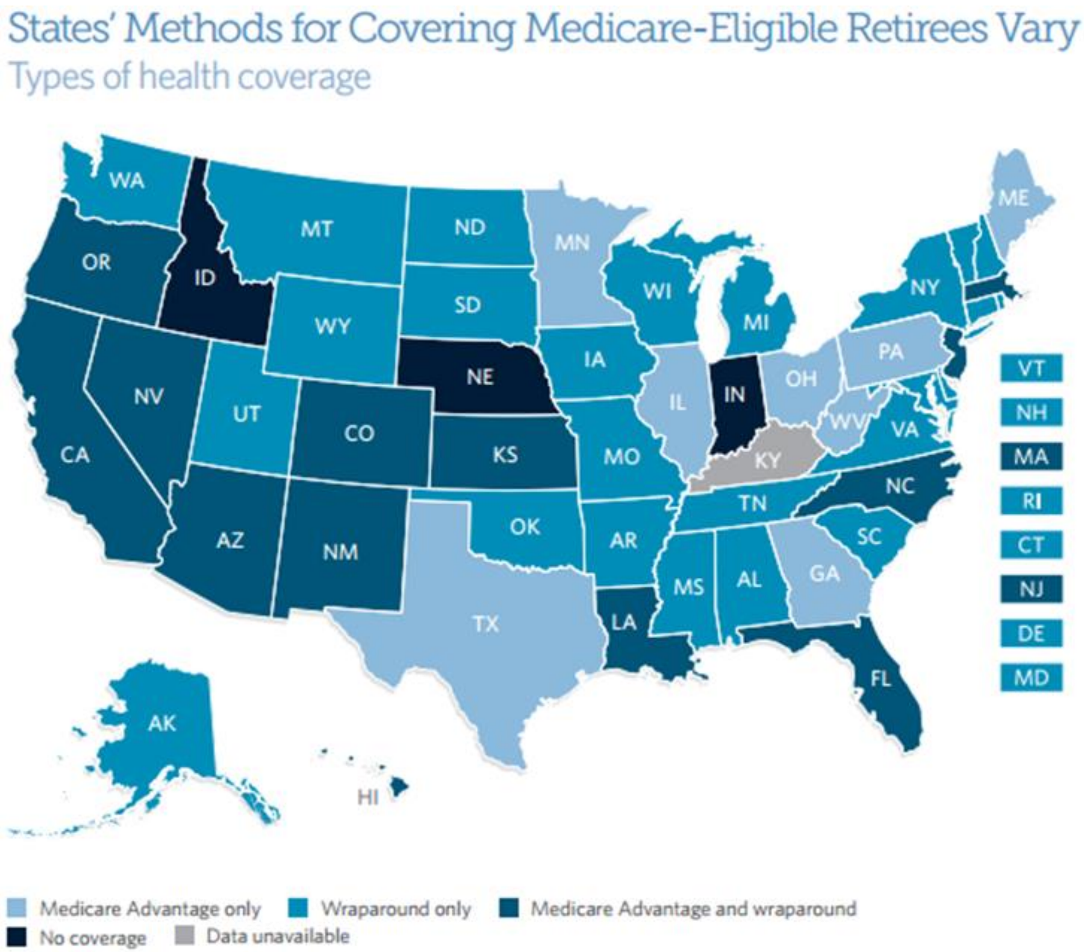
Sensitivity Analysis: Contribution Rates at Different Rates of Return on Investments

New Plan Reduces Cost and Risk by Over 50%



Note: Assuming a discount rate based on US Treasury securities (3.7%) the total cost would be 16.01% of pay for the current DB and 13.44% of pay for the hybrid. The state's cost is estimated to be 14.01% and 6.44% (current and hybrid).

Move to Medicare Advantage Follows Trend



- 21 states have adopted Medicare Advantage for their state employee OPEB plans.
- Represents 95% of Retiree Health and over half of Total Health Care Savings
- Savings for the first two years based on contractual commitment
- New provider (UHC) has track record of working with other states and generating savings over time.

Sources: Pew's [State Retiree Health Plan Spending]paper; NCSL; Savings data are from the State and their consulting actuaries.

Medicare Advantage Savings

Savings Include Discounted Prescription Drug Pricing

STATE OF CONNECTICUT

Budget Projections - Fiscal Years Ending June 30

AGGREGATE - STATE MEDICARE RETIREES: MEDICARE ADVANTAGE WITH PRESCRIPTION DRUG (INCREASED RETIREE POPULATION)

	Projections				
	2017	2018	2019	2020	2021
Medicare Advantage Premium (MA Component)	N/A	$22,100,000	$45,200,000	$56,000,000	$67,200,000
Medicare Advantage Premium (PD Component)	N/A	68,400,000	151,100,000	175,700,000	189,900,000
Medical Claims - Anthem	$90,300,000	60,000,000	N/A	N/A	N/A
Medical Claims - Oxford	14,900,000	10,700,000	N/A	N/A	N/A
Prescription Drug Claims - CVS/Caremark & Silverscript	252,200,000	140,100,000	N/A	N/A	N/A
Prescription Drug Rebates - CVS/Caremark & Silverscript	(40,200,000)	(42,400,000)	N/A	N/A	N/A
EGWP Savings - Silverscript*	(70,300,000)	(62,100,000)	(9,400,000)	N/A	N/A
ASO Fees - Anthem	11,400,000	5,900,000	N/A	N/A	N/A
ASO Fees - Oxford	1,400,000	700,000	N/A	N/A	N/A
ASO Fees - Silverscript	6,600,000	3,400,000	N/A	N/A	N/A
ACA Fees	100,000	100,000	100,000	N/A	N/A
Medicare Part B and D Reimbursement	64,900,000	69,200,000	74,500,000	80,200,000	86,300,000
Administrative Fees	1,100,000	1,100,000	1,200,000	1,200,000	1,200,000
Dental Premium - CIGNA	17,900,000	19,400,000	21,200,000	23,100,000	25,200,000
Medicare Retiree Expense Total	**$350,300,000**	**$296,600,000**	**$283,900,000**	**$336,200,000**	**$369,800,000**
Prior Projection	**$338,500,000**	**$359,300,000**	**$413,800,000**		
Change ($)	**11,800,000**	**(62,700,000)**	**(129,900,000)**		
Change (%)	**3.5%**	**-17.5%**	**-31.4%**		

Medicare Retiree General Fund Appropriation	2017	2018	2019	2020	2021
Total	**$335,980,000**	**$281,080,000**	**$266,940,000**	**$317,720,000**	**$349,640,000**
Prior Projection	$324,580,000	$344,340,000	$397,480,000		
Change ($)	11,400,000	(63,260,000)	(130,540,000)		
Change (%)	3.5%	-18.4%	-32.8%		

* Prior to CY 2017, EGWP reinsurance payments were paid in one lump sum seven months after the end of the calendar year. Effective CY 2017, reinsurance payments will be made on a monthly basis, with final reconciliation after the end of the calendar year. This will create a temporary cash flow advantage in FY 2017 and FY 2018, as shown above.

Projected Savings of $77M in FY18 and $144M in FY19 include negotiated price discounts from current vendor

7/10/2017

Segal Consulting 7

Policy Considerations

- Commission a 50-state comparative study of retirement benefits and policies to help ensure Connecticut is in line with peer states.

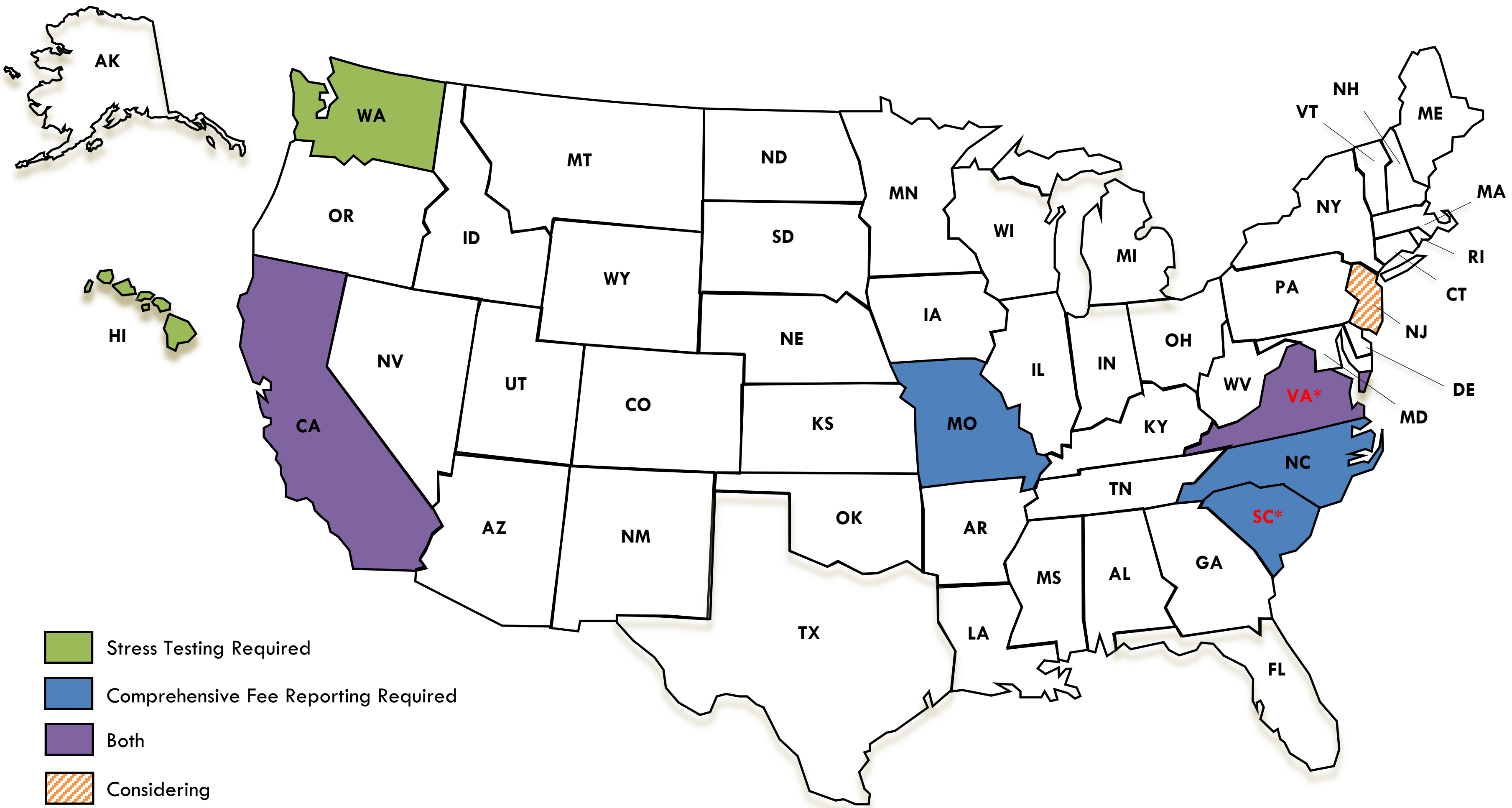
- Commission an independent actuarial assessment to assist policymakers in accurately evaluating the pension system's overall fiscal health.

- Require stress test analysis of all retirement plans as part of regular reporting to determine how the plan would perform during a financial crisis.

- Consider adding provisions that incentivize workers to save more in their defined contribution accounts.

- Establish a policy to fully disclose alternative investment fees.

States That Have Adopted Stress Testing and Investment Fee Transparency Measures*

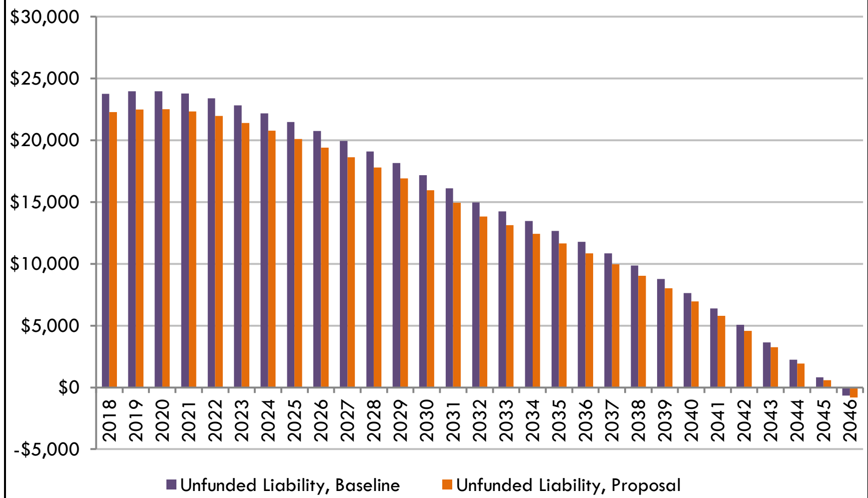


***Note:** South Carolina and Virginia also recently commissioned a 50 state comparative study of retirement benefits and policies

Stress Test: Visualizations

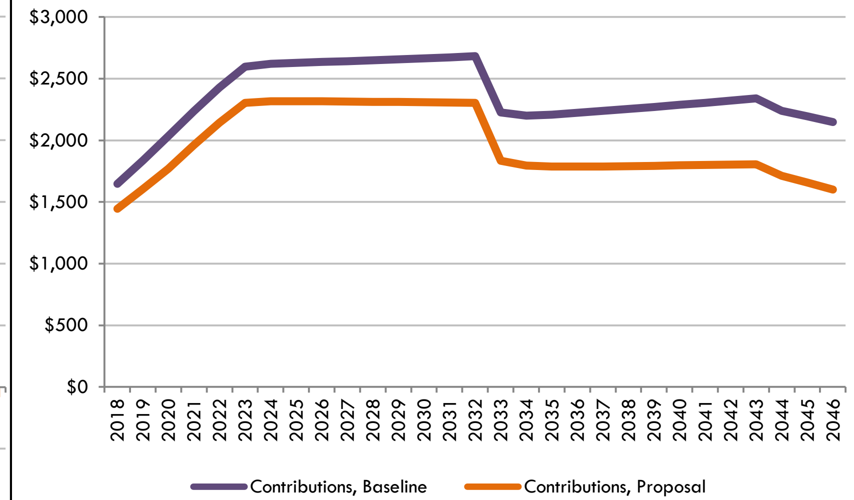
Pension Debt Over Time

SERS liabilities would shrink under current and proposed policy



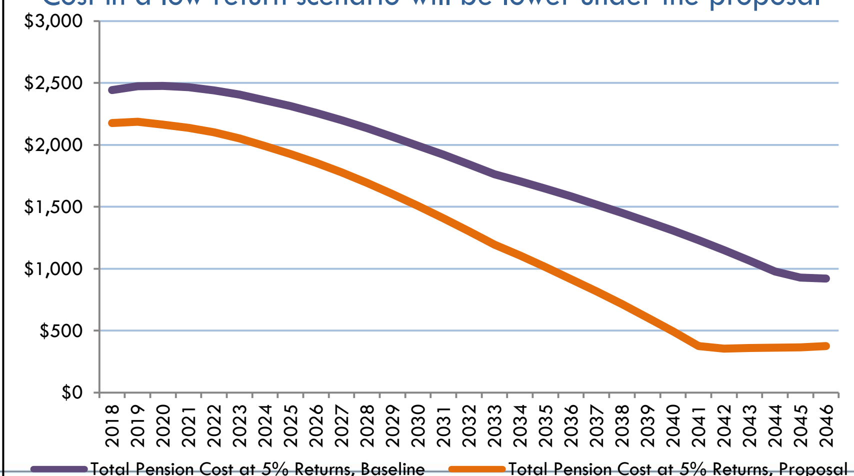
Contributions Over Time

Proposed changes offer ongoing savings



Total Pension Cost

Cost in a low return scenario will be lower under the proposal



Risk Over Time

Proposed changes reduce risk as new workers enter the hybrid