

Stamford Board of Finance

Pension and OPEB Discussion

Becky Sielman, FSA
Principal and Consulting Actuary

Yelena Pelletier, ASA
Consulting Actuary

April 12, 2022



Agenda

- Overview of Stamford's pension benefits
- Overview of Stamford's OPEB benefits
- Historical funded ratios and contribution levels
- High-level review of the results of the July 1, 2021 valuations
- Long-range forecast of the City's contributions
- Review of historical investment returns by plan

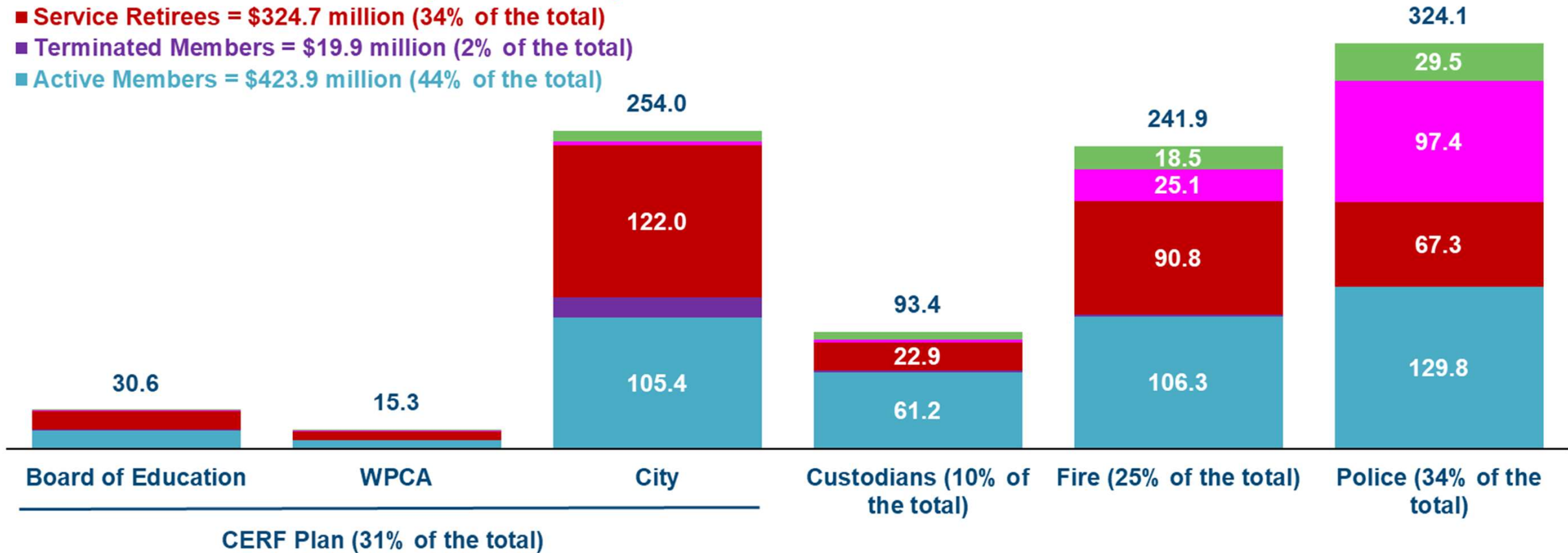
Overview of pension benefits

	CERF	Custodians	Police	Fire
Employees covered	UAW (open) UE (pre 8/1/2018) LAW (pre 8/5/2013) TEA (pre 6/30/2012) MAA (pre 6/30/2012) Nurses (pre 6/30/2012) Dental (pre 6/30/2012) 1199 (pre 6/30/2012)	Educational Assistants (open) Security Workers (pre 12/1/2013) Custodians (pre 7/1/2011)	Open to all employees of PD; different benefits apply to officers hired before vs after 4/11/2016	Open to all employees of FD; different benefits apply to firefighters hired before vs after 7/1/2016
Benefit Multiplier	Ranges from 1.5% to 2.0%	EA & SW: 1.5% Cust: 2.25%	Pre-2016: 2.5% yrs 0-20 + 3.0% yrs 20-25 + 2.33% yrs 25-30 Post-2016: 2.25%	Pre-2016: 2.5% yrs 0-20 + 2.0% yrs 20-32 Post-2016: 2.25%
Normal Retirement Date	Varies; generally Age 58 w/15 yrs Age 60 w/10 yrs	Age 60 w/10 yrs Any age w/25 yrs	Any age w/20 yrs	Age 48 w/20 yrs
Employee Contribution Rate	Varies from 5.00% to 6.00%	EA & SW: 5.00% Cust: 7.00%	7.0%	Pre-2016: 6.25% Post-2016: 7.25%

Overview of pension benefits

Accrued Liability as of July 1, 2021 = \$959.3 million in total

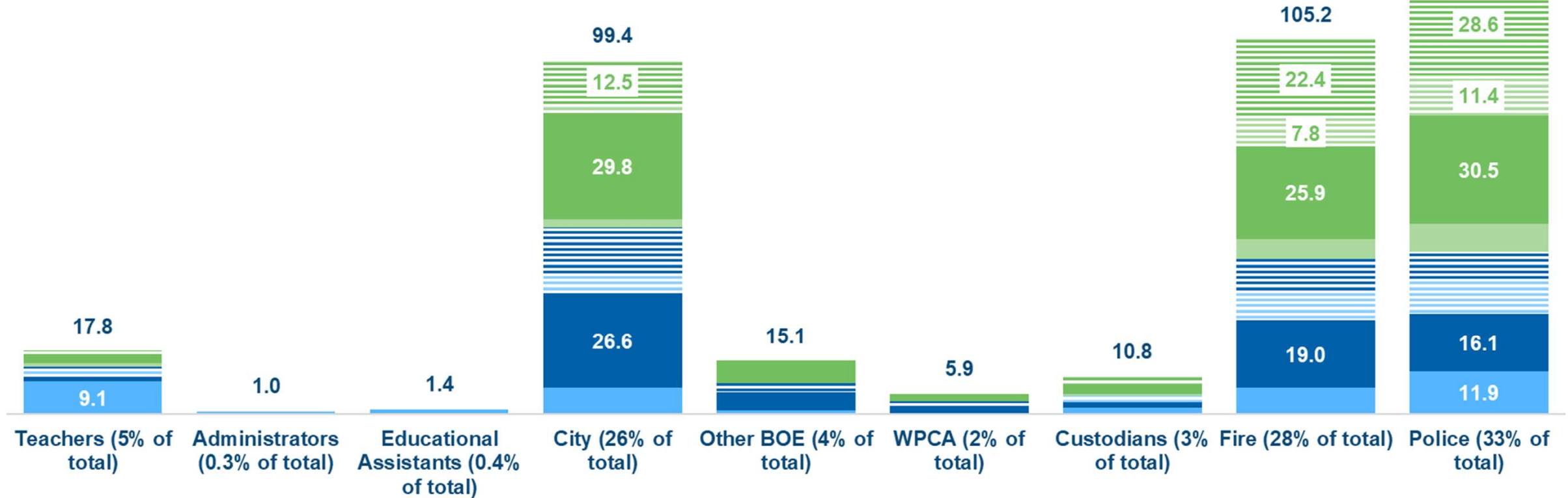
- Beneficiaries = \$62.4 million (7% of the total)
- Disabled Retirees = \$128.4 million (13% of the total)
- Service Retirees = \$324.7 million (34% of the total)
- Terminated Members = \$19.9 million (2% of the total)
- Active Members = \$423.9 million (44% of the total)



Overview of OPEB benefits

Accrued Liability as of July 1, 2021 = \$380.4 million in total

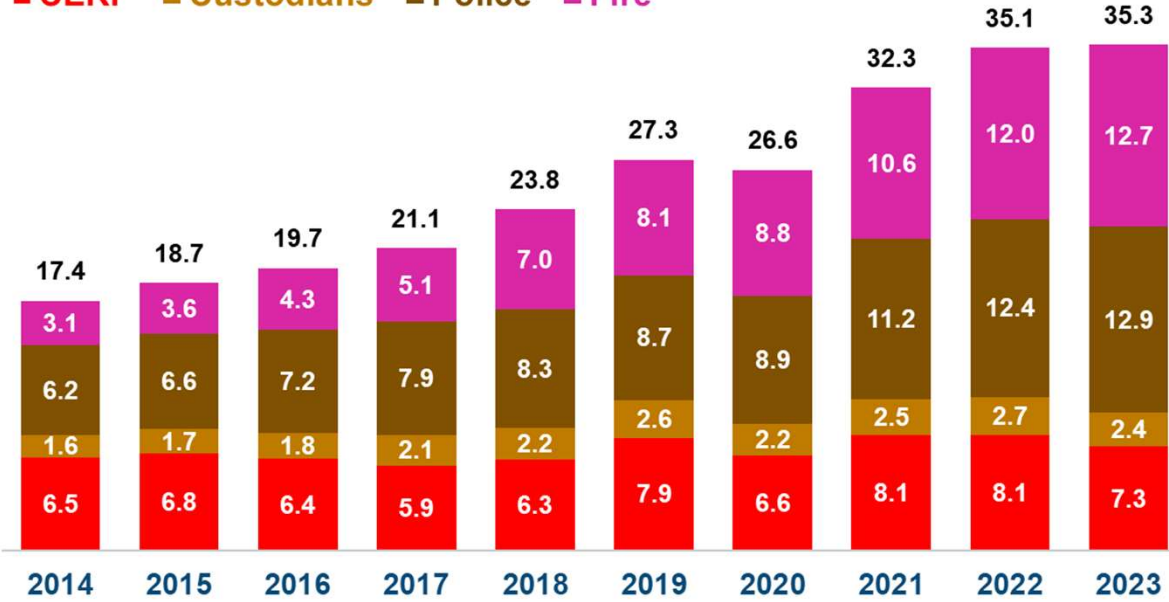
- Employee Pre-65 = \$40m (11% of total)
- = Spouse of Employee Pre-65 = \$28m (7% of total)
- Retiree Pre-65 = \$18m (5% of total)
- = Spouse of Retiree Pre-65 = \$23m (6% of total)
- Employee Post-65 = \$71m (19% of total)
- = Spouse of Employee Post-65 = \$34m (9% of total)
- Retiree Post-65 = \$99m (26% of total)
- = Spouse of Retiree Post-65 = \$68m (18% of total)



Historical pension metrics

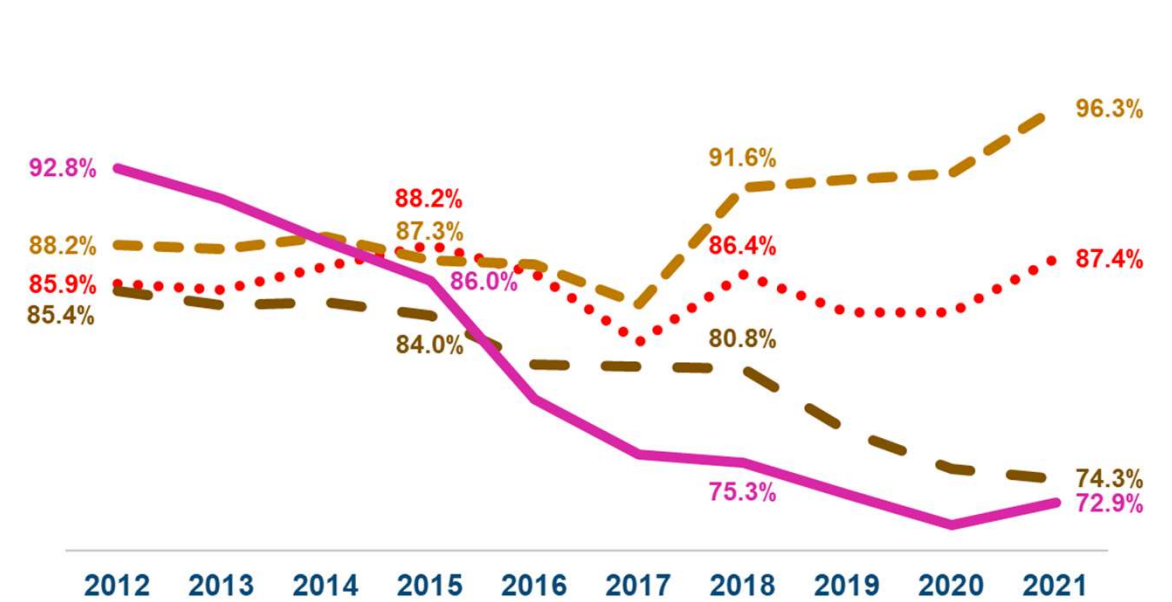
Actuarially Determined Contributions

■ CERF ■ Custodians ■ Police ■ Fire



Funded Ratio

●●● CERF — Custodians — Police — Fire



Growth rate FY 2014 through FY 2023

CERF	112%
Custodians	151%
Police	208%
Fire	407%
Combined	202%



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Results of July 1, 2021 pension valuations

	CERF City	CERF Board of Education	CERF WPCA	CERF Total	Custodians	Fire	Police
Accrued liability	\$253,970,197	\$30,647,204	\$15,297,954	\$299,915,355	\$93,431,426	\$241,878,923	\$324,071,108
Actuarial value of assets	221,473,972	26,734,997	13,862,499	262,071,468	90,005,976	176,262,258	240,712,260
Unfunded accrued liability	32,496,225	3,912,207	1,435,455	37,843,887	3,425,450	65,616,665	83,358,848
Past service cost	3,280,790	394,973	144,922	3,820,685	345,830	8,203,726	8,415,834
Total normal cost	3,660,292	637,480	215,027	4,512,799	2,987,672	4,984,889	4,938,077
Expected employee contributions	1,309,367	234,435	80,473	1,624,275	1,144,926	1,401,517	1,471,421
Administrative expenses	81,138	14,131	4,766	100,035	49,000	120,000	254,000
Net normal cost	2,432,063	417,176	139,320	2,988,559	1,891,746	3,703,372	3,720,656
Timing Adjustment	382,761	54,414	19,044	456,219	149,918	797,776	813,145
Actuarially Determined Contribution (ADC) for FYE 2023	6,095,614	866,563	303,286	7,265,463	2,387,494	12,704,874	12,949,635
ADC, All Plans Combined							35,307,466

Results of July 1, 2021 OPEB valuations

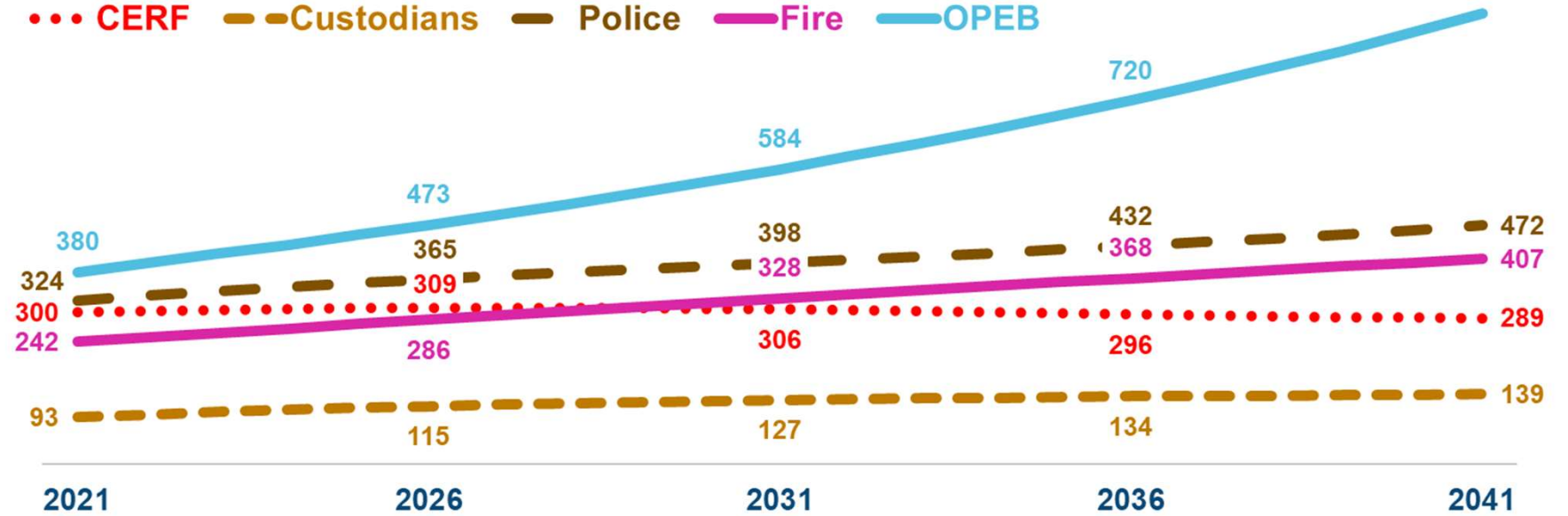
	City OPEB Plan						BOE OPEB Plan		
	CERF City	CERF BOE	CERF WPCA	Custodians	Fire	Police	Teachers	Admin.	Ed Assts.
Accrued Liability	\$99,414,309	\$15,068,110	\$5,882,658	\$10,774,428	\$105,235,755	\$123,793,603	\$17,798,742	\$956,082	\$1,442,477
Actuarial Value of Assets	52,232,938	7,916,886	3,129,883	5,660,956	55,291,565	65,041,982	19,149,722	1,028,652	1,551,966
Unfunded Accrued Liability	47,181,371	7,151,224	2,752,775	5,113,472	49,944,190	58,751,621	(1,350,980)	(72,570)	(109,489)
Funded Ratio	52.5%	52.5%	53.2%	52.5%	52.5%	52.5%	107.6%	107.6%	107.6%
Amortization Period	20	20	20	20	20	20	20	20	20
Amortization Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Past Service Cost	3,499,828	530,465	204,196	379,308	3,704,770	4,358,089	(100,213)	(5,383)	(8,122)
Total Normal Cost	2,906,889	598,199	197,032	232,245	2,576,322	2,786,585	708,453	41,450	116,137
Expected Employee Contributions	0	0	0	0	0	196,926	0	0	0
Net Normal Cost	2,906,889	598,199	197,032	232,245	2,576,322	2,589,659	708,453	41,450	116,137
Timing Adjustment	429,251	75,620	26,882	40,974	420,833	465,499	40,753	2,416	7,237
Actuarially Determined Contribution (ADC) for FYE 2023	6,835,968	1,204,284	428,110	652,527	6,701,925	7,413,247	648,993	38,483	115,252
ADC, Total for Each Plan						23,236,061			802,728
ADC, All Plans Combined									24,038,789



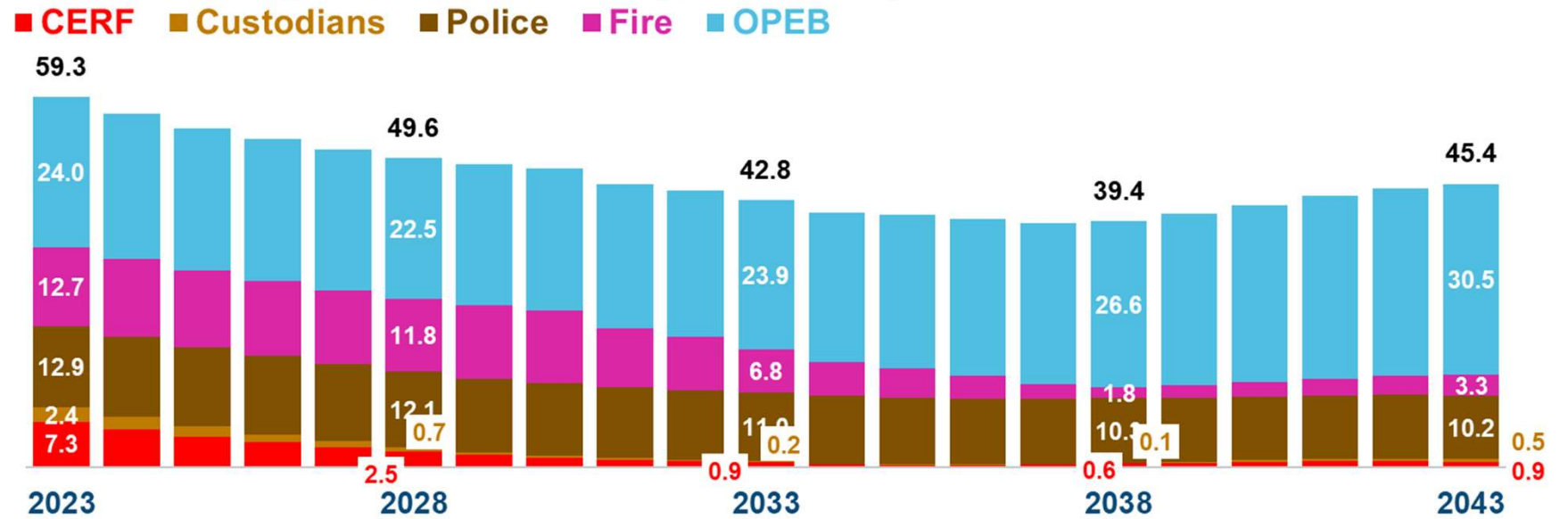
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Long range forecast based on July 1, 2021 valuations

Projected Accrued Liability (\$ millions)



Projected City Contributions (\$ millions)



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Long range forecast

These forecasts are based on the results of the July 1, 2021 actuarial valuations and assume that the City will pay the Actuarially Determined Contribution each year, the assets will return the assumed interest rate on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

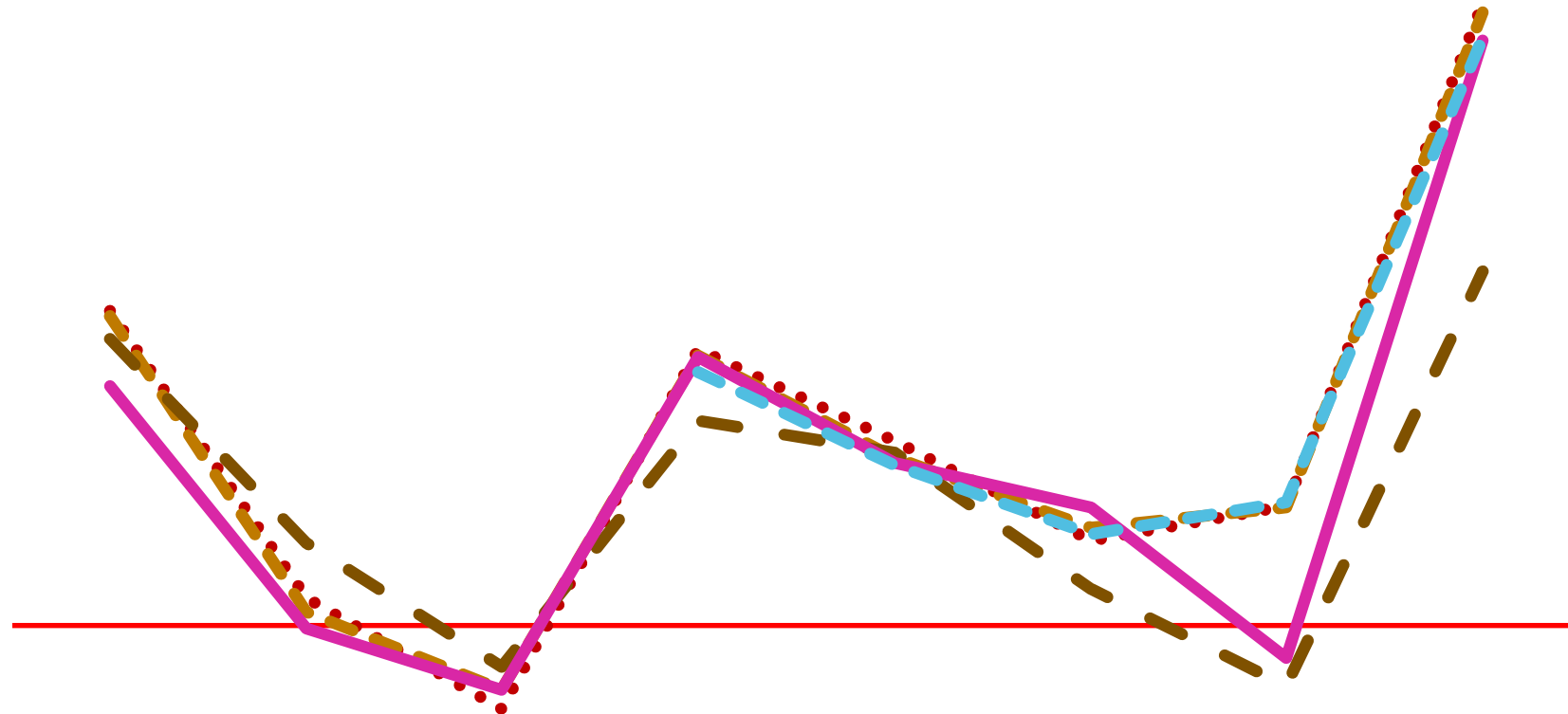
Valuation Date	Fiscal Year	Pension					OPEB			All Plans Combined
		CERF	Custodians	Fire	Police	Pension Plans Combined	BOE OPEB	City OPEB	OPEB Combined	
7/1/2021	2022-23	\$7,265,463	\$2,387,494	\$12,704,874	\$12,949,635	\$35,307,466	\$802,728	\$23,236,000	\$24,038,728	\$59,346,194
7/1/2022	2023-24	6,097,000	1,970,000	12,510,000	12,815,000	33,392,000	763,000	22,530,000	23,293,000	56,685,000
7/1/2023	2024-25	4,967,000	1,583,000	12,329,000	12,655,000	31,534,000	736,000	22,099,000	22,835,000	54,369,000
7/1/2024	2025-26	4,073,000	1,232,000	12,115,000	12,503,000	29,923,000	727,000	21,953,000	22,680,000	52,603,000
7/1/2025	2026-27	3,228,000	939,000	11,930,000	12,296,000	28,393,000	732,000	21,743,000	22,475,000	50,868,000
7/1/2026	2027-28	2,531,000	672,000	11,772,000	12,090,000	27,065,000	750,000	21,744,000	22,494,000	49,559,000
7/1/2027	2028-29	2,013,000	450,000	11,726,000	11,788,000	25,977,000	778,000	21,859,000	22,637,000	48,614,000
7/1/2028	2029-30	1,588,000	325,000	11,651,000	11,566,000	25,130,000	812,000	22,034,000	22,846,000	47,976,000
7/1/2029	2030-31	1,238,000	244,000	9,503,000	11,350,000	22,335,000	855,000	22,147,000	23,002,000	45,337,000
7/1/2030	2031-32	997,000	203,000	8,598,000	11,175,000	20,973,000	904,000	22,508,000	23,412,000	44,385,000
7/1/2031	2032-33	885,000	161,000	6,828,000	10,968,000	18,842,000	956,000	22,956,000	23,912,000	42,754,000
7/1/2032	2033-34	495,000	94,000	5,481,000	10,819,000	16,889,000	1,014,000	22,840,000	23,854,000	40,743,000
7/1/2033	2034-35	425,000	90,000	4,776,000	10,652,000	15,943,000	1,078,000	23,515,000	24,593,000	40,536,000
7/1/2034	2035-36	431,000	83,000	3,574,000	10,532,000	14,620,000	1,140,000	24,003,000	25,143,000	39,763,000
7/1/2035	2036-37	516,000	90,000	2,326,000	10,427,000	13,359,000	1,204,000	24,623,000	25,827,000	39,186,000
7/1/2036	2037-38	617,000	132,000	1,754,000	10,324,000	12,827,000	1,272,000	25,302,000	26,574,000	39,401,000
7/1/2037	2038-39	750,000	190,000	1,937,000	10,256,000	13,133,000	1,345,000	26,106,000	27,451,000	40,584,000
7/1/2038	2039-40	882,000	264,000	2,294,000	10,177,000	13,617,000	1,426,000	26,868,000	28,294,000	41,911,000
7/1/2039	2040-41	1,039,000	334,000	2,697,000	10,134,000	14,204,000	1,507,000	27,792,000	29,299,000	43,503,000
7/1/2040	2041-42	1,053,000	385,000	3,027,000	10,173,000	14,638,000	1,591,000	28,503,000	30,094,000	44,732,000



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Historical Stamford pension plan investment performance

Fiscal Year Ending June 30	2014	2015	2016	2017	2018	2019	2020	2021	Compound Annual Return
Stamford Fire	12.67%	-0.15%	-3.38%	14.22%	8.60%	6.28%	-1.68%	30.91%	7.95%
Stamford Police	15.13%	4.38%	-2.15%	10.81%	9.18%	1.92%	-3.18%	18.70%	6.59%
Stamford CERF	16.65%	1.44%	-4.38%	14.62%	9.77%	4.50%	6.29%	32.89%	9.73%
Stamford Custodians	16.34%	0.73%	-3.37%	14.27%	8.89%	5.18%	6.25%	32.39%	9.62%
OPEB				13.43%	8.51%	4.84%	6.55%	31.05%	

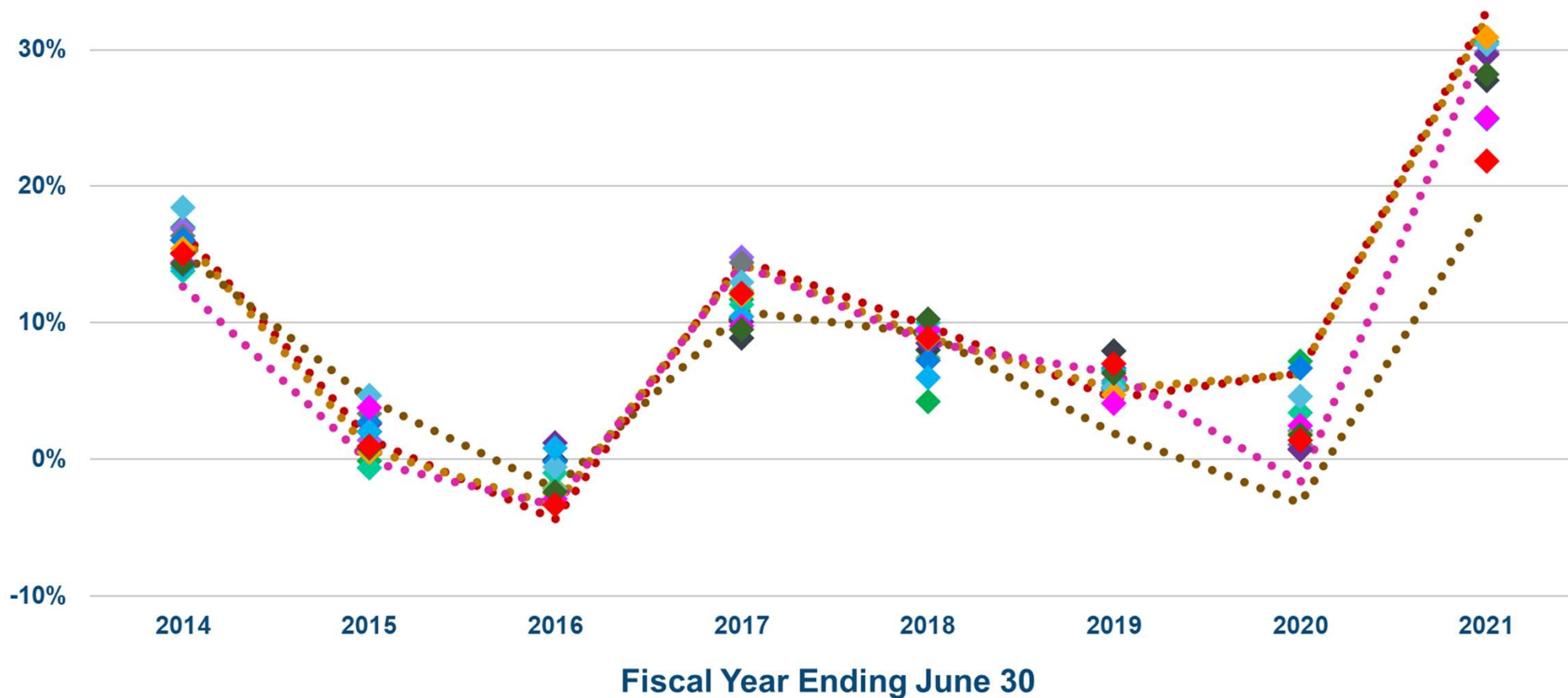


Comparative historical investment returns

15 largest CT municipal pension plans by size of assets at 6/30/2021

Historical Annual Reported Money-Weighted Rate of Return

••• Stamford CERF ••• Stamford Custodians ••• Stamford Police ••• Stamford Fire

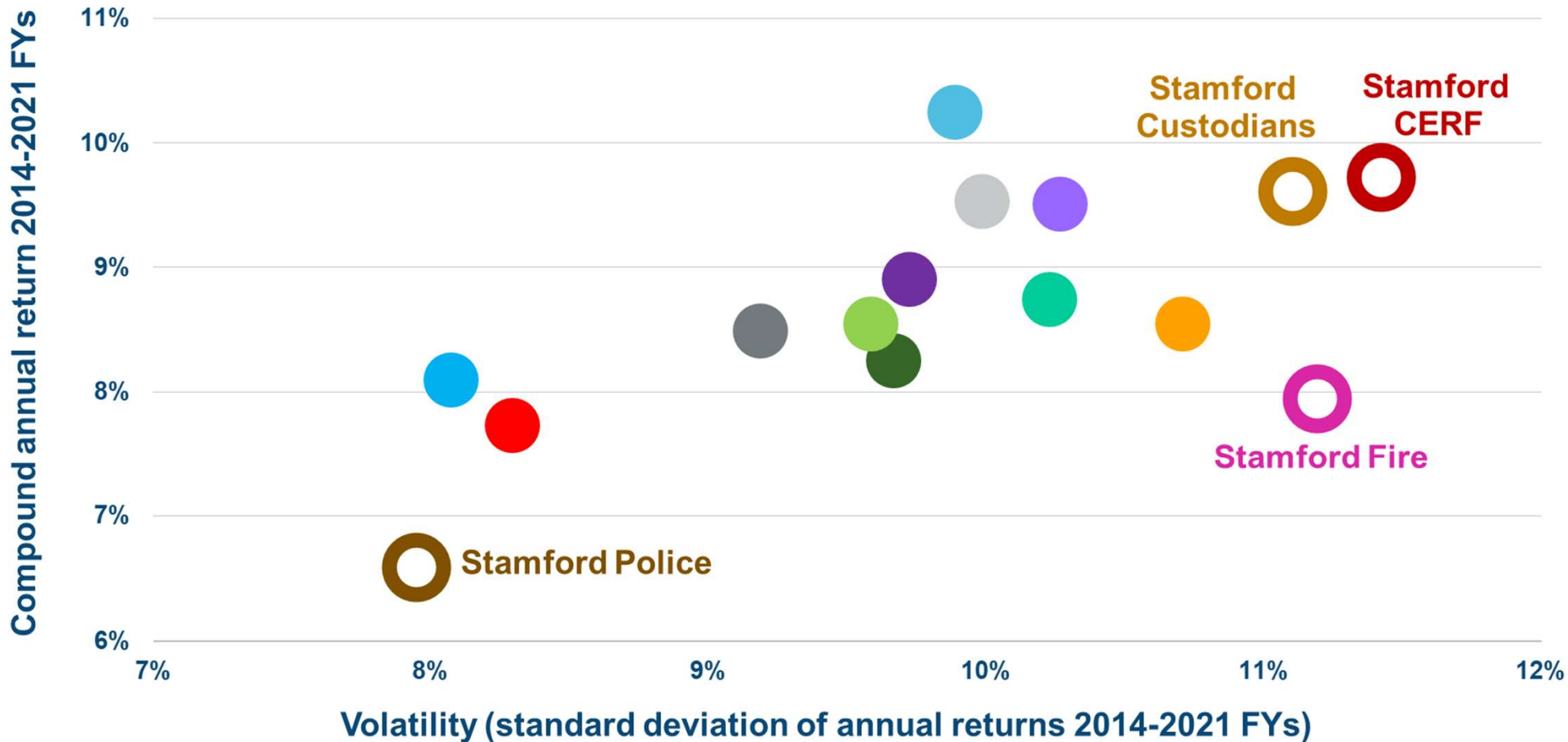


Source: Annual
 Comprehensive Financial Reports for FYE June 30, 2021 filed with the CT Office of Policy and Management. Where Milliman combined data for multiple plans, the rate of return was set equal to the weighted average of the returns for the individual plans based on their respective asset sizes at June 30, 2021.

Comparative historical risk vs. return

15* largest CT municipal pension plans by size of assets at 6/30/2021

Compound Annual Return vs Volatility of Returns



* Excluded Danbury, Middletown, and New Haven because they have not yet filed their FYE 2021 ACFRs.

Source: Annual Comprehensive Financial Reports for FYE June 30, 2021 filed with the CT Office of Policy and Management. Where Milliman combined data for multiple plans, the rate of return was set equal to the weighted average of the returns for the individual plans based on their respective asset sizes at June 30, 2021. Compounded returns and volatility of returns for 2014-2021 were calculated by Milliman.

Questions?