

# City of Stamford

## Board of Finance / Board of Representatives

### Pension and OPEB Discussion – April 12, 2023

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# Agenda

- High-level review of the results of the July 1, 2022 valuations
- Historical funded ratios and contribution levels
- Long-range forecast of the City's contributions
- Review of historical investment returns by plan

# Changes reflected in the July 1, 2022 valuations

- Significant asset losses in FY 2021-22; largely blunted by asset smoothing mechanism
- Experience studies for the CERF and Custodians pension plans
  - Detailed analysis of actual past plan experience
  - No change recommended to the interest rate assumption (6.70%)
  - Adjustments made to many other assumptions, including retirement, turnover, salary growth
    - Reduced CERF & Custodians pension liability by about \$50m; slight impact on OPEB liability
  - Switch from Projected Unit Credit to Entry Age Normal cost method
  - Revise funding policy to pay full Net Normal Cost when a plan is modestly overfunded (100-125%)
    - Generally increased liability and reduced Normal Cost; small net impact on contributions
- City OPEB valuation reflects continued shift of post-65 coverage to CT State Partnership Plan (SPP) and continued downward trend in premiums
  - Most groups moved 2020-2022; some Police retirees and all Fire retirees remain on other plans
  - Current annual premium for single coverage: SPP \$1,900 (down from \$3,300); other plans \$9,500-\$12,800
    - Reduced OPEB liability by about \$100m

# Results of July 1, 2022 pension valuations

	CERF City	CERF Board of Education	CERF WPCA	CERF Total	Custodians	Fire	Police
Accrued liability	\$240,941,500	\$28,677,072	\$13,906,296	\$283,524,868	\$87,133,059	\$246,584,928	\$322,571,385
Actuarial value of assets	227,447,577	27,123,168	14,219,625	268,790,370	94,177,157	185,125,615	245,972,243
Unfunded accrued liability	13,493,923	1,553,904	(313,329)	14,734,498	(7,044,098)	61,459,313	76,599,142
Past service cost	1,362,334	156,881	(31,633)	1,487,582	0	8,223,888	7,733,380
Total normal cost	3,197,358	564,379	190,432	3,952,169	2,140,814	5,257,258	6,614,267
Expected employee contributions	1,649,039	281,956	102,977	2,033,972	1,267,849	1,410,335	1,579,999
Administrative expenses	89,971	15,881	5,359	111,211	60,000	117,000	199,000
Net normal cost	1,638,290	298,304	92,814	2,029,408	932,965	3,963,923	5,233,268
Timing Adjustment	201,042	30,497	4,099	235,638	62,509	816,583	868,765
<b>Actuarially Determined Contribution (ADC) for FYE 2024</b>	<b>3,201,666</b>	<b>485,682</b>	<b>65,280</b>	<b>3,752,628</b>	<b>995,474</b>	<b>13,004,394</b>	<b>13,835,413</b>
<b>ADC, All Plans Combined</b>							<b>31,587,909</b>

# Results of July 1, 2022 OPEB valuations

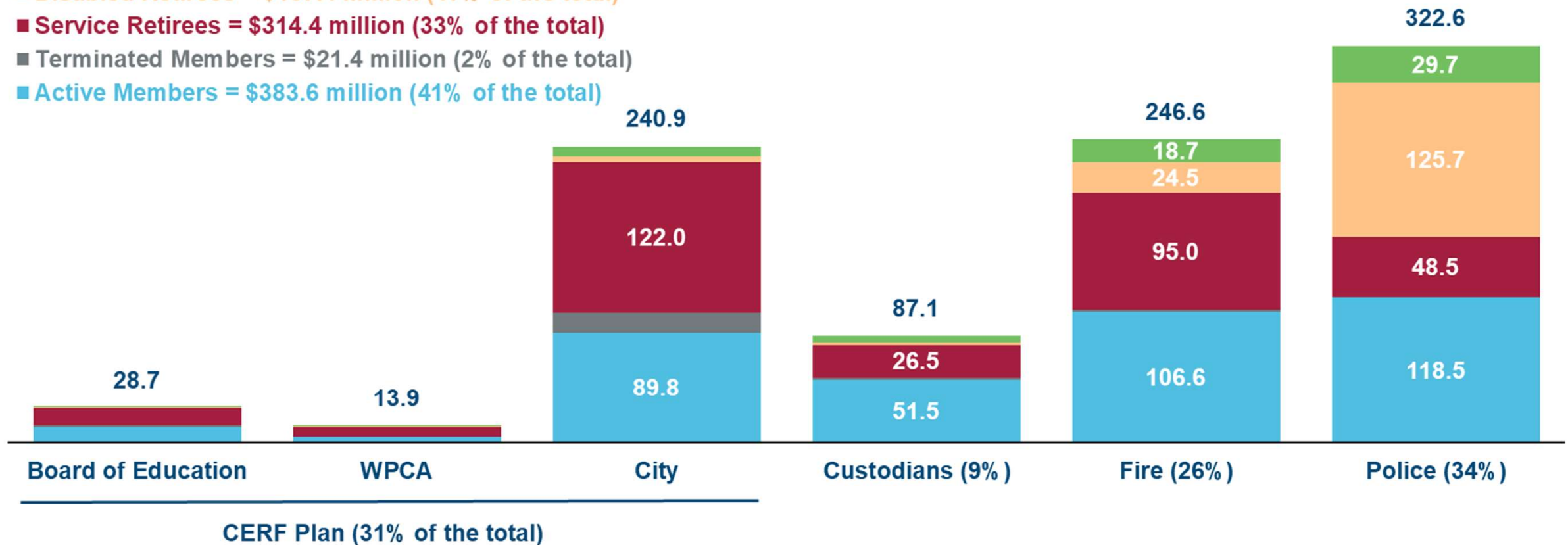
	City OPEB Plan						BOE OPEB Plan		
	CERF City	CERF BOE	CERF WPCA	Custodians	Fire	Police	Teachers	Admin.	Ed Assts.
Accrued Liability	\$45,452,202	\$5,990,652	\$2,314,442	\$5,979,570	\$114,754,512	\$117,497,239	\$22,595,233	\$1,233,387	\$607,019
Actuarial Value of Assets	34,186,440	4,505,811	3,659,939	4,497,477	86,311,510	88,374,424	21,268,232	1,160,952	571,369
Unfunded Accrued Liability	11,265,762	1,484,841	(1,345,497)	1,482,093	28,443,002	29,122,815	1,327,001	72,435	35,650
Funded Ratio	75.2%	75.2%	158.1%	75.2%	75.2%	75.2%	94.1%	94.1%	94.1%
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	835,674	110,143	(99,807)	109,939	2,109,850	2,160,278	98,435	5,373	2,644
Total Normal Cost	1,058,539	192,939	63,524	145,458	2,544,242	2,404,635	759,720	41,866	26,783
Expected Employee Contributions	0	0	0	0	0	212,448	0	0	0
Net Normal Cost	1,058,539	192,939	63,524	145,458	2,544,242	2,192,187	759,720	41,866	26,783
Timing Adjustment	126,913	20,306	(2,431)	17,112	311,824	291,615	57,496	3,165	1,972
<b>Actuarially Determined Contribution (ADC)* for FYE 2024</b>	2,021,126	323,388	0	272,509	4,965,916	4,644,080	915,651	50,404	31,399
<b>ADC, Total for Each Plan</b>						<b>12,227,019</b>			<b>997,454</b>
<b>ADC, All Plans Combined</b>									<b>13,224,473</b>

\*The ADC for each group is equal to the sum of the Past Service Cost, Net Normal Cost and Timing Adjustment, but not less than zero. The total ADC for the plan is equal to the sum of the ADC's for each group.

# Liability for pension benefits

Accrued Liability as of July 1, 2022 = \$939.8 million in total

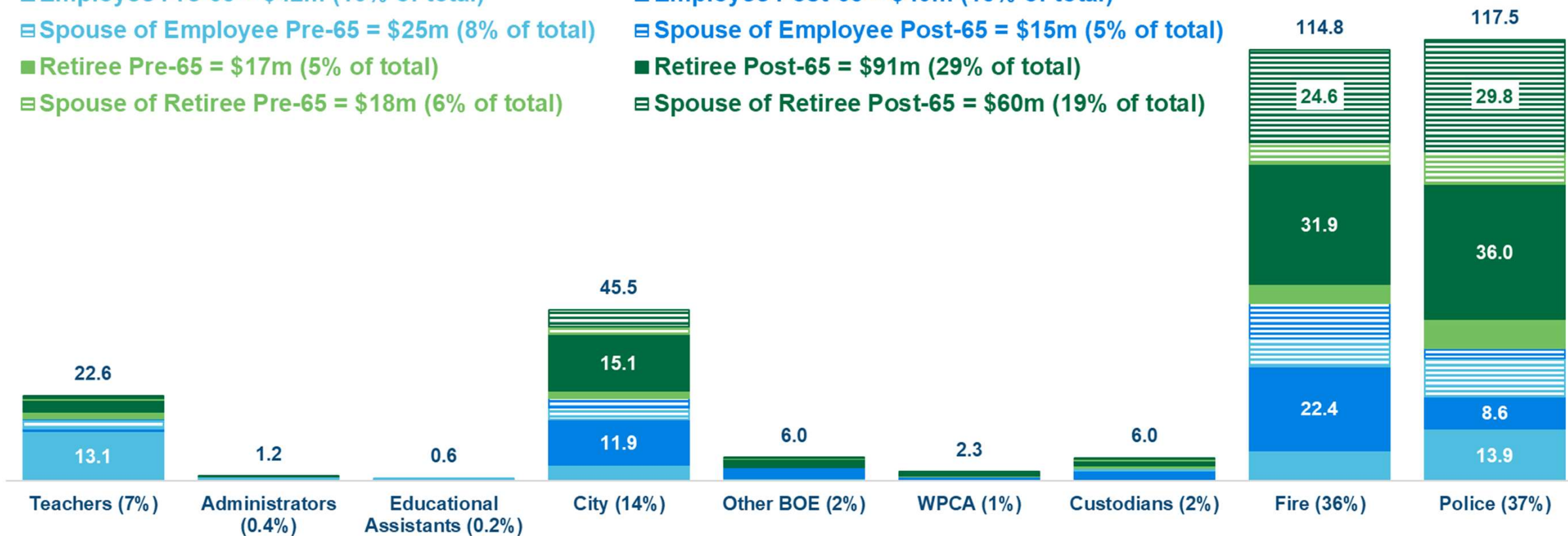
- Beneficiaries = \$63.0 million (7% of the total)
- Disabled Retirees = \$157.4 million (17% of the total)
- Service Retirees = \$314.4 million (33% of the total)
- Terminated Members = \$21.4 million (2% of the total)
- Active Members = \$383.6 million (41% of the total)



# Liability for OPEB benefits

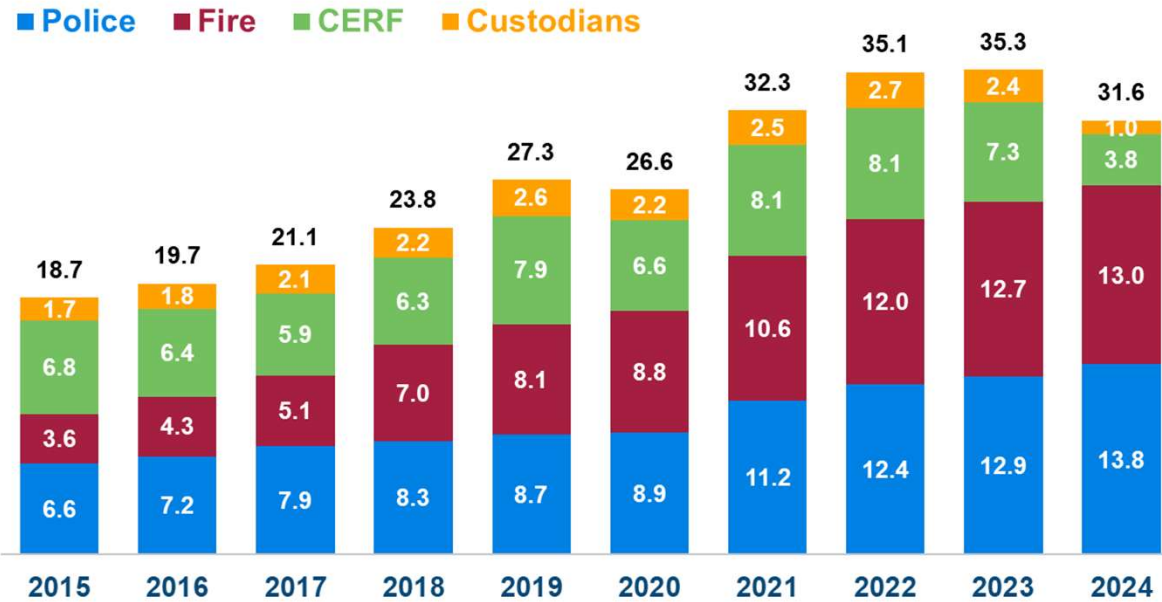
Accrued Liability as of July 1, 2022 = \$316.4 million in total

- Employee Pre-65 = \$42m (13% of total)
- Employee Post-65 = \$49m (15% of total)
- ▨ Spouse of Employee Pre-65 = \$25m (8% of total)
- ▨ Spouse of Employee Post-65 = \$15m (5% of total)
- Retiree Pre-65 = \$17m (5% of total)
- Retiree Post-65 = \$91m (29% of total)
- ▨ Spouse of Retiree Pre-65 = \$18m (6% of total)
- ▨ Spouse of Retiree Post-65 = \$60m (19% of total)

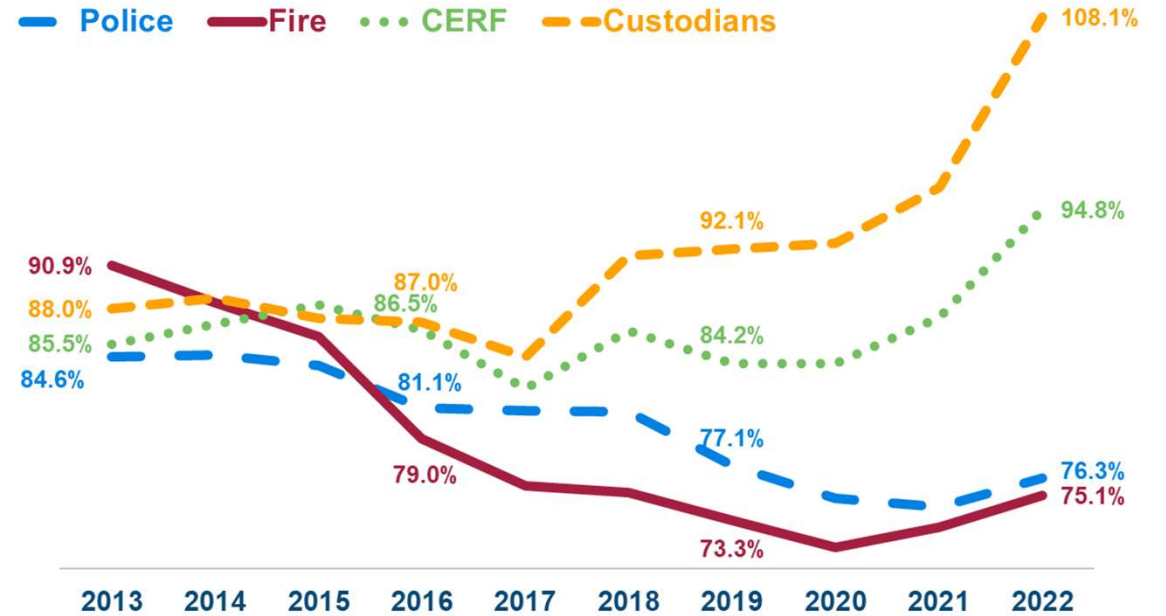


# Historical pension metrics

## Actuarially Determined Contributions



## Funded Ratios



## Contribution Growth Rate FY 2015-2024

Police	208%
Fire	364%
CERF	-45%
Custodians	-40%
Combined	169%

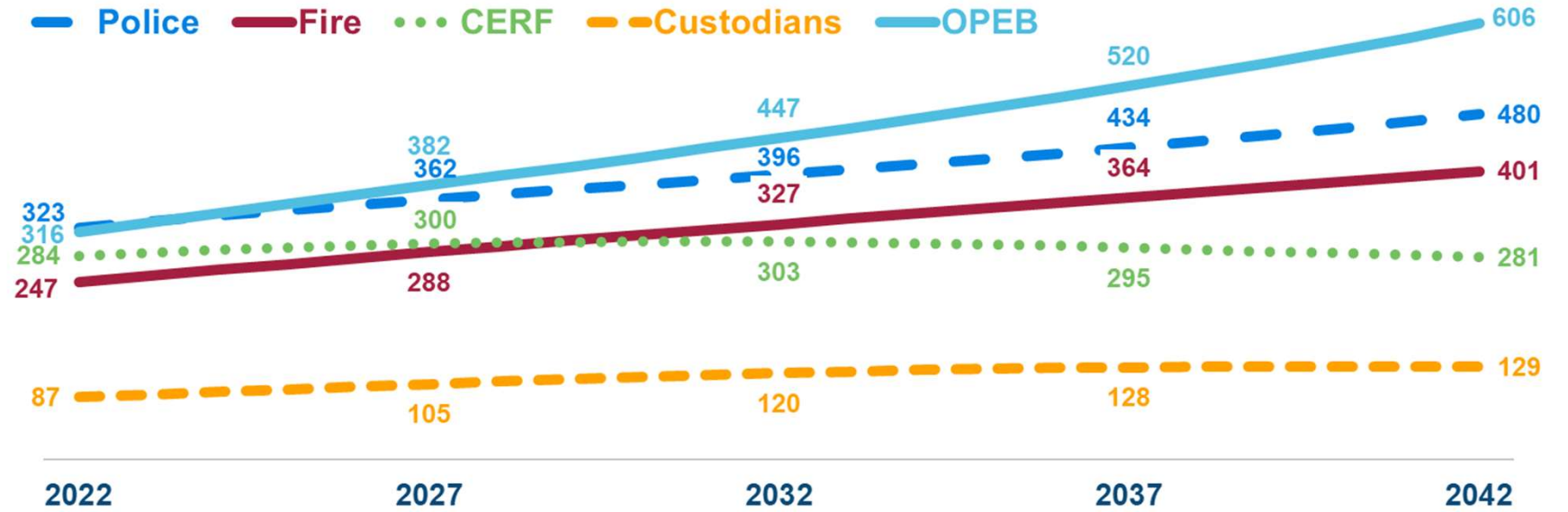


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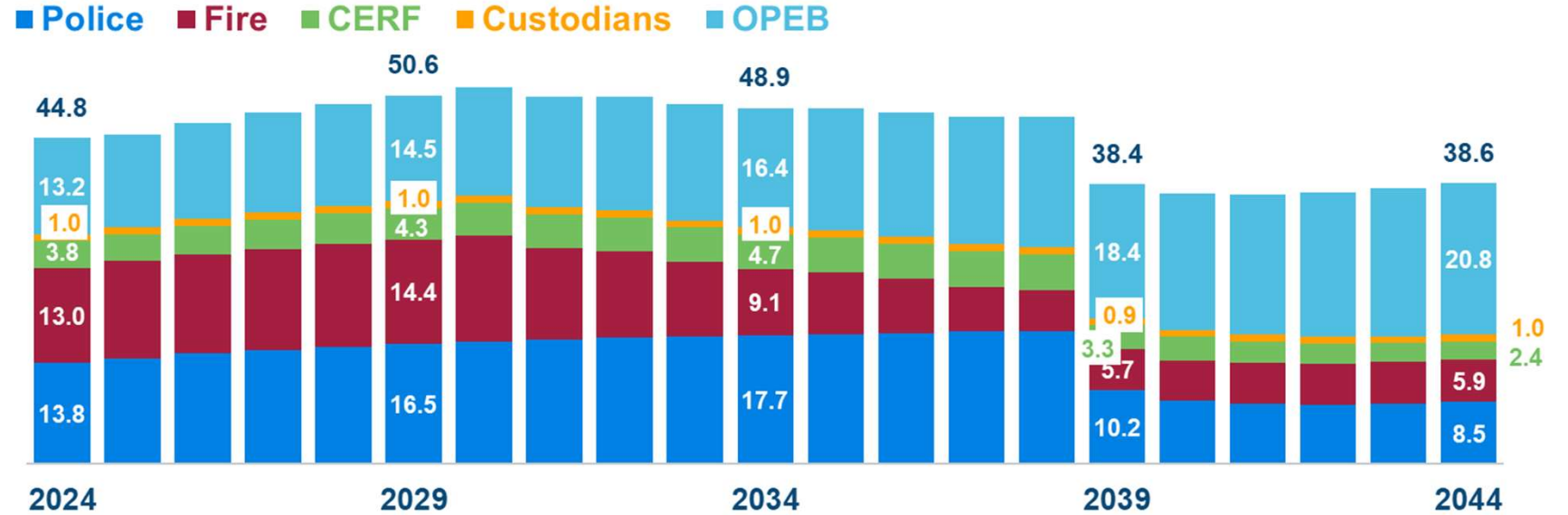


# Long range forecast based on July 1, 2022 valuations

## Projected Accrued Liability (\$ millions)



## Projected City Contributions (\$ millions)



# Long range contribution forecast

These forecasts are based on the results of the July 1, 2022 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	Plans Combined	BOE OPEB	City OPEB	OPEB Combined	
7/1/2022	2023-24	\$3,752,628	\$995,474	\$13,004,394	\$13,835,413	\$31,587,909	\$997,454	\$12,227,000	\$13,224,454	\$44,812,363
7/1/2023	2024-25	3,653,000	1,020,000	13,360,000	14,483,000	32,516,000	1,059,000	11,710,000	12,769,000	45,285,000
7/1/2024	2025-26	3,852,000	1,028,000	13,675,000	15,119,000	33,674,000	1,103,000	12,100,000	13,203,000	46,877,000
7/1/2025	2026-27	4,059,000	1,025,000	13,913,000	15,616,000	34,613,000	1,145,000	12,503,000	13,648,000	48,261,000
7/1/2026	2027-28	4,222,000	1,025,000	14,120,000	16,053,000	35,420,000	1,185,000	12,890,000	14,075,000	49,495,000
7/1/2027	2028-29	4,347,000	1,015,000	14,368,000	16,452,000	36,182,000	1,226,000	13,225,000	14,451,000	50,633,000
7/1/2028	2029-30	4,462,000	1,005,000	14,544,000	16,813,000	36,824,000	1,266,000	13,595,000	14,861,000	51,685,000
7/1/2029	2030-31	4,541,000	992,000	12,617,000	17,063,000	35,213,000	1,308,000	13,930,000	15,238,000	50,451,000
7/1/2030	2031-32	4,616,000	974,000	11,907,000	17,306,000	34,803,000	1,350,000	14,284,000	15,634,000	50,437,000
7/1/2031	2032-33	4,685,000	977,000	10,281,000	17,513,000	33,456,000	1,393,000	14,614,000	16,007,000	49,463,000
7/1/2032	2033-34	4,745,000	967,000	9,096,000	17,712,000	32,520,000	1,438,000	14,965,000	16,403,000	48,923,000
7/1/2033	2034-35	4,792,000	974,000	8,477,000	17,856,000	32,099,000	1,484,000	15,286,000	16,770,000	48,869,000
7/1/2034	2035-36	4,815,000	976,000	7,375,000	18,007,000	31,173,000	1,532,000	15,625,000	17,157,000	48,330,000
7/1/2035	2036-37	4,834,000	962,000	6,182,000	18,167,000	30,145,000	1,581,000	15,963,000	17,544,000	47,689,000
7/1/2036	2037-38	4,843,000	948,000	5,647,000	18,276,000	29,714,000	1,633,000	16,321,000	17,954,000	47,668,000
7/1/2037	2038-39	3,265,000	927,000	5,659,000	10,176,000	20,027,000	1,686,000	16,694,000	18,380,000	38,407,000
7/1/2038	2039-40	3,200,000	909,000	5,476,000	8,760,000	18,345,000	1,742,000	17,075,000	18,817,000	37,162,000
7/1/2039	2040-41	2,969,000	930,000	5,626,000	8,249,000	17,774,000	1,800,000	17,490,000	19,290,000	37,064,000
7/1/2040	2041-42	2,739,000	930,000	5,701,000	8,076,000	17,446,000	1,861,000	17,932,000	19,793,000	37,239,000
7/1/2041	2042-43	2,536,000	951,000	5,808,000	8,278,000	17,573,000	1,924,000	18,384,000	20,308,000	37,881,000



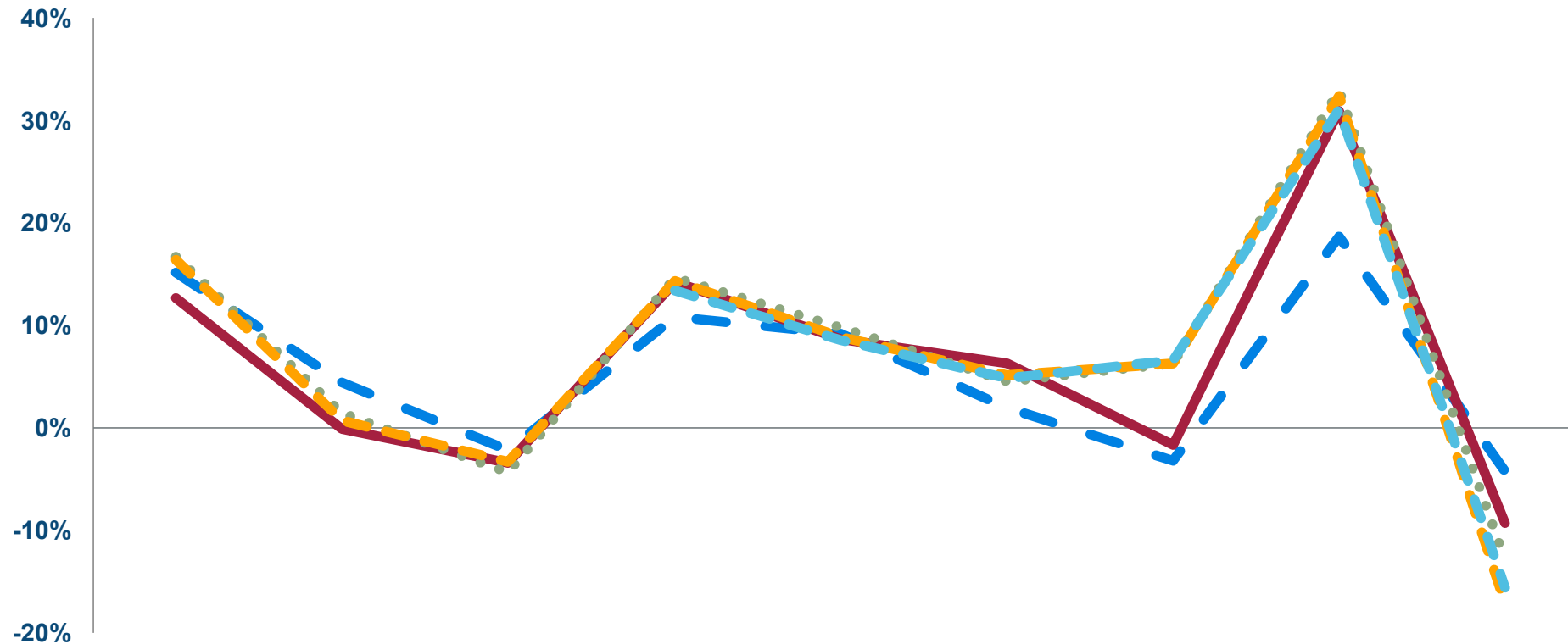
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# Historical investment performance

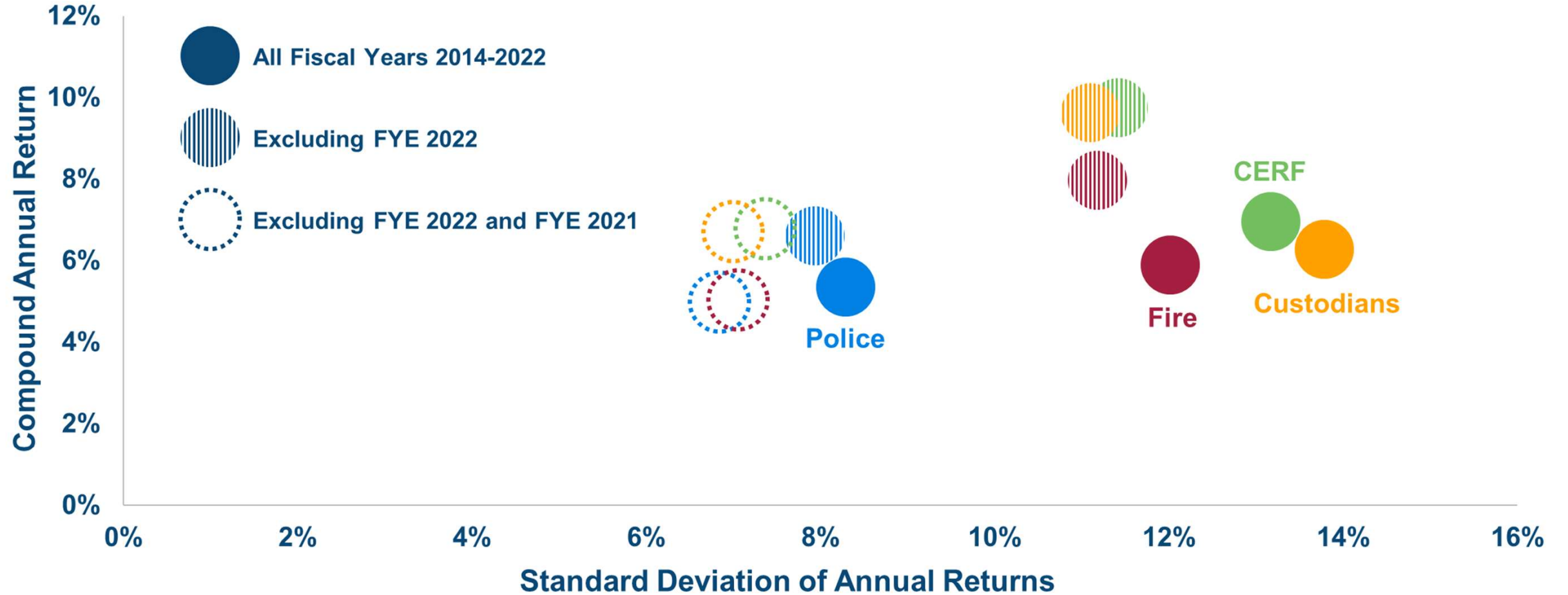
Fiscal Year Ending

June 30

	2014	2015	2016	2017	2018	2019	2020	2021	2022	Compound Annual Return	Standard Deviation of Annual Returns
Police	15.13%	4.38%	-2.15%	10.81%	9.18%	1.92%	-3.18%	18.70%	-4.22%	5.33%	8.30%
Fire	12.67%	-0.15%	-3.38%	14.22%	8.60%	6.28%	-1.68%	30.91%	-9.31%	5.88%	12.02%
CERF	16.65%	1.44%	-4.38%	14.62%	9.77%	4.50%	6.29%	32.89%	-12.92%	6.94%	13.18%
Custodians	16.34%	0.73%	-3.37%	14.27%	8.89%	5.18%	6.25%	32.39%	-17.12%	6.26%	13.79%
OPEB				13.43%	8.51%	4.84%	6.55%	31.05%	-15.63%	7.23%	15.04%



# Investment risks vs. rewards



# Market gains / losses relative to investment assumption

Police	Actual Investment Return	Expected Return	Market (Gain) / Loss
FYE			
6/30/2015	\$8,404,119	\$14,664,202	\$6,260,083
6/30/2016	(4,227,286)	14,747,812	18,975,098
6/30/2017	20,375,655	13,843,122	(6,532,533)
6/30/2018	18,688,574	14,400,082	(4,288,492)
6/30/2019	4,166,104	15,364,266	11,198,162
6/30/2020	(6,839,005)	15,003,262	21,842,267
6/30/2021	37,414,071	14,000,233	(23,413,838)
6/30/2022	(10,002,476)	16,091,946	26,094,422
<b>All 8 Years</b>	<b>67,979,756</b>	<b>118,114,925</b>	<b>50,135,169</b>
<b>Market Value June 30, 2022</b>			<b>219,197,323</b>
<b>All 8 Years ÷ Market Value</b>			<b>23%</b>

CERF	Actual Investment Return	Expected Return	Market (Gain) / Loss
FYE			
6/30/2015	\$3,015,465	\$16,004,777	\$12,989,312
6/30/2016	(9,080,116)	15,494,931	24,575,047
6/30/2017	27,749,374	14,233,817	(13,515,557)
6/30/2018	20,438,341	15,492,007	(4,946,334)
6/30/2019	10,047,409	15,821,574	5,774,165
6/30/2020	14,144,606	15,794,748	1,650,142
6/30/2021	75,788,253	16,166,257	(59,621,996)
6/30/2022	(38,930,346)	20,701,293	59,631,639
<b>All 8 Years</b>	<b>103,172,986</b>	<b>129,709,404</b>	<b>26,536,418</b>
<b>Market Value June 30, 2022</b>			<b>255,291,217</b>
<b>All 8 Years ÷ Market Value</b>			<b>10%</b>

Fire	Actual Investment Return	Expected Return	Market (Gain) / Loss
FYE			
6/30/2015	(\$191,595)	\$9,878,553	\$10,070,148
6/30/2016	(4,243,849)	8,919,322	13,163,171
6/30/2017	16,677,565	8,332,156	(8,345,409)
6/30/2018	11,320,351	9,319,469	(2,000,882)
6/30/2019	8,901,866	9,932,371	1,030,506
6/30/2020	(2,513,388)	10,323,635	12,837,023
6/30/2021	44,438,027	10,019,964	(34,418,063)
6/30/2022	(17,902,068)	12,987,408	30,889,476
<b>All 8 Years</b>	<b>56,486,909</b>	<b>79,712,878</b>	<b>23,225,970</b>
<b>Market Value June 30, 2022</b>			<b>169,194,389</b>
<b>All 8 Years ÷ Market Value</b>			<b>14%</b>

Custodians	Actual Investment Return	Expected Return	Market (Gain) / Loss
FYE			
6/30/2015	\$415,987	\$4,383,627	\$3,967,640
6/30/2016	(1,949,305)	4,347,578	6,296,883
6/30/2017	8,023,789	4,144,351	(3,879,438)
6/30/2018	5,730,009	4,761,698	(968,311)
6/30/2019	3,665,503	5,009,543	1,344,040
6/30/2020	4,644,714	5,216,437	571,723
6/30/2021	25,425,969	5,511,523	(19,914,446)
6/30/2022	(17,978,860)	7,214,381	25,193,241
<b>All 8 Years</b>	<b>27,977,806</b>	<b>40,589,138</b>	<b>12,611,332</b>
<b>Market Value June 30, 2022</b>			<b>85,880,603</b>
<b>All 8 Years ÷ Market Value</b>			<b>15%</b>

**Questions?**