

Fairfax County Employees' Retirement System



2023 Actuarial Valuation

October 18, 2023

Presented By

Fiona E. Liston, FSA

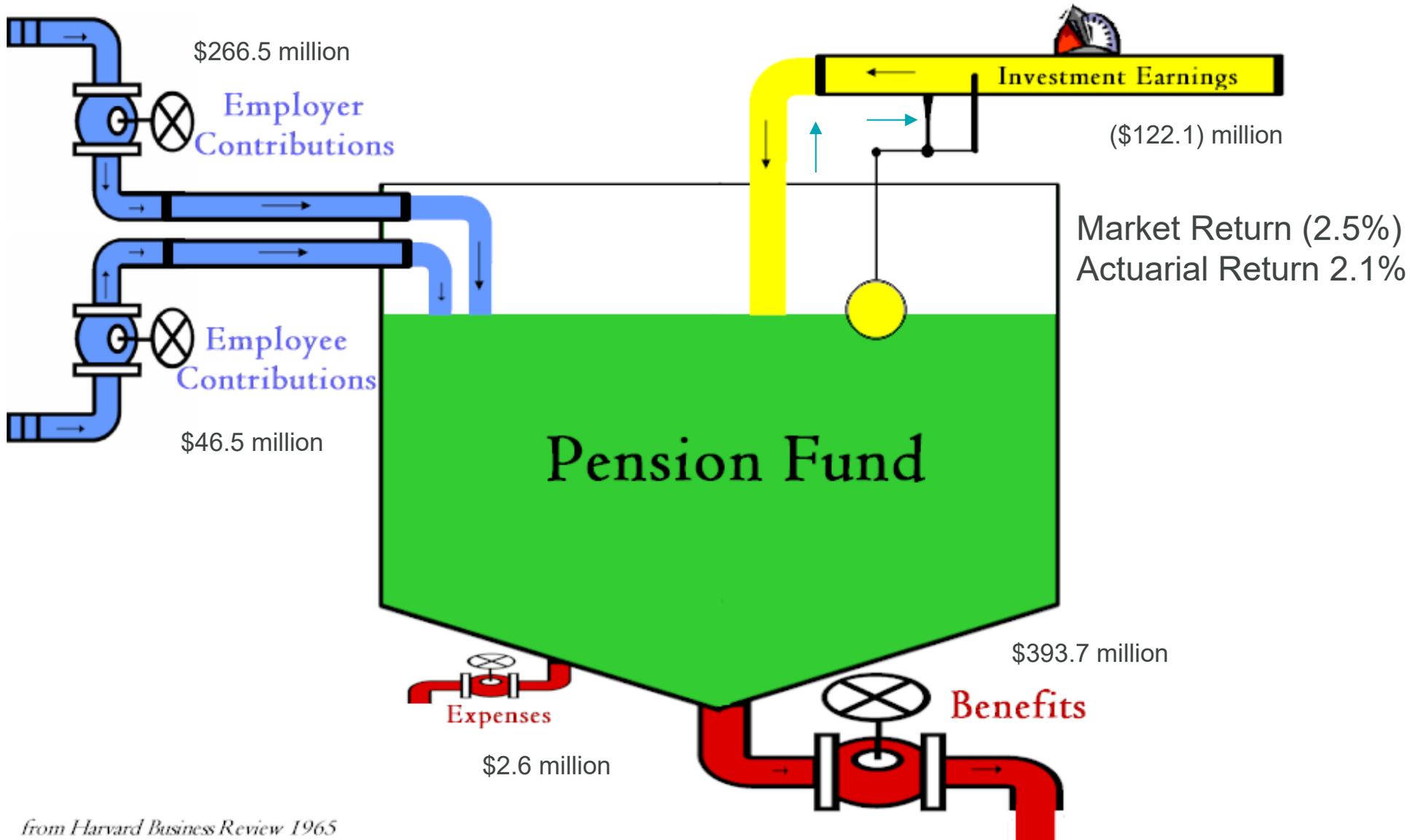
Coralie A. Taylor, FSA

Topics for Discussion



- Historical Review
- Principal 6/30/2023 Valuation Results
- Stress Testing
- GASB 67/68

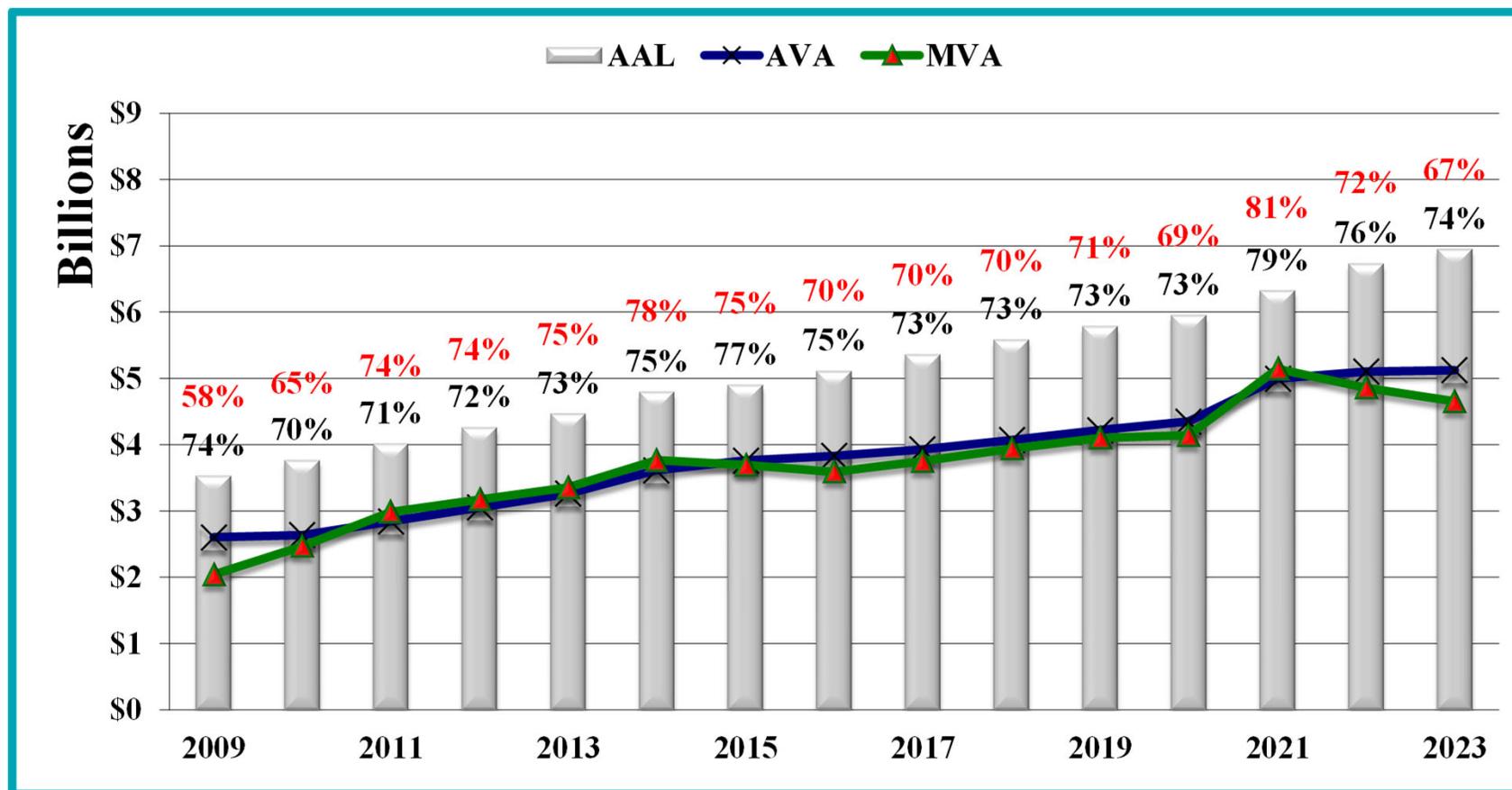
The Actuarial Valuation Process



from Harvard Business Review 1965



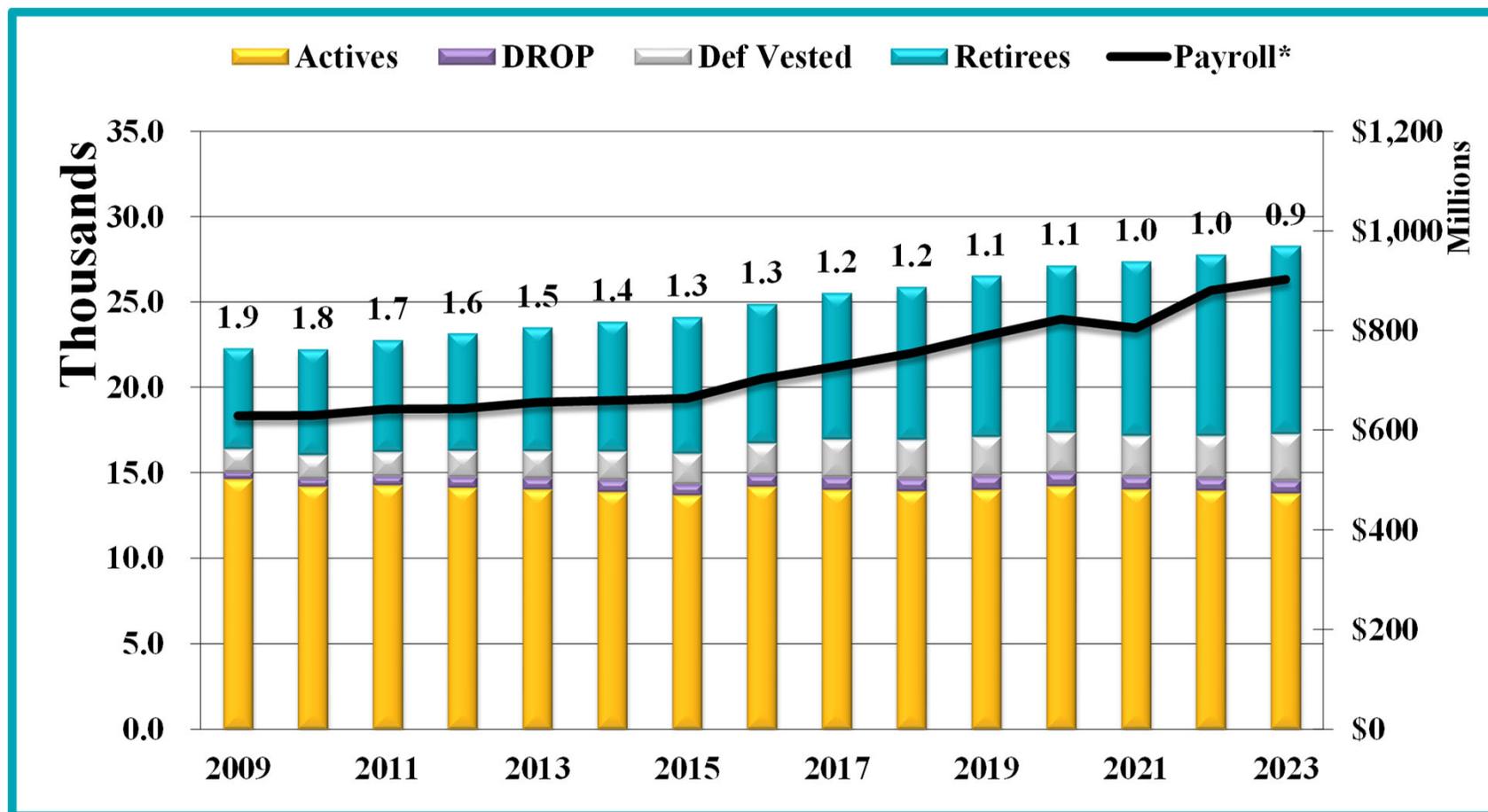
Key Actuarial Indicators: Assets & Liabilities



* Ratios in red represent the GASB funding ratio which uses Market Value of Assets. The ratios in black are based on Actuarial Value of Assets.



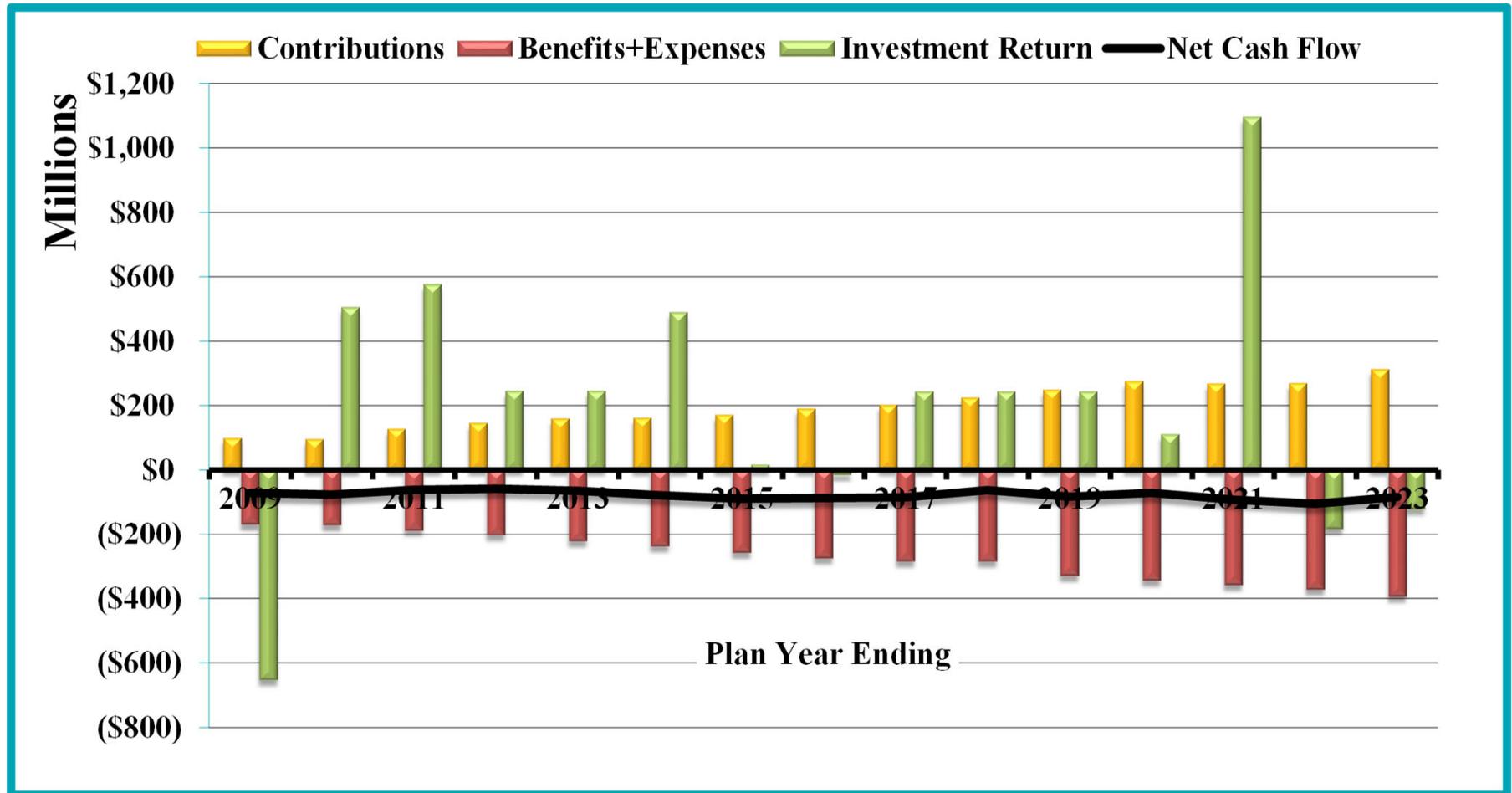
Plan Maturity Indicators: Participation



* Ratios represent the number of actives per inactive. The 2016 valuation used revised data techniques which no longer adjust for January - June retirements. There is a one-time increase in both active counts and covered payroll.

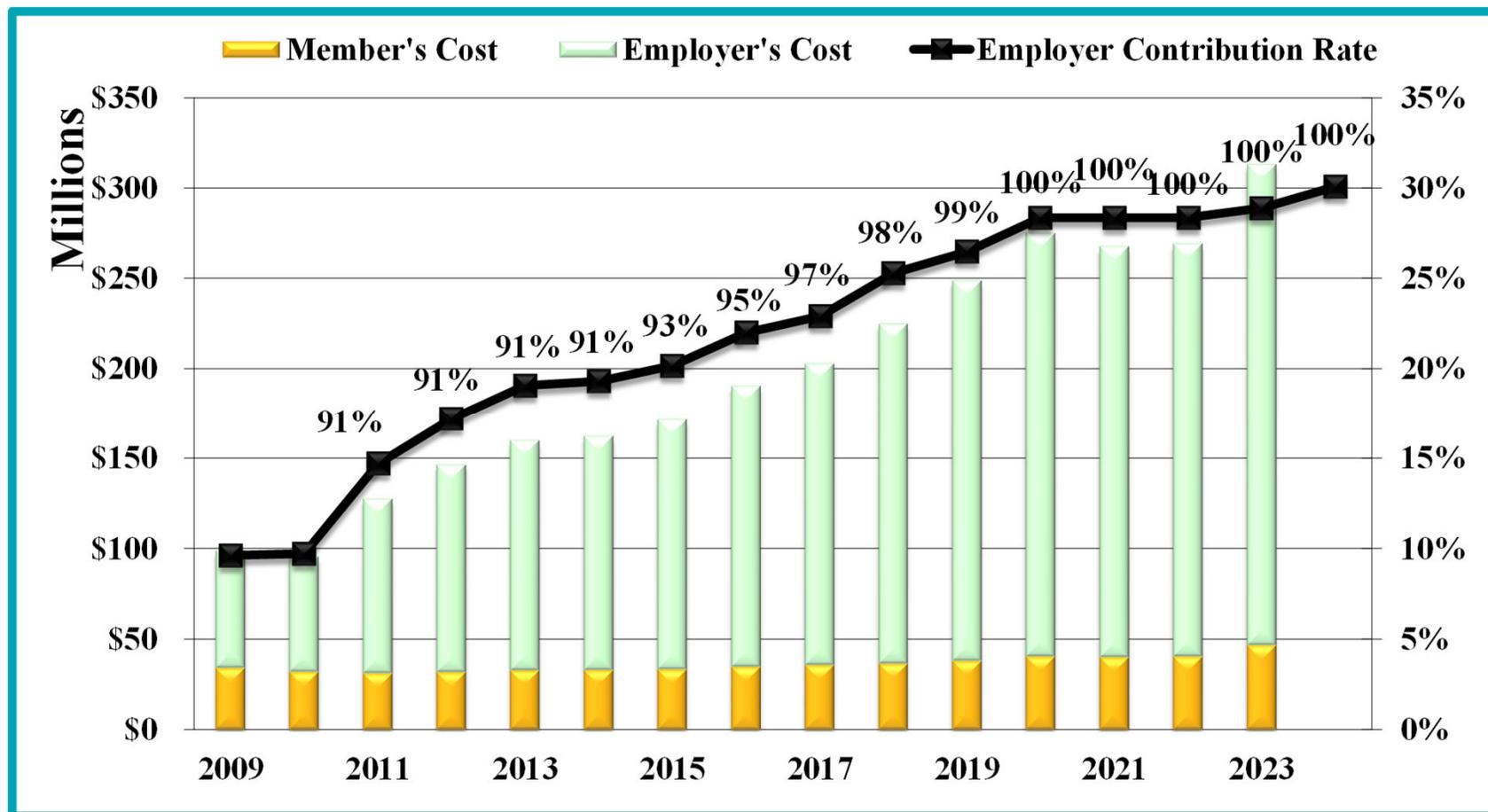


Plan Maturity Indicators: Annual Cash Flows





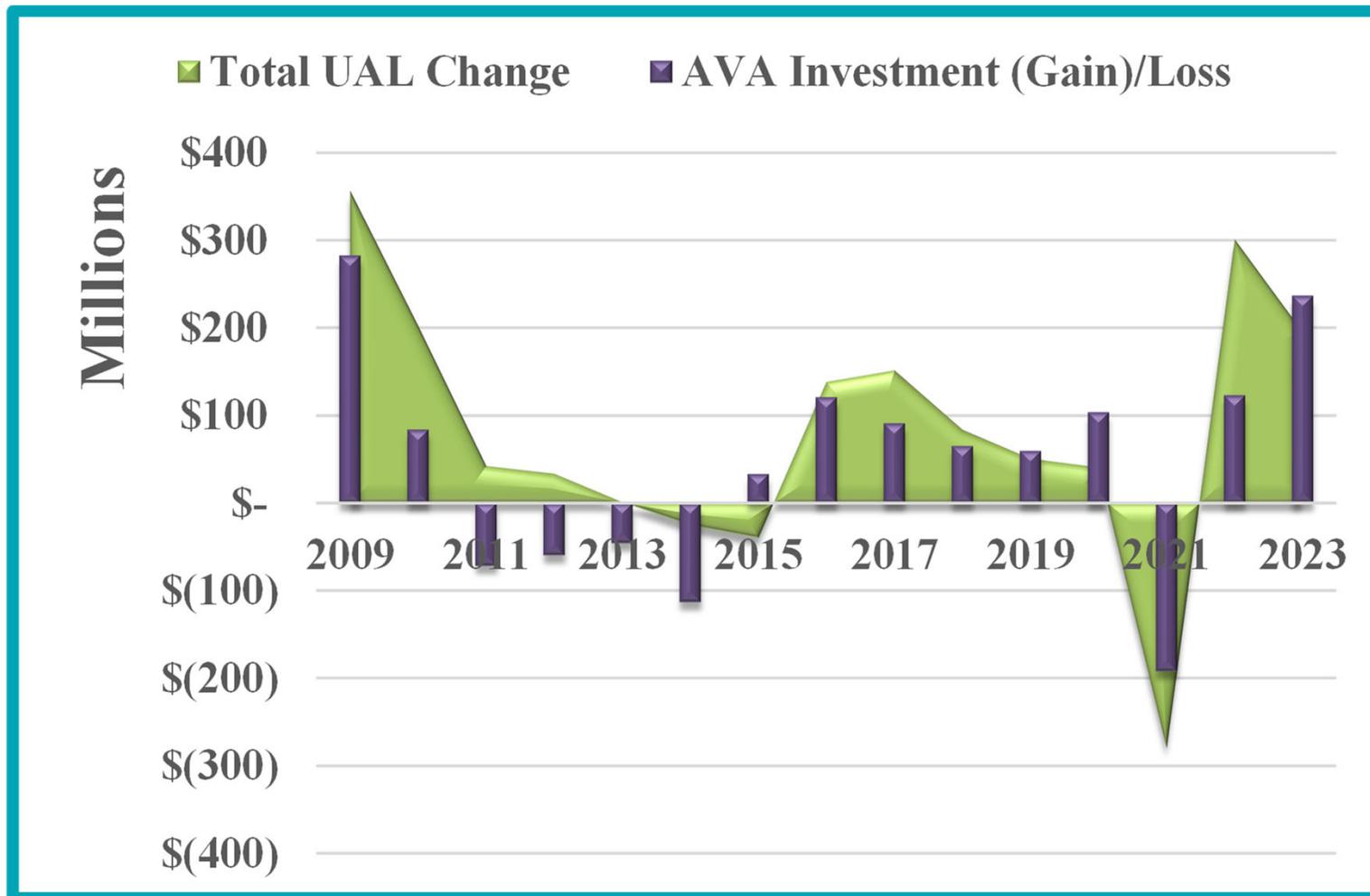
Key Actuarial Indicators: Contribution Rates



* Amounts shown in the bars above represent the amortization target funding ratio used in developing the contribution rate.

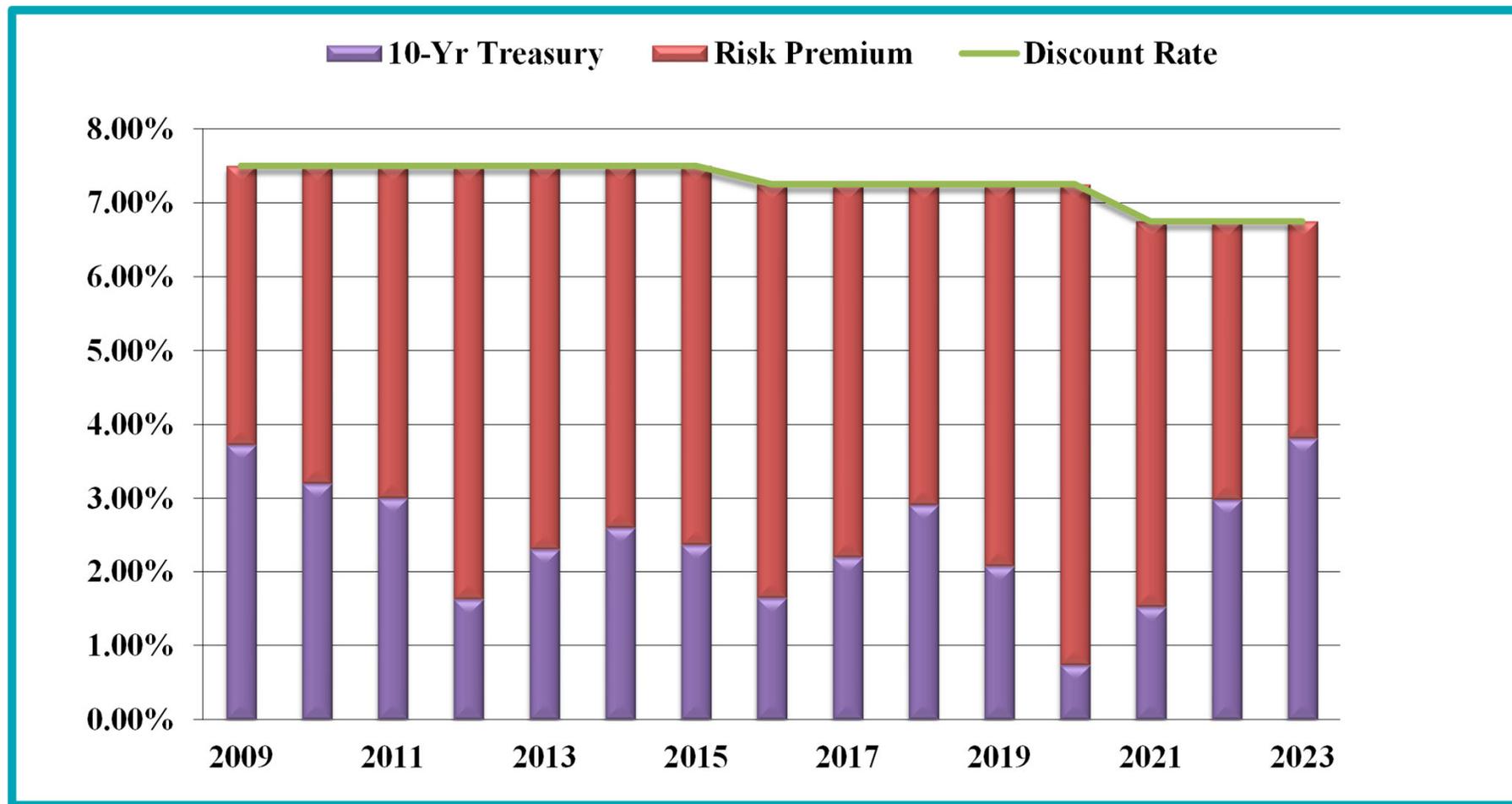


Key Risk Factors: Investment Risk



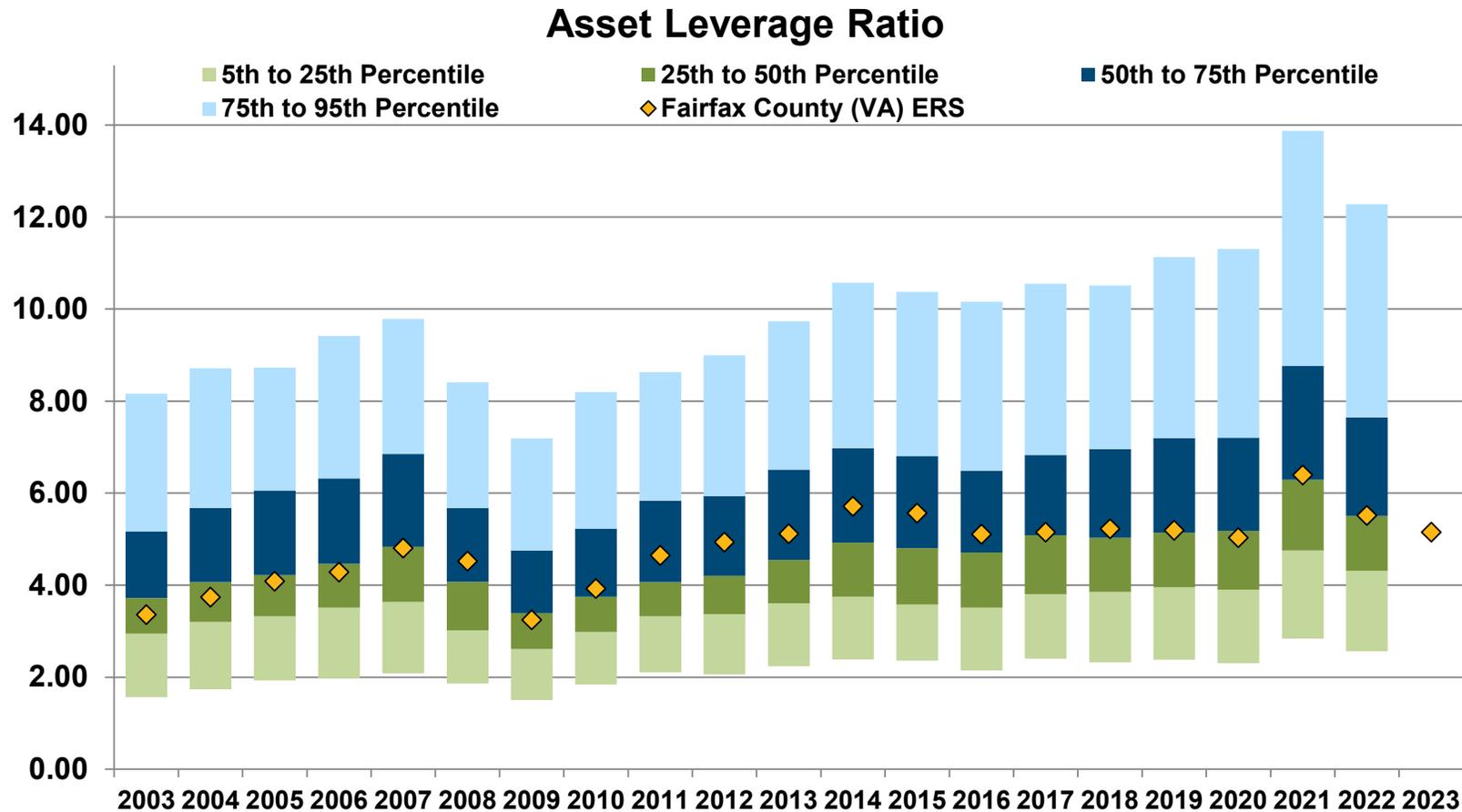


Key Risk Factors: Interest Rate





Key Risk Factors: Asset Leverage

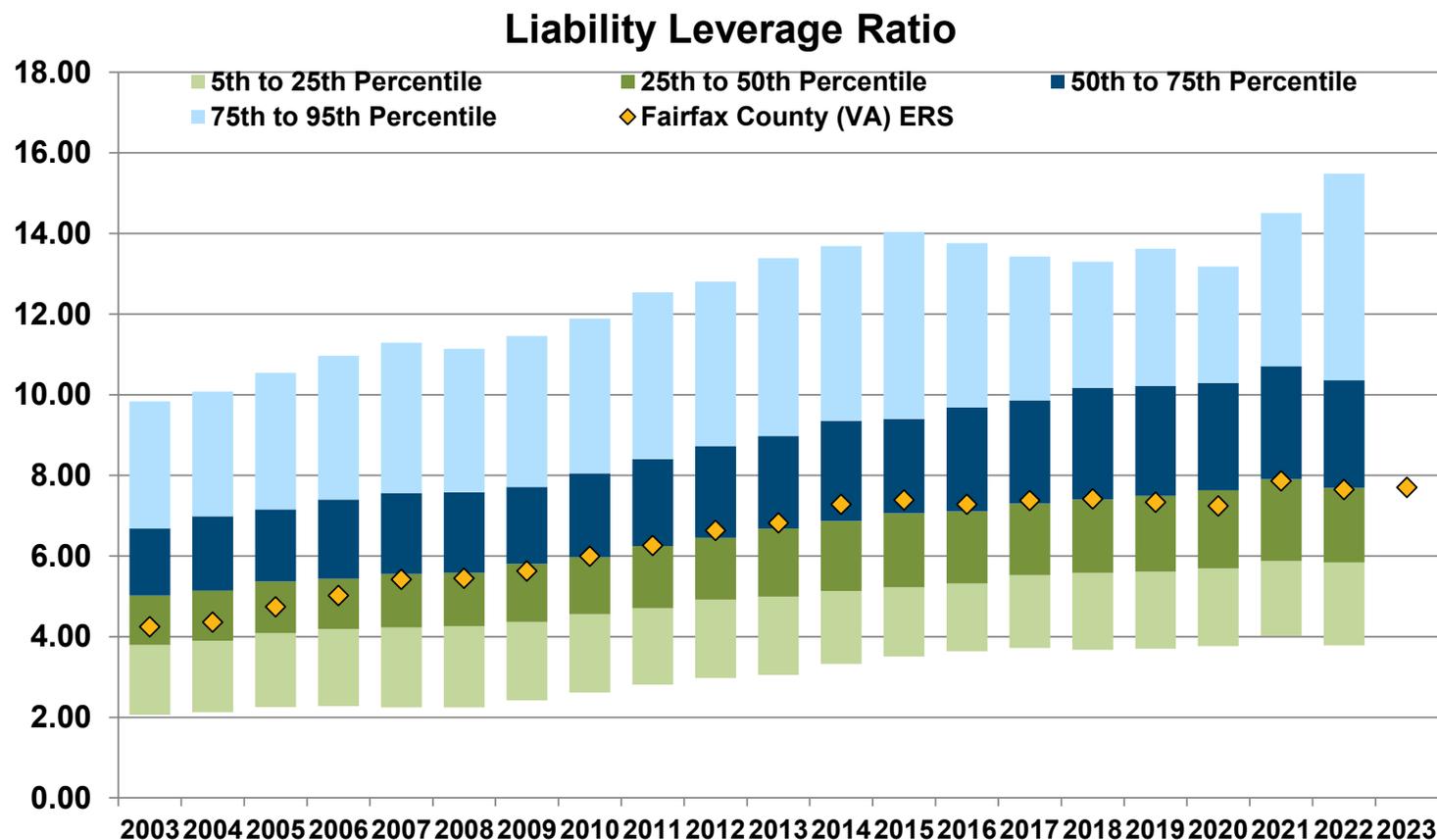


Survey Data from Public Plans Data as of 7/26/2023

Asset leverage ratio determined as Market Value of Assets / Payroll



Key Risk Factors: Liability Leverage



Survey Data from Public Plans Data as of 7/26/2023

Liability leverage ratio determined as Accrued Liability / Payroll

Principal 6/30/2023 Valuation Results



Key Statistics: Total Actives

	2022	2023	% Change
Number of Actives	13,943	13,783	(1.1)%
Number Active & DROP	14,677	14,525	(1.0)%
Total Salary	\$ 881 mil.	\$ 903 mil.	2.5%
Average Salary	\$ 63,181	\$ 65,523	3.7%

Reconciliation	Count	Average W2 Salary	
		2022	2023
Matches*	11,842	\$ 64,473	\$ 66,712
New	1,941	N/A	\$ 58,271
Left	2,101	\$ 55,896	N/A

* Expected average salary to increase 4.6% (\$67,439) vs. actual increase of 3.5%.

Principal 6/30/2023 Valuation Results



Key Statistics: County Actives

	2022	2023	% Change
Number of Actives	8,442	8,525	1.0%
Number Active & DROP	8,927	8,983	0.6%
Total Salary	\$ 661 mil.	\$ 683 mil.	3.4%
Average Salary	\$ 78,268	\$ 80,118	2.4%

Reconciliation	Count	<u>Average W2 Salary</u>	
		2022	2023
Matches*	7,346	\$ 78,819	\$ 81,320
New	1,179	N/A	\$ 72,625
Left	1,096	\$ 74,569	N/A

* Expected average salary to increase 4.2% (\$82,097) vs. actual increase of 3.2%.

Principal 6/30/2023 Valuation Results



Key Statistics: Schools Actives

	2022	2023	% Change
Number of Actives	5,501	5,258	(4.4)%
Number Active & DROP	5,750	5,542	(3.6)%
Total Salary	\$ 220 mil.	\$ 220 mil.	0.0%
Average Salary	\$ 40,028	\$ 41,861	4.6%

Reconciliation	Count	Average W2 Salary	
		2022	2023
Matches*	4,484	\$ 40,965	\$ 42,791
New	774	N/A	\$ 36,473
Left	1,017	\$ 35,899	N/A

* Expected average salary to increase 4.6% (\$42,870) vs. actual increase of 4.5%.

Principal 6/30/2023 Valuation Results



Key Statistics: Retired/Disabled/Beneficiaries

	2022	2023	% Change
Number Retired / Disabled / Beneficiaries	10,641	11,065	4.0%
Base Benefits	\$ 304 mil.	\$ 327 mil.	7.5%
Average Base Benefit	\$ 28,589	\$ 29,559	3.4%

Reconciliation	Count	Average Base Benefit	
		2022	2023
Matches*	10,346	\$ 28,706	\$ 29,767
New**	719	N/A	\$ 26,566
Left	295	\$ 24,471	N/A

* Expected average benefit to increase 2.1% (\$29,309) vs. actual increase of 3.7%.

** 288 of the 719 new retirees came from active status.

Principal 6/30/2023 Valuation Results



Key Statistics: DROP

	2022	2023	% Change
Number of DROP	734	742	1.1%
Total DROP Benefits	\$ 25.6 mil.	\$ 25.1 mil.	(2.2)%
Pre-Social Security Benefits	\$ 10.3 mil.	\$ 9.6 mil.	(6.1)%
Average DROP Base Benefit	\$ 34,916	\$ 33,770	(3.3)%

Reconciliation	Count	<u>Average Benefit</u>	
		2022	2023
Matches*	427	\$ 34,538	\$ 35,700
New	315	N/A	\$ 31,153
Left	307	\$ 35,441	N/A

* Expected average benefit to increase 2.1% (\$35,263) vs. actual increase of 3.4%.

Principal 6/30/2023 Valuation Results



KEY RESULTS	(\$ in millions)	
	6/30/2022	6/30/2023
Valuation Date		
Actuarial Accrued Liability	\$ 6,736	\$ 6,954
Actuarial Value of Assets	\$ 5,103	\$ 5,125
Unfunded Actuarial Liability	\$ 1,633	\$ 1,829
Funded Ratio AVA/AL	75.8%	73.7%
Market Value of Assets	\$ 4,857	\$ 4,652
Funded Ratio MVA/AL	72.1%	66.9%

Fiscal Year for Contribution	2024	2025
County Contribution Rate	30.07%	32.58%

Principal 6/30/2023 Valuation Results



Changes in Liabilities/Assets

	(\$ in millions)		
	Liability A	Actuarial Assets B	UAL C = A - B
6/30/2022	\$ 6,736	\$ 5,103	\$ 1,633
Expected Change	186 *	259 **	(73)
Assumption/Method Changes	0	0	0
Plan Changes	0	0	0
Expected at 6/30/2023	\$ 6,922	\$ 5,362	\$ 1,560
Actual at 6/30/2023	\$ 6,954	\$ 5,125	\$ 1,829
(Gain) / Loss	\$ 32	\$ (237)	\$ 269
Contribution Impact (% of pay)	0.10%	(2.46)%	2.56%

* Liability change includes Normal Cost, Benefits, and Interest.

** Asset change includes Contributions, Benefits, and Interest.



Sources of Liability Loss/(Gain)

	(\$ in millions) Liability Loss/(Gain)
Salary Increases	\$ (29)
New Hires/Rehires	9
COLA 3.7% vs assumed 2.1%	62
Other	(10)
Total Net Loss/(Gain)	\$ 32

	Actual	Expected	Difference
DROP	315	189	126
Retirement	<u>277</u>	<u>249</u>	<u>28</u>
Total	592	438	154

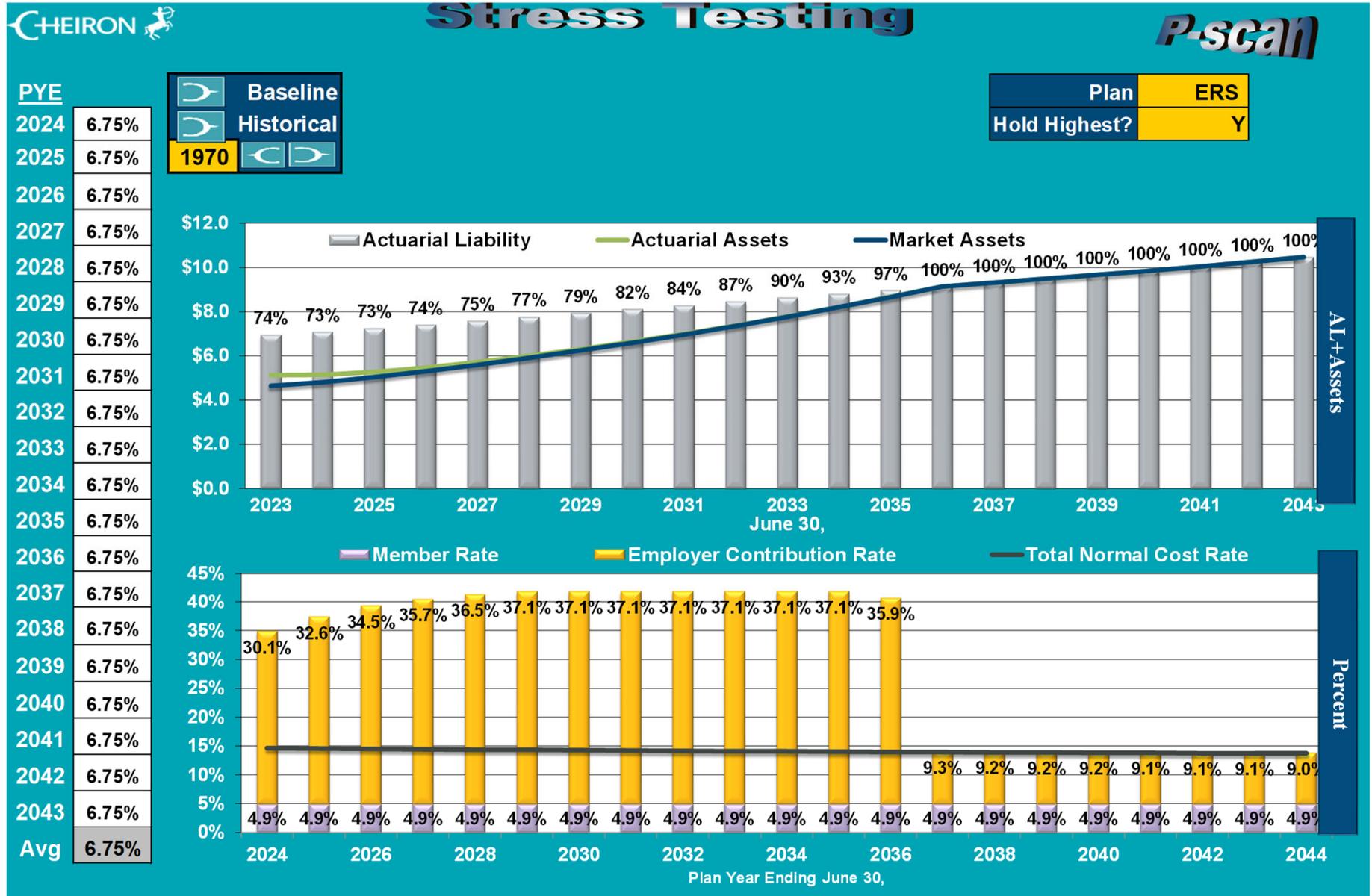


Contribution Rate

For Fiscal Year	2024	2025
Normal Cost	9.76%	9.63%
Amortized Charges	20.01%	22.65%
Expense	<u>0.30%</u>	<u>0.30%</u>
Base County Rate	30.07%	32.58%

Estimated Dollar Amount of Contribution (in millions)	\$265	\$301
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Baseline Projection



FY 2023 System Disclosure



Change in Collective Net Pension Liability

Increase (Decrease)

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2022	\$ 6,736,635,842	\$ 4,857,119,591	\$ 1,879,516,251
Changes for the year:			
Service cost	128,855,773		128,855,773
Interest	450,350,446		450,350,446
Changes of benefits			0
Differences between expected and actual experience	31,646,234		31,646,234
Changes of assumptions			0
Contributions - employer		266,535,889	(266,535,889)
Contributions - member		46,534,884	(46,534,884)
Net investment income		(122,093,611)	122,093,611
Benefit payments	(393,694,726)	(393,694,726)	0
Administrative expense		(2,565,821)	2,565,821
Net changes	<u>217,157,727</u>	<u>(205,283,385)</u>	<u>422,441,112</u>
Balances at 6/30/2023	<u>\$ 6,953,793,569</u>	<u>\$ 4,651,836,206</u>	<u>\$ 2,301,957,363</u>

Required Disclosures



In preparing this presentation, we relied on information (some oral and some written) supplied by the Fairfax County Retirement Administration Agency. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The actuarial assumptions, data, and methods are those used in the preparation of the latest actuarial valuation report prepared for these plans as of June 30, 2023.

The assumptions reflect our understanding of the likely future experience of the System, and individually represent our best estimate of future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the Plan could vary from our results. Future results may differ significantly from the current results presented in this presentation due to such factors as the following: Plan experience differing from that anticipated by the assumptions, changes in assumptions, and changes in Plan provisions or applicable law.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Fairfax County Employees' Retirement System Board for the purposes described herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Fiona E. Liston, FSA
Principal Consulting Actuary

Coralie A. Taylor, FSA
Consulting Actuary



Appendices

Principal 6/30/2023 Valuation Results



Key Statistics: County Retired/Disabled/Beneficiaries

	2022	2023	% Change
Number Retired / Disabled / Beneficiaries	6,544	6,790	3.8%
Base Benefits	\$ 227 mil.	\$ 244 mil.	7.6%
Average Base Benefit	\$ 34,636	\$ 35,912	3.7%

Reconciliation	Count	Average Base Benefit	
		2022	2023
Matches*	6,375	\$ 34,760	\$ 36,053
New	415	N/A	\$ 33,745
Left	169	\$ 29,942	N/A

* Expected average benefit to increase 2.1% (\$35,490) vs. actual increase of 3.7%.

Principal 6/30/2023 Valuation Results



Key Statistics: Schools Retired/Disabled/Beneficiaries

	2022	2023	% Change
Number Retired / Disabled / Beneficiaries	4,097	4,275	4.3%
Base Benefits	\$ 78 mil.	\$ 83 mil.	7.3%
Average Base Benefit	\$ 18,931	\$ 19,469	2.8%

Reconciliation	Count	Average Base Benefit	
		2022	2023
Matches*	3,971	\$ 18,969	\$ 19,676
New	304	N/A	\$ 16,766
Left	126	\$ 17,718	N/A

* Expected average benefit to increase 2.1% (\$19,367) vs. actual increase of 3.7%.

Principal 6/30/2023 Valuation Results



Key Statistics: County DROP

	2022	2023	% Change
Number of DROP	485	458	(5.6)%
Total DROP Benefits	\$ 19.7 mil.	\$ 18.5 mil.	(5.9)%
Pre-Social Security Benefits	\$ 7.9 mil.	\$ 7.3 mil.	(8.5)%
Average DROP Base Benefit	\$ 40,633	\$ 40,480	(0.4)%

Reconciliation	Count	Average Benefit	
		2022	2023
Matches*	287	\$ 40,339	\$ 41,691
New	171	N/A	\$ 38,448
Left	198	\$ 41,058	N/A

* Expected average benefit to increase 2.1% (\$41,186) vs. actual increase of 3.4%.

Principal 6/30/2023 Valuation Results



Key Statistics: Schools DROP

	2022	2023	% Change
Number of DROP	249	284	14.1%
Total DROP Benefits	\$ 5.9 mil.	\$ 6.5 mil.	10.1%
Pre-Social Security Benefits	\$ 2.4 mil.	\$ 2.4 mil.	1.8%
Average DROP Base Benefit	\$ 23,781	\$ 22,947	(3.5)%

Reconciliation	Count	Average Benefit	
		2022	2023
Matches*	140	\$ 22,646	\$ 23,417
New	144	N/A	\$ 22,491
Left	109	\$ 25,238	N/A

* Expected average benefit to increase 2.1% (\$23,122) vs. actual increase of 3.4%.