



Classic Values, Innovative Advice

# Sussex County Employee Pension Plan and Postemployment Benefits Plan

## 2025 Actuarial Valuations

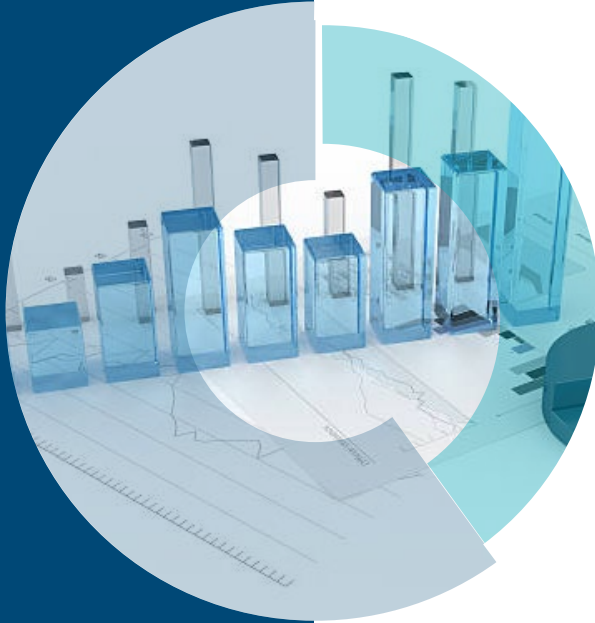
Janet Cranna, FSA, FCA, EA, MAAA

Brett Warren, FSA, CERA, EA, MAAA

November 20, 2025



# Agenda

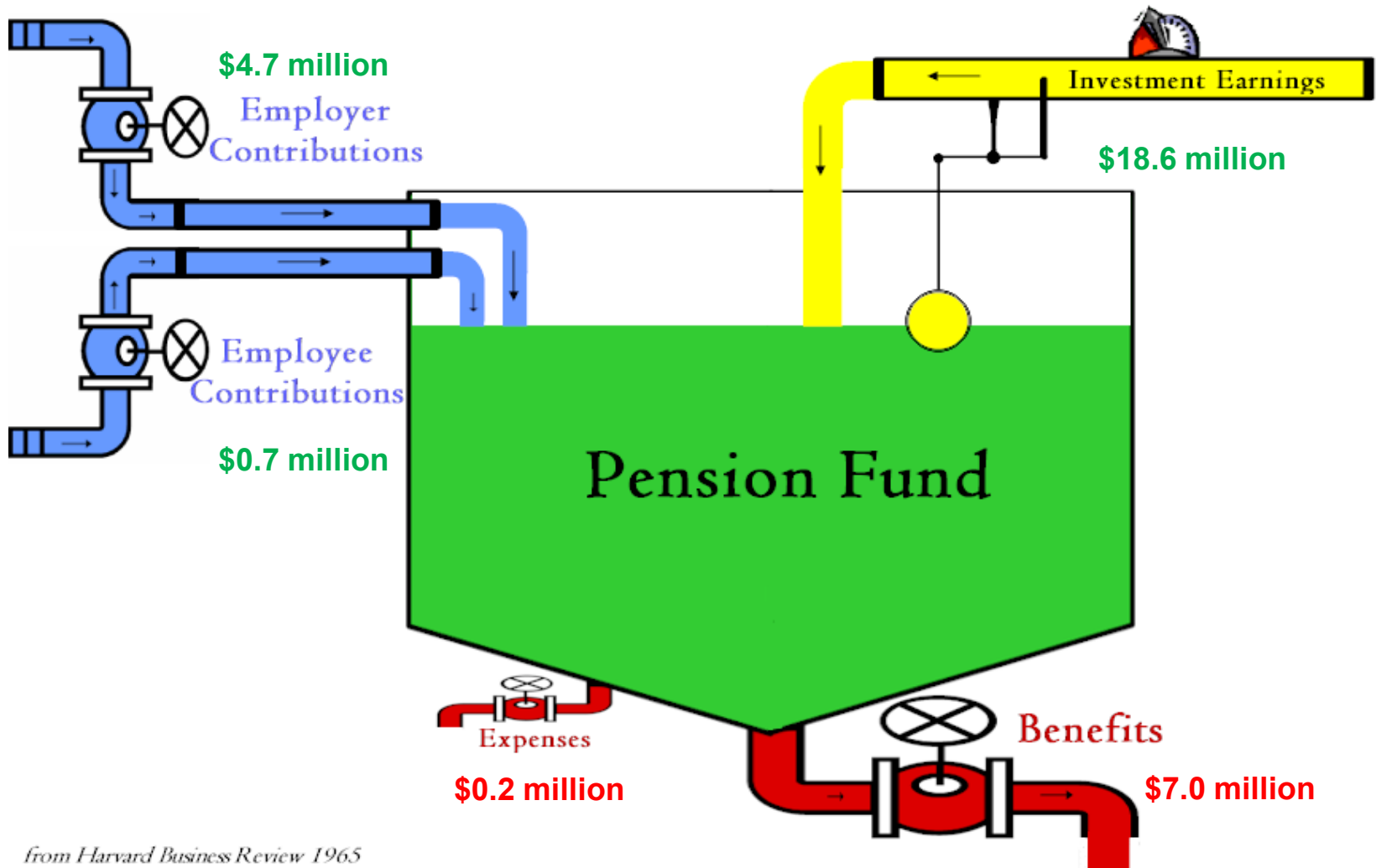


- 2025 Pension Actuarial Valuation
  - Historical Review
  - Identification and Assessment of Risk
  - Valuation Results
  - Projections
- 2025 OPEB Actuarial Valuation
  - Historical Review
  - Valuation Results
  - Projections
- Appendix – GASB 67/68/74/75



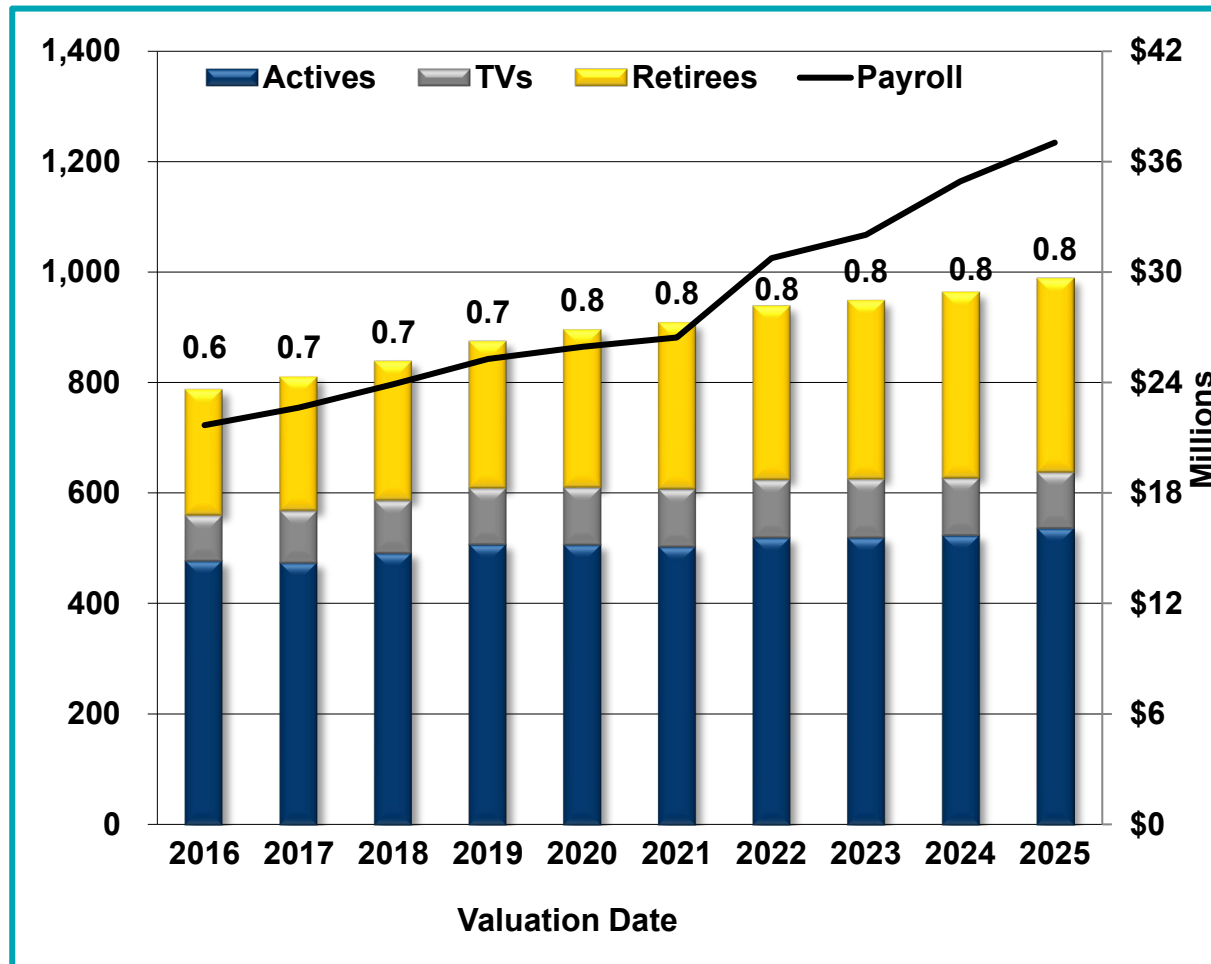
# 2025 Pension Actuarial Valuation

# The Actuarial Valuation Process

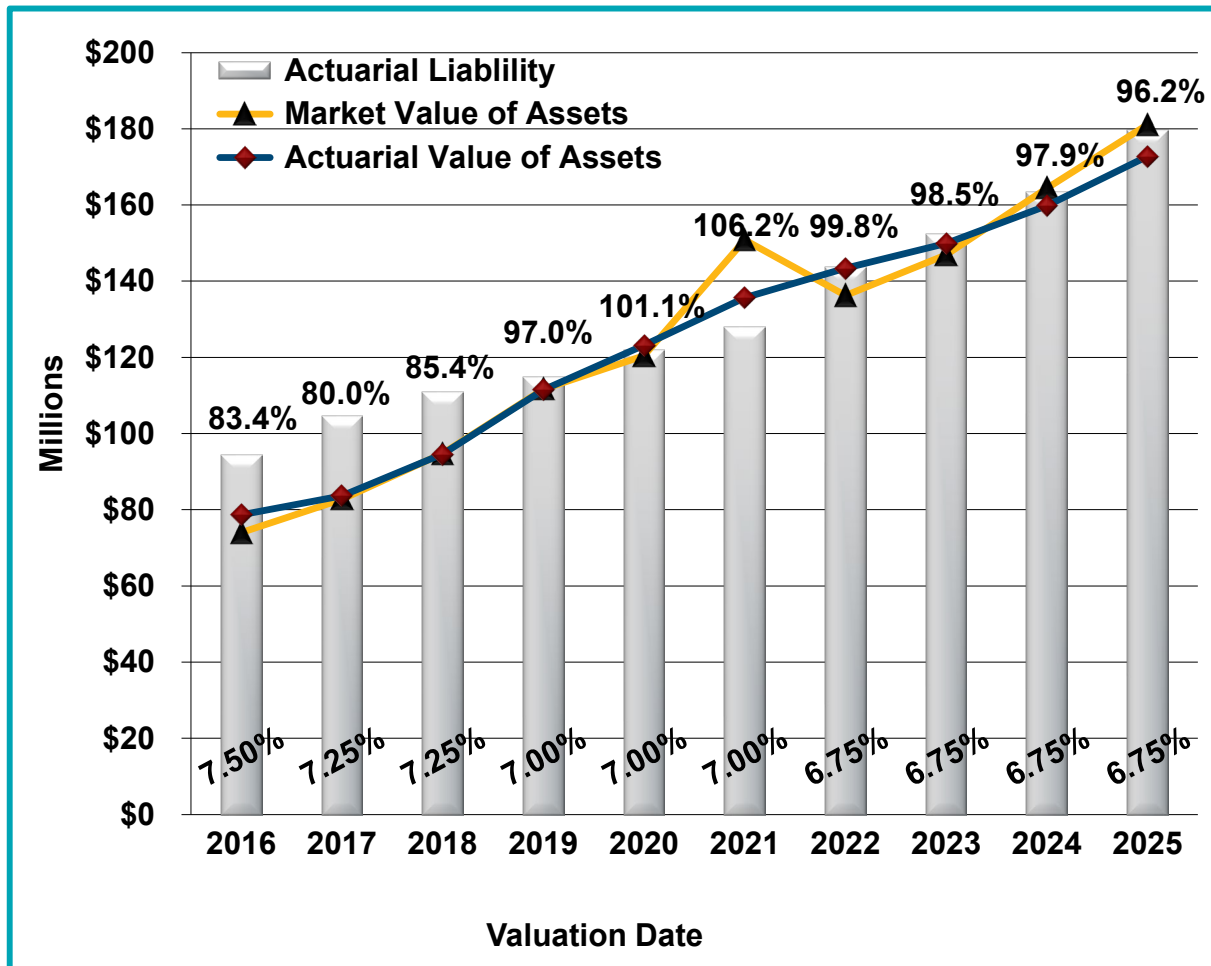


*from Harvard Business Review 1965*

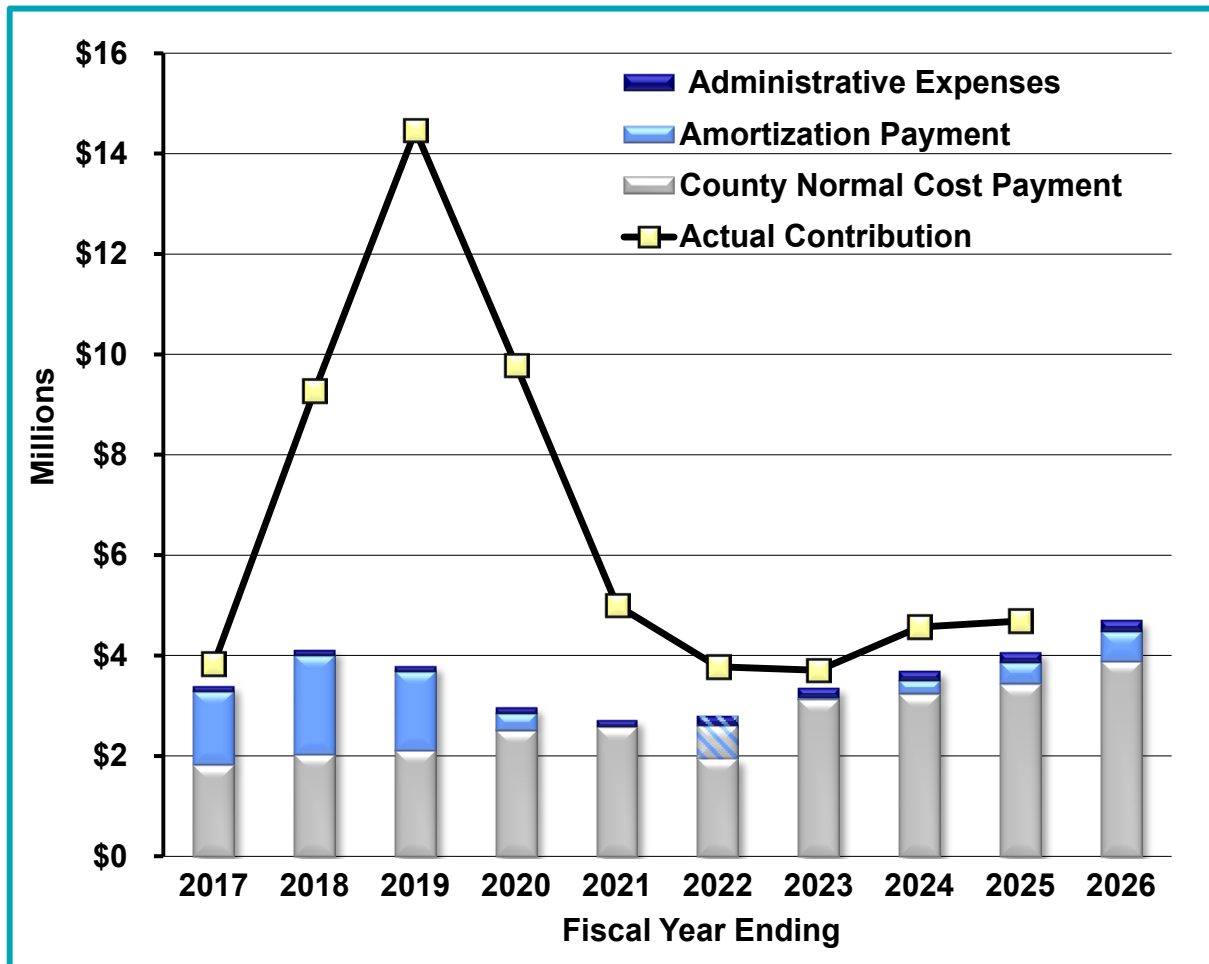
# Historical Trends – Participation



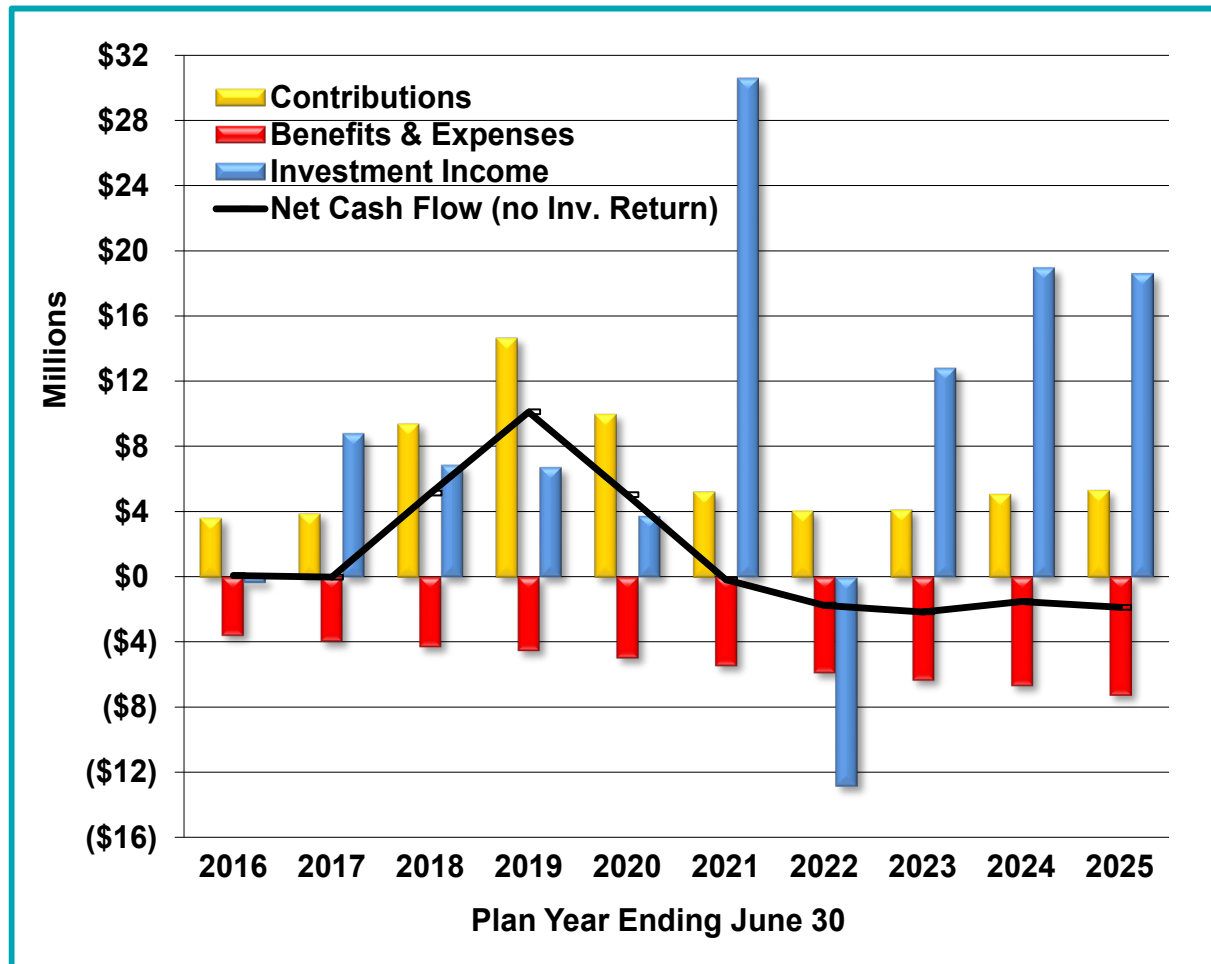
# Historical Trends – Assets and Liabilities



# Historical Trends – Contributions



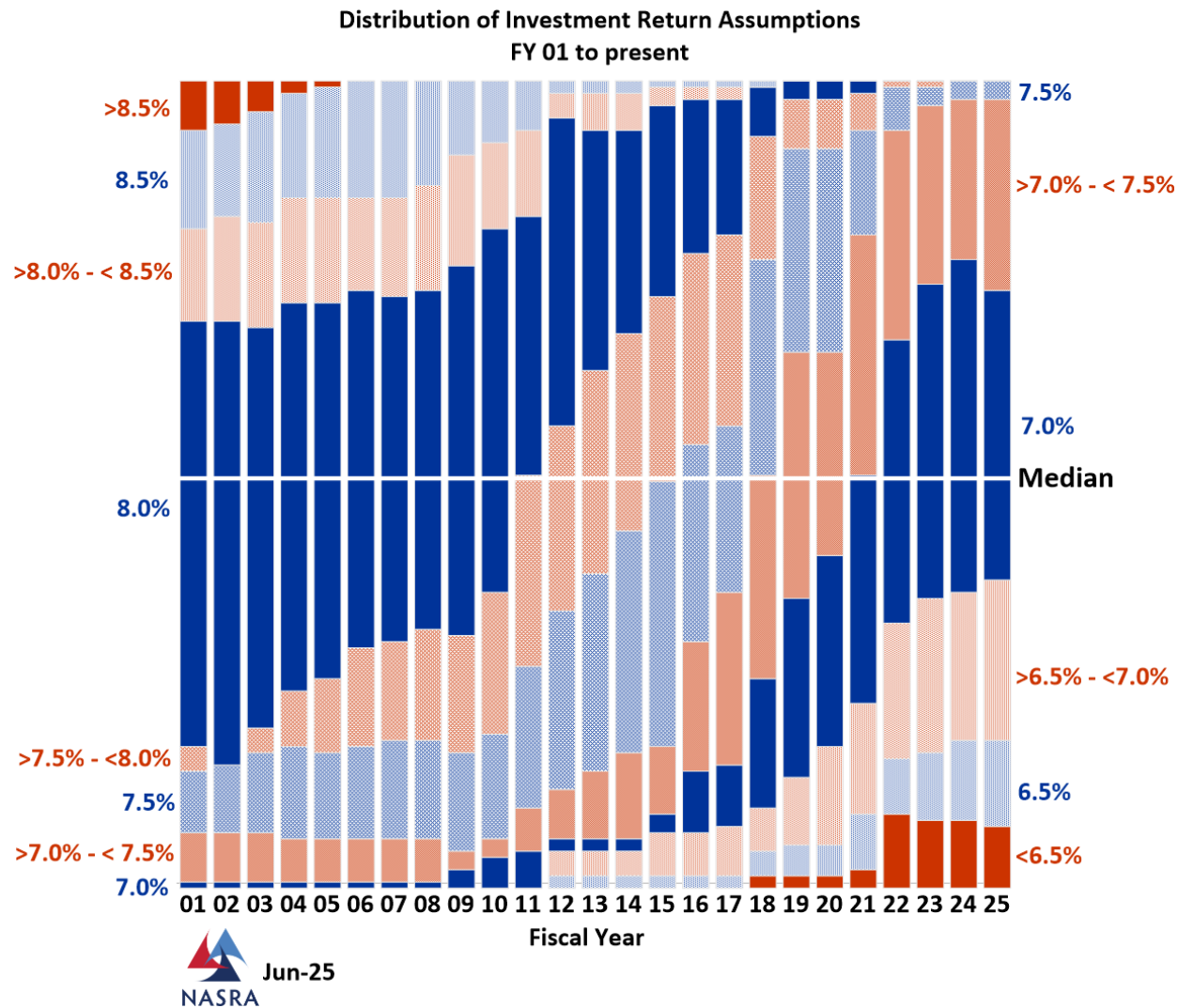
# Historical Trends – Cash Flow





- Material risks identified:
  - **Investment Risk** – the potential for investment returns to be different than expected
  - **Interest Rate Risk** – the potential for interest rates to be different than expected
  - **Longevity and other Demographic Risk** – the potential for mortality and other demographic experience to be different than expected
  - **Assumption Change Risk** – the potential for the environment to change such that future valuation assumptions are different than the current assumptions

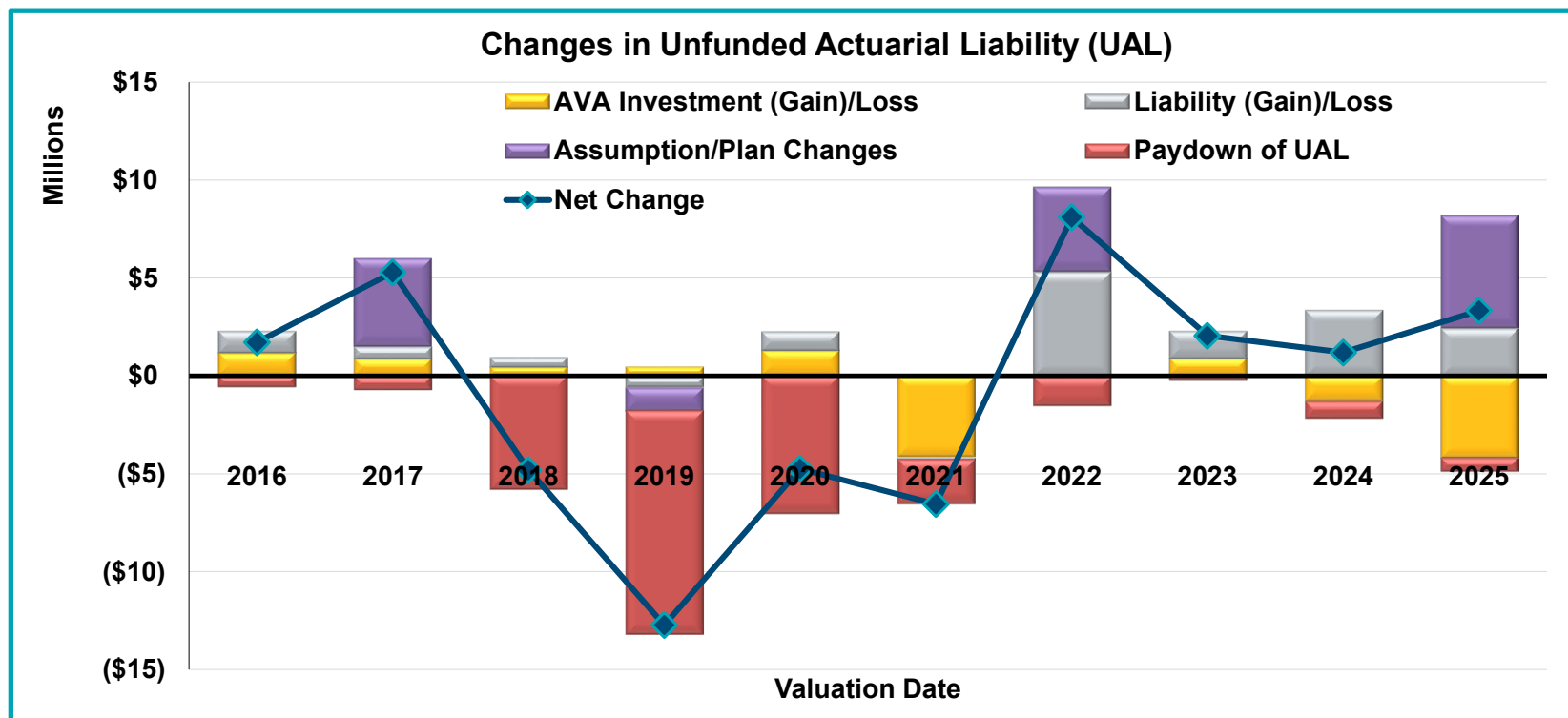
# NASRA Investment Return Assumptions History



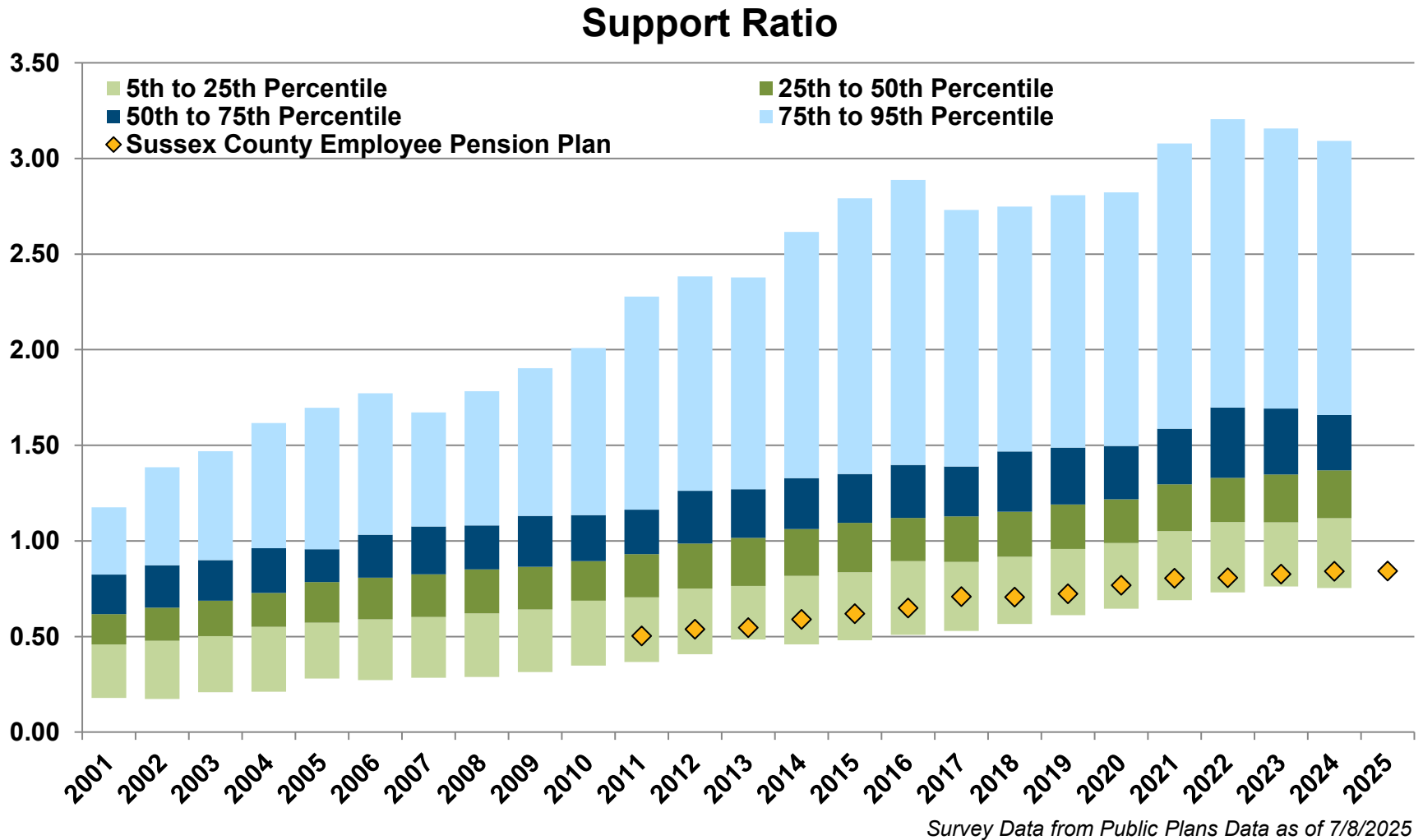
# Interest Rate Risk



# Material Risks – Changes in UAL

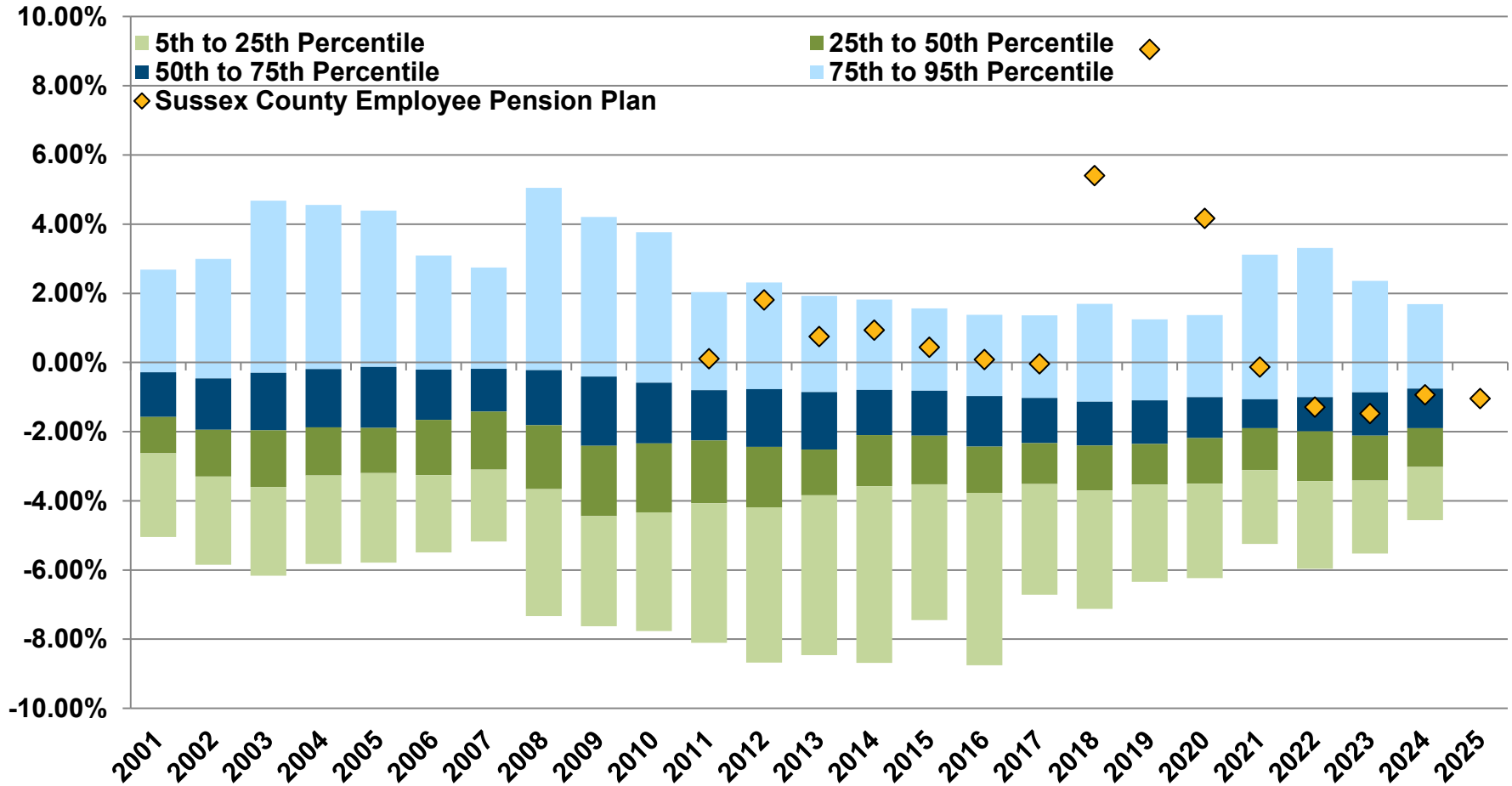


# Plan Maturity Measures – Support Ratio



# Plan Maturity Measures – Net Cash Flow

## Net Cash Flow Rate



Survey Data from Public Plans Data as of 7/8/2025

- Contributions
  - Actuarially Determined Contribution (ADC) increased from \$4.1 million to \$4.7 million
    - Primarily due to the assumption changes (shown on next slide)
- Unfunded actuarial liability (UAL) and funded status
  - UAL increased from \$3.5 million to \$6.8 million
  - Actuarial experience asset gain of \$4.2 million
    - 11.40% on market value (compared to 6.75% assumption)
    - 9.37% on actuarial value (assumes phase-in of 5-year asset smoothing)
  - Actuarial experience liability loss of \$2.5 million
  - Funded ratio (actuarial value of assets divided by actuarial liability) decreased from 97.9% to 96.2%

- Cheiron presented results on February 20, 2025
- County Council adopted recommended assumption changes on March 11, 2025, including
  - Mortality rates, retirement rates, termination rates, and salary increases
  - This increased the UAL by \$5.8 million and increased the ADC by \$1.1 million
- Amortization method changed
  - Initial UAL Base: 20-year closed period beginning July 1, 2025 (level dollar approach)
  - Subsequent Bases: Separate 20-year closed periods (level dollar approach)
  - This decreased the ADC by \$0.3 million



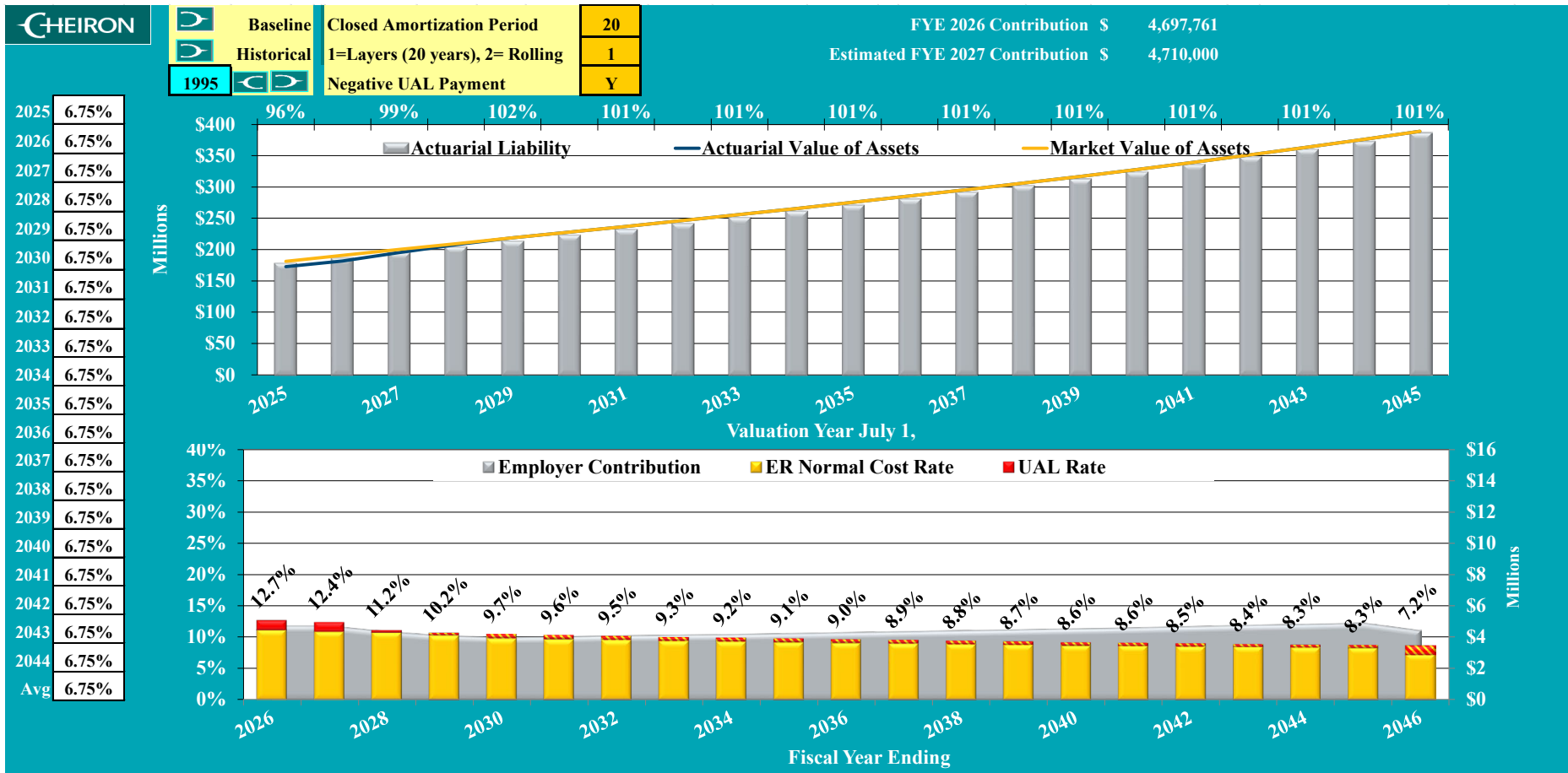
# 2025 Valuation – Participants

Participant Information			
	7/1/2024	7/1/2025	Percent Change
Number of Actives	523	536	2.5 %
Total Salary	\$34,921,960	\$37,024,408	6.0 %
Average Salary	\$66,772	\$69,075	3.5 %
Number of In-Pay	336	351	4.5 %
Total Benefits	\$6,716,210	\$7,165,839	6.7 %
Average Benefits	\$19,989	\$20,415	2.1 %
Number of Terminated Vested	104	101	-2.9 %
Total Benefits	\$965,505	\$971,692	0.6 %
Average Benefits	\$9,284	\$9,621	3.6 %

# 2025 Valuation – Principal Results

Principal Results		
	7/1/2024	7/1/2025
Actuarial Liability (AL)	\$163,249,579	\$179,583,169
Actuarial Values of Assets	159,767,302	172,767,923
Unfunded AL (UAL)	\$3,482,277	\$6,815,246
Actuarial Funded Ratio	97.9%	96.2%
Market Value of Assets	\$164,392,505	\$181,139,931
Market Funded Ratio	100.7%	100.9%
<b>FYE Contribution Applicable to</b>	<b>2025</b>	<b>2026</b>
Employer Normal Cost	\$3,430,743	\$3,887,506
UAL Amortization Payment	429,621	590,974
Administrative Expense	202,475	219,281
Total County Contribution	\$4,062,839	\$4,697,761
Contribution as a Percentage of Payroll	11.63%	12.69%

# Projected Outlook





The purpose of this presentation is to present the July 1, 2025 Actuarial Valuation results for the Sussex County Employee Pension Plan. 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.

In preparing this presentation, we relied on information, some oral and some written, supplied by the Sussex County staff. This information includes, but is not limited to, the plan provisions, member 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, Data Quality.

The analysis was based on financial data through June 30, 2025 and the July 1, 2025 membership data. The July 1, 2025 Actuarial Valuation Report should be referred to for a summary of the plan provision, methods and assumptions, and other disclosure information. Future results may differ significantly from 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.

The deterministic projections are based on our proprietary model P-Scan developed by our firm that utilize the results shown in the July 1, 2025 Actuarial Valuation Report. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2025 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2025 unless otherwise indicated. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

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.

Janet Cranna, FSA, FCA, EA, MAAA  
Principal Consulting Actuary

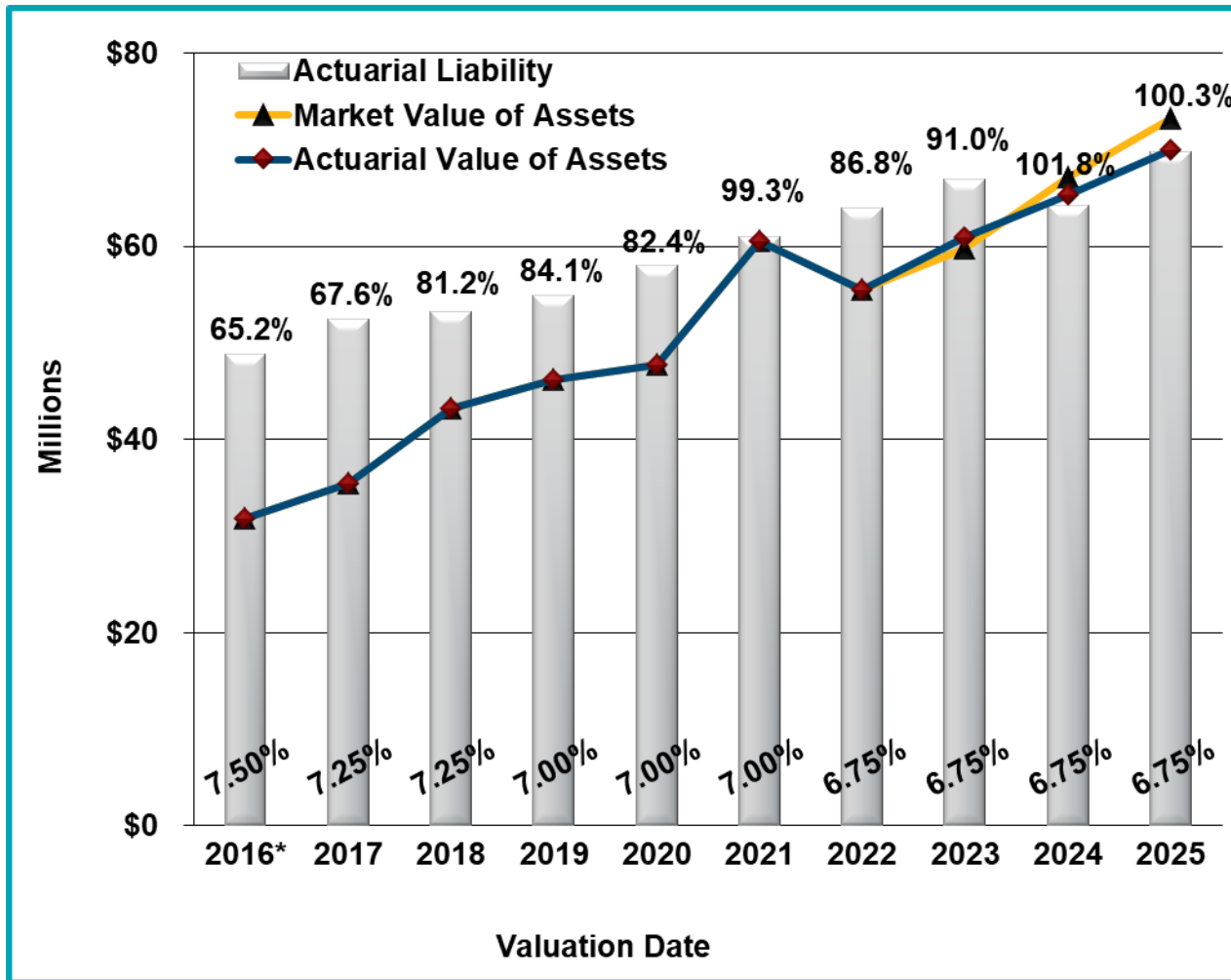
Brett Warren, FSA, CERA, EA, MAAA  
Consulting Actuary

November 20, 2025



# 2025 OPEB Actuarial Valuation

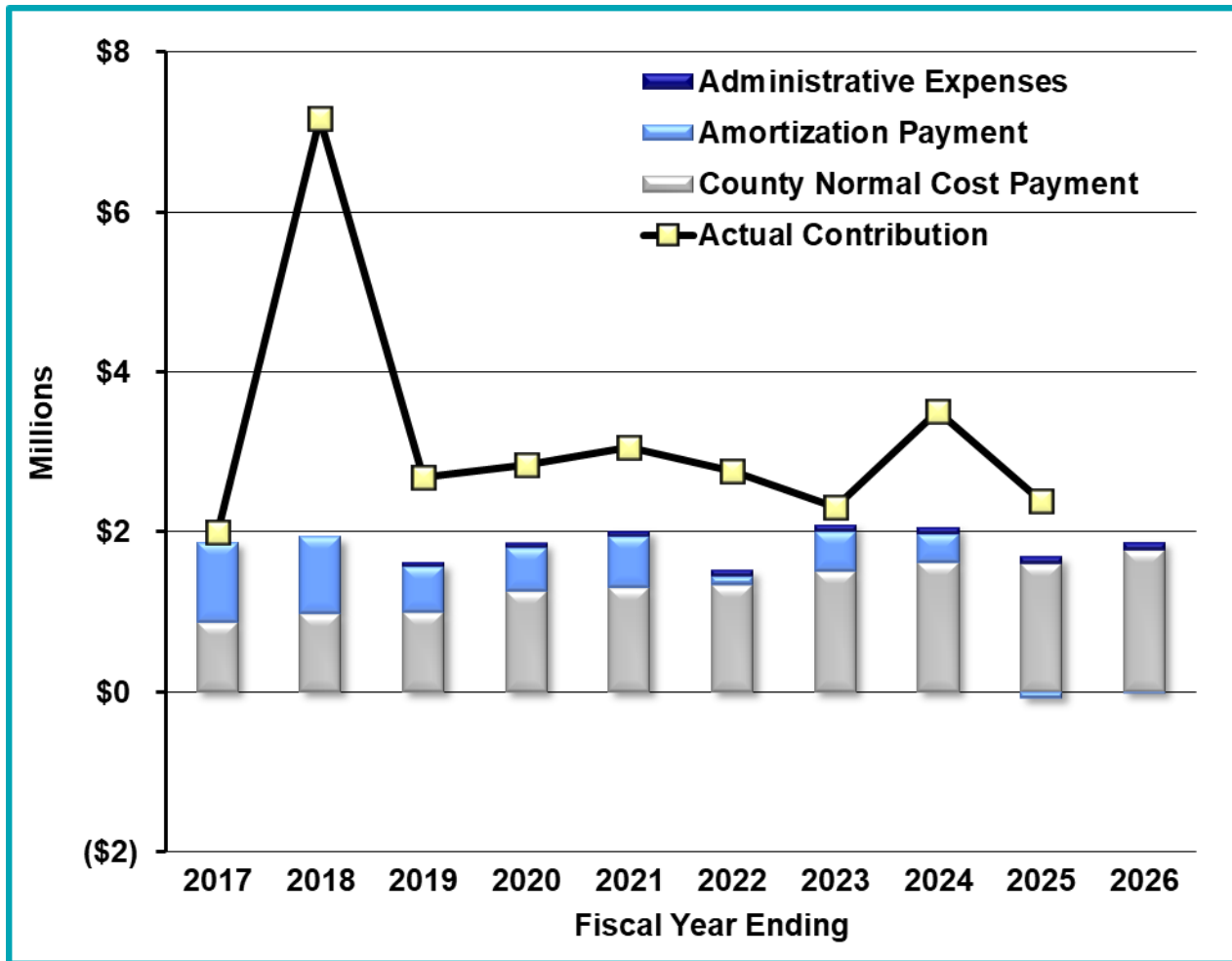
# Historical Review – Assets and Liabilities



Funding ratio based on AVA Smoothed Method starting in 2023

\* Valuation date change to 6/30 from 12/31.

# Historical Review – Contributions



# 2025 Valuation – Principal Results

Principal Results		
	7/1/2024	7/1/2025
Active Employees	517	537
Retirees	225	235
Disabled	9	9
Survivors	26	26
<b>Total Participants</b>	<b>777</b>	<b>807</b>
Actuarial Liability (AL)	\$ 64,168,398	\$ 69,725,322
Assets (AVA)	65,342,560	69,911,639
Unfunded AL (UAL)	\$ (1,174,162)	\$ (186,317)
Actuarial Funded Ratio	101.8%	100.3%
<b>FYE Contribution Applicable to</b>	<b>2025</b>	<b>2026</b>
Employer Normal Cost	\$ 1,583,828	\$ 1,750,090
UAL Amortization Payment	(68,239)	(16,156)
Interest	102,302	117,041
Total County Contribution	\$ 1,617,891	\$ 1,850,975
Contribution as a Percentage of Payroll	4.70%	5.01%
Covered Payroll	\$ 34,453,002	\$ 36,965,179



# Actuarial Asset Smoothing – 4-years

Development of Actuarial Value of Assets (AVA)		
Market Value of Assets at July 1, 2024	\$	67,091,654
Employer Contributions		2,382,678
Employee Contributions		0
Benefit Payments and Refunds		(3,728,828)
Administrative Expenses		(92,436)
Expected Return at 6.75%		4,480,927
Expected Value at July 1, 2025	\$	70,133,995
Actual Value of Assets at July 1, 2025		<u>73,216,066</u>
Investment Gain/(Loss)	\$	3,082,071
	<b>Total Gain/(Loss)</b>	<b>Excluded Portion</b>
Exclude 20% of 2022 Gain/(Loss)	\$ (9,430,393)	\$ (1,886,080)
Exclude 40% of 2023 Gain/(Loss)	1,330,162	532,065
Exclude 60% of 2024 Gain/(Loss)	3,654,641	2,192,785
Exclude 80% of 2025 Gain/(Loss)	3,082,071	<u>2,465,657</u>
Total Excluded Gain/(Loss) for AVA Calculation		\$ 3,304,427
Market Value of Assets at July 1, 2025		73,216,066
Total Gain/(Loss) Excluded		<u>3,304,427</u>
Actuarial Value of Assets at July 1, 2025	\$	69,911,639

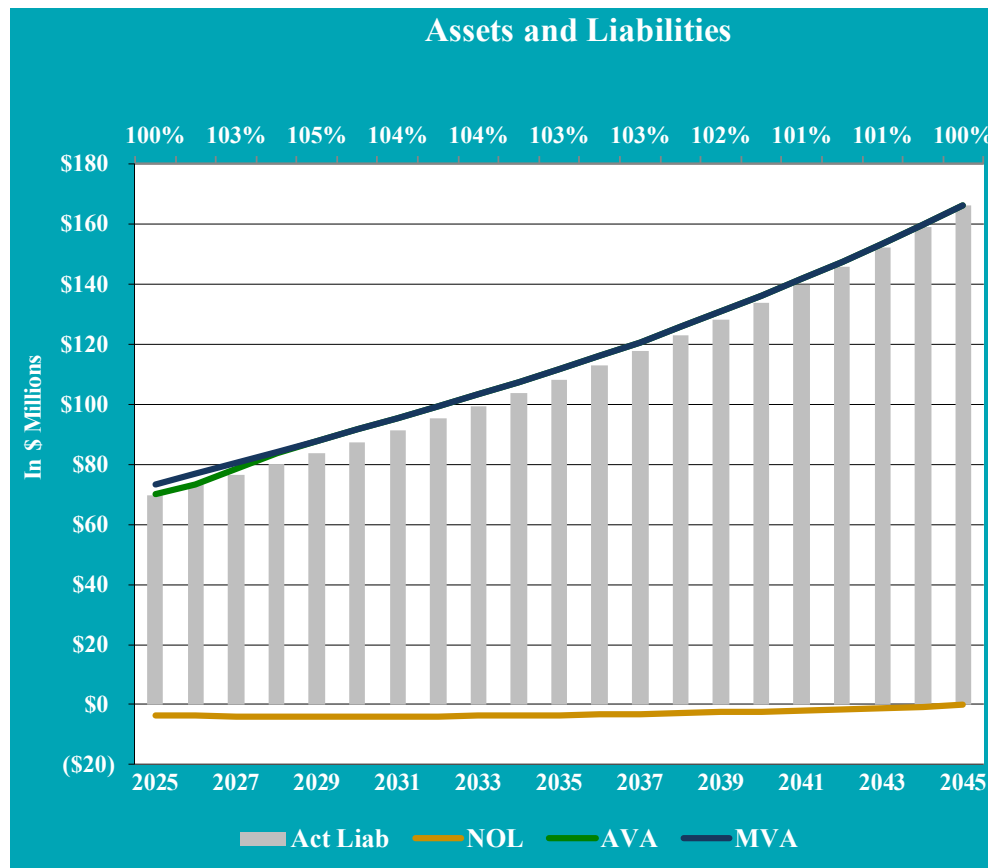
# Projected Outlook – Baseline

## Projection assumptions:

6.75% discount rate

ADC contributions

20 year layered amortization



The purpose of this presentation is to present the July 1, 2025 OPEB valuation and GASB 74/75 results for the Sussex County Postemployment Benefit Plan. 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.

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John Colberg, FSA, EA, MAAA  
Principal Consulting Actuary

Gaelle Gravot, FSA, MAAA  
Principal Consulting Actuary

Ryan Benitez, ASA, MAAA  
Consulting Actuary

# Appendix – GASB 67/68/74/75



- County first adopted GASB 67 in the June 30, 2014 financial statements
- Similar actuarial methods and assumptions used in developing the actuarial liability for funding purposes
- Assets will differ from funding since GASB requires using market value with no smoothing (funding uses 5-year smoothing)
- Discount rate for GASB 67 is 6.75% (same as funding)
  - Projections indicated that plan assets are expected to cover all future benefit payments for current plan members (if not, some blending with a municipal bond index (5.20% for 2025) would have been required)

- Under GASB 68, the pension expense is equal to the change in the plan's net pension liability (NPL), with adjustments for deferrals
  - Chart on next page shows the pension expense development two ways for both the 2025 and 2024 plan years
  - The County's FY 2025 expense will be based on the County's 2025 plan year results
- Treatment of deferrals
  - Asset gains or losses recognized over 5 years
  - Liability gains or losses and assumption changes recognized over average future working lifetime (6 years for the Plan)
  - No deferrals on plan changes
  - Deferred gains called "deferred inflows"; deferred losses called "deferred outflows"

# GASB 67 – Results

## Sensitivity of Net Pension Liability to Changes in Discount Rate

	1% Decrease 5.75%	Discount Rate 6.75%	1% Increase 7.75%
Total Pension Liability	\$ 204,083,416	\$ 179,583,169	\$ 159,353,383
Plan Fiduciary Net Position	<u>181,139,931</u>	<u>181,139,931</u>	<u>181,139,931</u>
Net Pension Liability	<u>\$ 22,943,485</u>	<u>\$ (1,556,762)</u>	<u>\$ (21,786,548)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	88.8%	100.9%	113.7%

# GASB 68 – Results

Calculation of Pension Expense		
	Measurement Year Ending 2025	2024
Change in Net Pension Liability	\$ (413,836)	\$ (6,427,115)
Change in Deferred Outflows	(4,274,266)	2,179,075
Change in Deferred Inflows	3,724,662	4,309,466
Employer Contributions	<u>4,688,420</u>	<u>4,568,242</u>
<b>Pension Expense</b>	<b>\$ 3,724,980</b>	<b>\$ 4,629,668</b>
<b>Pension Expense as % of Payroll</b>	<b>10.06%</b>	<b>13.26%</b>
<b>Operating Expenses</b>		
Service cost	\$ 4,068,640	\$ 3,756,517
Employee contributions	(654,343)	(538,465)
Administrative expenses	<u>213,933</u>	<u>197,537</u>
Total	\$ 3,628,230	\$ 3,415,589
<b>Financing Expenses</b>		
Interest cost	\$ 11,061,058	\$ 10,315,190
Expected return on assets	<u>(11,033,844)</u>	<u>(9,867,922)</u>
Total	\$ 27,214	\$ 447,268
<b>Changes</b>		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	1,678,869	514,749
Recognition of liability gains and losses	2,244,555	1,745,108
Recognition of investment gains and losses	<u>(3,853,888)</u>	<u>(1,493,046)</u>
Total	\$ 69,536	\$ 766,811
<b>Pension Expense</b>	<b>\$ 3,724,980</b>	<b>\$ 4,629,668</b>



- Similar actuarial methods and assumptions used in developing the actuarial liability for funding purposes
- GASB 74/75 requires using market value of assets
- Discount rate for GASB 74 is 6.75%

Change in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
<b>Balances at 6/30/2024</b>	\$ 64,168,398	\$ 67,091,654	\$ (2,923,256)
<b>Changes for the year:</b>			
Service cost	1,501,603		1,501,603
Interest	4,308,932		4,308,932
Changes of benefits	0		0
Differences between expected and	2,469,884		2,469,884
Changes of assumptions	1,005,333		1,005,333
Contributions - employer		2,382,678	(2,382,678)
Contributions - member		-	0
Net investment income		7,562,998	(7,562,998)
Benefit payments	(3,728,828)	(3,728,828)	0
Administrative expense		(92,436)	92,436
<b>Net changes</b>	<u>5,556,924</u>	<u>6,124,412</u>	<u>(567,488)</u>
<b>Balances at 6/30/2025</b>	<u>\$ 69,725,322</u>	<u>\$ 73,216,066</u>	<u>\$ (3,490,744)</u>

# GASB 75 – 2025 OPEB Expense

Calculation of OPEB Expense		
	FYE 2025	FYE 2024
Change in Net OPEB Liability	\$ (567,488)	\$ (10,142,499)
Change in Deferred Outflows	(2,262,267)	589,878
Change in Deferred Inflows	51,703	6,721,617
Employer Contributions	<u>2,382,678</u>	<u>3,504,709</u>
<b>OPEB Expense</b>	<b>\$ (395,374)</b>	<b>\$ 673,705</b>
<b>OPEB Expense as % of Payroll</b>	<b>-1.07%</b>	<b>1.96%</b>
<b>Operating Expenses</b>		
Service cost	\$ 1,501,603	\$ 1,510,151
Employee contributions	-	-
Administrative expenses	<u>92,436</u>	<u>85,629</u>
Total	\$ 1,594,039	\$ 1,595,780
<b>Financing Expenses</b>		
Interest cost	\$ 4,308,932	\$ 4,496,461
Expected return on assets	<u>(4,480,927)</u>	<u>(4,020,737)</u>
Total	\$ (171,995)	\$ 475,724
<b>Changes</b>		
Benefit changes	\$ 0	\$ 0
Recognition of assumption changes	(1,281,613)	(1,425,238)
Recognition of liability gains and losses	1,018,435	665,597
Recognition of investment gains and losses	<u>(1,554,240)</u>	<u>(638,158)</u>
Total	\$ (1,817,418)	\$ (1,397,799)
<b>OPEB Expense</b>	<b>\$ (395,374)</b>	<b>\$ 673,705</b>



**Classic Values, Innovative Advice.**

***Cheiron** (pronounced kī' · ron), the immortal centaur from Greek mythology, broke away from the pack and was educated by the gods. Cheiron became a mentor to classical Greek heroes, then sacrificed his immortality and was awarded in eternity as the constellation Sagittarius.*