



**Montana Teachers' Retirement System
Valuation Results
July 1, 2024**

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trs.mt.gov

Why does my Plan need an Actuary?

Develop

- Develop a strategy to systematically fund the promised benefits of the system

Measure

- Measure assets and liabilities (future benefit payments)

Determine

- Determine actuarial contribution rates

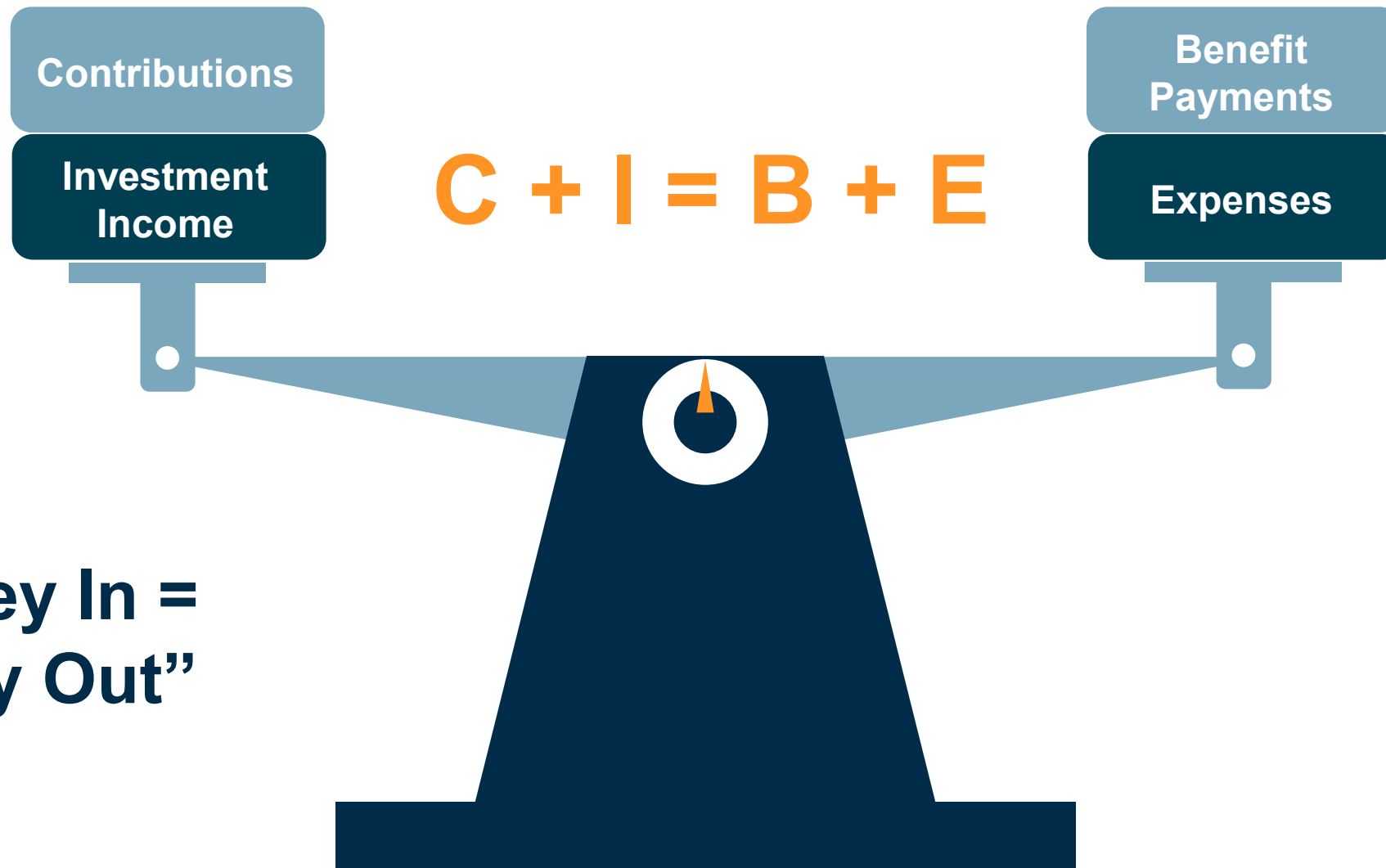
Analyze

- Analyze experience (actual vs. expected)

Report

- Report on trends, risks, accounting, etc.

Basic Retirement Funding Formula



$$C + I = B + E$$

“B” depends on

Plan Provisions

Experience



“C” depends on

Short Term

Actuarial Assumptions

Actuarial Cost Method

Long Term

I, B, E

July 1, 2024 Funding Results



Plan Experience

Assets



Market value of asset returns were 8.9% while returns on actuarial smoothed assets were 9.1%.

UAAL



UAAL decreased 78.0M from \$1,886.4M to \$1,808.4M.

Key Results

Funded Ratio



Funded ratio using actuarial value of assets increased from 72.49% to 74.26%.

Amortization Period



Amortization period declined from 24 years to 21 years.



Asset Returns

- Both Market and Actuarial asset returns are net of Investment and Administrative Expenses.
- Market: 8.89% (1.59% more than 7.30% expected)
- Actuarial: 9.09% (1.79% more than 7.30% expected)



Deferred Experience

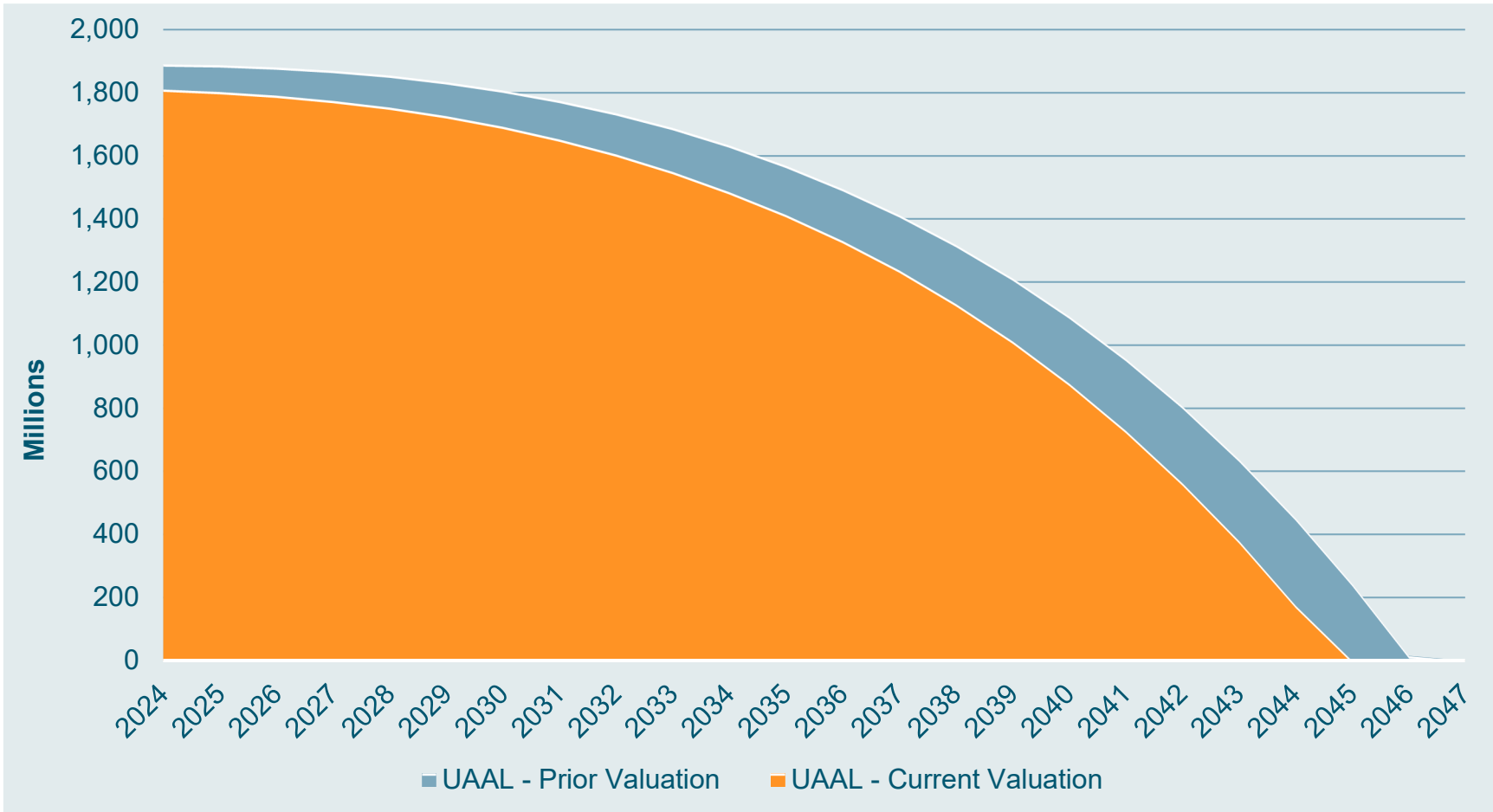
- Market value of assets are \$65,365,613 less than the actuarial value of assets.
- Experience is recognized over a four-year period.



Deferred Experience Recognition

- 2025 Investment Loss: (\$115.3) million
- 2026 Investment Gain: \$30.8 million
- 2027 Investment Gain: \$19.2 million

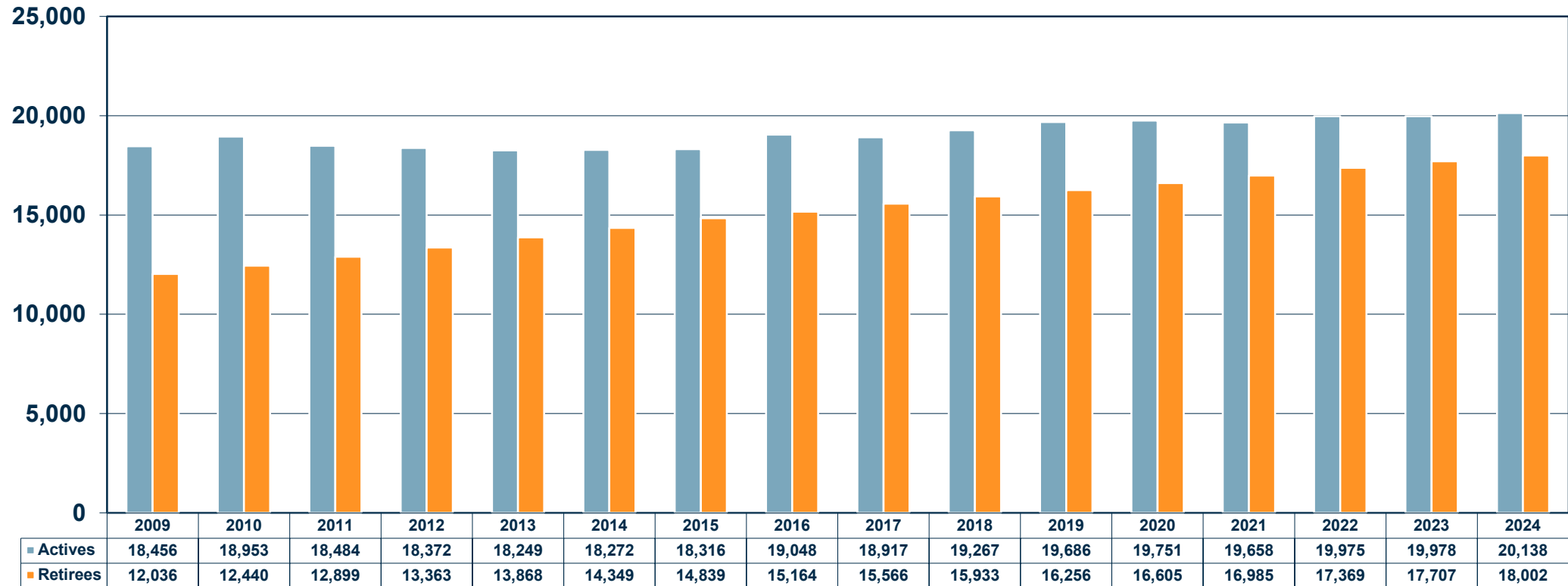
Progress Toward 100% Funding



Due to favorable plan experience during the prior year, the expected full funding date has moved from 2047 to 2045.

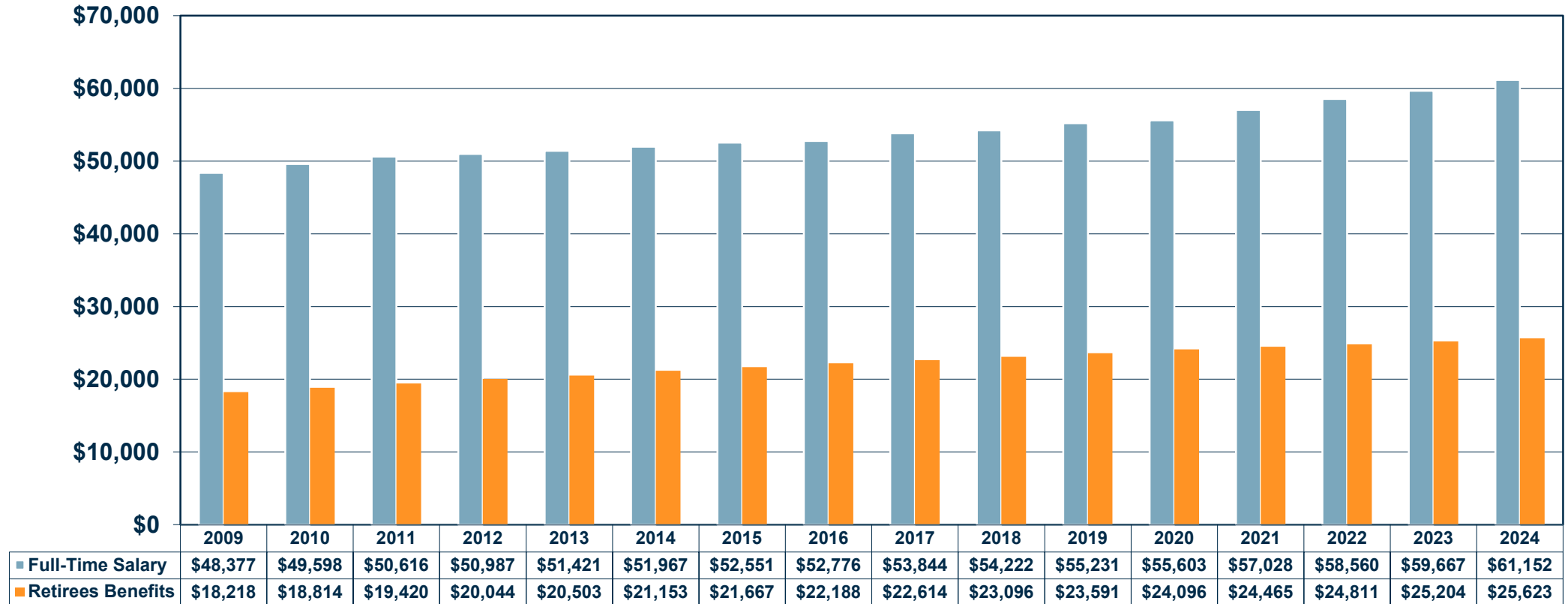


Active and Retired Membership



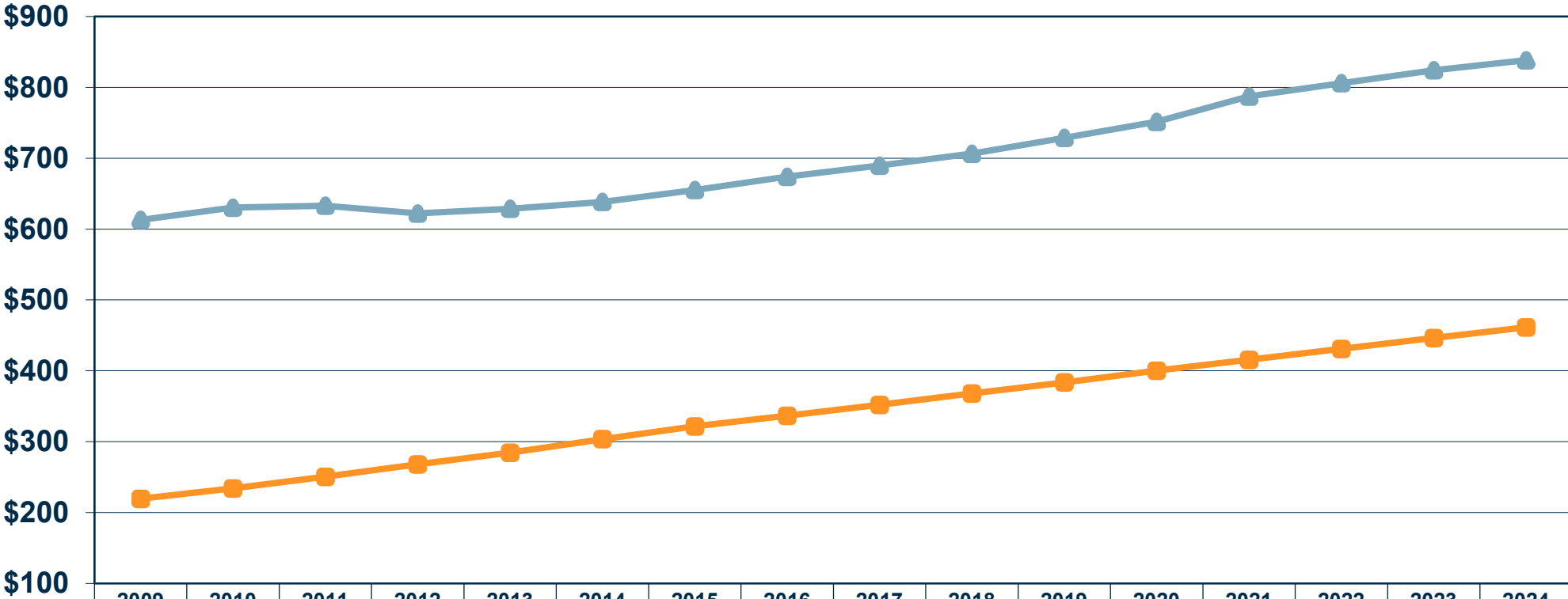
0.6% annual increase for active members since 2009; 0.8% increase for 2024.
2.7% annual increase for retired members since 2009; 1.7% increase for 2024.
1.5 actives per retiree 15 years ago; 1.1 actives per retiree now.

Average Salary and Benefits



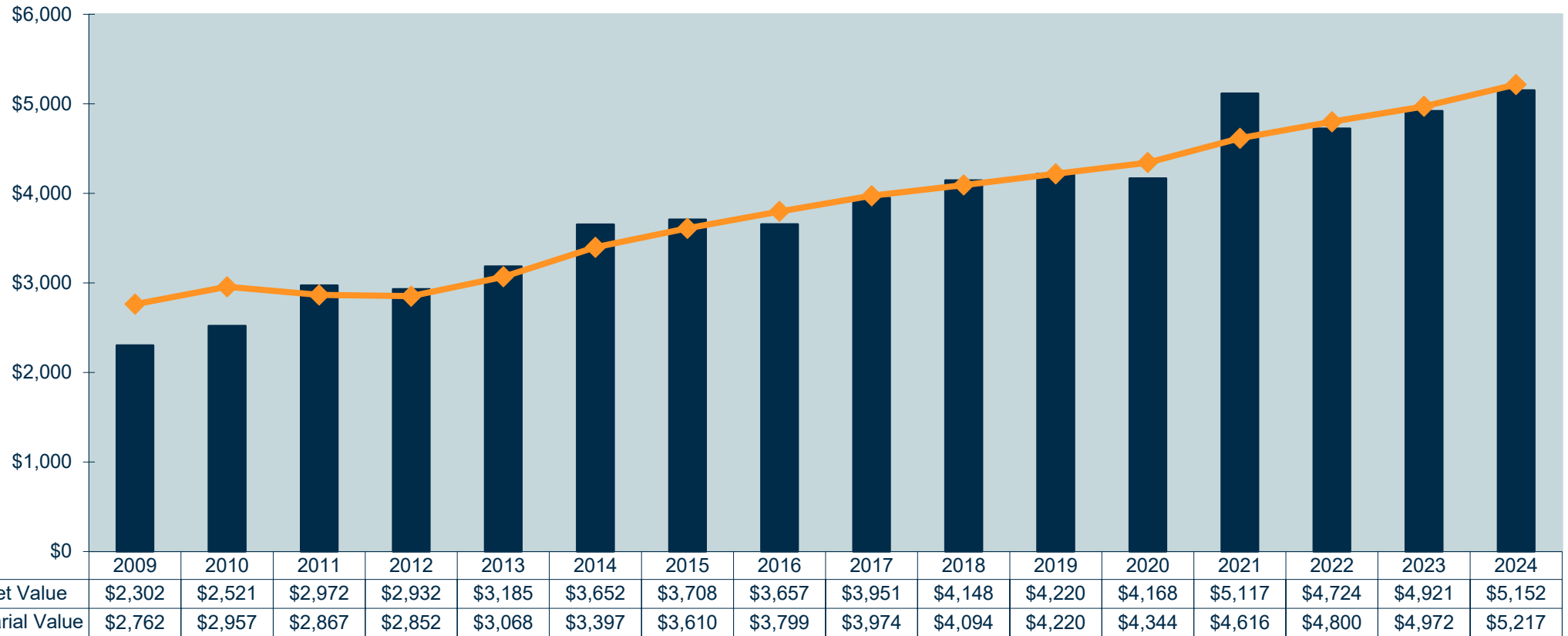
1.6% annual increase for average salary since 2009; 2.5% increase for 2024.
 2.3% annual increase for average benefits since 2009; 1.7% increase for 2024.

Payroll & Benefits (Millions)



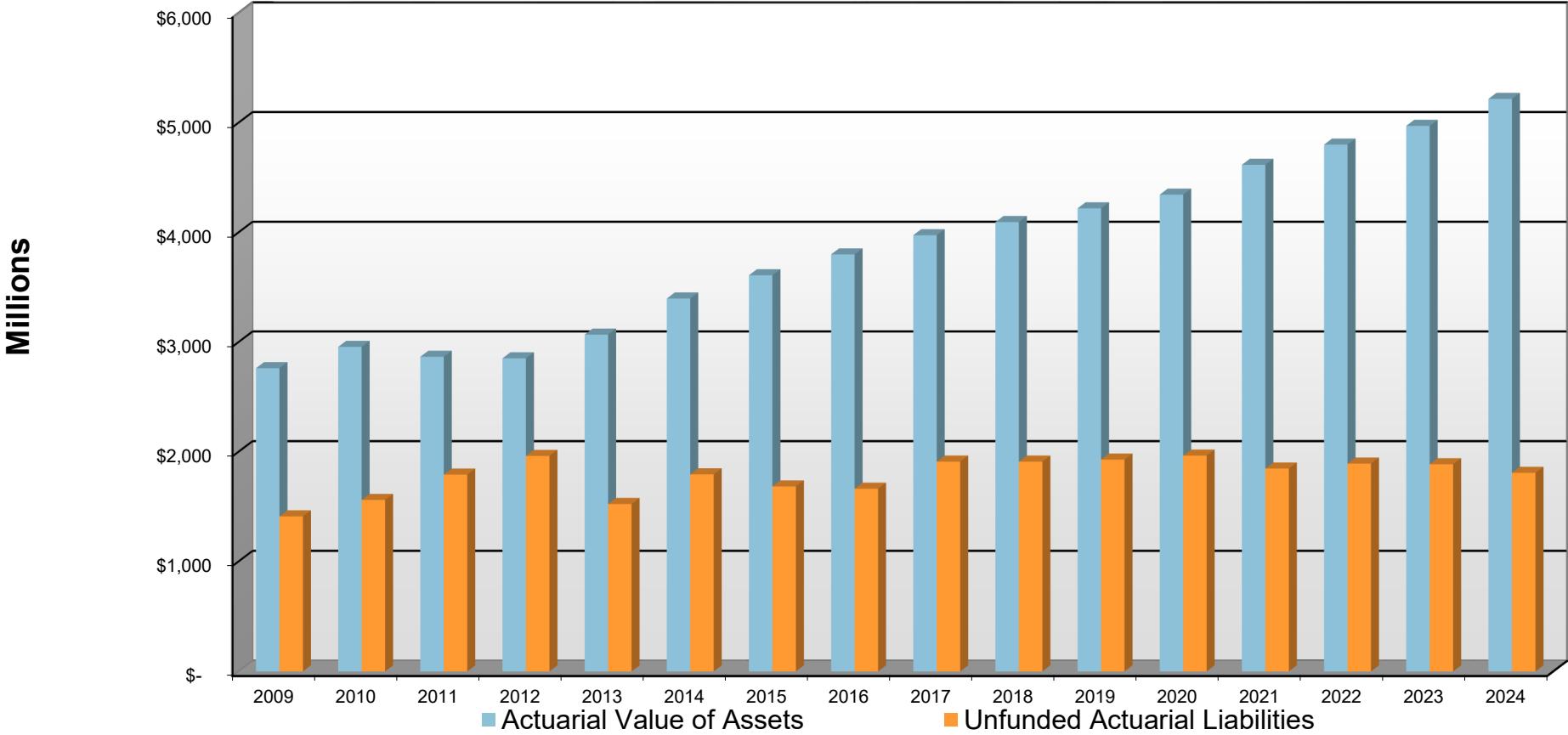
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Full-time Payroll	\$613.1	\$630.4	\$633.0	\$622.1	\$628.8	\$638.5	\$655.2	\$673.9	\$689.6	\$706.4	\$728.8	\$751.5	\$787.2	\$806.1	\$824.2	\$838.3
Benefits	\$219.3	\$234.0	\$250.5	\$267.9	\$284.3	\$303.5	\$321.5	\$336.5	\$352.0	\$368.0	\$383.5	\$400.1	\$415.5	\$430.9	\$446.3	\$461.3

Assets (\$ Millions)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market Return	(20.8)%	12.9%	21.7%	2.2%	12.9%	17.1%	4.6%	2.1%	11.9%	8.8%	5.7%	2.7%	27.7%	(4.1)%	8.3%	8.9%
Actuarial Return	(10.3)%	9.8%	(0.1)%	3.2%	12.0%	13.2%	9.6%	8.8%	8.2%	6.9%	7.0%	7.0%	10.7%	8.1%	7.7%	9.1%

Actuarial Assets vs. UAAL



Funding Results

	July 1, 2024 Valuation	July 1, 2023 Valuation
Total Normal Cost Rate	10.76%	10.75%
Less Member Rate	<u>8.15%</u>	<u>8.15%</u>
Employer Normal Cost Rate	2.61%	2.60%
Rate to Amortize UAL	<u>9.35%</u>	<u>9.36%</u>
Total Employer Statutory Rate	11.96%	11.96%
Actuarial Accrued Liability	\$7,025.6 million	\$6,858.3 million
Actuarial Value of Assets	\$5,217.2 million	\$4,971.9 million
Unfunded Accrued Liability	\$1,808.4 million	\$1,886.4 million
Funded Ratio	74.26%	72.49%
Amortization Period	21 Years	24 Years

