



SECURE

Your Financial Future

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

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

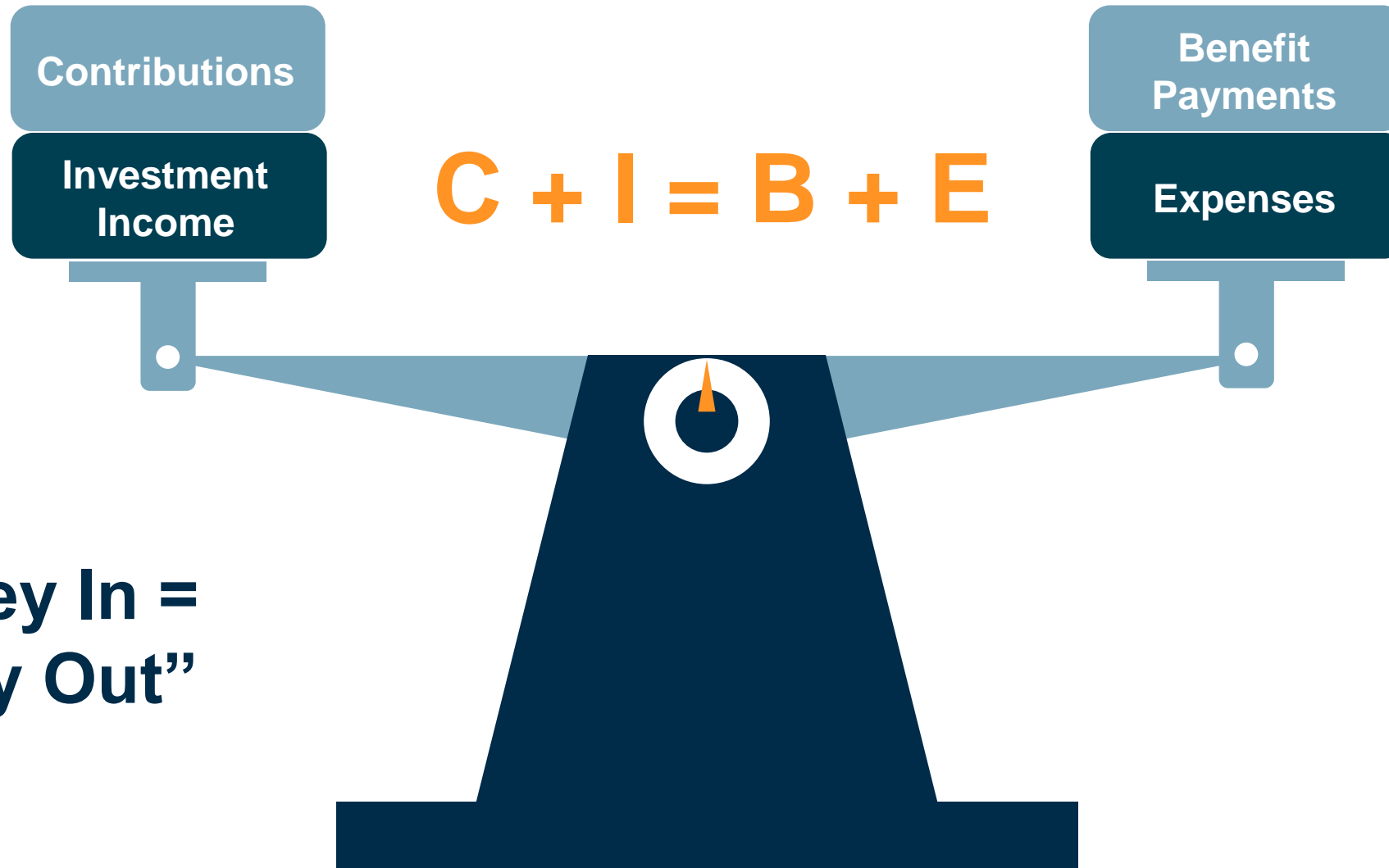
Analyze

- 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

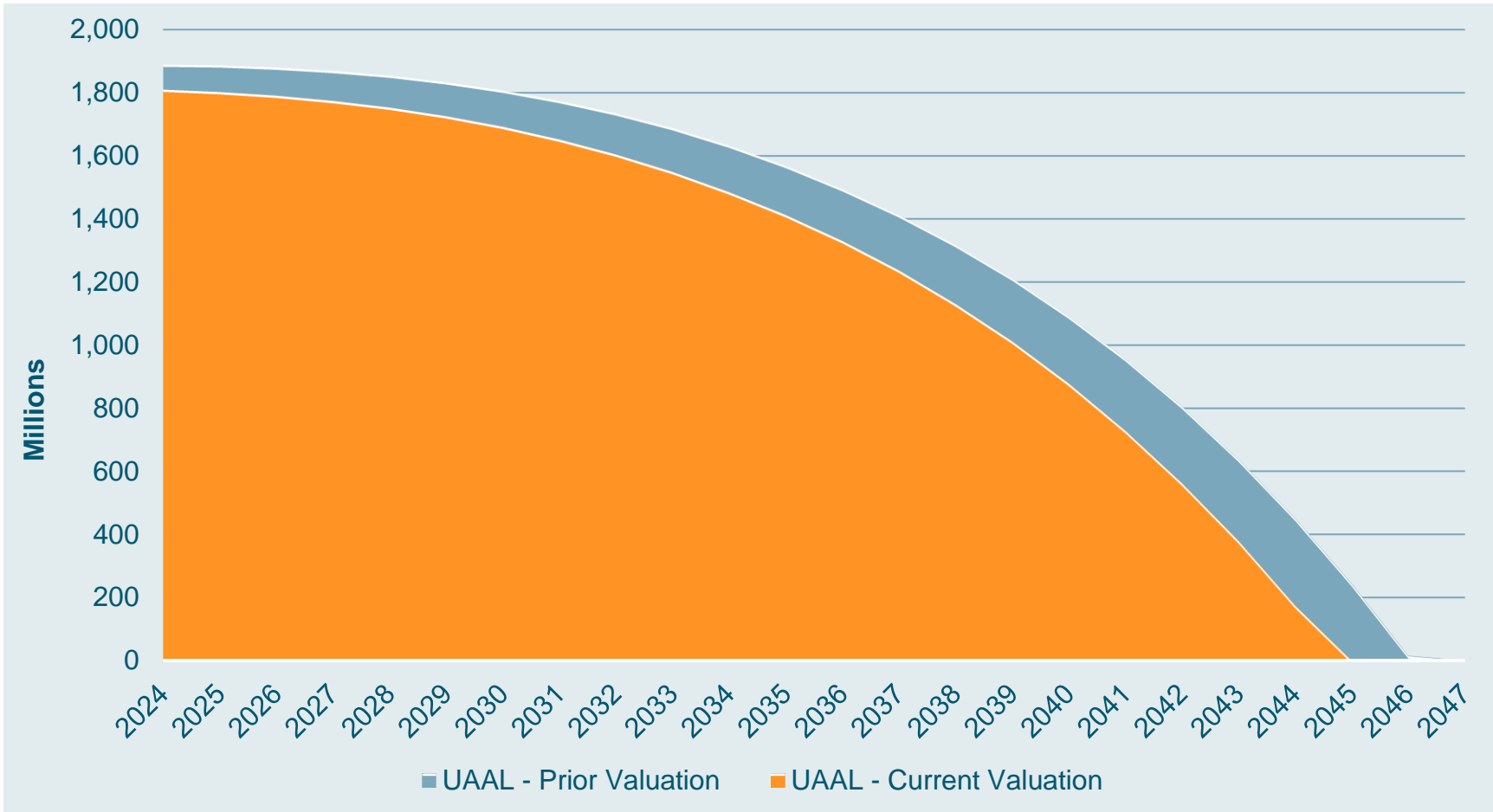
- Market value of assets are \$65,365,613 less than the actuarial value of assets.
- Experience is recognized over a four-year period.



Deferred Experience Recognition

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

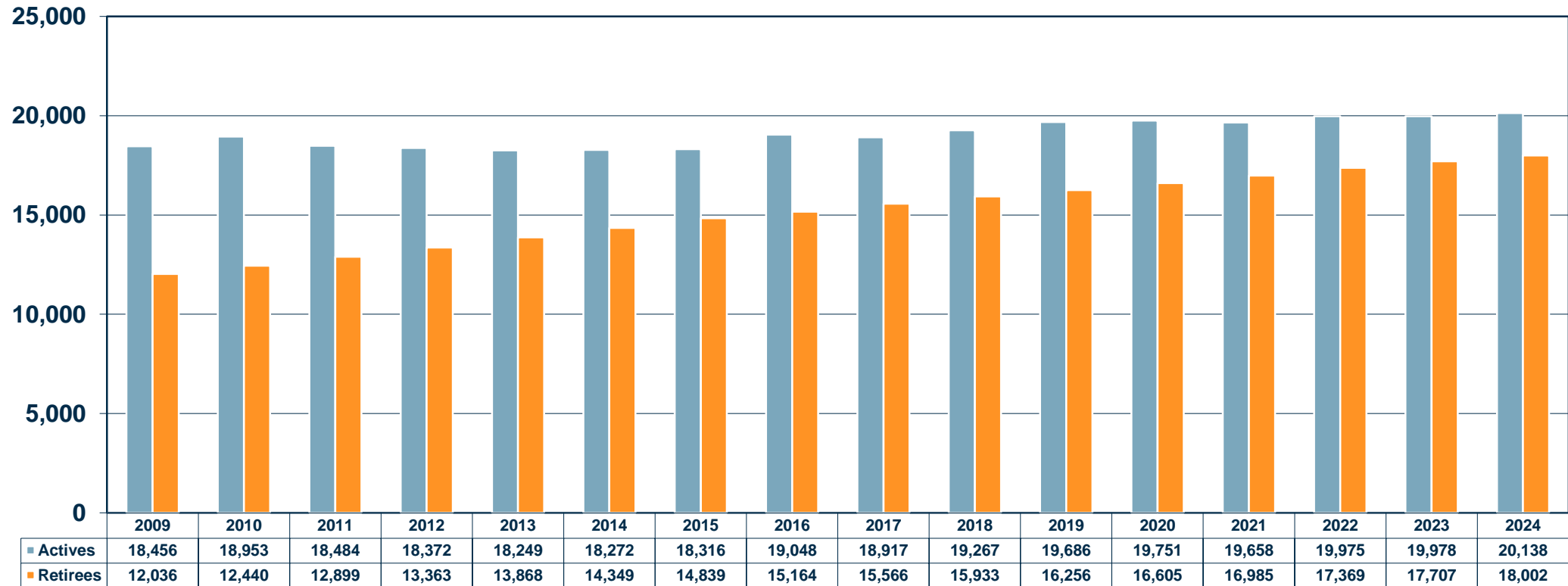
Progress Toward 100% Funding



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

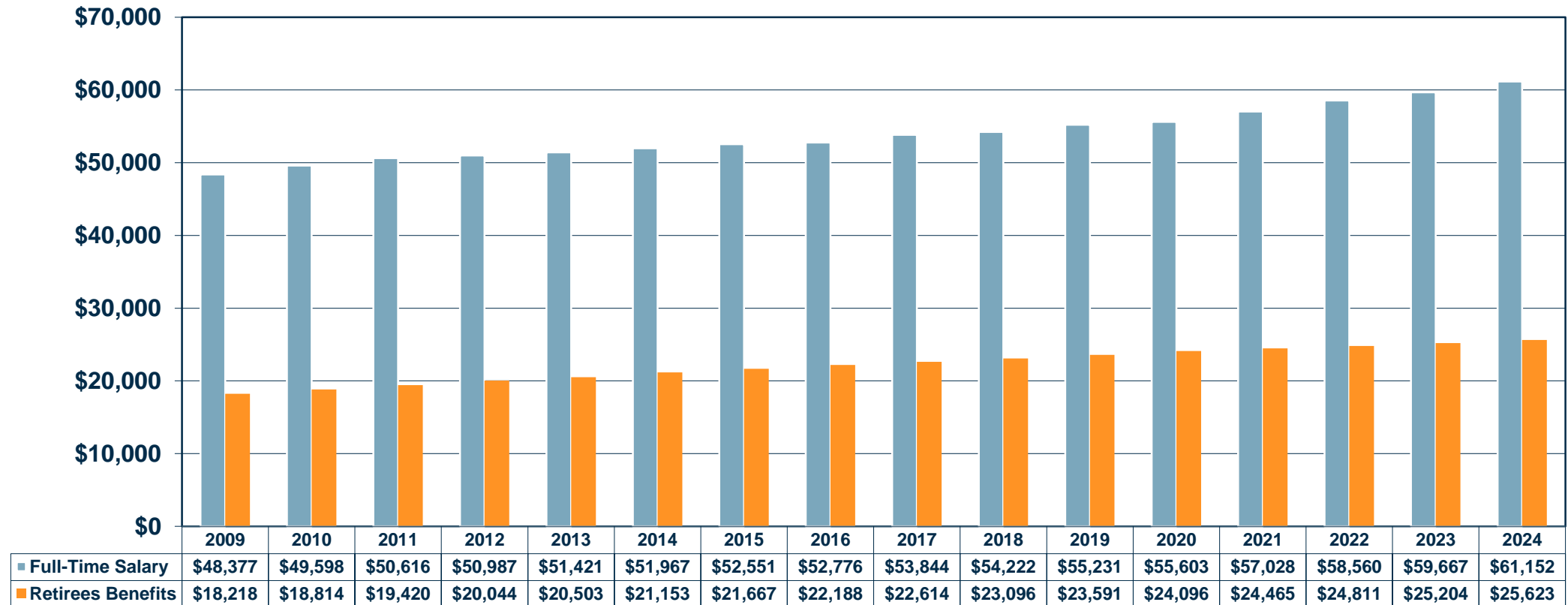


Active and Retired Membership



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.

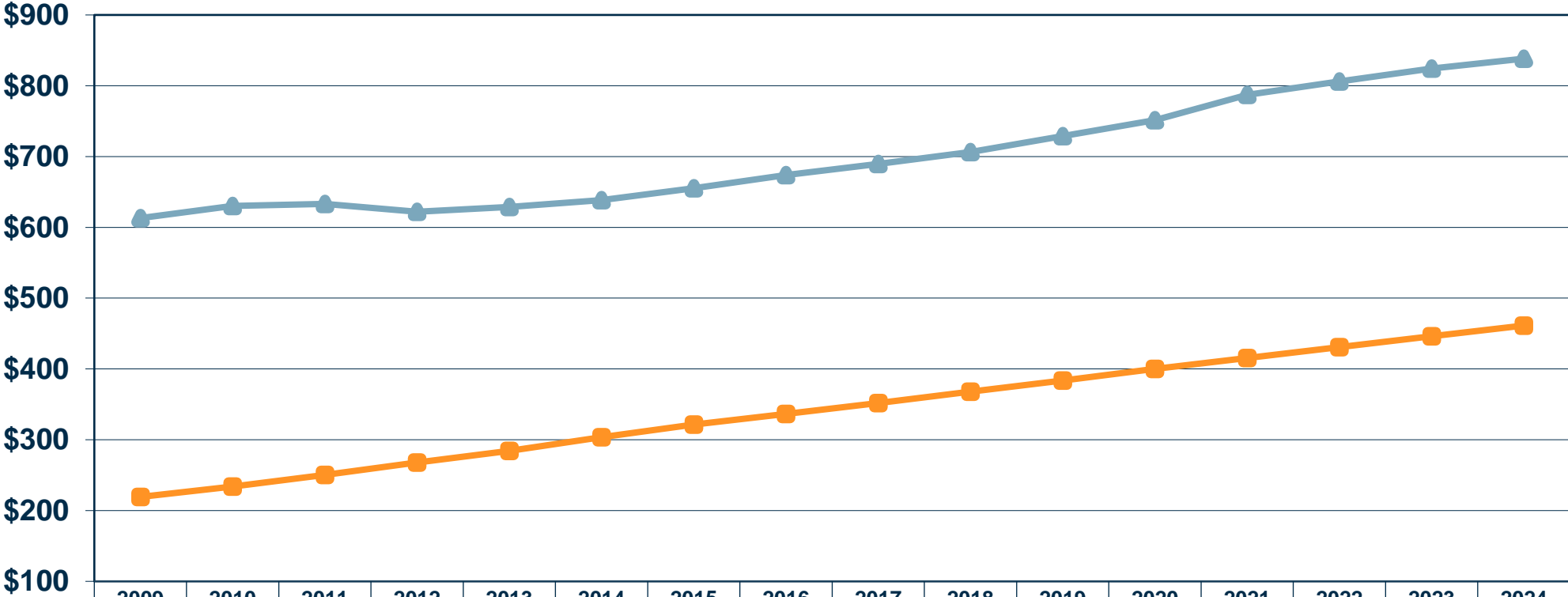
Average Salary and Benefits



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

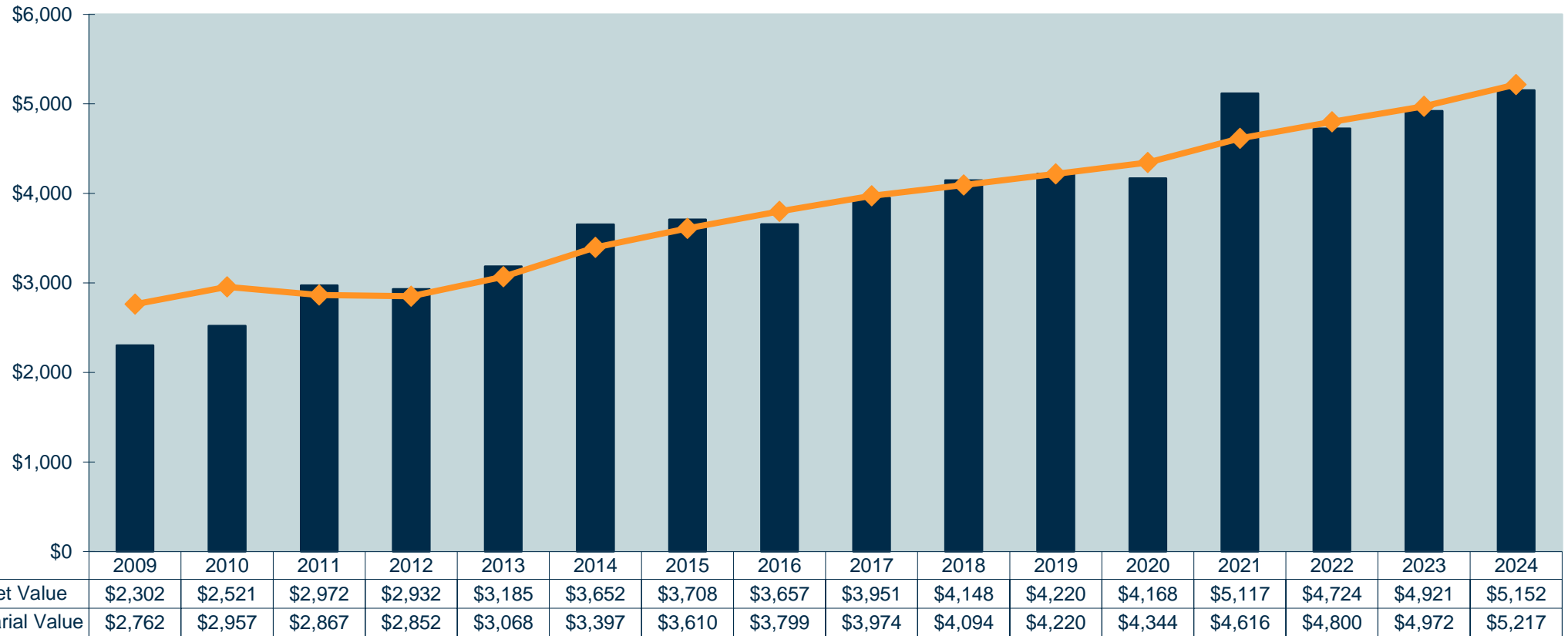
2.3% annual increase for average benefits since 2009; 1.7% increase for 2024.

Payroll & Benefits (Millions)



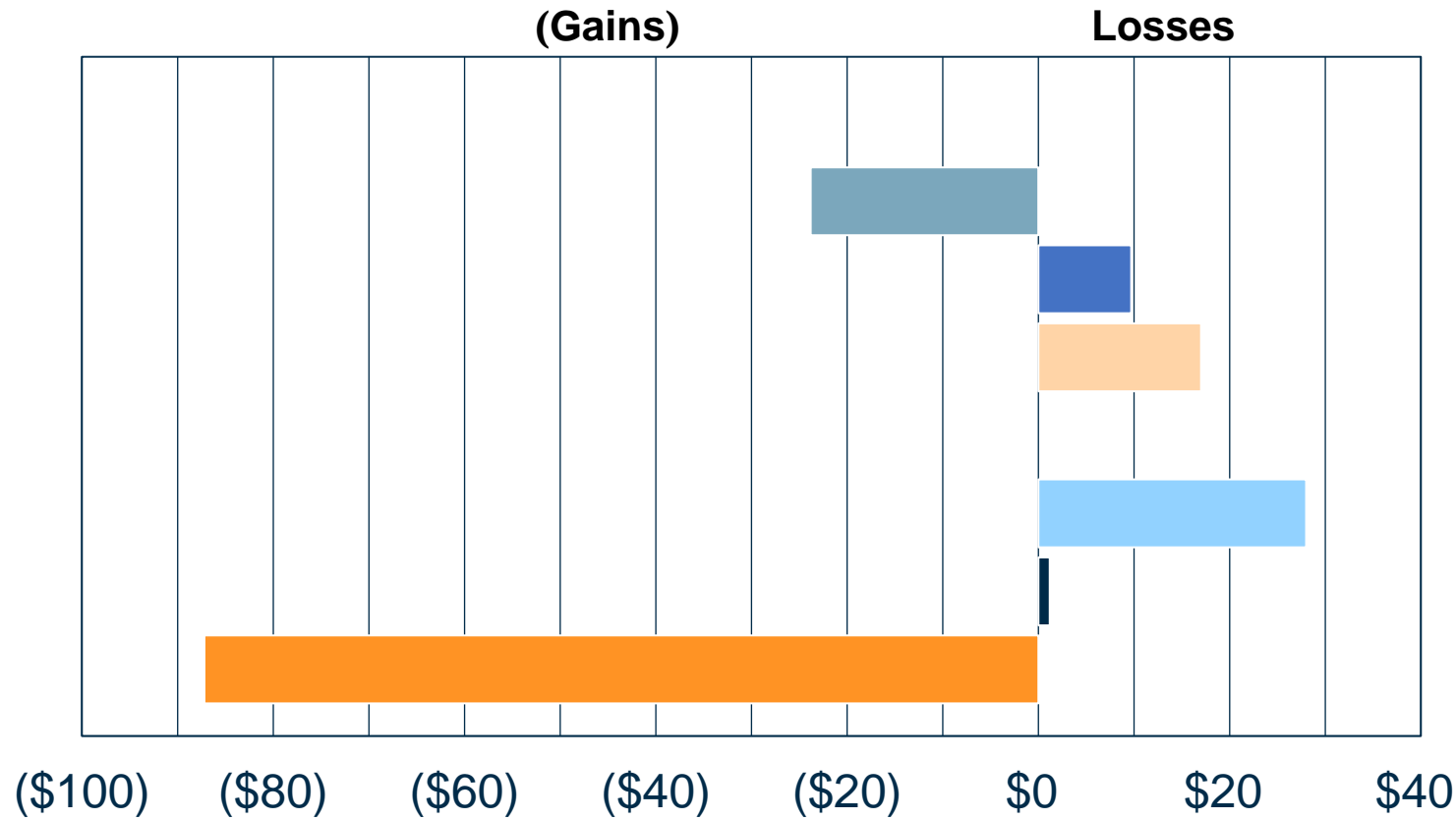
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Full-time Payroll	\$613.1	\$630.4	\$633.0	\$622.1	\$628.8	\$638.5	\$655.2	\$673.9	\$689.6	\$706.4	\$728.8	\$751.5	\$787.2	\$806.1	\$824.2	\$838.3
Benefits	\$219.3	\$234.0	\$250.5	\$267.9	\$284.3	\$303.5	\$321.5	\$336.5	\$352.0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

2023 (Gain)/Loss Analysis (\$ Millions)



- Assumption and Method Changes
- Data Adjustments and Benefit Payment Timing & Other
- Mortality
- Withdrawals
- Disability Retirements
- Age & Svc. Retirements
- Pay Increases
- Investment Income



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



- Additional information regarding the assumptions and methods can be found in the July 1, 2024 actuarial valuation report.
- The actuaries who prepared these results, Todd B. Green, ASA, EA, MAAA, FCA, and Bryan K. Hoge, FSA, EA, MAAA, FCA, are members of the American Academy of Actuaries and are qualified to render the actuarial opinions presented herein. We are happy to provide additional information and answer any questions, if necessary.



THANK
YOU

