



TRS

Montana Teachers' Retirement System

Montana Teachers' Retirement System Valuation Results July 1, 2021

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trs.mt.gov



Benefit Financing



➤ Basic Retirement Funding Equation

$$C + I = B + E$$

C = Contributions

I = Investment Income

B = Benefits Paid

E = Expenses (administration)



Benefit Financing



$$C + I = B + E$$

B depends on

- Plan Provisions
- Experience

C depends on

- Short Term: Actuarial Assumptions
Actuarial Cost Method
- Long Term: I, B, E



Participation in TRS



- Teachers, administrators, specialists and others employed in a teaching or educational services capacity by a public school district, state agency, county, community college, Montana University System or educational cooperative are covered by TRS.

– Active members	19,658
– Inactive members	9,824
– Retirees and Beneficiaries	16,985
– Employers	363



Results



Comments on Valuation



- Asset returns
 - Market asset return 27.73% vs. 7.50% expected (20.23% more than expected).
 - Actuarial asset return 10.68% vs. 7.50% expected (3.18% more than expected).
- Market value of assets are \$500,474,681 more than the actuarial value of assets. This unrecognized investment gain will be recognized over the next three years
 - 2022 Investment Gain of \$137.4 million
 - 2023 Investment Gain of \$156.8 million
 - 2024 Investment Gain of \$206.2 million



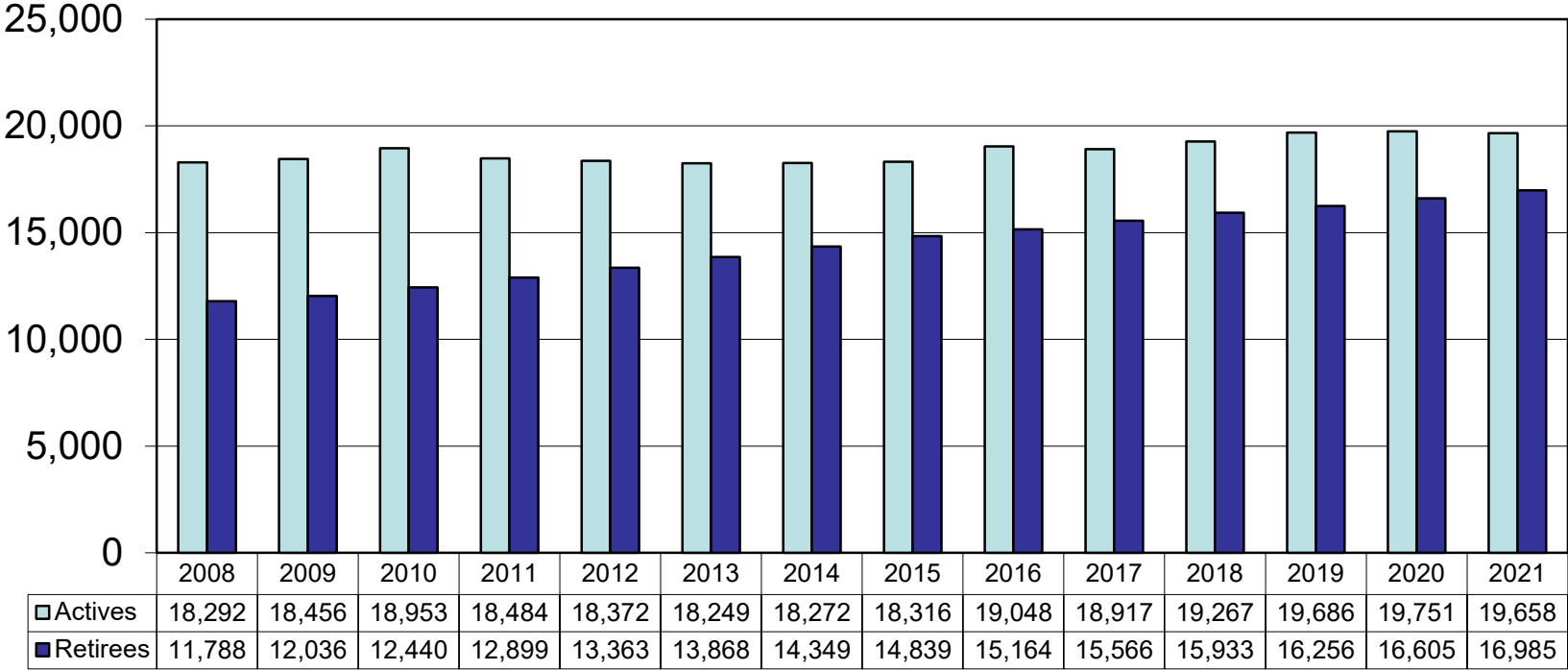
Comments on Valuation



- Funded Ratio
 - Funding increased from 68.84% to 71.43%
- Amortization Period
 - Amortization period decreased from 29 years to 24 years



Active and Retired Membership



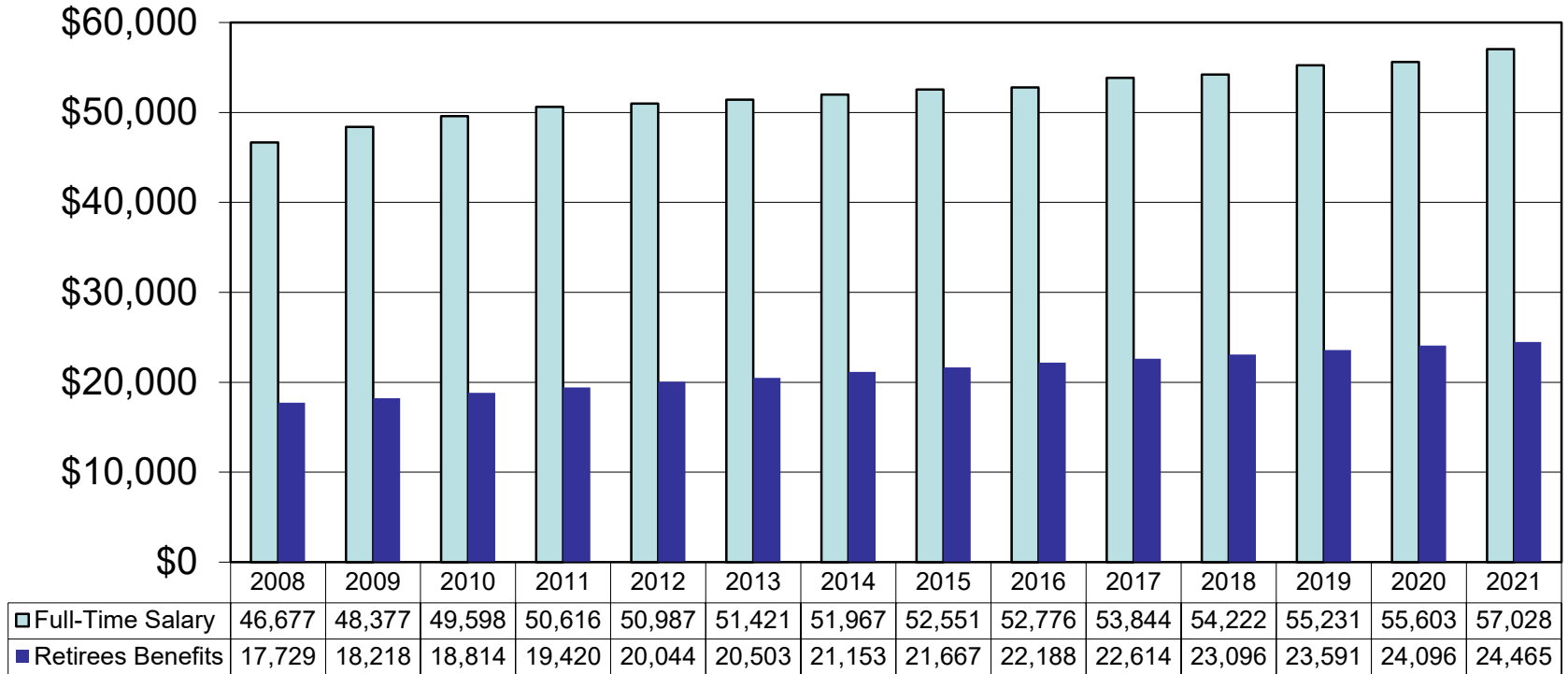
0.6% annual increase for active members since 2008; 0.5% decrease for 2021.

2.8% annual increase for retired members since 2008; 2.3% increase for 2021.

1.6 actives per retiree 13 years ago; 1.2 actives per retiree now.



Average Salary and Benefits

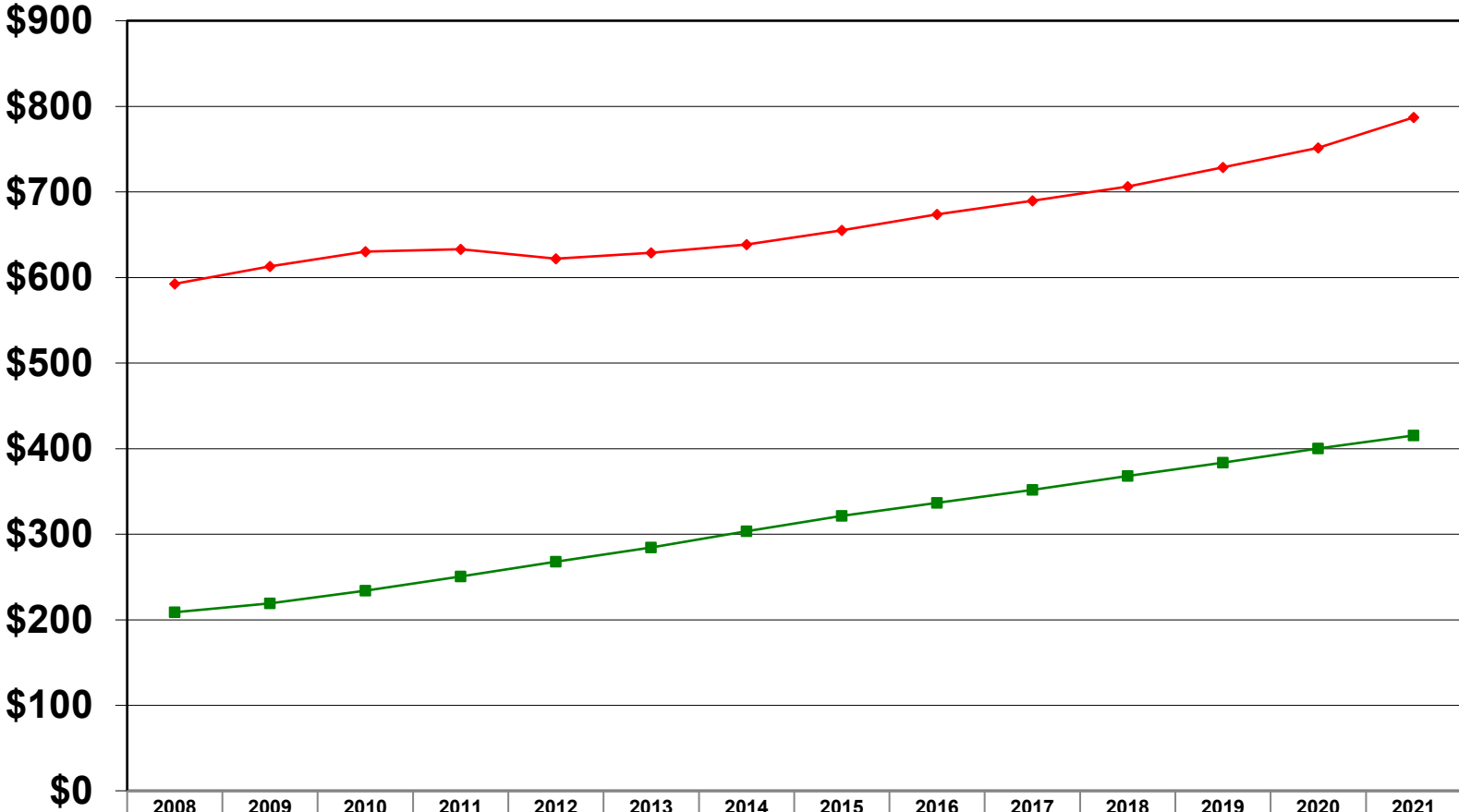


1.6% annual increase for average salary since 2008; 2.6% increase for 2021.

2.5% annual increase for average benefits since 2008; 1.5% increase for 2021.



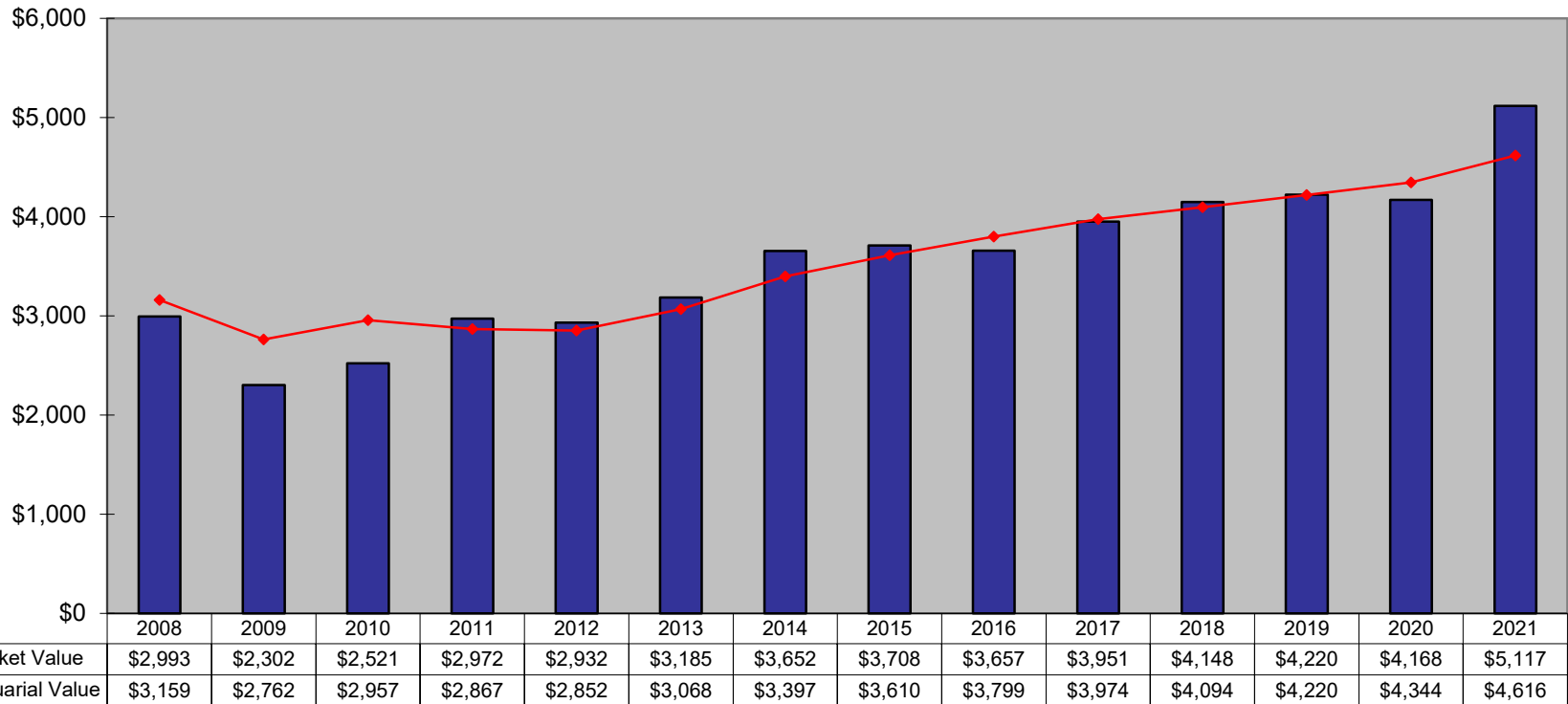
Payroll & Benefits (Millions)



◆ Full-time Payroll	\$592.5	\$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
■ Benefits	\$209.0	\$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



Assets (\$ Millions)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Market Return	(4.9)%	(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%
Actuarial Return	7.2%	(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%

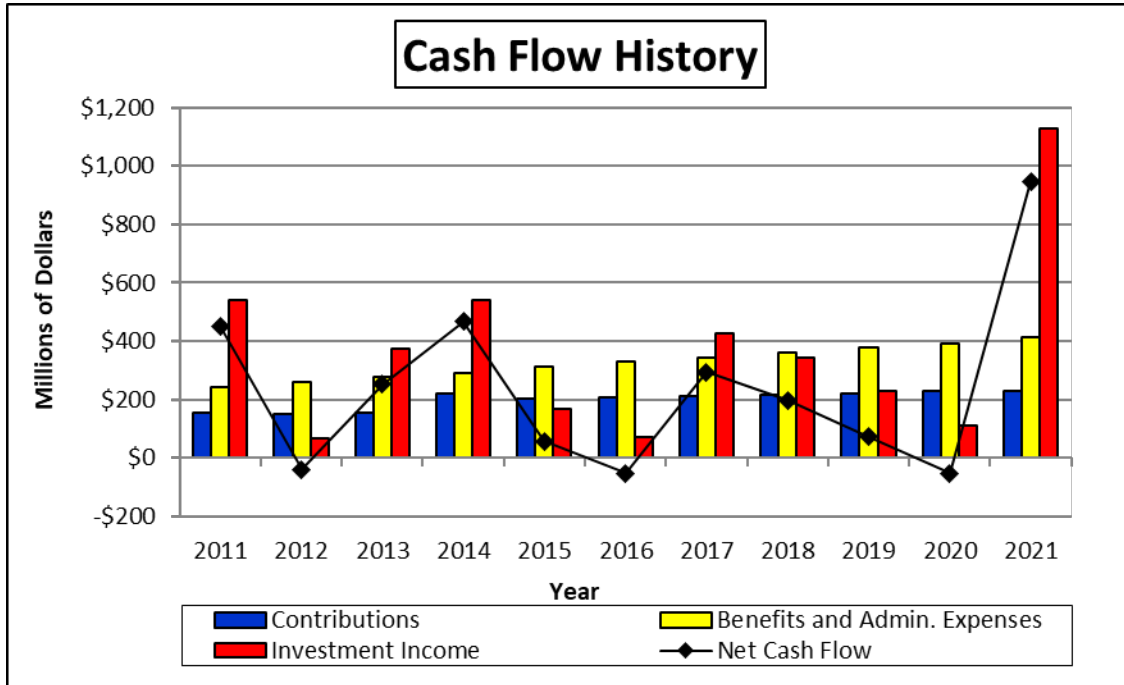


Actuarial Assets vs. UAAL





Historical Cash Flow (in Millions)





Funding Results

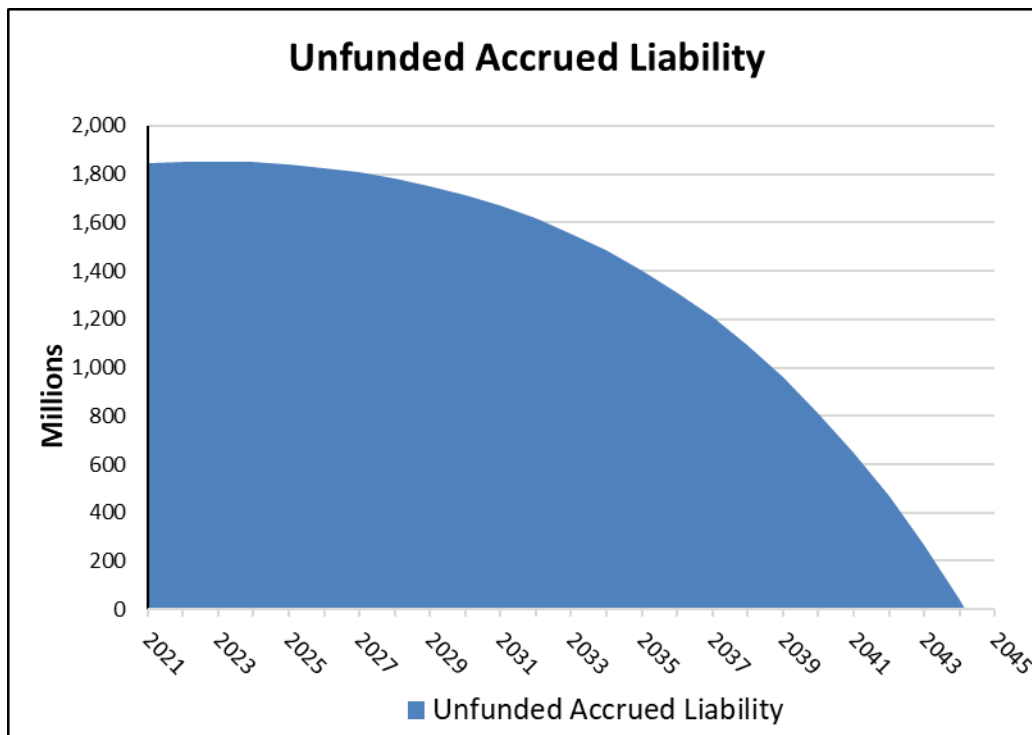


	July 1, 2020 Valuation	July 1, 2021 Valuation
Total Normal Cost Rate	9.75%	9.67%
Less Member Rate	<u>8.15%</u>	<u>8.15%</u>
Employer Normal Cost Rate	1.60%	1.52%
Administrative Expense Load	0.45%	0.46%
Rate to Amortize UAL	<u>9.61%</u>	<u>9.78%</u>
Total Employer Statutory Rate	11.66%	11.76%
Actuarial Accrued Liability	\$6,310.0 million	\$6,463.2 million
Actuarial Value of Assets	\$4,344.0 million	\$4,616.3 million
Unfunded Accrued Liability	\$1,966.0 million	\$1,846.9 million
Funded Ratio	68.84%	71.43%
Amortization Period*	29 Years	24 Years

* Reflects anticipated increase in employer supplemental contribution rate



Progress toward 100% Funding





Upcoming Projects



- Experience Study for the five-year period ending June 30, 2021