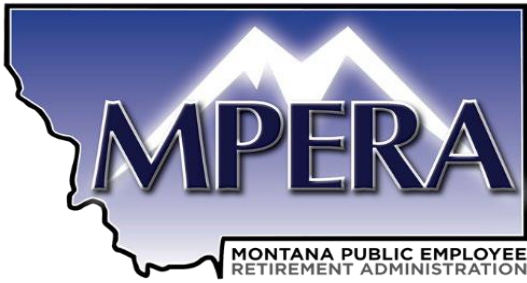


Montana Public Employee Retirement Administration

Montana Public Employees' Retirement Board Valuation Results June 30, 2022

**Dore Schwinden, Executive Director, MPERA
William Holahan, Deputy Director, MPERA**



Benefit Financing

➤ Basic Retirement Funding Equation

$$C + I = B + E$$

C= Contributions

I= Investments

B= Benefits Paid

E= Expenses (administration)

B depends on

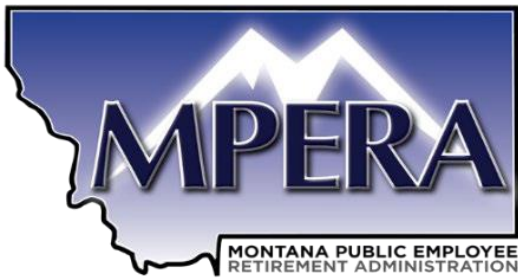
Plan Provisions

Experience

C depends on

Short Term: Actuarial Assumptions
Actuarial Cost Method

Long Term: I, B, E

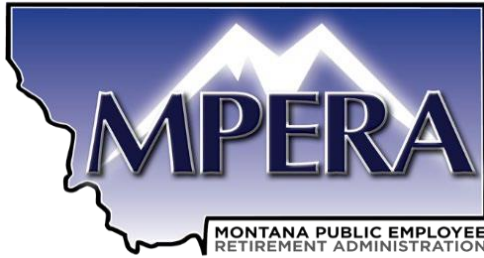


Participation in MPERA

- State, local governments, and certain employees of the Montana University system, & school districts are covered by MPERA.

- 43,279 Active Employees Including DC and 457 Members
- 30,005 Retirees & Beneficiaries (all DB systems)
- 39,557 Inactive (all DB systems)

- 563 Employers (DB)
- 225 Volunteer Fire Departments



Comments on Valuation for PERS

➤ Asset returns

- Market asset returns averaged -4.21% vs. 7.65% expected (11.86% less than expected).
- Actuarial asset returns averaged 8.02% vs. 7.65% expected (0.37% more than expected).

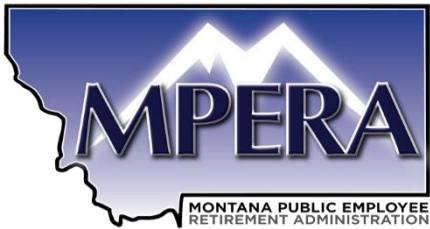
➤ **Market value of assets** are \$121,914,618 less than the actuarial value of assets. The asset valuation method being used is a four-year smoothing.

➤ Funded Ratio

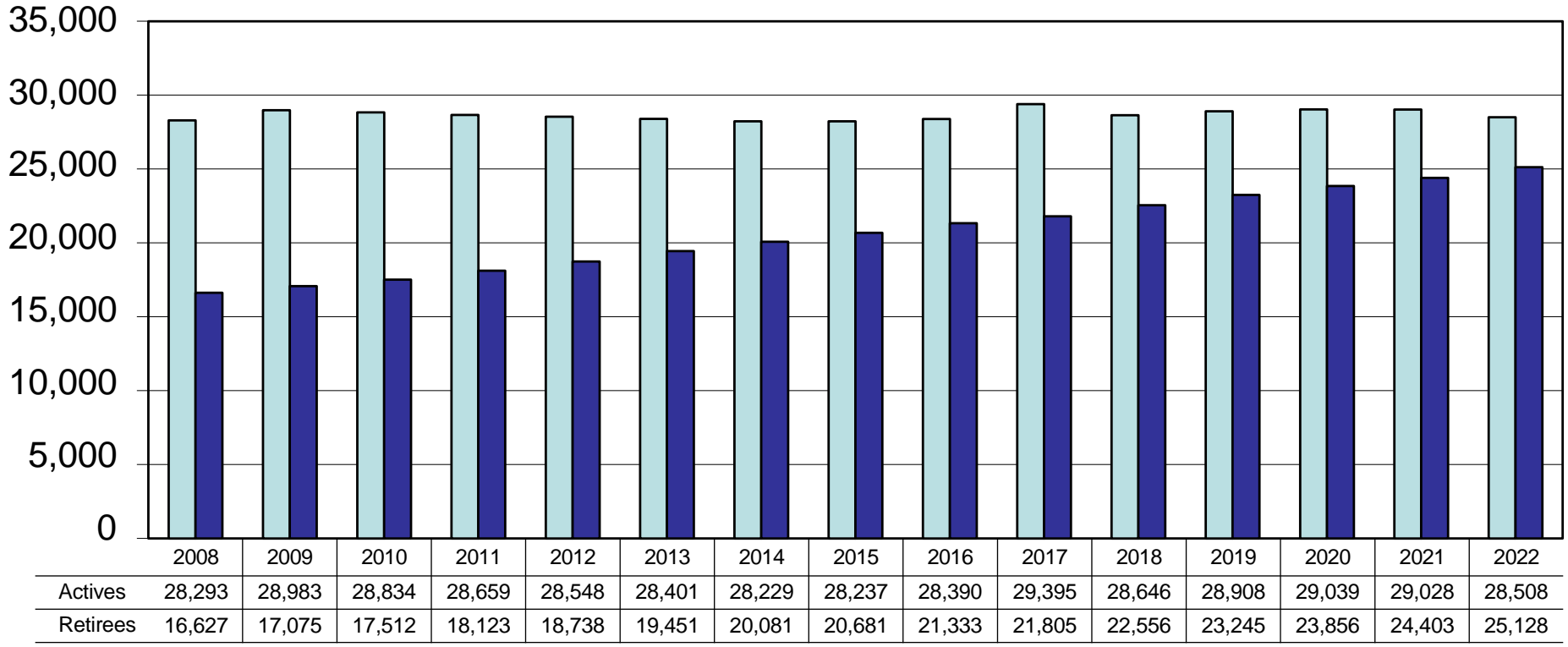
-Funding decreased from 76.34% to 75.01%

➤ Amortization Period

-Amortization period increased from 28 years to 32 years



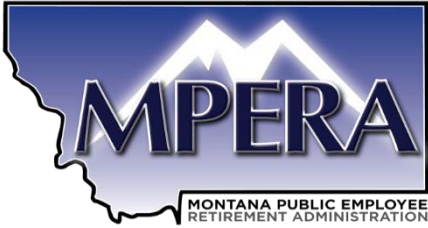
PERS Active and Retired Membership



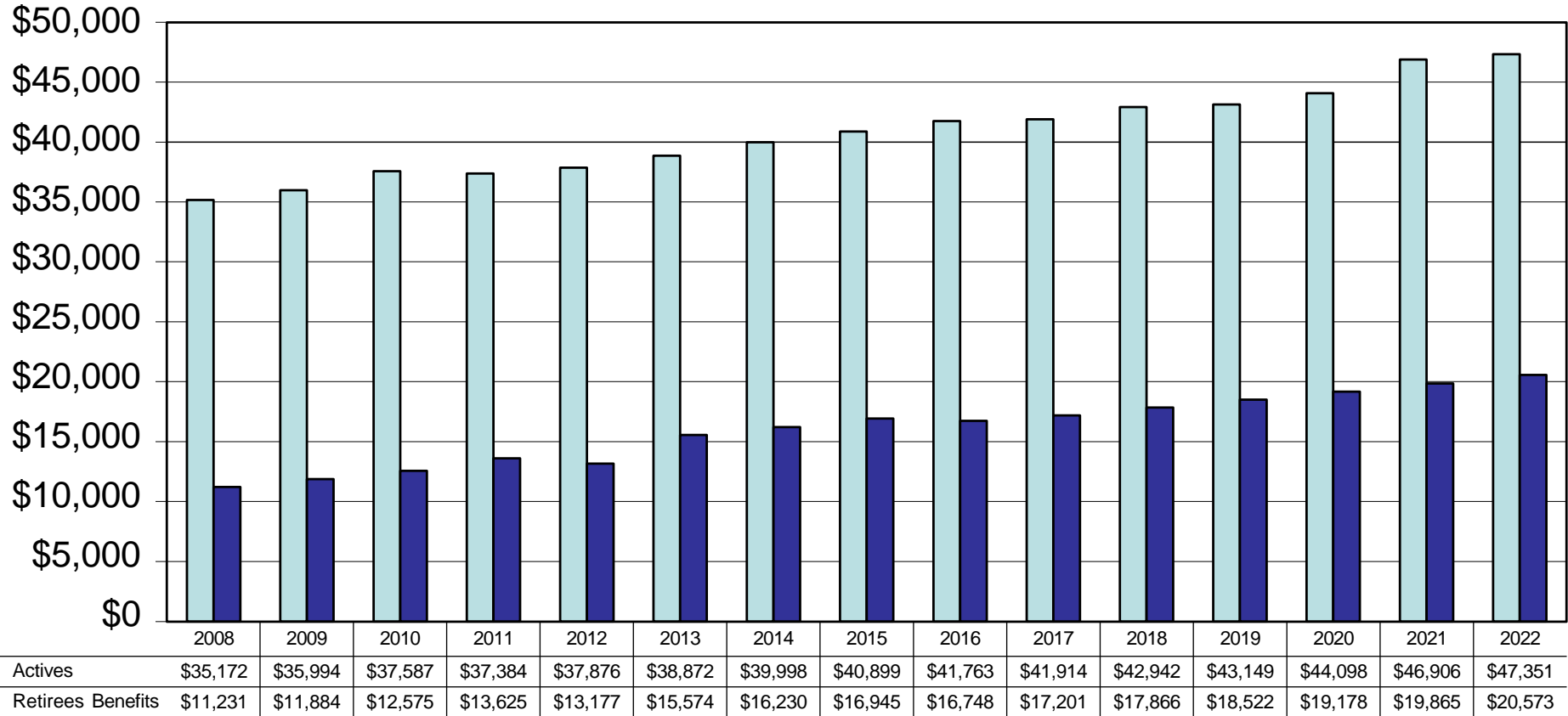
0.1% annual increase for active members since 2008; 1.8% decrease for 2022.

3.0% annual increase for retired members since 2008; 3.0% increase for 2022.

1.7 active per retiree 14 years ago; 1.13 active per retiree now.

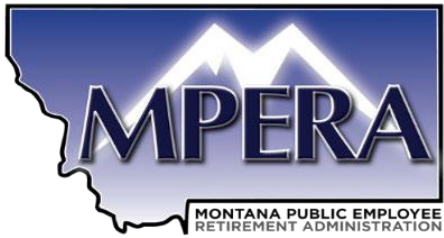


PERS Average Salary and Benefits



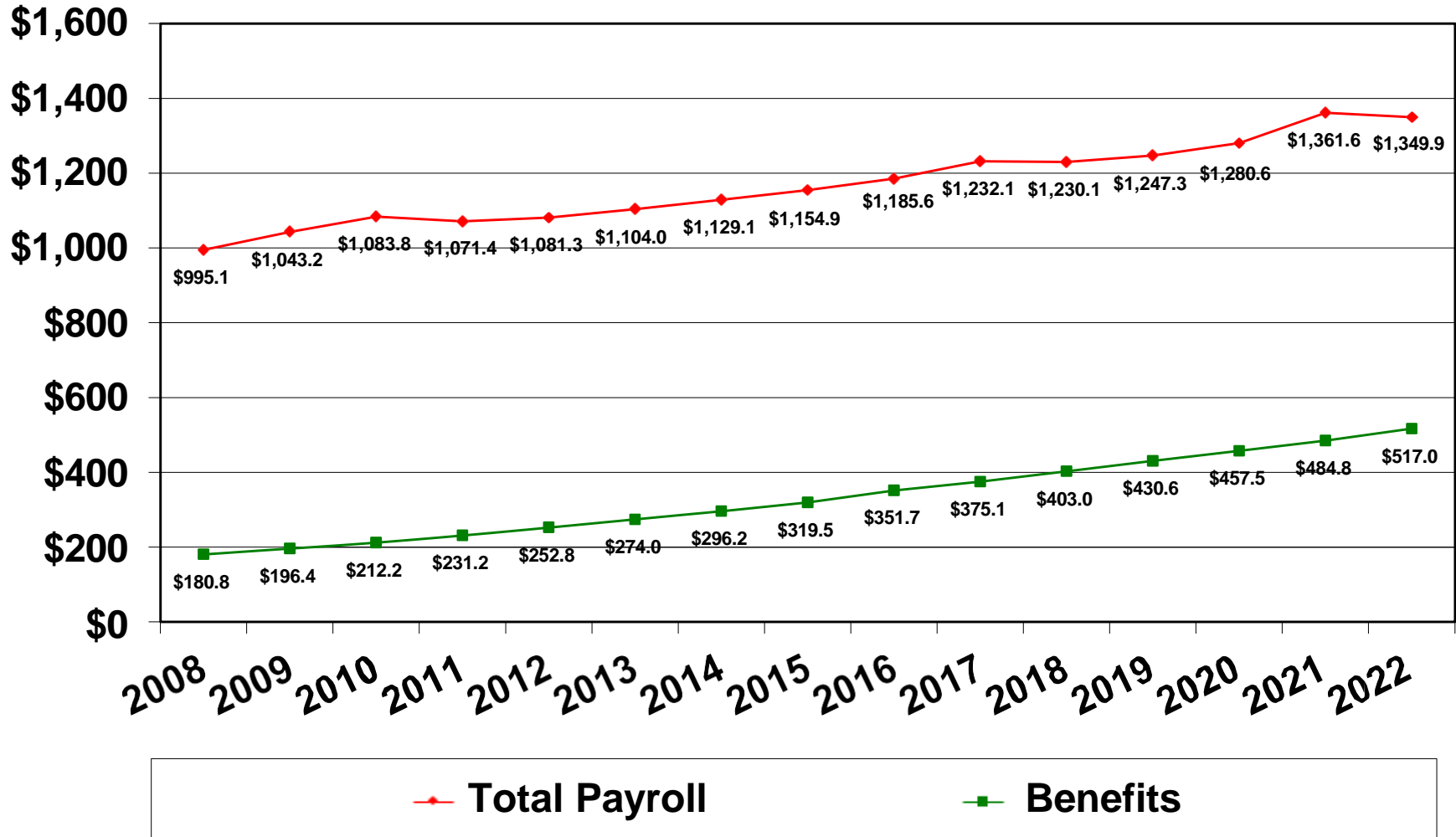
2.1% annual increase for average salary since 2008; 0.9% increase for 2022.

4.4% annual increase for average benefits since 2008; 3.6% increase for 2022.



PERS Payroll & Benefits

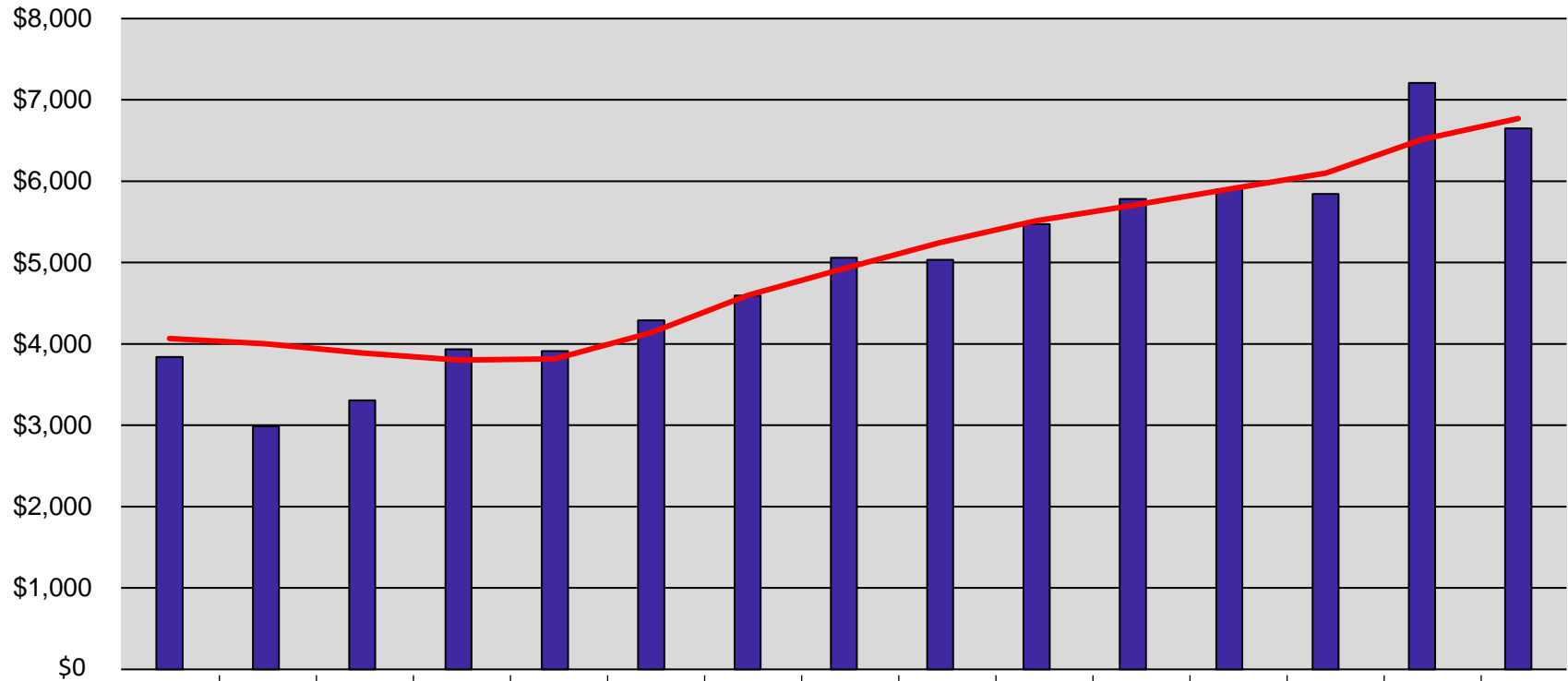
(\$ Millions)





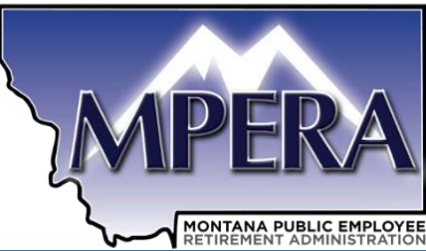
PERS Assets

(\$ Millions)



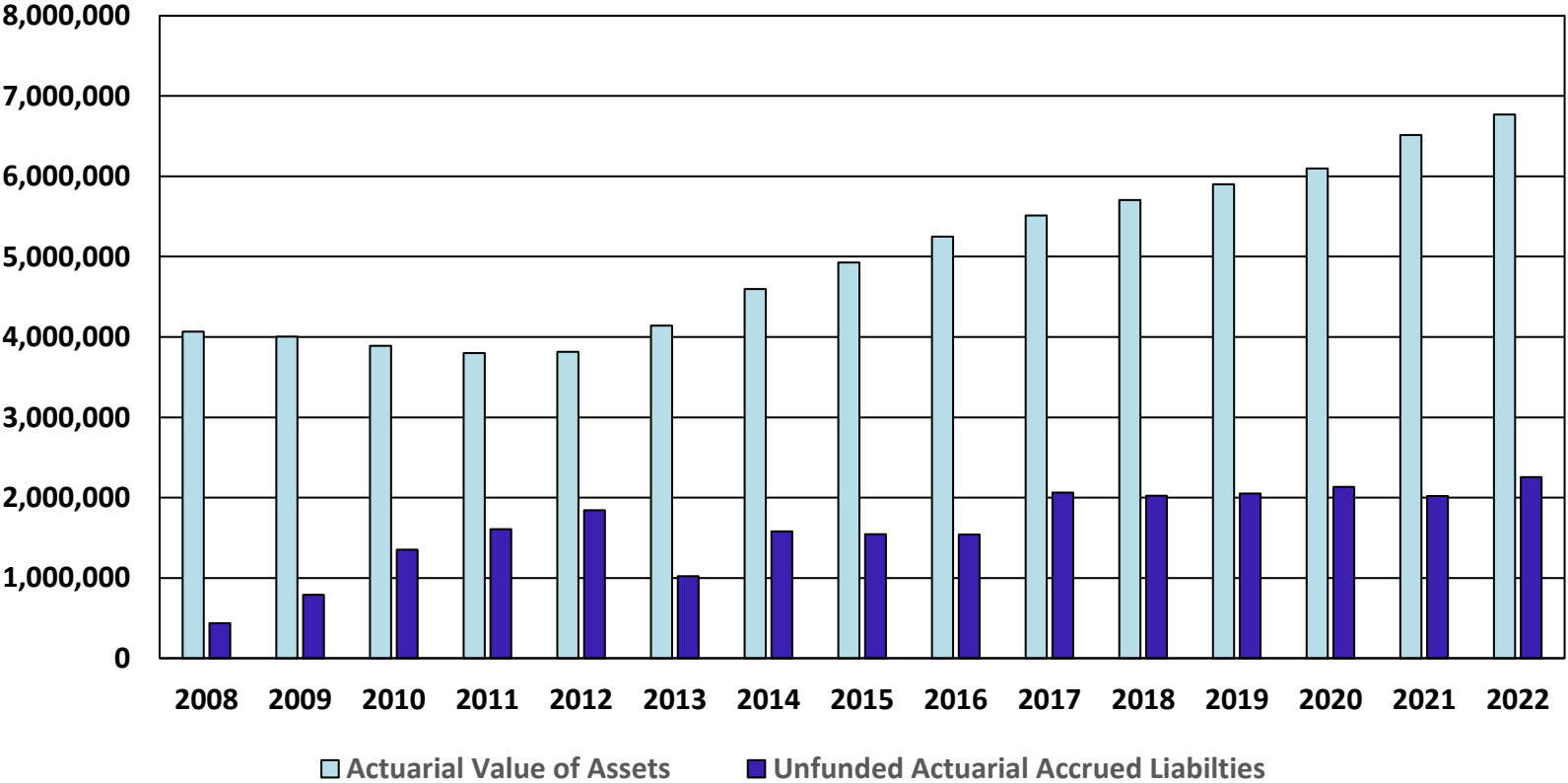
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Market Value	\$3,841	\$2,988	\$3,304	\$3,933	\$3,913	\$4,290	\$4,596	\$5,061	\$5,033	\$5,473	\$5,780	\$5,903	\$5,845	\$7,210	\$6,649
Actuarial Value	\$4,065	\$4,002	\$3,890	\$3,801	\$3,817	\$4,140	\$4,596	\$4,927	\$5,248	\$5,514	\$5,705	\$5,903	\$6,099	\$6,515	\$6,771

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Market Return	(4.9)%	(20.9)%	12.9%	21.7%	2.3%	13.0%	17.1%	4.6%	2.0%	11.9%	8.9%	5.7%	2.7%	27.8%	(4.2)%
Actuarial Return	7.6%	(0.2)%	(1.2)%	(0.1)%	3.3%	11.9%	13.2%	9.6%	9.3%	8.1%	6.7%	7.1%	7.1%	10.8%	8.02%



PERS Actuarial Assets vs UAAL

(\$ Millions)

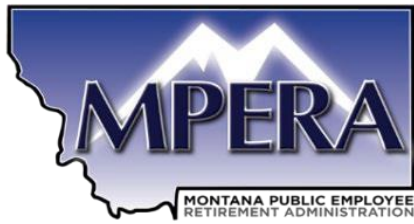




PERS Funding Results

		Before Exp. Study	After Exp. Study
	July 1, 2021 Valuation	July 1, 2022 Valuation	July 1, 2022 Valuation
Total Normal Cost Rate	9.71%	9.65%	9.72%
Administrative Expense Load	0.29%	0.35%	0.00%
Rate to Amortize UAL	6.83%	6.93%	7.21%
Transfer to DB Education Fund	<u>0.04%</u>	<u>0.04%</u>	<u>0.04%</u>
Statutory Funding Rate*	16.87%	16.97%	16.97%
Actuarial Accrued Liability	\$8,534.6 million	\$8,730.4 million	\$9,026.8 million
Actuarial Value of Assets	\$6,515.0 million	\$6,770.8 million	\$6,770.8 million
Unfunded Accrued Liability	\$2,019.6 million	\$1,959.6 million	\$2,256.0 million
Funded Ratio	76.34%	77.55%	75.01%
Amortization Period*	28 Years	27 Years	32 Years

* Reflects anticipated increases in employer supplemental contribution rates and projected State revenue. Payable in fiscal year immediately following the valuation date.



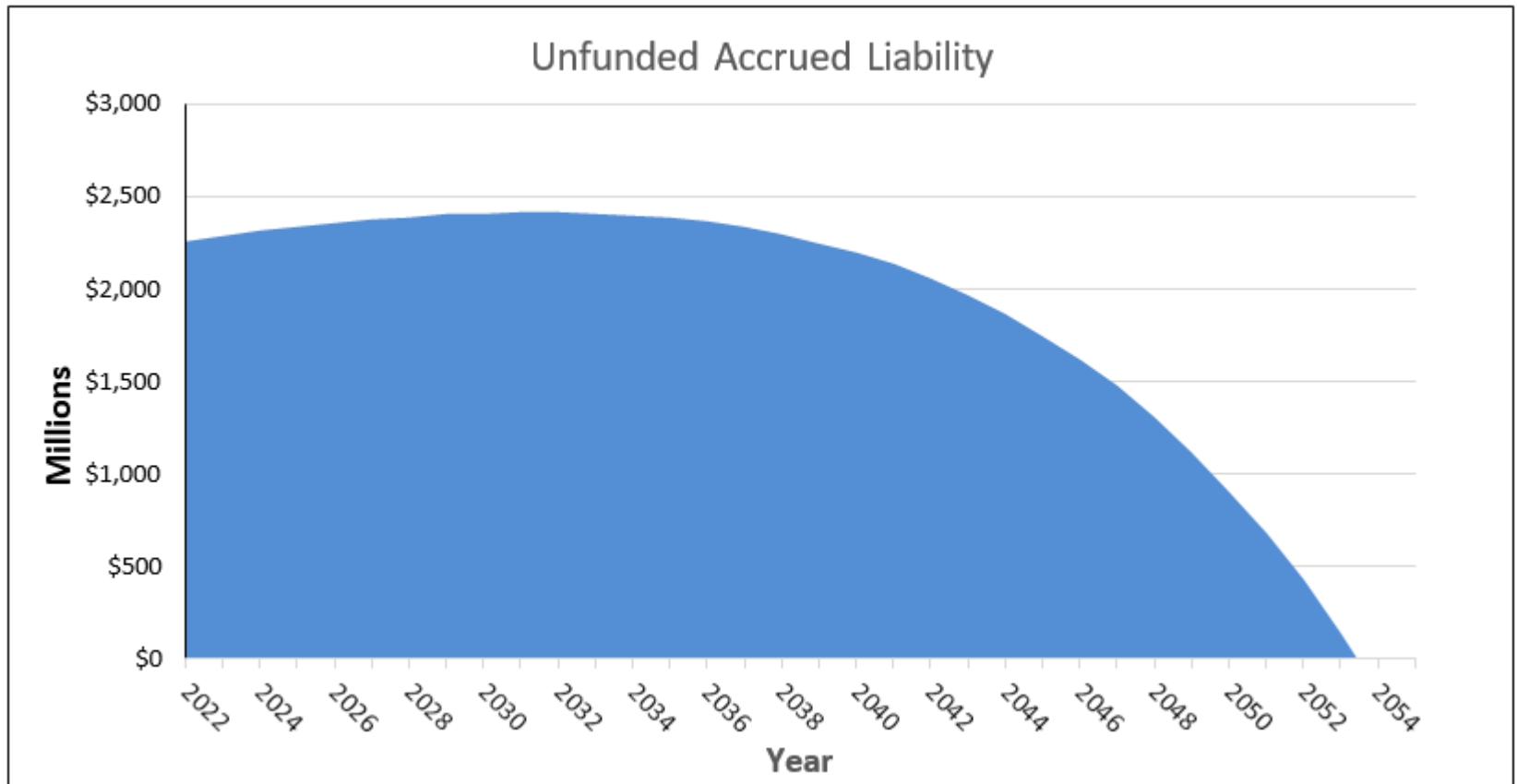
Valuation Results - Other Plans

System	Funded Ratio			Amortization Period			Statutory Rate	30-Year Funding Rate		
	2022			2022				2022		
	Exp. Study			Exp. Study				Exp. Study		
	2021	Before	After	2021	Before	After		2021	Before	After
JRS***	177%	180%	174%	0	0	0	7.00%	(11.97%)	(13.76%)	(8.99%)
HPORS**	67%	70%	66%	26	22	47	51.38%	48.81%	46.61%	56.53%
SRS	83%	84%	79%	18	17	33	23.61%	21.36%	21.05%	23.88%
GWPORS	85%	89%	83%	35	34	DNA	19.56%	19.85%	19.76%	24.21%
MPORS	74%	76%	71%	15	13	24	52.78%	43.13%	41.92%	50.67%
FURS	86%	88%	81%	6	5	12	57.66%	34.03%	32.65%	45.83%
VFCA*	99%	107%	91%	1	0	3	5% of premium taxes	\$351,815	\$0	\$1,060,482

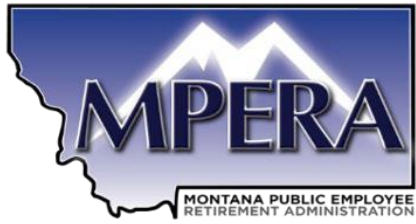
- * The actual contributions for the fiscal year ending 2021 and 2022 were \$2,591,791 and \$2,851,975, respectively.
- ** Calculation of amortization period includes state special revenue transfers.
- *** Employer contribution holiday beginning July 1, 2021 through June 30, 2023. Beginning July 1, 2023, employer contributions will resume at a reduced rate of 14.00% until the funded ratio drops below 120%.



Level Dollar vs. Level Percent of Pay



Projected UAAL- Level % of Pay



ASOP 4

- Effective for measurement dates on/after February 15, 2023 (July 1, 2023 valuation for MPERA)
- Changes Impacting Public Plans
 - Disclose Low-Default Risk Obligation Measure (LDRM)
 - Disclose Reasonable Actuarially Determined Contribution (ADC)
 - New guidance on amortization of the unfunded actuarial accrued liability
 - Assess implications of Contribution Allocation Procedure (CAP) or Funding Policy
 - Other changes
 - Output Smoothing Methods
 - Addressing contribution lag
 - Gain/loss analysis