



Montana Teachers' Retirement System Valuation Results July 1, 2019

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trs.mt.gov



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	19,686
– Inactive members	16,052
– Retirees and Beneficiaries	16,256
– Employers	365



Comments on Valuation

➤ Asset returns

- Market asset return 5.69% vs. 7.50% expected (1.81% less than expected).
- Actuarial asset return 7.00% vs. 7.50% expected (0.50% less than expected).

➤ Market value of assets are \$770,648 more than the actuarial value of assets. This unrecognized investment gain will be recognized over the next three years

- An investment gain followed by two investment losses



Comments on Valuation

- **Funded Ratio**
 - Funding increased from 68.19% to 68.63%
- **Amortization Period**
 - Amortization period decreased from 31 to 29 years

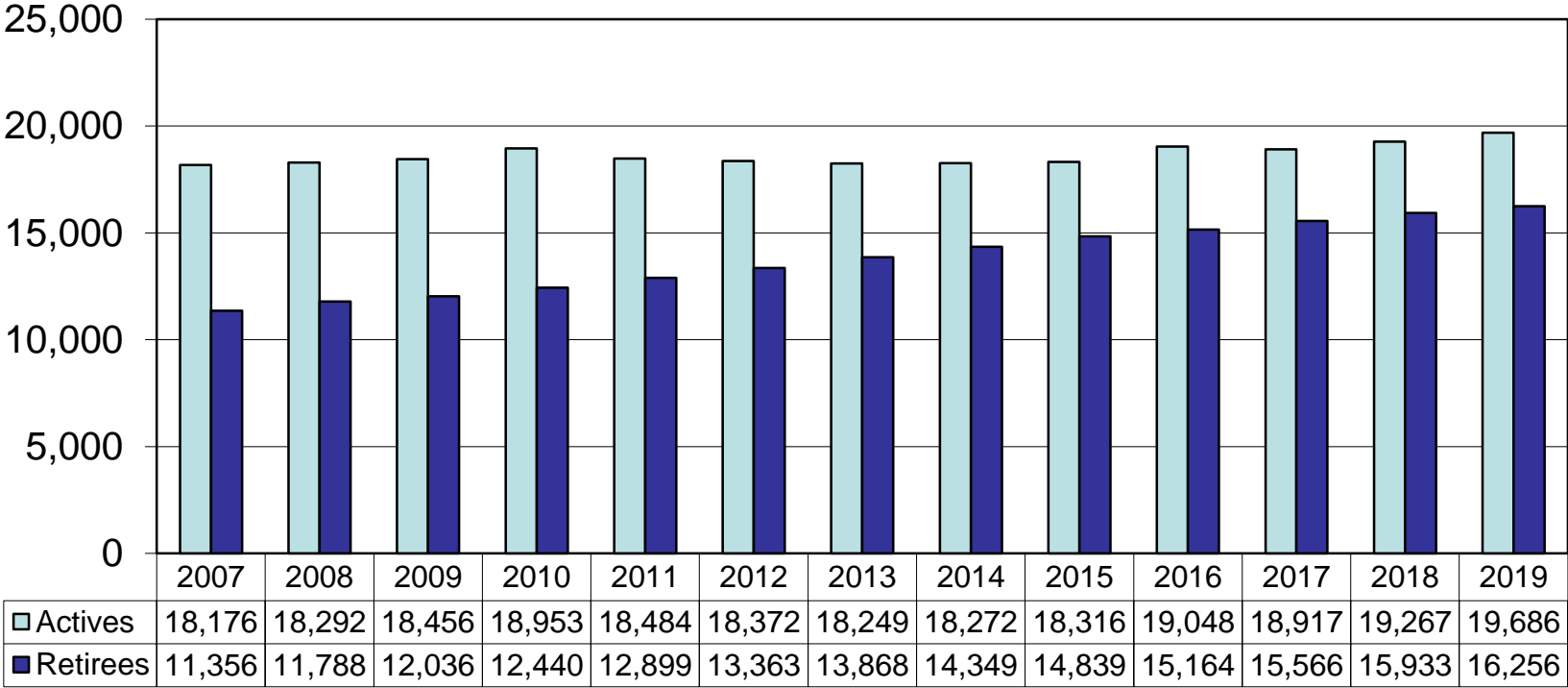


Changes Since the Previous Valuation

- Reduced assumed GABA for Tier Two members from 1.50% to 0.50%
 - Tier Two GABA requires Board approval to increase from 0.50%.
- Decreased amortization period from 30 to 29 years
- Decreased unfunded actuarial accrued liability by \$6.1 million



Active and Retired Membership



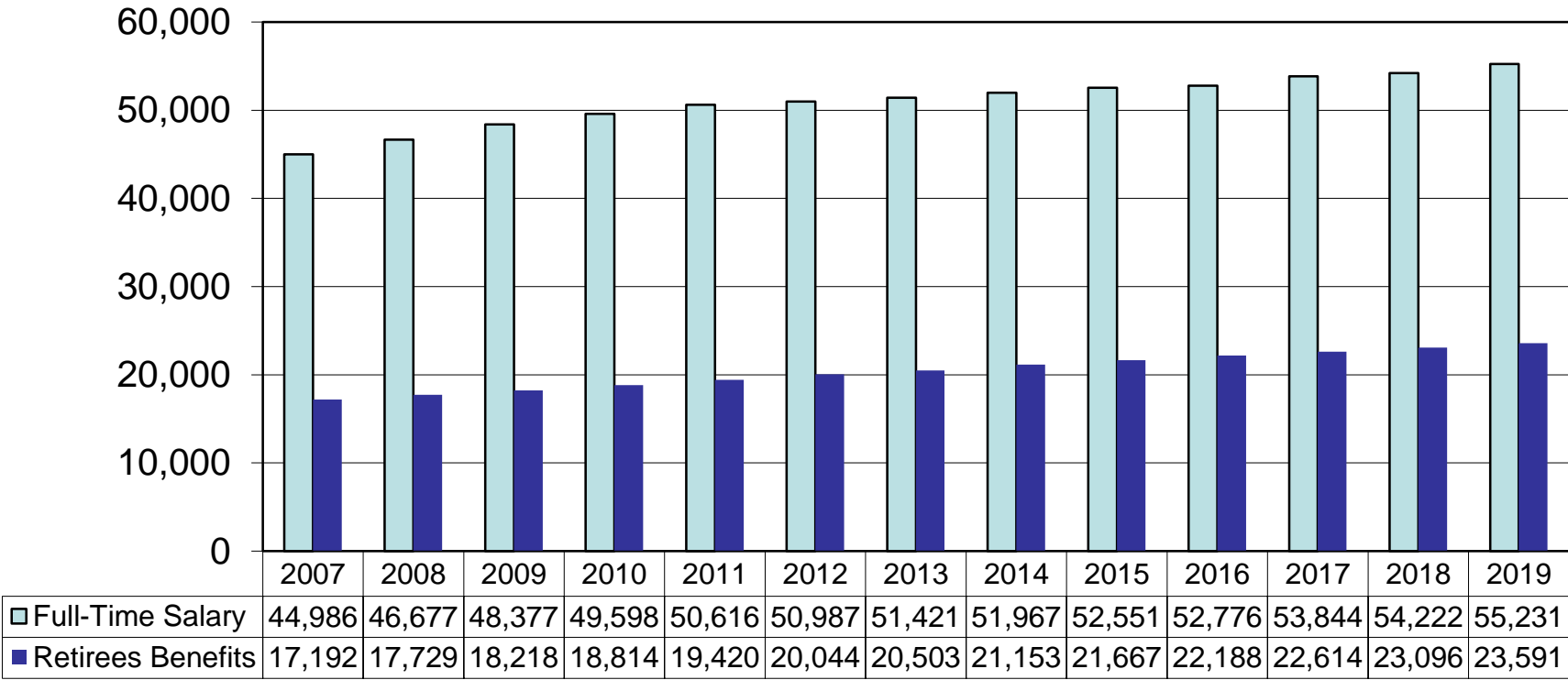
0.7% annual increase for active members since 2007; 2.2% increase for 2019.

3.0% annual increase for retired members since 2007; 2.0% increase for 2019.

0.6 retirees per active 12 years ago; 0.8 retirees per active now.



Average Salary and Benefits

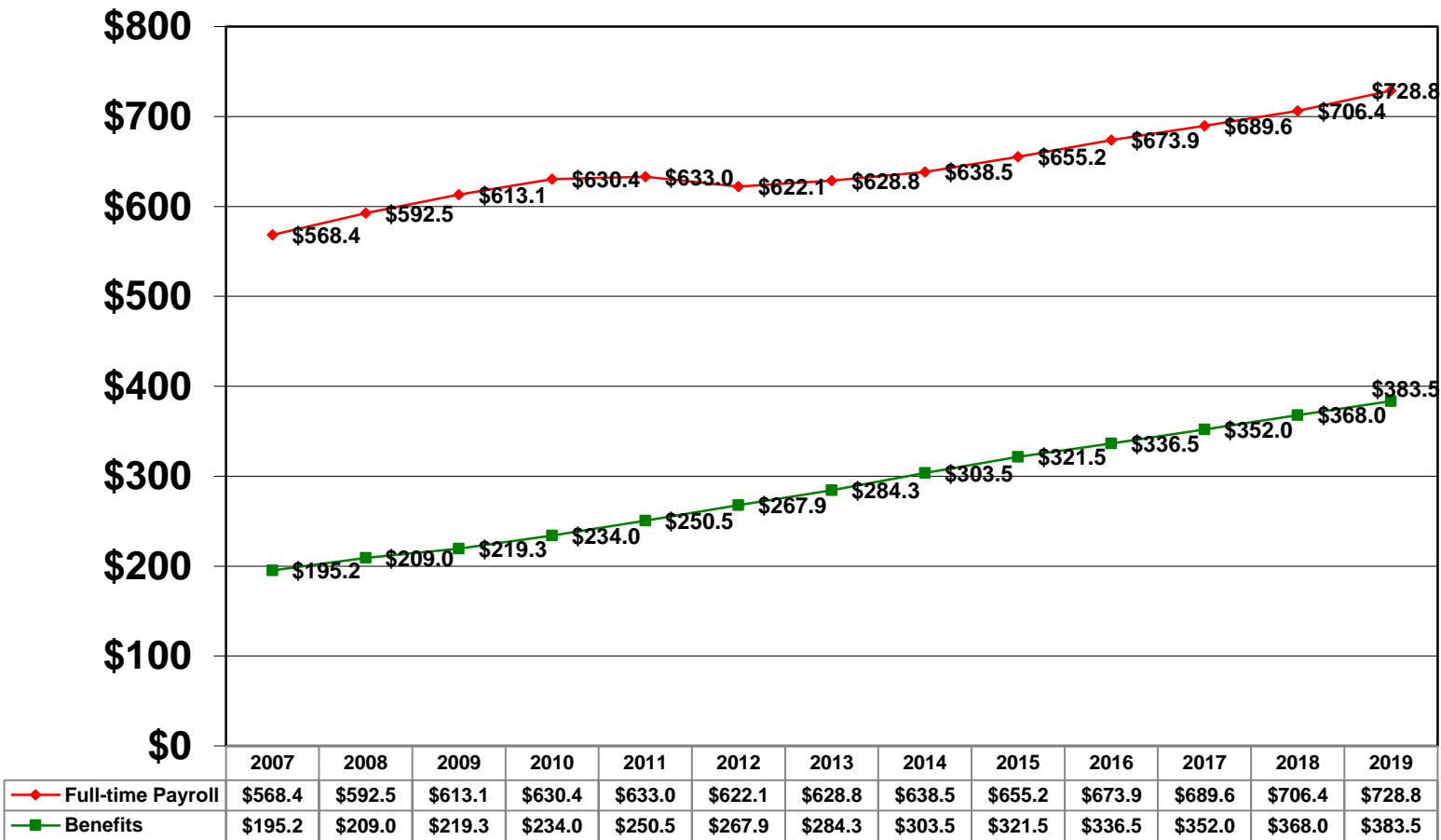


1.7% annual increase for average salary since 2007; 1.9% increase for 2019.

2.7% annual increase for average benefits since 2007; 2.1% increase for 2019.

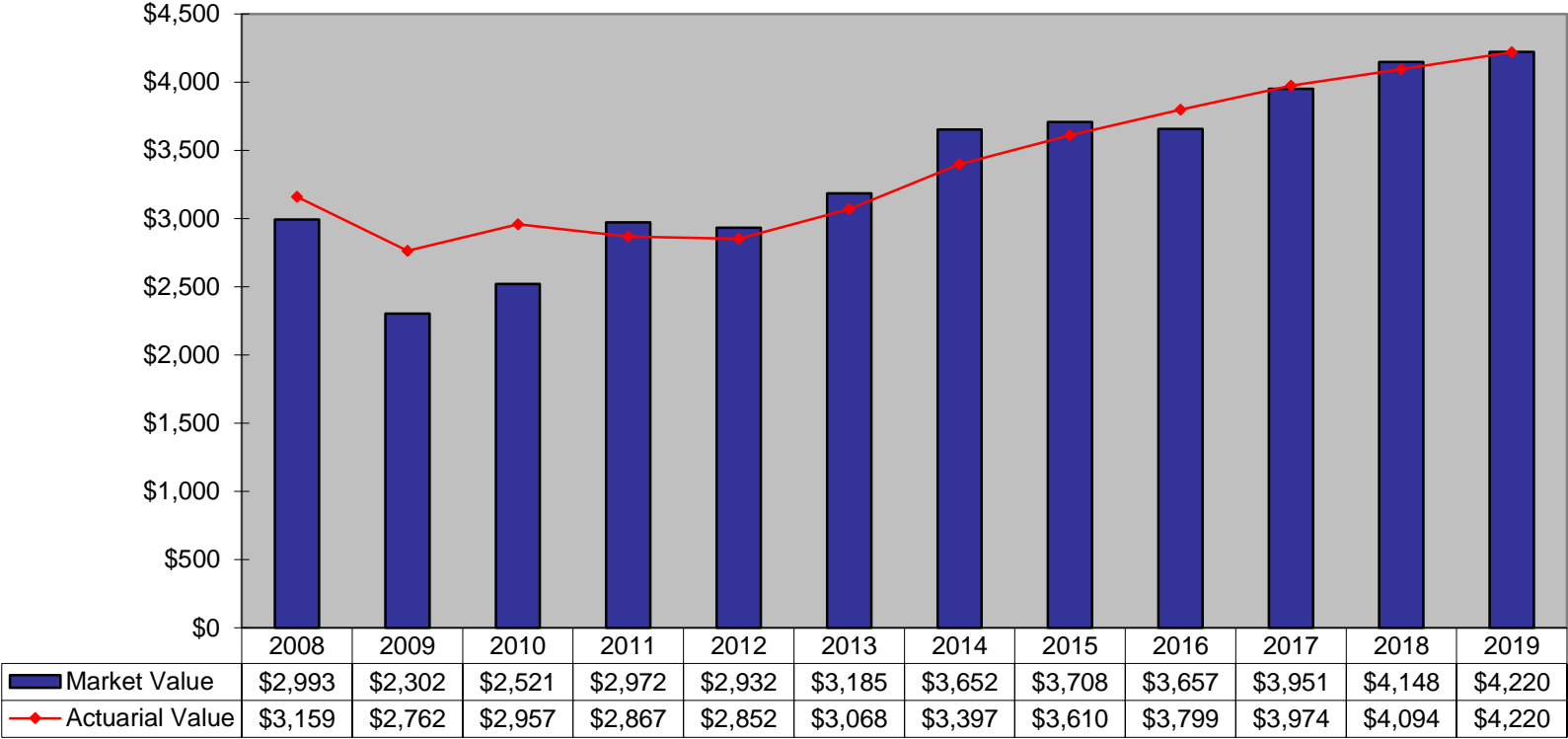


Payroll & Benefits (Millions)





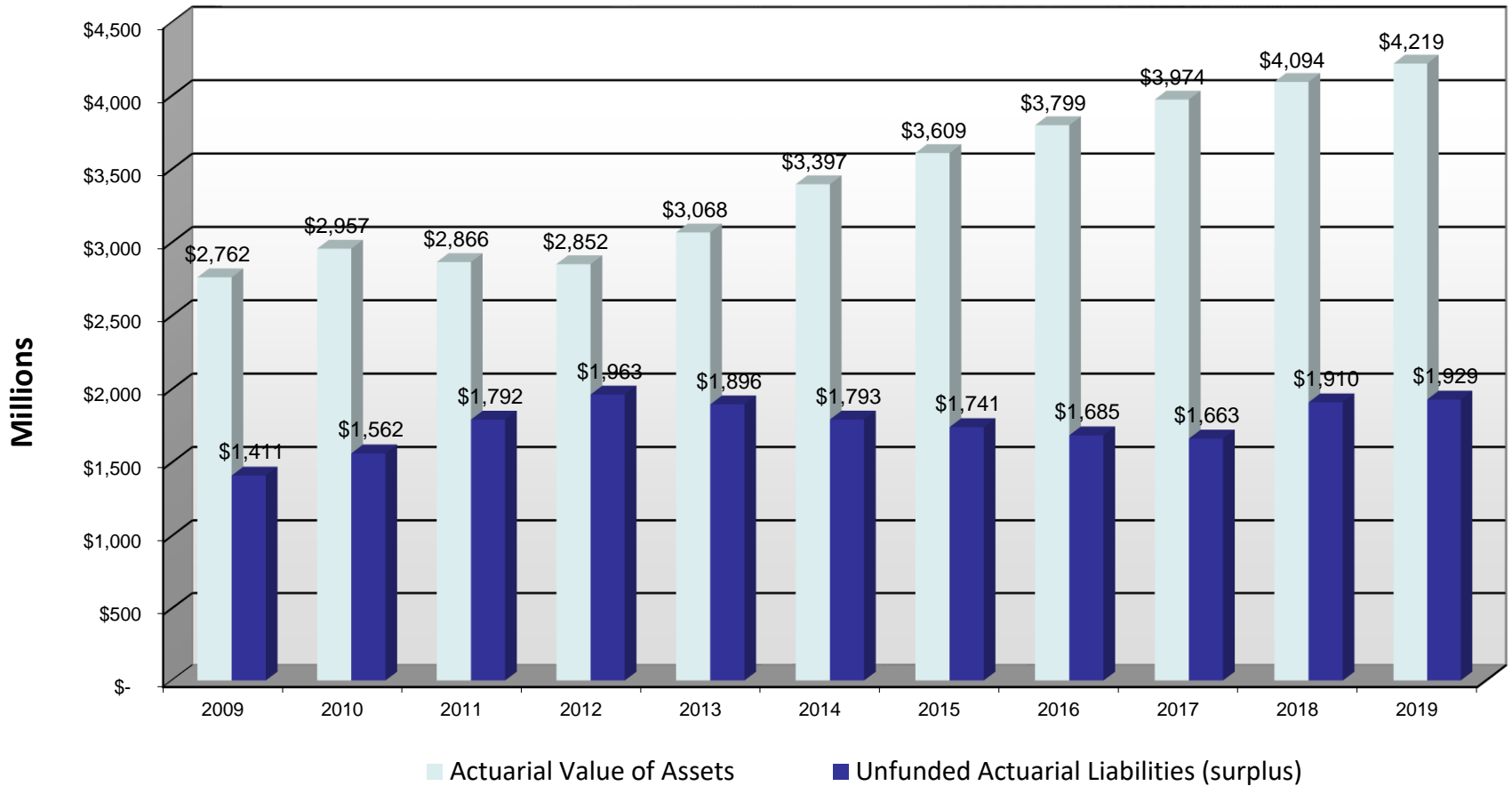
Assets (\$ Millions)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
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%
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%

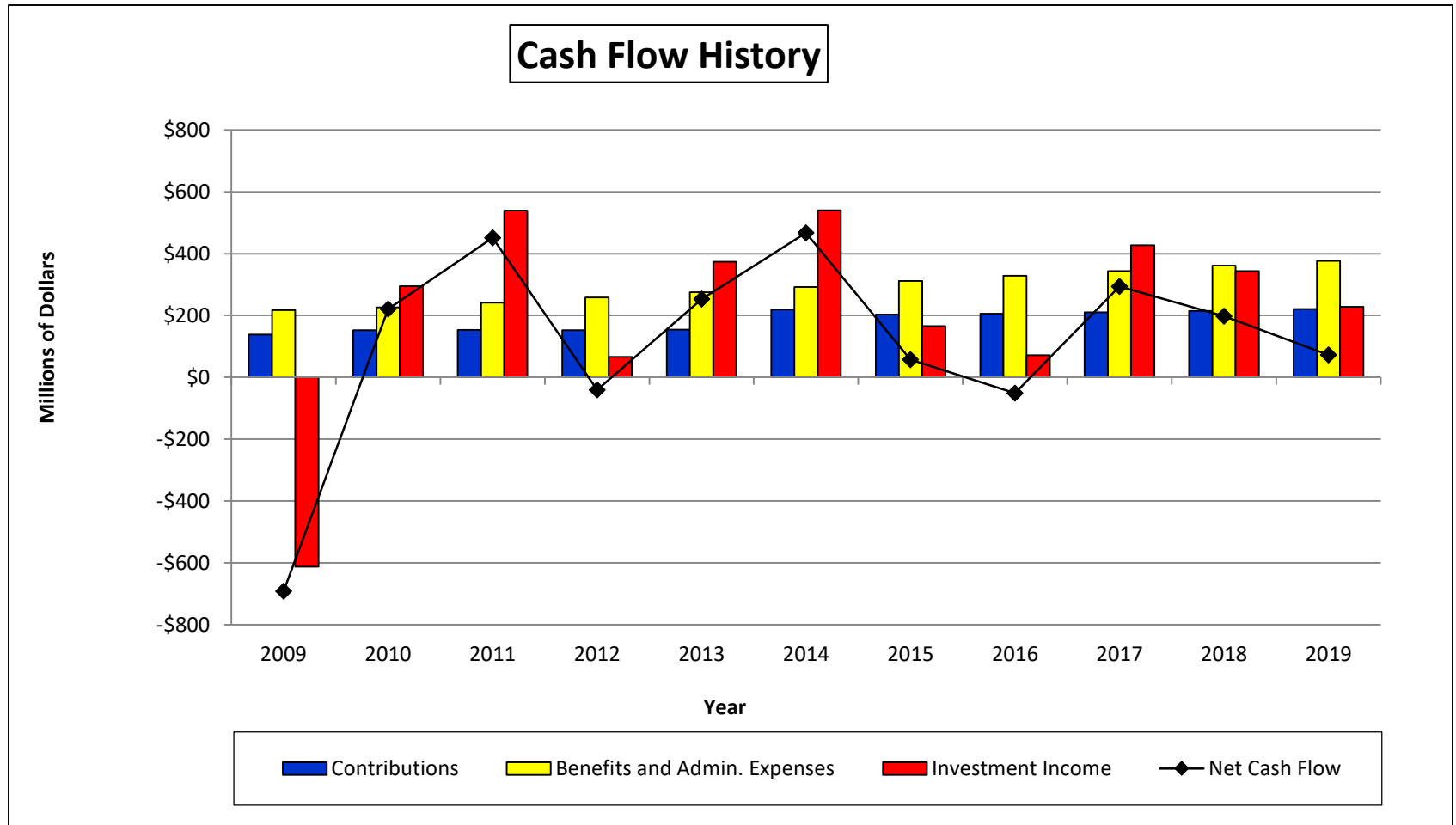


Actuarial Assets vs. UAAL





Historical Cash Flow (in Millions)





Funding Results

	July 1, 2019 Valuation	July 1, 2018 Valuation
Total Normal Cost Rate	9.78%	9.96%
Less Member Rate	<u>8.15%</u>	<u>8.15%</u>
Employer Normal Cost Rate	1.63%	1.81%
Administrative Expense Load	0.36%	0.36%
Rate to Amortize UAL	<u>9.57%</u>	<u>9.29%</u>
Total Employer Statutory Rate	11.56%	11.46%
Actuarial Accrued Liability	\$6,148.6 million	\$6,004.4 million
Actuarial Value of Assets	\$4,219.6 million	\$4,094.4 million
Unfunded Accrued Liability	\$1,929.0 million	\$1,910.0 million
Funded Ratio	68.63%	68.19%
Amortization Period*	29 Years	31 Years

* Reflects anticipated increase in employer supplemental contribution rate



Progress Toward 100% Funding

