



# Montana Teachers' Retirement System

## **Montana Teachers' Retirement System Valuation Results July 1, 2019**

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[trs.mt.gov](https://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

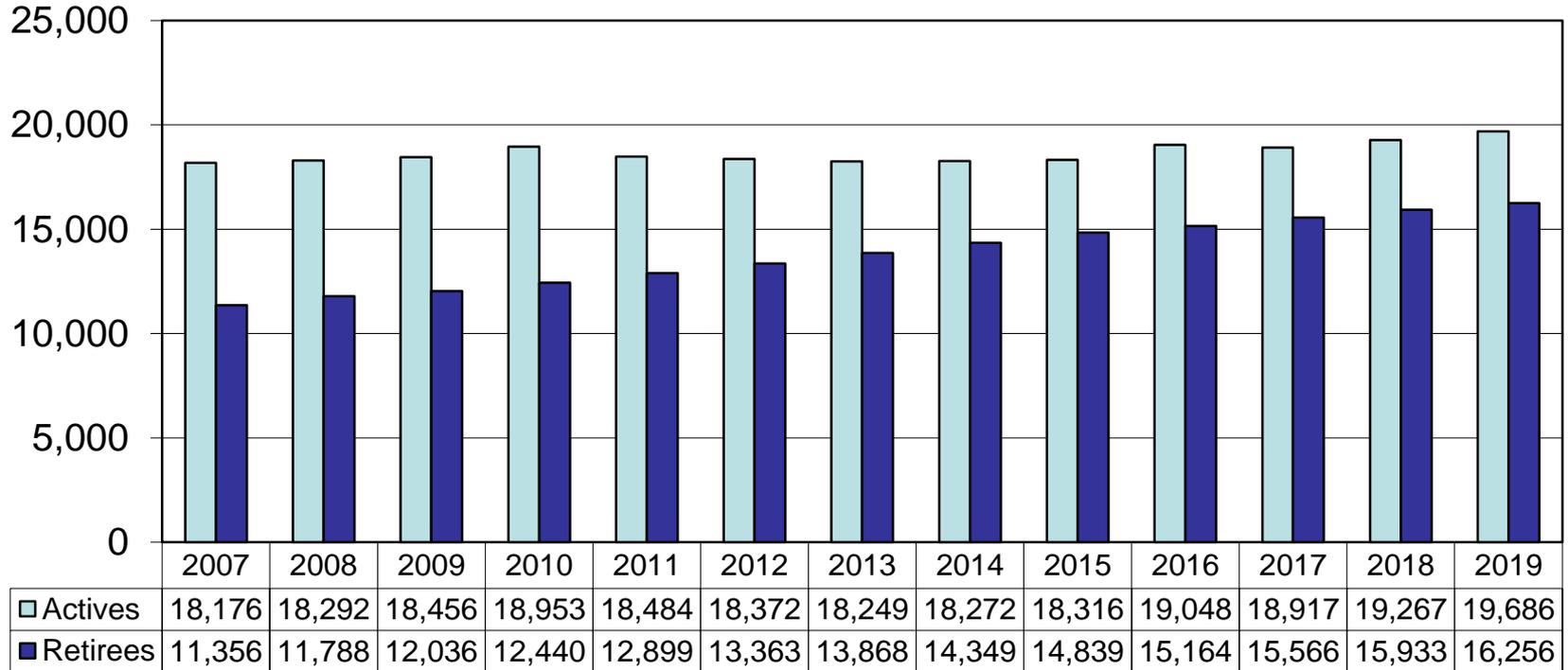


# Changes Since the Previous Valuation

- 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



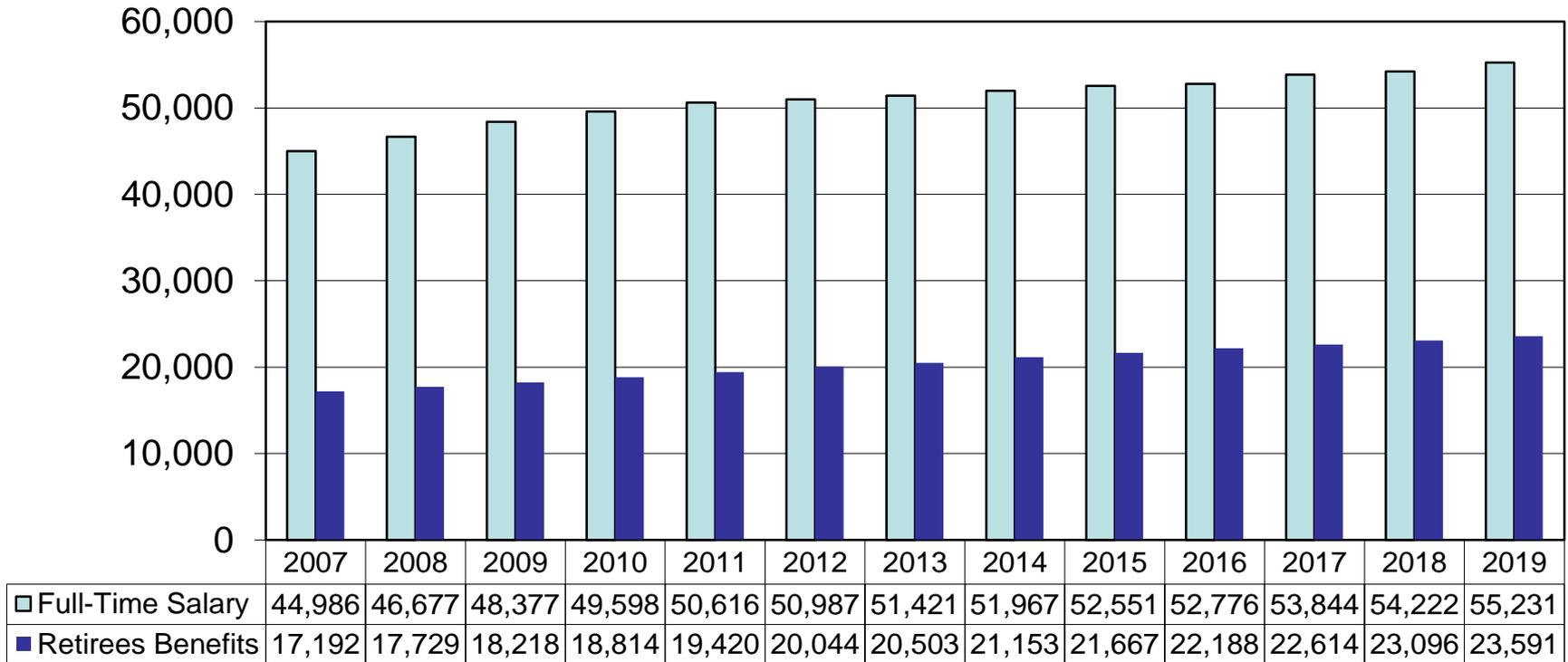
0.7% annual increase for active members since 2007; 2.2% increase for 2019.

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

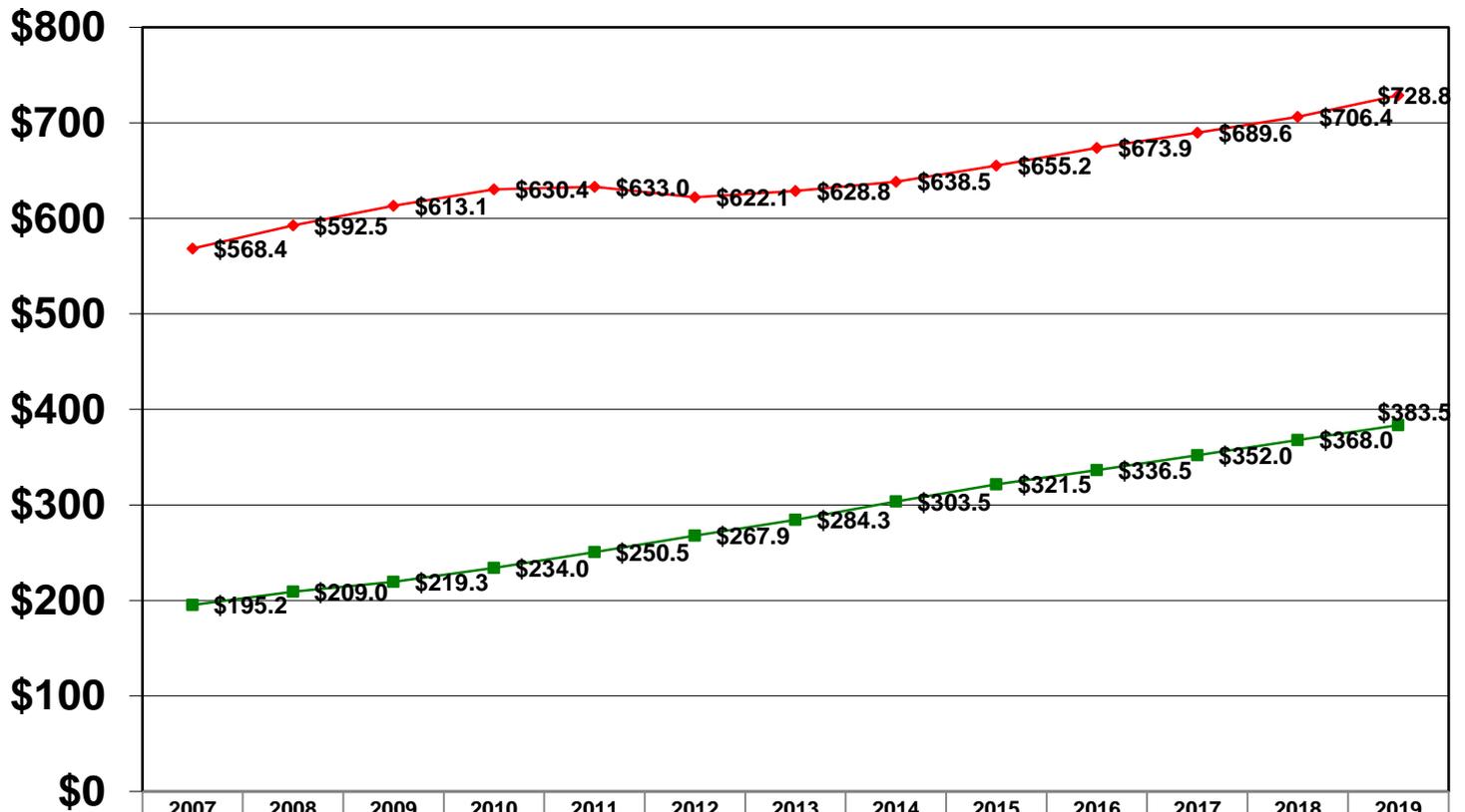


1.7% annual increase for average salary since 2007; 1.9% increase for 2019.

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



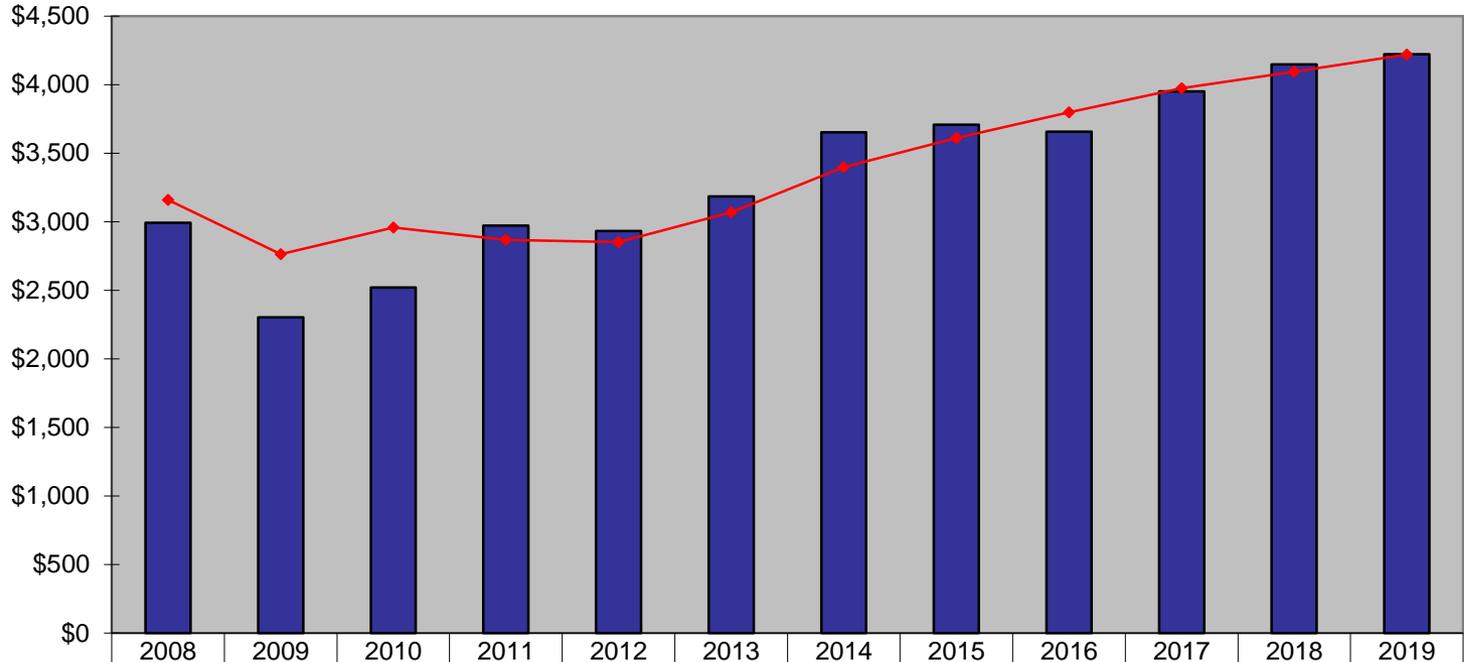
# Payroll & Benefits (Millions)



◆ Full-time Payroll	\$568.4	\$592.5	\$613.1	\$630.4	\$633.0	\$622.1	\$628.8	\$638.5	\$655.2	\$673.9	\$689.6	\$706.4	\$728.8
■ Benefits	\$195.2	\$209.0	\$219.3	\$234.0	\$250.5	\$267.9	\$284.3	\$303.5	\$321.5	\$336.5	\$352.0	\$368.0	\$383.5



# Assets (\$ Millions)

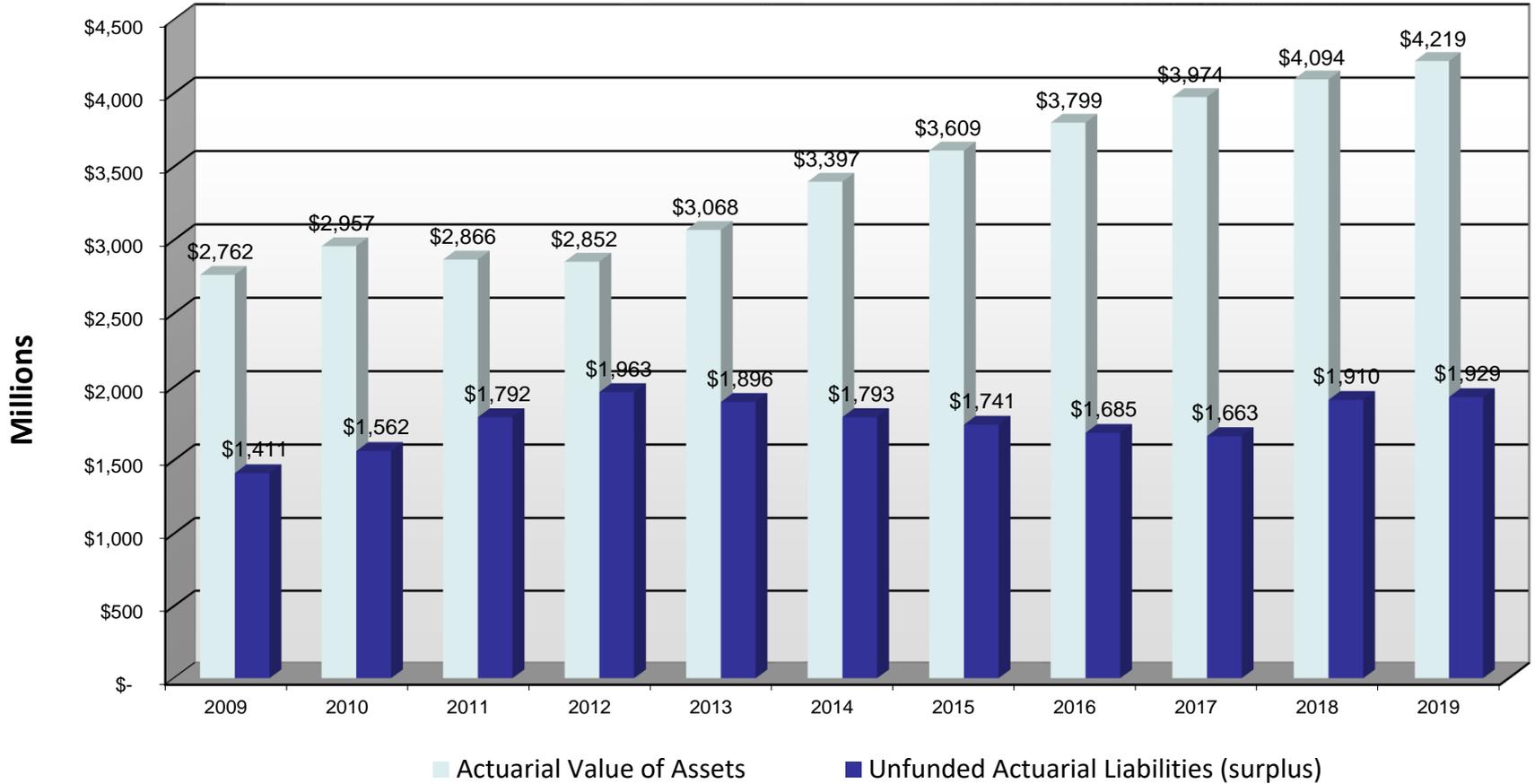


	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Market Value	\$2,993	\$2,302	\$2,521	\$2,972	\$2,932	\$3,185	\$3,652	\$3,708	\$3,657	\$3,951	\$4,148	\$4,220
Actuarial Value	\$3,159	\$2,762	\$2,957	\$2,867	\$2,852	\$3,068	\$3,397	\$3,610	\$3,799	\$3,974	\$4,094	\$4,220

	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%

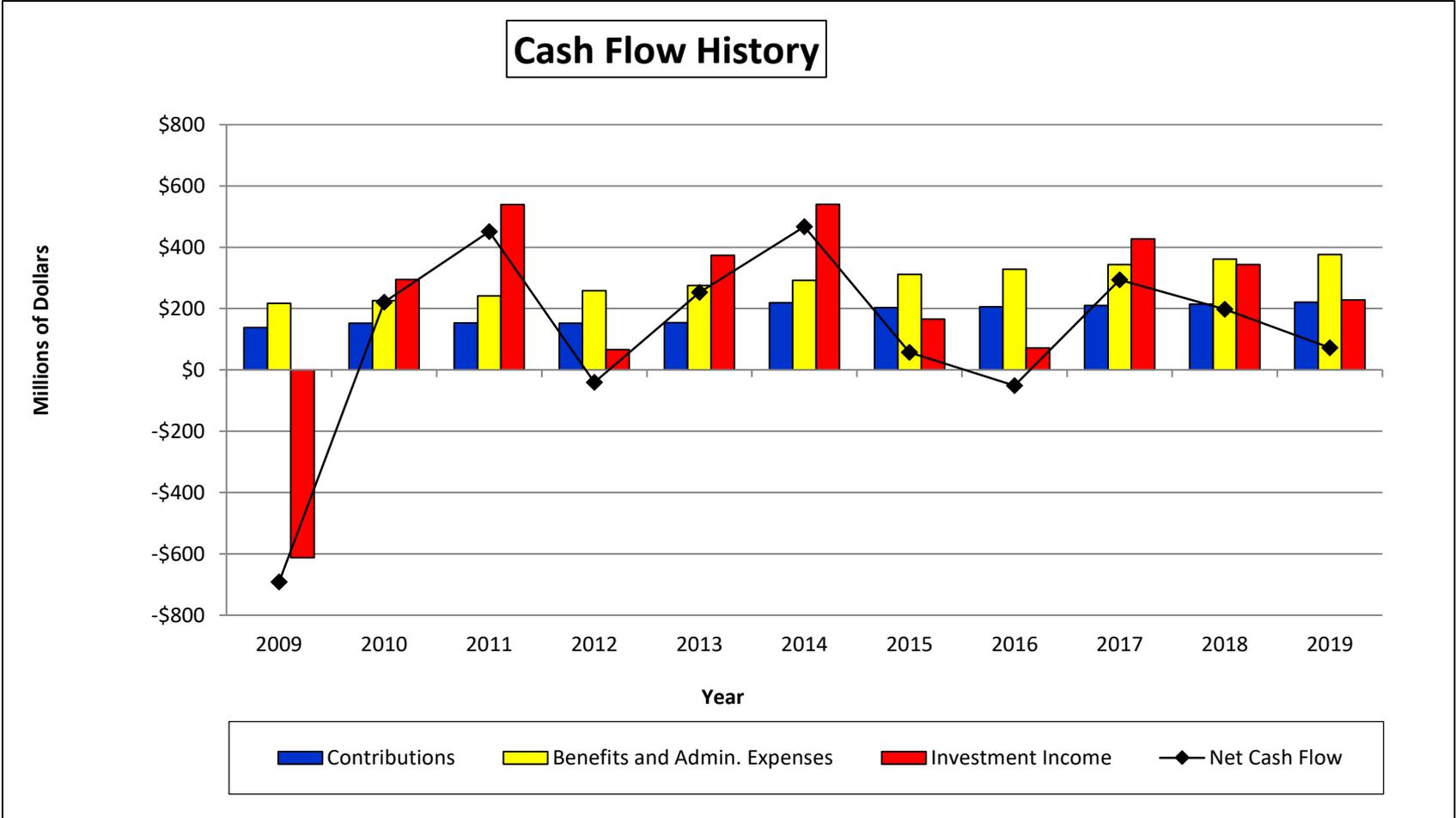


# Actuarial Assets vs. UAAL





# 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

