



TRS

Montana Teachers' Retirement System

Montana Teachers' Retirement System Valuation Results July 1, 2020

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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	19,751
– Inactive members	16,605
– Retirees and Beneficiaries	16,769
– Employers	367



Comments on Valuation



- Asset returns
 - Market asset return 2.72% vs. 7.50% expected (4.78% less than expected).
 - Actuarial asset return 7.00% vs. 7.50% expected (0.50% less than expected).
- Market value of assets are \$176,205,150 less than the actuarial value of assets. This unrecognized investment loss will be recognized over the next three years
 - 2021 Investment Loss of \$58.0 million
 - 2022 Investment Loss of \$68.8 million
 - 2023 Investment Loss of \$49.5 million



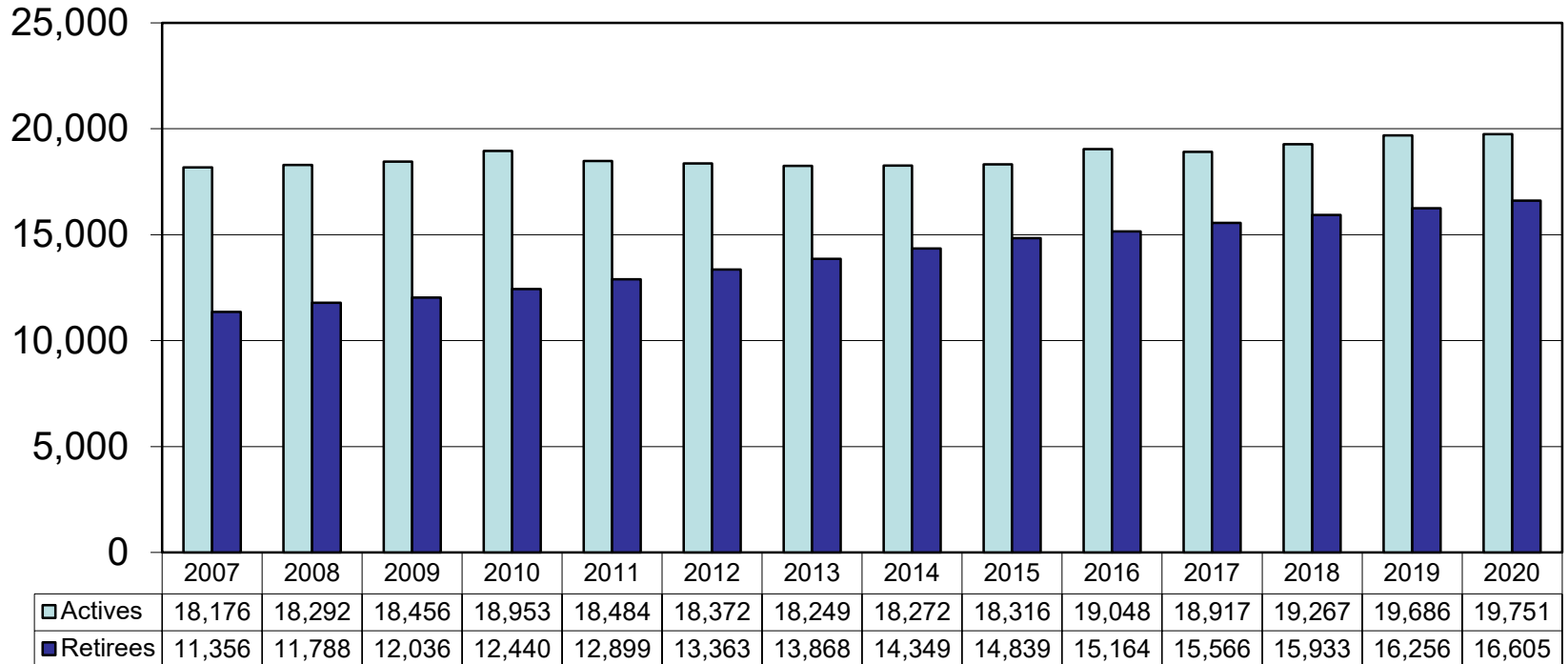
Comments on Valuation



- Funded Ratio
 - Funding increased from 68.63% to 68.84%
- Amortization Period
 - Amortization period did not change from 29 years



Active and Retired Membership



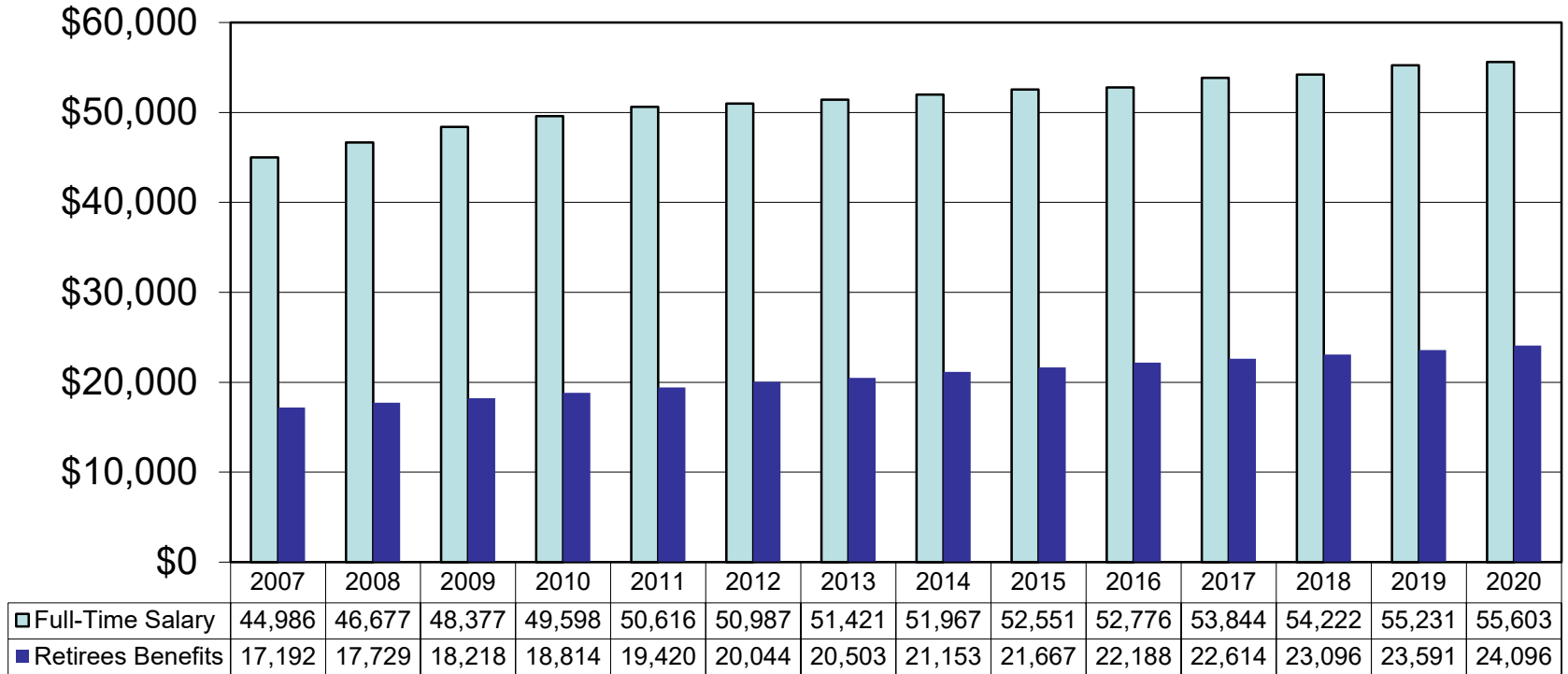
0.6% annual increase for active members since 2007; 0.3% increase for 2020.

3.0% annual increase for retired members since 2007; 2.1% increase for 2020.

0.6 retirees per active 13 years ago; 0.8 retirees per active now.



Average Salary and Benefits

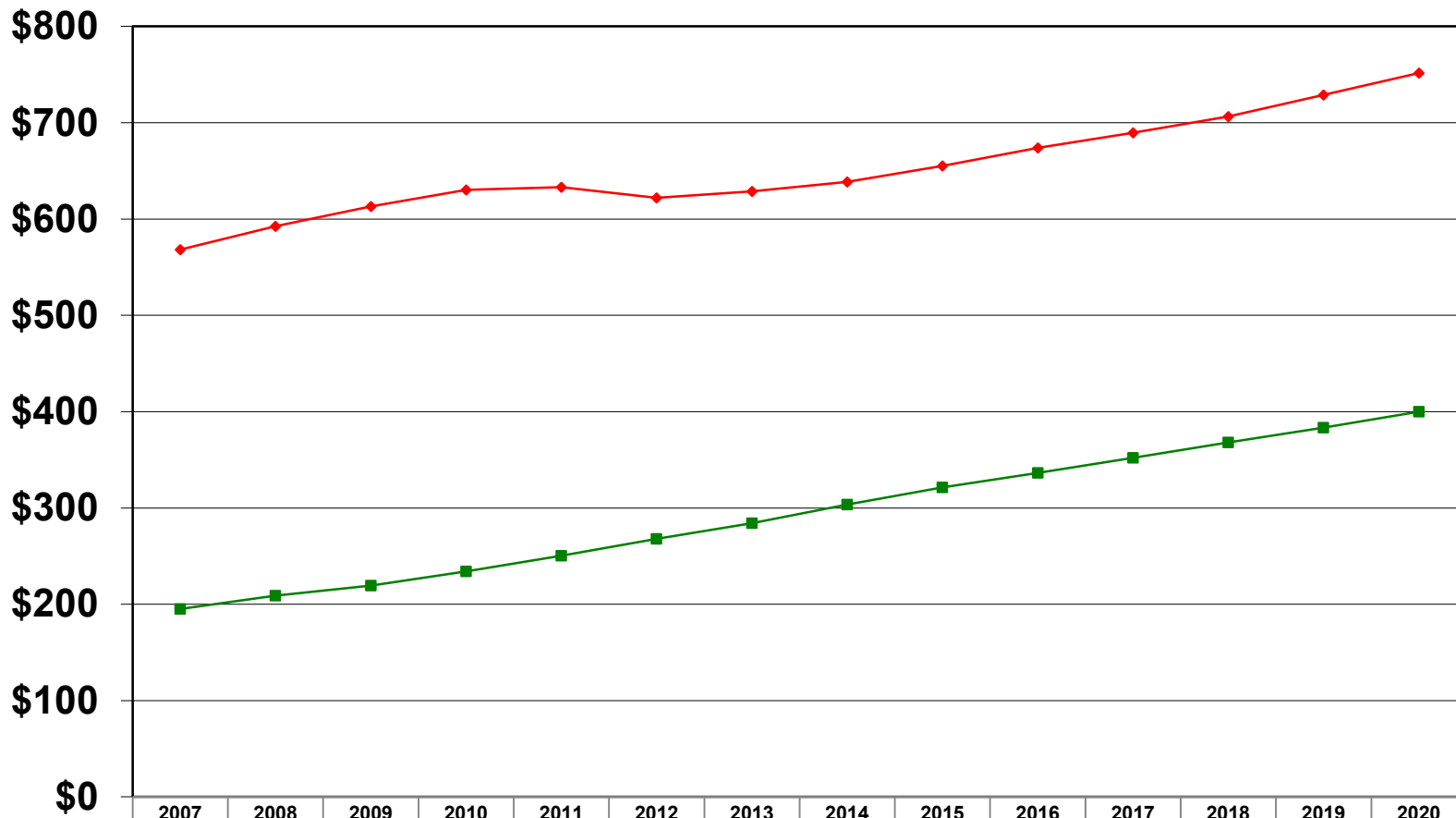


1.6% annual increase for average salary since 2007; 0.7% increase for 2020.

2.6% annual increase for average benefits since 2007; 2.1% increase for 2020.



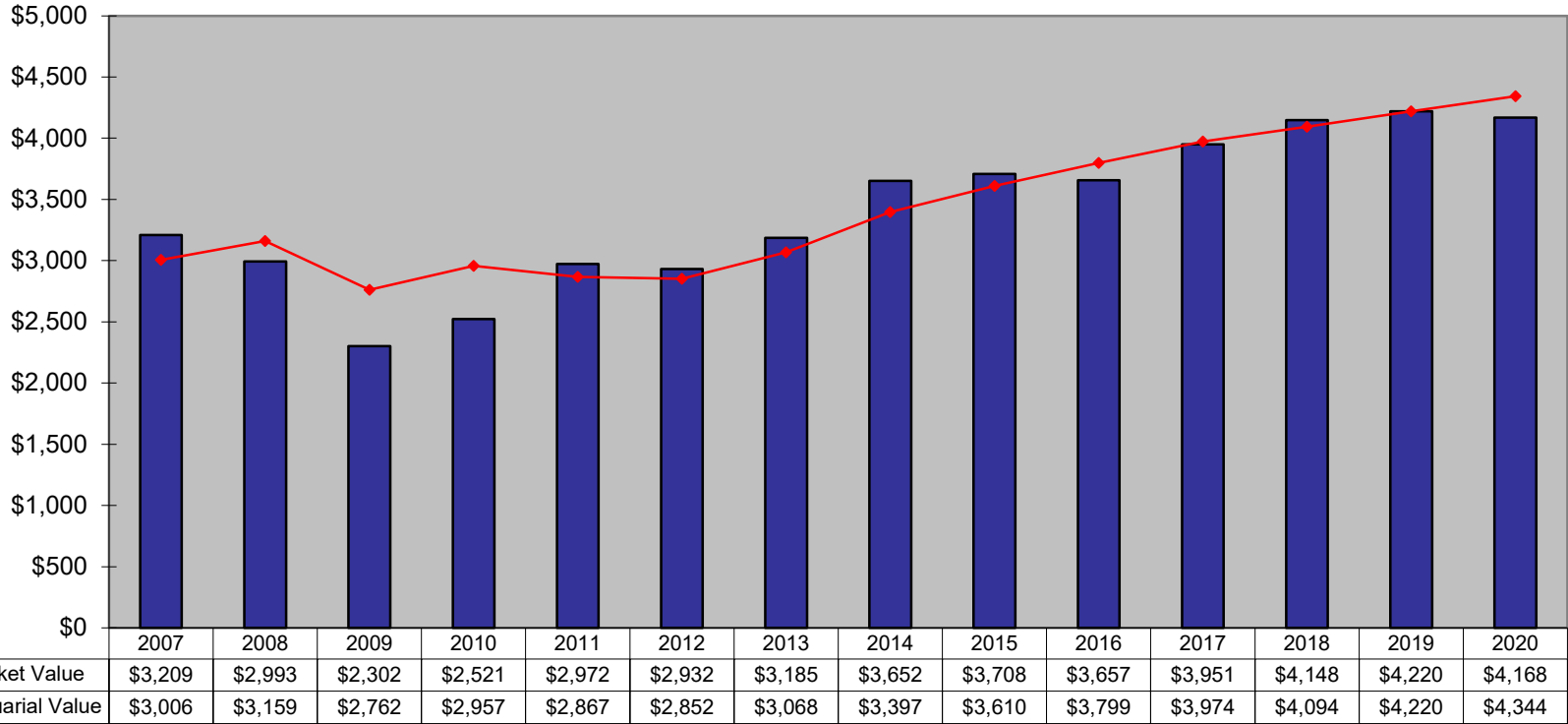
Payroll & Benefits (Millions)



◆ 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	\$751.5
■ 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	\$400.1



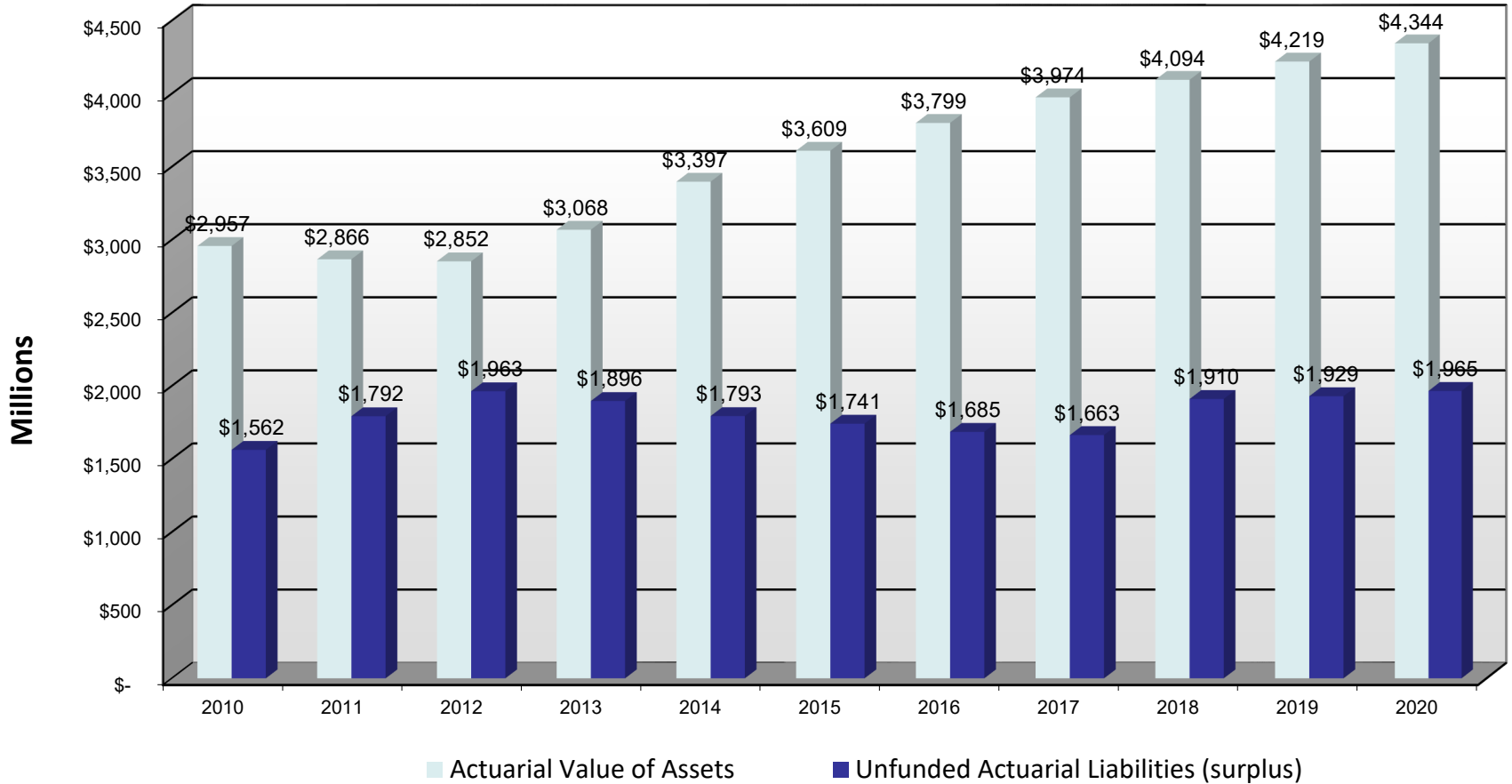
Assets (\$ Millions)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Market Return	17.6%	(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%
Actuarial Return	10.2%	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%

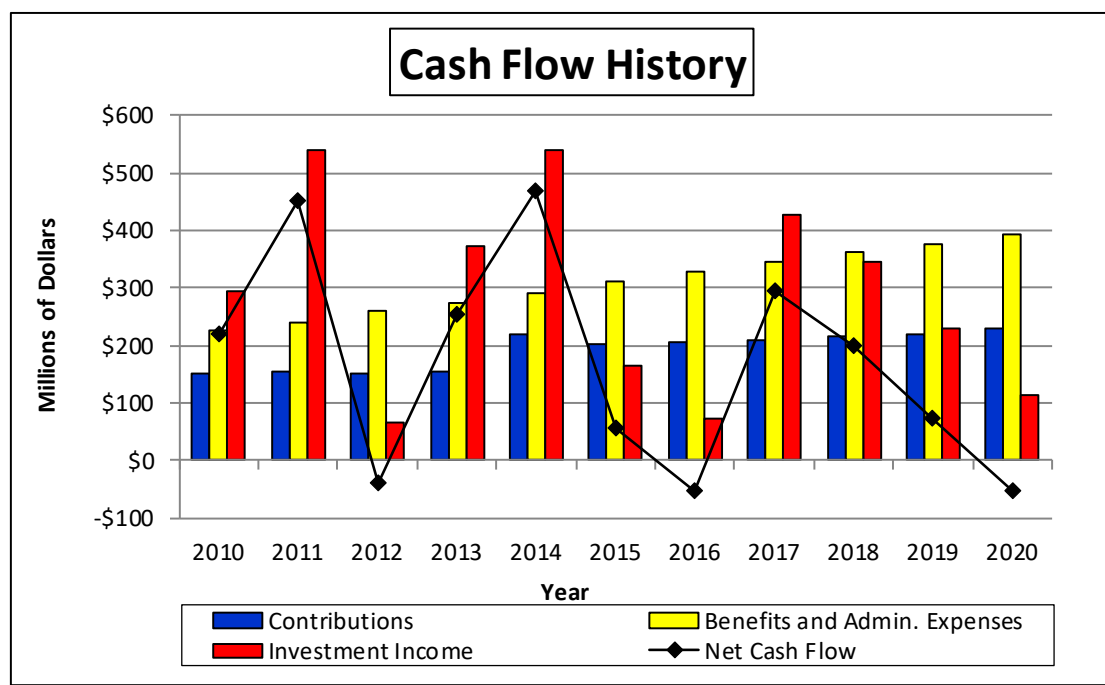


Actuarial Assets vs. UAAL





Historical Cash Flow (in Millions)





Funding Results



	July 1, 2019 Valuation	July 1, 2020 Valuation
Total Normal Cost Rate	9.78%	9.75%
Less Member Rate	<u>8.15%</u>	<u>8.15%</u>
Employer Normal Cost Rate	1.63%	1.60%
Administrative Expense Load	0.36%	0.45%
Rate to Amortize UAL	<u>9.57%</u>	<u>9.61%</u>
Total Employer Statutory Rate	11.56%	11.66%
Actuarial Accrued Liability	\$6,148.6 million	\$6,310.0 million
Actuarial Value of Assets	\$4,219.6 million	\$4,344.0 million
Unfunded Accrued Liability	\$1,929.0 million	\$1,966.0 million
Funded Ratio	68.63%	68.84%
Amortization Period*	29 Years	29 Years

* Reflects anticipated increase in employer supplemental contribution rate



Progress toward 100% Funding

