



TRS

# Montana Teachers' Retirement System

## **Montana Teachers' Retirement System Valuation Results July 1, 2021**

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



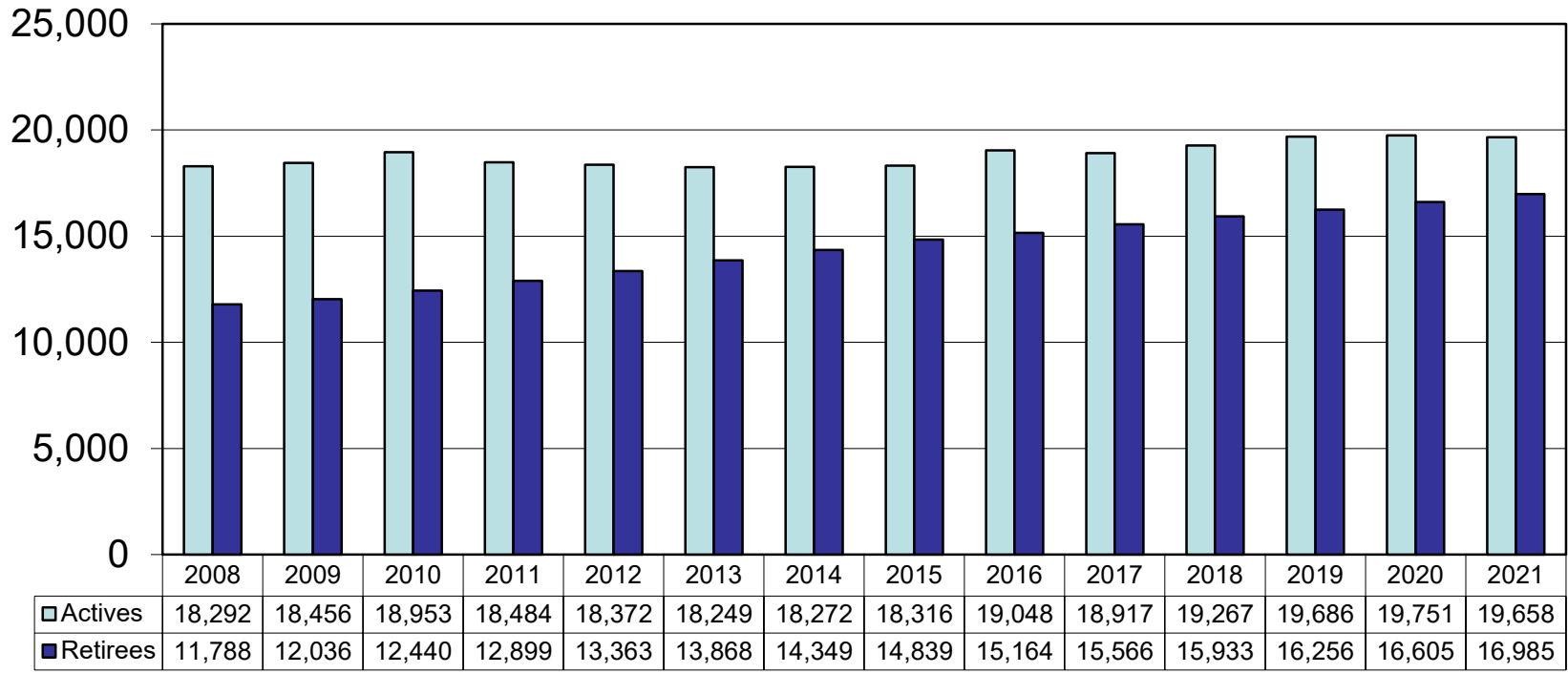
# Comments on Valuation



- 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.

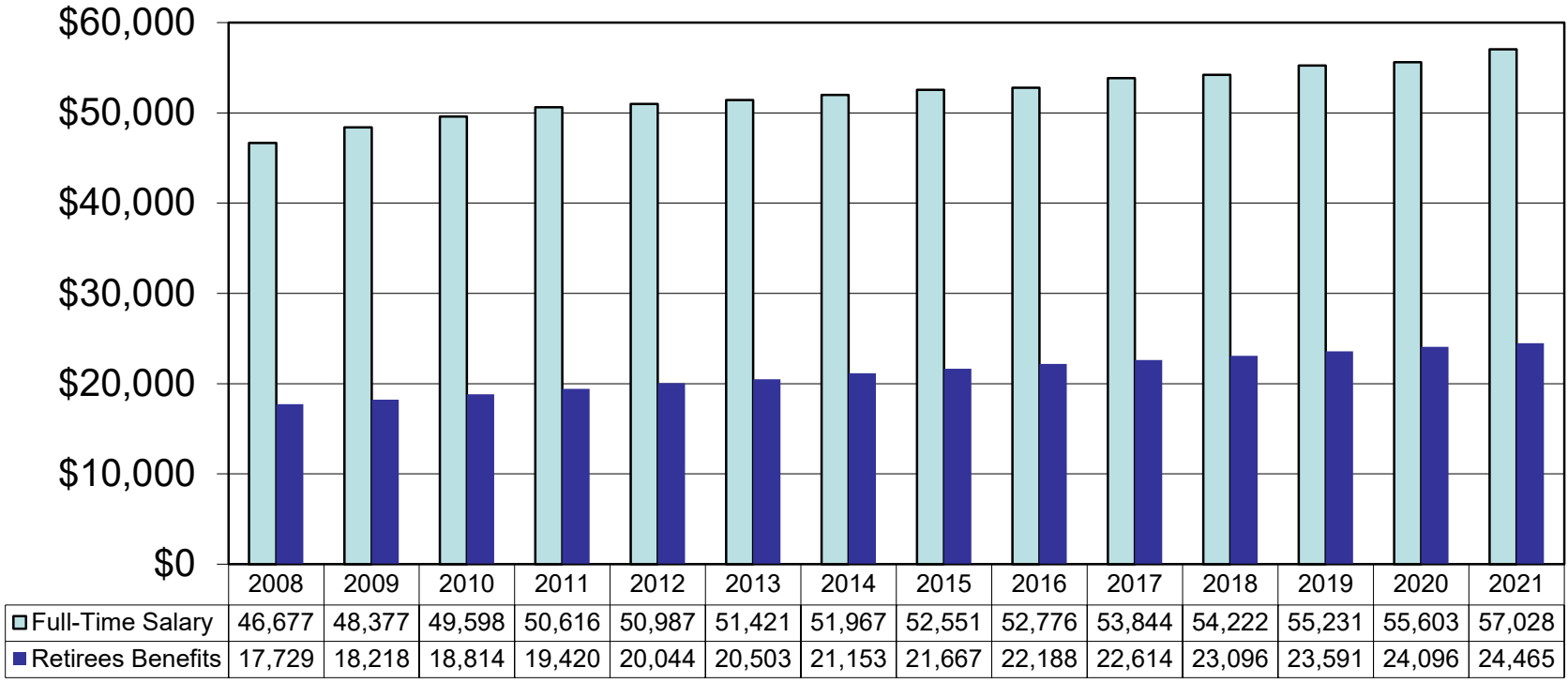
2.8% annual increase for retired members since 2008; 2.3% increase for 2021.

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





# Average Salary and Benefits

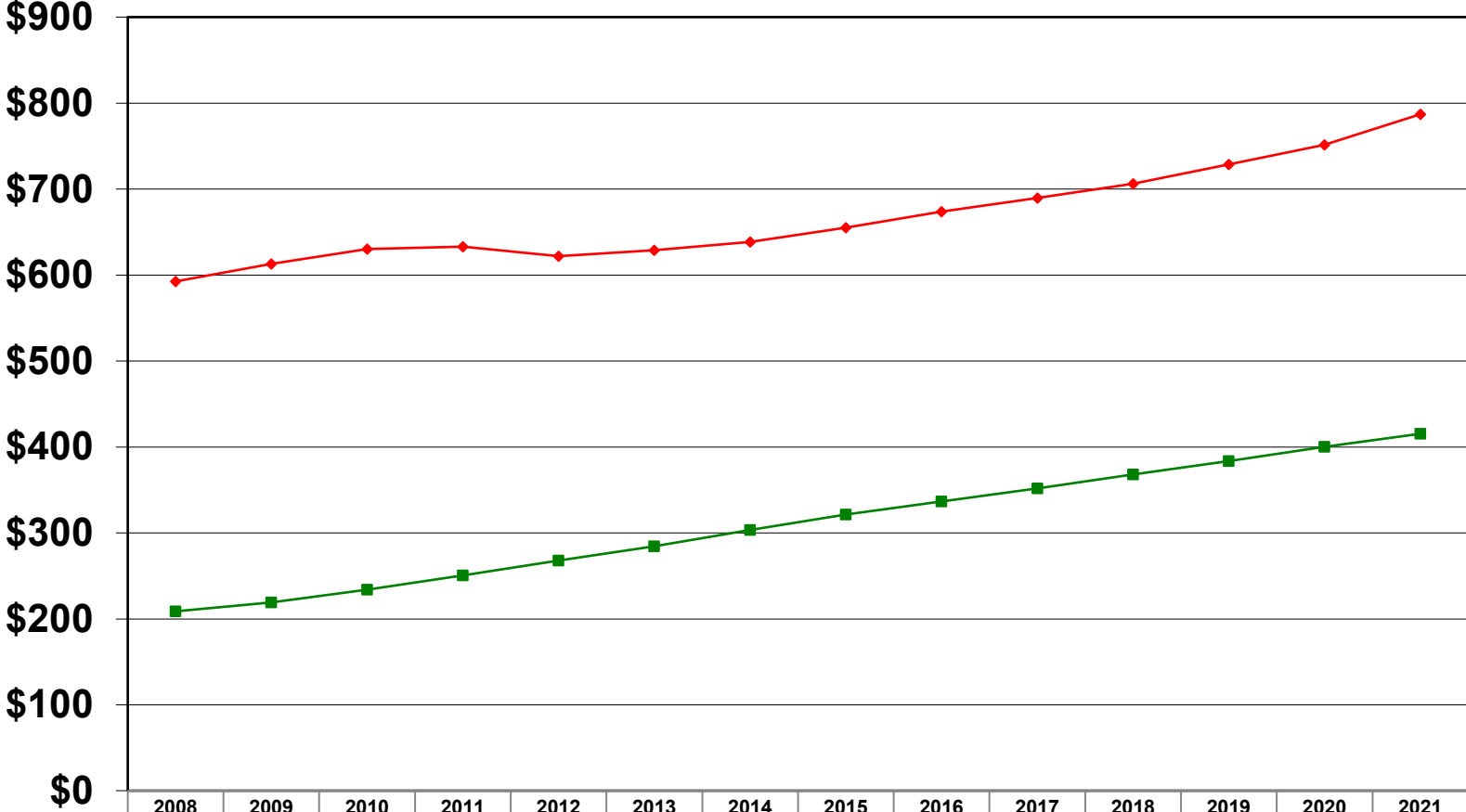


1.6% annual increase for average salary since 2008; 2.6% increase for 2021.

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



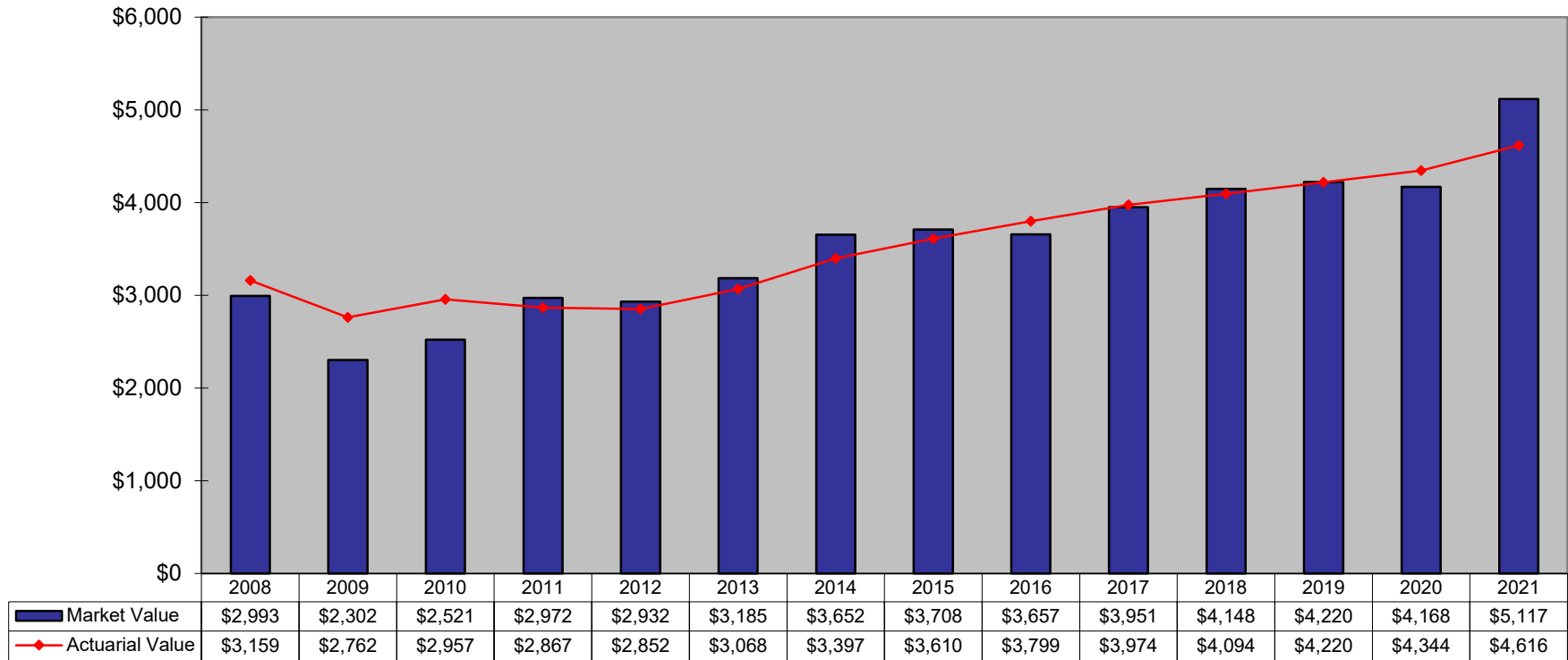
# Payroll & Benefits (Millions)



|                     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ◆ 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 |



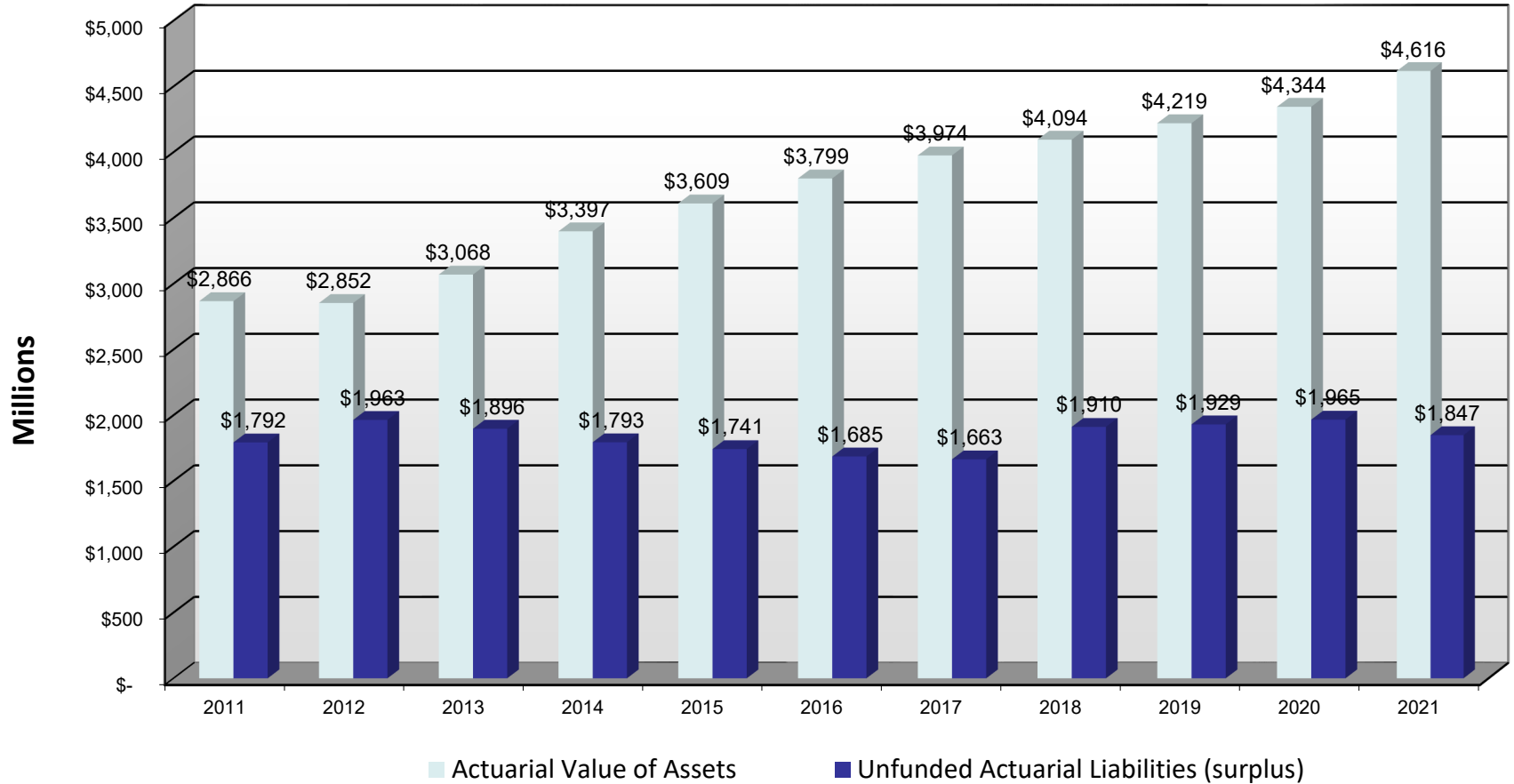
# Assets (\$ Millions)



|                  | 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% |

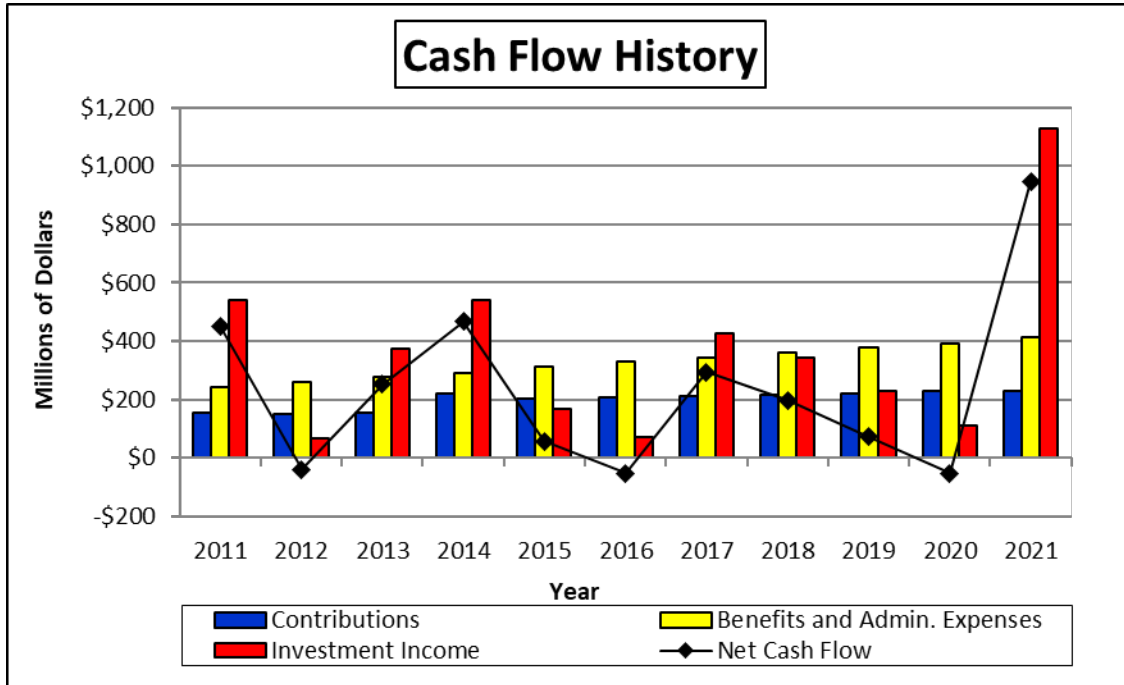


# Actuarial Assets vs. UAAL





# Historical Cash Flow (in Millions)





# Funding Results

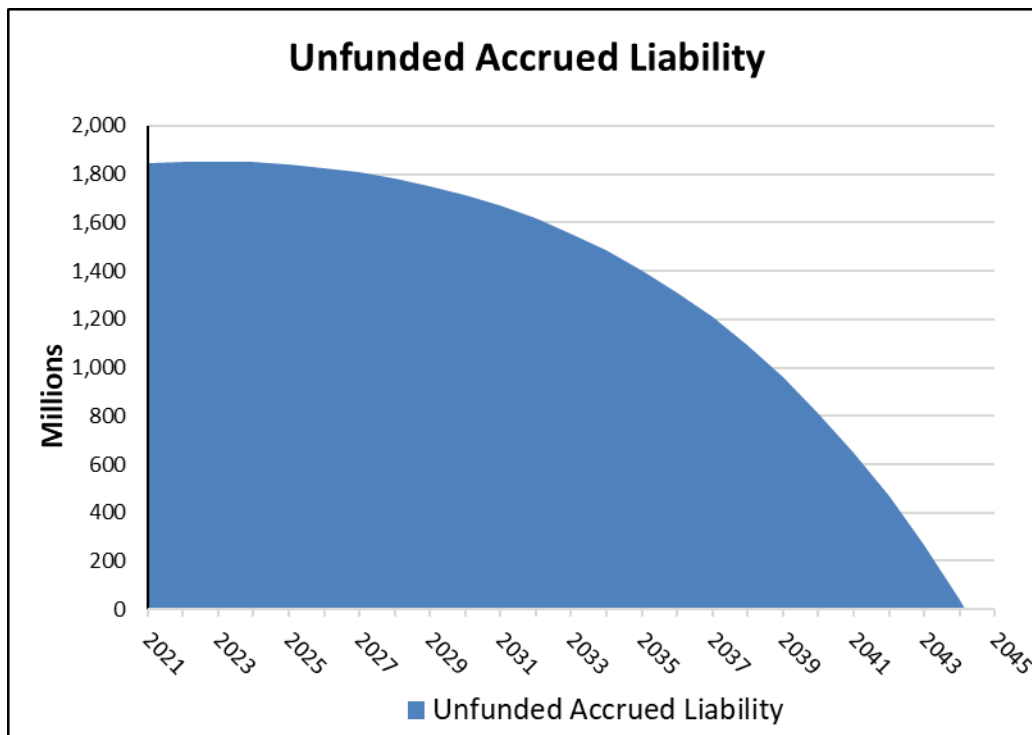


|                               | July 1, 2020 Valuation | July 1, 2021 Valuation |
|-------------------------------|------------------------|------------------------|
| Total Normal Cost Rate        | 9.75%                  | 9.67%                  |
| Less Member Rate              | <u>8.15%</u>           | <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