

Michigan State Employees'

Retiree Health Actuarial Valuation Results as of September 30, 2019

Retiree Health Benefits The Funding Issue

- Unlike pensions, health benefits have not been pre-funded for a long period of time
 - Pre-funding started in Fiscal Year 2013
 - Most plan sponsors nationwide have not pre-funded health benefits
- Costs rise as more members retire, and health inflation outpaces general inflation
- Pre-funding contribution rates have been calculated since 1999 – but pre-funding started only recently



September 30, 2019 Valuation

- Purpose of the September 30, 2019 is twofold:
 - Determines the actuarially computed employer contribution for FY 2022
 - Measures the retiree health plan's funding progress
- Reflects the investment return assumption remaining at 6.90% as the market rate of return for FY 2019 was too low to trigger the provisions of the Dedicated Gains Policy adopted by the Board of Trustees



FY 2019 – Expenditures vs. Contributions

- FY 2019 expenditures for employer paid retiree health care benefits:
 - \$428.0 million
 - Excludes retiree paid premiums
 - Excludes \$65.6 million in other governmental contributions
- FY 2019 contributions for retiree health care benefits:
 - \$765.2 million in employer contributions
 - Excludes \$65.6 million in other governmental contributions
 - Excludes retiree contributions

Amounts reported above are from the 2019 SERS financial statements.



Actuarially Computed Employer Contribution FY 2022 (\$ in Millions)

 Actuarially computed employer contribution for FYE September 30, 2022:

| | FY 2022 |
|-----------------------------------|-------------|
| Employer Normal Cost | \$ 94.3 |
| Amortization of UAAL ¹ | 508.1 |
| Actuarially Computed | |
| Employer Contribution | \$ 602.4 |

 Once fully funded, the annual employer contribution requirement decreases to the normal cost



¹Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 15 years from October 1, 2021.

Actuarial Gain/(Loss)

| | Gain/(Loss) | |
|---|-------------|---------------|
| 1. Premiums. Gains and losses resulting from actual premiums in valuation year versus that assumed from prior valuation. | \$ | 2,079,486,962 |
| Investment Income. If there is greater investment income than assumed, there is a gain. If less income, a loss. | | (8,552,671) |
| 3. Demographic and Other. Gains and losses resulting from demographic experience, data adjustments, timing of financial transactions, etc. | | 261,648,762 |
| financial transactions, etc. | | 201,040,702 |
| 4. Composite Gain/(Loss) During Year. | \$ | 2,332,583,053 |



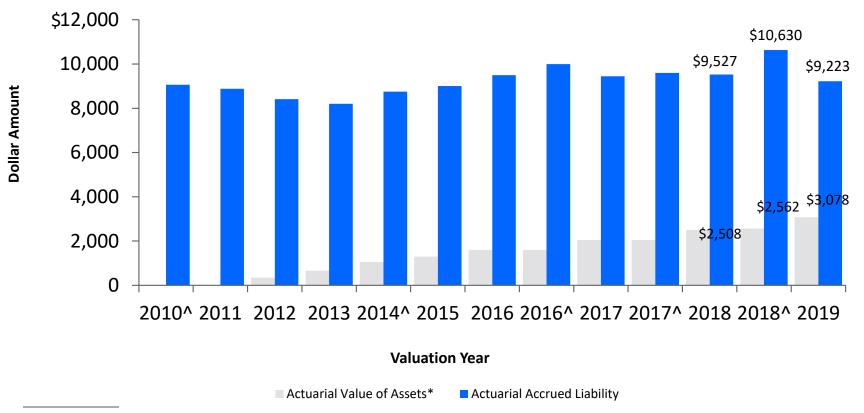
Circumstances That Would Increase Projected Costs

- Medicare funding reductions or cost shifting
- Unexpected new benefit recipients (from health benefit cutbacks of other employers)
- Medical inflation worse than assumed; the actual future contributions will depend on future per capita health cost increases (health inflation)*
- Lower than expected investment returns; bigger impact as plan assets grow
- This is not a complete list

^{*} Per capita costs are projected to increase 7.50% the first year, graded down to 3.50% in the fifteenth year.



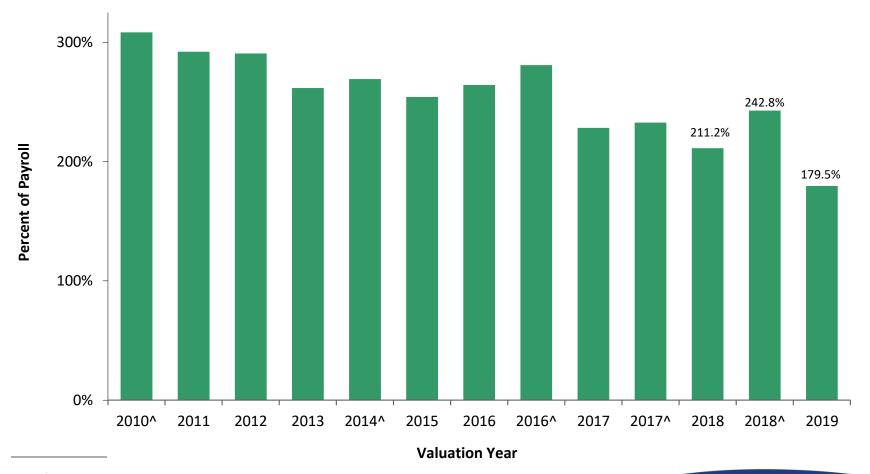
Retiree Health Assets & Accrued Liabilities Full Actuarial Funding (\$ Amounts in Millions)



[^] Reflects assumption changes.

^{*} The actuarial value of assets was set equal to the market value of assets prior to 2018.

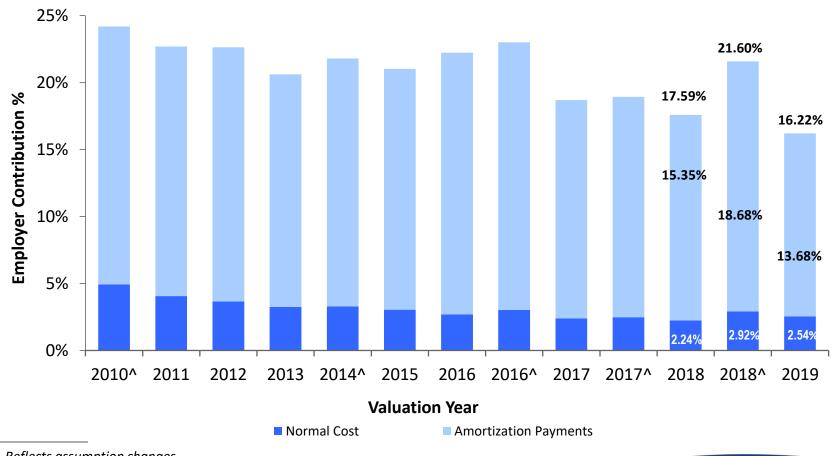
Unfunded Accrued Liabilities as %'s of Payroll – Full Actuarial Funding



[^] Reflects assumption changes.



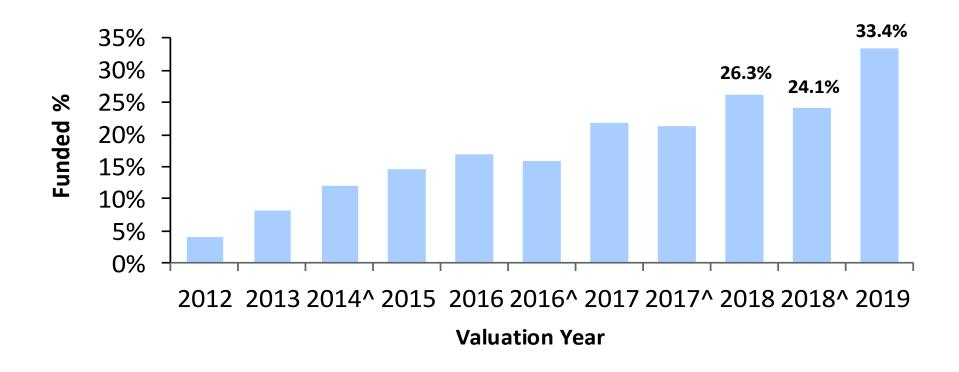
Computed Employer Contributions Expressed as Percents of Payroll (Full Actuarial Funding)



[^] Reflects assumption changes.



Funding Percent





[^] Reflects assumption changes.

Disclaimers

- This presentation is intended to be used in conjunction with the September 30, 2019 retiree health actuarial valuation report. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- The actuaries submitting this presentation (Mita D. Drazilov and Louise M. Gates) are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

