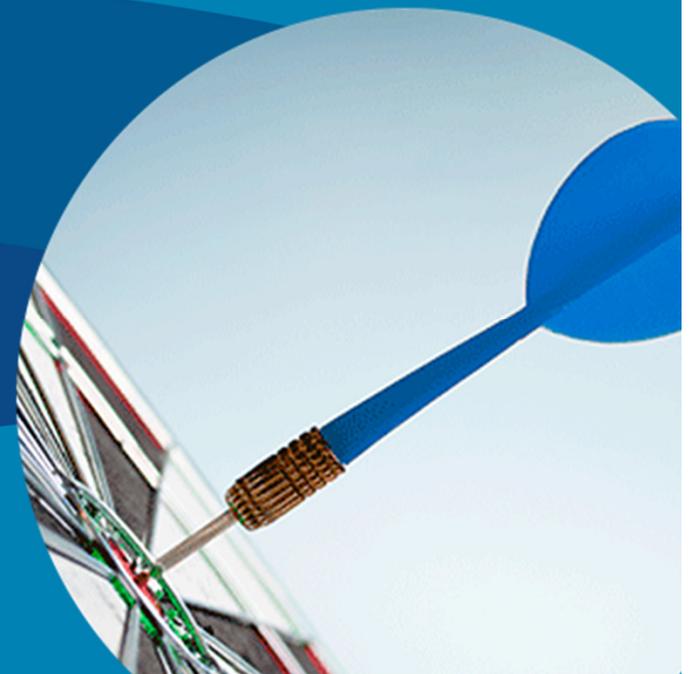




Michigan Public School Employees

Retiree Health Actuarial Valuation
Results as of September 30, 2017



Retiree Health Benefits

The Funding Issue

- Unlike pensions, health benefits have not been pre-funded for a long period of time
 - Most plan sponsors nationwide have not pre-funded health benefits either
 - Currently very little investment income to help pay benefits
- Costs rise as more members retire, and health inflation outpaces general inflation
- Pre-funding contributions have been calculated since 1999 – but pre-funding started only recently

Full Funding Employer Contribution

- Reported that full funding for MPSEERS began in fiscal year (FY) 2013
- September 30, 2017 valuation establishes the required employer contribution for FY 2020
- Reflects 3% of payroll active member contributions required to participate in the defined benefit retiree health program
- Reflects plan changes resulting from Public Act 300 of 2012
- Reflects investment return assumption that was lowered from 7.50% to 7.15% in accordance with the recently adopted Dedicated Gains Policy

Governmental Accounting Standards Board

- Beginning with the 2007 CAFR, GASB Statements No. 43 and No. 45 specified how retiree health benefit liabilities and expenses were reported in financial statements
 - One annual valuation report for accounting and funding purposes
- GASB Statement No. 74 became effective for the plan for the fiscal year ending September 30, 2017
 - Results are based upon:
 - the September 30, 2016 actuarial valuation results “rolled-forward” to the September 30, 2017 measurement date
 - the investment return assumption prior to the change resulting from the Dedicated Gains Policy (i.e., 7.50%)
 - A separate report was issued December 21, 2017 containing the September 30, 2017 annual valuation for accounting purposes

Retiree Health Valuation Results

Full Actuarial Funding

- FY 2017 expenditures for employer paid retiree health care benefits (i.e., excludes retiree paid premiums):
 - \$ 702.2 million
 - Also, \$553.8 million in refunds of employee contributions collected prior to PA 300 paid out in FY 2018 but reflected in the FY 2017 financials
- FY 2017 contributions for retiree health care benefits:
 - \$ 794.7 million – Employer contributions (includes other governmental contributions)
 - \$ 214.2 million – Employee contributions

Above reported amounts from the MPSERS 2017 Comprehensive Annual Financial Report.

Actuarially Computed Employer Contribution FY 2020 (\$ in Millions)

- Actuarially computed employer contribution for FYE September 30, 2020:

	<u>FY 2020</u>
Employer Normal Cost	\$ 34.2
Amortization of UAAL ¹	<u>604.2</u>
Actuarially Computed Employer Contribution	\$ 638.4

¹ *Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 19 years from October 1, 2019.*

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

Actuarial Gain/(Loss) (\$ in Millions)

	<u>Gain/(Loss)</u>
1. Premiums. Gains and losses resulting from actual premiums in valuation year versus that assumed from prior valuation.	\$ 1,434.4
2. Investment Income. If there is greater investment income than assumed, there is a gain. If less income, a loss.	259.5
3. Demographic and Other. Gains and losses resulting from demographic experience, data adjustments, timing of financial transactions, etc.	<u>67.1</u>
4. Composite Gain/(Loss) During Year.	\$ 1,761.0

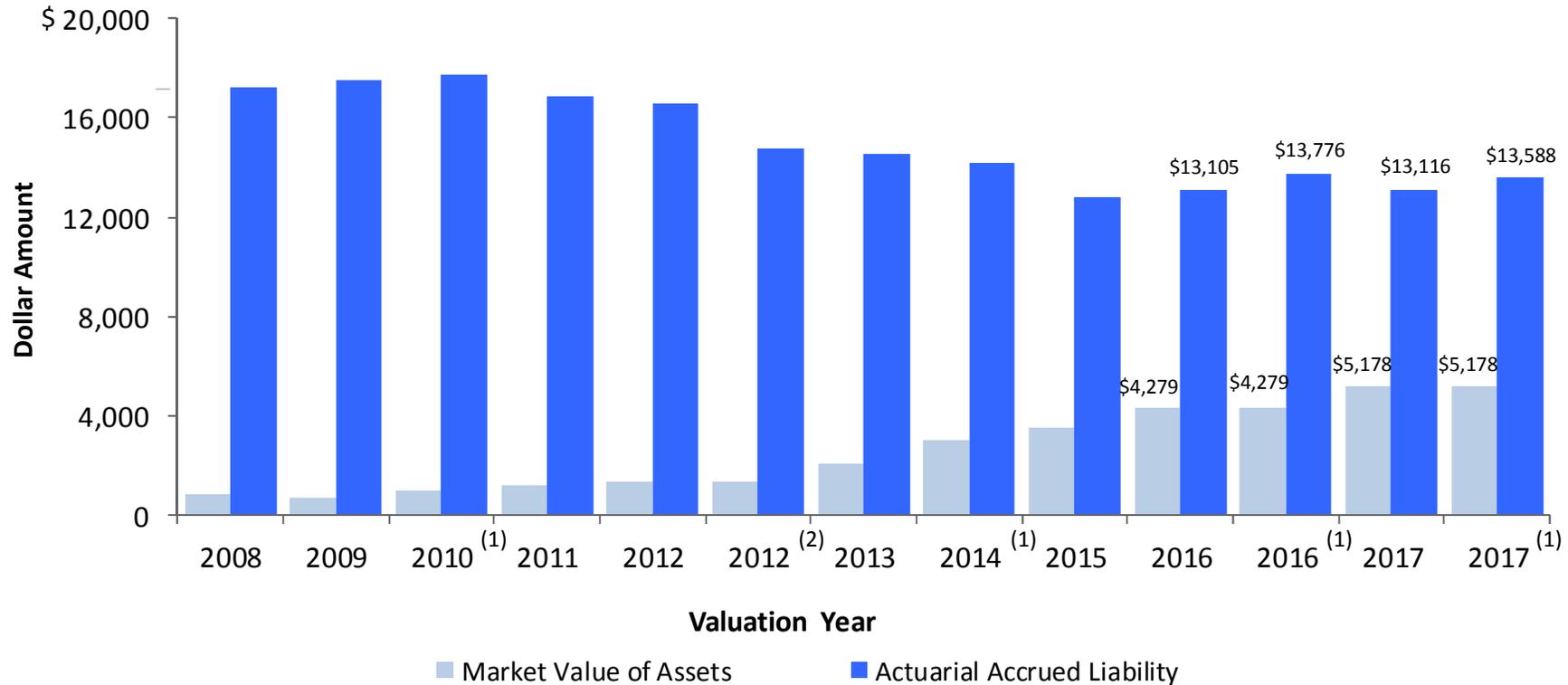
Circumstances That Would Increase Projected Costs

- 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)*
- Active member population decline (contribution rates as a percentage of payroll would increase)
- Lower than expected investment returns; bigger impact as plan assets grow
- This is not a complete list

* *Per capita costs are projected to increase 7.5% the first year, graded down to 3.5% in the twelfth and later years.*

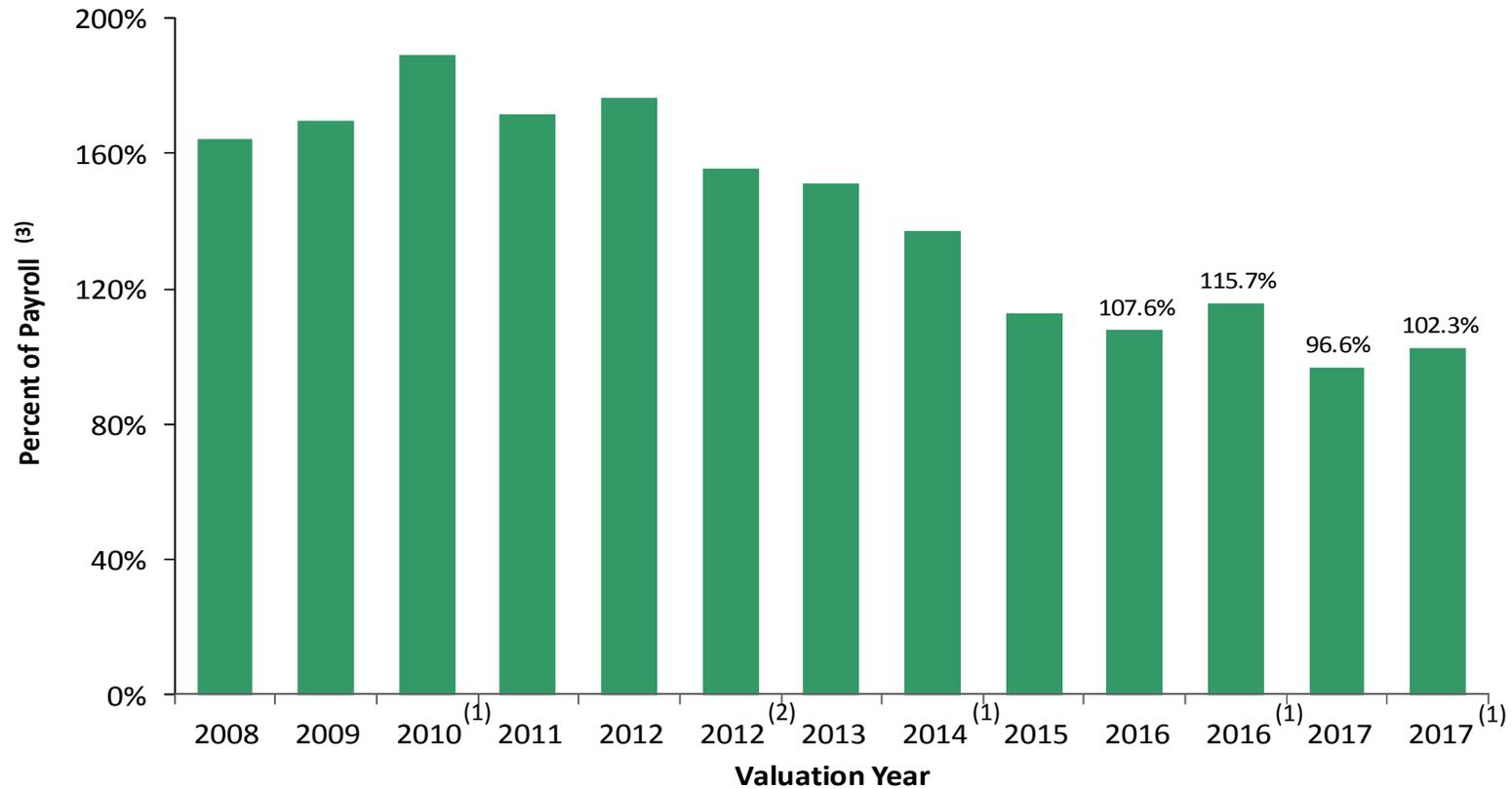
Health Assets & Accrued Liabilities

Full Actuarial Funding (\$ in Millions)



(1) Reflects assumption changes (not including trend assumption)
 (2) Reflects plan changes resulting from Public Act 300 of 2012

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

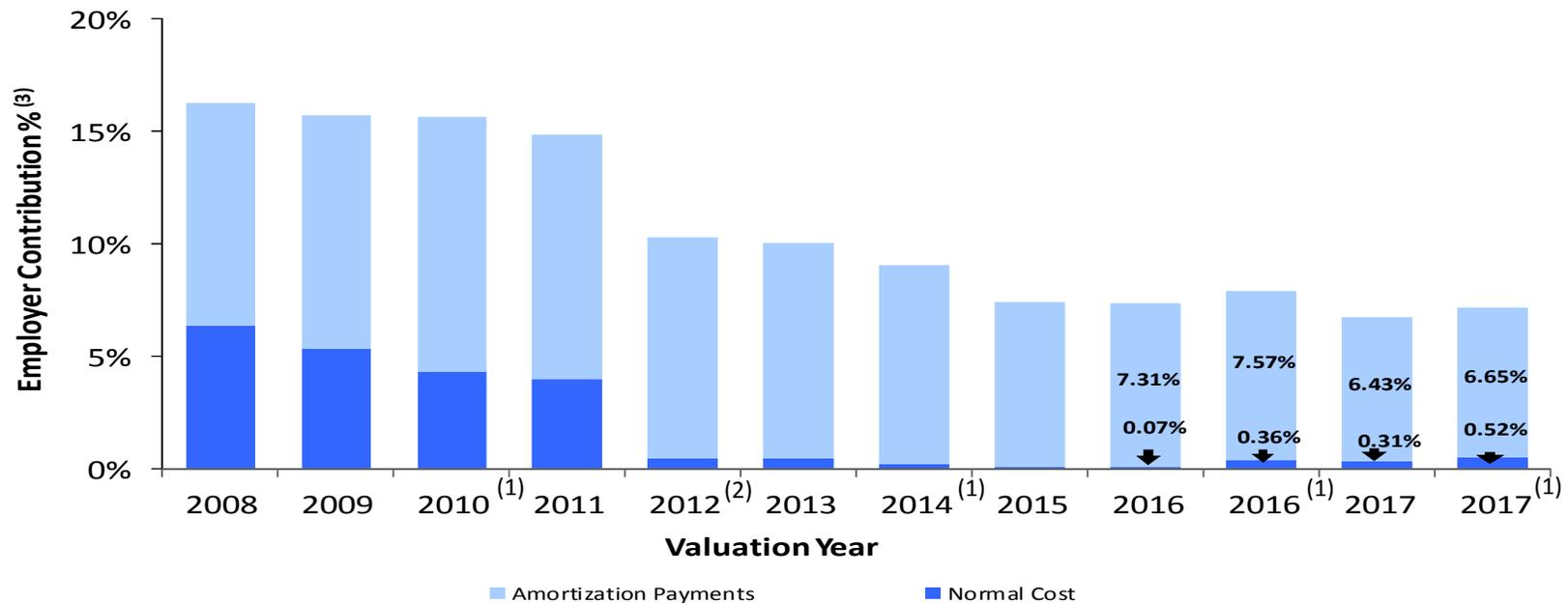


(1) Reflects assumption changes (not including trend assumption)

(2) Reflects plan changes resulting from Public Act 300 of 2012

(3) Percentage of total MPSERS payroll (including both PHF and non-PHF members)

Required Employer Contributions as Percents of Payroll (Full Actuarial Funding)

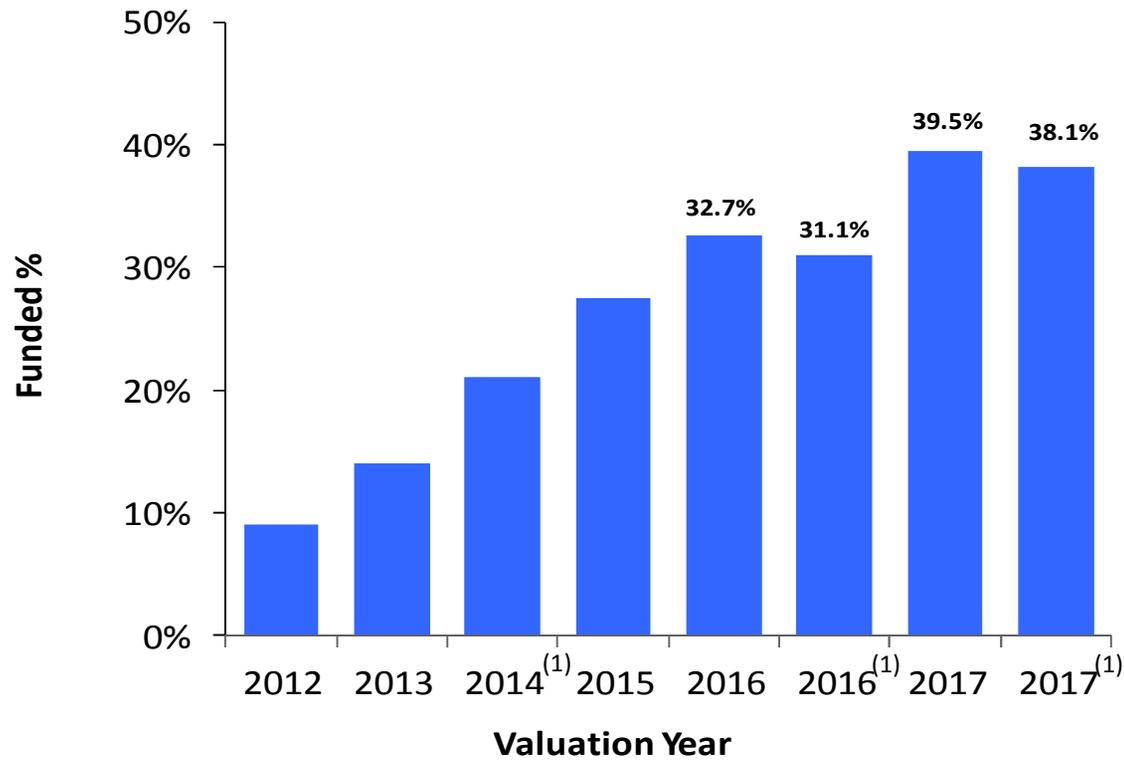


(1) Reflects assumption changes (not including trend assumption)

(2) Reflects plan changes resulting from Public Act 300 of 2012

(3) Starting with the 2012 valuation year, (a) the normal cost is expressed as a percentage of non-PHF active member payroll, (b) the Amortization Payment is expressed as a percentage of total MPSERS active member payroll (including PHF and non-PHF), and (c) the required employer contribution is for the fiscal year beginning two years after the valuation date

Funded Percent



(1) Reflects assumption changes (not including trend assumption)

Disclaimers

- This presentation is intended to be used in conjunction with the September 30, 2017 retiree health actuarial valuation report issued March 6, 2018. 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 Drazilov and Louise 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.