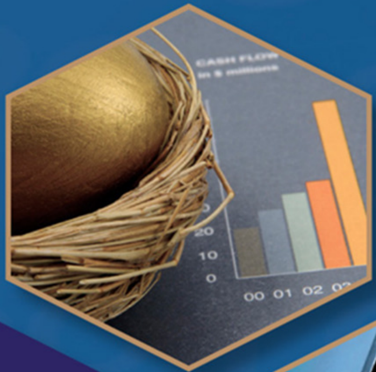

Michigan Public School Employees

Retiree Health Actuarial Valuation Results as of September 30, 2016

GRS

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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

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Full Funding Employer Contribution

- Reported that full funding for MPSERS began in fiscal year 2013
- September 30, 2016 valuation establishes the actuarially computed employer contribution (ACEC) for fiscal year 2019
- 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 8.0% to 7.5%.

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Governmental Accounting Standards Board

- Beginning with the 2007 CAFR, GASB Statements No. 43 and No. 45 specify how retiree health benefit liabilities and expenses are reported in financial statements
  - Actuarially computed employer contribution (ACEC) referred to as the Annual Required Contribution (ARC)
  - Since MPSERS is now being pre-funded, for accounting purposes, liability and expense results can be based upon the investment return assumption (e.g., 7.50% as of September 30, 2016)
- GASB Statement No. 74 will be effective for the plan year ending September 30, 2017
  - Expectation is that accounting results will continue to be based upon the investment return assumption (e.g., 7.50% as of September 30, 2016)
  - A separate report will be issued beginning with the September 30, 2017 annual valuation for accounting purposes

Public Act 300 of 2012

- Brief summary of plan changes
  - 90% employer subsidy for benefit recipients already Medicare eligible
  - 80% employer subsidy for other members not covered by a grading provision
  - 80% maximum employer subsidy for members covered by a grading provision
  - Members hired prior to September 4, 2012 had the option to elect to forfeit employer subsidized retiree health coverage and participate in the Personal Healthcare Fund (PHF)
  - Members hired on or after September 4, 2012 participate in the PHF with defined benefit retiree health coverage essentially limited to a lump sum at termination ($1,000 or $2,000 depending on age at termination), except in cases of duty death-in-service

Retiree Health Valuation Results
Full Actuarial Funding

- Annual Expenditures for Retiree Health Care Benefits:
  - FY 2016: $ 809.5 million
  - FY 2016 ACEC: $ 911.7 million

Annual Expenditures from the MPSERS 2016 Comprehensive Annual Financial Report.

Actual and Expected Contributions Full Actuarial Funding

- Actuarially Computed Employer Contribution (ACEC) for FYE September 30, 2019:

		ACEC - FY2019
Employer Normal Cost	$	24.5 million
Amortization of UAAL[1]	$	686.6 million
Actuarially Computed Employer Contribution (ACEC)	$	711.1 million

[1]Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 20 years from October 1, 2018.

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

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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.*

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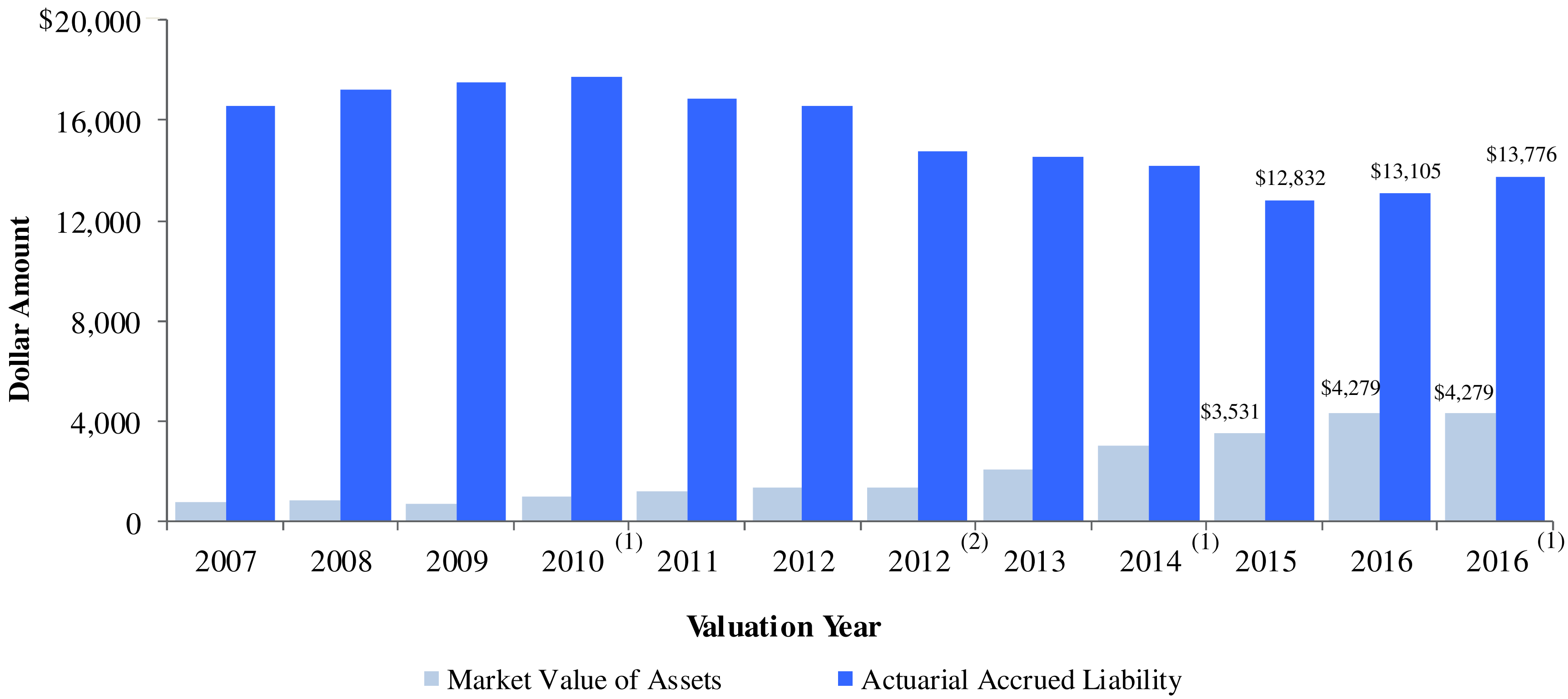
Health Assets & Accrued Liabilities Full Actuarial Funding (Amounts in Millions)



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

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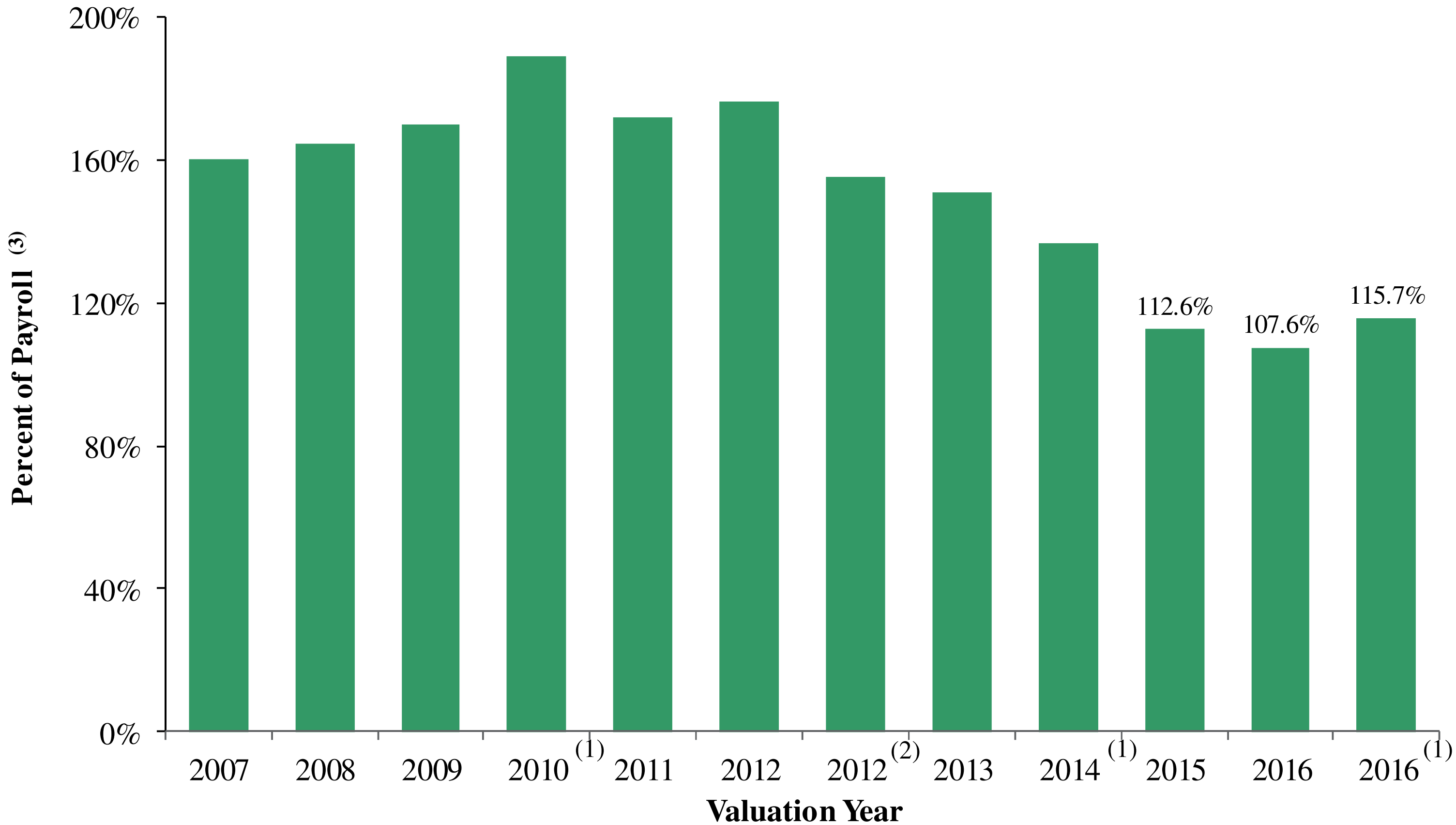
Unfunded Accrued Liabilities as %'s of Payroll – Full Actuarial Funding



(1) Reflects assumption changes
(2) Reflects plan changes resulting from Public Act 300 of 2012
(3) Percentage of total MPSERS payroll (including both PHF and non-PHF members)

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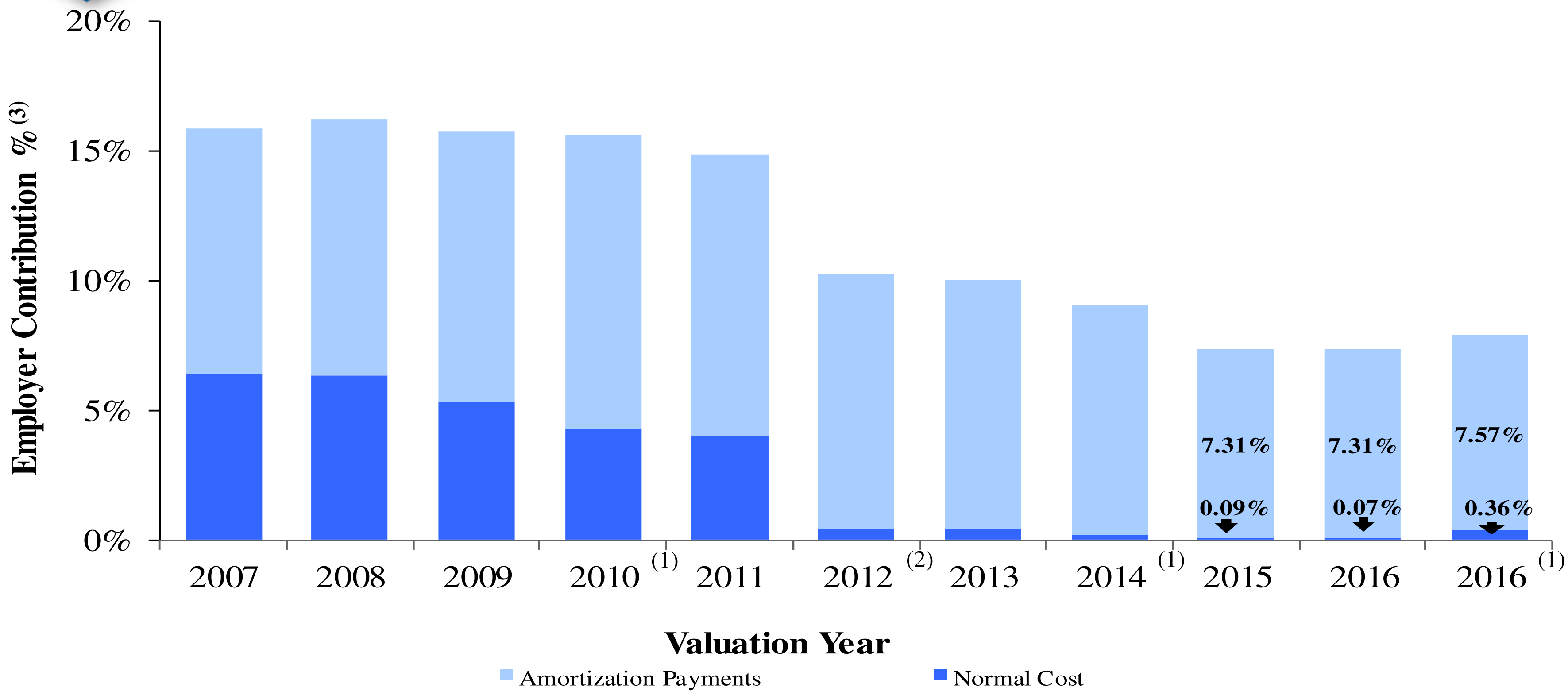
Actuarially Computed Employer Contributions (ACEC) as Percents of Payroll (Full Actuarial Funding)



(1) Reflects assumption changes
(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 ACEC is for the fiscal year beginning two years after the valuation date

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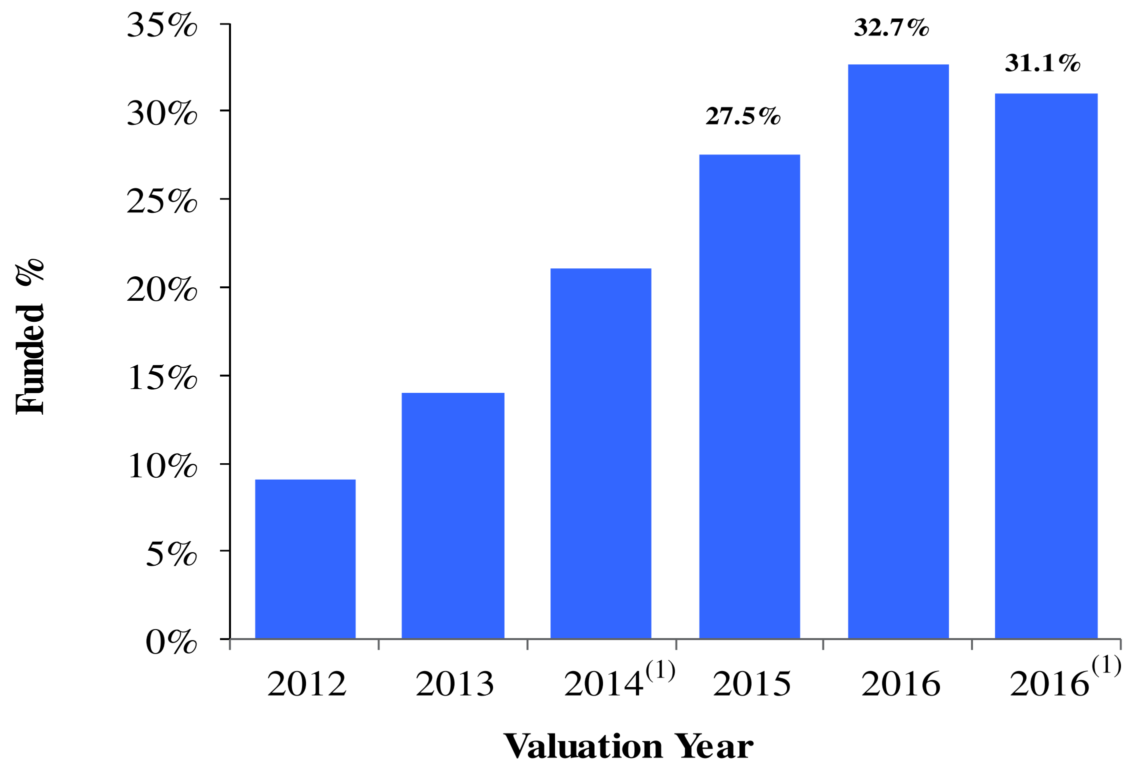
Funded Percent



(1) Reflects assumption changes

Disclaimers

- This presentation is intended to be used in conjunction with the September 30, 2016 retiree health annual actuarial valuation report issued March 16, 2017. 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.

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