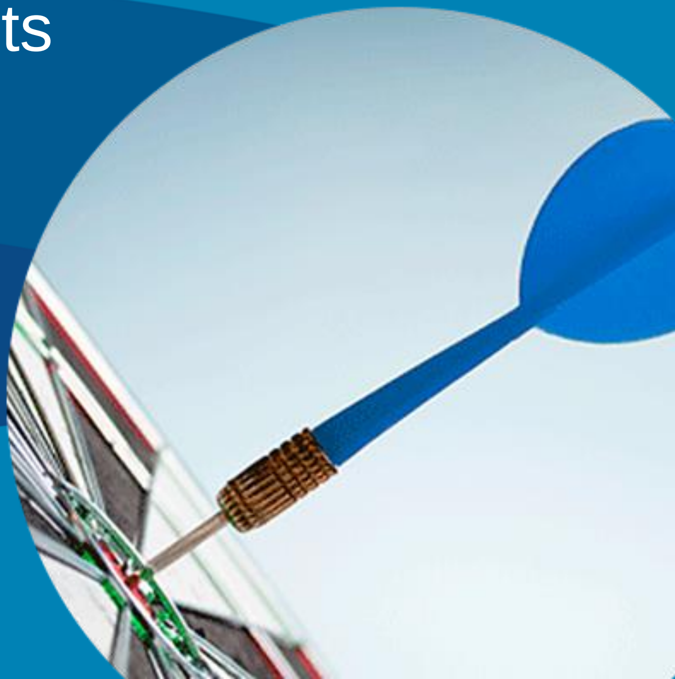
Michigan State Police

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 public plan sponsors nationwide have not pre-funded health benefits either
  - Currently, very little investment income is available to help pay the 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 SPRS began in fiscal year (FY) 2013
- September 30, 2017 valuation establishes the required employer contribution for FY 2020
- Reflects investment return assumption that was lowered from 7.50% to 7.40% in accordance with the recently adopted Dedicated Gains Policy

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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
  - One annual valuation report for accounting and funding purposes
- GASB Statement No. 74 became effective for the plan for the FY 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 18, 2017 containing the September 30, 2017 valuation for accounting purposes

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Retiree Health Valuation Results
Full Actuarial Funding

- FY 2017 expenditures for employer paid retiree health care benefits (excludes retiree paid premiums):
  – $34.0 million

- FY 2017 contributions for retiree health care Benefits:
  – $51.9 million – employer contributions (includes other governmental contributions)

Amounts reported above are from the 2017 SPRS Comprehensive Annual Financial Report.

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Actuarially Computed Employer Contribution FY 2020 ($ in Millions)

- Required employer contribution for FYE September 30, 2020:

	FY 2020
Employer Normal Cost	$ 8.4
Amortization of UAAL[1]	45.5
Required Employer Contribution	$ 53.9

[1]Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 17 years from September 30, 2019.

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

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Actuarial Gain/(Loss) ($ in Millions)

		Gain/(Loss)
1. **Premiums.** Gains and losses resulting from actual premiums in valuation year versus that assumed from prior valuation.	$	63.1
2. **Investment Income.** If there is greater investment income than assumed, there is a gain. If less income, a loss.		6.5
3. **Demographic and Other.** Gains and losses resulting from demographic experience, data adjustments, timing of financial transactions, etc.		2.9
4. **Composite Gain/(Loss) During Year.**	$	72.5

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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) *
- Lower than expected investment returns; bigger impact as plan assets grow
- This is not a complete list

* *Per capita costs are projected to increase 8.25% the first year, graded down to 3.5% in the ninth and later years.*

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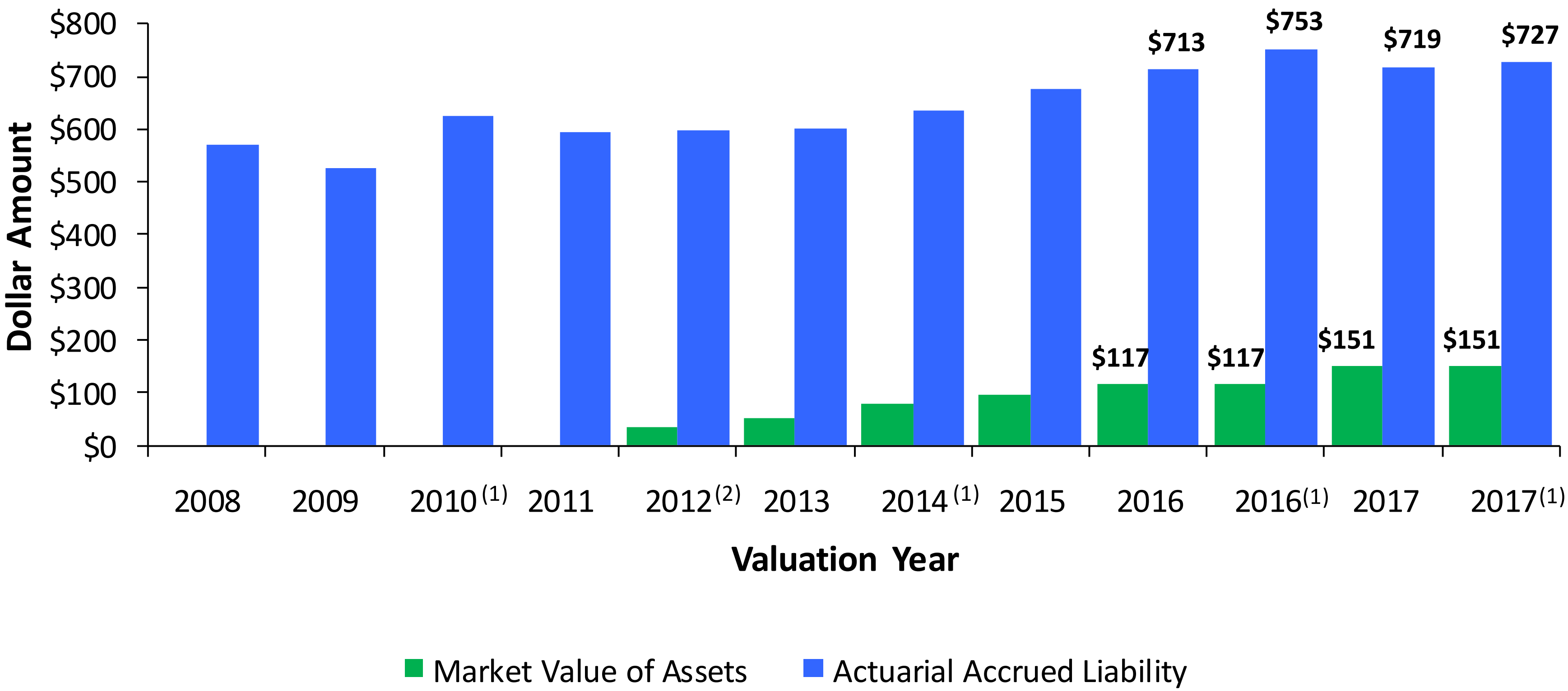
Health Assets & Accrued Liabilities
Full Actuarial Funding (Amounts in Millions)



(1) Reflects assumption changes

(2) Revised benefit provisions

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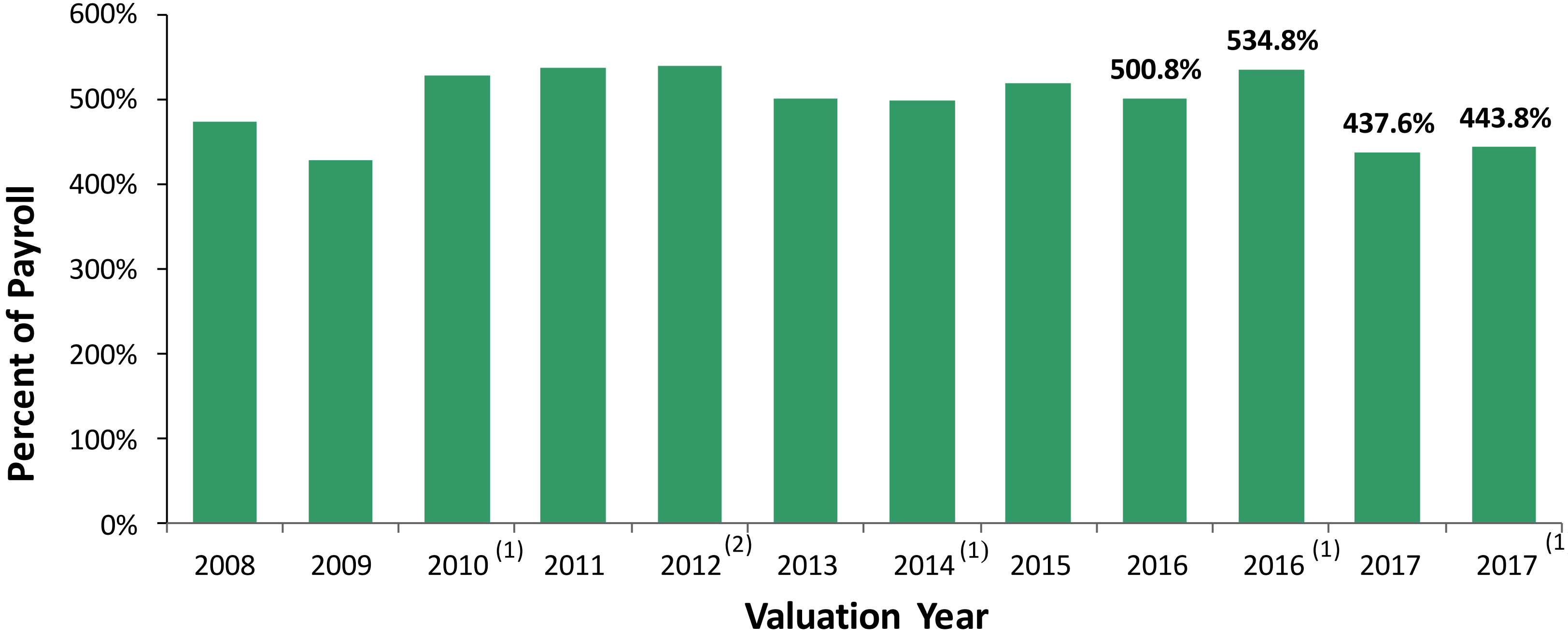
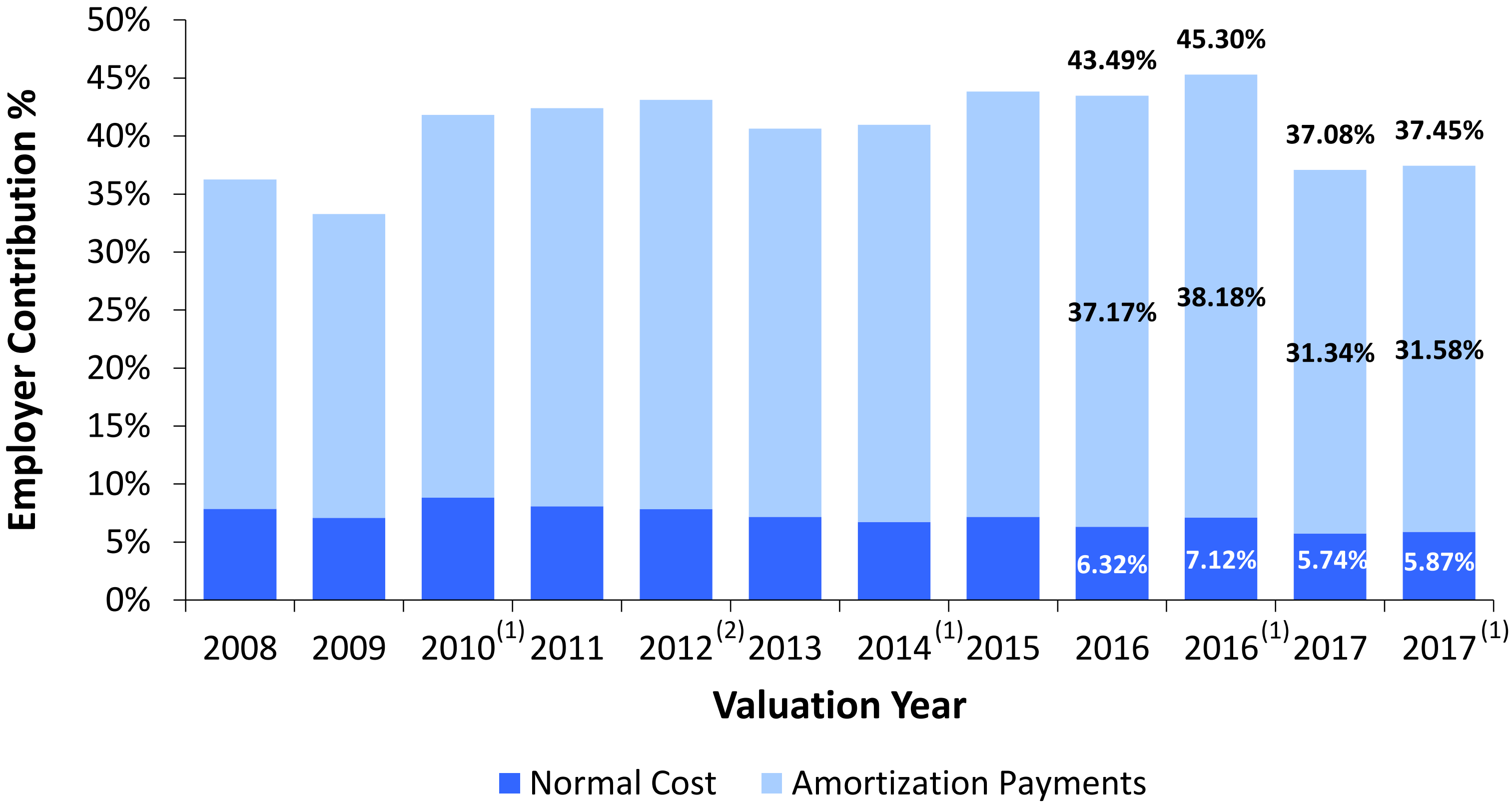
Unfunded Accrued Liabilities as %'s of Payroll – Full Actuarial Funding



(1) Reflects assumption changes

(2) Revised benefit provisions

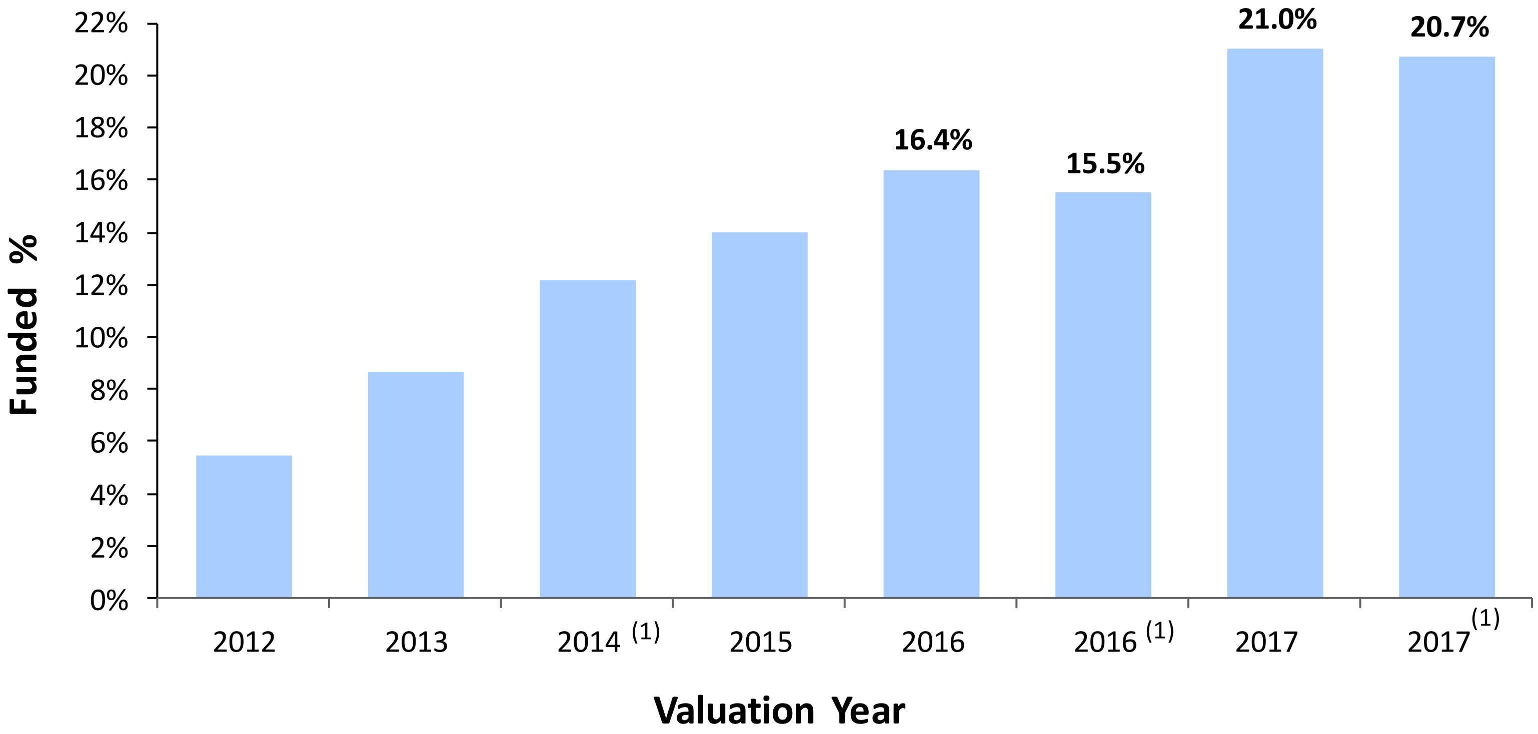
Required Employer Contributions as Percents of Payroll (Full Actuarial Funding)



(1) Reflects assumption changes

(2) Revised benefit provisions

Funded Percent



(1) Reflects assumption changes

Disclaimers

- This presentation is intended to be used in conjunction with the September 30, 2017 retiree health annual actuarial valuation report issued on April 23, 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 (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

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