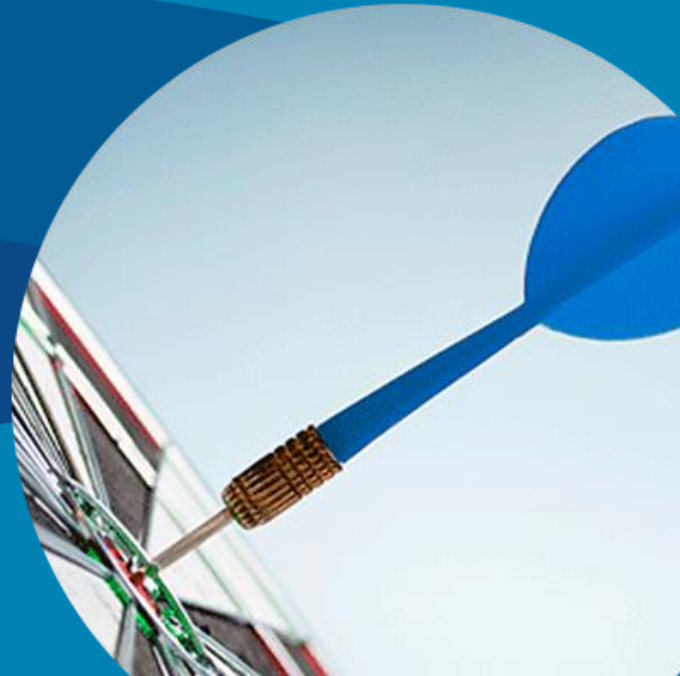# Michigan Judges' Retirement System

Pension Actuarial Valuation Results
as of September 30, 2018
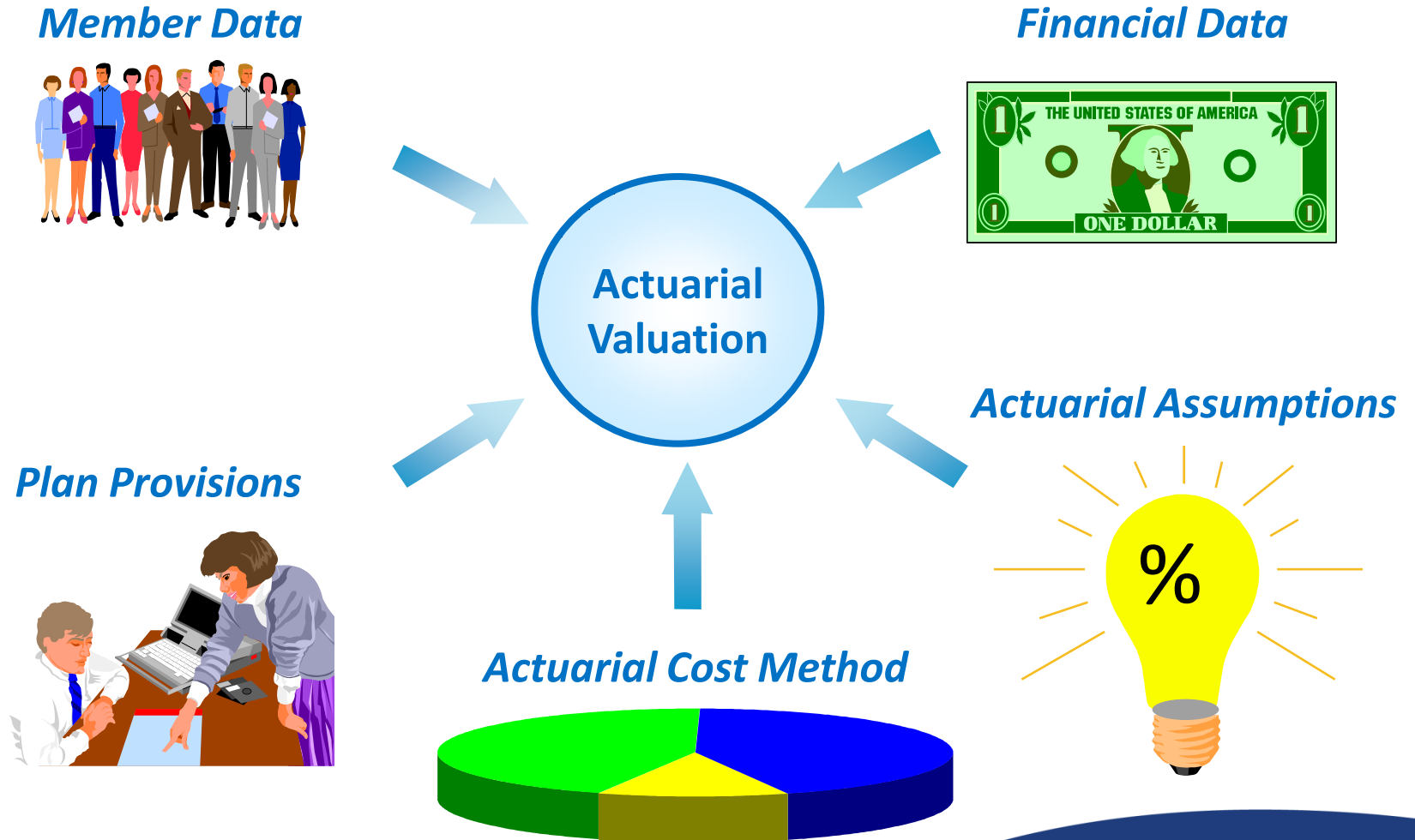
September 30, 2018 Valuation

- Purpose of the September 30, 2018 valuation is twofold:
  - Determine the employer contribution rate for fiscal year 2019
  - Measure the System's funding progress
- Reflects the Dedicated Gains Policy adopted by the Board of Trustees
  - The investment return assumption was reduced from 6.75% to 6.25% as a result of the Policy
- Reflects the adoption of new assumptions in conjunction with the Experience Study covering the period October 1, 2012 through September 30, 2017

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Actuarial Valuation Process

Member Data

Financial Data

THE UNITED STATES OF AMERICA

ONE DOLLAR

Actuarial Valuation

Actuarial Assumptions

%

Plan Provisions

Actuarial Cost Method

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Dedicated Gains Policy

- Adopted in 2017

- The purpose of the Policy is to reduce the investment return assumption for actuarial valuation purposes if the fiscal year's market value rate of return exceeds a certain amount

- The immediate recognition of the market value return is expected to offset the increase in the computed employer contribution from where it otherwise would have been

- JRS specific provisions
  - For normal cost purposes, the amount of excess investment return is sufficient to cover the increase in the employer normal cost for the first year only
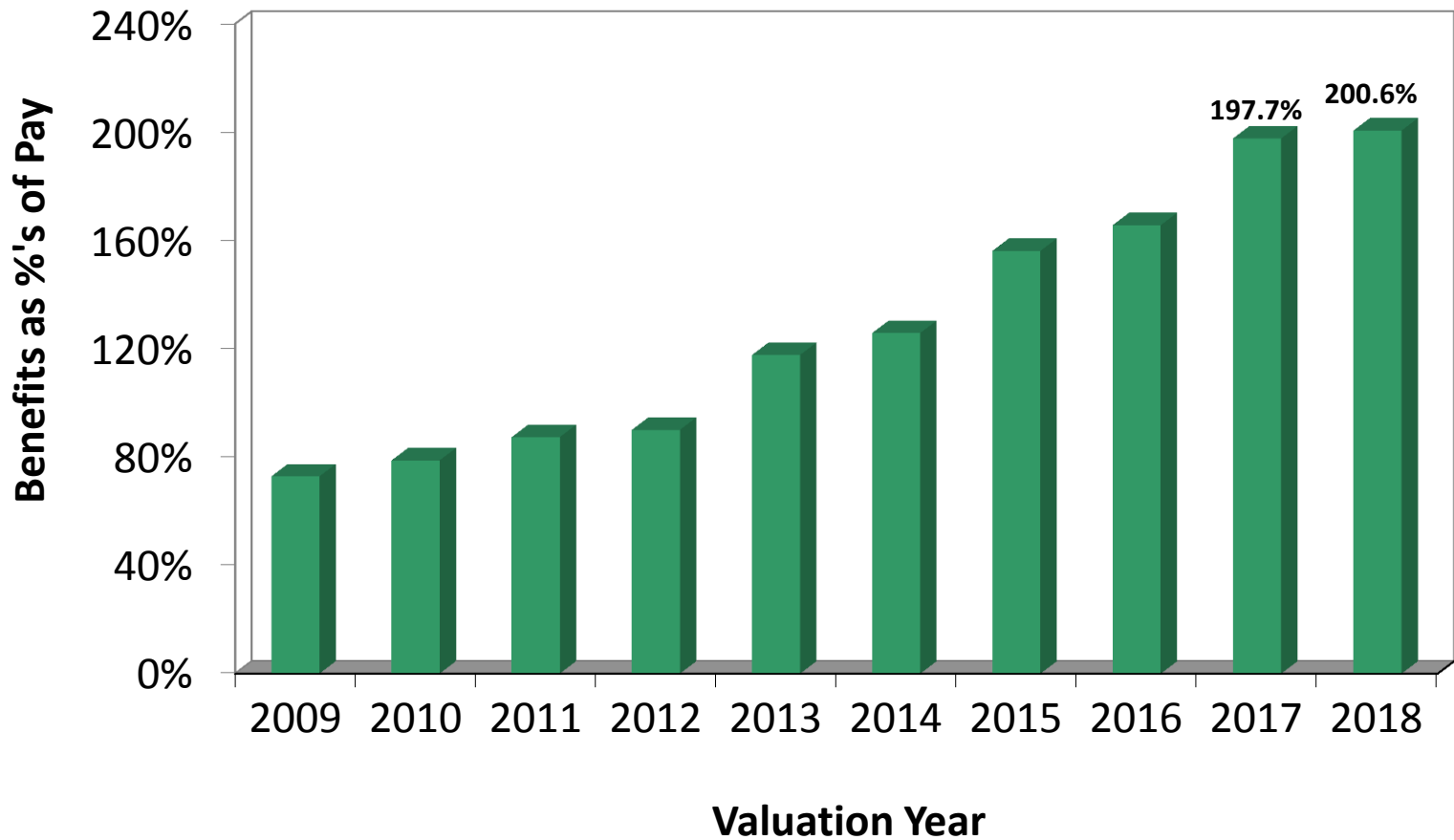
Membership Data
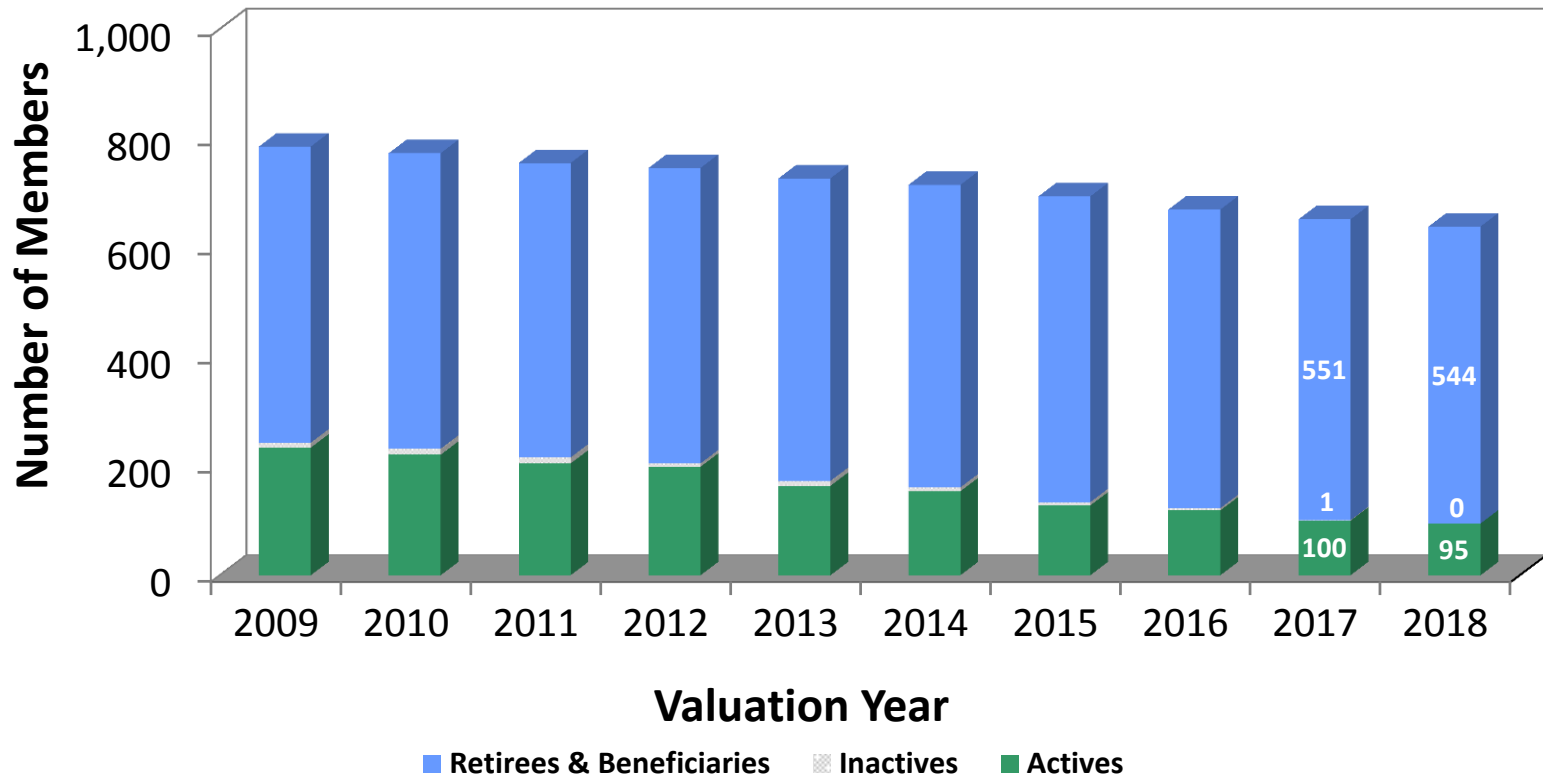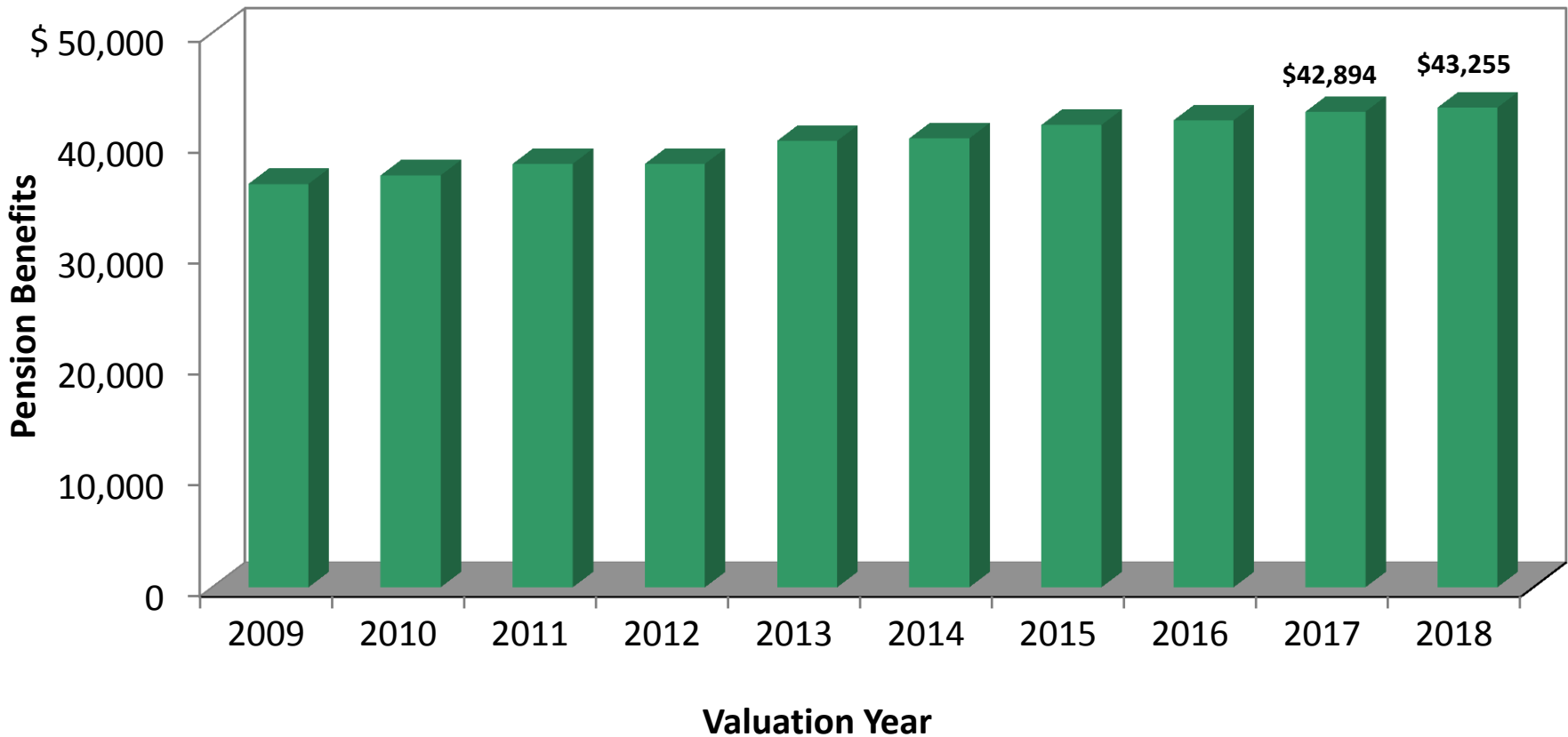
Ratio of Active Members to Pension Benefit Recipients
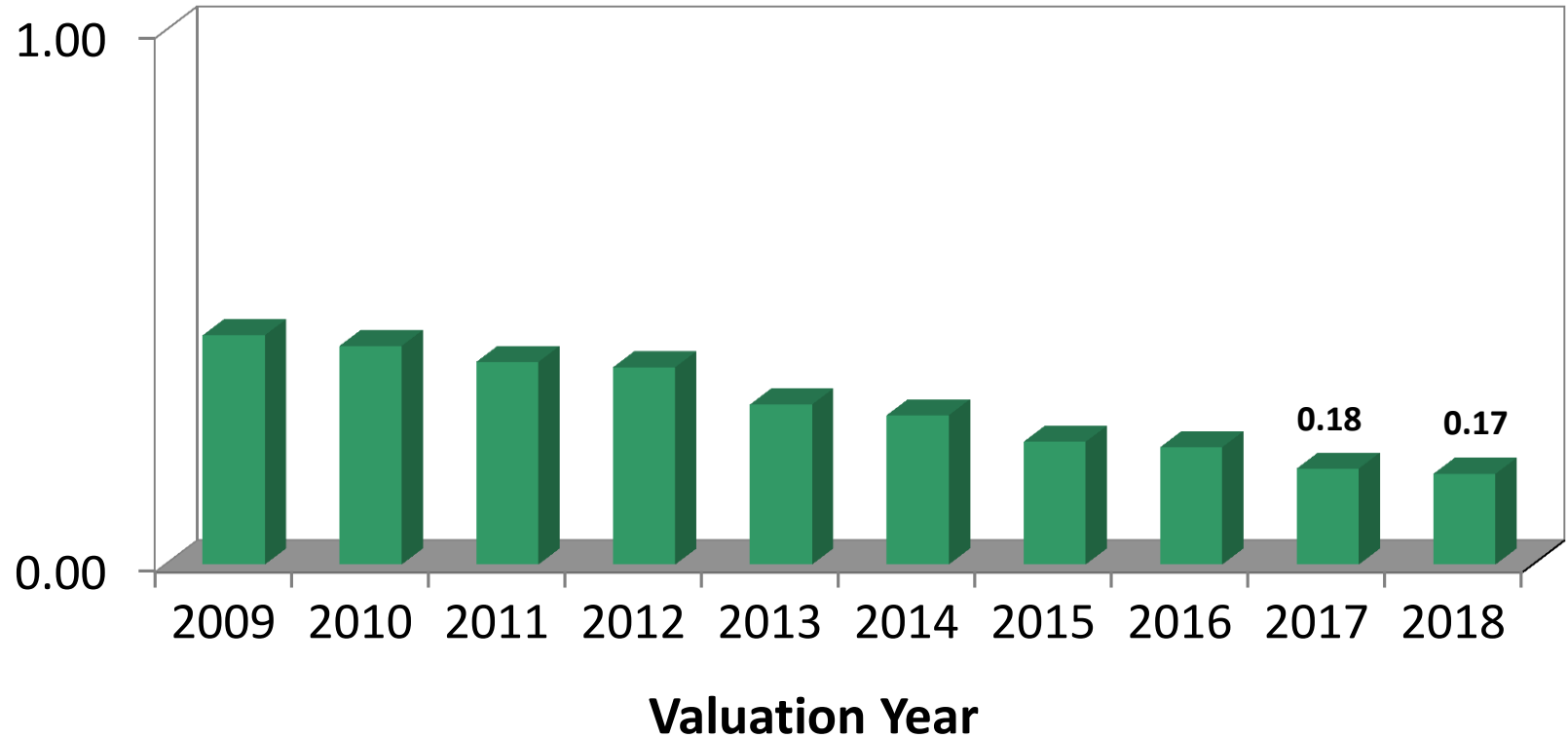
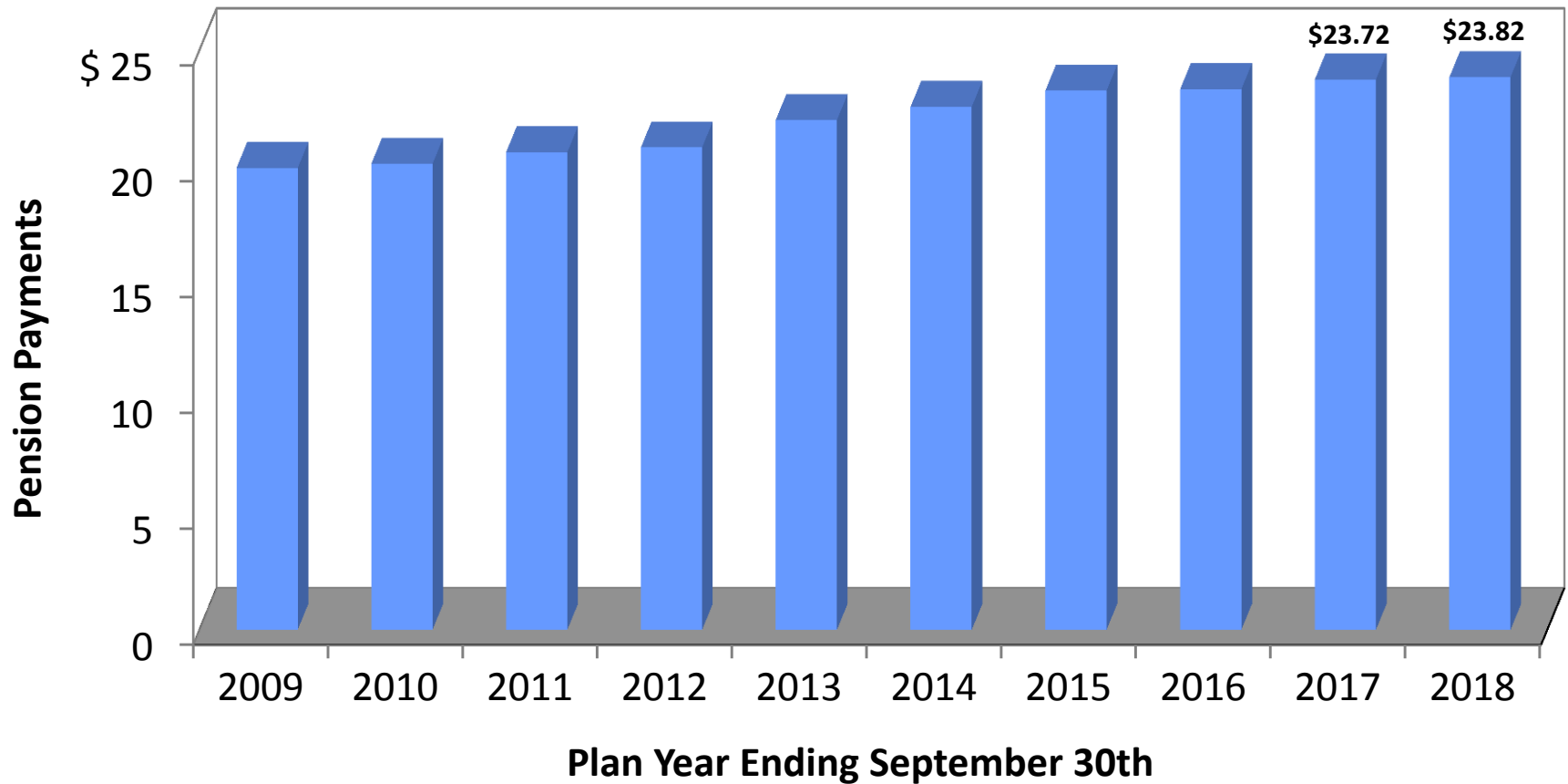# Pension Benefits Expressed as Percents of Active Member Pay

Average Annual Pensions

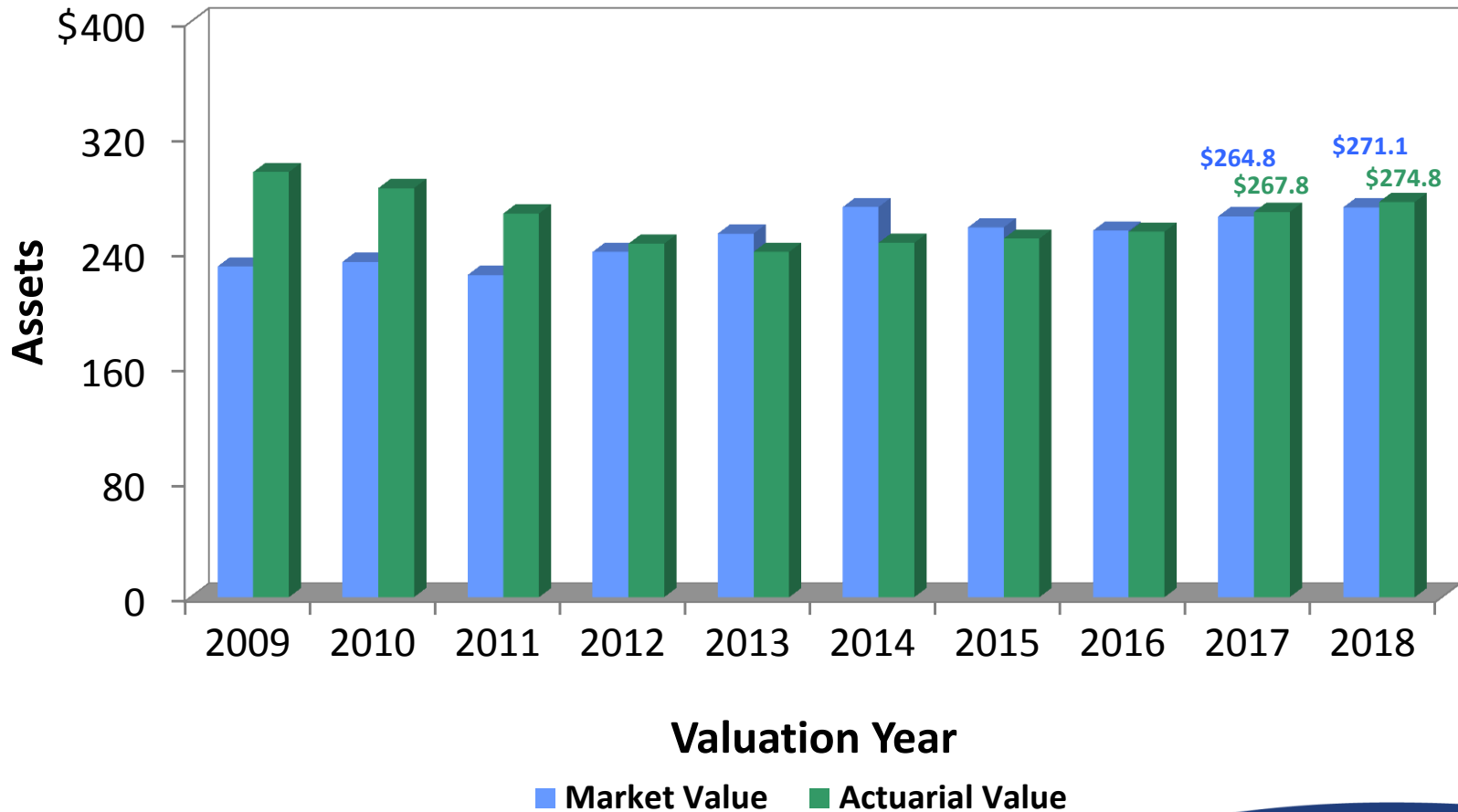# Reported Pension Payments by Plan Year
(Amounts in Millions)
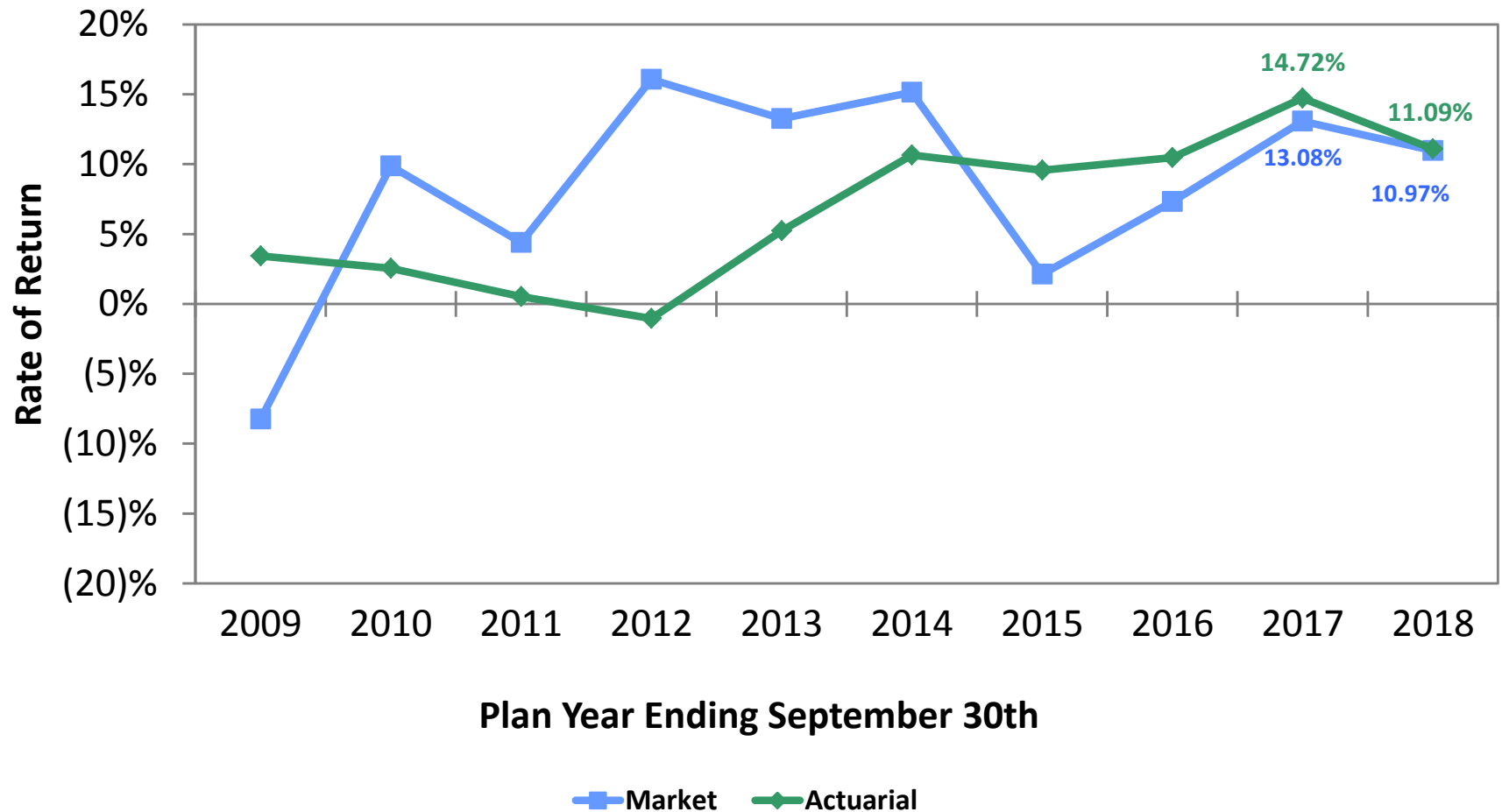

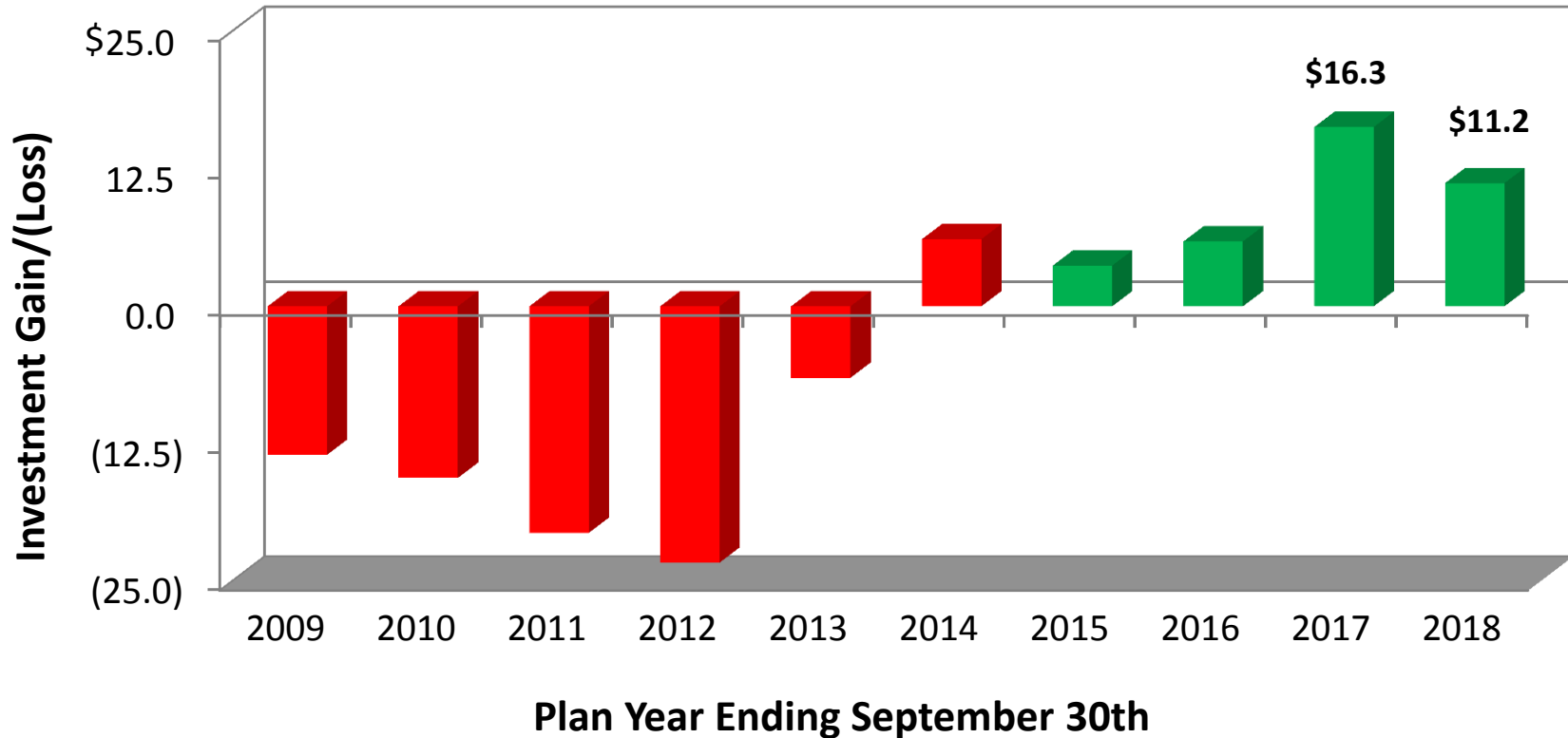**Pension Payments**

Plan Year Ending September 30th

Chart values:
- 2017: $23.72
- 2018: $23.82

Growth of Pension Assets (Amounts in Millions)

Market & Actuarial Net Rates of Return

Plan Year Ending September 30th

Investment Gain/Loss (Amounts in Millions)

Bar chart titled "Plan Year Ending September 30th" with y-axis labeled "Investment Gain/(Loss)" ranging from (25.0) to $25.0. Values: 2009 (red, ~-12.5), 2010 (red, ~-14), 2011 (red, ~-20), 2012 (red, ~-23), 2013 (red, ~-5), 2014 (red, ~+9), 2015 (green, ~+6), 2016 (green, ~+9), 2017 (green, $16.3), 2018 (green, $11.2).

Demographic Gain/Loss (Amounts in Millions)
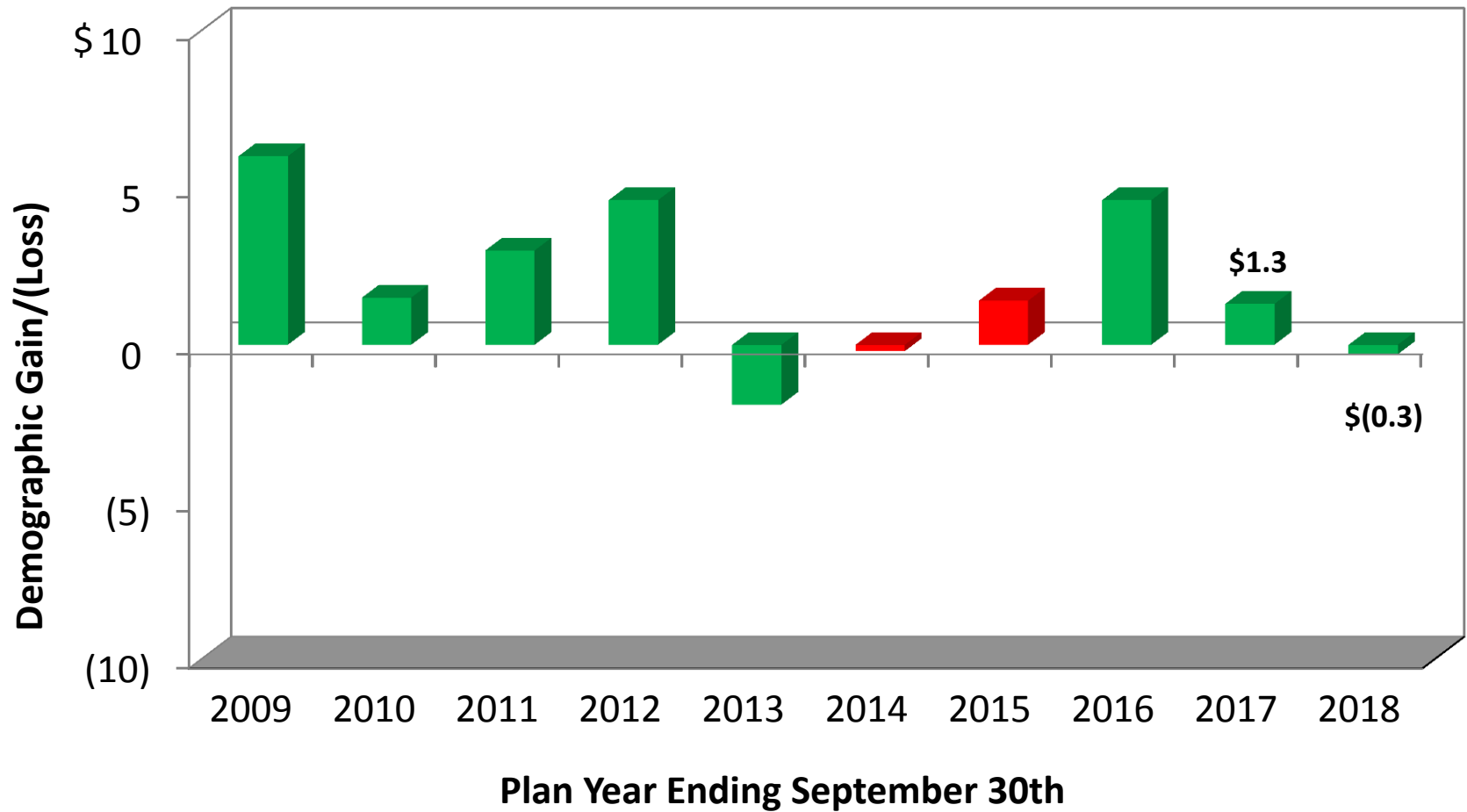
Gain/(Loss) by Type of Activity (Amounts in Millions)

Plan Year Ending 9/30	2018	2017	2016	2015	2014
New Entrants	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Retiree Deaths	(1.61)	0.28	2.36	1.01	(0.05)
Investments	11.17	16.34	5.92	3.69	6.14
Pay Increases	0.02	1.04	1.68	1.41	2.15
Withdrawals	0.04	0.05	0.06	(0.06)	(0.15)
Retirements	1.20	(0.58)	0.29	(1.19)	1.44
Other	0.08	0.55	0.16	0.23	(3.54)
Total	**10.90**	**17.68**	**10.47**	**5.09**	**5.99**

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Employer Contribution Dollars Valuation as of September 30th (Amounts in Millions)
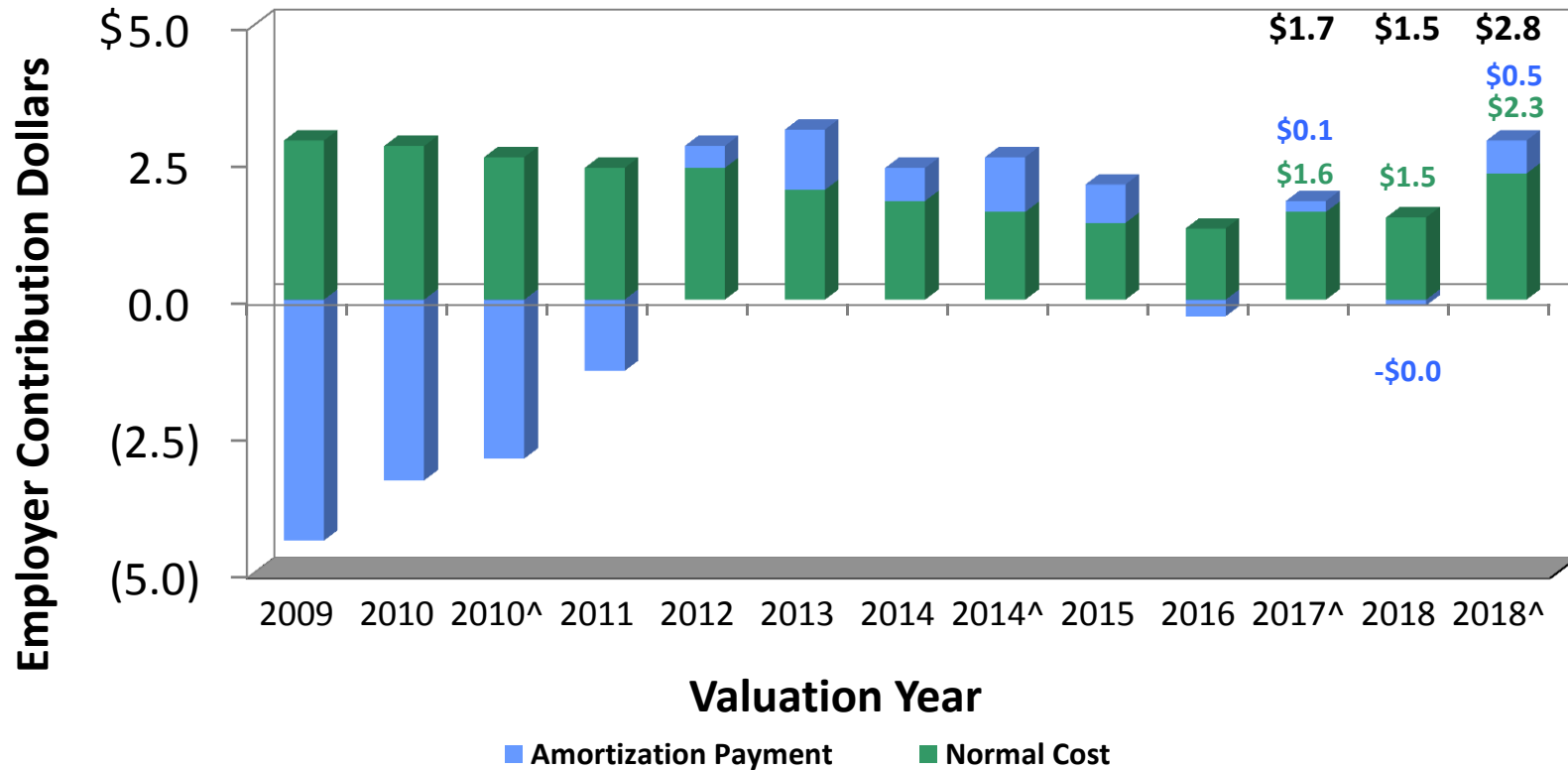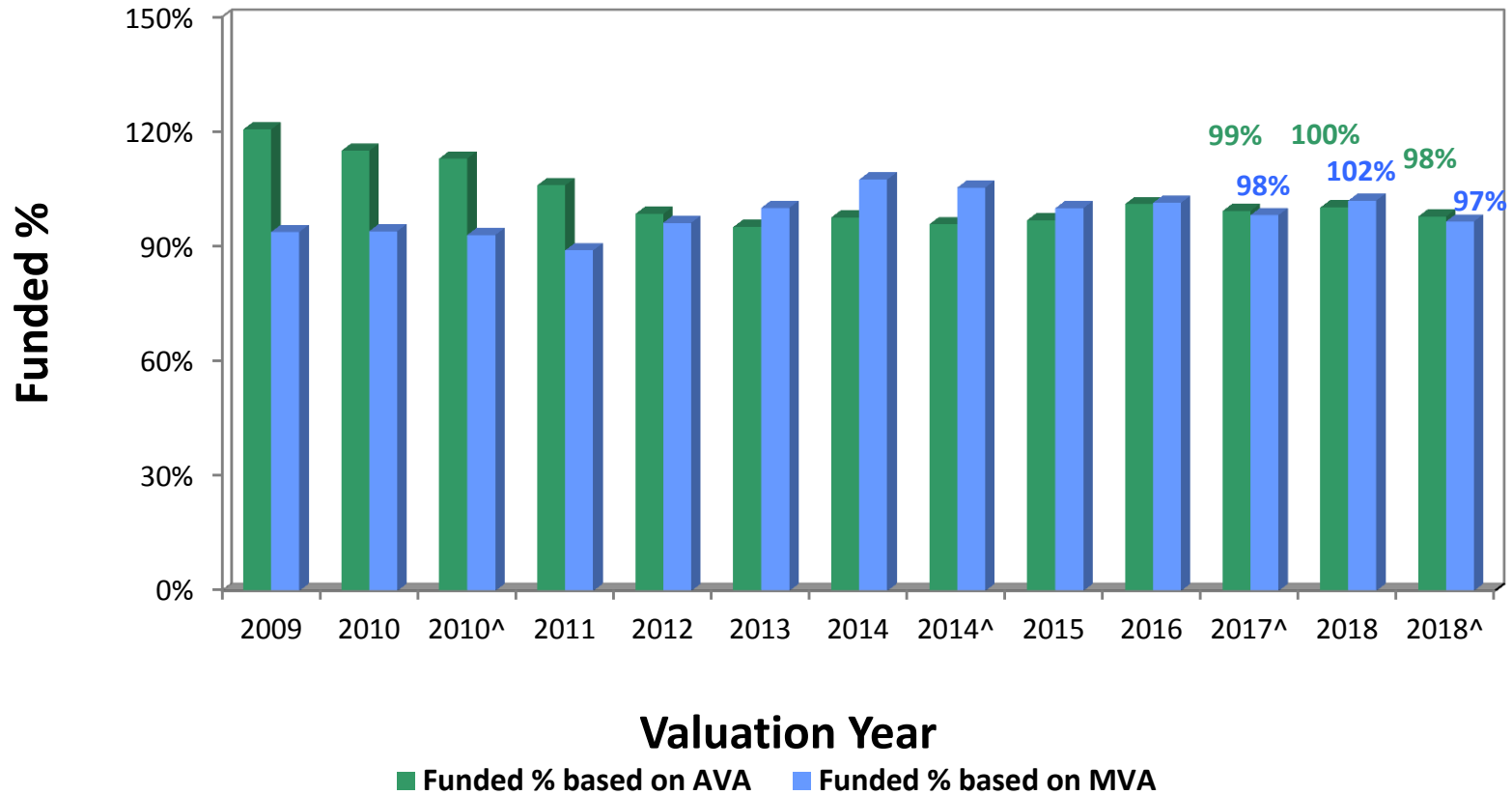

^ *Revised actuarial assumptions and/or methods.*

Actuarial Accrued Liability Compared to Actuarial Value of Assets (in Millions)
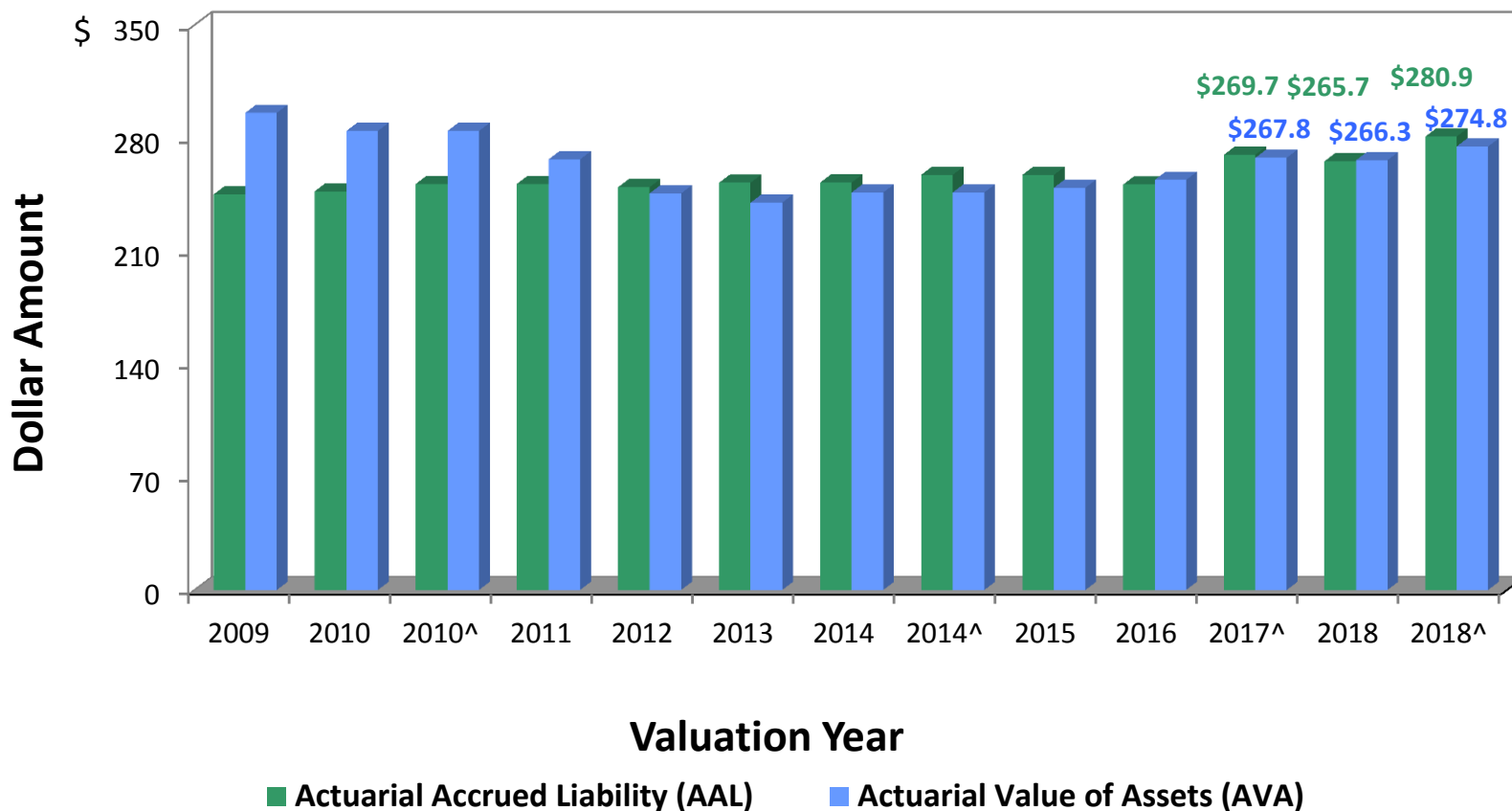
^ Revised actuarial assumptions and/or methods.

Retirement System Funded % Based on Actuarial Value and Market Value of Assets

^ Revised actuarial assumptions and/or methods.

Disclaimers

- This presentation is intended to be used in conjunction with the September 30, 2018 pension annual actuarial valuation report issued on March 13, 2019. 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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