# Interim Public Retirement Systems Committee Presentation



# Peace Officers' Retirement, Accident and Disability System (POR)

Presented by:

Roxann Ryan, Commissioner, Iowa Department of Public Safety Patrice A. Beckham, Consulting Actuary, Cavanaugh Macdonald Consulting, LLC

December 18, 2017



#### Governance

- Board of Trustees
  - □ Commissioner of Public Safety Roxann Ryan (Chairperson)
  - □ Treasurer of State Michael Fitzgerald
  - Governor's Appointee Chris Mayer, Actuary (Principal Insurance)
  - □ Active Member Representative Trooper Robert Conrad
  - Retired Member Representative Gail Schwab (Sergeant)
- Iowa Code, 97A
- Iowa Administrative Code 661



## **Active Membership**

- Sworn peace officers of the Iowa Department of Public Safety
  - □ Division of Criminal Investigation
  - Division of Narcotics Enforcement
  - □ Division of Intelligence
  - Iowa State Patrol Division
  - State Fire Marshal Division

Members not covered by Social Security



#### Plan Overview

- Benefit based on years of service and highest 3 years of Compensation (bi-weekly pay + longevity + meal allowance)
- Service Retirement with 7 optional forms of payment
- Accidental and Ordinary Disability/Death Benefits
- Minimum benefit 60.5% of high 3 years, after 22 years of service and age 55. Increases by 2.75% per year, up to 32 years of service (maximum benefit of 88%).
- Flat Escalator with a percentage based on wage increase provided for active members of the same rank.
- Line of Duty Death Benefit of \$100,000
- Earnings while a member of POR are exempt from Social Security (if sworn after March 1986 must pay Medicare 1.45%)

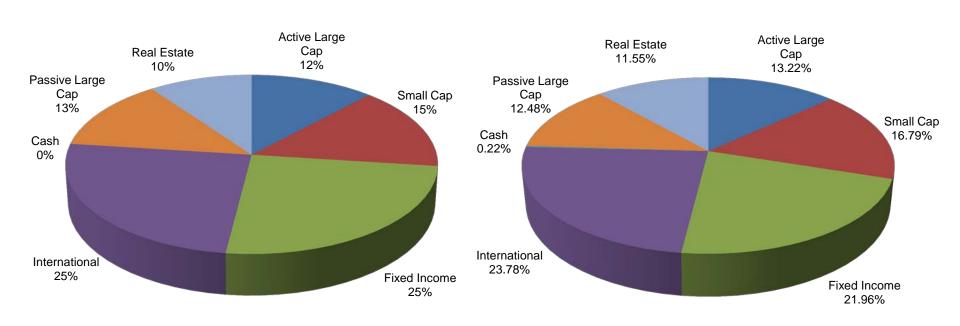


#### **Asset Allocation**

#### As of 7/1/2017

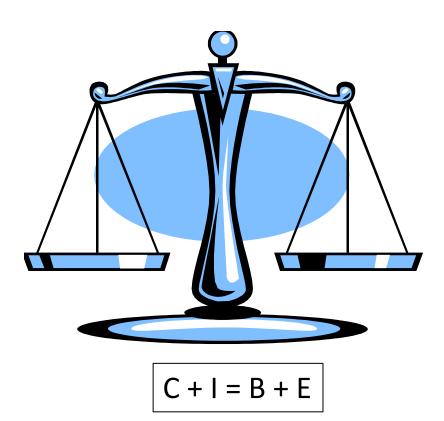
#### **Target Allocation**

#### **Actual Allocation**





# **Funding a Retirement Program**



C: Contributions

I: Investment Income

B: Benefits

E: Expenses



## July 1, 2017 Actuarial Valuation



- No changes in benefit provisions
- Changes resulting from completion of the Experience Study on demographic assumptions (economic assumptions reviewed in 2016)
  - Modified asset valuation method
  - Revised amortization methodology for the UAAL
  - Modified the set of demographic assumptions. Most significant change was moving to newest mortality table published by Society of Actuaries (RP 2014 Table)



# **Experience Study Changes**



#### Changes to actuarial methods

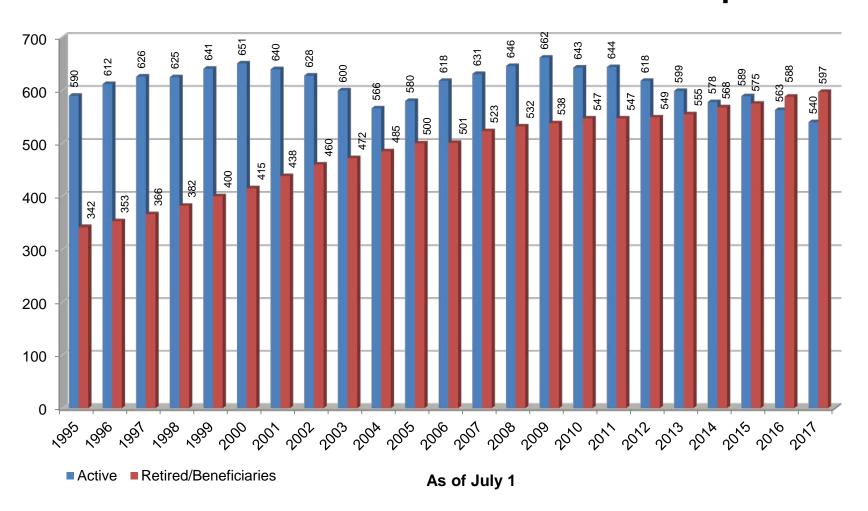
- ➤ The amortization of the UAAL was changed to a "layered" approach with new pieces of UAAL amortized over a closed 20-year period, beginning with the July 1, 2018 valuation. The legacy UAAL (at July 1, 2017) continues to be amortized on its current schedule (21 years).
- The asset smoothing method was modified to recognize investment gains and losses over a five-year period rather than four.

#### Cost impact on unfunded actuarial accrued liability

- Assumption changes increased the actuarial accrued liability by \$33.5 million.
- Change in asset smoothing method decreased the actuarial value of assets by \$4.7 million.
- All changes increased the actuarial contribution rate by 4.05%.

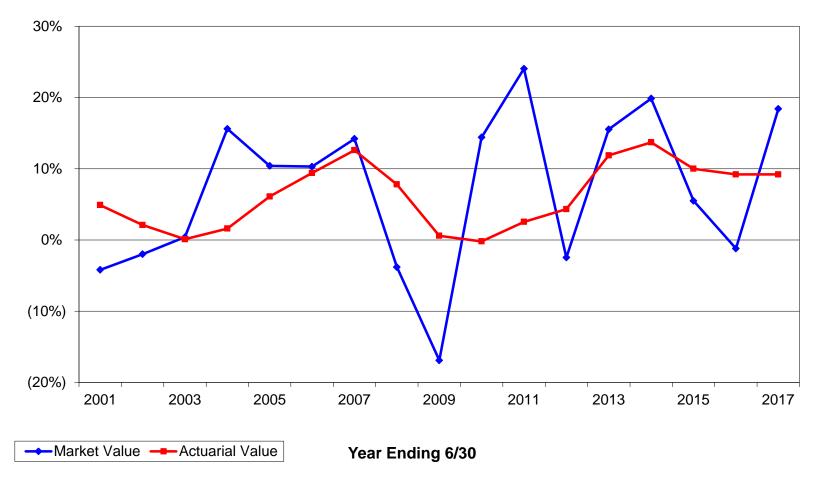


#### **Peace Officers' Retirement Membership**



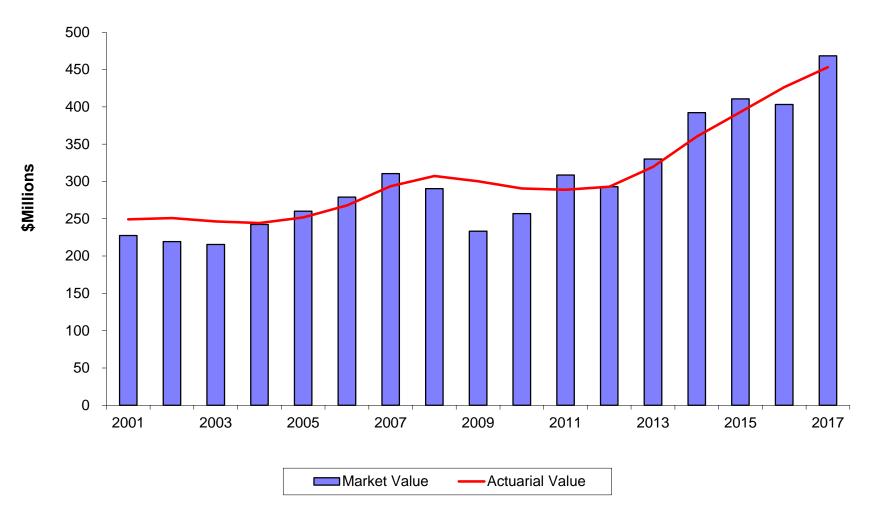


#### **Market and Actuarial Return**





#### Value of Assets - Market and Actuarial





# **Key Valuation Measurements** (\$ in Millions)

	As of July 1,	
	2017	2016
Actuarial Accrued Liability	\$636	\$578
Actuarial Assets	<u>453</u>	426
Unfunded Actuarial Accrued Liability	\$183	\$152
Funded Ratio (AVA)	71%	74%
Market Value Assets	\$468	\$403
Funded Ratio (MVA)	74%	70%

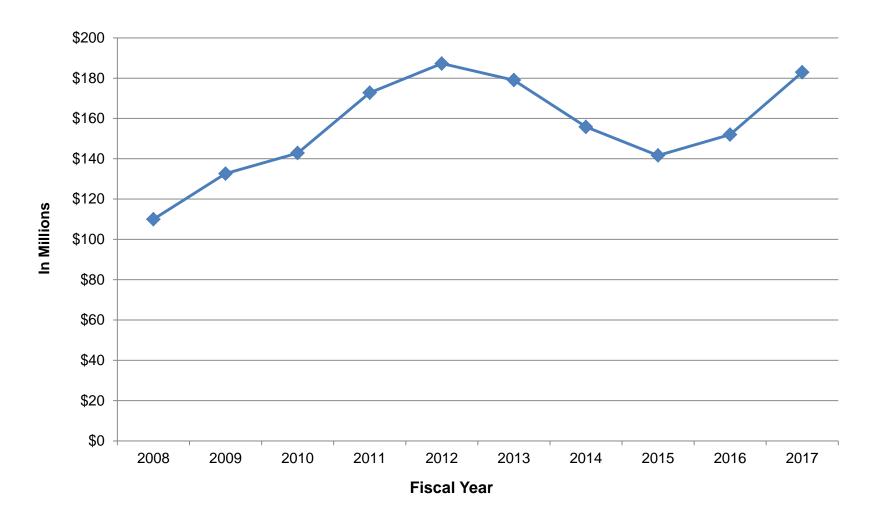


# Unfunded Actuarial Accrued Liability (UAAL)

UAAL July 1, 2016	\$152.0
<ul> <li>Contributions below actuarial rate</li> </ul>	0.7
<ul> <li>Expected increase from amortization</li> </ul>	0.2
<ul> <li>Investment experience</li> </ul>	(7.0)
<ul> <li>Liability experience*</li> </ul>	(1.9)
<ul> <li>Assumption changes</li> </ul>	33.5
<ul> <li>Asset valuation method change</li> </ul>	4.7
<ul> <li>Other experience</li> </ul>	0.7
UAAL July 1, 2017	\$182.9



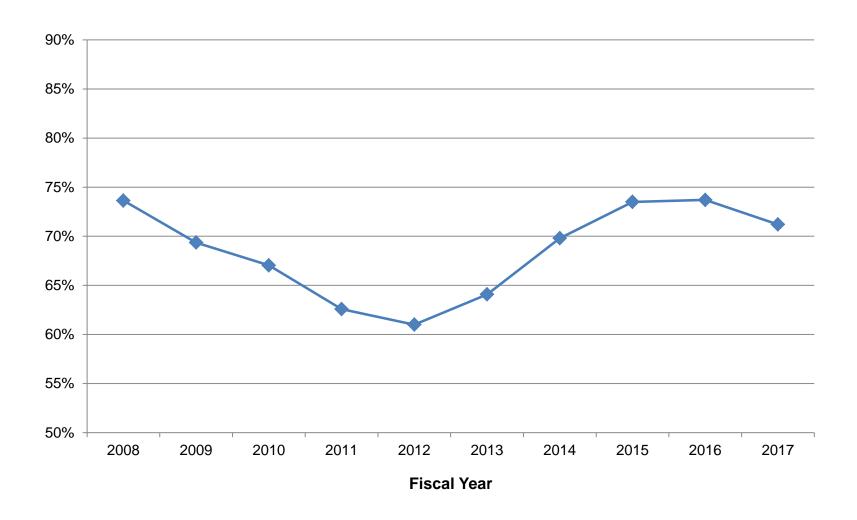
# **Unfunded Actuarial Accrued Liability**



The Entry Age Normal method which reports an unfunded actuarial liability has only been used since 2008.



#### **Historical Funded Ratio**



The Entry Age Normal method has only been used since 2008 so funded ratios are reported for those years only.



# **Key Valuation Results**

	Fiscal Year Beginning	
	<u>7/1/2017</u>	<u>7/1/2016</u>
Normal Cost	26.51%	28.70%
Administrative Expenses	0.54%	0.57%
UAL Payment	<u>29.89%</u>	<u>24.17%</u>
<b>Total Actuarial Contribution Rate</b>	56.94%	53.44%
Member Rate	(11.40%)	(11.40%)
Employer Rate	45.54%	42.04%
State Fixed Contribution Rate	(37.00%)	(35.00%)
Supplemental Contribution*	(11.16%)	(5.58%)
Contribution Shortfall/(Margin)	(2.62%)	1.46%

<sup>\* \$5</sup> million State supplemental contribution scheduled for the fiscal year.

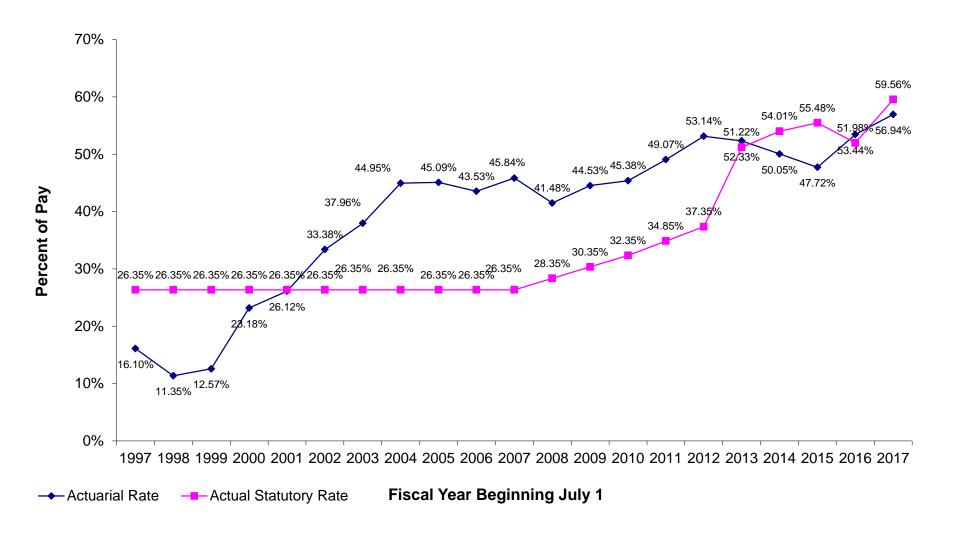


# **Change in Contribution Rate**

<ul> <li>Actuarial Contribution Rate 7/1/16</li> </ul>	53.44%
Change due to:	
<ul> <li>Asset experience</li> </ul>	(1.10%)
<ul> <li>Liability experience</li> </ul>	(0.30%)
<ul> <li>Other experience (lower payroll growth)</li> </ul>	0.73%
<ul> <li>Assumption and method changes</li> </ul>	4.05%
<ul> <li>Change in normal cost rate</li> </ul>	0.01%
<ul> <li>Contributions less than actuarial rate</li> </ul>	0.11%
<ul> <li>Actuarial Contribution Rate 7/1/17</li> </ul>	56.94%

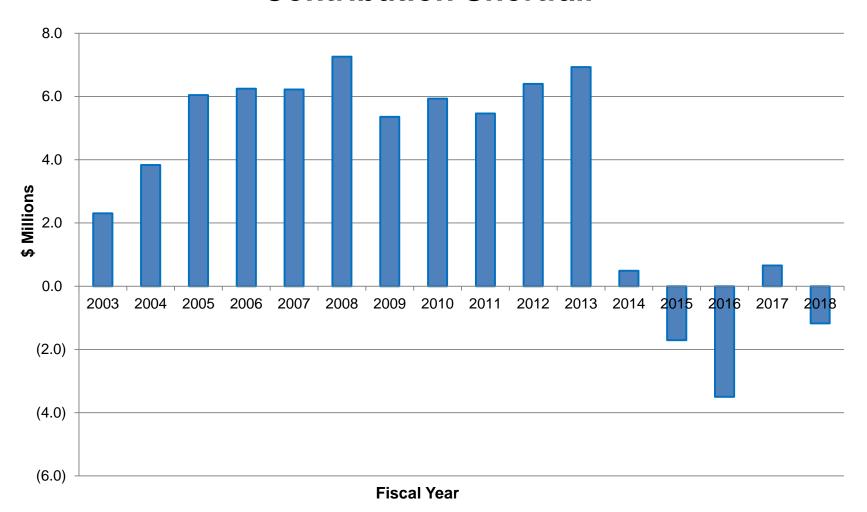


#### **Historical Contribution Rates**





#### **Contribution Shortfall**





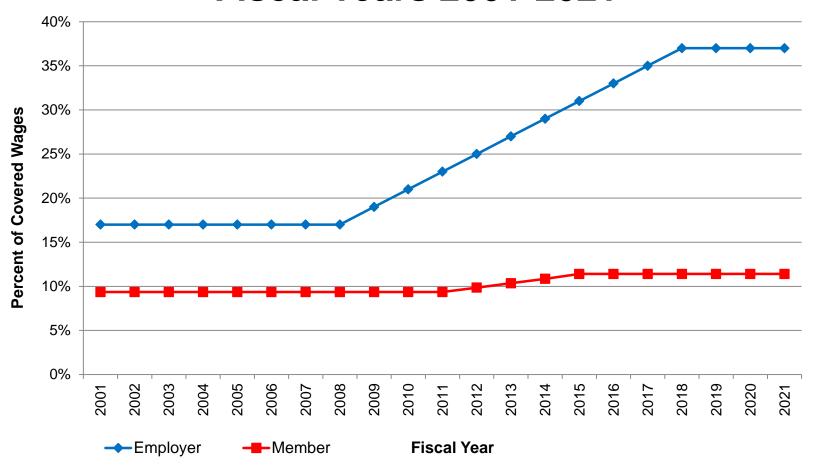
# **Changes Made to Improve Funding Status**

#### **Changes Made in 2010 Session:**

- □ Clarified the adjustment of pensions pursuant to 97A.6(14)(a)(2a), otherwise known as the flat escalator. Estimated impact on the required contribution rate of 2.24%, or an annual savings of \$940,000.
- □ Extended the annual 2% increase in employer contribution rate from FY2012 to FY2017, increasing to 37% (up from 27%)
- Provided a supplemental general fund appropriation of \$5,000,000 beginning in fiscal year 2013 (extended to fiscal year 2014) until the funded ratio reaches 85%
- □ Increased the employee contribution rate by 0.5% points each year over four years, for a total of 2% (from 9.35% to 11.35%)

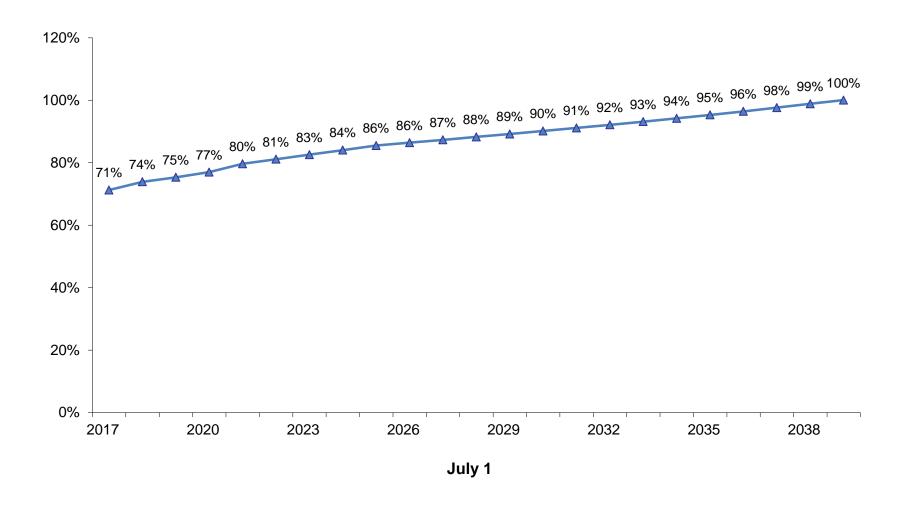


# **Statutory Contribution Rates Fiscal Years 2001-2021**





## **Projected Funded Ratio**



Projections assume all actuarial assumptions are met each year in the future and all contributions are made as scheduled, including the \$5 million supplemental contributions until the System is 85% funded.



## Comments

- ➤ Contribution margin for FY 2018 of 2.62%
  - Experience study changes resulted in a significant increase in the actuarial accrued liability of \$33.5 million and an increase in actuarial contribution rate of 4.05%
  - Return of 18.4% on market value of assets resulted in net deferred asset gain of \$15.2 M.
  - State supplemental contribution of \$5M is expected for FY 2018
- ➤ Long-term financial health is dependent on future investment returns and scheduled contributions, including receipt of the supplemental payment of \$5 million until 85% funded.
- Impact of higher contributions on funded ratio will take time to materialize in the valuation results (UAAL)