POR Board of Trustees Presentation of the July 1, 2024 Actuarial Valuation Results

Presented
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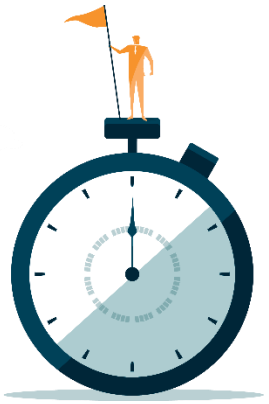
CavMac
Actuarial Consulting Services

Purpose of the Actuarial Valuation

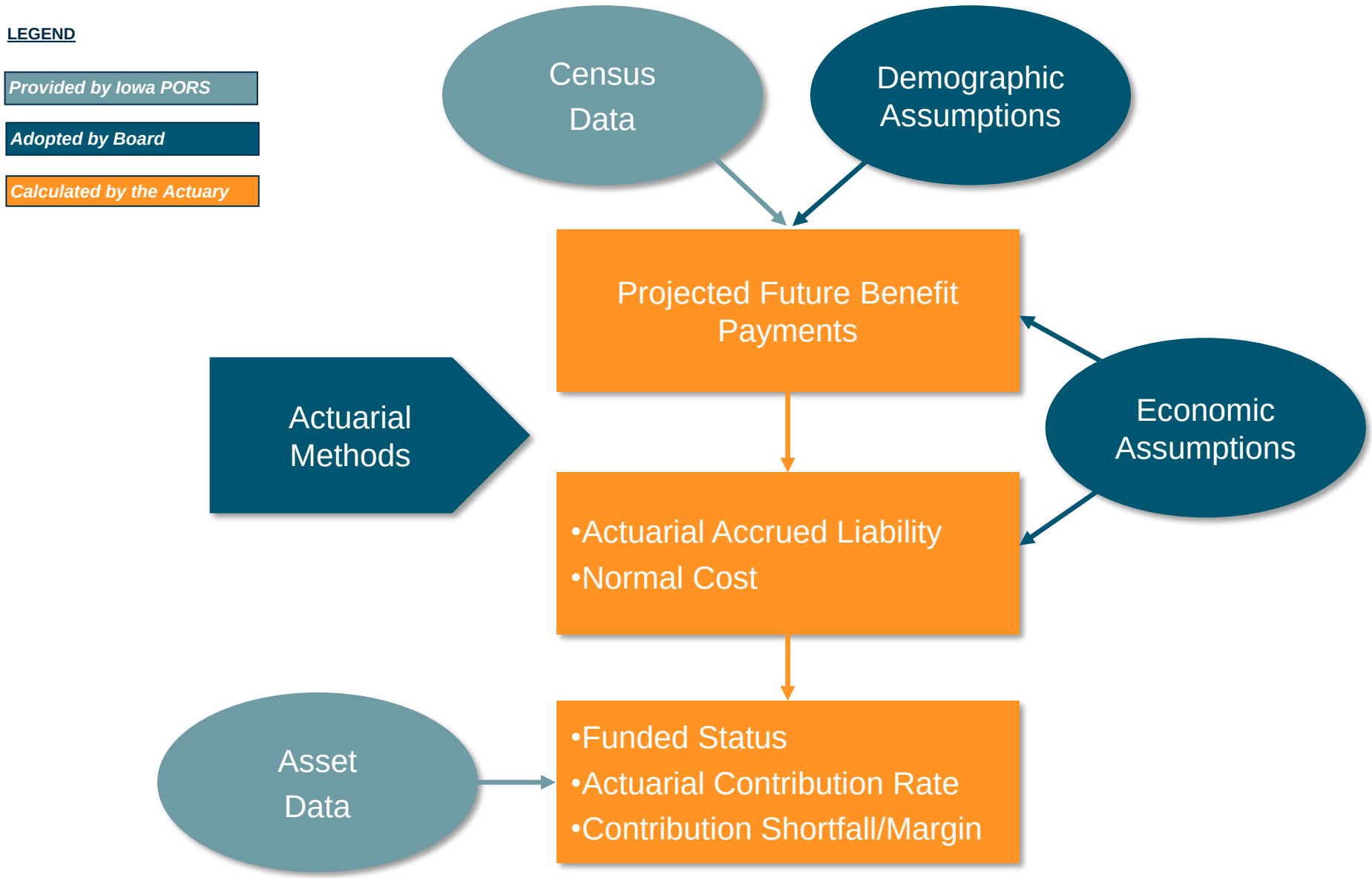
- Disclose key asset and liability measures
  - Funded ratio (assets/liability)
  - Unfunded actuarial accrued liability (liability minus assets)
- Determine actuarial contribution rate
- Evaluate the sufficiency of the current statutory funding of the System
  - Current year shortfall/margin
  - Determine if $5 million of supplemental contribution is required
  - Long term funding projections
- Assess and disclose key risks
- Analyze experience/report on trends



What Impacted the July 1, 2024 Actuarial Valuation

- Actual versus expected experience for FY 2024
  - Asset Experience
    - Investment return on market value of assets for FY 2024 was 11.2%
    - Return on actuarial (smoothed) value was 6.7% compared to 6.5% assumed investment return
      - Generated an actuarial gain of $1.5 million
      - Net deferred investment experience is a loss of $19.3 million
  - Liability Experience
    - Net liability loss of $14.8 million
      - Primarily due to salary increases larger than expected by assumptions
      - Salary increases also impact post-retirement escalator increases, resulting in larger increases than anticipated by the assumptions.
  - Contribution Shortfall
    - Statutory contributions were lower than actuarial contributions resulting in an increase in the UAAL of $5.4 million.

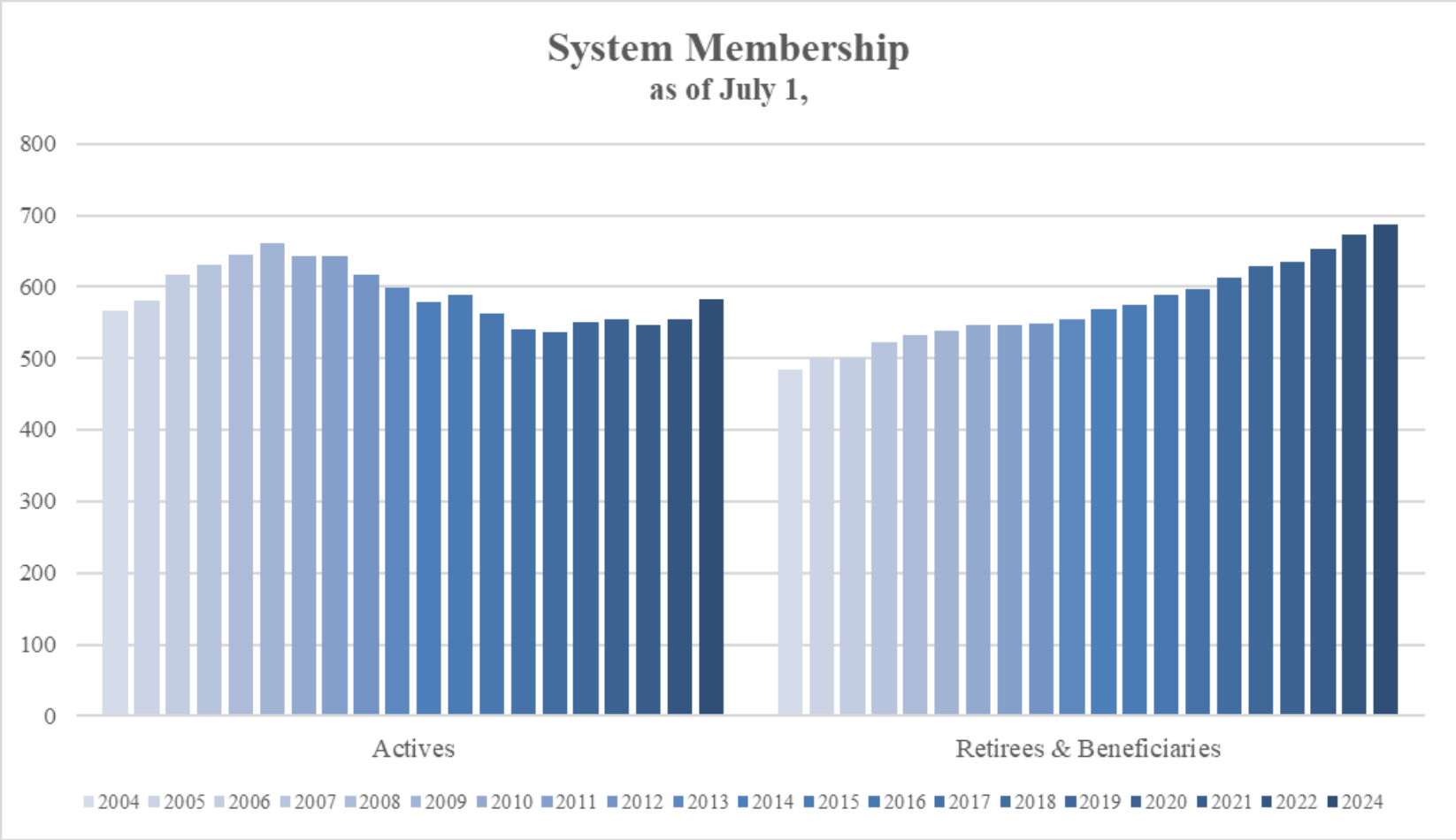
Valuation Process



Membership Data

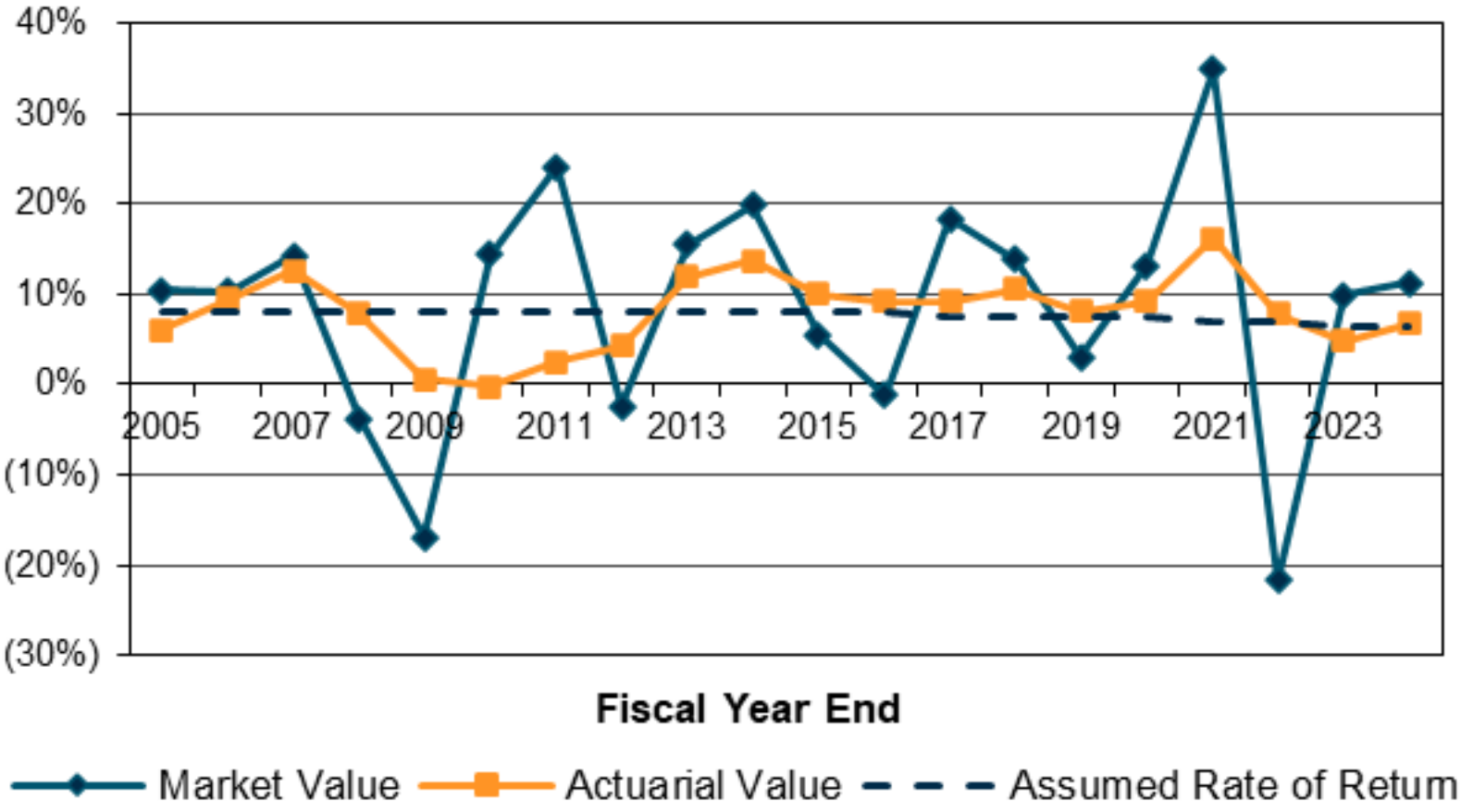
	July 1 Valuation					
	2024	2023	2022	2021	2020	2019
Active Members						
Count	583	588	555	547	555	551
Average Age	41.1	41.1	41.6	42.1	42.4	42.3
Credited Service	15.6	15.7	16.2	16.8	17.0	17.0
Annual Salary	$101,090	$95,390	$91,176	$89,779	$87,302	$85,218
Retired Members						
Count	687	679	673	654	635	629
Average Age	71.0	71.2	70.9	71.1	71.7	71.5
Annual Benefit	$62,559	$59,472	$57,541	$55,847	$54,584	$53,532
Inactive Vested						
Count	44	44	42	41	42	42

Longer Term Historical Membership Data



The active count has declined by 12% from its peak in 2009 while the number of members receiving a benefit has steadily increased. With fixed contribution rates, the decrease in the active population creates pressure on the funding of the System because covered payroll, and therefore contributions, are lower.

Historical Asset Returns



With actuarial funding, assets are accumulated while members are actively working to fund the Future benefit payments in advance. Given the extreme volatility in the market value returns, an asset valuation method is used to smooth the returns.

Change in Asset Values ($M)

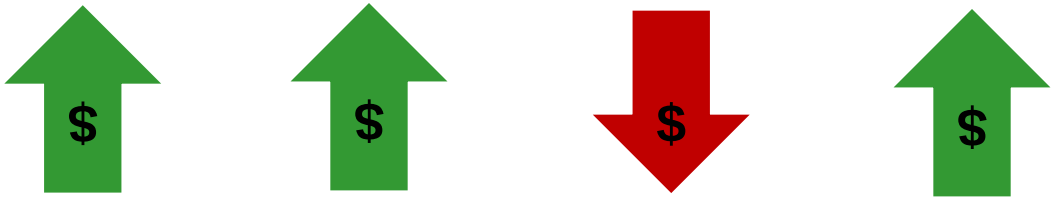
	Market	Actuarial
▪ 7/1/23 Value	$681.3	$728.7
– Contributions	32.1	32.1
– Benefit Payments	(40.7)	(40.7)
– Admin Expenses	(0.4)	(0.4)
– Net Investment Return	76.7	48.6
▪ 7/1/24 Value	$749.1	$768.4
▪ Rate of Return	+11.2%	+6.7%

Note: numbers may not add due to rounding

The 6.7% return on the actuarial value of assets was greater than the assumed rate of 6.5% which created an actuarial gain of $1.5 million.

Actuarial Value of Assets

- Asset Smoothing Method - how and when actuarial asset gains/losses are recognized
  - Smoothing is based on difference between actual and expected return on market value of assets
  - Smoothing period is 5 years
  - Net deferred loss yet to be recognized is $19.3 million as shown below compared to net deferred loss of $47.4 million last year.



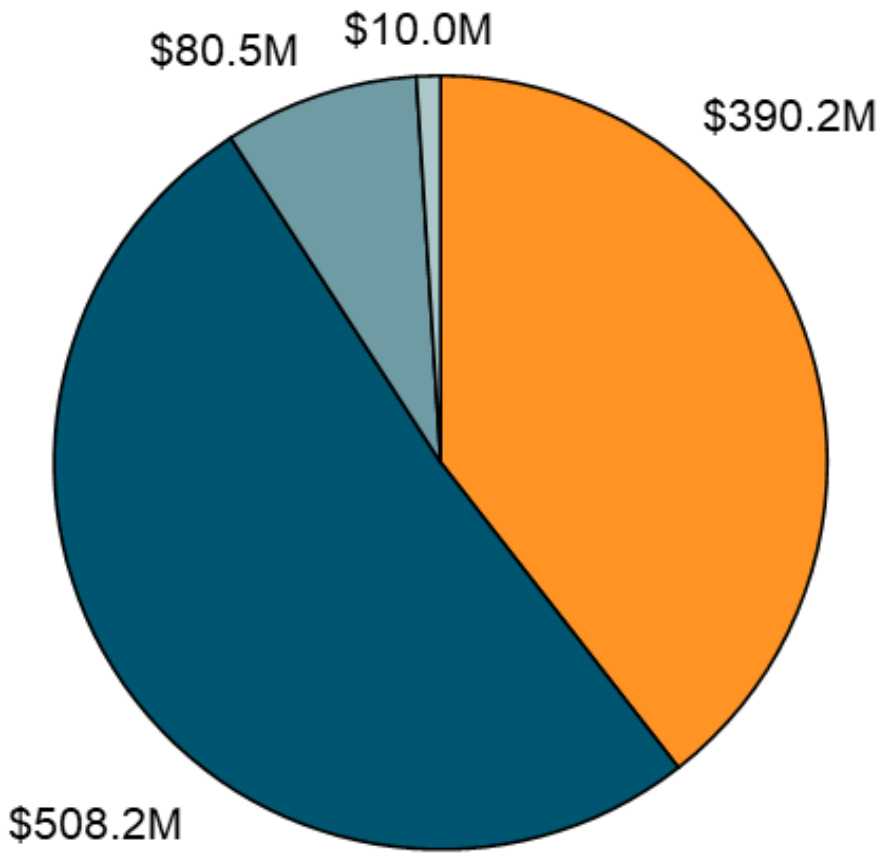
CY Ending:	2024	2023	2022	2021
Millions $:	26.1	13.0	(92.0)	33.6

Recognition of Deferred Asset Experience

Plan Year Ended	Gain/(Loss) Deferred to Future Years	Gain/(Loss) to be Recognized in Plan Year Ending			
		2025	2026	2027	2028
6/30/2021	33,629,929	33,629,929			
6/30/2022	(92,034,546)	(46,017,273)	(46,017,273)		
6/30/2023	12,967,456	4,322,485	4,322,485	4,322,486	
6/30/2024	26,145,452	6,536,363	6,536,363	6,536,363	6,536,363
Total	($19,291,709)	($1,528,496)	($35,158,425)	$10,858,849	$6,536,363

Note: the net deferred experience of $19.3M is not recognized equally over the next four years, but rather each year's experience is on its own schedule. Future experience will also impact the net amount recognized in future years.

Actuarial Accrued Liability (AAL)



In-pay liability of $589M is 60% of total actuarial accrued liability.

Actuarial Accrued Liability:	$989M
Actuarial Assets:	768M
Unfunded Liability:	$221M
Funded Ratio:	78%

Unfunded Actuarial Accrued Liability (UAAL)

UAAL July 1, 2023	$206.5
• Contributions below actuarial rate	5.4
• Expected decrease from amortization	(4.3)
• Investment experience	(1.5)
• Liability experience*	14.8
• Other experience	(0.3)
UAAL July 1, 2024	$220.6

*Primarily due to larger salary and post-retirement escalator increases than expected, based on actuarial assumptions.

Actuarial Contribution Rate

Components:

- Normal Cost
- Administrative Expenses
- Amortization of UAAL

“Layered amortization” method is used:

- Legacy UAAL amortized over 30 Years from 2008 (Closed Period) so 14 years remain as of July 1, 2024
- New pieces of UAAL amortized over closed 20-year periods
- UAAL payment is the sum of the payments for all bases

Utilization:

- Only a benchmark to evaluate the adequacy of the current contribution rates
- Projections are necessary to evaluate the Plan’s long-term funding

UAAL Contribution Rate

Amortization Bases	Original Amount	July 1, 2024 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2024	Annual Contribution*
2017 UAAL Base	$ 182,759,035	14	7/1/2037	$ 168,127,327	$ 15,482,855
2018 Experience Base	(20,775,216)	14	7/1/2037	(19,111,949)	(1,760,020)
2019 Experience Base	(7,599,217)	15	7/1/2038	(7,134,652)	(623,354)
2020 Assumption Change Base	42,755,186	16	7/1/2039	40,791,286	3,395,999
2020 Experience Base	(18,319,662)	16	7/1/2039	(17,478,175)	(1,455,111)
2021 Experience Base	(53,264,638)	17	7/1/2040	(51,613,362)	(4,110,119)
2022 Assumption Change Base	72,348,995	18	7/1/2041	70,966,413	5,423,715
2022 Experience Base	(8,541,603)	18	7/1/2041	(8,378,374)	(640,330)
2023 Experience Base	26,302,521	19	7/1/2042	26,084,780	1,919,022
2024 Experience Base	18,307,800	20	7/1/2043	18,307,800	1,299,981
Total				**$ 220,561,094**	**$ 18,932,638**

* Contribution amount reflects mid-year timing.

1. Total UAAL Amortization Payments	$ 18,932,638
2. Projected Payroll for Plan Year Ending June 30, 2025	$ 58,935,416
3. UAAL Amortization Payment Rate	32.12%

Normal Cost Rate

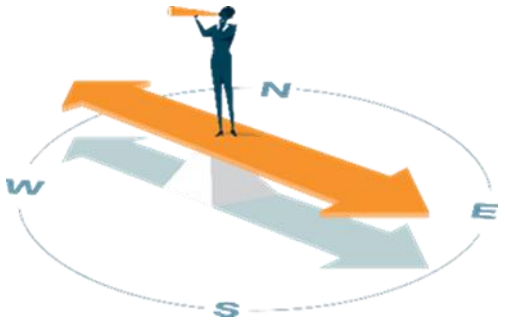
	July 1, 2024 Valuation	July 1, 2023 Valuation
Retirement Benefits	28.71%	28.70%
Withdrawal Benefits	0.68%	0.68%
Death Benefits	0.74%	0.74%
Disability Benefits	5.20%	5.20%
Total	35.33%	35.32%

The normal cost rate usually remains stable, absent changes to the actuarial assumptions.

Actuarial Contribution Rate

Normal Cost	35.33%
Administrative Expenses	0.62%
UAAL Contribution *	32.12%
Total Actuarial Contribution Rate	68.07%

* Amortization of UAAL payments are as a level percent of payroll, assuming a 2.75% annual increase in payroll so the dollar amount of payments increase in the future.



Change in Actuarial Contribution Rate

Actuarial Contribution Rate 7/1/23	66.56%
Change due to:	
• Asset experience	(0.19%)
• Liability/other experience	1.77%
• Payroll increase higher than expected	(0.73%)
• Change in normal cost rate	0.01%
• Contributions less than actuarial rate	0.65%
Actuarial Contribution Rate 7/1/24	68.07%

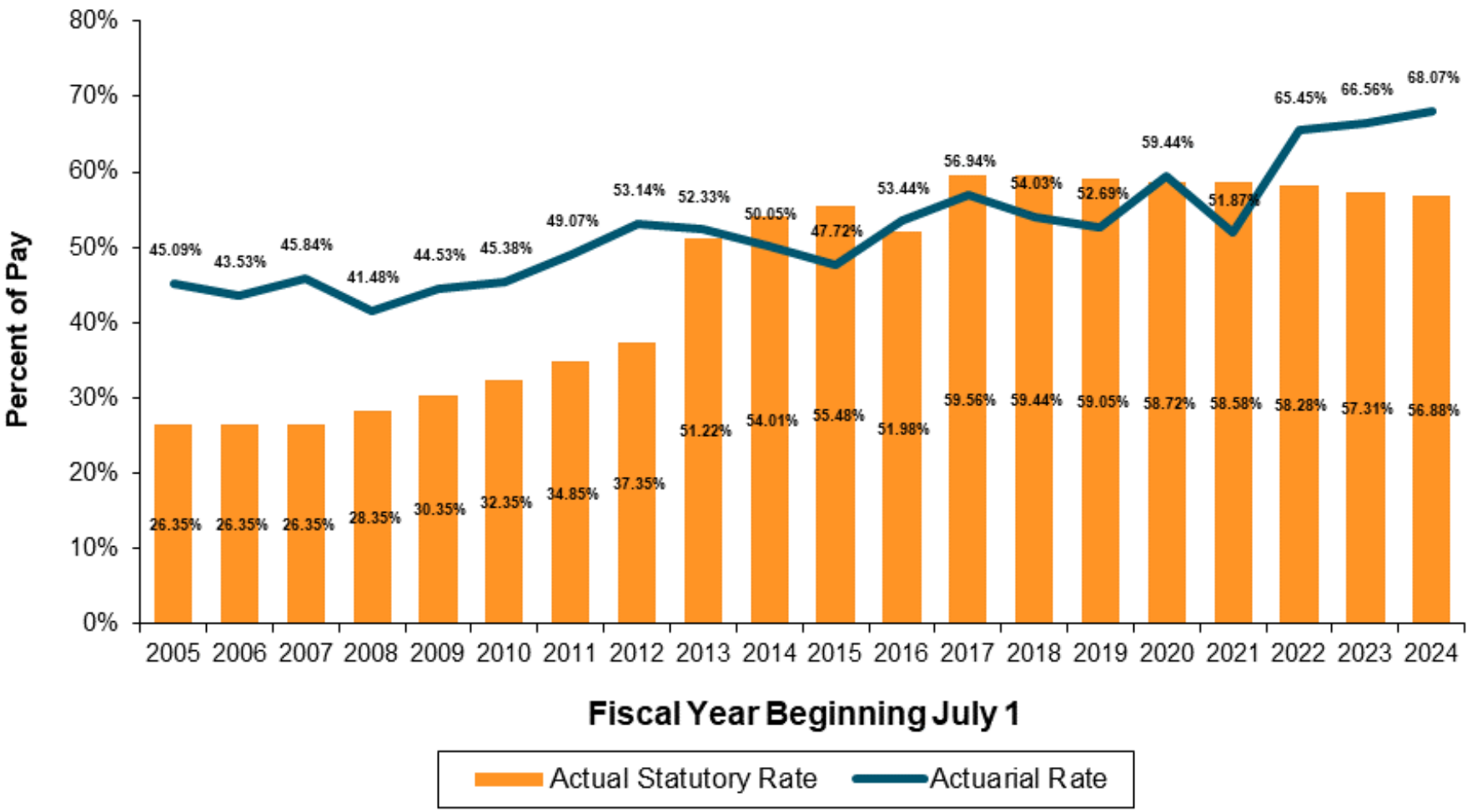
In our professional judgement, the actuarial contribution rate developed here is “reasonable” as defined in Actuarial Standard of Practice Number 4.

Contribution Rate Analysis

	7/1/2024	7/1/2023
Total Actuarial Contribution Rate	68.07%	66.56%
Member Contribution Rate	(11.40%)	(11.40%)
State Actuarial Contribution Rate	56.67%	55.16%
Statutory State Contribution Rate	(37.00%)	(37.00%)
State Supplemental Contribution*	(8.48%)	(8.91%)
Contribution Shortfall/(Margin)	11.19%	9.25%
Expected Payroll ($M)	$58.9	$56.1
Estimated Shortfall/(Margin) ($M)	$6.6	$5.2

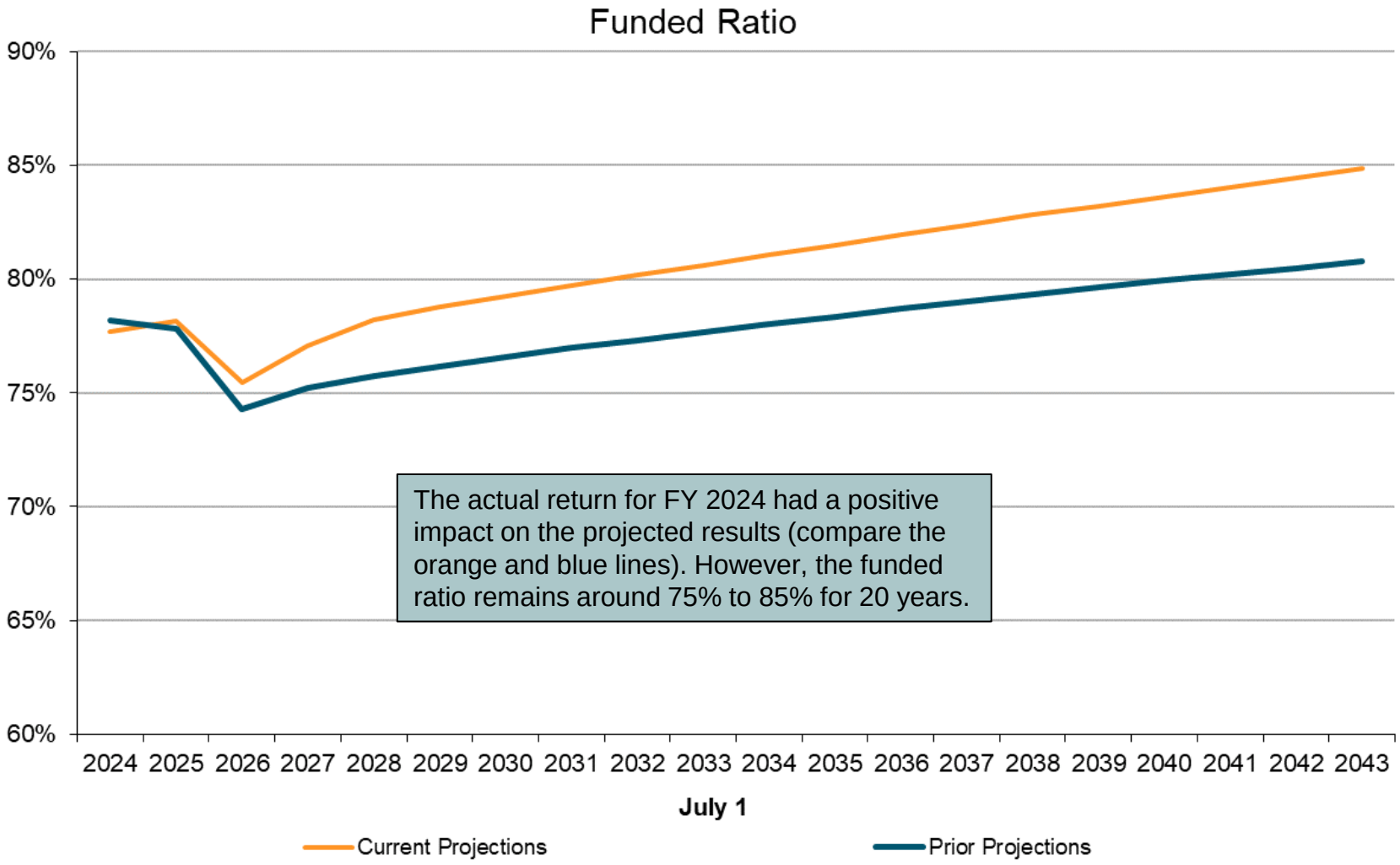
* $5.0 million per year for both FY 2024 and FY 2025.

Historical Contribution Rates



Over the early part of this period, the statutory rate was significantly below the actuarial rate. With legislative changes, the statutory contribution rate has been close to or greater than the actuarial rate between fiscal year 2014 and fiscal year 2022. However, there have been contribution shortfalls in the past three valuations.

Projected Funded Status: 2023 vs 2024 Modeling



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.

Summary Comments

- Contribution shortfall for FY 2025 of 11.19%
  - Large salary increases, and the corresponding post-retirement escalator increases, resulted in an $14.8 M liability loss.
  - Return of +6.7% on actuarial value of assets resulted in a $1.5 M gain.
  - State supplemental contribution of $5M is expected in foreseeable future.

- Long-term financial health of the System is dependent on future investment returns and scheduled contributions, including the $5 million supplemental payment
  - The funded ratio is projected to remain around 75% to 85% over the next 20 years if all assumptions are met. Actual experience will impact these projections from year to year, perhaps significantly.
  - Recommend closely monitoring the contribution shortfall and projected funded status trend each year in order to evaluate whether changes in the current funding policy are needed to address the long-term funding of the System.

Actuarial Certification

I, Patrice A. Beckham, FSA, am a consulting actuary with Cavanaugh Macdonald Consulting, LLC. I am a member of the American Academy of Actuaries, Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. I am available to answer any questions or provide additional information as needed.

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Consulting Actuary


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