

JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

APRIL 28TH MEETING

April 28, 2026

The Joint Committee on Public Employee Retirement held a meeting on the 28th of April, 2026, in House Hearing Room 3. Chair Moon called the hearing to order and roll was called. Chair Moon, and Vice-Chair Steinhoff were present as was Senator Beck, and Representatives Clemens, Hovis, Reedy, and West. Senators Bernskoetter and Fitzwater were not present. A quorum was established. Senators McCreery and Williams joined later. Representative Bosley also joined later via a call-in number.

Chair Moon offered opening remarks and invited MOSERS representatives to present testimony. MOSER Executive Director Abby Spieler and Tim McEnery of Cerity Partners spoke on behalf of MOSERS. Director Spieler indicated members of the MOSERS Board of Trustee were present, including Senator Beck, Jenny Jacobs the boards Vice-Chair, and Ken Zellers, the Commissioner of Office of Administration. Additionally, board members Senator Black and Representative Deatons attended portions of the hearing.

Director Spieler began her testimony with a summary of the plan, including the membership counts, funding status, and covered retirees.

Senator McCreery joined the hearing.

Director Spieler continued with a summary of the board of trustee responsibilities before handing off the meeting to Tim McEnery of Cerity Partners. Mr. McEnery reported the plan's returns for 2025 were 9.5% and the current funding ratio was 55%. Director Spieler noted the use of actuarial smoothing means the full value of the returns would not immediately appear in the valuation.

Director Spieler stated the board of trustees has approved an increase in the schedule of contributions, from 27.44% to 32.00%, this was an increase over the actuarial recommended contributions and is reflected in the budget for Office of Administration.

Representative Bosley called into the meeting.

Director Spieler reported this increase should lead to a funding ratio of 80% in 11 years, if all other assumptions hold true. Director Spieler highlighted several changes the board adopted from the new experience study, including a change to assumed rate of return on investment and adoption of a new mortality table. It was also noted the board did not accept an increase in the payroll growth assumption, choosing to use the current framework instead. Director Spieler stated the actuary did not object to this choice.

It was also noted the lower-than-expected payroll increases coupled with the high number of inactive members continues to negatively impact the system.

Mr. McEnery spoke next. He discussed the importance of asset allocation in investment returns, stating asset allocation is a larger driver of returns than the choice of fund investment managers.

Senator Willams joined the meeting.

Director Spieler moved onto legislation MOSERS is monitoring and give special focus on SB 1054, sponsored by Senator Black. This bill will allow MOSERS to submit automatic refunds for non-vestment members with under \$1000 in contributions.

On with those comments, Director Spieler concluded the presentation.

Chair Moon had follow-up questions regarding total assets and liabilities, and membership numbers, which were answered by Director Spieler. The chair then asked if there were other committee members with questions.

Representative Hovis asked if a different type of asset allocation would have been prudent. Mr. McEnery noted the previous board had opted for a risk balance approach that would have insulated the plan from disruptions in the markets. Mr. McEnery noted while not presently working with MOSERS at the time this would have been a reasonable decision in 2012.

Chair Moon expressed concerns the plan has been on a steady downward trend for the past 20 years and asked how do you reach the results of 80% funded ratio in 12 years. The director replied that the system will need to stay at 32% contribution level and meet the other actuarial assumptions. Chair Moon asked who set the asset allocation, and the director stated it was a board decision.

Senator Beck commented there was a 20-year period in which the funding ratio has moved down. The current board is working to improve the state of the system, holding long detailed meetings and putting in max effort, but the current funding state is creating major headwinds on the plan.

Representative Clemens asked when MOSERS start using their current actuaries and was informed MOSERS started using CavMac in 2016. The representative asked if there was an option to return to a 32% contribution rate if there was a downturn after reaching 80% funded ratio. The director said the board could reinstate the increased contribution level, if needed.

Chair Moon asked if the slowing payroll growth meant the plan should have been on a more aggressive strategy. Mr. McEnery said that,

while he was not working with MOSERS at the time, it was impossible to know if that was going to be the wrong choice.

Senator McCreery made note the meeting represents the Committee's desire to ensure the health and well-being of MOSERS for all present and future members. Director Spieler reiterated the MOSERS board members have made key changes to strengthen the plans overall health.

Representatives Clemens and Reedy left the meeting. Representative Bosley left the virtual leg of the meeting. They were followed shortly thereafter by Senator Beck.

The Chair thanked the MOSERS for appearing before the committee and adjourned the meeting.

A handwritten signature in black ink, appearing to read "Robert Coleman", written over a horizontal line.

Robert Coleman
Executive Director

Rep. Hovis, Chairman
Senator Bernskoetter, Vice-Chairman
Senator Beck
Senator Fitzwater
Senator McCreery
Senator Moon
Senator Williams
Rep. Bosley
Rep. Clemens
Rep. Reedy
Rep. Steinhoff
Rep. West



Administration
Bill Room
Communications
Information Technology
Legislative Research - Oversight
Majority Caucus Staff
Research
Secretary of Senate
Security
Sergeant-at-arms

Joint Committee on Public Employee Retirement

Day: Tuesday, April 28, 2026

Time: 8:30 am

Place: House Hearing Room 3

AGENDA

Testimonies

Roll Call

Comments of the Chair

A vote may be taken to close the meeting pursuant to section 610.021(3), RSMo and section 610.021(13), RSMo relating to personnel matters.

Only individuals or organizations testifying in person will be entered into the committee minutes.

JOINT COMMITTEE ON PUBLIC EMPLOYEE RETIREMENT

**Public Hearing
April 28, 2026
8:30 am—10:00 am
House Hearing Room 3, State Capitol**

AGENDA

Roll Call

Testimonies

Comments of the Chair

A vote may be taken to close the meeting pursuant to section 610.021(3), RSMo and section 610.021(13), RSMo relating to personnel matters.

www.jcper.org

Missouri State Employees' Retirement System Overview

Abby Spieler
Executive Director
MOSERS

Tim McEnery
Partner
Certy Partners

April 28, 2026



MOSERS Overview

- Statutorily created retirement system (Chapter 104)
 - Body corporate and state instrumentality
 - Oversight is vested in 11-member Board of Trustees
- MOSERS administers
 - 401(a) Defined Benefit Pension Plan
 - Missouri Deferred Compensation Plan – 457 Plan
 - Colleges & Universities Retirement Plan (CURP)
 - Teaching faculty only

MOSERS Covered Employers

defined benefit pension plan

- State of Missouri (excluding MoDOT & Hwy Patrol)
- Harris-Stowe State University
- Lincoln University
- Missouri Southern State University
- Missouri State University
- Missouri Western State University
- Northwest Missouri State University
- Southeast Missouri State University
- State Technical College of Missouri
- Truman State University
- University of Central Missouri
- Environmental Improvement & Energy Resources Authority
- Missouri Agriculture & Small Business Development Authority
- Missouri Consolidated Health Care Plan
- Missouri Development Finance Board
- Missouri Housing Development Commission
- Missouri Public Entity Risk Management Fund
- Missouri State Employees' Retirement System
- Missouri Wine and Grape Board

MOSERS Board of Trustees

- 2 members of the House of Representatives
- 2 members of the Senate
- 2 members appointed by the Governor
- 2 active members elected by active membership
- 1 retired member elected by retired membership
- 2 ex officio members
 - Commissioner of the Office of Administration
 - State Treasurer

Key Responsibilities of the Board

- Serve as fiduciaries to the members and beneficiaries of the System
- Set MOSERS funding policy
 - Selects actuarial assumptions and methods used to fund the plan
- Set MOSERS investment policy
 - Asset allocation, benchmarks, and other risk parameters
- Certify the annual employer contribution rate to fund the plan
- Perform general oversight of the System

Role of the External Actuary

- Cavanaugh Macdonald Consulting's key duties include:
 - Advising on actuarial assumptions and methods used to fund the plan
 - Examples: price inflation assumption, investment return assumption, amortization period, mortality assumptions
 - Performing an annual actuarial valuation of the System
 - Performing an experience study at least every 5 years
 - Compares actual plan experience during the study period with current assumptions and methods
 - Providing fiscal analysis of legislative proposals

Role of the External Investment Consultant

- Cerity Partners' key duties include:
 - Advising the Board on the System's *Investment Policy Statement*
 - Recommending asset allocation, benchmarks, and risk parameters
 - Monitoring and reporting on investment returns and risk measures

MSEP Valuation Highlights

as of June 30, 2025

- Fiscal Year 2025 investment return of 9.8%
- Funded ratio increased 0.1% from 55.3% to 55.4%

	Actuarial Value of Assets
Actuarial Accrued Liability	\$17,393,412,163
Value of Assets	<u>9,642,618,591</u>
Unfunded Actuarial Accrued Liability	\$7,750,793,572
Funded Ratio	55.4%

Employer Min. Contribution Rate <i>(set in June 30, 2023 valuation)</i>
FY 25: 28.75%
FY 26: 30.25%
FY 27: 32.00%

- Fiscal Year 2027 actuarial employer contribution rate of 27.44%
- In 2023, the Board implemented a minimum employer contribution rate policy
 - Certified the employer contribution rate for Fiscal Year 2027 at 32%
 - The rate increase from 30.25% to 32% is the cause of the increase in the HB 5 appropriation to OA for the MOSERS contributions.

MSEP Valuation Highlights - Member Demographics

as of June 30, 2025

A. Number of Active Members	44,673
<i>2011 plan members</i>	<i>30,745</i>
B. Number of Inactive Members	56,812
<i>Term Vested</i>	<i>17,943</i>
<i>Term-Nonvested</i>	<i>38,869</i>
C. Retirees & Beneficiaries	56,494

MSEP Valuation Highlights - Contribution Rate

As of June 30, 2025

	Percent of Payroll		
	<u>MSEP & MSEP 2000</u>	<u>MSEP 2011</u>	<u>Weighted Average</u>
A. Normal Cost (<i>cost of one year of service</i>)	9.14	8.43	8.69
B. Less Member Contributions	0.00	4.00	2.55
C. Employer Normal Cost [A-B]	9.14	4.43	6.14
D. Unfunded Actuarial Accrued Liabilities			21.30
E. Actuarial Employer Contribution Rate [C+D]			27.44%
F. Policy Minimum Employer Contribution Rate			32.00%

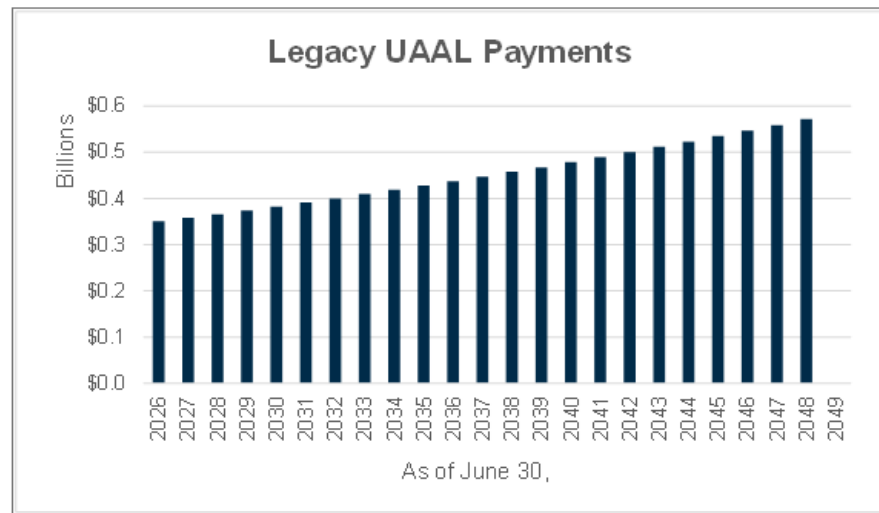
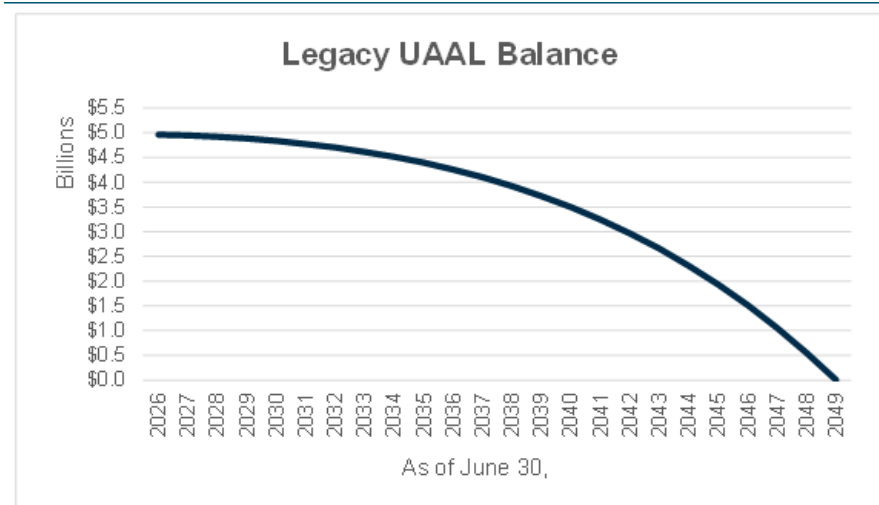
Employer Normal Cost rate is expected to decrease as more of the active population is covered by MSEP 2011 which has a lower normal cost rate.

Employers pay all the Normal Cost for MSEP and MSEP 2000 members and roughly 50% of the Normal Cost for MSEP 2011 members.

Unfunded Actuarial Accrued Liability (UAAL)

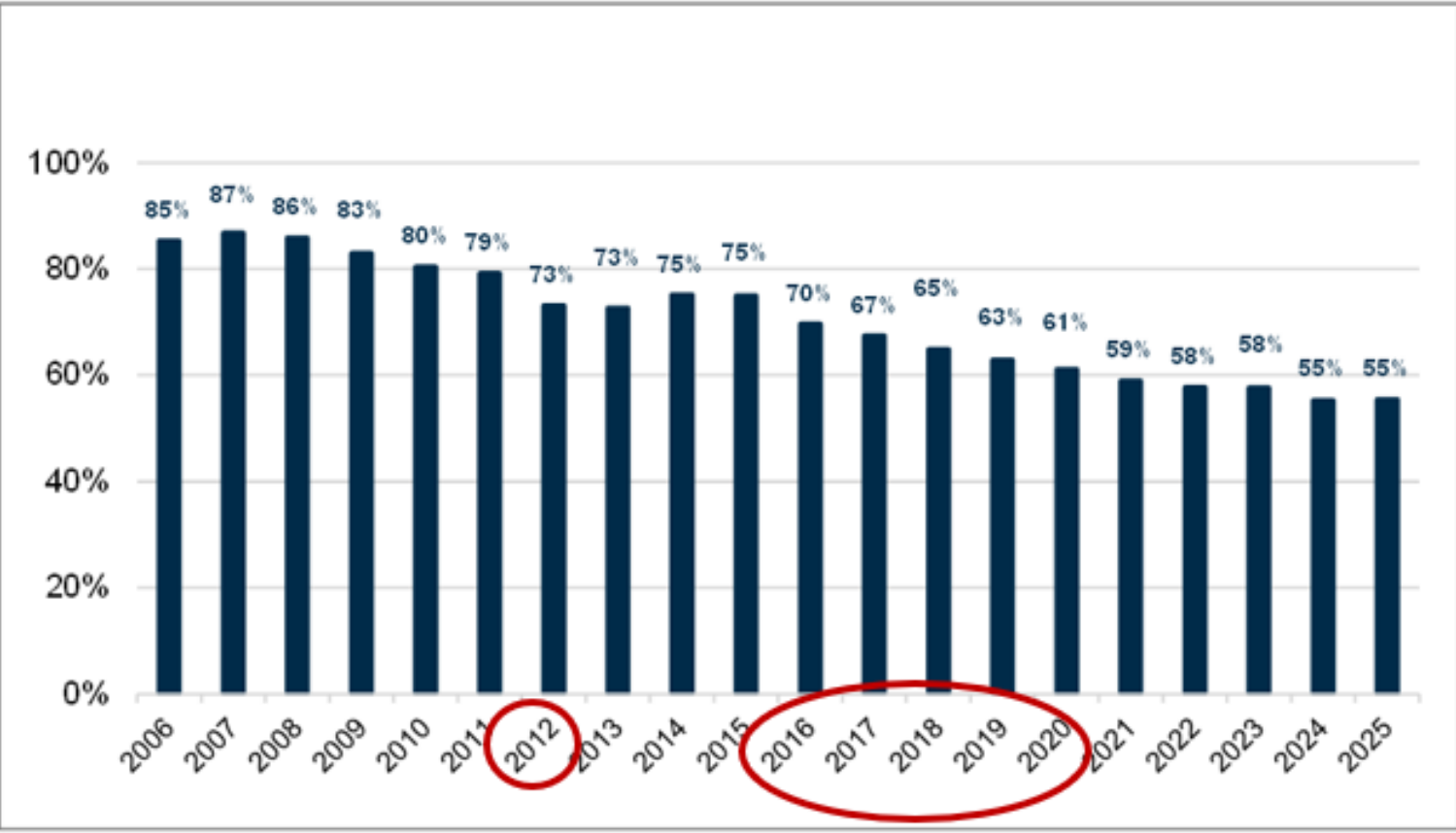
- MOSERS, like other pension plans, uses level percent of payroll amortization method to finance the UAAL
 - Assumes annual UAAL payments will grow 2.25% (payroll growth assumption) each year
 - Results in smaller payments in short-term and larger payments in long-term
- The UAAL, as determined in the June 30, 2018, valuation is amortized over a closed 30-year period – 23 years currently remain
 - Subsequent UAAL changes due to actuarial gains or losses or assumption changes are separately financed over a closed 25-year period

Payment of the UAAL



As of June 30	Outstanding Balance (BOY)	Amortization Years Remaining	Contributions (\$M)
2026	4,962	23	350
2027	4,945	22	358
2028	4,919	21	366
2029	4,882	20	374
2030	4,834	19	383
2031	4,775	18	391
2032	4,702	17	400
2033	4,615	16	409
2034	4,513	15	418
2035	4,394	14	428
2036	4,257	13	437
2037	4,101	12	447
2038	3,923	11	457
2039	3,723	10	467
2040	3,499	9	478
2041	3,247	8	489
2042	2,968	7	500
2043	2,657	6	511
2044	2,313	5	522
2045	1,934	4	534
2046	1,516	3	546
2047	1,056	2	559
2048	552	1	571
2049	0	0	0

Assumption changes impact on UAAL & funded ratio

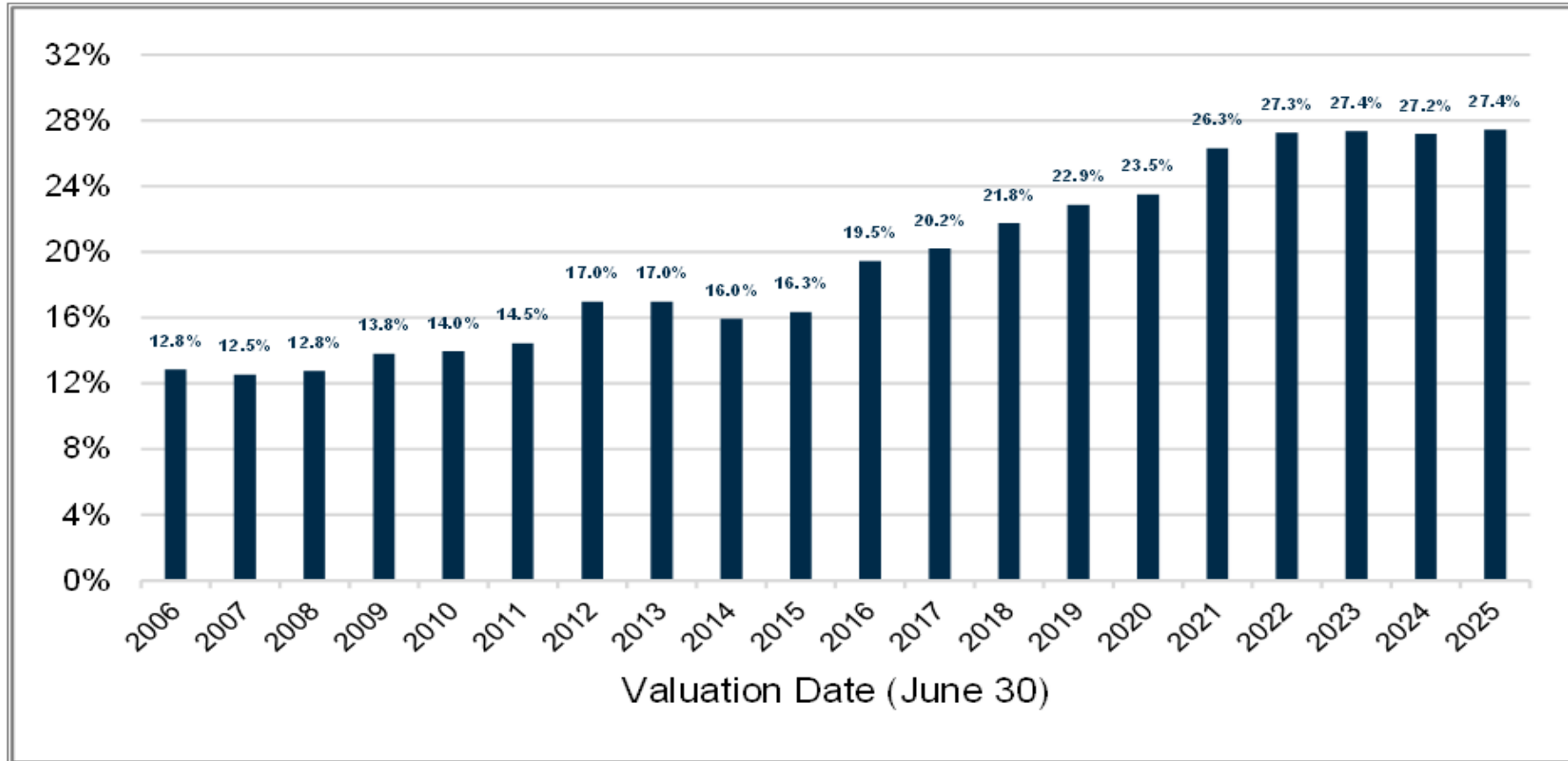


Open 30-year period amortization

Funding policy changes have significantly impacted the increase in the unfunded liabilities and decline in the funded ratio:

- Changes to the investment return assumption:
 - 2012: 8.50% to 8.00%
 - 2016: 8.00% to 7.65%
 - 2017: 7.65% to 7.50%
 - 2018: 7.50% to 7.25%
 - 2019: 7.25% to 7.10%
 - 2020: 7.10% to 6.95%
- 2021 - Update to mortality assumption to use generational mortality improvements
- Change to closed amortization period in 2014

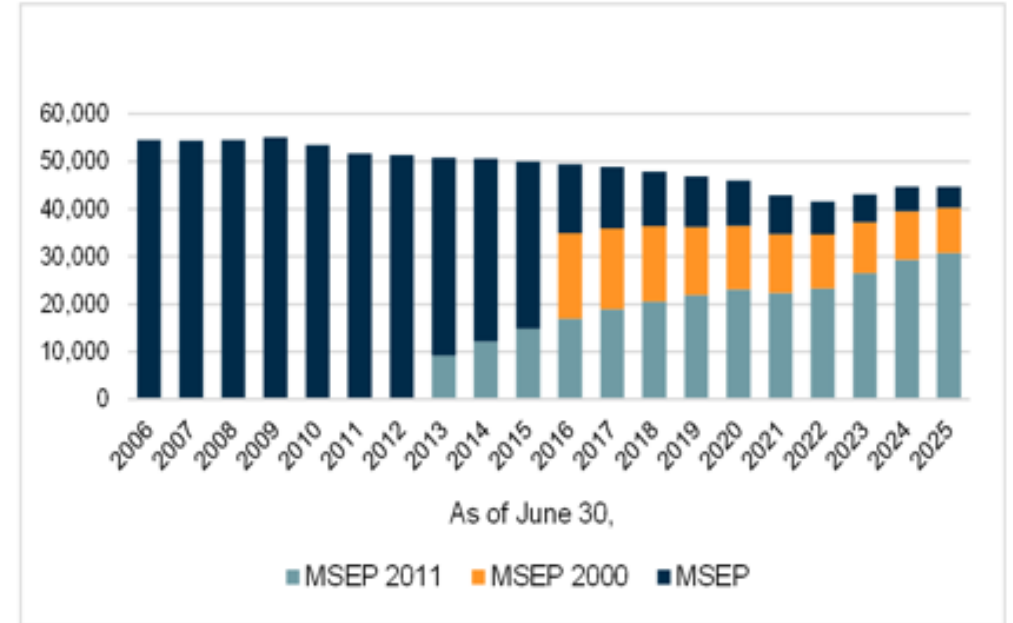
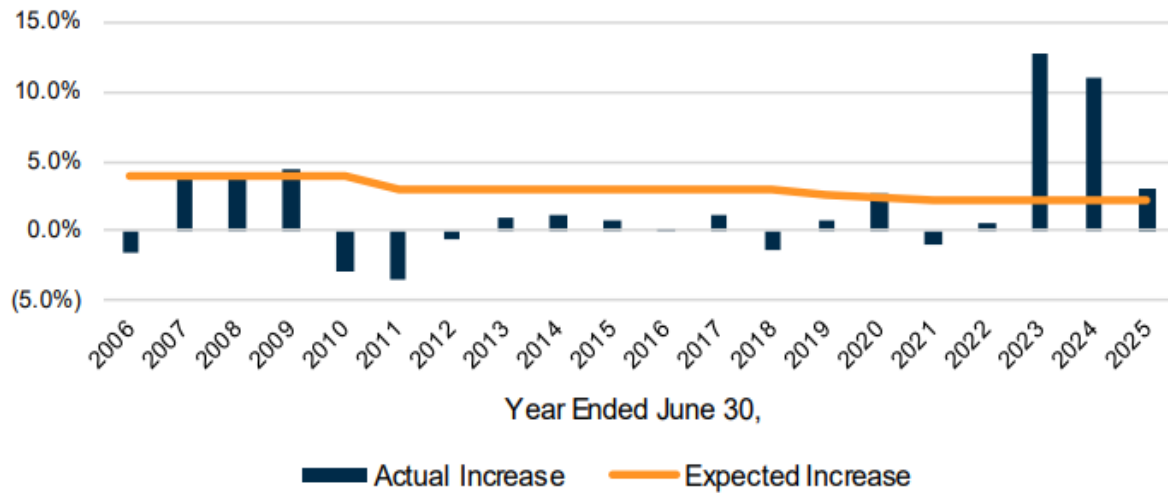
Historical MSEP Actuarial Employer Rate



Funding policy changes have also significantly impacted the contribution rate.

Lack of payroll growth impact on contribution rate & funded ratio

Annual Change in Covered Payroll



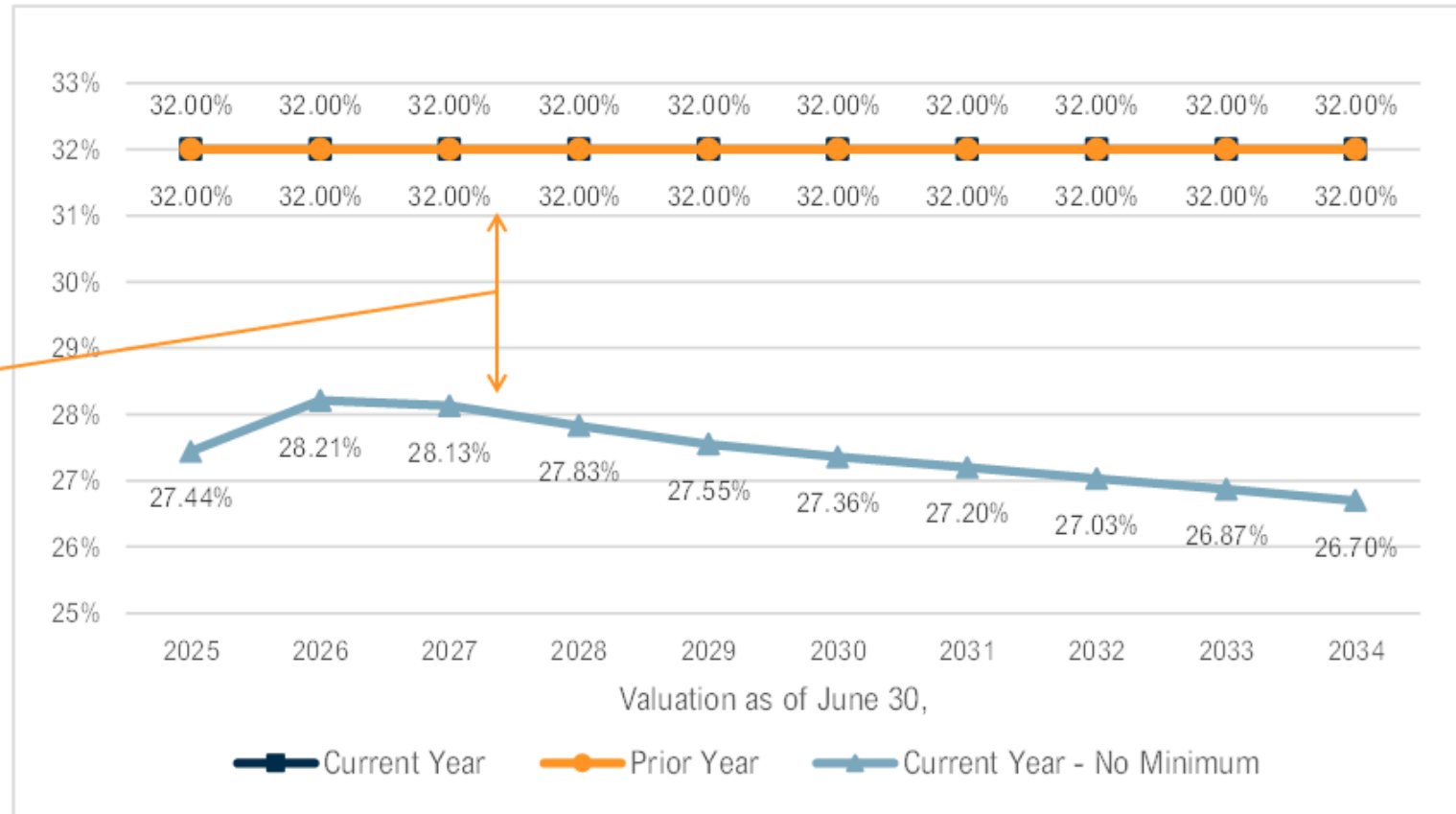
Over the last 20 years, the active membership has declined about 20% (majority since 2009) but has been more stable recently.

Minimum Employer Contribution Rate Policy

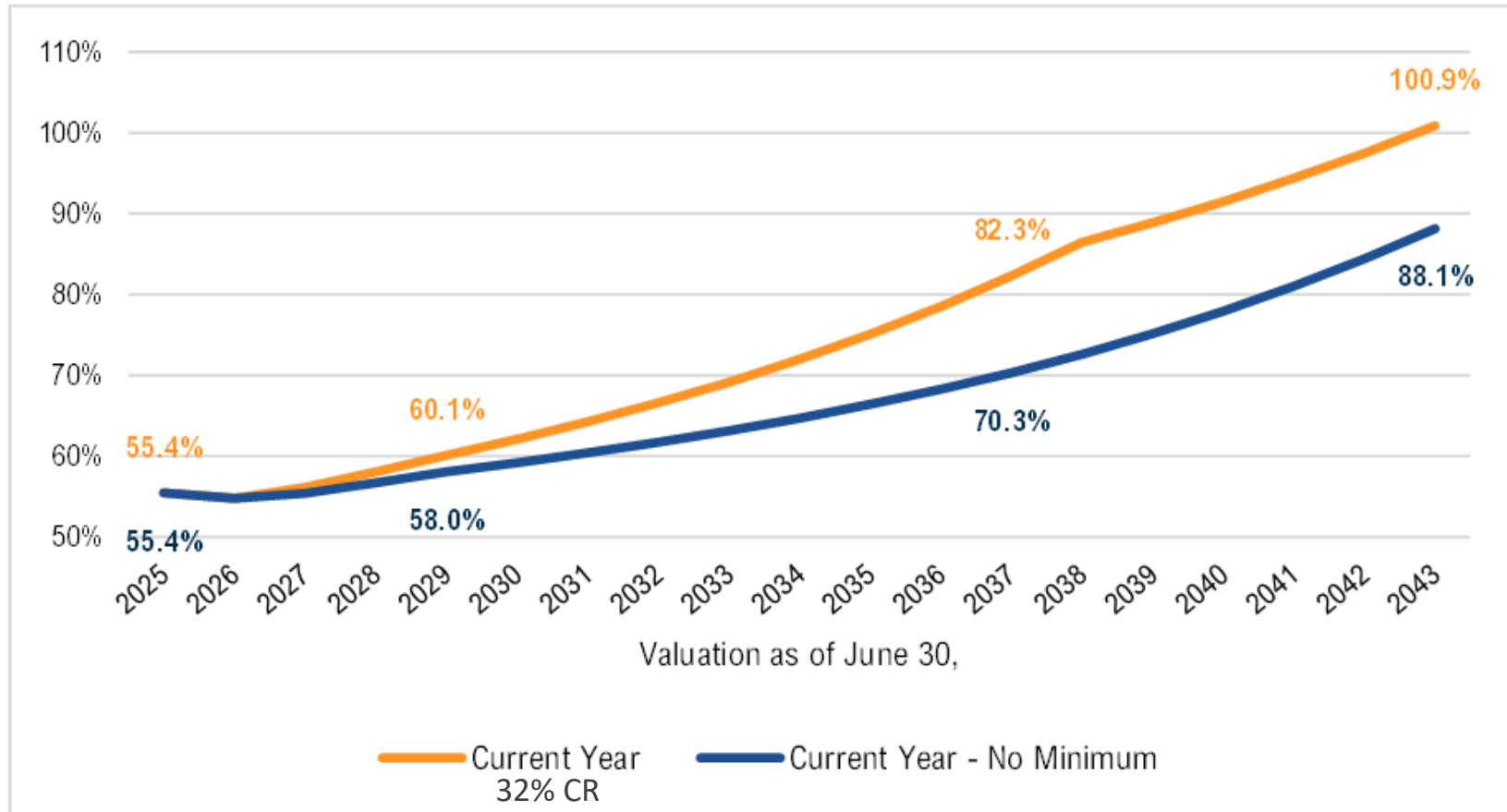
- At the September 2023 meeting, the Board voted to implement a minimum employer contribution rate policy for all years to:
 - 28.75% of pay for Fiscal Year 2025
 - 30.25% of pay for Fiscal Year 2026
 - 32% of pay for fiscal years thereafter
- The policy is designed to, hopefully, increase the funded status more rapidly than following the actuarial employer contribution rate.
 - The difference between the minimum employer contribution rate and actuarial employer contribution pays down the UAAL.

Projected MSEP Contribution Rates

The difference between the required rate and the actuarial rate will serve to move the plan to full funding more rapidly.



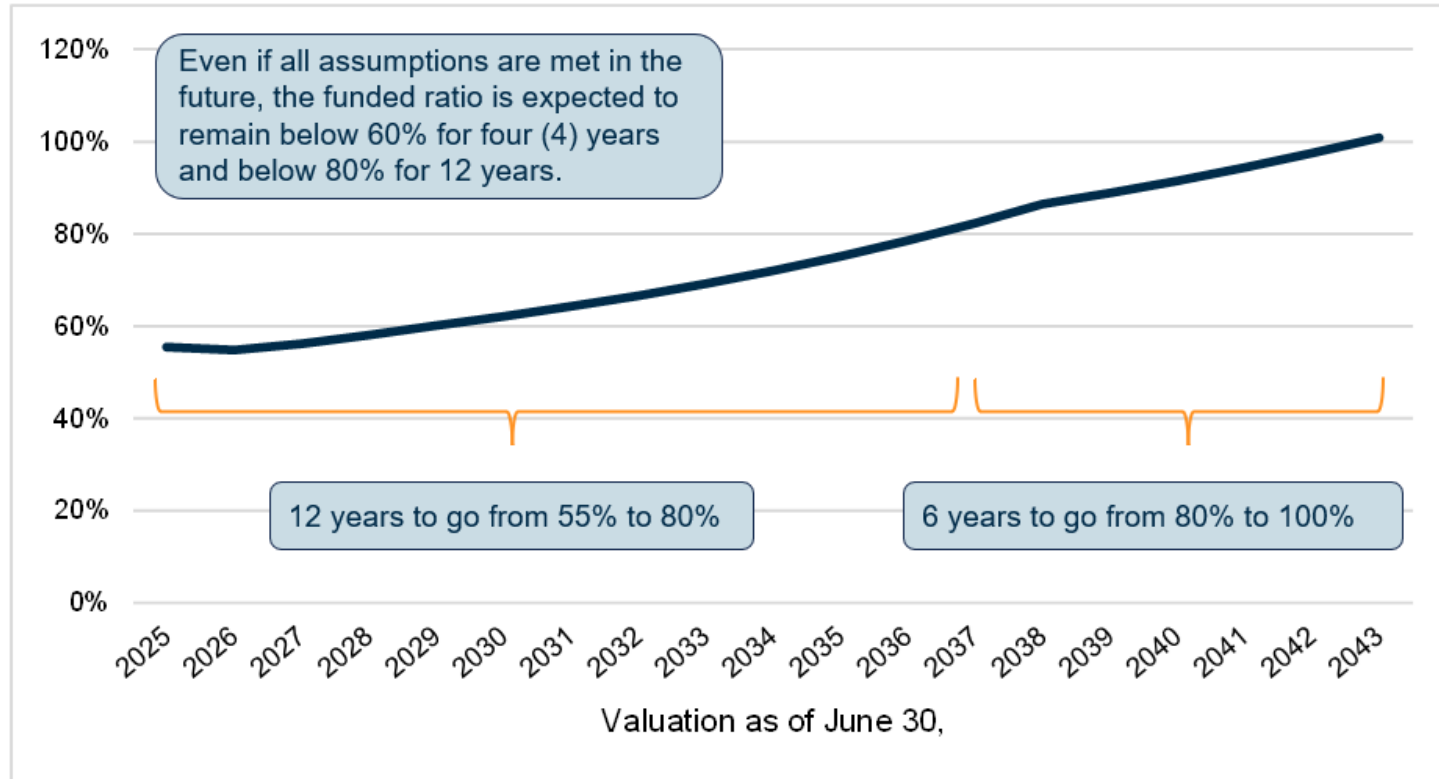
Projected MSEP Funded Ratio



If all assumptions are met, MSEP is expected to reach an 80% funded ratio four (4) years sooner (2037 vs. 2041) due to the minimum contribution rate in the Funding Policy.

Note: Once the funded ratio reaches 80%, the minimum contribution rate does not apply.

Projected MSEP Funded Ratio – 32% CR

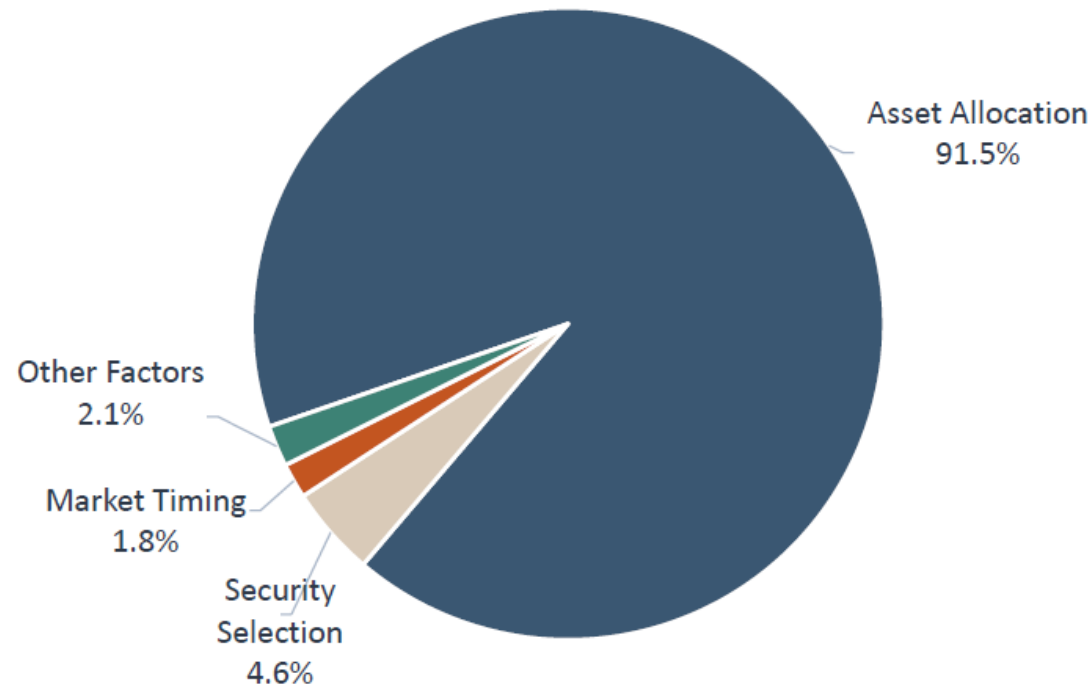


- Payments in future years are assumed to increase 2.25% using the “level percent of pay” amortization methodology. **As a result, payments are smaller in the short term and larger in the long term.**

Reflects minimum contribution rate and assumes all actuarial assumptions are met in the future, including a 6.95% return on the market value of assets.

Asset Allocation is a Critical Decision

PERCENT OF VARIATION EXPLAINED¹

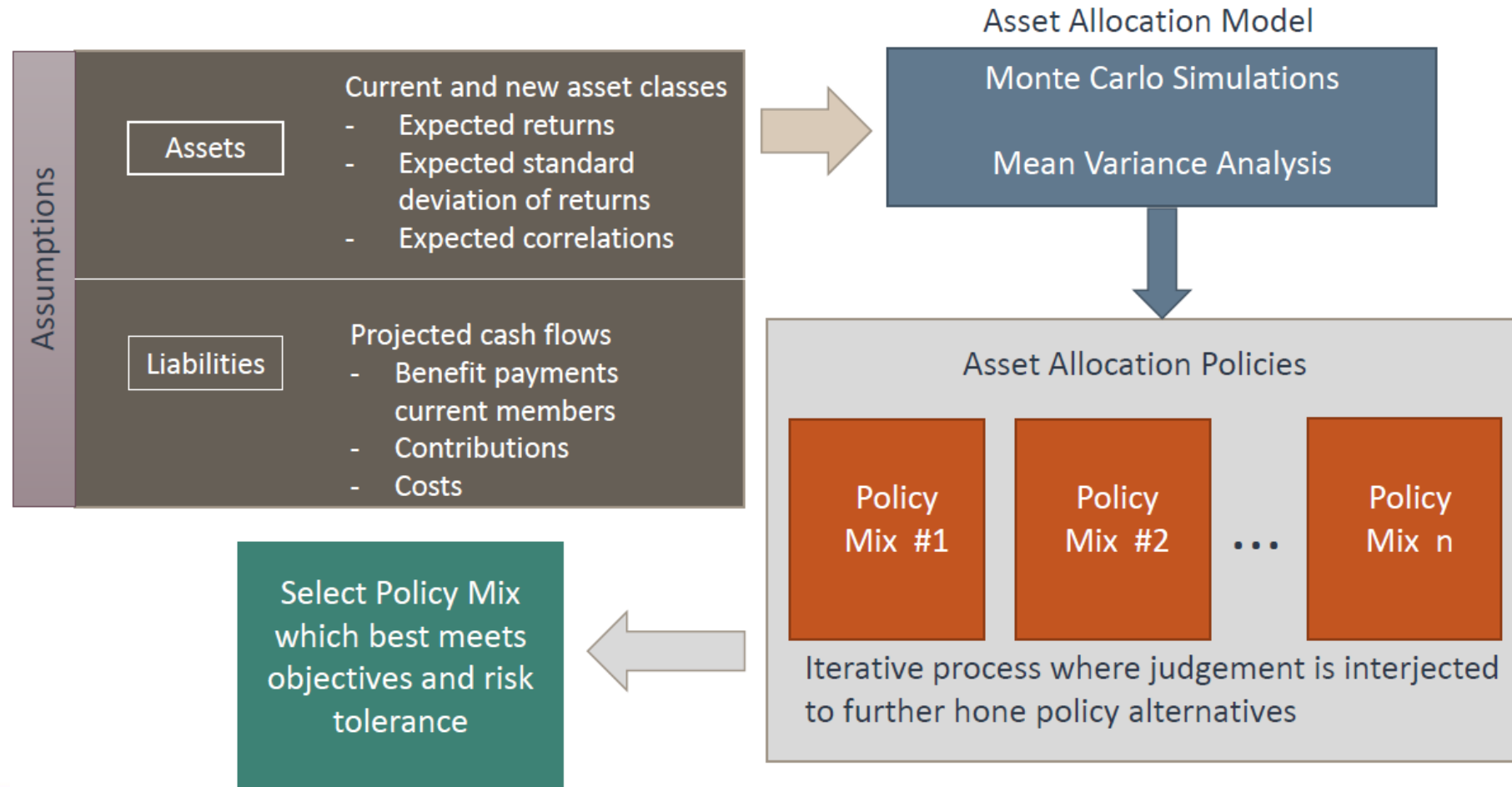


Asset allocation drives the bulk of the variation in portfolio returns over time

Studies have found that most of the variability in a portfolios' returns can be attributed to asset allocation (91.5%)

¹ Brinson, Singer & Beebower: Determinants of Portfolio Performance II: An Update

What is “best practices” approach to asset allocation process for public pension funds?



Historical asset allocation – MOSERS vs. peers

ASSET CLASS	MOSERS (2012)	MOSERS (2018)	PEER (Average) ¹
Growth	38.0	45.0	56.9
Public Equities	27.0	30.0	42.7
Private Equities	11.0	15.0	14.2
Income	44.0	35.0	19.3
Long Treasuries	44.0	25.0	--
Core Bonds	--	10.0	19.3
Inflation Hedge	59.0	40.0	12.5
Commodities	20.0	5.0	0.5
TIPS	39.0	25.0	--
Private Real Assets	--	5.0	10.0
Other Public Real Assets	--	5.0	2.0
Absolute Return	31.0	20.0	11.3
Hedge Funds	16.0	5.0	5.0
Alternative Beta	16.0	10.0	--
Private Credit	--	5.0	6.3
Total Fund	172%	140%	100%

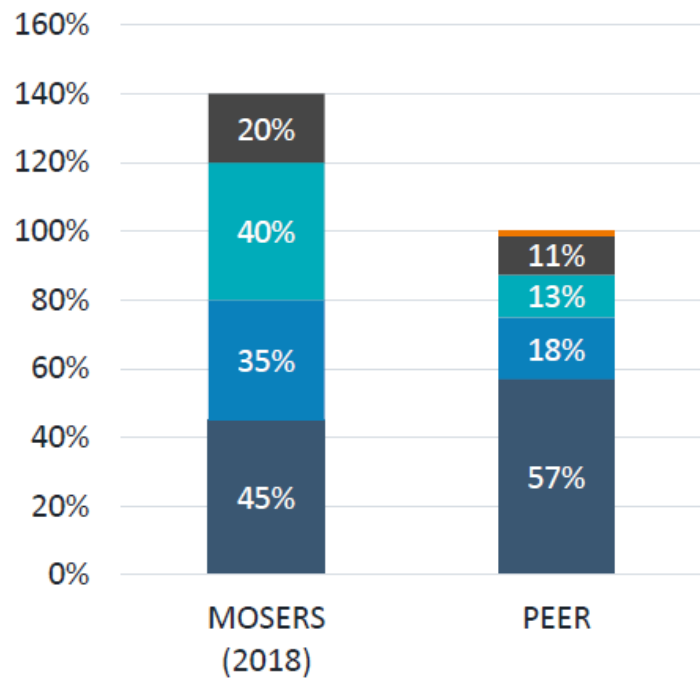
The historical asset allocation strategy employed by MOSERS differed from most public fund peers

This “Risk Balanced” approach used leverage at the Total Fund level to adjust the volatility characteristics of each asset class so that each contributed a more balanced amount of expected volatility

¹ Annual Comprehensive Financial Reports of 50 largest public plans as of FY 2022.

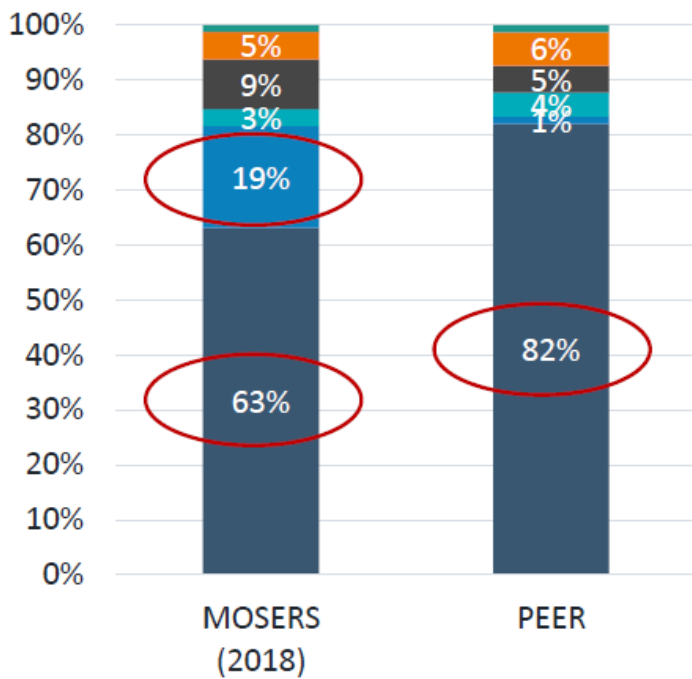
How do asset allocation differences shape portfolio risk?

CAPITAL ALLOCATION



- Growth
- Income
- Inflation Hedge
- Absolute Return
- Cash

RISK ALLOCATION



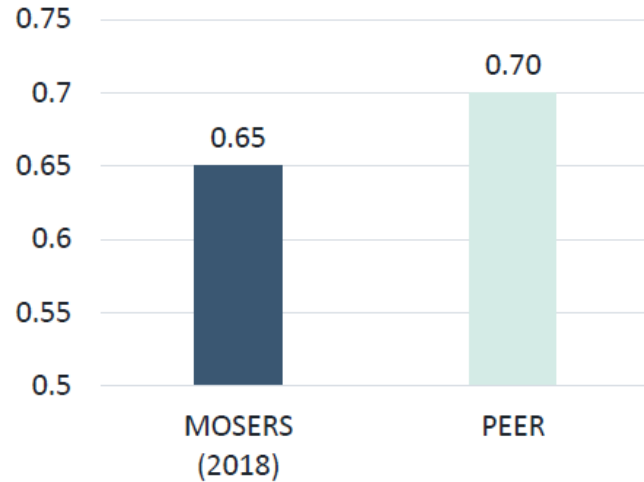
- Equity
- Rates
- Credit
- Inflation
- Currency Risk
- Selection Risk

The “Risk Balanced” approach resulted in an asset allocation that was less equity-centric and placed a greater emphasis on fixed income (rates)

MOSERS (2018) and Peer represents asset allocations shown previously.

How do these risks influence portfolio results?

EQUITY MARKET SENSITIVITY (BETA)

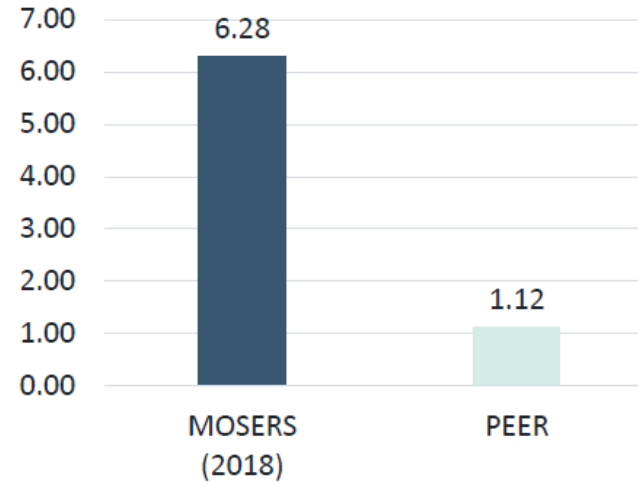


Beta measures how much the portfolio tends to move relative to global equity markets

- 1.0 = moves in line with markets
- Less than 1.0 = less market-sensitive
- Higher beta = greater equity risk

MOSERS (2018) and Peer represents asset allocations shown previously.

INTEREST RATE SENSITIVITY (DURATION)



Duration measures how sensitive fixed income assets are to changes in interest rates

- Higher duration = greater rate sensitivity
- Lower duration = less rate sensitivity

What drove return differences relative to peers?

PERFORMANCE ATTRIBUTION RELATIVE TO PEERS – 5 YEARS ENDING 6/30/24

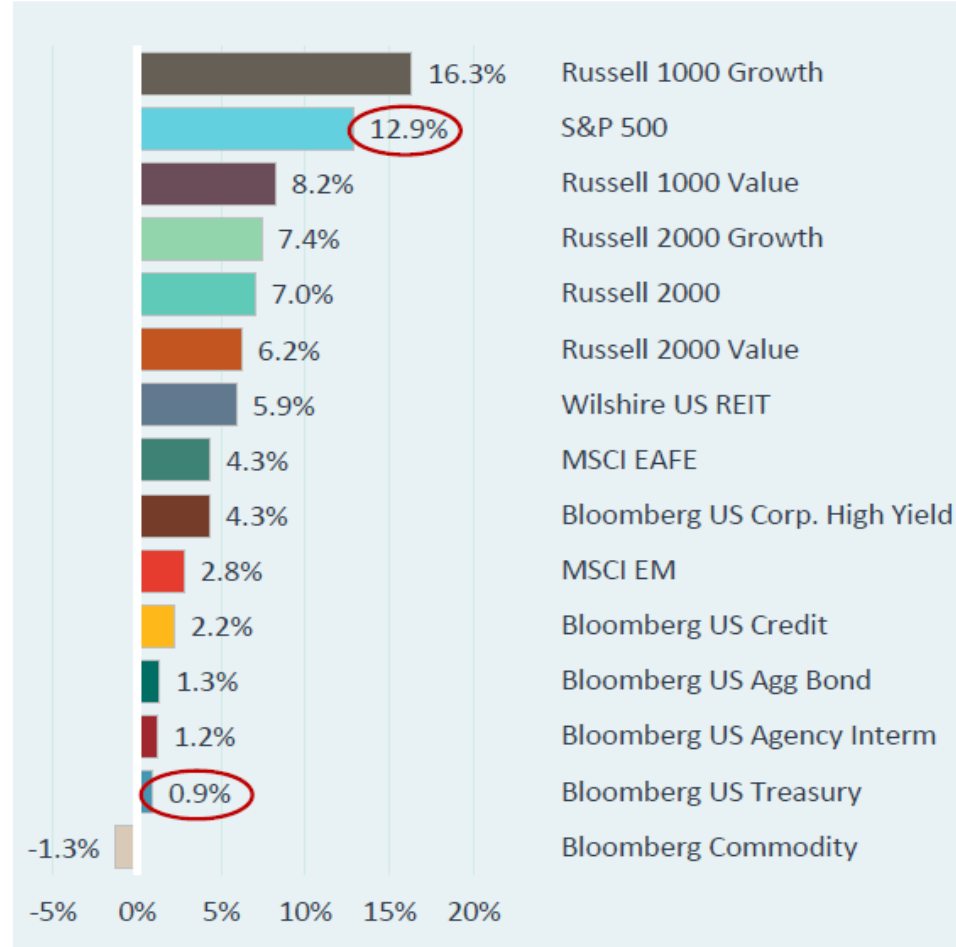
Asset Class	MOSERS (2018)	PEER (Average)	Over/Under Weight Relative to Peers	MOSERS Asset Class Benchmark Returns	Relative Performance Impact
Public Equity	30.0%	42.7%	-12.7%	11.0%	-1.4%
Private Equity	15.0%	14.2%	0.8%	10.8%	0.1%
Long Treasuries	25.0%	--	25.0%	-6.2%	-1.6%
Core Bonds	10.0%	19.3%	-8.0%	-0.2%	0.0%
Commodities	5.0%	0.5%	4.5%	4.8%	0.2%
TIPS	25.0%	--	25.0%	0.6%	0.2%
Private Real Assets	5.0%	10.0%	-5.0%	1.4%	-0.1%
Other Public Real Assets	5.0%	2.0%	3.0%	3.0%	0.1%
Hedge Funds	5.0%	5.0%	0.0%	7.5%	0.0%
Alternative Beta	10.0%	0.0%	10.0%	0.1%	0.0%
Private Credit	5.0%	6.3%	-1.3%	7.5%	-0.1%
Total Fund	140.0%	100.0%			-2.7%

MOSERS – Policy Index Return (%)	4.4%
Public Fund Peers – Median Return (%)	7.1%
Difference (%)	-2.7%

Summary of return differences and changes made in 2024

- Historical return differences relative to peers can be attributed to asset allocation differences
 - MOSERS' lower-than-peer exposure to Public Equities detracted from results
 - MOSERS' higher-than-peer exposure to Long Treasuries detracted from results
- In 2024, the MOSERS Board adopted a new asset allocation policy that is being phased in over a 24-month period

TEN YEARS ENDING 6/30/24

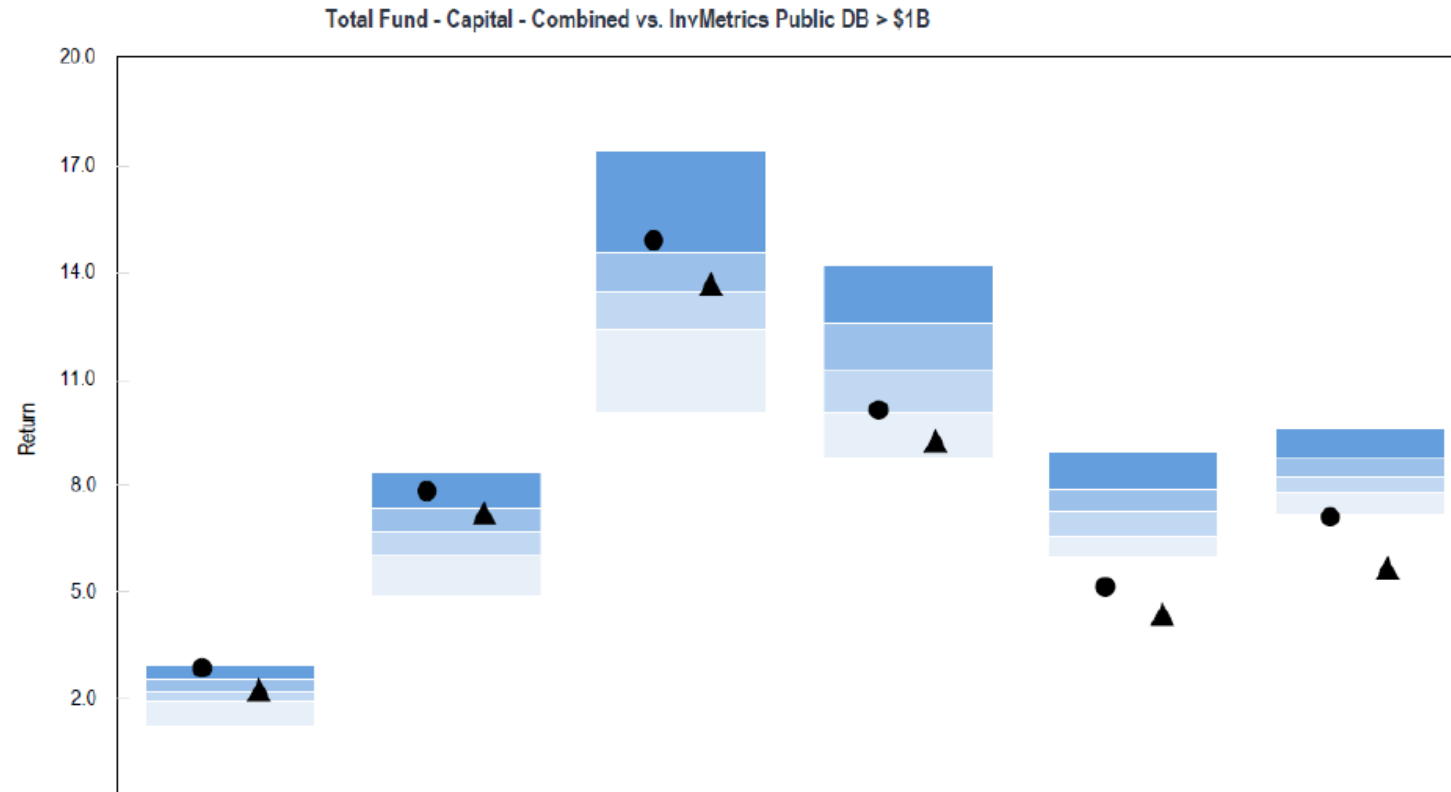


Asset Allocation Transition Timeline

	6/30/2024	9/30/2024	12/31/2024	3/31/2025	6/30/2025	9/30/2025	12/31/2025	3/31/2026	6/30/2026
Global Public Equities	30.0%	31.3%	32.5%	33.8%	35.0%	36.3%	37.5%	38.8%	40.0%
Global Private Equities	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
U.S. Treasuries	25.0%	24.4%	23.8%	23.1%	22.5%	21.9%	21.3%	20.6%	20.0%
Core Bonds	10.0%	8.8%	7.5%	6.3%	5.0%	3.8%	2.5%	1.3%	--
Private Credit	5.0%	5.6%	6.3%	6.9%	7.5%	8.1%	8.8%	9.4%	10.0%
Commodities	5.0%	4.4%	3.8%	3.1%	2.5%	1.9%	1.3%	0.6%	--
TIPS	25.0%	21.9%	18.8%	15.6%	12.5%	9.4%	6.3%	3.1%	--
Private Real Estate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Public Real Assets	5.0%	4.4%	3.8%	3.1%	2.5%	1.9%	1.3%	0.6%	--
Private Real Assets	0.0%	0.6%	1.3%	1.9%	2.5%	3.1%	3.8%	4.4%	5.0%
Hedge Funds	5.0%	4.4%	3.8%	3.1%	2.5%	1.9%	1.3%	0.6%	--
Alt Beta	10.0%	10.6%	11.3%	11.9%	12.5%	13.1%	13.8%	14.4%	15.0%
Total Fund	140.0%	136.3%	132.5%	128.8%	125.0%	121.3%	117.5%	113.8%	110.0%

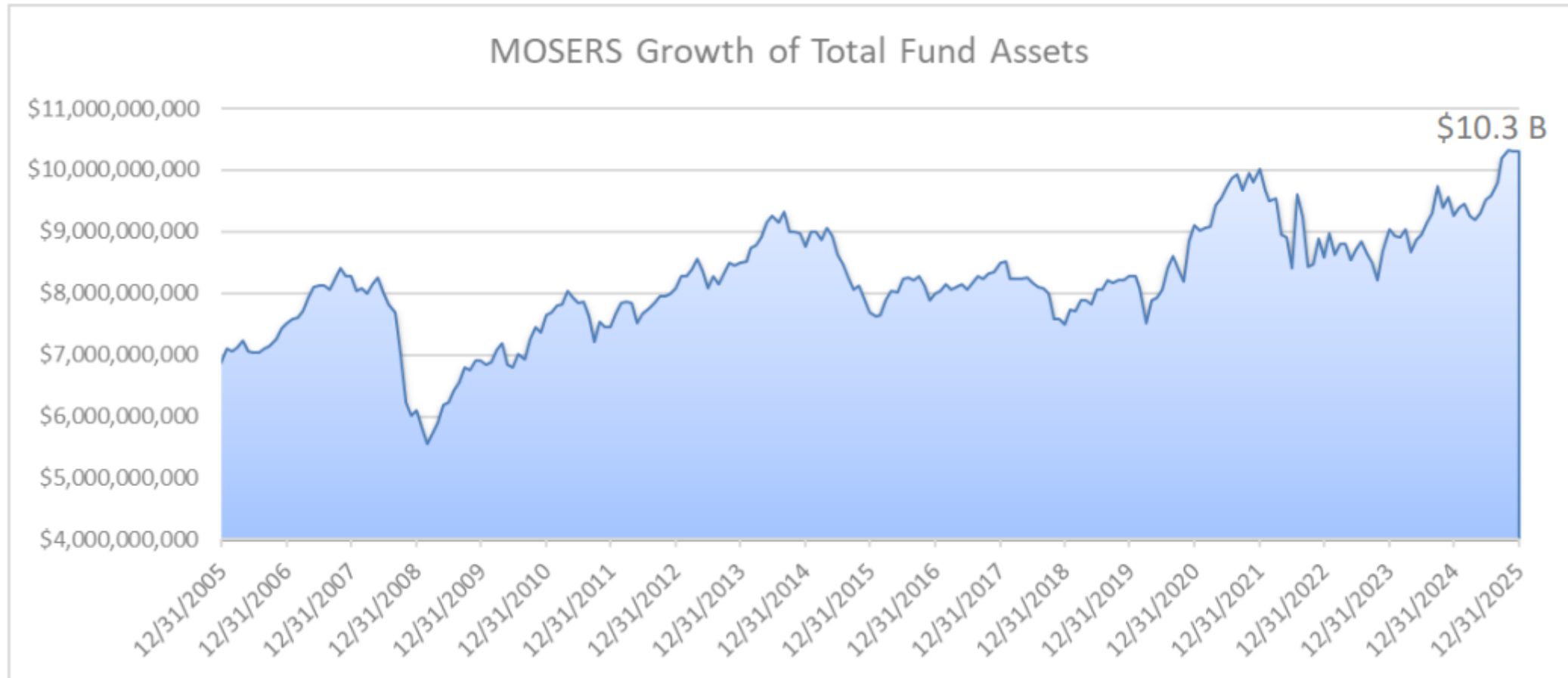
Recent performance relative to peers

MOSERS recent performance has benefited from the changes made in 2024



	Quarter	Fiscal YTD	1 Year	3 Years	5 Years	10 Years
MOSERS	2.9%	7.8%	14.9%	10.1%	5.2%	7.2%
Policy Index	2.3%	7.2%	13.7%	9.3%	4.4%	5.7%
Median Peer	2.2%	6.7%	13.4%	11.3%	7.3%	8.3%

MOSERS Market Value (December 31, 2025)



Recent Experience Study

review period 6/30/21-6/30/25

- Evaluate whether to change current assumptions and actuarial methods
- Assumptions are just that – assumptions, long-term estimates
- Assumptions do not affect the true cost of the plan – the actual benefit payments paid from the trust fund
 - Benefit payments depend on several unknown contingent events; thus, we use assumptions
- No changes were made relative to the actuarial methods
 - Amortization period remains at closed 25-year period

Recent Experience Study

review period 6/30/21-6/30/25

- Minor changes were made to actuarial assumptions
 - Inflation changed from 2.25% to 2.50%
 - Cost-of-living adjustment changed from 1.8% to 2.00%
 - Mortality tables updated to latest set of public plan mortality tables published in 2025
 - Investment return assumption remains at 6.95%
 - Only recommendation not adopted by the Board was increasing the payroll growth assumption from 2.25% to 2.5%
 - Actuary believes 2.25% is reasonable and provides some margin for adverse experience in the future given the variable size of the active membership / payroll growth in the past (shown earlier)

Cost Impact of Changes from the Experience Study

Comparison of Valuation Results and Costs MSEP			
	6/30/25 Valuation		Difference
	Baseline	All Changes	
Actuarial Accrued Liability (\$M)	17,393	17,545	152
Actuarial Value of Assets (\$M)	<u>9,643</u>	<u>9,643</u>	<u>0</u>
Unfunded Actuarial Accrued Liability (UAAL) (\$M)	7,751	7,903	152
Funded Ratio	55.4%	55.0%	(0.4%)
Normal Cost Rate	8.69%	9.37%	0.68%
UAAL Amortization Rate	<u>21.30%</u>	<u>21.11%</u>	<u>(0.19%)</u>
Total Contribution Rate	29.99%	30.48%	0.49%
Member Contribution Rate	<u>(2.55%)</u>	<u>(2.55%)</u>	<u>0.00%</u>
Employer Contribution Rate	27.44%	27.93%	0.49%
Required Employer Contribution Rate	32.00%	32.00%	0.00%

Note: the impact of the assumption changes, as measured in the June 30, 2026 valuation, will be different than that shown here.

2026 Legislation: SB 1557 & 1054

1. Automatic refund of employee contributions to terminated non-vested members with a balance of under \$1,000
 - Number of term non-vested members growing approx. 10% each year
 - 60% of term non-vested members (approx. 23,000 members) have balances under \$1,000
 - 70% with balances under \$500 (& less than two months of service)
 - 40% with balances under \$200 (& less than a month of service)
 - Increases operational efficiency by returning the members money sooner rather than later
 - Required by federal law to refund the money under required minimum distribution rules (RMD)
 - Increases likelihood members receive their money back
2. MO Deferred Comp auto escalation for employees who continue to defer at the automatic enrollment rate of 1%
 - Currently, members are auto enrolled in the deferred comp plan at 1%
 - Incrementally auto-escalating contribution by 0.5% each year until 10% (reached after 20 years)
 - Members can opt-out

Fiscal Year 2025 Member Services KPIs

- **Retirement Process Satisfaction:** 9.4 (out of 10)
- **Caller Satisfaction:** 98%
- **Education Session Satisfaction** 9.3 (out of 10)