



# Asset Liability Management Stakeholder Webinar

December 4, 2025

# Today's Discussion

- Asset Liability Management (ALM) Overview
- Explaining the Board's ALM Decisions
- Actuarial Assumption Changes and Impacts
- Looking Ahead
- Q & A

# Our Presenters



**Michele Nix**  
Chief Financial Officer

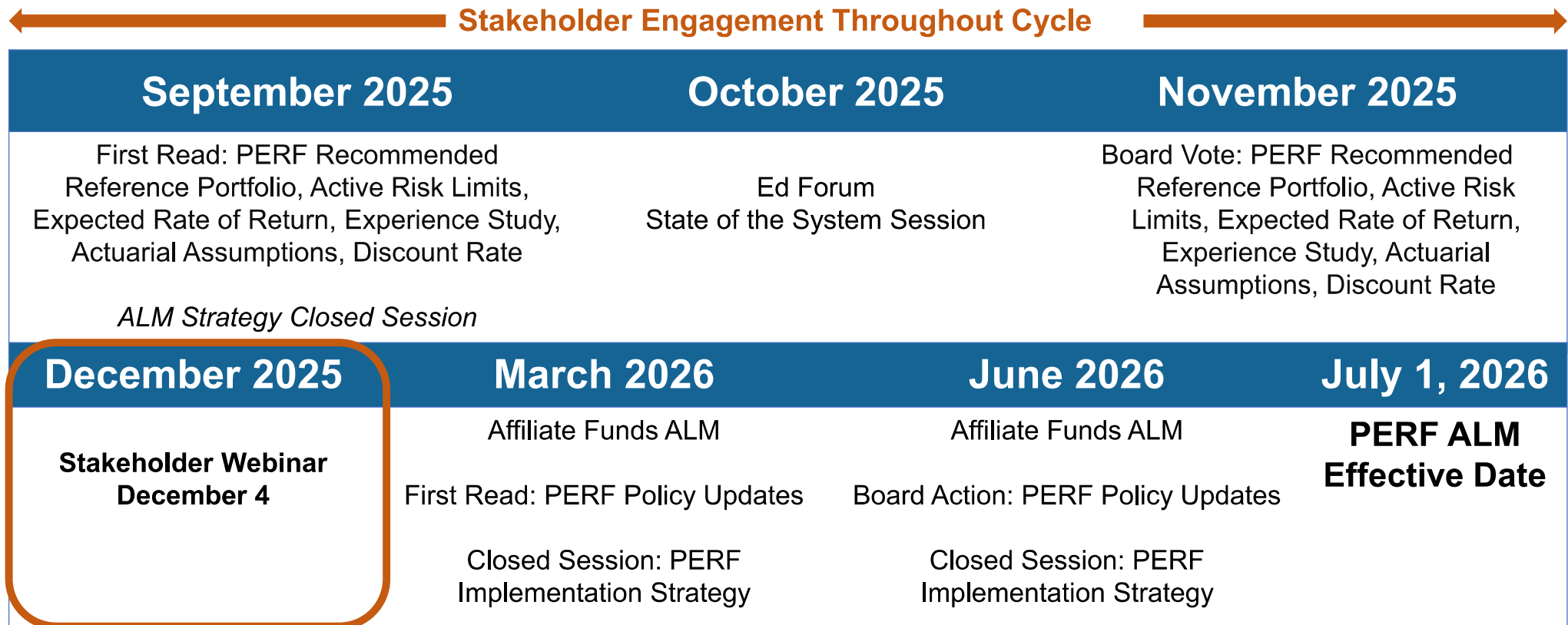


**Stephen Gilmore**  
Chief Investment Officer



**Scott Terando**  
Chief Actuary

# ALM Timeline

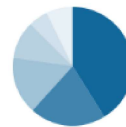


# What is ALM?

**A**sset  
**L**iability  
**M**anagement



**Four Year Cycle with a Mid-Cycle Review**



**Public Employees Retirement Fund and Affiliate Funds**

**Connecting How We Invest With What We Owe  
in Pension Liabilities**

# Purpose of ALM

## The Tool For Achieving our Strategic Goal of:

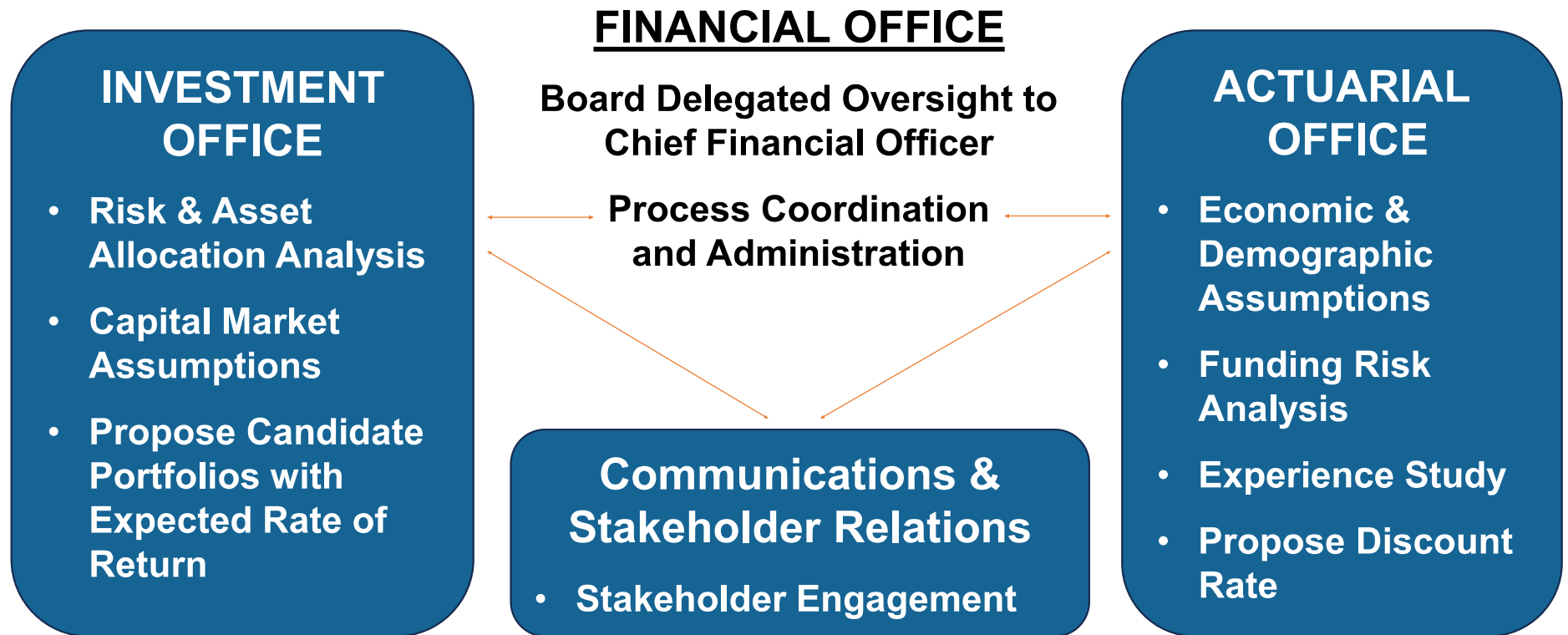


### **Pension Sustainability**

Strengthen the Long-term Sustainability of the Pension Fund

**Ensure Contributions, Plus Investment Returns, Are Enough to Pay the Benefits and Expenses of the Pension System Now and Into the Future**

# ALM Key Functions



# ALM Review: November 2024 to Now

## Our ALM Process is Working as Designed



Teamwork and Collaboration By the Financial, Investment, and Actuarial Offices



To Date: Nine Board Education Sessions, Three Stakeholder Webinars and a Variety of Stakeholder Engagements



Introduced a New Investment Framework: Total Portfolio Approach (TPA)  
– A Global Evolution of Strategic Asset Allocation (SAA)



# PERF Board Decisions

## Adopted a Total Portfolio Approach With:

- Capital Market Assumptions
- Formal Total Fund Risk:
  - 75/25 Equity-Bonds Reference Portfolio (RP)
  - Active Risk Limit of 400 Basis Points

## No Change to the Current 6.8% Discount Rate

# Adopting a Total Portfolio Approach Means...

## No Changes To:

Board authority for setting investment risk and governance model

ALM process:

- 4-year cycle, mid-point review
- Board deliverables of capital market assumptions and expected returns analysis
- Actuarial assumptions and deliverables

## Changes Under TPA:

**The Board adopted a new investment governance model that sets formal Total Fund Risk via:**

- **A Reference Portfolio**
- **Active Risk Limit**

This replaces adopting a target strategic asset allocation and policy ranges for management discretion

In ALM years, the Board will review its formal Total Fund Risk

# About Total Portfolio Approach

## TPA Evolves and Builds on SAA For Better Outcomes

### Improved Internal Governance

Adds New Formal Overall Total Fund Risk

### Reference Portfolio (RP)

Passive Market Risk Exposure Using Equities & Bonds, Gives Passive Returns

### Simplicity

From 11 benchmarks to One Total Fund Benchmark, the Reference Portfolio, For Evaluating Management's Decisions

### Better Transparency

Management Decisions are Reported Relative to the Reference Portfolio

### Greater Accountability

Management's Decisions and Performance Will Be Clear, More Transparent, Drive Accountability

### Investment Decisions For the Whole

Investments Made Based on the Best Value to the Total Portfolio

**Taken Together, TPA Leads to Better Performance and System Funding**

# Investment Reporting

Investment Reporting	Current	Under TPA
Annual Fiscal Year End Trust Level Review (TLR)	X	X
7 Stand Alone Annual Program Reviews (APRs)	X	X
New Performance Dashboard into All TLRs		X
Forward Looking In-Depth Business Strategy Reviews (closed session)	X	X
3 Quarterly TLRs	X	X
Annual Board Consultant TLR Report	X	X
Ad Hoc Investment Strategy Reports	X	X
Annual Comprehensive Financial Report (ACFR)*	X	X
Annual Investment Performance (AIR) Report*	X	X
Annual Global Investment Performance Standards (GIPS) Report*	X	X



\*Standards based reports expect to have additional disclosure and commentary about the shift to TPA.

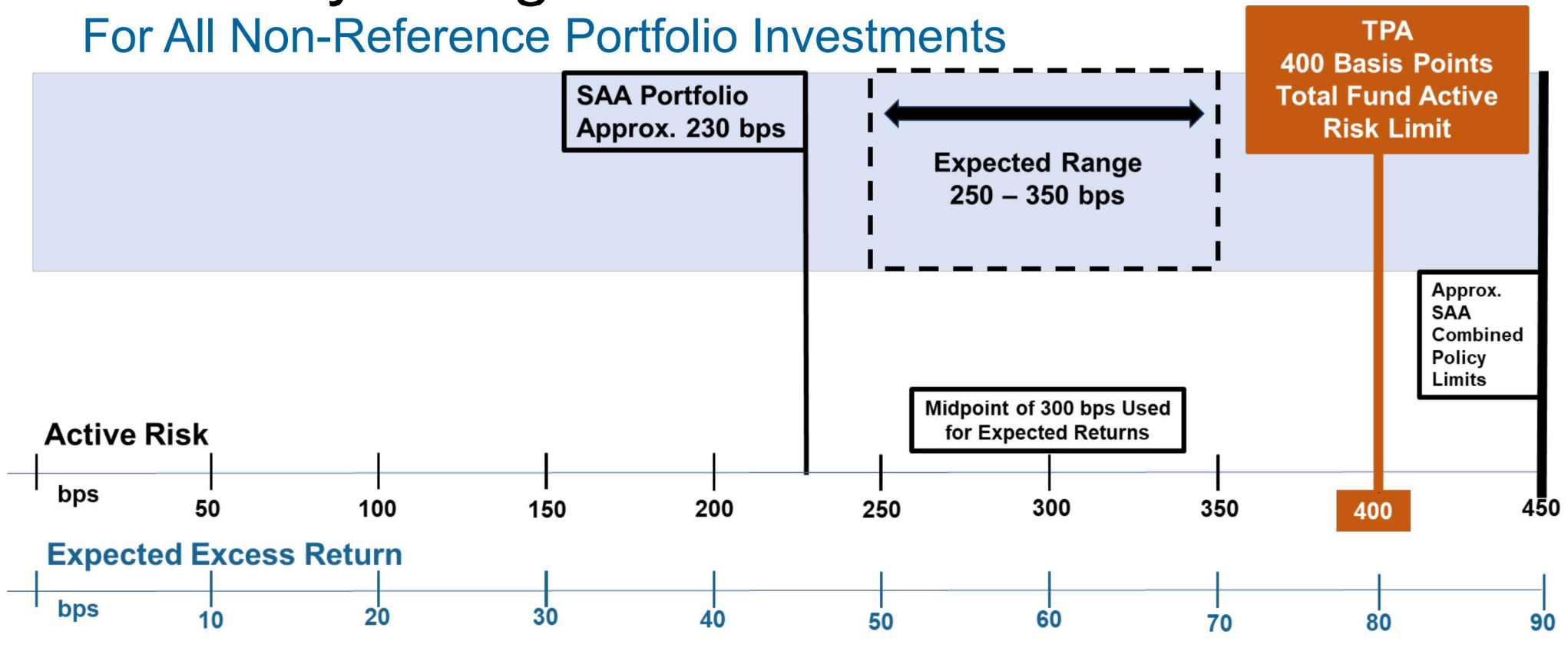
# Reference Portfolio Index Types

## Accessible, Investible, and Operationally Simple

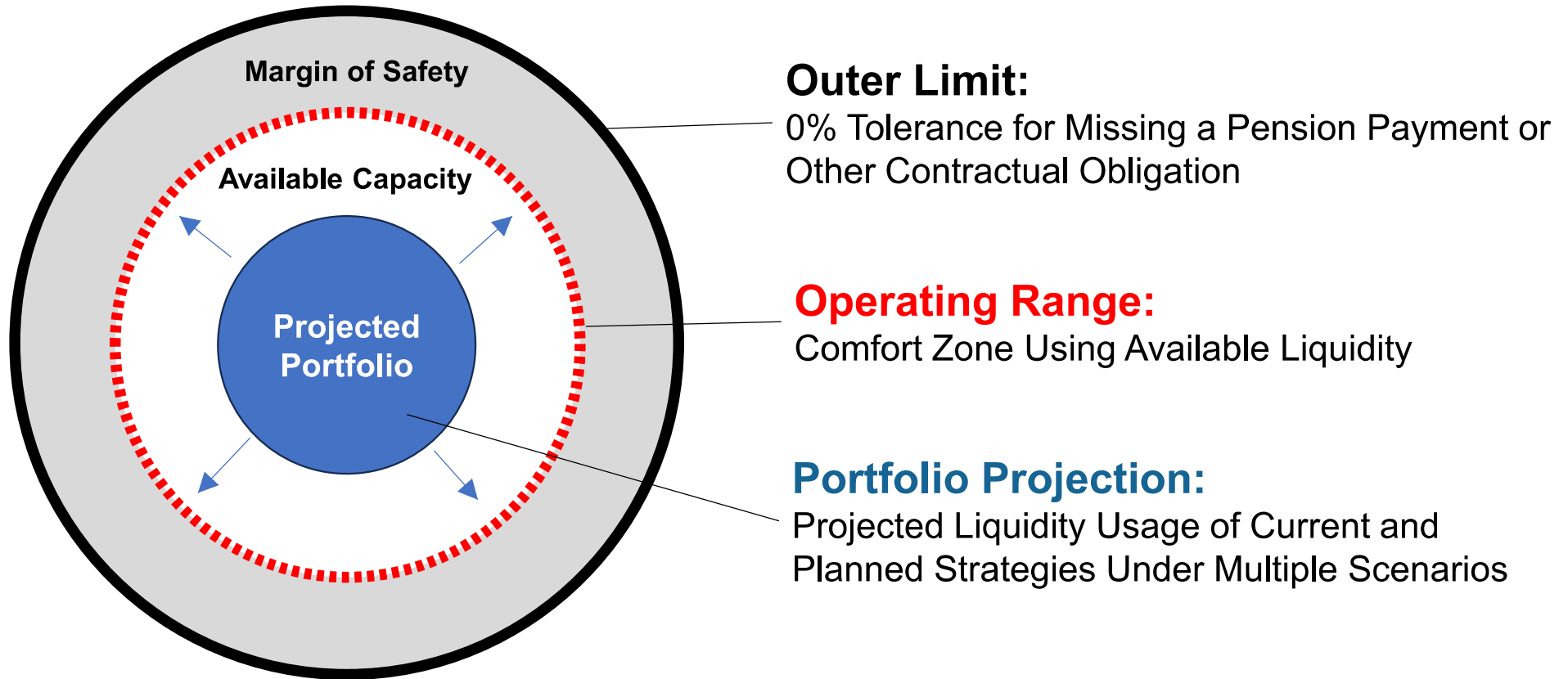
	<u>Proposed</u>	<u>Reasons Why</u>
<b>Equities</b>	<b>Cap Weighted Global Equities</b>	<ul style="list-style-type: none"><li>• Commonly Used</li><li>• Market Efficient</li><li>• Minimizes Turnover/Cost</li><li>• Continuity: Largest Current PERF Asset Class</li></ul>
<b>Bonds</b>	<b>US Treasury Bonds (1+ year Maturity)</b>	<ul style="list-style-type: none"><li>• Adds Term Premium &amp; Diversifies From Equities</li><li>• Industry Standard Interest Rate Exposure</li><li>• Continuity: Similar Overall Interest Rate Exposure as Current PERF SAA</li></ul>

# Flexibility Using Active Risk

## For All Non-Reference Portfolio Investments



# A Prudent Approach to Liquidity Planning



# Implementing Total Portfolio Approach Part 1

## Eight Project Workstreams (1-4)

### #1 Board Action\*

Board adopts (1) a simple and investible Reference Portfolio aligned with the long-term return objectives of the plan; and (2) an Active Risk Limit providing management discretion to invest away from the Reference Portfolio.

### #2 Internal Governance

Develop comprehensive internal governance and investment decision framework to allocate, measure, monitor, and manage active risk.

### #3 Portfolio Construction

Develop a portfolio construction approach that synthesizes strategies, risk factors, cost of liquidity, and investment horizons into a cohesive active risk budgeting framework.

### #4 Treasury Management

Develop a framework to manage liquidity and leverage under a TPA and ensure TPA goals align with the Data and Tech Modernization Initiative.



# Implementing Total Portfolio Approach Part 2

## Eight Project Workstreams (5-8)

### **#5 Policy & Controls**

Update policies, procedures, and controls underpinning the successful transition to TPA.

### **#6 Communication & Engagement**

Develop a strategy to guide and support team members through the transition to a TPA by fostering understanding, alignment, and engagement.

### **#7 Reporting**

Implement transparent and consistent reporting mechanisms to ensure clear and accurate communication under a TPA.

### **#8 Implementation**

Operationalize the processes, systems, and frameworks necessary to transition to a TPA.

# Actuarial Assumptions

## Board Approves Assumptions During ALM Cycle



### Experience Study



### Economic Assumptions

- Long-term Investment Return
- Discount Rate
- Inflation



### Non-Economic Assumptions

- Pay Increases
- Longevity
- Retirement
- Termination
- Disability
- Others

Assumptions are long-term expectations of 20+ years and not typically changed from 1-2 years of inconsistent experience

# ALM Member and Employer Impacts

Plan Funded Status, Employer and PEPRA Contribution Rates



**Plan Annual  
Actuarial  
Valuation**



**Plan Funded Status**



**Normal Cost Contribution Rates**



**Retirement Options & Service Credit  
Purchases**



**PEPRA Member Contribution Rates**

# Demographic Assumption Changes

Demographic Assumption	Adopted Change
<b>Retirement Rates</b>	
Service Retirement	Some retirement rates increasing while others are decreasing
Industrial Disability Retirement (IDR)	IDR rates declining for Sheriffs, minimal changes for others
Non-Industrial Disability Retirement	Minimal changes; disability rates were consolidated into 3 sets
<b>Mortality Rates</b>	
Post-retirement Mortality – Male	Slight reduction in the projected mortality rates
Post-retirement Mortality – Female	Slight reduction in the base and projected mortality rates
Pre-retirement Mortality – Male	Slight reduction in the projected mortality rates
Pre-retirement Mortality – Female	Slight reduction in the base and projected mortality rates

# More Demographic Assumption Changes

Demographic Assumption	Adopted Change
<b>Termination Rates</b>	
Termination with Refund	Minimal changes
Termination without Refund	Minimal changes for some, no change for others
<b>Salary Scale (excluding inflation)</b>	Moderate to higher merit increases for most plans Moderate decreases for State Industrial and Schools
<b>% Married and Spouse Age Difference</b>	No change

# Economic Assumption Changes

<b>Economic Assumption</b>	<b>Adopted Change</b>
<b>Discount Rate</b>	<b>No Change, Stays 6.8%</b>
<b>Price Inflation</b>	<b>Increase From 2.3% to 2.5%</b>
<b>Wage Growth Assumption</b>	<b>Increase From 2.8% to 3.0%</b>
<b>Amortization Payment Growth Rate (for Older UAL Bases)</b>	<b>No Change, Stays 2.8%</b>

## Impact of Assumption Changes on Contribution Rates - Public Agencies

	Min	Max	Median
<b>Classic Formulas</b>			
2% @ 60 Miscellaneous	0.1%	0.9%	0.3%
2% @ 55 Miscellaneous	0.1%	3.8%	0.7%
2.5% @ 55 Miscellaneous	0.0%	3.0%	0.3%
2.7% @ 55 Miscellaneous	-0.1%	3.0%	0.3%
3% @ 60 Miscellaneous	0.2%	3.1%	0.3%
2% @ 50 Safety	3.0%	3.1%	3.1%
3% @ 55 Safety	-0.6%	2.2%	1.8%
3% @ 50 Safety	-1.1%	7.5%	1.6%
<b>PEPRA Formulas</b>			
2% @ 62 Miscellaneous	-0.5%	2.7%	0.1%
2.7% @ 57 Safety	-2.0%	6.0%	1.3%

**Note:** Inflation and resulting salary scales had the largest impact driving the changes

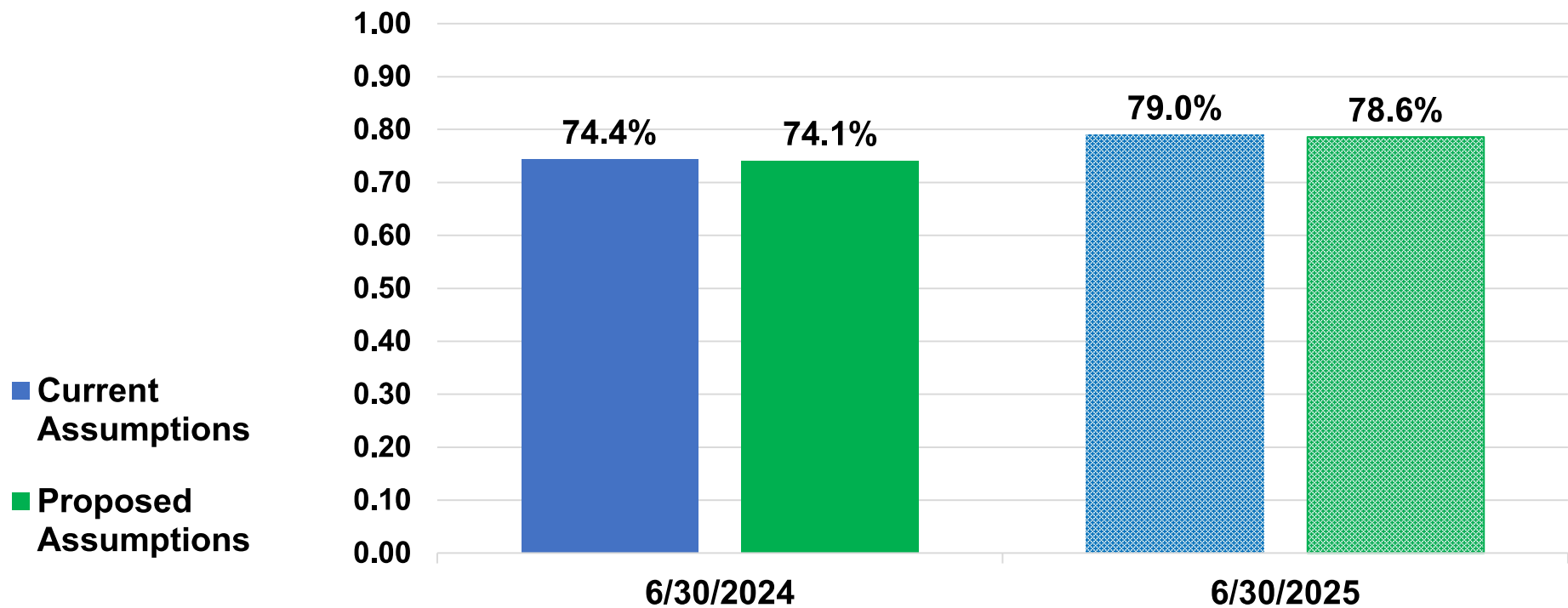
## Impact of Assumption Changes on Contribution Rates - State

State and Schools	Normal Cost Change	UAL Change	Total Change
Miscellaneous First Tier Plan	0.9%	0.7%	1.6%
Industrial Plan	0.2%	0.3%	0.5%
Safety Plan	0.5%	0.7%	1.2%
Peace Officers & Firefighters Plan	1.3%	0.6%	1.9%
California Highway Patrol Plan	1.0%	0.8%	1.8%
Schools Miscellaneous Plan	0.5%	0.1%	0.6%



# PERF Funded Ratio Impact

## Estimated Impact of Assumption Change to Funded Ratio



# Affected PEPRA Member Contribution Rates

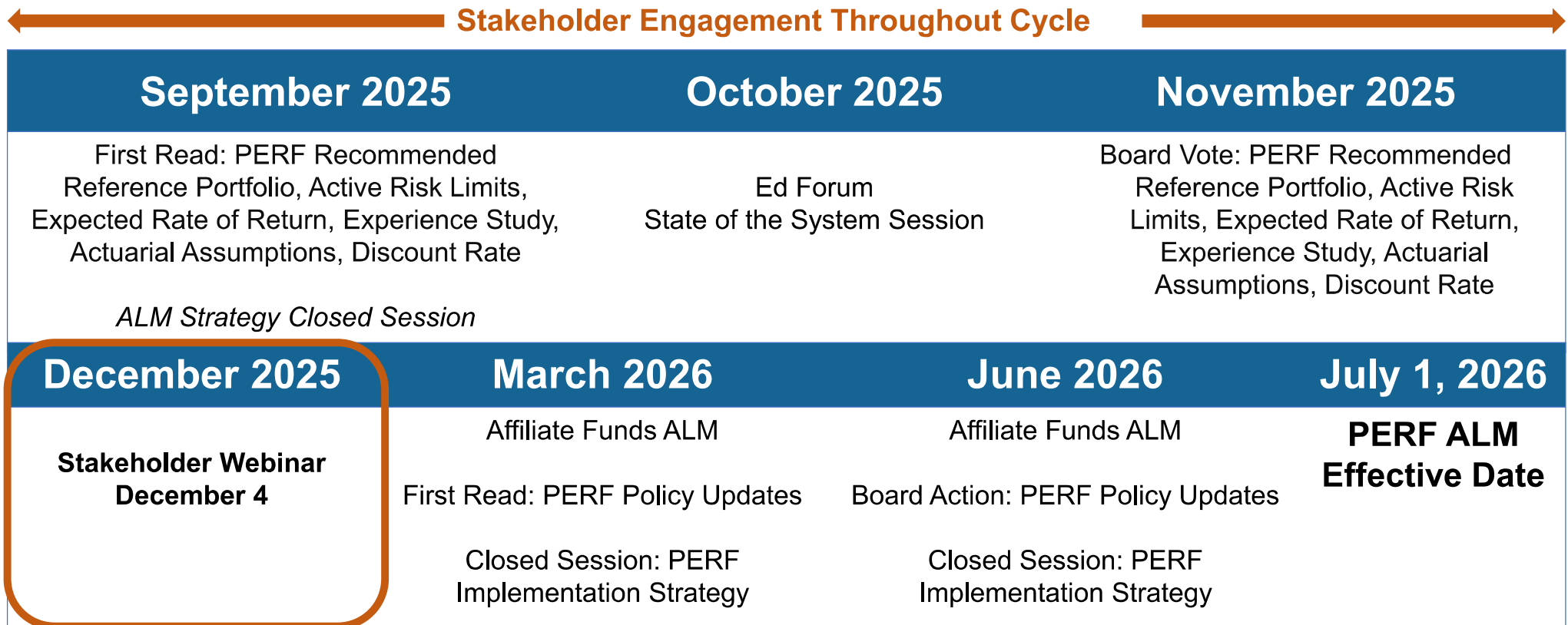
	Miscellaneous Plans		Safety Plans	
	Plan Count	Active Member Count	Plan Count	Active Member Count
Not Affected	1,413	155,404	227	10,620
Increase	9	1,738	551	16,431
Decrease	0	0	4	86

## Next Steps: Implementation

- Members**
- All retirements effective on or after November 20, 2025 will use the new assumptions
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- Employers**
- New actuarial assumptions used for the June 30, 2025 actuarial valuations
  - State and Schools contribution rates first impacted in FY 2026-2027
  - Public Agency contribution rates first impacted in FY 2027-2028
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# ALM Timeline



# Resources and Who To Contact

**Please Contact Stakeholder Relations for Any Questions**

**CalPERS\_Stakeholder\_Relations@calpers.ca.gov**

## ALM Webpage

<https://www.calpers.ca.gov/about/organization/facts-at-a-glance/asset-liability-management>

## ALM Policy

<https://www.calpers.ca.gov/sites/default/files/sf/docs/asset-liability-management-policy.pdf>

## ALM Frequently Asked Questions (FAQ)

<https://www.calpers.ca.gov/about/organization/facts-at-a-glance/asset-liability-management/alm-faqs>

# Q & A