

2025 Review of PERF Actuarial Assumptions

Finance and Administration Committee

April 14, 2025

Today's Presentation

- Overview
- Mortality
- Inflation
- Cost Impacts and Next Steps

What is an Actuarial Experience Study?

- Reviews actuarial assumptions relative to recent past experience and future expectations
- Performed periodically, usually every 3-5 years
- Recommends whether to maintain or modify existing assumptions

Importance of Actuarial Assumptions

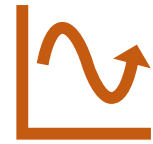
- Used to determine expected costs for the system:
 - funded status
 - required employer and member contributions
 - financial reporting information
- Used to create actuarial equivalent factors for benefits and service credit purchases
- Assumptions that understate or overstate pension costs result in future funding corrections

Experience Studies at CalPERS

- Required by PERL Sections 20132 and 20133
- Is a piece of the Asset Liability Management Policy as a deliverable to the Board
- Performed every four years, most recently in 2021

Actuarial Assumptions

The discount rate assumption is studied during asset-liability management cycle



Economic Assumptions

- Long-term Investment Return
- Discount Rate
- Inflation



Non-Economic Assumptions

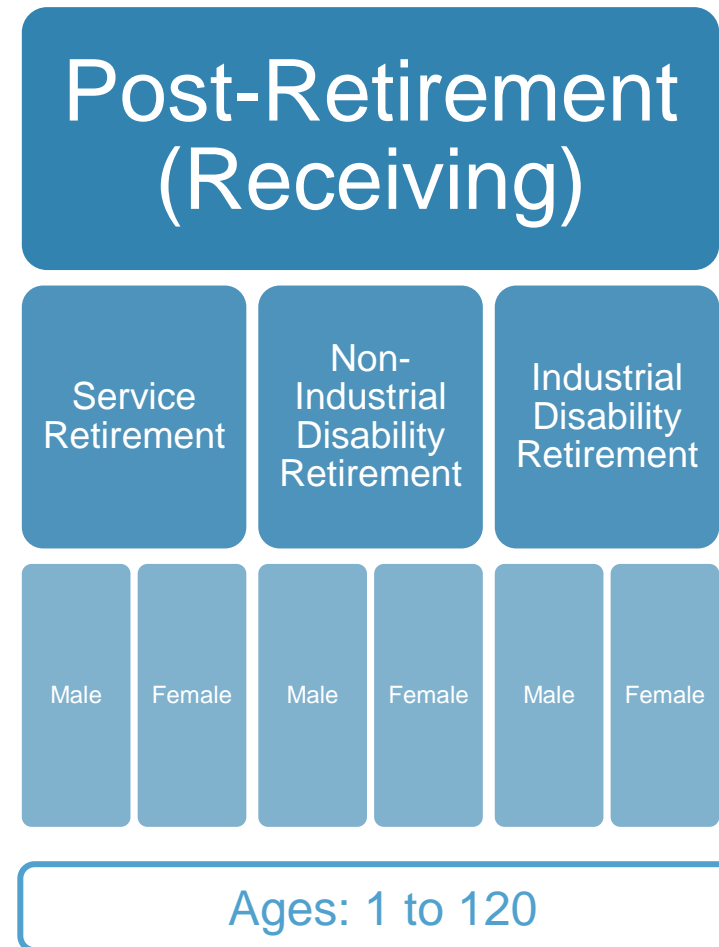
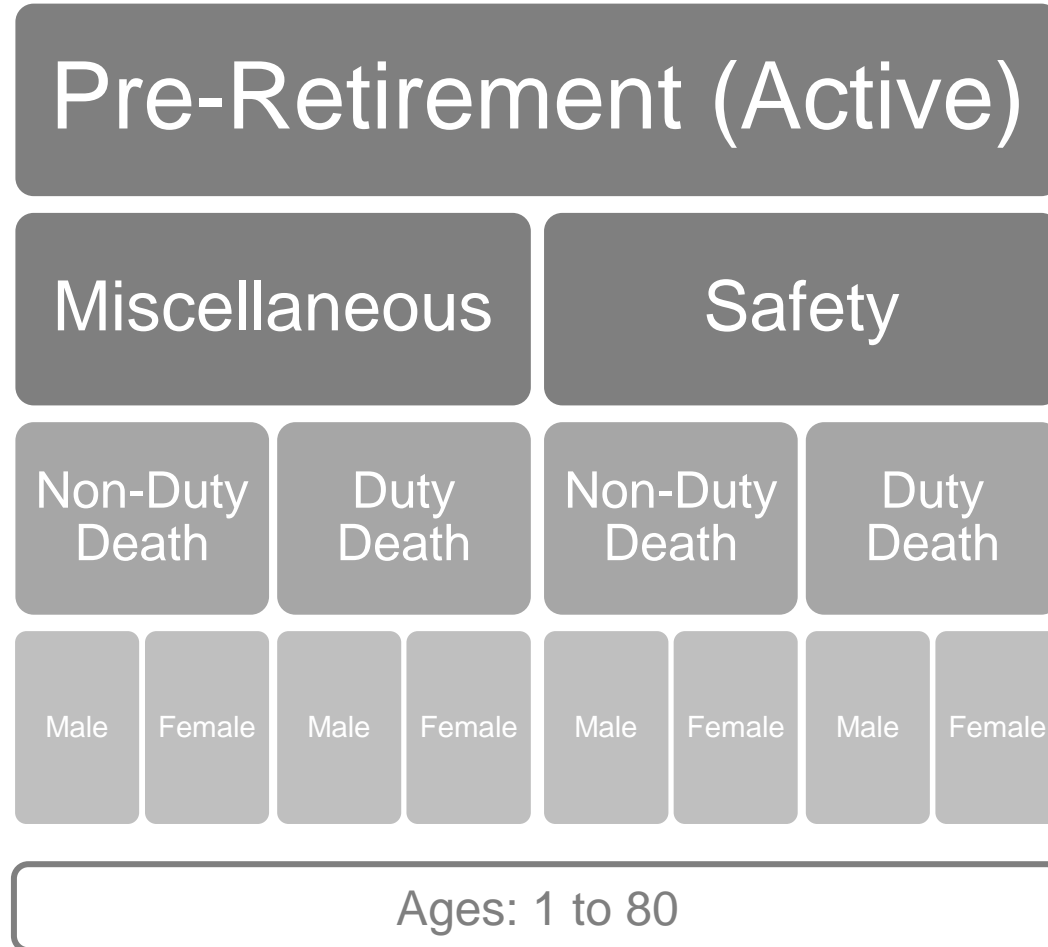
- Pay Increases
- Longevity
- Retirement
- Termination
- Disability
- Others

Key Findings of the Study

- *Study is nearing completion, actual contribution impact analyses are not yet complete*
- Four new years of experience, including the Pandemic experience data
- Pandemic experience was excluded for a number of assumptions due to anomalous results
- For many assumptions, significant changes are not warranted

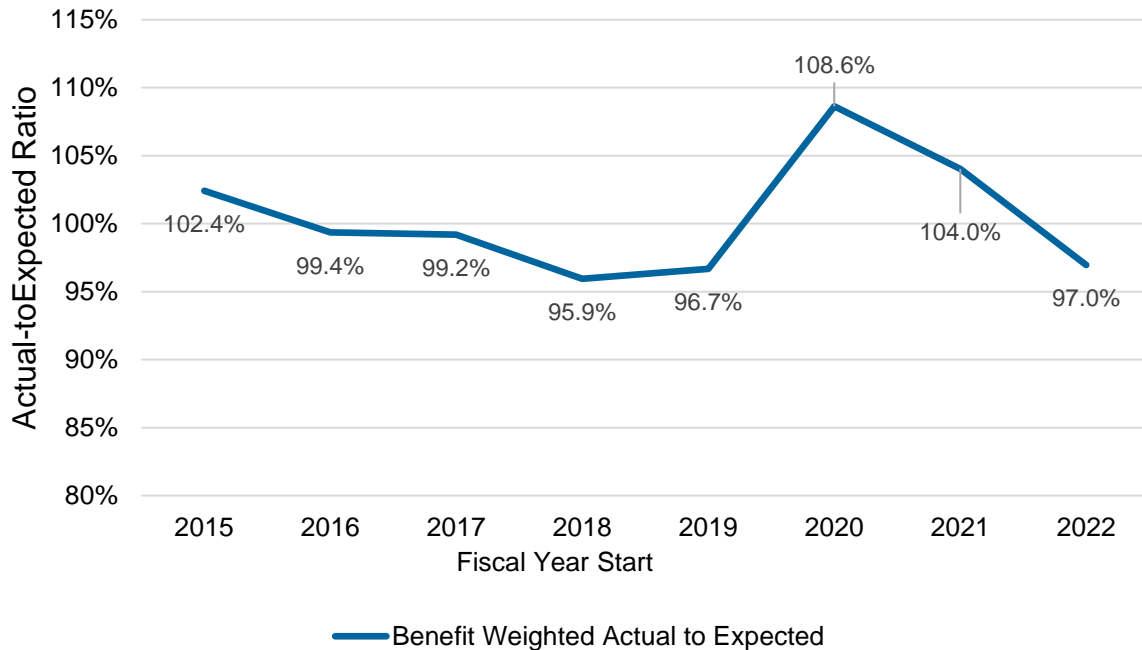
Mortality

Mortality Rates

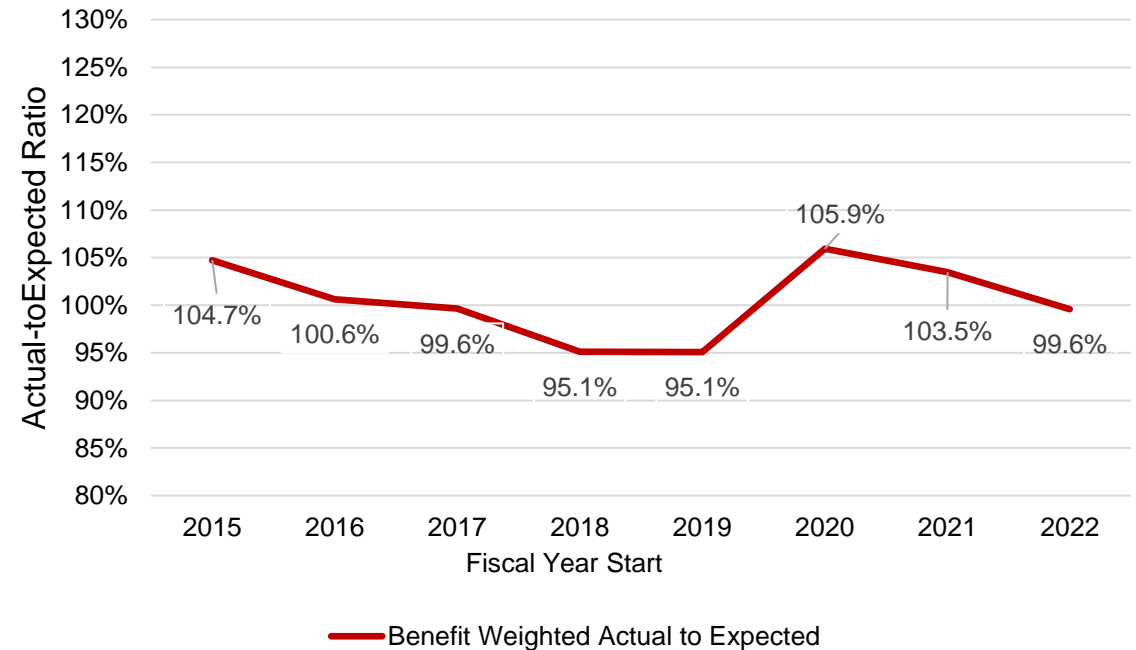


Post-Retirement Mortality Analysis – Actual Experience vs Assumptions

Male Service Retirement Mortality Actual To Expected Ratios (FY 2015-16 to FY 2022-23)



Female Service Retirement Mortality Actual To Expected Ratios (FY 2015-16 to FY 2022-23)



Observations

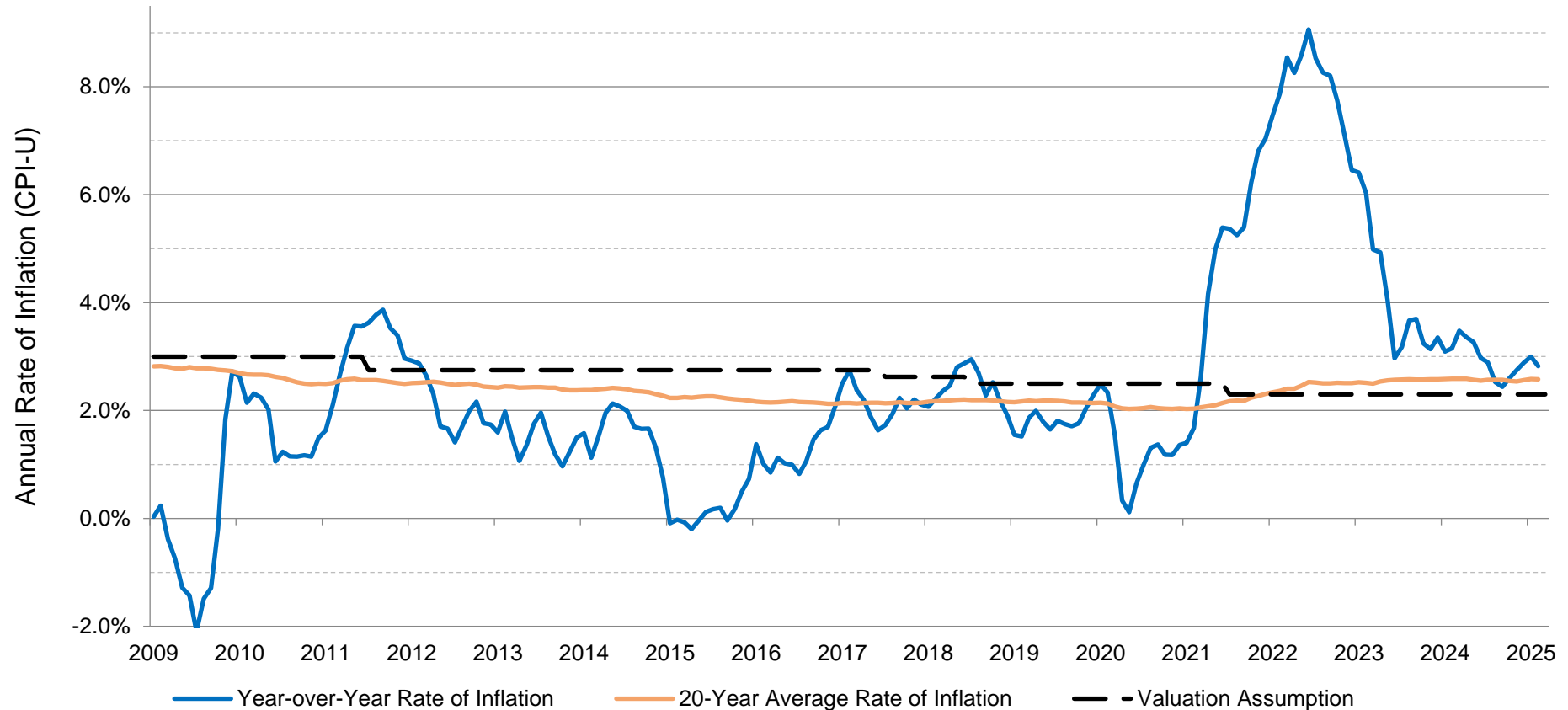
- Mortality experience during the years impacted by COVID provided no value in assessing the current base mortality rates or assumptions for future mortality improvement
- Prior to COVID, the CalPERS mortality rates aligned well with actual experience

Likely Recommendation in September

- No change other than the normal improvement progression
- Continue to monitor California and national mortality trends

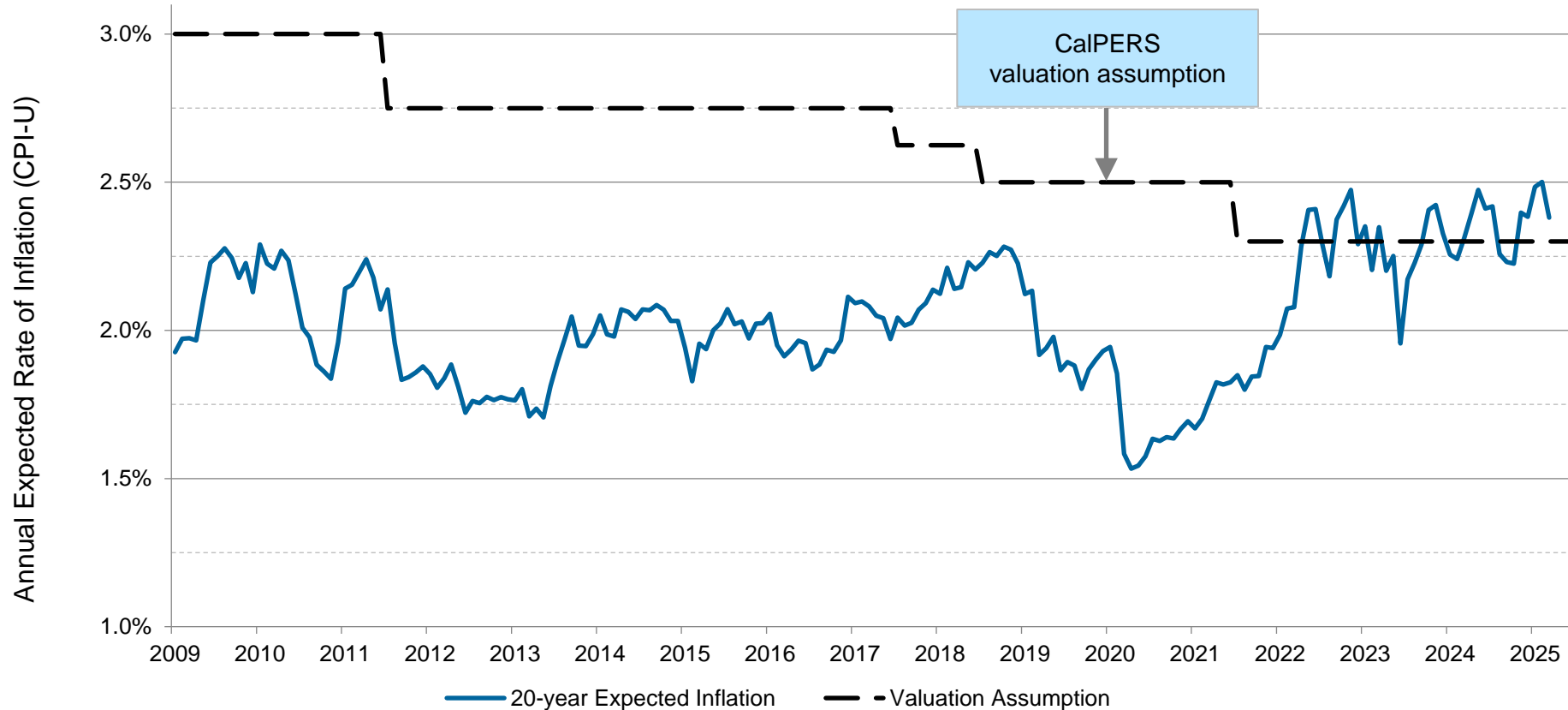
Inflation

History of Inflation Since 2009 (CPI-U)



Cleveland Federal Reserve Inflation Model

Published monthly showing expected inflation for 20 years



Observations

- Inflation during the previous 3-4 years has significantly exceeded the inflation assumption
- Recent inflation has slowly declined toward longer historical averages and the Federal Reserve target of 2%
- Forecasters are typically projecting long-term inflation averages to be slightly higher than the current CalPERS assumption of 2.3%

Likely Recommendation in September

- Increase inflation assumption 10-30 basis points

Cost Impacts and Next Steps

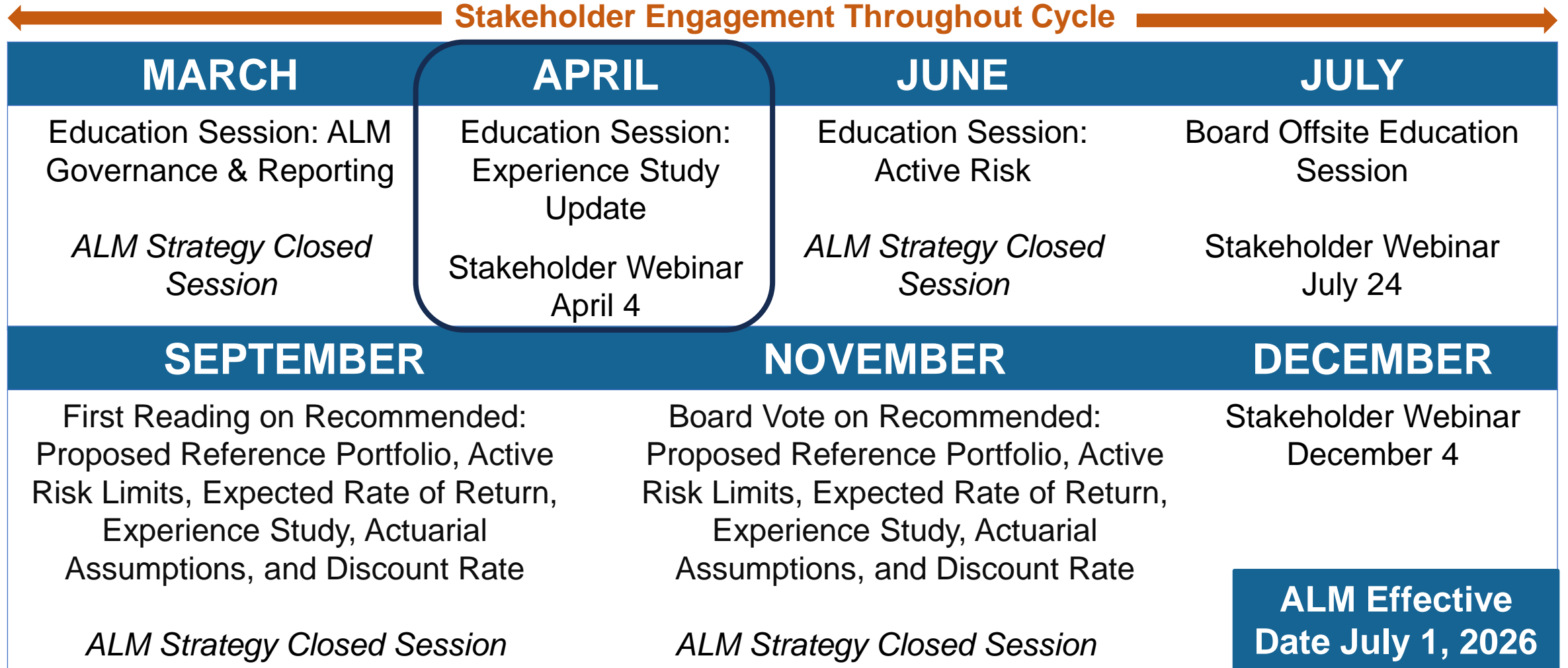
Costs

- Inflation and salary scale revisions will be the biggest drivers for cost change
- The magnitude of the rate changes vary by employee category and benefit provisions (COLA)

Next Steps

- Study findings are being reviewed by an external actuary
- All results will be presented to the Board
 - First reading, September 2025
 - Second reading, November 2025

2025 Asset Liability Management (ALM) Timeline



Questions?