



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 20

MEETING DATE: August 19, 2026

SUBJECT: Actuarial Experience Study

SUBMITTED FOR: X Action Information

RECOMMENDATION

Receive and file the Actuarial Experience Study as of June 30, 2025; adopt assumptions as recommended by Segal effective the June 30, 2026 valuation, including a reduction in the discount rate to 6.50%; and consider whether to implement either a two- or a three-year phase-in of the unfunded liability contribution-rate increase.

PURPOSE/STRATEGIC PRIORITY

This item supports the Strategic Management Plan objective to solidify SCERS' long-term financial sustainability and proactively develop strategies for sustaining a high funded ratio.

DISCUSSION

At the May and June 2026, Board meetings, Segal discussed potential actuarial assumption changes, contribution-rate impacts, and considerations as part of the Experience Study of economic and demographic actuarial assumptions. Any new assumptions derived from the current experience study will be used for the June 30, 2026, valuation, but will not impact contribution rates until the 2027-28 fiscal year, beginning July 1, 2027. After presentation and discussion with the Board, Staff briefed employer and labor representatives to solicit feedback.

In addition to minor assumption adjustments, Segal has recommended lowering the investment return assumption to 6.50% from 6.75%, which corresponds to a 62% confidence level for achieving a 6.50% return in any given year.

COST IMPACT

If the investment return assumption is lowered, employer and employee contribution rates would increase because a greater share of future pension costs would be funded through contributions rather than assumed investment earnings.

The following table summarizes the projected financial impact of the recommended actuarial assumption changes and highlights the estimated effects on employer and member contribution rates, unfunded actuarial liability, and the System's funded status:

COMPARISON OF COST IMPACTS (as of June 30, 2025)	6.50% Investment Return Assumption
Average Employer Contribution Rates	
Increase due to changes in economic assumptions	3.41%
Decrease due to changes in demographic assumptions	(0.74%)
Total increase/(decrease) in average employer rate	2.67%
Total estimated increase/(decrease) in annual dollar amount (\$000s)	\$39,423
Average Member Contribution Rates	
Increase/(decrease) due to changes in economic assumptions	0.91%
Decrease due to changes in demographic assumptions	(0.09%)
Total increase/(decrease) in average member rate	0.82%
Total estimated increase/(decrease) in annual dollar amount (\$000s)	\$12,258
Impact on Unfunded Actuarial Accrued Liability (\$000s)	
Increase due to changes in economic assumptions	\$527,316
Decrease due to changes in demographic assumptions	(115,301)
Total increase in Unfunded Liability (\$000s)	\$412,015
Change in Funded Percentage (Actuarial Value)	90.1% to 87.8%

It is important to view the cost impact in context. Employer contribution rates have declined over the past four years as SCERS has recognized strong investment performance and continued paying down its unfunded liability. Those favorable trends are expected to continue. If the Board adopts a lower investment return assumption, much of the resulting increase would be offset by these existing reductions, leading to relatively flat employer contribution rates over the next several years rather than continued decreases.

EMPLOYER CONTRIBUTION RATE PHASE-IN OPTIONS

Employer contribution increases consist of two components:

- Normal Cost – the estimated cost of pension benefits active employees earn during the

current year.

- Unfunded Liability – pension obligations attributable to prior years that are paid down over time.

If the Board adopts the 6.50% investment return assumption, it may wish to consider phasing in the impact on the employer contribution rates over either a two- or a three-year period, consistent with prior practice. Adoption of the recommended 6.50% investment return assumption is projected to increase the aggregate employer contribution rate by 2.67%. Of the total increase, 1.81% is attributable to the unfunded actuarial accrued liability (UAAL) component, while 0.86% is attributable to the normal cost component.

The portion of any increase attributable to the unfunded liability may be phased in to reduce contribution volatility for employers. However, changes to the normal cost must be recognized immediately because they reflect the cost of benefits currently being earned by employees. Phasing in assumption-related employer contribution-rate increases is a common actuarial funding practice among public retirement systems, particularly in California, and is intended to reduce short-term contribution volatility while maintaining the System's long-term funding objectives.

Segal has presented two options for the Board to phase in only the employer contribution-rate increase attributable to the UAAL over either a two- or three-year period.

For simplicity, the following tables illustrate the projected employer contribution-rate impact for the County. The same actuarial principles apply to all participating employers. A phase-in reduces the initial employer contribution-rate increase by temporarily deferring a portion of the UAAL contribution, which creates a small actuarial loss that is recognized in future actuarial valuations, resulting in slightly higher employer contributions over time. Consequently, while a phase-in provides initial contribution relief to employers by reducing the near-term contribution-rate increases, the employer contribution rate once the phase-in is complete is projected to be modestly higher than it would have been without a phase-in. In effect, a phase-in changes the timing of when a portion of the employer contributions are paid rather than eliminating those costs.

2-Year Cumulative Increase in Aggregate Employer Rates-Miscellaneous County¹

Fiscal Year	<u>Without Phase-in</u>	<u>With Phase-in</u>
2027-28	2.03%	1.36%
2028 and later	2.03%	2.08%

¹ Note: See 2025 Experience Study UAAL Contribution Phase-In Letter for all cumulative increase in aggregate employer rates (Pages 4-5).

2-Year Cumulative Increase in Aggregate Employer Rates-Safety County

Fiscal Year	<u>Without Phase-in</u>	<u>With Phase-in</u>
2027-28	4.94%	3.21%
2028 and later	4.94%	5.06%

3-Year Cumulative Increase in Aggregate Employer Rates-Miscellaneous County²

Fiscal Year	<u>Without Phase-in</u>	<u>With Phase-in</u>
2027-28	2.03%	1.13%
2028-29	2.03%	1.64%
2029 and later	2.03%	2.12%

3-Year Cumulative Increase in Aggregate Employer Rates-Safety County

Fiscal Year	<u>Without Phase-in</u>	<u>With Phase-in</u>
2027-28	4.94%	2.63%
2028-29	4.94%	3.95%
2029 and later	4.94%	5.19%

ATTACHMENTS

- Board Order
- Segal Presentation
- Actuarial Experience Study During the Period July 1, 2022 through June 30, 2025
- 2025 Experience Study UAAL Contribution Phase-In Letter
- Stakeholder Letters (5)

Prepared by:

/S/

Margo Allen
Chief Operations Officer

Reviewed by:

/S/

Eric Stern
Chief Executive Officer

² Note: See 2025 Experience Study UAAL Contribution Phase-In Letter for all cumulative increase in aggregate employer rates (Pages 6-7).



Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement
August 19, 2026

AGENDA ITEM:

Actuarial Experience Study

THE BOARD OF RETIREMENT hereby approves the Staff recommendation to receive and file the Actuarial Experience Study as of June 30, 2025; adopt assumptions as recommended by Segal effective the June 30, 2026 valuation, including a reduction in the discount rate to 6.50%; and consider whether to implement either a two- or a three-year phase-in of the unfunded liability contribution-rate increase.

I HEREBY CERTIFY that the above order was passed and adopted on August 19, 2026 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES (Present but not voting):

Chris Giboney
Board President

Eric Stern
Chief Executive Officer and
Board Secretary



Sacramento County Employees' Retirement System

Actuarial Experience Study

Analysis for the period from July 1, 2022 through June 30, 2025

August 19, 2026 / Matthew Strom / Molly Calcagno

Agenda

Actuarial Experience Study Overview

Summary of Recommendations

Actuarial Cost Impact

Taking a Closer Look

Actuarial Experience Study Overview

Actuarial Experience Study Overview

Why do we need experience studies?

Develop recommended assumptions for annual actuarial valuation

- Reviews economic and demographic assumptions every three years
- Current study is based on the **three-year** period from 2022-2025
 - Various assumptions include experience from prior studies

Segal's role is to make appropriate recommendations to the Board

- Recommendations follow guidance of Actuarial Standards of Practice
 - Assumptions are reasonable individually and in aggregate (ASOP No. 27)

Purpose of the Actuarial Assumptions

What do the assumptions do?



Economic

How will assets grow?

How will salaries and benefits increase?

How will UAAL be amortized?

What type of benefits will be paid?

When will benefits be paid and how long?



Demographic

Actuaries make assumptions as to when and how a member will leave active service and estimate the amount, duration and present value of the expected benefits paid.

Role of Actuarial Assumptions and Methods

$$C + I = B + E$$

Contributions + Interest Income
equals
Benefit Payments + Expenses

- Assumptions do not directly affect the **payment** of benefits, only the **timing** of contributions
 - Actuarial valuation determines the “current” cost, not the ultimate cost

Actuarial Assumption Impacts

How do the assumptions impact liabilities and costs?

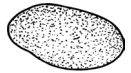
Economic



Inflation



Investment return



Salary increase

Demographic



Post-retirement mortality



Pre-retirement mortality



Retirement



Termination



Disability (Miscellaneous members)



Disability (Safety members)

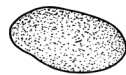
Scale of relative impact of assumptions



Boulder



Rock



Pebble



Sand

Summary of Recommendations

Summary of Economic Assumptions



Assumption	Recommendation
Inflation	• Maintain current assumption of 2.50%
Cost-of-Living Increases	• Maintain current assumption of 2.75% per annum for tiers with a 4.00% maximum COLA and at 2.00% per annum for tiers with a 2.00% maximum COLA
Investment Return	• Reduce investment return assumption from 6.75% to 6.50%
Salary Increase	• Maintain current inflation assumption of 2.50% • Maintain current “across-the-board” salary assumption of 0.25% • Introduce separate assumptions for legacy and CalPEPRA members • Adjust merit & promotion salary assumptions to reflect past experience
Payroll Growth	• Maintain current assumption of 2.75%

Summary of Demographic Assumptions

Rates of decrement



Assumption	Recommendation
Mortality	• Adopt new Pub-2016 base tables • Adopt new adjustments to base tables to reflect SCERS experience • Maintain latest MP-2021 projection scale
Disability	• Adjust rates to reflect lower incidence of disability overall for Miscellaneous members and higher incidence of disability overall for Safety members
Termination	• Adjust rates to reflect higher overall termination experience for Miscellaneous and Safety members
Retirement	• Adjust rates to reflect recent experience

Summary of Demographic Assumptions

Miscellaneous assumptions

Assumption	Recommendation
Service From Unused Sick Leave Conversions	• Maintain the sick leave conversion assumption for new Miscellaneous retirees • Decrease the sick leave conversion assumption for new Safety retirees
Reciprocity	• Decrease assumption from 25% to 20% of future Miscellaneous deferred vested members that will be covered by a reciprocal system • Decrease assumption from 35% to 30% of future Safety deferred vested members that will be covered by a reciprocal system
Deferred Vested Retirement Age	• Maintain current assumption at 61 for Miscellaneous members with reciprocity • Maintain current assumption at 59 for Miscellaneous members without reciprocity • Decrease assumption from 55 to 54 for Safety members with reciprocity • Maintain current assumption at 52 for Safety members without reciprocity
Beneficiary Assumptions	• Maintain current assumption of 80% for males and 60% for females expected to have an eligible survivor at retirement • Maintain current assumption that male retirees are three years older than their female survivors and that female retirees are two years younger than their male survivors

Actuarial Cost Impact

Estimated Actuarial Impact

Modeled as of June 30, 2025

Component	Economic Assumptions	Demographic Assumptions	Total Change
Employer normal cost rate	+1.01%	−0.15%	+0.86%
Employer UAAL rate	<u>+2.40%</u>	<u>−0.59%</u>	<u>+1.81%</u>
Total Employer rate	+3.41%	−0.74%	+2.67%
Total Member rate	+0.91%	−0.09%	+0.82%
UAAL	+\$527 M	−\$115 M	+\$412 M
AVA funded ratio	−3.0%	+0.7%	−2.3%

Actual cost impact will be reflected in the June 30, 2026 valuation

Estimated Actuarial Impact

Modeled as of June 30, 2025

Component	Current Assumptions	Total Change	Recommended Assumptions
Employer normal cost rate	11.85%	+0.86%	12.71%
Employer UAAL rate	<u>15.67%</u>	<u>+1.81%</u>	<u>17.48%</u>
Total Employer rate	27.52%	+2.67%	30.19%
Total Member rate	11.18%	+0.82%	12.00%
UAAL	\$1,985 M	+\$412 M	\$2,397 M
AVA funded ratio	90.1%	-2.3%	87.8%

Actual cost impact will be reflected in the June 30, 2026 valuation

Employer Contribution Rate Impact

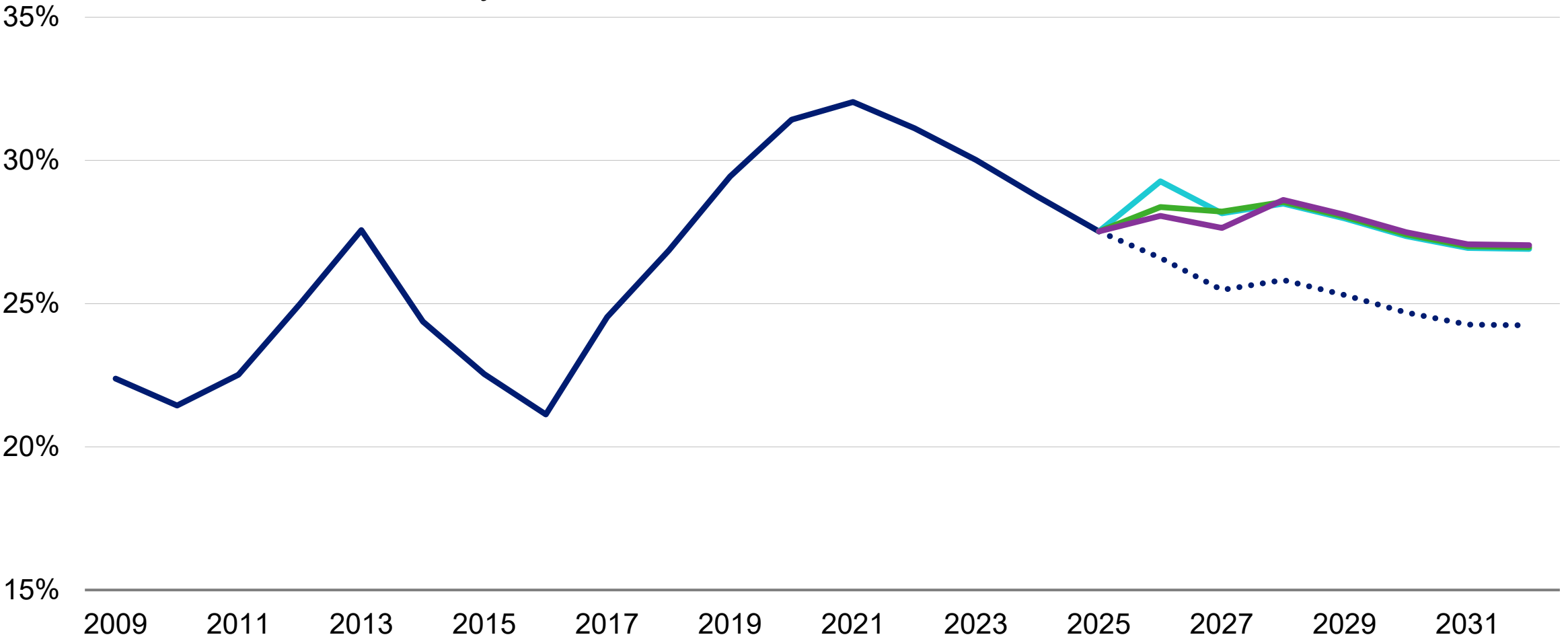
Modeled as of June 30, 2025 as % of payroll

Plan and Employer	Current Assumptions	Total Change	Recommended Assumptions
Miscellaneous County	20.65%	+2.03%	22.68%
Superior Court	22.86%	+2.20%	25.06%
District	29.11%	+2.05%	31.16%
SacSewer	22.94%	+2.61%	25.55%
Safety County	51.31%	+4.94%	56.25%
All Categories Combined	27.52%	+2.67%	30.19%

Employer Contribution Rate Impact

Actual cost impact will be determined as of June 30, 2026

Baseline 2.67% of Payroll Increase With 2-Year Phase-In With 3-Year Phase-In



Member Contribution Rate Impact

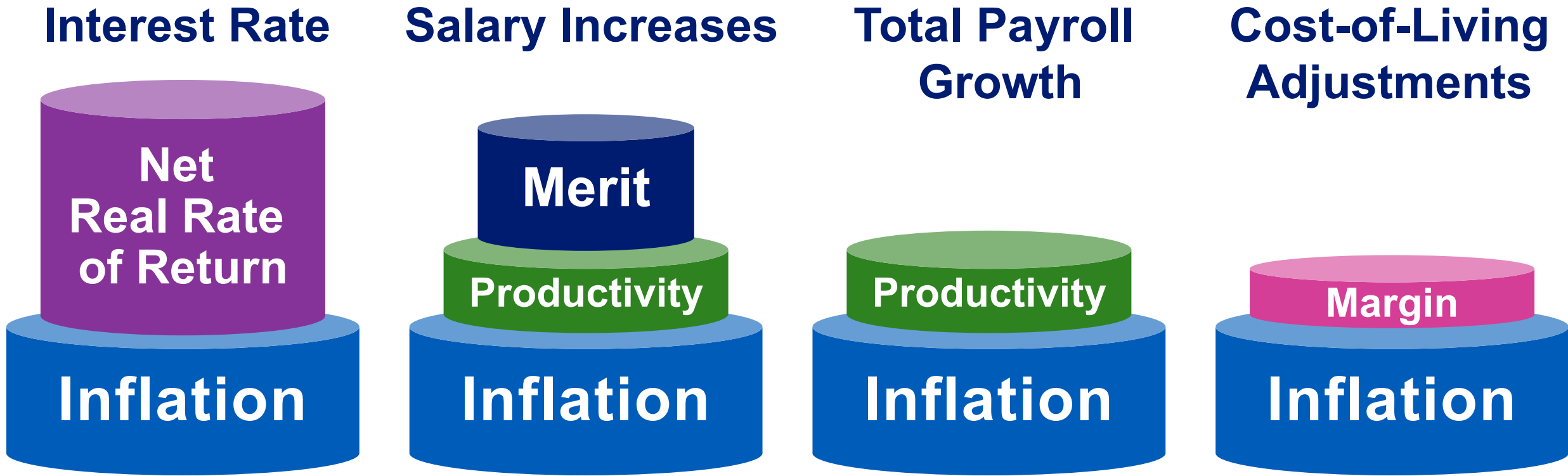
Modeled as of June 30, 2025 as % of payroll

Plan and Employer	Current Assumptions	Total Change	Recommended Assumptions
Miscellaneous 50:50 (County, Orangevale)			
Tier 1	8.54%	+1.41%	9.95%
Tier 2	8.09%	+0.68%	8.77%
Tier 3	10.75%	+0.83%	11.58%
Tier 4	10.44%	+0.72%	11.16%
Tier 5	9.53%	+0.59%	10.12%
Miscellaneous Court and other Districts			
Tier 1	6.47%	+1.05%	7.52%
Tier 2	4.17%	+0.31%	4.48%
Tier 3	6.05%	+0.49%	6.54%
Tier 5	9.53%	+0.59%	10.12%
Miscellaneous SacSewer			
Tier 2	4.75%	+0.36%	5.11%
Tier 3	6.91%	+0.58%	7.49%
Tier 4	9.94%	+0.80%	10.74%
Tier 5	9.28%	+0.53%	9.81%
Safety			
Tier 1	21.22%	+1.87%	23.09%
Tier 2	20.92%	+1.94%	22.86%
Tier 3	20.31%	+1.68%	21.99%
Tier 4	14.62%	+1.12%	15.74%
All Categories Combined	11.18%	+0.82%	12.00%

Taking a Closer Look

Summary of Economic Assumptions

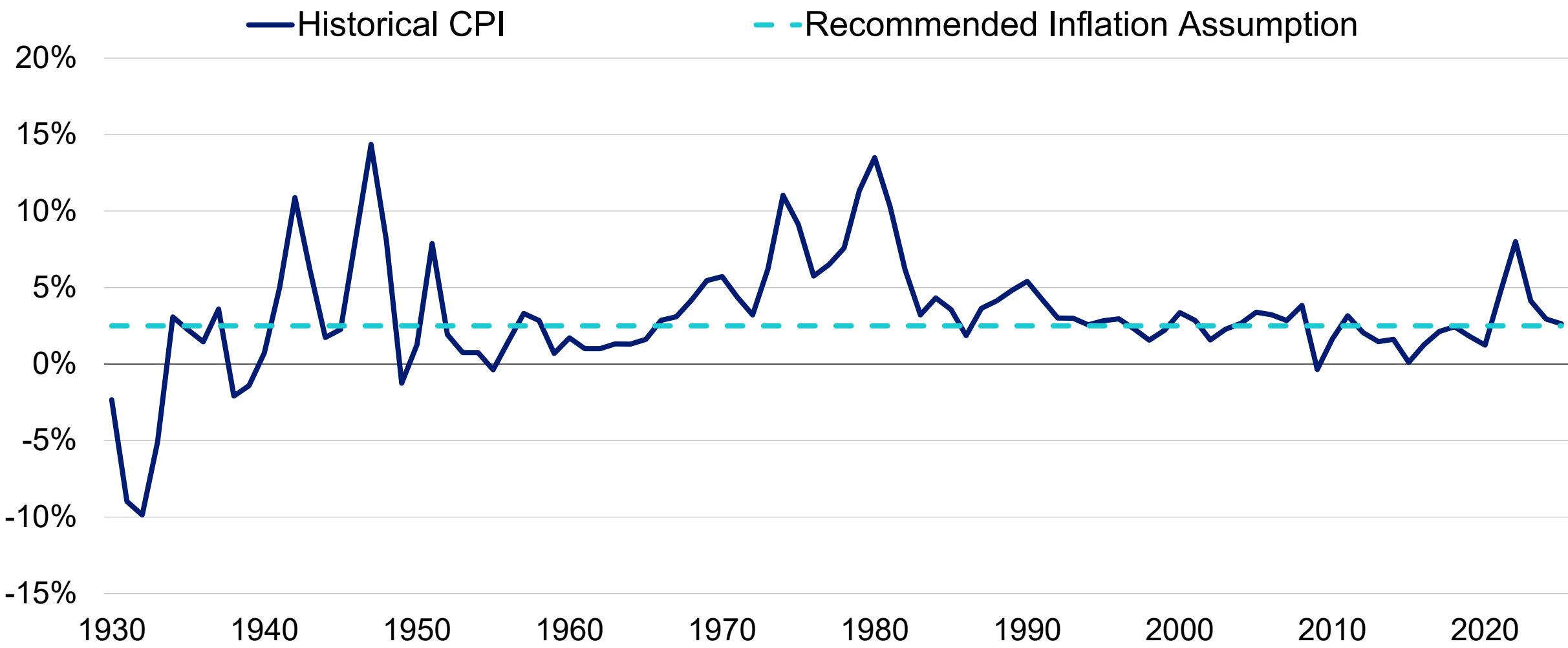
What are the components of the economic assumptions?



Each component should be consistent across all economic assumptions

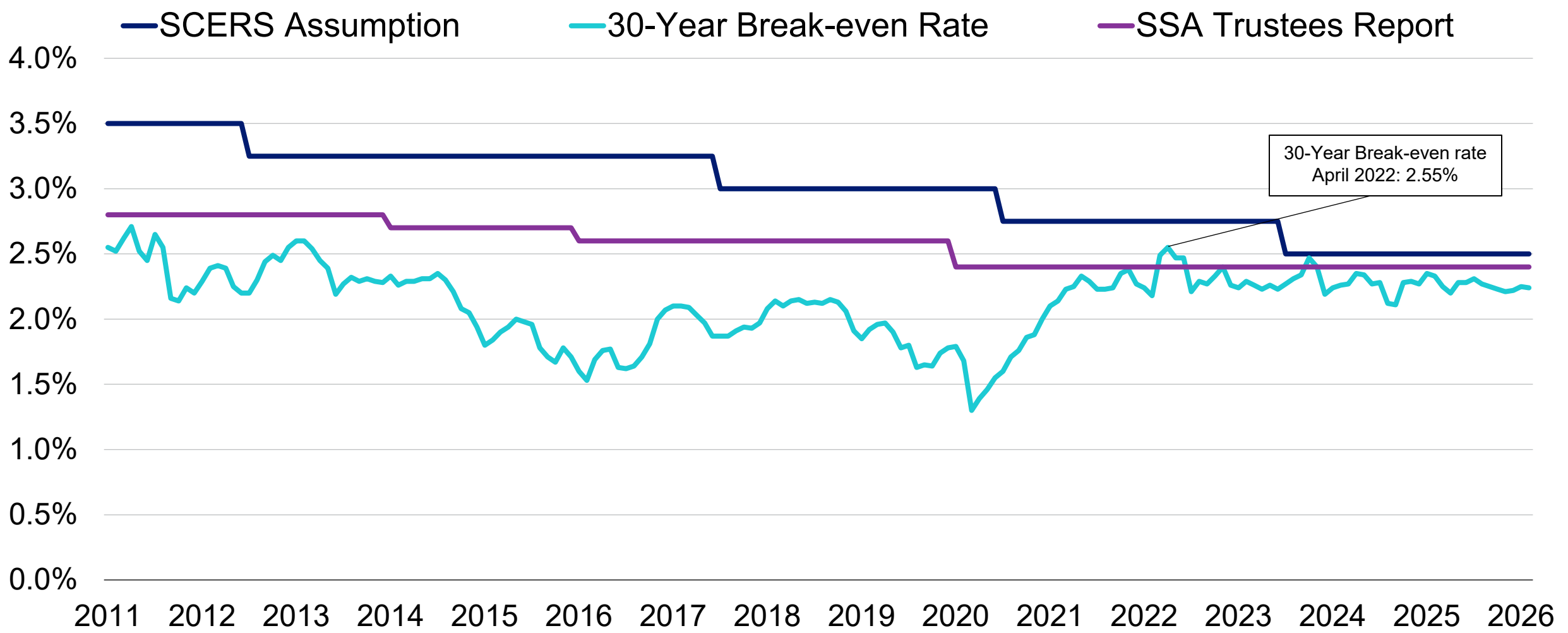
Historical Consumer Price Index (CPI)

Price inflation historical review



Historical Inflation Forecasts

Price inflation comparisons



Price Inflation Assumption

Looking forward

Future expectations

- Investment consultant survey average inflation is 2.49%
 - Cerity (formerly Verus): 2.30% annual inflation for 30-year horizon
- Social Security Administration: 2.40% average CPI over 75 years
- Market implied forward inflation hovering between 2%-2.5%
- Public Plan Database: 2.50% median inflation assumption

Recommend maintaining annual inflation assumption at 2.50%

Investment Earnings Assumption

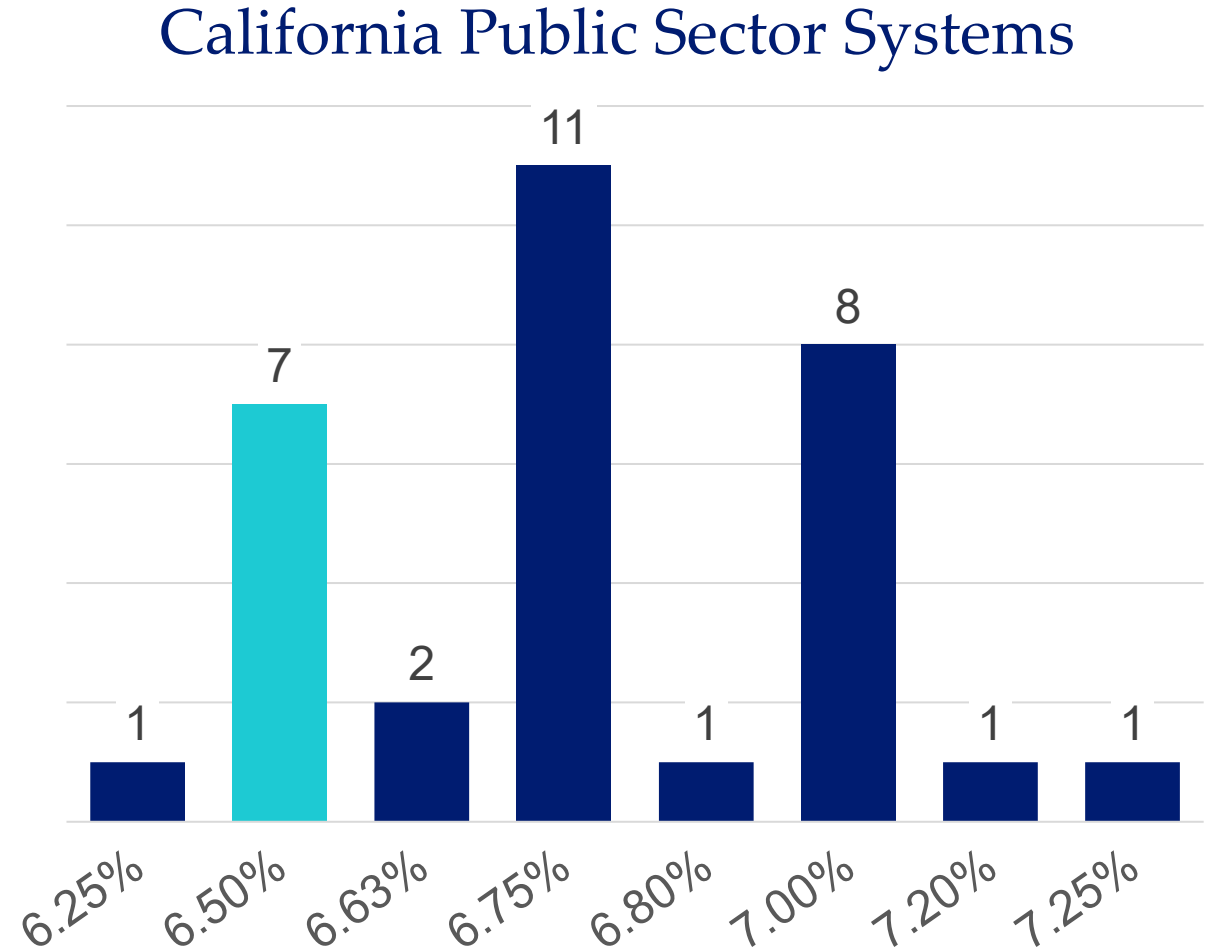
Putting it all together

Assumption Component	June 30, 2026 Recommended	June 30, 2023 Adopted	Change in Component
Inflation	2.50%	2.50%	—
Arithmetic real rate of return	5.71%	5.92%	−0.21%
Expense adjustment	(0.15%)	(0.15%)	—
Geometric return adjustment	(0.66%)	(0.62%)	−0.04%
Risk adjustment	(0.90%)	(0.90%)	—
Total	6.50%	6.75%	−0.25%
Confidence level	62%	62%	—

Comparison with Other Systems

How does the 6.50% recommendation compare?

- **National** median is 7.00%
 - NCPERS's survey mean is 6.67%
 - 49 public fund responses for 2025
 - Public Plan's survey mean is 6.91%
 - 239 large public funds in their 2024 fiscal year valuation
 - 72% of the systems have reduced their investment return assumption from 2017 to 2024



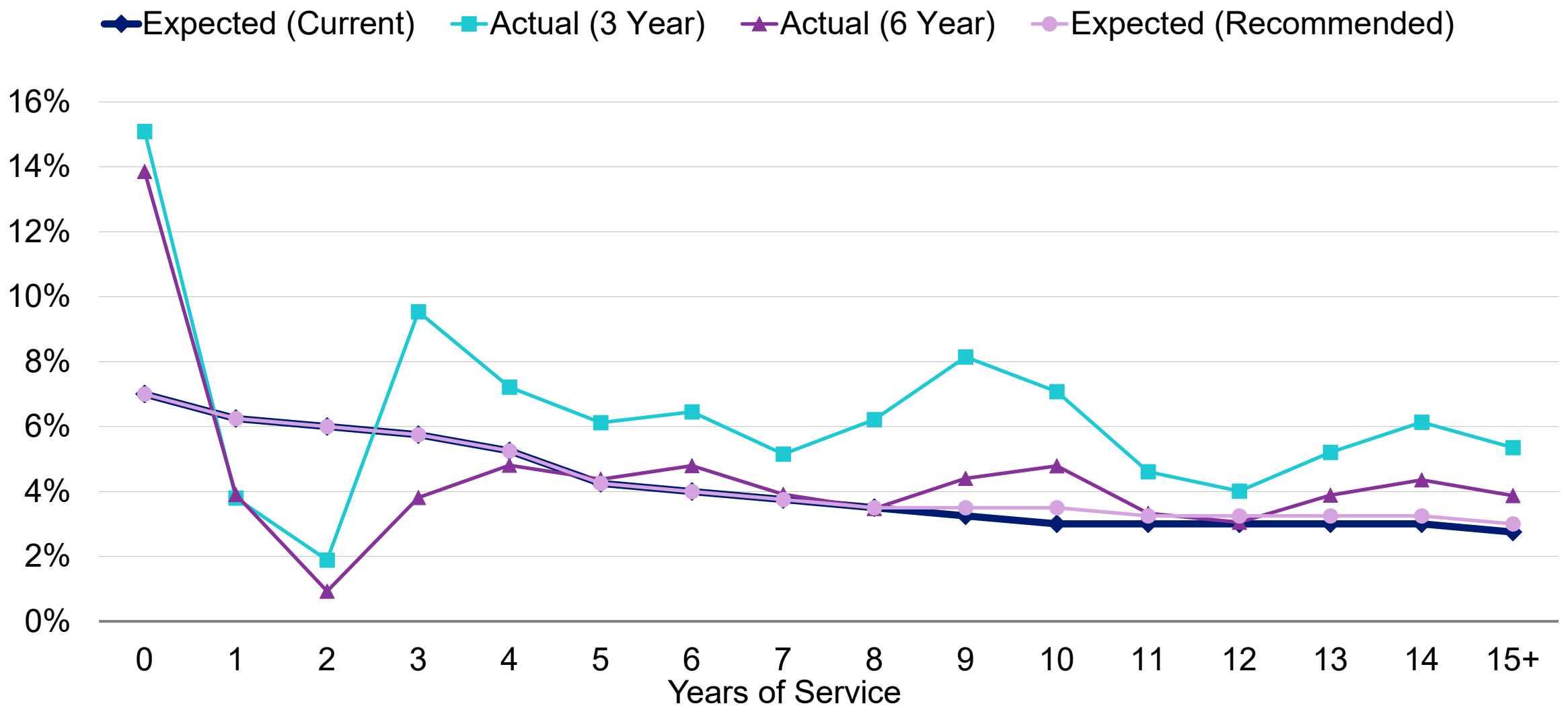
Assumed Salary Increase

What are the components of this assumption?

- **Inflation increases: 2.50%**
 - Assumed to equal price inflation assumption
- **Real “across-the-board” pay increases: 0.25%**
 - Averaged **0.1%–0.4%** during the last ten to twenty years according to an index produced by the Department of Labor
 - Projected to be **1.14%** in the Social Security program’s 2026 annual report
 - For reference, SCERS’ wage inflation exceeded price inflation by an average of **0.27%** over the last six years
- **Merit and promotion increases: 1.75%–8.00%, vary by tier & service**
 - Based on observed increases for employees at each service level
 - Reflects an individual employee’s career advancement

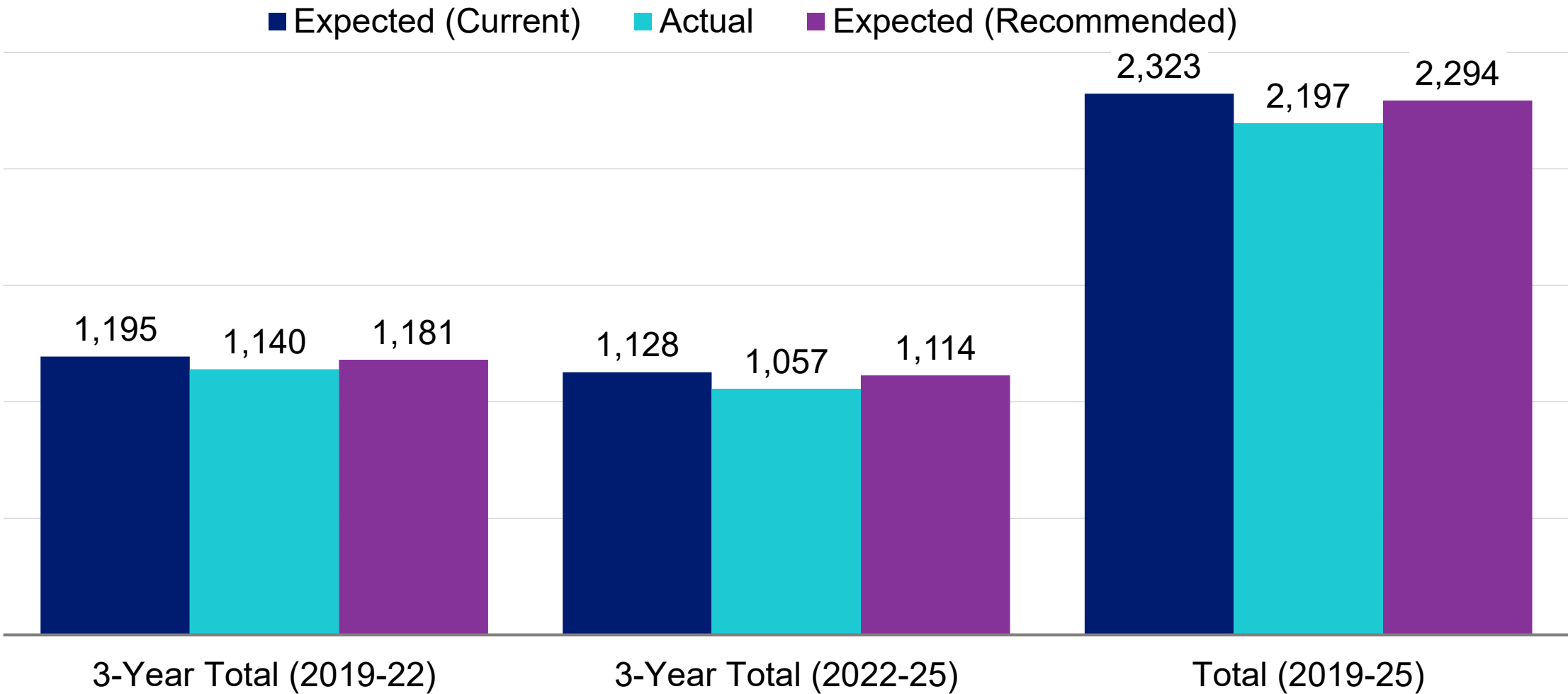
Merit and Promotion Increase Example

Safety Tiers 1, 2, and 3 Members



Retirement Assumption Example

Miscellaneous Members



Note: Results may not add due to rounding.

Thank You

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary
mstrom@segalco.com

Molly Calcagno, ASA, MAAA, EA
Vice President and Consulting Actuary
mcalcagno@segalco.com



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Sacramento County Employees' Retirement System

Actuarial Experience Study

**Analysis of Experience During the Period
July 1, 2022 through June 30, 2025**



180 Howard Street
Suite 1100
San Francisco, CA 94105-6147
T 415.263.8200
F 415.376.1167
segalco.com

July 16, 2026

Board of Retirement
Sacramento County Employees' Retirement System
980 9th Street, Suite 1900
Sacramento, CA 95814

Dear Members of the Board:

We are pleased to submit this report of our review of the actuarial experience for the Sacramento County Employees' Retirement System ("SCERS" or "the System"). This study utilizes the census data for the period July 1, 2022 through June 30, 2025 as well as prior periods for certain assumptions, examines other relevant inputs, and provides the recommended actuarial assumptions, both economic and demographic, to be used in the June 30, 2026 valuation.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. The actuarial calculations were completed under the supervision of Molly Calcagno, ASA, MAAA, Enrolled Actuary.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report with you and answering any questions you may have.

Sincerely,

A handwritten signature in black ink that reads "Matthew A. Strom".

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

A handwritten signature in black ink that reads "Molly Calcagno".

Molly Calcagno, ASA, MAAA, EA
Vice President and Actuary

DC/jl

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Section 1: Introduction and Summary

To project the cost and liabilities of a pension plan, assumptions are made about all future events that could affect the amount and timing of the benefits to be paid and the assets to be accumulated. Each year actual experience is compared against the projected experience, and to the extent there are differences, the future contribution requirement is adjusted.

If assumptions are modified, contribution requirements are adjusted to take into account a change in the projected experience in all future years. There is a difference in both philosophy and cost impact between recognizing actuarial deviations as they occur annually and changing the actuarial assumptions. Taking into account one year's gains or losses without making a change in the assumptions treats that year's experience as temporary and assumes that, over the long run, experience will return to what was originally assumed. Changing assumptions reflects a fundamental change in thinking about the future and has a much greater effect on the current contribution requirements than recognizing gains or losses as they occur.

The use of realistic actuarial assumptions is important in maintaining adequate funding, while paying the promised benefit amounts to participants already retired and to those near retirement. The actuarial assumptions used do not determine the "actual cost" of the plan. The actual cost is determined solely by the benefits and administrative expenses paid out, offset by investment income received. However, it is desirable to estimate as closely as possible what the actual cost will be so as to permit an orderly method for setting aside contributions today to provide benefits in the future, and to maintain equity among generations of participants and taxpayers.

This study was undertaken in order to review the economic and demographic actuarial assumptions and to compare the actual experience with that expected under the current assumptions during the three-year experience period from July 1, 2022 through June 30, 2025. The study was performed in accordance with Actuarial Standard of Practice (ASOP) No. 27 "Selection of Assumptions for Measuring Pension Obligations". This Standard of Practice provides guidance for the selection of the various actuarial assumptions utilized in a pension plan actuarial valuation. Based on the results of this study and expected future experience, we are recommending various changes in the current actuarial assumptions.

Section 2 provides background on the basic principles and methodology used in the review of the economic and demographic actuarial assumptions. A detailed discussion of each assumption and reasons for the recommended changes is found in *Section 3* for the economic assumptions and *Section 4* for the demographic assumptions. The cost impact of the recommended changes is detailed in *Section 5*. Lastly, a summary of the current actuarial assumptions is provided in *Appendix A*, and a summary of the recommended actuarial assumptions is provided in *Appendix B*.

Section 1: Introduction and Summary

Summary of recommendations

Page	Actuarial Assumption	Recommendation
11	Inflation: Future increases in the Consumer Price Index (CPI), which is a component of investment return and active member salary increases.	Maintain the inflation assumption at 2.50% per annum as discussed in <i>Section 3(A)</i> .
13	Cost-of-living adjustment (COLA): Future increases to a member's retirement benefit.	Maintain the COLA assumption at 2.75% per annum for tiers with a 4.00% maximum COLA and at 2.00% per annum for tiers with a 2.00% maximum COLA as discussed in <i>Section 3(A)</i> .
14	Investment return: The estimated average net rate of return on current and future assets of the System as of the valuation date. This rate is used to discount liabilities.	Reduce the investment return assumption from 6.75% to 6.50% per annum as discussed in <i>Section 3(B)</i> .
21	Salary increases: Increases in the salary of a member between the date of the valuation to the date of separation from active service. This assumption has three components: • Inflationary salary increases • Real “across-the-board” salary increases • Merit and promotion increases	Maintain the inflationary salary increase assumption at 2.50% and maintain the real “across-the-board” salary increase assumption at 0.25%. Adjust the merit and promotion salary increases as developed in <i>Section 3(C)</i> to reflect past experience. This includes introducing separate merit and promotion salary increases for legacy and CalPEPRA members. The recommended total rates of salary increase anticipate higher increases than the current assumptions for Miscellaneous and Safety members.
27	Payroll growth: Used to amortize the unfunded actuarial accrued liability (UAAL) in determining the UAAL contribution rate.	Maintain the payroll growth assumption (combined inflationary and real “across-the-board” salary increases) at 2.75%.

Section 1: Introduction and Summary

Page	Actuarial Assumption	Recommendation
31	Mortality rates – healthy: The probability of dying at each age for non-disabled members. Mortality rates are used to anticipate life expectancies.	Healthy retirees: Change base tables from Pub-2010 Healthy Retiree Amount-Weighted Above-Median mortality tables to Pub-2016 Healthy Retiree Amount-Weighted Above-Median mortality tables. Adjust the base tables to reflect partial credibility of SCERS' experience. Overall, the recommended assumptions anticipate more deaths for Miscellaneous members and fewer deaths for Safety members than previously projected. Beneficiaries not in pay status: Change mortality tables to be consistent with the mortality tables recommended for Miscellaneous healthy retirees. Beneficiaries in pay status: Change base tables from Pub-2010 Contingent Survivor Amount-Weighted Above-Median mortality tables to Pub-2016 Contingent Survivor Amount-Weighted Above-Median mortality tables. Adjust the base tables to reflect partial credibility of SCERS' experience. Overall, the recommended assumptions anticipate more deaths than previously projected. Pre-retirement mortality: Change base tables from Pub-2010 Employee Amount-Weighted Above-Median mortality tables to Pub-2016 Employee Amount-Weighted Above-Median mortality tables. There is no adjustment to the base tables. The recommended assumptions anticipate more deaths for Miscellaneous and Safety members than previously projected. Mortality projection: Maintain generational mortality improvement projection with Scale MP-2021. Mortality for member contribution rates, optional forms and reserves: Adjust the mortality rates to those developed in <i>Section 4(A)</i> for member contribution rates. A discussion of mortality rates for optional forms and reserves is also provided in <i>Section 4(A)</i>. Pre-retirement death type: Maintain the assumption that 100% of Miscellaneous pre-retirement deaths are non-service connected and 50% of Safety pre-retirement deaths are non-service connected.
41	Mortality rates – disabled: The probability of dying at each age for disabled members. Mortality rates are used to project life expectancies.	Disabled retirees: Change base tables from Pub-2010 Disabled Retiree Amount-Weighted mortality tables to Pub-2016 Disabled Retiree Amount-Weighted mortality tables. Adjust the base tables to reflect partial credibility of SCERS' experience. The recommended assumptions anticipate fewer deaths for Miscellaneous members and more deaths for Safety members than previously projected. Mortality projection: Maintain generational mortality improvement projection with Scale MP-2021.
45	Disability incidence rates: The probability of becoming disabled at each age.	Adjust the disability rates to those developed in <i>Section 4(C)</i> to reflect a lower incidence of disability overall for Miscellaneous members and a higher incidence of disability overall for Safety members.

Section 1: Introduction and Summary

Page	Actuarial Assumption	Recommendation
49	Termination rates: The probability of leaving employment at each age and receiving either a refund of member contributions or a deferred vested retirement benefit.	Adjust the withdrawal and vested termination rates to those developed in <i>Section 4(D)</i> to reflect a higher incidence of termination for Miscellaneous and Safety members.
55	Retirement rates: The probability of retirement at each age at which participants are eligible to retire. Includes retirement age for deferred vested members.	For active members, adjust the current retirement rates to those developed in <i>Section 4(E)</i> . For deferred vested members that work for a reciprocal employer, maintain the assumed retirement age at 61 for Miscellaneous members and decrease the assumed retirement age from 55 to 54 for Safety members. For deferred vested members that do not work for a reciprocal employer, maintain the assumed retirement age at 59 for Miscellaneous members and maintain the assumed retirement age at 52 for Safety members.
72	Service From Unused Sick Leave Conversions: Additional service that is expected to be received when a member retires due to conversion of unused sick leave.	Maintain the sick leave conversion assumption for new Miscellaneous retirees and decrease the sick leave conversion assumption for new Safety retirees as shown in <i>Section (4)(F)</i> .
73	Miscellaneous assumptions including: • Reciprocity • Future benefit accruals • Unreported data for members • Form of payment • Percentage with eligible survivor • Eligible survivor age and gender • Average entry ages	Decrease the current proportion of future deferred vested members expected to be covered by a reciprocal system from 25% to 20% for Miscellaneous members and decrease the current proportion of future deferred vested members expected to be covered by a reciprocal system from 35% to 30% for Safety members. Maintain the current future benefit accrual assumption, adjust the assumption for members with unknown gender , and maintain the form of payment assumption as outlined in <i>Section 4(G)</i> . For active and deferred vested members, maintain the current percentage with eligible survivor assumption at 80% for males and 60% for females. Maintain the spouse age difference assumption that male retirees are three years older than their spouses and that female retirees are two years younger than their spouses. Maintain the current assumed average entry ages of 35 for Miscellaneous and 29 for Safety.

Cost impact summary

We have estimated the impact of the recommended assumption changes as if they were applied to the June 30, 2025 actuarial valuation. If adopted by the Board, these assumptions would first apply with the June 30, 2026 actuarial valuation. The tables below show the impact on key results due to the recommended assumption changes separately for the economic assumptions (including the merit and promotion salary increases) and demographic assumptions. More details, including the contribution impact by cost group, can be found in *Section 5*.

Section 1: Introduction and Summary

Cost Impact Based on June 30, 2025 Actuarial Valuation (\$ in '000s)

Assumption	Impact on Average Employer Contribution Rates	Impact on Average Member Contribution Rates
Changes in economic assumptions	3.41%	0.91%
Changes in demographic assumptions	(0.74%)	(0.09%)
Total increase in average contribution rate	2.67%	0.82%
Total increase in annual dollar amount¹	\$39,423	\$12,258

Assumption	Impact on Funded Status
Increase in UAAL due to changes in economic assumptions	\$527,316
Decrease in UAAL due to changes in demographic assumptions	(115,301)
Total increase in UAAL	\$412,015
Change in funded ratio on AVA basis	(2.3%)

Of the various assumption changes, the most significant rate increase is due to the change in the investment return assumption.

¹ Based on June 30, 2025 projected annual payroll as determined under each set of assumptions.

Section 2: Background and Methodology

In this report, we analyzed both economic and demographic assumptions.

The primary economic assumptions reviewed are inflation, investment return, and salary increases. Demographic assumptions include the probabilities of certain events occurring in the population of members, referred to as “decrements” (e.g., termination from service, disability retirement, service retirement, and death before and after retirement).

In addition to decrements, other demographic assumptions reviewed in this study include the percentage of members assumed to go on to work for a reciprocal system, reciprocal salary increases, percentage of members with an eligible spouse or domestic partner, survivor age difference, unused sick leave conversion, and average entry age for members hired after January 1, 1975 and prior to January 1, 2013.

It should be noted that with the exception of selecting the merit and promotion salary increases and the mortality assumptions on an amount-weighted or benefit-weighted basis, all the demographic assumptions in this report have been selected on a headcount-weighted basis. A value of “N/A” represents a service bucket for which there were no exposure over the time-period measured.

Economic assumptions

Economic assumptions consist of:

- **Inflation:** Increases in the price of goods and services. The inflation assumption reflects the basic return that investors expect from securities markets. It also reflects the expected basic salary increase for active employees and drives increases in the allowances of retired members (if any).
- **Investment return:** Expected long-term rate of return on the System’s investments after accounting for certain investment and administrative expenses. This assumption has a significant impact on contribution rates.
- **Salary increases:** In addition to inflationary increases, it is assumed that salaries will also grow by real “across-the-board” pay increases in excess of price inflation. It is also assumed that employees will receive raises above these average increases as they advance in their careers, which are commonly referred to as merit and promotion increases. Payments to amortize any unfunded actuarial accrued liability (UAAL) are calculated to increase each year by the price inflation rate plus any real “across-the-board” pay increases that are assumed.

The setting of the economic assumptions is described in *Section 3*.

Section 2: Background and Methodology

Demographic assumptions

To determine the probability of an event occurring, we examine the “decrements” and “exposures” of that event. For example, when considering termination from service, we compare the number of employees who actually terminate in a specific service category/group (the number of “decrements”) with those who could have terminated (the number of “exposures”). If there were 500 active employees in the 3–4 years of service category at the beginning of the year and 50 of them left during the year, the probability of termination in that service category is $50 \div 500$, or 10%.

The reliability of the resulting probability depends heavily on both the number of decrements and the number of exposures. For instance, if there are only a few people in a high service category at the beginning of the year (number of exposures), the probability of termination developed for that service category may be less credible, particularly if it does not align with the pattern shown for the other service categories. Similarly, when considering the mortality decrement, if an age category has a large number of exposures but very few decrements (actual deaths), then the probability developed for that category would also be considered less reliable.

One reason we use several years of experience for such a study is to enhance statistical reliability by increasing the number of exposures and decrements. Another reason for using several years of data is to smooth out any fluctuations that may occur from one year to the next. Nevertheless, we also calculate the rates on a yearly basis to check for any emerging trends in the recent years.

Segal has routinely reviewed the experience over the most recent three-year period and the prior three-year period when setting assumptions, for a total of six years. (We note that for setting the mortality assumptions, we have actually used the data for a fifteen-year period.) As noted above, using more years of data tends to smooth out year-to-year fluctuations in the actual experience.

The setting of the demographic assumptions is provided in *Section 4*.

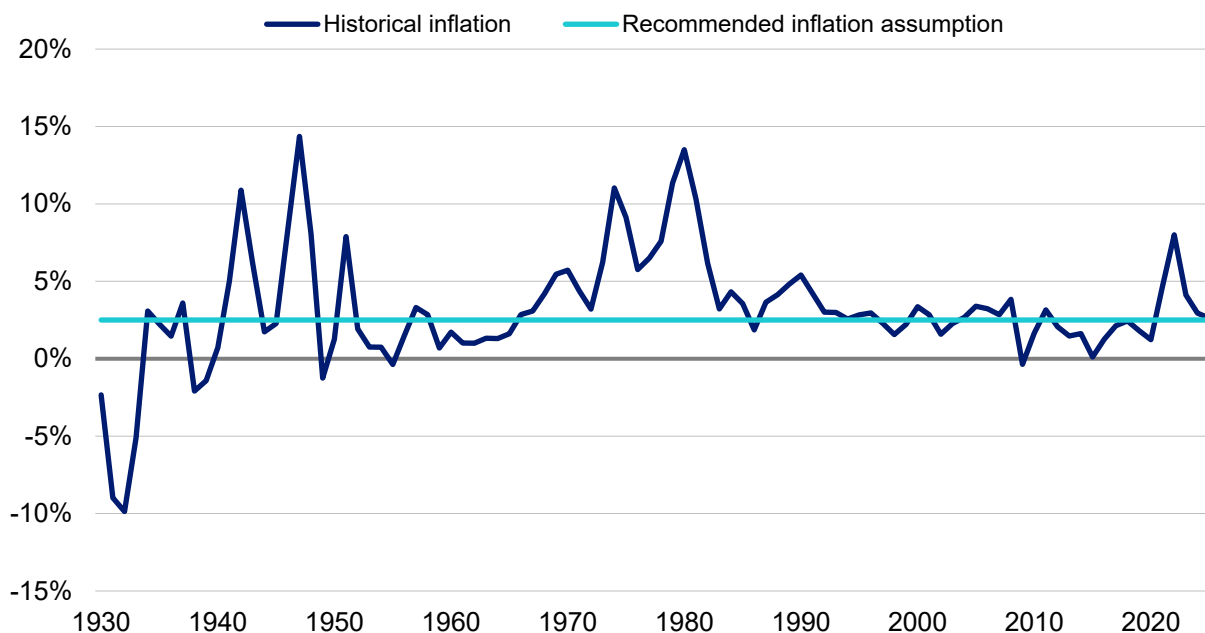
Section 3: Economic Assumptions

A. Inflation

Unless an investment grows at least as fast as prices increase, investors will experience a reduction in the inflation-adjusted value of their investment. There may be times when “riskless” investments return more or less than inflation, but over the long term, investment market forces will generally require an issuer of fixed income securities to maintain a minimum return that protects investors from inflation.

The inflation assumption is long term in nature, so our analysis begins with a review of historical information. The following graph compares historical inflation rates with the recommended inflation assumption of 2.50%. We then proceed with a discussion of other sources of inflation data to provide additional context to our recommendation.

Historical Consumer Price Index (CPI) — 1930 to 2025²
(U.S. City Average — All Urban Consumers)



There was a spike in inflation that started in the second quarter of 2021 and continued into 2022. The rate of inflation started to decrease after the Federal Reserve began raising interest rates around the second quarter of 2022. As inflation continued to decrease, the Federal Reserve changed course in late 2024 and reduced interest rates three times. After a period of no changes, the Federal Reserve cut interest rates again three times in late 2025.³ Based on the most recent data, the change in the CPI from December 2024 to December 2025 was 2.7%.

² Source: Bureau of Labor Statistics — Based on CPI for All Items in U.S. city average, all urban consumers, not seasonally adjusted (Series ID: CUUR0000SA0).

³ As of early 2026, the Federal Reserve’s median projection of the interest rate for the year-end target range is 3.25%-3.50%. This target implies one additional 25-basis-point cut in 2026, building on the series of reductions that occurred in late 2024 and 2025.

Section 3: Economic Assumptions

According to the Public Plans Database,⁴ the median inflation assumption was 2.50% in the 2024 fiscal year valuations for 243⁵ public pension plans across the U.S. In California, CalSTRS and four⁶ 1937 Act CERL systems currently use an inflation assumption of 2.75%, while CalPERS and the 16 remaining 1937 Act CERL systems (including SCERS) use an assumption of 2.50%.⁷

SCERS' investment consultant, Cerity (formerly Verus), anticipates an annual inflation rate of 2.30% over a 30-year horizon.⁸ The average inflation assumption provided by Cerity and five other investment advisory firms retained by Segal's California public sector clients, as well as Segal's investment advisory division (Segal Marco Advisors), was 2.49%. The time horizon used by the investment consultants included in our review, with the exception of one investment consultant that uses a one-year horizon, generally ranges from 20 years to 30 years.

To find a forecast of inflation based on a longer time horizon, we referred to the Social Security Administration's (SSA) 2026 report on the financial status of the Social Security program.⁹ The projected average increase in the CPI over the next 75 years under the intermediate cost assumptions used in that report was 2.40%, which the SSA has maintained for several years. The SSA report also includes alternative projections using lower and higher inflation assumptions of 1.80% and 3.00%, respectively.

Finally, we also compared the yields on the 30-year inflation indexed U.S. Treasury bonds to comparable traditional U.S. Treasury bonds.¹⁰ This "break-even rate" is commonly regarded as a market-based gauge of future inflation expectations. While this measure can be quite volatile, it is worth noting that during the peak of the most recent inflation spike this break-even rate exceeded 2.50% in only a single month, April 2022 (2.55%). As of May 2026, the difference in yields was 2.30%.

The following graph shows SCERS' historical and recommended inflation assumptions as well as the two metrics just discussed. In effect, this compares SCERS' assumption to two separate independent forecasts, one based on market observations and one developed by economists at the SSA. The graph shows that over the observed period, SCERS' assumption has been gradually decreasing as it converges with the other metrics and seems to be in a stable place at this point in time.

⁴ Public Plans Data is produced by the Center for Retirement Research at Boston College in partnership with the MissionSquare Research Institute, National Association of State Retirement Administrators, and the Government Finance Officers Association.

⁵ Among 253 large public retirement funds, the 2024 fiscal year inflation assumption was not available for 10 of the public retirement funds in the survey data as of March 2026.

⁶ We note that none of these four 1937 Act CERL systems are served by Segal.

⁷ Eight of these 1937 Act CERL systems use a 2.50% inflation assumption with a 2.75% COLA assumption.

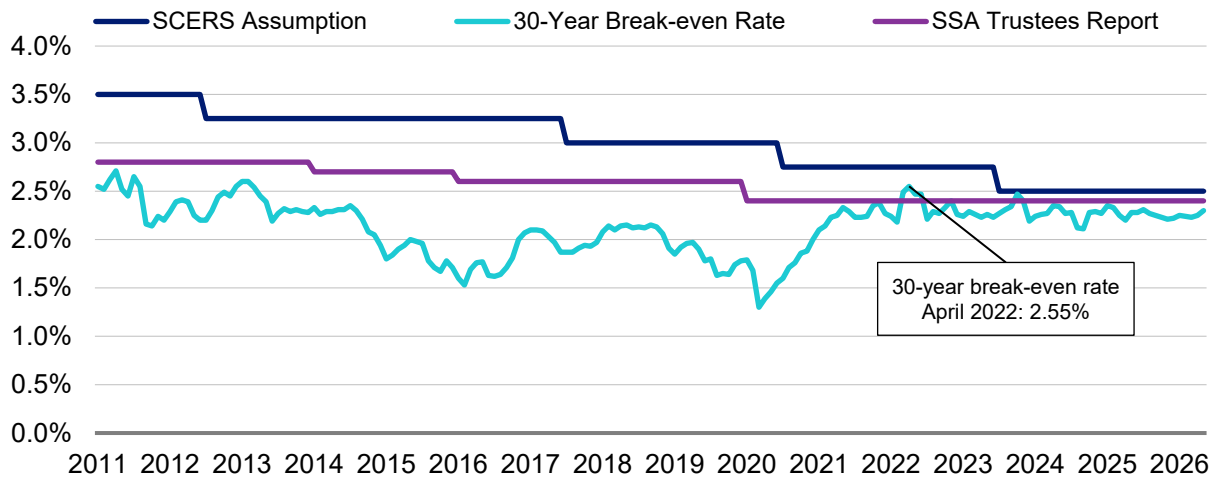
⁸ The annual inflation assumption used by Cerity is 2.7% over a 10-year horizon.

⁹ Source: "Social Security Administration: The 2026 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds."

¹⁰ Source: Board of Governors of the Federal Reserve System.

Section 3: Economic Assumptions

Historical Inflation Forecasts



The setting of the inflation assumption using the information outlined above is a somewhat subjective process, and Segal does not apply a specific weight to each of the metrics in determining our recommended inflation assumption. Based on a consideration of all the above metrics, beginning in 2021 we have been recommending the same 2.50% inflation assumption in our experience studies for our California public retirement system clients.

We recommend maintaining the annual inflation assumption at 2.50%.

Retiree cost-of-living increases

In our last experience study as of June 30, 2022, the Board maintained the recommended cost-of-living adjustments (COLA) assumption of 2.75% for Tier 1. The assumption of 2.75% included a 0.25% margin above the recommended inflation assumption, to reflect the experience from the annual CPI for the San Francisco-Oakland-Hayward Area that is used by the Board to set COLAs. The table below shows the change in Annual Average CPI for the San Francisco Area and the U.S. City Average for the most recent 5, 10, and 20-year periods ending December 31, 2025.

Comparison of Changes in Annual Average CPI

Period	Change in Annual Average CPI for San Francisco-Oakland-Hayward	Change in Annual Average CPI for U.S. City Average
5-Year Average	3.48%	4.46%
10-Year Average	3.25%	3.11%
20-Year Average	2.86%	2.53%

We recommend maintaining the retiree COLA assumption of 2.75% per year for Tier 1, which includes a 0.25% margin above our recommended inflation assumption to mitigate actuarial losses that may arise from future COLA increases greater than the inflation assumption. We recommend no change in the 2.00% assumption used to value the post-retirement COLA for Miscellaneous Tiers 3, 4 and 5 and Safety Tiers 2, 3 and 4.

Section 3: Economic Assumptions

B. Investment return

The investment return assumption is comprised of two primary components: inflation and real rate of return with adjustments for certain expenses and risk.

Real rate of return

This component represents the portfolio's expected incremental investment market returns over inflation. Generally, when an investor takes on greater investment risk, the return on the investment is expected to also be greater, at least in the long run.¹¹ This additional risk and return is expected to vary by asset class and empirical data supports that expectation. For that reason, real rate of return assumptions are developed for each asset class and the resulting assumption for a retirement plan's portfolio will vary based on the Board's asset allocation.

The System's target asset allocation and corresponding real rate of return assumptions (net of investment management expenses) are shown in the following table. The first column of returns are determined by reducing Cerity's nominal 30-year arithmetic return assumptions by their assumed 2.30% inflation rate. The second column of returns shows the average real rate of return assumptions provided to us by Cerity, five other investment advisors to Segal's California public sector retirement clients, and Segal Marco Advisors. We believe these averages are a reasonable consensus of long-term future market returns in excess of inflation.

¹¹ However, an argument can also be made that taking on more risk in the portfolio could justify a greater risk margin in the actuarial assumption used, to help manage that risk.

Section 3: Economic Assumptions

SCERS' Asset Allocation and Arithmetic Real Rate of Return Assumptions

Asset Class	SCERS' Target Asset Allocation	Cerity's Real Rate of Return Assumption	Average Real Rate of Return Assumption from Seven Investment Firms
Global equity ex-U.S.	39.00%	6.30%	5.99%
U.S. core plus fixed income	12.00%	3.90%	3.65%
U.S. treasury	4.00%	2.60%	2.60%
Core real estate	5.00%	5.10%	4.57%
Private equity	11.00%	8.60%	9.18%
Private credit	9.00%	6.90%	5.98%
Cash	2.00%	1.60%	0.85%
Value added real estate	1.50%	7.40%	7.40% ¹²
Opportunistic real estate	1.50%	9.20%	9.20% ¹²
Private real assets	7.00%	7.10%	7.10% ¹²
Absolute return	7.00%	3.50%	3.50% ¹²
Liquid real return	1.00%	5.10%	5.10% ¹²
Total	100.00%	5.93%	5.71%

Generally, the above are representative of “indexed” returns for securities that are publicly traded, returns net of fees for securities that are non-publicly traded and do not include any additional returns (“alpha”) from active management. Consideration of returns without alpha is consistent with the Actuarial Standard of Practice No. 27, Section 3.7.3.d, which states:

“Investment Manager Performance — Anticipating superior (or inferior) investment manager performance may be unduly optimistic (or pessimistic). The actuary should not assume that superior or inferior returns will be achieved, net of investment expenses, from an active investment management strategy compared to a passive investment management strategy unless the actuary believes, based on relevant supporting data, that such superior or inferior returns represent a reasonable expectation over the measurement period.”

The following are some observations about the returns provided above:

- The investment consultants and Segal’s investment advisory division included in our sample provided us with their expected real rates of return for each asset class over time horizons that varied from one year to 30 years. In general, the time horizon used by an individual investment consultant is not necessarily consistent with the time horizon of the actuarial assumption, which is used to discount cashflows over the expected lifetime of each plan member.

¹² There is a larger disparity in returns for this asset class among the firms surveyed, so Cerity’s assumption is applied in lieu of the average to more closely reflect the underlying investments made specifically for SCERS.

Section 3: Economic Assumptions

- Using an average of real rate of return assumptions allows SCERS' investment return assumption to reflect a broad range of capital market information and to help reduce year to year volatility in the investment return assumption.
- We recommend the 5.71% portfolio net real rate of return, as calculated above, be used in the determination of SCERS' investment return assumption.
 - This return is 0.21% lower than the 5.92% net return that was used three years ago in the review of the recommended investment return assumption for the June 30, 2023 valuation.
 - The 0.21% decrease in the portfolio net real rate of return since 2023 is due to changes in the real rate of return assumptions provided by the investment advisory firms (-0.21% under the 2023 asset allocation), changes in SCERS' target asset allocation (+0.03%) and the interaction effect between these changes (-0.03%).
 - Even though there is a reduction in the real rates of return between the 2023 study and the current study, it is worth noting that the real rates of return provided in the capital market assumptions in the current study are generally higher than those in the ten-year period following the Global Financial Crisis, and so altogether should be used with caution in selecting a long-term investment return assumption.

System expenses

For funding purposes, the real rate of return assumption for the portfolio needs to be adjusted for investment expenses expected to be paid from investment income. Current practice for SCERS also adjusts for expected administrative expenses. As the investment consultants discussed in the prior section provide us with real rates of return that are net of expected investment manager fees, we only need to make adjustments for investment consulting fees, custodian fees and other miscellaneous investment expenses.

The following table shows the administrative and investment expenses as a percentage of the beginning of year actuarial value of assets.

Administrative and Investment Expenses as a Percentage of Actuarial Value of Assets (\$ in '000s)

Year Ended June 30	Actuarial Value of Assets ¹³	Administrative Expenses	Investment Expenses ¹⁴	Administrative Expenses as %	Investment Expenses as %	Total %
2020	\$9,703,313	\$8,460	\$3,731	0.09%	0.04%	0.13%
2021	10,229,760	9,165	3,929	0.09%	0.04%	0.13%
2022	10,929,549	8,971	3,330	0.08%	0.03%	0.11%
2023	11,647,866	11,047 ¹⁵	4,732	0.09%	0.04%	0.13%
2024	12,423,093	12,422	4,369	0.10%	0.04%	0.14%
2025	13,209,968	13,739	4,168	0.10%	0.03%	0.13%

¹³ As of beginning of plan year.

¹⁴ Equals the sum of investment consulting fees, custodian fees and other miscellaneous investment expenses. Excludes investment manager fees.

¹⁵ 2023 administrative expenses exclude a one-time impairment amount of \$17.1 million associated with termination of pension administration services provided by an outside vendor.

Section 3: Economic Assumptions

Administrative and Investment Expense Averages and Assumptions

Averaging Period and Assumption	Expense Percentage
Current assumption	0.15%
Three-year average (2023–2025)	0.14%
Six-year average (2020–2025)	0.13%
Recommended assumption	0.15%

We recommend maintaining the expense component of the investment return assumption at 0.15%.

Adjustment to expected geometric real rate of return

The recommended 5.71% real rate of return assumption was based on expected arithmetic average returns. A retirement system using an expected arithmetic average return as the discount rate in a funding valuation is expected, over long periods of time, to have no surplus or asset shortfall relative to its expected obligations assuming all other actuarial assumptions are met in the future.¹⁶

Beginning with the previous study, we have converted the portfolio's arithmetic average return to a geometric average return. A retirement system using a geometric average return as the discount rate in a funding valuation will, over long periods of time, have an equal likelihood of having a surplus or asset shortfall relative to its expected obligations assuming all actuarial assumptions are met in the future.¹⁷ The majority of public plans across the United States use geometric average return to determine the expected return on assets.

For any given asset portfolio, the geometric average return will be less than the arithmetic average return.¹⁸ The difference depends on the variability of the portfolio as measured by its standard deviation. Based on the portfolio's standard deviation of 11.90% provided by Cerity, the adjustment to a geometric average return reduces the expected return by 0.66%.

Risk adjustment

The real rate of return assumption for the portfolio is further adjusted to reflect the potential risk of shortfalls in the return assumptions. SCERS' asset allocation determines this portfolio risk, since risk levels are driven by the variability of returns for the various asset classes and the correlation of returns among those asset classes. This portfolio risk is incorporated into the real rate of return assumption through a risk adjustment.

The purpose of the risk adjustment (as measured by the corresponding confidence level) is to increase the likelihood of achieving the actuarial investment return assumption in the long

¹⁶ The mathematical terminology for this is that the mean (or average) surplus or asset shortfall is expected to be zero.

¹⁷ The mathematical terminology for this is that over time the median surplus or asset shortfall is expected to be zero.

¹⁸ This is because the expected geometric average return reflects expected median outcomes, while the expected arithmetic average return reflects expected average or mean outcomes. Expected median outcomes are lower than expected average outcomes because they are less affected by the possibility of extraordinary ("outlier") favorable outcomes.

Section 3: Economic Assumptions

term.¹⁹ It also acknowledges that investment results carry significant volatility over time, and yet the recommended assumption is a static number that does not explicitly convey this risk or its ramifications. The practice of including a risk adjustment helps mitigate some of this risk and is consistent with our experience that retirement plan fiduciaries would generally prefer that returns exceed the assumed rate more often than not.

The confidence level associated with a particular risk adjustment represents a relative likelihood that future investment earnings would equal or exceed the assumed earnings over a 15-year period. The 15-year time horizon represents an approximation of the “duration” of the fund’s liabilities, where the duration of a liability represents the sensitivity of that liability to interest rate variations.

Three years ago, the Board adopted an investment return assumption of 6.75%. That return implied a risk adjustment of 0.90%, corresponding to a 15-year confidence level of 62%, based on an annual portfolio return standard deviation of 11.50% provided by Verus in 2023.

If we use the same 62% 15-year confidence level from our last study to set this year’s risk adjustment, based on the current annual portfolio return standard deviation of 11.90% provided by Cerity, the corresponding risk adjustment would be 0.93%. Together with the other investment return components, this would result in an investment return assumption of 6.47%, which is lower than the current assumption of 6.75%.

Based on Segal’s general practice of using one-quarter percentage point increments for economic assumptions, we considered an investment return assumption of 6.50%, which would produce a risk adjustment of 0.90% and a corresponding confidence level of 62%. For comparison, the current net investment return assumption of 6.75% would have a confidence level of 58% under this model.

Recommended investment return assumption

The following table summarizes the components of the recommended investment return assumption. For comparison purposes, we have also included similar values from the last study.

Recommended Investment Return Assumption

Assumption Component	June 30, 2026 Recommended Value	June 30, 2026 Current Value	June 30, 2023 Adopted Value
Inflation	2.50%	2.50%	2.50%
Arithmetic real rate of return	5.71%	5.71%	5.92%
Expense adjustment	(0.15%)	(0.15%)	(0.15%)
Geometric return adjustment	(0.66%)	(0.66%)	(0.62%)
Risk adjustment	(0.90%)	(0.65%)	(0.90%)
Total	6.50%	6.75%	6.75%
Confidence level	62%	58%	62%

¹⁹ This type of risk adjustment is referred to in the Actuarial Standards of Practice as a “margin for adverse deviation.”

Section 3: Economic Assumptions

We recommend reducing the investment return assumption from 6.75% to 6.50% per annum.

Comparison with historical assumptions

The table below shows SCERS' recommended investment return assumption and the corresponding risk adjustment and confidence level compared to similar values from prior studies.

Adopted for the Valuation as of ²⁰	Investment Return	Risk Adjustment	Confidence Level
June 30, 2012	7.50%	1.27%	64%
June 30, 2014	7.50%	0.92%	60%
June 30, 2017	7.00%	0.50%	57%
June 30, 2020	6.75%	0.29%	54%
June 30, 2023	6.75%	0.90%	62%
June 30, 2026 (Recommended)	6.50%	0.90%	62%

As we have discussed in prior experience studies, the risk adjustment model and associated confidence level is most useful as a means for comparing how SCERS has positioned itself relative to risk over periods of time.²¹ The use of a 62% confidence level should be considered in context with other factors, including:

- As noted above, the confidence level is more of a relative measure than an absolute measure, and so can be reevaluated and reset for future comparisons. This is particularly true when comparing confidence levels developed using different models, as we have shown above between 2020 and 2023 when we transitioned from the arithmetic model to the geometric model.
- The confidence level is based on the standard deviation of the portfolio that is determined and provided to us by Cerity. The standard deviation is a statistical measure of the future volatility of the portfolio and so is itself based on assumptions about future portfolio volatility and can be considered somewhat of a “soft” number.
- We have not taken into account any additional returns (“alpha”) that might be earned on active management. If active management generates enough alpha to cover its related expenses, returns would increase.
- As with any model, the results of the risk adjustment model should be evaluated for reasonableness and consistency. This is discussed in the later section on “Comparison with other public retirement systems”.

²⁰ Based on expected geometric average returns starting in 2023.

²¹ In particular, it would not be appropriate to use this type of risk adjustment as a measure of determining an investment return rate that is “risk-free.”

Section 3: Economic Assumptions

Comparison with alternative model

To maintain a robust analytical framework, we have employed an alternative model for comparison by evaluating the recommended 6.50% assumption based on the expected geometric return for the entire portfolio net of investment management expenses, but using a fully stochastic approach and a different source for capital market assumptions.

Under this alternative model, over a 15-year period, there is a 62% likelihood that future average geometric returns will meet or exceed 6.50%²² developed using the capital market assumptions compiled by Horizon Actuarial Services based on their most recent survey published in August 2025. This 62% likelihood of achieving a 6.50% return is greater than the corresponding likelihood of 54% (for achieving a 6.75% return) that we observed in this comparison during the assumption review in 2023. Note that the likelihood of 54% we calculated in the prior study was based on the capital market assumptions provided in the Horizon Survey updated through August 2022.

Comparison with other public retirement systems

One final review of the recommended investment return assumption is to compare it against those used by other public retirement systems, both in California and nationwide.

An investment return of 6.75% or lower is becoming more common among California public sector retirement systems. Of the twenty 1937 Act CERL systems, one uses a 7.25% investment assumption, six use 7.00%, eight use 6.75%, four use 6.50%, and one uses 6.25%. Furthermore, CalSTRS currently uses a 7.00% investment return assumption, CalPERS uses a 6.80% investment return assumption, while the San Jose and San Diego City retirement systems use investment return assumptions of 6.625% and 6.50%, respectively.

The following table compares SCERS' recommended investment return assumption against those of the 239²³ large public retirement funds in their 2024 fiscal year valuations based on information found in the Public Plans Database,²⁴ which is produced in partnership with NASRA.

Assumption	SCERS	Public Plan Data Low	Public Plan Data Median	Public Plan Data High
Investment return	6.50%	4.31%	7.00%	7.50%

The detailed survey results show that 72% of the systems have reduced their investment return assumption from 2017 to 2024. State systems outside of California tend to change their economic assumptions less frequently and so may lag behind emerging practices in this area. NCPERS also conducts an annual survey of public plans nationwide, and their 2026 survey reports an average investment return assumption of 6.67%.

²² We performed this stochastic simulation using the capital market assumptions included in the 2025 survey prepared by Horizon Actuarial Services. That simulation was performed using 10,000 trial outcomes of future market returns, using assumptions from 20-year arithmetic returns, standard deviations and correlation matrix that were found in the 2025 survey that included responses from 41 investment advisors.

²³ Among 246 large public retirement funds, the 2024 fiscal year investment return assumption was not available for 7 of the public retirement funds in the Public Plans Database as of March 2026.

²⁴ Public Plans Data website – Produced in partnership with the National Association of State Retirement Administrators (NASRA).

Section 3: Economic Assumptions

C. Salary increases

Salary increases impact plan costs in two ways:

1. Increasing members' benefits (since benefits are a function of the members' highest average pay) and future normal cost collections; and
2. Increasing total active member payroll, which in turn generates lower UAAL contribution rates as a percentage of payroll.

As an employee progresses through his or her career, increases in pay are expected to come from three sources: inflation, real "across-the-board" increases and merit and promotion increases. Each of these assumptions is discussed in more detail below.

Inflation

Unless pay grows at least as fast as consumer prices grow, employees will experience a reduction in their standard of living. There may be times when pay increases lag or exceed inflation, but over the long term, labor market forces may require an employer to maintain its employees' standards of living.

As discussed earlier in this report, we recommend maintaining the annual inflation assumption at 2.50%.

Real "across-the-board" pay increases

These increases are typically termed productivity increases since they are considered to be derived from the ability of an organization or an economy to produce goods and services in a more efficient manner. As that occurs, at least some portion of the value of these improvements can provide a source for pay increases. These increases are typically assumed to extend to all employees "across the board." The State and Local Government Workers Employment Cost Index produced by the Department of Labor provides evidence that real "across-the-board" pay increases have averaged about 0.1% – 0.4% annually during the last ten to twenty years.

We also referred to the annual report on the financial status of the Social Security program published in June 2026. In that report, real "across-the-board" pay increases are forecast to be 1.14% per year under the intermediate assumptions.

The real pay increase assumption is generally considered a more "macroeconomic" assumption that is not necessarily based on individual plan experience. However, the following table compares SCERS' recent salary experience to the change in CPI over the three-year and six-year period ending June 30, 2025.

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Valuation Date	Actual Average ²⁵ Wage Inflation	Annual Average Change in CPI ²⁶
June 30, 2020	3.46%	1.72%
June 30, 2021	2.47%	3.21%
June 30, 2022	-0.10%	5.60%
June 30, 2023	7.21%	3.67%
June 30, 2024	4.48%	2.76%
June 30, 2025	3.23%	2.18%
Three-year average (2023 – 2025)	4.97%	2.87%
Six-year average (2020 – 2025)	3.46%	3.19%

Based on the above information, we recommend maintaining the real “across-the-board” salary increase assumption at 0.25%.

Merit and promotion increases

As the name implies, these increases come from an employee’s career advancement. This form of pay increase differs from the previous two, since it is specific to the individual. For SCERS, we continue to recommend service-specific merit and promotion increase assumptions.

The annual merit and promotion increases are determined by measuring the actual increases received by members over the experience period, net of the assumed inflationary and real “across-the-board” pay increases. This is accomplished by:

1. Measuring each continuing member’s actual salary increase over each year of the experience period;
2. Excluding any members with increases of more than 50% or decreases of more than 25% during any particular year;
3. Categorizing these increases into groups by years of service;
4. Removing the assumed inflation and real “across-the-board” increases each year;
5. Averaging these annual increases over the experience period on a salary-weighted basis, with higher weights assigned to experience from members with larger salaries; and
6. Modifying current assumptions to reflect some portion of these measured increases reflective of their “credibility.”

To be consistent with the other economic assumptions, these merit and promotion assumptions should be used in combination with the assumed inflation and real “across-the-board” increases recommended earlier in this study.

²⁵ Reflects the increase in average salary for members at the beginning of the year versus those at the end of the year. It does not reflect the average salary increases received by members who worked the full year.

²⁶ Based on the change in the annual average CPI index for the San Francisco-Oakland-Hayward Area compared to the prior year.

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Merit and promotion increases are measured separately for Miscellaneous and Safety members. **Note that beginning with this experience study, we are also recommending separate merit and promotion increase assumptions for legacy members (i.e., Miscellaneous Tiers 1, 2, 3 and 4 and Safety Ties 1, 2 and 3) and CalPEPRA members (Miscellaneous Tier 5 and Safety Tier 4).**

Due to the high variability of the actual salary increases, we have analyzed this assumption using data for the past six years. We believe that when the experience from the current and prior study is combined, it provides a more reasonable representation of potential future merit and promotion salary increases over the long term.

While preparing the recommended merit and promotion increase assumptions, we took into account that the most recent three-year period included significant salary adjustments, likely in response to the high inflationary period after COVID. Therefore, we have generally not increased the rates (after considering credibility) by as much as the actual rates may seem to imply. We will continue to monitor the rates and reevaluate in the next experience study if the higher salary adjustments continue over a longer period of time.

The following table shows the Miscellaneous legacy members' actual average merit and promotion increases by years of service over the three-year period from July 1, 2022 through June 30, 2025. As mentioned above, we have also included the actual average increases based on the past six years (July 1, 2019 through June 30, 2025). These actual increases were reduced by the assumed average inflation plus "across-the-board" increase. The current and recommended assumptions are also shown.

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Miscellaneous Tiers 1, 2, 3 and 4 — Merit and Promotion Salary Increase Rates

Years of Service	Current Expected Increase	Actual 3 Year Average	Actual 6 Year Average	Recommended Expected Increase
Less than 1	6.00%	9.57%	5.96%	6.00%
1 – 2	6.00%	5.83%	5.73%	6.00%
2 – 3	5.50%	7.38%	4.50%	5.50%
3 – 4	5.25%	5.59%	3.73%	5.25%
4 – 5	4.25%	4.66%	3.62%	4.25%
5 – 6	3.25%	4.65%	2.50%	3.25%
6 – 7	2.75%	4.36%	2.68%	2.75%
7 – 8	2.50%	3.10%	1.81%	2.50%
8 – 9	2.25%	4.72%	1.93%	2.50%
9 – 10	2.10%	6.46%	3.18%	2.50%
10 – 11	2.00%	5.81%	3.30%	2.25%
11 – 12	1.70%	4.94%	2.44%	2.00%
12 – 13	1.50%	4.78%	1.90%	1.75%
13 – 14	1.50%	4.89%	1.99%	1.75%
14 – 15	1.50%	5.61%	2.76%	1.75%
15 and over	1.50%	3.90%	2.38%	1.75%
Actual / Expected (6 years)	100.8%			100.5%

For Miscellaneous legacy members with less than eight years of service, we recommend maintaining the current merit and promotion salary increases due to the overall low level of experience for those service categories. For Miscellaneous legacy members with eight or more years of service, we recommend increasing the current merit and promotion salary increases.

Chart 1 on page 29 compares the actual merit and promotion increase experience for Miscellaneous legacy members with the current and recommended assumptions.

The following table shows similar information for Miscellaneous Tier 5 members.

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Miscellaneous Tier 5 — Merit and Promotion Salary Increase Rates

Years of Service	Current Expected Increase	Actual 3 Year Average	Actual 6 Year Average	Recommended Expected Increase
Less than 1	6.00%	6.06%	5.21%	6.00%
1 – 2	6.00%	8.66%	7.61%	6.75%
2 – 3	5.50%	7.80%	6.51%	6.25%
3 – 4	5.25%	7.96%	6.24%	6.00%
4 – 5	4.25%	6.69%	5.09%	5.00%
5 – 6	3.25%	5.03%	3.78%	3.50%
6 – 7	2.75%	4.87%	3.77%	3.25%
7 – 8	2.50%	4.26%	3.54%	3.00%
8 – 9	2.25%	3.72%	3.42%	2.50%
9 – 10	2.10%	3.74%	3.72%	2.50%
10 – 11	2.00%	2.95%	2.94%	2.25%
11 – 12	1.70%	2.44%	2.39%	2.00%
12 – 13	1.50%	2.81%	3.01%	1.75%
13 – 14	1.50%	1.52%	1.42%	1.75%
14 – 15	1.50%	1.62%	1.81%	1.75%
15 and over	1.50%	7.01%	5.77%	1.75%
Actual / Expected (6 years)	100.7%			100.2%

For Miscellaneous Tier 5 members with less than eight years of service, we recommend increasing the merit and promotion salary increases for most service categories. For Miscellaneous Tier 5 members with eight or more years of service, we recommend the same merit and promotion salary increases that are recommended for Miscellaneous legacy members with eight or more years of service due to the overall low level of experience for Miscellaneous Tier 5 members in those service categories.

Chart 2 on page 29 compares the actual merit and promotion increase experience for Miscellaneous Tier 5 members with the current and recommended assumptions.

The following table shows the Safety legacy members' actual average merit and promotion increases by years of service over the three-year period from July 1, 2022 through June 30, 2025. As mentioned above, we have also included the actual average increases based on the past six years (July 1, 2019 through June 30, 2025). These actual increases were reduced by the assumed average inflation plus "across-the-board" increase. The current and recommended assumptions are also shown.

Section 3: Economic Assumptions

Safety Tiers 1, 2 and 3 — Merit and Promotion Salary Increase Rates

Years of Service	Current Expected Increase	Actual 3 Year Average	Actual 6 Year Average	Recommended Expected Increase
Less than 1	7.00%	15.09%	13.86%	7.00%
1 – 2	6.25%	3.80%	3.91%	6.25%
2 – 3	6.00%	1.89%	0.93%	6.00%
3 – 4	5.75%	9.54%	3.81%	5.75%
4 – 5	5.25%	7.22%	4.81%	5.25%
5 – 6	4.25%	6.12%	4.37%	4.25%
6 – 7	4.00%	6.46%	4.80%	4.00%
7 – 8	3.75%	5.15%	3.91%	3.75%
8 – 9	3.50%	6.21%	3.47%	3.50%
9 – 10	3.25%	8.15%	4.40%	3.50%
10 – 11	3.00%	7.08%	4.78%	3.50%
11 – 12	3.00%	4.61%	3.33%	3.25%
12 – 13	3.00%	4.01%	3.05%	3.25%
13 – 14	3.00%	5.20%	3.88%	3.25%
14 – 15	3.00%	6.13%	4.36%	3.25%
15 and over	2.75%	5.35%	3.87%	3.00%
Actual / Expected (6 years)	101.0%			100.7%

For Safety legacy members with less than nine years of service, we recommend maintaining the current merit and promotion salary increases due to the overall low level of experience for those service categories. For Safety legacy members with nine or more years of service, we recommend increasing the current merit and promotion salary increases.

Chart 3 on page 30 compares the actual merit and promotion increase experience for Safety legacy members with the current and recommended assumptions.

The following table shows similar information for Safety Tier 4 members.

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Safety Tier 4 — Merit and Promotion Salary Increase Rates

Years of Service	Current Expected Increase	Actual 3 Year Average	Actual 6 Year Average	Recommended Expected Increase
Less than 1	7.00%	10.83%	8.69%	8.00%
1 – 2	6.25%	7.79%	6.39%	6.50%
2 – 3	6.00%	7.77%	6.08%	6.25%
3 – 4	5.75%	7.86%	5.98%	6.00%
4 – 5	5.25%	6.52%	5.71%	5.50%
5 – 6	4.25%	4.23%	3.46%	4.25%
6 – 7	4.00%	3.05%	2.19%	3.50%
7 – 8	3.75%	3.14%	2.69%	3.50%
8 – 9	3.50%	3.09%	2.65%	3.50%
9 – 10	3.25%	2.84%	2.57%	3.50%
10 – 11	3.00%	3.37%	3.31%	3.50%
11 – 12	3.00%	3.07%	2.88%	3.25%
12 – 13	3.00%	2.31%	2.19%	3.25%
13 – 14	3.00%	7.85%	4.40%	3.25%
14 – 15	3.00%	3.82%	3.01%	3.25%
15 and over	2.75%	7.75%	8.14%	3.00%
Actual / Expected (6 years)	99.9%			99.7%

For Safety Tier 4 members with less than nine years of service, we recommend adjusting the merit and promotion salary increases to be higher overall. For Safety Tier 4 members with nine or more years of service, we recommend the same merit and promotion salary increases that are recommended for Safety legacy members with nine or more years of service due to the overall low level of experience for Safety Tier 4 members in those service categories.

Chart 4 on page 30 compares the actual merit and promotion increase experience for Safety Tier 4 members with the current and recommended assumptions.

Total payroll growth

Projected increases in active member payrolls are used to develop the UAAL contribution rate. Future values are determined as a product of the number of employees in the workforce and the average pay for all employees. The average pay for all employees increases only by inflation and real “across-the-board” pay increases. The merit and promotion increases are not included, because this average pay is not specific to an individual.

Under the Board’s current practice, the UAAL contribution rate is developed by assuming the number of active members will remain about the same, so that the total payroll for all active

Section 3: Economic Assumptions

members will increase annually over the amortization periods at the same assumed rates of inflation plus real “across-the-board” salary increase assumptions as are used to project the members’ future benefits. Note again that this does not include the assumed merit and promotion increases, because longer service members are assumed to be replaced by new members.

As part of reviewing the current practice, we have summarized in the table below how the number of active members and total payroll has changed over the last six valuations.

Active Members and Projected Payroll²⁷

Year Ended June 30	Number of Active Members	Projected Payroll (\$ in ‘000s)
2020	12,650	\$1,070,512
2021	12,500	1,081,961
2022	12,757	1,131,640
2023	13,167	1,251,966
2024	13,690	1,358,649
2025	13,952	1,431,014
Average Annual Rate of Increase	1.99%	6.03%

As can be observed from the above table, the average annual rate of increase in the projected payroll during the above period was 6.03% before accounting for the 1.99% average annual change in the total active workforce (and 4.04% after netting out the impact due to the change in the active workforce).

After considering the above factors and experience, we recommend maintaining the payroll growth assumption at 2.75% annually (consistent with the combined recommended inflation and real “across-the-board” salary increase assumptions).

²⁷ Projected payroll is used to develop the UAAL contribution rate in the actuarial valuation.

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Chart 1: Merit and Promotion Salary Increase Rates
Miscellaneous Tiers 1, 2, 3 and 4 Members

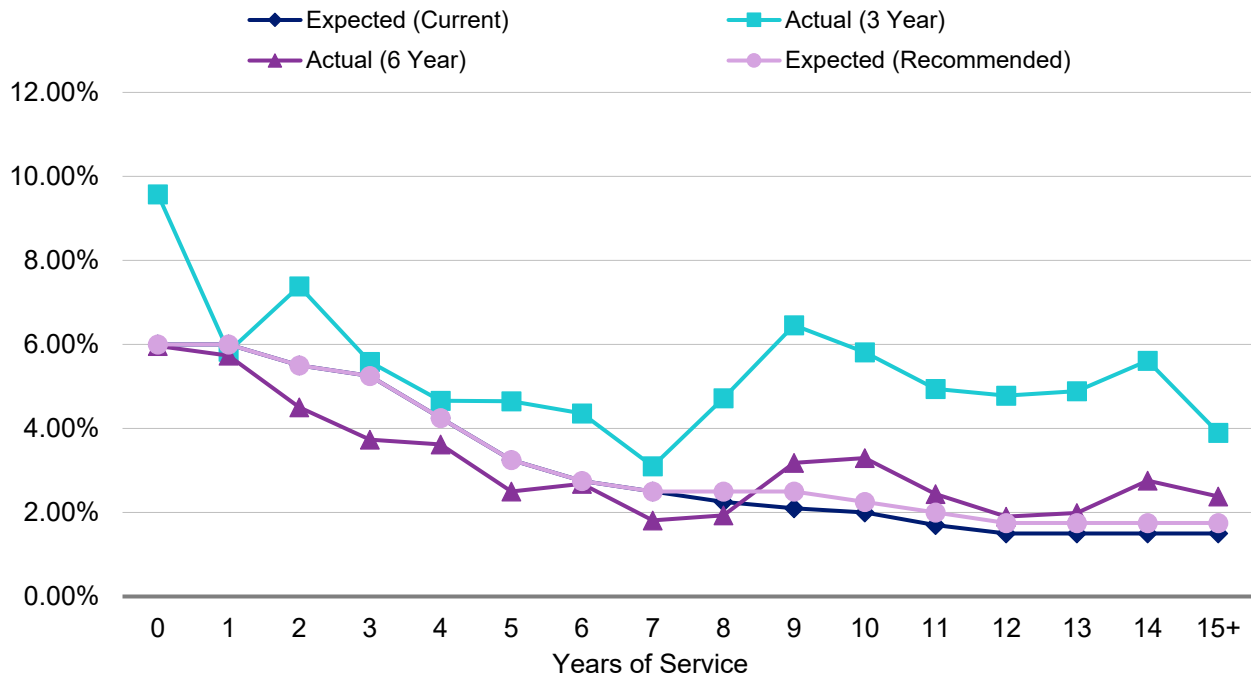
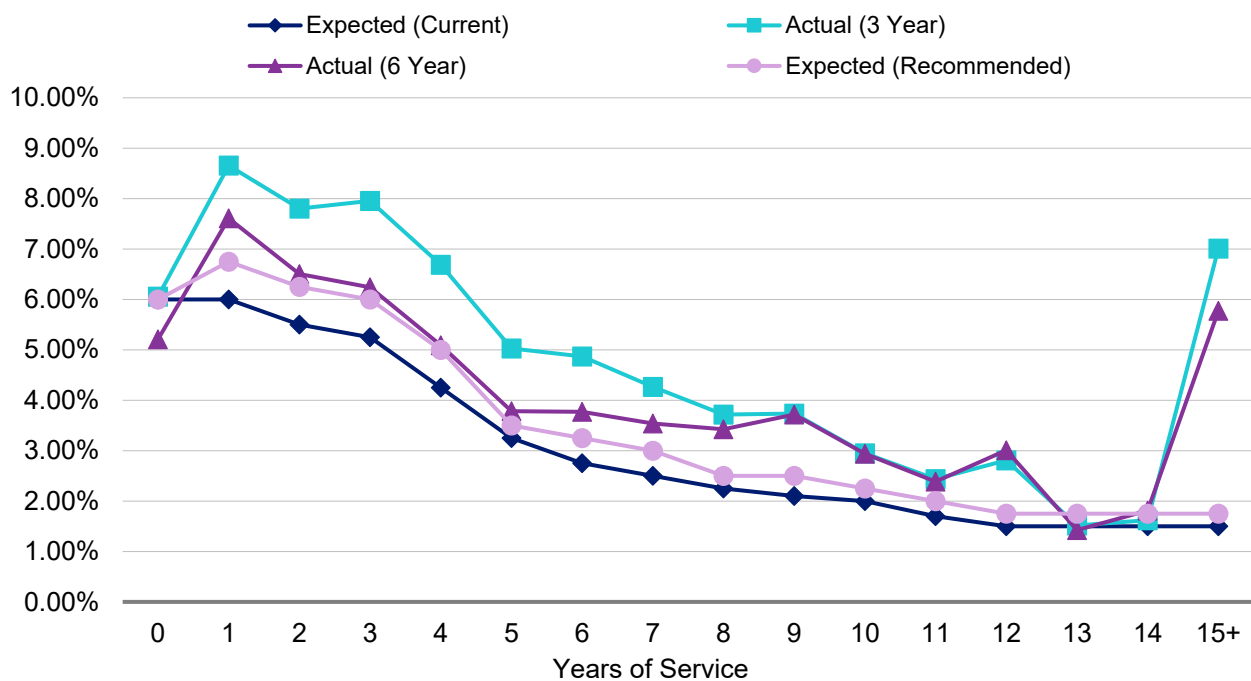


Chart 2: Merit and Promotion Salary Increase Rates
Miscellaneous Tier 5 Members



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Chart 3: Merit and Promotion Salary Increase Rates
Safety Tiers 1, 2 and 3 Members

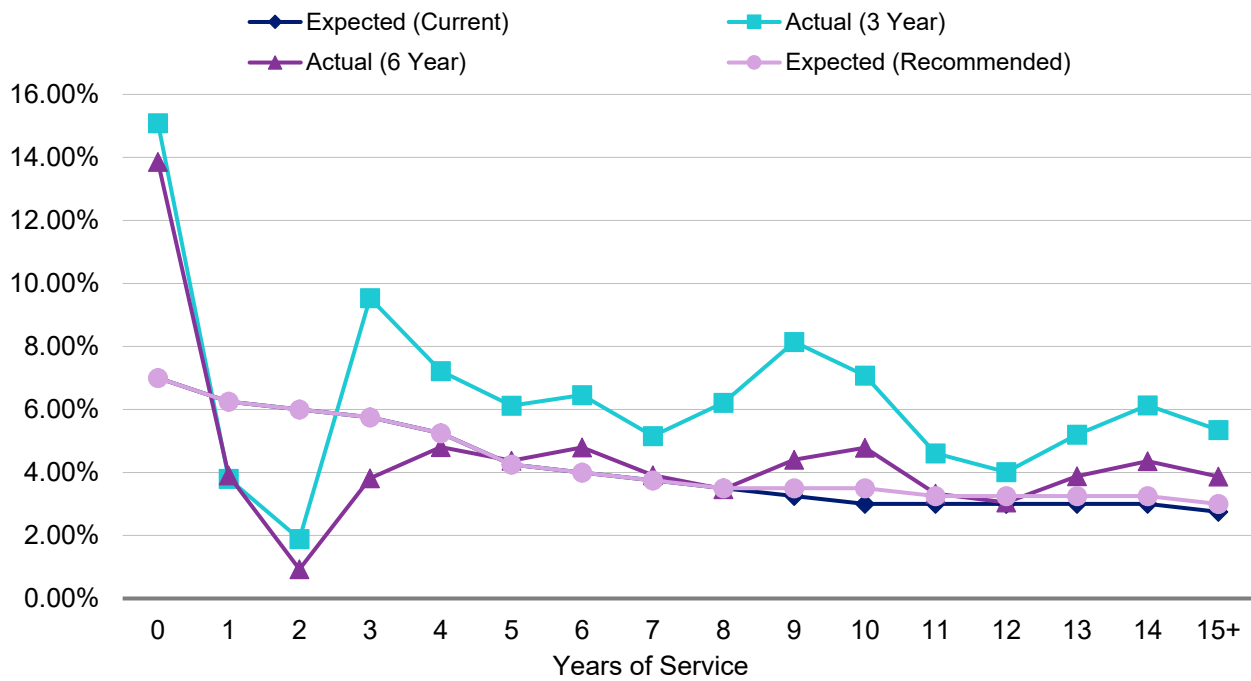
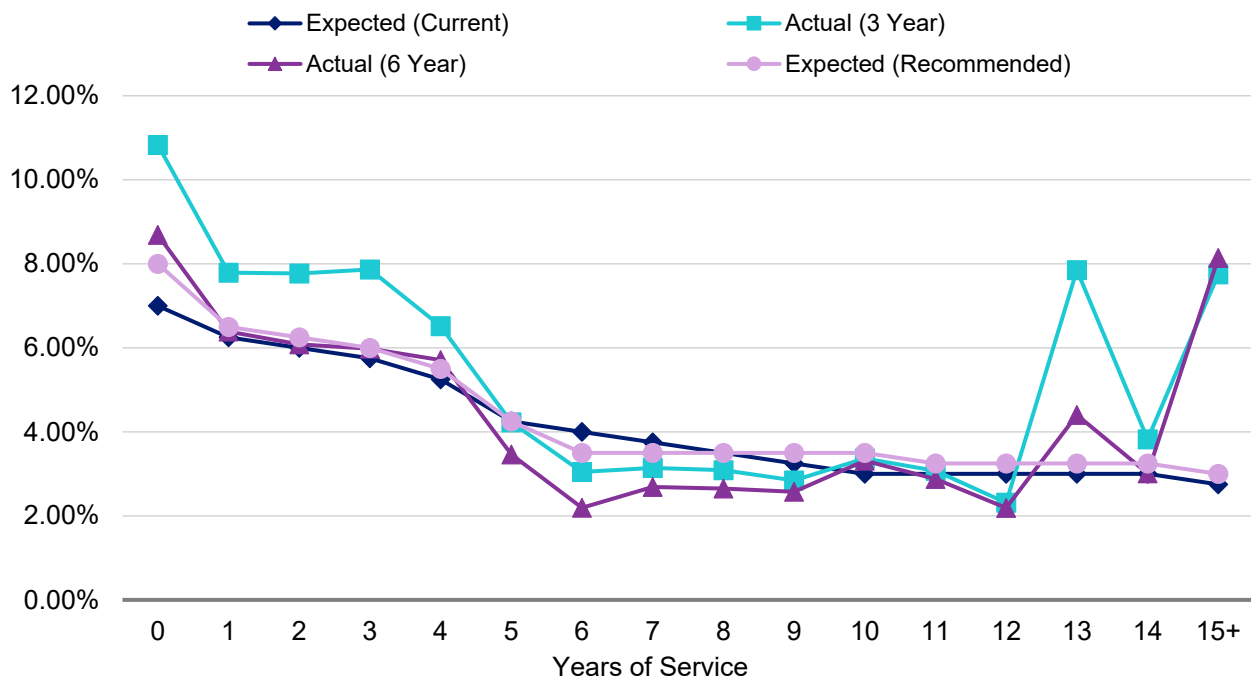


Chart 4: Merit and Promotion Salary Increase Rates
Safety Tier 4 Members



Section 4: Demographic Assumptions

A. Mortality rates — healthy

The “healthy” mortality rates project the life expectancy of a member who retires from service (i.e., who did not retire on a disability pension). Also, the “healthy” pre-retirement (employee) mortality rates project what proportion of members will live to retirement.

In 2019, the Retirement Plans Experience Committee (RPEC) of the SOA published the first family of mortality tables based exclusively on public sector pension plan experience in the United States referred to as the Pub-2010 Public Retirement Plans Mortality Tables (Pub-2010). In 2025, RPEC published an updated family of mortality tables, referred to as the Pub-2016 Public Retirement Plans Mortality Tables (Pub-2016).²⁸

Within the Pub-2010 and Pub-2016 family of mortality tables, there are separate tables by job categories of Miscellaneous, Safety and Teachers. Included with the mortality tables is the analysis prepared by RPEC that continues to observe that benefit amount for healthy retirees and salary for employees are the most significant predictors of mortality differences within the job categories. Therefore, Pub-2010 and Pub-2016 include mortality rates developed on an “amount-weighted” basis, with higher credibility assigned to experience from annuitants and employees receiving larger benefits and salaries, respectively. The Pub-2016 mortality tables were developed with specific above-median and below-median variations, to reflect that salary and benefit amounts are strong predictors of lifespan differences.

We recommend the “amount-weighted” tables from the Pub-2016 family of mortality tables be used (adjusted for SCERS experience as discussed herein), as well as using the “above-median” tables where applicable.

A generational mortality table provides dynamic projections of mortality experience for each cohort of retirees. For example, the mortality rate for someone who is 65 next year will be slightly less than for someone who is 65 this year. In general, using generational mortality anticipates increases in the cost of the plan over time as participants’ life expectancies are projected to increase and is now the established practice within the actuarial profession.

RPEC has historically published annual updates to their mortality improvement scale. However, the mortality data observed during 2020 was severely impacted by the COVID-19 pandemic and RPEC has not released a new mortality improvement scale that incorporates the substantially higher rate of mortality experience from 2020. Therefore, Scale MP-2021 remains the most recent mortality improvement scale published as of the date of this report.

We recommend continuing to apply Scale MP-2021 generationally where each future year has its own mortality table that reflects the forecasted improvements.

²⁸ The Pub-2016 family of mortality tables have been developed without experience from the COVID-19 pandemic.

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In order to reflect more SCERS experience in our analysis of the mortality assumption, we have used experience over a 15-year period by using data from the current experience study period (from July 1, 2022 through June 30, 2025) and the last four experience studies covering the periods from July 1, 2010 through June 30, 2022.

In 2008 the SOA published an article recommending that mortality assumptions include an adjustment for credibility. Under this approach, the number of deaths needed for full credibility in a given cohort for a headcount-weighted mortality table is just over 1,000,²⁹ where full credibility means a 90% confidence that the actual experience will be within 5% of the expected value. For SCERS, the number of actual deaths differs for each cohort and varies from no deaths for Safety active females to 1,465 deaths for Miscellaneous healthy retiree females over the 15-year period studied. In our recommended assumptions, we have adjusted the Pub-2016 mortality tables to fit SCERS' experience based on the partial credibility for each cohort.

Post-retirement mortality (service retirements)

The current mortality tables used for post-retirement mortality are as follows:

- **Miscellaneous members**
 - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with Scale MP-2021.
- **Safety members**
 - Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.

The following table shows the observed benefit-weighted deaths for healthy retired members based on the actual experience during the 15-year period. Also shown are the expected benefit-weighted deaths under the current and recommended assumptions.

Healthy Retiree Mortality – Benefit-Weighted Deaths (\$ in millions)

Gender	Miscellaneous Current Expected	Miscellaneous Actual	Miscellaneous Recomm. Expected	Safety Current Expected	Safety Actual	Safety Recomm. Expected
Male	\$50.60	\$50.22	\$50.38	\$22.80	\$22.72	\$21.71
Female	33.57	35.58	35.36	2.76	\$2.21	2.52
Total	\$84.17	\$85.80	\$85.74	\$25.56	\$24.93	\$24.23
Actual / Expected	101.9%		100.1%³⁰	97.5%		102.9%³¹

Notes

²⁹ The number of deaths needed for full credibility for an "amount" weighted mortality table is generally higher and based on the dispersion of the benefit amount for a given retiree group.

³⁰ If we used the benchmark Pub-2016 General Healthy Retiree table without any adjustment, the recommended actual to expected ratio would be 110%.

³¹ If we used the benchmark Pub-2016 Safety Healthy Retiree table without any adjustment, the recommended actual to expected ratio would be 102%.

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1. Experience shown above is weighted by annual benefit amounts for deceased members.
2. Expected amounts under the current and recommended generational mortality tables are based on mortality rates from the base year projected with mortality improvements to the year the death occurred (or was expected to occur).
3. Results may not add due to rounding.

As shown in the table above, the recommended mortality tables have an actual to expected ratio of about 100% and 103% for Miscellaneous and Safety, respectively, after adjustments for partial credibility. In future years the ratios should remain around these levels as long as actual mortality improves at the same rates as anticipated by the generational mortality tables.

Based on standard statistical theory, the data used in our analysis is only partially credible under the recommended “amount-weighted” basis when dispersion of retirees’ benefit amounts is considered, particularly for the Safety membership groups (for example, a credibility of 17% for Safety females). Therefore, the recommended mortality tables reflect only a partial adjustment for actual SCERS experience.

We recommend updating the post-retirement mortality assumptions to the following:

- **Miscellaneous members**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected generationally with Scale MP-2021.
- **Safety members**
 - Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates unadjusted for males and decreased by 5% for females, projected generationally with Scale MP-2021.

Chart 5 on page 39 compares the actual to expected deaths on an amount-weighted basis for Miscellaneous service retirement members over the 15-year period for the current and recommended assumptions.

Chart 6 on page 39 compares the actual to expected deaths on an amount-weighted basis for Safety service retirement members over the 15-year period for the current and recommended assumptions.

Chart 7 and Chart 8 on page 40 show the life expectancies (i.e., expected future lifetime) under the current and recommended tables for Miscellaneous service retirement members and Safety service retirement members, respectively, on an amount-weighted basis. Life expectancies under the current and recommended generational mortality rates are based on age in 2026. In practice, assumed life expectancies will increase in accordance with the mortality improvement scale.

Beneficiary mortality

The current mortality tables used for beneficiary mortality are as follows:

Section 4: Demographic Assumptions

- **Beneficiaries not in pay status as of valuation**
 - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with Scale MP-2021.
- **Beneficiaries in pay status as of valuation**
 - Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected generationally with Scale MP-2021.

The Pub-2016 Contingent Survivor mortality tables (as well as the Pub-2010 Contingent Survivor mortality tables) are developed based only on beneficiary data after the death of the member. This is consistent with the data that we have available for SCERS' beneficiaries and we have confirmed that the Pub-2016 Contingent Survivor mortality rates are comparable to SCERS' actual mortality experience for beneficiaries.

Because the Contingent Survivor mortality tables reflect beneficiary mortality experience only **after** the death of the member, in the prior study we recommended the use of two separate mortality tables for beneficiaries, based on the pay status of the beneficiary. In particular, we recommended that the Miscellaneous Healthy Retiree mortality tables be used for beneficiary mortality (both before and after the **expected** death of the Miscellaneous or Safety member) when calculating the liability for the continuance to a beneficiary of a surviving member. Upon the **actual** death of the member (i.e., for all beneficiaries in pay status as of the valuation date), we recommended that the Contingent Survivor mortality tables, adjusted for SCERS experience, be used. We note that the use of different mortality tables (before and after the death of the member) has been found by the RPEC to be reasonable.

The following table shows the observed benefit-weighted deaths for beneficiaries based on the actual experience during the 15 years studied. Also shown are the expected benefit-weighted deaths under the current and recommended assumptions.

Beneficiary Mortality – Benefit-Weighted Deaths (\$ in millions)

Gender	Current Expected	Actual	Recomm. Expected
Male	\$3.06	\$3.76	\$3.38
Female	17.14	19.12	18.44
Total	\$20.20	\$22.88	\$21.82
Actual / Expected	113.3%		104.9%³²

Notes

1. Experience shown above is weighted by annual benefit amounts for deceased beneficiaries.

³² If we used the benchmark Pub-2016 Contingent Survivor table without any adjustment, the recommended actual to expected ratio would be 119%.

Section 4: Demographic Assumptions

2. Expected amounts under the current and recommended generational mortality table are based on mortality rates from the base year projected with mortality improvements to the year the death occurred (or was expected to occur).
3. Results may not add due to rounding.

As shown in the table above, the recommended mortality table has an actual to expected ratio of about 105% after adjustments for partial credibility. In future years the ratios should remain around these levels as long as actual mortality improves at the same rates as anticipated by the generational mortality tables.

The recommended mortality table reflects current experience to the extent that the experience is credible based on standard statistical theory. For many plans, including SCERS, there is less data available for beneficiaries than there is for retirees, so it is given relatively less credibility and the recommended tables are adjusted by less than they would be if the experience for beneficiaries had full credibility.

We recommend updating the beneficiary mortality assumption to the following:

- **Beneficiaries not in pay status as of valuation**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected generationally with Scale MP-2021.
- **Beneficiaries in pay status as of valuation**
 - Pub-2016 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 15% for females, projected generationally with Scale MP-2021.

As noted above, we continued to recommend the use of separate mortality tables for beneficiaries before and after the actual death of the member.

Pre-retirement mortality

The current mortality tables used for pre-retirement mortality are as follows:

- **Miscellaneous members**
 - Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.
- **Safety members**
 - Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.

The table below shows the observed salary-weighted deaths for active members based on the actual experience during the 15 years studied. Also shown are the expected salary-weighted deaths under the current and recommended assumptions.

Section 4: Demographic Assumptions

Pre-Retirement Mortality – Salary-Weighted Deaths (\$ in millions)

Gender	Miscellaneous Current Expected	Miscellaneous Actual	Miscellaneous Recomm. Expected	Safety Current Expected	Safety Actual	Safety Recomm. Expected
Male	\$1.89	\$1.49	\$1.96	\$0.47	\$0.22	\$0.47
Female	1.32	1.46	1.43	0.11	0.00	0.11
Total	\$3.21	\$2.94	\$3.39	\$0.57	\$0.22	\$0.58
Actual / Expected	91.6%		86.8%	38.2%		37.9%

Notes

1. Experience shown above is weighted by annual salary for deceased members.
2. Expected amounts under the current and recommended generational mortality table are based on mortality rates from the base year projected with mortality improvements to the year the death occurred (or was expected to occur).
3. Results may not add due to rounding.

As shown in the table above, the recommended mortality tables have an actual to expected ratio of about 87% and 38% for Miscellaneous and Safety, respectively after adjustments for partial credibility. In future years the ratios should remain around these levels as long as actual mortality improves at the same rates as anticipated by the generational mortality tables.

The recommended mortality tables reflect current experience to the extent that the experience is credible based on standard statistical theory. For many plans, there is generally less mortality experience available for actives, so it is given little credibility and the recommended tables are adjusted by less than they would be if the experience for actives had full credibility.

We recommend updating the pre-retirement mortality assumption to the following:

- **Miscellaneous members**
 - Pub-2016 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.
- **Safety members**
 - Pub-2016 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.

Currently, our assumption is that 100% of Miscellaneous pre-retirement deaths are non-service connected and 50% of Safety pre-retirement deaths are non-service connected. Observed experience for active member deaths is limited. In particular, from July 1, 2024 to June 30, 2025, there were 15 Miscellaneous pre-retirement deaths and two Safety member pre-retirement deaths, and only one death (a Miscellaneous member) was service connected.

Section 4: Demographic Assumptions

Service vs. Non-Service Connected Death

Non-Service Connected Death %	Miscellaneous	Safety
Current assumption	100%	50%
Actual experience	93%	0%
Recommended assumption	100%	50%

Due in part to the limited actual experience, we recommend maintaining the current assumption that 100% of Miscellaneous pre-retirement deaths are non-service connected and 50% of Safety pre-retirement deaths are non-service connected.

Mortality table for member contributions, optional forms of payment and reserves

There are administrative reasons why a generational mortality table is more difficult to implement for determining member contributions for the legacy tiers, optional forms of payment and reserves. For determining member contributions, one emerging practice is to approximate the use of a generational mortality table by the use of a static table with projection of the mortality improvement from the measurement year over a period that is close to the duration of the benefit payments for active legacy members. We recommend the use of this approximation for determining member contributions for employees in the legacy tiers.

We recommend updating the mortality tables used for determining contributions to the following:

- **Miscellaneous members**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected 30 years (from 2016) with Scale MP-2021, weighted 40% male and 60% female.
- **Safety members**
 - Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates with rates unadjusted for males and decreased by 5% for females, projected 30 years (from 2016) with Scale MP-2021, weighted 75% male and 25% female.

For optional forms of payment and reserves, we would apply a similar methodology. However, the projection of the mortality improvement would be from the measurement year over a period that is close to the duration of the benefit payments for active members retiring in the next three years. The recommended tables along with the mortality rates will be provided in a separate letter at a later date, similar to prior years.

For Miscellaneous and Safety service retirements, we recommend using the corresponding base tables and adjustments described within this section, projected 25 years (from 2016) with Scale MP-2021 along with weighting based on actual gender distributions for each group.

Section 4: Demographic Assumptions

For all beneficiaries, we recommend using the corresponding base tables and adjustments described within this section, projected 25 years (from 2016) with Scale MP-2021 along with weighting based on the inverse of the actual gender distributions for each group.

For Miscellaneous and Safety disability retirements, we recommend using the corresponding base tables and adjustments described within the following section, projected 25 years (from 2016) with Scale MP-2021 along with weighting based on actual gender distributions for each group.

Section 4: Demographic Assumptions

Chart 5: Service Retired Benefit-Weighted Deaths (\$ in millions)
Miscellaneous Members

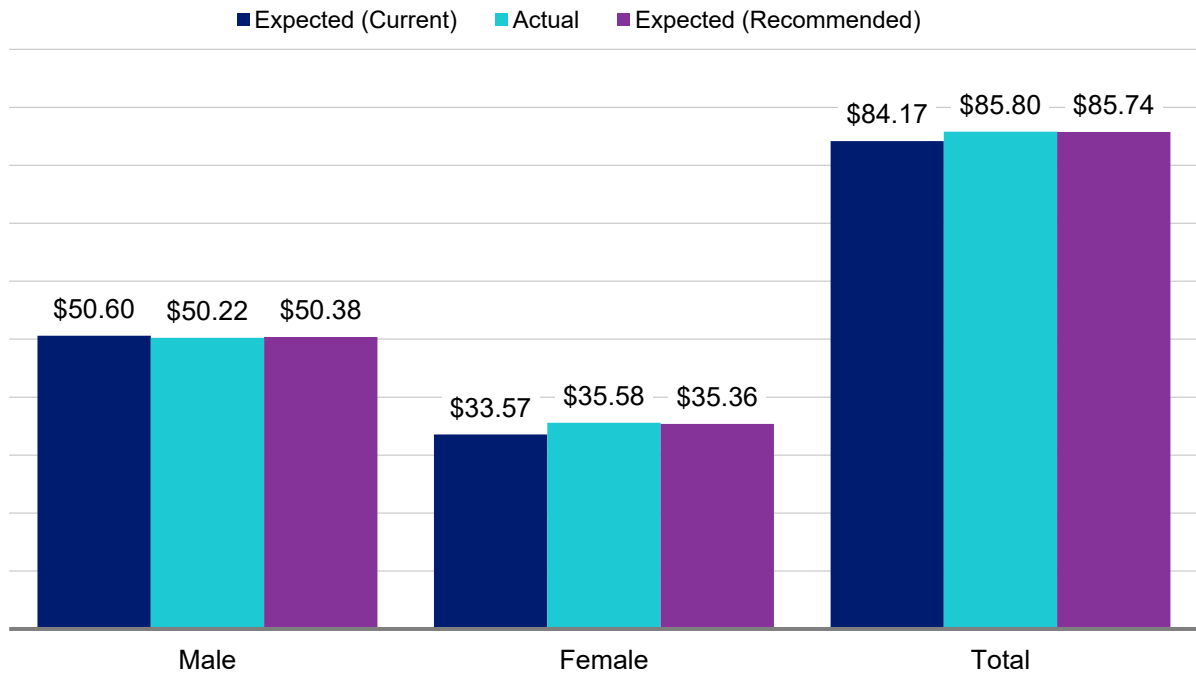
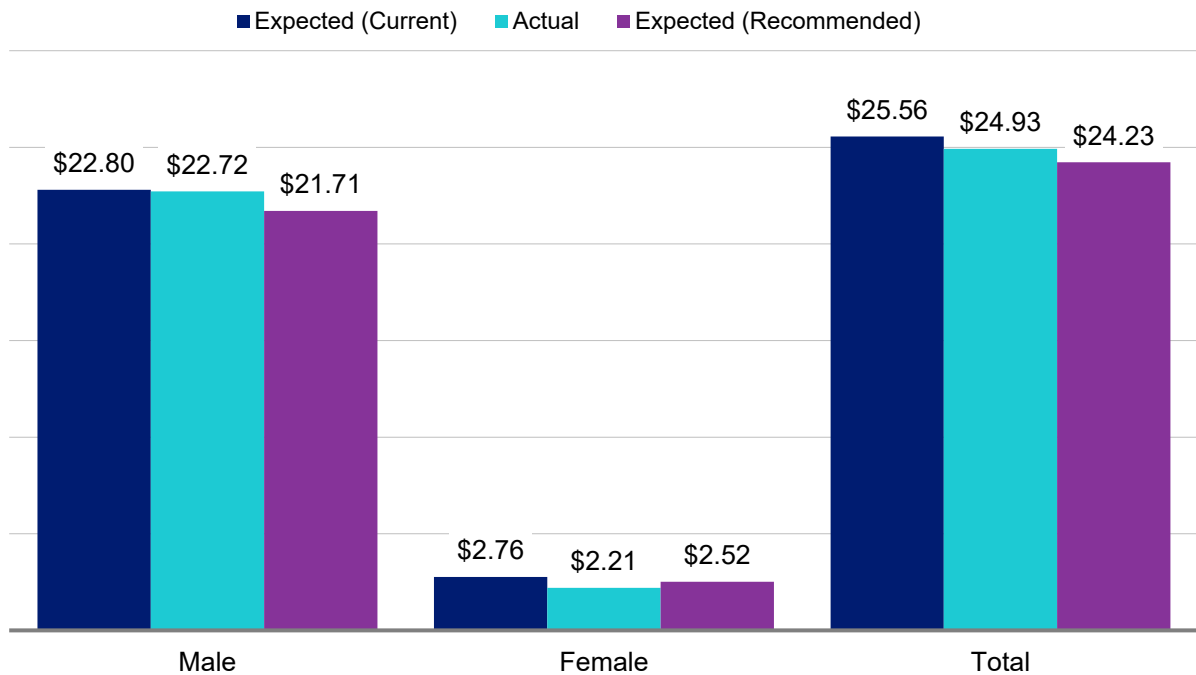


Chart 6: Service Retired Benefit-Weighted Deaths (\$ in millions)
Safety Members



Section 4: Demographic Assumptions

Chart 7: Service Retired Benefit-Weighted Life Expectancies in 2026
Miscellaneous Members

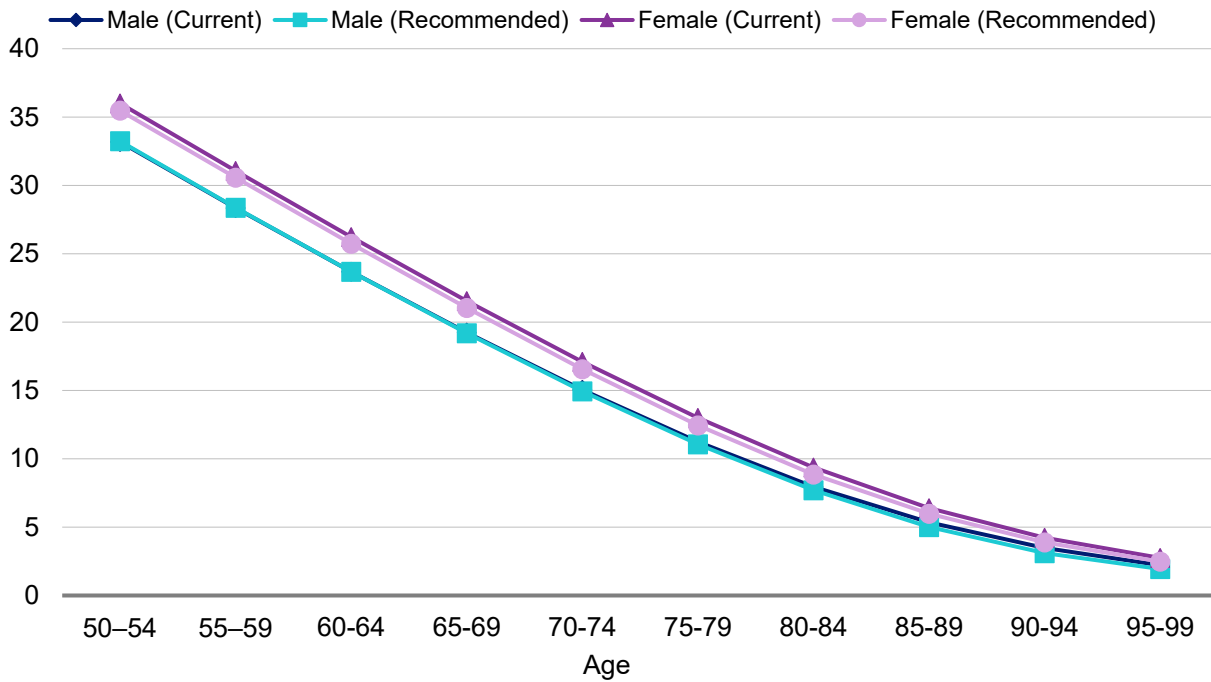
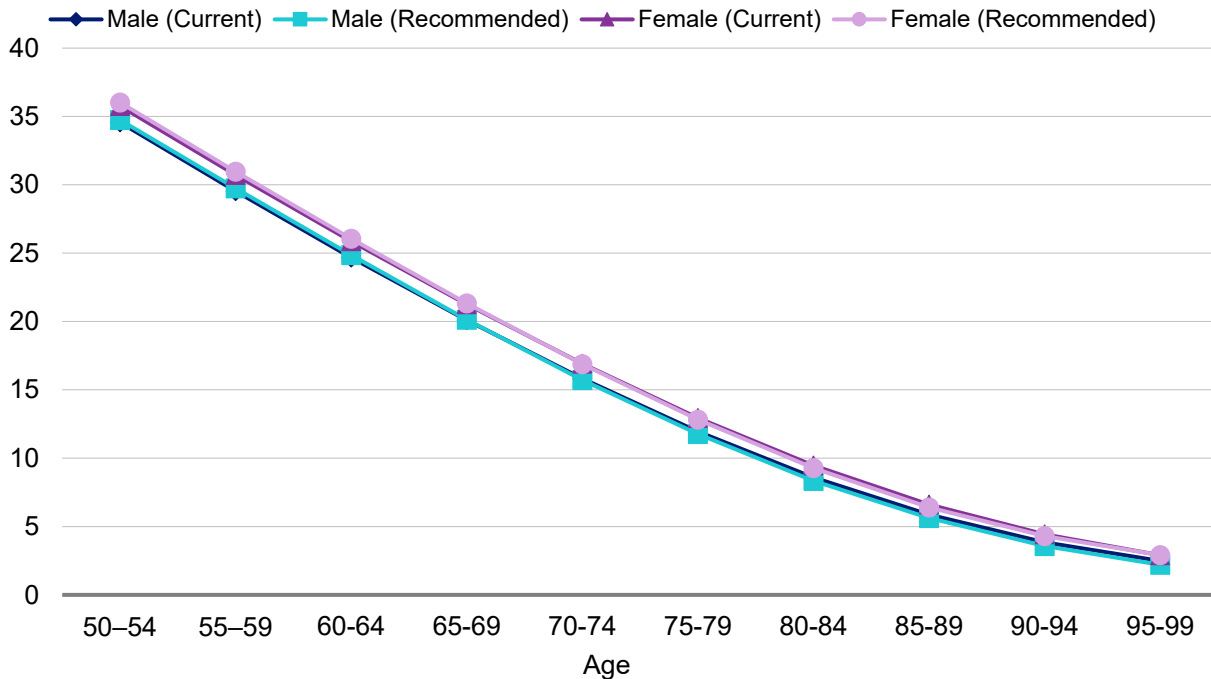


Chart 8: Service Retired Benefit-Weighted Life Expectancies in 2026
Safety Members



Section 4: Demographic Assumptions

B. Mortality rates — disabled

Since mortality rates for disabled members can vary from those of healthy members, a different mortality assumption is often used.

The current mortality tables used for disabled mortality are as follows:

- **Miscellaneous members**

- Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates unadjusted for males and increased by 5% for females, projected generationally with Scale MP-2021.

- **Safety members**

- Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected generationally with Scale MP-2021.

The following table shows the observed benefit-weighted deaths for disability retired members based on the actual experience during the 15 years studied. Also shown are the expected benefit-weighted deaths under the current and recommended assumptions.

The recommended mortality tables have an actual to expected ratio of 116% and 108% for Miscellaneous and Safety, respectively, after adjustments for partial credibility. In future years the ratios should remain around these levels as long as actual mortality improves at the same rates as anticipated by the generational mortality tables.

Disabled Retiree Mortality – Benefit-Weighted Deaths (\$ in millions)

Gender	Miscellaneous Current Expected	Miscellaneous Actual	Miscellaneous Recomm. Expected	Safety Current Expected	Safety Actual	Safety Recomm. Expected
Male	\$3.61	\$3.79	\$3.32	\$3.41	\$3.76	\$3.47
Female	3.09	3.47	2.92	0.40	0.49	0.46
Total	\$6.70	\$7.26	\$6.24	\$3.82	\$4.24	\$3.93
Actual / Expected	108.5%		116.4%³³	111.1%		108.0%³⁴

Notes

1. Experience shown above is weighted by annual benefit amounts for deceased members.
2. Expected amounts under the current and recommended generational mortality table are based on mortality rates from the base year projected with mortality improvements to the year the death occurred (or was expected to occur).
3. Results may not add due to rounding.

³³ If we used the benchmark Pub-2016 Non-Safety Disabled Retiree table without any adjustment, the recommended actual to expected ratio would be 125%.

³⁴ If we used the benchmark Pub-2016 Safety Disabled Retiree table without any adjustment, the recommended actual to expected ratio would be 113%.

Section 4: Demographic Assumptions

Similar to mortality rates for service retirees, the recommended mortality tables reflect current experience to the extent that the experience is credible based on standard statistical theory. For SCERS, there is much less data available for disabled retirees, so it is given little credibility and the recommended tables are adjusted by less than they would be if the experience for disabled retirees had full credibility.

We recommend updating the mortality tables used for disabled mortality to the following:

- **Miscellaneous members**
 - Pub-2016 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected generationally with Scale MP-2021.
- **Safety members**
 - Pub-2016 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected generationally with Scale MP-2021.

Chart 9 on page 43 compares the actual to expected deaths on an amount-weighted basis for Miscellaneous disabled retirement members over the 15-year period for the current and recommended assumptions.

Chart 10 on page 43 compares the actual to expected deaths on an amount-weighted basis for Safety disabled retirement members over the 15-year period for the current and recommended assumptions.

Chart 11 and Chart 12 on page 44 show the life expectancies (i.e., expected future lifetime) under the current and recommended tables for Miscellaneous disabled retirement members and Safety disabled retirement members, respectively, on an amount-weighted basis. Life expectancies under the current and recommended generational mortality rates are based on age in 2026. In practice, assumed life expectancies will increase in accordance with the mortality improvement scale.

Section 4: Demographic Assumptions

Chart 9: Disability Retired Benefit-Weighted Deaths (\$ in millions)
Miscellaneous Members

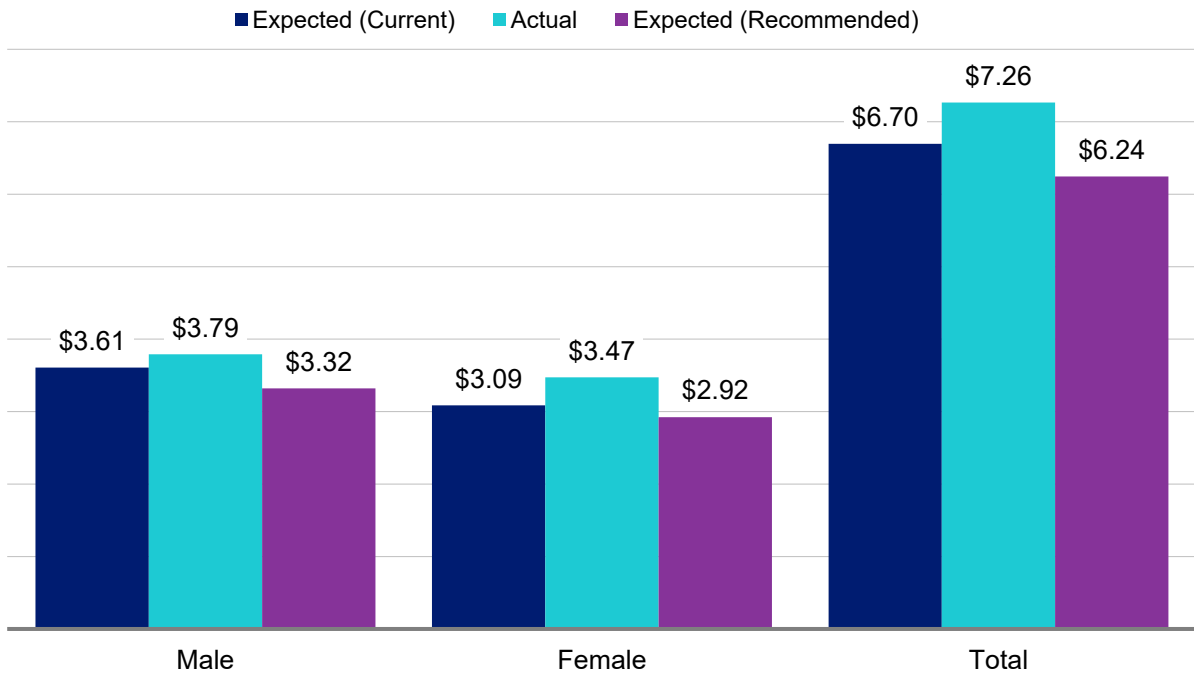
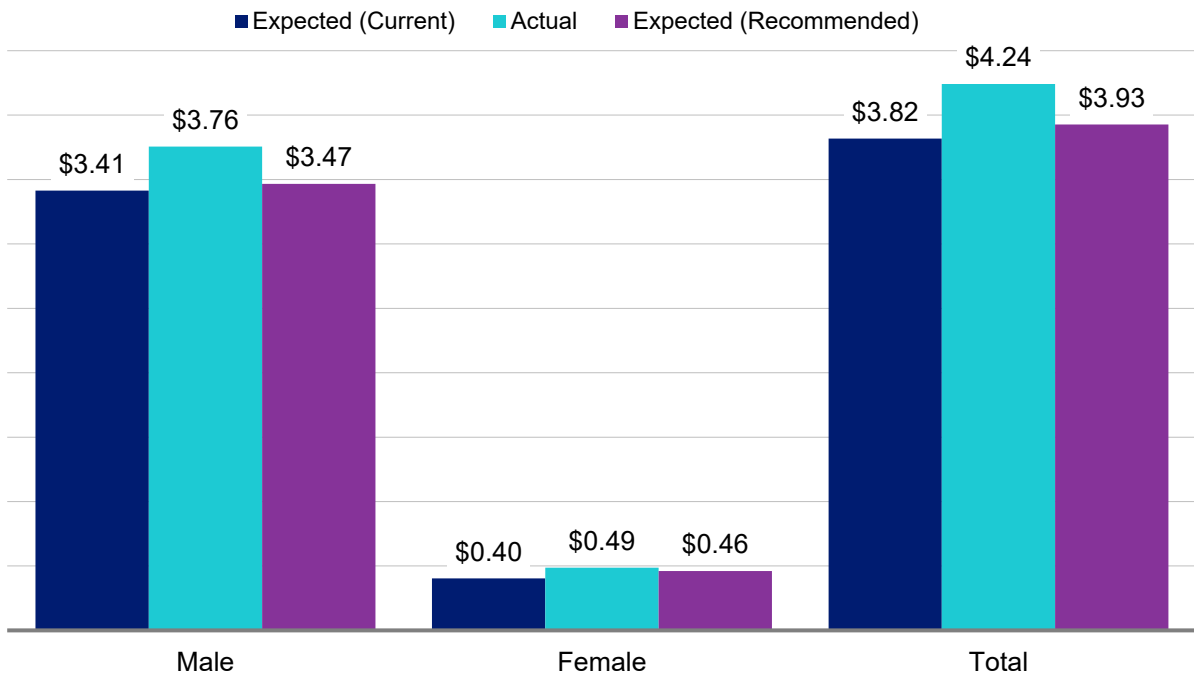


Chart 10: Disability Retired Benefit-Weighted Deaths (\$ in millions)
Safety Members



Section 4: Demographic Assumptions

Chart 11: Disability Retired Benefit-Weighted Life Expectancies in 2026
Miscellaneous Members

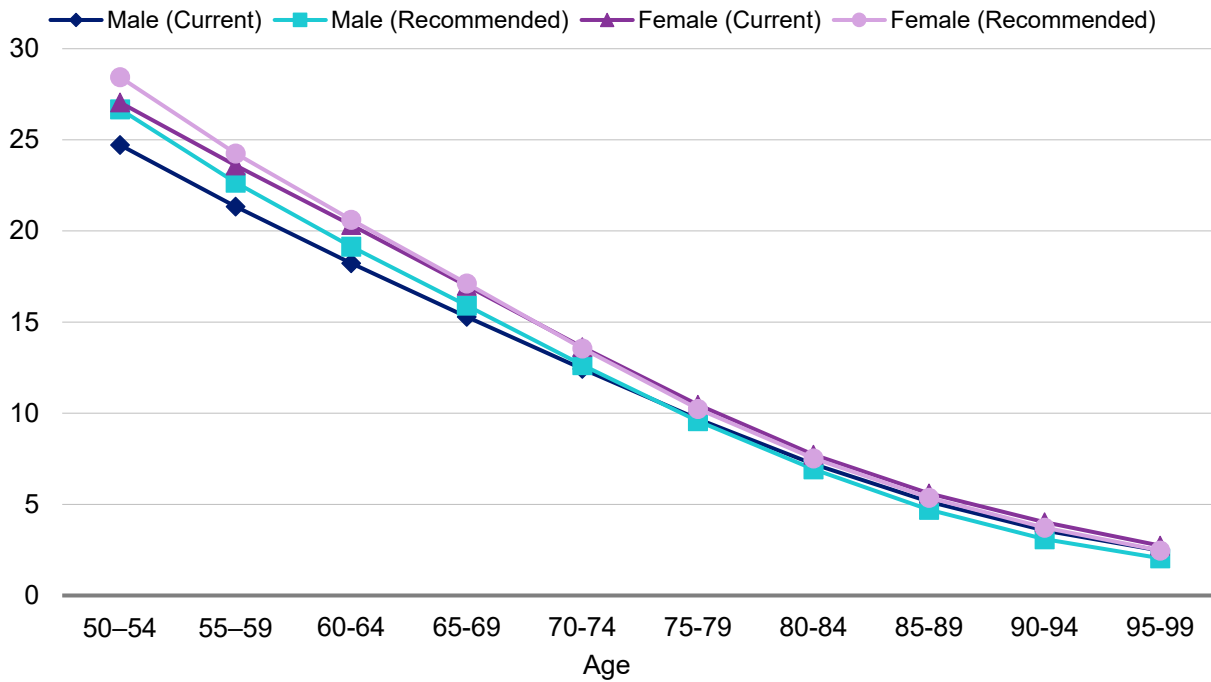
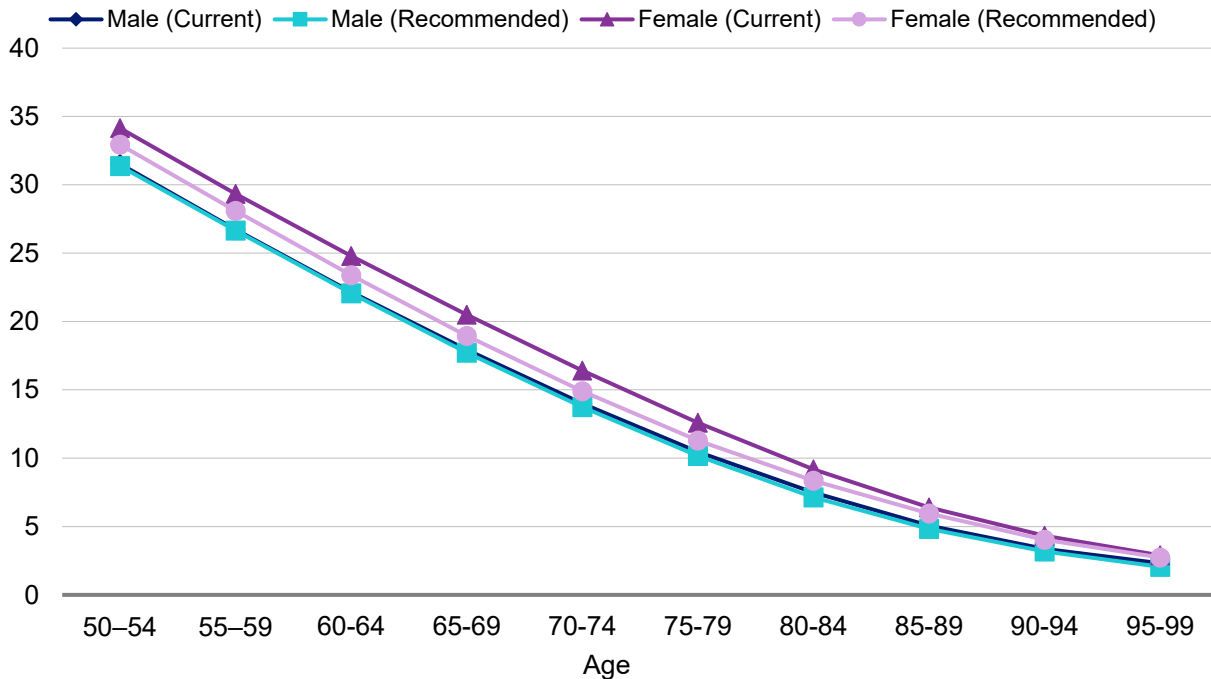


Chart 12: Disability Retired Benefit-Weighted Life Expectancies in 2026
Safety Members



Section 4: Demographic Assumptions

C. Disability incidence rates

When a member becomes disabled, he or she may be entitled to at least a 50% of pay pension (service-connected disability), or a pension that depends upon the member's years of service (non-service-connected disability).

Under current assumptions, there is an overall incidence of disability assumed, set as a function of the member's age. This is combined with an assumption that a member will receive either a service-connected disability or a non-service-connected disability. Furthermore, the disability incidence rates are a function of the member's age.

We recommend maintaining the current structure of the disability incidence rate assumption.

To increase the credibility of the data, we have also included and considered the actual experience over the past six years. The following tables show the observed overall rate of disability incidence based on actual experience during the three-year period from July 1, 2022 through June 30, 2025 as well as the six-year period from July 1, 2019 through June 30, 2025. Also shown are the current and recommended assumptions.

Miscellaneous — Disability Incidence Rates

Age	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
20 – 24	0.00%	0.00%	0.00%	0.00%
25 – 29	0.01%	0.00%	0.00%	0.00%
30 – 34	0.02%	0.03%	0.01%	0.02%
35 – 39	0.05%	0.05%	0.02%	0.05%
40 – 44	0.10%	0.09%	0.09%	0.09%
45 – 49	0.20%	0.17%	0.14%	0.18%
50 – 54	0.22%	0.25%	0.20%	0.22%
55 – 59	0.30%	0.24%	0.28%	0.28%
60 – 64	0.35%	0.28%	0.26%	0.32%
65 – 69	0.55%	0.59%	0.44%	0.55%
70 – 74	0.75%	0.00%	0.22%	0.65%
Actual / Expected (6 Years)	81.4%			86.8%

We recommend decreasing the disability incidence assumption at most ages for Miscellaneous members.

Chart 13 on page 47 compares the number of actual disabilities for Miscellaneous members over the past six years to the current and recommended assumptions.

Chart 15 on page 48 compares the actual disability incidence experience for Miscellaneous members with the current and recommended assumptions.

Section 4: Demographic Assumptions

Safety – Disability Incidence Rates

Age	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
20 – 24	0.05%	0.00%	0.00%	0.05%
25 – 29	0.05%	0.00%	0.00%	0.05%
30 – 34	0.10%	0.74%	0.42%	0.20%
35 – 39	0.25%	0.68%	0.39%	0.35%
40 – 44	0.35%	0.65%	0.49%	0.45%
45 – 49	0.45%	0.94%	0.60%	0.55%
50 – 54	1.00%	1.17%	1.37%	1.15%
55 – 59	1.50%	3.83%	2.90%	2.00%
60 – 64	1.20%	0.00%	0.56%	1.20%
Actual / Expected (6 Years)	152.9%			120.9%

We recommend increasing the disability incidence assumption at most ages for Safety members.

Chart 14 on page 47 compares the number of actual disabilities for Safety members over the past six years to the current and recommended assumptions.

Chart 16 on page 48 compares the actual disability incidence experience for Safety members with the current and recommended assumptions.

Service-connected vs. non-service-connected disability

The following table shows the observed percentage of new disabled members that received a service-connected disability based on the actual experience over the past three years as well as the actual experience over the past six years. Also shown are the current and recommended assumptions.

Disabled Members Receiving a Service-Connected Disability

Line Description	Miscellaneous	Safety
Current assumption	50%	90%
Actual percentage (3 years)	71%	92%
Actual percentage (6 years)	65%	94%
Recommended assumption	60%	90%

We recommend increasing the assumption for future disabled members receiving a service-connected disability for Miscellaneous members from 50% to 60% and maintaining the assumption for Safety members at 90%. The remaining percentages are assumed to be non-service-connected disabilities (40% for Miscellaneous members and 10% for Safety members).

Section 4: Demographic Assumptions

Chart 13: Actual Number of Disabilities Compared to Expected
Miscellaneous Members

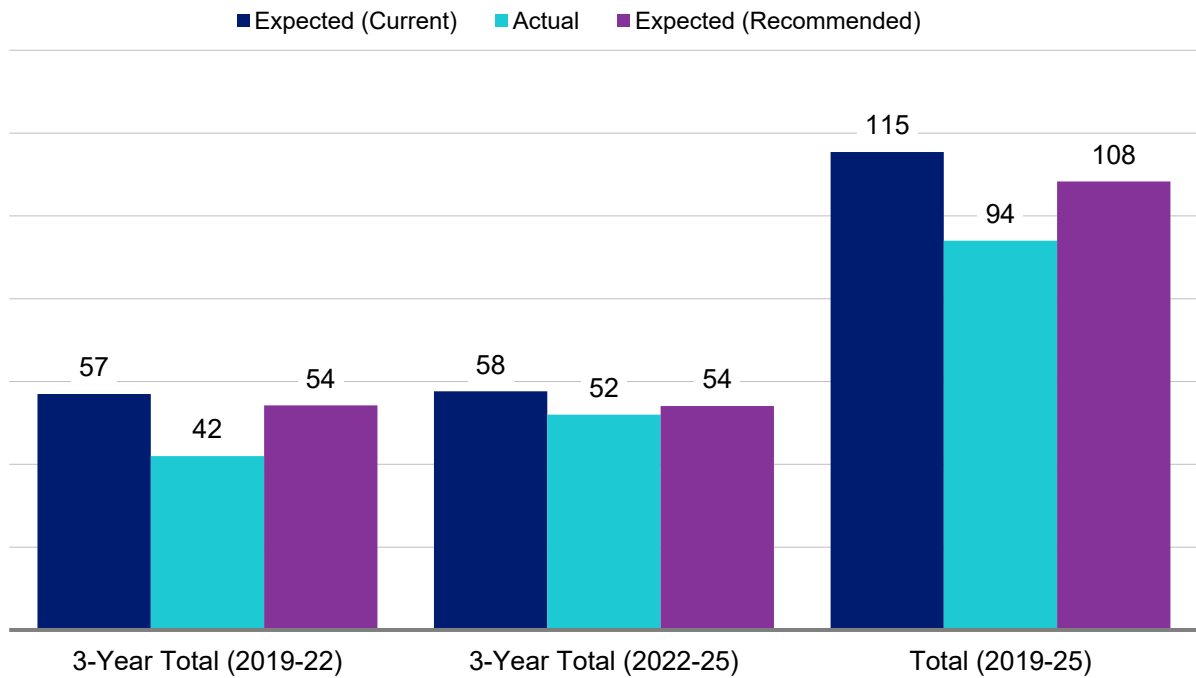
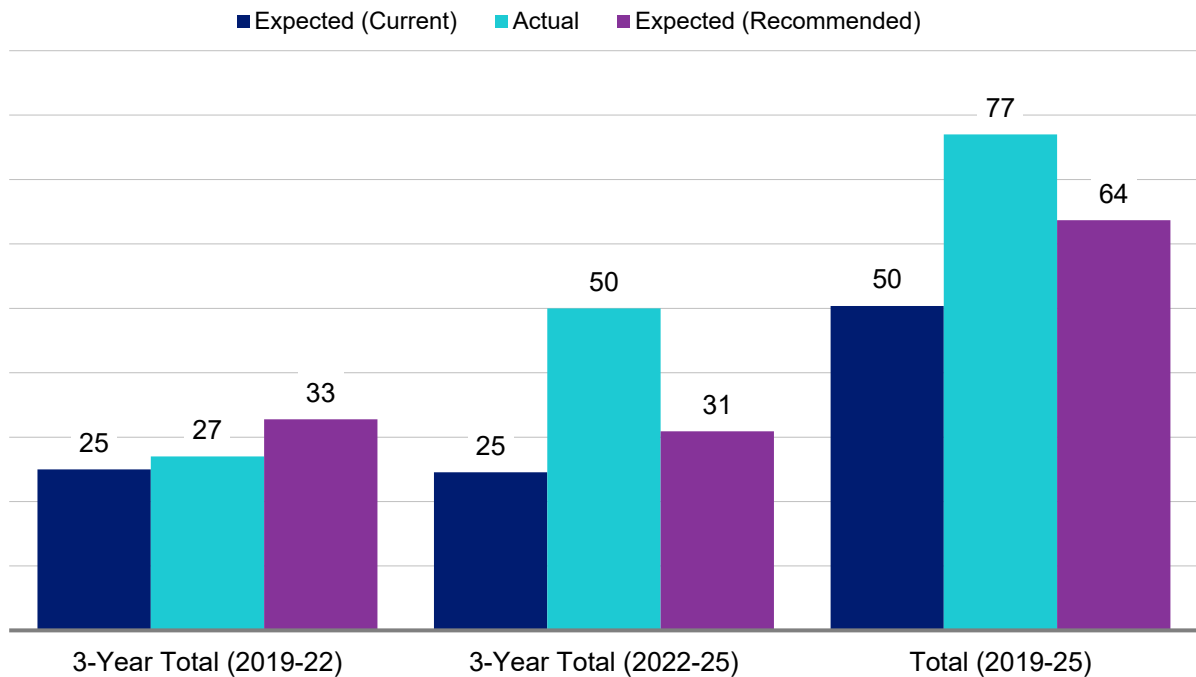


Chart 14: Actual Number of Disabilities Compared to Expected
Safety Members



Section 4: Demographic Assumptions

Chart 15: Disability Rates
Miscellaneous Members

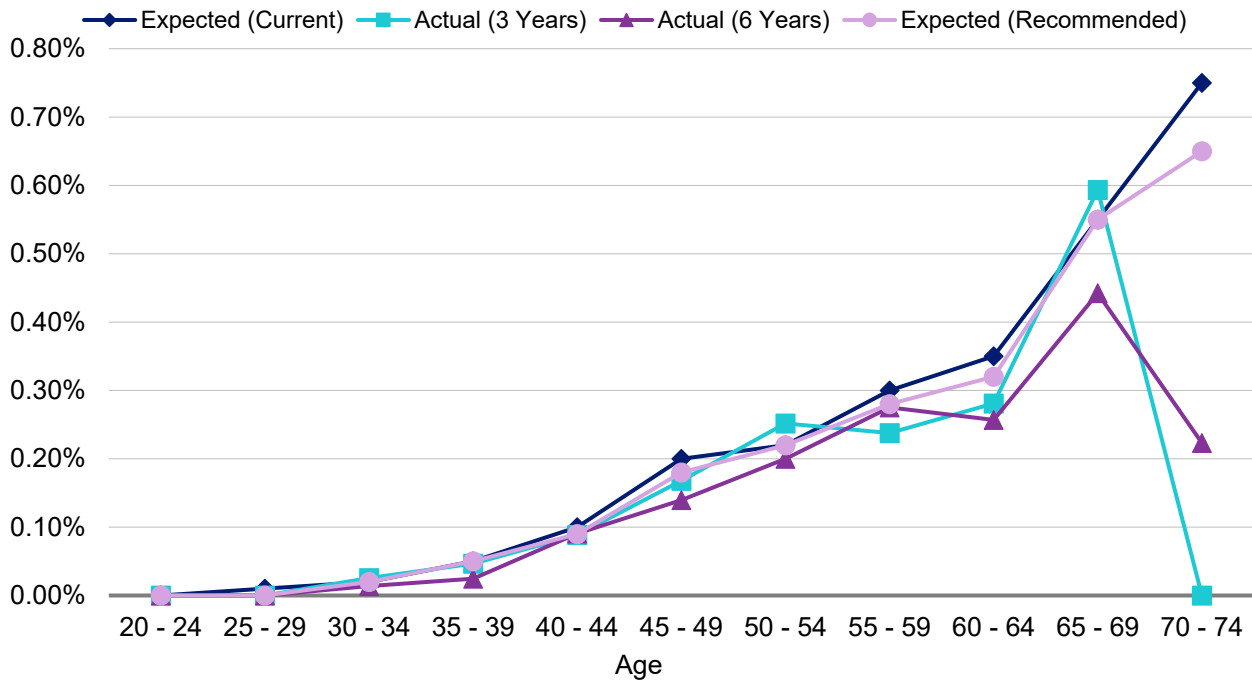
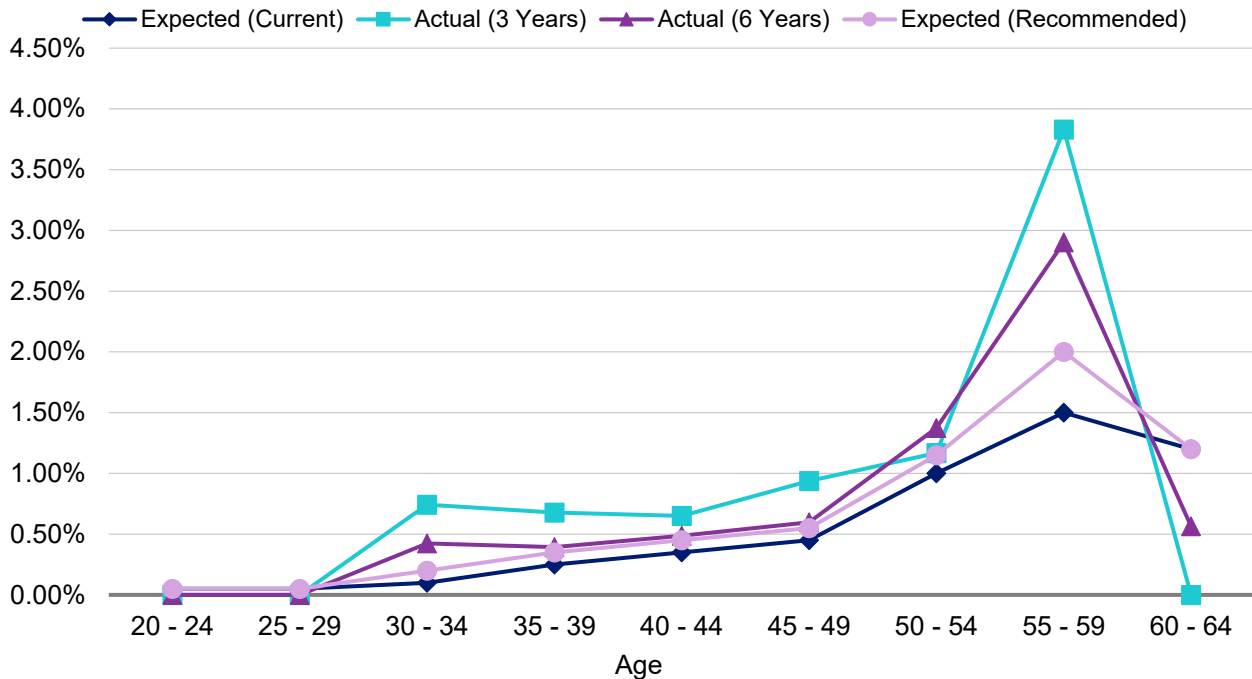


Chart 16: Disability Rates
Safety Members



Section 4: Demographic Assumptions

D. Termination rates

Termination rates include all terminations for reasons other than death, disability, or retirement. Additionally, when a member terminates from service, they can choose between receiving an immediate refund of member contributions or, if they leave their contributions on deposit they will be entitled to a deferred vested benefit.

Under current assumptions, there is an overall incidence of termination assumed, set as a function of the member's years of service and applied until the member is first eligible, and assumed, to retire. This is combined with an assumption that a member will choose between a refund of member contributions and a deferred vested benefit.

We recommend maintaining the current structure of the termination rate assumption.

It is important to note that not every years of service category has enough exposures and/or decrements such that the results for that category are statistically credible even when looking at six years' worth of experience. This is mainly the case for the higher service categories, since most members in those categories are eligible to retire and therefore have been excluded from our review of termination experience.

The following tables show the observed overall rate of termination based on actual experience during the three-year period from July 1, 2022 through June 30, 2025 as well as the six-year period from July 1, 2019 through June 30, 2025. Also shown are the current and recommended assumptions.

Section 4: Demographic Assumptions

Miscellaneous – Termination Rates

Years of Service	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
Less than 1	13.00%	15.14%	14.68%	14.50%
1 – 2	9.50%	9.30%	10.12%	9.50%
2 – 3	7.00%	9.57%	8.70%	8.50%
3 – 4	5.75%	7.03%	6.36%	6.50%
4 – 5	5.50%	7.50%	6.48%	6.25%
5 – 6	5.50%	7.67%	7.27%	6.00%
6 – 7	5.25%	6.57%	6.04%	5.75%
7 – 8	5.00%	6.56%	5.97%	5.50%
8 – 9	4.75%	5.31%	5.30%	5.25%
9 – 10	4.50%	4.56%	3.87%	4.50%
10 – 11	4.25%	1.91%	3.26%	4.25%
11 – 12	3.50%	4.74%	4.37%	4.00%
12 – 13	3.25%	4.57%	3.93%	3.75%
13 – 14	2.75%	3.90%	2.88%	3.00%
14 – 15	2.50%	4.39%	3.96%	3.00%
15 – 16	2.00%	2.34%	2.22%	2.25%
16 – 17	2.00%	3.02%	2.73%	2.25%
17 – 18	2.00%	1.00%	1.13%	2.00%
18 – 19	2.00%	1.91%	2.31%	2.00%
19 – 20	1.75%	2.13%	1.79%	1.75%
20 – 21	1.75%	1.74%	1.25%	1.75%
21 and over	1.50%	1.33%	1.40%	1.50%
Actual / Expected (6 Years)	113.5%			103.2%

We recommend increasing the termination rates for certain service groups while maintaining the rates for other service groups. Overall, the proposed rates represent an increase from the current rates for Miscellaneous members.

Chart 17 on page 53 compares the number of actual terminations for Miscellaneous members over the past six years to the current and recommended assumptions.

Chart 19 on page 54 compares the actual terminations experience for Miscellaneous members with the current and recommended assumptions.

Section 4: Demographic Assumptions

Safety – Termination Rates

Years of Service	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
Less than 1	4.75%	8.15%	6.87%	5.75%
1 – 2	4.00%	4.38%	3.53%	4.25%
2 – 3	4.00%	3.02%	3.52%	4.00%
3 – 4	2.50%	4.85%	3.06%	3.50%
4 – 5	2.50%	1.39%	2.44%	2.50%
5 – 6	2.50%	3.07%	2.88%	2.50%
6 – 7	2.50%	1.30%	2.40%	2.25%
7 – 8	2.25%	2.10%	2.22%	2.25%
8 – 9	1.25%	3.08%	2.39%	2.25%
9 – 10	1.00%	1.01%	0.68%	1.00%
10 – 11	1.00%	1.43%	0.93%	1.00%
11 – 12	1.00%	1.96%	0.95%	1.00%
12 – 13	1.00%	0.00%	0.98%	1.00%
13 – 14	1.00%	1.61%	0.47%	1.00%
14 – 15	1.00%	0.00%	1.79%	1.00%
15 – 16	0.75%	0.93%	0.63%	0.75%
16 – 17	0.75%	0.72%	0.60%	0.75%
17 – 18	0.75%	1.23%	1.02%	0.75%
18 – 19	0.75%	1.64%	0.72%	0.75%
19 – 20	0.75%	0.58%	0.75%	0.75%
20 and over	0.00%	N/A	0.00%	0.00%
Actual / Expected (6 Years)	109.4%			100.0%

We recommend adjusting the termination rates for Safety members. Overall, the proposed rates represent a slight increase from the current rates for Safety members.

Chart 18 on page 53 compares the number of actual terminations for Safety members over the past six years to the current and recommended assumptions.

Chart 20 on page 54 compares the actual terminations experience for Safety members with the current and recommended assumptions.

Section 4: Demographic Assumptions

Election of refund of member contributions

As mentioned above, when a member terminates from service, they can choose between receiving an immediate refund of member contributions or, if they leave their contributions on deposit they will be entitled to a deferred vested benefit.

The following tables show the observed percentage of members who elected a refund of contributions based on the actual experience during the three-year period from July 1, 2022 through June 30, 2025 as well as the six-year period from July 1, 2019 through June 30, 2025. Also shown are the current and recommended assumptions.

Miscellaneous — Percentage of Total Terminations Assumed to Receive Refund of Contributions

Years of Service	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
Less than 5	45.00%	43.15%	39.56%	45.00%
5 or more	20.00%	28.73%	24.32%	20.00%
Actual / Expected (6 Years)	109.6%			109.6%

Safety — Percentage of Total Terminations Assumed to Receive Refund of Contributions

Years of Service	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recommended Expected Rate
Less than 5	45.00%	27.78%	30.81%	35.00%
5 or more	15.00%	23.53%	19.77%	15.00%
Actual / Expected (6 Years)	85.94%			106.14%

We recommend maintaining the rates for Miscellaneous members electing a refund of contributions. For Safety members, we recommend decreasing the rate of electing a refund of contribution for members with less than five years of service and maintaining the rate of electing a refund of contributions for members with five or more years of service.

The assumed percentage of members who leave their contributions on deposit and receive a deferred vested benefit is equal to 100% minus the percentage assumed to elect a refund of contributions.

Section 4: Demographic Assumptions

Chart 17: Actual Number of Terminations Compared to Expected
Miscellaneous Members

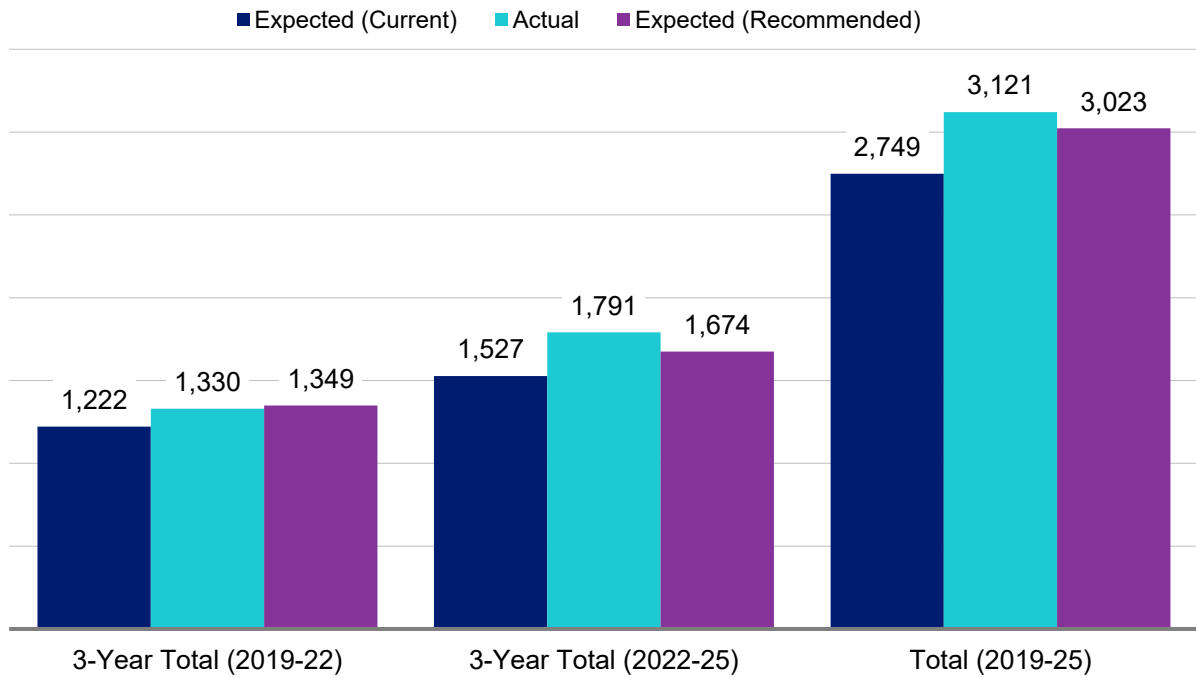
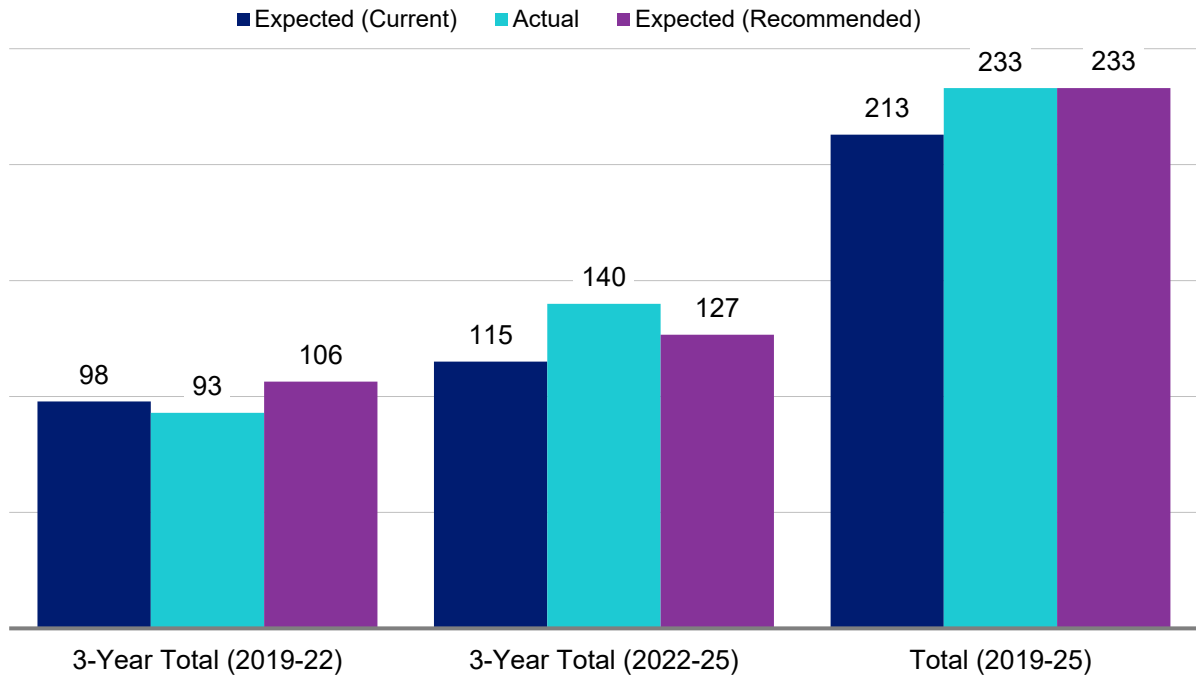


Chart 18: Actual Number of Terminations Compared to Expected
Safety Members



Section 4: Demographic Assumptions

Chart 19: Termination Rates
Miscellaneous Members

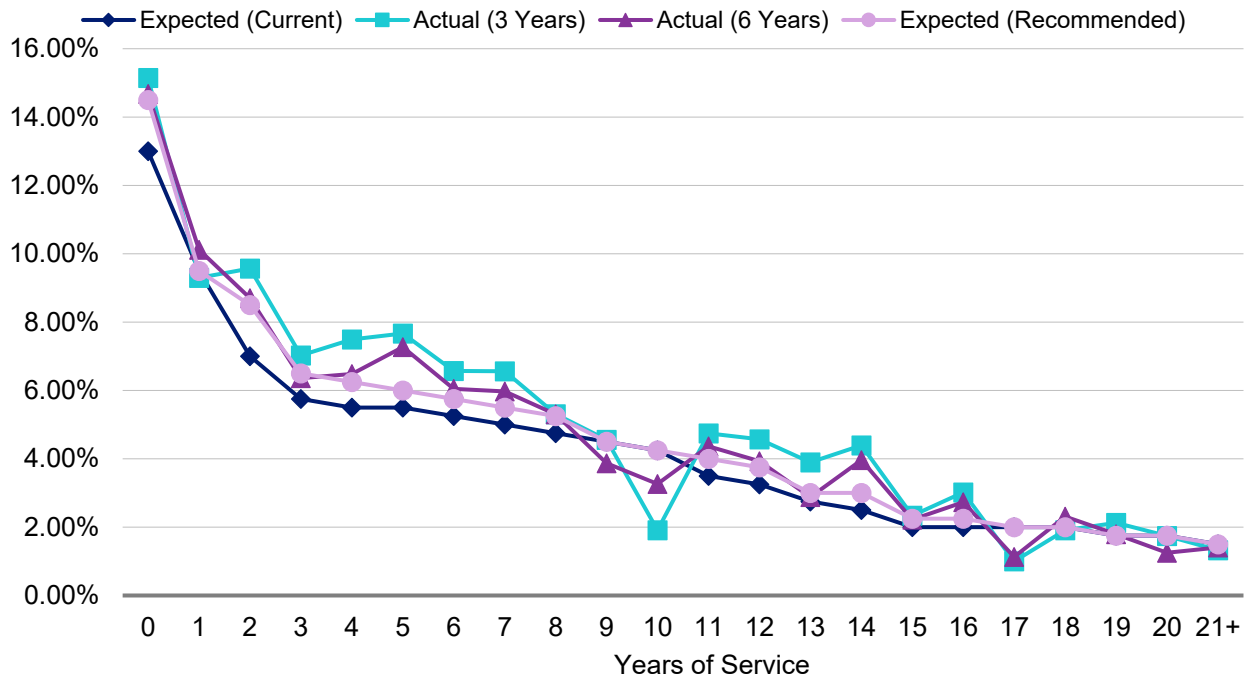
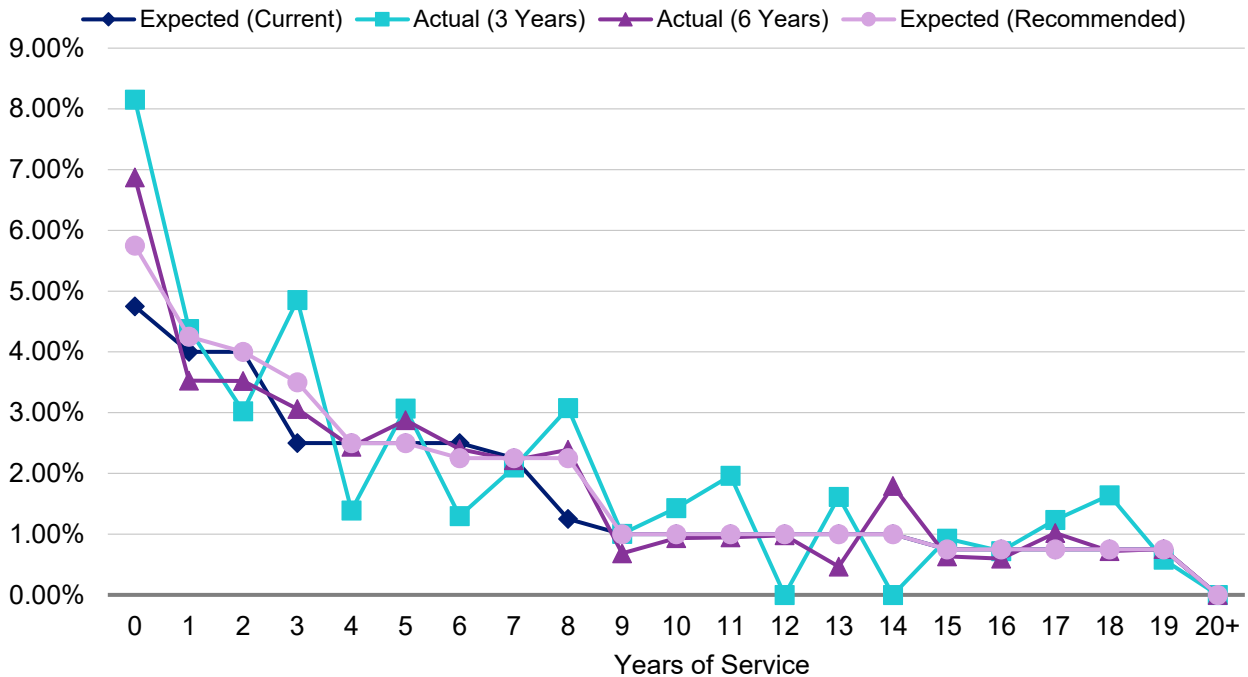


Chart 20: Termination Rates
Safety Members



Section 4: Demographic Assumptions

E. Retirement rates

The age at which a member retires from service will affect both the amount of benefits that will be paid to that member as well as the period over which funding must take place.

Currently, the assumed retirement rates for Miscellaneous Tiers 2, 3 and 5 and Safety Tiers 1 and 2 are a function of both age and years of service. For Miscellaneous Tiers 1 and 4 and Safety Tier 3 that are closed to new entrants and have relatively fewer active members, we will continue to recommend that retirement rates be structured as a function of only age. With this year's experience study, we recommend that retirement rates be structured as a function of both age and years of service for Safety Tier 4. For Safety Tier 4, the new structure of retirement assumptions will apply different sets of age-based retirement assumptions for those with less than 25 years of service and those with 25 or more years of service.

To increase the credibility of the data, particularly for Safety members, we have also included and considered the actual experience over the past six years. The following tables show the observed service retirement rates based on actual experience during the three-year period from July 1, 2022 through June 30, 2025 as well as the six-year period from July 1, 2019 through June 30, 2025. Also shown are the current and recommended assumptions.

Section 4: Demographic Assumptions

Miscellaneous Tier 1 – Retirement Rates

Age	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recomm. Expected Rate
50	6.00%	N/A	N/A	6.00%
51	4.50%	N/A	N/A	4.50%
52	4.50%	N/A	N/A	4.50%
53	4.50%	N/A	N/A	4.50%
54	5.50%	N/A	N/A	5.50%
55	12.00%	N/A	N/A	12.00%
56	18.00%	N/A	N/A	18.00%
57	18.00%	N/A	0.00%	18.00%
58	18.00%	N/A	0.00%	18.00%
59	20.00%	N/A	83.33%	20.00%
60	28.00%	100.00%	40.00%	28.00%
61	35.00%	N/A	12.50%	35.00%
62	35.00%	N/A	30.00%	35.00%
63	35.00%	50.00%	33.33%	35.00%
64	35.00%	33.33%	12.50%	35.00%
65	35.00%	33.33%	33.33%	35.00%
66	40.00%	100.00%	50.00%	40.00%
67	40.00%	0.00%	0.00%	40.00%
68	50.00%	33.33%	25.00%	50.00%
69	60.00%	50.00%	33.33%	60.00%
70 and over	100.00%	11.11%	29.41%	100.00%
Actual / Expected (6 Years)	61.4%			61.4%

As shown above, we recommend maintaining the current retirement rate assumptions for Miscellaneous Tier 1 members as there are only 3 active members left as of June 30, 2025.

Chart 21 on page 65 compares the number of actual to expected retirements over the past six years for the current and recommended assumptions for all Miscellaneous members.

Chart 23 on page 66 compares the actual retirement experience with the current and recommended assumptions for Miscellaneous Tier 1 members.

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Miscellaneous Tiers 2 and 3 — Retirement Rates

Age	<30 YOS Current Expected Rate	<30 YOS Actual Rate (3 Years)	<30 YOS Actual Rate (6 Years)	<30 YOS Recomm. Expected Rate	30+ YOS Current Expected Rate	30+ YOS Actual Rate (3 Years)	30+ YOS Actual Rate (6 Years)	30+ YOS Recomm. Expected Rate
50	2.50%	3.20%	2.84%	2.50%	2.50%	0.00%	0.00%	2.50%
51	2.00%	1.32%	1.87%	2.00%	2.00%	20.00%	5.88%	5.00%
52	2.00%	1.83%	2.02%	2.00%	2.00%	13.33%	13.89%	5.00%
53	2.00%	2.15%	2.05%	2.00%	2.00%	4.76%	4.08%	5.00%
54	3.50%	3.52%	3.90%	3.50%	9.00%	8.82%	9.57%	9.00%
55	4.50%	4.72%	4.87%	4.50%	12.00%	11.32%	12.33%	12.00%
56	5.50%	5.53%	6.07%	5.50%	12.00%	14.94%	14.06%	13.00%
57	7.50%	7.96%	7.72%	7.50%	15.00%	19.80%	16.59%	16.00%
58	8.00%	6.80%	6.45%	7.50%	20.00%	25.21%	24.19%	22.00%
59	8.00%	9.47%	8.57%	8.50%	25.00%	19.09%	21.88%	22.00%
60	9.00%	12.22%	10.70%	10.00%	25.00%	19.59%	23.16%	22.00%
61	15.00%	18.27%	15.76%	15.00%	30.00%	34.57%	32.52%	32.00%
62	20.00%	20.69%	22.27%	20.00%	31.00%	22.64%	28.07%	28.00%
63	18.00%	16.48%	16.50%	17.00%	25.00%	27.78%	26.92%	26.00%
64	20.00%	19.63%	19.02%	20.00%	25.00%	26.19%	26.19%	26.00%
65	30.00%	27.08%	25.06%	27.00%	30.00%	31.82%	28.57%	30.00%
66	35.00%	25.48%	32.84%	30.00%	35.00%	40.63%	37.74%	35.00%
67	30.00%	32.14%	30.18%	30.00%	30.00%	15.00%	12.50%	30.00%
68	30.00%	26.15%	29.25%	30.00%	30.00%	23.53%	23.08%	30.00%
69	30.00%	21.15%	23.68%	30.00%	30.00%	30.77%	44.44%	30.00%
70	30.00%	39.47%	29.67%	30.00%	30.00%	28.57%	25.00%	30.00%
71	30.00%	20.69%	24.64%	30.00%	30.00%	0.00%	0.00%	30.00%
72	30.00%	37.50%	34.69%	30.00%	30.00%	0.00%	0.00%	30.00%
73	30.00%	38.46%	30.00%	30.00%	30.00%	16.67%	11.11%	30.00%
74	30.00%	33.33%	30.43%	30.00%	30.00%	50.00%	42.86%	30.00%
75 and over	100.00%	16.22%	13.51%	100.00%	100.00%	0.00%	25.00%	100.00%
Actual / Expected (6 Years)	95.9%			97.5%	99.7%			99.3%

Based on this experience, we recommend adjusting the retirement rate assumption at certain ages for Miscellaneous Tiers 2 and 3 members. Overall, the recommended rates represent a decrease from the current rates for Miscellaneous Tiers 2 and 3 members.

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Chart 24 on page 66 compares the actual retirement experience with the current and recommended assumptions for Miscellaneous Tier 2 and 3 members with less than 30 years of experience.

Chart 25 on page 67 compares the actual retirement experience with the current and recommended assumptions for Miscellaneous Tier 2 and 3 members with 30 or more years of experience.

Miscellaneous Tier 4 — Retirement Rates

Age	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recomm. Expected Rate
50	2.50%	11.11%	10.00%	2.50%
51	2.00%	28.57%	22.22%	2.00%
52	2.00%	0.00%	11.11%	2.00%
53	2.00%	16.67%	16.67%	2.00%
54	2.50%	16.67%	28.57%	2.50%
55	3.50%	0.00%	0.00%	3.50%
56	5.00%	12.50%	12.50%	5.00%
57	6.00%	0.00%	0.00%	6.00%
58	6.00%	12.50%	11.11%	6.00%
59	6.00%	20.00%	42.86%	6.00%
60	7.50%	0.00%	0.00%	7.50%
61	12.00%	22.22%	20.00%	15.00%
62	13.00%	25.00%	41.67%	15.00%
63	12.00%	20.00%	16.67%	15.00%
64	13.00%	0.00%	0.00%	15.00%
65	25.00%	30.00%	30.00%	27.00%
66	21.00%	25.00%	40.00%	23.00%
67	21.00%	0.00%	0.00%	23.00%
68	21.00%	100.00%	100.00%	23.00%
69	23.00%	0.00%	0.00%	23.00%
70	30.00%	75.00%	50.00%	30.00%
71	30.00%	0.00%	0.00%	30.00%
72	30.00%	0.00%	0.00%	30.00%
73	30.00%	0.00%	0.00%	30.00%
74	30.00%	N/A	N/A	30.00%
75 and over	100.00%	N/A	N/A	100.00%
Actual / Expected (6 Years)	176.1%			164.0%

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Based on this experience, we recommend increasing the retirement rate assumption at certain ages for Miscellaneous Tier 4 members.

Chart 26 on page 67 compares the current and recommended assumptions for Miscellaneous Tier 4 members.

Miscellaneous Tier 5 — Retirement Rates

Age	<30 YOS Current Expected Rate	<30 YOS Actual Rate (3 Years)	<30 YOS Actual Rate (6 Years)	<30 YOS Recomm. Expected Rate	30+ YOS Current Expected Rate	30+ YOS Recomm. Expected Rate
52	3.50%	1.23%	1.82%	3.00%	4.00%	4.00%
53	1.25%	0.65%	1.48%	1.25%	2.50%	2.50%
54	1.50%	1.50%	1.61%	1.50%	3.00%	3.00%
55	1.75%	2.68%	1.80%	1.75%	3.50%	3.50%
56	2.00%	0.93%	0.65%	2.00%	4.00%	4.00%
57	4.00%	5.88%	5.33%	5.00%	6.00%	6.00%
58	4.50%	1.87%	3.23%	4.00%	6.50%	6.00%
59	4.50%	5.10%	5.16%	5.00%	6.50%	7.00%
60	5.00%	1.04%	3.47%	5.00%	7.00%	7.00%
61	8.00%	2.06%	3.10%	7.00%	11.00%	11.00%
62	10.00%	7.41%	7.69%	9.00%	12.00%	12.00%
63	9.00%	9.64%	9.35%	9.00%	11.00%	12.00%
64	11.00%	7.14%	7.53%	9.00%	13.00%	12.00%
65	22.00%	17.02%	17.81%	20.00%	24.00%	24.00%
66	18.00%	17.95%	22.03%	18.00%	18.00%	18.00%
67	18.00%	25.00%	22.22%	20.00%	18.00%	20.00%
68	21.00%	25.00%	28.57%	23.00%	21.00%	23.00%
69	23.00%	8.33%	9.52%	23.00%	23.00%	23.00%
70	30.00%	14.29%	9.76%	30.00%	30.00%	30.00%
71	30.00%	11.76%	11.11%	30.00%	30.00%	30.00%
72	30.00%	15.00%	16.67%	30.00%	30.00%	30.00%
73	30.00%	0.00%	6.67%	30.00%	30.00%	30.00%
74	30.00%	22.22%	30.00%	30.00%	30.00%	30.00%
75 and over	100.00%	22.22%	11.76%	100.00%	100.00%	100.00%
Actual / Expected (6 Years)	72.2%			73.7%		

The recommended rates represent a slight overall decrease for Miscellaneous Tier 5 members with less than 30 years of service. There were no active members with 30 or more years of service in Miscellaneous Tier 5 over the past three years, so no actual

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rates for that group are shown in the above table. We have based our recommended rates for Miscellaneous Tier 5 members with 30 or more years of service on a combination of the current assumptions, the recommended rates for Miscellaneous Tier 5 members with less than 30 years of experience, and the recommended rates for Miscellaneous Tiers 2 and 3 members.

Chart 27 on page 68 compares the actual retirement experience with the current and recommended assumptions for Miscellaneous Tier 5 members with less than 30 years of experience.

Chart 28 on page 68 compares the current and recommended assumptions for Miscellaneous Tier 5 members with 30 or more years of experience.

Safety Tiers 1 and 2 — Retirement Rates

Age	<25 YOS Current Expected Rate	<25 YOS Actual Rate (3 Years)	<25 YOS Actual Rate (6 Years)	<25 YOS Recomm. Expected Rate	25+ YOS Current Expected Rate	25+ YOS Actual Rate (3 Years)	25+ YOS Actual Rate (6 Years)	25+ YOS Recomm. Expected Rate
44	0.00%	3.05%	3.79%	2.50%	0.00%	0.00%	0.00%	2.50%
45	2.50%	1.11%	1.75%	2.50%	2.50%	0.00%	0.00%	2.50%
46	3.00%	7.08%	5.36%	4.00%	3.00%	18.18%	11.76%	4.00%
47	4.50%	4.55%	4.86%	4.50%	4.50%	0.00%	5.71%	4.50%
48	7.00%	7.69%	9.06%	7.50%	10.00%	33.33%	25.93%	15.00%
49	16.00%	23.21%	22.35%	18.00%	35.00%	32.50%	37.33%	35.00%
50	25.00%	35.29%	36.84%	30.00%	50.00%	60.00%	57.14%	55.00%
51	20.00%	15.19%	22.22%	20.00%	40.00%	39.29%	37.29%	40.00%
52	22.00%	22.54%	25.00%	22.00%	45.00%	37.04%	45.65%	45.00%
53	16.00%	13.16%	18.81%	16.00%	45.00%	20.00%	34.29%	40.00%
54	18.00%	25.00%	19.75%	20.00%	35.00%	15.38%	32.14%	35.00%
55	20.00%	28.00%	28.07%	25.00%	30.00%	57.14%	70.59%	35.00%
56	20.00%	10.00%	18.87%	20.00%	30.00%	50.00%	31.25%	30.00%
57	20.00%	25.00%	20.45%	20.00%	30.00%	0.00%	26.67%	30.00%
58	20.00%	11.11%	16.67%	20.00%	35.00%	25.00%	40.00%	35.00%
59	30.00%	22.22%	21.43%	30.00%	30.00%	57.14%	46.15%	30.00%
60	45.00%	0.00%	23.81%	45.00%	45.00%	66.67%	62.50%	45.00%
61	50.00%	36.36%	31.82%	50.00%	50.00%	0.00%	0.00%	50.00%
62	70.00%	60.00%	42.86%	50.00%	70.00%	0.00%	40.00%	50.00%
63	70.00%	0.00%	22.22%	50.00%	70.00%	100.00%	50.00%	50.00%
64	70.00%	40.00%	50.00%	50.00%	70.00%	N/A	50.00%	50.00%
65 and over	100.00%	66.67%	42.11%	100.00%	100.00%	25.00%	25.00%	100.00%
Actual / Expected (6 Years)	113.3%			106.2%	108.9%			106.2%

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We recommend an overall increase in the retirement rates for Safety Tiers 1 and 2 members with less than 25 years of service. For Safety Tiers 1 and 2 members with 25 or more years of service, we recommend a combination of the recommended rates for Safety Tiers 1 and 2 members with less than 25 years of service and adjustments due to experience, specifically at age 50. We recommend extending the retirement rates to age 44 for Safety Tiers 1 and 2 members regardless of years of service.

Chart 22 on page 65 compares the number of actual to expected retirements over the past six years for the current and recommended assumptions for all Safety members.

Chart 29 on page 69 compares the actual retirement experience with the current and recommended assumptions for Safety Tier 1 and 2 members with less than 25 years of service.

Chart 30 on page 69 compares the actual retirement experience with the current and recommended assumptions for Safety Tier 1 and 2 members with 25 or more years of service.

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Safety Tier 3 — Retirement Rates

Age	Current Expected Rate	Actual Rate (3 Years)	Actual Rate (6 Years)	Recomm. Expected Rate
44	0.00%	N/A	N/A	1.50%
45	1.50%	N/A	0.00%	1.50%
46	1.50%	N/A	0.00%	1.50%
47	1.50%	0.00%	0.00%	1.50%
48	1.50%	0.00%	0.00%	1.50%
49	4.00%	50.00%	33.33%	4.00%
50	10.00%	0.00%	0.00%	10.00%
51	12.00%	0.00%	0.00%	12.00%
52	14.00%	20.00%	16.67%	14.00%
53	16.00%	33.33%	33.33%	16.00%
54	18.00%	16.67%	12.50%	18.00%
55	50.00%	50.00%	50.00%	50.00%
56	25.00%	0.00%	0.00%	25.00%
57	25.00%	50.00%	50.00%	25.00%
58	25.00%	0.00%	0.00%	25.00%
59	30.00%	0.00%	0.00%	30.00%
60	45.00%	0.00%	0.00%	45.00%
61	55.00%	N/A	0.00%	50.00%
62	70.00%	50.00%	50.00%	50.00%
63	70.00%	0.00%	0.00%	50.00%
64	70.00%	0.00%	0.00%	50.00%
65 and over	100.00%	100.00%	100.00%	100.00%
Actual / Expected (6 Years)	68.5%			73.3%

We recommend extending retirement rates to age 44, maintaining retirement rates below age 61, and decreasing retirement rates from ages 61 to 64 for Safety Tier 3 members.

Chart 31 on page 70 compares the actual retirement experience with the current and recommended assumptions for Safety Tier 3 members.

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Safety Tier 4 — Retirement Rates

Age	<25 YOS Current Expected Rate	<25 YOS Actual Rate (3 Years)	<25 YOS Actual Rate (6 Years)	<25 YOS Recomm. Expected Rate	25+ YOS Current Expected Rate	25+ YOS Recomm. Expected Rate
50	15.00%	0.00%	0.00%	10.00%	15.00%	15.00%
51	10.50%	0.00%	0.00%	10.00%	10.50%	12.00%
52	12.00%	0.00%	5.56%	12.00%	12.00%	14.00%
53	14.00%	0.00%	0.00%	14.00%	14.00%	16.00%
54	15.50%	18.75%	18.18%	16.00%	15.50%	18.00%
55	40.00%	7.14%	11.76%	30.00%	40.00%	40.00%
56	25.00%	0.00%	0.00%	25.00%	25.00%	25.00%
57	25.00%	8.33%	15.79%	25.00%	25.00%	25.00%
58	25.00%	0.00%	6.67%	25.00%	25.00%	25.00%
59	25.00%	25.00%	21.43%	25.00%	25.00%	25.00%
60	45.00%	0.00%	18.18%	45.00%	45.00%	45.00%
61	55.00%	0.00%	10.00%	50.00%	55.00%	50.00%
62	70.00%	22.22%	25.00%	50.00%	70.00%	50.00%
63	70.00%	0.00%	14.29%	50.00%	70.00%	50.00%
64	70.00%	0.00%	50.00%	50.00%	70.00%	50.00%
65 and over	100.00%	N/A	100.00%	100.00%	100.00%	100.00%
Actual / Expected (6 Years)	36.8%			41.9%		

The recommended rates represent an overall decrease for Safety Tier 4 members with less than 25 years of service. There were no active members with 25 or more years of service in Safety Tier 4 over the past three years, so no actual rates for that group are shown in the above table. We have based our recommended rates for Safety Tier 4 members with 25 or more years of service on a combination of the recommended rates for Safety Tier 4 members with less than 25 years of service and the recommended rates for Safety Tiers 1 and 2 members with 25 or more years of service.

Chart 32 on page 70 compares the actual retirement experience with the current and recommended assumptions for Safety Tier 4 members with less than 25 years of service.

Chart 33 on page 71 compares the current and recommended assumptions for Safety Tier 4 members with 25 or more years of service.

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Deferred vested members

The following tables show the observed deferred vested retirement age based on the actual experience over the past six years, separately for those who went on to work at a reciprocal retirement system and those that did not. Also shown are the current and recommended assumptions.

Miscellaneous Members' Deferred Vested Retirement Age

Line Description	Reciprocal Members	Non-Reciprocal Members
Current assumption	61.0	59.0
Actual average age (six years)	60.8	58.7
Recommended assumption	61.0	59.0

We recommend maintaining the Miscellaneous deferred vested retirement age assumption at age 61 for those covered by a reciprocal retirement system and age 59 for those who are non-reciprocal.

Safety Members' Deferred Vested Retirement Age

Line Description	Reciprocal Members	Non-Reciprocal Members
Current assumption	55.0	52.0
Actual average age (six years)	53.9	51.6
Recommended assumption	54.0	52.0

We recommend decreasing the Safety deferred vested retirement age assumption from age 55 to age 54 for those covered by a reciprocal retirement system and maintaining the Safety deferred vested retirement age assumption at age 52 for those who are non-reciprocal.

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Chart 21: Actual Number of Retirements Compared to Expected
Miscellaneous Members

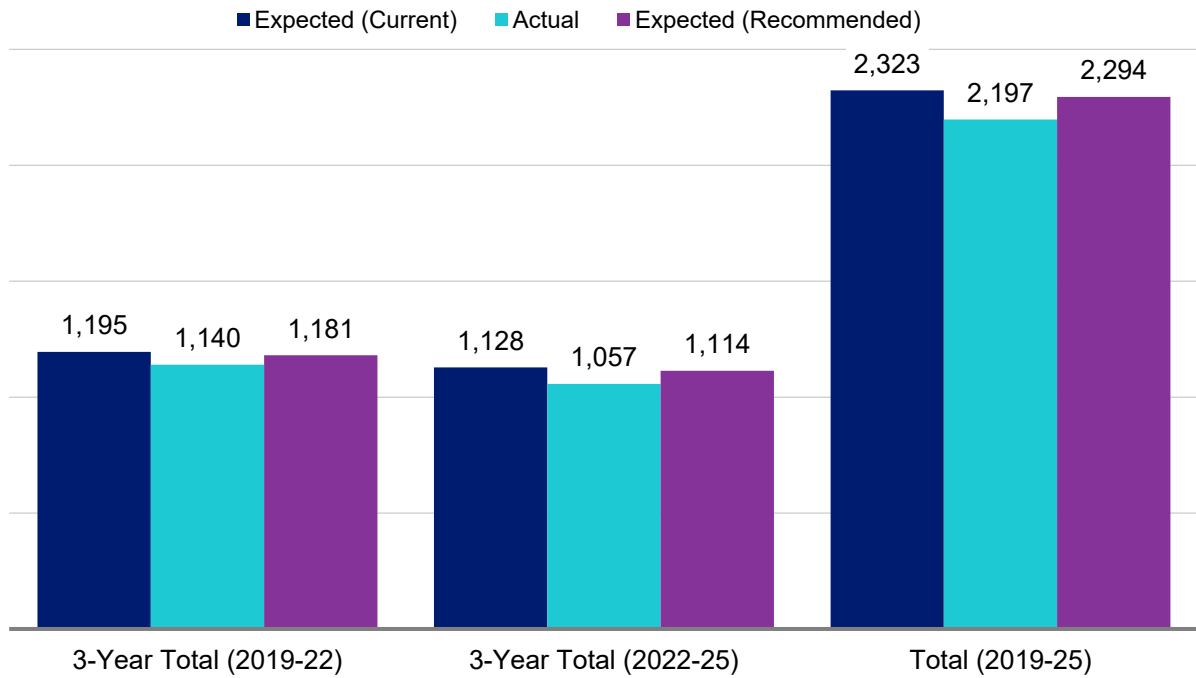
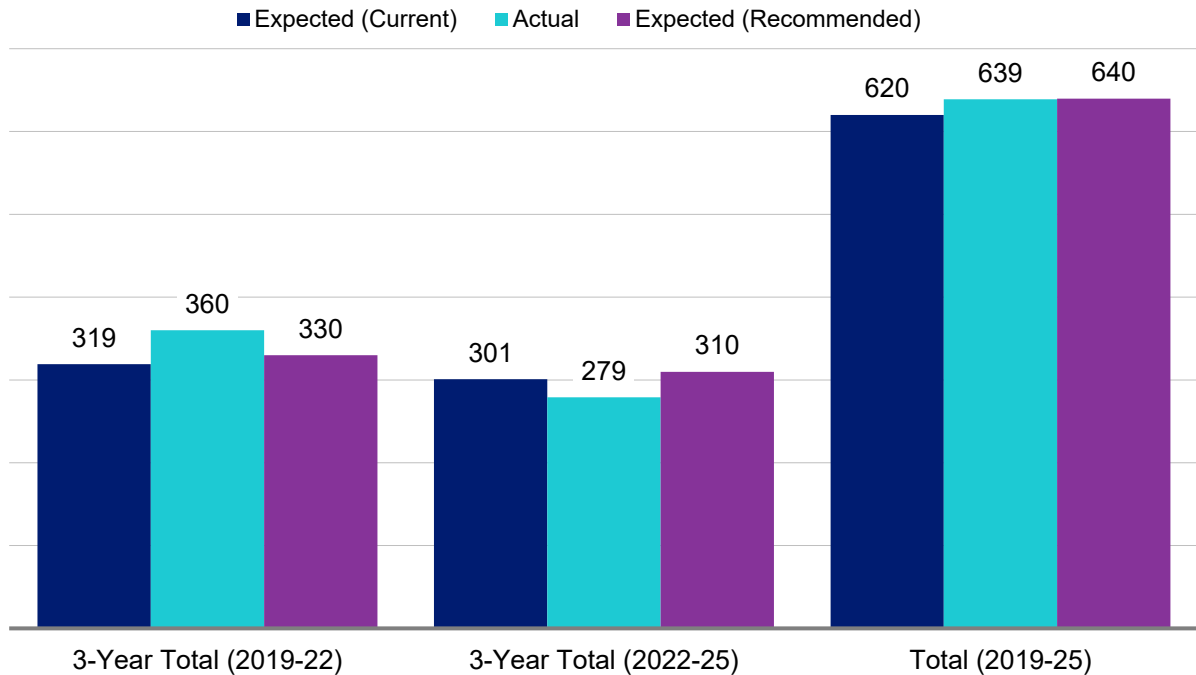


Chart 22: Actual Number of Retirements Compared to Expected
Safety Members



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Chart 23: Retirement Rates
Miscellaneous Tier 1 Members

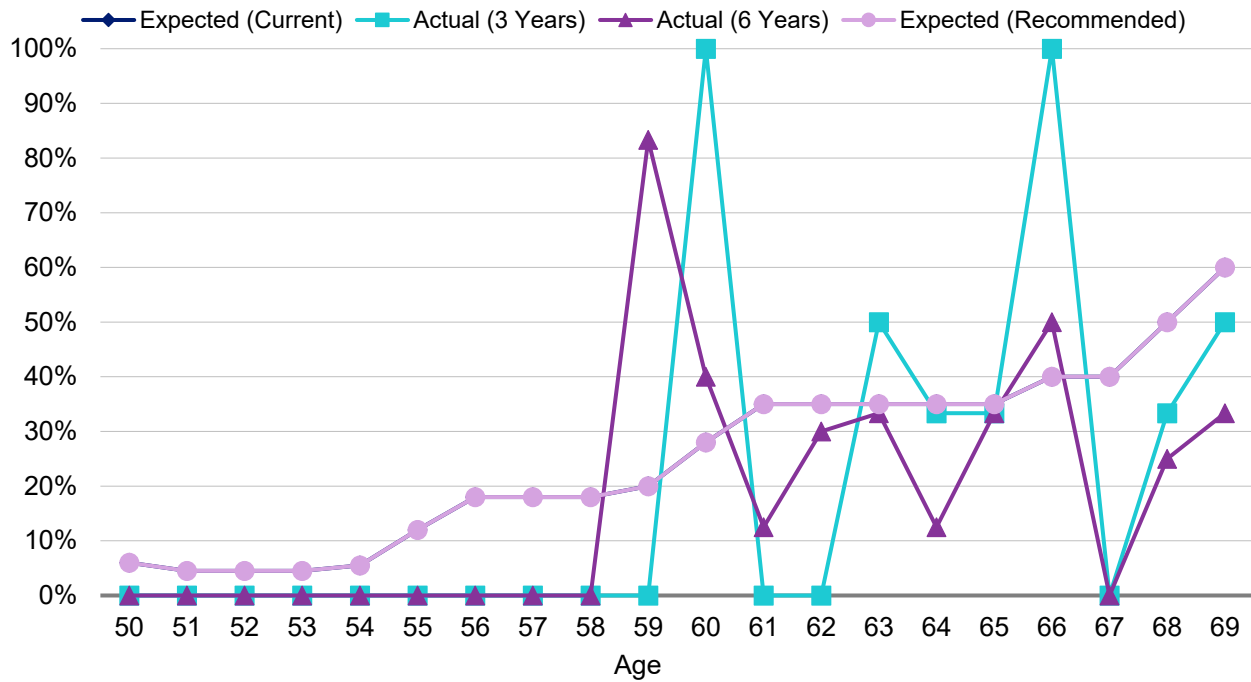
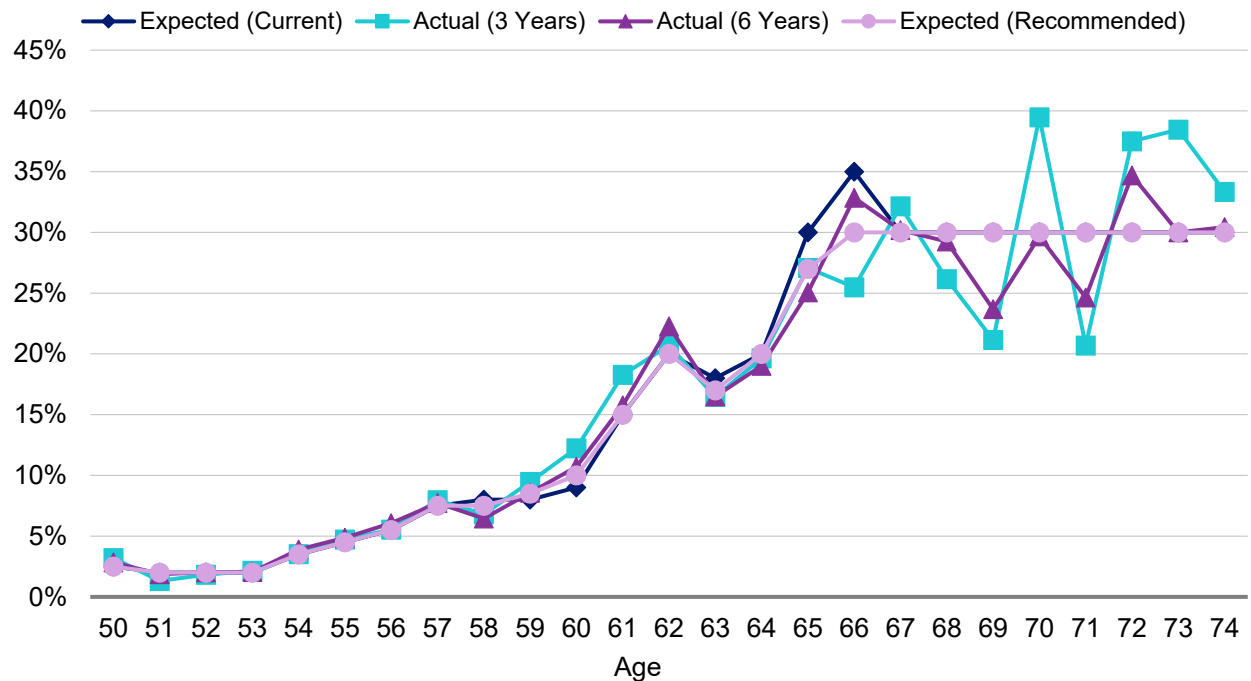


Chart 24: Retirement Rates
Miscellaneous Tier 2 and 3 Members with less than 30 Years of Service



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Chart 25: Retirement Rates

Miscellaneous Tier 2 and 3 Members with 30 or more Years of Service

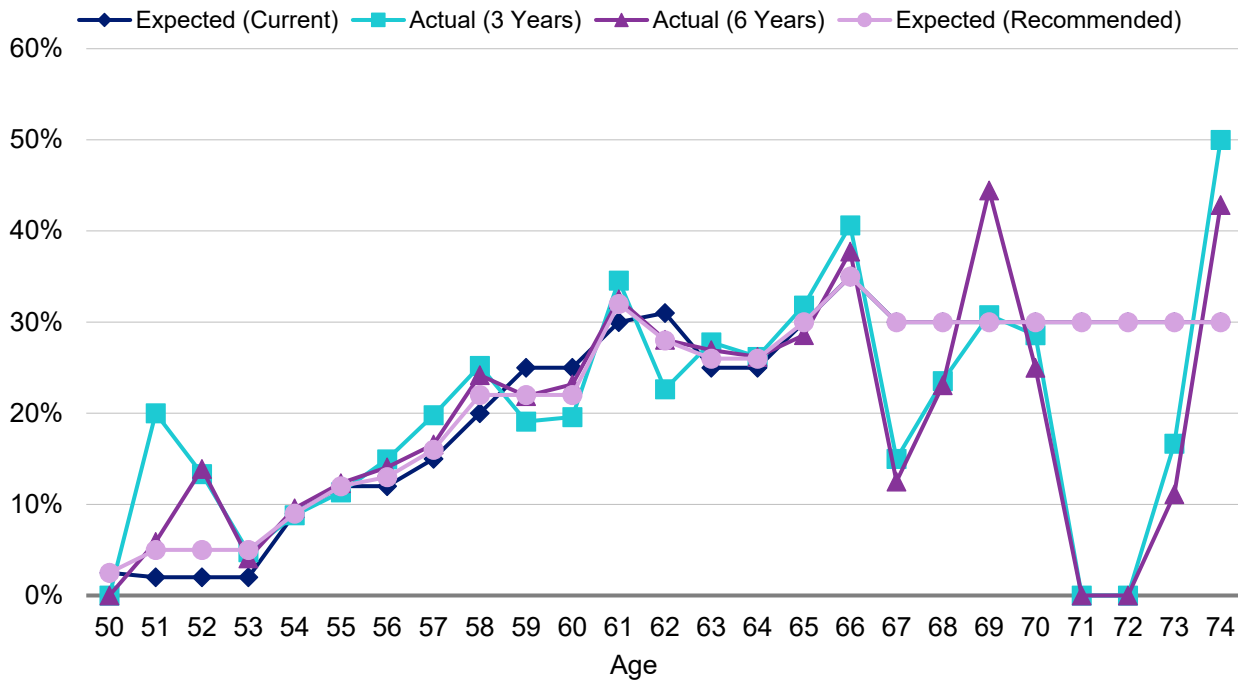
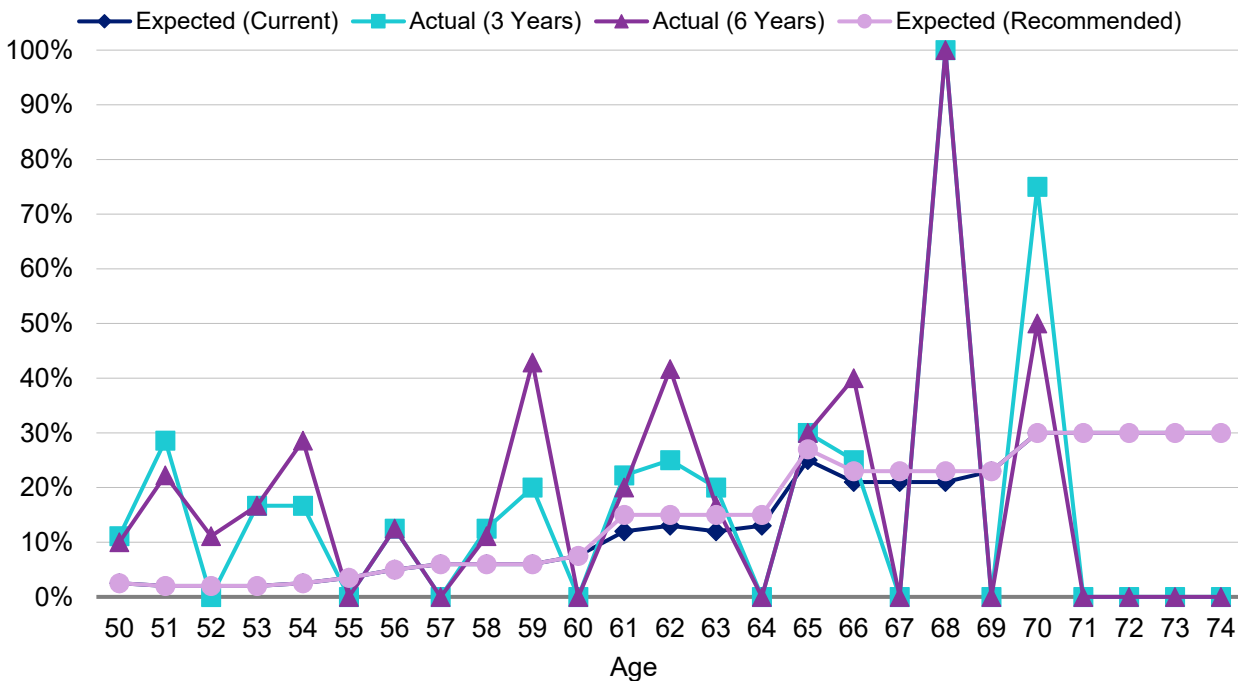


Chart 26: Retirement Rates

Miscellaneous Tier 4 Members



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Chart 27: Retirement Rates

Miscellaneous Tier 5 Members with less than 30 Years of Service

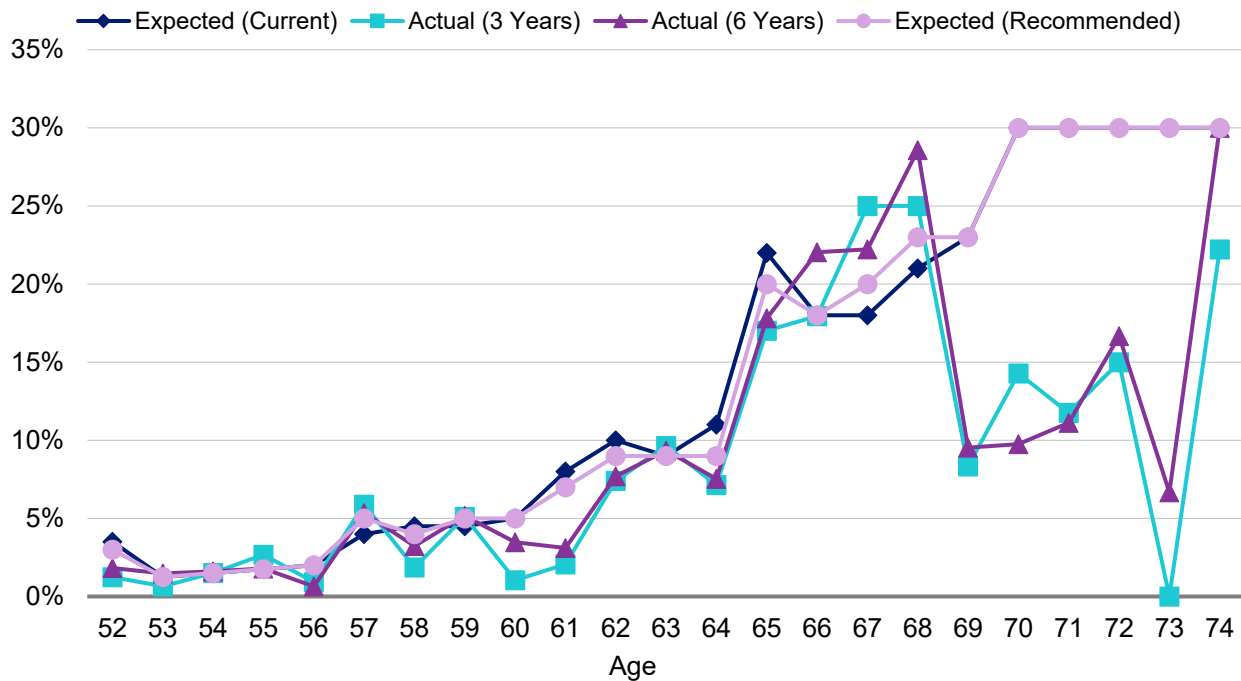
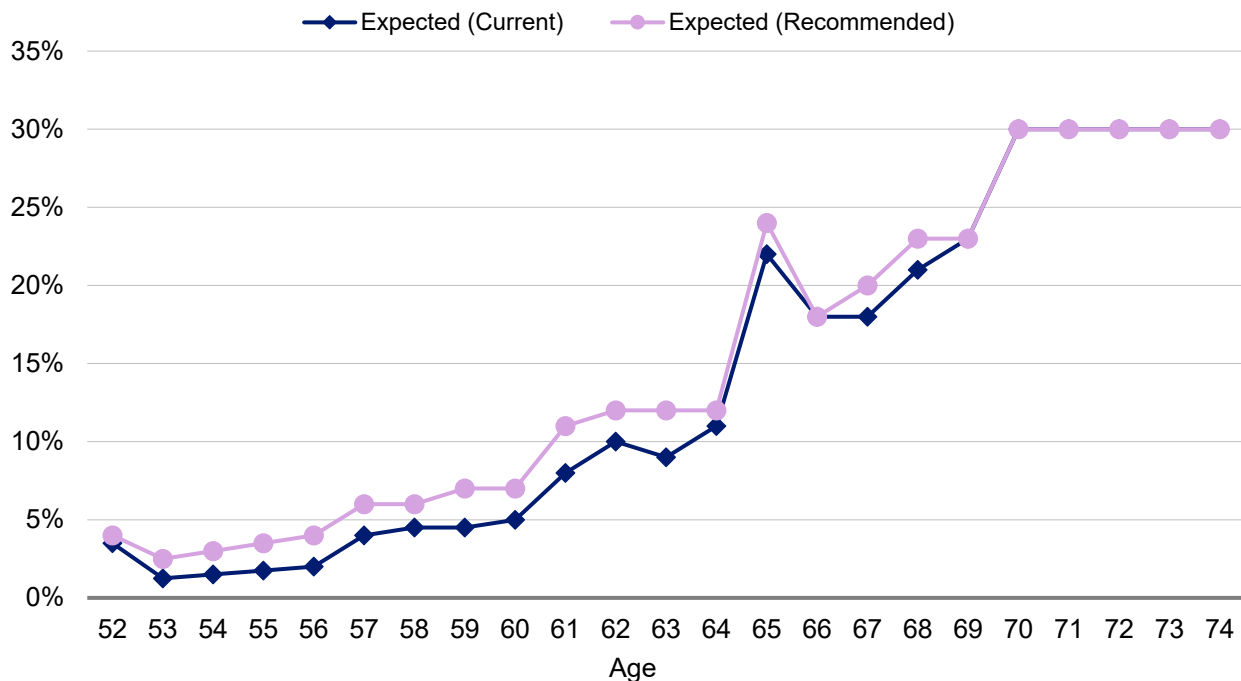


Chart 28: Retirement Rates

Miscellaneous Tier 5 Members with 30 or more Years of Service



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Chart 29: Retirement Rates

Safety Tier 1 and 2 Members with less than 25 Years of Service

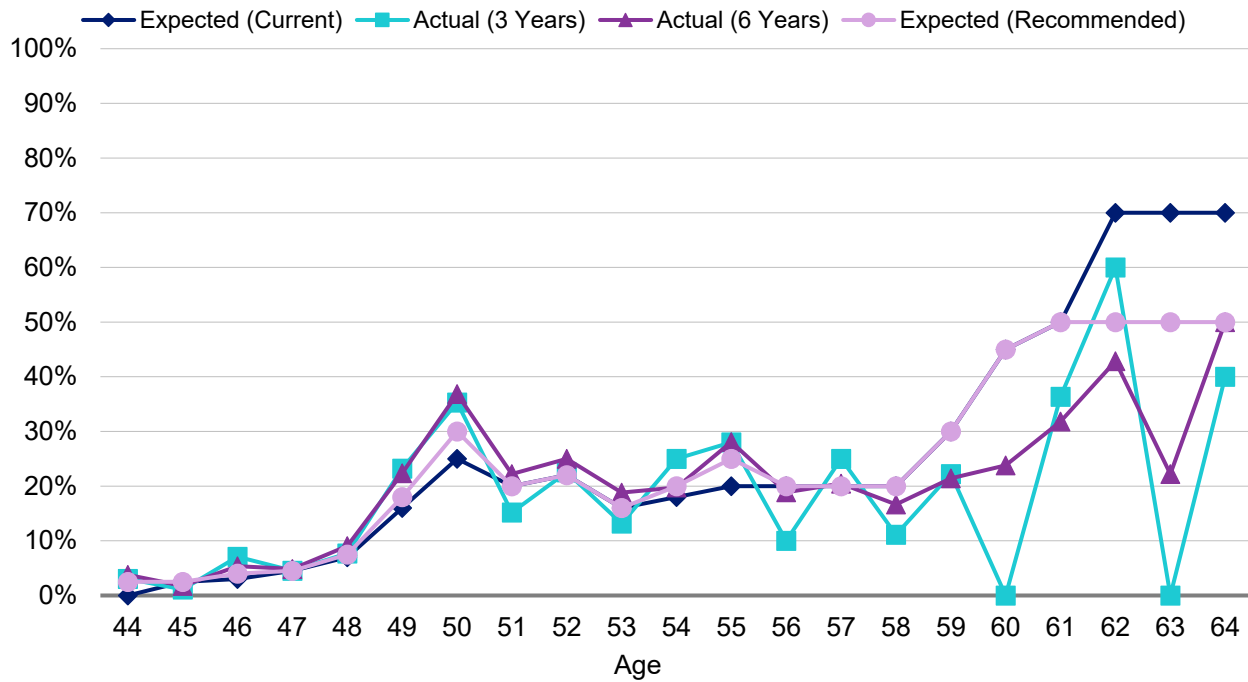
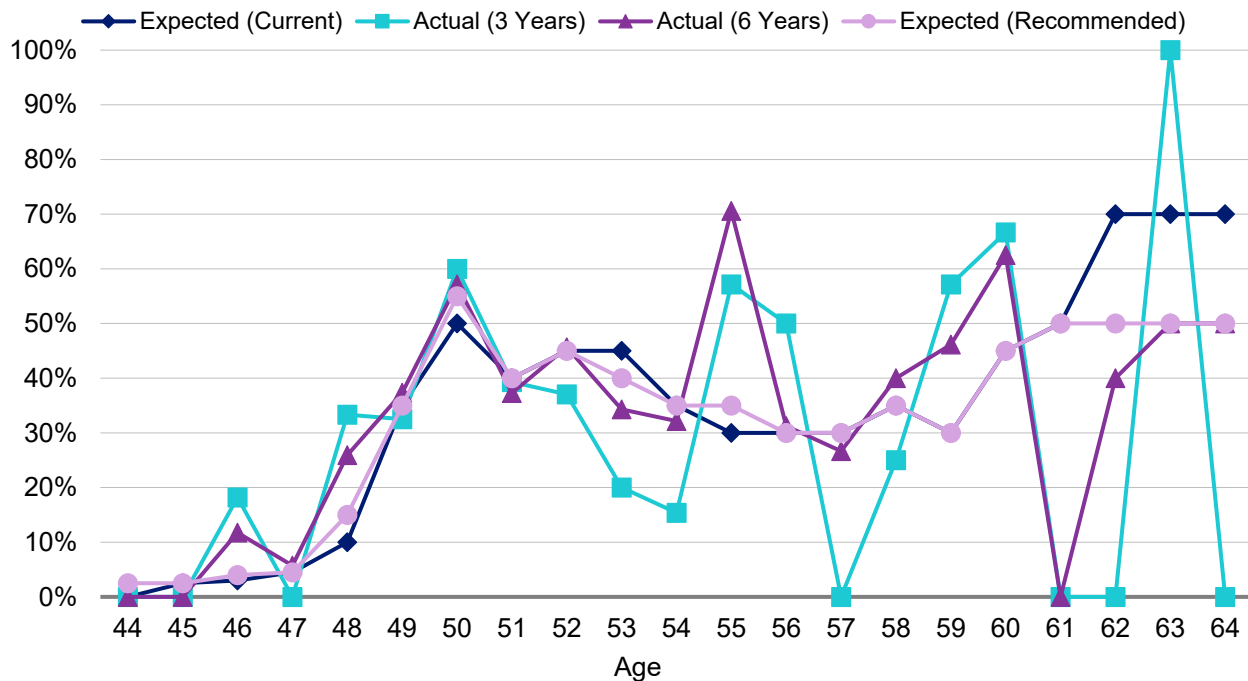


Chart 30: Retirement Rates

Safety Tier 1 and 2 Members with 25 or more Years of Service



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Chart 31: Retirement Rates
Safety Tier 3 Members

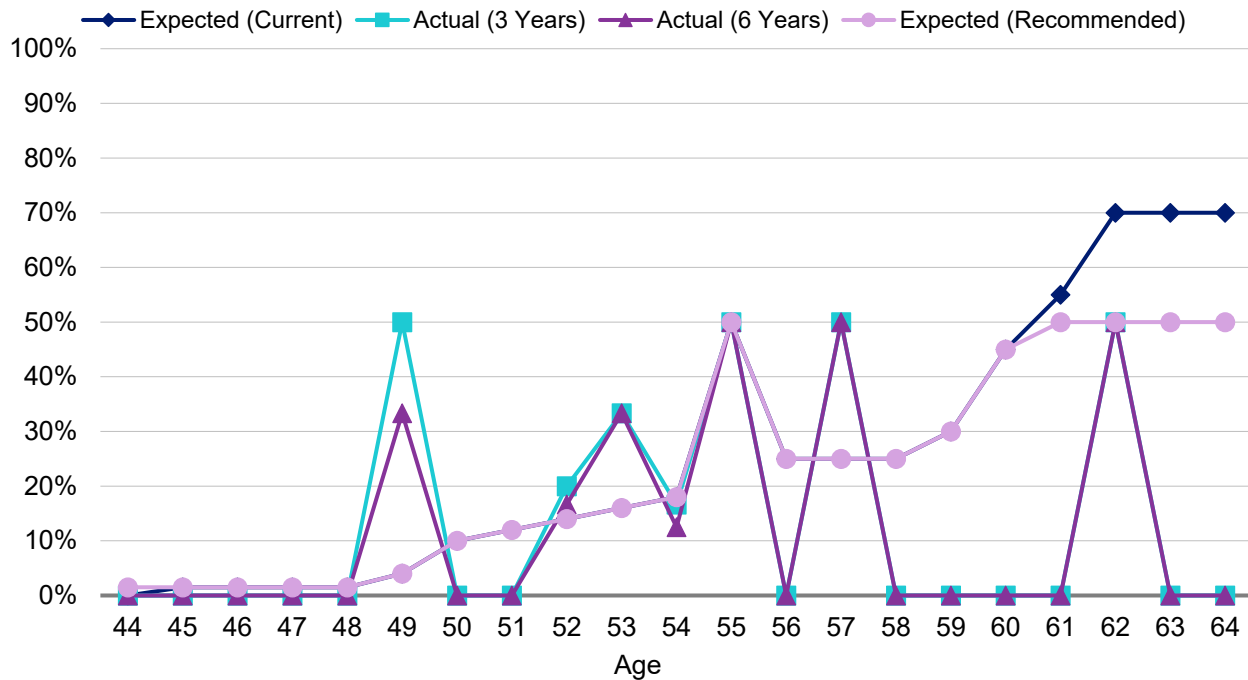
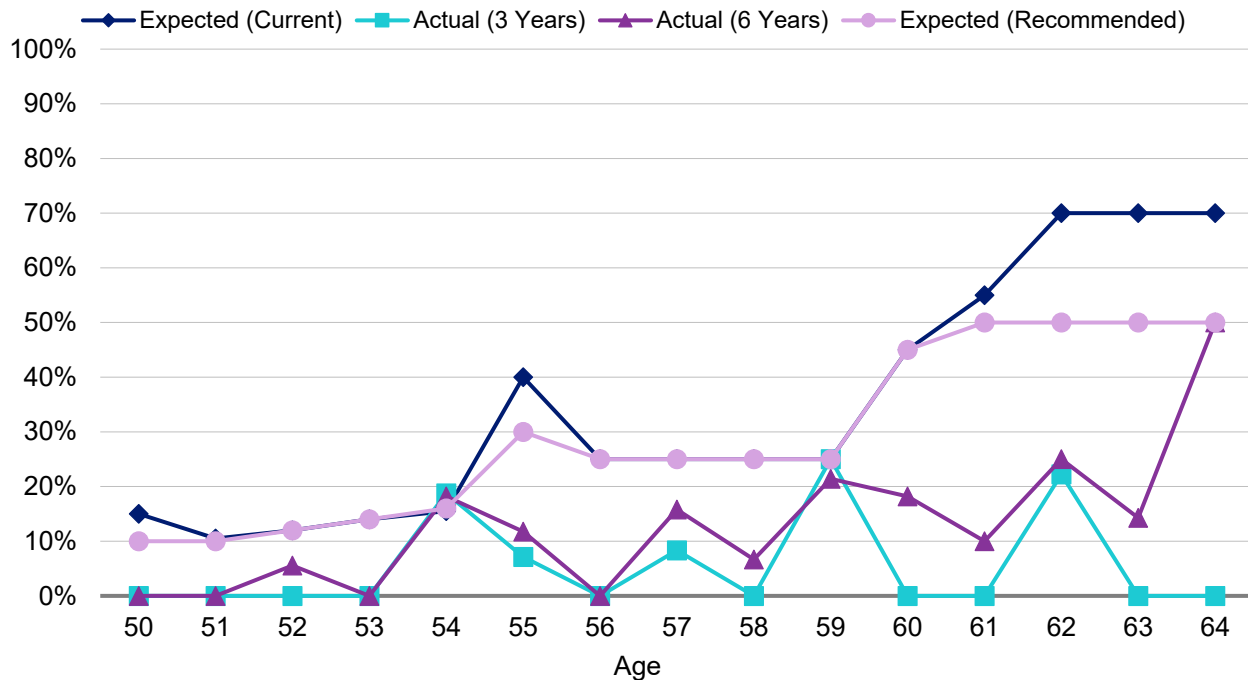
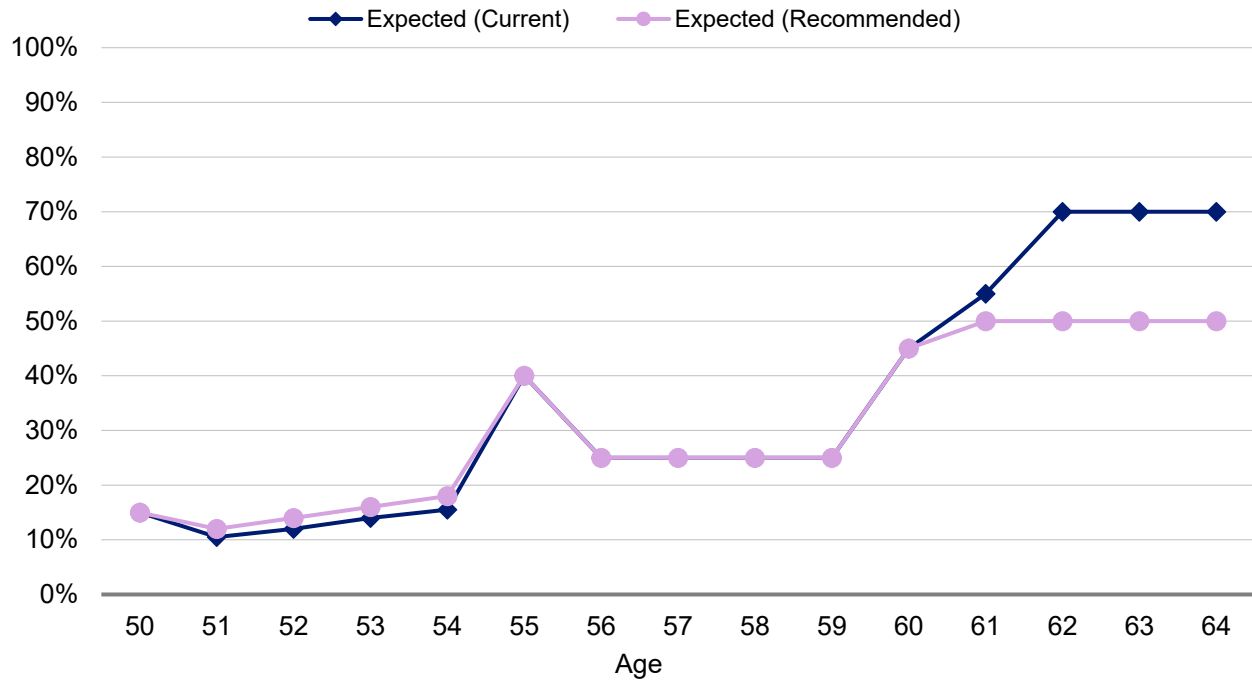


Chart 32: Retirement Rates
Safety Tier 4 Members with less than 25 Years of Service



Section 4: Demographic Assumptions

Chart 33: Retirement Rates
Safety Tier 4 Members with 25 or more Years of Service



Section 4: Demographic Assumptions

F. Service from unused sick leave conversions

At retirement, members can convert their unused sick leave to increase the service credit used in the calculation of their retirement benefit. The actuarial valuation anticipates this additional benefit using an assumption to estimate the proportional increase in service that will occur due to unused sick leave conversions.

We collected information on the actual amount of sick leave converted to service credit for retirees during the three-year period studied. Consistent with the format of the current assumption, the actual converted sick leave was expressed as a percentage of members' total service credit (before using the unused sick leave credit).

The table below shows the actual sick leave converted to service credit as a percentage of total service credit (before including the sick leave converted to service credit) at retirement separately for Miscellaneous and Safety members. Also shown are the current and recommended assumptions. The rates are based on actual experience during the two-year period from July 1, 2023 through June 30, 2025 as well as the five-year period from July 1, 2019 through June 30, 2025, excluding the one-year period from July 1, 2022 through June 30, 2023 due to insufficient data.

Sick Leave Conversion

Line Description	Miscellaneous	Safety
Current assumption	1.50%	2.25%
Actual rate (2 years)	1.32%	1.92%
Actual rate (5 years)	1.33%	2.04%
Recommended assumption	1.50%	2.00%

Based on the data in the above table, we recommend maintaining the sick leave conversion assumption for new non-disabled Miscellaneous retirees and decreasing the sick leave conversion assumption from 2.25% to 2.00% for new non-disabled Safety retirees.

Section 4: Demographic Assumptions

G. Miscellaneous assumptions

Reciprocity

Under the current assumptions, a percentage of future deferred vested members are assumed to be covered by a reciprocal system.

Unlike other assumptions, we do not review only new deferred vested members during the three-year period because there is typically a lag between a member's date of termination and the time that it is known that they are covered by a reciprocal system. Therefore, the following table shows the observed reciprocity percentage based on the actual experience of all deferred vested members as of June 30, 2025. Also shown are the current and recommended assumptions.

Percentage of Inactive Members at Reciprocal System as of June 30, 2025

Line Description	Miscellaneous	Safety
Current assumption	25.0%	35.0%
Actual experience	19.7%	22.6%
Recommended assumption	20.0%	30.0%

We recommend decreasing the reciprocal assumption from 25% to 20% for Miscellaneous members and decreasing the reciprocal assumption from 35% to 30% for Safety members.

Under the current assumptions, we assume reciprocal members will receive annual salary increases from the date of termination to the expected date of retirement based on the ultimate salary increase assumptions for active members.

We recommend maintaining the annual reciprocal salary increase assumption to be the same as the ultimate salary increase assumptions for active members.

Future benefit accruals

Benefits are based on the years of service and compensation earned by the member. In order to project benefits and determine the liabilities, an assumption about the amount of service earned by members each year is necessary.

We recommend maintaining the current assumption that employees accrue 1.0 year of service annually for the full-time employees, and that part-time employees continue their current partial service accrual.

Unreported data for members

When various elements of valuation data are not available, an assumption must be made in order to project benefits and determine liabilities.

Section 4: Demographic Assumptions

The following table shows the gender of active members based on actual experience as of June 30, 2025. Also shown are the current and recommended assumptions for members with unreported gender.

Assumption for Unreported Gender

Line Description	Miscellaneous Male Member	Miscellaneous Female Member	Safety Male Member	Safety Female Member
Current assumption	100.0%	0.0%	100.0%	0.0%
Actual percentage as of June 30, 2025	40.8%	59.2%	74.2%	25.8%
Recommended assumption	0.0%	100.0%	100.0%	0.0%

We recommend updating the assumption for members with unreported gender to assume Miscellaneous members are female and Safety members are male. In addition, beneficiaries are assumed to be the opposite gender of the member.

Form of payment

In prior valuations, it was assumed that all members would select the unmodified option at retirement. Actual experience for recent new retirees shows that around 81% select the unmodified option at retirement.

We recommend maintaining the assumption that all members will elect the unmodified option at retirement.

Percentage with eligible survivor

The value of a member's retirement, disability, or death benefit depends on the percentage of members who are assumed to have an eligible spouse or domestic partner.

The following table shows the observed percentage of new retirees who were reported with an eligible spouse or domestic partner at the time of retirement based on the actual experience over the past three years. Also shown are the current and recommended assumptions.

New Retirees with Eligible Spouse or Domestic Partner who Elected the Unmodified Option

Line Description	Male Member	Female Member
Current assumption	80.0%	60.0%
Actual percentage (three years)	78.5%	55.9%
Recommended assumption	80.0%	60.0%

We recommend maintaining the percentage with eligible survivor assumption for male members at 80% and for female members at 60%.

Section 4: Demographic Assumptions

Eligible survivor age and gender

Since the present value of the survivor's automatic continuance benefit is dependent on the survivor's age and gender, we must also have assumptions for these demographics of the survivor.

The following table shows the member's age as compared to the survivor's age for new retirees who elected the unmodified option with an eligible spouse or domestic partner at the time of retirement based on the actual experience over the past three years. Also shown are the current and recommended assumptions.

Member's Age as Compared to Survivor's Age

Line Description	Male Retiree	Female Retiree
Current assumption	3 years older	2 years younger
Actual average age (three years)	2.4 years older	2.2 years younger
Recommended assumption	3 years older	2 years younger

We recommend maintaining the survivor assumption that male retirees are three years older than their survivor and that female retirees are two years younger than their survivor.

We recommend maintaining the survivor assumption that male retirees have a female survivor, and female retirees have a male survivor. This recommendation is consistent with the actual data for most members as of June 30, 2025, even with the inclusion of domestic partners.

Average entry ages

SCERS members who entered Miscellaneous Tiers 1, 2, 3 and 4 and Safety Tiers 1, 2 and 3 after January 1, 1975 and prior to January 1, 2013 pay member contribution rates based on average entry age of all members in the Miscellaneous or Safety plan. The following table shows the average entry age for Miscellaneous and Safety based on actual experience as of June 30, 2025. Also shown are the current and recommended assumptions.

Entry Age

Line Description	Miscellaneous	Safety
Current assumption	35.0	29.0
Actual average age (as of June 30, 2025)	34.7	29.4
Recommended assumption	35.0	29.0

We recommend maintaining the Miscellaneous and Safety average entry age assumption at age 35 and age 29, respectively.

Section 5: Cost Impact

This section presents the estimated impact of the recommended economic assumptions from *Section 3* and the recommended demographic assumptions from *Section 4*. The cost impact is estimated by recalculating the June 30, 2025 actuarial valuation using the recommended assumptions. The actual impact of the recommended assumptions will be measured as of the June 30, 2026 valuation.

Cost Impact Based on June 30, 2025 Actuarial Valuation (\$ in '000s)

Assumption	Impact on Average Employer Contribution Rates	Impact on Average Member Contribution Rates
Changes in economic assumptions	3.41%	0.91%
Changes in demographic assumptions	(0.74%)	(0.09%)
Total increase in average contribution rate	2.67%	0.82%
Total increase in annual dollar amount³⁵	\$39,423	\$12,258

Assumption	Impact on Funded Status
Increase in UAAL due to changes in economic assumptions	\$527,316
Decrease in UAAL due to changes in demographic assumptions	(115,301)
Total increase in UAAL	\$412,015
Change in funded ratio on AVA basis	(2.3%)

Of the various assumption changes, the most significant rate increase is due to the change in the investment return assumption.

The tables below show the total impact on the employer and average member contribution rates for each cost group due to the recommended assumptions.

Employer Contribution Rate Increases/(Decreases) (% of Payroll)

Plan and Employer	Normal Cost	UAAL	Total	Annual Amount (\$ in '000s) ³⁵
Miscellaneous County	0.68%	1.35%	2.03%	\$19,764
Superior Court	0.85%	1.35%	2.20%	1,553
District	0.79%	1.26%	2.05%	1,002
SacSewer	0.83%	1.78%	2.61%	2,103
Safety County	1.47%	3.47%	4.94%	15,001
All Categories Combined	0.86%	1.81%	2.67%	\$39,423

³⁵ Based on June 30, 2025 projected annual payroll as determined under each set of assumptions.

Section 5: Cost Impact

Average Member Contribution Rate Increases/(Decreases) (% of Payroll)

Plan and Employer	Change
Miscellaneous 50:50 (County, Orangevale)	
Tier 1	1.41%
Tier 2	0.68%
Tier 3	0.83%
Tier 4	0.72%
Tier 5	0.59%
Miscellaneous Court and other Districts	
Tier 1	1.05%
Tier 2	0.31%
Tier 3	0.49%
Tier 5	0.59%
Miscellaneous SacSewer	
Tier 2	0.36%
Tier 3	0.58%
Tier 4	0.80%
Tier 5	0.53%
Safety	
Tier 1	1.87%
Tier 2	1.94%
Tier 3	1.68%
Tier 4	1.12%
All Categories Combined	0.82%

Appendix A: Current Actuarial Assumptions

Economic assumptions

Net investment return

6.75%, net of administrative and investment expenses.

Member contribution crediting rate³⁶

2.50% (assumed rate of inflation), compounded semi-annually.

Inflation

2.50% per year.

Cost-of-Living Adjustment (COLA)

Miscellaneous and Safety Tier 1 benefits are assumed to increase at 2.75% per year (for Tier 1 members with a sufficient COLA bank, withdrawals from the bank are assumed to be made to increase the retiree COLA up to 4% per year).

Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 benefits are assumed to increase at 2.00% per year.

Miscellaneous Tier 2 receive no COLA increases.

Increase in IRC Section 401(a)(17) compensation limit

2.50% per year from the valuation date.

Increase in Section 7522.10 compensation limit

2.50% per year from the valuation date.

Payroll growth

Inflation of 2.50% per year plus “across-the-board” salary increases of 0.25% per year.

³⁶ Current policy is to credit the member contribution account with interest up to the current 5-year Treasury rate, if such earnings are available. However, the difference in earnings between the 5-year Treasury rate and the target crediting rate will be applied to the other valuation reserves so that the overall valuation reserve target crediting rate is maintained at 6.75%.

Appendix A: Current Actuarial Assumptions

Salary Increases

The annual rate of compensation increase includes inflation of 2.50%, “across-the-board” increase of 0.25%, and a merit and promotion increase that varies by service.

Merit and Promotion Salary Increases

Years of Service	Miscellaneous	Safety
Less than 1	6.00%	7.00%
1 – 2	6.00%	6.25%
2 – 3	5.50%	6.00%
3 – 4	5.25%	5.75%
4 – 5	4.25%	5.25%
5 – 6	3.25%	4.25%
6 – 7	2.75%	4.00%
7 – 8	2.50%	3.75%
8 – 9	2.25%	3.50%
9 – 10	2.10%	3.25%
10 – 11	2.00%	3.00%
11 – 12	1.70%	3.00%
12 – 13	1.50%	3.00%
13 – 14	1.50%	3.00%
14 – 15	1.50%	3.00%
15 and over	1.50%	2.75%

Demographic assumptions

Mortality

The Pub-2010 mortality tables and adjustments shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Post-retirement mortality rates

- **Service retirees**

- **Miscellaneous**

- Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with Scale MP-2021.

Appendix A: Current Actuarial Assumptions

- **Safety**
 - Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.
- **Disabled retirees**
 - **Miscellaneous**
 - Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates unadjusted for males and increased by 5% for females, projected generationally with Scale MP-2021.
 - **Safety**
 - Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected generationally with Scale MP-2021.
- **Beneficiaries**
 - **Not currently in pay status**
 - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with Scale MP-2021.
 - **In pay status**
 - Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected generationally with Scale MP-2021.

Pre-retirement mortality rates

- **Miscellaneous**
 - Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.
- **Safety**
 - Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.

Appendix A: Current Actuarial Assumptions

Pre-Retirement Mortality Rates – Before Generational Projection from 2010

Age	Miscellaneous Male	Miscellaneous Female	Safety Male	Safety Female
20	0.04%	0.01%	0.04%	0.01%
25	0.02%	0.01%	0.03%	0.02%
30	0.03%	0.01%	0.04%	0.02%
35	0.04%	0.02%	0.04%	0.03%
40	0.06%	0.03%	0.05%	0.04%
45	0.09%	0.05%	0.07%	0.06%
50	0.13%	0.08%	0.10%	0.08%
55	0.19%	0.11%	0.15%	0.11%
60	0.28%	0.17%	0.23%	0.14%
65	0.41%	0.27%	0.35%	0.20%

Pre-Retirement Death Type

Pre-Retirement Death Type	Miscellaneous	Safety
Service connected	0%	50%
Non-service connected	100%	50%

Mortality rates for member contributions

- **Miscellaneous**

- Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 30 years (from 2010) with Scale MP-2021, weighted 40% male and 60% female.

- **Safety**

- Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 30 years (from 2010) with Scale MP-2021, weighted 75% male and 25% female.

Assumptions for optional form of benefits

A 6.75% per annum interest rate with a 0.00% COLA is used, along with the following mortality assumptions:

- **Miscellaneous service retirees**

- Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with Scale MP-2021, weighted 40% male and 60% female.

Appendix A: Current Actuarial Assumptions

- **Safety service retirees**
 - Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 25 years (from 2010) with Scale MP-2021, weighted 75% male and 25% female.
- **Miscellaneous disabled retirees**
 - Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates unadjusted for males and increased by 5% for females, projected 25 years (from 2010) with Scale MP-2021, weighted 40% male and 60% female.
- **Safety disabled retirees**
 - Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected 25 years (from 2010) with Scale MP-2021, weighted 75% male and 25% female.
- **All Miscellaneous beneficiaries**
 - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with Scale MP-2021, weighted 60% male and 40% female.
- **All Safety beneficiaries**
 - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with Scale MP-2021, weighted 25% male and 75% female.

Disability incidence

Disability Incidence Rates

Age	Miscellaneous	Safety
20	0.000%	0.050%
25	0.006%	0.050%
30	0.016%	0.080%
35	0.038%	0.190%
40	0.080%	0.310%
45	0.160%	0.410%
50	0.212%	0.780%
55	0.268%	1.300%
60	0.330%	1.320%
65	0.470%	0.000%
70	0.670%	0.000%

Appendix A: Current Actuarial Assumptions

Disability Type

Disability Type	Miscellaneous	Safety
Service connected	50%	90%
Non-service connected	50%	10%

Termination

Termination rates are set to zero once a member is eligible and assumed to retire.

Termination Rates from Active Status

Years of Service	Miscellaneous	Safety
Less than 1	13.00%	4.75%
1 – 2	9.50%	4.00%
2 – 3	7.00%	4.00%
3 – 4	5.75%	2.50%
4 – 5	5.50%	2.50%
5 – 6	5.50%	2.50%
6 – 7	5.25%	2.50%
7 – 8	5.00%	2.25%
8 – 9	4.75%	1.25%
9 – 10	4.50%	1.00%
10 – 11	4.25%	1.00%
11 – 12	3.50%	1.00%
12 – 13	3.25%	1.00%
13 – 14	2.75%	1.00%
14 – 15	2.50%	1.00%
15 – 16	2.00%	0.75%
16 – 17	2.00%	0.75%
17 – 18	2.00%	0.75%
18 – 19	2.00%	0.75%
19 – 20	1.75%	0.75%
20 – 21	1.75%	0.00%
21 and over	1.50%	0.00%

Appendix A: Current Actuarial Assumptions

Proportion of Total Terminations Assumed to Elect a Refund of Contributions Upon Termination

Years of Service	Miscellaneous	Safety
Less than 5	45%	45%
5 or more	20%	15%

Assumptions for Current and Future Inactives with a Deferred Benefit

Assumption Type	Miscellaneous	Safety
Retirement age		
Non-reciprocal members, with less than 5 years	70	70
Non-reciprocal members, with 5 or more years	59	52
Reciprocal members	61	55
Reciprocity assumptions		
Future inactives assumed to work for reciprocal employer	25%	35%
Annual salary increases from separation date	4.25%	5.50%

Appendix A: Current Actuarial Assumptions

Retirement Rates

Retirement rates apply to members who are eligible to retire at the age shown.

Retirement Rates — Miscellaneous

Age	Tier 1	Tier 2 and 3 Service < 30	Tier 2 and 3 Service ≥ 30	Tier 4	Tier 5 Service < 30	Tier 5 Service ≥ 30
50	6.00%	2.50%	2.50%	2.50%	0.00%	0.00%
51	4.50%	2.00%	2.00%	2.00%	0.00%	0.00%
52	4.50%	2.00%	2.00%	2.00%	3.50%	4.00%
53	4.50%	2.00%	2.00%	2.00%	1.25%	2.50%
54	5.50%	3.50%	9.00%	2.50%	1.50%	3.00%
55	12.00%	4.50%	12.00%	3.50%	1.75%	3.50%
56	18.00%	5.50%	12.00%	5.00%	2.00%	4.00%
57	18.00%	7.50%	15.00%	6.00%	4.00%	6.00%
58	18.00%	8.00%	20.00%	6.00%	4.50%	6.50%
59	20.00%	8.00%	25.00%	6.00%	4.50%	6.50%
60	28.00%	9.00%	25.00%	7.50%	5.00%	7.00%
61	35.00%	15.00%	30.00%	12.00%	8.00%	11.00%
62	35.00%	20.00%	31.00%	13.00%	10.00%	12.00%
63	35.00%	18.00%	25.00%	12.00%	9.00%	11.00%
64	35.00%	20.00%	25.00%	13.00%	11.00%	13.00%
65	35.00%	30.00%	30.00%	25.00%	22.00%	24.00%
66	40.00%	35.00%	35.00%	21.00%	18.00%	18.00%
67	40.00%	30.00%	30.00%	21.00%	18.00%	18.00%
68	50.00%	30.00%	30.00%	21.00%	21.00%	21.00%
69	60.00%	30.00%	30.00%	23.00%	23.00%	23.00%
70	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
71	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
72	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
73	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
74	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
75 and over	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Appendix A: Current Actuarial Assumptions

Retirement Rates — Safety

Age	Tier 1 and 2 Service < 25	Tier 1 and 2 Service ≥ 25	Tier 3	Tier 4
45	2.50%	2.50%	1.50%	0.00%
46	3.00%	3.00%	1.50%	0.00%
47	4.50%	4.50%	1.50%	0.00%
48	7.00%	10.00%	1.50%	0.00%
49	16.00%	35.00%	4.00%	0.00%
50	25.00%	50.00%	10.00%	15.00%
51	20.00%	40.00%	12.00%	10.50%
52	22.00%	45.00%	14.00%	12.00%
53	16.00%	45.00%	16.00%	14.00%
54	18.00%	35.00%	18.00%	15.50%
55	20.00%	30.00%	50.00%	40.00%
56	20.00%	30.00%	25.00%	25.00%
57	20.00%	30.00%	25.00%	25.00%
58	20.00%	35.00%	25.00%	25.00%
59	30.00%	30.00%	30.00%	25.00%
60	45.00%	45.00%	45.00%	45.00%
61	50.00%	50.00%	55.00%	55.00%
62	70.00%	70.00%	70.00%	70.00%
63	70.00%	70.00%	70.00%	70.00%
64	70.00%	70.00%	70.00%	70.00%
65 and over	100.00%	100.00%	100.00%	100.00%

Appendix A: Current Actuarial Assumptions

Service from unused sick leave conversion

The following assumptions for service converted from unused sick leave as a percentage of service at service (non-disabled) retirement are used:

Sick Leave Conversion

Category	Service (Non-Disabled) Retirement
Miscellaneous	1.50%
Safety	2.25%

Survivor assumptions

Survivor Assumptions for Actives and Inactives

Member Gender	% with Survivor at Retirement or Pre-Retirement Death	Survivor Age	Survivor Gender
Male	80%	3 years younger than member	Female
Female	60%	2 years older than member	Male

Form of payment

All active and inactive members are assumed to elect the unmodified option at retirement.

Unknown data for members

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male. If not provided, salary is assumed to be equal to the average salary of the membership group and tier.

Future benefit accruals

1.0 year of service per year of employment for the full-time employees. Continuation of current partial service accrual for part-time employees.

Appendix B: Recommended Actuarial Assumptions

Economic assumptions

Net investment return

6.50%, net of administrative and investment expenses.

Member contribution crediting rate³⁷

2.50% (assumed rate of inflation), compounded semi-annually.

Inflation

2.50% per year.

Cost-of-Living Adjustment (COLA)

Miscellaneous and Safety Tier 1 benefits are assumed to increase at 2.75% per year (for Tier 1 members with a sufficient COLA bank, withdrawals from the bank are assumed to be made to increase the retiree COLA up to 4% per year).

Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 benefits are assumed to increase at 2.00% per year.

Miscellaneous Tier 2 receive no COLA increases.

Increase in IRC Section 401(a)(17) compensation limit

2.50% per year from the valuation date.

Increase in Section 7522.10 compensation limit

2.50% per year from the valuation date.

Payroll growth

Inflation of 2.50% per year plus “across-the-board” salary increases of 0.25% per year.

³⁷ Current policy is to credit the member contribution account with interest up to the current 5-year Treasury rate, if such earnings are available. However, the difference in earnings between the 5-year Treasury rate and the target crediting rate will be applied to the other valuation reserves so that the overall valuation reserve target crediting rate is maintained at 6.50%.

Appendix B: Recommended Actuarial Assumptions

Salary Increases

The annual rate of compensation increase includes inflation of 2.50%, “across-the-board” increase of 0.25%, and a merit and promotion increase that varies by service.

Merit and Promotion Salary Increases

Years of Service	Miscellaneous Tiers 1, 2, 3 and 4	Miscellaneous Tier 5	Safety Tiers 1, 2 and 3	Safety Tier 4
Less than 1	6.00%	6.00%	7.00%	8.00%
1 – 2	6.00%	6.75%	6.25%	6.50%
2 – 3	5.50%	6.25%	6.00%	6.25%
3 – 4	5.25%	6.00%	5.75%	6.00%
4 – 5	4.25%	5.00%	5.25%	5.50%
5 – 6	3.25%	3.50%	4.25%	4.25%
6 – 7	2.75%	3.25%	4.00%	3.50%
7 – 8	2.50%	3.00%	3.75%	3.50%
8 – 9	2.50%	2.50%	3.50%	3.50%
9 – 10	2.50%	2.50%	3.50%	3.50%
10 – 11	2.25%	2.25%	3.50%	3.50%
11 – 12	2.00%	2.00%	3.25%	3.25%
12 – 13	1.75%	1.75%	3.25%	3.25%
13 – 14	1.75%	1.75%	3.25%	3.25%
14 – 15	1.75%	1.75%	3.25%	3.25%
15 and over	1.75%	1.75%	3.00%	3.00%

Demographic assumptions

Mortality

The Pub-2016 mortality tables and adjustments shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Post-retirement mortality rates

- **Service retirees**

- **Miscellaneous**

- Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected generationally with Scale MP-2021.

Appendix B: Recommended Actuarial Assumptions

- **Safety**
 - Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates unadjusted for males and decreased by 5% for females, projected generationally with Scale MP-2021.
- **Disabled retirees**
 - **Miscellaneous**
 - Pub-2016 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected generationally with Scale MP-2021.
 - **Safety**
 - Pub-2016 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected generationally with Scale MP-2021.
- **Beneficiaries**
 - **Not currently in pay status**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected generationally with Scale MP-2021.
 - **In pay status**
 - Pub-2016 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 15% for females, projected generationally with Scale MP-2021.

Pre-retirement mortality rates

- **Miscellaneous**
 - Pub-2016 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.
- **Safety**
 - Pub-2016 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with Scale MP-2021.

Appendix B: Recommended Actuarial Assumptions

Pre-Retirement Mortality Rates – Before Generational Projection from 2016

Age	Miscellaneous Male	Miscellaneous Female	Safety Male	Safety Female
20	0.03%	0.01%	0.02%	0.01%
25	0.03%	0.01%	0.03%	0.01%
30	0.03%	0.01%	0.04%	0.02%
35	0.04%	0.02%	0.04%	0.03%
40	0.06%	0.04%	0.05%	0.04%
45	0.09%	0.06%	0.07%	0.06%
50	0.13%	0.08%	0.10%	0.09%
55	0.19%	0.12%	0.16%	0.13%
60	0.29%	0.19%	0.27%	0.20%
65	0.44%	0.29%	0.45%	0.32%
70	0.68%	0.46%	0.84%	0.50%

Pre-Retirement Death Type

Pre-Retirement Death Type	Miscellaneous	Safety
Service connected	0%	50%
Non-service connected	100%	50%

Mortality rates for member contributions

- **Miscellaneous**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected 30 years (from 2016) with Scale MP-2021, weighted 40% male and 60% female.
- **Safety**
 - Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates unadjusted for males and decreased by 5% for females, projected 30 years (from 2016) with Scale MP-2021, weighted 75% male and 25% female.

Assumptions for optional form of benefits

A 6.50% per annum interest rate with a 0.00% COLA is used, along with the following mortality assumptions:

- **Miscellaneous service retirees**
 - Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and

Appendix B: Recommended Actuarial Assumptions

females, projected 25 years (from 2016) with Scale MP-2021, weighted 40% male and 60% female.

- **Safety service retirees**

- Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates unadjusted for males and decreased by 5% for females, projected 25 years (from 2016) with Scale MP-2021, weighted 75% male and 25% female.

- **Miscellaneous disabled retirees**

- Pub-2016 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected 25 years (from 2016) with Scale MP-2021, weighted 40% male and 60% female.

- **Safety disabled retirees**

- Pub-2016 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected 25 years (from 2016) with Scale MP-2021, weighted 75% male and 25% female.

- **All Miscellaneous beneficiaries**

- Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected 25 years (from 2016) with Scale MP-2021, weighted 60% male and 40% female.

- **All Safety beneficiaries**

- Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected 25 years (from 2016) with Scale MP-2021, weighted 25% male and 75% female.

Appendix B: Recommended Actuarial Assumptions

Disability incidence

Disability Incidence Rates

Age	Miscellaneous	Safety
20	0.000%	0.050%
25	0.000%	0.050%
30	0.012%	0.140%
35	0.038%	0.290%
40	0.074%	0.410%
45	0.144%	0.510%
50	0.204%	0.910%
55	0.256%	1.660%
60	0.304%	1.520%
65	0.458%	0.480%
70	0.610%	0.000%

Disability Type

Disability Type	Miscellaneous	Safety
Service connected	60%	90%
Non-service connected	40%	10%

Appendix B: Recommended Actuarial Assumptions

Termination

Termination rates are set to zero once a member is eligible and assumed to retire.

Termination Rates from Active Status

Years of Service	Miscellaneous	Safety
Less than 1	14.50%	5.75%
1 – 2	9.50%	4.25%
2 – 3	8.50%	4.00%
3 – 4	6.50%	3.50%
4 – 5	6.25%	2.50%
5 – 6	6.00%	2.50%
6 – 7	5.75%	2.25%
7 – 8	5.50%	2.25%
8 – 9	5.25%	2.25%
9 – 10	4.50%	1.00%
10 – 11	4.25%	1.00%
11 – 12	4.00%	1.00%
12 – 13	3.75%	1.00%
13 – 14	3.00%	1.00%
14 – 15	3.00%	1.00%
15 – 16	2.25%	0.75%
16 – 17	2.25%	0.75%
17 – 18	2.00%	0.75%
18 – 19	2.00%	0.75%
19 – 20	1.75%	0.75%
20 – 21	1.75%	0.00%
21 and over	1.50%	0.00%

Appendix B: Recommended Actuarial Assumptions

Proportion of Total Terminations Assumed to Elect a Refund of Contributions Upon Termination

Years of Service	Miscellaneous	Safety
Less than 5	45%	35%
5 or more	20%	15%

Assumptions for Current and Future Inactives with a Deferred Benefit

Assumption Type	Miscellaneous	Safety
Retirement age		
Non-reciprocal members, with less than 5 years	70	70
Non-reciprocal members, with 5 or more years	59	52
Reciprocal members	61	54
Reciprocity assumptions		
Future inactives assumed to work for reciprocal employer	20%	30%
Annual salary increases from separation date	4.50%	5.75%

Retirement Rates

Retirement rates apply to members who are eligible to retire at the age shown.

Miscellaneous – Retirement Rates

Age	Tier 1	Tiers 2 and 3 Service < 30	Tiers 2 and 3 Service ≥ 30	Tier 4	Tier 5 Service < 30	Tier 5 Service ≥ 30
50	6.00%	2.50%	2.50%	2.50%	0.00%	0.00%
51	4.50%	2.00%	5.00%	2.00%	0.00%	0.00%
52	4.50%	2.00%	5.00%	2.00%	3.00%	4.00%
53	4.50%	2.00%	5.00%	2.00%	1.25%	2.50%
54	5.50%	3.50%	9.00%	2.50%	1.50%	3.00%
55	12.00%	4.50%	12.00%	3.50%	1.75%	3.50%
56	18.00%	5.50%	13.00%	5.00%	2.00%	4.00%
57	18.00%	7.50%	16.00%	6.00%	5.00%	6.00%
58	18.00%	7.50%	22.00%	6.00%	4.00%	6.00%
59	20.00%	8.50%	22.00%	6.00%	5.00%	7.00%
60	28.00%	10.00%	22.00%	7.50%	5.00%	7.00%
61	35.00%	15.00%	32.00%	15.00%	7.00%	11.00%
62	35.00%	20.00%	28.00%	15.00%	9.00%	12.00%
63	35.00%	17.00%	26.00%	15.00%	9.00%	12.00%
64	35.00%	20.00%	26.00%	15.00%	9.00%	12.00%
65	35.00%	27.00%	30.00%	27.00%	20.00%	24.00%

Appendix B: Recommended Actuarial Assumptions

Age	Tier 1	Tiers 2 and 3 Service < 30	Tiers 2 and 3 Service ≥ 30	Tier 4	Tier 5 Service < 30	Tier 5 Service ≥ 30
66	40.00%	30.00%	35.00%	23.00%	18.00%	18.00%
67	40.00%	30.00%	30.00%	23.00%	20.00%	20.00%
68	50.00%	30.00%	30.00%	23.00%	23.00%	23.00%
69	60.00%	30.00%	30.00%	23.00%	23.00%	23.00%
70	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
71	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
72	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
73	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
74	100.00%	30.00%	30.00%	30.00%	30.00%	30.00%
75 and over	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Appendix B: Recommended Actuarial Assumptions

Safety – Retirement Rates

Age	Tiers 1 and 2 Service < 25	Tiers 1 and 2 Service ≥ 25	Tier 3	Tier 4 Service < 25	Tier 4 Service ≥ 25
44	2.50%	2.50%	1.50%	0.00%	0.00%
45	2.50%	2.50%	1.50%	0.00%	0.00%
46	4.00%	4.00%	1.50%	0.00%	0.00%
47	4.50%	4.50%	1.50%	0.00%	0.00%
48	7.50%	15.00%	1.50%	0.00%	0.00%
49	18.00%	35.00%	4.00%	0.00%	0.00%
50	30.00%	55.00%	10.00%	10.00%	15.00%
51	20.00%	40.00%	12.00%	10.00%	12.00%
52	22.00%	45.00%	14.00%	12.00%	14.00%
53	16.00%	40.00%	16.00%	14.00%	16.00%
54	20.00%	35.00%	18.00%	16.00%	18.00%
55	25.00%	35.00%	50.00%	30.00%	40.00%
56	20.00%	30.00%	25.00%	25.00%	25.00%
57	20.00%	30.00%	25.00%	25.00%	25.00%
58	20.00%	35.00%	25.00%	25.00%	25.00%
59	30.00%	30.00%	30.00%	25.00%	25.00%
60	45.00%	45.00%	45.00%	45.00%	45.00%
61	50.00%	50.00%	50.00%	50.00%	50.00%
62	50.00%	50.00%	50.00%	50.00%	50.00%
63	50.00%	50.00%	50.00%	50.00%	50.00%
64	50.00%	50.00%	50.00%	50.00%	50.00%
65 and over	100.00%	100.00%	100.00%	100.00%	100.00%

Appendix B: Recommended Actuarial Assumptions

Service from unused sick leave conversion

The following assumptions for service converted from unused sick leave as a percentage of service at service (non-disabled) retirement are used:

Sick Leave Conversion

Category	Service (Non-Disabled) Retirement
Miscellaneous	1.50%
Safety	2.00%

Survivor assumptions

Survivor Assumptions for Actives and Inactives

Member Gender	% with Survivor at Retirement or Pre-Retirement Death	Survivor Age	Survivor Gender
Male	80%	3 years younger than member	Female
Female	60%	2 years older than member	Male

Form of payment

All active and inactive members are assumed to elect the unmodified option at retirement.

Unknown data for members

Same as those exhibited by members with similar known characteristics. If not specified, Miscellaneous members are assumed to be female and Safety members are assumed to be male. If not provided, salary is assumed to be equal to the average salary of the membership group and tier.

Future benefit accruals

1.0 year of service per year of employment for the full-time employees. Continuation of current partial service accrual for part-time employees.

5991838v5/05750.705

July 30, 2026

Mr. Eric Stern
Chief Executive Officer
Sacramento County Employees' Retirement System
980 9th Street, Suite 1900
Sacramento, CA 95814-2738

**Re: Sacramento County Employees' Retirement System (SCERS)
Hypothetical Phase-in of the Increase in the Unfunded Actuarial Accrued Liability
Contribution Rate due to Changes in Actuarial Assumptions**

Dear Eric:

We have been requested to provide information on a hypothetical two-year and three-year "phase-in" of the increase in the unfunded actuarial accrued liability (UAAL) contribution rate due to changes in actuarial assumptions in our triennial experience study recommending assumptions for the June 30, 2026 valuation. This letter provides an illustration of the phased-in contribution rate and discusses the impact of the phase-in on the ultimate employer contribution rate after the phase-in is over.

Background

We estimated that if all the recommended actuarial assumptions in the upcoming Actuarial Experience Study, including a 6.50% investment return assumption, were to be adopted by the Board of Retirement (Board), the aggregate employer contribution rate would increase by 2.67% of payroll and the aggregate member rate would increase by 0.82% of payroll.

Please note that the discussion in this letter reflects the general practice that, even when changes in employer rates are phased in, changes in the member rates due to assumption changes are not phased in. There are two main reasons for that practice. The principal reason is that, because the phase-in increases the UAAL and the UAAL is funded only by the employer, a phase-in of the member rates would in effect shift cost from the employees to the employers. In addition, because member contribution rates are based solely on normal cost and are unaffected by changes in the UAAL, the cost impact on member rates is generally smaller than the impact on employer rates.

This letter illustrates only a phase-in of the UAAL amortization component of the employer rate increase. In practice, this is usually most of the cost impact. For example, of the 2.67% of rate impact noted above, the UAAL amortization component increased by 1.81%, while the normal cost rate increased by 0.86%.

Another reason to phase in only the changes in the UAAL rate has to do with the fact that, under the California Public Employees' Pension Reform Act of 2013 (CalPEPRA), the normal cost is split 50:50 between the employers and the members. Since, as noted earlier, changes in member rates due to assumption changes are not phased in, it may be considered more consistent with CalPEPRA to exclude the change in employer normal cost from the phase-in as well.

We would advise the Board that phasing in of the employer's contribution rate impact of assumption changes is a common practice both nationally and especially here in California. Some systems routinely phase in such rate changes whenever assumptions are changed and the cost impact is above some threshold amount. Furthermore, guidance on actuarial funding policy from both the California Actuarial Advisory Panel and the Conference of Consulting Actuaries views this as an acceptable practice as long as the phase-in period is no longer than the time until the next experience study, just as is being illustrated here.

Impact of two-year phase-in of only the employer UAAL contribution rate change

For illustration purposes in this letter only, we have assumed that the effect of the changes in actuarial assumptions in the triennial experience study would be to increase the employer's UAAL contribution rate in the June 30, 2026 valuation by 1.35% of payroll for Miscellaneous County and Superior Court, 1.26% of payroll for Districts, 1.78% of payroll for SacSewer, and 3.47% of payroll for Safety County, as estimated based on the June 30, 2025 valuation. Under this scenario, the 1.35%, 1.26%, 1.78%, and 3.47% would be phased in over two years starting with the June 30, 2026 valuation, which establishes the employer and member contribution rates for the 2027/2028 fiscal year. The actual amount phased in would be determined as part of the June 30, 2026 annual valuation.

The following is a general description of how a two-year phase-in would work:

- The portion of the employer contribution to be phased in would be determined one time, as part of the June 30, 2026 valuation. That total fixed amount would not be redetermined in later valuations. In this illustration, that amount is 1.35% of payroll for Miscellaneous County and Superior Court, 1.26% of payroll for Districts, 1.78% of payroll for SacSewer, and 3.47% of payroll for Safety County.
- In the June 30, 2026 valuation, the actual employer contribution rate would immediately increase by the full impact of the change in normal cost. The actual employer contribution rate would also reflect **one half** of the impact of the change in the UAAL amortization rate. In this illustration, that amount is 0.68% of payroll ($1/2 \times 1.35\%$) for Miscellaneous County and Superior Court, 0.63% of payroll for Districts ($1/2 \times 1.26\%$), 0.89% of payroll for SacSewer ($1/2 \times 1.78\%$), and 1.74% of payroll ($1/2 \times 3.47\%$) for Safety County. In other words, the actual employer rates would defer recognition of one-half of the impact by subtracting 0.67% for Miscellaneous County and Superior Court, 0.63% for Districts, 0.89% for SacSewer, and 1.73% for Safety County from the employer rate determined in the June 30, 2026 valuation.

- In the June 30, 2027 valuation, the employer contribution rate would reflect the full impact of the change in UAAL amortization rate shown above, or 1.35% of payroll for Miscellaneous County and Superior Court, 1.26% of payroll for Districts, 1.78% of payroll for SacSewer, and 3.47% of payroll for Safety County. None of the original impact would be deferred and there would be no deduction from the employer rate determined in the June 30, 2027 valuation.

During the phase-in period, the plan is not receiving the full UAAL amortization payments. That means that in the next actuarial valuation, there will be an actuarial loss that will increase the future UAAL and future UAAL contributions. This contribution loss will be amortized and funded over a period of 20 years starting with the actuarial valuation that follows the contribution loss (i.e., following the year of the phased in contribution). In our experience, contribution losses due to phase-ins are usually relatively small and so are not identified separately, but simply become part of “other gains and losses.”

If the Board adopts the two-year phase-in only for the impact on UAAL amortization, the employer contribution rates would immediately increase by the full impact of the change in normal cost. The cumulative increase in **only** the aggregate employer UAAL amortization rates both before and after applying the phase-in is provided in the tables below:

Cost Phase-in Applied Only to UAAL Amortization Rate for Miscellaneous County and Superior Court

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.35%	0.68%
2028 and later	1.35%	1.40%

Cost Phase-in Applied Only to UAAL Amortization Rate for Districts

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.26%	0.63%
2028 and later	1.26%	1.31%

Cost Phase-in Applied Only to UAAL Amortization Rate for SacSewer

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.78%	0.89%
2028 and later	1.78%	1.84%

Cost Phase-in Applied Only to UAAL Amortization Rate for Safety County

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	3.47%	1.74%
2028 and later	3.47%	3.59%

When we then add in the full impact of the change in normal cost, the total increases in the total employer rate¹ would be as follows:

Cost Phase-in Applied Only to UAAL Amortization Rate for Miscellaneous County

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.03%	1.36%
2028 and later	2.03%	2.08%

Cost Phase-in Applied Only to UAAL Amortization Rate for Superior Court

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.20%	1.53%
2028 and later	2.20%	2.25%

Cost Phase-in Applied Only to UAAL Amortization Rate for Districts

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.05%	1.42%
2028 and later	2.05%	2.10%

¹ It is our understanding that, in practice, separate employer rates are paid for each tier. While the UAAL rate to be phased-in for each tier within a cost group would be the same, we would calculate different total employer rates for each tier because of the different normal cost rates.

Cost Phase-in Applied Only to UAAL Amortization Rate for SacSewer

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.61%	1.72%
2028 and later	2.61%	2.67%

Cost Phase-in Applied Only to UAAL Amortization Rate for Safety County

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	4.94%	3.21%
2028 and later	4.94%	5.06%

These tables show that, because of the contribution losses discussed earlier, the rate impact for the second year of the phase-in is somewhat higher than simply adding another one-half of the phased in amount to the contribution rates for the preceding year.

Impact of three-year phase-in of only the employer UAAL contribution rate change

As an alternative, we have shown below the impact of a three-year phase-in of the UAAL amortization rate for the employer. The structure is similar to a two-year phase in, except that one-third of the rate increase will be recognized each year, causing contribution losses in the next two actuarial valuations that will increase the future UAAL and future UAAL contributions.

If the Board adopts the three-year phase-in only for the impact on UAAL amortization, the employer contribution rates would immediately increase by the full impact of the change in normal cost. The cumulative increase in **only** the aggregate employer UAAL amortization rates both before and after applying the phase-in is provided in the tables below:

Cost Phase-in Applied Only to UAAL Amortization Rate for Miscellaneous County and Superior Court

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.35%	0.45%
2028/2029	1.35%	0.96%
2029 and later	1.35%	1.44%

Cost Phase-in Applied Only to UAAL Amortization Rate for Districts

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.26%	0.42%
2028/2029	1.26%	0.90%
2029 and later	1.26%	1.35%

Cost Phase-in Applied Only to UAAL Amortization Rate for SacSewer

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	1.78%	0.59%
2028/2029	1.78%	1.28%
2029 and later	1.78%	1.91%

Cost Phase-in Applied Only to UAAL Amortization Rate for Safety County

Fiscal Year	Cumulative Increase in Employer UAAL Rates without Phase-in	Cumulative Increase in Employer UAAL Rates with Phase-in
2027/2028	3.47%	1.16%
2028/2029	3.47%	2.48%
2029 and later	3.47%	3.72%

When we then add in the full impact of the change in normal cost, the total increases in the total employer rate² would be as follows:

Cost Phase-in Applied Only to UAAL Amortization Rate for Miscellaneous County

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.03%	1.13%
2028/2029	2.03%	1.64%
2029 and later	2.03%	2.12%

² It is our understanding that, in practice, separate employer rates are paid for each tier. While the UAAL rate to be phased-in for each tier within a cost group would be the same, we would calculate different total employer rates for each tier because of the different normal cost rates.

Cost Phase-in Applied Only to UAAL Amortization Rate for Superior Court

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.20%	1.30%
2028/2029	2.20%	1.81%
2029 and later	2.20%	2.29%

Cost Phase-in Applied Only to UAAL Amortization Rate for Districts

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.05%	1.21%
2028/2029	2.05%	1.69%
2029 and later	2.05%	2.14%

Cost Phase-in Applied Only to UAAL Amortization Rate for SacSewer

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	2.61%	1.42%
2028/2029	2.61%	2.11%
2029 and later	2.61%	2.74%

Cost Phase-in Applied Only to UAAL Amortization Rate for Safety County

Fiscal Year	Cumulative Increase in Aggregate Employer Rates without Phase-in	Cumulative Increase in Aggregate Employer Rates with Phase-in
2027/2028	4.94%	2.63%
2028/2029	4.94%	3.95%
2029 and later	4.94%	5.19%

These tables show that, because of the contribution losses discussed earlier, the rate impacts for the second and third years of the phase-in are somewhat higher than simply adding another one-third of the phased-in amount to the contribution rates for the preceding year.

The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions, and we look forward to discussing this with you and your Board.

Sincerely,



Molly Calcagno, ASA, MAAA, EA
Vice President & Consulting Actuary

/elf

cc: Margo Allen

Disclaimer

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County Executive

David Villanueva

**County of Sacramento****Board of Supervisors**

Phillip R. Serna, District 1
Patrick Kennedy, District 2
Rich Desmond, District 3
Rosario Rodriguez, District 4
Pat Hume, District 5

July 31, 2026

VIA E-MAIL

Sacramento County Employees' Retirement System (SCERS)
Attn: Retirement Administrator Eric Stern
980 9th Street, Suite 1900
Sacramento, CA 95814

Subject: Comment Letter on SCERS 2026 Actuarial Assumption Review

Dear Mr. Stern,

The County of Sacramento appreciates the briefing you provided on July 9, 2026, and the opportunity to comment on the Board of Retirement's triennial review of Actuarial Assumptions. It is our understanding that this item will be considered by the Board of Retirement at the August 19, 2026, meeting.

Background

The County understands that the need to review Actuarial Assumptions on a three-year cycle is required by the County's Employee Retirement Law (CERL) and that this process sets key actuarial assumptions, including but not limited to investment return, mortality, salary growth, and retirement experience.

Based on the information provided, we understand that the SCERS actuary is likely to recommend reducing the investment return assumption from the existing 6.75% to 6.50%, which is the most significant actuarial change being deliberated. We understand that while 6.50% is being recommended, 6.75% is also a reasonable option for the Board to adopt. This was demonstrated through the confidence level of SCERS meeting its investment returns over time, which will only increase from 58% to 62% if this change is made.

However, if this change is made, there will be estimated employer contribution increases starting in 2027/28 (starting July 1, 2027) of 2.0% for County Miscellaneous and 4.9% for County Safety as a percentage of payroll. In addition, since the normal cost will increase, this will affect employee

contributions for those who are responsible for 50% of the normal cost of their retirement benefit.

County Views

The County has been supportive in previous actuarial review cycles that lowered actuarial assumptions of investment return for the purpose of avoiding an underfunded pension system. These changes resulted in the lowering from 7.5% to 7.0% starting in 2017 and the subsequent lowering from 7.0% to 6.75% in 2020. We believe these moves have been prudent and contributed greatly to the strong funding of the pension system, which benefits the County as well as our employees.

However, as the discount rate continues to decrease further, each decrease comes at great cost in that the loss of expected investment earnings must be made with increased employer and employee contributions. These proposed increases would occur at a time when the County's revenue is expected to fall short of obligations, a product of both federal reductions and increased costs. Moreover, through the employee lens, these increases coupled with increased health insurance premium costs and higher general inflation serve to erode employee purchasing power—despite Board-authorized salary increases over the next several years.

The County and its employees will be legally obligated to make increased pension contributions if this proposal is adopted by SCERS. While we respect SCERS' ability to lower the discount rate and the tough decision before the Board, we respectfully ask for a pause after more than a decade of lowering investment assumptions. This pause could be used strategically and would allow SCERS to take one of several options in collaboration with employers:

1. **Adopt Contribution Smoothing Policies.** Based on preliminary information shared, SCERS is expected to exceed its 6.75% actuarial investment rate of return for the fiscal year ended June 30, 2026. This is likely to measurably move the plan toward full funding. In previous discussions between the County and SCERS, the concept of a contribution smoothing policy was shared, which could be explored further. While this may not by itself reduce contribution risk, it would reduce funding risk and volatility over time.
2. **Actuarial Peer Review or Audit.** It is common for retirement systems to periodically obtain a peer review or audit. We understand that the last peer review of the SCERS Actuarial Experience Study occurred for the period ended June 30, 2019, and the valuation ended June 30, 2021. An updated peer review or audit may be helpful to confirm the long-term reasonability of the actuarial assumptions presented.

3. **Study lowering the discount rate more slowly.** If a pause is not the path the Board would like to take, we would ask the Board to consider a 6.63% discount rate to be studied. Board materials presented by the SCERS Actuary at the May 20, 2026, meeting demonstrated on Slide 14 indicate that several peer systems use a 6.63% assumption. This would gradually continue the lowering of the discount rate, recognizing the maturity of the pension plan.

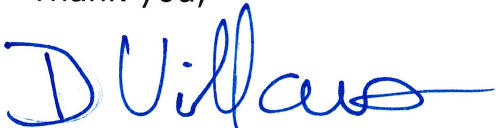
While these items ultimately may not negate the long-term need to lower the discount rate given the maturity of the pension plan, it will ensure that other options are given due consideration, which the County would appreciate.

Closing

We hope that these comments from a major participating employer, representing 85.01% of the System's covered employees, aid the Board's deliberation at the coming meeting.

We are prepared to continue to engage with you and SCERS personnel to ensure the full funding of these critical retirement benefits and ensure long-term sustainability of the system. Should you have questions on this letter, please contact Sylvester Fadal, Deputy County Executive, at (916) 874-4383 or FadalS@saccounty.gov.

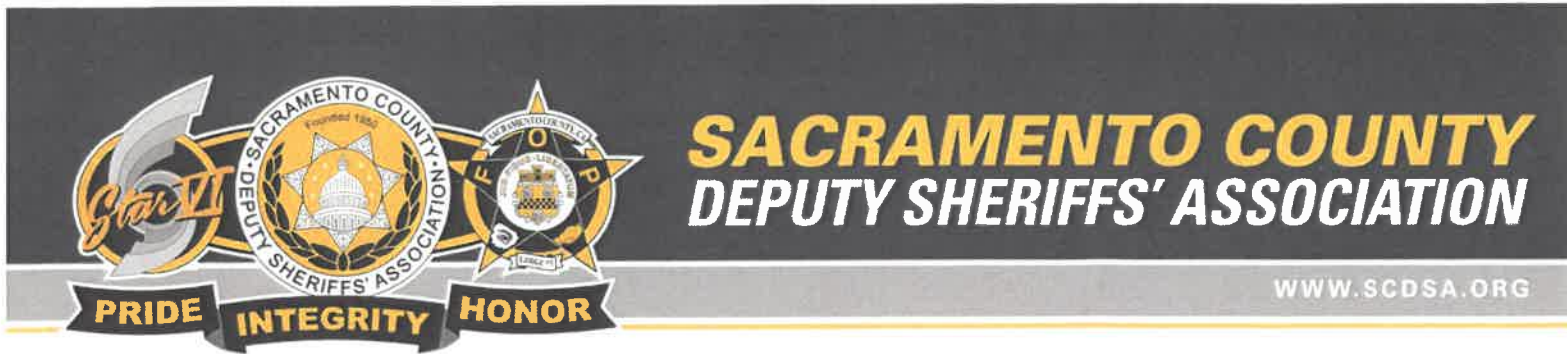
Thank you,



David Villanueva, County Executive
County of Sacramento

Copy:

- Sylvester Fadal, Deputy County Executive
- Amanda Thomas, Chief Fiscal Officer
- Joseph Angelo, Director of Personnel Services



July 27, 2026

Sacramento County Employees' Retirement System
Retirement Board
980 Ninth Street, 19th Floor
Sacramento, CA 95814

RE: Proposed Reduction of the Assumed Rate of Return from 6.75% to 6.50%

Members of the Retirement Board,

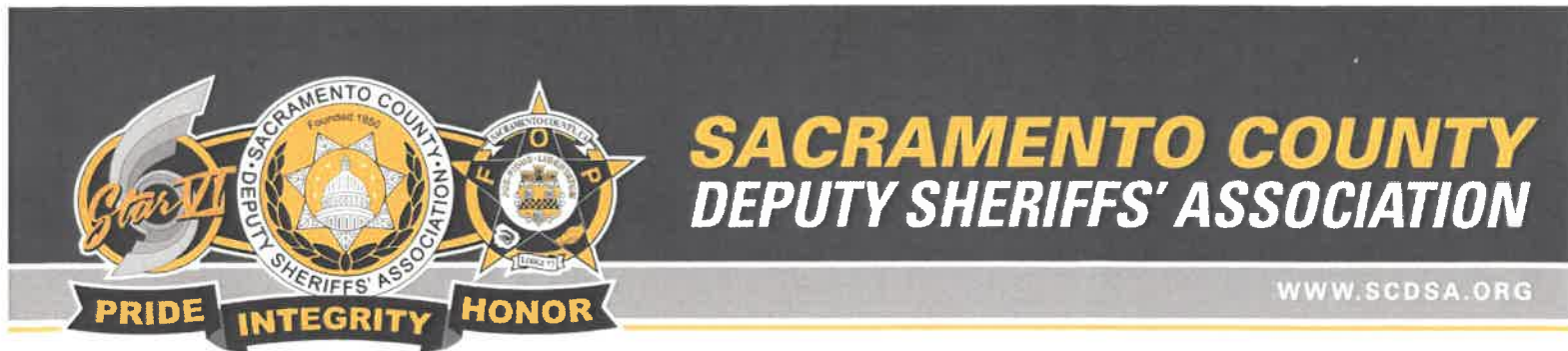
On behalf of the Sacramento County Deputy Sheriffs' Association, I appreciate the opportunity to provide comments regarding the proposed reduction of SCERS' assumed investment return from 6.75 percent to 6.50 percent.

We recognize and respect the Board's fiduciary responsibility to ensure the long-term financial stability of the retirement system. Maintaining a healthy pension system is in the best interest of both employees and employers. However, we have significant concerns regarding the impact this proposal will have on active employees, particularly Tier 2 safety members, who already shoulder one of the highest employee contribution burdens among comparable public safety retirement systems in California. With this proposed increase, we will be asking Tier 2 Safety members to contribute just shy of one quarter of their paychecks to their retirement alone.

Unlike employers, employees don't always have a mechanism to phase in increased normal cost contributions. Any increase is immediate and results in an instant reduction in take-home pay. While the proposal explains that employer increases attributable to unfunded liability may be spread over multiple years to reduce financial impacts, employees often receive no similar protection without labor agreements.

This disparity is especially concerning because Tier 2 employees have already accepted significantly greater pension costs than previous generations of employees as well as the current employees outside that tier. These members entered this career contributing 9% and now are expected to pay over 23% with this proposal. This is a 14-point increase (156%) in a short period of time. Many are already contributing a larger percentage of their salary toward retirement than similarly situated public safety employees throughout California.

The proposal also deserves careful scrutiny because it is not driven by investment underperformance. SCERS has consistently exceeded its assumed rate of return over both the short and long term and is currently approximately 94 percent funded, placing it among the



healthiest public retirement systems in the state. The recommendation instead reflects a more conservative outlook based largely on future market projections and capital market forecasts.

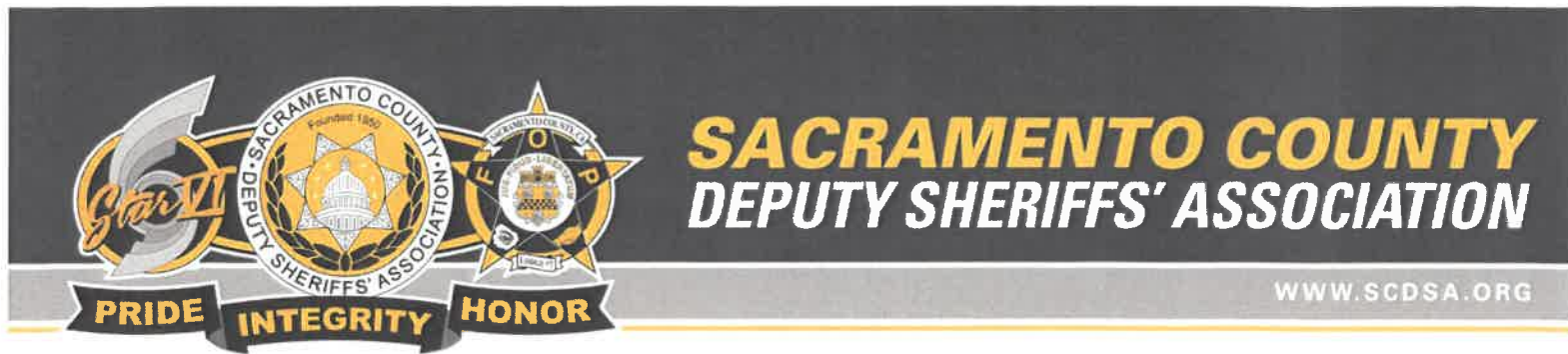
While conservative assumptions have value, there must also be recognition that every reduction in the assumed rate of return transfers adds additional financial responsibility to current employees. Those costs are real, immediate, and recurring, while the underlying justification is based on forecasts that may or may not materialize.

Sacramento County continues to face significant recruitment and retention challenges in public safety. Law enforcement agencies across California compete for qualified candidates in an increasingly limited labor market. Compensation is evaluated as a total package, and retirement contributions directly affect an employee's net earnings. Increasing mandatory employee contributions makes Sacramento County less competitive when many neighboring agencies require substantially lower employee pension contributions. It should also be noted that this board has elected to offer a reduced package to PEPRA employees that almost all other retirement systems do not. I'm of course referring to the removal of regular recurring pay items from the pensionable column. Our members are leaving when they discover this because every county and city that surrounds us offers more benefits for less money out of their pockets. Keeping these employees around can increase income from more people on the job. We currently sit at our lowest staffing levels in my tenure of almost 23 years, and this just makes it harder to recruit and retain good people in this profession.

The Board should also recognize that Safety Tier 4 members have already done exactly what pension reform intended. They contribute more, receive less generous retirement formulas than prior generations, and have accepted greater personal responsibility for funding the retirement system. Asking these employees to absorb yet another increase sends the message that pension reform is never complete and that today's employees will continue to bear an ever-growing share of future funding decisions regardless of the system's overall financial health. Ultimately, where does it stop?

On behalf of our more than 2,000 members, we respectfully request that the Board carefully evaluate whether reducing the assumed investment return is necessary at this time given SCERS' strong funded status and history of exceeding investment expectations.

A retirement system should be financially secure, but it should also remain fair to the employees whose careers sustain it. Long-term stability and workforce sustainability are complementary goals, not competing ones.



Thank you for your consideration and for the opportunity to provide these comments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'N. Seger', is written over a horizontal line.

Nathan Seger, *President*

Sacramento County Deputy Sheriffs' Association

MEMORANDUM

TO: The Sacramento County Employees' Retirement System (SCERS) Retirement Board
FROM: Engineering Technicians and Technical Inspectors (ETTI) Employee Union
SUBJECT: Stakeholder Feedback Concerning Proposed Actuarial Assumption Adjustments

1. Introduction

ETTI gratefully acknowledges the opportunity to submit feedback concerning the Sacramento County Employees' Retirement System's (SCERS) triennial review and the preliminary recommendations presented by its actuary. Specifically, this correspondence addresses the proposal to reduce the assumed long-term investment return (discount rate) from 6.75% to 6.50%. While we comprehend that revising assumptions constitutes a routine element of pension funding governance, we must explicitly state our stance: now is not the appropriate juncture in our current economic environment to propose modifications that will impose additional financial burdens on our members.

2. Immediate Financial Impact on Working Members

The suggested reduction in the discount rate directly incurs an immediate financial obligation for our members. As noted in the SCERS proposal, lowering the investment return assumption necessitates an increase in employee contribution rates, as a larger portion of future costs must be funded through active contributions.

Unlike employer contribution increments—which can be phased over two or three years to attenuate volatility—employee contribution rates are entirely dictated by changes in the normal cost. Consequently, our members face an immediate, unphased hike commencing July 1, 2027, including projected rate increases across various tiers.

In the current economic climate, our members are already managing household budgets amidst broader economic pressures. Deducting a larger portion of their hard-earned earnings to cover normal costs immediately diminishes their take-home pay and imposes an unfair burden on working families.

3. The Robust Current Financial Standing of SCERS

The rationale for extracting additional funds from employees at this time is further undermined by SCERS' own present financial health. As documented in the system's report, SCERS has successfully exceeded its 6.75% investment return assumption over both short-term and long-term periods. Moreover, the system maintains an exceptionally strong funding status of approximately 94%.

While we acknowledge the board's obligation to consider long-term, multi-decade perspectives, it appears counterintuitive to penalize active employees during a challenging national economic environment when the retirement system itself remains financially robust, well-funded, and surpassing its benchmarks.

4. Conclusion and Recommendation

Although independent market forecasts may predict more conservative long-term returns over the next decade, the Union contends that the Retirement Board must weigh these projections against the actual, immediate economic realities confronting the workforce today.

Given that SCERS currently maintains a secure, 94% funded status, there is no urgent crisis necessitating an immediate increase in employee normal contribution rates. We strongly recommend that the Retirement Board retain the current 6.75% discount rate. Now is not the appropriate time to adopt shifting fiscal assumptions that burden our dedicated public servants, who sustain our community's operations, with additional out-of-pocket expenses.

Respectfully,

Martin Bryant

President of ETTI



Kelsey Johnson, President
Bryan Jones, Vice President
Jason Walkup, Secretary
Leonard Orman, Board Member
Justin Hess, Board Member
Vacant, Board Member
(Terms ending 6/2028)

Donald "Reid" Smith, Treasurer
Elvira Fong, Board Member
Colleen Mahlman, Board Member
Blake Sequeira, Board Member
Vanessa Stacholy, Board Member
Michelle Espy, Board Member
(Terms ending 6/2027)

July 29, 2026

SCERS Board
980 9th Street, Suite 1900
Sacramento, CA 95814

Re: Opposition to Proposed Reduction of the Discount Rate from 6.75% to 6.5%

Dear Members of the Board,

I write on behalf of the Sacramento County Management Association (SCMA). SCMA is the recognized employee organization that represents more than 850 Sacramento County employees--civil attorneys and managers in more than 165 unique job classifications. This letter is respectfully submitted to formally oppose the recommendation to lower SCERS' assumed investment return from 6.75% to 6.5%. We support, understand, and respect the Board's fiduciary duty to safeguard the long-term soundness of the fund. That said, we respectfully urge the Board to vote "no" on this recommendation at this time.

The system's current financial standing is strong and does not support this change.

SCERS is currently approximately 94% funded, which is considered strong and healthy. The fund has averaged roughly 8% in investment returns over the past ten years — well above the existing 6.75% assumption. This same reduction was proposed to the Board three years ago and was not adopted; in the years since, without the change, funding still climbed from the low-to-mid 80th percentile to 94%. Nothing in the current actuarial picture suggests the fund is at risk, or will be at risk, before the next triennial review.

The financial burden falls on employees immediately, and cannot be phased in.

Unlike employer rate increases, which SCERS can smooth or phase in over several years, member contribution rates move directly with the normal cost. That means our members would

see a full, unphased **decrease to their paychecks** beginning July 1, 2027, with no transition period. Unlike employer contributions, there is no equivalent cushion for employees.

The timing could not be worse for our members or for the County.

California's cost of living — housing, food, gas, utilities, and medical premiums — has climbed steadily, and for many members any recent salary increases have already been absorbed by these costs. An additional, unphased contribution increase at this moment would create real and avoidable financial hardship for working families. At the same time, the County is already facing significant budget pressure of its own. Adding new employer costs, on top of an existing deficit risks, further cuts to positions and services upon which our communities rely. If SCERS does not move forward with this change, the County may instead realize savings that help protect jobs and services.

SCMA urgently requests the Board:

1. Vote **no** on reducing the discount rate at this time;
2. At minimum, defer any decision until after the next triennial actuarial review, when the data will better show whether this change is truly necessary; and
3. If a change is ultimately deemed necessary in the future, explore ways to phase in any impact to employee contribution rates so members are not asked to absorb the full cost in a single year.

We appreciate the Board's continued diligence in stewarding this system, and we welcome the opportunity to discuss these concerns further before any final decision is made.

Respectfully,



Kelsey Johnson

President, Sacramento County Management Association



SACRAMENTO COUNTY PROBATION ASSOCIATION

8950 Cal Center Drive, Ste. 108
Sacramento, CA 95826

www.sacprobation.org

July 30, 2026

SCERS Board
980 9th Street, Suite 1900
Sacramento, CA 95814

Re: Recommendation to Lower Investment Assumption to 6.5%

Dear SCERS Board,

I write to you on behalf of the Sacramento County Probation Association (SCPA) representing all sworn Sacramento County Assistant Probation Officers, Deputy Probation Officers, Senior Deputy Probation Officers and Supervising Probation Officers.

We fully understand your fiduciary responsibilities. Although we greatly appreciate the work you have done for SCERS to achieve being 94% funded, we must oppose this recommendation to lower the investment assumption from 6.75% to 6.5%.

As stated in the PowerPoint presented to us on July 17, 2026, not only is SCERS 94% funded, the average return rate over the past 10 years has been 8%. SCERS conducts an actuarial every three years, and nothing indicates that the SCERS funding is currently in danger or will be in danger over the next three years. In fact, three years ago this exact recommendation came before the SCERS Board and was thankfully not approved. At that point, SCERS was funded in the 80 percentile and without the change still grew to 94% funded.

Not only is there not a financial necessity to make this change right now, it is also being proposed at one of the worst possible times. The basic cost of living (food, gas, housing, electricity, water etc.) has continued to escalate for our Members. Our Members medical premiums have greatly increased year after year. Any salary increases our Members have earned have been virtually erased. This SCERS proposed increase to our contribution will cause unnecessary and avoidable hardship for our Members already struggling financially.

It must also be noted that Sacramento County Safety Members already pay a significant amount more to our retirement than safety members in CalPERS or other 37 Act Counties. These other safety members find it shocking we already pay over 20%, especially when many of them receive a higher benefit than we do.

In addition to increasing costs for our Members, this change will also increase costs for the County. As you are aware, because of federal law changes, the county faced a significant deficit this fiscal year. The Probation Department was forced to cut 10 Deputy Probation Officer positions. The County is projecting an even greater deficit next year. Placing these unnecessary additional costs onto an already significant deficit will cause the County to cut additional employees and County services. In the presentation it was explained that through the smoothing out process SCERS predicts that the increased employer costs will be offset and the County will remain virtually flat in its contribution amount. But, if SCERS does not move forward with this proposal, the County could experience cost savings that would ease some of the deficit they are facing. This in return could save Members jobs and County services.

It is completely unnecessary for SCERS to make this change effective July 1, 2027. The SCERS Board should wait for the next actuarial in three years and evaluate the recommended change then.

At a minimum it would be both prudent and respectful of the SCERS Board to wait until after the County Budget Hearings in June of 2027 to consider if this change must be implemented before the next actuarial is completed in three years. If the SCERS Board concludes it must, then it can decide at that time to make the change effective July 1st of 2028 or 2029. Again, this is at a minimum as we believe waiting for the next actuarial in three years is the correct course of action.

For these reasons, we respectfully request you vote no on this recommendation.

Respectfully,



Greg Stuber – SCPA President