Public Agenda Item #13

**Consideration of 2024 Pension Experience Study Process and Recommendations – (Action)*

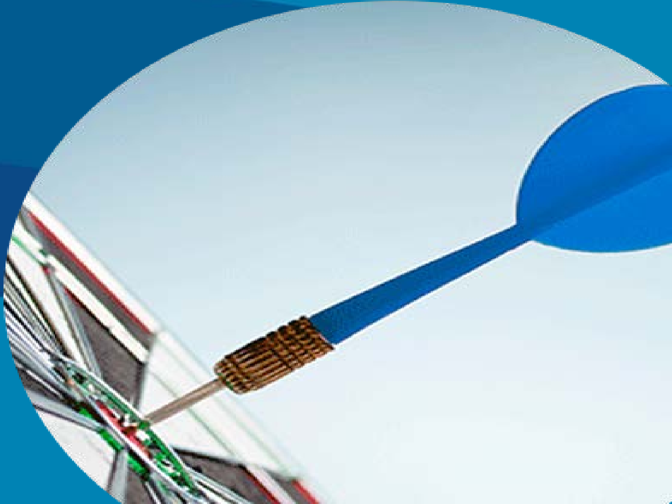
March 20, 2024

Jennifer Chambers, Director of Government Relations and Special Projects
Dana Woolfrey, FSA, EA, MAA, Gabriel, Roeder, Smith & Company
Joseph Newton, FSA, EA, MAA, Gabriel, Roeder, Smith & Company

ERS of Texas
2024 Experience Study

March 20, 2024

Dana Woolfrey, FSA, EA, MAAA
Joseph Newton, FSA, EA, MAAA



Purpose of Experience Study

- Experience study is a regularly scheduled review of the assumptions and methods
  - ERS conducts studies at least every four years based on current statute
- General process for setting assumptions and methods
  - Actuary compares previous year's patterns to what was expected by the current assumptions
  - Actuary uses professional judgement to determine if any deviation is a reliable change in trend to incorporate for future decision making
  - Actuary makes recommendations for new assumptions
  - Board considers actuary's recommendation and makes the final decision for the system

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Big Picture Context - Economics

- Inflation has been high, but is leveling off
- The median return assumption from the National Association of State Retirement Administrators (NASRA) survey has dropped from 7.25% to 7.00% since last experience study.
- However, capital market expectations have increased recently after several years at historically low levels.

Big Picture Context - Demographics

- The pandemic distorted the results for some of the years
- Mortality clearly impacted
- Too early to tell long-term impacts
  - Several competing schools of thought
  - Need time for experience to bear out
- Rule of thumb to not add more risk (assume shorter lifespans) based on recent, uncertain experience
  - Wait for more data

Big Picture Context – Plan Design

- Reform in 2021 Legislative Session changed ERS funding to be actuarially determined
- Group 4 cash balance design eases pressure on assumptions over time
  - Reasonably level accruals over career reduce importance of retirement/termination assumptions
  - Changing investment expectations cause parallel movement in gain sharing expectations
  - Mortality remains important assumption

Summary of Findings

- In general, the current assumption set is reasonable.
- The most meaningful recommendations are:
  - Lower retirement probabilities at younger ages and first eligibility
  - Lower probabilities of disability
  - Slightly increase rates of turnover for LECO and slightly lower for Regular Class hired later in their career
  - Update Judges mortality to reflect “white collar” occupation
  - Increase expected administrative expenses
- Full detail is in the report

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Experience Study Recommendations Impact

As of August 31, 2023 For FY 2024	Employees Retirement System of Texas (ERS)		Law Enforcement and Custodial Officers Supplemental Retirement Fund (LECOSRF)		Judicial Retirement System Plan 2 (JRS 2)	
	Current Assumptions	Proposed Assumptions	Current Assumptions	Proposed Assumptions	Current Assumptions	Proposed Assumptions
Normal Cost Rate*	13.52%	13.52%	2.11%	2.08%	28.24%	29.19%
Unfunded Liability	$14.0 B	$13.7 B	$0 M	($10 M)	($8 M)	$20 M
Funded Ratio	70.8%	71.2%	100.0%	100.6%	101.2%	97.1%
Legacy Payment to Eliminate UAAL by 2054	$385 million	$366 million	NA	NA	NA	NA
Recommended Legacy Payment for Upcoming Biennium	$510 million	$510 million	NA	NA	NA	NA
Are current contributions sufficient?	Yes	Yes	Yes	Yes	Yes	Yes

* Average normal cost rate for all groups, includes administrative expenses

Inside the Actuarial Valuation: Projecting the Liability for Each Member

What is the probability the member reaches retirement?
(Termination assumption)

When will the member retire?
(Retirement assumption)

How much will the benefit be?
(Salary increase assumption)

How long will the benefit be paid?
(Mortality assumption)

Hired at age 30

Retire with annual benefit

Receive benefit for remaining lifetime

What investment earnings will be available to help pay the benefits?

What overall payroll will be available to provide contributions?

How assumptions factor in…

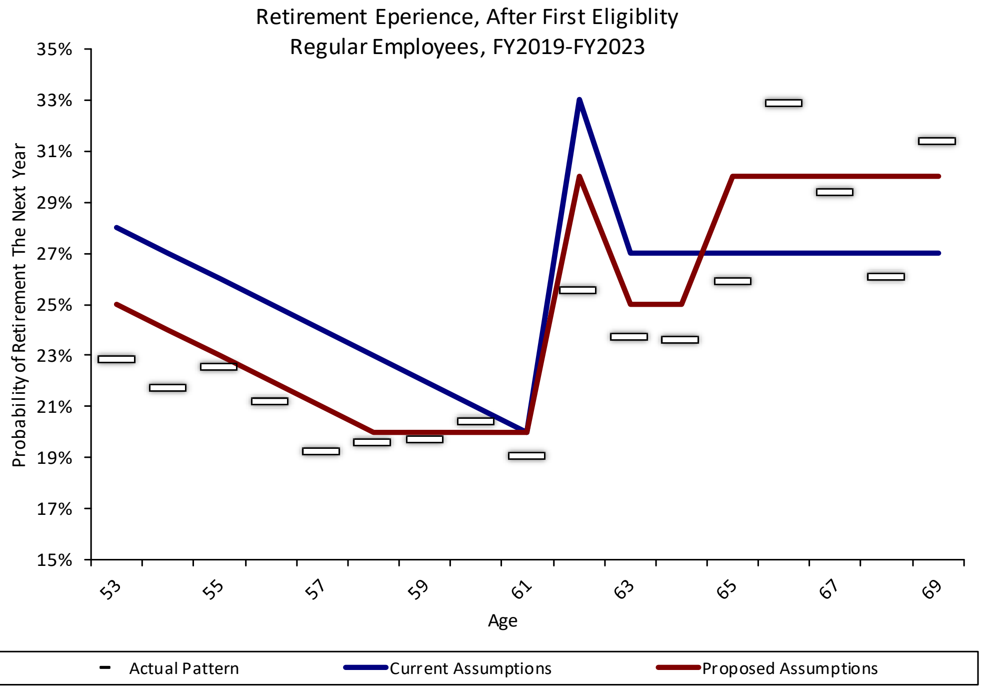
- Over time, the true <u>cost</u> of benefits will be borne out in actual experience
  - Ultimate benefits paid are NOT affected by actuarial assumptions or methods
  - Determined by <u>actual</u> participant behavior (termination, retirement), plan provisions, and <u>actual</u> investment returns
- Assumptions help us develop a reasonable starting point for decision making and budgeting today
- Methods help us set patterns of contributions and how fast the contributions will react to unfolding experience

Actual/Expected

- For an experience study, we determine the actual number of deaths, retirements, etc. that occurred. Then we determine the number expected.
- We then calculate the A/E ratio, where "A" is the actual number and "E" is the expected number.
- If the current assumptions were “perfect”, the A/E ratio would be 100%.
- When there is a variation from this figure, it suggests that a new assumption may be needed.
- We not only look at the assumptions as a whole, but we also review how well they fit the actual results by gender, by age, and by service.

Retirement Experience

- Members have been retiring later
- Especially at First Eligibility, where the current assumption adds 30% to the pattern to the right. The Actual was closer to 10% and thus we have lowered this accordingly



Other Assumption Cleanup

- A/E ratios
  - Termination (>100% conservative)
    - Regular class hired before 35 — 103% -> 103%
    - Regular class hired after 35 — 98% -> 103%
    - LECOS — 112% -> 106%
    - Judges (moved to service based) — 116% -> 111%
  - Disability
    - Lower rates consistent with experience

Economic Assumptions - Inflation

- Current sources of inflation forecasts for the next 10-20 years range from 2.1% to 2.5%
  - 10-Year Breakeven Treasury 2.09%
  - 20-Year Breakeven Treasury 2.37%
  - 30-Year Breakeven Treasury 2.19%
  - Social Security’s Assumption 2.40%
  - 10-Year Federal Reserve Bank of Philadelphia 2.40%
  - 20-Year Federal Reserve Bank of Cleveland 2.33%
  - 20-Year Federal Reserve Bank of St. Louis 2.42%

- We find the current 2.30% to be reasonable

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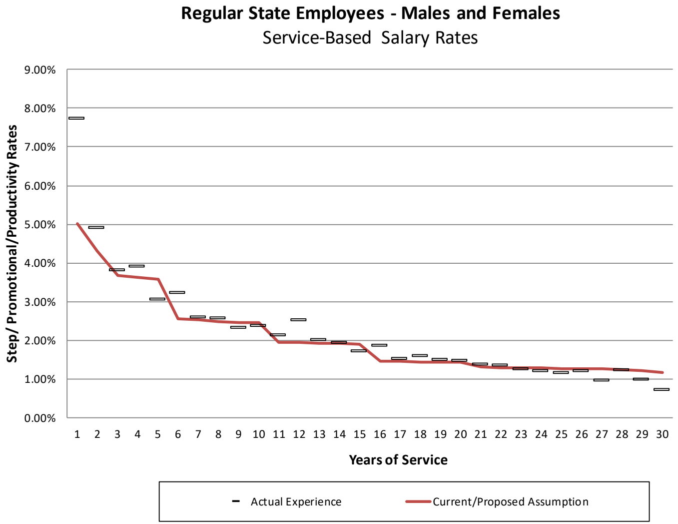
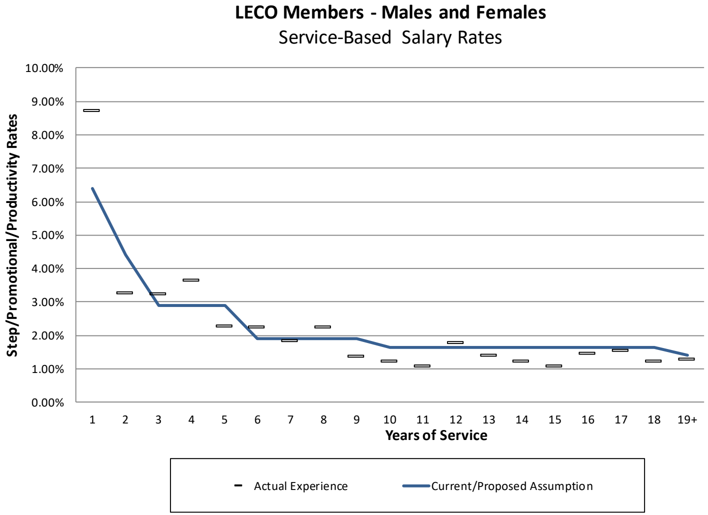
Salary

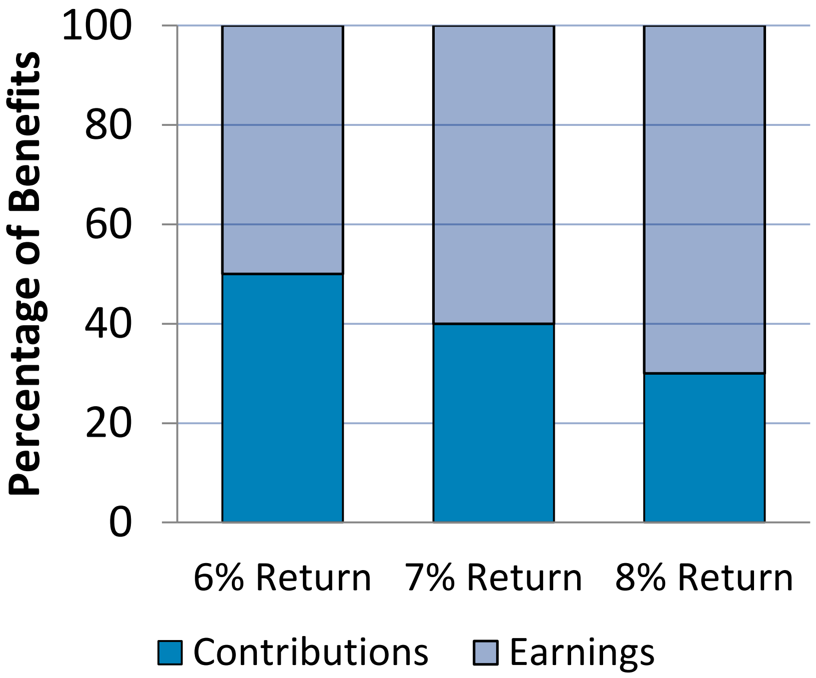
- After adjusting for actual inflation over 10-year study period (2.76%) compared to the assumed inflation (2.30%) merit/promotion component looked to be a good fit for both Regular class and LECOS





Investment Return Assumption

- This assumption is used to predict what percentage of a future benefit payments will be covered by investment return and what percentage by contributions.
- Lower Returns/Higher Contributions



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Investment Return Assumption

- The assumption selected should be reasonable
- Assumption is selected using a process that considers:
  - ERS target asset allocation
  - Capital market expectations
    - Utilize a building block approach that reflects expected inflation, real rates of return, and plan related expenses
    - Take into account the volatility of the expected returns produced by the investment portfolio
- Other factors to consider
  - Historical investment performance
  - Comparison with peers

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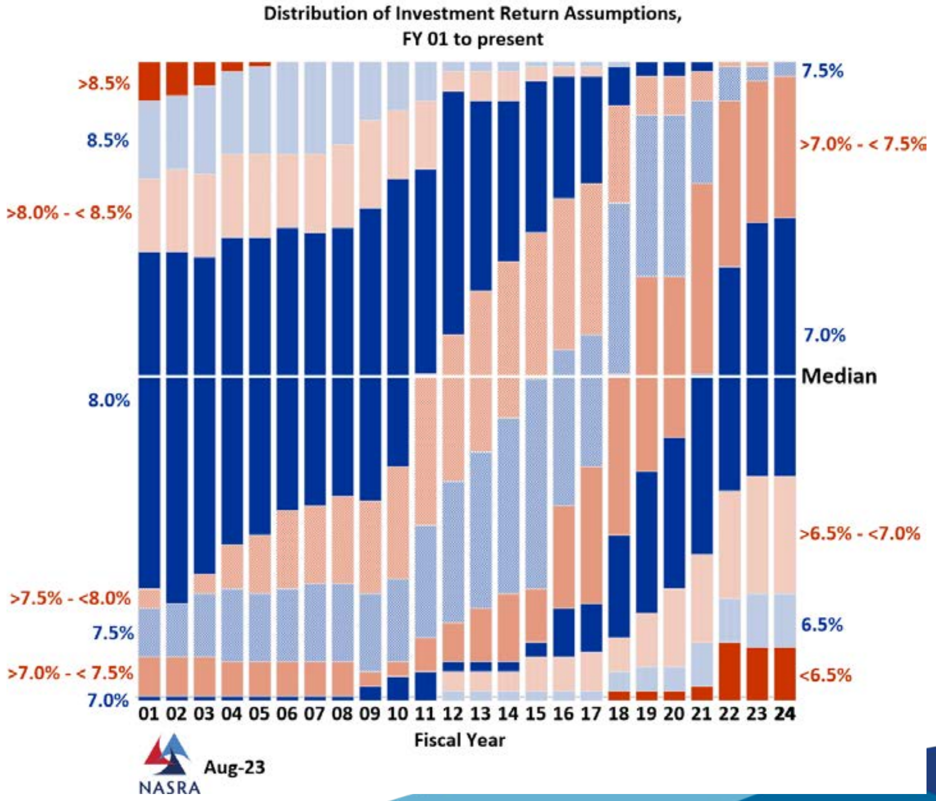
Investment Return Assumption –National Trends



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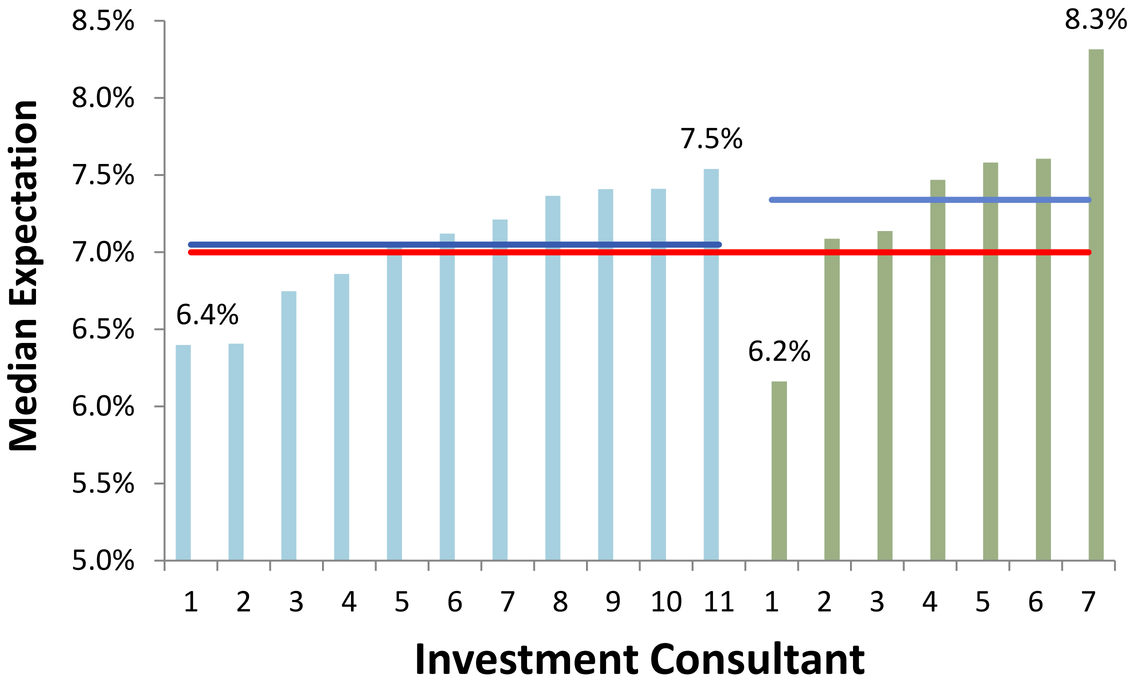
GRS Survey of Investment Consultants

- We analyzed the current asset allocation
- Projected real returns were developed using ERS Long-Term Target Asset Allocation and current capital market return assumptions
  - GRS Survey of 11 investment consulting firms

GRS Survey:
Distribution of Forward-Looking Returns Expectations



NEPC's expectations for ERS were 6.47% over shorter term and 7.59% over longer term. Implies a mid-term (20 year) expectation of 6.47% ... 7.03%.

Recommendation

- We find the current 7.00% to be reasonable
- Per GRS' survey, the expectations for ERS based on current capital market projections:

	Expected Return	Probability of achieving at least 7.0%
10 Year Period	7.05%	50.5%
30 Year Period	7.34%	53.3%

- If assume the $510 million Legacy Payments continue, the necessary average annual return is 6.61% to be fully funded by 2054
  - 62% probability based on current survey expectations

Discussion and Next Steps

- The Board needs to adopt a new set of assumptions to be used in the August 31, 2024 valuations and 2025 Legislative Session

Actuary’s Qualifications

- We believe the recommended set of actuarial assumptions should present a more accurate portrayal of ERS’s financial condition and should reduce the magnitude of future experience gains and losses.
- The study was conducted in accordance with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board
- Dana and Joe meet the Qualification Standards of the American Academy of Actuaries

Discussion

Action Item