Preliminary Demographic Experience Study Results



Presentation to: LEOFF Plan 2 Retirement Board





Today's Presentation

- Preview of preliminary results from our current demographic experience study
- No action required at today's meeting



What Is An Experience Study?

- Review of current assumptions
 - How do they compare with actual experience?
 - Do they need to change?
- Assumptions help us estimate
 - When benefits are paid
 - How much is paid
 - How long they're paid
- Those estimates inform contribution rate and funded status calculations

How Often Do We Perform Them?

- Economic experience studies
 - Performed every two years
 - Last performed in 2017
- Demographic experience studies
 - Performed at least once every six years
 - Last performed in 2014



Why Do We Perform Them?

- Things change
- Ensure assumptions remain reasonable
 - Reasonable assumptions contribute to reasonable funding
- Important part of systematic actuarial funding
- Risk management

How Do We Perform Them?

- They're data driven
 - Over 20 years of experience in some cases
- They also involve professional judgment
 - Past not always the best predictor of future
- Because they involve professional judgment and expertise
 - You hire an actuary to perform studies and certify work
 - You hire an outside actuary to review reasonableness



Why Are The Results Preliminary?

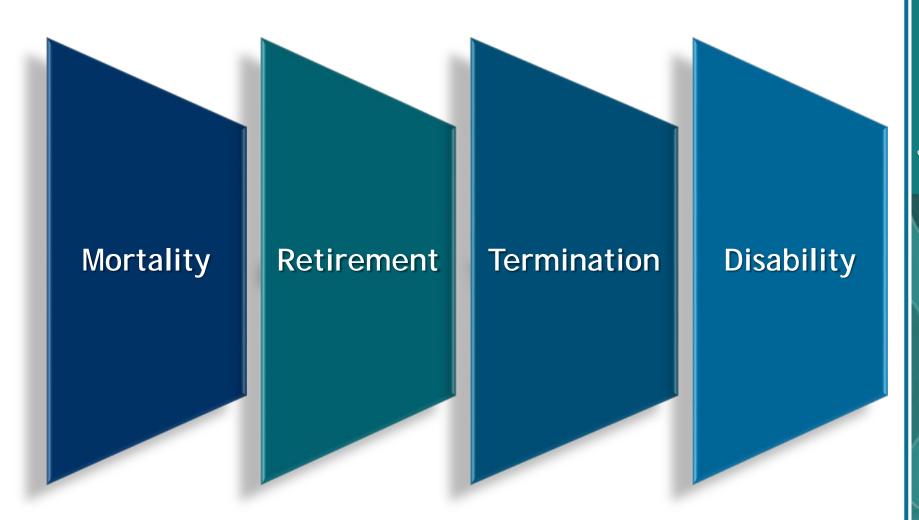
- The study is still in progress
- We don't expect to complete the work until 2019
- The work will be reviewed by an outside actuary hired by the PFC and the results may change

When Will The New Assumptions Impact Contribution Rates?

- The new assumptions will first impact contribution rates calculated and adopted in 2020
- Rates adopted in 2020 will be collected during 2021-23



What Have We Studied Thus Far?



Definitions

Mortality

Estimate how long members will live and receive pension

Retirement

Estimate when members will retire and begin receiving pension

Termination

Estimate when members exit the system (i.e., quit, get fired, change systems, etc.) and either withdraw from the system or collect a deferred pension when eligible

Disability

Estimate when members experience a disability and elect to receive a disability pension benefit

A Quick Technical Note

- We model the payment of a member's Defined Benefit (DB)
- A Plan 3 member that retires or experiences a disability may elect to retire from the Defined Contribution portion of Plan 3 and defer commencement of their DB pension
- If they decide to defer commencement of their DB, they are considered to terminate under our valuation model

What Have We Observed Thus Far?

- Members are continuing to live longer, but at a slightly lower annual rate of improvement than expected
- Members are continuing to defer retirement
 - Especially at ages prior to normal retirement for PERS/TRS/SERS
- We continue to see lower rates of disability than expected
- Differences in plan design are beginning to drive different behavior
 - Later retirement and higher termination rates in Plan 3 than Plan 2
 - Higher rates of disability in Plan 2 than Plan 3
- Material percentage of PERS/TRS/SERS Plan 2 and Plan 3 members that are eligible to retire leave employment (terminate) and defer commencement of their pension

Planned Assumption Updates

- Lower the annual rate of projected mortality improvement by about 0.2%/0.5% at most post-retirement ages for females/males
- Move rates of retirement, termination and disability closer to observed experience
- Establish separate rates of retirement, termination and disability for Plan 2 and Plan 3
- Establish new rates of termination for members eligible to retire in PERS/TRS/SERS/PSERS



What's The Expected Impact Of These Updates?

- Not yet determined
- Work still in progress, subject to future audit and change
- However, we expect the impacts to be much smaller than the last demographic experience study

Next Steps For The Study

Study new national public plan mortality tables when finalized

Study service-based salary increase assumptions

Complete the study of other miscellaneous demographic assumptions

Work with outside actuary to complete audit of our work

Finalize study, contribution rate and budget impacts

Questions?

