



# **Actuarial Audit Update**

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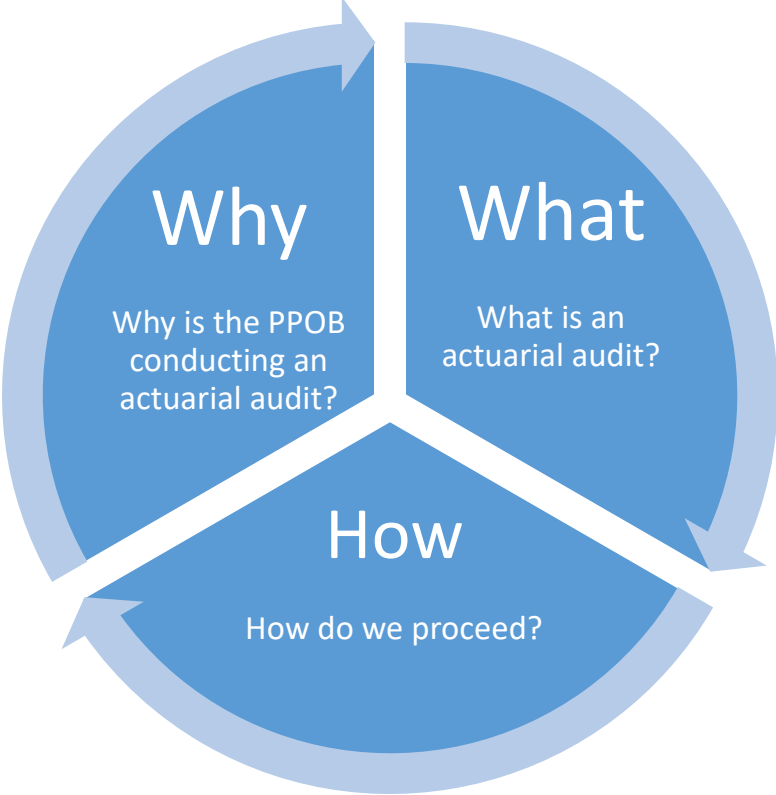
**Public Pension Oversight Board**

**LRC Staff**

**October 19, 2021**

# Actuarial Audit 2021

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# Why?

## Statutory Duty

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- House Bill 238 (RS 2016) codified as KRS 7A.250
  - Actuarial Audit
    - Mandatory
    - Every 5 years
    - Evaluate the reliability of each system's actuarial assumptions and methods
  - Funding pursuant to KRS 7A.240
    - To be paid by the state-administered retirement systems to the LRC
    - Included in administrative budget of the systems



# What is an Actuarial Audit?

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- Each system retains a ***consulting actuary*** to perform an actuarial valuation each fiscal year.
- An actuarial audit involves engaging an outside actuary or ***reviewing actuary*** to evaluate the work of the retirement system's ***consulting actuary***.
- An actuarial audit is **NOT**:
  - A financial statement audit, as conducted by a CPA or the Auditor of Public Accounts
  - A forensic audit, such as those conducted to investigate public companies, probe investments, bank statements, etc.
  - An operational or management audit to analyze administrative expenses

# Actuarial Audit

## Actuarial Assumptions

Economic  
Non-Economic/Demographic  
Health Insurance

## Actuarial Methods

Amortization  
Asset Smoothing

## Actuarial Valuation Replication

Total Liability  
Funding Level  
Depends on Level of Audit\*

## Actuarial Process

Standards of Practice  
Reporting  
Board Presentation and Advice

Reasonable  
Consistent  
Accurate  
Calculations  
Match\*



# Three Levels of Actuarial Audit

<i>SCOPE OF REVIEW</i>	<b>LEVEL 1 Full Scope</b>	<b>LEVEL 2 Limited Scope</b>	<b>LEVEL 3 Basic</b>
Examines consulting actuary's valuation reports, experience studies, CAFR, other data, and may dialogue with actuary and staff	✓	✓	✓
Examines actuarial methods, procedures, and assumptions	✓	✓	✓
Uses same data, assumptions, methods, calculations, and experience used by consulting actuary	✓	✓	
Uses sample of system's member data to test valuation		✓	
Replicates original actuarial valuation using member data as received by consulting actuary	✓		
Demonstrates degree to which audit deviates from valuation (i.e. 100% match or less)	✓	✓	
Offers opinion on whether valuation is reasonable consistent, and accurate	✓	✓	✓



# Previous Actuarial Audits of the State-Administered Retirement Systems

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- Generally conducted every 10 years
- Kentucky Retirement Systems
  - 2019-2020
  - The Segal Group
  - June 30, 2019 Actuarial Valuation and 2014-2018 Experience Study
  - Limited Scope
  - \$97.5 K\*
- Teachers' Retirement System
  - 2015
  - The Segal Group
  - June 30, 2014 Actuarial Valuation
  - Full Scope
  - \$95 K\*

\*Based on publicly available contracts stating not-to-exceed fees for services.



# How?

## In a perfect world...

- LRC (on behalf of PPOB) contracts with a firm (Reviewing Actuary) to conduct a Level 1, full-scope actuarial audit of 3 multi-plan, multi-tiered state-administered systems
- Reviewing Actuary receives from each retirement system and from each of the systems' consulting actuaries all pertinent data necessary to conduct an audit, for example:
  - Plan provisions
  - Member data
  - Asset information
  - Actuarial valuation reports with underlying data
  - Experience study reports with underlying data
- Reviewing Actuary is able to:
  - Match calculations of systems' actuaries, and
  - Confirm that each system's actuary's assumptions and methods are reasonable, consistent, and accurate
- Reviewing Actuary submits preliminary report to LRC/retirement system staff
- Reviewing Actuary presents final report to Public Pension Oversight Board





# How?

## Request for Information

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- Part of the procurement process
- Issued prior to a RFP, RFQ, or other procurement step
- Explains the task without a narrow scope of work
- Seeks proposed solutions for how to accomplish the task
- Informational only.
  - Does not obligate contracting entity (LRC) to conduct a RFP, solicitation, or purchase
  - LRC not financially responsible for any cost associated with responses
  - Permits greater public discussion (i.e. before the PPOB)
- Provides the contracting entity (LRC) with a pool of interested firms
- Offers answers/solutions to assist contracting entity (LRC) tailor the final scope of work



# How?

## Responses to RFI

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- Interested firms respond with no specific bid, but may provide:
  - Answers to contracting entity's inquiries
  - Alternate solutions (either/both)
  - Discussion of matters unique to contracting entity
  - Qualifications necessary to accomplish task
  - Number of staff required to complete task along with titles
  - Prior experience with similar tasks
  - Estimated time to accomplish task
  - Estimated cost for the type of task



# RFI for PPOB Actuarial Audit

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- Introduction, Background Information
- What scope of actuarial audit recommended?
  - Level 1 (Full scope, replication)
  - Level 2 (Limited scope, sampling)
  - Level 3 or other proposal?
- How to conduct an actuarial audit of three (3) systems?
  - Other issues unique to the Kentucky state-administered retirement systems
- Level of independence (i.e. prior service to systems)
- Structure of the audit process (i.e. it's not a perfect world)
- Qualifications necessary to conduct the actuarial audit
- Estimated time (within six months or less)
- Estimated number of actuaries/staff (primary, secondary, other)
- Estimated cost

**Questions?**

