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GRS PERSPECTIVES

Understanding Actuarial Audits: Important Due Diligence for Plan Fiduciaries

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Introduction

Public sector Defined Benefit (DB) retirement plans have faced heightened focus for many years. Continued increased attention on public DB retirement plans highlights the importance and critical role of a retirement board's governance and the due diligence of its retirement plan.

The key trends driving this focus include:

- The aging of the U.S. population and a growing concern regarding financial security in retirement;
- Some criticism of public sector retirement plans by think tanks and other ideological organizations; and
- Declining tax revenue growth and reductions in state and federal revenue sharing leading to increased pressure on governmental budgets.

Importantly, the outlook for public sector DB plans has grown more optimistic for several reasons:

- Since 2022, strong investment returns have led to an increase in funded status and a decrease in contribution requirements for many plans;
- In order to encourage employee retention, employers are considering reopening pension plans that previously closed or offering plans for the first time; and
- An increased interest in alternative investments, which encompass a range of assets such as private equity, private debt and real estate, has provided plan sponsors with other options to diversify plans' investment portfolios.

Public sector retirement plan governance is a responsibility shared by several stakeholders, but primarily attended to by the retirement plan board of trustees. The board of trustees are fiduciaries tasked primarily with retirement plan administration. With the continued heightened focus on public plans, there is a crucial awareness of the need for due diligence on the part of retirement plan trustees in performing their fiduciary duties. Trustees have a duty to prudently select plan service providers and to monitor the quality of their work.

As one of those plan service providers, actuaries are responsible for setting assumptions regarding the future behavior of plan members and investment performance. Those assumptions are used to measure plan liabilities and determine the contributions necessary for the plan to keep the benefit promises made to members. Most plans have actuarial valuations performed annually, in which the plan's funding progress is measured and reported. Periodically, the actuary will perform an experience study to assess and update plan assumptions based on past and anticipated future plan experience. Beyond these two important functions, a third report

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– an actuarial audit – should periodically be considered by the board of trustees.

This article discusses actuarial audits as a due diligence tool for plan trustees to help manage retirement plan risk. High quality actuarial work is vital to ensure the long-term financial solvency and sustainability of a retirement plan. Conversely, low quality actuarial work can undermine a plan's financial security in a relatively short time period when left undiscovered.

What is an Actuarial Audit?

An actuarial audit is the scrutiny of one actuary's work by another qualified actuary. The goal is to ensure that: 1) actuarial valuations are performed correctly; 2) the methods and assumptions used are reasonable; and 3) the advice given is reasonable. Actuarial audits provide assurance to plan trustees and other interested parties that the financial condition of the plan is accurate, as stated by the plan's actuary.

How Often Should Actuarial Audits Be Performed?

The Government Finance Officers Association (GFOA) recommends that actuarial audits be conducted at least every five years unless there is a change in actuary.[1] In some plans, audits are performed regularly based on the retirement board's policy or state law. In other plans, they are performed when heightened risk appears in the financial structure of the plan.

Some examples of heightened risk in the financial structure of a retirement plan include:

- Retired life liabilities being less than fully funded with no significant progress toward full funding;
- A protracted period of decline in the funded ratio or increases in computed contributions without adequate explanation; and
- An inconsistent relationship among the various valuation assumptions (sometimes difficult for a non-actuary to notice).

What are the Benefits of an Actuarial Audit?

The outcome of the actuarial audit reveals whether the procedures used in the actuarial valuations of the plan are technically sound and if plan objectives are being met. Equally important, this type of review can help to generate a sense of security among those concerned with plan financing. The value of such knowledge may make the cost of the audit incidental.

The audit process itself should facilitate conversation between the retained actuary, the auditing actuary, and those responsible for managing the plan. In addition to being an opportunity to discuss areas for improvement in the actuarial work being done for the plan, an audit can be educational for all involved. Dialogue with a second qualified actuary can help plan administrators gain a deeper understanding of the plan since the audit process often allows for a different perspective on the plan than the annual valuation.

Of course, if the advice a plan has been receiving is inaccurate or inappropriate, the actuarial audit should bring this to light so that remedial action can be initiated. Nevertheless, dialogue between the two actuarial teams and plan administrators is critical since what may appear to be incorrect could have justification that simply is not immediately obvious.

What are the Different Types of Actuarial Audits?

There are different types of actuarial audits that can be classified depending upon the level of audit desired. The types of actuarial audits are described below as Levels One through Three (with Level One being the most comprehensive and Level Three being the least comprehensive).

[1] GFOA Best Practices Procuring Actuarial Services are available at: https://www.gfoa.org/materials/procuring-actuarial-services

TYPES OF ACTUARIAL AUDITS
Level One Audit A complete actuarial valuation of the plan based on the same census data, assumptions and actuarial methods used by the plan's actuary
Level Two Audit A review of the plan's actuarial reports and testing of valuation results using a sample of individuals included in the valuation
Level Three Audit A review of the previous actuarial valuation, including dialogue with the retained actuary and plan representatives, and a presentation of findings

Level One

A Level One audit is a complete actuarial valuation of the plan based on the same census data, assumptions, and actuarial methods used by the plan's actuary. The goal is to replicate the results of the most recent valuation, which is why the Level One audit is often referred to as a full replication audit. Generally, there is some testing of plan experience as part of the review, and also dialogue among the retirement plan representatives, the retained actuary, and the reviewing actuary. A detailed report and presentation of the findings in a meeting with plan representatives is standard.

Level Two

A Level Two audit includes a review of the actuarial reports of the plan and a test of the valuation results using a mathematical model of plan activity or sampling (as opposed to performing a complete replication of the retained actuary's valuation of the plan). As in a Level One audit, there is dialogue with the plan's actuary and plan representatives. A detailed report and presentation of the findings would be included. An auditing actuarial firm with broad public plan experience and technical capability can usually verify the retained actuary's previous results reasonably well with a Level Two audit. If results cannot be verified or explained, it may be necessary to expand the scope of the audit to Level One. This would be recommended before any action is taken as a result of the audit.

Level Three

A Level Three audit includes a review of the previous actuarial valuation and experience study reports, dialogue with the retained actuary and plan representatives, and a presentation of findings. At this level, there are no independent calculations. Instead, this approach consists of an overview of the retained actuary's assumptions and methods, both of which are assessed for reasonableness and internal consistency. Depending on the timing of the audit, additional actuarial reports may be reviewed (such as the last experience study) as part of all three levels of an audit.

What are the Alternatives?

A small number of people in the public retirement plan community and some think tank organizations have suggested changing actuaries every three to five years to get the benefit of different viewpoints and possibly savings in actuarial fees.

However, changing actuaries may have the opposite impact of what was intended. This is because continuity and consistency in actuarial service providers helps to ensure high quality actuarial work and saves time for retirement plan staff since a new actuary does not have to be educated on plan practices and plan provisions. In addition, continuity in service providers may be critical during periods of stress or turnover in retirement plan staff and trustees. In fact, this continuity helps to reduce retirement plan costs through the efficient delivery of services and the historical knowledge of the retained actuary, which are disrupted or lost when there is a change in actuarial service providers.

Which Level of Audit Should Be Performed?

It is important to recognize that not all retirement plans need to consider a costly Level One, or even a Level Two audit. The purpose of the audit process is to provide the board and plan members with the assurance that the assumptions and methods utilized by the retained actuary are reasonable and appropriate and to assess the overall health of the plan or its funding progress. Typically, for these purposes, a Level Three audit is sufficient for many plans, particularly smaller plans with limited budgets for a more in-depth analysis. Again, if concerns arise, the audit can always be expanded to a Level Two or Level One audit.

What Guidelines Should Be Used When Selecting an Auditing Actuary?

GRS' experience with actuarial audits is considerable and was developed over time serving as both auditing actuary and audited actuary. The following guidelines have been developed as a result of our experience serving public employee retirement plans for over 80 years.

The auditing actuary is typically selected through a competitive bidding process (i.e., the use of a Request for Proposal (RFP)). The auditing actuary should have experience with the type of plan being audited and the legislative environment in which the plan operates. In addition, the advice provided should be unbiased and the audit assignment should not be viewed as an opportunity to gain a new client.

An actuarial firm that offers audit services to public retirement plans should have the infrastructure necessary to perform public plan actuarial work, including:

- Valuation software designed to model the wide range of public retirement plan designs with precision;
- A secure file transfer site necessary to protect plan member data during transfer between actuaries;
- Robust tools for validating investment return and other key actuarial assumptions;
- A large number of current public retirement plan clients, including those similar to the plan being audited; and
- Sufficient staff to provide the work promised for the retirement plan in a timely manner.

Fees for an actuarial audit can vary widely depending on the complexity of the plan and the extent of the audit. A Level One audit could cost as much as the retained actuary's annual fees. A Level Three audit could cost as little as the fees that would be paid for a simple legislative analysis or benefit change scenario. In addition, depending upon the scope of the audit, fees may be charged to the plan for the additional time spent by the retained actuary in responding to auditor questions and requests for information. While this may seem like a large expense, consider a plan with liabilities of $1 billion and, in which, a 5% mistake is found. The value of that mistake would be $50 million, which makes the fees for the audit seem small by comparison.

How are Audit Results Communicated to the Retirement Plan?

With any type of audit, there should be formal, written communication summarizing the auditing actuary's findings. This report should provide constructive criticisms of the retained actuary's work and suggestions for improvement. The information should be listed in the order of relative importance and clarify the difference between issues that the auditing actuary believes to be large and those that are minor or matters of judgment. Without this form of classification, the audit results may cause unnecessary concern and even confusion.

Depending on the type of audit that is performed, the auditing actuary should provide a comparison of their mathematical results to those of the retained actuary. The comparison should discuss whether or not the differences between the two sets of calculations are within reasonable bounds. It should also provide

comments on the assumptions and methods used by the retained actuary. The audit should verify that the retained actuary is following Actuarial Standards of Practice.[2] An actuarial audit can include a critique of the plan actuary's judgment concerning the plan's exposure to risk.

In all cases, both the retained actuary and the auditing actuary should communicate in a professional manner and in accordance with the Code of Professional Conduct for Actuaries.

What if an Error is Found?



Generally, in actuarial work, there is no unique, correct answer, but rather a range of reasonable results. No two actuaries will typically agree exactly on the results of an actuarial valuation. Given this, one might wonder what constitutes an actuarial error.

In our experience, there are two basic types of errors: 1) actuarial results that fall outside of a reasonable range; and 2) actuarial results that are in a reasonable range, but contain mathematical errors, show poor judgment, or are based on false premises or bad data. The second type of mistake is more common than the first.

While identification of errors and areas for improvement are the most obvious reasons for an actuarial audit, if the reviewing actuary believes that the plan has been getting good advice, this should be stated as part of the findings communicated in the audit report. If areas of concern are discovered during the audit, it is ideal for the reviewing and retained actuary to work together to resolve any concerns. If errors are found, these errors should be corrected in a professional manner. Furthermore, the next audit should verify that the corrections have been made.

Conclusion

An actuarial audit is an important process with a goal of sound financial management of public employee retirement plans. An actuarial audit is an important tool available to plan trustees in fulfilling their fiduciary duties. It is in everyone's best interest to ensure that the retained actuary is following the Actuarial Standards of Practice as well as providing sound advice and accurate financial measurements to enable the plan to meet its financial obligations today and in the future.

[2] http://www.actuarialstandardsboard.org/standards-of-practice/

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