



# PERiSCOPE

Public Employee Retirement Systems

New accounting rules for public postretirement benefit plans in the United States are set to take effect soon. Successful implementation of the new rules will require an understanding of a variety of technical concepts regarding the various newly required calculations. Two years ago, in a multipart PERiScope series, we explored these technical topics in detail as they related to Governmental Accounting Standards Board (GASB) Statements 67 and 68. We now take a similar approach with GASB Statements 73, 74, and 75. Milliman has established a GASB 73/74/75 Task Force that will publish a detailed series of educational articles regarding various key implementation and technical issues surrounding these new statements. This series will result in numerous articles in the upcoming months.

## **GASB 74/75: Long-term expected investment returns and the money-weighted rate of return**

Hassan Ghazi, FSA, EA, MAAA

In 2015, the Governmental Accounting Standards Board (GASB) released new accounting standards for public OPEB plans and participating employers. These standards, GASB Statements 74 and 75, have substantially revised the accounting requirements previously mandated under GASB Statements 43 and 45.

Required implementation is imminent, with GASB 74 effective for plan fiscal years beginning after June 15, 2016, and GASB 75 effective for employer fiscal years beginning after June 15, 2017.

This article in the Milliman GASB 73/74/75 Task Force's PERiScope miniseries, begins with a discussion of the development of the long-term expected rate of return assumption and the selection of the municipal bond rate, both of which are used to determine the single equivalent discount rate. This article also covers the technical details of calculating the money-weighted rate of return (a new disclosure item), followed by a summary of the discount rate and other asset-related disclosures required by GASB 74 and 75.

As discussed in the previous miniseries article, "Depletion Date Projections," the single equivalent discount rate that is used to determine liabilities under GASB 74 and 75 is the outcome of a depletion date projection process. For plans that are not projected to have a depletion date, the single equivalent discount rate is equal to the long-term expected rate of return on investments. For plans that are projected to reach a depletion date, the single equivalent discount rate is a blend of the long-term expected rate of return on investments and a municipal bond rate. Note that the long-term expected rate of return is an actuarial assumption, so it is generally not updated each year between valuation dates unless there is an indication that the assumption is no longer reasonable. In contrast, the municipal bond rate is not an assumption, but rather a published yield or index rate that changes over time, so it must be updated on each successive measurement date.

Did you know? Milliman's GASB 73/74/75 Task Force is releasing a miniseries on technical and implementation issues surrounding GASB 73, 74, and 75.

Each article will be released through PERiScope. Look for the following articles in coming months:

- Balance sheet items and projections from valuation date to measurement date
- Calculation of OPEB expense
- GASB 73
- Revised ASOP 6 and Community Rated Plans
- Alternative Measurement Method

Visit [milliman.com/GASB-73-74-75](http://milliman.com/GASB-73-74-75) for the latest resources on the new statements.

**Long-term expected rate of return assumption**

According to GASB 74 (paragraph 52) and GASB 75 (paragraph 40), the long-term expected rate of return should be based on the nature and mix of current and expected future plan investments over a period representative of the length of time from when an employee begins to provide service to when all benefits to the employee have been paid. This is likely a much longer investment time frame than plan sponsors are used to considering with their investment professionals. The expected rate of return must be determined net of investment expenses, but not net of administrative expenses.

GASB 74 and 75 also specify that the selection of any assumption must comply with all applicable Actuarial Standards of Practice (ASOPs) issued by the Actuarial Standards Board (see paragraphs 42 and 46 of GASB 74 and paragraphs 29, 33, 72, 76, 148, and 152 of GASB 75). Notably, the assumption should be prospective in nature and focused on a reasonable estimate of anticipated future investment experience.

In September 2013, the Actuarial Standards Board adopted a revised version of ASOP No. 27, Selection of Economic Assumptions for Measuring Pension Obligations, which governs the selection of an investment return assumption and will be effective for any actuarial work product with a measurement date on or after September 30, 2014, including all work under the new GASB standards.

The revised ASOP 27 prescribes multiple steps in the assumption-setting process, including evaluating relevant data, considering factors specific to the measurement, and then selecting a reasonable assumption. For this purpose, the term “reasonable assumption” has a specific meaning:

- Is appropriate for the purpose of the measurement.
- Reflects the actuary’s professional judgment.
- Takes into account historical and current economic data that is relevant as of the measurement date.
- Reflects the actuary’s estimate of future experience, the actuary’s observation of estimates inherent in market data, or a combination of the two.
- Has no significant bias (i.e., it is not significantly optimistic or pessimistic).

In selecting the assumption, the actuary may incorporate the views of experts (i.e., investment advisors, economists, or other professionals), so long as the resulting assumption reflects the actuary’s professional judgment. The actuary should not assume that superior or inferior returns will be achieved, net of investment expenses, from the use of an active rather than passive investment management strategy (often referred to as “alpha”), unless there is relevant data supporting this conclusion. All economic assumptions should be internally consistent, and the rationale used in selecting any non-prescribed assumption must be disclosed.

In addition to explicitly tying the assumption selection process to Actuarial Standards of Practice, the new GASB statements require a description of how the investment return assumption is determined, as well as disclosure of specific components of this assumption (see below for a discussion of the additional disclosures). As plan sponsors prepare to implement GASB 74 and 75, it is an opportune time to evaluate their own assumption-setting processes to ensure that they comply with the new standards and are well-articulated for the necessary disclosures. Milliman consultants have the tools and expertise to work with you and your investment professionals to help you select a long-term rate of return assumption that will satisfy both the revised ASOP No. 27 and the new GASB 74 and 75 requirements.

**Municipal bond yield or index rate**

According to GASB 74 and 75, the municipal bond yield or index rate to be used for benefit payments expected to be paid after the depletion date should be based on 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another scale).

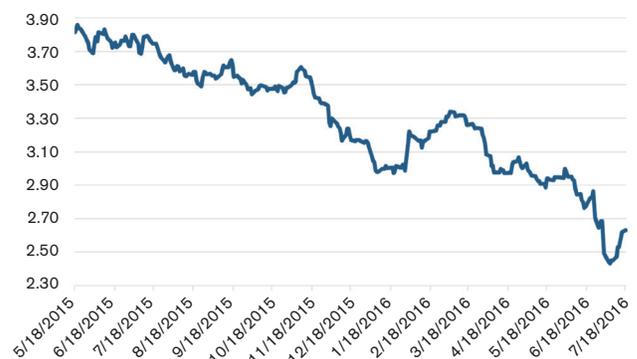
While this GASB description provides a basis and some guidance, it does not state a specific municipal bond rate source that should be used. For example, Bond Buyer and S&P both publish 20-year municipal bond indices. The charts below show the rates for each of these indices since May 2015. Other indices are available as well.

**FIGURE 1: BOND BUYER GENERAL OBLIGATION 20-BOND MUNICIPAL BOND INDEX**



Source: <https://research.stlouisfed.org/fred2/series/WSLB20/downloaddata>

**FIGURE 2: S&P MUNICIPAL BOND 20 YEAR HIGH GRADE RATE INDEX**



Source: <http://us.spindices.com/indices/fixed-income/sp-municipal-bond-20-year-high-grade-rate-index/>

## Money-weighted rate of return calculation

One of the new GASB 74 disclosure requirements is the annual money-weighted rate of return. This figure incorporates both the size and the timing of cash flows to determine an internal rate of return. The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of OPEB plan investments by the proportion of time they are available to earn a return during that period. There are several specific requirements for how the rate should be determined:

- The rate should be net of investment expenses but not net of administrative expenses.
- The external cash flows used as inputs to the calculation (i.e., contributions, benefit payments, and administrative expenses) should be determined on at least a monthly basis.
- The cash flows should be determined on an accrual basis of accounting rather than a cash basis.
- Cash-flow weighting should be representative of the plan's actual external cash-flow timing (i.e., beginning, middle, or end of month).

From a practical standpoint, plan sponsors may not currently have access to monthly cash-flow information aggregated across all plan investments, and therefore may need to build out the infrastructure to enable this information to be compiled.

## Discount rate and other asset-related disclosure requirements

GASB 74 and 75 introduce several new discount rate and other asset-related disclosure requirements. Many of these new requirements are contained in both GASB 74 and 75, and the precise location of the disclosure requirements between plans and employers can vary depending on the plan type (i.e., single employer versus agent multiple employer).

To satisfy GASB 74 and 75, the following information regarding the discount rate should be disclosed:

- Discount rate: The rate applied in the measurement of the total OPEB liability (TOL) and the change from the prior measurement date.
- Projected cash flows: Assumptions regarding the projected cash flows into and out of the OPEB plan, such as contributions from employers, non-employer contributing entities, and employees.
- Long-term rate of return assumption: Include a brief description of the significant methods and assumptions used to determine the long-term expected rate of return assumption. This includes the assumed asset allocation of the OPEB plan's portfolio, the long-term real rate of expected future return for each major asset class, and whether the information is presented as arithmetic or geometric means.

- Municipal bond yield or index rate: If a municipal bond yield or index rate was used in the determination of the single equivalent discount rate, the bond or index used must be disclosed.
- Projected benefit payments: Disclose which periods used the long-term rate of return assumption and which periods used the municipal bond yield or index rate.
- Sensitivity of the net OPEB liability: Show the net OPEB liability (NOL) calculation using a discount rate that is 1% higher and 1% lower than the single equivalent discount rate.

To satisfy GASB 74 and 75, the following asset-related disclosure requirements apply:

- Investment policies: The procedures and authority for amending the investment policy, policies pertaining to investment policy asset allocation, and a description of changes to the investment policy during the reporting period must be disclosed.
- Fair value of investments and significant assets: Must include a brief description of how the fair value of investments is determined, including any methods and significant assumptions used if it is estimated. Investments in any one organization representing 5% or more of the plan's fiduciary net position (other than U.S.-government-issued or -guaranteed) must be disclosed.
- Money-weighted rate of return calculation: The internal rate of return on OPEB plan investments must be disclosed. As discussed above, this calculation is done on a monthly, accrual basis and is net of investment expenses.

GASB 74 and 75 will require plan sponsors to consider several elements of their assumption-setting and reporting processes. Now is the time for plan sponsors to start reviewing the methodology used to set the long-term expected rate of return assumption, consider which municipal bond yield or index rate to use as a benchmark, and begin assessing their ability to obtain monthly cash-flow information on an accrual basis for the money-weighted rate of return calculation. Milliman consultants can work with you and your other plan professionals to help provide a smooth transition to the new discount rate and asset-related reporting and disclosure requirements of GASB 74 and 75.

---

### CONTACT:

Hassan Ghazi  
[hassan.ghazi@milliman.com](mailto:hassan.ghazi@milliman.com)