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SOA Releases Public Plan Mortality Tables (Pub-2010)

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The first mortality tables specifically for public-sector retirement plans were released by the Society of Actuaries (SOA) in early 2019. Prior to 2019, there were no publicly available mortality tables for public sector plans despite the general consensus that mortality experience for public-sector retirement plans differs from those of private pension plans. The current mortality assumptions used by public plans vary considerably, and many plans must rely on tables that were created using data for private pension plans such as RP-2000 or RP-2014.

The Importance of Mortality Tables

Using the right mortality table for your plan, whether it's one of the Pub-2010 tables or another table, is very important. As mortality improves, people live longer and receive benefits for a longer period of time which increases the cost of your plan. In order to measure this cost and to fund your plan enough to pay future benefits, you need to choose an appropriate mortality assumption that reflects expectations. If you are using an outdated mortality table or one that doesn't fit your plan's population, your liability could be much larger than you realize. Your future contributions could increase significantly, or your plan may be unable to pay future benefits.

Pub-2010 Mortality Tables

The new mortality tables, referred to as "Pub-2010", are not a single table but a set of 94 tables. The SOA analyzed multiple factors that affect mortality rates, and the published tables use combinations of these factors:

- Gender (male/female)
- Job category (teacher/public safety employee/general employee)
- Employment status (active employee, deferred vested participant, retiree, survivor)
- Health status (healthy/disabled)
- Income level (above/below median)

Plan Characteristics to Consider

Job category and income level were the two most statistically significant factors. You should pay special attention to job categories when considering using these tables.

The SOA did not release a combined table using data from all job categories, because the experience varied significantly between the categories. If your plan covers multiple categories, your Findley consultant could help you consider either valuing the groups using separate mortality tables or constructing a combined table that reflects the demographic breakdown of your specific population.

Not all plans may be able to easily divide their participants into these categories. For example, a plan for a regional transit authority with primarily blue-collar workers such as bus drivers may not be able to use these tables, since their workers do not easily fit into any of these job categories. The below-median Pub-2010 table for general employees is an option, but the RP-2014 Blue Collar table may be more appropriate.

Impact of New Tables

Using these tables is likely to increase the measurement of your liability, depending on your current mortality table and the demographics of your plan. Based on the study, teachers have the longest expected lifespan; liabilities for teachers are expected to be higher using the Pub-2010 tables than using the RP-2014 White Collar table. General employees have mortality rates in the Pub-2010 tables similar to those of the RP-2014 White Collar table. As expected, public safety employees have the highest mortality of the three groups, more similar to the RP-2000 table projected with Scale BB.

Income level is also a big determinant of mortality. The study population showed that lower income people had higher mortality rates than higher income people and had a shorter lifespan. If your plan is primarily composed of lower or higher paid employees, you

should consider using the below or above median tables, respectively.

Location, Location, Location

The SOA was also expected to release tables based on geographic region. Ultimately, data based on geographic region was not used, because it was much less statistically significant than other factors and the data was not uniform across the geographic regions. If you expect your plan to have mortality rates that differ greatly from the national average, your Findley consultant can use the mortality information from the Center for Disease Control (CDC) to help develop adjustment factor(s) for geography. The CDC has mortality rates by census region, state, and county. If most of your participants live in one county that has a much higher mortality rate than the national average, you could scale the Pub-2010 tables by a factor in order to more closely model your plan population's expected mortality.

What Now

Now that there are public plan tables available, you and your actuary need to consider adopting them or have a sufficient explanation as to why they are not appropriate. Keep in mind that there's a lot of flexibility to tailor the tables to best match your plan's population. You should discuss this with your plan actuary and your auditor.

For questions, contact your Findley consultant or Catie Barger at catie.barger@findley.com.