



AMERICAN ACADEMY *of* ACTUARIES

May 29, 2014

Erika Schulty
Society of Actuaries
475 N. Martingale Rd., Ste. 600
Schaumburg, IL 60173

Re: RP-2014 and MP-2014 Comments

Dear Ms. Schulty:

On behalf of the American Academy of Actuaries¹ Pension Committee, I write to provide the Society of Actuaries' Retirement Plans Experience Committee (RPEC) comments on the RP-2014 and MP-2014 Exposure Drafts.

Although the Pension Committee has not done analysis related to the credibility of the data, we have compared the quantity of data used to produce the RP-2000 mortality table and found it to be comparable to the quantity of data used to produce the RP-2014 mortality table (See Appendix). While the quantity of data retained may be sufficient, or at least comparable in *quantity* to the data used for RP-2000, the Exposure Draft has raised concerns with us about its *quality*. The reasons given by the RPEC for eliminating roughly 70% of the data may result in the data that was retained being biased toward lower rates of mortality and may give the impression to some readers that blocks of data were eliminated because they did not fit with anticipated experience.

We urge the RPEC to review the data that was eliminated to ensure that valid data, which by its nature might have tended to show higher rates of mortality, was not inappropriately excluded.

Here is the Pension Committee's detailed list of concerns about the data that was eliminated:

- Plans were generally excluded on the basis that their preliminary “actual to expected” ratios (actual deaths compared to expected deaths based on RP 2000 projected to exposure year with Scale BB) were “unusually high or low”; i.e., not within 10% of what

¹ The American Academy of Actuaries is an 18,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

was expected at a 95% confidence level. No information is given as to whether the experienced deaths were mostly unexpectedly high or unexpectedly low, so we do not know what effect these exclusions had. More information should be provided regarding these exclusions so their effect can be understood. In addition, the report should explain why RPEC believes it is appropriate to exclude data that differs by more than 10% from what they expected, and why 95% is the appropriate confidence level, especially for smaller plans.

- On page 15 the Exposure Draft says that the RPEC asked the contributing organization about unexpected results, and the data was only kept if the contributing organization “confirmed that the actual to expected [ratio] was reasonable.” Again, more information should be provided so that the appropriateness of the exclusions and their effect on the study can be better understood.
- The RPEC eliminated from inclusion two large public employee plans on the basis that they are not representative of private employer plans because they showed higher mortality. But the MP-2014 Exposure Draft says on page 11 that, “As part of the analysis performed in connection with the Scale BB Report [16], RPEC had determined that between calendar years 1998 and 2006 the mortality improvement patterns of two large public plans were generally consistent with those based on of the SSA mortality data.” Therefore, it appears the RPEC used the fact that the public employee plan improvement was similar to SSA to conclude that the SSA mortality improvement can be applied to private employer plans, while at the same time saying that the public employee plan data is not representative for private plans.
- The study used a process in which records from different years for the same participant were linked together to produce a consolidated record that could be followed through the entire exposure period, and if this linkage could not occur the data wasn’t used. We believe that a linkage is more likely to fail, with the data then excluded, in cases where a death has occurred, biasing the data retained. No such approach was apparent in the RP-2000 study.
- Data was excluded if there was “missing, incomplete or inconsistent” information. One of the examples cited of “inconsistent” information was when the plan used the same identifier for the participant and the resulting surviving spouse/beneficiary, and the “inconsistency” was that the gender code changed. This would appear to introduce a bias toward disregarding data where deaths occurred. It appears (page 14) that if the gender changed in what was understood to be a consolidated record for a single person, the gender that appeared most often was assumed to be correct. However these could also have been unrecognized cases of deaths with a survivor with the same identifier in the record; many plan administrators keep records this way for ease in identification of the original participant.
- The 120 plans which submitted data were winnowed down to 38, with two-thirds of the retiree experience (the most important experience by far) coming from five plans. This is a small base of plans, which could skew the results towards specific industries (it is not

known to us what industries these five plans represent); the RP-2000 study did not appear to be similarly overrepresented by a handful of plans in a very few industries.

- In contrast to roughly 30% of data retained in this study, RP-2000 used 75% of the data submitted (10,957,000 exposed life years included and 3,655,000 excluded). The 2000 study deleted data mostly because RPEC decided not to include multiemployer and government plans, since these plans were not required to use current liability mortality and the study had as one of its aims determining a suitable table for that purpose. A small percentage (less than 10%) was excluded for other reasons.
- Beneficiaries are included with healthy retirees. A couple is likely to choose a form of payment that takes into account the relative health of the retiree and the beneficiary, making joint-and-survivor and term-certain annuities more likely to be chosen when the beneficiary is healthier than average. Including beneficiaries with healthy retirees could result in overstating actual rates of retiree mortality. The decision about whether to value beneficiary liabilities using lower rates of mortality should be based on the plan design, the population, and the plan's specific experience, not incorporated universally by way of the underlying mortality table.
- We are concerned about the non-inclusion of data from the Pension Benefit Guaranty Corporation (PBGC). The PBGC has said they are willing to provide it. Also the PBGC has commented that it routinely performs its own mortality studies and found the RP-2000 table, projected with scale AA and setback 1 year, to be the best fit with PBGC experience. This is a significant amount of data which could materially impact the results.

In addition to our concerns about the data, the Pension Committee believes that the RPEC should also address the following issues:

- The exposure draft firmly indicates that RP-2014 and MP-2014 should be used for all private plans. Although the 1% ultimate improvement rate and the 20-year phase-in used to develop MP-2014 may be reasonable, they are speculative and other assumptions might also be reasonable. Therefore, we suggest that the language in the Exposure Drafts be softened and made more flexible (perhaps with boundaries that the RPEC deems to be reasonable) and that a tool be made available that would allow for alternative assumptions for the ultimate improvement rates over various projection periods.
- We believe that the two-dimensional nature of MP-2014 creates a false impression of greater precision, while also greatly complicating the process of actuarial valuation of pension liabilities and the understanding of plan administrators and participants. We believe that nearly identical results can be obtained from a one-dimensional improvement scale, and urge the RPEC to produce one, as a supplement to MP-2014.

Although we appreciate the tables showing the change from RP-2000 with generational AA, we believe that illustrating the changes from the Pension Protection Act (PPA) funding tables would be more useful as these tables are more commonly used today and thus would provide a more helpful comparison of the effect of the change.

We are concerned that the issues described above, if not addressed, will potentially cause MP-2014 and RP-2014 to be viewed as flawed. We urge the RPEC to closely review each of the decisions underlying the exclusion of data, particularly data that the RPEC judged to be unreasonable. We are especially concerned that excluding all data from plans with “outlier” ratios of actual to expected mortality may not take into account the inherent variability in mortality experience.

The Pension Committee appreciates the opportunity to comment on this matter. Please contact Assistant Director of Public Policy Bill Rapp (rapp@actuary.org; 202/223-8106) if you would like to discuss these comments further.

Sincerely,

Michael F. Pollack, FSA, MAAA, EA, FCA
Chairperson, Pension Committee
American Academy of Actuaries

Appendix

Group	RP-2014		RP-2000		Ratio	
	Exposures	Deaths	Exposures	Deaths	Exposures	Deaths
Employees						
Male	2,467,108	5,358	3,872,245	7,911	0.637	0.677
Female	<u>1,989,637</u>	<u>2,277</u>	<u>1,862,358</u>	<u>1,911</u>	<u>1.068</u>	<u>1.192</u>
Subtotal	4,456,745	7,635	5,734,603	9,822	0.777	0.777
Healthy Retirees						
Male	3,165,190	110,647	3,255,543	114,220	0.972	0.969
Female	<u>1,470,855</u>	<u>45,586</u>	<u>865,117</u>	<u>20,921</u>	<u>1.700</u>	<u>2.179</u>
Subtotal	4,636,045	156,233	4,120,660	135,141	1.125	1.156
Beneficiaries						
Male	60,549	3,245	23,034	1,138	2.629	2.851
Female	<u>978,819</u>	<u>45,341</u>	<u>709,175</u>	<u>25,600</u>	<u>1.380</u>	<u>1.771</u>
Subtotal	1,039,368	48,586	732,209	26,738	1.419	1.817
Disabled						
Male	240,917	11,901	292,182	16,584	0.825	0.718
Female	<u>127,769</u>	<u>4,062</u>	<u>77,463</u>	<u>2,652</u>	<u>1.649</u>	<u>1.532</u>
Subtotal	368,686	15,963	369,645	19,236	0.997	0.830
Total	10,500,844	228,417	10,957,117	190,937	0.958	1.196

This table shows:

1. While the amount of male employee data used decreased significantly, it still exceeds the data available for female employees for both RP-2000 and RP-2014.
2. While there was a modest decline in the data available for healthy male retirees, this was more than offset by the increase in data for healthy female retirees.
3. There was a very significant increase in data available for beneficiaries.

For these reasons we believe that the quantity of data used for RP-2014 is not worse overall than the data used for RP-2000, and is significantly improved for retirees and beneficiaries. This is an important improvement since the huge majority of retirement plan participant mortality occurs after retirement.