

# RP-2014 Mortality Tables

## MP-2014 Mortality Improvement Scale

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William H. Clark-Shim, FSA, EA, MAAA  
Principal and Consulting Actuary



# Background

- Society of Actuaries (SOA) periodically studies mortality data for US pension plans
  - Last study released in 2000
- New RP-2014 mortality tables contain significant improvements at most “key” retirement ages (55 to 95, roughly speaking)
- New MP-2014 mortality improvement scales project significant, persistent improvements in mortality rates in future decades
- Reports are available for free download on SOA website
  - <https://www.soa.org/Research/Experience-Study/Pension/research-mort-table-mort-imp-scale.aspx>

# Observations on the New Tables

- Final data set used much smaller than starting data set
  - Public plan data solicited but ultimately not used
- White-collar improvements through 2014 exceeded blue-collar improvements
- Milliman life insurance colleagues indicated informally that mortality improvements in RP-2014 appeared generally consistent with changes to mortality observed in life insurance industry
- MP-2014 mortality improvement scale is complicated
  - Amount of improvement dependent upon each person's year of birth and current year
  - Sometimes referred to as “two-dimensional” and/or “generational”
  - Does the additional precision improve overall accuracy?

# Effect of the New Tables

- Report excerpts in handout show effect of new tables
  - Possible 5% to 10% increase in actuarial liabilities if new tables and improvement scales adopted in full
- Increase in actuarial liabilities depends upon factors such as:
  - Discount rate used
  - Prior mortality assumptions
  - Extent of adoption of improvement scales
- Plan sponsors may want to think about new tables, but...
  - Make sure they fit the covered population
  - Consider switch to blue collar if  $\geq 70\%$  hourly / unionized
  - Consider set-forward/back to RP-2014 tables to align with recent experience, and project improvements off that base
  - Consider adjustments or alternatives to MP-2014

# Potential Impacts of the New Tables

- Notes from the field on ASC 715 (employer accounting)
  - Auditors generally looking for updated mortality assumptions
  - Many sponsors seem to be moving to some version of RP-2014
  - Many sponsors seem to be using an alternative to MP-2014
- Regulators likely to adopt new tables in some format
  - IRS Minimum funding requirements
  - PBGC “variable-rate” premiums on underfunded plans
  - Actuarial equivalence to determine lump sums
  - Possible adoption in 2016 or (more likely?) 2017
  - Will they go with two-dimensional generational projection?
    - Current tables are in a simpler “static” format
    - Could there be any age discrimination concerns with generational projection?