



Aging and Retirement

Fast Facts

Mortality Improvement Scale MP-2017 Report

SUMMARY

The Scale MP-2017 Report reflects historical U.S. population mortality experience through 2015, complete with relevant data, research and analysis. This is the third annual update to the underlying RPEC_2014 mortality improvement model. The Retirement Plans Experience Committee (RPEC) of the Society of Actuaries (SOA) has designed the materials to assist actuaries in determining mortality improvement assumptions.

Scale MP-2017 is the mortality improvement scale that results from running the RPEC_2014_v2017 model using RPEC's committee-selected assumptions. This scale has been provided in an Excel-formatted spreadsheet that actuaries can use in computations.

HIGHLIGHTS

- The Scale MP-2017 Report shows that age-adjusted mortality rates in the United States increased 1.2% between 2014 and 2015--from 724.6 per 100,000 to 733.1.
- This was the first year-over-year increase in age-adjusted U.S. mortality rates since 2005.
- This was only the seventh time since 1980 that age-adjusted U.S. mortality rates went up rather than down.
- Mortality rates in calendar year 2015 were significantly higher than those in 2014 for eight of the 10 leading causes of death in the United States; the largest percentage increases were for Alzheimer's disease and unintentional injuries.
- The Scale MP-2017 mortality improvement rates presented in this report are generally lower than the corresponding Scale MP-2016 rates.
- Starting with RP-2014 base mortality rates adjusted back to 2006, most 2017 pension obligations calculated using Scale MP-2017 (with a discount rate of 4.0%) are anticipated to be approximately 0.7% to 1.0% lower than those calculated using Scale MP-2016.
- The analysis suggests that Scale MP-2017 produces a reasonable mortality improvement assumption for measuring obligations for most retirement programs in the United States within the context of the "assumption universe" as described in Actuarial Standard of Practice No. 35 (ASOP No. 35).
- It is the actuary's responsibility to determine which mortality improvement assumption is appropriate to use for a given purpose.

LINK TO FULL REPORT

Mortality Improvement Scale MP-2017 https://www.soa.org/Files/Research/Exp-Study/mortality-improvement-scale-mp-2017.pdf

METHODOLOGY

- Actuarial research and calculations using Scale MP-2017 and the RPEC_2014_v2017 model
- Body of research: This research incorporates data from the Social Security Administration (SSA) and its 2017 Trustees' Report, the Centers for Disease Control and Prevention (CDC), the U.S. Census Bureau, the Center for Medicare and Medicaid Services (CMS), the National Vital Statistics System and the National Center for Health Statistics. It also draws upon numerous actuarial studies, including the Actuarial Standard of Practice No. 35 (ASOP No. 35).

REPORT SPECS

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- Research Sponsor: The Society of Actuaries (SOA) Aging and Retirement Strategic Research Program
- Research team: Retirement Plans Experience Committee members
- Author(s): The SOA Retirement Plans Experience Committee (RPEC) and its Mortality Improvement subcommittee
- Contents: Executive summary, data sources and underlying model, impact of Scale MP-2017, sensitivity analysis, related topics, 18 tables and charts, 4 appendixes, and references



Scale MP-2017 rates (Excel format)

https://www.soa.org/Files/Research/Exp-Study/mortality-improvement-scale-mp-2017-rates.xlsx

The RPEC_2014_v2017 Model Implementation Tool https://www.soa.org/resources/experience-studies/2017/rpec-2014-v2017-

model-implementation-tool/

Mortality Improvement Scale MP-2016 (most recent previous scale)

<a href="https://www.soa.org/experience-studies/2016/mortality-improvement-studies/2016/mo

Mortality Improvement Scale MP-2014 (original scale)

scale-mp-2016/ report-final.pdf

https://www.soa.org/experiencestudies/2014/research-2014-mp/



Steven Siegel
SOA Research Actuary
Research@soa.org
(847) 706-3500

Patrick Nolan SOA Experience Studies Actuary (847) 273-8860