

Society of Actuaries Mortality Research Update

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IAA MWG April 2017

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Recent Mortality Table Releases

- US Individual Life Insurance
 - Follow up to 2015 VBT / 2017 CSO in conjunction with AAA
 - Preneed table published
 - <https://www.soa.org/resources/experience-studies/2017/preneed-mortality-report/>
 - Guaranteed Issue
 - Exposed for comment by regulators
 - http://naic.org/meetings1704/cmte_a_latf_2017_spring_nm_materials.pdf?1492169000240
 - Simplified Issue
 - Final Stages
- Industry & Regulator Focus on Accelerated Underwriting
 - Business Practices Survey; Delphi Study for Valuation Assumptions

Recent Mortality Table Releases

- Annuity Experience Reports
 - Individual Payout Annuities
 - <https://www.soa.org/experience-studies/2016/2009-13-individual-payout-annuity/>
 - 21 participating companies; 5.8 million contract-years of exposure; \$26.8 billion in annual income-years exposed; and 260,000 deaths
 - Group Payout Annuities
 - <https://www.soa.org/experience-studies/2016/2011-14-group-annuity-exp/>
 - 8 participating companies; 5.9 million contract-years of exposure; \$25 billion in annual income-years exposed; and 267,000 deaths
 - Structured Settlements
 - <https://www.soa.org/experience-studies/2016/2009-13-structured-settlement/>

2009-13 Individual Payout Annuity -- Key Observations

A/E RATIOS	2009-2013 A/E ratios		2005-2008 A/E ratios	
Expected basis	By contract	By amount	By contract	By amount
1983 IAM Table	93.2%	86.2%	96.9%	85.1%
The Annuity 2000 Table	109.5%	101.9%	114.0%	101.1%
2012 IAM Basic Table	115.8%	107.2%	121.3%	109.8%
2012 IAM Period Table	128.6%	119.1%	134.8%	122.0%
2012 IAM Basic G2 Table	114.8%	106.4%	115.2%	103.9%
2012 IAM Period G2 Table	127.5%	118.2%	128.0%	115.4%
2005-2008 SSA Table	-	-	77.5%	68.5%
2009-2013 SSA Table	78.9%	73.4%	-	-

2011-2014 Group Annuity Mortality Experience Study and Pivot Tables

Expected Basis	Actual-to-Expected Ratios (2011 – 2014)	
	By Lives	By Income
1983 GAM	91.7%	80.9%
1994 GAM Basic with Projection	104.8%	95.3%
1994 GAR	112.7%	102.4%
RP-2014 Projected with MP-2015 to Experience Year	109.6%	100.8%
RP-2014 Projected with MP-2015 to Study Midpoint	109.7%	100.8%

Recent Mortality Table Releases

- Pension Mortality Studies
 - RP-2014 / MP-2016 proposed as standards by IRS for minimum contributions in US Single Employer plans beginning Jan 2018
 - US Public Plan Study
 - Robust set of data
 - Analysis underway for determining mortality differentiation categories (geography, occupation, income level, etc)
 - Target exposure in Spring 2018
 - Annual CDC / CMS / SSA analysis for input to improvement model
 - Mortality Improvement analysis extends to individual life insurance, others?

Practice Research Projects

- Cause of Death tables for 8 countries in HMD
 - <https://www.soa.org/research-reports/2017/2017-hmd-cause-of-death/>
- Growing reports with focus on CDC data
 - <https://www.soa.org/research-reports/2016/potentially-preventable-deaths/>
 - Cause of Death by US Region; US 2017 Pneumonia / Influenza Season
- Components of Historical Mortality Improvement
- Co-sponsor of IFoA Mortality Modeling Project
- Living to 100
 - Monograph
 - “Mini-Symposium” within SOA Annual Meeting in Boston in October 2017

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