



October 24, 2023

Honorable Ben Slutsker, Chair
Valuation Manual (VM)-22 (A) Subgroup
National Association of Insurance Commissioners (NAIC)

Dear Mr. Slutsker,

On behalf of the American Academy of Actuaries¹ Annuity Reserve and Capital Subcommittee, thank you for the chance to comment on the July 2023 exposure draft of the VM-22 Standard Projection Amount (SPA). The Academy supports the removal of complex technical provisions, such as the Company Specific Market Path (CSMP) and Withdrawal Delay Cohort Method (WDCM).

The Academy would continue to strongly recommend that the regulation not include a binding SPA. Incorporating the SPA as a disclosure item would better reflect the spirit of principle-based reserving while preserving the benefit of identifying outliers.

The Academy would further note that as a disclosure item, the SPA should not use the very worst-case assumptions, such as 100% of the available withdrawal amount as defined in Section C.3.D. Rather, the SPA should be directionally prudent to help identify outliers; for example, a 0% equity return may not be prudent for the valuation of performance-based index annuity riders (edits proposed below) because it may undervalue the benefits.

This early exposure provides preliminary information about the structure relative to the VM-21 SPA; however, it is difficult to fully comment without additional details on the assumptions to be used. The Academy looks forward to a future exposure that includes the proposed assumptions. With a more complete understanding of the regulators' intent, all interested stakeholders will be better able to opine on the reasonability given their professional judgment or utilizing data that may not be available broadly. In this way, additional confidence can be assured in the assumptions, reducing the likelihood that a field test would reveal "fatal flaws" and ensuring that the overall VM-22 effort remains on track. We refer to our May 2022 letter, which included a report prepared by Willis Towers Watson. The report included the Academy's recommendations on assumptions

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.

at that time. We would appreciate the opportunity to understand and discuss any material deviations from those recommendations that the Subgroup chose to pursue.

With regards to dynamic lapse assumptions, we would highlight the following for consideration:

- Fixed annuities are sold through many more channels (bank, broker dealer, career agent, etc.) relative to variable annuities. There is a concern that nuances in fixed annuity behavior by channel could lead to SPA assumptions that are inappropriate without due consideration. For example, less dynamic policyholder behavior is frequently observed in the career agent channel.
- The inputs and structure of the dynamic lapse formula could result in unintentional outcomes. We have identified the following and propose some edits to address these concerns:
 - a. The guarantee actuarial present value (GAPV) does not consider waiting for benefits to become more valuable. Roll-ups tend to be higher for fixed/index annuities relative to variable annuities.
 - b. The discount rate on the GAPV for the in-the-moneyness (ITM) factor could result in redundant impacts with the interest sensitive lapse, if not well parameterized. This needs to be analyzed in field testing.
 - c. The base lapse rates and underlying experience used to develop those lapse rates must be calibrated in tandem with the dynamic lapse rates for the dynamic function to work as intended.
 - d. The ITM factor does not appear to ever reduce lapses to 0%. We note that the lapse rate should be 0% when the account value is zero.
 - e. An integrated GAPV, as outlined in the proposed edits below, may produce more reasonable outcomes and be easier to calibrate when there are multiple benefits present.
 - f. The interest sensitive lapse function does not appear to consider the impact of the Market Value Adjustment (MVA), Free Partial Withdrawal (FPW), Guaranteed Minimum Interest Rate (GMIR), or Standard Non-Forfeiture Law (SNFL) Rate.

Given the above considerations, the Academy would propose the following changes:

- For Section C.3:

3. Guarantee Actuarial Present Value

The Guarantee Actuarial Present Value (GAPV) is used in the determination of the full surrender rates (Section 6.C.5) and other voluntary contract terminations (Section 6.C.10). The GAPV ~~represents~~represent the integrated actuarial present value of the lump sum or income payments associated with all guaranteed ~~benefit~~living and death benefits, including Account Value, within the policy. For the purpose of calculating the GAPV,

such payments shall include the portion that is paid out of the contract holder's Account Value.

The calculation of an integrated benefit, for a future projection period can be expressed as:

p_x * Living Benefit (survival to receive benefit at time t and associated amount) + q_x * Death Benefit (then current probability of death multiplied by any death benefit)

The GAPV shall be calculated in the following manner:

- ~~a. — If a guaranteed benefit is exercisable immediately, then the GAPV shall be determined assuming immediate or continued exercise of that benefit unless otherwise specified in a subsequent subsection of Section 6.C.3.~~
- ~~b. — If a guaranteed benefit is not exercisable immediately (e.g., because of minimum age or contract year requirements), then the GAPV shall be determined assuming exercise of the guaranteed benefit at the earliest possible time unless otherwise specified in a subsequent subsection of Section 6.C.3.~~
- ~~c. — Determination of the GAPV of a guaranteed benefit that is exercisable or payable at a future projection interval shall take account of any guaranteed growth in the basis for the guarantee (e.g., where the basis grows according to an index or an interest rate), as well as survival to the date of exercise using the mortality table specified in Section 6.C.3.h.~~
- da. The GAPV shall be determined in a prudent manner such that the policyholder reasonably realizes the value of the product (i.e., elect immediate, defer until a significant deferral credit or attained age band break, etc.). Note that it is generally prudent to assume immediate election, unless there are other product feature considerations that make immediate election unavailable or significantly less valuable than waiting for a preset period of time.
- b. Once a GMWB is exercised, the contract holder shall be assumed to withdraw in each subsequent contract year ~~an amount equal to 100%~~ no less than their initial percentage taken of the GMWB's guaranteed maximum annual withdrawal amount in that contract year (and 100% when the account value is depleted).
- ec. If account value growth is required to determine projected benefits or product features, then the account value growth shall either be assumed to be ~~0% net of all~~ the current fixed credited interest rate or

the current options budget by strategy reduced by fees chargeable to the account value.

~~f. If a market index is required to determine projected benefits or product features, then the required index shall be assumed to remain constant at its value during the projection interval.~~

~~g. The GAPV ford. For a GMDB that terminates at a certain age or in a certain contract year the GAPV shall be calculated as if the GMDB does not terminate. Benefit features such as guaranteed growth in the GMDB benefit basis may be calculated so that no additional benefit basis growth occurs after the GMDB termination age or date defined in the contract.~~

- For Section C.5 (which aligns with slides 41-44 of the Academy's May 2022 presentation):

5. Full Surrenders

For contracts within the Accumulation Reserving Category, base lapse and full surrender rates shall be dynamically adjusted upward (or downward) when the actual credited rate is below (or above) the competitor rate. For contracts with a guaranteed living benefit, base lapse and full surrender rates shall be further adjusted based on the ITM of the rider value.

The following formula shall be used:

Total Lapse = (Base Lapse + Rate Factor) × ITM Factor where

ITM Factor = 1 if $ITM \leq 1.25$

ITM Factor = $(1.25 \div ITM)^2$ if $ITM > 1.25$

ITM Factor = 0 if $AV = 0$

ITM = $GAPV \div Account Value$

Rate Factor = $Market Factor \times Max(0, 1 - 5 \times SCPercentage) / 100$
 $10 \times (1 - CSV/AV) \times GMIR/SNFL Era Factor$

GMIR/SNFL Era Factor = 1 (for current in-scope business, should be revisited and developed when high GMIR business is included in-scope from the inforce)

Market Factor = $-1.25X \times (CR - MR)^{2.5}$ if $CR \geq MR$

X = 1 during SC Period, 5 at Shock, and 3 thereafter

$MarketFactor = 0$ if $MR > CR \geq (MR - BF)$

$MarketFactor = 1.25Y \times (MR - BF - CR)^{2.5}$ if $CR < (MR - BF)$

Y = 3 during SC Period, 5 at Shock, and 6 thereafter

Minimum Lapse = 1% Rate Factor = -2% generally, -4% at shock

Maximum Lapse = 60% — if other than interest rate guarantee Rate Factor = 10% during surrender charge period, 60% at shock, and 35% thereafter

Maximum Lapse = 90% — if at the end of the interest guaranteed period

CR = the crediting rate, or options budget, at the time of the projection

MR = the market competitor rate at the time of the projection, calibrated to the 10-YR treasury plus 60% BBB / 40% A spreads – pricing spread, such that the pricing spread is calibrated to current rate and cap levels at the start of the projection

BF = a buffer factor where dynamic lapses do not occur, 25 bps

We thank you for considering our comments. If you have any questions or would like further dialogue on the above topics, please contact Amanda Barry-Moilanen, life policy analyst, at barrymoilanen@actuary.org.

Sincerely,

Chris Conrad
Chairperson, Annuity Reserves and Capital Subcommittee
American Academy of Actuaries