

VM-22 Field Test Specifications: A Presentation by the American Academy of Actuaries' Annuity Reserves and Capital Sub-Committee (ARCS)

NAIC Life Actuarial Task Force

March 14, 2024

Phoenix, AZ

Introduction

ARCS has been actively supporting LATF's efforts to implement PBR in VM-22

1. June 2020: Presentation to the NAIC VM-22 Subgroup on the preliminary framework elements for Fixed Annuity PBR
2. On more than 10 occasions, ARCS has submitted presentations and/or comment letters with discussions of VM-22 elements
3. In 2021-2022, ARCS engaged WTW to assist in developing reasonable assumptions for the Standard Projection Amount:
 - a) Final report of their work was presented to VM-22 work group in 2022.
 - b) ARCS and WTW representatives participated in meetings of the various workstreams of the VM-22 work group during 2022.

Now working to assist LATF in preparing for the field test of VM-22

- A. June 2022: ARCS drafted preliminary specifications for the field test, complete with a template for the collection of data
- B. December 2023: [LATF or VM-22 Subgroup) exposed the draft preliminary specifications for public comment
- C. December 2023: Academy joined with NAIC and ACLI in engaging EY to:
 - a) Assist all parties in the preparation for, conduct of, and analysis of the field test results.
 - b) EY will also develop a model office implementation of the VM-22 specifications, using results from that model office to compare results with those from the field test and to assess products and/or scenarios which might be difficult for participants in the field test.

Introduction (cont.)

First Task: prepare field test specifications for presentation to LATF and public exposure

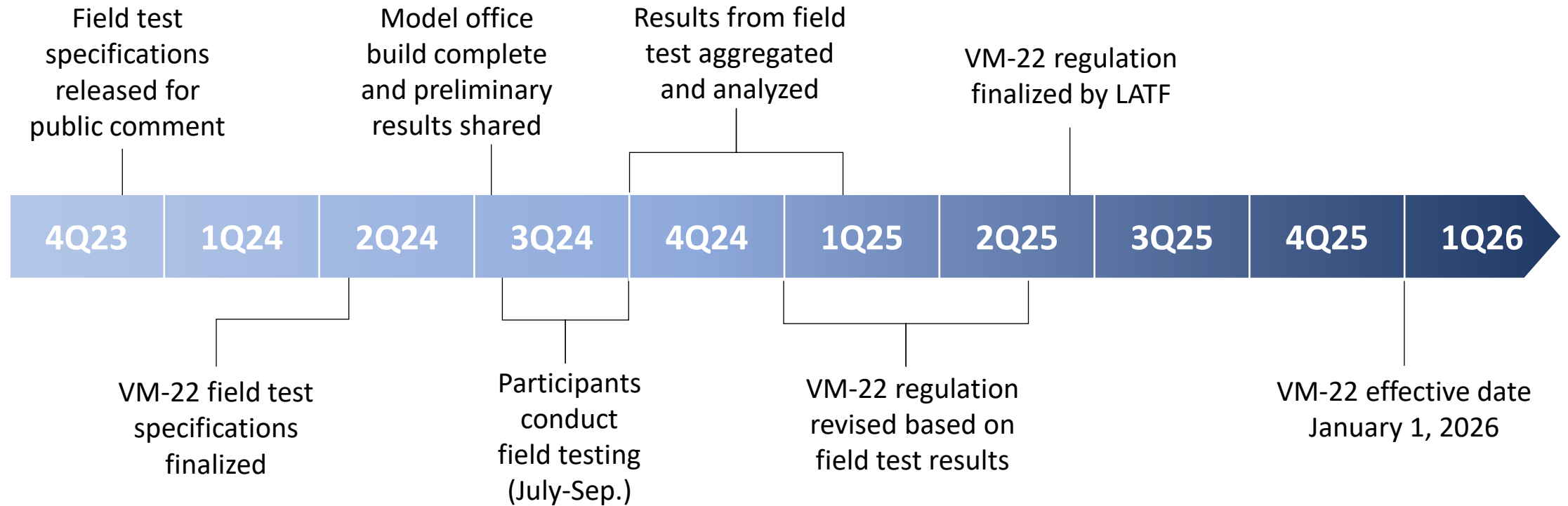
January 2024: EY reviews preliminary draft specifications from ARCS, providing comments and suggestions to the three parties.

February 2024: NAIC, ACLI, Academy and EY representatives meet weekly to review specifications and seek consensus.

- The draft specifications circulated with the materials for this meeting are the product of those meetings.
- We will now hear from EY which, after introducing the overall timeline expected for this VM-22 work, will talk through the highlights of the specifications which ARCS has submitted for LATF's consideration.

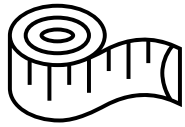
Target VM-22 Timeline

VM-22 field test timeline and key milestones are provided below:



Overview of Field Test Specifications

Key objectives of the field test include the following items:



Measurement of Business Impacts

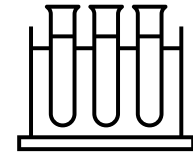
Measure the impact on actual business of the proposed reserve and capital frameworks relative to the current standards to ensure frameworks are working as intended.



Uphold Principles

At a high-level, ensure pillars of framework are met:

- Appropriate Reflection of Risk
- Comprehensive
- Consistency Across Products
- Practicality and Appropriateness

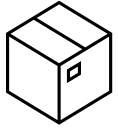


Assess Open Design Decisions

Test the impact of key open VM-22 design decisions:

- Aggregation
- Reinvestment guardrail mix
- Stochastic Exclusion Ratio Test threshold
- Standard Projection Amount (SPA) assumptions

Overview of Field Test Specifications (cont.)



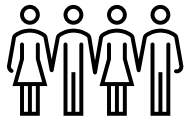
In-scope product classes:

Deferred Annuities with Guaranteed Living Benefits	Deferred Annuities without Guaranteed Living Benefits	Payout Annuities
<ul style="list-style-type: none">• Fixed Indexed Annuities (FIAs) with GLBs• Fixed Deferred Annuities (FDAs) with GLBs	<ul style="list-style-type: none">• FIAs without GLBs• FDAs without GLBs	<ul style="list-style-type: none">• Single Premium Immediate Annuities (SPIAs)• Pension Risk Transfer (PRT)• Deferred Income Annuities (DIAs)• Structured Settlement Contracts (SSCs)

All results should be consolidated and summarized in total and by each of these three product categories

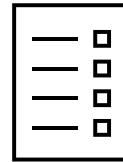
Overview of Field Test Specifications (cont.)

Other Specifications:



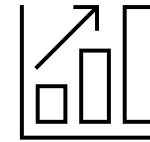
Populations

- At least 10 years of actual in-force business
- 12/31/2023 valuation date



Assumptions

- Asset assumptions as outlined currently in draft VM-22
- Companies must set prudent estimate assumptions for mortality, policyholder behavior, expenses, hedging, etc.
- Companies must set and disclose margins, or use suggested margins provided
- Standard Projection Amount assumptions and GOES scenarios to be determined before field test begins

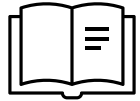


Required Metrics

- CARVM and C3P1
- Scenario reserves
- Exclusion test
- Standard projection amount
- Sensitivities
- Survey questions
- Projected reserves (if possible)

Overview of Model Office

EY will be developing a Moody's AXIS-based model office to support the field test



Overview

Model office specifications were recently finalized, after rounds of discussions between EY, NAIC, ACLI and Academy personnel. The specifications were also refined as per feedback provided by ACLI member companies and ARCS.



Objectives

- Produce results to analyze VM22 framework on a **representative set of products**, under various sensitivities and scenarios
- Provide **first cut of analysis** in advance of field test commencement, to get ahead of any unexpected test-related results or issues
- Perform further ad-hoc analysis and sensitivities to **lighten the load** on the number of runs being demanded of industry participants
- **Establish a forum** with industry participants while field test is in progress, to triage emerging issues and provide support
- Assess products, scenarios or projections **which may not be feasible** for participants in the field test

Overview of Model Office (cont.)

Model office specifications

The table below provides a summary of the model office product chassis that will be built, as per the agreed-upon specifications:

Product Class	Product Features	Notable BE Assumptions	Common Elements
FDA	<ul style="list-style-type: none"> 5-year surrender charge period, with MVA Crediting based on Treasury minus spread, subject to GMIR 	<ul style="list-style-type: none"> Dynamic lapses based on rate competitiveness 	<ul style="list-style-type: none"> Valuation date: 12/31/2023 10 years of in-force business modeled (2014-2023) Standard Projection Amount assumptions modeled as currently proposed/specified The following will be built as per field test specs: <ul style="list-style-type: none"> Asset assumptions and investment guardrails Prudent margins Hedging Exclusion testing Pre-PBR measures for comparison No reinsurance will be modeled
	<ul style="list-style-type: none"> 10-year surrender charge period, no MVA Guaranteed Lifetime Withdrawal Benefit (GLWB) with 10-year rollup period and explicit charges Crediting based on Treasury minus spread, subject to GMIR 	<ul style="list-style-type: none"> Dynamic lapses based on WB ITM WB utilization distributed by attained age, duration and Q/NQ 	
FIA	<ul style="list-style-type: none"> 5-year surrender charge period, no MVA Crediting based on 1 year S&P PtP, with OB equal to Treasury minus spread 	<ul style="list-style-type: none"> Dynamic lapses based on rate competitiveness 	
	<ul style="list-style-type: none"> 10-year surrender charge period, no MVA GLWB with 10-year rollup period and explicit charges Crediting based on 1 year S&P PtP, with OB equal to Treasury minus spread 	<ul style="list-style-type: none"> Dynamic lapses based on WB ITM WB utilization distributed by attained age, duration and Q/NQ 	
SPIA	<ul style="list-style-type: none"> 10 year period certain, with life thereafter 	<ul style="list-style-type: none"> 2012 IAM mortality, with 0.5% improvement from 2012 base 	
PRT	<ul style="list-style-type: none"> Multiple sub-blocks representing different mixes of deferred and retirees 	<ul style="list-style-type: none"> Group mortality table from SPA assumptions to be used 	

Next steps and how to prepare

Next steps for the VM-22 field test

- Field test specifications will be released for another public comment period through April 15th
- The NAIC will be requesting company participation in the field test, beginning now through April 28th
- EY will continue working with the NAIC, ACLI, and the Academy to develop a model office

Companies should begin preparing for the field test if they haven't already

- How much of your business will be in scope?
- Do you have a plan and the resources needed to participate in the field test?
- What existing models can you leverage (VM-21, pricing, etc.)?
- What assumptions and margins will you use?
- How will you model hedging?
- Do you have projected reserve capabilities?
- How will you educate your teams about VM-22?
- How will you communicate expected impacts to company leadership?

Questions or Comments?

Please contact:

Amanda Barry-Moilanen (barrymoilanen@actuary.org)

Life Policy Analyst

American Academy of Actuaries

Steve Jackson (sjackson@actuary.org)

Director of Research (Public Policy)

American Academy of Actuaries