## 20200805 AAT 2020

### Welcome to the AAT 2020 Survey

**We appreciate your participation in the American Academy of Actuaries' Asset Adequacy Testing 2020 survey. Please contact Steve Jackson at sjackson@actuary.org with any questions or comments.**

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

1

## BACKGROUND

1. What type is your current employer?

☐ US Stock insurer        ☐ US Insurance regulator

☐ US Mutual insurer        ☐ Accounting firm

☐ US Fraternal insurer        ○ Consulting firm

☐ US Reinsurer

○ Other (please describe)

```
[                                    ]
```

2. Which of the following responsibilities are part of your role (check all that apply)?

☐ Chief actuary        ☐ CFO

☐ Appointed actuary        ☐ CRO

☐ AAT modeling        ☐ CIO

☐ AAT assumption-setting

☐ Other (please describe)

```
[                                    ]
```

3. Please indicate how many entities rely on you for the statement of actuarial opinion.

☐ 1

☐ 2

☐ 3

○ More than 3

August 5, 2020 Not for Distribution or Citation. Use only to prepare for responses to surveymonkey version of survey.

2

## BACKGROUND

4. Because you provide the opinion for more than one entity, please indicate how we should interpret your responses.

☐ Unrelated entities: I will complete one survey for each of these.

◯ Related entities, and I will complete a survey for each of these.

☐ Unrelated entities: I will complete a survey for only one of these.

☐ I will complete one survey, making my responses as broad as possible in consideration for all entities.

☐ Related entities, and I will complete my survey in light of the largest entity.

◯ Other (please describe)

[                                        ]

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

3

## BACKGROUND

5. For those lines of business which are material to your asset adequacy testing, what is your primary method for testing asset adequacy for each line?

Testing Method, if Material

Non-Par whole life

Participating whole Life

Group life

Term life

Interest sensitive - without SG

Interest sensitive - with SG

Variable life

Indexed life

Guaranteed Living Benefit Riders on Life Products

Guaranteed Death Benefits Riders on Life Products

Other life insurance (please describe)

Fixed deferred annuities

Variable annuities

Payout annuities

Indexed annuities

Guaranteed Living Benefit Riders on Annuities

Guaranteed Death Benefits Riders on Annuities

Other annuity (please describe)

Medical

Individual LTC

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

4

Group  LTC

LTC combo  products

Individual LTD

Group  LTD

Other long duration
health (please describe)

Other short duration
health (please describe)

Other (please describe)

## BACKGROUND

6. What is the size group of your company by Reserve, net of 3rd party reinsurance.

☐ $0-20 million ☐         ☐ $5,000-20,000 million

$20-100 million ☐         ☐ $20,000-50,000 million

$100-500 million         ◯ $50,000 million +

    $500-5,000 million
◯

7. Is your company calculating VM-20 Principle-Based Reserves?

☐ Yes, effective 1/1/2020

☐ Yes, we early adopted prior to 1/1/2020

☐ We are taking the Life PBR Exemption

☐ Our business or Company is not subject to PBR, or some other reason (please describe)

 

8. In the current environment there's a much greater likelihood for material changes between an earlier testing date and year-end, and subsequent to year-end. How are you considering that risk in planning 2020 AAT, particularly if you're not currently tooled to run 12/31/XX models?

 

9. Do you test using 12/31/XX inforce assets and liabilities or do you use an earlier date?

☐ 12/31/XX

☐ 12/31/XX economic conditions, but with assets and liabilities as of an earlier date

◯ Earlier

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

6

## BACKGROUND

10. You indicated that you test earlier than 12/31/XX. Please indicate the date of testing.

Date

Date

MM/DD/YYYY

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

7

## BACKGROUND

11. How do you handle events after 12/31/XX and prior to signing opinion letter?

☐ I believe this is out of scope.

☐ I believe this is only important if the event is material enough to change my opinion.

☐ I believe that if a material event occurs but doesn't change my opinion I must still mention this in the Actuarial Memorandum.

☐ I believe the opinion is as of 12/31 but any material subsequent events that may have altered the opinion should be disclosed in the Actuarial Opinion and discussed in the Actuarial Memorandum.

☐ Other (please specify and/or explain)

[ ]

12. If we need to follow-up on any item to better clarify your comments, a representative of the American Academy of Actuaries will contact you if you give permission. Please indicate whether you are willing to be contacted; if yes, please provide your name and email address.

☐ Yes

☐ No

If yes, please provide Name and Email address

[ ]

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

8

## LIABILITIES

13. What changes do you anticipate making to your base mortality assumptions for life insurance policies in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated.

☐ Increase long-term mortality

☐ Decrease long-term mortality

☐ Temporary additional mortality, constant by age

☐ Temporary additional mortality, varying by age

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

> [                                        ]

14. What changes do you anticipate making to your base mortality assumptions for contracts with longevity risk (payout annuities, LTC, etc.) in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated.

☐ Increase long-term mortality

☐ Decrease long-term mortality

☐ Temporary additional mortality, constant by age

☐ Temporary additional mortality, varying by age

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

> [                                        ]

August 5, 2020  Not for Distribution or Citation.  Use only to prepare for responses to surveymonkey version of survey.

9

15. What changes do you anticipate making to your base morbidity assumptions for LTC and accident & health insurance policies in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated

☐ Increase long-term morbidity

☐ Decrease long-term morbidity

☐ Temporary additional morbidity, constant by age

☐ Temporary additional morbidity, varying by age

☐ Temporary reduction to morbidity

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

> [                                        ]

16. Do you anticipate changing your base policyholder behavior assumptions in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated

☐ Increase base lapse and/or partial withdrawal rates

☐ Decrease base lapse and/or partial withdrawal rates

☐ Increase utilization of guaranteed withdrawal benefits

☐ Decrease utilization of guaranteed withdrawal benefits

☐ Increase flexible premium payment assumptions

☐ Decrease flexible premium payment assumptions

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

> [                                        ]

17. Do you anticipate changing your dynamic policyholder behavior parameters in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated

☐ Increase surrender and partial withdrawal sensitivity to low competitor rates.

☐ Decrease surrender and partial withdrawal sensitivity to low competitor rates.

☐ Increase surrender and partial withdrawal sensitivity to high competitor rates.

☐ Decrease surrender and partial withdrawal sensitivity to high competitor rates.

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

[ ]

18. Do you anticipate changing your premium persistency behavior parameters in 2020 as a result of current conditions? (Check all that apply)

☐ No changes anticipated

☐ Increase premium persistency

☐ Decrease premium persistency

☐ Assume more one-time premium dump-ins

☐ Decrease surrender and partial withdrawal sensitivity to high competitor rates.

☐ Will make changes, but not due to COVID-19

☐ N/A

☐ Other (please describe)

[ ]

19. Do you believe deflation in projected AAT expenses should be permitted?

○ Not sure or have never considered

○ No

○ Yes (please describe)

[ ]

20. Is there any guidance you will look to or need as you review the assumptions related to liabilities?

[ ]

## ADEQUACY CRITERIA

21. Do you view the current interest rate environment held level for all future projection periods in the testing horizon as being beyond moderately adverse?

▢ Yes, regardless of length of the testing horizon

▢ Yes, for years in the testing horizon which extend beyond 10 years from valuation date

▢ Yes, for years in the testing horizon which extend beyond 20 years from valuation date

○ Other (please elaborate)

▢ Yes, for years in the testing horizon which extend beyond 40 years from valuation date

○ No

## ADEQUACY CRITERIA

22. Has your opinion regarding the level scenario being beyond moderately adverse changed relative to the interest rate environment at the time of your 2019 testing?

☐ Yes

○ No

## ADEQUACY CRITERIA

23. At the time this survey was drafted, Treasury rates were at historic low levels. Assuming a similar environment holds at year-end 2020, which of the following best summarizes your viewpoint on the level interest rate scenario (or NY1) in your 2020 AAT? (choose one, based on the information you have thus far)

☐ The Level scenario is a required "pass" for my criteria, regardless of how low interest rates are at valuation date.

☐ The Level scenario for 2020 has now moved into the "more than moderately adverse" category, therefore I will not consider it as a required "pass" for my adequacy criteria.

☐ I anticipate replacing the Level scenario with an alternative (please specify).

> [                                    ]

24. With respect to low interest rates (i.e. Treasury yields) which of these statements best reflects your view of "moderately adverse conditions" given current interest rate levels?

☐ A moderately adverse scenario should reflect permanent reduction in interest rates from current levels.

☐ A moderately adverse scenario should reflect temporary reduction in interest rates, followed by a return to current levels.

☐ A moderately adverse scenario should reflect temporary reduction in interest rates, followed by a return to interest rates above current levels.

☐ A moderately adverse scenario should reflect a gradual increase in interest rates from current levels

○ Other (please describe)

> [                                    ]

☐ The level scenario is a moderately adverse scenario.

○ A moderately adverse scenario should reflect level interest rates for a period of time, followed by a return to interest rates above current levels.

○ A moderately adverse scenario should reflect an immediate increase in interest rates from current levels.

25. Has the view you reflected in the previous question changed since your 2019 testing?

☐ Yes

☐ No

Is there any guidance you will look to or need as you review this particular assumption?

> [                                    ]

26. With respect to low fixed income yields (e.g. corporate bond yields) which of these statements best reflects your view of "moderately adverse conditions" given current interest rate levels?

- [ ] A moderately adverse scenario should reflect permanent reduction in yields from current levels.
- [ ] A moderately adverse scenario should reflect temporary reduction in yields, followed by a return to current levels.
- [ ] A moderately adverse scenario should reflect temporary reduction in yields, followed by a return to yields above current levels.
- [ ] A moderately adverse scenario should reflect a gradual increase in yields from current levels
- [ ] Other (please describe)

- [ ] The level scenario is a moderately adverse scenario.
- [ ] A moderately adverse scenario should reflect level yields for a period of time, followed by a return to yields above current levels.
- [ ] A moderately adverse scenario should reflect an immediate increase in yields from current levels.

27. Has the view you reflected in the previous question changed since your 2019 testing?

- [ ] Yes
- [ ] No

28. If you use deterministic interest rate scenario sets other than the NY7 to support your opinion, do you anticipate making any of the following changes from 2019 to 2020? (check all that apply)

- [ ] Run same set, but require more scenarios to be passed.
- [ ] Run same set, but require fewer scenarios to be passed.
- [ ] Add higher rate scenarios
- [ ] Eliminate higher rate scenarios
- [ ] Modify high rate scenarios to have more moderate changes
- [ ] Modify high rate scenarios to have more extreme changes
- [ ] Other (please describe)

- [ ] Add lower rate scenarios
- [ ] Eliminate lower rate scenarios
- [ ] Modify low rate scenarios to have more moderate changes
- [ ] Modify low rate scenarios to have more extreme changes
- [ ] Do not anticipate making any changes
- [ ] N/A

29. Regarding interim results, how will you consider these results for your 2020 AAT?

- [ ] Interim results considered equally with ending results
- [ ] Consider management's ability to respond to interim deficiencies
- [ ] Early deficiencies given greater weight than later deficiencies
- [ ] Later deficiencies given greater weight than early deficiencies
- [ ] Interim deficiencies given greater weight for scenarios where conditions revert to normal
- [ ] Other (please describe)

30. Has the view you reflected in the previous question changed since your 2019 testing?

☐ Yes

☐ No

31. Do you anticipate adding any moderately adverse conditions/sensitivities in your 2020 testing relative to 2019?

☐ No

☐ Too early

☐ Yes (please describe additional condition)

_____

32. Looking forward to 2020 AAT, what changes are you contemplating with respect to the primary set of scenarios used to state your opinion?

☐ In 2019 I used a stochastic set of scenarios, I anticipate no material changes in this approach for 2020

☐ In 2019 I used a fixed number of deterministic scenarios, I anticipate ADDING scenarios to this set for 2020

☐ In 2019 I used a stochastic set of scenarios, I anticipate continuing this approach but modifying my criteria for adequacy for 2020, making the passing reserves cover a greater number of scenarios

☐ In 2019 I used a stochastic set of scenarios, I anticipate continuing this approach but modifying my criteria for adequacy for 2020, making the passing reserves cover fewer scenarios

☐ In 2019 I used a stochastic set of scenarios, I anticipate continuing this approach but modifying my criteria for adequacy for 2020, making the passing reserves cover the same number of scenarios

○ In 2019 I used the basic (NY) 7 scenarios, I anticipate no material changes in this approach for 2020

☐ In 2019 I used the basic (NY) 7 scenarios plus auxiliary scenarios. I anticipate no material changes in this approach for 2020

☐ In 2019 I used the basic (NY) 7 scenarios, I anticipate material changes in this approach for 2020. Please describe the expected changes and/or any Other changes you expect to make

_____

33. For some, the criteria for adequacy is based on stochastic scenario testing. How will the passing rate for 2020 compare to that used for 2019?

☐ N/A - I do not utilize stochastic testing in my criteria

☐ Consistent with 2019 - i.e. no changes to the passing rate for 2020 AAT

☐ I anticipate increasing the required passing rate for 2020 AAT

☐ I anticipate decreasing the required passing rate for 2020 AAT

○ Other (please describe)

_____

34. Is there any guidance you will look to or need as you review the assumptions related to adequacy criteria?

## STOCHASTIC ASSUMPTIONS

35. Does your stochastic interest rate generator utilize mean reversion?

☐ Yes

○ No

## STOCHASTIC ASSUMPTIONS

36. Do you plan to change your mean reversion targets in 2020?

☐ Yes

○ No

## STOCHASTIC ASSUMPTIONS

37. What magnitude of change do you expect to make to the mean reversion target at the 10-year point (or other long rate tenor, if applicable)?

☐ < -2.00%

☐ 0.01% to 0.50%

☐ -2.00% to -1.01%

☐ 0.51% to 1.00%

☐ -1.00% to -0.51%

☐ 1.01% to 2.00%

○ -0.50% to -0.01%

○ > 2.00%

## STOCHASTIC ASSUMPTIONS

38. What mean reversion rate was used in 2019 AAT?

## STOCHASTIC ASSUMPTIONS

39. Do your stochastic interest rate scenarios include implicit or explicit floors?

☐ Yes

◯ No

## STOCHASTIC ASSUMPTIONS

40. Do you plan to change the stochastic interest rate floors in 2020?

☐ Yes

○ No

## STOCHASTIC ASSUMPTIONS

41. What change are you planning in 2020 for interest rate floors?

- ☐ Planning to eliminate floors.
- ☐ Planning to reduce floors, but still above zero.
- ☐ Planning to reduce floors to below zero.
- ☐ Planning to increase floors.
- ○ Other (please describe)

## DETERMINISTIC ASSUMPTIONS

42. Do your deterministic interest rate scenarios include implicit or explicit floors?

☐ Yes

◯ No

## DETERMINISTIC ASSUMPTIONS

43. Do you plan to change the deterministic interest rate floors in 2020?

☐ Yes

○ No

## DETERMINISTIC ASSUMPTIONS

44. What change in interest rate floors are you planning for 2020?

☐ Planning to eliminate floors.

☐ Planning to reduce floors, but still above zero.

☐ Planning to reduce floors to below zero.

☐ Planning to increase floors.

◯ Other (please describe)

## ASSETS  AND ECONOMIC ASSUMPTIONS

45. Did your 2019 AAT scenarios include negative interest rates, and  do  you  anticipate using any  negative interest rate  scenarios in 2020? (Select one  response for each year)

|  | 2019 | 2020 |
|---|---|---|
| Yes, for both deterministic and stochastic | ☐ | ☐ |
| Yes, for deterministic only | ☐ | ☐ |
| Yes, for stochastic only | ☐ | ☐ |
| No, due to model limitations | ☐ | ☐ |
| No, for other reasons | ☐ | ☐ |

Other (please describe if alternate approach)

☐

## ASSETS AND ECONOMIC ASSUMPTIONS

46. Please describe your approach to modeling asset spreads in 2019.

☐ Constant spreads based on December 31 actual

☐ Constant spreads based on earlier model start date

☐ Constant spreads based on long-term average

☐ Initial spreads Reverting to long-term average

☐ Other (please describe)

[                                                        ]

47. Please describe your plans for modeling asset spreads in 2020.

☐ Constant spreads based on December 31 actual

☐ Constant spreads based on earlier model start date

☐ Constant spreads based on long-term average

☐ Initial spreads Reverting to long-term average

○ Other (please describe)

[                                                        ]

## ASSETS AND ECONOMIC ASSUMPTIONS

48. Do you plan to change your long-term average spread assumptions in 2020?

☐ Yes

◯ No

## ASSETS AND ECONOMIC ASSUMPTIONS

49. How do you plan to change your long-term average spread assumptions in 2020? (check all that apply)

☐ Planning to increase long-term average spreads.

☐ Planning to decrease long-term average spreads.

☐ Planning to increase spread reversion period.

☐ Planning to decrease spread reversion period.

☐ Other (please describe)

## ASSETS AND ECONOMIC ASSUMPTIONS

50. Please describe your approach to modeling asset defaults and/or credit losses in 2019 and your plans for 2020.

|  | 2019 | 2020 |
|---|---|---|
| Constant defaults based on December 31 expectations | ☐ | ☐ |
| Constant defaults based on earlier model start date | ☐ | ☐ |
| Constant defaults based on long-term average | ☐ | ☐ |
| Higher initial defaults reverting to long term average | ☐ | ☐ |
| Lower initial defaults reverting to long term average | ☐ | ☐ |

51. Other than refreshing long-term rates for another year of experience, do you plan to change your default assumptions in 2020?

☐ Yes

◯ No

## ASSETS AND ECONOMIC ASSUMPTIONS

52. How do you plan to change your default assumptions in 2020? (Check all that apply)

| | | | |
|---|---|---|---|
| ☐ | Planning to increase initial default rates. | ☐ | Planning to decrease long-term default rates. |
| ☐ | Planning to decrease initial default rates. | ☐ | Planning to increase default rate reversion period. |
| ☐ | Planning to increase long-term average default rates. | ☐ | Planning to decrease default rate reversion period. |

☐ Other (please describe)

## ASSETS AND ECONOMIC ASSUMPTIONS

53. For 2020, do you plan to assume any correlation among interest rates, spread, and default/credit loss assumptions?

☐ Yes

○ No

## ASSETS AND ECONOMIC ASSUMPTIONS

54. For 2020, what assumptions are you planning to make concerning correlation among interest rates, spread, and default/credit loss assumptions? (check all that apply)

☐ Spreads positively correlated to interest rates.

☐ Initial spreads and defaults negatively correlated.

☐ Spreads negatively correlated to interest rates.

☐ Ultimate spreads and defaults positively correlated.

☐ Initial spreads and defaults positively correlated.

☐ Ultimate spreads and defaults negatively correlated.

☐ Other (please describe)

## ASSETS AND ECONOMIC ASSUMPTIONS

55. Do you model equities or equity-like assets, either as existing assets or reinvestment assets?

☐ Yes

◯ No

## ASSETS AND ECONOMIC ASSUMPTIONS

56. How do you model equities or equity-like assets?

- [ ] Deterministically.

- [ ] Stochastically.

- ○ Both deterministically and stochastically.

## ASSETS AND ECONOMIC ASSUMPTIONS

57. Are you planning to change your deterministic equity return assumptions in 2020?

☐ Yes

○ No

## ASSETS  ND ECONOMIC ASSUMPTIONS

58. How are  you planning to change your deterministic equity return  assumptions in 2020? (check  all that apply)

☐ Increase long-term equity rates of return.

☐ Decrease long-term equity rates of return.

☐ Add or increase initial equity price shock.

☐ Remove or decrease initial equity price shock.

☐ Other (please describe)

[                                    ]

## ASSETS AND ECONOMIC ASSUMPTIONS

59. Are you planning to change your stochastic equity return assumptions in 2020?

☐ Yes

◯ No

## ASSETS AND ECONOMIC ASSUMPTIONS

60. How are you planning to change your stochastic equity return assumptions in 2020? (check all that apply)

☐ Increase long-term equity volatility assumption

☐ Decrease long-term equity volatility assumption.

☐ Increase initial equity volality assumption.

☐ Decrease initial equity volality assumption.

☐ Add or strengthen correlation between equity returns and interest rates.

☐ Remove or weaken correlation between equity returns and interest rates.

☐ Other (please describe)

_____

## ASSETS AND ECONOMIC ASSUMPTIONS

61. In light of persistent low interest rates, what is your view on the appropriateness of using historical averages to set equity return targets?

☐ Long-term average return is an appropriate basis for future expected equity returns.

☐ Long-term average equity risk premium (over risk free rates) is an appropriate basis for future expected equity returns.

☐ Long-term average return and equity risk premium overstate future expected equity returns and equity risk premia.

☐ Other (please describe)

62. Do you plan to make changes to the allocation of existing assets to your 2020 AAT models due to the current environment?

☐ Yes

○ No

## ASSETS AND ECONOMIC ASSUMPTIONS

63. What changes do you plan to make to the allocation of existing assets to your 2020 AAT models due to the current environment? (check all that apply)

|  | Increase | Decrease |
|---|---|---|
| Investment grade bond allocation. | ○ | ○ |
| High yield bond allocation. | ○ | ○ |
| Mortgage loan allocation. | ○ | ○ |
| Structured security allocation. | ○ | ○ |
| Equity allocation. | ○ | ○ |
| Other invested asset allocation. | ○ | ○ |
| Asset duration | ○ | ○ |

Other (please specify)

## ASSETS AND ECONOMIC ASSUMPTIONS

64. Do you plan to make changes to the reinvestment asset mix in your 2020 AAT models due to the current environment?

☐ Yes

○ No

## ASSETS AND ECONOMIC ASSUMPTIONS

65. What changes do you plan to make to the reinvestment asset mix in your 2020 AAT models due to the current environment? (check all that apply)

| | Increase | Decrease |
|---|---|---|
| Investment grade bond allocation. | ○ | ○ |
| High yield bond allocation. | ○ | ○ |
| Mortgage loan allocation. | ○ | ○ |
| Structured security allocation. | ○ | ○ |
| Equity allocation. | ○ | ○ |
| Other invested asset allocation. | ○ | ○ |
| Asset duration | ○ | ○ |

Other (please describe

## REINSURANCE

66. ASOP No. 22 does not mention considerations for reinsurance. Revisions to ASOP No. 22 recently exposed specifically provide guidance on reinsurance ceded (3.1.3). For your 2020 AAT, which best describes your approach?

☐ Reinsurance is not present, or is immaterial

☐ AAT was performed on a net basis in 2019, and will continue to be performed on a net basis in 2020. No special consideration for reinsurance recoverability will be added.

☐ AAT was performed on a direct basis in 2019, and will continue to be performed on a direct basis, even though reinsurance ceded is present

☐ AAT was performed on a direct basis in 2019, but will now be performed on a net basis in 2020

☐ AAT was performed on a net basis in 2019, and will continue to be performed on a net basis in 2020, with distinct consideration for reinsurance recoverability

○ Other (please describe)

67. If YRT reinsurance is an element of your AAT, will your AAT assumption anticipate reinsurers increasing YRT premiums due to COVID-19 or other adverse experience?

☐ Yes

☐ No

Comments

## GPV

68. Will you revise the basis for the discount rates used in your GPV analyses?

☐ Yes

☐ No

○ i do not use GPV analysis.

|  |
|--|

## GPV

69. How will you revise the basis for the discount rates used in your GPV analyses? I intend to use (check all that apply):

☐ Initial portfolio yield held constant

☐ Initial market yield held constant

☐ Initial portfolio yield grading downward to reflect future reinvestment

☐ Initial portfolio yield grading upward to reflect future reinvestment

☐ Initial market yield grading downward to reflect future reinvestment

☐ Initial market yield grading upward to reflect future reinvestment

☐ Other (please specify)

## GPV

70. Will you revise your GPV discount rate adjusted to be net of investment expense and/or defaults?

☐ Yes

◯ No

## GPV

71. How will you revise your GPV discount rate adjusted to be net of investment expense and/or defaults? I intend to adjust for (check all that apply):

☐ Both investment expense and default rate, with constant defaults based on expectations at model start date

☐ Only default rate, with constant defaults based on expectations at model start date

☐ Both investment expense and default rate, with constant defaults based on expectations at year-end

☐ Only default rate, with constant defaults based on expectations at year-end

☐ Both investment expense and default rate, with constant defaults based on long-term average

☐ Only default rate, with constant defaults based on long-term average

☐ Both investment expense and default rate, with higher initial defaults reverting to long-term average

☐ Only default rate, with higher initial defaults reverting to long-term average

☐ Both investment expense and default rate, with lower initial defaults reverting to long-term average

☐ Only default rate, with lower initial defaults reverting to long-term average

☐ Only investment expense

☐ Other (please describe)

## GPV

72. Will you revise how expected conservatism is reflected in your GPV discount rate?

◯ Yes

◯ No

## GPV

73. In what way will you revise how expected conservatism is reflected in your GPV discount rate? I intend to (check all that apply):

☐ Add margin to achieve moderately adverse margin

☐ Remove margin to achieve moderately adverse margin

☐ Add margin to achieve greater than moderately adverse margin

☐ Remove margin to achieve greater than moderately adverse margin

☐ Add margin to achieve margin that is less than moderately adverse margin

☐ Remove margin to achieve margin that is less than moderately adverse margin

☐ Other (please describe)

## GPV

74. Will you add any sensitivity tests for your GPV discount rate?

☐ Yes

○ No

## GPV

75. I intend to sensitivity test for (check all that apply):

☐ a GPV discount rate <=1.0% in all years

☐ a GPV discount rate >1.0% in all years

☐ a GPV discount rate <=1.0% as an ultimate discount rate

☐ a GPV discount rate >1.0% as an ultimate discount rate

☐ a GPV discount rate which considers a temporary shock for excess defaults

☐ Other (please describe)

76. Does your adequacy conclusion consider the results of any sensitivity testing?

☐ Yes

☐ No

## Management Actions

77. What is your expectation around establishing additional reserves as a result of 2020 AAT?

- ☐ Expect to hold additional reserves at same relative level as 2019, considering growth or decline in block size

- ☐ Expect to hold additional reserves at levels lower than 2019, due to COVID-related environment

- ☐ Expect to hold additional reserves at levels higher than 2019, due to COVID-related environment

- ☐ Expect to hold additional reserves at levels lower than 2019, due to reasons OTHER THAN COVID-related environment

- ☐ Expect to hold additional reserves at levels higher than 2019, due to reasons OTHER THAN COVID-related environment

- ☐ Did not hold additional reserves at 2019, and do not expect this to change for 2020

- ○ Other (please describe)

## MODELING METHODS

78. Regarding modeling methods, check all that you expect will apply to 2020 AAT.

☐ Change in aggregating lines of business - more aggregation than for 2019

☐ Change in aggregating lines of business - less aggregation than for 2019

☐ Change in stochastic generation of asset variables (interest/equity rates)- more

☐ Change in stochastic generation of asset variables (interest/equity rates)- less

☐ Change in stochastic generation of asset variables (other than interest/equity rates)- more

☐ Change in stochastic generation of asset variables (other than interest/equity rates)- less

☐ Other (please describe)

☐ Change in stochastic generation of liability variables - more

☐ Change in stochastic generation of liability variables - less

☐ Changes I intend to implement reflect an increase in conservatism from 2019 methods

☐ Changes I intend to implement reflect a decrease in conservatism from 2019 methods

☐ No changes to modeling methods

79. Will 2020 AAT include more sensitivity tests than were performed for 2019 AAT?

○ Yes

○ No

## MODELING METHODS

80. I intend to expand my sensitivity testing for (check all that apply):

☐ premium persistency                    ☐ inflation

☐ mortality                              ☐ spreads

☐ morbidity                              ☐ defaults

☐ lapses                                 ☐ option/rider election rates

☐ renewal expenses

☐ Other (please describe)

## MODELING METHODS

81. Regarding generation of economic environment variables (such as interest rates, equity returns) which of these statements best summarizes your primary concerns as you look to 2020 AAT? (check all that apply)

☐ I have considered negative interest rates and I hold the opinion that these are not appropriate for AAT

☐ I feel I should be testing negative interest rates, but my interest rate generator is not capable of producing negative rates

☐ Even if I use negative interest rates, I am unsure whether my model can accommodate these (i.e. I have never tested this capability)

☐ Equity returns : Compared to 2019, my equity return scenarios will demonstrate smaller price shocks

☐ Equity returns : Compared to 2019, my equity return scenarios will demonstrate larger price shocks

☐ Equity returns : Compared to 2019, my equity return scenarios will demonstrate an increase to long-term return assumptions

☐ Equity returns : Compared to 2019, my equity return scenarios will demonstrate an decrease to long-term return assumptions

☐ Equity returns : These do not apply to my AAT

☐ Other (please describe)

82. Are you familiar with the Academy Interest Rate Generator?

☐ Yes

☐ No

## MODELING METHODS

83. What do you believe are limitations of the Academy Interest Rate Generator for capturing moderately adverse conditions in the current environment? (check all that apply)

☐ No significant limitations

☐ Formulaic mean reversion targets too high.

☐ Formulaic mean reversion targets too low.

☐ Insufficient dispersion among scenarios.

☐ Too much dispersion among scenarios.

☐ Insufficient interest rate variability within scenarios.

☐ Too much interest rate variability within scenarios.

☐ Interest rates floored above zero.

☐ Not enough low rate scenarios.

☐ Too many low rate scenarios.

☐ Not enough high rate scenarios.

☐ Too many high rate scenarios.

☐ Equity Returns produced are not correlated with interest rates

☐ Other (please describe)

## DATA SOURCES

84. Have you held any discussions with your regulator about current conditions and potential AAT changes for yearend 2020?

☐ No

☐ Yes

If yes, describe the general nature of guidance provided.

```

```

85. On a scale of 1-5 where 5 is most useful, how useful is each of the following guidance or reference sources in the AAT exercise (esp. selecting scenarios; setting assumptions; assessing adequacy)?

| | 1 (Least Useful) | 2 | 3 | 4 | 5 (Most Useful) |
|---|---|---|---|---|---|
| Standard Valuation Law | ○ | ○ | ○ | ○ | ○ |
| State-specific AOMR, including NY Reg126 | ○ | ○ | ○ | ○ | ○ |
| VM-20 - PBR Requirements for Life Products | ○ | ○ | ○ | ○ | ○ |
| VM-21 - PBR Requirements for Variable Annuities | ☐ | ☐ | ☐ | ☐ | ☐ |
| VM-22 - Statutory Maximum Valuation Interest Rates for Income Annuities | ○ | ○ | ○ | ○ | ○ |
| VM-25 - Health Insurance Minimum Reserve Requirements | ☐ | ☐ | ☐ | ☐ | ☐ |
| VM-30 - AOMR | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 2 - Nonguaranteed Charges or Benefits For Life and Annuity | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 5 - Incurred Health and Disability Claims | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 7 - Analysis of Life, Health, or P&C Insurer Cash Flows | ☐ | ☐ | ☐ | ☐ | ☐ |

|  | 1 (Least Useful) | 2 | 3 | 4 | 5 (Most Useful) |
|---|:---:|:---:|:---:|:---:|:---:|
| ASOP No. 11 - Financial Statement Treatment of Reinsurance Transactions | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 15 - Dividends for individual Participating life, Annuities and Disability Insurance | ▢ | ▢ | ▢ | ▢ | ▢ |
| ASOP No. 18 - Long Term Care Insurance | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 21 - Responding to or Assisting Auditors or Examiners | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 22 (current or revised exposure) Statements of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 23 - Data Quality | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 25 - Credibility Procedures | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 40 - Compliance with Valuation of Life Ins Policies Model Reg with respect to deficiency reserve mortality | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 42 - Health and disability Actuarial Assets and Liabilities other than Liabilities for Incurred Claims | ○ | ○ | ○ | ○ | ○ |
| ASOP No. 52 - Principle-based Reserves for Life Products under the NAIC Valuation Manual | ○ | ○ | ○ | ○ | ○ |
| Academy Practice Note on Asset Adequacy Analysis | ○ | ○ | ○ | ○ | ○ |

| | 1 (Least Useful) | 2 | 3 | 4 | 5 (Most Useful) |
|---|---|---|---|---|---|
| Academy Life & Health Valuation Manual | ○ | ○ | ○ | ○ | ○ |
| Academy Life PBR Assumption Resource Manual | ○ | ○ | ○ | ○ | ○ |
| Other regulatory guidance | ○ | ○ | ○ | ○ | ○ |
| Other ASOP | ○ | ○ | ○ | ○ | ○ |
| Other Practice Notes | ☐ | ☐ | ☐ | ☐ | ☐ |
| Other guidance | ○ | ○ | ○ | ○ | ○ |

Please describe any Other options

## DATA SOURCES

**The following set of questions relate to Data Sources you expect to use for 2020 AAT in developing certain asset and economic assumptions.**

86. Interest Rate Scenarios - Do you intend to use the Academy ESG with VM-20 parameterization, without modification?

☐ Yes

○ No

## DATA SOURCES

87. Interest Rate  Scenarios - I intend to use (check  all that  apply):

☐  US  Treasury rate history

☐  Interest rate history in other countries

☐  Society of Actuaries interest rate research  reports and/or Other (please describe)

## DATA SOURCES

88. Credit Spreads - Do you intend to use the VM-20 spread requirements without modification (i.e. including grading, etc.)?

☐ Yes

◯ No

## DATA SOURCES

89. Credit Spreads - I intend to use (check all that apply):

☐ NAIC VM-20 Long-term spreads

☐ NAIC VM-20 Current spreads

☐ Investment advisors

☐ Consulting firm

☐ Proprietary bond yield indices and/or Other (please describe)

## DATA SOURCES

90. Asset Defaults - Do you intend to use the VM-20 default cost requirements without modification?

☐ Yes

○ No

## DATA SOURCES

91. Asset default - I intend to use (Check all that apply)

☐ NAIC's PBR (VM20/VM21) default cost methodology (and baseline default rate table)

☐ Own experience

☐ Combination of industry studies and own experience

☐ Proprietary default cost studies and/or
Other (please specify)

☐ Investment advisors

☐ Consulting firm

☐ Company investment department

## DATA SOURCES

92. Equity return and/or Volatility - Do you intend to use the Academy ESG with VM-20 parameterization, without modification?

☐ Yes

☐ No

◯ N/A

## DATA SOURCES

93. Equity return and volatility - I intend to use (check all that apply):

☐ Long-term averages of publicly available equity return indices      ☐ Recent averages of proprietary volatility indices

☐ Long-term averages of proprietary equity return indices      ☐ Own experience

☐ Long-term averages of publicly available volatility indices      ☐ Combination of external indices and own experience

☐ Long-term averages of proprietary volatility indices      ☐ Company investment department

☐ Recent averages of publicly available equity return indices      ☐ Investment advisors

☐ Recent averages of proprietary equity return indices      ☐ Consulting firm

☐ Recent averages of publicly available volatility indices

☐ Other (please describe)

## DATA SOURCES

94. Mortgage Asset Prepayment - I intend to use (check all that apply):

☐ Own experience ☐ Investment advisors

☐ Combination of external indices and own experience ☐ Consulting firm

☐ Company investment department ☐ Proprietary assumptions in asset modeling platforms

☐ Other (please describe)

95. Are there gaps in the authoritative guidance or in the available data sources for setting assumptions that you believe significantly limit the ability of the appointed actuary to project economic assumptions into the future and/or to otherwise fulfill their obligations in the current environment (please describe).

## CONCLUSION

**Thank you for participating in the Asset Adequacy Testing 2020 survey. And thank you for completing the survey.**