**Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force**

**Amendment Proposal Form\***

1. Identify yourself, your affiliation, and a very brief description (title) of the issue.

 **Identification:**

VACRSG

 **Title of the Issue:**

Make updates to VM-21 SPA assumptions that are out of date.

2. Identify the document, including the date if the document is “released for comment,” and the location in the document where the amendment is proposed:

VM-21 Section 6.C.2 (Maintenance Expenses), VM-21 Section 6.C.6 (Full Surrenders), VM-21 Section 6.C.9 (Mortality), VM-21 Section 11.B.3 (Mortality)

January 1, 2024 NAIC Valuation Manual

3. Show what changes are needed by providing a red-line version of the original verbiage with deletions and identify the verbiage to be deleted, inserted, or changed by providing a red-line (turn on “track changes” in Word®) version of the verbiage. (You may do this through an attachment.)

**VM-21 Section 6.C.2 (Maintenance Expenses)**

2. Maintenance Expenses

Maintenance expense assumptions shall be determined as the sum of (a) plus (b) if the company is responsible for the administration or (c) if the company is not responsible for the administration of the contract:

1. Each contract for which the company is responsible for administration incurs an annual expense equal to $100 multiplied by 1.025^(valuation year – 2015) in the first projection year, increased by an assumed annual inflation rate of 2.5% for subsequent projection years.
2. Seven basis points of the projected account value for each year in the projection.
3. Each contract for which the company is not responsible for administration (e.g., if the contract were assumed by the company in a reinsurance transaction in which only the risks associated with a guaranteed benefit rider were transferred) incurs an annual expense equal to $35 multiplied by 1.025^(valuation year – 2015) in the first projection year, increased by an assumed annual inflation rate of 2.5% for subsequent projection years.

**Guidance Note:** The framework adopted by the Variable Annuities Issues (E) Working Group includes the review and possible update of these assumptions every three to five years.

**VM-21 Section 6.C.6 (Full Surrenders)**

6. Full Surrenders

The full surrender rate for all contracts shall be calculated based on the Standard Table for Full Surrenders as detailed below in Table 6.3, except for simple 403(b) VA contracts and index-linked VA contracts with no guaranteed living benefits. The Standard Table for Full Surrender prescribes different full surrender rates depending on the contract year and the in-the-moneyness (“ITM”) of the contract’s guaranteed benefit.

**VM-21 Section 6.C.6.f (New Section - Full Surrenders for ILVAs)**

f. The full surrender rate for index-linked VA contracts with no guaranteed living benefits shall be:

1. In surrender charge period, or in policy years 1–3 for contracts without surrender charges, 4%.
2. In the first year after the surrender charge period, the greater of 60% and the shock lapse assumption used in the stochastic reserve.
3. In subsequent years or in policy years 4 and onwards for contracts without surrender charges, 15%.

**VM-21 Section 6.C.6 (Table 6.3 – Standard Table for Full Surrenders)**

|  |  |  |  |
| --- | --- | --- | --- |
| ITM | In surrender charge period, or in policy years 1–3 for contracts without surrender charges | First year after the surrender charge period | Subsequent years, or in policy years 4 and onwards for contracts without surrender charges |
| Under 50% | 4.0% | 25.0% | 15.0% |
| 50–75% | 3.0% | 18.0% | 10.0% |
| 75–100% | 2.5% | 12.0% | 7.0% |
| 100–125% | 2.5% | 8.0% | 4.5% |
| 125–150% | 2.5% | 6.0% | 3.0% |
| 150–175% | 2.0% | 5.0% | 2% |
| 175–200% | 2.0% | 4.5% | 1.5% |
| Over 200% | 2.0% | 4.0% | 1.0% |

**VM-21 Section 6.C.9 (Mortality)**

9. Mortality

The mortality rate for a contract holder with age x in year (2012 + n) shall be calculated using the following formula, where qx denotes mortality from the 2012 IAM Basic Mortality Table multiplied by the appropriate factor (Fx) from Table 6.9 and G2x denotes mortality improvement from Projection Scale G2:

$$q\_{x}^{2012+n}=q\_{x}^{2012}(1-G2\_{x})^{n}\*F\_{x}$$

**Table 6.9**

|  |  |  |  |
| --- | --- | --- | --- |
| Attained Age (x) | Fx for VA with GLB | Fx for VA without GLB and with roll-up GDB | Fx for All Other |
|  | Male | Female | Male | Female | Male | Female |
| <=52 | 100% | 95% | 160% | 150% | 110% | 105% |
| 53 | 99% | 95% | 160% | 152% | 110% | 106% |
| 54 | 98% | 95% | 160% | 154% | 110% | 107% |
| 55 | 97% | 95% | 160% | 156% | 110% | 108% |
| 56 | 96% | 95% | 160% | 158% | 110% | 109% |
| 57 | 95% | 95% | 160% | 160% | 110% | 110% |
| 58 | 93.5% | 93.5% | 160% | 160% | 109% | 109% |
| 59 | 92% | 92% | 160% | 160% | 108% | 108% |
| 60 | 90.5% | 90.5% | 160% | 160% | 107% | 107% |
| 61 | 89% | 89% | 160% | 160% | 106% | 106% |
| 62 | 88% | 88% | 160% | 160% | 105% | 105% |
| 63 | 89% | 88% | 160% | 159% | 105% | 104% |
| 64 | 90% | 88% | 160% | 158% | 105% | 103% |
| 65 | 91% | 88% | 160% | 157% | 105% | 102% |
| 66 | 92% | 88% | 160% | 156% | 105% | 101% |
| 67 | 93% | 88% | 160% | 155% | 105% | 100% |
| 68 | 95% | 90% | 160% | 154% | 107% | 101.5% |
| 69 | 97% | 92% | 160% | 153% | 109% | 103% |
| 70 | 99% | 94% | 160% | 152% | 111% | 104.5% |
| 71 | 101% | 96% | 160% | 151% | 113% | 106% |
| 72 | 103% | 98% | 160% | 150% | 115% | 108% |
| 73 | 103.5% | 99.5% | 158% | 149% | 115% | 109% |
| 74 | 104% | 101% | 156% | 148% | 115% | 110% |
| 75 | 104.5% | 102.5% | 154% | 147% | 115% | 111% |
| 76 | 104.5% | 103.5% | 152% | 146% | 115% | 112% |
| 77 | 105% | 105% | 150% | 145% | 115% | 113% |
| 78 | 106.5% | 106.5% | 147% | 143% | 115% | 113.5% |
| 79 | 108% | 108% | 144% | 141% | 115% | 114% |
| 80 | 109.5% | 109.5% | 141% | 139% | 115% | 114.5% |
| 81 | 111% | 111% | 138% | 137% | 115% | 114.5% |
| 82 | 113% | 113% | 135% | 135% | 115% | 115% |
| 83 | 113% | 113% | 132% | 132% | 114.5% | 114.5% |
| 84 | 113% | 113% | 129% | 129% | 114% | 114% |
| 85 | 113% | 113% | 126% | 126% | 113.5% | 113.5% |
| 86 | 113% | 113% | 123% | 123% | 113.5% | 113.5% |
| 87 | 113% | 113% | 120% | 120% | 113% | 113% |
| 88 | 113% | 113% | 119% | 119% | 113% | 113% |
| 89 | 113% | 113% | 118% | 118% | 113% | 113% |
| 90 | 113% | 113% | 117% | 117% | 113% | 113% |
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| 93 | 112.5% | 112.5% | 114% | 114% | 112.5% | 112.5% |
| 94 | 112% | 112% | 113% | 113% | 112% | 112% |
| 95 | 111.5% | 111.5% | 112% | 112% | 111.5% | 111.5% |
| 96 | 111% | 111% | 111% | 111% | 111% | 111% |
| 97 | 110% | 110% | 110% | 110% | 110% | 110% |
| 98 | 109% | 109% | 109% | 109% | 109% | 109% |
| 99 | 108% | 108% | 108% | 108% | 108% | 108% |
| 100 | 107% | 107% | 107% | 107% | 107% | 107% |
| 101 | 106% | 106% | 106% | 106% | 106% | 106% |
| 102 | 105% | 105% | 105% | 105% | 105% | 105% |
| 103 | 103.0% | 103.0% | 103.0% | 103.0% | 103.0% | 103.0% |
| 104 | 101.0% | 101.0% | 101.0% | 101.0% | 101.0% | 101.0% |
| >=105 | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**VM-21 Section 11.B.3 (Mortality)**

3. No Data Requirements

When little or no experience or information is available on a business segment, the company shall use expected mortality curves that would produce expected deaths no less than the appropriate percentage (Fx) from Table 1 of the 2012 IAM Basic Table with Projection Scale G2 for contracts with no VAGLBs and expected deaths no greater than the appropriate percentage (Fx) from Table 1 of the 2012 IAM Basic Mortality Table with Projection Scale G2 for contracts with VAGLBs. If mortality experience on the business segment is expected to be atypical (e.g., demographics of target markets are known to have higher [lower] mortality than typical), these “no data” mortality requirements may not be adequate.

$$q\_{x}^{2012+n}=q\_{x}^{2012}(1-G2\_{x})^{n}\*F\_{x}$$

**Table 11.1**

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| Attained Age (x) | Fx for VA with GLB | Fx for VA without GLB and with roll-up GDB | Fx for All Other |
|  | Male | Female | Male | Female | Male | Female |
| <=52 | 100% | 95% | 160% | 150% | 110% | 105% |
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| 55 | 97% | 95% | 160% | 156% | 110% | 108% |
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| 57 | 95% | 95% | 160% | 160% | 110% | 110% |
| 58 | 93.5% | 93.5% | 160% | 160% | 109% | 109% |
| 59 | 92% | 92% | 160% | 160% | 108% | 108% |
| 60 | 90.5% | 90.5% | 160% | 160% | 107% | 107% |
| 61 | 89% | 89% | 160% | 160% | 106% | 106% |
| 62 | 88% | 88% | 160% | 160% | 105% | 105% |
| 63 | 89% | 88% | 160% | 159% | 105% | 104% |
| 64 | 90% | 88% | 160% | 158% | 105% | 103% |
| 65 | 91% | 88% | 160% | 157% | 105% | 102% |
| 66 | 92% | 88% | 160% | 156% | 105% | 101% |
| 67 | 93% | 88% | 160% | 155% | 105% | 100% |
| 68 | 95% | 90% | 160% | 154% | 107% | 101.5% |
| 69 | 97% | 92% | 160% | 153% | 109% | 103% |
| 70 | 99% | 94% | 160% | 152% | 111% | 104.5% |
| 71 | 101% | 96% | 160% | 151% | 113% | 106% |
| 72 | 103% | 98% | 160% | 150% | 115% | 108% |
| 73 | 103.5% | 99.5% | 158% | 149% | 115% | 109% |
| 74 | 104% | 101% | 156% | 148% | 115% | 110% |
| 75 | 104.5% | 102.5% | 154% | 147% | 115% | 111% |
| 76 | 104.5% | 103.5% | 152% | 146% | 115% | 112% |
| 77 | 105% | 105% | 150% | 145% | 115% | 113% |
| 78 | 106.5% | 106.5% | 147% | 143% | 115% | 113.5% |
| 79 | 108% | 108% | 144% | 141% | 115% | 114% |
| 80 | 109.5% | 109.5% | 141% | 139% | 115% | 114.5% |
| 81 | 111% | 111% | 138% | 137% | 115% | 114.5% |
| 82 | 113% | 113% | 135% | 135% | 115% | 115% |
| 83 | 113% | 113% | 132% | 132% | 114.5% | 114.5% |
| 84 | 113% | 113% | 129% | 129% | 114% | 114% |
| 85 | 113% | 113% | 126% | 126% | 113.5% | 113.5% |
| 86 | 113% | 113% | 123% | 123% | 113.5% | 113.5% |
| 87 | 113% | 113% | 120% | 120% | 113% | 113% |
| 88 | 113% | 113% | 119% | 119% | 113% | 113% |
| 89 | 113% | 113% | 118% | 118% | 113% | 113% |
| 90 | 113% | 113% | 117% | 117% | 113% | 113% |
| 91 | 113% | 113% | 113% | 116% | 113% | 113% |
| 92 | 113% | 113% | 115% | 115% | 113% | 113% |
| 93 | 112.5% | 112.5% | 114% | 114% | 112.5% | 112.5% |
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| 95 | 111.5% | 111.5% | 112% | 112% | 111.5% | 111.5% |
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| 102 | 105% | 105% | 105% | 105% | 105% | 105% |
| 103 | 103.0% | 103.0% | 103.0% | 103.0% | 103.0% | 103.0% |
| 104 | 101.0% | 101.0% | 101.0% | 101.0% | 101.0% | 101.0% |
| >=105 | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

4. State the reason for the proposed amendment? (You may do this through an attachment.)

VM-21 SPA expense assumption is updated to be consistent with the VM-22 draft, so that expense assumptions reflect inflation and so are kept current without requiring annual updates. Updating baseline inflation, as the historical composite CPI has exceeded Fed targets.

Mortality assumption update based on SOA recommendation.

Surrender assumption update based on regulator survey.

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| --- | --- | --- | --- |
| **Dates:** Received | Reviewed by Staff | Distributed | Considered |
|  |  |  |  |
| **Notes:**  |