# Experience Studies PRO



# 2018-24 Individual Life Mortality Experience Study Data Request

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# 2018-24 Individual Life Mortality Experience Study Data Request

#### Section 1 Request for Data Contributions

The Society of Actuaries Research Institute's (SOA's) Individual Life Experience Committee (ILEC) and LIMRA are soliciting mortality experience for individual life products for calendar years 2018 through 2024.

#### Section 2 Purpose and Scope of the Study

The SOA Research Institute and LIMRA are partnering to complete industry experience studies. Under this partnership, the SOA Research Institute's ILEC and LIMRA plan to provide an update to the ILEC mortality studies, restricted to a subset of contributors and with additional information not part of VM-51.

The goals of this study include:

- Updating industry mortality for study years 2018 through 2024 to provide more up-to-date assessment of industry mortality than is currently available;
- Assessing the impact of COVID on mortality and exposures during and after the shock event by gathering additional policy level information, including detailed cause of death, and;
- Exploring additional features of life insurance risk by assessing accelerated living and death beneft riders on life insurance policies.

Coverages to be included in the study are all policies and riders covering a single life issued or in-force between January 1, 2018, and December 31, 2024. This also includes coverages which may have been issued and lapsed before they could be reported to the NAIC. Experience will be analyzed by various segments of the data, including but not limited to sex, product type, policy years, calendar year, issue and attained age, duration since issue, underwriting and preferred status, cause of death, and plan-level information. The study will include sufficient detail for companies to be able to understand how their experience compares to the industry. This experience may augment each company's experience analysis, improve communication of results to senior management, and improve internal assumption development. This study is not specifically designed to study post-level term mortality, allthough it will include post-level term durations as is done in current ILEC data releases.

### Section 3 Study Process

This Study will be designed, overseen, and peer reviewed by the SOA Research Institute's volunteer project oversight group (POG). Studies like this one rely on volunteer efforts from industry experts like those on the POG. The SOA Research Institute and LIMRA, under the Experience Studies Pro partnership to complete experience studies, will handle all data steps, including study construction and data privacy. Study Participants will receive significant benefits as described in the *Benefits to Study Participants* section below. A short public report with limited Study highlights will be available for free to the public.

More information on the SOA Research Institute and LIMRA experience study partnership can be found at <u>A Powerful Partnership | SOA</u>.

#### Section 4 Form of Data Contributions

The SOA Research Institute and LIMRA expect participating companies to provide the following:

- 2018-2024 experience data in the format requested for this study (Appendix A)
- Additional supplemental data regarding cause of death and accelerated benefits for each <u>policy</u> (Appendix B)
- Additional supplemental data regarding <u>company</u> underwriting practices (Appendix C)

The basis for data submission is the VM-51 format for Appendix A. If your company also provides the Form for Additional Plans and such plans are present in your submission, please provide this Form with your submission.

For Appendix B, if the contributor's internal cause of death code is provided, please also provide a translation mapping of those codes.

#### Section 5 Important Dates

We request your intent to participate and provide data for the study. Please provide your response to <a href="StudyPro@soa.org">StudyPro@soa.org</a> by July 31, 2025.

Your timely data submission is a valuable contribution to this Study. If you have indicated that you intend to participate in the study by submitting data, we request your data, as described in the following section, no later than **September 30, 2025**. If you would like to contribute, but find that this timing is challenging, please contact **StudyPro@soa.org** to discuss options.

#### Section 6 Data Transmission Instructions

#### Section 7 Study Outputs

A report with high level summary results of the study will be made publicly available.

The detailed study results will be made available in a "Standard Data Package" included in a 2026 subscription to Experience Studies Pro. The Standard Data Package may include some combination of the following:

- experience study report with analysis and commentary;
- a set of data visualization dashboards with the ability to filter on and drill down into the detail of the results of the study;
- dataset(s) containing the aggregated experience collected for the purpose of this study. The
  datasets may be made available in excel files, text files or downloads from the data visualization
  tool;
- models or other tools developed to support the analyses completed in the study; and
- other outputs as determined by the SOA Research Institute and LIMRA.
- Any output of the study, whether publicly available or available for purchase, will not contain any private information or any confidential contributor level information.

#### Section 8 Benefits to Data Contributors

Data contributors will be acknowledged in the study output. Their experience data will be part of a broad industry study that will benefit the industry. The experience data for this study will/may be compared against current industry standard valuation assumptions, and significant variance from the current standard may trigger the development of new standards. In such a situation, the data from this study may be used as the basis to develop new valuation standards. Data contributors will benefit from having their company's data be included in the comparison to standard valuation assumptions and from being included in the basis for any new valuation standards.

Data contributors whose data is retained for inclusion in the study and who purchase a 2026 subscription to Experience Studies Pro will also receive the following benefits:

- the ability to see their own experience results compared to the industry results in non-public, data visualization dashboards or excel pivot tables;
- the option to choose a group of no less than 5 peer companies from the companies who provided data to the study and receive a comparison of the aggregated results of these peer companies to their own company results;
  - o If your company is chosen to be in another company's peer group, your company's confidentiality will be protected in any peer group analysis in the following ways:
    - A peer group must contain at least five (5) companies.
    - If needed, any company with data that dominates the rest of the group (i.e., represents more than 25% of the exposure for the group) will be scaled back to 25%.
  - o If you submit data for more than one company, please contact <a href="StudyPro@soa.org">StudyPro@soa.org</a> if you prefer the data for all the companies to be combined as one 'company group' or kept as separate individual companies in your peer group analysis.
  - o By being a data contributor, you acknowledge and agree that your company's data may be part of another company's peer group analysis. If you want to exclude your company's data from another company's peer group analysis, please notify <a href="StudyPro@soa.org">StudyPro@soa.org</a>. In this case, your company will not have the option to receive a peer group analysis.

• the opportunity to have a meeting with the SOA Research Institute and LIMRA researcher(s) who performed the analyses for the study. At this meeting, the contributor will be able to quickly gain deeper insights into the results and questions in specific areas of interest.

#### Section 9 Data Access, Ownership and Retention

The SOA Research Institute and LIMRA have partnered together to collect and process experience data for this effort. The data collected under this partnership will be processed and housed within LIMRA's existing study data infrastructure. The agreement between the SOA Research Institute and LIMRA includes provisions to ensure the data is kept secure and confidential. Only SOA Research Institute and LIMRA staff directly involved with the project will have access to the original data. SOA Research Institute volunteers working on the experience analysis and table development will not have access to original data. For more information on LIMRA's information security program, please see the LLG (LIMRA) Governing Information Security Policy in the Appendix C.

The SOA Research Institute and LIMRA will create aggregated datasets from the original data contributions for the purpose of completing this effort. These aggregated datasets will not contain any personally identifiable information (PII). All aggregated datasets compiled by the SOA Research Institute and LIMRA from the original data contributions will be the property of the SOA Research Institute and LIMRA. Only SOA Research Institute staff, LIMRA staff, or contracted independent consultants will have access to contributor-level data. The aggregated datasets may be used for future efforts, as deemed appropriate by the SOA Research Institute or LIMRA.

#### Section 10 Appendix A – Policy Level File #1 – VM51 Data

Please provide the VM51 data elements for calendar years 2018-2024 for individual life policies and riders. If it is easier to supply the full VM51 submission, please do so, and we will exclude data which is not within scope. We would prefer that the VM51 files be provided in separate calendar years where possible. If you are also participating in the post-level term study, you will only need to submit one VM51 submission for both studies. In that case, be sure to provide guidance for us to subset the files as needed for each study.

Pending NAIC approval, we will apply the NAIC validation rules.

If the Form for Additional Plans was submitted to the NAIC, please also submit this with your submission.

Valuation Manual (VM51) Appendix 4: Mortality Data Elements and Format

1/1/2023 Edition, reflecting NAIC adoptions through 8/13/2022

ITEM	LENGTH	DATA ELEMENT	DESCRIPTION
1	9	Submitting Company ID	ID number representing the company submitting this file.  If the company has an NAIC Company Code, then that code must be used.
			If the company does not have an NAIC Company Code, the company's Federal Employer Identification Number (FEIN) must be used.
			The NAIC has asked us to omit this field going forward. Therefore, for the 2024 submission year, please omit this field.
2	5	NAIC Company Code of the Direct Writer of Business	The NAIC Company Code of the company that wrote the business being reported.
			In the case of assumption reinsurance where the assuming company is legally responsible for all benefits and claims paid, the assuming company is considered to be the direct writer.
			If the direct writer is the company submitting the data file, items 1 and 2 must contain the same value.
3	4	Observation Year	Enter Calendar Year of Observation
4	20	Policy Number	Enter Policy Number. For Policy Numbers with length less than 20, left justify the number, and blank fill the empty columns. Any other unique identifying number can be used instead of a Policy Number for privacy reasons.

		1	
6	2	Segment Number  State of Issue	If only one policy segment exists, enter segment number '1'. For a single life policy, the base policy is to be put in the record with segment number '1'. Subsequent policy segments are in separate records with information about that coverage and differing segment numbers.  For joint life policies, the base policy of the first life is to be put in a record with segment number '1,' and the base policy of the second life is to be put in a separate record with segment number '2.' Joint life policies with more than two lives are not to be submitted. Subsequent policy segments are in separate records with information about that coverage and differing segment numbers.  Policy segments with the same policy number are to be submitted for:  a) Single life policies; b) Joint life policies; c) Term/paid up riders; or d) Additional amounts of insurance including purchase through dividend options.  Use standard, two-letter state abbreviation codes (e.g., NY for New York)
7	1	Gender	0 = Unknown or unable to subdivide 1 = Male 2 = Female 3 = Unisex – Unknown or unable to identify 4 = Unisex – Male 5 = Unisex – Female
8	8	Date of Birth	Enter the numeric date of birth in YYYYMMDD format
9	1	Age Basis	0 = Age Nearest Birthday 1 = Age Last Birthday 2 = Age Next birthday  Drafting Note: Professional actuarial organization will need to develop either age next birthday mortality tables or procedure to adapt existing mortality tables to age next birthday basis.
10	3	Issue Age	Enter the insurance Issue Age
11	8	Issue Date	Enter the numeric calendar year in YYYYMMDD format.
12	1	Smoker Status	Smoker status should be submitted where reliable.  0 = Unknown  1 = No tobacco usage  2 = Nonsmoker  3 = Cigarette smoker  4 = Tobacco user

13	1	Preferred Class Structure Indicator	<ul> <li>0 = If no reliable information on multiple preferred and standard classes is available or if the policy segment was issued substandard or if there were no multiple preferred and standard classes available for this policy segment or if preferred information is unknown.</li> <li>1 = If this policy was issued in one of the available multiple preferred and standard classes for this policy segment.</li> <li>Note: If Preferred Class Structure Indicator is 0, or if preferred information is unknown, leave next four items blank.</li> </ul>
14	1	Number of Classes in Nonsmoker Preferred Class Structure	If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 3, or 4, or if preferred information is unknown, leave blank. For nonsmoker or no tobacco usage policies that could have been issued as one of multiple preferred and standard classes, enter the number of nonsmoker preferred and standard classes available at time of issue.
15	1	Nonsmoker Preferred Class	If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 3, or 4, or if preferred information is unknown, leave blank.  For nonsmoker policy segments that could have been issued as one of multiple preferred and standard classes:  1 = Best preferred class  2 = Next Best preferred class after 1  3 = Next Best preferred class after 2  4 = Next Best preferred class after 3  5 = Next Best preferred class after 4  6 = Next Best preferred class after 5  7 = Next Best preferred class after 6  8 = Next Best preferred class after 7  9 = Next Best preferred class after 8  Note: The policy segment with the highest nonsmoker Preferred Class number should have that number equal to the Number of Classes in Nonsmoker Preferred Class Structure.
16	1	Number of Classes in Smoker Preferred Class Structure	If Preferred Class Structure Indicator_is 0 or if Smoker Status is 0, 1 or 2, or if preferred information is unknown, leave blank.  For smoker or tobacco user policies that could have been issued as one of multiple preferred and standard classes, enter the number of smoker preferred and standard classes available at time of issue.

17	1	Smoker Preferred Class	If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 1 or 2, or if preferred information is unknown,
			leave blank.
			For smoker policy segments that could have been issued as one of multiple preferred and standard classes:
			1 = Best preferred class 2 = Next Best preferred class after 1
			3 = Next Best preferred class after 2 4 = Next Best preferred class after 3
			5 = Next Best preferred class after 4 6 = Next Best preferred class after 5
			7 = Next Best preferred class after 6
			8 = Next Best preferred class after 7 9 = Next Best preferred class after 8
			Note: The policy segment with the highest Smoker
			Preferred Class number should have that number equal to the Number of Classes in Smoker Preferred Class Structure.
18	2	Type of Underwriting Requirements	If underwriting requirement of ordinary business is reliably known, use code other than "99." Ordinary business does not include separate lines of business, such as simplified issue/guaranteed issue, worksite, individually solicited group life, direct response, final expense, preneed, home
			service and COLI/BOLI/CHOLI.  01 = Underwritten, but unknown whether fluid was
			collected  02 = Underwritten with no fluid collection
			03 = Underwritten with fluid collected
			06 = Term Conversion
			07 = Group Conversion 09 = Not Underwritten
			99 = For issues where underwriting requirement unknown
10	1	Collection decided by P. C.	or unable to subdivide
19	1	Substandard Indicator	0 = Policy segment is not substandard 1 = Policy segment is substandard
			2 = Policy segment is uninsurable
			Notes:
			a. All policy segments that are substandard need to be identified as substandard or
			need to be identified as substandard or uninsurable.
			b. Submission of substandard policies is
			required. c. If feasible, identify substandard policy
			segments where temporary flat extra has ceased as substandard.

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20	3	Plan	Exclude from contribution: spouse and children under family policies or riders. If Form for Additional Plan Codes was submitted for this policy, enter unique three-digit plan number(s) that differ from the plan numbers below:  000 = If unable to distinguish among plan types listed below  100 = Joint life plan unable to distinguish among joint life plan types listed below
			Permanent Plans:  010 = Traditional fixed premium fixed benefit permanent plan  011 = Permanent life (traditional) with term  012 = Single premium whole life  013 = Econolife (permanent life with lower premiums in the early durations)
			<ul> <li>014 = Excess interest whole life</li> <li>015 = First to die whole life plan (submit separate records for each life)</li> <li>016 = Second to die whole life plan (submit separate records for each life)</li> <li>017 = Joint whole life plan – unknown whether 015 or 016 (submit separate records for each life)</li> <li>018 = Permanent products with non-level death benefits</li> <li>019 = Permanent plans 010, 011, 012, 013, 014, 015, 016, 017, 018 combined (i.e. unable to separate)</li> </ul>
			Term Insurance Plans:  020 = Term (traditional level benefit and attained age premium)  021 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for five years)  211 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 10 years)  212 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 15 years)  213 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 20 years)  214 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 25 years)  215 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 30 years)  022 = Term (level death benefit with guaranteed level premium for 10 years and anticipated level term

- 221 = Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 15 years)
- 222 = Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 20 years)
- 223 = Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 25 years)
- 224 = Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 30 years)
- 023 = Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 15 years)
- 231 = Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 20 years)
- 232 = Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 25 years)
- 233 = Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 30 years)
- 024 = Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 20 years)
- 241 = Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 25 years)
- 242 = Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 30 year)
- 025 = Term (level death benefit with guaranteed level premium for 25 years and anticipated level term period for 25 years)
- 251 = Term (level death benefit with guaranteed level premium for 25 years and anticipated level term period for 30 year)
- 026 = Term (level death benefit with guaranteed level premium for 30 years and anticipated level term period for 30 years)
- 027 = Term (level death benefit with guaranteed level premium period equal to anticipated level term period where the period is other than five, 10, 15, 20, 25 or 30 years)
- 271 = Term (level death benefit with guaranteed level premium period not equal to anticipated level term period, where the periods are other than five, 10, 15, 20, 25 or 30 years)
- 028 = Term (decreasing benefit)
- 040 = Select ultimate term (premium depends on issue age and duration)

- 041 = Return of Premium Term (level death benefit with guaranteed level premium for 15 years)
- 042 = Return of Premium Term (level death benefit with guaranteed level premium for 20 years)
- 043 = Return of Premium Term (level death benefit with guaranteed level premium for 25 years)
- 044 = Return of Premium Term (level death benefit with guaranteed level premium for 30 years)
- 045 = Return of Premium Term (level death benefit with guaranteed level premium for period other than 15, 20, 25 or 30 years)
- 046 = Economatic term
- 059 = Term plan, unable to classify
- 101 = First to die term plan (submit separate records for each life)
- 102 = Second to die term plan (submit separate records for each life)
- 103 = Joint term plan unknown whether 101 or 102 (submit separate records for each life)

# Universal Life Plans (Other than Variable), issued without a Secondary Guarantee:

- 061 = Single premium universal life
- 062 = Universal life (decreasing risk amount)
- 063 = Universal life (level risk amount)
- 064 = Universal life unknown whether code 062 or 063
- 065 = First to die universal life plan (submit separate records for each life)
- 066 = Second to die universal life plan (submit separate records for each life)
- 067 = Joint life universal life plan unknown whether code 065 or 066 (submit separate records for each life)
- 068 = Indexed universal life

# Universal Life Plans (Other than Variable) with Secondary Guarantees:

- 071 = Single premium universal life with secondary guarantees
- 072 = Universal life with secondary guarantees (decreasing risk amount)
- 073 = Universal life with secondary guarantees (level risk amount)
- 074 = Universal life with secondary guarantees –unknown whether code 072 or 073
- 075 = First to die universal life plan with secondary guarantees (submit separate records for each life)
- 076 = Second to die universal life plan with secondary guarantees (submit separate records for each life)
- 077 = Joint life universal life plan with secondary guarantees unknown whether code 075 or 076 (submit separate records for each life)
- 078 = Indexed universal life with secondary guarantees

			Variable Life Plans issued without a Secondary Guarantee:  080 = Variable life  081 = Variable universal life (decreasing risk amount)  082 = Variable universal life (level risk amount)  083 = Variable universal life – unknown whether code 081 or 082  084 = First to die variable universal life plan (submit separate records for each life)  085 = Second to die variable universal life plan (submit separate records for each life)  086 = Joint life variable universal life plan – unknown whether 084 or 085 (submit separate records for each life)
			Variable Life Plans with Secondary Guarantees:  090 = Variable life with secondary guarantees  091 = Variable universal life with secondary guarantees
			Coverage purchased with dividends: 196 = Paid Up Additions 197 = One-Year Term
			Nonforfeiture:  098 = Extended term  099 = Reduced paid-up  198 = Extended term for joint life (submit separate records for each life)  199 = Reduced paid-up for joint life (submit separate records for each life)
21	1	In-force Indicator	0 = If the policy segment was not in force at the end of the calendar year of observation 1 = If the policy segment was in force at the end of the calendar year of observation
22	12	Face Amount of Insurance at Issue	Face amount of the policy segment at its issue date rounded to nearest dollar. If policy provides payment of cash value in addition to face amount, include face amount and do not include cash value. If the policy was issued

			during the observation year, the Face Amount of Insurance
			at the Beginning of the Observation Year should be blank.
23	12	Face Amount of Insurance at the Beginning of the Observation Year	Face amount of the policy segment at the beginning of the calendar year of observation rounded to nearest dollar. If policy provides payment of cash value in addition to face amount, include face amount and do not include cash value. Exclude extra amounts attributable to 7702 corridors. If the policy was issued during the observation year, the Face Amount at the Beginning of the Observation Year should be blank.
24	12	Face Amount of Insurance at the End of the Observation Year	Face amount of the policy segment at the end of the calendar year of observation rounded to nearest dollar. If policy provides payment of cash value in addition to face amount, include face amount, and do not include cash value. Exclude extra amounts attributable to 7702 corridors.  If In-force Indicator is 0, enter face amount of the policy segment at the time of termination, if available; otherwise, leave blank.
25	12	Death Claim Amount	If In-force Indicator is 1, leave blank.
			Death claim amount rounded to the nearest dollar.
			If In-force Indicator is 0 and Cause of Termination is 04, then enter the face amount.
			If In-force Indicator is 0 and Cause of Termination is not 04, then leave blank.
			If the policy provides payment of cash value in addition to face amount, report face amount, and do not include cash value.
26	8	Termination Reported Date	If In-force Indicator is 1, leave blank. Enter in the format YYYYMMDD the eight-digit calendar date that the termination was reported.
27	8	Actual Termination Date	If In-force Indicator is 1, leave blank.
			Enter in the format YYYYMMDD the eight-digit calendar date when the termination occurred.
			If termination is due to death (Cause of Termination is 04), enter actual date of death.
			If termination is lapse due to non-payment of premium (Cause of Termination is 01 or 02 or 14), enter the last day the premium was paid to.
28	2	Cause of Termination	If Inforce Indicator is 1, leave blank.  00 = Termination type unknown or unable to subdivide  01 = Reduced paid-up  02 = Extended term

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			03 = Voluntary; unable to subdivide among 01, 02, 07, 09, 10, 11 or 13 04 = Death 07 = 1035 exchange 09 = Term conversion – unknown whether attained age or original age 10 = Attained age term conversion 11 = Original age term conversion 12 = Coverage expired or contract reached end of the mortality table 13 = Surrendered for full cash value 14 = Lapse (other than to Reduced Paid Up or Extended Term) 15 = Termination via payment of a discounted face amount while still alive, pursuant to an accelerated death benefit
29	10	Annualized Premium at Issue	provision  For level term segments with plan codes 021 through 027, 041 through 045 or 211 through 271 of Item 19, Plan, enter the annualized premium set at issue.
			Except for level term segments specified above, leave blank for non-base segments.
			For the base segments for ULSG, and Variable Life with Secondary Guarantees (VLSG) with plan codes 071 through 078 or 090 through 096 of Item 19, Plan, enter the annualized billed premium set at issue.
30	10	Annualized Premium at the Beginning of Observation Year	For level term segments with plan codes 021 through 027, 041 through 045 or 211 through 271 of Item 19, Plan, enter the annualized premium for the policy year that includes the beginning of the observation year.
			Except for level term segments specified above, leave blank for non-base segments.
			For the base segments for ULSG and VLSG with plan codes 071 through 078 or 090 through 096 of Item 19, Plan, enter the annualized billed premium for the policy year that includes the beginning of the observation year.
			For policies issued in the observation year, leave blank.
			If unknown, leave blank.
31	10	Annualized Premium at the End of Observation Year, if available. Otherwise Annualized Premium as of Year/Actual Termination Date	For level term segments with plan codes 021 through 027, 041 through 045 or 211 through 271 of Item 19, Plan, for each segment that has Item 20, with the In-force Indicator = 1, enter the annualized premium for the policy year that includes the end of the observation year. Otherwise, enter the annualized premium that would have been paid at the end of the observation year. If end of year premium is not

			available, enter the annualized premium as of the Actual Termination Date (Item 26).  Except for level term segments specified above, leave blank for non-base segments.  For the base segments for ULSG and VLSG with plan codes 071 through 078 or 090 through 096 of Item 19, Plan, use the annualized billed premium. For base segments that have Item 20, with the Inforce Indicator =1, enter the annualized billed premium for the policy year that includes the end of the observation year. Otherwise, enter the annualized billed premium that would have been paid at the end of the observation year. If end of year premium is not available, enter the annualized premium as of the Actual Termination Date (Item 26).  Round to the nearest dollar.
32	2	Premium Mode	If unknown, leave blank.  01 = Annual 02 = Semiannual 03 = Quarterly 04 = Monthly Bill Sent 05 = Monthly Automatic Payment 06 = Semimonthly 07 = Biweekly 08 = Weekly 09 = Single Premium 10 = Other / Unknown
33	10	Cumulative Premium Collected as of the Beginning of Observation Year	If not ULSG or VLSG, leave blank.  For ULSG, and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan:  1) For non-base segments, leave blank.  2) For base segments, enter the cumulative premium collected since issue, as of the beginning of the observation year. Round to the nearest dollar.  For policies issued in the observation year, leave blank. If unknown, leave blank.
34	10	Cumulative Premium Collected as of the End of Observation Year if available. Otherwise Cumulative Premium Collected as of Actual Termination Date	If not ULSG or VLSG, leave blank.  For ULSG, and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan:  1) For non-base segments, leave blank.  2) For base segments inforce at the end of the observation year, enter the cumulative premium collected as of the end of the observation year.  3) For base segments terminated during the observation year, enter the cumulative premium collected since issue, as of the Actual Termination Date (Item 26).  Round to the nearest dollar.

			If unknown, leave blank.
35	2	ULSG/VLSG Premium Type	For non-base segments, leave blank.
			If not ULSG or VLSG, leave blank.
			For ULSG and VLSG policies with plan codes 071
			through 078 or 090 through 096 of Item 19, Plan: 00 = Unknown
			01 = Single premium
			02 = ULSG/VLSG Whole life level premium
			03 = Lower premium (term like)
			04 = Other
36	2	Type of Secondary	For non-base segments, leave blank.
		Guarantee	If not ULSG or VLSG, leave blank.
			For ULSG and VLSG policies with plan codes 071 through
			078 or 090 through 096 of Item 19, Plan: 00 = Unknown
			01 = Cumulative Premium without Interest (Single Tier)
			02 = Cumulative Premium without Interest (Multiple Tier)
			03 = Cumulative Premium without Interest (Other)
			04 = Cumulative Premium with Interest (Single Tier)
			05 = Cumulative Premium with Interest (Multiple Tier)
			06 = Cumulative Premium with Interest (Other) 11 = Shadow Account (Single Tier)
			11 = Shadow Account (Single Her) 12 = Shadow Account (Multiple Tier)
			13 = Shadow Account (Other)
			21 = Both Cumulative Premium without Interest and
			Shadow Account
			22 = Both Cumulative Premium with Interest and Shadow Account
			23= Other, not involving either Cumulative Premium
			or Shadow Account
37	10	Cumulative Minimum	If not ULSG or VLSG, leave blank.
		Premium as of the	
		Beginning of Observation Year	For ULSG and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan:
		real	,
			If Item 35, Type of Secondary Guarantee is blank, 00, 11,
			12, 13 or 23, leave blank.
			If Item 35, Type of Secondary Guarantee is 01, 02, 03,
			04, 05, 06, 21 or 22:
			1) Leave non-base segments, blank.
			2) For base segments:
			Enter the cumulative minimum premiums,
			including applicable interest, for all policy years up to the beginning of the observation year.
<u> </u>	I .	<u> </u>	ap to the beginning of the observation year.

	1		
			Round to the nearest dollar.
			For policies issued in the observation year, leave blank.
			If unknown, leave blank.
38	10	Cumulative Minimum	If not ULSG or VLSG, leave blank.
		Premium as of the End of Observation Year/ Actual Termination Date	For ULSG and VLSG policies with plan codes 071 through 078 and 090 through 096 of Item 19, Plan: If Item 35, Type of Secondary Guarantee is blank, 00, 11, 12, 13 or 23, leave blank. If Item 35, Type of Secondary Guarantee is 01, 02, 03, 04, 05, 06, 21 or 22: 1) For non-base segments, leave blank. 2) For base segments inforce at the end of the observation year, enter the cumulative minimum premiums, including applicable interest, up to the end of the observation year. 3) For base segments terminated during the observation year, enter the cumulative minimum premiums, including applicable interest, up to the Actual Termination Date (Item 26)
			Round to the nearest dollar.
			If unknown, leave blank.
39	10	Shadow Account Amount at	If not ULSG, or VLSG, leave blank.
		the Beginning of Observation Year	For ULSG and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan: If Item 35, Type of Secondary Guarantee is blank, 00, 01, 02, 03, 04, 05, 06, or 23 leave blank.
			If Item 35, Type of Secondary Guarantee is 11, 12, 13, 21 or 22:  1) Leave non-base segments blank.
			2) For base segments:
			Enter total amount of the Shadow Account at the beginning of the observation year. The Shadow Account can be positive, zero or negative.
			Round to the nearest dollar.
			For policies issued in the observation year, leave blank.
			If unknown, leave blank.
40	10	Shadow Account Amount at	If not ULSG, or VLSG, leave blank.
		the End of Observation Year/ Actual Termination Date	For ULSG and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan:
			If Item 35, Type of Secondary Guarantee is blank, 00, 01,

			02 02 04 05 06 or 22 loave blank
			02, 03, 04, 05, 06, or 23 leave blank.
			<ul> <li>If Item 35, Type of Secondary Guarantee is 11, 12, 13, 21 or 22:</li> <li>1) For non-base segments, leave blank.</li> <li>2) For base segments inforce at the end of the observation year, enter the total amount of the Shadow Account at the end of the observation year. The Shadow Account can be positive, zero or negative.</li> <li>3) For base segments terminated during the observation year, enter the total amount of the Shadow Account as of the Actual Termination Date (Item 26). The Shadow Account can be positive, zero or negative.</li> <li>Round to the nearest dollar.</li> </ul>
			If unknown, leave blank.
41	10	Account Value at the	For non-base segments, leave blank.
		Beginning of Observation Year	If not ULSG or VLSG, leave blank.
			For ULSG and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan, the policy Account Value (gross of any loan) at the Beginning of the Observation Year. The policy Account Value can be positive, zero or negative.
			Round to the nearest dollar.
			For policies issued in the observation year, leave blank.
			If unknown, leave blank.
42	10	Account Value at the End of	For non-base segments, leave blank.
		Observation Year/Actual Termination Date	If not ULSG or VLSG, leave blank.
			<ul> <li>For ULSG and VLSG policies with plan codes 071 through 078 or 090 through 096 of Item 19, Plan:</li> <li>1) If policy is in force at the end of observation year, enter the policy Account Value (gross of any loan) at the end of the Observation Year. The policy Account Value can be positive, zero or negative.</li> <li>2) If policy terminated during the observation year, enter the policy Account Value (gross of any loan) as of the Actual Termination Date (Item 26). The policy Account Value can be positive, zero or negative.</li> <li>Round to the nearest dollar.</li> </ul>

			If unknown, leave blank.
43	10	Amount of Surrender	For non-base segments, leave blank.
		Charge at the Beginning of Observation Year	If not ULSG or VLSG, leave blank.
		Observation Year	II HOL OLSG OF VESG, leave blank.
			For ULSG and VLSG policies with plan codes 071
			through 078 and 090 through 096 of Item 19, Plan,
			enter the dollar Amount of the Surrender Charge as of
			the Beginning of the Observation Year.
			Round to the nearest dollar.
			For policies issued in the observation year, leave blank.
			If unknown, leave blank.
44	10	Amount of Surrender	For non-base segments, leave blank.
		Charge at the End of	If not III CC on VI CC loose blonk
		Observation Year/Actual Termination Date	If not ULSG or VLSG, leave blank.
		Terrimation Date	For ULSG and VLSG policies with plan codes 071
			through 078 or 090 through 096 of Item 19, Plan:
			1) If policy is in force at the end of observation year,
			enter the dollar amount of the Surrender Charge at
			the end of the Observation Year.
			2) If policy terminated during the observation year,
			enter the dollar amount of the Surrender Charge as of the Actual Termination Date (Item 26).
			of the Actual Termination Date (Item 20).
			Round to the nearest dollar.
			If unknown, leave blank.
45	2	Operative Secondary	The company defines whether a secondary guarantee is
		Guarantee at the Beginning	in effect for a policy with a secondary guarantee at the
		of Observation Year	beginning of the Observation Year.
			If Item 35, Type of Secondary Guarantee is blank, leave
			blank.
			If Item 35, Type of Secondary Guarantee is 00 through
			23:
			<ul><li>1) For non-base segments, leave blank.</li><li>2) For base segments:</li></ul>
			00 = If unknown whether the secondary guarantee is in
			effect
			01 = If secondary guarantee is not in effect
			02 = If secondary guarantee is in effect
			03 = If all secondary guarantees have expired
46	2	Operative Secondary	The company defines whether a secondary guarantee is
		Guarantee at the End of	in effect for a policy with a secondary guarantee at the
		Observation Year/Actual Termination Date	end of the Observation Year/Actual Termination Date.
		Termination Date	If Item 35, Type of Secondary Guarantee is blank, leave
			blank.
<b>L</b>	1	1	

			If Item 35, Type of Secondary Guarantee is 00 through 23:  1) For non-base segments, leave blank.  2) For base segments in force at the end of observation year, enter the appropriate value below as of the end of observation year:  00 = If unknown whether the secondary guarantee is in effect 01 = If secondary guarantee is not in effect 02 = If secondary guarantee is in effect	
			03 = If all secondary guarantees have expired 3) For base segments terminated during the observation year, enter the appropriate value below as of the Actual Termination Date (Item 26): 00 = If unknown whether the secondary guarantee is in effect 01 = If secondary guarantee is not in effect 02 = If secondary guarantee is in effect 03 = If all secondary guarantees have expired	
47	2	State of Domicile	Use standard, two-letter state abbreviations codes (e.g., FL for Florida) for the state of the policy owner's domicile.  If unknown or outside of the U.S., leave blank.	

#### Section 11 Appendix B – Policy Level File #2 – Supplemental Data

If any data item is not available, leave the field blank; do not code missing items as zero. For dollar amounts, do not include dollar signs, commas, decimal points, or cents, and round to the nearest dollar, unless the field description specifies otherwise.

The purpose of the cause of death information is to understand both the direct and indirect impacts of COVID and how they relate to other factors in the study.

The purpose of the accelerated benefit information is to explore their relationships to the death benefit of the policy, including how that may have been impacted by COVID. Below is a description of each accelerated benefit:

**Accelerated Death Benefit/Terminal Illness**: full or partial benefit payable if the insured is expected to die within some short future period, such as within the next six or twelve months

**Chronic Illness Rider**: full or partial benefit payable when the insured is diagnosed with a permanent condition resulting in the loss of two or more of the following activities of daily living: ambulation, continence, feeding, dressing, personal hygiene, or toileting.

**Critical Illness Rider**: full or partial benefit payable when the insured is diagnosed with a specified illness such as cancer, heart attack, or stroke

Long Term Care Rider: full or partial benefit payable for long-term care expenses, such as nursing home or at-home care, when the insured is diagnosed with a permanent condition resulting in the loss of two or more of the following activities of daily living: ambulation, continence, feeding, dressing, personal hygiene, or toileting.

PROVIDI	PROVIDE DATA ITEMS #1-4 FOR ALL POLICIES IN YOUR DATA SUBMISSION				
ITEM#	FIELD NAME	LENGTH	DATA ELEMENT	DESCRIPTION	
1	Company Code	9	Alphanumeric	ID number representing the company submitting.  Use the same Company Code provided on the first policy level data file (Policy Level File #1).	
2	Policy ID	20	Alphanumeric	Enter a unique ID for the policy.  This ID must match the policy id used on the first policy level file submission (Policy Level File #1).	
3	Segment Number	3	Numeric	Provide an identifier for the current product or plan code for the policy. This field will be used to link the policy information to the product code data requested in spreadsheet format.	

				This ID must match the segment id used on the first policy level file submission (Policy Level File #1).
4	Observation Year	4	Numeric	The observation year to which this record applies for the given combination of Policy ID and Segment Number.
				This can be set to 0 if it should apply to all observation years. However, do not mix 0s and observation years for a given policy ID/segment ID combination. Either set to 0, which covers all observation years, or provide individual observation years for years 2018-2024, but not both.
5	Life ID	10	Alphanumeric	(Optional) Company-specific ID for the distinct life associated with the policy.
6	Cause of Death Code	8	Alphanumeric	This holds the cause of death code and must be populated for all records in Policy Level File #1 where the termination code is due to death (4 or 5) or due to payment of accelerated death benefit (code 15), as follows:  Please see the section below on coding ICD codes for coding requirements.  If you cannot provide an ICD code, please use your internal code. We will need a supplemental file from you with descriptions of the internal codes.  For policies which did not terminate due to death or death benefit acceleration, leave blank.
7	Cause of Death Code Type	1	Numeric	The type of code in Column 6.  0 = ICD 9  1 = ICD 10  2 = Internal  For policies which did not terminate due to death, leave blank.
8	Zip Code	10	Alphanumeric	The zip code for the coverage, if available.

9	Substandard Rating Type	1	Numeric	0 — Not Rated 1 — Table Rating 2 — Flat Extra 3 — Issue age is increased to rate the risk
10	Multiplicative Table Rating	3	Numeric	Blank, if not substandard, or if multiplicative extra mortality is not used.  Otherwise, three-digit percentage of
				total mortality (For three tables or 175%, use 175)
11	Multiplicative Table Rating Period	2	Numeric	Blank, if not substandard, or if multiplicative extra mortality not used
				Otherwise, the duration in years. Set to 99 if permanent.
12	Additive (Flat Extra) Rating	7	Numeric	Blank, if not substandard, or if additive extra mortality not used.
				Otherwise, the dollar amount per 1,000, rounded to three decimals. For example, 123.456
13	Additive (Flat Extra) Rating Period	2	Numeric	Blank, if not substandard, or if additive extra mortality is not used
				Otherwise, the duration in years. Set to 99 if permanent.
14	Accelerated Benefit Present – Terminal Illness	1	Numeric	Required. See glossary for definitions for benefit types.
	illitess			0 – if no terminal illness/accelerated death benefit rider is present 1 – if terminal illness/accelerated death benefit rider is present
15	Accelerated Benefits Paid Year – Terminal Illness	4	Numeric	Year that a terminal illness/accelerated death benefit was incurred.
				Leave blank if this does not apply to the record.
16	Accelerated Benefits Paid Month – Terminal Illness	2	Numeric	Month that a terminal illness/accelerated benefit was incurred.
				Leave blank if this does not apply to the record.

17	Accelerated Benefits Paid Day – Terminal Illness	2	Numeric	Day that a terminal illness/accelerated death benefit was incurred.  Leave blank if this does not apply to the record.
18	Accelerated Benefits Diagnosis Code — Terminal Illness	8	Alphanumeric	This holds diagnosis code when a terminal illness/accelerated death benefit has been incurred, as follows:  For policies which did not incur an accelerated benefit, leave blank.  Please see the section below on coding ICD codes for additional discussion.
19	Accelerated Benefit Diagnosis Code Type – Terminal Illness	1	Numeric	The type of code in Column 18.  0 = ICD 9 1 = ICD 10 2 = Internal  For policies which did not incur an accelerated benefit, leave blank.
20	Accelerated Benefit Present – Chronic Illness	1	Numeric	Required. See glossary for definitions for benefit types.  0 – if no chronic illness rider is present 1 – if chronic illness rider is present
21	Accelerated Benefits Paid Year – Chronic Illness	4	Numeric	Year that a chronic illness benefit was incurred.  Leave blank if this does not apply to the record.
22	Accelerated Benefits Paid Month – Chronic Illness	2	Numeric	Month that a chronic illness benefit was incurred.  Leave blank if this does not apply to the record.
23	Accelerated Benefits Paid Day – Chronic Illness	2	Numeric	Day that a chronic illness benefit was incurred.  Leave blank if this does not apply to the record.
24	Accelerated Benefits Diagnosis Code – Chronic Illness	8	Alphanumeric	This holds diagnosis code when a chronic illness benefit has been incurred, as follows:

				For policies which did not incur an accelerated benefit, leave blank.  Please see the section below on coding ICD codes for additional discussion.
25	Accelerated Benefit Diagnosis Code Type – Chronic Illness	1	Numeric	The type of code in Column 24.  0 = ICD 9 1 = ICD 10 2 = Internal  For policies which did not incur a benefit, leave blank.
26	Accelerated Benefit Present – Critical Illness	1	Numeric	Required. See glossary for definitions for benefit types.  0 – if no critical illness rider is present 1 – if critical illness rider is present
27	Accelerated Benefits Paid Year – Critical Illness	4	Numeric	Year that a critical illness benefit was incurred.  Leave blank if this does not apply to the record.
28	Accelerated Benefits Paid Month – Critical Illness	2	Numeric	Month that a critical illness benefit was incurred.  Leave blank if this does not apply to the record.
29	Accelerated Benefits Paid Day – Critical Illness	2	Numeric	Day that a critical illness benefit was incurred.  Leave blank if this does not apply to the record.
30	Accelerated Benefits Diagnosis Code – Critical Illness	8	Alphanumeric	This holds diagnosis code when a critical illness benefit has been incurred, as follows:  For policies which did not incur a critical illness benefit, leave blank.  Please see the section below on coding ICD codes for additional discussion.
31	Accelerated Benefit Diagnosis Code Type – Critical Illness	1	Numeric	The type of code in Column 30.

32	Accelerated Benefit Present – Long Term Care Rider	1	Numeric	0 = ICD 9 1 = ICD 10 2 = Internal  For policies which did not incur a critical illness benefit, leave blank.  Required. See glossary for definitions for benefit types.
				0 – if no long term care rider is present 1 – if long term care rider is present
33	Accelerated Benefits Paid Year – Long Term Care Rider	4	Numeric	Year that a long term care benefit was incurred.  Leave blank if this does not apply to the record.
34	Accelerated Benefits Paid Month – Long Term Care Rider	2	Numeric	Month that a long term care benefit was incurred.  Leave blank if this does not apply to the record.
35	Accelerated Benefits Paid Day – Long Term Care Rider	2	Numeric	Day that a long term care benefit was incurred.  Leave blank if this does not apply to the record.
36	Accelerated Benefits Diagnosis Code – Long Term Care Rider	8	Alphanumeric	This holds diagnosis code when a long term care benefit has been incurred, as follows:  For policies which did not incur a long term care benefit, leave blank.  Please see the section below on coding ICD codes for additional discussion.
37	Accelerated Benefit Diagnosis Code Type – Long Term Care Rider	1	Numeric	The type of code in Column 36.  0 = ICD 9  1 = ICD 10  2 = Internal  For policies which did not incur an accelerated benefit, leave blank.

#### Section 12 Appendix C – Underwriting Questionnaire

Life insurance underwriting continues to evolve as additional data sources and advanced methodologies are developed and applied. In Appendix C, we ask that you provide information at the company level regarding certain underwriting practices, as follows:

- 1. Whether you have implemented premium classification systems which do not conform to the preferred class structure schema in columns 12-17 of the VM51 standard, and
- 2. A high level history of the evolution of underwriting for individual life at your company, from traditional full underwriting including fluid collection to fluidless underwriting performed with models and AI.

If you have any questions regarding these items, please reach out to us at <a href="StudyPro@soa.org">StudyPro@soa.org</a>. We would be happy to assist you in filling out the information in this questionnaire.

#### Section 13 Appendix D – Cause of Death/Diagnosis Coding

To facilitate validation and processing of cause of death/diagnosis codes, we ask that all codes be provided in a consistent format. In our experience with other studies, contributors provide codes in mutually incompatible ways.

#### **13.1** ICD 9 CODING

Although ICD 9 coding has been mostly replaced with ICD 10 coding, some contributors may still use them for certain purposes. ICD 9 codes should be provided without decimals and with leading zeros for padding. This ensures that the code is consistent with official mappings from Centers for Medicare and Medicaid Services.

In general, if you are using decimalized ICD 9 codes,

- the code before the decimal should be padded with leading zeros if the code is otherwise numeric, such that it is three digits,
- the code after the decimal should be appended as is, and
- a leading alphabetical code, such as E, should remain in the beginning part of the code

For example, if the contributor's system codes "botulism food poisoning" with ICD 9 code of 5.1, then it should be provided to us as 0051. As another example, if your system codes "Injury due to war operations by unintentional destruction of aircraft due to own onboard explosives" with ICD 9 code E994.1, this should be provided to us as E9441.

ICD 9 coding also permits the use of two additional code types: cancer morphology codes, and personal and family history codes.

For cancer morphology codes, only include if the cause of death/diagnosis is cancer.

For personal and family history codes, please only include these if this is the best information that is at all available for cause of death/diagnosis.

#### 13.2 ICD 10 CODING

ICD 10 codes are always prefixed with a letter, and they should be provided without decimals. For example, if the contributor's system codes "bubonic plague" as A20.0, we would like this provided to us as A200.

ICD 10 coding provides a much richer description for external causes of death/diagnosis than ICD 9 coding does. Therefore, for accidents, suicide, homicide, and drug overdoses, we ask that you provide the detailed S, T, V, W, and X codes. For instance, all "poisoning by ecstasy" codes are equipped with intent modifiers which would result in very different groupings.

Code	Description	Category
T43641A	Poisoning by ecstasy, accidental (unintentional), initial encounter	Drug Overdose
T43642A	Poisoning by ecstasy, intentional self-harm, initial encounter	Suicide
T43643A	Poisoning by ecstasy, assault, initial encounter	Homicide
T43644A	Poisoning by ecstasy, undetermined, initial encounter	Accidental (non-MVA)

#### 13.3 USE OF INTERNAL CODING SYSTEMS

If a contributor, for whatever reason, is unable to supply the detailed ICD codes, they can provide their internal code. If so, they must also provide a table which describes that code.

#### Section 14 Appendix E – Validation Rules

We plan to provide validation rules that we will apply to contributor data as part of the data ingestion and validation process. It is not required that a contributor do so prior to submission. However, doing so will expedite the data validation process.

#### Section 15 Appendix F – LLG Governing Information Security Policy

LLG Information Technology has created and maintains a comprehensive information security program called Governing Information Security Policy for LLG. This program covers information security, risk assessment, and privacy for all LLG IT activities. The program ensures that LLG has in place adequate technical, administrative, and physical safeguards to protect sensitive information. LLG's Chief Information Security Officer is the owner of the program document, and reviews and updates it annually.

#### 1. Zero Trust Architecture Model

LLG's security model is centered on the belief that devices are not to be automatically trusted inside or outside our perimeters. All connections must verify and continually be verified they meet a defined set of requirements before being granted access as well as ongoing access.

#### 2. Physical Security

LLG has industry best practice physical controls to protect staff, information, and guard against intrusion theft, damage, and unauthorized access. A badge reader system controls access to LLG's facilities, computer rooms, and areas where sensitive information is stored. Employees, contractors, and consultants have photo ID badges, that must be prominently displayed. Visitors and third parties must be provided with badges that are prominently displayed at all times during their use of LLG's buildings. LLG IT maintains procedures to ensure that computer and communications rooms are secured and protected from fire.

#### 3. Data Storage

The physical storage location of data is Windsor, CT. The core physical infrastructure that includes physical hardware asset management, security, data protection, and networking services is managed by LLG staff. All systems are managed, monitored, and operated by LLG.

#### 4. End-Point Protection

LLG Information Technology department develops, maintains, and revises as needed, a manual of procedures that govern the following:

- Use of software to protect the computing environment from viruses and other malicious tools
- Updating the computing environment with "patches" for known vulnerabilities
- Restricting the ability of unprotected systems to access the environment
  - o Installed and running on all LLG connected computers is an industry approved end-point protection software program that is updated regularly. Definitions are set to update daily

#### 5. Firewalls

LLG utilizes next-generation firewalls to inspect all traffic including applications, threats, and content. The next-generation firewalls provide LL Global the ability to:

- Securely enable applications, users, and content by classifying all traffic.
- Apply security policies to block known vulnerability exploits, viruses, ransomware, spyware, botnets, and other unknown malware, such as advanced persistent threats.
- Protect our network by segmenting data and applications and enforcing the Zero Trust principle.
- Provide centralized visibility and streamline network security, making data actionable to prevent successful cyberattacks.
- URL filtering for outbound connections to prevent access to inappropriate websites.
- Malware analysis and reporting via a cloud-based analysis service that provides detailed analysis and reporting on malware that passes through the firewall.

#### 6. Network Zoning

LLG isolates critical network segments. Virtual machines are one network segment, databases are another, etc.

#### 7. Access Controls

LLG has a comprehensive Access Control Policy that governs access control standards within processing systems and LLG networks, for user registration and privilege management, and for password use and management. This policy also contains requirements and safeguards associated with mobile technologies.

To access LLG computer network and business applications, all users must authenticate with a single unique user ID and a personal secret password managed through Active Directory. Each computer and communication system user ID uniquely identifies only one user. Shared or group user IDs are not created or used. User passwords have strength Requirements and must be changed every 90 days for LLG systems.

#### 8. Least Privilege

LLG adheres to the principle of least privilege. The computer and communications system privileges of all users, systems, and programs are restricted based on the need to know. Special system privileges, such as the ability to examine the files of other users, are restricted to those directly responsible for system

management and/or systems security. The number of privileged user IDs is strictly limited to people who absolutely need such privileges for authorized business purposes.

System administrators who manage computer systems with more than one user will have at least two user IDs, one that provides privileged access and is logged, and the other that provides the privileges of a normal user for day-to-day work.

#### 9. Default System Configuration

LLG disables and does not use default or vendor accounts.

#### 10. Recertification of Access

LLG recertifies users access accounts on a quarterly basis.

#### 11. Connection to LLG Network

LLG network does not permit anyone to physically connect a personal computer or device to the network. All computers and devices that physically connect to the LLG network are owned, configured, and maintained by LLG. LLG does have a smartphone Bring Your Own Device policy, but devices covered under this policy, are configured only for e-mail access and do not connect to the LLG network.

#### Section 16 About The Society of Actuaries Research Institute

Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, datadriven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience and new technologies to help effectively identify, predict and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute connects actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors and nongovernmental organizations, building an effective network which provides support, knowledge and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its <a href="strategic research programs">strategic research programs</a>: aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of <a href="topical research available">topical research available</a>, including an expanding collection of international and market-specific research, experience studies, models and timely research.

Society of Actuaries Research Institute 8770 W. Bryn Mawr Ave., Ste 1000 Chicago, Illinois 60631 www.SOA.org

#### Section 17 About LIMRA

Established in 1916, LIMRA is a research and professional development not-for-profit trade association for the financial services industry. More than 600 insurance and financial services organizations around the world rely on LIMRA's research and educational solutions to help them make bottom-line decisions with greater confidence. Companies look to LIMRA for its unique ability to help them understand their customers, markets, distribution channels and competitors and leverage that knowledge to develop realistic business solutions.

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