# Actuarial Memorandum 

## Policy Forms: ICC10 TLC-3 as UniProduct Series

Long Term Care Coverage

## 1) Scope and Purpose

This rate filing is a request for a $42.33 \%$ increase in premium, effective upon approval by the Interstate Compact and corresponding issue state, on the base policy and all associated riders for all insureds covered under the above captioned policy forms. The purpose of this memorandum is to demonstrate that the requirement of the Interstate Compact in regards to an in force rate increase request have been met. This memorandum is not to be used for other purposes.

Under rate stability regulations, we have utilized the original pricing loss ratio of $63.8 \%$ for currently projected earned premiums, which is greater than the standard $58 \%$ loss ratio defined in the rate stability regulations, and $85 \%$ for any additional earned premiums as the recoverable loss ratios in calculating the requested increase of $42.33 \%$. There has not previously been a rate increase for policies of these forms.

The requested rate increase will take effect upon approval by the Department of Insurance subject to all notification requirements and premium rate guarantee periods. The requested premium rate increase is needed because experience has exceeded the margin for adverse experience included in the original pricing under the rate stability regulations.

The requested rate increase of $42.33 \%$ is the same for all pricing cells as we did not observe any material differences in lifetime loss ratios in our analysis by key pricing cohorts and benefit characteristics.

The requested rate increase will not result in renewal premium rate schedules greater than new business premium rate schedules except for differences attributable to benefits.

This filing is also a request to allow the Company to make available to eligible policyholders with compound benefit increase options (BIOs) the means to completely offset the requested rate increase by agreeing to reduce the BIO growth factor applicable to their policy. If elected, the reduced BIO growth factor would begin to apply on the anniversary date following the effective date of the
rate increase subject to the premium rate guarantee period. Once applicable, the reduced BIO factor would remain in effect in all future years the policy remains inforce. The growth in policy benefits accumulated from issue-to-date would not be lost for policyholders electing this downgrade option. Policyholders eligible for this downgrade option would be limited only to those who currently have compound BIO included on their policy where benefit growth is unlimited. The reduced future BIO growth factors to which policyholders would need to agree to completely offset the requested rate increase are as follows:

| BIO Type | Current BIO <br> Growth Factor | Future BIO <br> Growth Factor |
| :--- | :--- | :--- |
| Compound | $5.00 \% /$ year | $1.8 \% /$ year |
| Compound | $3.00 \% /$ year | $1.55 \% /$ year |

Further, we would like to make available to eligible policyholders with Simple 5\% BIO the means to partially offset the requested rate increase by agreeing to remove the BIO growth factor applicable to their policy. If elected, the policyholder would have a BIO growth factor of $0.00 \%$ beginning on the anniversary date following the effective date of the rate increase subject to the premium rate guarantee period and have their premiums increase by $23.8 \%$. This is summarized in the table below:

| BIO Type | Current BIO <br> Growth Factor | Future BIO <br> Growth Factor | Premium Rate <br> Increase Left |
| :--- | :--- | :--- | :--- |
| Simple | $5.00 \% /$ year | $0.0 \% /$ year | $23.8 \%$ |

This BIO downgrade offer would only affect the rate increase request of this filing. Policyholders who elect this BIO downgrade offer may still be subject to additional future rate action were it to become justified due to further deterioration of experience not currently anticipated as explained in the second prior paragraph.

These Future BIO Growth Factors were calculated using a Gross Premium Valuation (GPV) approach which calculates the present value of all premiums less all benefits and expenses to determine the profits of the block of business using the various assumptions explained in later sections of this memorandum. The GPV was first calculated using the one-time rate increase percentage, e.g., the $42.33 \%$. Then, the GPV was calculated without the one-time rate increase but with the BIO growth factors reduced. This calculation was iteratively repeated until the GPV result matched that calculated with the one-time rate increase. Thus the Future BIO Growth Factors produce the same present value results as the requested rate increase.

Our analysis of the experience for certain cohorts indicates either an immaterial difference in relative lifetime expectations or a lack of credibility at certain levels of granularity. The requested rate increase percentage will not vary by issue age, benefit period, benefit increase option, or any other component of the coverage.

## 2) Benefits *

## Base Benefits

A. Long Term Care Facility Benefit

Once the Elimination Period has been met, the actual charges incurred for each day the Insured Person is confined to a Facility, as defined in the Policy, will be paid. Payments will be subject to the Maximum Daily Benefit.
B. Home Care and Adult Day Care Benefit

Once the applicable Elimination Period has been met, the actual charges incurred for each day the Insured Person receives Home Care and Adult Day Care, up to the Maximum Daily Benefit, will be paid.
C. Cash Benefit

Once an Insured Person has met the benefit eligibility, the insurer will pay the Monthly Benefit each calendar month. This benefit will be paid in lieu of all other benefits for care or services provided under this policy.
D. Waiver of Premium

Premiums will be waived on a monthly basis once the Elimination Period has been met and while the Insured Person is receiving Long Term Care Facility benefits.
E. Contingent Non-forfeiture Benefit - Shortened Benefit Period A contingent non-forfeiture benefit will only be in effect for policyholders with issue ages 69 and older for lifetime pay and 65 and older for limited pay, should the full requested rate increase be approved. Approximately $6.1 \%$ of the active population meets this criteria as of $9 / 30 / 2017$. Any policyholder with a younger issue age has a contingent non-forfeiture trigger above $42.33 \%$. Should a lower rate increase be approved and implemented, this contingent non-forfeiture may not be available per the contingent nonforfeiture schedule.

Reserves have not been incorporated into the rate schedule increase as we have not modeled shock lapses. From our historical experience, there have been no discernable shock lapses after prior rate increases.

## F. Rate Guarantee

A 5 year rate guarantee was included at no extra charge, but given that the last policy for this rate schedule was issued in $7 / 1 / 2013$, most policies are outside of the 5 -year guarantee period. For any policies still within the rate guarantee period when the rate increase is approved, notices will be sent but not implemented until the first policy anniversary after the rate guarantee period has expired.

[^0]For our projections, we have not included the rate guarantee as a restricting condition on the rate increase. We have calculated the justified rate increase in the filing assuming that rates will increase with the assumed effectiveness in the second half of 2018 without regard for the rate guarantee period. This results in a lower justified rate increase and is the benefit of the rate guarantee provided.

## Inflation Options and Optional Benefits

A. Additional Inflation optional benefits that were available:

Simple Benefit Increase Option, Compound Benefit Increase Option, Step-Rated Compound Benefit Increase Option, Tailored Benefit Increase Option, Full Simple Benefit Increase Option, Full Compound Benefit Increase Option, Full Step-Rated Compound Benefit Increase Option, Full Tailored Benefit Increase Option, Deferred Benefit Increase Option, Guaranteed Purchase Option,
B. Additional Optional Benefits that were available:

Monthly Benefit, Full Restoration of Benefits, Shared Care Benefit, Return of Premium Upon Death, Waiver of Premium for Home Care and Adult Day Care Benefit, Waiver of Premium for Cash Benefit, Joint Waiver of Premium Benefit, Non-Forfeiture Benefit, Accident Benefit, Return of Premium to Age 67

## 3) Renewability

These policy forms are guaranteed renewable for life, subject to the company's right to change premium rates.

## 4) Applicability

This filing applies to inforce insureds only for policy form ICC10 TLC-3 rates approved in 2011 and the historical and projected experience used in this filing is specific to business issued on this initial rate schedule. The projections used in the actuarial memorandum for this rate increase request only include policies written on form ICC10 TLC-3 with rates approved in 2011 . Further, the projection only includes active policies that are premium paying or are limited-pay (but not single-pay) as well as policies that are on claim. Policies under this rate schedule were issued until July 2013. The premium change will be applicable to the base rates, but will be subject to a rate cap equal to the new business premium rates on the comparable product policy forms. There will be no change to the original factors that are applied to the base rates.

We have analyzed the experience for policies issued on the rates approved in both 2012 and 2015, and have concluded that a rate increase for these issues is not required at this time.

## 5) Morbidity

The company's morbidity assumptions are studied on a first principles basis and the claim costs are developed by our first principles models based on the daily benefit, benefit type, expected recovery, expected on-claim mortality, and expected utilization. The underlying claim costs assumptions used in this rate increase filing are based on internal data derived from company experience study and is consistent with the company's best estimate assumption used in cashflow testing. The morbidity assumptions are based on a 10 -year exposure period beginning 1/1/2006 to $12 / 31 / 2015$ with a data collection date of $2 / 28 / 2017$ while the morbidity improvement assumption is based on studies such as those by Stallard, et. al and medical research publications which demonstrate improvement of approximately 2\% per year in the United States population. Future trends in dementia detection and treatment, pharmaceutical developments, fall prevention programs, etc. are taken into account. Additionally, industry standards are reviewed when setting all assumptions, and third party consultants review the assumptions annually.

As shown in the enclosed Exhibit II, the projected lifetime Actual to Expected Incurred Claims is $142.1 \%$. This indicates that the currently projected lifetime claim cost is $42.1 \%$ greater than the original pricing projected lifetime claim cost. This is a result of deviation in actual historical persistency and morbidity experience as well as an updated set of morbidity and persistency assumptions used in the projection. This exceeds the moderately adverse conditions assumption in the original pricing, which was $10 \%$.

Sample claim incidence rate and claim termination (on-claim mortality and recovery) curves by site of care (nursing home, assisted living facility, home health care) are below:

Claim Incidence Rate by Attained Age
Female, Issue Age 67, Comprehensive Benefits


# Claim Termination Rate By Months On-Claim 

Female, Attained Age 82, Comprehensive Lifetime Benefits


Further sample morbidity component rates are provided in Attachment F.

## 6) Off-Claim Mortality

The off-claim mortality assumption used in our rate filing projection is based on company experience studies and expressed in relation to sex-distinct 1983 GAM tables. Attained age adjustments to the tables vary by marital status and gender, with interpolation between the quinquennial ages. Selection factors are applied by marital status, gender and age band. We apply calendar year adjustments to reflect the experienced calendar year trend. Mortality improvement rates have also been included and vary by attained age and gender for 40 years with a calendar year application.

Off-claim mortality assumptions have been included in Attachment C .
As shown in the enclosed Exhibit II, the projected lifetime Actual to Expected Earned Premiums is $107.5 \%$, so actual mortality rate and/or lapse rate has been smaller than assumed in the original pricing.

## 7) Persistency

Voluntary lapse rates are based on Company experience and vary by duration and issue age. Different lapse rates are assumed based on the service group, benefit inflation option, (BIO), marital status, benefit period, issue age, and policy duration. We have not included shock lapses in our projections.

Persistency assumptions have been included in Attachment B.

## 8) Expenses

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

## 9) Attribution of Requested Rate Increase

As our prior models were on a claims cost basis and our current modeling and assumptions are on a first-principles basis, we have provided an attribution below with persistency and mortality grouped together and morbidity components grouped together.

| Assumption Attribution | RINC \% |
| :--- | ---: |
| Persistency Mortality | $7.98 \%$ |
| Morbidity | $34.35 \%$ |

## 10) Marketing

These policy forms were marketed by agents to individuals 18 years and older. In addition, employers, associations, or affinity groups were accepted for group sponsored rates under this individual policy.

## 11) Policy Design

Policy design features have been taken into consideration. Benefit provisions, exclusions, elimination periods, benefit periods, number of units, benefit growth, etc. have been accounted for either the development of claim costs or projection model formulas.

## 12) Underwriting

These policy forms were underwritten with the use of various underwriting tools in addition to the application, which may have included medical records, an attending physician's statement, telephone interview and/or face-to-face assessment. The effect of underwriting has been incorporated into the projection. The underwriting for the policies written are consistent with that assumed in the original pricing.

## 13) Claims Adjudication Practice

No significant changes to the standard operating practices of the Claims Department have been necessary to date nor are any changes expected to be necessary in the future. The claim adjudication staff has maintained a consistently high degree of expertise, experience, and performance over the life of these policy forms and this is expected to continue in the future. Therefore, special adjustments due to claim adjudication practice have not been incorporated into the projection.

## 14) Premiums

Premiums vary based on original issue age, rate class, and benefit options selected.
15) Limited Pay

Limited pay policies excluding single pay policies have been included in the data underlying our requested rate increase. As of 9/30/2017, there are 153 single pay policies that are still active.
16) Issue Age Range

Applicants age 18 years and older were eligible for all elimination periods and benefit periods.
17) Area Factors

Area factors are not used for these products.

## 18) Average Annualized Premium

Interstate Compact Nationwide
Before increase: $\quad \$ 1,958$ \$2,034
After increase:
\$2,787
\$2,895
19) Premium Modalization Rules

Modal factors which are applied to the annual premium are no greater than as follows:

| Annual | 1.000 |
| :--- | :---: |
| Semi-annual | .520 |
| Quarterly | .265 |
| Monthly | .090 |

## 20) Claim Liability and Reserve

The present value of amounts not yet due (Exhibit 6) is calculated for all open claims using termination rates derived from company experience. The resulting reserve is adjusted by factors based on age at incurral, gender, and benefit period developed from company experience. The interest rate varies by year of incurral. The incurred but not reported and in course of settlement reserves are calculated based on the development of incurred claims by month of incurral, based on internal Company data. The claim reserves underlying the incurred claims in the projection are consistent with the reserves reported in Exhibits 6 and 8 of the Company's financial statement.

## 21) Active Life Reserve

Active life reserves have not been used in this rate filing to demonstrate compliance with the minimum loss ratio requirement. The inclusion of active life reserves would result in a larger justifiable rate increase based on loss ratios and actual-to-expected projections.

## 22) Trend Assumptions

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

## 23) Anticipated Loss Ratio

The original anticipated lifetime loss ratio for these policy forms given the current mix of business is $63.8 \%$ and $60 \%$ in aggregate before adjustment for actual distribution of business, which is greater than the standard $58 \%$ loss ratio defined in the rate stability regulations. The currently anticipated lifetime loss ratio is $84.3 \%$ without the proposed rate increase and $67.9 \%$ with the proposed rate increase.

Although the original rates assume the same $10 \%$ increase to incidence rates (claim costs), the underlying profitability (including loss ratios) for different cohorts are slightly varied. As such, we believe it is appropriate to utilize the loss ratios of the policy mix actually written.

## 24) Distribution of Business

See Attachment A

## 25) Margin for Moderately Adverse Conditions

The margin included in the original pricing of these policy forms was the greater of a $10 \%$ increase in morbidity, $10 \%$ decrease in mortality, $10 \%$ decrease in lapses, or investment rates that are 50 basis points less than expected. Actual historical experience combined with revised assumptions for morbidity and persistency have resulted in lifetime expected loss ratios significantly greater than those anticipated at the time of original pricing. The enclosed Exhibit II shows that the projected lifetime Actual to Expected Incurred Claims is $142.1 \%$, much greater than the $110 \%$ level of morbidity included under adverse conditions. The current margin for moderately adverse conditions is a $10 \%$ increase in expected morbidity.

We also performed sensitivity testing to confirm the adequacy of our 10\% morbidity margin by either decreasing the mortality rate by $10 \%$ or decreasing the lapse rate by $10 \%$. The chart below shows the resulting loss ratios with and without the proposed rate increase of $42.33 \%$. We observe that our 10\% morbidity margin produces a higher loss ratio and therefore is more conservative than the mortality and lapse scenarios.

| Scenario | LR w/ 42.33\% RINC | LR w/o RINC |
| :--- | :---: | :---: |
| $10 \%$ increase in <br> morbidity | $67.92 \%$ | $84.27 \%$ |
| $10 \%$ decrease in <br> mortality | $65.06 \%$ | $80.87 \%$ |
| $10 \%$ decrease in <br> lapse | $64.07 \%$ | $79.65 \%$ |

The $10 \%$ morbidity margin in the rates after the $42.33 \%$ rate increase is equivalent to:

- $27 \%$ decrease in mortality assumption,
- $70 \%$ decrease in lapse assumption, or
- 40 basis points decrease in assumed interest rate

The rates after the rate increase include a $10 \%$ margin over expected morbidity except for certain pricing cohorts where equivalent new business rates are less than these rates. In that case, the rate increased rate would be capped by the new business rates of those on currently-sold policy forms. Approximately 7\% of current premium-paying policy holders have hit the new business rate cap.

## 26) Experience on the Form

Assumptions used in this filing are based on experience studies the company performed and finalized in 2017. These assumptions are an update to the assumptions used to price rates applicable to policy form ICC13 TLC-4 (rates approved in 2017) and ICC10 TLC-3 (rates approved in 2015) and reflect what is currently the company's best estimate $+10 \%$ margin on incidence rates.

The enclosed Exhibit I shows that more than $63.8 \%$ of historical and projected current premiums are paid out as claims and that more than $85 \%$ of the proposed rate increased premium portions are paid out as claims. The $63.8 \%$ represents the original pricing loss ratio under the current business for this policy form. A 10\% margin for future adverse claims experience is included in the exhibit.

See Exhibit I for nationwide calendar year historical experience through March 31, 2017, as well as projected experience thereafter both with and without the proposed rate increase where all policyholders are assumed to pay the increase under the 'with proposed rate increase' scenario.

See Exhibit II for nationwide actual-to-expected experience by duration where 'actual' experience includes historical experience through March 31, 2017. Historical Incurred Claims reflect claim payment runoff through September 30, 2017 plus the claim reserve estimate as of September 30, 2017 (as described in Section 18 above).

See Exhibit III for Interstate-Compact-only calendar year historical experience through March 30, 2017, for the above captioned form series experience of the Company.

Exhibits I, II, and III include a $10 \%$ margin in the projections. This was applied by increasing our modeled incidence rates by $10 \%$ across the board. Our actuarial model projects exhaustion and, as such, we believe our methodology is more accurate than simply increasing the overall resulting claim cost.

Attachment E shows a version of Exhibit II that includes only actual historical experience and have compared it to the original pricing loss ratio. We see that when we remove the projection experience, the actual cumulative loss ratio at duration 6 is less than the original pricing expected loss ratio. Therefore, we believe we are not recouping past losses in the proposed rate increase.

## 27) Interest Rate

The statutory discount rate used in the contract reserves for this block of business uses either $3.5 \%$ or $4 \%$ depending on the issue-year as prescribed by the NAIC. The interest rate used to accumulate and discount values displayed in Exhibits I, II, and III is $4.0 \%$ in all cohorts. This is a conservative approach as it results in a lower loss ratio and lower justified rate increase. A break-down of the cohorts is shown below:

Statutory Discount Rate Split by Policy Count

| Disc Rates | IC | Non-IC | Total |
| ---: | ---: | ---: | ---: |
| $4.00 \%$ | $81.25 \%$ | $64.60 \%$ | $76.36 \%$ |
| $3.50 \%$ | $18.75 \%$ | $35.40 \%$ | $23.64 \%$ |
|  |  |  |  |

## 28) Number of Policyholders

As of September 30, 2017, the number of policies that will be affected by this increase is:

|  | Insureds | Annualized Premium |
| :--- | ---: | ---: |
| Interstate <br> Compact States | 6,873 | $\$ 13,458,461$ |
| Nationwide | 9,726 | $\$ 19,785,952$ |

A detailed breakdown of the counts of insureds and annualized premiums is shown in Attachment D

## 29) Proposed Effective Date

The increase will be implemented within 3 months following approval after fulfillment of all statutory and contractual requirements.

## 30) Actuarial Certification

I certify that to the best of my knowledge and judgment, this premium rate filing complies with the IIPRC-LTC-I-Ratel, and with Actuarial Standard of Practice Nos. 8 and 18 and that:

- No further premium rate schedule increases are anticipated if the requested premium rate schedule increase is implemented and the underlying assumptions, which reflect moderately adverse conditions, are realized,
- Policy design, underwriting and claims adjudication practices have been taken into consideration, and
- The resulting premium rate schedules are not greater than new business premium rate schedules except for differences attributable to benefits.
- Per IIPRC-LTC-I-3-RATEI 4C(1)(c), the submitted rate schedule in the supplemental document 'IC - Uni-2 Filing Rates - RINC' contains the rates to which the information in this memo applies.
- The actuarial certification is not reliant on Company actions not otherwise stated in this memorandum


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September 21, 2018

## Attachment A

| Premium Pay Type |  |  | BIO |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original | Actual |  | Original | Actual |  |
| Regular / Lifetime | 95.4\% | 94.9\% | Compound 5\% | 19.3\% | 17.9\% |  |
| Limited - 5 pay | 4.6\% | 0.0\% | Compound 3\% | 13.4\% | 47.1\% |  |
| Limited - 10 pay |  | 4.7\% | Simple 5\% | 40.8\% | 0.2\% |  |
| Limited - Paid up @ 65 |  | 0.4\% | Tailored | 0.0\% | 0.7\% |  |
|  |  |  | No BIO | 21.4\% | 28.4\% |  |
| Marital Status |  |  | Step rated 3 | 0.0\% | 4.7\% |  |
|  | Original | Actual | Step rated 5 | 5.0\% | 1.0\% |  |
| Single | 40.5\% | 21.4\% |  |  |  |  |
| Married | 59.5\% | 78.6\% |  |  |  |  |
|  |  |  | Issue Age Gps | Original | Actual |  |
| Benefit Period |  |  | 0-24 | 0.91\% | 0.57\% |  |
|  | Original | Actual | 25-29 | 1.31\% | 1.76\% |  |
| Less than 3 | 8.7\% | 13.8\% | 30-34 | 1.88\% | 2.72\% |  |
| 3 | 40.7\% | 52.0\% | 35-39 | 3.01\% | 4.43\% |  |
| 4 | 24.1\% | 13.4\% | 40-44 | 5.14\% | 6.31\% |  |
| 5 | 9.3\% | 17.1\% | 45-49 | 7.59\% | 9.62\% |  |
| Greater than 5 | 17.1\% | 3.7\% | 50-54 | 12.10\% | 16.99\% |  |
|  |  |  | 55-59 | 18.10\% | 22.93\% |  |
| Service Group |  |  | 60-64 | 22.64\% | 20.06\% |  |
|  | Original | Actual | 65-69 | 16.21\% | 10.43\% |  |
| Individual | 48.9\% | 33.9\% | 70-74 | 7.67\% | 3.55\% |  |
| Worksite | 26.9\% | 46.9\% | 75+ | 3.44\% | 0.62\% |  |
| Association | 24.1\% | 19.2\% |  |  |  |  |

## Attachment B

Persistency/voluntary lapse rates The voluntary lapse rate is calculated by summing the base issue age and duration component (see Table 1 below), the limited benefit issue age and duration component (see Table 2 below), and attained age component (see Table 3 below), and then multiplying this sum by service group adjustments for the business sold to worksite or affinity groups (see Table 3 below). The service group adjustment grades to 100\% between policy year 11 and 20.

TABLE 1

| $\begin{array}{\|l\|} \hline \text { Issue Age } \\ \text { BIO Flag } \\ \hline \end{array}$ | Ages 0-39 |  | Ages 40-49 |  | Ages 50-59 |  | Ages 60-69 |  | Ages 70-79 |  | Ages 80+ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| 1 | 6.37\% | 5.07\% | 3.55\% | 2.83\% | 2.23\% | 1.78\% | 3.47\% | 2.76\% | 5.08\% | 4.05\% | 5.08\% | 4.05 |
| 2 | 5.01\% | 3.99\% | 2.72\% | 2.17\% | 2.05\% | 1.63\% | 2.92\% | 2.32\% | 3.66\% | 2.92\% | 3.66\% | 2.92 |
| 3 | 3.91\% | 3.12\% | 2.50\% | 1.99\% | 1.88\% | 1.50\% | 2.44\% | 1.94\% | 2.73\% | 2.17\% | 2.73\% | 2.17 |
| 4 | 3.06\% | 2.44\% | 2.29\% | 1.82\% | 1.72\% | 1.37\% | 2.03\% | 1.61\% | 2.12\% | 1.69\% | 2.12\% | 1.6 |
| 5 | 2.54\% | 2.02\% | 2.20\% | 1.75\% | 1.57\% | 1.25\% | 1.67\% | 1.33\% | 1.72\% | 1.37\% | 1.72\% | 1.37 |
| 6 | 2.25\% | 1.79\% | 2.11\% | 1.68\% | 1.43\% | 1.14\% | 1.38\% | 1.10\% | 1.44\% | 1.15\% | 1.44\% | 1.15\% |
| 7 | 2.15\% | 1.71\% | 2.01\% | 1.60\% | 1.29\% | 1.03\% | 1.14\% | 0.91\% | 1.24\% | 0.99\% | 1.24\% | 0.99 |
| 8 | 2.02\% | 1.61\% | 1.73\% | 1.37\% | 1.17\% | 0.93\% | 0.95\% | 0.75\% | 1.08\% | 0.86\% | 1.08\% | 0.86 |
| 9 | 1.95\% | 1.55\% | 1.47\% | 1.17\% | 1.06\% | 0.84\% | 0.79\% | 0.63\% | 0.91\% | 0.73\% | 0.91\% | 0.73 |
| 10 | 1.76\% | 1.40\% | 1.23\% | 0.98\% | 0.89\% | 0.71\% | 0.68\% | 0.54\% | 0.86\% | 0.68\% | 0.86\% | 0.68 |
| 11 | 1.50\% | 1.19\% | 1.08\% | 0.86\% | 0.73\% | 0.58\% | 0.63\% | 0.50\% | 0.80\% | 0.64\% | 0.80\% | 0.64 |
| 12 | 1.37\% | 1.09\% | 0.88\% | 0.70\% | 0.65\% | 0.52\% | 0.58\% | 0.46\% | 0.74\% | 0.59\% | 0.74\% | 0.59 |
| 13 | 1.26\% | 1.00\% | 0.85\% | 0.67\% | 0.57\% | 0.46\% | 0.55\% | 0.44\% | 0.67\% | 0.54\% | 0.67\% | 0.54 |
| 14 | 1.25\% | 0.99\% | 0.76\% | 0.60\% | 0.50\% | 0.40\% | 0.54\% | 0.43\% | 0.61\% | 0.49\% | 0.61\% | 0.49 |
| 15 | 1.25\% | 0.99\% | 0.74\% | 0.59\% | 0.48\% | 0.39\% | 0.54\% | 0.43\% | 0.56\% | 0.45\% | 0.56\% | 0.45 |
| 16 | 1.19\% | 0.95\% | 0.67\% | 0.53\% | 0.47\% | 0.38\% | 0.55\% | 0.44\% | 0.53\% | 0.42\% | 0.53\% | 0.42 |
| 17 | 1.10\% | 0.88\% | 0.64\% | 0.51\% | 0.45\% | 0.36\% | 0.56\% | 0.44\% | 0.52\% | 0.41\% | 0.52\% | 0.41 |
| 18 | 1.01\% | 0.81\% | 0.64\% | 0.51\% | 0.43\% | 0.35\% | 0.56\% | 0.45\% | 0.53\% | 0.42\% | 0.53\% | 0.42\% |
| 19 | 1.01\% | 0.81\% | 0.64\% | 0.51\% | 0.43\% | 0.35\% | 0.57\% | 0.46\% | 0.57\% | 0.45\% | 0.57\% | 0.45 |
| 20 | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55\% |
| 21 | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55 |
| 22 | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55 |
| 23 | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55\% |
| 24 | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55 |
| 25+ | 1.01\% | 0.81\% | 0.71\% | 0.56\% | 0.49\% | 0.39\% | 0.58\% | 0.46\% | 0.69\% | 0.55\% | 0.69\% | 0.55 |

Single

| Issue Age: | Ages 0-3 |  | Ages |  | Ages |  | Age |  | Ages |  | Age |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIO Flag | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| 1 | 11.24\% | 8.68\% | 6.26\% | 4.84\% | 3.93\% | 3.04\% | 6.12\% | 4.73\% | 8.96\% | 6.92\% | 8.96\% | 6.92 |
| 2 | 8.83\% | 6.82\% | 4.80\% | 3.71\% | 3.62\% | 2.79\% | 5.15\% | 3.98\% | 6.46\% | 4.99\% | 6.46\% | 4.99 |
| 3 | 6.90\% | 5.33\% | 4.41\% | 3.40\% | 3.32\% | 2.56\% | 4.30\% | 3.32\% | 4.81\% | 3.72\% | 4.81\% | 3.72 |
| 4 | 5.40\% | 4.17\% | 4.04\% | 3.12\% | 3.03\% | 2.34\% | 3.57\% | 2.76\% | 3.73\% | 2.88\% | 3.73\% | 2.8 |
| 5 | 4.47\% | 3.45\% | 3.88\% | 2.99\% | 2.77\% | 2.14\% | 2.95\% | 2.28\% | 3.03\% | 2.34\% | 3.03\% | 2.34 |
| 6 | 3.97\% | 3.07\% | 3.71\% | 2.87\% | 2.52\% | 1.94\% | 2.43\% | 1.88\% | 2.55\% | 1.97\% | 2.55\% | $1.97 \%$ |
| 7 | 3.78\% | 2.92\% | 3.55\% | 2.74\% | 2.28\% | 1.76\% | 2.01\% | 1.55\% | 2.19\% | 1.69\% | 2.19\% | 1.69 |
| 8 | 3.55\% | 2.75\% | 3.04\% | 2.35\% | 2.06\% | 1.59\% | 1.67\% | 1.29\% | 1.90\% | 1.47\% | 1.90\% | 1.47\% |
| 9 | 3.44\% | 2.66\% | 2.60\% | 2.01\% | 1.87\% | 1.44\% | 1.40\% | 1.08\% | 1.61\% | 1.24\% | 1.61\% | 24\% |
| 10 | 3.10\% | 2.39\% | 2.17\% | 1.67\% | 1.57\% | 1.21\% | 1.20\% | 0.93\% | 1.52\% | 1.17\% | 1.52\% | 1.17 |
| 11 | 2.64\% | 2.04\% | 1.90\% | 1.47\% | 1.28\% | 0.99\% | 1.11\% | 0.86\% | 1.41\% | 1.09\% | 1.41\% | $1.09 \%$ |
| 12 | 2.41\% | 1.86\% | 1.56\% | 1.20\% | 1.15\% | 0.88\% | 1.02\% | 0.79\% | 1.30\% | 1.01\% | 1.30\% | 1.01 |
| 13 | 2.22\% | 1.72\% | 1.49\% | 1.15\% | 1.01\% | 0.78\% | 0.96\% | 0.74\% | 1.19\% | 0.92\% | 1.19\% | 0.92 |
| 14 | 2.20\% | 1.70\% | 1.33\% | 1.03\% | 0.88\% | 0.68\% | 0.95\% | 0.73\% | 1.08\% | 0.84\% | 1.08\% | 0.84 |
| 15 | 2.20\% | 1.70\% | 1.31\% | 1.01\% | 0.86\% | 0.66\% | 0.95\% | 0.74\% | 1.00\% | 0.77\% | 1.00\% | 0.77 |
| 16 | 2.11\% | 1.63\% | 1.17\% | 0.91\% | 0.83\% | 0.64\% | 0.98\% | 0.76\% | 0.94\% | 0.72\% | 0.94\% | $0.72 \%$ |
| 17 | 1.95\% | 1.51\% | 1.13\% | 0.87\% | 0.79\% | 0.61\% | 0.98\% | 0.76\% | 0.92\% | 0.71\% | 0.92\% | 0.71\% |
| 18 | 1.79\% | 1.38\% | 1.13\% | 0.87\% | 0.77\% | 0.59\% | 0.99\% | 0.77\% | 0.94\% | 0.73\% | 0.94\% | 0.73 |
| 19 | 1.79\% | 1.38\% | 1.13\% | 0.87\% | 0.77\% | 0.59\% | 1.01\% | 0.78\% | 1.01\% | 0.78\% | 1.01\% | 0.78 |
| 20 | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% | 0.94 |
| 21 | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% | 0.94 |
| 22 | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% | 0.94 |
| 23 | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% | 0.9 |
| 24 | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% | 0.94 |
| $25+$ | 1.79\% | 1.38\% | 1.25\% | 0.97\% | 0.86\% | 0.66\% | 1.02\% | 0.79\% | 1.22\% | 0.94\% | 1.22\% |  |

TABLE 2
2 Year Married

| Issue Ages BIO Flag | Ages 0-39 |  | Ages 40-49 |  | Ages 50-59 |  | Ages 60-69 |  | Ages 70-79 |  | Ages 80+ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| 1 | 2.41\% | 1.08\% | 2.27\% | 0.03\% | 1.77\% | 0.19\% | 1.03\% | -0.77\% | -0.78\% | -1.94\% | -0.78\% | -1.94\% |
| 2 | 2.50\% | 1.27\% | 2.51\% | 0.40\% | 1.57\% | 0.14\% | 0.52\% | -0.80\% | -0.51\% | -1.37\% | -0.51\% | -1.37\% |
| 3 | 2.51\% | 1.39\% | 2.19\% | 0.31\% | 1.37\% | 0.10\% | 0.14\% | -0.80\% | -0.46\% | -1.06\% | -0.46\% | -1.06\% |
| 4 | 2.47\% | 1.44\% | 1.89\% | 0.23\% | 1.19\% | 0.06\% | -0.13\% | -0.77\% | -0.54\% | -0.91\% | -0.54\% | -0.91\% |
| 5 | 2.27\% | 1.35\% | 1.52\% | 0.07\% | 1.01\% | 0.02\% | -0.31\% | -0.73\% | -0.65\% | -0.85\% | -0.65\% | -0.85\% |
| 6 | 1.98\% | 1.17\% | 1.18\% | -0.06\% | 0.83\% | -0.03\% | -0.42\% | -0.67\% | -0.75\% | -0.81\% | -0.75\% | -0.81\% |
| 7 | 1.63\% | 0.94\% | 0.89\% | -0.18\% | 0.67\% | -0.07\% | -0.49\% | -0.62\% | -0.80\% | -0.77\% | -0.80\% | -0.77\% |
| 8 | 1.42\% | 0.80\% | 0.82\% | -0.12\% | 0.51\% | -0.11\% | -0.51\% | -0.56\% | -0.79\% | -0.72\% | -0.79\% | -0.72\% |
| 9 | 1.23\% | 0.68\% | 0.76\% | -0.08\% | 0.37\% | -0.14\% | -0.50\% | -0.50\% | -0.71\% | -0.63\% | -0.71\% | -0.63\% |
| 10 | 1.25\% | 0.71\% | 0.73\% | -0.02\% | 0.32\% | -0.12\% | -0.48\% | -0.45\% | -0.69\% | -0.60\% | -0.69\% | -0.60\% |
| 11 | 1.38\% | 0.83\% | 0.65\% | -0.01\% | 0.28\% | -0.09\% | -0.48\% | -0.44\% | -0.63\% | -0.56\% | -0.63\% | -0.56\% |
| 12 | 1.42\% | 0.87\% | 0.65\% | 0.05\% | 0.18\% | -0.11\% | -0.45\% | -0.40\% | -0.55\% | -0.50\% | -0.55\% | -0.50\% |
| 13 | 1.45\% | 0.90\% | 0.53\% | 0.00\% | 0.10\% | -0.13\% | -0.43\% | -0.38\% | -0.46\% | -0.43\% | -0.46\% | -0.43\% |
| 14 | 1.39\% | 0.85\% | 0.50\% | 0.01\% | 0.04\% | -0.13\% | -0.42\% | -0.37\% | -0.36\% | -0.37\% | -0.36\% | -0.37\% |
| 15 | 1.29\% | 0.79\% | 0.43\% | -0.02\% | -0.05\% | -0.17\% | -0.41\% | -0.37\% | -0.29\% | -0.31\% | -0.29\% | -0.31\% |
| 16 | 1.21\% | 0.73\% | 0.46\% | 0.02\% | -0.12\% | -0.20\% | -0.42\% | -0.38\% | -0.24\% | -0.28\% | -0.24\% | -0.28\% |
| 17 | 1.10\% | 0.67\% | 0.48\% | 0.04\% | -0.15\% | -0.21\% | -0.42\% | -0.38\% | -0.22\% | -0.27\% | -0.22\% | -0.27\% |
| 18 | 0.92\% | 0.55\% | 0.52\% | 0.06\% | -0.17\% | -0.22\% | -0.43\% | -0.39\% | -0.24\% | -0.28\% | -0.24\% | -0.28\% |
| 19 | 0.56\% | 0.29\% | 0.52\% | 0.06\% | -0.13\% | -0.20\% | -0.45\% | -0.40\% | -0.28\% | -0.31\% | -0.28\% | -0.31\% |
| 20+ | 0.48\% | 0.24\% | 0.46\% | 0.01\% | -0.12\% | -0.21\% | -0.47\% | -0.41\% | -0.31\% | -0.37\% | -0.31\% | -0.37\% |

2 Year Single

| Issue Ages BIO Flag | Ages 0-39 |  | Ages 40-49 |  | Ages 50-59 |  | Ages 60-69 |  | Ages 70-79 |  | Ages 80+ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| 1 | -1.97\% | -0.28\% | 2.95\% | 1.01\% | 2.40\% | 0.98\% | 3.27\% | 0.66\% | -2.16\% | -2.60\% | -2.16\% | -2.60\% |
| 2 | -0.91\% | 0.35\% | 3.48\% | 1.55\% | 2.11\% | 0.84\% | 2.04\% | 0.15\% | -1.46\% | -1.82\% | -1.46\% | -1.82\% |
| 3 | -0.12\% | 0.82\% | 3.02\% | 1.31\% | 1.84\% | 0.71\% | 1.09\% | -0.23\% | -1.23\% | -1.44\% | -1.23\% | -1.44\% |
| 4 | 0.44\% | 1.12\% | 2.58\% | 1.08\% | 1.57\% | 0.58\% | 0.39\% | -0.48\% | -1.24\% | -1.30\% | -1.24\% | -1.30\% |
| 5 | 0.60\% | 1.15\% | 2.01\% | 0.74\% | 1.32\% | 0.46\% | -0.10\% | -0.65\% | -1.34\% | -1.27\% | -1.34\% | -1.27\% |
| 6 | 0.50\% | 0.98\% | 1.49\% | 0.44\% | 1.06\% | 0.33\% | -0.44\% | -0.73\% | -1.44\% | -1.27\% | -1.44\% | -1.27\% |
| 7 | 0.20\% | 0.69\% | 1.04\% | 0.17\% | 0.82\% | 0.21\% | -0.64\% | -0.77\% | -1.49\% | -1.25\% | -1.49\% | -1.25\% |
| 8 | 0.07\% | 0.54\% | 0.99\% | 0.21\% | 0.60\% | 0.10\% | -0.75\% | -0.76\% | -1.44\% | -1.18\% | -1.44\% | -1.18\% |
| 9 | -0.08\% | 0.39\% | 0.94\% | 0.24\% | 0.40\% | 0.00\% | -0.79\% | -0.73\% | -1.29\% | -1.04\% | -1.29\% | -1.04\% |
| 10 | 0.07\% | 0.48\% | 0.94\% | 0.30\% | 0.34\% | 0.00\% | -0.79\% | -0.69\% | -1.25\% | -1.00\% | -1.25\% | -1.00\% |
| 11 | 0.40\% | 0.71\% | 0.84\% | 0.27\% | 0.31\% | 0.02\% | -0.81\% | -0.68\% | -1.15\% | -0.92\% | -1.15\% | -0.92\% |
| 12 | 0.53\% | 0.81\% | 0.86\% | 0.33\% | 0.16\% | -0.06\% | -0.76\% | -0.64\% | -1.00\% | -0.82\% | -1.00\% | -0.82\% |
| 13 | 0.64\% | 0.88\% | 0.68\% | 0.23\% | 0.05\% | -0.11\% | -0.72\% | -0.61\% | -0.84\% | -0.70\% | -0.84\% | -0.70\% |
| 14 | 0.59\% | 0.82\% | 0.65\% | 0.23\% | -0.02\% | -0.13\% | -0.69\% | -0.59\% | -0.69\% | -0.59\% | -0.69\% | -0.59\% |
| 15 | 0.48\% | 0.73\% | 0.54\% | 0.16\% | -0.17\% | -0.22\% | -0.69\% | -0.58\% | -0.56\% | -0.49\% | -0.56\% | -0.49\% |
| 16 | 0.43\% | 0.67\% | 0.61\% | 0.23\% | -0.27\% | -0.29\% | -0.70\% | -0.59\% | -0.48\% | -0.43\% | -0.48\% | -0.43\% |
| 17 | 0.38\% | 0.61\% | 0.65\% | 0.26\% | -0.32\% | -0.31\% | -0.70\% | -0.60\% | -0.45\% | -0.41\% | -0.45\% | -0.41\% |
| 18 | 0.26\% | 0.47\% | 0.70\% | 0.29\% | -0.35\% | -0.33\% | -0.71\% | -0.61\% | -0.47\% | -0.43\% | -0.47\% | -0.43\% |
| 19 | -0.13\% | 0.12\% | 0.71\% | 0.30\% | -0.28\% | -0.28\% | -0.75\% | -0.63\% | -0.54\% | -0.48\% | -0.54\% | -0.48\% |
| 20+ | -0.21\% | 0.05\% | 0.61\% | 0.21\% | -0.27\% | -0.29\% | -0.79\% | -0.66\% | -0.62\% | -0.56\% | -0.62\% | -0.56\% |

4 Year Married

| Issue Ages BIO Flag | Ages 0-39 |  | Ages 40-49 |  | Ages 50-59 |  | Ages 60-69 |  | Ages 70-79 |  | Ages 80+ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Y | N | Y | N | Y | N | Y | N | Y | N | Y |
| 1 | 1.00\% | 0.17\% | -0.27\% | -0.50\% | -0.57\% | -0.30\% | -1.03\% | -0.85\% | -2.55\% | -2.25\% | -2.55\% | -2.25\% |
| 2 | 1.25\% | 0.46\% | 0.22\% | -0.08\% | -0.58\% | -0.32\% | -1.00\% | -0.81\% | -1.89\% | -1.65\% | -1.89\% | -1.65\% |
| 3 | 1.37\% | 0.64\% | 0.13\% | -0.12\% | -0.57\% | -0.32\% | -1.24\% | -1.00\% | -1.43\% | -1.25\% | -1.43\% | -1.25\% |
| 4 | 1.37\% | 0.71\% | 0.06\% | -0.16\% | -0.55\% | -0.32\% | -1.16\% | -0.93\% | -1.11\% | -0.97\% | -1.11\% | -0.97\% |
| 5 | 1.18\% | 0.62\% | -0.11\% | -0.27\% | -0.52\% | -0.31\% | -0.90\% | -0.72\% | -0.88\% | -0.77\% | -0.88\% | -0.77\% |
| 6 | 0.86\% | 0.42\% | -0.25\% | -0.36\% | -0.49\% | -0.30\% | -0.69\% | -0.56\% | -0.69\% | -0.62\% | -0.69\% | -0.62\% |
| 7 | 0.47\% | 0.15\% | -0.36\% | -0.43\% | -0.45\% | -0.28\% | -0.55\% | -0.45\% | -0.54\% | -0.49\% | -0.54\% | -0.49\% |
| 8 | 0.22\% | -0.02\% | -0.26\% | -0.33\% | -0.42\% | -0.26\% | -0.39\% | -0.32\% | -0.40\% | -0.38\% | -0.40\% | -0.38\% |
| 9 | 0.00\% | -0.17\% | -0.16\% | -0.24\% | -0.38\% | -0.24\% | -0.27\% | -0.22\% | -0.27\% | -0.27\% | -0.27\% | -0.27\% |
| 10 | 0.02\% | -0.13\% | -0.05\% | -0.14\% | -0.29\% | -0.17\% | -0.19\% | -0.16\% | -0.26\% | -0.25\% | -0.26\% | -0.25\% |
| 11 | 0.22\% | 0.03\% | 0.00\% | -0.09\% | -0.18\% | -0.09\% | -0.18\% | -0.15\% | -0.25\% | -0.24\% | -0.25\% | -0.24\% |
| 12 | 0.23\% | 0.05\% | 0.12\% | 0.01\% | -0.16\% | -0.08\% | -0.16\% | -0.14\% | -0.24\% | -0.23\% | -0.24\% | -0.23\% |
| 13 | 0.23\% | 0.05\% | 0.11\% | 0.00\% | -0.14\% | -0.07\% | -0.17\% | -0.14\% | -0.23\% | -0.22\% | -0.23\% | -0.22\% |
| 14 | 0.13\% | -0.01\% | 0.17\% | 0.06\% | -0.11\% | -0.05\% | -0.20\% | -0.16\% | -0.21\% | -0.20\% | -0.21\% | -0.20\% |
| 15 | 0.04\% | -0.08\% | 0.18\% | 0.07\% | -0.14\% | -0.07\% | -0.22\% | -0.18\% | -0.19\% | -0.18\% | -0.19\% | -0.18\% |
| 16 | 0.00\% | -0.10\% | 0.29\% | 0.15\% | -0.16\% | -0.10\% | -0.25\% | -0.21\% | -0.16\% | -0.16\% | -0.16\% | -0.16\% |
| 17 | 0.01\% | -0.09\% | 0.36\% | 0.20\% | -0.17\% | -0.10\% | -0.27\% | -0.21\% | -0.11\% | -0.13\% | -0.11\% | -0.13\% |
| 18 | 0.10\% | -0.02\% | 0.44\% | 0.26\% | -0.18\% | -0.12\% | -0.27\% | -0.22\% | -0.06\% | -0.09\% | -0.06\% | -0.09\% |
| 19 | 0.10\% | -0.02\% | 0.44\% | 0.26\% | -0.20\% | -0.14\% | -0.28\% | -0.22\% | -0.01\% | -0.06\% | -0.01\% | -0.06\% |
| 20+ | 0.10\% | -0.02\% | 0.37\% | 0.21\% | -0.25\% | -0.18\% | -0.28\% | -0.23\% | -0.03\% | -0.08\% | -0.03\% | -0.08\% |

TABLE 3

Attained Age Lapse Rates

| Attained Age | 2 Year Benefit Period | 4 Year Benefit Period | Lifetime Benefit Period |
| :---: | :---: | :---: | :---: |
| 0-29 | 0.00\% | 0.00\% | 0.00\% |
| 30 | 0.00\% | 0.00\% | 0.00\% |
| 31 | 0.00\% | 0.00\% | 0.00\% |
| 32 | 0.00\% | 0.00\% | 0.00\% |
| 33 | 0.00\% | 0.00\% | 0.00\% |
| 34 | 0.00\% | 0.00\% | 0.00\% |
| 35 | 0.00\% | 0.00\% | 0.00\% |
| 36 | 0.00\% | 0.00\% | 0.00\% |
| 37 | 0.00\% | 0.00\% | 0.00\% |
| 38 | 0.00\% | 0.00\% | 0.00\% |
| 39 | 0.00\% | 0.00\% | 0.00\% |
| 40 | 0.00\% | 0.00\% | 0.00\% |
| 41 | 0.00\% | 0.00\% | 0.00\% |
| 42 | 0.00\% | 0.00\% | 0.00\% |
| 43 | 0.00\% | 0.00\% | 0.00\% |
| 44 | 0.00\% | 0.00\% | 0.00\% |
| 45 | 0.00\% | 0.00\% | 0.00\% |
| 46 | 0.00\% | 0.00\% | 0.00\% |
| 47 | 0.00\% | 0.00\% | 0.00\% |
| 48 | 0.00\% | 0.00\% | 0.00\% |
| 49 | 0.00\% | 0.00\% | 0.00\% |
| 50 | 0.00\% | 0.00\% | 0.00\% |
| 51 | 0.00\% | 0.00\% | 0.00\% |
| 52 | 0.10\% | 0.00\% | 0.00\% |
| 53 | 0.10\% | 0.00\% | 0.00\% |
| 54 | 0.10\% | 0.00\% | 0.00\% |
| 55 | 0.10\% | 0.00\% | 0.00\% |
| 56 | 0.10\% | 0.00\% | 0.00\% |
| 57 | 0.11\% | 0.10\% | 0.00\% |
| 58 | 0.12\% | 0.10\% | 0.00\% |
| 59 | 0.14\% | 0.10\% | 0.00\% |
| 60 | 0.15\% | 0.10\% | 0.00\% |
| 61 | 0.17\% | 0.12\% | 0.00\% |
| 62 | 0.19\% | 0.14\% | 0.00\% |
| 63 | 0.22\% | 0.16\% | 0.00\% |
| 64 | 0.35\% | 0.17\% | 0.00\% |
| 65 | 0.37\% | 0.17\% | 0.00\% |
| 66 | 0.39\% | 0.17\% | 0.00\% |
| 67 | 0.41\% | 0.17\% | 0.00\% |
| 68 | 0.43\% | 0.17\% | 0.00\% |
| 69 | 0.45\% | 0.17\% | 0.00\% |
| 70 | 0.46\% | 0.19\% | 0.00\% |
| 71 | 0.50\% | 0.19\% | 0.00\% |
| 72 | 0.63\% | 0.19\% | 0.00\% |
| 73 | 0.70\% | 0.19\% | 0.00\% |
| 74 | 0.76\% | 0.19\% | 0.00\% |
| 75 | 0.77\% | 0.27\% | 0.00\% |
| 76 | 0.79\% | 0.30\% | 0.00\% |
| 77 | 0.84\% | 0.33\% | 0.00\% |
| 78 | 0.89\% | 0.36\% | 0.00\% |
| 79 | 0.96\% | 0.39\% | 0.00\% |
| 80 | 1.04\% | 0.39\% | 0.03\% |
| 81 | 1.09\% | 0.49\% | 0.05\% |
| 82 | 1.14\% | 0.58\% | 0.08\% |
| 83 | 1.23\% | 0.70\% | 0.10\% |
| 84 | 1.34\% | 0.79\% | 0.15\% |
| 85 | 1.44\% | 0.88\% | 0.25\% |
| 86 | 1.63\% | 0.98\% | 0.40\% |
| 87 | 1.85\% | 1.07\% | 0.45\% |
| 88 | 2.09\% | 1.16\% | 0.50\% |
| 89 | 2.38\% | 1.25\% | 0.55\% |
| 90 | 2.66\% | 1.51\% | 0.60\% |
| 91 | 2.90\% | 1.67\% | 0.82\% |
| 92 | 3.09\% | 1.86\% | 1.04\% |
| 93 | 3.33\% | 2.07\% | 1.26\% |
| 94 | 3.56\% | 2.30\% | 1.48\% |
| 95 | 3.95\% | 2.55\% | 1.70\% |
| 96 | 4.34\% | 2.84\% | 1.92\% |
| 97 | 4.64\% | 3.15\% | 2.14\% |
| 98 | 4.95\% | 3.50\% | 2.36\% |
| 99 | 5.20\% | 3.89\% | 2.58\% |
| 100 | 5.41\% | 4.32\% | 2.78\% |
| 101 | 5.62\% | 4.55\% | 2.80\% |
| 102 | 5.80\% | 4.55\% | 2.81\% |
| 103 | 5.97\% | 4.55\% | 2.81\% |
| 104 | 6.16\% | 4.55\% | 2.81\% |
| 105 | 6.35\% | 4.55\% | 2.82\% |
| 106 | 6.53\% | 4.55\% | 2.82\% |
| 107 | 6.72\% | 4.55\% | 2.82\% |
| 108 | 6.91\% | 4.55\% | 2.82\% |
| 109 | 7.09\% | 4.55\% | 2.82\% |
| 110 | 7.09\% | 4.55\% | 2.82\% |
| 111 | 7.09\% | 4.55\% | 2.82\% |
| 112 | 7.09\% | 4.55\% | 2.82\% |
| 113 | 7.09\% | 4.55\% | 2.82\% |
| 114 | 7.09\% | 4.55\% | 2.82\% |
| 115 | 7.09\% | 4.55\% | 2.82\% |
| 116 | 7.09\% | 4.55\% | 2.82\% |
| 117 | 7.09\% | 4.55\% | 2.82\% |
| 118 | 7.09\% $0.00 \%$ | 4.55\% $0.00 \%$ | 2.82\% $0.00 \%$ |

Service Group Lapse Adjustments

| Attained Age | Worksite Service Groups | Association Service Groups | Not in a Service Group | 2yrBP Comp3 Worksite |
| :---: | :---: | :---: | :---: | :---: |
| 0-29 | 263\% | 162\% | 93\% | 538\% |
| 30 | 255\% | 161\% | 93\% | 538\% |
| 31 | 242\% | 160\% | 93\% | 538\% |
| 32 | 230\% | 159\% | 93\% | 538\% |
| 33 | 218\% | 156\% | 93\% | 538\% |
| 34 | 203\% | 153\% | 93\% | 538\% |
| 35 | 203\% | 151\% | 93\% | 538\% |
| 36 | 203\% | 148\% | 93\% | 538\% |
| 37 | 203\% | 144\% | 93\% | 538\% |
| 38 | 203\% | 140\% | 93\% | 538\% |
| 39 | 203\% | 137\% | 93\% | 538\% |
| 40 | 203\% | 133\% | 93\% | 538\% |
| 41 | 203\% | 129\% | 93\% | 484\% |
| 42 | 203\% | 126\% | 93\% | 436\% |
| 43 | 203\% | 122\% | 93\% | 392\% |
| 44 | 203\% | 119\% | 93\% | 353\% |
| 45 | 203\% | 115\% | 93\% | 371\% |
| 46 | 203\% | 112\% | 93\% | 371\% |
| 47 | 203\% | 108\% | 93\% | 371\% |
| 48 | 203\% | 104\% | 93\% | 371\% |
| 49 | 203\% | 100\% | 93\% | 371\% |
| 50 | 203\% | 98\% | 93\% | 368\% |
| 51 | 203\% | 93\% | 93\% | 365\% |
| 52 | 203\% | 90\% | 93\% | 359\% |
| 53 | 203\% | 87\% | 93\% | 359\% |
| 54 | 203\% | 86\% | 93\% | 359\% |
| 55 | 203\% | 86\% | 93\% | 365\% |
| 56 | 203\% | 85\% | 93\% | 359\% |
| 57 | 196\% | 84\% | 93\% | 359\% |
| 58 | 189\% | 83\% | 93\% | 359\% |
| 59 | 181\% | 82\% | 93\% | 359\% |
| 60 | 174\% | 81\% | 93\% | 359\% |
| 61 | 168\% | 80\% | 93\% | 359\% |
| 62 | 163\% | 79\% | 93\% | 359\% |
| 63 | 158\% | 78\% | 93\% | 359\% |
| 64 | 153\% | 76\% | 93\% | 359\% |
| 65 | 148\% | 73\% | 93\% | 359\% |
| 66 | 143\% | 73\% | 93\% | 359\% |
| 67 | 138\% | 73\% | 93\% | 354\% |
| 68 | 133\% | 73\% | 93\% | 344\% |
| 69 | 128\% | 73\% | 93\% | 334\% |
| 70 | 123\% | 73\% | 93\% | 319\% |
| 71 | 118\% | 73\% | 93\% | 301\% |
| 72 | 113\% | 73\% | 93\% | 283\% |
| 73 | 108\% | 73\% | 93\% | 267\% |
| 74 | 103\% | 76\% | 93\% | 251\% |
| 75 | 98\% | 77\% | 93\% | 236\% |
| 76 | 93\% | 78\% | 93\% | 221\% |
| 77 | 88\% | 79\% | 93\% | 206\% |
| 78 | 83\% | 80\% | 93\% | 193\% |
| 79 | 78\% | 81\% | 93\% | 180\% |
| 80 | 78\% | 82\% | 93\% | 168\% |
| 81 | 78\% | 83\% | 93\% | 156\% |
| 82 | 78\% | 84\% | 93\% | 145\% |
| 83 | 78\% | 85\% | 93\% | 134\% |
| 84 | 78\% | 86\% | 93\% | 124\% |
| 85 | 78\% | 86\% | 93\% | 118\% |
| 86 | 78\% | 87\% | 93\% | 116\% |
| 87 | 78\% | 88\% | 93\% | 116\% |
| 88 | 78\% | 89\% | 93\% | 116\% |
| 89 | 78\% | 90\% | 93\% | 116\% |
| 90 | 78\% | 93\% | 93\% | 116\% |
| 91 | 78\% | 93\% | 93\% | 116\% |
| 92 | 78\% | 93\% | 93\% | 116\% |
| 93 | 78\% | 93\% | 93\% | 116\% |
| 94 | 78\% | 93\% | 93\% | 116\% |
| 95 | 78\% | 93\% | 93\% | 116\% |
| 96 | 78\% | 93\% | 93\% | 116\% |
| 97 | 78\% | 93\% | 93\% | 116\% |
| 98 | 78\% | 93\% | 93\% | 116\% |
| 99 | 78\% | 93\% | 93\% | 116\% |
| 100 | 78\% | 93\% | 93\% | 116\% |
| 101 | 78\% | 93\% | 93\% | 116\% |
| 102 | 78\% | 93\% | 93\% | 116\% |
| 103 | 78\% | 93\% | 93\% | 116\% |
| 104 | 78\% | 93\% | 93\% | 116\% |
| 105 | 78\% | 93\% | 93\% | 116\% |
| 106 | 78\% | 93\% | 93\% | 116\% |
| 107 | 78\% | 93\% | 93\% | 116\% |
| 108 | 78\% | 93\% | 93\% | 116\% |
| 109 | 78\% | 93\% | 93\% | 116\% |
| 110 | 78\% | 93\% | 93\% | 116\% |
| 111 | 78\% | 93\% | 93\% | 116\% |
| 112 | 78\% | 93\% | 93\% | 116\% |
| 113 | 78\% | 93\% | 93\% | 116\% |
| 114 | 78\% | 93\% | 93\% | 116\% |
| 115 | 78\% | 93\% | 93\% | 116\% |
| 116 | 78\% | 93\% | 93\% | 116\% |
| 117 | 78\% | 93\% | 93\% | 116\% |
| 118 | $78 \%$ $0 \%$ | $93 \%$ $0 \%$ | 93\% | $116 \%$ $0 \%$ |

## Attachment C

Off-claim mortality
TABLE 1 - Death rate adjustments to 1983 GAM 2000+

|  | Married |  | Single |  |
| :---: | :---: | :---: | :---: | :---: |
| Age Band | Female | Male | Female | Male |
| $\mathbf{3 7}$ | $106 \%$ | $83 \%$ | $129 \%$ | $105 \%$ |
| $\mathbf{4 2}$ | $106 \%$ | $83 \%$ | $129 \%$ | $105 \%$ |
| $\mathbf{4 7}$ | $106 \%$ | $53 \%$ | $129 \%$ | $79 \%$ |
| $\mathbf{5 2}$ | $86 \%$ | $43 \%$ | $129 \%$ | $68 \%$ |
| $\mathbf{5 7}$ | $65 \%$ | $41 \%$ | $129 \%$ | $60 \%$ |
| $\mathbf{6 2}$ | $54 \%$ | $37 \%$ | $80 \%$ | $66 \%$ |
| $\mathbf{6 7}$ | $52 \%$ | $36 \%$ | $71 \%$ | $44 \%$ |
| $\mathbf{7 2}$ | $38 \%$ | $35 \%$ | $53 \%$ | $37 \%$ |
| $\mathbf{7 7}$ | $36 \%$ | $35 \%$ | $44 \%$ | $45 \%$ |
| $\mathbf{8 2}$ | $34 \%$ | $41 \%$ | $39 \%$ | $37 \%$ |
| $\mathbf{8 7}$ | $41 \%$ | $42 \%$ | $41 \%$ | $50 \%$ |
| $\mathbf{9 7}$ | $54 \%$ | $55 \%$ | $52 \%$ | $53 \%$ |
| $\mathbf{1 0 2}$ | $68 \%$ | $72 \%$ | $73 \%$ | $59 \%$ |
| $\mathbf{1 0 7}$ | $74 \%$ | $75 \%$ | $70 \%$ | $71 \%$ |

TABLE 2 - Annual trend and corresponding experience year adjustments

| Year | Females | Females | Males | Males |
| :--- | ---: | :--- | :--- | ---: |
|  | Married | Single | Married | Single |
| 2010 | 0.9472 | 0.9472 | 0.9040 | 0.9415 |
| 2011 | 0.9406 | 0.9406 | 0.8950 | 0.9321 |
| 2012 | 0.9340 | 0.9340 | 0.8860 | 0.9227 |
| 2013 | 0.9274 | 0.9274 | 0.8772 | 0.9135 |
| 2014 | 0.9210 | 0.9210 | 0.8684 | 0.9044 |
| 2015 | 0.9145 | 0.9145 | 0.8597 | 0.8953 |
| $2016+$ | 0.9081 | 0.9081 | 0.8511 | 0.8864 |

TABLE 3 - Selection factors
Selection Modifier

|  | single 2000+ FEMALES |  |  |  | married 2000+ Females |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 00-59 | 60-69 | 70-79 | 80+ | 00-59 | 60-69 | 70-79 | 80+ |
| 1 | 0.247 | 0.405 | 0.301 | 0.301 | 0.159 | 0.359 | 0.440 | 0.440 |
| 2 | 0.293 | 0.474 | 0.440 | 0.440 | 0.252 | 0.449 | 0.560 | 0.560 |
| 3 | 0.339 | 0.571 | 0.579 | 0.579 | 0.344 | 0.539 | 0.680 | 0.680 |
| 4 | 0.421 | 0.668 | 0.717 | 0.717 | 0.436 | 0.647 | 0.800 | 0.800 |
| 5 | 0.503 | 0.793 | 0.812 | 0.812 | 0.528 | 0.755 | 0.891 | 0.891 |
| 6 | 0.594 | 0.872 | 0.834 | 0.834 | 0.637 | 0.847 | 0.931 | 0.931 |
| 7 | 0.665 | 0.921 | 0.860 | 0.860 | 0.727 | 0.916 | 0.946 | 0.946 |
| 8 | 0.716 | 0.930 | 0.883 | 0.883 | 0.794 | 0.940 | 0.958 | 0.958 |
| 9 | 0.756 | 0.932 | 0.905 | 0.905 | 0.827 | 0.941 | 0.970 | 0.970 |
| 10 | 0.794 | 0.934 | 0.928 | 0.928 | 0.853 | 0.942 | 0.986 | 0.986 |
| 11 | 0.835 | 0.936 | 0.950 | 0.950 | 0.876 | 0.943 | 0.987 | 0.987 |
| 12 | 0.849 | 0.937 | 0.954 | 0.954 | 0.891 | 0.944 | 0.988 | 0.988 |
| 13 | 0.890 | 0.941 | 0.976 | 0.976 | 0.911 | 0.945 | 0.989 | 0.989 |
| 14 | 0.958 | 0.974 | 0.998 | 0.998 | 0.980 | 0.970 | 0.995 | 0.995 |
| 15 | 0.968 | 0.985 | 0.998 | 0.998 | 0.985 | 0.971 | 0.997 | 0.997 |
| 16 | 0.970 | 0.987 | 0.998 | 0.998 | 0.988 | 0.972 | 0.998 | 0.998 |
| 17 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 18 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 19 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 20 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |


| single 2000+ males |  |  | married 2000+ males |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 00-59 | 60-69 | 70-79 | 80+ | 00-59 | 60-69 | 70-79 | 80+ |
| 1 | 0.263 | 0.332 | 0.349 | 0.349 | 0.214 | 0.380 | 0.290 | 0.267 |
| 2 | 0.356 | 0.476 | 0.612 | 0.612 | 0.312 | 0.534 | 0.460 | 0.462 |
| 3 | 0.452 | 0.618 | 0.776 | 0.776 | 0.410 | 0.685 | 0.632 | 0.632 |
| 4 | 0.562 | 0.749 | 0.851 | 0.851 | 0.531 | 0.811 | 0.773 | 0.773 |
| 5 | 0.682 | 0.851 | 0.887 | 0.887 | 0.651 | 0.895 | 0.883 | 0.883 |
| 6 | 0.802 | 0.912 | 0.897 | 0.897 | 0.767 | 0.914 | 0.946 | 0.946 |
| 7 | 0.926 | 0.949 | 0.924 | 0.924 | 0.880 | 0.930 | 0.959 | 0.959 |
| 8 | 0.929 | 0.952 | 0.928 | 0.928 | 0.910 | 0.934 | 0.962 | 0.962 |
| 9 | 0.932 | 0.953 | 0.934 | 0.934 | 0.920 | 0.936 | 0.964 | 0.964 |
| 10 | 0.949 | 0.954 | 0.959 | 0.959 | 0.931 | 0.942 | 0.965 | 0.965 |
| 11 | 0.954 | 0.955 | 0.965 | 0.965 | 0.945 | 0.943 | 0.966 | 0.966 |
| 12 | 0.959 | 0.956 | 0.966 | 0.966 | 0.948 | 0.944 | 0.966 | 0.966 |
| 13 | 0.961 | 0.957 | 0.969 | 0.969 | 0.951 | 0.947 | 0.970 | 0.970 |
| 14 | 0.983 | 0.972 | 0.976 | 0.976 | 0.976 | 0.972 | 0.979 | 0.979 |
| 15 | 0.987 | 0.986 | 0.980 | 0.980 | 0.980 | 0.977 | 0.982 | 0.982 |
| 16 | 0.989 | 0.989 | 0.984 | 0.984 | 0.982 | 0.980 | 0.983 | 0.983 |
| 17 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 18 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 19 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 20 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

## Attachment D

| State | Count | Annual Premium | Avg Prem before rate increase |  | Avg Prem after rate increase |  |  | Count | Annual Premium | Avg Prem before rate increase |  | Avg Prem after rate increase |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AK | 8 | 13,289 | \$ | 1,661 | \$ | 2,364 | AR | 41 | 87,274 | \$ | 2,129 | \$ | 3,030 |
| AL | 110 | 203,571 | \$ | 1,851 | \$ | 2,634 | AZ | 198 | 407,088 | \$ | 2,056 | \$ | 2,926 |
| CO | 451 | 674,323 | \$ | 1,495 | \$ | 2,128 | CT | 902 | 2,041,063 | \$ | 2,263 | \$ | 3,221 |
| GA | 457 | 884,846 | \$ | 1,936 | \$ | 2,756 | DC | 187 | 363,801 | \$ | 1,945 | \$ | 2,769 |
| IA | 293 | 596,215 | \$ | 2,035 | \$ | 2,896 | DE | 33 | 60,026 | \$ | 1,819 | \$ | 2,589 |
| ID | 58 | 160,222 | \$ | 2,762 | \$ | 3,932 | HI | 460 | 935,365 | \$ | 2,033 | \$ | 2,894 |
| IL | 509 | 1,138,880 | \$ | 2,237 | \$ | 3,185 | IN | 186 | 476,217 | \$ | 2,560 | \$ | 3,644 |
| KS | 184 | 342,658 | \$ | 1,862 | \$ | 2,651 | MT | 59 | 165,644 | \$ | 2,808 | \$ | 3,996 |
| KY | 111 | 202,654 | \$ | 1,826 | \$ | 2,599 | ND | 259 | 341,150 | \$ | 1,317 | \$ | 1,875 |
| LA | 143 | 221,501 | \$ | 1,549 | \$ | 2,205 | NJ | 387 | 1,105,381 | \$ | 2,856 | \$ | 4,065 |
| MA | 383 | 807,053 | \$ | 2,107 | \$ | 2,999 | NV | 28 | 51,111 | \$ | 1,825 | \$ | 2,598 |
| MD | 260 | 476,440 | \$ | 1,832 | \$ | 2,608 | OR | 84 | 207,087 | \$ | 2,465 | \$ | 3,509 |
| ME | 28 | 61,963 | \$ | 2,213 | \$ | 3,150 | SD | 29 | 86,286 | \$ | 2,975 | \$ | 4,235 |
| MI | 311 | 535,948 | \$ | 1,723 | \$ | 2,453 | Non-IC States | 2,853 | 6,327,491 | \$ | 2,218 | \$ | 3,157 |
| MN | 365 | 637,355 | \$ | 1,746 | \$ | 2,485 |  |  |  |  |  |  |  |
| MO | 159 | 278,507 | \$ | 1,752 | \$ | 2,493 |  |  |  |  |  |  |  |
| MS | 117 | 161,740 | \$ | 1,382 | \$ | 1,968 |  |  |  |  |  |  |  |
| NC | 305 | 533,758 | \$ | 1,750 | \$ | 2,491 |  |  |  |  |  |  |  |
| NE | 99 | 263,912 | \$ | 2,666 | \$ | 3,794 |  |  |  |  |  |  |  |
| NH | 30 | 155,153 | \$ | 5,172 | \$ | 7,361 |  |  |  |  |  |  |  |
| NM | 37 | 91,354 | \$ | 2,469 | \$ | 3,514 |  |  |  |  |  |  |  |
| OH | 225 | 497,927 | \$ | 2,213 | \$ | 3,150 |  |  |  |  |  |  |  |
| OK | 74 | 162,399 | \$ | 2,195 | \$ | 3,124 |  |  |  |  |  |  |  |
| PA | 319 | 661,368 | \$ | 2,073 | \$ | 2,951 |  |  |  |  |  |  |  |
| RI | 19 | 62,365 | \$ | 3,282 | \$ | 4,672 |  |  |  |  |  |  |  |
| SC | 149 | 350,410 | \$ | 2,352 | \$ | 3,347 |  |  |  |  |  |  |  |
| TN | 200 | 400,434 | \$ | 2,002 | \$ | 2,850 |  |  |  |  |  |  |  |
| TX | 686 | 1,277,993 | \$ | 1,863 | \$ | 2,652 |  |  |  |  |  |  |  |
| UT | 53 | 87,845 | \$ | 1,657 | \$ | 2,359 |  |  |  |  |  |  |  |
| VA | 317 | 591,556 | \$ | 1,866 | \$ | 2,656 |  |  |  |  |  |  |  |
| VT | 3 | 19,822 | \$ | 6,607 | \$ | 9,404 |  |  |  |  |  |  |  |
| WA | 257 | 549,230 | \$ | 2,137 | \$ | 3,042 |  |  |  |  |  |  |  |
| WI | 106 | 228,544 | \$ | 2,156 | \$ | 3,069 |  |  |  |  |  |  |  |
| WV | 18 | 50,218 | \$ | 2,790 | \$ | 3,971 |  |  |  |  |  |  |  |
| WY | 29 | 77,009 | \$ | 2,655 | \$ | 3,780 |  |  |  |  |  |  |  |
| IC States | 6,873 | 13,458,461 | \$ | 1,958 | \$ | 2,787 |  |  |  |  |  |  |  |

Attachment E

|  | Actual |  |  | Expected |  |  | Actual to Expected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G=A/D | H=B/E | $\mathrm{l}=\mathrm{C} / \mathrm{F}$ |
| Duration | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Earned Premium $@$ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative <br> Loss Ratio <br> Excluding ALR Increase | Cumulative <br> Actual to Expected Earned Premium | Cumulative Actual to Expected Incurred Claims Excluding ALR Increase | Cumulative <br> Loss Ratio <br> Excluding ALR Increase |
| 1 | 21,849,315 | 266,773 | 1.22\% | 21,290,714 | 375,790 | 1.77\% | 102.6\% | 70.99\% | 69.17\% |
| 2 | 21,702,006 | 303,116 | 1.31\% | 20,389,852 | 542,118 | 2.20\% | 104.5\% | 62.09\% | 59.42\% |
| 3 | 20,441,679 | 449,568 | 1.59\% | 19,747,651 | 674,938 | 2.59\% | 104.2\% | 64.00\% | 61.44\% |
| 4 | 19,575,809 | 705,490 | 2.06\% | 19,251,701 | 838,061 | 3.01\% | 103.6\% | 70.96\% | 68.51\% |
| 5 | 12,545,226 | 1,631,421 | 3.49\% | 18,845,523 | 1,078,333 | 3.53\% | 96.6\% | 95.64\% | 99.04\% |
| 6 | 1,400,999 | 67,737 | 3.51\% | 18,120,421 | 1,336,963 | 4.12\% | 82.9\% | 70.66\% | 85.24\% |
| 7 | 408 | 0 | 3.51\% | 17,771,497 | 1,674,725 | 4.82\% | 72.0\% | 52.51\% | 72.92\% |
| 8 | 0 | 0 | 3.51\% | 17,318,794 | 2,087,616 | 5.64\% | 63.8\% | 39.78\% | 62.30\% |
| 9 | 0 | 0 | 3.51\% | 16,068,457 | 2,533,118 | 6.60\% | 57.8\% | 30.73\% | 53.20\% |
| 10 | 0 | 0 | 3.51\% | 15,684,826 | 3,025,787 | 7.68\% | 52.9\% | 24.17\% | 45.72\% |
| 11 | 0 | 0 | 3.51\% | 15,302,730 | 3,574,602 | 8.88\% | 48.8\% | 19.30\% | 39.54\% |
| 12 | 0 | 0 | 3.51\% | 14,980,949 | 4,230,953 | 10.23\% | 45.4\% | 15.58\% | 34.32\% |
| 13 | 0 | 0 | 3.51\% | 14,596,755 | 4,959,428 | 11.74\% | 42.5\% | 12.71\% | 29.90\% |
| 14 | 0 | 0 | 3.51\% | 14,111,372 | 5,669,820 | 13.39\% | 40.1\% | 10.50\% | 26.22\% |
| 15 | 0 | 0 | 3.51\% | 13,702,924 | 6,436,493 | 15.18\% | 37.9\% | 8.77\% | 23.13\% |
| 16 | 0 | 0 | 3.51\% | 13,332,076 | 7,289,185 | 17.13\% | 36.0\% | 7.39\% | 20.50\% |
| 17 | 0 | 0 | 3.51\% | 12,889,520 | 8,342,437 | 19.29\% | 34.4\% | 6.26\% | 18.20\% |
| 18 | 0 | 0 | 3.51\% | 12,476,143 | 9,555,787 | 21.71\% | 33.0\% | 5.33\% | 16.18\% |
| 19 | 0 | 0 | 3.51\% | 12,089,537 | 10,705,146 | 24.33\% | 31.7\% | 4.57\% | 14.43\% |
| 20 | 0 | 0 | 3.51\% | 11,667,125 | 11,832,662 | 27.14\% | 30.5\% | 3.95\% | 12.94\% |
| 21 | 0 | 0 | 3.51\% | 11,235,783 | 12,976,247 | 30.14\% | 29.5\% | 3.43\% | 11.65\% |
| 22 | 0 | 0 | 3.51\% | 10,779,533 | 14,301,807 | 33.38\% | 28.5\% | 3.00\% | 10.52\% |
| 23 | 0 | 0 | 3.51\% | 10,311,128 | 15,695,633 | 36.86\% | 27.7\% | 2.64\% | 9.53\% |
| 24 | 0 | 0 | 3.51\% | 9,825,578 | 16,900,220 | 40.53\% | 27.0\% | 2.34\% | 8.66\% |
| 25 | 0 | 0 | 3.51\% | 9,325,872 | 17,892,853 | 44.33\% | 26.3\% | 2.08\% | 7.92\% |
| 26 | 0 | 0 | 3.51\% | 8,819,028 | 18,746,896 | 48.24\% | 25.7\% | 1.87\% | 7.28\% |
| 27 | 0 | 0 | 3.51\% | 8,299,194 | 19,587,610 | 52.25\% | 25.1\% | 1.69\% | 6.72\% |
| 28 | 0 | 0 | 3.51\% | 7,775,388 | 20,359,888 | 56.37\% | 24.6\% | 1.53\% | 6.23\% |
| 29 | 0 | 0 | 3.51\% | 7,253,112 | 20,859,216 | 60.53\% | 24.2\% | 1.40\% | 5.80\% |
| 30 | 0 | 0 | 3.51\% | 6,719,884 | 21,006,788 | 64.66\% | 23.8\% | 1.29\% | 5.43\% |
| 31 | 0 | 0 | 3.51\% | 6,191,198 | 20,893,650 | 68.72\% | 23.4\% | 1.20\% | 5.11\% |
| 32 | 0 | 0 | 3.51\% | 5,677,966 | 20,620,408 | 72.68\% | 23.1\% | 1.12\% | 4.83\% |
| 33 | 0 | 0 | 3.51\% | 5,175,922 | 20,214,918 | 76.53\% | 22.8\% | 1.05\% | 4.59\% |
| 34 | 0 | 0 | 3.51\% | 4,688,777 | 19,629,999 | 80.25\% | 22.6\% | 0.99\% | 4.38\% |
| 35 | 0 | 0 | 3.51\% | 4,220,363 | 18,753,803 | 83.77\% | 22.4\% | 0.94\% | 4.19\% |
| 36 | 0 | 0 | 3.51\% | 3,774,324 | 17,705,120 | 87.08\% | 22.2\% | 0.89\% | 4.03\% |
| 37 | 0 | 0 | 3.51\% | 3,353,669 | 16,557,909 | 90.16\% | 22.0\% | 0.86\% | 3.89\% |
| 38 | 0 | 0 | 3.51\% | 2,959,738 | 15,393,222 | 93.01\% | 21.9\% | 0.83\% | 3.78\% |
| 39 | 0 | 0 | 3.51\% | 2,593,775 | 14,266,485 | 95.66\% | 21.7\% | 0.80\% | 3.67\% |
| 40 | 0 | 0 | 3.51\% | 2,258,476 | 13,052,648 | 98.07\% | 21.6\% | 0.77\% | 3.58\% |
| 41 | 0 | 0 | 3.51\% | 1,953,524 | 11,804,170 | 100.25\% | 21.5\% | 0.75\% | 3.50\% |
| 42 | 0 | 0 | 3.51\% | 1,679,145 | 10,599,865 | 102.22\% | 21.5\% | 0.74\% | 3.44\% |
| 43 | 0 | 0 | 3.51\% | 1,434,049 | 9,479,385 | 103.97\% | 21.4\% | 0.72\% | 3.38\% |
| 44 | 0 | 0 | 3.51\% | 1,215,945 | 8,525,435 | 105.56\% | 21.3\% | 0.71\% | 3.33\% |
| 45 | 0 | 0 | 3.51\% | 1,026,148 | 7,588,490 | 106.98\% | 21.3\% | 0.70\% | 3.28\% |
| 46 | 0 | 0 | 3.51\% | 861,638 | 6,701,615 | 108.24\% | 21.2\% | 0.69\% | 3.24\% |
| 47 | 0 | 0 | 3.51\% | 719,278 | 5,871,503 | 109.35\% | 21.2\% | 0.68\% | 3.21\% |
| 48 | 0 | 0 | 3.51\% | 596,892 | 5,122,116 | 110.32\% | 21.2\% | 0.67\% | 3.18\% |
| 49 | 0 | 0 | 3.51\% | 490,733, | 4,505,213 | 111.18\% | 21.2\% | 0.67\% | 3.16\% |
| 50 | 0 | 0 | 3.51\% | 403,305 | 3,919,431 | 111.93\% | 21.1\% | 0.66\% | 3.14\% |
| 51 | 0 | 0 | 3.51\% | 330,418 | 3,357,926 | 112.58\% | 21.1\% | 0.66\% | 3.12\% |
| 52 | 0 | 0 | 3.51\% | 268,508 | 2,829,532 | 113.13\% | 21.1\% | 0.66\% | 3.10\% |
| 53 | 0 | 0 | 3.51\% | 216,681\| | 2,349,816 | 113.58\% | 21.1\% | 0.65\% | 3.09\% |
| 54 | 0 | 0 | 3.51\% | 173,193 | 1,956,761 | 113.96\% | 21.1\% | 0.65\% | 3.08\% |
| 55 | 0 | 0 | 3.51\% | 138,805 | 1,612,653 | 114.28\% | 21.1\% | 0.65\% | 3.07\% |
| 56 | 0 | 0 | 3.51\% | 110,645 | 1,306,298 | 114.53\% | 21.1\% | 0.65\% | 3.07\% |
| 57 | 0 | 0 | 3.51\% | 87,254 | 1,039,016 | 114.74\% | 21.1\% | 0.65\% | 3.06\% |
| 58 | 0 | 0 | 3.51\% | 68,097 | 812,201 | 114.89\% | 21.1\% | 0.64\% | 3.06\% |
| 59 | 0 | 0 | 3.51\% | 51,821 | 644,273 | 115.02\% | 21.1\% | 0.64\% | 3.05\% |
| 60 | 0 | 0 | 3.51\% | 40,165 | 507,898 | 115.12\% | 21.1\% | 0.64\% | 3.05\% |
| 61 | 0 | 0 | 3.51\% | 30,343 | 393,205 | 115.20\% | 21.1\% | 0.64\% | 3.05\% |
| 62 | 0 | 0 | 3.51\% | 22,628 | 297,923 | 115.26\% | 21.1\% | 0.64\% | 3.05\% |
| 63 | 0 | 0 | 3.51\% | 16,936 | 223,252 | 115.30\% | 21.1\% | 0.64\% | 3.05\% |
| 64 | 0 | 0 | 3.51\% | 12,450 | 169,916 | 115.33\% | 21.1\% | 0.64\% | 3.04\% |
| $65+$ | 0 | 0 | 3.51\% | 30,793 | 450,959 | 115.42\% | 21.1\% | 0.64\% | 3.04\% |
| Lifetime | 97,515,441 | 3,424,105 | 3.51\% | 462,856,667 | 534,248,136 | 115.42\% | 21.1\% | 0.64\% | 3.04\% |
| PV Lifetime | 105,990,381 | 3,630,209 | 3.4\% | 326,220,918 | 208,121,224 | 63.80\% | 32.5\% | 1.7\% | 5.4\% |

## Attachment F





| Transamerica Life Insurance Company |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Incidence Rate Exhibit |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Claims Assumption Exhibit |  |  |  |  |  |  |
| -Issue Ages 52, 57 |  |  |  |  |  |  |
| -Single |  |  |  |  |  |  |
| -4 Year Benefit Period |  |  |  |  |  |  |
| -60 Day Elimination Period |  |  |  |  |  |  |
| Incidence, Male |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Nursing Home |  | Home Health Care |  | Assisted Living Facility |  |
|  | Issue Age |  |  |  |  |  |
| Attained Age | 52 | 57 | 52 | 57 | 52 | 57 |
| 52 | 0.000098 | 0.000000 | 0.000109 | 0.000000 | 0.000040 | 0.000000 |
| 53 | 0.000098 | 0.000000 | 0.000164 | 0.000000 | 0.000060 | 0.000000 |
| 54 | 0.000098 | 0.000000 | 0.000164 | 0.000000 | 0.000080 | 0.000000 |
| 55 | 0.000098 | 0.000000 | 0.000218 | 0.000000 | 0.000100 | 0.000000 |
| 56 | 0.000099 | 0.000000 | 0.000327 | 0.000000 | 0.000121 | 0.000000 |
| 57 | 0.000100 | 0.000109 | 0.000441 | 0.000166 | 0.000141 | 0.000078 |
| 58 | 0.000102 | 0.000128 | 0.000539 | 0.000335 | 0.000161 | 0.000104 |
| 59 | 0.000203 | 0.000146 | 0.000663 | 0.000505 | 0.000181 | 0.000131 |
| 60 | 0.000197 | 0.000164 | 0.000795 | 0.000677 | 0.000261 | 0.000157 |
| 61 | 0.000196 | 0.000314 | 0.000847 | 0.000852 | 0.000352 | 0.000183 |
| 62 | 0.000345 | 0.000352 | 0.000976 | 0.001041 | 0.000402 | 0.000209 |
| 63 | 0.000421 | 0.000387 | 0.001169 | 0.001244 | 0.000452 | 0.000235 |
| 64 | 0.000448 | 0.000417 | 0.001214 | 0.001189 | 0.000507 | 0.000261 |
| 65 | 0.000495 | 0.000477 | 0.001435 | 0.001201 | 0.000614 | 0.000287 |
| 66 | 0.000553 | 0.000501 | 0.001708 | 0.001394 | 0.000723 | 0.000366 |
| 67 | 0.000714 | 0.000661 | 0.001961 | 0.001814 | 0.000975 | 0.000575 |
| 68 | 0.001027 | 0.000982 | 0.002150 | 0.002285 | 0.001230 | 0.000705 |
| 69 | 0.001431 | 0.001371 | 0.002595 | 0.002925 | 0.001324 | 0.001054 |
| 70 | 0.001879 | 0.001805 | 0.002811 | 0.003057 | 0.001531 | 0.001403 |
| 71 | 0.002149 | 0.002069 | 0.003074 | 0.003298 | 0.001739 | 0.001674 |
| 72 | 0.002397 | 0.002313 | 0.003281 | 0.003606 | 0.001933 | 0.001866 |
| 73 | 0.002679 | 0.002592 | 0.003921 | 0.004252 | 0.002205 | 0.002133 |
| 74 | 0.003102 | 0.003007 | 0.004876 | 0.004863 | 0.002435 | 0.002360 |
| 75 | 0.003746 | 0.003640 | 0.005734 | 0.005571 | 0.003094 | 0.003006 |
| 76 | 0.004511 | 0.004392 | 0.007468 | 0.007271 | 0.004121 | 0.004012 |
| 77 | 0.004895 | 0.004776 | 0.009267 | 0.009043 | 0.005705 | 0.005566 |
| 78 | 0.005523 | 0.005401 | 0.011465 | 0.011211 | 0.006999 | 0.006844 |
| 79 | 0.006419 | 0.006290 | 0.013665 | 0.013390 | 0.008241 | 0.008074 |
| 80 | 0.007326 | 0.007192 | 0.016425 | 0.016126 | 0.009726 | 0.009550 |
| 81 | 0.008153 | 0.008021 | 0.018681 | 0.018377 | 0.011327 | 0.011143 |
| 82 | 0.008957 | 0.008829 | 0.020900 | 0.020601 | 0.013203 | 0.013014 |
| 83 | 0.009629 | 0.009509 | 0.023902 | 0.023605 | 0.015291 | 0.015101 |
| 84 | 0.010317 | 0.010208 | 0.026498 | 0.026218 | 0.017238 | 0.017056 |
| 85 | 0.011097 | 0.011000 | 0.029326 | 0.029069 | 0.019102 | 0.018935 |
| 86 | 0.011595 | 0.011514 | 0.032443 | 0.032218 | 0.022100 | 0.021947 |
| 87 | 0.012562 | 0.012498 | 0.036778 | 0.036588 | 0.024212 | 0.024087 |
| 88 | 0.013414 | 0.013368 | 0.042538 | 0.042393 | 0.025915 | 0.025826 |
| 89 | 0.014395 | 0.014371 | 0.051661 | 0.051574 | 0.027133 | 0.027087 |
| 90 | 0.015506 | 0.015506 | 0.060473 | 0.060473 | 0.028098 | 0.028098 |
| 91 | 0.016134 | 0.016134 | 0.066203 | 0.066203 | 0.030545 | 0.030545 |
| 92 | 0.016668 | 0.016668 | 0.073322 | 0.073322 | 0.033794 | 0.033794 |
| 93 | 0.016602 | 0.016602 | 0.079458 | 0.079458 | 0.036843 | 0.036843 |
| 94 | 0.016461 | 0.016461 | 0.083146 | 0.083146 | 0.039291 | 0.039291 |
| 95 | 0.015960 | 0.015960 | 0.085182 | 0.085182 | 0.040897 | 0.040897 |
| 96 | 0.015517 | 0.015517 | 0.085496 | 0.085496 | 0.041366 | 0.041366 |
| 97 | 0.015310 | 0.015310 | 0.085471 | 0.085471 | 0.041366 | 0.041366 |
| 98 | 0.015259 | 0.015259 | 0.084286 | 0.084286 | 0.041366 | 0.041366 |
| 99 | 0.015206 | 0.015206 | 0.081075 | 0.081075 | 0.041366 | 0.041366 |

Page 25

| Transamerica Life Insurance Company On Claim Mortality Rate Exhibit |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Claims Assumption Exhibit |  |  |  |  |  |  |
|  | -Issue Ages 52, 57 |  |  |  |  |  |
|  | -2/4 Year Benefit Period |  |  |  |  |  |
|  | -60 Day Elimination Period |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  On Claim Mortality, Female <br> Nursing Home Home Health Care |  |  |  |  |  |
| Duration |  |  |  |  | Assisted Living Facility |  |
|  | Issue Age |  |  |  |  |  |
| Month | 52 | 57 | 52 | 57 | 52 | 57 |
| 1 | 0.102728 | 0.102728 | 0.193422 | 0.193422 | 0.023652 | 0.023652 |
| 2 | 0.057791 | 0.057791 | 0.093084 | 0.093084 | 0.016591 | 0.016591 |
| 3 | 0.046440 | 0.046440 | 0.054522 | 0.054522 | 0.013483 | 0.013483 |
| 4 | 0.040530 | 0.040530 | 0.043163 | 0.043163 | 0.011638 | 0.011638 |
| 5 | 0.036535 | 0.036535 | 0.034076 | 0.034076 | 0.010383 | 0.010383 |
| 6 | 0.033192 | 0.033192 | 0.026125 | 0.026125 | 0.010158 | 0.010158 |
| 7 | 0.030656 | 0.030656 | 0.021325 | 0.021325 | 0.010056 | 0.010056 |
| 8 | 0.028140 | 0.028140 | 0.017771 | 0.017771 | 0.009967 | 0.009967 |
| 9 | 0.025643 | 0.025643 | 0.016586 | 0.016586 | 0.009890 | 0.009890 |
| 10 | 0.023165 | 0.023165 | 0.015401 | 0.015401 | 0.009822 | 0.009822 |
| 11 | 0.020706 | 0.020706 | 0.014217 | 0.014217 | 0.009760 | 0.009760 |
| 12 | 0.018267 | 0.018267 | 0.013032 | 0.013032 | 0.009704 | 0.009704 |
| 13 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 14 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 15 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 16 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 17 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 18 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 19 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 20 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 21 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 22 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 23 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 24 | 0.015894 | 0.015894 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 25 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 26 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 27 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 28 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 29 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 30 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 31 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 32 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 33 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 34 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 35 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 36 | 0.014271 | 0.014271 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 37 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 38 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 39 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 40 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 41 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 42 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 43 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 44 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 45 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 46 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 47 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
| 48 | 0.017148 | 0.017148 | 0.010035 | 0.010035 | 0.008458 | 0.008458 |
|  |  |  |  |  |  |  |
|  | Attained Age after first 48 months |  |  |  |  |  |
| 56 | 0.182395 |  | 0.026876 |  | 0.058171 |  |
| 57 | 0.182730 |  | 0.029758 |  | 0.060865 |  |
| 58 | 0.183064 |  | 0.032180 |  | 0.063552 |  |
| 59 | 0.183399 |  | 0.034988 |  | 0.066233 |  |
| 60 | 0.183734 |  | 0.037914 |  | 0.068907 |  |
| 61 | 0.184068 | 0.184068 | 0.040959 | 0.040959 | 0.071574 | 0.071574 |
| 62 | 0.184402 | 0.184402 | 0.044124 | 0.044124 | 0.074236 | 0.074236 |
| 63 | 0.184736 | 0.184736 | 0.047487 | 0.047487 | 0.076890 | 0.076890 |
| 64 | 0.185070 | 0.185070 | 0.051054 | 0.051054 | 0.079539 | 0.079539 |
| 65 | 0.185404 | 0.185404 | 0.054714 | 0.054714 | 0.082180 | 0.082180 |
| 66 | 0.185738 | 0.185738 | 0.058352 | 0.058352 | 0.084816 | 0.084816 |
| 67 | 0.186072 | 0.186072 | 0.061847 | 0.061847 | 0.087445 | 0.087445 |
| 68 | 0.186405 | 0.186405 | 0.065220 | 0.065220 | 0.090067 | 0.090067 |
| 69 | 0.186739 | 0.186739 | 0.068543 | 0.068543 | 0.092683 | 0.092683 |
| 70 | 0.188274 | 0.188274 | 0.073373 | 0.073373 | 0.095293 | 0.095293 |
| 71 | 0.188437 | 0.188437 | 0.076512 | 0.076512 | 0.097946 | 0.097946 |
| 72 | 0.188772 | 0.188772 | 0.079642 | 0.079642 | 0.100592 | 0.100592 |
| 73 | 0.189106 | 0.189106 | 0.082764 | 0.082764 | 0.103231 | 0.103231 |
| 74 | 0.189441 | 0.189441 | 0.085463 | 0.085463 | 0.105864 | 0.105864 |
| 75 | 0.191476 | 0.191476 | 0.085811 | 0.085811 | 0.107355 | 0.107355 |
| 76 | 0.197481 | 0.197481 | 0.089978 | 0.089978 | 0.109949 | 0.109949 |
| 77 | 0.205160 | 0.205160 | 0.095858 | 0.095858 | 0.112537 | 0.112537 |
| 78 | 0.212777 | 0.212777 | 0.102391 | 0.102391 | 0.115118 | 0.115118 |
| 79 | 0.224343 | 0.224343 | 0.112430 | 0.112430 | 0.117692 | 0.117692 |
| 80 | 0.236759 | 0.236759 | 0.123694 | 0.123694 | 0.121907 | 0.121907 |
| 81 | 0.243319 | 0.243319 | 0.128613 | 0.128613 | 0.125509 | 0.125 ¢99 |
| 82 | 0.249216 | 0.249216 | 0.128749 | 0.128749 | 0.130284 | 0.130284 |
| 83 | 0.254418 | 0.254418 | 0.128885 | 0.128885 | 0.133103 | 0.133103 |
| 84 | 0.260206 | 0.260206 | 0.129021 | 0.129021 | 0.135978 | 0.135978 |
| 85 | 0.263784 | 0.263784 | 0.129031 | 0.129031 | 0.141109 | 0.141109 |





## Exhibit I

## Transamerica Life Insurance Company

Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 353,565 | 353,565 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 9,739,176 | 9,739,176 | 1,167 | 0.0\% | 0.0\% | 0.01\% | 0.01\% |
| 2013 | 21,049,413 | 21,049,413 | 564,302 | 2.7\% | 2.7\% | 1.79\% | 1.79\% |
| 2014 | 20,596,180 | 20,596,180 | 436,060 | 2.1\% | 2.1\% | 1.92\% | 1.92\% |
| 2015 | 20,599,830 | 20,599,830 | 427,197 | 2.1\% | 2.1\% | 1.96\% | 1.96\% |
| 2016 | 20,496,057 | 20,496,057 | 1,913,972 | 9.3\% | 9.3\% | 3.50\% | 3.50\% |
| 2017Q1 | 4,681,220 | 4,681,220 | 81,407 | 1.7\% | 1.7\% | 3.43\% | 3.43\% |
| 2017Q2-Q4 | 15,582,330 | 15,582,330 | 1,964,334 | 12.6\% | 12.6\% | 4.59\% | 4.59\% |
| 2018 | 20,031,043 | 24,205,250 | 1,904,677 | 9.5\% | 7.9\% | 5.26\% | 5.11\% |
| 2019 | 19,268,181 | 27,118,342 | 2,326,385 | 12.1\% | 8.6\% | 6.02\% | 5.62\% |
| 2020 | 18,861,322 | 26,516,881 | 2,819,343 | 14.9\% | 10.6\% | 6.86\% | 6.23\% |
| 2021 | 18,401,788 | 25,837,117 | 3,421,698 | 18.6\% | 13.2\% | 7.82\% | 6.94\% |
| 2022 | 16,657,146 | 23,328,785 | 4,073,847 | 24.5\% | 17.5\% | 8.93\% | 7.79\% |
| 2023 | 15,184,019 | 21,205,529 | 4,776,637 | 31.5\% | 22.5\% | 10.17\% | 8.77\% |
| 2024 | 14,879,850 | 20,743,386 | 5,609,935 | 37.7\% | 27.0\% | 11.52\% | 9.84\% |
| 2025 | 14,566,201 | 20,267,762 | 6,555,096 | 45.0\% | 32.3\% | 13.01\% | 11.02\% |
| 2026 | 14,236,336 | 19,769,117 | 7,591,703 | 53.3\% | 38.4\% | 14.62\% | 12.30\% |
| 2027 | 13,895,776 | 19,255,045 | 8,825,994 | 63.5\% | 45.8\% | 16.39\% | 13.70\% |
| 2028 | 13,523,556 | 18,696,105 | 10,271,998 | 76.0\% | 54.9\% | 18.34\% | 15.26\% |
| 2029 | 13,132,624 | 18,112,041 | 11,832,922 | 90.1\% | 65.3\% | 20.47\% | 16.95\% |
| 2030 | 12,731,363 | 17,516,897 | 13,363,515 | 105.0\% | 76.3\% | 22.74\% | 18.77\% |
| 2031 | 12,301,005 | 16,886,590 | 14,778,751 | 120.1\% | 87.5\% | 25.12\% | 20.66\% |
| 2032 | 11,857,990 | 16,244,611 | 16,515,956 | 139.3\% | 101.7\% | 27.64\% | 22.67\% |
| 2033 | 11,399,378 | 15,584,869 | 18,266,054 | 160.2\% | 117.2\% | 30.30\% | 24.79\% |
| 2034 | 10,923,302 | 14,904,925 | 19,837,157 | 181.6\% | 133.1\% | 33.04\% | 26.98\% |
| 2035 | 10,427,524 | 14,201,899 | 21,316,764 | 204.4\% | 150.1\% | 35.85\% | 29.21\% |
| 2036 | 9,914,201 | 13,479,216 | 22,743,802 | 229.4\% | 168.7\% | 38.70\% | 31.49\% |
| 2037 | 9,391,261 | 12,747,899 | 24,234,138 | 258.0\% | 190.1\% | 41.60\% | 33.81\% |
| 2038 | 8,860,069 | 12,008,370 | 25,660,077 | 289.6\% | 213.7\% | 44.55\% | 36.16\% |
| 2039 | 8,322,593 | 11,263,164 | 26,747,648 | 321.4\% | 237.5\% | 47.49\% | 38.50\% |
| 2040 | 7,778,398 | 10,511,662 | 27,511,619 | 353.7\% | 261.7\% | 50.38\% | 40.81\% |
| 2041 | 7,233,905 | 9,762,564 | 28,029,397 | 387.5\% | 287.1\% | 53.20\% | 43.06\% |
| 2042 | 6,695,970 | 9,024,866 | 28,446,628 | 424.8\% | 315.2\% | 55.95\% | 45.26\% |
| 2043 | 6,166,234 | 8,299,789 | 28,730,937 | 465.9\% | 346.2\% | 58.62\% | 47.39\% |
| 2044 | 5,648,807 | 7,592,797 | 28,632,703 | 506.9\% | 377.1\% | 61.18\% | 49.43\% |
| 2045 | 5,146,359 | 6,907,765 | 28,164,157 | 547.3\% | 407.7\% | 63.60\% | 51.36\% |
| 2046 | 4,662,381 | 6,249,332 | 27,413,386 | 588.0\% | 438.7\% | 65.86\% | 53.17\% |
| 2047 | 4,200,638 | 5,622,431 | 26,524,114 | 631.4\% | 471.8\% | 67.96\% | 54.85\% |
| 2048 | 3,762,479 | 5,028,403 | 25,548,129 | 679.0\% | 508.1\% | 69.91\% | 56.42\% |
| 2049 | 3,350,588 | 4,470,926 | 24,337,766 | 726.4\% | 544.4\% | 71.70\% | 57.85\% |
| 2050 | 2,966,713 | 3,952,488 | 22,924,441 | 772.7\% | 580.0\% | 73.33\% | 59.15\% |
| 2051 | 2,611,233 | 3,473,460 | 21,397,908 | 819.5\% | 616.0\% | 74.79\% | 60.32\% |

## Exhibit I <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred <br> Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |


| AV Past | $105,990,381$ | $105,990,381$ | $3,630,209$ | $3.43 \%$ | $3.43 \%$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| PV Future | $244,842,901$ | $329,277,007$ | $292,010,672$ | $119.26 \%$ | $88.68 \%$ |
| AV/PV Lifetime | $350,833,282$ | $435,267,388$ | $295,640,881$ | $84.27 \%$ | $67.92 \%$ |
|  |  |  |  |  |  |
| A $=$ | $\$ 67,621,863$ | Accumulated value of initial earned premium times $63.8 \%$ |  |  |  |
| B $=$ | $\$ 0$ |  |  | Accumulated value of prior premium rate increases times $85 \%$ |  |
| C $=$ | $\$ 156,209,771$ | Present value of future projected initial earned premium times $63.8 \%$ |  |  |  |
| $\mathrm{D}=$ | $\$ 71,768,990$ Present value of future projected earned premium from rate increases times $85 \%$ |  |  |  |  |
| A+B+C+D $=$ | $\$ 295,600,624$ |  |  |  |  |

Accumulated value of incurred claims + present value of future projected incurred claims is not less than $A+B+C+D$ in aggregate across premium types

Exhibit II
Transamerica Life Insurance Company
Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company Actual To Expected Lifetime Experience
Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Actual |  |  | Expected |  |  | Actual to Expected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | $\mathrm{G}=\mathrm{A} / \mathrm{D}$ | $\mathrm{H}=\mathrm{B} / \mathrm{E}$ | I=C/F |
| Duration | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Cumulative <br> Actual to <br> Expected <br> Earned <br> Premium | Cumulative Actual to Expected Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase |
| 1 | 21,853,568 | 266,977 | 1.2\% | 21,290,714 | 375,790 | 1.8\% | 102.6\% | 71.0\% | 69.2\% |
| 2 | 21,863,146 | 311,925 | 1.3\% | 20,389,852 | 542,118 | 2.2\% | 104.9\% | 63.1\% | 60.1\% |
| 3 | 21,057,479 | 476,187 | 1.6\% | 19,747,651 | 674,938 | 2.6\% | 105.4\% | 66.2\% | 62.8\% |
| 4 | 20,574,140 | 769,282 | 2.1\% | 19,251,701 | 838,061 | 3.0\% | 105.8\% | 75.0\% | 70.9\% |
| 5 | 19,644,077 | 2,583,645 | 4.2\% | 18,845,523 | 1,078,333 | 3.5\% | 105.5\% | 125.6\% | 119.1\% |
| 6 | 19,246,957 | 1,838,892 | 5.0\% | 18,120,421 | 1,336,963 | 4.1\% | 105.6\% | 128.9\% | 122.1\% |
| 7 | 19,219,530 | 2,092,825 | 5.8\% | 17,771,497 | 1,674,725 | 4.8\% | 105.9\% | 127.9\% | 120.7\% |
| 8 | 18,909,804 | 2,542,314 | 6.7\% | 17,318,794 | 2,087,616 | 5.6\% | 106.3\% | 126.4\% | 118.9\% |
| 9 | 18,578,066 | 3,066,486 | 7.7\% | 16,068,457 | 2,533,118 | 6.6\% | 107.2\% | 125.2\% | 116.8\% |
| 10 | 18,256,552 | 3,750,004 | 8.9\% | 15,684,826 | 3,025,787 | 7.7\% | 108.0\% | 124.9\% | 115.7\% |
| 11 | 15,321,144 | 4,412,852 | 10.3\% | 15,302,730 | 3,574,602 | 8.9\% | 107.4\% | 124.6\% | 116.1\% |
| 12 | 15,037,612 | 5,146,491 | 11.9\% | 14,980,949 | 4,230,953 | 10.2\% | 106.9\% | 124.1\% | 116.1\% |
| 13 | 14,730,017 | 6,084,635 | 13.6\% | 14,596,755 | 4,959,428 | 11.7\% | 106.5\% | 123.8\% | 116.2\% |
| 14 | 14,411,193 | 7,070,981 | 15.6\% | 14,111,372 | 5,669,820 | 13.4\% | 106.3\% | 124.0\% | 116.7\% |
| 15 | 14,080,248 | 8,169,340 | 17.8\% | 13,702,924 | 6,436,493 | 15.2\% | 106.1\% | 124.4\% | 117.3\% |
| 16 | 13,733,709 | 9,550,792 | 20.3\% | 13,332,076 | 7,289,185 | 17.1\% | 105.9\% | 125.5\% | 118.5\% |
| 17 | 13,341,591 | 11,110,344 | 23.1\% | 12,889,520 | 8,342,437 | 19.3\% | 105.8\% | 126.7\% | 119.7\% |
| 18 | 12,953,212 | 12,785,548 | 26.2\% | 12,476,143 | 9,555,787 | 21.7\% | 105.7\% | 127.7\% | 120.8\% |
| 19 | 12,543,277 | 14,279,243 | 29.6\% | 12,089,537 | 10,705,146 | 24.3\% | 105.6\% | 128.5\% | 121.7\% |
| 20 | 12,099,732 | 15,750,553 | 33.2\% | 11,667,125 | 11,832,662 | 27.1\% | 105.6\% | 129.2\% | 122.3\% |
| 21 | 11,649,637 | 17,671,972 | 37.2\% | 11,235,783 | 12,976,247 | 30.1\% | 105.5\% | 130.1\% | 123.3\% |
| 22 | 11,181,704 | 19,326,113 | 41.4\% | 10,779,533 | 14,301,807 | 33.4\% | 105.5\% | 130.7\% | 123.9\% |
| 23 | 10,695,166 | 20,835,679 | 45.8\% | 10,311,128 | 15,695,633 | 36.9\% | 105.4\% | 131.0\% | 124.2\% |
| 24 | 10,187,435 | 22,307,349 | 50.4\% | 9,825,578 | 16,900,220 | 40.5\% | 105.4\% | 131.1\% | 124.4\% |
| 25 | 9,664,214 | 23,686,445 | 55.2\% | 9,325,872 | 17,892,853 | 44.3\% | 105.3\% | 131.2\% | 124.6\% |
| 26 | 9,135,018 | 25,326,646 | 60.3\% | 8,819,028 | 18,746,896 | 48.2\% | 105.3\% | 131.6\% | 125.0\% |
| 27 | 8,596,082 | 26,605,353 | 65.6\% | 8,299,194 | 19,587,610 | 52.3\% | 105.2\% | 132.0\% | 125.4\% |
| 28 | 8,052,023 | 27,494,295 | 70.9\% | 7,775,388 | 20,359,888 | 56.4\% | 105.2\% | 132.3\% | 125.8\% |
| 29 | 7,501,628 | 28,074,850 | 76.2\% | 7,253,112 | 20,859,216 | 60.5\% | 105.2\% | 132.5\% | 126.0\% |
| 30 | 6,954,713 | 28,429,719 | 81.6\% | 6,719,884 | 21,006,788 | 64.7\% | 105.1\% | 132.7\% | 126.2\% |
| 31 | 6,416,770 | 28,892,574 | 87.0\% | 6,191,198 | 20,893,650 | 68.7\% | 105.1\% | 133.1\% | 126.6\% |
| 32 | 5,887,598 | 28,997,692 | 92.4\% | 5,677,966 | 20,620,408 | 72.7\% | 105.1\% | 133.6\% | 127.1\% |
| 33 | 5,372,988 | 28,634,878 | 97.7\% | 5,175,922 | 20,214,918 | 76.5\% | 105.1\% | 134.1\% | 127.6\% |
| 34 | 4,875,287 | 27,951,811 | 102.8\% | 4,688,777 | 19,629,999 | 80.2\% | 105.1\% | 134.6\% | 128.1\% |
| 35 | 4,398,399 | 27,012,307 | 107.7\% | 4,220,363 | 18,753,803 | 83.8\% | 105.1\% | 135.1\% | 128.6\% |
| 36 | 3,945,685 | 26,123,558 | 112.4\% | 3,774,324 | 17,705,120 | 87.1\% | 105.1\% | 135.7\% | 129.1\% |
| 37 | 3,517,408 | 25,006,670 | 117.0\% | 3,353,669 | 16,557,909 | 90.2\% | 105.1\% | 136.3\% | 129.7\% |
| 38 | 3,117,691 | 23,615,805 | 121.2\% | 2,959,738 | 15,393,222 | 93.0\% | 105.1\% | 136.9\% | 130.3\% |
| 39 | 2,746,767 | 22,085,882 | 125.2\% | 2,593,775 | 14,266,485 | 95.7\% | 105.1\% | 137.5\% | 130.9\% |
| 40 | 2,405,275 | 20,480,347 | 128.9\% | 2,258,476 | 13,052,648 | 98.1\% | 105.1\% | 138.1\% | 131.4\% |
| 41 | 2,093,751 | 18,914,953 | 132.3\% | 1,953,524 | 11,804,170 | 100.3\% | 105.1\% | 138.7\% | 132.0\% |
| 42 | 1,811,638 | 17,320,528 | 135.4\% | 1,679,145 | 10,599,865 | 102.2\% | 105.1\% | 139.2\% | 132.5\% |
| 43 | 1,558,434 | 15,682,968 | 138.3\% | 1,434,049 | 9,479,385 | 104.0\% | 105.1\% | 139.8\% | 133.0\% |
| 44 | 1,333,225 | 14,138,446 | 140.8\% | 1,215,945 | 8,525,435 | 105.6\% | 105.1\% | 140.2\% | 133.4\% |
| 45 | 1,134,563 | 12,682,971 | 143.1\% | 1,026,148 | 7,588,490 | 107.0\% | 105.1\% | 140.6\% | 133.8\% |
| 46 | 960,822 | 11,339,697 | 145.2\% | 861,638 | 6,701,615 | 108.2\% | 105.1\% | 141.0\% | 134.1\% |
| 47 | 810,023 | 10,097,546 | 147.0\% | 719,278 | 5,871,503 | 109.3\% | 105.2\% | 141.4\% | 134.5\% |
| 48 | 680,082 | 8,922,322 | 148.7\% | 596,892 | 5,122,116 | 110.3\% | 105.2\% | 141.7\% | 134.8\% |
| 49 | 568,860 | 7,871,349 | 150.1\% | 490,733 | 4,505,213 | 111.2\% | 105.2\% | 142.0\% | 135.0\% |
| 50 | 474,174 | 6,930,281 | 151.4\% | 403,305 | 3,919,431 | 111.9\% | 105.2\% | 142.3\% | 135.3\% |
| 51 | 394,070 | 6,101,850 | 152.5\% | 330,418 | 3,357,926 | 112.6\% | 105.2\% | 142.5\% | 135.5\% |
| 52 | 326,653 | 5,354,409 | 153.5\% | 268,508 | 2,829,532 | 113.1\% | 105.2\% | 142.8\% | 135.7\% |
| 53 | 270,150 | 4,666,627 | 154.4\% | 216,681 | 2,349,816 | 113.6\% | 105.2\% | 143.0\% | 135.9\% |
| 54 | 222,936 | 4,051,272 | 155.2\% | 173,193 | 1,956,761 | 114.0\% | 105.2\% | 143.3\% | 136.1\% |
| 55 | 183,588 | 3,515,091 | 155.8\% | 138,805 | 1,612,653 | 114.3\% | 105.2\% | 143.5\% | 136.4\% |
| 56 | 150,872 | 3,040,825 | 156.4\% | 110,645 | 1,306,298 | 114.5\% | 105.2\% | 143.7\% | 136.6\% |
| 57 | 123,712 | 2,622,438 | 156.9\% | 87,254 | 1,039,016 | 114.7\% | 105.2\% | 143.9\% | 136.7\% |
| 58 | 101,197 | 2,242,030 | 157.3\% | 68,097 | 812,201 | 114.9\% | 105.3\% | 144.1\% | 136.9\% |
| 59 | 82,565 | 1,907,021 | 157.7\% | 51,821 | 644,273 | 115.0\% | 105.3\% | 144.3\% | 137.1\% |
| 60 | 67,144 | 1,617,135 | 158.0\% | 40,165 | 507,898 | 115.1\% | 105.3\% | 144.5\% | 137.2\% |
| 61 | 54,399 | 1,362,570 | 158.3\% | 30,343 | 393,205 | 115.2\% | 105.3\% | 144.6\% | 137.4\% |
| 62 | 43,887 | 1,138,443 | 158.5\% | 22,628 | 297,923 | 115.3\% | 105.3\% | 144.8\% | 137.5\% |
| 63 | 35,235 | 943,850 | 158.7\% | 16,936 | 223,252 | 115.3\% | 105.3\% | 144.9\% | 137.6\% |
| 64 | 28,142 | 777,433 | 158.8\% | 12,450 | 169,916 | 115.3\% | 105.3\% | 145.0\% | 137.7\% |
| 65+ | 97,877 | 2,882,439 | 159.4\% | 30,793 | 450,959 | 115.4\% | 105.3\% | 145.4\% | 138.1\% |
| Lifetime | 487,364,541 | 776,743,753 | 159.4\% | 462,856,667 | 534,248,136 | 115.4\% | 105.3\% | 145.4\% | 138.1\% |
| PV Lifetime | 350,833,282 | 295,640,762 | 84.27\% | 326,220,918 | 208,121,224 | 63.80\% | 107.5\% | 142.1\% | 132.1\% |

## Exhibit III - Interstate Compact States Only

## Transamerica Life Insurance Company

## Policy Forms: ICC10 TLC-3 UniProduct Series

Experience for Transamerica Life Insurance Company - IC States Only Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 224,089 | 224,089 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 7,121,454 | 7,121,454 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 15,263,274 | 15,263,274 | 275,235 | 1.8\% | 1.8\% | 1.20\% | 1.20\% |
| 2014 | 14,583,756 | 14,583,756 | 424,345 | 2.9\% | 2.9\% | 1.85\% | 1.85\% |
| 2015 | 14,300,867 | 14,300,867 | 35,888 | 0.3\% | 0.3\% | 1.42\% | 1.42\% |
| 2016 | 13,966,838 | 13,966,838 | 1,793,014 | 12.8\% | 12.8\% | 3.73\% | 3.73\% |
| 2017Q1 | 3,186,530 | 3,186,530 | 75,125 | 2.4\% | 2.4\% | 3.67\% | 3.67\% |
| 2017Q2-Q4 | 10,643,914 | 10,643,914 | 1,851,222 | 17.4\% | 17.4\% | 5.37\% | 5.37\% |
| 2018 | 13,602,366 | 16,451,961 | 1,394,288 | 10.3\% | 8.5\% | 6.01\% | 5.85\% |
| 2019 | 13,049,515 | 18,494,040 | 1,704,615 | 13.1\% | 9.2\% | 6.78\% | 6.33\% |
| 2020 | 12,811,424 | 18,132,009 | 2,067,272 | 16.1\% | 11.4\% | 7.64\% | 6.94\% |
| 2021 | 12,549,300 | 17,734,480 | 2,509,985 | 20.0\% | 14.2\% | 8.64\% | 7.66\% |
| 2022 | 11,259,793 | 15,875,228 | 2,979,854 | 26.5\% | 18.8\% | 9.79\% | 8.55\% |
| 2023 | 10,121,025 | 14,230,000 | 3,486,051 | 34.4\% | 24.5\% | 11.10\% | 9.58\% |
| 2024 | 9,917,561 | 13,914,217 | 4,086,241 | 41.2\% | 29.4\% | 12.53\% | 10.71\% |
| 2025 | 9,699,952 | 13,578,175 | 4,759,026 | 49.1\% | 35.0\% | 14.10\% | 11.94\% |
| 2026 | 9,469,128 | 13,223,545 | 5,495,332 | 58.0\% | 41.6\% | 15.80\% | 13.29\% |
| 2027 | 9,230,835 | 12,858,530 | 6,370,458 | 69.0\% | 49.5\% | 17.66\% | 14.76\% |
| 2028 | 8,972,475 | 12,465,408 | 7,386,668 | 82.3\% | 59.3\% | 19.71\% | 16.39\% |
| 2029 | 8,702,268 | 12,056,616 | 8,464,960 | 97.3\% | 70.2\% | 21.93\% | 18.16\% |
| 2030 | 8,420,317 | 11,634,079 | 9,498,368 | 112.8\% | 81.6\% | 24.29\% | 20.04\% |
| 2031 | 8,116,803 | 11,185,913 | 10,437,115 | 128.6\% | 93.3\% | 26.75\% | 22.00\% |
| 2032 | 7,806,242 | 10,732,721 | 11,606,745 | 148.7\% | 108.1\% | 29.34\% | 24.07\% |
| 2033 | 7,486,154 | 10,269,387 | 12,763,959 | 170.5\% | 124.3\% | 32.06\% | 26.23\% |
| 2034 | 7,154,966 | 9,793,794 | 13,779,072 | 192.6\% | 140.7\% | 34.85\% | 28.46\% |
| 2035 | 6,810,282 | 9,302,745 | 14,711,985 | 216.0\% | 158.1\% | 37.69\% | 30.72\% |
| 2036 | 6,453,726 | 8,798,890 | 15,603,291 | 241.8\% | 177.3\% | 40.56\% | 33.01\% |
| 2037 | 6,092,542 | 8,292,289 | 16,546,908 | 271.6\% | 199.5\% | 43.48\% | 35.33\% |
| 2038 | 5,727,561 | 7,782,890 | 17,424,765 | 304.2\% | 223.9\% | 46.42\% | 37.68\% |
| 2039 | 5,360,040 | 7,272,275 | 18,054,448 | 336.8\% | 248.3\% | 49.33\% | 40.00\% |
| 2040 | 4,988,878 | 6,758,828 | 18,458,985 | 370.0\% | 273.1\% | 52.19\% | 42.28\% |
| 2041 | 4,619,368 | 6,249,689 | 18,697,205 | 404.8\% | 299.2\% | 54.96\% | 44.50\% |
| 2042 | 4,256,988 | 5,752,018 | 18,880,817 | 443.5\% | 328.2\% | 57.66\% | 46.64\% |
| 2043 | 3,902,181 | 5,265,573 | 18,987,957 | 486.6\% | 360.6\% | 60.26\% | 48.72\% |
| 2044 | 3,557,813 | 4,794,196 | 18,830,713 | 529.3\% | 392.8\% | 62.74\% | 50.70\% |
| 2045 | 3,225,678 | 4,340,489 | 18,435,946 | 571.5\% | 424.7\% | 65.08\% | 52.57\% |
| 2046 | 2,907,777 | 3,907,068 | 17,866,161 | 614.4\% | 457.3\% | 67.25\% | 54.31\% |
| 2047 | 2,606,541 | 3,497,111 | 17,216,122 | 660.5\% | 492.3\% | 69.27\% | 55.93\% |
| 2048 | 2,322,294 | 3,110,734 | 16,525,143 | 711.6\% | 531.2\% | 71.14\% | 57.42\% |
| 2049 | 2,056,951 | 2,750,639 | 15,694,030 | 763.0\% | 570.6\% | 72.85\% | 58.79\% |
| 2050 | 1,811,390 | 2,418,109 | 14,737,233 | 813.6\% | 609.5\% | 74.40\% | 60.03\% |
| 2051 | 1,585,473 | 2,112,855 | 13,709,044 | 864.7\% | 648.8\% | 75.78\% | 61.14\% |



Accumulated value of incurred claims + present value of future projected incurred claims is not less than $A+B+C+D$ in aggregate across premium types

## Exhibit I

## Transamerica Life Insurance Company

Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company - Regular Premium Type Only Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 336,289 | 336,289 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 8,491,017 | 8,491,017 | 1,167 | 0.0\% | 0.0\% | 0.01\% | 0.01\% |
| 2013 | 17,615,389 | 17,615,389 | 537,281 | 3.1\% | 3.1\% | 2.01\% | 2.01\% |
| 2014 | 17,379,831 | 17,379,831 | 436,060 | 2.5\% | 2.5\% | 2.20\% | 2.20\% |
| 2015 | 17,412,134 | 17,412,134 | 427,145 | 2.5\% | 2.5\% | 2.27\% | 2.27\% |
| 2016 | 17,362,165 | 17,362,165 | 1,911,886 | 11.0\% | 11.0\% | 4.10\% | 4.10\% |
| 2017Q1 | 3,945,224 | 3,945,224 | 80,436 | 2.0\% | 2.0\% | 4.01\% | 4.01\% |
| 2017Q2-Q4 | 13,165,384 | 13,165,384 | 1,907,755 | 14.5\% | 14.5\% | 5.34\% | 5.34\% |
| 2018 | 16,963,887 | 20,489,878 | 1,784,134 | 10.5\% | 8.7\% | 6.04\% | 5.87\% |
| 2019 | 16,330,426 | 22,940,000 | 2,185,160 | 13.4\% | 9.5\% | 6.86\% | 6.41\% |
| 2020 | 15,973,605 | 22,410,887 | 2,659,240 | 16.6\% | 11.9\% | 7.79\% | 7.07\% |
| 2021 | 15,602,975 | 21,858,631 | 3,239,978 | 20.8\% | 14.8\% | 8.85\% | 7.86\% |
| 2022 | 15,307,707 | 21,410,528 | 3,870,818 | 25.3\% | 18.1\% | 10.03\% | 8.75\% |
| 2023 | 15,025,806 | 20,980,463 | 4,547,768 | 30.3\% | 21.7\% | 11.31\% | 9.73\% |
| 2024 | 14,737,847 | 20,541,388 | 5,347,510 | 36.3\% | 26.0\% | 12.72\% | 10.82\% |
| 2025 | 14,438,543 | 20,086,176 | 6,250,494 | 43.3\% | 31.1\% | 14.26\% | 12.03\% |
| 2026 | 14,124,243 | 19,609,676 | 7,237,140 | 51.2\% | 36.9\% | 15.93\% | 13.33\% |
| 2027 | 13,794,141 | 19,110,481 | 8,410,430 | 61.0\% | 44.0\% | 17.77\% | 14.78\% |
| 2028 | 13,445,815 | 18,585,530 | 9,782,259 | 72.8\% | 52.6\% | 19.80\% | 16.37\% |
| 2029 | 13,076,265 | 18,031,891 | 11,254,484 | 86.1\% | 62.4\% | 22.00\% | 18.11\% |
| 2030 | 12,684,814 | 17,450,701 | 12,687,648 | 100.0\% | 72.7\% | 24.35\% | 19.96\% |
| 2031 | 12,271,260 | 16,844,283 | 14,004,957 | 114.1\% | 83.1\% | 26.80\% | 21.90\% |
| 2032 | 11,835,497 | 16,212,615 | 15,618,050 | 132.0\% | 96.3\% | 29.39\% | 23.94\% |
| 2033 | 11,378,626 | 15,555,351 | 17,230,106 | 151.4\% | 110.8\% | 32.11\% | 26.09\% |
| 2034 | 10,902,900 | 14,875,905 | 18,664,198 | 171.2\% | 125.5\% | 34.91\% | 28.30\% |
| 2035 | 10,409,766 | 14,176,642 | 20,002,113 | 192.1\% | 141.1\% | 37.76\% | 30.56\% |
| 2036 | 9,901,150 | 13,460,652 | 21,279,313 | 214.9\% | 158.1\% | 40.65\% | 32.84\% |
| 2037 | 9,380,577 | 12,732,700 | 22,599,027 | 240.9\% | 177.5\% | 43.59\% | 35.16\% |
| 2038 | 8,850,240 | 11,994,389 | 23,846,182 | 269.4\% | 198.8\% | 46.55\% | 37.51\% |
| 2039 | 8,313,150 | 11,249,733 | 24,771,772 | 298.0\% | 220.2\% | 49.49\% | 39.84\% |
| 2040 | 7,771,684 | 10,502,113 | 25,381,450 | 326.6\% | 241.7\% | 52.38\% | 42.12\% |
| 2041 | 7,230,370 | 9,757,537 | 25,760,784 | 356.3\% | 264.0\% | 55.18\% | 44.34\% |
| 2042 | 6,693,908 | 9,021,932 | 26,035,979 | 389.0\% | 288.6\% | 57.90\% | 46.50\% |
| 2043 | 6,164,843 | 8,297,809 | 26,182,019 | 424.7\% | 315.5\% | 60.53\% | 48.58\% |
| 2044 | 5,647,649 | 7,591,150 | 25,983,778 | 460.1\% | 342.3\% | 63.03\% | 50.56\% |
| 2045 | 5,145,223 | 6,906,149 | 25,446,330 | 494.6\% | 368.5\% | 65.39\% | 52.43\% |
| 2046 | 4,661,265 | 6,247,745 | 24,652,273 | 528.9\% | 394.6\% | 67.59\% | 54.18\% |
| 2047 | 4,199,543 | 5,620,873 | 23,732,497 | 565.1\% | 422.2\% | 69.62\% | 55.79\% |
| 2048 | 3,762,208 | 5,028,018 | 22,740,220 | 604.4\% | 452.3\% | 71.50\% | 57.28\% |
| 2049 | 3,350,588 | 4,470,926 | 21,549,496 | 643.2\% | 482.0\% | 73.21\% | 58.64\% |
| 2050 | 2,966,713 | 3,952,488 | 20,194,225 | 680.7\% | 510.9\% | 74.76\% | 59.87\% |
| 2051 | 2,611,233 | 3,473,460 | 18,754,159 | 718.2\% | 539.9\% | 76.14\% | 60.96\% |

## Exhibit I <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company - Regular Premium Type Only Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2052 | 2,284,963 | 3,034,789 | 17,279,824 | 756.2\% | 569.4\% | 77.37\% | 61.94\% |
| 2053 | 1,987,906 | 2,636,291 | 15,818,501 | 795.7\% | 600.0\% | 78.45\% | 62.80\% |
| 2054 | 1,719,458 | 2,277,059 | 14,359,204 | 835.1\% | 630.6\% | 79.40\% | 63.55\% |
| 2055 | 1,479,236 | 1,956,533 | 12,929,890 | 874.1\% | 660.9\% | 80.22\% | 64.21\% |
| 2056 | 1,265,765 | 1,672,398 | 11,575,898 | 914.5\% | 692.2\% | 80.93\% | 64.77\% |
| 2057 | 1,077,832 | 1,422,752 | 10,317,348 | 957.2\% | 725.2\% | 81.54\% | 65.26\% |
| 2058 | 913,751 | 1,205,178 | 9,166,473 | 1003.2\% | 760.6\% | 82.06\% | 65.68\% |
| 2059 | 771,385 | 1,016,682 | 8,107,415 | 1051.0\% | 797.4\% | 82.51\% | 66.03\% |
| 2060 | 648,779 | 854,572 | 7,146,643 | 1101.6\% | 836.3\% | 82.89\% | 66.33\% |
| 2061 | 543,877 | 715,971 | 6,285,577 | 1155.7\% | 877.9\% | 83.21\% | 66.59\% |
| 2062 | 454,501 | 597,920 | 5,510,036 | 1212.3\% | 921.5\% | 83.48\% | 66.81\% |
| 2063 | 378,840 | 498,016 | 4,815,961 | 1271.2\% | 967.0\% | 83.71\% | 66.99\% |
| 2064 | 315,061 | 413,824 | 4,193,604 | 1331.0\% | 1013.4\% | 83.90\% | 67.14\% |
| 2065 | 261,498 | 343,154 | 3,637,364 | 1391.0\% | 1060.0\% | 84.06\% | 67.27\% |
| 2066 | 216,622 | 283,967 | 3,154,559 | 1456.3\% | 1110.9\% | 84.20\% | 67.38\% |
| 2067 | 179,102 | 234,501 | 2,726,434 | 1522.3\% | 1162.7\% | 84.31\% | 67.47\% |
| 2068 | 147,780 | 193,225 | 2,346,063 | 1587.5\% | 1214.2\% | 84.40\% | 67.54\% |
| 2069 | 121,665 | 158,839 | 2,010,627 | 1652.6\% | 1265.8\% | 84.48\% | 67.60\% |
| 2070 | 99,923 | 130,233 | 1,710,525 | 1711.9\% | 1313.4\% | 84.54\% | 67.65\% |
| 2071 | 81,818 | 106,440 | 1,452,113 | 1774.8\% | 1364.3\% | 84.59\% | 67.69\% |
| 2072 | 66,745 | 86,662 | 1,226,643 | 1837.8\% | 1415.4\% | 84.64\% | 67.73\% |
| 2073 | 54,238 | 70,278 | 1,028,636 | 1896.5\% | 1463.7\% | 84.67\% | 67.75\% |
| 2074 | 43,878 | 56,736 | 857,054 | 1953.3\% | 1510.6\% | 84.70\% | 67.78\% |
| 2075 | 35,317 | 45,571 | 707,921 | 2004.5\% | 1553.5\% | 84.72\% | 67.79\% |
| 2076 | 28,273 | 36,405 | 581,881 | 2058.0\% | 1598.3\% | 84.73\% | 67.81\% |
| 2077 | 22,505 | 28,918 | 473,494 | 2103.9\% | 1637.4\% | 84.75\% | 67.82\% |
| 2078 | 17,801 | 22,825 | 382,063 | 2146.3\% | 1673.9\% | 84.76\% | 67.83\% |
| 2079 | 13,980 | 17,887 | 305,517 | 2185.4\% | 1708.1\% | 84.77\% | 67.83\% |
| 2080+ | 44,041 | 55,754 | 989,963 | 2247.8\% | 1775.6\% | 84.79\% | 67.85\% |


| AV Past | $89,735,281$ | $89,735,281$ | $3,596,355$ | $4.01 \%$ | $4.01 \%$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| PV Future | $230,198,877$ | $310,071,243$ | $267,672,734$ | $116.28 \%$ | $86.33 \%$ |
| AV/PV Lifetime | $319,934,158$ | $399,806,524$ | $271,269,089$ | $84.79 \%$ | $67.85 \%$ |

[^1]Exhibit II
Transamerica Life Insurance Company
Policy Forms: ICC10 TLC-3 UniProduct Series
Experience for Transamerica Life Insurance Company - Regular Premium Type Only Actual To Expected Lifetime Experience
Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Actual |  |  | Expected |  |  | Actual to Expected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | $\mathrm{G}=\mathrm{A} / \mathrm{D}$ | $\mathrm{H}=\mathrm{B} / \mathrm{E}$ | I=C/F |
| Duration | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Cumulative Actual to Expected Earned Premium | Cumulative Actual to Expected Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase |
| 1 | 18,644,142 | 264,562 | 1.4\% | 18,197,716 | 359,651 | 2.0\% | 102.5\% | 73.6\% | 71.8\% |
| 2 | 18,578,925 | 287,319 | 1.5\% | 17,413,432 | 521,774 | 2.5\% | 104.5\% | 62.6\% | 59.9\% |
| 3 | 17,850,343 | 476,178 | 1.9\% | 16,859,325 | 653,463 | 2.9\% | 105.0\% | 67.0\% | 63.8\% |
| 4 | 17,407,166 | 709,053 | 2.4\% | 16,433,561 | 814,184 | 3.4\% | 105.2\% | 73.9\% | 70.3\% |
| 5 | 16,785,207 | 2,639,526 | 4.9\% | 16,086,325 | 1,050,047 | 4.0\% | 105.0\% | 128.8\% | 122.6\% |
| 6 | 16,220,445 | 1,726,881 | 5.8\% | 15,791,034 | 1,304,889 | 4.7\% | 104.7\% | 129.8\% | 124.0\% |
| 7 | 16,246,672 | 1,960,281 | 6.6\% | 15,525,746 | 1,636,106 | 5.5\% | 104.7\% | 127.2\% | 121.5\% |
| 8 | 15,995,223 | 2,392,049 | 7.6\% | 15,274,647 | 2,041,190 | 6.4\% | 104.7\% | 124.8\% | 119.2\% |
| 9 | 15,711,605 | 2,896,709 | 8.7\% | 15,029,149 | 2,478,499 | 7.4\% | 104.7\% | 123.0\% | 117.5\% |
| 10 | 15,435,157 | 3,557,053 | 10.0\% | 14,781,845 | 2,960,423 | 8.6\% | 104.6\% | 122.4\% | 116.9\% |
| 11 | 15,160,413 | 4,198,299 | 11.5\% | 14,527,857 | 3,496,493 | 9.8\% | 104.6\% | 121.9\% | 116.5\% |
| 12 | 14,881,245 | 4,903,077 | 13.1\% | 14,263,928 | 4,137,781 | 11.3\% | 104.6\% | 121.2\% | 115.9\% |
| 13 | 14,593,167 | 5,802,175 | 14.9\% | 13,988,465 | 4,846,477 | 12.9\% | 104.6\% | 121.0\% | 115.7\% |
| 14 | 14,290,512 | 6,742,611 | 16.9\% | 13,698,491 | 5,534,194 | 14.6\% | 104.6\% | 121.1\% | 115.8\% |
| 15 | 13,971,257 | 7,787,645 | 19.2\% | 13,391,173 | 6,271,902 | 16.5\% | 104.5\% | 121.6\% | 116.3\% |
| 16 | 13,635,309 | 9,100,391 | 21.7\% | 13,065,071 | 7,090,505 | 18.5\% | 104.5\% | 122.7\% | 117.3\% |
| 17 | 13,279,424 | 10,579,583 | 24.6\% | 12,719,765 | 8,098,522 | 20.7\% | 104.5\% | 123.9\% | 118.5\% |
| 18 | 12,900,633 | 12,157,266 | 27.8\% | 12,354,867 | 9,255,365 | 23.2\% | 104.5\% | 125.0\% | 119.6\% |
| 19 | 12,499,688 | 13,555,454 | 31.2\% | 11,970,388 | 10,343,614 | 25.9\% | 104.5\% | 125.8\% | 120.4\% |
| 20 | 12,075,618 | 14,921,009 | 34.8\% | 11,566,218 | 11,401,982 | 28.8\% | 104.5\% | 126.5\% | 121.1\% |
| 21 | 11,628,668 | 16,702,949 | 38.8\% | 11,142,835 | 12,462,879 | 31.8\% | 104.5\% | 127.5\% | 122.0\% |
| 22 | 11,161,086 | 18,220,150 | 43.0\% | 10,701,461 | 13,680,911 | 35.1\% | 104.5\% | 128.2\% | 122.7\% |
| 23 | 10,674,896 | 19,594,886 | 47.5\% | 10,243,366 | 14,950,039 | 38.6\% | 104.5\% | 128.5\% | 123.0\% |
| 24 | 10,171,239 | 20,918,764 | 52.1\% | 9,770,115 | 16,033,862 | 42.2\% | 104.5\% | 128.8\% | 123.2\% |
| 25 | 9,653,417 | 22,144,837 | 56.8\% | 9,283,196 | 16,906,431 | 46.0\% | 104.5\% | 129.0\% | 123.5\% |
| 26 | 9,124,398 | 23,597,979 | 61.8\% | 8,783,917 | 17,642,615 | 49.9\% | 104.5\% | 129.5\% | 124.0\% |
| 27 | 8,586,542 | 24,707,566 | 67.0\% | 8,274,033 | 18,352,962 | 53.8\% | 104.4\% | 130.0\% | 124.4\% |
| 28 | 8,042,640 | 25,439,977 | 72.2\% | 7,756,437 | 18,993,357 | 57.8\% | 104.4\% | 130.3\% | 124.8\% |
| 29 | 7,496,619 | 25,871,768 | 77.4\% | 7,234,336 | 19,378,160 | 61.9\% | 104.4\% | 130.6\% | 125.1\% |
| 30 | 6,952,621 | 26,097,858 | 82.6\% | 6,711,408 | 19,437,622 | 65.9\% | 104.4\% | 130.9\% | 125.4\% |
| 31 | 6,414,717 | 26,405,748 | 87.8\% | 6,191,198 | 19,255,215 | 69.8\% | 104.4\% | 131.3\% | 125.8\% |
| 32 | 5,886,424 | 26,389,965 | 92.9\% | 5,677,966 | 18,930,533 | 73.6\% | 104.4\% | 131.8\% | 126.3\% |
| 33 | 5,371,836 | 25,947,065 | 97.9\% | 5,175,922 | 18,500,362 | 77.2\% | 104.4\% | 132.3\% | 126.8\% |
| 34 | 4,874,156 | 25,206,158 | 102.8\% | 4,688,777 | 17,922,077 | 80.8\% | 104.4\% | 132.8\% | 127.3\% |
| 35 | 4,397,288 | 24,238,393 | 107.4\% | 4,220,363 | 17,095,056 | 84.1\% | 104.4\% | 133.2\% | 127.7\% |
| 36 | 3,944,595 | 23,315,508 | 111.8\% | 3,774,324 | 16,124,101 | 87.2\% | 104.4\% | 133.8\% | 128.2\% |
| 37 | 3,517,408 | 22,198,249 | 116.0\% | 3,353,669 | 15,072,868 | 90.2\% | 104.4\% | 134.3\% | 128.7\% |
| 38 | 3,117,691 | 20,848,976 | 120.0\% | 2,959,738 | 14,012,143 | 92.9\% | 104.4\% | 134.8\% | 129.2\% |
| 39 | 2,746,767 | 19,395,754 | 123.6\% | 2,593,775 | 12,988,552 | 95.4\% | 104.4\% | 135.3\% | 129.6\% |
| 40 | 2,405,275 | 17,883,722 | 127.0\% | 2,258,476 | 11,884,506 | 97.7\% | 104.4\% | 135.7\% | 130.0\% |
| 41 | 2,093,751 | 16,411,051 | 130.1\% | 1,953,524 | 10,746,387 | 99.8\% | 104.4\% | 136.2\% | 130.4\% |
| 42 | 1,811,638 | 14,939,954 | 132.9\% | 1,679,145 | 9,648,244 | 101.6\% | 104.4\% | 136.6\% | 130.8\% |
| 43 | 1,558,434 | 13,439,587 | 135.5\% | 1,434,049 | 8,627,794 | 103.3\% | 104.4\% | 136.9\% | 131.1\% |
| 44 | 1,333,225 | 12,039,210 | 137.7\% | 1,215,945 | 7,753,980 | 104.8\% | 104.4\% | 137.3\% | 131.4\% |
| 45 | 1,134,563 | 10,733,178 | 139.8\% | 1,026,148 | 6,897,808 | 106.2\% | 104.5\% | 137.5\% | 131.7\% |
| 46 | 960,822 | 9,537,375 | 141.6\% | 861,638 | 6,088,503 | 107.4\% | 104.5\% | 137.8\% | 131.9\% |
| 47 | 810,023 | 8,443,201 | 143.2\% | 719,278 | 5,331,295 | 108.4\% | 104.5\% | 138.0\% | 132.1\% |
| 48 | 680,082 | 7,419,481 | 144.6\% | 596,892 | 4,648,391 | 109.3\% | 104.5\% | 138.2\% | 132.3\% |
| 49 | 568,860 | 6,513,733 | 145.9\% | 490,733 | 4,084,344 | 110.2\% | 104.5\% | 138.4\% | 132.4\% |
| 50 | 474,174 | 5,699,394 | 147.0\% | 403,305 | 3,550,007 | 110.9\% | 104.5\% | 138.6\% | 132.6\% |
| 51 | 394,070 | 4,981,154 | 148.0\% | 330,418 | 3,037,451 | 111.5\% | 104.5\% | 138.7\% | 132.7\% |
| 52 | 326,653 | 4,334,671 | 148.8\% | 268,508 | 2,554,960 | 112.0\% | 104.5\% | 138.9\% | 132.9\% |
| 53 | 270,150 | 3,745,194 | 149.5\% | 216,681 | 2,118,122 | 112.4\% | 104.6\% | 139.1\% | 133.0\% |
| 54 | 222,936 | 3,224,800 | 150.2\% | 173,193 | 1,760,861 | 112.8\% | 104.6\% | 139.2\% | 133.1\% |
| 55 | 183,588 | 2,772,063 | 150.7\% | 138,805 | 1,448,691 | 113.1\% | 104.6\% | 139.4\% | 133.3\% |
| 56 | 150,872 | 2,375,922 | 151.2\% | 110,645 | 1,172,306 | 113.3\% | 104.6\% | 139.5\% | 133.4\% |
| 57 | 123,712 | 2,031,000 | 151.6\% | 87,254 | 932,071 | 113.5\% | 104.6\% | 139.7\% | 133.5\% |
| 58 | 101,197 | 1,722,613 | 151.9\% | 68,097 | 728,917 | 113.7\% | 104.6\% | 139.8\% | 133.7\% |
| 59 | 82,565 | 1,453,408 | 152.2\% | 51,821 | 578,961 | 113.8\% | 104.6\% | 139.9\% | 133.8\% |
| 60 | 67,144 | 1,220,913 | 152.5\% | 40,165 | 458,003 | 113.9\% | 104.6\% | 140.1\% | 133.9\% |
| 61 | 54,399 | 1,023,065 | 152.7\% | 30,343 | 355,077 | 114.0\% | 104.6\% | 140.2\% | 134.0\% |
| 62 | 43,887 | 849,344 | 152.9\% | 22,628 | 269,443 | 114.0\% | 104.6\% | 140.3\% | 134.1\% |
| 63 | 35,235 | 699,841 | 153.0\% | 16,936 | 202,605 | 114.1\% | 104.6\% | 140.3\% | 134.1\% |
| 64 | 28,142 | 573,347 | 153.1\% | 12,450 | 154,164 | 114.1\% | 104.6\% | 140.4\% | 134.2\% |
| 65+ | 97,877 | 2,117,936 | 153.5\% | 30,793 | 412,539 | 114.2\% | 104.6\% | 140.7\% | 134.5\% |
| Lifetime | 455,938,437 | 700,084,828 | 153.5\% | 435,713,707 | 497,482,236 | 114.2\% | 104.6\% | 140.7\% | 134.5\% |
| PV Lifetime | 319,934,158 | 271,268,973 | 84.79\% | 300,279,440 | 195,664,504 | 65.16\% | 106.5\% | 138.6\% | 130.1\% |

## Exhibit III - Interstate Compact States Only

## Transamerica Life Insurance Company

Policy Forms: ICC10 TLC-3 UniProduct Series

## Experience for Transamerica Life Insurance Company - IC States and Regular Premium

 Type OnlyActual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase |  <br> Projected <br> Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 209,741 | 209,741 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 6,172,492 | 6,172,492 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 12,528,112 | 12,528,112 | 248,213 | 2.0\% | 2.0\% | 1.29\% | 1.29\% |
| 2014 | 12,031,505 | 12,031,505 | 424,345 | 3.5\% | 3.5\% | 2.13\% | 2.13\% |
| 2015 | 11,772,587 | 11,772,587 | 35,847 | 0.3\% | 0.3\% | 1.65\% | 1.65\% |
| 2016 | 11,492,355 | 11,492,355 | 1,791,395 | 15.6\% | 15.6\% | 4.45\% | 4.45\% |
| 2017Q1 | 2,602,247 | 2,602,247 | 74,366 | 2.9\% | 2.9\% | 4.38\% | 4.38\% |
| 2017Q2-Q4 | 8,734,444 | 8,734,444 | 1,053,817 | 12.1\% | 12.1\% | 5.32\% | 5.32\% |
| 2018 | 11,192,413 | 13,532,666 | 1,302,978 | 11.6\% | 9.6\% | 6.15\% | 5.98\% |
| 2019 | 10,745,945 | 15,217,625 | 1,597,198 | 14.9\% | 10.5\% | 7.09\% | 6.63\% |
| 2020 | 10,548,287 | 14,913,988 | 1,945,109 | 18.4\% | 13.0\% | 8.14\% | 7.39\% |
| 2021 | 10,362,173 | 14,625,338 | 2,371,863 | 22.9\% | 16.2\% | 9.32\% | 8.28\% |
| 2022 | 10,177,649 | 14,336,854 | 2,825,727 | 27.8\% | 19.7\% | 10.62\% | 9.27\% |
| 2023 | 9,989,845 | 14,043,391 | 3,312,209 | 33.2\% | 23.6\% | 12.03\% | 10.35\% |
| 2024 | 9,795,561 | 13,740,677 | 3,886,665 | 39.7\% | 28.3\% | 13.56\% | 11.54\% |
| 2025 | 9,592,077 | 13,424,734 | 4,527,008 | 47.2\% | 33.7\% | 15.24\% | 12.84\% |
| 2026 | 9,376,604 | 13,091,943 | 5,225,301 | 55.7\% | 39.9\% | 17.04\% | 14.25\% |
| 2027 | 9,148,555 | 12,741,497 | 6,053,609 | 66.2\% | 47.5\% | 19.02\% | 15.79\% |
| 2028 | 8,906,670 | 12,371,814 | 7,013,932 | 78.7\% | 56.7\% | 21.18\% | 17.50\% |
| 2029 | 8,649,327 | 11,981,328 | 8,025,968 | 92.8\% | 67.0\% | 23.53\% | 19.34\% |
| 2030 | 8,376,277 | 11,571,452 | 8,984,782 | 107.3\% | 77.6\% | 26.01\% | 21.29\% |
| 2031 | 8,087,681 | 11,144,491 | 9,847,533 | 121.8\% | 88.4\% | 28.57\% | 23.31\% |
| 2032 | 7,783,749 | 10,700,725 | 10,921,197 | 140.3\% | 102.1\% | 31.27\% | 25.44\% |
| 2033 | 7,465,403 | 10,239,869 | 11,972,000 | 160.4\% | 116.9\% | 34.08\% | 27.66\% |
| 2034 | 7,134,564 | 9,764,774 | 12,880,859 | 180.5\% | 131.9\% | 36.96\% | 29.92\% |
| 2035 | 6,792,524 | 9,277,488 | 13,703,565 | 201.7\% | 147.7\% | 39.87\% | 32.22\% |
| 2036 | 6,440,675 | 8,780,326 | 14,476,733 | 224.8\% | 164.9\% | 42.80\% | 34.53\% |
| 2037 | 6,081,858 | 8,277,091 | 15,285,459 | 251.3\% | 184.7\% | 45.75\% | 36.87\% |
| 2038 | 5,717,732 | 7,768,909 | 16,021,262 | 280.2\% | 206.2\% | 48.72\% | 39.21\% |
| 2039 | 5,350,597 | 7,258,844 | 16,521,199 | 308.8\% | 227.6\% | 51.65\% | 41.52\% |
| 2040 | 4,982,164 | 6,749,279 | 16,801,160 | 337.2\% | 248.9\% | 54.50\% | 43.78\% |
| 2041 | 4,615,833 | 6,244,662 | 16,924,301 | 366.7\% | 271.0\% | 57.25\% | 45.95\% |
| 2042 | 4,254,926 | 5,749,084 | 16,989,387 | 399.3\% | 295.5\% | 59.90\% | 48.05\% |
| 2043 | 3,900,790 | 5,263,593 | 16,980,007 | 435.3\% | 322.6\% | 62.45\% | 50.07\% |
| 2044 | 3,556,656 | 4,792,550 | 16,735,777 | 470.5\% | 349.2\% | 64.86\% | 51.98\% |
| 2045 | 3,224,542 | 4,338,872 | 16,279,145 | 504.9\% | 375.2\% | 67.12\% | 53.76\% |
| 2046 | 2,906,661 | 3,905,481 | 15,665,279 | 538.9\% | 401.1\% | 69.21\% | 55.42\% |
| 2047 | 2,605,446 | 3,495,553 | 14,980,911 | 575.0\% | 428.6\% | 71.13\% | 56.94\% |
| 2048 | 2,322,023 | 3,110,349 | 14,265,136 | 614.3\% | 458.6\% | 72.90\% | 58.34\% |
| 2049 | 2,056,951 | 2,750,639 | 13,437,126 | 653.3\% | 488.5\% | 74.50\% | 59.61\% |
| 2050 | 1,811,390 | 2,418,109 | 12,517,678 | 691.1\% | 517.7\% | 75.94\% | 60.75\% |
| 2051 | 1,585,473 | 2,112,855 | 11,552,823 | 728.7\% | 546.8\% | 77.21\% | 61.76\% |

## Exhibit III - Interstate Compact States Only <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company - IC States and Regular Premium Type Only <br> Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | $\begin{array}{\|c\|} \hline \text { PV Actual } \\ \text { Cumulative w/o } \\ \text { Rate Increase } \\ \hline \end{array}$ | PV Actual Cumulative w/ Rate Increase |
| 2052 | 1,379,503 | 1,835,177 | 10,570,006 | 766.2\% | 576.0\% | 78.34\% | 62.66\% |
| 2053 | 1,193,234 | 1,584,650 | 9,610,134 | 805.4\% | 606.5\% | 79.33\% | 63.44\% |
| 2054 | 1,026,019 | 1,360,364 | 8,661,031 | 844.1\% | 636.7\% | 80.19\% | 64.12\% |
| 2055 | 877,400 | 1,161,683 | 7,742,883 | 882.5\% | 666.5\% | 80.92\% | 64.71\% |
| 2056 | 746,226 | 986,799 | 6,887,363 | 923.0\% | 697.9\% | 81.56\% | 65.22\% |
| 2057 | 631,538 | 834,228 | 6,095,608 | 965.2\% | 730.7\% | 82.10\% | 65.65\% |
| 2058 | 532,136 | 702,256 | 5,376,279 | 1010.3\% | 765.6\% | 82.56\% | 66.01\% |
| 2059 | 446,542 | 588,815 | 4,720,059 | 1057.0\% | 801.6\% | 82.95\% | 66.32\% |
| 2060 | 373,356 | 491,982 | 4,129,061 | 1105.9\% | 839.3\% | 83.28\% | 66.59\% |
| 2061 | 311,171 | 409,780 | 3,609,508 | 1160.0\% | 880.8\% | 83.56\% | 66.81\% |
| 2062 | 258,558 | 340,258 | 3,141,946 | 1215.2\% | 923.4\% | 83.79\% | 66.99\% |
| 2063 | 214,331 | 281,838 | 2,728,828 | 1273.2\% | 968.2\% | 83.98\% | 67.15\% |
| 2064 | 177,303 | 232,947 | 2,362,544 | 1332.5\% | 1014.2\% | 84.15\% | 67.28\% |
| 2065 | 146,418 | 192,192 | 2,033,926 | 1389.1\% | 1058.3\% | 84.28\% | 67.38\% |
| 2066 | 120,694 | 158,266 | 1,752,871 | 1452.3\% | 1107.5\% | 84.39\% | 67.47\% |
| 2067 | 99,308 | 130,072 | 1,503,872 | 1514.4\% | 1156.2\% | 84.49\% | 67.55\% |
| 2068 | 81,547 | 106,662 | 1,284,599 | 1575.3\% | 1204.4\% | 84.56\% | 67.61\% |
| 2069 | 66,804 | 87,244 | 1,092,719 | 1635.7\% | 1252.5\% | 84.63\% | 67.66\% |
| 2070 | 54,579 | 71,151 | 921,271 | 1688.0\% | 1294.8\% | 84.68\% | 67.70\% |
| 2071 | 44,429 | 57,806 | 776,664 | 1748.1\% | 1343.6\% | 84.72\% | 67.73\% |
| 2072 | 35,994 | 46,732 | 651,755 | 1810.7\% | 1394.7\% | 84.75\% | 67.76\% |
| 2073 | 29,004 | 37,572 | 543,605 | 1874.2\% | 1446.8\% | 84.78\% | 67.78\% |
| 2074 | 23,224 | 30,017 | 450,369 | 1939.2\% | 1500.4\% | 84.80\% | 67.80\% |
| 2075 | 18,461 | 23,810 | 369,958 | 2004.0\% | 1553.8\% | 84.82\% | 67.81\% |
| 2076 | 14,564 | 18,746 | 302,603 | 2077.7\% | 1614.2\% | 84.83\% | 67.82\% |
| 2077 | 11,398 | 14,644 | 245,182 | 2151.1\% | 1674.3\% | 84.84\% | 67.83\% |
| 2078 | 8,846 | 11,345 | 196,436 | 2220.7\% | 1731.4\% | 84.85\% | 67.84\% |
| 2079 | 6,800 | 8,710 | 155,846 | 2291.7\% | 1789.3\% | 84.85\% | 67.84\% |
| 2080+ | 19,511 | 24,897 | 489,151 | 2507.1\% | 1964.7\% | 84.87\% | 67.85\% |


| AV Past | 61,851,596 | 61,851,596 | 2,708,260 | 4.38\% | 4.38\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PV Future | 151,131,537 | 204,544,399 | 178,053,981 | 117.81\% | 87.05\% |
| AV/PV Lifetime | 212,983,133 | 266,395,995 | 180,762,242 | 84.87\% | 67.85\% |
| $A=$ | \$39,461,318 Accumulated value of initial earned premium times 63.8\% |  |  |  |  |
| $B=$ | \$0 Accumulated value of prior premium rate increases times 85\% |  |  |  |  |
| $C=$ | \$96,421,921 Present value of future projected initial earned premium times 63.8\% |  |  |  |  |
| D $=$ | \$45,400,933 Present value of future projected earned premium from rate increases times $85 \%$ |  |  |  |  |
| $A+B+C+D=$ | \$181,284,172 |  |  |  |  |
|  | \$180,762,242 Accumulated value of incurred claims + present value of future projected incurred claims |  |  |  |  |


| Exhibit I <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company - Limited Pay Premium Type Only Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| Year |  <br> Projected <br> Future w/o <br> Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 17,276 | 17,276 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 1,248,159 | 1,248,159 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 3,434,025 | 3,434,025 | 27,021 | 0.8\% | 0.8\% | 0.57\% | 0.57\% |
| 2014 | 3,216,349 | 3,216,349 | - | 0.0\% | 0.0\% | 0.34\% | 0.34\% |
| 2015 | 3,187,696 | 3,187,696 | 52 | 0.0\% | 0.0\% | 0.25\% | 0.25\% |
| 2016 | 3,133,893 | 3,133,893 | 2,086 | 0.1\% | 0.1\% | 0.21\% | 0.21\% |
| 2017Q1 | 735,996 | 735,996 | 971 | 0.1\% | 0.1\% | 0.21\% | 0.21\% |
| 2017Q2-Q4 | 2,416,946 | 2,416,946 | 56,579 | 2.3\% | 2.3\% | 0.48\% | 0.48\% |
| 2018 | 3,067,156 | 3,715,372 | 120,543 | 3.9\% | 3.2\% | 0.95\% | 0.92\% |
| 2019 | 2,937,755 | 4,178,341 | 141,224 | 4.8\% | 3.4\% | 1.37\% | 1.28\% |
| 2020 | 2,887,717 | 4,105,993 | 160,103 | 5.5\% | 3.9\% | 1.77\% | 1.60\% |
| 2021 | 2,798,813 | 3,978,486 | 181,720 | 6.5\% | 4.6\% | 2.15\% | 1.90\% |
| 2022 | 1,349,438 | 1,918,258 | 203,030 | 15.0\% | 10.6\% | 2.62\% | 2.29\% |
| 2023 | 158,213 | 225,066 | 228,869 | 144.7\% | 101.7\% | 3.20\% | 2.80\% |
| 2024 | 142,002 | 201,997 | 262,424 | 184.8\% | 129.9\% | 3.83\% | 3.35\% |
| 2025 | 127,658 | 181,586 | 304,602 | 238.6\% | 167.7\% | 4.54\% | 3.97\% |
| 2026 | 112,093 | 159,441 | 354,562 | 316.3\% | 222.4\% | 5.33\% | 4.66\% |
| 2027 | 101,635 | 144,564 | 415,564 | 408.9\% | 287.5\% | 6.22\% | 5.43\% |
| 2028 | 77,742 | 110,574 | 489,738 | 630.0\% | 442.9\% | 7.24\% | 6.31\% |
| 2029 | 56,359 | 80,150 | 578,438 | 1026.4\% | 721.7\% | 8.39\% | 7.32\% |
| 2030 | 46,549 | 66,196 | 675,867 | 1451.9\% | 1021.0\% | 9.68\% | 8.44\% |
| 2031 | 29,744 | 42,308 | 773,794 | 2601.5\% | 1829.0\% | 11.11\% | 9.68\% |
| 2032 | 22,493 | 31,996 | 897,905 | 3991.9\% | 2806.3\% | 12.70\% | 11.07\% |
| 2033 | 20,752 | 29,518 | 1,035,948 | 4992.2\% | 3509.5\% | 14.47\% | 12.61\% |
| 2034 | 20,402 | 29,020 | 1,172,959 | 5749.1\% | 4041.9\% | 16.39\% | 14.29\% |
| 2035 | 17,758 | 25,257 | 1,314,651 | 7403.2\% | 5205.0\% | 18.46\% | 16.09\% |
| 2036 | 13,051 | 18,564 | 1,464,489 | 11221.4\% | 7888.9\% | 20.69\% | 18.03\% |
| 2037 | 10,684 | 15,198 | 1,635,112 | 15304.1\% | 10758.5\% | 23.07\% | 20.10\% |
| 2038 | 9,829 | 13,981 | 1,813,895 | 18454.3\% | 12973.8\% | 25.61\% | 22.32\% |
| 2039 | 9,443 | 13,431 | 1,975,876 | 20924.1\% | 14711.3\% | 28.28\% | 24.64\% |
| 2040 | 6,714 | 9,549 | 2,130,169 | 31727.0\% | 22308.3\% | 31.04\% | 27.05\% |
| 2041 | 3,534 | 5,027 | 2,268,612 | 64188.0\% | 45129.1\% | 33.87\% | 29.51\% |
| 2042 | 2,062 | 2,934 | 2,410,648 | 116896.8\% | 82168.5\% | 36.76\% | 32.03\% |
| 2043 | 1,392 | 1,980 | 2,548,918 | 183165.2\% | 128744.2\% | 39.70\% | 34.60\% |
| 2044 | 1,157 | 1,647 | 2,648,925 | 228880.2\% | 160878.2\% | 42.64\% | 37.16\% |
| 2045 | 1,136 | 1,617 | 2,717,827 | 239178.3\% | 168122.1\% | 45.54\% | 39.68\% |
| 2046 | 1,116 | 1,587 | 2,761,113 | 247500.8\% | 173979.9\% | 48.37\% | 42.15\% |
| 2047 | 1,095 | 1,558 | 2,791,617 | 254904.8\% | 179189.0\% | 51.13\% | 44.55\% |
| 2048 | 271 | 385 | 2,807,909 | 1037548.6\% | 729277.7\% | 53.79\% | 46.87\% |
| 2049 | 0 | 0 | 2,788,271 |  |  | 56.33\% | 49.09\% |
| 2050 | 0 | 0 | 2,730,217 |  |  | 58.73\% | 51.17\% |
| 2051 | 0 | 0 | 2,643,749 |  |  | 60.96\% | 53.11\% |



Accumulated value of incurred claims + present value of future projected incurred claims is not less than $A+B+C+D$ in aggregate across premium types

Exhibit II
Transamerica Life Insurance Company
Policy Forms: ICC10 TLC-3 UniProduct Series
Experience for Transamerica Life Insurance Company - Limited Pay Premium Type Only Actual To Expected Lifetime Experience
Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Actual |  |  | Expected |  |  | Actual to Expected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | $\mathrm{G}=\mathrm{A} / \mathrm{D}$ | $\mathrm{H}=\mathrm{B} / \mathrm{E}$ | l=C/F |
| Duration | Earned Premium @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Earned Premium <br> @ Original Rate Level | Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase | Cumulative Actual to Expected Earned Premium | Cumulative Actual to Expected Incurred Claims Excluding ALR Increase | Cumulative Loss Ratio Excluding ALR Increase |
| 1 | 3,209,425 | 2,415 | 0.1\% | 3,092,998 | 16,139 | 0.5\% | 103.8\% | 15.0\% | 14.4\% |
| 2 | 3,284,220 | 24,606 | 0.4\% | 2,976,420 | 20,344 | 0.6\% | 107.0\% | 74.1\% | 69.2\% |
| 3 | 3,207,136 | 9 | 0.3\% | 2,888,326 | 21,475 | 0.6\% | 108.3\% | 46.6\% | 43.1\% |
| 4 | 3,166,974 | 60,229 | 0.7\% | 2,818,140 | 23,878 | 0.7\% | 109.3\% | 106.6\% | 97.6\% |
| 5 | 2,858,870 | -55,881 | 0.2\% | 2,759,198 | 28,287 | 0.8\% | 108.2\% | 28.5\% | 26.3\% |
| 6 | 3,026,512 | 112,012 | 0.8\% | 2,329,388 | 32,074 | 0.8\% | 111.2\% | 100.8\% | 90.7\% |
| 7 | 2,972,859 | 132,544 | 1.3\% | 2,245,751 | 38,619 | 0.9\% | 113.7\% | 152.6\% | 134.2\% |
| 8 | 2,914,581 | 150,265 | 1.7\% | 2,044,147 | 46,426 | 1.1\% | 116.5\% | 187.6\% | 161.0\% |
| 9 | 2,866,461 | 169,777 | 2.2\% | 1,039,307 | 54,619 | 1.3\% | 123.9\% | 211.4\% | 170.6\% |
| 10 | 2,821,395 | 192,951 | 2.6\% | 902,982 | 65,364 | 1.5\% | 131.3\% | 227.2\% | 173.0\% |
| 11 | 160,732 | 214,552 | 3.3\% | 774,873 | 78,109 | 1.8\% | 127.7\% | 235.9\% | 184.7\% |
| 12 | 156,367 | 243,415 | 4.1\% | 717,021 | 93,172 | 2.1\% | 124.6\% | 240.5\% | 192.9\% |
| 13 | 136,850 | 282,460 | 5.0\% | 608,291 | 112,951 | 2.5\% | 122.2\% | 242.2\% | 198.2\% |
| 14 | 120,680 | 328,370 | 6.0\% | 412,881 | 135,626 | 3.0\% | 120.7\% | 242.2\% | 200.7\% |
| 15 | 108,991 | 381,695 | 7.2\% | 311,751 | 164,591 | 3.6\% | 119.6\% | 240.4\% | 200.9\% |
| 16 | 98,400 | 450,400 | 8.6\% | 267,005 | 198,680 | 4.3\% | 118.8\% | 238.0\% | 200.3\% |
| 17 | 62,166 | 530,761 | 10.3\% | 169,755 | 243,915 | 5.2\% | 118.3\% | 234.3\% | 198.2\% |
| 18 | 52,580 | 628,283 | 12.3\% | 121,276 | 300,422 | 6.3\% | 117.9\% | 229.8\% | 194.9\% |
| 19 | 43,589 | 723,789 | 14.6\% | 119,148 | 361,531 | 7.7\% | 117.6\% | 224.6\% | 191.0\% |
| 20 | 24,114 | 829,544 | 17.3\% | 100,907 | 430,681 | 9.2\% | 117.2\% | 219.0\% | 186.8\% |
| 21 | 20,969 | 969,022 | 20.3\% | 92,948 | 513,368 | 11.1\% | 116.9\% | 213.8\% | 182.9\% |
| 22 | 20,617 | 1,105,963 | 23.9\% | 78,072 | 620,896 | 13.4\% | 116.6\% | 207.6\% | 178.1\% |
| 23 | 20,270 | 1,240,794 | 27.8\% | 67,762 | 745,595 | 16.1\% | 116.4\% | 200.6\% | 172.3\% |
| 24 | 16,196 | 1,388,586 | 32.2\% | 55,462 | 866,358 | 19.3\% | 116.2\% | 193.9\% | 166.8\% |
| 25 | 10,797 | 1,541,608 | 37.1\% | 42,676 | 986,422 | 22.9\% | 116.1\% | 187.9\% | 161.9\% |
| 26 | 10,619 | 1,728,667 | 42.6\% | 35,112 | 1,104,281 | 27.0\% | 116.0\% | 183.1\% | 157.9\% |
| 27 | 9,540 | 1,897,786 | 48.6\% | 25,161 | 1,234,648 | 31.5\% | 115.9\% | 178.9\% | 154.4\% |
| 28 | 9,383 | 2,054,318 | 55.2\% | 18,950 | 1,366,530 | 36.5\% | 115.8\% | 175.0\% | 151.0\% |
| 29 | 5,009 | 2,203,081 | 62.2\% | 18,776 | 1,481,056 | 42.0\% | 115.8\% | 171.5\% | 148.2\% |
| 30 | 2,092 | 2,331,861 | 69.6\% | 8,476 | 1,569,166 | 47.7\% | 115.8\% | 168.8\% | 145.8\% |
| 31 | 2,053 | 2,486,826 | 77.5\% | 0 | 1,638,435 | 53.8\% | 115.8\% | 166.9\% | 144.1\% |
| 32 | 1,173 | 2,607,727 | 85.8\% | 0 | 1,689,875 | 60.0\% | 115.8\% | 165.6\% | 143.0\% |
| 33 | 1,152 | 2,687,814 | 94.3\% | 0 | 1,714,556 | 66.3\% | 115.8\% | 164.7\% | 142.3\% |
| 34 | 1,131 | 2,745,653 | 103.1\% | 0 | 1,707,922 | 72.6\% | 115.8\% | 164.4\% | 142.0\% |
| 35 | 1,110 | 2,773,914 | 111.9\% | 0 | 1,658,747 | 78.7\% | 115.8\% | 164.6\% | 142.2\% |
| 36 | 1,090 | 2,808,050 | 120.8\% | 0 | 1,581,018 | 84.5\% | 115.8\% | 165.5\% | 142.9\% |
| 37 | 0 | 2,808,421 | 129.8\% | 0 | 1,485,041 | 90.0\% | 115.8\% | 166.9\% | 144.2\% |
| 38 | 0 | 2,766,829 | 138.6\% | 0 | 1,381,079 | 95.1\% | 115.8\% | 168.7\% | 145.7\% |
| 39 | 0 | 2,690,127 | 147.1\% | 0 | 1,277,933 | 99.8\% | 115.8\% | 170.7\% | 147.4\% |
| 40 | 0 | 2,596,624 | 155.4\% | 0 | 1,168,143 | 104.1\% | 115.8\% | 172.8\% | 149.3\% |
| 41 | 0 | 2,503,902 | 163.4\% | 0 | 1,057,783 | 108.0\% | 115.8\% | 175.1\% | 151.3\% |
| 42 | 0 | 2,380,575 | 170.9\% | 0 | 951,621 | 111.5\% | 115.8\% | 177.5\% | 153.3\% |
| 43 | 0 | 2,243,381 | 178.1\% | 0 | 851,592 | 114.6\% | 115.8\% | 179.8\% | 155.3\% |
| 44 | 0 | 2,099,236 | 184.8\% | 0 | 771,456 | 117.5\% | 115.8\% | 182.1\% | 157.3\% |
| 45 | 0 | 1,949,794 | 191.0\% | 0 | 690,682 | 120.0\% | 115.8\% | 184.2\% | 159.1\% |
| 46 | 0 | 1,802,322 | 196.7\% | 0 | 613,112 | 122.3\% | 115.8\% | 186.2\% | 160.8\% |
| 47 | 0 | 1,654,345 | 202.0\% | 0 | 540,208 | 124.3\% | 115.8\% | 188.1\% | 162.5\% |
| 48 | 0 | 1,502,841 | 206.7\% | 0 | 473,725 | 126.0\% | 115.8\% | 189.9\% | 164.0\% |
| 49 | 0 | 1,357,617 | 211.1\% | 0 | 420,869 | 127.6\% | 115.8\% | 191.5\% | 165.4\% |
| 50 | 0 | 1,230,886 | 215.0\% | 0 | 369,424 | 128.9\% | 115.8\% | 193.0\% | 166.7\% |
| 51 | 0 | 1,120,697 | 218.5\% | 0 | 320,475 | 130.1\% | 115.8\% | 194.5\% | 168.0\% |
| 52 | 0 | 1,019,737 | 221.8\% | 0 | 274,571 | 131.1\% | 115.8\% | 195.8\% | 169.1\% |
| 53 | 0 | 921,434 | 224.7\% | 0 | 231,693 | 132.0\% | 115.8\% | 197.1\% | 170.3\% |
| 54 | 0 | 826,471 | 227.4\% | 0 | 195,900 | 132.7\% | 115.8\% | 198.4\% | 171.3\% |
| 55 | 0 | 743,028 | 229.7\% | 0 | 163,961 | 133.3\% | 115.8\% | 199.5\% | 172.3\% |
| 56 | 0 | 664,903 | 231.8\% | 0 | 133,992 | 133.8\% | 115.8\% | 200.6\% | 173.3\% |
| 57 | 0 | 591,438 | 233.7\% | 0 | 106,946 | 134.2\% | 115.8\% | 201.6\% | 174.2\% |
| 58 | 0 | 519,417 | 235.4\% | 0 | 83,284 | 134.5\% | 115.8\% | 202.6\% | 175.0\% |
| 59 | 0 | 453,613 | 236.8\% | 0 | 65,312 | 134.7\% | 115.8\% | 203.5\% | 175.7\% |
| 60 | 0 | 396,222 | 238.1\% | 0 | 49,895 | 134.9\% | 115.8\% | 204.3\% | 176.4\% |
| 61 | 0 | 339,505 | 239.2\% | 0 | 38,129 | 135.1\% | 115.8\% | 205.0\% | 177.1\% |
| 62 | 0 | 289,098 | 240.1\% | 0 | 28,480 | 135.2\% | 115.8\% | 205.6\% | 177.6\% |
| 63 | 0 | 244,009 | 240.9\% | 0 | 20,648 | 135.3\% | 115.8\% | 206.2\% | 178.1\% |
| 64 | 0 | 204,086 | 241.5\% | 0 | 15,752 | 135.3\% | 115.8\% | 206.6\% | 178.5\% |
| 65+ | 0 | 764,503 | 243.9\% | 0 | 38,420 | 135.5\% | 115.8\% | 208.5\% | 180.1\% |
| Lifetime | 31,426,104 | 76,658,925 | 243.9\% | 27,142,960 | 36,765,900 | 135.5\% | 115.8\% | 208.5\% | 180.1\% |
| PV Lifetime | 30,899,124 | 24,371,788 | 78.88\% | 25,941,478 | 12,456,720 | 48.02\% | 119.1\% | 195.7\% | 164.3\% |

## Exhibit III - Interstate Compact States Only

## Transamerica Life Insurance Company

Policy Forms: ICC10 TLC-3 UniProduct Series Experience for Transamerica Life Insurance Company - IC States and Limited Pay Premium Type Only

## Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected <br> Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | $\begin{array}{\|c\|} \text { PV Actual } \\ \text { Cumulative w/o } \\ \text { Rate Increase } \\ \hline \end{array}$ | PV Actual Cumulative w/ Rate Increase |
| 2011 | 14,347 | 14,347 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 948,962 | 948,962 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 2,735,162 | 2,735,162 | 27,021 | 1.0\% | 1.0\% | 0.72\% | 0.72\% |
| 2014 | 2,552,251 | 2,552,251 | - | 0.0\% | 0.0\% | 0.44\% | 0.44\% |
| 2015 | 2,528,280 | 2,528,280 | 41 | 0.0\% | 0.0\% | 0.32\% | 0.32\% |
| 2016 | 2,474,483 | 2,474,483 | 1,620 | 0.1\% | 0.1\% | 0.26\% | 0.26\% |
| 2017Q1 | 584,283 | 584,283 | 758 | 0.1\% | 0.1\% | 0.26\% | 0.26\% |
| 2017Q2-Q4 | 1,909,469 | 1,909,469 | 797,406 | 41.8\% | 41.8\% | 5.62\% | 5.62\% |
| 2018 | 2,409,954 | 2,919,295 | 91,309 | 3.8\% | 3.1\% | 5.37\% | 5.22\% |
| 2019 | 2,303,570 | 3,276,415 | 107,417 | 4.7\% | 3.3\% | 5.29\% | 4.94\% |
| 2020 | 2,263,137 | 3,218,021 | 122,164 | 5.4\% | 3.8\% | 5.30\% | 4.80\% |
| 2021 | 2,187,127 | 3,109,142 | 138,122 | 6.3\% | 4.4\% | 5.38\% | 4.76\% |
| 2022 | 1,082,144 | 1,538,374 | 154,127 | 14.2\% | 10.0\% | 5.71\% | 5.00\% |
| 2023 | 131,181 | 186,609 | 173,842 | 132.5\% | 93.2\% | 6.25\% | 5.47\% |
| 2024 | 122,000 | 173,539 | 199,576 | 163.6\% | 115.0\% | 6.85\% | 5.99\% |
| 2025 | 107,874 | 153,441 | 232,018 | 215.1\% | 151.2\% | 7.53\% | 6.58\% |
| 2026 | 92,523 | 131,602 | 270,031 | 291.9\% | 205.2\% | 8.28\% | 7.23\% |
| 2027 | 82,280 | 117,033 | 316,850 | 385.1\% | 270.7\% | 9.13\% | 7.97\% |
| 2028 | 65,805 | 93,594 | 372,736 | 566.4\% | 398.2\% | 10.10\% | 8.82\% |
| 2029 | 52,941 | 75,289 | 438,992 | 829.2\% | 583.1\% | 11.21\% | 9.77\% |
| 2030 | 44,040 | 62,627 | 513,586 | 1166.2\% | 820.1\% | 12.45\% | 10.85\% |
| 2031 | 29,122 | 41,422 | 589,581 | 2024.5\% | 1423.3\% | 13.82\% | 12.05\% |
| 2032 | 22,493 | 31,996 | 685,549 | 3047.8\% | 2142.6\% | 15.36\% | 13.39\% |
| 2033 | 20,752 | 29,518 | 791,959 | 3816.4\% | 2682.9\% | 17.06\% | 14.87\% |
| 2034 | 20,402 | 29,020 | 898,213 | 4402.5\% | 3095.1\% | 18.93\% | 16.50\% |
| 2035 | 17,758 | 25,257 | 1,008,420 | 5678.7\% | 3992.6\% | 20.94\% | 18.25\% |
| 2036 | 13,051 | 18,564 | 1,126,558 | 8632.1\% | 6068.5\% | 23.10\% | 20.13\% |
| 2037 | 10,684 | 15,198 | 1,261,449 | 11806.8\% | 8299.9\% | 25.42\% | 22.16\% |
| 2038 | 9,829 | 13,981 | 1,403,503 | 14279.0\% | 10038.5\% | 27.91\% | 24.32\% |
| 2039 | 9,443 | 13,431 | 1,533,249 | 16236.7\% | 11415.8\% | 30.53\% | 26.60\% |
| 2040 | 6,714 | 9,549 | 1,657,825 | 24691.9\% | 17361.7\% | 33.25\% | 28.97\% |
| 2041 | 3,534 | 5,027 | 1,772,904 | 50162.4\% | 35268.1\% | 36.05\% | 31.41\% |
| 2042 | 2,062 | 2,934 | 1,891,431 | 91719.0\% | 64470.7\% | 38.92\% | 33.91\% |
| 2043 | 1,392 | 1,980 | 2,007,950 | 144291.3\% | 101420.2\% | 41.85\% | 36.46\% |
| 2044 | 1,157 | 1,647 | 2,094,936 | 181012.8\% | 127232.6\% | 44.79\% | 39.03\% |
| 2045 | 1,136 | 1,617 | 2,156,801 | 189806.1\% | 133417.6\% | 47.70\% | 41.56\% |
| 2046 | 1,116 | 1,587 | 2,200,881 | 197282.7\% | 138679.3\% | 50.56\% | 44.05\% |
| 2047 | 1,095 | 1,558 | 2,235,212 | 204099.0\% | 143474.3\% | 53.35\% | 46.48\% |
| 2048 | 271 | 385 | 2,260,006 | 835093.5\% | 586974.9\% | 56.06\% | 48.85\% |
| 2049 | 0 | 0 | 2,256,903 |  |  | 58.67\% | 51.12\% |
| 2050 | 0 | 0 | 2,219,555 |  |  | 61.13\% | 53.26\% |

## Exhibit III - Interstate Compact States Only <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company - IC States and Limited Pay Premium Type Only

## Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter

|  | Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase |  <br> Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2051 | 0 | 0 | 2,156,221 |  |  | 63.43\% | 55.27\% |
| 2052 | 0 | 0 | 2,092,013 |  |  | 65.58\% | 57.14\% |
| 2053 | 0 | 0 | 2,014,885 |  |  | 67.57\% | 58.87\% |
| 2054 | 0 | 0 | 1,915,223 |  |  | 69.38\% | 60.45\% |
| 2055 | 0 | 0 | 1,806,746 |  |  | 71.03\% | 61.89\% |
| 2056 | 0 | 0 | 1,690,964 |  |  | 72.52\% | 63.18\% |
| 2057 | 0 | 0 | 1,574,933 |  |  | 73.84\% | 64.34\% |
| 2058 | 0 | 0 | 1,456,969 |  |  | 75.03\% | 65.37\% |
| 2059 | 0 | 0 | 1,336,136 |  |  | 76.07\% | 66.28\% |
| 2060 | 0 | 0 | 1,210,128 |  |  | 76.98\% | 67.07\% |
| 2061 | 0 | 0 | 1,097,400 |  |  | 77.77\% | 67.76\% |
| 2062 | 0 | 0 | 996,283 |  |  | 78.46\% | 68.36\% |
| 2063 | 0 | 0 | 903,763 |  |  | 79.06\% | 68.89\% |
| 2064 | 0 | 0 | 817,016 |  |  | 79.58\% | 69.34\% |
| 2065 | 0 | 0 | 731,951 |  |  | 80.04\% | 69.74\% |
| 2066 | 0 | 0 | 656,463 |  |  | 80.42\% | 70.07\% |
| 2067 | 0 | 0 | 587,199 |  |  | 80.76\% | 70.37\% |
| 2068 | 0 | 0 | 522,266 |  |  | 81.05\% | 70.62\% |
| 2069 | 0 | 0 | 462,540 |  |  | 81.29\% | 70.83\% |
| 2070 | 0 | 0 | 405,540 |  |  | 81.50\% | 71.01\% |
| 2071 | 0 | 0 | 353,670 |  |  | 81.67\% | 71.16\% |
| 2072 | 0 | 0 | 304,814 |  |  | 81.81\% | 71.28\% |
| 2073 | 0 | 0 | 259,104 |  |  | 81.93\% | 71.38\% |
| 2074 | 0 | 0 | 219,111 |  |  | 82.02\% | 71.47\% |
| 2075 | 0 | 0 | 184,625 |  |  | 82.10\% | 71.53\% |
| 2076 | 0 | 0 | 152,989 |  |  | 82.16\% | 71.59\% |
| 2077 | 0 | 0 | 124,752 |  |  | 82.21\% | 71.63\% |
| 2078 | 0 | 0 | 101,129 |  |  | 82.25\% | 71.66\% |
| 2079 | 0 | 0 | 80,949 |  |  | 82.27\% | 71.69\% |
| 2080+ | 0 | 0 | 247,092 |  |  | 82.35\% | 71.75\% |



Accumulated value of incurred claims + present value of future projected incurred claims is not less than $A+B+C+D$ in aggregate across premium types

| Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company <br> Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter Individual Sales Only |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned P | Premium | Incurred Claims | Discounted Ea | rned Premium | Discounted Incurred Claims |  | Ratios Exclu | g Change in |  |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 129,164 | 129,164 | - | 158,696 | 158,696 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 4,344,580 | 4,344,580 | - | 5,132,624 | 5,132,624 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 9,768,881 | 9,768,881 | 457,048 | 11,096,939 | 11,096,939 | 519,183 | 4.7\% | 4.7\% | 3.17\% | 3.17\% |
| 2014 | 9,533,412 | 9,533,412 | 265,336 | 10,412,940 | 10,412,940 | 289,815 | 2.8\% | 2.8\% | 3.02\% | 3.02\% |
| 2015 | 9,659,280 | 9,659,280 | 320,897 | 10,294,344 | 10,294,344 | 340,286 | 3.3\% | 3.3\% | 3.10\% | 3.10\% |
| 2016 | 9,717,644 | 9,717,644 | 1,169,751 | 9,959,601 | 9,959,601 | 1,212,993 | 12.0\% | 12.0\% | 5.02\% | 5.02\% |
| 2017Q1 | 2,225,870 | 2,225,870 | 12,024 | 2,225,870 | 2,225,870 | 12,024 | 0.5\% | 0.5\% | 4.82\% | 4.82\% |
| 2017Q2-Q4 | 7,295,207 | 7,295,207 | 1,117,346 | 7,176,273 | 7,176,273 | 1,104,596 | 15.3\% | 15.3\% | 6.16\% | 6.16\% |
| 2018 | 9,529,397 | 11,507,965 | 979,891 | 9,055,621 | 10,935,844 | 930,829 | 10.3\% | 8.5\% | 6.73\% | 6.54\% |
| 2019 | 9,244,141 | 12,963,856 | 1,204,169 | 8,445,507 | 11,843,827 | 1,099,910 | 13.0\% | 9.3\% | 7.45\% | 6.95\% |
| 2020 | 9,054,428 | 12,680,860 | 1,468,292 | 7,954,332 | 11,140,141 | 1,289,597 | 16.2\% | 11.6\% | 8.30\% | 7.52\% |
| 2021 | 8,825,183 | 12,338,829 | 1,789,204 | 7,454,754 | 10,422,762 | 1,511,015 | 20.3\% | 14.5\% | 9.30\% | 8.24\% |
| 2022 | 7,699,542 | 10,721,252 | 2,128,253 | 6,260,057 | 8,716,999 | 1,728,443 | 27.6\% | 19.9\% | 10.50\% | 9.17\% |
| 2023 | 6,790,417 | 9,411,287 | 2,484,829 | 5,304,018 | 7,351,191 | 1,940,446 | 36.6\% | 26.4\% | 11.87\% | 10.25\% |
| 2024 | 6,652,113 | 9,196,989 | 2,903,186 | 4,996,157 | 6,907,521 | 2,179,913 | 43.6\% | 31.6\% | 13.37\% | 11.44\% |
| 2025 | 6,507,959 | 8,974,493 | 3,368,113 | 4,699,960 | 6,481,256 | 2,431,857 | 51.8\% | 37.5\% | 15.00\% | 12.74\% |
| 2026 | 6,349,271 | 8,731,786 | 3,870,018 | 4,409,007 | 6,063,447 | 2,686,782 | 61.0\% | 44.3\% | 16.76\% | 14.14\% |
| 2027 | 6,187,562 | 8,485,191 | 4,464,152 | 4,131,481 | 5,665,618 | 2,979,971 | 72.1\% | 52.6\% | 18.68\% | 15.68\% |
| 2028 | 6,005,407 | 8,210,035 | 5,153,922 | 3,855,741 | 5,271,207 | 3,308,152 | 85.8\% | 62.8\% | 20.78\% | 17.36\% |
| 2029 | 5,814,892 | 7,924,363 | 5,873,068 | 3,589,809 | 4,892,075 | 3,624,953 | 101.0\% | 74.1\% | 23.05\% | 19.19\% |
| 2030 | 5,618,587 | 7,633,176 | 6,552,651 | 3,335,256 | 4,531,123 | 3,889,186 | 116.6\% | 85.8\% | 25.46\% | 21.11\% |
| 2031 | 5,403,586 | 7,319,632 | 7,168,619 | 3,084,306 | 4,177,944 | 4,091,312 | 132.7\% | 97.9\% | 27.94\% | 23.11\% |
| 2032 | 5,188,866 | 7,010,722 | 7,932,412 | 2,847,833 | 3,847,708 | 4,353,013 | 152.9\% | 113.1\% | 30.56\% | 25.21\% |
| 2033 | 4,968,652 | 6,697,029 | 8,695,569 | 2,622,118 | 3,534,212 | 4,588,666 | 175.0\% | 129.8\% | 33.29\% | 27.41\% |
| 2034 | 4,740,245 | 6,374,718 | 9,359,225 | 2,405,393 | 3,234,765 | 4,749,098 | 197.4\% | 146.8\% | 36.10\% | 29.66\% |
| 2035 | 4,504,454 | 6,044,969 | 9,971,670 | 2,197,857 | 2,949,494 | 4,865,379 | 221.4\% | 165.0\% | 38.94\% | 31.95\% |
| 2036 | 4,261,099 | 5,707,531 | 10,538,115 | 1,999,186 | 2,677,785 | 4,944,132 | 247.3\% | 184.6\% | 41.81\% | 34.26\% |
| 2037 | 4,013,830 | 5,367,434 | 11,107,987 | 1,810,762 | 2,421,390 | 5,010,966 | 276.7\% | 207.0\% | 44.71\% | 36.59\% |
| 2038 | 3,765,705 | 5,028,128 | 11,639,005 | 1,633,508 | 2,181,106 | 5,048,873 | 309.1\% | 231.5\% | 47.61\% | 38.93\% |
| 2039 | 3,516,502 | 4,688,971 | 12,008,154 | 1,466,758 | 1,955,783 | 5,008,883 | 341.5\% | 256.1\% | 50.49\% | 41.24\% |
| 2040 | 3,266,901 | 4,350,736 | 12,241,699 | 1,310,259 | 1,744,937 | 4,910,073 | 374.7\% | 281.4\% | 53.30\% | 43.50\% |
| 2041 | 3,017,991 | 4,014,577 | 12,360,419 | 1,163,895 | 1,548,217 | 4,767,158 | 409.6\% | 307.9\% | 56.01\% | 45.69\% |
| 2042 | 2,773,866 | 3,685,822 | 12,434,926 | 1,028,616 | 1,366,779 | 4,611,368 | 448.3\% | 337.4\% | 58.64\% | 47.81\% |
| 2043 | 2,536,832 | 3,367,190 | 12,455,763 | 904,551 | 1,200,620 | 4,441,626 | 491.0\% | 369.9\% | 61.18\% | 49.85\% |
| 2044 | 2,307,117 | 3,058,783 | 12,309,760 | 791,016 | 1,048,725 | 4,220,954 | 533.6\% | 402.4\% | 63.58\% | 51.79\% |
| 2045 | 2,085,739 | 2,762,024 | 12,005,047 | 687,623 | 910,574 | 3,958,298 | 575.6\% | 434.6\% | 65.84\% | 53.61\% |
| 2046 | 1,874,468 | 2,479,253 | 11,580,093 | 594,214 | 785,930 | 3,671,470 | 617.8\% | 467.1\% | 67.94\% | 55.30\% |
| 2047 | 1,674,778 | 2,212,409 | 11,092,235 | 510,502 | 674,379 | 3,381,539 | 662.3\% | 501.4\% | 69.87\% | 56.86\% |
| 2048 | 1,487,485 | 1,962,407 | 10,561,776 | 435,982 | 575,181 | 3,096,099 | 710.0\% | 538.2\% | 71.64\% | 58.29\% |
| 2049 | 1,313,031 | 1,729,843 | 9,940,441 | 370,056 | 487,527 | 2,802,019 | 757.1\% | 574.6\% | 73.25\% | 59.59\% |
| 2050 | 1,152,133 | 1,515,770 | 9,249,210 | 312,228 | 410,774 | 2,506,977 | 802.8\% | 610.2\% | 74.69\% | 60.75\% |
| 2051 | 1,004,863 | 1,320,224 | 8,535,317 | 261,851 | 344,029 | 2,224,556 | 849.4\% | 646.5\% | 75.97\% | 61.79\% |






|  |  | Actual Natio | Poli Experie wide Experien | Transamerica icy Forms: ICC nce for Trans nce Through Policies | Exhibit I <br> a Life Insuran <br> C10 TLC-3 Un samerica Life March 31, 201 with Inflation | ce Company <br> iProduct Ser Insurance Co 7 and Projec Option | ries ompany ted Experien | Thereafter |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned Premium |  | Incurred Claims | Discounted Earned Premium |  | Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| Year |  <br> Projected <br> Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2052 | 2,063,016 | 2,742,007 | 18,256,050 | 517,075 | 687,262 | 4,575,126 | 884.9\% | 665.8\% | 77.10\% | 62.01\% |
| 2053 | 1,799,014 | 2,387,482 | 16,867,664 | 433,573 | 575,401 | 4,064,705 | 937.6\% | 706.5\% | 78.37\% | 63.03\% |
| 2054 | 1,559,672 | 2,066,872 | 15,446,538 | 361,441 | 478,984 | 3,579,197 | 990.4\% | 747.3\% | 79.49\% | 63.92\% |
| 2055 | 1,344,870 | 1,779,968 | 14,035,804 | 299,683 | 396,640 | 3,127,282 | 1043.7\% | 788.5\% | 80.47\% | 64.71\% |
| 2056 | 1,153,406 | 1,524,862 | 12,679,257 | 247,139 | 326,732 | 2,716,429 | 1099.3\% | 831.5\% | 81.33\% | 65.39\% |
| 2057 | 984,324 | 1,300,040 | 11,405,462 | 202,803 | 267,852 | 2,349,583 | 1158.7\% | 877.3\% | 82.07\% | 65.98\% |
| 2058 | 836,286 | 1,103,559 | 10,223,953 | 165,679 | 218,631 | 2,025,205 | 1222.5\% | 926.5\% | 82.71\% | 66.50\% |
| 2059 | 707,472 | 932,859 | 9,118,482 | 134,772 | 177,709 | 1,736,797 | 1288.9\% | 977.5\% | 83.26\% | 66.94\% |
| 2060 | 596,245 | 785,672 | 8,096,389 | 109,218 | 143,917 | 1,482,812 | 1357.9\% | 1030.5\% | 83.73\% | 67.31\% |
| 2061 | 500,839 | 659,517 | 7,177,114 | 88,215 | 116,165 | 1,263,905 | 1433.0\% | 1088.2\% | 84.13\% | 67.64\% |
| 2062 | 419,337 | 551,784 | 6,349,778 | 71,021 | 93,454 | 1,075,211 | 1514.2\% | 1150.8\% | 84.48\% | 67.91\% |
| 2063 | 350,165 | 460,383 | 5,606,512 | 57,027 | 74,977 | 912,843 | 1601.1\% | 1217.8\% | 84.77\% | 68.15\% |
| 2064 | 291,712 | 383,170 | 4,933,544 | 45,681 | 60,004 | 772,391 | 1691.2\% | 1287.6\% | 85.02\% | 68.35\% |
| 2065 | 242,507 | 318,210 | 4,319,038 | 36,516 | 47,916 | 650,182 | 1781.0\% | 1357.3\% | 85.23\% | 68.51\% |
| 2066 | 201,187 | 263,687 | 3,781,430 | 29,130 | 38,181 | 547,354 | 1879.6\% | 1434.1\% | 85.40\% | 68.66\% |
| 2067 | 166,567 | 218,025 | 3,300,738 | 23,191 | 30,356 | 459,409 | 1981.6\% | 1513.9\% | 85.55\% | 68.77\% |
| 2068 | 137,607 | 179,848 | 2,867,505 | 18,423 | 24,078 | 383,762 | 2083.8\% | 1594.4\% | 85.68\% | 68.87\% |
| 2069 | 113,416 | 147,989 | 2,479,355 | 14,601 | 19,052 | 319,061 | 2186.1\% | 1675.4\% | 85.78\% | 68.96\% |
| 2070 | 93,239 | 121,439 | 2,126,220 | 11,542 | 15,033 | 263,097 | 2280.4\% | 1750.9\% | 85.87\% | 69.03\% |
| 2071 | 76,409 | 99,321 | 1,819,078 | 9,096 | 11,823 | 216,436 | 2380.7\% | 1831.5\% | 85.94\% | 69.08\% |
| 2072 | 62,374 | 80,908 | 1,546,908 | 7,140 | 9,261 | 176,980 | 2480.1\% | 1911.9\% | 86.00\% | 69.13\% |
| 2073 | 50,711 | 65,636 | 1,304,210 | 5,582 | 7,225 | 143,477 | 2571.8\% | 1987.0\% | 86.04\% | 69.17\% |
| 2074 | 41,039 | 52,999 | 1,092,385 | 4,344 | 5,610 | 115,556 | 2661.8\% | 2061.1\% | 86.08\% | 69.20\% |
| 2075 | 33,037 | 42,571 | 907,324 | 3,363 | 4,333 | 92,289 | 2746.4\% | 2131.3\% | 86.11\% | 69.22\% |
| 2076 | 26,448 | 34,005 | 748,341 | 2,589 | 3,328 | 73,193 | 2829.5\% | 2200.7\% | 86.13\% | 69.24\% |
| 2077 | 21,049 | 27,004 | 610,100 | 1,981 | 2,542 | 57,379 | 2898.5\% | 2259.3\% | 86.15\% | 69.26\% |
| 2078 | 16,643 | 21,305 | 493,480 | 1,506 | 1,928 | 44,627 | 2965.1\% | 2316.2\% | 86.17\% | 69.27\% |
| 2079 | 13,064 | 16,686 | 394,971 | 1,137 | 1,452 | 34,346 | 3023.4\% | 2367.1\% | 86.18\% | 69.28\% |
| 2080+ | 40,994 | 51,797 | 1,262,726 | 3,103 | 3,924 | 95,649 | 3080.3\% | 2437.9\% | 86.21\% | 69.30\% |
|  |  |  |  |  |  |  |  |  |  |  |
| AV Past | 87,921,399 | 87,921,399 | 3,111,821 |  |  |  | 3.54\% | 3.54\% |  |  |
| PV Future | 207,821,360 | 279,975,375 | 251,848,817 |  |  |  | 121.19\% | 89.95\% |  |  |
| AV/PV Lifetime | 295,742,759 | 367,896,774 | 254,960,638 |  |  |  | 86.21\% | 69.30\% |  |  |
| A $=$ | \$56,093,852 | Accumulated val | ue of initial earne | ed premium times | 63.8\% |  |  |  |  |  |
| $B=$ |  | Accumulated val | ue of prior premiu | um rate increases | s times 85\% |  |  |  |  |  |
| $\mathrm{C}=$ | \$132,590,028 | Present value of | future projected | initial earned prem | mium times 63.8\% |  |  |  |  |  |
|  | \$61,330,913 | Present value of | future projected | earned premium fror | from rate increas | es times 85\% |  |  |  |  |
| $A+B+C+D=$ | \$250,014,793 |  |  |  |  |  |  |  |  |  |
|  | \$254,960,638 | Accumulated val | of incurred cla | aims + present valu | lue of future proje | ed incurred cla |  |  |  |  |



|  |  | Actual Nation |  | Transamerica <br> icy Forms: IC nce for Trans nce Through Policies w | Exhibit I <br> Life Insuran <br> C10 TLC-3 Un <br> samerica Life <br> March 31, 2017 <br> without Inflatio | ce Company <br> iProduct Ser Insurance Co 7 and Projec Option | ries ompany ted Experience | Thereafter |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned Premium |  | Incurred Claims | Discounted Earned Premium |  | $\begin{gathered} \hline \text { Discounted } \\ \text { Incurred } \\ \text { Claims } \\ \hline \end{gathered}$ | Loss Ratios Excluding Change in ALR |  |  |  |
| Year | Actual Past \& Projected Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual Past \& Projected Future w/o Proposed Rate Increase |  <br> Projected <br> Future w/ <br> Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2052 | 221,946 | 292,782 | 1,574,258 | 55,626 | 73,380 | 394,584 | 709.3\% | 537.7\% | 70.71\% | 57.84\% |
| 2053 | 188,891 | 248,809 | 1,394,840 | 45,522 | 59,962 | 336,176 | 738.4\% | 560.6\% | 71.26\% | 58.29\% |
| 2054 | 159,786 | 210,188 | 1,224,335 | 37,027 | 48,707 | 283,741 | 766.2\% | 582.5\% | 71.73\% | 58.67\% |
| 2055 | 134,366 | 176,565 | 1,066,192 | 29,940 | 39,342 | 237,594 | 793.5\% | 603.9\% | 72.12\% | 58.98\% |
| 2056 | 112,359 | 147,536 | 921,822 | 24,073 | 31,610 | 197,526 | 820.4\% | 624.8\% | 72.45\% | 59.25\% |
| 2057 | 93,508 | 122,713 | 789,846 | 19,264 | 25,281 | 162,743 | 844.7\% | 643.7\% | 72.72\% | 59.47\% |
| 2058 | 77,464 | 101,618 | 672,060 | 15,345 | 20,130 | 133,150 | 867.6\% | 661.4\% | 72.94\% | 59.65\% |
| 2059 | 63,913 | 83,823 | 568,437 | 12,174 | 15,966 | 108,291 | 889.4\% | 678.1\% | 73.12\% | 59.80\% |
| 2060 | 52,534 | 68,901 | 477,951 | 9,622 | 12,619 | 87,552 | 909.8\% | 693.7\% | 73.27\% | 59.92\% |
| 2061 | 43,037 | 56,454 | 400,724 | 7,579 | 9,942 | 70,583 | 931.1\% | 709.8\% | 73.39\% | 60.01\% |
| 2062 | 35,164 | 46,136 | 333,728 | 5,954 | 7,812 | 56,524 | 949.1\% | 723.4\% | 73.48\% | 60.09\% |
| 2063 | 28,675 | 37,633 | 276,573 | 4,669 | 6,127 | 45,042 | 964.5\% | 734.9\% | 73.56\% | 60.15\% |
| 2064 | 23,349 | 30,654 | 228,351 | 3,655 | 4,799 | 35,759 | 978.0\% | 744.9\% | 73.62\% | 60.20\% |
| 2065 | 18,992 | 24,944 | 188,170 | 2,859 | 3,755 | 28,333 | 990.8\% | 754.4\% | 73.66\% | 60.24\% |
| 2066 | 15,434 | 20,280 | 155,176 | 2,234 | 2,935 | 22,467 | 1005.4\% | 765.2\% | 73.70\% | 60.27\% |
| 2067 | 12,535 | 16,477 | 127,437 | 1,744 | 2,293 | 17,741 | 1016.7\% | 773.4\% | 73.73\% | 60.29\% |
| 2068 | 10,173 | 13,377 | 104,683 | 1,361 | 1,790 | 14,013 | 1029.0\% | 782.6\% | 73.76\% | 60.31\% |
| 2069 | 8,249 | 10,850 | 85,919 | 1,061 | 1,396 | 11,059 | 1041.6\% | 791.9\% | 73.77\% | 60.33\% |
| 2070 | 6,683 | 8,794 | 70,377 | 827 | 1,088 | 8,710 | 1053.0\% | 800.3\% | 73.79\% | 60.34\% |
| 2071 | 5,409 | 7,119 | 57,831 | 643 | 847 | 6,882 | 1069.2\% | 812.4\% | 73.80\% | 60.35\% |
| 2072 | 4,372 | 5,754 | 47,545 | 500 | 658 | 5,440 | 1087.6\% | 826.3\% | 73.81\% | 60.36\% |
| 2073 | 3,527 | 4,642 | 39,194 | 388 | 510 | 4,312 | 1111.3\% | 844.3\% | 73.82\% | 60.36\% |
| 2074 | 2,839 | 3,736 | 32,249 | 300 | 395 | 3,412 | 1135.9\% | 863.1\% | 73.82\% | 60.37\% |
| 2075 | 2,280 | 2,999 | 26,475 | 232 | 305 | 2,693 | 1161.3\% | 882.7\% | 73.83\% | 60.37\% |
| 2076 | 1,826 | 2,400 | 21,772 | 178 | 235 | 2,130 | 1192.6\% | 907.1\% | 73.83\% | 60.37\% |
| 2077 | 1,457 | 1,913 | 17,807 | 137 | 180 | 1,675 | 1222.4\% | 930.6\% | 73.83\% | 60.38\% |
| 2078 | 1,158 | 1,519 | 14,499 | 105 | 137 | 1,311 | 1251.9\% | 954.3\% | 73.84\% | 60.38\% |
| 2079 | 916 | 1,200 | 11,705 | 80 | 104 | 1,018 | 1277.2\% | 975.1\% | 73.84\% | 60.38\% |
| 2080+ | 3,047 | 3,957 | 39,852 | 229 | 297 | 2,996 | 1307.7\% | 1007.1\% | 73.84\% | 60.38\% |
|  |  |  |  |  |  |  |  |  |  |  |
| AV Past | 18,068,983 | 18,068,983 | 518,388 |  |  |  | 2.87\% | 2.87\% |  |  |
| PV Future | 37,021,541 | 49,301,632 | 40,161,855 |  |  |  | 108.48\% | 81.46\% |  |  |
| AV/PV Lifetime | 55,090,523 | 67,370,615 | 40,680,243 |  |  |  | 73.84\% | 60.38\% |  |  |
| $A=\quad \$ 11,528,011$ Accumulated value of initial earned premium times 63.8\% |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{B}=\quad$ \$0 Accumulated value of prior premium rate increases times 85\% |  |  |  |  |  |  |  |  |  |  |
| $C=\quad \$ 23,619,743$ Present value of future projected initial earned premium times 63.8\% |  |  |  |  |  |  |  |  |  |  |
| $D=\$ 10,438,078$ Present value of future projected earned premium from rate increases times $85 \%$ |  |  |  |  |  |  |  |  |  |  |
| A+B+C+D $=\quad \$ 45,585,832$ |  |  |  |  |  |  |  |  |  |  |
| \$40,680,243 Accumulated value of incurred claims + present value of future projected incurred claims |  |  |  |  |  |  |  |  |  |  |


| Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company <br> Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter Policies with Unlimited Benefit Period |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned P | mium | Incurred Claims | Discounted Ea | ned Premium | Incurred Claims |  | Ratios Exclu | ng Change in |  |
| Year |  <br> Projected <br> Future w/o <br> Proposed Rate Increase |  <br> Projected <br> Future w/ Proposed Rate Increase | Actual Past \& Projected Future |  <br> Projected <br> Future w/o <br> Proposed Rate Increase |  <br> Projected <br> Future w/ <br> Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 9,363 | 9,363 | - | 11,504 | 11,504 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 503,214 | 503,214 | - | 594,489 | 594,489 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2013 | 1,121,221 | 1,121,221 | - | 1,273,648 | 1,273,648 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2014 | 1,051,806 | 1,051,806 | 352 | 1,148,843 | 1,148,843 | 384 | 0.0\% | 0.0\% | 0.01\% | 0.01\% |
| 2015 | 1,062,944 | 1,062,944 | 63 | 1,132,871 | 1,132,871 | 66 | 0.0\% | 0.0\% | 0.01\% | 0.01\% |
| 2016 | 1,025,815 | 1,025,815 | 1,045,781 | 1,051,495 | 1,051,495 | 1,086,822 | 101.9\% | 101.9\% | 20.86\% | 20.86\% |
| 2017Q1 | 230,867 | 230,867 | 1,187 | 230,867 | 230,867 | 1,187 | 0.5\% | 0.5\% | 19.99\% | 19.99\% |
| 2017Q2-Q4 | 787,201 | 787,201 | 25,371 | 774,560 | 774,560 | 24,275 | 3.2\% | 3.2\% | 17.89\% | 17.89\% |
| 2018 | 1,010,743 | 1,221,547 | 105,397 | 960,667 | 1,161,022 | 100,128 | 10.4\% | 8.6\% | 16.89\% | 16.44\% |
| 2019 | 973,887 | 1,378,769 | 122,669 | 889,872 | 1,259,817 | 112,064 | 12.6\% | 8.9\% | 16.42\% | 15.34\% |
| 2020 | 958,344 | 1,355,310 | 140,565 | 841,981 | 1,190,739 | 123,471 | 14.7\% | 10.4\% | 16.25\% | 14.73\% |
| 2021 | 934,682 | 1,320,022 | 162,027 | 789,706 | 1,115,271 | 136,846 | 17.3\% | 12.3\% | 16.34\% | 14.48\% |
| 2022 | 741,428 | 1,043,590 | 183,842 | 603,317 | 849,202 | 149,318 | 24.8\% | 17.6\% | 16.83\% | 14.71\% |
| 2023 | 600,310 | 841,274 | 206,120 | 469,008 | 657,263 | 160,972 | 34.3\% | 24.5\% | 17.60\% | 15.22\% |
| 2024 | 591,484 | 827,105 | 232,140 | 444,337 | 621,338 | 174,314 | 39.2\% | 28.1\% | 18.45\% | 15.83\% |
| 2025 | 582,463 | 812,637 | 261,246 | 420,730 | 586,989 | 188,629 | 44.9\% | 32.1\% | 19.41\% | 16.53\% |
| 2026 | 567,905 | 790,358 | 292,051 | 394,454 | 548,963 | 202,760 | 51.4\% | 37.0\% | 20.46\% | 17.32\% |
| 2027 | 556,330 | 772,478 | 329,158 | 371,535 | 515,883 | 219,726 | 59.2\% | 42.6\% | 21.61\% | 18.21\% |
| 2028 | 540,873 | 749,232 | 370,366 | 347,361 | 481,172 | 237,730 | 68.5\% | 49.4\% | 22.89\% | 19.19\% |
| 2029 | 524,935 | 725,473 | 414,844 | 324,138 | 447,963 | 256,038 | 79.0\% | 57.2\% | 24.28\% | 20.28\% |
| 2030 | 509,322 | 702,407 | 460,025 | 302,411 | 417,054 | 273,029 | 90.3\% | 65.5\% | 25.77\% | 21.45\% |
| 2031 | 485,878 | 668,493 | 502,817 | 277,410 | 381,671 | 286,950 | 103.5\% | 75.2\% | 27.35\% | 22.70\% |
| 2032 | 470,076 | 645,668 | 561,468 | 258,037 | 354,421 | 308,081 | 119.4\% | 87.0\% | 29.06\% | 24.05\% |
| 2033 | 457,072 | 626,945 | 623,437 | 241,247 | 330,904 | 328,961 | 136.4\% | 99.4\% | 30.89\% | 25.51\% |
| 2034 | 443,504 | 607,519 | 679,755 | 225,080 | 308,315 | 344,891 | 153.3\% | 111.9\% | 32.80\% | 27.04\% |
| 2035 | 429,368 | 587,376 | 737,489 | 209,523 | 286,624 | 359,801 | 171.8\% | 125.6\% | 34.80\% | 28.63\% |
| 2036 | 414,660 | 566,516 | 797,432 | 194,561 | 265,809 | 374,079 | 192.3\% | 140.8\% | 36.87\% | 30.28\% |
| 2037 | 399,380 | 544,929 | 868,123 | 180,181 | 245,843 | 391,563 | 217.4\% | 159.3\% | 39.04\% | 32.02\% |
| 2038 | 383,532 | 522,564 | 938,362 | 166,374 | 226,683 | 406,999 | 244.7\% | 179.6\% | 41.30\% | 33.83\% |
| 2039 | 367,108 | 499,429 | 997,650 | 153,123 | 208,312 | 416,091 | 271.8\% | 199.8\% | 43.61\% | 35.68\% |
| 2040 | 350,141 | 475,605 | 1,051,859 | 140,427 | 190,744 | 421,833 | 300.4\% | 221.2\% | 45.95\% | 37.56\% |
| 2041 | 332,706 | 451,199 | 1,102,456 | 128,301 | 173,994 | 425,132 | 331.4\% | 244.3\% | 48.30\% | 39.45\% |
| 2042 | 314,907 | 426,322 | 1,154,343 | 116,766 | 158,077 | 428,006 | 366.6\% | 270.8\% | 50.67\% | 41.35\% |
| 2043 | 296,843 | 401,045 | 1,204,253 | 105,834 | 142,985 | 429,363 | 405.7\% | 300.3\% | 53.06\% | 43.26\% |
| 2044 | 278,573 | 375,477 | 1,234,035 | 95,500 | 128,720 | 423,088 | 443.0\% | 328.7\% | 55.40\% | 45.15\% |
| 2045 | 260,149 | 349,751 | 1,249,662 | 85,754 | 115,290 | 411,978 | 480.4\% | 357.3\% | 57.69\% | 46.99\% |
| 2046 | 241,667 | 324,041 | 1,254,472 | 76,598 | 102,707 | 397,667 | 519.1\% | 387.1\% | 59.89\% | 48.76\% |
| 2047 | 223,269 | 298,534 | 1,255,398 | 68,046 | 90,984 | 382,653 | 562.3\% | 420.5\% | 62.02\% | 50.47\% |
| 2048 | 205,075 | 273,381 | 1,250,827 | 60,098 | 80,115 | 366,608 | 609.9\% | 457.5\% | 64.05\% | 52.11\% |
| 2049 | 187,242 | 248,811 | 1,229,077 | 52,762 | 70,112 | 346,404 | 656.4\% | 494.0\% | 65.98\% | 53.67\% |
| 2050 | 169,912 | 225,049 | 1,186,481 | 46,038 | 60,978 | 321,551 | 698.3\% | 527.2\% | 67.77\% | 55.11\% |
| 2051 | 153,212 | 202,290 | 1,132,714 | 39,918 | 52,705 | 295,179 | 739.3\% | 559.9\% | 69.42\% | 56.44\% |



| Exhibit I <br> Transamerica Life Insurance Company <br> Policy Forms: ICC10 TLC-3 UniProduct Series <br> Experience for Transamerica Life Insurance Company <br> Actual Nationwide Experience Through March 31, 2017 and Projected Experience Thereafter Policies with Benefit Periods of One to Six Years |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned Premium |  | Incurred Claims | Discounted Earned Premium |  | Discounted Incurred Claims | Loss Ratios Excluding Change in ALR |  |  |  |
| Year |  <br> Projected <br> Future w/o Proposed Rate Increase | Actual Past \& Projected Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual Past \& Projected Future w/o Proposed Rate Increase |  <br> Projected <br> Future w/ Proposed Rate Increase | Actual Past \& Projected Future | Actual w/o Rate Increase | Actual w/ Rate Increase | PV Actual Cumulative w/o Rate Increase | PV Actual Cumulative w/ Rate Increase |
| 2011 | 344,201 | 344,201 | - | 422,900 | 422,900 | - | 0.0\% | 0.0\% | 0.00\% | 0.00\% |
| 2012 | 9,235,962 | 9,235,962 | 1,167 | 10,911,233 | 10,911,233 | 1,379 | 0.0\% | 0.0\% | 0.01\% | 0.01\% |
| 2013 | 19,928,193 | 19,928,193 | 564,302 | 22,637,385 | 22,637,385 | 641,018 | 2.8\% | 2.8\% | 1.89\% | 1.89\% |
| 2014 | 19,544,374 | 19,544,374 | 435,708 | 21,347,488 | 21,347,488 | 475,905 | 2.2\% | 2.2\% | 2.02\% | 2.02\% |
| 2015 | 19,536,885 | 19,536,885 | 427,135 | 20,822,180 | 20,822,180 | 455,135 | 2.2\% | 2.2\% | 2.07\% | 2.07\% |
| 2016 | 19,470,242 | 19,470,242 | 868,191 | 19,955,125 | 19,955,125 | 888,092 | 4.5\% | 4.5\% | 2.56\% | 2.56\% |
| 2017Q1 | 4,450,353 | 4,450,353 | 80,220 | 4,450,353 | 4,450,353 | 80,220 | 1.8\% | 1.8\% | 2.53\% | 2.53\% |
| 2017Q2-Q4 | 14,795,129 | 14,795,129 | 1,938,964 | 14,558,268 | 14,558,268 | 1,915,971 | 13.1\% | 13.1\% | 3.87\% | 3.87\% |
| 2018 | 19,020,300 | 22,983,703 | 1,799,280 | 18,082,080 | 21,850,024 | 1,709,259 | 9.5\% | 7.8\% | 4.63\% | 4.50\% |
| 2019 | 18,294,294 | 25,739,572 | 2,203,716 | 16,720,072 | 23,524,726 | 2,012,980 | 12.0\% | 8.6\% | 5.46\% | 5.10\% |
| 2020 | 17,902,978 | 25,161,571 | 2,678,778 | 15,733,553 | 22,112,638 | 2,352,841 | 15.0\% | 10.6\% | 6.36\% | 5.77\% |
| 2021 | 17,467,106 | 24,517,096 | 3,259,671 | 14,760,040 | 20,717,479 | 2,752,936 | 18.7\% | 13.3\% | 7.36\% | 6.53\% |
| 2022 | 15,915,718 | 22,285,196 | 3,890,005 | 12,938,456 | 18,116,637 | 3,159,235 | 24.4\% | 17.5\% | 8.51\% | 7.43\% |
| 2023 | 14,583,709 | 20,364,256 | 4,570,517 | 11,394,568 | 15,911,115 | 3,569,199 | 31.3\% | 22.4\% | 9.78\% | 8.43\% |
| 2024 | 14,288,366 | 19,916,281 | 5,377,794 | 10,734,501 | 14,962,696 | 4,038,019 | 37.6\% | 27.0\% | 11.16\% | 9.53\% |
| 2025 | 13,983,738 | 19,455,125 | 6,293,850 | 10,101,648 | 14,054,172 | 4,544,284 | 45.0\% | 32.4\% | 12.68\% | 10.74\% |
| 2026 | 13,668,431 | 18,978,758 | 7,299,652 | 9,494,128 | 13,182,769 | 5,067,820 | 53.4\% | 38.5\% | 14.32\% | 12.04\% |
| 2027 | 13,339,445 | 18,482,566 | 8,496,836 | 8,909,325 | 12,344,455 | 5,671,941 | 63.7\% | 46.0\% | 16.12\% | 13.48\% |
| 2028 | 12,982,683 | 17,946,872 | 9,901,632 | 8,337,660 | 11,525,806 | 6,355,582 | 76.3\% | 55.2\% | 18.11\% | 15.06\% |
| 2029 | 12,607,688 | 17,386,568 | 11,418,078 | 7,785,435 | 10,736,532 | 7,047,384 | 90.6\% | 65.7\% | 20.28\% | 16.79\% |
| 2030 | 12,222,041 | 16,814,490 | 12,903,490 | 7,257,068 | 9,983,979 | 7,658,549 | 105.6\% | 76.7\% | 22.59\% | 18.63\% |
| 2031 | 11,815,127 | 16,218,098 | 14,275,934 | 6,745,717 | 9,259,593 | 8,147,630 | 120.8\% | 88.0\% | 25.01\% | 20.56\% |
| 2032 | 11,387,914 | 15,598,943 | 15,954,488 | 6,251,810 | 8,563,649 | 8,755,366 | 140.1\% | 102.3\% | 27.57\% | 22.61\% |
| 2033 | 10,942,306 | 14,957,924 | 17,642,617 | 5,776,203 | 7,895,995 | 9,310,056 | 161.2\% | 117.9\% | 30.27\% | 24.76\% |
| 2034 | 10,479,798 | 14,297,406 | 19,157,402 | 5,319,359 | 7,257,139 | 9,721,023 | 182.8\% | 134.0\% | 33.05\% | 26.98\% |
| 2035 | 9,998,156 | 13,614,523 | 20,579,275 | 4,879,781 | 6,644,841 | 10,041,147 | 205.8\% | 151.2\% | 35.90\% | 29.24\% |
| 2036 | 9,499,540 | 12,912,700 | 21,946,370 | 4,458,176 | 6,060,008 | 10,296,564 | 231.0\% | 170.0\% | 38.79\% | 31.55\% |
| 2037 | 8,991,881 | 12,202,969 | 23,366,016 | 4,057,684 | 5,506,740 | 10,540,909 | 259.9\% | 191.5\% | 41.73\% | 33.89\% |
| 2038 | 8,476,537 | 11,485,806 | 24,721,714 | 3,678,077 | 4,983,852 | 10,724,094 | 291.6\% | 215.2\% | 44.71\% | 36.27\% |
| 2039 | 7,955,485 | 10,763,735 | 25,749,997 | 3,319,277 | 4,490,980 | 10,741,065 | 323.7\% | 239.2\% | 47.68\% | 38.64\% |
| 2040 | 7,428,257 | 10,036,057 | 26,459,760 | 2,980,162 | 4,026,403 | 10,613,038 | 356.2\% | 263.6\% | 50.60\% | 40.97\% |
| 2041 | 6,901,199 | 9,311,365 | 26,926,940 | 2,662,271 | 3,592,049 | 10,385,301 | 390.2\% | 289.2\% | 53.44\% | 43.24\% |
| 2042 | 6,381,063 | 8,598,543 | 27,292,285 | 2,366,985 | 3,189,543 | 10,121,347 | 427.7\% | 317.4\% | 56.21\% | 45.45\% |
| 2043 | 5,869,391 | 7,898,744 | 27,526,684 | 2,093,491 | 2,817,327 | 9,816,023 | 469.0\% | 348.5\% | 58.90\% | 47.59\% |
| 2044 | 5,370,233 | 7,217,320 | 27,398,668 | 1,841,817 | 2,475,316 | 9,395,053 | 510.2\% | 379.6\% | 61.46\% | 49.64\% |
| 2045 | 4,886,210 | 6,558,014 | 26,914,494 | 1,611,393 | 2,162,734 | 8,874,397 | 550.8\% | 410.4\% | 63.89\% | 51.58\% |
| 2046 | 4,420,714 | 5,925,291 | 26,158,914 | 1,401,836 | 1,878,954 | 8,293,813 | 591.7\% | 441.5\% | 66.15\% | 53.39\% |
| 2047 | 3,977,369 | 5,323,897 | 25,268,717 | 1,212,764 | 1,623,348 | 7,703,483 | 635.3\% | 474.6\% | 68.25\% | 55.07\% |
| 2048 | 3,557,404 | 4,755,021 | 24,297,302 | 1,043,014 | 1,394,156 | 7,122,650 | 683.0\% | 511.0\% | 70.20\% | 56.62\% |
| 2049 | 3,163,346 | 4,222,115 | 23,108,690 | 891,825 | 1,190,323 | 6,513,950 | 730.5\% | 547.3\% | 71.99\% | 58.05\% |
| 2050 | 2,796,801 | 3,727,440 | 21,737,961 | 758,177 | 1,010,466 | 5,892,078 | 777.2\% | 583.2\% | 73.60\% | 59.35\% |
| 2051 | 2,458,021 | 3,271,170 | 20,265,194 | 640,724 | 852,689 | 5,281,766 | 824.5\% | 619.5\% | 75.05\% | 60.51\% |




[^0]:    * This is not intended to be a comprehensive listing of all benefits available.

[^1]:    $A=\quad \$ 57,251,109$ Accumulated value of initial earned premium times 63.8\%
    $B=$
    $C=$
    \$0 Accumulated value of prior premium rate increases times 85\%
    883 Present value of future projected initial earned premium times 63.8\%
    $A+B+C+D=\$ 272,009,504$
    $\$ 271,269,089$ Accumulated value of incurred claims + present value of future projected incurred claims

