## Lincoln Benefit Life Company

## Company NAIC No. 65595

Home Office: 2940 South 84 ${ }^{\text {th }}$ Street, Lincoln, NE 68506-4142 Administrative Office: Post Office Box 4243, Woodland Hills, CA 91365-4243

Actuarial Memorandum

August 2018

## Nursing Care Only Policy: <br> Comprehensive Long Term Care Policy: <br> Home and Community Based Care Policy:

Form LB-6301-P-MD(Q)\&(NQ)
Form LB-6302-P-MD(Q)\&(NQ)
Form LB-6303-P-MD(Q)\&(NQ)

The above referenced individual Long Term Care (LTC) policy forms were issued in Maryland from 1999 to 2004 under the product name "Senior Linc". Midway through this issue period, certain contracts (referred to as "enhanced") were issued with additional benefits and different rates for the benefit increase riders. Both preenhanced and enhanced policies are included in the scope of this filing. These policy forms are no longer being marketed.

## 1. Purpose of Filing

This is a rate increase filing for existing Long-Term Care (LTC) policy forms. This actuarial memorandum has been prepared for the purpose of documenting a proposed rate increase and demonstrating that the rates meet the requirements in the statutes of Maryland. It may not be suitable for other purposes.

## 2. Scope of Filing

This filing applies to the Company's LTC policy forms as specified above. These forms provide daily benefit for qualified long-term care services in various settings, as summarized in Exhibit A, when the insured meets policy benefit qualification requirements.

All forms included in this filing are individual LTC policies that are guaranteed renewable for life, subject to the Company's right to change premium rates.

These policy forms were issue age rated and fully underwritten. The issue ages were from 40 to 84 on an age nearest birthday basis, except for endorsed groups where the issue age range was 18 to 84 . Strict underwriting criteria were administered with frequent utilization of medical records and paramedical functional assessments, personal history interviews and MIB searches.

These policy forms were marketed by individual agents of Lincoln Benefit Life Company.

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## Actuarial Memorandum

August 2018

The proposed rate increase is applicable to all inforce policies as these forms are no longer being marketed. Paid-up policies will not receive a rate increase. Single pay and 10 pay policies are not included in the scope of this filing.

The number of policyholders and the annual inforce premium, as of December 2017, are displayed in Exhibit B, which also shows the average annual premium before and after proposed rate increase.

## 3. Reason for the Increase

A rate increase is necessary at this time due to significantly higher anticipated future and lifetime loss ratios. The higher loss ratios are a result of a combination of lower lapse, lower death, and longer claim continuance.

The Company has been evaluating this LTCi block and updating assumptions based on the actual experience as well as the LTCi industry experience. For the policy forms specified above, projected experience is now worse than what original pricing assumptions were projecting. Ultimate lapse rates and mortality rates have had the most significant deviation from original pricing. The combined effect of changing the underlying claim costs to better reflect actual experience, as well as industry data, and updating the mortality and lapse assumptions resulted in the need for a rate increase.

The current premium levels are inadequate. Therefore, the Company is requesting a rate increase in order to maintain the viability and financial stability of the policy forms. Implementing a necessary rate increase earlier reduces the amount of the rate increase.

## 4. Requested Rate Increase

The Company is requesting the approval of a flat increase of $15 \%$ on the current base rates. The increase does not vary by issue age or other policy characteristics. The new premium for any contract is equal to the product of the contract's current premium and one plus the base premium increase percentage. Paid-up policies will not be affected by the rate increase.

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## Actuarial Memorandum

August 2018

Please see Exhibits B1-B3 for rate tables reflecting the rate increase:

| B1 | LB-6301-P-MD proposed rates |
| :--- | :--- |
| B2 | LB-6302-P-MD proposed rates |
| B3 | LB-6303-P-MD proposed rates |

Please note that the actual rates implemented may vary from those in rate pages slightly due to implementation rounding algorithms.

## 5. History of Previous Rate Revisions

A rate increase was approved for forms LB-6301-P-MD, LB-6302-P-MD, and LB-6303-P-MD on August 23,2007 with a cap of $15 \%$. A flat increase of $15 \%$ was approved for these forms on July 23, 2009. Another flat increase of $15 \%$ was approved on April 5, 2016.

## 6. Actuarial Assumptions

a. Interest

The maximum valuation interest rate for contract reserves, $4.5 \%$, has been used for accumulating historical experience and for discounting projected future experience.
b. Lapse

The current best estimate ultimate lapse rate is assumed to be $1.0 \%$, formulated by analyzing the trend in lapse rates of later durations. Exhibit C shows the Company's actual lapse experience by duration.
c. Mortality

The current best estimate mortality assumptions are based on experience from the reinsurer's entire similarly underwritten and administered block of LTC policies. The attained age mortality is assumed to be $85 \%$ of the 1994 Group Annuity Mortality Table for ages 85 and younger and graded to $100 \%$ of the 1994 Group Annuity Mortality Table at age 90 and older, with duration selection factors, varied by single vs. joint, shown in Exhibit D1. Mortality selection factors for Single grade from $16.5 \%$ to $100 \%$ over 21 years while selection factors for Joint grade from $9.5 \%$

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## Actuarial Memorandum

August 2018
to $100 \%$ over 25 years. No mortality improvement is assumed in the projection.
Exhibit D2 shows the comparison of actual deaths and expected deaths based on best estimate assumptions for the combined reinsurer's block of LTC policies.

## d. Morbidity

The current best estimate morbidity assumptions are also based on the reinsurer's combined experience. Studies are performed for incidence, continuance, recovery, and utilization from claim data.

Incidence rates by gender, marital status, and attained age have been developed. Claim termination rates are derived from reinsurer data that has been credibility blended with the latest industry data. Recovery and return to active status is based on the attained age at the time the claim is incurred, grading down from $60 \%$ of all claims at incurral age 40, to $6 \%$ at incurral age 101 , and then $0 \%$ at incurral age 120. Utilization factors are applied to the claim costs, which are as follows: $70 \%$ for COLA reimbursement policies and $85 \%$ for non-COLA reimbursement policies. No underwriting selection durational factors or morbidity improvement are assumed in the projection.

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

Exhibit E1 shows the best estimate incidence rates by gender and partner status. Exhibit E2 demonstrates the best estimate length of stay for lifetime benefit period, 90-day elimination period policies with and without 5\% Compound Inflation Protection.

Exhibits E3 and E4 contain the analysis of actual to expected incidence and termination, with expected based on best estimate assumptions, for the combined reinsurer block of LTC policies.
e. Expenses

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

## f. Rate Increase Impact on Policyholder Behavior

Premium rate increases on long-term care policies may induce some policyholders to seek a reduction in benefits or to lapse their policy. Similarly, policyholders who accept the rate

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Actuarial Memorandum

August 2018
increase and remain inforce or retain their full benefits may exhibit some morbidity antiselection, understanding that they may need the long-term care benefits in the future. All else equal, additional lapses or benefit reductions on a long-term care block of policies is financially favorable to the Company, while anti-selection is unfavorable to the Company.

The projections in Exhibits F1 and F2 do not include either the assumption of additional lapses and reduction in benefits or the assumption of anti-selection. We assume for the purpose of this rate increase that the two impacts offset each other.

The above discussed current best estimate assumptions are based on the experience of the Company, reinsurer and industry experience, and judgement. The best estimate assumptions reflect an estimate of the most likely outcome and do not reflect an explicit margin for conservatism.

## 7. Area Factors and Trend Assumptions

Area factors were not used in pricing for the above-listed policy forms. As this is not medical insurance, an explicit medical cost trend is not included in the projections.

## 8. Claim Liability and Reserves

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2017 have been discounted to the incurral date of each respective claim and included in historical incurred claims. Incurred but not reported reserve (IBNR) balances as of December 31, 2017 have been allocated to a calendar year of incurral and included in historical incurred claims. Paid claims have been discounted to the incurral date and included in historical incurred claims. Claim reserves are calculated for active and pending claimants as present value of benefit payments discounted by interest and terminations. The IBNR is based on lag factors which are applied to the claim reserves and survivor payments based on the difference between the incurral date and the valuation date.

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## Company NAIC No. 65595

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Actuarial Memorandum

August 2018

## 9. Past and Future Policy Experience

Earned premiums and incurred claims for projection years 2018 through 2057 are developed from an active lives model representing actual contracts in force as of December 31, 2017. The best estimate assumptions described above for morbidity, voluntary lapse, and mortality are used to project earned premiums and incurred claims.

Nationwide and statewide historical experience and projections without and with proposed rate increase are shown in Exhibits F1 and F2 respectively.

Historical experience is shown by claim incurral year with the loss ratio for each loss year calculated by the following formula:

$$
L R_{j}=\frac{\sum_{t=j}^{2017} P m t_{t}^{j} \times v^{t-j}+{ }_{j} C R_{2017} \times v^{2017-j+0.5}+{ }_{j} I B N R_{2017} \times v^{2017-j+0.5}}{E P_{j}}
$$

$\boldsymbol{L R}_{j}=$ loss ratio for year $j$
$\boldsymbol{P m} \boldsymbol{t}_{t}^{j}=$ claim payments in year $t$ on claims incurred in year $j$, assumed to occur mid-year
${ }_{j} \boldsymbol{C R}_{2017}=$ claim reserve held on December 31, 2017 for claims incurred in year $j$
${ }_{j} \boldsymbol{I B N R} \boldsymbol{R}_{2017}=$ incurred but not reported reserve as of December 31, 2017 attributable to claims incurred in year $j$
$\boldsymbol{E P}_{j}=$ earned premium in year $j$, assumed mid-year
$\boldsymbol{j}=$ year of incurral
$v=1 / 1.045=0.956938$

Future anticipated loss ratio is calculated, with and without interest, as anticipated incurred claims divided by earned premiums. Lifetime loss ratio as of December 31, 2017 is calculated as the sum of accumulated past experience and discounted future experience where accumulation and discounting occur at maximum valuation interest rate $4.5 \%$.

## 10. Analysis Performed

The initial originally approved premium schedule was based on pricing assumptions believed to be appropriate, given industry experience available when the initial originally approved rate schedule was

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## Company NAIC No. 65595

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## Actuarial Memorandum

August 2018
developed. The original pricing assumptions for voluntary lapse, mortality and claim costs were as follows:
a. Original Pricing Ultimate Lapse: 5\%
b. Original Pricing Mortality: 1975-80 Select and Ultimate
c. Original Pricing Morbidity

Original pricing claim costs for skilled, intermediate and Facility Care Benefits are derived from The Reports of the Society of Actuaries based on the 1985 National Nursing Home Survey Utilization Data in Transactions, Society of Actuaries, 1988-89-90 Reports; and the Long Term Care Intercompany Study: 1984-1991 Experience in Transactions, Society of Actuaries, 1993-94 Reports. Claim costs factors shown in the original actuarial memorandum are applied to the inforce lives and represent the expected cost per life of incurred benefits.

Original pricing claim costs for Home and Community Based Care are decreasing percentages of Facility Care claims costs derived from information provided by a reinsurer.

Underwriting selection durational factors are $10 \%, 20 \%, 40 \%, 60 \%, 80 \%, 100 \%$ for durations 6 and later.
d. Original Pricing Interest

Pre-enhanced policies: 7.5\%
Enhanced policies: $\quad 7.0 \%$

As part of the inforce management of the business, the reinsurer and administrator on the business monitor the performance of the business by completing periodic actual-to-expected analysis for voluntary lapse, mortality, claim incidence, and claim length of stay. The findings from these analyses were used in projecting the inforce business to determine the effect of experience on the projected lifetime loss ratio. An analysis of the projected lifetime loss ratio based on current best estimate assumptions compared to that assumed at the time of original pricing revealed that experience has deteriorated significantly.

The best estimate assumptions used in this filing (described in Section 6) are based on actual inforce experience of the Company, experience of reinsurer's similarly underwritten and administered LTC products, industry experience, and judgement. Actual persistency has been higher than that assumed in

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## Actuarial Memorandum

## August 2018

original pricing.

## 11. Loss Ratio Requirement Compliance Demonstration

Projected experience using current best estimate assumptions is shown in Exhibits F1 (nationwide) and F2 (statewide).

In all projections, the expected lifetime loss ratios with and without the requested rate increase exceed the minimum loss ratio requirements.
12. Proposed Effective Date

The rate increase will apply to policies on their policy anniversary date following at least a 60-day policyholder notification period after approval.
13. Nationwide Distribution of Business as of December 31, 2017

As of December 31, 2017, the number of policies in force that will be affected by this increase by policy form is shown in Exhibits G1 (nationwide) and G2 (statewide).

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## Actuarial Memorandum

August 2018

## 14. Actuarial Certification

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for preparing health rate filings.

I believe this rate filing is in compliance with the applicable laws of the State of Maryland and with the rules of the Department. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The data used to develop this actuarial memorandum was provided by LifeCare Assurance Company, the administrator of the policies, and Employers Reassurance Corporation, the reinsurer of the business. I have reviewed the data for reasonableness.

To the best of my knowledge and judgement, I hereby certify that:

- this rate submission is in compliance with the applicable laws and regulations of the state where it is filed;
- policy design, underwriting, and claims adjudication practices have been taken into consideration;
- the rates are not unfairly discriminatory and the gross premiums are not excessive and bear reasonable relationship to the benefits, based on the lifetime loss ratio exceeding the minimum loss ratio requirement; and
- the relationship between renewal premium rate schedules and new business premium rate schedules is not applicable because the company is no longer marketing new business in any states.


Xiaoyan Song, FSA, MAAA, FLMI, LTCP
Consulting Actuary

# Lincoln Benefit Life Company <br> Policy Form: LB-6301, LB-6302, LB-6303 

Exhibit A: Benefit Summary
(does not reflect state variations)

| Benefits | Benefit Description |
| :---: | :---: |
| General Information |  |
| Issue Age | 40-84 age nearest birthday |
| Benefit Periods | 3-year, 5-year \& Lifetime |
| Risk Classes | Preferred Non-smoker, Preferred \& Standard |
| Benefit Type | Reimbursement (optional Indemnity Rider) |
| Elimination Periods | $0,30 \& 90$ days |
| Elimination Period Cumulative | Yes |
| Personal Care Advisor | Yes |
| Alternative Plan of Care | Yes |
| Benefit Triggers | 2 of 6 ADL's or Cognitive Impairment |
| Base Policy Benefits |  |
| Nursing Care (In A Nursing or Assisted Living Facility) |  |
| Waiver of Premium | After 60 days of care |
| Bed Reservation (up to 21 days per calendar year) | 100\% of daily benefit |
| Home \& Community Based Care Benefit |  |
| Waiver of Premium | By Rider Only |
| Professional Services | $50 \%$ or $100 \%$ of daily benefit |
| Homemaker Services | $50 \%$ or $100 \%$ of daily benefit |
| Adult Day Care \& Hospice Care | $50 \%$ or $100 \%$ of daily benefit |
| Respite Care (up to 14 days per calendar year) | $50 \%$ or $100 \%$ of daily benefit |
| Optional Riders/Payment Options |  |
| Compound Benefit Increase (5\%) | Yes |
| Simple Benefit Increase (5\%) | Yes |
| HCBC Indemnity Rider | Available to Comprehensive LTC policies only |
| Single Premium Payment Option | Not available to HCBC policies |
| 10-Year Premium Payment Option | Not available to HCBC policies |
| Full Nonforfeiture Rider | Yes |
| Limited Nonforfeiture Rider | Yes |
| Shortened Benefit Period Nonforfeiture Rider | Yes |
| HCBC Waiver of Premium Benefit Rider | Available to Comprehensive LTC policies only |
| Paid-up Survivor Benefit Rider | Yes |
| Asisted Living Facility Benefit Rider | Available to HCBC policies only |

# Lincoln Benefit Life Company <br> Policy Form: LB-6301, LB-6302, LB-6303 

Exhibit B: Policies Inforce, Annual Premium and Average Premium

\left.| Nationwide | Cost of Living Adjustment |  |  | Simple |
| :---: | :---: | :---: | :---: | :---: |
|  | None |  |  | Compound |$\right]$


| Maryland | Cost of Living Adjustment |  |  | Compound |
| :---: | :---: | :---: | :---: | :---: |

Exhibit B1: Proposed Rates and Factors After 15\% Increase Individual Coverage / Preferred Risk Class / Lifetime Benefit Period / 90 Day Elimination Period

| $\begin{gathered} \text { Issue } \\ \text { Age } \end{gathered}$ | Nursing Care \$10 Daily Benefit | Other Riders <br> Shortened <br> Benefit Period | Benefit Increase Factors |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  | Compound | Simple |
| 40 | 36.96 | 1.600 | 3.248 | 2.343 |
| 41 | 38.19 | 1.600 | 3.194 | 2.279 |
| 42 | 39.42 | 1.600 | 3.141 | 2.215 |
| 43 | 40.65 | 1.600 | 3.088 | 2.151 |
| 44 | 41.88 | 1.600 | 3.035 | 2.087 |
| 45 | 43.11 | 1.600 | 2.981 | 2.055 |
| 46 | 45.58 | 1.600 | 2.928 | 2.023 |
| 47 | 48.03 | 1.600 | 2.875 | 1.991 |
| 48 | 50.49 | 1.600 | 2.822 | 1.959 |
| 49 | 52.95 | 1.600 | 2.769 | 1.927 |
| 50 | 55.43 | 1.600 | 2.715 | 1.895 |
| 51 | 59.12 | 1.600 | 2.662 | 1.868 |
| 52 | 62.82 | 1.600 | 2.556 | 1.840 |
| 53 | 66.51 | 1.600 | 2.449 | 1.812 |
| 54 | 70.21 | 1.600 | 2.343 | 1.785 |
| 55 | 73.91 | 1.600 | 2.236 | 1.757 |
| 56 | 81.30 | 1.600 | 2.130 | 1.725 |
| 57 | 88.69 | 1.530 | 2.023 | 1.693 |
| 58 | 96.08 | 1.514 | 1.917 | 1.661 |
| 59 | 103.47 | 1.498 | 1.810 | 1.629 |
| 60 | 110.87 | 1.482 | 1.703 | 1.597 |
| 61 | 123.18 | 1.466 | 1.683 | 1.580 |
| 62 | 135.51 | 1.450 | 1.661 | 1.563 |
| 63 | 147.82 | 1.424 | 1.640 | 1.546 |
| 64 | 160.14 | 1.398 | 1.619 | 1.529 |
| 65 | 172.46 | 1.372 | 1.597 | 1.512 |
| 66 | 197.09 | 1.346 | 1.576 | 1.495 |
| 67 | 221.74 | 1.320 | 1.555 | 1.478 |
| 68 | 246.37 | 1.296 | 1.533 | 1.460 |
| 69 | 271.00 | 1.272 | 1.512 | 1.430 |
| 70 | 295.65 | 1.248 | 1.491 | 1.400 |
| 71 | 332.61 | 1.224 | 1.469 | 1.390 |
| 72 | 369.56 | 1.200 | 1.448 | 1.380 |
| 73 | 406.53 | 1.184 | 1.427 | 1.370 |
| 74 | 443.48 | 1.168 | 1.406 | 1.360 |
| 75 | 480.44 | 1.152 | 1.384 | 1.350 |
| 76 | 554.35 | 1.136 | 1.374 | 1.340 |
| 77 | 628.27 | 1.120 | 1.363 | 1.330 |
| 78 | 702.19 | 1.116 | 1.352 | 1.320 |
| 79 | 776.10 | 1.112 | 1.341 | 1.310 |
| 80 | 850.02 | 1.108 | 1.331 | 1.300 |
| 81 | 923.93 | 1.104 | 1.320 | 1.290 |
| 82 | 997.84 | 1.100 | 1.310 | 1.280 |
| 83 | 1,071.76 | 1.090 | 1.299 | 1.270 |
| 84 | 1,145.67 | 1.085 | 1.289 | 1.260 |

Issue Age Independent Factors


[^0]Exhibit B2: Proposed Rates and Factors After 15\% Increase
Individual Coverage / Preferred Risk Class / Lifetime Benefit Period / 90 Day Elimination Period

| $\begin{gathered} \text { Issue } \\ \text { Age } \\ \hline \end{gathered}$ | Comprehensive LTC |  | $\begin{gathered} \hline \text { Other Riders } \\ \hline \text { Shortened } \\ \text { Benefit Period } \end{gathered}$ | Benefit Increase Factors |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$10 NC + \$10 HCBCDaily Benefit\$10 NC + \$5 HCBC <br> Daily Benefit |  |  |  |  |
|  |  |  | Compound | Simple |
| 40 | 55.43 | 46.20 |  | 1.600 | 3.248 | 2.343 |
| 41 | 57.28 | 47.73 | 1.600 | 3.194 | 2.279 |
| 42 | 59.12 | 49.26 | 1.600 | 3.141 | 2.215 |
| 43 | 60.98 | 50.80 | 1.600 | 3.088 | 2.151 |
| 44 | 62.82 | 52.34 | 1.600 | 3.035 | 2.087 |
| 45 | 64.67 | 53.90 | 1.600 | 2.981 | 2.055 |
| 46 | 68.36 | 56.97 | 1.600 | 2.928 | 2.023 |
| 47 | 72.07 | 60.05 | 1.600 | 2.875 | 1.991 |
| 48 | 75.76 | 63.13 | 1.600 | 2.822 | 1.959 |
| 49 | 79.46 | 66.21 | 1.600 | 2.769 | 1.927 |
| 50 | 83.15 | 69.27 | 1.600 | 2.715 | 1.895 |
| 51 | 88.69 | 73.91 | 1.600 | 2.662 | 1.868 |
| 52 | 94.25 | 78.53 | 1.600 | 2.556 | 1.840 |
| 53 | 99.77 | 83.15 | 1.600 | 2.449 | 1.812 |
| 54 | 105.32 | 87.76 | 1.600 | 2.343 | 1.785 |
| 55 | 110.87 | 92.37 | 1.600 | 2.236 | 1.757 |
| 56 | 121.95 | 101.62 | 1.600 | 2.130 | 1.725 |
| 57 | 133.04 | 110.87 | 1.530 | 2.023 | 1.693 |
| 58 | 144.12 | 120.11 | 1.514 | 1.917 | 1.661 |
| 59 | 155.21 | 129.35 | 1.498 | 1.810 | 1.629 |
| 60 | 166.30 | 138.59 | 1.482 | 1.703 | 1.597 |
| 61 | 184.78 | 153.98 | 1.466 | 1.683 | 1.580 |
| 62 | 203.26 | 169.39 | 1.450 | 1.661 | 1.563 |
| 63 | 221.74 | 184.78 | 1.424 | 1.640 | 1.546 |
| 64 | 240.21 | 200.18 | 1.398 | 1.619 | 1.529 |
| 65 | 258.70 | 215.57 | 1.372 | 1.597 | 1.512 |
| 66 | 295.65 | 246.37 | 1.346 | 1.576 | 1.495 |
| 67 | 332.61 | 277.17 | 1.320 | 1.555 | 1.478 |
| 68 | 369.56 | 307.98 | 1.296 | 1.533 | 1.460 |
| 69 | 406.53 | 338.76 | 1.272 | 1.512 | 1.430 |
| 70 | 443.48 | 369.56 | 1.248 | 1.491 | 1.400 |
| 71 | 498.91 | 415.77 | 1.224 | 1.469 | 1.390 |
| 72 | 554.35 | 461.95 | 1.200 | 1.448 | 1.380 |
| 73 | 609.78 | 508.16 | 1.184 | 1.427 | 1.370 |
| 74 | 665.22 | 554.35 | 1.168 | 1.406 | 1.360 |
| 75 | 720.65 | 600.55 | 1.152 | 1.384 | 1.350 |
| 76 | 831.53 | 692.94 | 1.136 | 1.374 | 1.340 |
| 77 | 942.41 | 785.34 | 1.120 | 1.363 | 1.330 |
| 78 | 1,053.27 | 877.73 | 1.116 | 1.352 | 1.320 |
| 79 | 1,164.15 | 970.12 | 1.112 | 1.341 | 1.310 |
| 80 | 1,275.01 | 1,062.51 | 1.108 | 1.331 | 1.300 |
| 81 | 1,385.89 | 1,154.92 | 1.104 | 1.320 | 1.290 |
| 82 | 1,496.75 | 1,247.31 | 1.100 | 1.310 | 1.280 |
| 83 | 1,607.64 | 1,339.70 | 1.090 | 1.299 | 1.270 |
| 84 | 1,718.50 | 1,432.09 | 1.085 | 1.289 | 1.260 |

Issue Age Independent Factors

| Risk Classes |  | Elimination Period |  | Payment Mode |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Preferred Nonsmoker Preferred Standard | $\begin{aligned} & \hline 0.80 \\ & 1.00 \\ & 1.20 \end{aligned}$ | $\begin{array}{l\|l} \hline 90 \text {-Day } \\ 30 \text {-Day } \\ 0 \text {-Day } \end{array}$ | $\begin{aligned} & \hline 1.00 \\ & 1.10 \\ & 1.20 \end{aligned}$ | Monthly <br> Quarterly <br> Semi-Annual <br> Annual |  | $\begin{aligned} & \hline 0.085 \\ & 0.270 \\ & 0.520 \\ & 1.000 \end{aligned}$ |
| Joint Coverage Risk Class * |  | Benefit Period |  | Waiver of Premium Rider |  |  |
| 2 Preferred Nonsmokers <br> 1 Preferred Nonsmoker / 1 Preferred 2 Preferreds <br> 1 Preferred Nonsmoker / 1 Standard 1 Preferred / 1 Standard 2 Standards | $\begin{aligned} & \hline 0.80 \\ & 0.90 \\ & 1.00 \end{aligned}$ | 3-Yr Benefit Period 5-Yr Benefit Period | $\begin{aligned} & \hline 0.70 \\ & 0.90 \end{aligned}$ | Enhanced | $\begin{gathered} \hline 50 \% \text { HCBC } \\ 100 \% \mathrm{HCBC} \end{gathered}$ | $\begin{aligned} & \hline 1.10 \\ & 1.15 \end{aligned}$ |
|  | 1.00 | HCBC In |  | Pre-Enhanced | 50\% HCBC | 1.15 |
|  | $\begin{aligned} & 1.10 \\ & 1.20 \end{aligned}$ | Enhanced Pre-Enhanced | $\begin{aligned} & \hline 1.12 \\ & 1.16 \end{aligned}$ |  | 100\% HCBC | 1.20 |

[^1]Exhibit B3: Proposed Rates and Factors After 15\% Increase Individual Coverage / Preferred Risk Class / Lifetime Benefit Period

| $\begin{gathered} \text { Issue } \\ \text { Age } \\ \hline \end{gathered}$ | HCBC |  |  | Other Riders | Benefit Increase Factors |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$10 Daily Benefit 90-day EP | \$10 Daily Benefit 30-day EP | $\begin{gathered} \hline \$ 10 \text { Daily Benefit } \\ \text { 0-day EP } \\ \hline \end{gathered}$ | Shortened Benefit Period | $\begin{gathered} \hline \text { Compound } \\ \text { 90-day EP } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Simple } \\ \text { 90-day EP } \end{gathered}$ | $\begin{array}{r} \text { Compound } \\ \text { 0-day, 30-day } \end{array}$ | $\begin{aligned} & \hline \text { Simple } \\ & \text { y, 30-day EP } \end{aligned}$ |
| 40 | 26.65 | 30.65 | 33.44 | 1.600 | 3.189 | 2.300 | 3.050 | 2.200 |
| 41 | 27.55 | 31.67 | 34.54 | 1.600 | 3.136 | 2.237 | 3.000 | 2.140 |
| 42 | 28.43 | 32.69 | 35.67 | 1.600 | 3.084 | 2.175 | 2.950 | 2.080 |
| 43 | 29.31 | 33.71 | 36.77 | 1.600 | 3.032 | 2.112 | 2.900 | 2.020 |
| 44 | 30.21 | 34.75 | 37.91 | 1.600 | 2.980 | 2.049 | 2.850 | 1.960 |
| 45 | 31.09 | 35.76 | 39.01 | 1.600 | 2.927 | 2.018 | 2.800 | 1.930 |
| 46 | 32.86 | 37.80 | 41.23 | 1.600 | 2.875 | 1.986 | 2.750 | 1.900 |
| 47 | 34.66 | 39.85 | 43.48 | 1.600 | 2.823 | 1.955 | 2.700 | 1.870 |
| 48 | 36.43 | 41.89 | 45.70 | 1.600 | 2.770 | 1.924 | 2.650 | 1.840 |
| 49 | 38.21 | 43.94 | 47.93 | 1.600 | 2.718 | 1.892 | 2.600 | 1.810 |
| 50 | 39.99 | 45.98 | 50.17 | 1.600 | 2.666 | 1.861 | 2.550 | 1.780 |
| 51 | 42.65 | 49.05 | 53.52 | 1.600 | 2.614 | 1.834 | 2.500 | 1.750 |
| 52 | 45.32 | 52.11 | 56.84 | 1.600 | 2.509 | 1.807 | 2.400 | 1.730 |
| 53 | 47.98 | 55.17 | 60.20 | 1.600 | 2.405 | 1.779 | 2.300 | 1.700 |
| 54 | 50.65 | 58.23 | 63.53 | 1.600 | 2.300 | 1.752 | 2.200 | 1.680 |
| 55 | 53.31 | 61.31 | 66.88 | 1.600 | 2.195 | 1.725 | 2.100 | 1.650 |
| 56 | 58.66 | 67.44 | 73.56 | 1.600 | 2.091 | 1.694 | 2.000 | 1.620 |
| 57 | 63.98 | 73.57 | 80.27 | 1.530 | 1.986 | 1.662 | 1.900 | 1.590 |
| 58 | 69.32 | 79.71 | 86.96 | 1.514 | 1.882 | 1.631 | 1.800 | 1.560 |
| 59 | 74.64 | 85.83 | 93.65 | 1.498 | 1.777 | 1.600 | 1.700 | 1.530 |
| 60 | 79.98 | 91.97 | 100.33 | 1.482 | 1.673 | 1.568 | 1.600 | 1.500 |
| 61 | 88.88 | 102.20 | 111.49 | 1.466 | 1.652 | 1.551 | 1.580 | 1.480 |
| 62 | 97.75 | 112.41 | 122.62 | 1.450 | 1.631 | 1.535 | 1.560 | 1.470 |
| 63 | 106.65 | 122.62 | 133.77 | 1.424 | 1.610 | 1.518 | 1.540 | 1.450 |
| 64 | 115.54 | 132.87 | 144.95 | 1.398 | 1.589 | 1.501 | 1.520 | 1.440 |
| 65 | 124.41 | 143.07 | 156.08 | 1.372 | 1.568 | 1.485 | 1.500 | 1.420 |
| 66 | 142.19 | 163.51 | 178.38 | 1.346 | 1.547 | 1.468 | 1.480 | 1.400 |
| 67 | 159.97 | 183.96 | 200.68 | 1.320 | 1.526 | 1.451 | 1.460 | 1.390 |
| 68 | 177.75 | 204.41 | 222.99 | 1.296 | 1.505 | 1.434 | 1.440 | 1.370 |
| 69 | 195.51 | 224.84 | 245.29 | 1.272 | 1.485 | 1.418 | 1.420 | 1.360 |
| 70 | 213.30 | 245.29 | 267.59 | 1.248 | 1.464 | 1.400 | 1.400 | 1.340 |
| 71 | 239.95 | 275.94 | 301.03 | 1.224 | 1.443 | 1.388 | 1.380 | 1.330 |
| 72 | 266.62 | 306.61 | 334.48 | 1.200 | 1.422 | 1.376 | 1.360 | 1.320 |
| 73 | 293.28 | 337.27 | 367.93 | 1.184 | 1.401 | 1.363 | 1.340 | 1.300 |
| 74 | 319.96 | 367.94 | 401.38 | 1.168 | 1.380 | 1.351 | 1.320 | 1.290 |
| 75 | 346.62 | 398.60 | 434.83 | 1.152 | 1.359 | 1.338 | 1.300 | 1.280 |
| 76 | 399.94 | 459.91 | 501.72 | 1.136 | 1.349 | 1.328 | 1.290 | 1.270 |
| 77 | 453.24 | 521.26 | 568.64 | 1.120 | 1.338 | 1.317 | 1.280 | 1.260 |
| 78 | 506.57 | 582.56 | 635.53 | 1.116 | 1.328 | 1.307 | 1.270 | 1.250 |
| 79 | 559.91 | 643.90 | 702.44 | 1.112 | 1.317 | 1.296 | 1.260 | 1.240 |
| 80 | 613.23 | 705.21 | 769.32 | 1.108 | 1.307 | 1.286 | 1.250 | 1.230 |
| 81 | 666.56 | 766.54 | 836.23 | 1.104 | 1.296 | 1.275 | 1.240 | 1.220 |
| 82 | 719.88 | 827.86 | 903.12 | 1.100 | 1.285 | 1.265 | 1.230 | 1.210 |
| 83 | 773.22 | 889.19 | 970.03 | 1.090 | 1.276 | 1.255 | 1.220 | 1.200 |
| 84 | 826.53 | 950.50 | 1,036.93 | 1.085 | 1.265 | 1.244 | 1.210 | 1.190 |

Issue Age Independent Factors

| Risk Classes |  | Payment Mode |  |
| :--- | :--- | :--- | :---: |
| Preferred Nonsmoker | 0.80 | Monthly | 0.085 |
| Preferred | 1.00 | Quarterly | 0.270 |
| Standard | 1.20 | Semi-Annual | 0.520 |
| Joint Coverage Risk Class ** |  | 1.000 |  |
| Annual |  | Benefit Period |  |
| 2 Preferred Nonsmokers | 0.80 | 3-Yr Benefit Period | 0.70 |
| 1 Preferred Nonsmoker / Preferred | 0.90 | 5-Yr Benefit Period | 0.90 |
| 2 Preferreds | 1.00 | Endorsed Group Discount |  |
| 1 Preferred Nonsmoker / 1 Standard | 1.00 | Ages 40-64 | 0.85 |
| 1 Preferred / 1 Standard | 1.10 | Ages 65-84 | 0.90 |
| 2 Standards | 1.20 |  |  |

* HCBC with Assisted Living Facility Benefit Rider, multiply base rates by 1.20
** Premiums for various joint combinations are calculated as $150 \%$ of the base policy premium of the older insured, times the Joint Coverage Risk Class factor

Lincoln Benefit Life Company
Policy Form: LB-6301, LB-6302, LB-6303

Exhibit C: Lapse

| Duration | Exposure* $^{*}$ | Lapse | Lapse Rate |
| :---: | :---: | :---: | :---: |
| 1 | 31,169 | 1,636 | $5.25 \%$ |
| 2 | 29,591 | 1,129 | $3.82 \%$ |
| 3 | 28,536 | 747 | $2.62 \%$ |
| 4 | 27,797 | 477 | $1.72 \%$ |
| 5 | 27,257 | 362 | $1.33 \%$ |
| 6 | 26,693 | 336 | $1.26 \%$ |
| 7 | 25,924 | 321 | $1.24 \%$ |
| 8 | 25,123 | 318 | $1.27 \%$ |
| 9 | 24,449 | 264 | $1.08 \%$ |
| 10 | 23,796 | 196 | $0.82 \%$ |
| 11 | 23,219 | 177 | $0.76 \%$ |
| 12 | 22,716 | 175 | $0.77 \%$ |
| 13 | 22,078 | 178 | $0.81 \%$ |
| 14 | 20,507 | 131 | $0.64 \%$ |
| 15 | 16,627 | 102 | $0.61 \%$ |
| 16 | 10,438 | 63 | $0.60 \%$ |
| 17 | 6,220 | 43 | $0.69 \%$ |
| 18 | 3,336 | 17 | $0.51 \%$ |
| 19 | 1,036 | 6 | $0.58 \%$ |
| 20 | 43 | 0 | $0.00 \%$ |
| Average | 396,555 | 6,678 | $1.68 \%$ |

* Lifetime pay policies only

Lincoln Benefit Life Company
Combined Reinsurer Experience

Exhibit D1: Mortality Selection Factors

| Policy <br> Duration | Selection Factors |  |
| :---: | :---: | :---: |
|  | Single | Joint |
| 1 | 0.165 | 0.095 |
| 2 | 0.335 | 0.135 |
| 3 | 0.390 | 0.225 |
| 4 | 0.425 | 0.240 |
| 5 | 0.470 | 0.280 |
| 6 | 0.485 | 0.320 |
| 7 | 0.520 | 0.330 |
| 8 | 0.530 | 0.370 |
| 9 | 0.600 | 0.380 |
| 10 | 0.610 | 0.390 |
| 11 | 0.630 | 0.410 |
| 12 | 0.670 | 0.435 |
| 13 | 0.680 | 0.455 |
| 14 | 0.760 | 0.490 |
| 15 | 0.800 | 0.500 |
| 16 | 0.850 | 0.520 |
| 17 | 0.875 | 0.590 |
| 18 | 0.925 | 0.610 |
| 19 | 0.930 | 0.650 |
| 20 | 0.940 | 0.680 |
| 21 | 1.000 | 0.820 |
| 22 | 1.000 | 0.830 |
| 23 | 1.000 | 0.930 |
| 24 | 1.000 | 0.960 |
| 25 | 1.000 | 1.000 |

## Lincoln Benefit Life Company

Combined Reinsurer Experience

Exhibit D2: Mortality Actual to Expected (Best Estimate) Analysis

| Attained Age | Single Lives Death Counts |  |  | Joint Lives Death Counts** |  |  | Total Death Counts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual | Expected* | A/E | Actual | Expected* | A/E | Actual | Expected* | A/E |
| <40 | 1 | 1 | 89\% | 1 | 2 | 62\% | 2 | 3 | 73\% |
| 40-44 | 1 | 3 | 31\% | 14 | 7 | 211\% | 15 | 10 | 153\% |
| 45-49 | 26 | 13 | 206\% | 50 | 27 | 187\% | 76 | 39 | 193\% |
| 50-54 | 65 | 50 | 130\% | 152 | 105 | 144\% | 217 | 155 | 140\% |
| 55-59 | 172 | 170 | 101\% | 495 | 372 | 133\% | 667 | 542 | 123\% |
| 60-64 | 430 | 493 | 87\% | 1,114 | 1,081 | 103\% | 1,544 | 1,574 | 98\% |
| 65-69 | 805 | 1,034 | 78\% | 1,792 | 2,215 | 81\% | 2,597 | 3,249 | 80\% |
| 70-74 | 1,308 | 1,449 | 90\% | 2,664 | 2,958 | 90\% | 3,972 | 4,408 | 90\% |
| 75-79 | 1,654 | 1,775 | 93\% | 3,058 | 3,190 | 96\% | 4,712 | 4,965 | 95\% |
| 80-84 | 1,962 | 1,829 | 107\% | 2,672 | 2,643 | 101\% | 4,634 | 4,472 | 104\% |
| 85-89 | 1,554 | 1,426 | 109\% | 1,639 | 1,374 | 119\% | 3,193 | 2,800 | 114\% |
| 90+ | 1,085 | 890 | 122\% | 540 | 461 | 117\% | 1,625 | 1,351 | 120\% |
| Total | 9,063 | 9,133 | 99\% | 14,191 | 14,435 | 98\% | 23,254 | 23,568 | 99\% |

* Expected - $85 \%$ of 94 GAM and graded to $100 \%$ from ages 85 to 90 with selection
** Joint lives - joint policy at issue

Lincoln Benefit Life Company
Policy Form: LB-6301, LB-6302, LB-6303
Exhibit E1: Incidence Rates Per 100

| Best Estimate |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nursing Facility Care Incidence Rates |  |  |  | Incidence Rate Factors |  |
| Attained Age | Single Male | Single Female | Married Male | Married Female | Home and Community Based Care and Assisted Living Facility | Assisted Living Facility |
| 40 | 0.0038 | 0.0040 | 0.0009 | 0.0007 | 1.550 | 0.300 |
| 41 | 0.0044 | 0.0047 | 0.0010 | 0.0009 | 1.550 | 0.300 |
| 42 | 0.0051 | 0.0055 | 0.0012 | 0.0011 | 1.550 | 0.300 |
| 43 | 0.0059 | 0.0064 | 0.0015 | 0.0013 | 1.550 | 0.300 |
| 44 | 0.0069 | 0.0074 | 0.0018 | 0.0015 | 1.550 | 0.300 |
| 45 | 0.0080 | 0.0087 | 0.0021 | 0.0019 | 1.550 | 0.300 |
| 46 | 0.0092 | 0.0101 | 0.0025 | 0.0022 | 1.550 | 0.300 |
| 47 | 0.0107 | 0.0118 | 0.0030 | 0.0027 | 1.550 | 0.300 |
| 48 | 0.0124 | 0.0137 | 0.0036 | 0.0033 | 1.550 | 0.300 |
| 49 | 0.0144 | 0.0160 | 0.0044 | 0.0039 | 1.550 | 0.300 |
| 50 | 0.0168 | 0.0187 | 0.0052 | 0.0048 | 1.550 | 0.300 |
| 51 | 0.0194 | 0.0217 | 0.0063 | 0.0057 | 1.550 | 0.300 |
| 52 | 0.0226 | 0.0253 | 0.0075 | 0.0069 | 1.550 | 0.300 |
| 53 | 0.0262 | 0.0295 | 0.0090 | 0.0084 | 1.550 | 0.300 |
| 54 | 0.0304 | 0.0344 | 0.0107 | 0.0101 | 1.550 | 0.300 |
| 55 | 0.0353 | 0.0401 | 0.0129 | 0.0122 | 1.550 | 0.300 |
| 56 | 0.0409 | 0.0468 | 0.0154 | 0.0147 | 1.550 | 0.300 |
| 57 | 0.0475 | 0.0545 | 0.0184 | 0.0177 | 1.550 | 0.300 |
| 58 | 0.0577 | 0.0665 | 0.0231 | 0.0224 | 1.436 | 0.290 |
| 59 | 0.0706 | 0.0817 | 0.0292 | 0.0285 | 1.311 | 0.290 |
| 60 | 0.0859 | 0.0997 | 0.0366 | 0.0360 | 1.206 | 0.280 |
| 61 | 0.1041 | 0.1215 | 0.0458 | 0.0454 | 1.111 | 0.270 |
| 62 | 0.1247 | 0.1461 | 0.0566 | 0.0566 | 1.045 | 0.270 |
| 63 | 0.1504 | 0.1769 | 0.0704 | 0.0709 | 0.969 | 0.260 |
| 64 | 0.1835 | 0.2168 | 0.0887 | 0.0900 | 0.872 | 0.260 |
| 65 | 0.2222 | 0.2636 | 0.1108 | 0.1133 | 0.795 | 0.250 |
| 66 | 0.2678 | 0.3191 | 0.1378 | 0.1421 | 0.728 | 0.240 |
| 67 | 0.3214 | 0.3846 | 0.1706 | 0.1773 | 0.671 | 0.240 |
| 68 | 0.3864 | 0.4643 | 0.2117 | 0.2216 | 0.613 | 0.230 |
| 69 | 0.4652 | 0.5614 | 0.2630 | 0.2775 | 0.555 | 0.230 |
| 70 | 0.5571 | 0.6751 | 0.3249 | 0.3455 | 0.507 | 0.220 |
| 71 | 0.6628 | 0.8066 | 0.3989 | 0.4275 | 0.470 | 0.220 |
| 72 | 0.7788 | 0.9517 | 0.4836 | 0.5223 | 0.452 | 0.210 |
| 73 | 0.9209 | 1.1302 | 0.5900 | 0.6422 | 0.425 | 0.210 |
| 74 | 1.0902 | 1.3437 | 0.7207 | 0.7905 | 0.397 | 0.200 |
| 75 | 1.2911 | 1.5980 | 0.8807 | 0.9735 | 0.369 | 0.200 |
| 76 | 1.5297 | 1.9014 | 1.0766 | 1.1994 | 0.341 | 0.190 |
| 77 | 1.7994 | 2.2461 | 1.3068 | 1.4671 | 0.323 | 0.190 |
| 78 | 2.1171 | 2.6539 | 1.5864 | 1.7950 | 0.305 | 0.190 |
| 79 | 2.4722 | 3.1121 | 1.9115 | 2.1795 | 0.297 | 0.180 |
| 80 | 2.9095 | 3.6782 | 2.3211 | 2.6673 | 0.279 | 0.180 |
| 81 | 3.4249 | 4.3480 | 2.8192 | 3.2648 | 0.261 | 0.170 |
| 82 | 4.0001 | 5.0998 | 3.3975 | 3.9652 | 0.253 | 0.170 |
| 83 | 4.7100 | 6.0303 | 4.1277 | 4.8549 | 0.235 | 0.170 |
| 84 | 5.5019 | 7.0740 | 4.9751 | 5.8971 | 0.227 | 0.160 |
| 85 | 6.4271 | 8.2987 | 5.9967 | 7.1634 | 0.219 | 0.160 |
| 86 | 6.8320 | 8.7318 | 6.3922 | 7.5817 | 0.212 | 0.150 |
| 87 | 7.2687 | 9.1955 | 6.8197 | 8.0315 | 0.204 | 0.150 |
| 88 | 7.7337 | 9.6842 | 7.2761 | 8.5082 | 0.196 | 0.150 |
| 89 | 8.2288 | 10.1993 | 7.7634 | 9.0137 | 0.188 | 0.140 |
| 90 | 8.7559 | 10.7423 | 8.2837 | 9.5496 | 0.180 | 0.140 |
| 91 | 9.2385 | 11.2191 | 8.7644 | 10.0323 | 0.182 | 0.140 |
| 92 | 9.8307 | 11.8168 | 9.3521 | 10.6291 | 0.174 | 0.130 |
| 93 | 10.4613 | 12.4469 | 9.9797 | 11.2620 | 0.166 | 0.130 |
| 94 | 11.0282 | 12.9879 | 10.5497 | 11.8209 | 0.169 | 0.130 |
| 95 | 11.6358 | 13.5641 | 11.1618 | 12.4181 | 0.171 | 0.130 |
| 96 | 12.3824 | 14.2877 | 11.9110 | 13.1578 | 0.163 | 0.120 |
| 97 | 13.0533 | 14.9086 | 12.5912 | 13.8106 | 0.166 | 0.120 |
| 98 | 13.7724 | 15.5699 | 13.3217 | 14.5083 | 0.168 | 0.120 |
| 99 | 14.5187 | 16.2467 | 14.0826 | 15.2284 | 0.171 | 0.110 |
| 100 | 15.3056 | 16.9530 | 14.8871 | 15.9842 | 0.174 | 0.110 |
| 101 | 16.1489 | 17.7052 | 15.7510 | 16.7919 | 0.176 | 0.110 |
| 102 | 17.0243 | 18.4752 | 16.6509 | 17.6256 | 0.179 | 0.110 |
| 103 | 17.9625 | 19.2950 | 17.6173 | 18.5164 | 0.181 | 0.100 |
| 104 | 18.9365 | 20.1343 | 18.6241 | 19.4359 | 0.184 | 0.100 |
| 105 | 19.9633 | 21.0103 | 19.6885 | 20.4011 | 0.187 | 0.100 |
| 106 | 21.0637 | 21.9429 | 20.8314 | 21.4324 | 0.189 | 0.100 |
| 107 | 22.2062 | 22.8978 | 22.0223 | 22.4971 | 0.192 | 0.100 |
| 108 | 23.4108 | 23.8943 | 23.2813 | 23.6148 | 0.195 | 0.100 |
| 109 | 24.7015 | 24.9553 | 24.6331 | 24.8089 | 0.197 | 0.100 |
| 110 | 26.0417 | 26.0417 | 26.0417 | 26.0417 | 0.200 | 0.100 |

Exhibit E2: Length of Stay Per \$1 of Daily Benefit

| Best Estimate Length of Stay* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Attained | Male |  | Female |  |
| Age | No COLA | 5\% Compound COLA | No COLA | 5\% Compound COLA |
| 40 | 657.68 | 914.60 | 671.46 | 862.32 |
| 41 | 657.68 | 914.60 | 671.46 | 862.32 |
| 42 | 657.68 | 914.60 | 671.46 | 862.32 |
| 43 | 657.68 | 914.60 | 671.46 | 862.32 |
| 44 | 657.68 | 914.60 | 671.46 | 862.32 |
| 45 | 657.68 | 914.60 | 671.46 | 862.32 |
| 46 | 657.68 | 914.60 | 671.46 | 862.32 |
| 47 | 657.68 | 914.60 | 671.46 | 862.32 |
| 48 | 657.68 | 914.60 | 671.46 | 862.32 |
| 49 | 657.68 | 914.60 | 671.46 | 862.32 |
| 50 | 657.68 | 914.60 | 671.46 | 862.32 |
| 51 | 657.68 | 914.60 | 671.46 | 862.32 |
| 52 | 657.68 | 914.60 | 671.46 | 862.32 |
| 53 | 649.68 | 897.86 | 643.79 | 813.94 |
| 54 | 642.05 | 881.97 | 624.06 | 783.77 |
| 55 | 634.77 | 866.89 | 605.68 | 756.03 |
| 56 | 627.83 | 852.56 | 588.48 | 730.40 |
| 57 | 621.21 | 838.95 | 572.34 | 706.65 |
| 58 | 614.89 | 826.02 | 557.14 | 684.55 |
| 59 | 608.86 | 813.73 | 542.77 | 663.90 |
| 60 | 603.10 | 802.04 | 529.15 | 644.56 |
| 61 | 597.59 | 790.93 | 516.21 | 626.36 |
| 62 | 592.32 | 780.36 | 503.89 | 609.20 |
| 63 | 598.15 | 779.79 | 533.27 | 644.42 |
| 64 | 605.41 | 781.20 | 564.62 | 682.10 |
| 65 | 614.11 | 784.55 | 598.09 | 722.45 |
| 66 | 624.26 | 789.82 | 633.85 | 765.70 |
| 67 | 635.85 | 796.99 | 677.51 | 824.27 |
| 68 | 615.94 | 755.13 | 699.34 | 844.71 |
| 69 | 600.38 | 722.62 | 724.30 | 870.87 |
| 70 | 588.16 | 697.20 | 750.74 | 898.92 |
| 71 | 578.53 | 677.19 | 778.69 | 928.84 |
| 72 | 570.94 | 661.35 | 808.18 | 960.63 |
| 73 | 566.37 | 645.00 | 815.05 | 965.04 |
| 74 | 567.57 | 643.34 | 822.53 | 970.39 |
| 75 | 569.47 | 642.82 | 830.58 | 976.60 |
| 76 | 571.96 | 643.24 | 839.16 | 983.61 |
| 77 | 574.96 | 644.45 | 849.38 | 994.20 |
| 78 | 574.83 | 642.01 | 852.50 | 994.71 |
| 79 | 575.59 | 641.24 | 856.05 | 995.82 |
| 80 | 576.67 | 640.88 | 860.02 | 997.50 |
| 81 | 578.03 | 640.92 | 864.39 | 999.74 |
| 82 | 579.68 | 641.33 | 869.16 | 1,002.52 |
| 83 | 565.68 | 622.01 | 851.36 | 971.65 |
| 84 | 554.92 | 608.01 | 840.86 | 955.39 |
| 85 | 545.15 | 595.41 | 831.61 | 941.04 |
| 86 | 536.20 | 583.95 | 823.41 | 928.25 |
| 87 | 527.95 | 573.45 | 816.11 | 916.79 |
| 88 | 509.29 | 550.33 | 779.39 | 870.24 |
| 89 | 494.17 | 532.30 | 746.39 | 828.95 |
| 90 | 480.29 | 515.83 | 716.44 | 791.86 |
| 91 | 467.49 | 500.71 | 689.11 | 758.30 |
| 92 | 455.64 | 486.79 | 664.02 | 727.77 |
| 93 | 455.64 | 486.79 | 664.02 | 727.77 |
| 94 | 455.64 | 486.79 | 664.02 | 727.77 |
| 95 | 455.64 | 486.79 | 664.02 | 727.77 |
| 96 | 455.64 | 486.79 | 664.02 | 727.77 |
| 97 | 455.64 | 486.79 | 664.02 | 727.77 |
| 98 | 455.64 | 486.79 | 664.02 | 727.77 |
| 99 | 455.64 | 486.79 | 664.02 | 727.77 |
| 100 | 455.64 | 486.79 | 664.02 | 727.77 |
| 101 | 455.64 | 486.79 | 664.02 | 727.77 |
| 102 | 455.64 | 486.79 | 664.02 | 727.77 |
| 103 | 455.64 | 486.79 | 664.02 | 727.77 |
| 104 | 455.64 | 486.79 | 664.02 | 727.77 |
| 105 | 455.64 | 486.79 | 664.02 | 727.77 |
| 106 | 455.64 | 486.79 | 664.02 | 727.77 |
| 107 | 455.64 | 486.79 | 664.02 | 727.77 |
| 108 | 455.64 | 486.79 | 664.02 | 727.77 |
| 109 | 455.64 | 486.79 | 664.02 | 727.77 |
| 110 | 455.64 | 486.79 | 664.02 | 727.77 |

[^2]Lincoln Benefit Life Company

## Combined Reinsurer Experience

Exhibit E3: Incidence Actual to Expected (Best Estimate) Analysis

| Attained <br> Age | Single Male |  |  |  |  | Single Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exposure | Actual <br> Claim Count | Expected <br> Claim Count | $\mathrm{A} / \mathrm{E}$ | Exposure | Actual <br> Claim Count | Elaim Count | A/E |  |
|  | 1,111 | 0 | 0 | $0 \%$ | 1,356 | 0 | 0 | $0 \%$ |  |
| $45-49$ | 3,488 | 5 | 1 | $607 \%$ | 5,404 | 5 | 1 | $351 \%$ |  |
| $50-54$ | 8,155 | 6 | 4 | $149 \%$ | 15,706 | 23 | 9 | $261 \%$ |  |
| $55-59$ | 16,996 | 30 | 17 | $172 \%$ | 37,341 | 57 | 44 | $128 \%$ |  |
| $60-64$ | 27,755 | 63 | 59 | $106 \%$ | 67,050 | 192 | 169 | $114 \%$ |  |
| $65-69$ | 34,829 | 151 | 154 | $98 \%$ | 89,191 | 484 | 473 | $102 \%$ |  |
| $70-74$ | 32,083 | 290 | 292 | $99 \%$ | 84,327 | 928 | 941 | $99 \%$ |  |
| $75-79$ | 21,631 | 416 | 409 | $102 \%$ | 60,929 | 1,452 | 1,444 | $101 \%$ |  |
| $80-84$ | 11,342 | 453 | 442 | $103 \%$ | 34,744 | 1,751 | 1,740 | $101 \%$ |  |
| $85-89$ | 3,988 | 324 | 272 | $119 \%$ | 14,086 | 1,411 | 1,225 | $115 \%$ |  |
| $90+$ | 875 | 103 | 80 | $129 \%$ | 3,693 | 591 | 408 | $145 \%$ |  |
| Total | 162,253 | 1,841 | 1,730 | $106 \%$ | 413,827 | 6,894 | 6,456 | $107 \%$ |  |


| Attained <br> Age | Married Male |  |  |  |  | Married Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exposure | Actual <br> Claim Count | Expected <br> Claim Count | A/E | Exposure | Actual <br> Claim Count | Expected <br> Claim Count | A/E |  |
| $40-44$ | 3,641 | 0 | 0 | $0 \%$ | 6,688 | 5 | 0 | $3077 \%$ |  |
| $45-49$ | 12,627 | 5 | 1 | $576 \%$ | 20,035 | 15 | 1 | $1223 \%$ |  |
| $50-54$ | 33,327 | 19 | 6 | $338 \%$ | 48,996 | 42 | 8 | $551 \%$ |  |
| $55-59$ | 78,392 | 75 | 32 | $234 \%$ | 103,022 | 113 | 40 | $280 \%$ |  |
| $60-64$ | 141,559 | 207 | 140 | $148 \%$ | 164,150 | 245 | 161 | $152 \%$ |  |
| $65-69$ | 182,152 | 435 | 431 | $101 \%$ | 181,488 | 456 | 442 | $103 \%$ |  |
| $70-74$ | 156,669 | 854 | 886 | $96 \%$ | 136,347 | 781 | 828 | $94 \%$ |  |
| $75-79$ | 93,197 | 1,316 | 1,267 | $104 \%$ | 75,497 | 1,178 | 1,148 | $103 \%$ |  |
| $80-84$ | 38,837 | 1,275 | 1,261 | $101 \%$ | 30,217 | 1,157 | 1,143 | $101 \%$ |  |
| $85-89$ | 9,660 | 702 | 612 | $115 \%$ | 7,477 | 626 | 560 | $112 \%$ |  |
| $90+$ | 1,271 | 189 | 108 | $175 \%$ | 1,122 | 150 | 110 | $137 \%$ |  |
| Total | 751,330 | 5,077 | 4,743 | $107 \%$ | 775,038 | 4,768 | 4,442 | $107 \%$ |  |

Lincoln Benefit Life Company
Combined Reinsurer Experience

Exhibit E4: Claim Termination Actual to Expected (Best Estimate) Analysis

| Duration | Claim Exposure | Actual | Expected | A/E |
| :---: | :---: | :---: | :---: | :---: |
| 1st quarter | 1,475 | 440 | 444 | 99\% |
| 2nd quarter | 3,454 | 594 | 441 | 135\% |
| 3rd quarter | 2,864 | 253 | 247 | 103\% |
| 4th quarter | 2,524 | 197 | 183 | 107\% |
| 2 | 8,680 | 1,897 | 1,969 | 96\% |
| 3 | 5,874 | 1,322 | 1,446 | 91\% |
| 4 | 3,904 | 1,185 | 1,096 | 108\% |
| 5 | 2,338 | 564 | 643 | 88\% |
| 6 | 1,527 | 344 | 399 | 86\% |
| 7 | 996 | 217 | 267 | 81\% |
| 8 | 653 | 136 | 167 | 82\% |
| 9 | 430 | 88 | 111 | 79\% |
| 10 | 280 | 60 | 81 | 74\% |
| 11 | 176 | 36 | 43 | 83\% |
| 12 | 112 | 29 | 34 | 85\% |
| 13 | 65 | 10 | 24 | 41\% |
| 14 | 42 | 18 | 13 | 142\% |
| 15 | 24 | 11 | 9 | 118\% |
| 16 | 14 | 5 | 2 | 209\% |
| 17 | 10 | 5 | 2 | 263\% |
| 18 | 5 | 3 | 4 | 67\% |
| 19 | 1 | 0 | 1 | 0\% |
| 20 | 0 | 0 | 0 | 0\% |
| Average | 35,448 | 7,414 | 7,627 | 97\% |

## Lincoln Benefit Life Company

## Policy Form: LB-6301, LB-6302, LB-6303

All Issue Years
Exhibit F1: Nationwide Experience Projection

|  | Calendar Year | Before Proposed Increase |  |  | After Proposed Increase |  |  | at: <br> Year End <br> 2017 | $\begin{aligned} & \hline 4.50 \% \\ & \text { Factor } \\ & 1.0450 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Earned Premium | Incurred Claims | $\begin{aligned} & \hline \text { Loss } \\ & \text { Ratio } \\ & \hline \end{aligned}$ | Earned Premium | Incurred Claims | $\begin{aligned} & \hline \text { Loss } \\ & \text { Ratio } \\ & \hline \end{aligned}$ |  |  |
|  | 1998 | 468,385 | 0 | 0\% | 468,385 | 0 | 0\% | 19.5 | 2.3592 |
|  | 1999 | 4,486,447 | 92,404 | 2\% | 4,486,447 | 92,404 | $2 \%$ | 18.5 | 2.2576 |
|  | 2000 | 10,423,173 | 1,465,061 | 14\% | 10,423,173 | 1,465,061 | 14\% | 17.5 | 2.1604 |
|  | 2001 | 18,002,509 | 1,293,352 | 7\% | 18,002,509 | 1,293,352 | 7\% | 16.5 | 2.0674 |
|  | 2002 | 27,745,251 | 2,750,934 | 10\% | 27,745,251 | 2,750,934 | 10\% | 15.5 | 1.9783 |
|  | 2003 | 38,568,615 | 2,661,542 | 7\% | 38,568,615 | 2,661,542 | 7\% | 14.5 | 1.8932 |
|  | 2004 | 43,187,255 | 7,327,787 | 17\% | 43,187,255 | 7,327,787 | 17\% | 13.5 | 1.8116 |
|  | 2005 | 43,020,831 | 7,292,708 | 17\% | 43,020,831 | 7,292,708 | 17\% | 12.5 | 1.7336 |
|  | 2006 | 41,994,717 | 11,081,604 | 26\% | 41,994,717 | 11,081,604 | 26\% | 11.5 | 1.6590 |
| Historical | 2007 | 42,567,991 | 16,158,830 | 38\% | 42,567,991 | 16,158,830 | 38\% | 10.5 | 1.5875 |
| Experience | 2008 | 43,211,744 | 18,010,516 | 42\% | 43,211,744 | 18,010,516 | 42\% | 9.5 | 1.5192 |
|  | 2009 | 44,302,232 | 16,315,169 | 37\% | 44,302,232 | 16,315,169 | 37\% | 8.5 | 1.4537 |
|  | 2010 | 45,535,065 | 17,147,184 | 38\% | 45,535,065 | 17,147,184 | 38\% | 7.5 | 1.3911 |
|  | 2011 | 46,425,719 | 29,360,362 | 63\% | 46,425,719 | 29,360,362 | 63\% | 6.5 | 1.3312 |
|  | 2012 | 46,027,745 | 27,569,616 | 60\% | 46,027,745 | 27,569,616 | 60\% | 5.5 | 1.2739 |
|  | 2013 | 43,931,015 | 25,456,674 | 58\% | 43,931,015 | 25,456,674 | 58\% | 4.5 | 1.2191 |
|  | 2014 | 42,574,510 | 40,450,351 | 95\% | 42,574,510 | 40,450,351 | 95\% | 3.5 | 1.1666 |
|  | 2015 | 41,315,579 | 40,944,522 | 99\% | 41,315,579 | 40,944,522 | 99\% | 2.5 | 1.1163 |
|  | 2016 | 41,589,907 | 42,613,398 | 102\% | 41,589,907 | 42,613,398 | 102\% | 1.5 | 1.0683 |
|  | 2017 | 42,063,477 | 59,698,626 | 142\% | 42,063,477 | 59,698,626 | 142\% | 0.5 | 1.0223 |
| Projected Future Experience | 2018 | 40,926,709 | 51,457,896 | 126\% | 42,461,461 | 51,457,896 | 121\% | -0.5 | 0.9782 |
|  | 2019 | 38,509,801 | 57,636,308 | 150\% | 44,286,271 | 57,636,308 | 130\% | -1.5 | 0.9361 |
|  | 2020 | 36,069,372 | 64,077,952 | 178\% | 41,479,778 | 64,077,952 | 154\% | -2.5 | 0.8958 |
|  | 2021 | 33,623,711 | 70,669,475 | 210\% | 38,667,268 | 70,669,475 | 183\% | -3.5 | 0.8572 |
|  | 2022 | 31,183,498 | 77,255,595 | 248\% | 35,861,023 | 77,255,595 | 215\% | -4.5 | 0.8203 |
|  | 2023 | 28,757,625 | 83,640,041 | 291\% | 33,071,269 | 83,640,041 | 253\% | -5.5 | 0.7850 |
|  | 2024 | 26,370,491 | 89,681,032 | 340\% | 30,326,064 | 89,681,032 | 296\% | -6.5 | 0.7512 |
|  | 2025 | 24,040,777 | 95,165,966 | 396\% | 27,646,894 | 95,165,966 | 344\% | -7.5 | 0.7188 |
|  | 2026 | 21,786,673 | 99,956,275 | 459\% | 25,054,674 | 99,956,275 | 399\% | -8.5 | 0.6879 |
|  | 2027 | 19,625,526 | 103,912,841 | 529\% | 22,569,354 | 103,912,841 | 460\% | -9.5 | 0.6583 |
|  | 2028 | 17,571,682 | 106,821,597 | 608\% | 20,207,434 | 106,821,597 | 529\% | -10.5 | 0.6299 |
|  | 2029 | 15,636,694 | 108,542,475 | 694\% | 17,982,198 | 108,542,475 | 604\% | -11.5 | 0.6028 |
|  | 2030 | 13,826,775 | 109,074,630 | 789\% | 15,900,792 | 109,074,630 | 686\% | -12.5 | 0.5768 |
|  | 2031 | 12,146,052 | 108,379,552 | 892\% | 13,967,960 | 108,379,552 | 776\% | -13.5 | 0.5520 |
|  | 2032 | 10,597,297 | 106,327,100 | 1003\% | 12,186,891 | 106,327,100 | 872\% | -14.5 | 0.5282 |
|  | 2033 | 9,181,683 | 102,986,279 | 1122\% | 10,558,936 | 102,986,279 | 975\% | -15.5 | 0.5055 |
|  | 2034 | 7,898,530 | 98,590,511 | 1248\% | 9,083,309 | 98,590,511 | 1085\% | -16.5 | 0.4837 |
|  | 2035 | 6,744,953 | 93,345,063 | 1384\% | 7,756,696 | 93,345,063 | 1203\% | -17.5 | 0.4629 |
|  | 2036 | 5,716,803 | 87,304,154 | 1527\% | 6,574,323 | 87,304,154 | 1328\% | -18.5 | 0.4429 |
|  | 2037 | 4,808,855 | 80,722,333 | 1679\% | 5,530,183 | 80,722,333 | 1460\% | -19.5 | 0.4239 |
|  | 2038 | 4,014,291 | 73,884,172 | 1841\% | 4,616,434 | 73,884,172 | 1600\% | -20.5 | 0.4056 |
|  | 2039 | 3,325,363 | 66,976,619 | 2014\% | 3,824,168 | 66,976,619 | 1751\% | -21.5 | 0.3882 |
|  | 2040 | 2,733,525 | 60,189,336 | 2202\% | 3,143,554 | 60,189,336 | 1915\% | -22.5 | 0.3714 |
|  | 2041 | 2,229,811 | 53,644,035 | 2406\% | 2,564,283 | 53,644,035 | 2092\% | -23.5 | 0.3554 |
|  | 2042 | 1,805,122 | 47,441,443 | 2628\% | 2,075,891 | 47,441,443 | 2285\% | -24.5 | 0.3401 |
|  | 2043 | 1,450,370 | 41,611,750 | 2869\% | 1,667,925 | 41,611,750 | 2495\% | -25.5 | 0.3255 |
|  | 2044 | 1,156,714 | 36,232,968 | 3132\% | 1,330,221 | 36,232,968 | 2724\% | -26.5 | 0.3115 |
|  | 2045 | 915,754 | 31,293,506 | 3417\% | 1,053,117 | 31,293,506 | 2972\% | -27.5 | 0.2981 |
|  | 2046 | 719,727 | 26,793,308 | 3723\% | 827,687 | 26,793,308 | 3237\% | -28.5 | 0.2852 |
|  | 2047 | 561,581 | 22,726,929 | 4047\% | 645,819 | 22,726,929 | 3519\% | -29.5 | 0.2729 |
|  | 2048 | 435,022 | 19,103,217 | 4391\% | 500,275 | 19,103,217 | 3819\% | -30.5 | 0.2612 |
|  | 2049 | 334,517 | 15,898,208 | 4753\% | 384,694 | 15,898,208 | 4133\% | -31.5 | 0.2499 |
|  | 2050 | 255,309 | 13,098,567 | 5130\% | 293,605 | 13,098,567 | 4461\% | -32.5 | 0.2392 |
|  | 2051 | 193,353 | 10,685,367 | 5526\% | 222,356 | 10,685,367 | 4806\% | -33.5 | 0.2289 |
|  | 2052 | 145,261 | 8,635,417 | 5945\% | 167,051 | 8,635,417 | 5169\% | -34.5 | 0.2190 |
|  | 2053 | 108,218 | 6,909,604 | 6385\% | 124,450 | 6,909,604 | 5552\% | -35.5 | 0.2096 |
|  | 2054 | 79,919 | 5,468,119 | 6842\% | 91,907 | 5,468,119 | 5950\% | -36.5 | 0.2006 |
|  | 2055 | 58,485 | 4,284,150 | 7325\% | 67,258 | 4,284,150 | 6370\% | -37.5 | 0.1919 |
|  | 2056 | 42,392 | 3,320,567 | 7833\% | 48,751 | 3,320,567 | 6811\% | -38.5 | 0.1837 |
|  | 2057 | 30,426 | 2,544,421 | 8363\% | 34,990 | 2,544,421 | 7272\% | -39.5 | 0.1758 |
|  | Past <br> Future <br> Lifetime | 707,442,164 | 367,690,639 | 52\% | 707,442,164 | 367,690,639 | 52\% |  |  |
|  |  | 425,618,667 | 2,346,288,776 | 551\% | 484,857,213 | 2,346,288,776 | 484\% |  |  |
|  |  | 1,133,060,832 | 2,713,979,415 | 240\% | 1,192,299,377 | 2,713,979,415 | 228\% |  |  |
| Interest | 4.50\% |  |  |  |  |  |  |  |  |
|  | Past w/ int | 1,039,547,259 | 466,100,596 | 45\% | 1,039,547,259 | 466,100,596 | 45\% |  |  |
|  | Future w/ int | 314,497,170 | 1,334,081,140 | 424\% | 357,167,717 | 1,334,081,140 | 374\% |  |  |
|  | Lifetime w/ int | 1,354,044,429 | 1,800,181,736 | 133\% | 1,396,714,975 | 1,800,181,736 | 129\% |  |  |

Exhibit F2: Maryland Experience Projection

|  | Calendar Year | Before Proposed Increase |  |  | After Proposed Increase |  |  | at: <br> Year End 2017 | $\begin{aligned} & \hline 4.50 \% \\ & \text { Factor } \\ & 1.0450 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Earned Premium | Incurred Claims | Loss <br> Ratio | Earned Premium | Incurred Claims | Loss <br> Ratio |  |  |
|  | 1998 | 0 | 0 | 0\% | 0 | 0 | 0\% | 19.5 | 2.3592 |
|  | 1999 | 31,861 | 0 | 0\% | 31,861 | 0 | 0\% | 18.5 | 2.2576 |
|  | 2000 | 162,198 | 0 | 0\% | 162,198 | 0 | 0\% | 17.5 | 2.1604 |
|  | 2001 | 282,650 | 0 | 0\% | 282,650 | 0 | 0\% | 16.5 | 2.0674 |
|  | 2002 | 441,654 | 0 | 0\% | 441,654 | 0 | 0\% | 15.5 | 1.9783 |
|  | 2003 | 703,780 | 0 | 0\% | 703,780 | 0 | 0\% | 14.5 | 1.8932 |
|  | 2004 | 913,013 | 0 | 0\% | 913,013 | 0 | 0\% | 13.5 | 1.8116 |
|  | 2005 | 863,985 | 9,970 | 1\% | 863,985 | 9,970 | 1\% | 12.5 | 1.7336 |
|  | 2006 | 825,078 | 1,378,839 | 167\% | 825,078 | 1,378,839 | 167\% | 11.5 | 1.6590 |
| Historical | 2007 | 852,043 | 835,222 | 98\% | 852,043 | 835,222 | 98\% | 10.5 | 1.5875 |
| Experience | 2008 | 883,290 | 0 | 0\% | 883,290 | 0 | 0\% | 9.5 | 1.5192 |
|  | 2009 | 889,555 | 58,548 | 7\% | 889,555 | 58,548 | 7\% | 8.5 | 1.4537 |
|  | 2010 | 903,155 | 0 | 0\% | 903,155 | 0 | 0\% | 7.5 | 1.3911 |
|  | 2011 | 942,241 | 71,697 | 8\% | 942,241 | 71,697 | 8\% | 6.5 | 1.3312 |
|  | 2012 | 916,394 | 43,948 | 5\% | 916,394 | 43,948 | 5\% | 5.5 | 1.2739 |
|  | 2013 | 887,046 | 179,854 | 20\% | 887,046 | 179,854 | 20\% | 4.5 | 1.2191 |
|  | 2014 | 871,236 | 757,907 | 87\% | 871,236 | 757,907 | 87\% | 3.5 | 1.1666 |
|  | 2015 | 852,450 | 659,787 | 77\% | 852,450 | 659,787 | 77\% | 2.5 | 1.1163 |
|  | 2016 | 875,367 | 537,779 | 61\% | 875,367 | 537,779 | 61\% | 1.5 | 1.0683 |
|  | 2017 | 916,352 | 528,843 | 58\% | 916,352 | 528,843 | 58\% | 0.5 | 1.0223 |
| Projected <br> Future <br> Experience | 2018 | 912,175 | 985,389 | 108\% | 946,382 | 985,389 | 104\% | -0.5 | 0.9782 |
|  | 2019 | 870,269 | 1,135,843 | 131\% | 1,000,810 | 1,135,843 | 113\% | -1.5 | 0.9361 |
|  | 2020 | 826,543 | 1,299,713 | 157\% | 950,524 | 1,299,713 | 137\% | -2.5 | 0.8958 |
|  | 2021 | 781,274 | 1,468,724 | 188\% | 898,465 | 1,468,724 | 163\% | -3.5 | 0.8572 |
|  | 2022 | 734,856 | 1,644,246 | 224\% | 845,085 | 1,644,246 | 195\% | -4.5 | 0.8203 |
|  | 2023 | 687,354 | 1,828,205 | 266\% | 790,457 | 1,828,205 | 231\% | -5.5 | 0.7850 |
|  | 2024 | 639,191 | 2,009,725 | 314\% | 735,069 | 2,009,725 | 273\% | -6.5 | 0.7512 |
|  | 2025 | 590,892 | 2,180,003 | $369 \%$ | 679,526 | 2,180,003 | 321\% | -7.5 | 0.7188 |
|  | 2026 | 543,063 | 2,342,265 | 431\% | 624,523 | 2,342,265 | 375\% | -8.5 | 0.6879 |
|  | 2027 | 496,103 | 2,492,541 | 502\% | 570,518 | 2,492,541 | 437\% | -9.5 | 0.6583 |
|  | 2028 | 450,516 | 2,622,865 | 582\% | 518,094 | 2,622,865 | 506\% | -10.5 | 0.6299 |
|  | 2029 | 406,726 | 2,718,753 | 668\% | 467,734 | 2,718,753 | 581\% | -11.5 | 0.6028 |
|  | 2030 | 365,037 | 2,774,499 | 760\% | 419,792 | 2,774,499 | 661\% | -12.5 | 0.5768 |
|  | 2031 | 325,652 | 2,793,538 | 858\% | 374,500 | 2,793,538 | 746\% | -13.5 | 0.5520 |
|  | 2032 | 288,723 | 2,765,212 | 958\% | 332,032 | 2,765,212 | 833\% | -14.5 | 0.5282 |
|  | 2033 | 254,356 | 2,703,758 | 1063\% | 292,510 | 2,703,758 | 924\% | -15.5 | 0.5055 |
|  | 2034 | 222,589 | 2,619,579 | 1177\% | 255,978 | 2,619,579 | 1023\% | -16.5 | 0.4837 |
|  | 2035 | 193,452 | 2,506,352 | 1296\% | 222,470 | 2,506,352 | 1127\% | -17.5 | 0.4629 |
|  | 2036 | 166,962 | 2,376,734 | 1424\% | 192,007 | 2,376,734 | 1238\% | -18.5 | 0.4429 |
|  | 2037 | 143,095 | 2,236,481 | 1563\% | 164,559 | 2,236,481 | 1359\% | -19.5 | 0.4239 |
|  | 2038 | 121,794 | 2,075,477 | 1704\% | 140,063 | 2,075,477 | 1482\% | -20.5 | 0.4056 |
|  | 2039 | 102,972 | 1,911,133 | 1856\% | 118,418 | 1,911,133 | 1614\% | -21.5 | 0.3882 |
|  | 2040 | 86,475 | 1,754,130 | 2028\% | 99,446 | 1,754,130 | 1764\% | -22.5 | 0.3714 |
|  | 2041 | 72,126 | 1,603,745 | 2224\% | 82,945 | 1,603,745 | 1933\% | -23.5 | 0.3554 |
|  | 2042 | 59,744 | 1,465,385 | 2453\% | 68,705 | 1,465,385 | 2133\% | -24.5 | 0.3401 |
|  | 2043 | 49,146 | 1,335,038 | 2716\% | 56,518 | 1,335,038 | 2362\% | -25.5 | 0.3255 |
|  | 2044 | 40,148 | 1,212,586 | 3020\% | 46,171 | 1,212,586 | 2626\% | -26.5 | 0.3115 |
|  | 2045 | 32,567 | 1,090,825 | 3350\% | 37,452 | 1,090,825 | 2913\% | -27.5 | 0.2981 |
|  | 2046 | 26,223 | 973,528 | 3712\% | 30,157 | 973,528 | 3228\% | -28.5 | 0.2852 |
|  | 2047 | 20,947 | 854,274 | 4078\% | 24,089 | 854,274 | 3546\% | -29.5 | 0.2729 |
|  | 2048 | 16,594 | 736,556 | 4439\% | 19,083 | 736,556 | 3860\% | -30.5 | 0.2612 |
|  | 2049 | 13,025 | 625,400 | 4801\% | 14,979 | 625,400 | 4175\% | -31.5 | 0.2499 |
|  | 2050 | 10,119 | 523,965 | 5178\% | 11,637 | 523,965 | 4502\% | -32.5 | 0.2392 |
|  | 2051 | 7,772 | 432,512 | 5565\% | 8,938 | 432,512 | 4839\% | -33.5 | 0.2289 |
|  | 2052 | 5,893 | 352,945 | 5989\% | 6,777 | 352,945 | 5208\% | -34.5 | 0.2190 |
|  | 2053 | 4,407 | 284,611 | 6458\% | 5,068 | 284,611 | 5615\% | -35.5 | 0.2096 |
|  | 2054 | 3,247 | 226,900 | 6989\% | 3,734 | 226,900 | 6077\% | -36.5 | 0.2006 |
|  | 2055 | 2,352 | 178,960 | 7608\% | 2,705 | 178,960 | 6615\% | -37.5 | 0.1919 |
|  | 2056 | 1,673 | 139,106 | 8313\% | 1,924 | 139,106 | 7228\% | -38.5 | 0.1837 |
|  | 2057 | 1,168 | 106,220 | 9098\% | 1,343 | 106,220 | 7911\% | -39.5 | 0.1758 |
|  | Past | 14,013,349 | 5,062,394 | 36\% | 14,013,349 | 5,062,394 | 36\% |  |  |
|  | Future | 10,577,220 | 61,387,722 | 580\% | 12,061,184 | 61,387,722 | 509\% |  |  |
|  | Lifetime | 24,590,569 | 66,450,115 | 270\% | 26,074,533 | 66,450,115 | 255\% |  |  |
| $\begin{array}{ll}\text { Interest } & 4.50 \% \\ & \text { Past } \mathrm{w} / \mathrm{int} \\ & \text { Future } \mathrm{w} / \mathrm{int} \\ & \text { Lifetime } \mathrm{w} / \mathrm{int}\end{array}$ |  |  |  |  |  |  |  |  |  |
|  |  | 20,320,475 | 6,822,241 | 34\% | 20,320,475 | 6,822,241 | 34\% |  |  |
|  |  | 7,631,160 | 33,037,637 | 433\% | 8,675,448 | 33,037,637 | 381\% |  |  |
|  |  | 27,951,635 | 39,859,878 | 143\% | 28,995,923 | 39,859,878 | 137\% |  |  |

Lincoln Benefit Life Company
Policy Form: LB-6301, LB-6302, LB-6303
Exhibit G1: Nationwide Policy and Premium Distribution

|  | Policies | Premium | \% of Policies | \% of Premium |
| :---: | :---: | :---: | :---: | :---: |
| Base |  |  |  |  |
| Comprehensive | 12,205 | 38,734,556 | 86\% | 90\% |
| Nursing Home Only | 865 | 2,303,362 | 6\% | 5\% |
| Home Health Only Only | 1,101 | 1,930,150 | 8\% | 4\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| COLA Options |  |  |  |  |
| No COLA | 2,467 | 5,055,932 | 17\% | 12\% |
| Simple COLA | 1,131 | 3,303,838 | 8\% | 8\% |
| Compound COLA | 10,573 | 34,608,297 | 75\% | 81\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Nonforfeiture Options |  |  |  |  |
| None | 13,895 | 41,845,536 | 98\% | 97\% |
| SBP | 77 | 222,211 | 1\% | 1\% |
| Full ROP \& SBP | 16 | 51,186 | 0\% | 0\% |
| Limited ROP | 67 | 214,238 | 0\% | 0\% |
| Full ROP | 116 | 634,896 | 1\% | 1\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Joint/Single Life |  |  |  |  |
| Joint | 6,208 | 23,182,447 | 44\% | 54\% |
| Single | 7,963 | 19,785,621 | 56\% | 46\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Billing Mode |  |  |  |  |
| Annual | 4,914 | 16,332,952 | 35\% | 38\% |
| Semi-Annual | 617 | 1,997,465 | 4\% | 5\% |
| Quarterly | 1,402 | 4,292,387 | 10\% | 10\% |
| Monthly | 7,238 | 20,345,264 | 51\% | 47\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Elimination Period |  |  |  |  |
| 0 Day | 1,702 | 4,365,026 | 12\% | 10\% |
| 30 Days | 3,721 | 11,792,075 | 26\% | 27\% |
| 60 Days | 491 | 1,282,663 | 3\% | 3\% |
| 90 Days | 8,257 | 25,528,304 | 58\% | 59\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Benefit Period (NH/HH) |  |  |  |  |
| 3 Year / 3 Year | 1,955 | 4,750,536 | 14\% | 11\% |
| 5 Year / 3 Year | 158 | 473,665 | 1\% | 1\% |
| 5 Year/5 Year | 1,267 | 3,706,439 | 9\% | 9\% |
| Lifetime / 3 Year | 775 | 2,495,919 | 5\% | 6\% |
| Lifetime / 5 Year | 274 | 922,522 | 2\% | 2\% |
| Lifetime / Lifetime | 9,742 | 30,618,988 | 69\% | 71\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Issue Age Cohort |  |  |  |  |
| 20-29 | 1 | 1,561 | 0\% | 0\% |
| 30-39 | 39 | 58,698 | 0\% | 0\% |
| 40-49 | 916 | 1,770,099 | 6\% | 4\% |
| 50-59 | 5,675 | 14,763,588 | 40\% | 34\% |
| 60-69 | 6,461 | 21,814,743 | 46\% | 51\% |
| 70-79 | 1,060 | 4,441,761 | 7\% | 10\% |
| 80-89 | 19 | 117,617 | 0\% | 0\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Daily Benefit Cohort |  |  |  |  |
| \$1-\$50 | 354 | 556,386 | 2\% | 1\% |
| \$51-\$100 | 6,754 | 18,267,138 | 48\% | 43\% |
| \$101-\$150 | 5,748 | 18,716,312 | 41\% | 44\% |
| \$151-\$200 | 1,076 | 4,399,798 | 8\% | 10\% |
| \$201-\$250 | 231 | 995,391 | 2\% | 2\% |
| \$251-\$300 | 8 | 33,043 | 0\% | 0\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |
| Attained Age Cohort |  |  |  |  |
| 30-39 | 0 | 0 | 0\% | 0\% |
| 40-49 | 7 | 6,381 | 0\% | 0\% |
| 50-59 | 305 | 557,983 | 2\% | 1\% |
| 60-69 | 2,546 | 5,780,672 | 18\% | 13\% |
| 70-79 | 7,437 | 22,200,852 | 52\% | 52\% |
| 80-89 | 3,507 | 12,806,718 | 25\% | 30\% |
| 90-99 | 369 | 1,615,461 | 3\% | 4\% |
| Total | 14,171 | 42,968,068 | 100\% | 100\% |

## Lincoln Benefit Life Company

Policy Form: LB-6301-P-MD, LB-6302-P-MD, LB-6303-P-MD
Exhibit G2: Maryland Policy and Premium Distribution

|  | Policies | Premium | \% of Policies | \% of Premium |
| :---: | :---: | :---: | :---: | :---: |
| Base |  |  |  |  |
| Comprehensive | 269 | 893,372 | 92\% | 96\% |
| Nursing Home Only | 5 | 8,474 | 2\% | 1\% |
| Home Health Only Only | 17 | 31,664 | 6\% | 3\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| COLA Options |  |  |  |  |
| No COLA | 31 | 76,416 | 11\% | 8\% |
| Simple COLA | 18 | 48,698 | 6\% | 5\% |
| Compound COLA | 242 | 808,395 | 83\% | 87\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Nonforfeiture Options |  |  |  |  |
| None | 291 | 933,510 | 100\% | 100\% |
| SBP | 0 | 0 | 0\% | 0\% |
| Full ROP \& SBP | 0 | 0 | 0\% | 0\% |
| Limited ROP | 0 | 0 | 0\% | 0\% |
| Full ROP | 0 | 0 | 0\% | 0\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Joint/Single Life |  |  |  |  |
| Joint | 125 | 509,916 | 43\% | 55\% |
| Single | 166 | 423,594 | 57\% | 45\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Billing Mode |  |  |  |  |
| Annual | 113 | 370,545 | 39\% | 40\% |
| Semi-Annual | 11 | 39,925 | 4\% | 4\% |
| Quarterly | 40 | 115,486 | 14\% | 12\% |
| Monthly | 127 | 407,554 | 44\% | 44\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Elimination Period |  |  |  |  |
| 0 Day | 23 | 78,253 | 8\% | 8\% |
| 30 Days | 75 | 223,774 | 26\% | 24\% |
| 60 Days | 0 | 0 | 0\% | 0\% |
| 90 Days | 193 | 631,483 | 66\% | 68\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Benefit Period (NH/HH) |  |  |  |  |
| 3 Year/3 Year | 44 | 107,373 | 15\% | 12\% |
| 5 Year/3 Year | 6 | 18,786 | 2\% | 2\% |
| 5 Year/5 Year | 24 | 73,163 | 8\% | 8\% |
| Lifetime / 3 Year | 15 | 63,575 | 5\% | 7\% |
| Lifetime / 5 Year | 7 | 19,278 | 2\% | 2\% |
| Lifetime / Lifetime | 195 | 651,334 | 67\% | 70\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Issue Age Cohort |  |  |  |  |
| 20-29 | 0 | 0 | 0\% | 0\% |
| 30-39 | 1 | 2,480 | 0\% | 0\% |
| 40-49 | 31 | 85,309 | 11\% | 9\% |
| 50-59 | 134 | 357,628 | 46\% | 38\% |
| 60-69 | 118 | 460,134 | 41\% | 49\% |
| 70-79 | 7 | 27,959 | 2\% | 3\% |
| 80-89 | 0 | 0 | 0\% | 0\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Daily Benefit Cohort |  |  |  |  |
| \$1-\$50 | 3 | 2,765 | 1\% | 0\% |
| \$51-\$100 | 76 | 178,931 | 26\% | 19\% |
| \$101-\$150 | 163 | 558,819 | 56\% | 60\% |
| \$151-\$200 | 42 | 162,464 | 14\% | 17\% |
| \$201-\$250 | 7 | 30,529 | 2\% | 3\% |
| \$251-\$300 | 0 | 0 | 0\% | 0\% |
| Total | 291 | 933,510 | 100\% | 100\% |
| Attained Age Cohort |  |  |  |  |
| 30-39 | 0 | 0 | 0\% | 0\% |
| 40-49 | 0 | 0 | 0\% | 0\% |
| 50-59 | 15 | 36,348 | 5\% | 4\% |
| 60-69 | 70 | 187,330 | 24\% | 20\% |
| 70-79 | 155 | 512,749 | 53\% | 55\% |
| 80-89 | 49 | 188,597 | 17\% | 20\% |
| 90-99 | 2 | 8,486 | 1\% | 1\% |
| Total | 291 | 933,510 | 100\% | 100\% |


[^0]:    * Premiums for various joint combinations are calculated as $150 \%$ of the base policy premium of the older insured, times the Joint Coverage Risk Class factor

[^1]:    * Premiums for various joint combinations are calculated as $150 \%$ of the base policy premium of the older insured, times the Joint Coverage Risk Class factor

[^2]:    * Based on SOA LTC Intercompany 2000-2011 Study and reinsurer's experiences, 4.5\% interest, Lifetime Benefits, 90 Day Elimination Period

