

**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

**Product or Rider**

**Long Term Care  
Annual 5% Compound Benefit Inflation Rider  
Cost of Living (CPI) Benefit Inflation Rider  
Nonforfeiture Benefit Rider  
Increased Benefits Option Rider**

**Form Number**

**H-LTC3JP20, et al.  
H-5AI  
H-COLI-1  
H-NF3-4  
H-IBOR**

These policy forms are individual policy forms providing comprehensive long term care coverage. These forms were issued in Maryland from January 1994 through February 1997.

**1. Purpose of Filing**

This actuarial memorandum has been prepared for the purpose of documenting the rates and demonstrating that the anticipated loss ratio of this product with those rates meets the minimum requirements in the statutes of Maryland. It may not be suitable for other purposes.

**2. Description of Benefits**

These are individually underwritten policies which pay a daily benefit for Nursing Facility Care, Assisted Living Facility Care, Alzheimer's Facility Care, Hospice Facility Care, Bed Reservation, and Respite Care provided in a Facility setting, Home Health Care, Home Hospice Care, Adult Day Care, and Respite Care provided in a Home or Community Based setting.

Reduced Benefit option pays 80% of expenses up to 50% of the daily benefit amount for Nursing Facility Care. Standard Benefit option pays 80% of expenses up to 100% of the daily benefit amount for Nursing Facility Care. Increased Benefit option pays 100% of expenses up to 100% of the daily benefit amount for Nursing Facility Care.

Elimination periods are generally 20, 60, and 100 days. In some states, a 90 day elimination period also exists. The elimination period applies to all benefits except the Respite Care Benefit, Care Coordination Benefit, and Alternate Plan of Care Benefit. The elimination period must be satisfied in full only once during the life of the contract.

Benefit periods are 2 years, 3 years, 5 years, and unlimited. Benefit eligibility is defined as having a 90-day certification period and not being able to perform at least two of five Activities of Daily Living (ADLs) (dressing, eating, toileting, transferring, and bathing) or cognitive impairment.

The most the company will pay for all services received on one day will be the daily benefit amount for Nursing Facility Care, except for Care Coordination benefits and Alternate Plan of Care benefits, which may be paid in a lump sum.

Premiums will be waived if benefits, other than Respite Care, Care Coordination, or Alternate Plan of Care, are being paid.

A 5% compound and a cost of living (CPI) inflation rider as well as a non-forfeiture rider are available options.

**3. Renewability**

These policy forms are guaranteed renewable for life.

**BRIGHTHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

**4. Applicability**

This filing is applicable to in-force policies only as these policy forms are no longer being sold in the market. The premium changes will apply to the base form and all riders associated with the base form.

**5. Actuarial Assumptions**

- a. Morbidity. In 2015 Genworth long-term care (LTC) actuaries undertook a project to develop a completely new and up-to-date set of claim costs to be used for this block of business. Genworth is the administrator and a reinsurer for these policies. The claim costs were derived from Genworth’s 2014 best estimate morbidity assumptions used for older blocks of Genworth LTC business that correlate to the Brighthouse policy forms.

The Genworth best estimate claim cost assumptions were developed from first principles, using incidence rates, continuance rates, and utilization factors. These rates and factors were individually developed based upon experience from inception to fourth quarter of 2013. Incidence rates were developed by product, gender, attained age, and policy duration. Utilization factors were developed by product, situs, benefit inflation option, benefit period, claim age, diagnosis, and claim duration. Continuance was developed by situs, gender, claim age, and benefit period. The incidence rates, continuance, and utilization factors were then combined together to develop total life claim cost factors which can be applied to life years of LTC exposure adjusted for daily benefit amounts.

The Genworth LTC actuaries then customized the Genworth morbidity assumption for use with the Brighthouse policy forms based on the actual emerging experience of the Brighthouse policy forms. These claim costs provided by Genworth were used as the basis for the morbidity assumption in this filing.

The company reviewed emerging experience in 2016 and determined that no changes were needed to the morbidity assumption developed in 2015.

A cumulative 0.6% increase in morbidity is assumed due to adverse selection from the rate increase.

- b. Termination Rates. Historical termination rates are based on actual experience of these policy forms.

Future voluntary lapse rates vary by duration as developed from actual experience through December 31, 2015, including runout through June 30, 2016, and are shown in the following table:

**Voluntary Lapse Rates**

<b>Policy Duration</b>	<b>Lapse Rate</b>
1	6.0%
2	4.0%
3	2.5%
4	1.5%
5	1.3%
6	1.1%
7	1.0%
8+	0.8%

**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

A benefit exhaustion rate assumption, varying by benefit period, is applied to policies with non-lifetime benefit periods additively in conjunction with the lapse assumption. Policies with benefit periods less than 4 years have been mapped to the 3-year benefit period assumption while all other non-lifetime policies have been mapped to the 5-year benefit period assumption. The benefit exhaustion assumption is not applicable to policies with a lifetime benefit period. Benefit exhaustion rates were developed from actual experience through December 31, 2015, including runout through June 30, 2016, and are shown in the following table:

**Assumed Benefit Exhaustion Rates**

<b>Attained Age</b>	<b>3-year Assumed Rates</b>	<b>5-year Assumed Rates</b>	<b>Attained Age</b>	<b>3-year Assumed Rates</b>	<b>5-year Assumed Rates</b>
< 67	0.000%	0.000%	84	0.912%	0.667%
67	0.013%	0.006%	85	1.109%	0.806%
68	0.016%	0.008%	86	1.346%	0.971%
69	0.020%	0.010%	87	1.632%	1.168%
70	0.025%	0.013%	88	1.980%	1.405%
71	0.031%	0.016%	89	2.405%	1.684%
72	0.039%	0.021%	90	2.928%	2.013%
73	0.049%	0.026%	91	3.533%	2.394%
74	0.062%	0.033%	92	4.221%	2.835%
75	0.077%	0.042%	93	4.996%	3.336%
76	0.097%	0.053%	94	5.859%	3.909%
77	0.123%	0.069%	95	6.814%	4.552%
78	0.199%	0.131%	96	7.862%	5.287%
79	0.282%	0.198%	97	9.003%	6.107%
80	0.376%	0.272%	98	10.202%	6.999%
81	0.482%	0.353%	99	11.503%	8.001%
82	0.603%	0.444%	100	12.907%	9.134%
83	0.745%	0.547%	101+	12.907%	9.134%

In the year of rate increase implementation, an additional 1.0% of in-force policyholders are assumed to lapse, and a 1.5% reduction in premium and claims is expected due to the election of reduced benefits.

Future mortality is based on 1983 IAM with selection factors consistent with experience through December 31, 2015, including runout through June 30, 2016, and shown in the following table:

**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

**Mortality Selection Factors**

<b>Policy Duration</b>	<b>Factor</b>
1	30%
2	45%
3	51%
4	55%
5	59%
6	63%
7	66%
8	68%
9	69%
10	70%
11	71%
12	72%
13	73%
14	75%
15	77%
16	80%
17	84%
18	88%
19	91%
20	94%
21	96%
22	98%
23	100%
24	101%
25+	102%

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

The above assumptions are based on actual experience of the policies in-force under these policy forms and general experience of the reinsurer and are deemed reasonable for these particular policies. Exhibit I provides justification for the assumptions used in this filing.

Exhibit II provides an analysis of actual and projected nationwide experience with respect to changes in morbidity, mortality, lapse, and interest and how changing each assumption from original pricing to current impacts the projected lifetime loss ratio.

Exhibit III provides a comparison of the current and original pricing assumptions used to project the values in Exhibit II.

**6. Marketing Method**

These policy forms were marketed by agents as well as through various subsidiaries of Citigroup.

**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

**7. Underwriting Description**

These policy forms were fully 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.

**8. Premiums**

Premiums are unisex, level and payable for life. The premiums vary by issue age, elimination period, benefit period, initial daily benefit, level of community-based care benefits, and inflation protection option.

**9. Issue Age Range**

Elimination periods of 20, 60, 100, and in some states 90 days are available for issue ages 18 to 79. Only the 60, 90, and 100 day elimination periods of the 2-year benefit period are available for issue ages 80 through 84.

**10. Area Factors**

Area factors are not used for this product.

**11. Premium Modalization Rules**

The following modal factors and nationwide percent distributions (based on in-force count as of 12/31/2016) are applied to the annual premium (AP):

<b>Premium Mode</b>	<b>Modal Factors</b>	<b>Percent Distribution</b>
Annual	1.00*AP	48.8%
Semi-Annual	0.51*AP	20.0%
Quarterly	0.26*AP	6.5%
Monthly	0.09*AP	24.7%

**12. Reserves**

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2016 have been discounted to the incurred date of each respective claim and included in historical incurred claims. Incurred but not reported balances as of December 31, 2016 have been allocated to a calendar year of incurred and included in historic incurred claims.

**13. Trend Assumptions**

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

**14. Past and Future Policy Experience**

Nationwide experience for these policy forms is shown in Exhibit IV. The experience and projections in Exhibit IV have been restated to reflect the rate level approved in Maryland on a nationwide basis as described in Section 16. Maryland-specific experience for these policy forms is shown in Exhibit V.

The company has chosen a credibility standard of a 90% confidence interval for the number of claims with an error of plus or minus 5%. Based on these parameters, 1,082 claims (over the

**BRIGHTHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

entire historical period) is the criterion for full credibility. Using this standard, the nationwide experience provided with this filing is 100.0% credible; whereas Maryland-specific experience is only 62.7% credible. The credibility percentages shown in the following table are determined as  $(\text{Number of Claims} / 1,082)^{1/2}$ .

<b>Experience</b>	<b>Claim Count</b>	<b>Credibility</b>
Maryland	426	62.7%
Nationwide	11,743	100.0%

Maryland-specific experience for the above-referenced forms is not considered fully credible, but is being provided as generally requested by the Administration.

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

$$LR_j = \frac{\sum_{t=j}^{2016} Pmt_t^j * v^{t-j} + {}_jCR_{2016} * v^{2016-j+1/2} + {}_jIBNR_{2016} * v^{2016-j+1/2}}{EP_j}$$

$LR_j$  = loss ratio for year  $j$

$Pmt_t^j$  = claim payments in year  $t$  on claims incurred in year  $j$ , assumed to occur mid-year

${}_jCR_{2016}$  = open claim reserve held on December 31, 2016 for claims incurred in year  $j$

${}_jIBNR_{2016}$  = incurred but not reported reserve as of December 31, 2016 attributable to claims incurred in year  $j$

$EP_j$  = earned premium in year  $j$ , assumed mid-year

$j$  = year of incurral

$v = 1 / 1.045 = 0.956938$

A future annual loss ratio is calculated, with and without interest, as anticipated incurred claims divided by earned premiums.

A lifetime loss ratio as of 12/31/2016 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium. Historical values are accumulated with interest using an interest rate of 4.5% from inception through 2014 and 4.0% for 2015 and 2016. Future values are discounted using an interest rate of 4.0%.

**15. Projected Earned Premiums and Incurred Claims**

Exhibits IV and V contain lifetime projections of earned premium and incurred claims based on the current premiums and the filed premium rate schedule increase. Earned premiums and incurred claims for projection years 2017 through 2056 are developed from an asset share model representing actual contracts in-force as of December 31, 2016. The assumptions described

# BRIGHOUSE LIFE INSURANCE COMPANY

Address: 1209 Orange Street, Wilmington, DE 19801

## Actuarial Memorandum for the LTC3+ Comprehensive Product

September 2017

above for morbidity, voluntary lapse and mortality are used to project life years, earned premiums and incurred claims. The projections reflecting the rate increase assume that the increase is effective on each policy's first anniversary on or after January 1, 2018, but no sooner than 12 months after the prior rate increase was effective.

A large and complex Excel-based and Access-integrated model was used to project the earned premium, incurred claim, and end of year life values. A description of how the model works to project these values on a seriatim basis is provided in Exhibit VI.

Enclosed with this actuarial memorandum is an Excel workbook of Exhibits IV and V. This workbook contains formulas for the projected earned premium, incurred claims, and life years using illustrative factors, which are retained in this workbook.

### 16. History of Previous Rate Revisions

Five prior rate increases have been approved and implemented on these policy forms and associated riders. A 15.0% increase was approved on August 19, 2004 and implemented on each contract's next billing anniversary beginning December 4, 2004. A 15.0% increase was approved on August 13, 2010 and implemented on each contract's next billing anniversary beginning December 2, 2010. A 15.0% increase was approved on February 4, 2014 and implemented on each contract's next billing anniversary beginning September 27, 2014. A 15.0% increase was approved on June 16, 2015 and implemented on each contract's next billing anniversary beginning October 3, 2015. A 15.0% increase was approved on November 9, 2016 and implemented on each contract's next billing anniversary beginning February 4, 2017.

The experience and projections in Exhibit IV have been restated to reflect the rate level approved in Maryland on a nationwide basis. The restated nationwide projections assume the previously approved rate increases in Maryland were implemented on each policy's first anniversary on or after the effective dates of the prior rate increases in Maryland.

Exhibit VII provides a nationwide status listing of the current and all prior rate increase filings for each jurisdiction in which these policy forms are in force.

### 17. Requested Rate Increase and Demonstration of Satisfaction of Loss Ratio Requirements

Emerging experience continues to show the need for significant rate relief. The company is requesting a premium rate increase of 15.0% at this time. Even though the company believes a larger increase is needed to alleviate the poor performance on this block of business, it is limiting the increase to 15.0% to comply with COMAR 31.14.01.04(5).

The company is seeking approximately equal cumulative premium rate increases across all jurisdictions (except where limited by regulatory restrictions) and as such, is requesting a 21.0% increase in all jurisdictions plus the difference between past requests and prior approvals in each jurisdiction.

As mentioned above, the rate increase request is limited to 15.0% in Maryland in order to comply with COMAR 31.14.01.04(5). Absent this restriction, the company would be requesting a 57.9% rate increase in Maryland at this time. Exhibit VIII shows projected nationwide experience with a 57.9% rate increase. Similar to Exhibit IV, the experience and projections in Exhibit VIII have been restated to reflect the rate level approved in Maryland on a nationwide basis.

As shown in Exhibit VIII, the projected lifetime loss ratio would be 118.3% if the company were able to request a 57.9% rate increase. The company agrees to establish this as a target loss ratio for this product going forward. This means that any future rate increase requests will result in a lifetime loss ratio exceeding 118.3%. As the current 15.0% rate increase request does not achieve the target loss ratio of 118.3%, future rate increase requests are likely.

**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

Projected experience assuming the requested increase is implemented is shown in Exhibits IV and V. As shown in Exhibits IV and V, the expected lifetime loss ratio with and without the requested rate increase exceeds the minimum loss ratio of 60.0%.

Corresponding rate tables are included with this memorandum in Exhibit IX. The actual rates implemented may vary slightly from those in Exhibit IX due to rounding in the implementation algorithm.

**18. Maryland Average Annual Premium (Annual Premium Based on 2016 In-force)**

Before increase: \$4,175  
After increase: \$4,801

**19. Proposed Effective Date**

The rate increase will apply to policies on their billing anniversary date following at least a 60-day policyholder notification period following approval, but no sooner than 12 months after the prior rate increase was effective.

**20. Nationwide Distribution of Business as of 12/31/2016 (based on in-force count)**

By Issue Age:

<b>Issue Ages</b>	<b>Percent Distribution</b>
< 48	3.3%
48 - 52	8.0%
53 - 57	15.7%
58 - 62	25.9%
63 - 67	30.4%
68 - 72	13.9%
73 +	2.8%

By Elimination Period:

<b>Elimination Period</b>	<b>Percent Distribution</b>
20-day	41.5%
60-day	15.8%
90-day	2.0%
100-day	40.7%



**BRIGHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

By Benefit Period:

<b>Benefit Period</b>	<b>Percent Distribution</b>
2-Year	5.1%
3-Year	29.5%
5-Year	31.5%
Unlimited	33.9%

By Inflation Protection Option:

<b>Inflation Option</b>	<b>Percent Distribution</b>
None	12.1%
Compound	46.6%
CPI	41.3%

By Home Care (HC) Daily Benefit:

<b>HC Benefit Option</b>	<b>Percent Distribution</b>
Reduced	12.0%
Standard	39.8%
Increased	48.2%

**21. Number of Policyholders**

As of 12/31/2016, the number of policies in-force and annualized premium in the state and nationwide are:

	<b>Number of Insured</b>	<b>Annual Premium* based on 2016 In-force</b>
Maryland	645	\$2,692,801
Nationwide	17,690	\$62,805,977

\*Annualized premiums reflect all prior rate increases approved prior to March 21, 2017.

**BRIGHTHOUSE LIFE INSURANCE COMPANY**

**Address: 1209 Orange Street, Wilmington, DE 19801**

**Actuarial Memorandum for the LTC3+ Comprehensive Product**

**September 2017**

**22. Actuarial Certification**

I am a Principal and Consulting Actuary for Milliman, Inc. and have been retained by GNA Corporation (Genworth), a reinsurer of this business, to prepare this memorandum on behalf of Brighthouse Life Insurance Company. I am a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries. I meet the Academy's qualification standards to render this actuarial opinion and am familiar with the requirements for filing long-term care insurance premium and rate increases. This memorandum has been prepared for the sole purpose stated, and it may not be appropriate for other purposes.

I believe this rate filing is in compliance with the applicable laws of the State of Maryland and with the rules of the Administration. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8 and 18.

I hereby certify that, to the best of my knowledge and judgment, this rate submission is in compliance with the applicable laws and regulations of the state where it is filed. In my opinion, the actuarial assumptions are appropriate and the rates are not excessive or unfairly discriminatory. Furthermore, the gross premiums bear reasonable relationship to the benefits, based on the lifetime loss ratio exceeding the minimum loss ratio requirement.

In preparing this actuarial memorandum, I relied on data and assumptions provided to me by Union Fidelity Life Insurance Company, the retrocessionaire on this business, and Genworth. I did not audit this information but did review it for reasonableness and for consistency with the intended purpose. To the extent that this information is incomplete or inaccurate the contents of this memorandum may be materially affected.



Mike Bergerson, FSA, MAAA  
Principal and Consulting Actuary, Milliman, Inc.

Date: September 18, 2017

**Exhibit I**  
**Brighthouse Life Insurance Company**  
**Assumption Justification**  
**LTC3+ Comprehensive Policy Form**

**Voluntary Lapse**

The voluntary lapse assumption for this policy form was developed from experience on all of Brighthouse's individual long-term care (LTC) policy forms combined.

Table 1 below provides a comparison of the actual voluntary lapse rates for all individual LTC policy forms combined through December 2015, including runout through June 2016, and the currently assumed voluntary lapse rates for this policy form.

**Table 1**  
**Actual and Assumed Voluntary Lapse Rates**  
**Using Experience through December 2015**

Duration	Actual Lapse Rates	Currently Assumed Lapse Rates
1	6.0%	6.0%
2	4.1%	4.0%
3	2.4%	2.5%
4	1.6%	1.5%
5	1.2%	1.3%
6	1.0%	1.1%
7	0.9%	1.0%
8 +	0.8%	0.8%

Table 2 below provides the benefit exhaustion rate assumption. This assumption which was embedded in the voluntary lapse assumption prior to 2014 is now split out as a separate assumption. This assumption, varying by benefit period, is applied to policies with non-lifetime benefit periods additively in conjunction with the lapse assumption. Policies with benefit periods less than 4 years have been mapped to the 3-year benefit period assumption while all other non-lifetime policies have been mapped to the 5-year benefit period assumption. The benefit exhaustion assumption is not applicable to policies with a lifetime benefit period. The assumption is based on actual benefit exhaustion experience for all individual LTC policy forms combined through December 2015, including runout through June 2016.

**Table 2**  
**Assumed Benefit Exhaustion Rates**  
**Using Experience through December 2015**

Attained Age	3-year Assumed Rates	5-year Assumed Rates	Attained Age	3-year Assumed Rates	5-year Assumed Rates
< 67	0.000%	0.000%	84	0.912%	0.667%
67	0.013%	0.006%	85	1.109%	0.806%
68	0.016%	0.008%	86	1.346%	0.971%
69	0.020%	0.010%	87	1.632%	1.168%
70	0.025%	0.013%	88	1.980%	1.405%
71	0.031%	0.016%	89	2.405%	1.684%
72	0.039%	0.021%	90	2.928%	2.013%
73	0.049%	0.026%	91	3.533%	2.394%
74	0.062%	0.033%	92	4.221%	2.835%
75	0.077%	0.042%	93	4.996%	3.336%
76	0.097%	0.053%	94	5.859%	3.909%
77	0.123%	0.069%	95	6.814%	4.552%
78	0.199%	0.131%	96	7.862%	5.287%
79	0.282%	0.198%	97	9.003%	6.107%
80	0.376%	0.272%	98	10.202%	6.999%
81	0.482%	0.353%	99	11.503%	8.001%
82	0.603%	0.444%	100	12.907%	9.134%
83	0.745%	0.547%	101+	12.907%	9.134%

**Exhibit I**  
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**Assumption Justification**  
**LTC3+ Comprehensive Policy Form**

In the year of rate increase implementation, an additional 1.0% of in-force policyholders are assumed to lapse, and a 1.5% reduction in premium and claims is expected due to the election of reduced benefits. These assumptions are loosely based on data from prior rate increase requests as well as actuarial judgment.

**Mortality**

The mortality assumption for this policy form was developed from experience on all of Brighthouse's individual LTC policy forms combined.

Future mortality is based on the 1983 Individual Annuitant Mortality Table with selection consistent with experience. Table 3 below provides a comparison of the actual selection experienced through December 2015, including runout through June 2016, and the currently assumed selection factors.

**Table 3**  
**Actual and Assumed Mortality Selection Factors**  
**Using Experience through December 2015**

<b>Duration</b>	<b>Actual Selection Factors</b>	<b>Currently Assumed Selection Factors</b>
1	29%	30%
2	48%	45%
3	51%	51%
4	56%	55%
5	57%	59%
6	64%	63%
7	66%	66%
8	68%	68%
9	69%	69%
10	69%	70%
11	70%	71%
12	73%	72%
13	75%	73%
14	75%	75%
15	75%	77%
16	81%	80%
17	81%	84%
18	89%	88%
19	90%	91%
20	93%	94%
21	93%	96%
22	98%	98%
23	105%	100%
24	114%	101%
25+	100%	102%

**Exhibit I**  
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**LTC3+ Comprehensive Policy Form**

**Morbidity**

In 2015 Genworth LTC actuaries undertook a project to develop a completely new and up-to-date set of claim costs to be used for this block of business. Genworth is the administrator and a reinsurer for these policies. The claim costs were derived from Genworth's 2014 best estimate morbidity assumptions used for older blocks of Genworth LTC business that correlate to the Brighthouse policy forms.

The Genworth best estimate claim cost assumptions were developed from first principles, using incidence rates, continuance rates, and utilization factors. These rates and factors were individually developed based upon experience from inception to fourth quarter of 2013. Incidence rates were developed by product, gender, attained age, and policy duration. Utilization factors were developed by product, situs, benefit inflation option, benefit period, claim age, diagnosis, and claim duration. Continuance was developed by situs, gender, claim age, and benefit period. The incidence rates, continuance, and utilization factors were then combined together to develop total life claim cost factors which can be applied to life years of LTC exposure adjusted for daily benefit amounts.

The Genworth LTC actuaries then customized the Genworth morbidity assumption for use with the Brighthouse policy forms based on the actual emerging experience of the Brighthouse policy forms. These claim costs provided by Genworth were used as the basis for the morbidity assumption in this filing.

The company reviewed emerging experience in 2016 and determined that no changes were needed to the morbidity assumption developed in 2015.

Table 4 below provides a projection of historical experience using the current morbidity assumption compared to actual historical experience for this policy form and other similar policy forms sold during the same issue era. As seen in this table, the assumption validates reasonably well to emerging experience.

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**Table 4**  
**Nationwide Historical Actual-to-Model Incurred Claim Projection Results (in 000's)**

Policy Duration	Actual Incurred Claims	Model Incurred Claims	Actual To Model	Cumulative Actual Incurred Claims	Cumulative Model Incurred Claims	Cumulative Actual To Model
1	\$9,823	\$17,946	55%	\$9,823	\$17,946	55%
2	19,025	25,809	74%	28,848	43,755	66%
3	25,962	34,665	75%	54,810	78,420	70%
4	35,676	44,907	79%	90,486	123,327	73%
5	49,192	57,078	86%	139,679	180,405	77%
6	60,333	67,636	89%	200,011	248,041	81%
7	76,170	78,967	96%	276,182	327,009	84%
8	86,843	91,430	95%	363,024	418,439	87%
9	106,442	106,269	100%	469,466	524,708	89%
10	125,631	122,966	102%	595,097	647,673	92%
11	145,182	141,675	102%	740,279	789,349	94%
12	162,959	159,251	102%	903,237	948,600	95%
13	189,800	179,344	106%	1,093,038	1,127,944	97%
14	212,073	200,577	106%	1,305,111	1,328,521	98%
15	247,704	222,638	111%	1,552,814	1,551,159	100%
16	267,867	245,365	109%	1,820,681	1,796,524	101%
17	280,404	253,303	111%	2,101,086	2,049,828	103%
18	249,921	229,624	109%	2,351,006	2,279,452	103%
19	207,699	186,691	111%	2,558,705	2,466,143	104%
20	153,147	136,566	112%	2,711,852	2,602,709	104%
21	69,793	72,112	97%	2,781,645	2,674,820	104%
22	23,429	25,076	93%	2,805,074	2,699,896	104%
23	1,872	2,604	72%	2,806,946	2,702,500	104%

Exhibit I-a provides an analysis of the loss ratios using three-year groupings of the before increase values with experience restated to the originally filed rate level. The use of three-year groupings and restating of earned premium to the original rate level smooths the historical and projected loss ratios and aids in identifying the trend in claim experience. As seen in Exhibit I-a, the annualized trend in loss ratios is reasonably consistent from the historical to projection periods.

**Exhibit I**  
**Brighthouse Life Insurance Company**  
**Assumption Justification**  
**LTC3+ Comprehensive Policy Form**

**Interest Rate**

The company has provided actual historical earned rates on the assets backing its LTC products in Table 5 below. Actual earned rates are unavailable prior to 2004. The historical earned rates are net of investment expenses and default risk, but are provided on both a pre-tax and post-tax basis.

**Table 5**  
**Historical Earned Investment Rates**  
**Net of Investment Expenses and Default Risk**

<b>Calendar Year</b>	<b>Pre-Tax Rates</b>	<b>Post-Tax Rates</b>
2004	6.19%	4.17%
2005	6.17%	4.16%
2006	6.38%	4.30%
2007	6.02%	4.06%
2008	5.14%	4.04%
2009	5.12%	4.03%
2010	5.92%	4.04%
2011	5.93%	4.05%
2012	5.77%	3.95%
2013	5.68%	3.89%
2014	5.56%	3.81%
2015	5.26%	3.61%
2016	5.22%	3.57%

A 4.5% interest rate assumption had been used for this block of business. However, based on the continued low interest rate environment, the company has revised its interest rate assumption to be 4.5% for historical years through 2014 and 4.0% for years 2015 and later (including all projection years). This assumption, like all assumptions, will continue to be monitored and updates will be made as the interest rate environment changes.

**Expenses**

Expenses have not been reflected in the projections for this filing. It is assumed that the originally filed expense assumptions remain appropriate.

**Exhibit I-a**  
**Brighthouse Life Insurance Company**  
**Nationwide Three-Year Average Experience Projections Restated to the Original Rate Level with No Increase**  
**LTC3+ Comprehensive Policy Form**

<b>Loss Ratio Demonstration with Interest</b>									
	<b>Calendar Year Values</b>			<b>3-Year Totals</b>			<b>Analysis</b>		
	Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	3-Year Trend	Annualized Trend
Historical Experience	1993	326	0	0.0%					
	1994	3,794,162	0	0.0%	37,434,185	1,494,362	4.0%		
	1995	33,639,697	1,494,362	4.4%					
	1996	90,658,581	4,757,133	5.2%					
	1997	134,193,280	26,896,816	20.0%	357,322,482	53,100,317	14.9%	3.72	1.55
	1998	132,470,621	21,446,368	16.2%					
	1999	127,254,358	30,831,824	24.2%					
	2000	119,336,870	40,079,812	33.6%	359,627,379	120,325,502	33.5%	2.25	1.31
	2001	113,036,151	49,413,866	43.7%					
	2002	106,943,787	54,848,993	51.3%					
	2003	100,781,005	59,985,859	59.5%	302,364,176	187,435,505	62.0%	1.85	1.23
	2004	94,639,385	72,600,653	76.7%					
	2005	87,516,635	76,839,395	87.8%					
	2006	81,343,968	78,167,927	96.1%	245,393,260	242,575,255	98.9%	1.59	1.17
	2007	76,532,657	87,567,933	114.4%					
	2008	71,829,377	105,208,586	146.5%					
	2009	67,223,142	109,074,453	162.3%	201,531,377	338,208,875	167.8%	1.70	1.19
2010	62,478,858	123,925,836	198.3%						
2011	56,321,798	123,983,041	220.1%						
2012	51,272,143	139,322,026	271.7%	154,616,856	407,013,754	263.2%	1.57	1.16	
2013	47,022,914	143,708,687	305.6%						
2014	42,533,891	138,921,635	326.6%						
2015	37,531,013	136,312,192	363.2%	113,079,781	400,382,141	354.1%	1.35	1.10	
2016	33,014,877	125,148,315	379.1%						
Projected Future Experience	2017	29,218,855	111,138,937	380.4%					
	2018	25,379,885	106,133,558	418.2%	76,480,458	317,469,530	415.1%	1.17	1.05
	2019	21,881,718	100,197,035	457.9%					
	2020	18,730,902	93,652,661	500.0%					
	2021	15,925,054	86,702,855	544.4%	48,108,816	259,910,207	540.3%	1.30	1.09
	2022	13,452,859	79,554,691	591.4%					
	2023	11,294,483	72,603,446	642.8%					
	2024	9,424,944	66,197,839	702.4%	28,537,358	199,161,253	697.9%	1.29	1.09
	2025	7,817,931	60,359,968	772.1%					
	2026	6,446,872	54,644,134	847.6%					
	2027	5,285,739	49,138,055	929.6%	16,042,138	147,646,300	920.4%	1.32	1.10
	2028	4,309,528	43,864,111	1017.8%					
	2029	3,494,605	38,840,937	1111.5%					
	2030	2,818,925	34,155,890	1211.7%	8,575,854	102,835,784	1199.1%	1.30	1.09
	2031	2,262,324	29,838,958	1319.0%					
	2032	1,806,651	25,960,431	1436.9%					
	2033	1,435,814	22,523,860	1568.7%	4,378,170	67,952,161	1552.1%	1.29	1.09
	2034	1,135,704	19,467,870	1714.2%					
	2035	894,101	16,730,894	1871.3%					
	2036	700,570	14,247,001	2033.6%	2,140,983	43,007,176	2008.8%	1.29	1.09
	2037	546,312	12,029,281	2201.9%					
	2038	423,957	10,075,932	2376.6%					
	2039	327,374	8,356,510	2552.6%	1,002,833	25,287,492	2521.6%	1.26	1.08
	2040	251,502	6,855,051	2725.6%					
	2041	192,194	5,553,918	2889.7%					
	2042	146,070	4,452,900	3048.5%	448,646	13,541,241	3018.2%	1.20	1.06
	2043	110,382	3,534,423	3202.0%					
2044	82,915	2,768,980	3339.5%						
2045	61,894	2,144,366	3464.6%	190,710	6,551,014	3435.1%	1.14	1.04	
2046	45,900	1,637,668	3567.9%						
2047	33,805	1,235,837	3655.8%						
2048	24,718	923,038	3734.3%	76,462	2,840,998	3715.5%	1.08	1.03	
2049	17,939	682,122	3802.4%						
2050	12,920	498,753	3860.3%						
2051	9,234	360,498	3904.1%	28,703	1,116,420	3889.6%	1.05	1.02	
2052	6,549	257,169	3926.8%						
2053	4,610	180,899	3923.8%						
2054	3,222	126,147	3914.8%	10,070	393,847	3911.2%	1.01	1.00	
2055	2,237	86,802	3880.2%						
2056	1,543	59,056	3827.1%						
Past		1,771,369,496	1,750,535,711	98.8%					
Future		186,022,744	1,187,772,478	638.5%					
Lifetime		1,957,392,240	2,938,308,189	150.1%					



**Exhibit II**  
**Brighthouse Life Insurance Company**  
**Nationwide Experience**  
**Impact on the Lifetime Loss Ratio of Changing from Original Pricing to Current Assumptions**

The following table provides the isolated impact of each changed assumption (current versus original pricing) on the projected lifetime loss ratio when actual historical experience and rate history is reflected and only the projection assumptions vary. All of the lifetime loss ratios in the table below reflect actual historical experience, except for the loss ratio calculated using the original pricing assumptions from inception.

This table also shows the rate increase needed to produce a lifetime loss ratio of 86.4%. This lifetime loss ratio represents the maximum of the lifetime loss ratio based on (a) original pricing assumptions from inception and (b) historical experience and projections with original pricing assumptions.

Please note that the lifetime loss ratio for each changed assumption does not reflect any synergy of the assumptions. As a result, the total impact of all current assumptions on the lifetime loss ratio (e.g. 39.8%) is not equal to the sum of each changed assumptions' impact on the lifetime loss ratio (e.g. 26.3% = 4.2% + 4.6% + 1.4% + 16.1%).

**LTC3+ Comprehensive Policy Form**

Scenario	Lifetime Loss Ratio	Impact of Each Assumption on the Lifetime Loss Ratio	Increase Needed to Produce a Lifetime Loss Ratio of 86.4%*
Original Pricing Assumptions	46.6%	N/A	N/A
Historical Experience & Projections with Original Pricing Assumptions	86.4%	N/A	0.0%
Historical Experience & Projections with Original Pricing Assumptions except for Current:			
Morbidity	90.6%	4.2%	91.9%
Mortality	91.0%	4.6%	73.5%
Lapse	87.8%	1.4%	28.1%
Interest	102.5%	16.1%	218.6%
Historical Experience & Projections with All Current Assumptions	126.2%	39.8%	344.0%

\* Calculations ignore the effects of shock lapse, reduced benefit option election, and adverse selection due to the needed rate increase. Calculations do not include the effects of rate increases implemented after March 21, 2017 and assume that the needed rate increase is fully implemented on January 1, 2018.

**Exhibit III**  
**Brighthouse Life Insurance Company**  
**Original Pricing & Current Assumptions Comparison**

**Policy Form:** LTC3+ Comprehensive Policy Form

**Original Pricing Assumptions**

**Mortality:** 1980 Commissioners Standard Ordinary Table D

**Voluntary Lapse Rates:**

<b>Duration</b>	<b>Rate</b>
1	13.00%
2	10.00%
3	7.00%
4+	4.00%

**Morbidity:** Data published by the National Center for Health Statistics ("NCHS") in 1977 and 1985, the Wilkins adjustments to the 1985 National Nursing Home Survey conducted by the NCHS, the 1982 and 1984 National Long Term Care Surveys, and the NCHS advance data publications #92 and #133.

**Interest Rate:** 7.5%

**Exhibit III**  
**Brighthouse Life Insurance Company**  
**Original Pricing & Current Assumptions Comparison**

**Policy Form:** LTC3+ Comprehensive Policy Form

**Current Assumptions**

**Mortality:** 1983 Individual Annuitant Mortality Basic Table with selection.

<b>Duration</b>	<b>Factor</b>
1	30%
2	45%
3	51%
4	55%
5	59%
6	63%
7	66%
8	68%
9	69%
10	70%
11	71%
12	72%
13	73%
14	75%
15	77%
16	80%
17	84%
18	88%
19	91%
20	94%
21	96%
22	98%
23	100%
24	101%
25+	102%

**Voluntary Lapse Rates:**

<b>Duration</b>	<b>Rate</b>
1	6.0%
2	4.0%
3	2.5%
4	1.5%
5	1.3%
6	1.1%
7	1.0%
8+	0.8%

**Exhibit III**  
**Brighthouse Life Insurance Company**  
**Original Pricing & Current Assumptions Comparison**

**Policy Form:** LTC3+ Comprehensive Policy Form

**Current Assumptions**

**Voluntary Lapse Rates (Continued):**

A benefit exhaustion rate assumption, varying by benefit period, is applied to policies with non-lifetime benefit periods additively in conjunction with the lapse assumption. Policies with benefit periods less than 4 years have been mapped to the 3-year benefit period assumption while all other non-lifetime policies have been mapped to the 5-year benefit period assumption. The benefit exhaustion assumption is not applicable to policies with a lifetime benefit period.

Attained Age	3-year Assumed Rates	5-year Assumed Rates	Attained Age	3-year Assumed Rates	5-year Assumed Rates
< 67	0.000%	0.000%	84	0.912%	0.667%
67	0.013%	0.006%	85	1.109%	0.806%
68	0.016%	0.008%	86	1.346%	0.971%
69	0.020%	0.010%	87	1.632%	1.168%
70	0.025%	0.013%	88	1.980%	1.405%
71	0.031%	0.016%	89	2.405%	1.684%
72	0.039%	0.021%	90	2.928%	2.013%
73	0.049%	0.026%	91	3.533%	2.394%
74	0.062%	0.033%	92	4.221%	2.835%
75	0.077%	0.042%	93	4.996%	3.336%
76	0.097%	0.053%	94	5.859%	3.909%
77	0.123%	0.069%	95	6.814%	4.552%
78	0.199%	0.131%	96	7.862%	5.287%
79	0.282%	0.198%	97	9.003%	6.107%
80	0.376%	0.272%	98	10.202%	6.999%
81	0.482%	0.353%	99	11.503%	8.001%
82	0.603%	0.444%	100	12.907%	9.134%
83	0.745%	0.547%	101+	12.907%	9.134%

**Morbidity:**

In 2015 Genworth long-term care (LTC) actuaries undertook a project to develop a completely new and up-to-date set of claim costs to be used for this block of business. Genworth is the administrator and a reinsurer for these policies. The claim costs were derived from Genworth's 2014 best estimate morbidity assumptions used for older blocks of Genworth LTC business that correlate to the Brighthouse policy forms.

The Genworth best estimate claim cost assumptions were developed from first principles, using incidence rates, continuance rates, and utilization factors. These rates and factors were individually developed based upon experience from inception to fourth quarter of 2013. Incidence rates were developed by product, gender, attained age, and policy duration. Utilization factors were developed by product, situs, benefit inflation option, benefit period, claim age, diagnosis, and claim duration. Continuance was developed by situs, gender, claim age, and benefit period. The incidence rates, continuance, and utilization factors were then combined together to develop total life claim cost factors which can be applied to life years of LTC exposure adjusted for daily benefit amounts.

The Genworth LTC actuaries then customized the Genworth morbidity assumption for use with the Brighthouse policy forms based on the actual emerging experience of the Brighthouse policy forms. These claim costs provided by Genworth were used as the basis for the morbidity assumption in this filing.

The company reviewed emerging experience in 2016 and determined that no changes were needed to the morbidity assumption developed in 2015.

**Interest Rate:**

4.5% from inception through 2014 and 4.0% for 2015 and beyond.

**Exhibit IV  
Brighthouse Life Insurance Company  
Nationwide Experience Projections with No Increase  
LTC3+ Comprehensive Policy Form**

	Loss Ratio Demonstration							Interest Rate Factors		
	Calendar Year	Without Interest			Life Years	With Interest			Calendar Year Effective Int Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio		Earned Premium	Incurred Claims	Loss Ratio		
Historical Experience	1993	117	0	0.0%	1	326	0	0.0%	4.5%	2.7866
	1994	1,422,870	0	0.0%	3,349	3,794,162	0	0.0%	4.5%	2.6666
	1995	13,183,106	585,628	4.4%	14,880	33,639,697	1,494,362	4.4%	4.5%	2.5517
	1996	37,127,086	1,948,172	5.2%	35,113	90,658,581	4,757,133	5.2%	4.5%	2.4418
	1997	57,428,703	11,510,630	20.0%	35,609	134,193,280	26,896,816	20.0%	4.4%	2.3367
	1998	59,242,599	9,591,097	16.2%	36,385	132,470,621	21,446,368	16.2%	4.4%	2.2361
	1999	59,470,760	14,408,874	24.2%	35,393	127,254,359	30,831,824	24.2%	4.4%	2.1398
	2000	58,280,297	19,573,694	33.6%	34,595	119,336,870	40,079,812	33.6%	4.4%	2.0476
	2001	57,686,952	25,218,093	43.7%	33,833	113,035,327	49,413,866	43.7%	4.4%	1.9595
	2002	57,034,186	29,251,514	51.3%	33,085	106,943,787	54,848,993	51.3%	4.4%	1.8751
	2003	56,166,151	33,430,653	59.5%	32,350	100,781,005	59,985,859	59.5%	4.4%	1.7943
	2004	55,153,896	42,281,735	76.7%	31,337	94,703,041	72,600,653	76.7%	4.4%	1.7171
	2005	57,956,935	46,764,091	80.7%	30,242	95,230,672	76,839,395	80.7%	4.4%	1.6431
	2006	59,493,684	49,713,398	83.6%	29,267	93,546,170	78,167,927	83.6%	4.4%	1.5724
	2007	58,493,640	58,197,756	99.5%	28,342	88,013,138	87,567,933	99.5%	4.4%	1.5047
	2008	57,369,401	73,068,235	127.4%	27,388	82,604,343	105,208,586	127.4%	4.4%	1.4399
	2009	56,106,525	79,162,001	141.1%	26,371	77,307,148	109,074,453	141.1%	4.4%	1.3779
2010	54,533,480	93,987,884	172.3%	25,302	71,904,025	123,925,836	172.3%	4.3%	1.3185	
2011	55,903,808	98,262,677	175.8%	24,024	70,536,691	123,983,041	175.8%	4.3%	1.2618	
2012	56,159,262	115,388,459	205.5%	22,899	67,807,666	139,322,026	205.5%	4.3%	1.2074	
2013	53,822,925	124,377,524	231.1%	21,741	62,188,261	143,708,687	231.1%	4.2%	1.1554	
2014	51,153,274	125,644,957	245.6%	20,330	56,558,549	138,921,635	245.6%	4.1%	1.1057	
2015	52,328,721	128,524,135	245.6%	18,869	55,499,635	136,312,192	245.6%	4.0%	1.0606	
2016	54,685,498	122,718,019	224.4%	17,690	55,768,484	125,148,315	224.4%	4.0%	1.0198	
Projected Future Experience	2017	54,682,663	113,339,921	207.3%	16,308	53,620,763	111,138,937	207.3%	4.0%	0.9806
	2018	54,035,666	112,564,834	208.3%	14,935	50,948,394	106,133,558	208.3%	4.0%	0.9429
	2019	48,470,019	110,519,323	228.0%	13,590	43,943,014	100,197,035	228.0%	4.0%	0.9066
	2020	43,150,850	107,432,779	249.0%	12,289	37,616,005	93,652,661	249.0%	4.0%	0.8717
	2021	38,155,075	103,438,788	271.1%	11,047	31,981,754	86,702,855	271.1%	4.0%	0.8382
	2022	33,521,905	98,707,275	294.5%	9,874	27,017,510	79,554,691	294.5%	4.0%	0.8060
	2023	29,270,165	93,685,836	320.1%	8,776	22,683,417	72,603,446	320.1%	4.0%	0.7750
	2024	25,402,969	88,836,994	349.7%	7,757	18,929,295	66,197,839	349.7%	4.0%	0.7452
	2025	21,915,255	84,242,721	384.4%	6,818	15,702,295	60,359,968	384.4%	4.0%	0.7165
	2026	18,795,538	79,315,902	422.0%	5,960	12,949,054	54,644,134	422.0%	4.0%	0.6889
	2027	16,027,451	74,176,788	462.8%	5,183	10,617,307	49,138,055	462.8%	4.0%	0.6624
	2028	13,590,749	68,864,078	506.7%	4,483	8,656,852	43,864,111	506.7%	4.0%	0.6370
	2029	11,462,216	63,417,109	553.3%	3,858	7,020,238	38,840,937	553.3%	4.0%	0.6125
	2030	9,616,396	57,998,356	603.1%	3,303	5,663,205	34,155,890	603.1%	4.0%	0.5889
	2031	8,026,818	52,694,716	656.5%	2,814	4,545,273	29,838,958	656.5%	4.0%	0.5663
	2032	6,666,898	47,679,166	715.2%	2,386	3,630,004	25,960,431	715.2%	4.0%	0.5445
	2033	5,510,737	43,022,229	780.7%	2,013	2,885,091	22,523,860	780.7%	4.0%	0.5235
	2034	4,533,559	38,672,467	853.0%	1,689	2,282,211	19,467,870	853.0%	4.0%	0.5034
	2035	3,712,130	34,564,949	931.1%	1,411	1,796,827	16,730,894	931.1%	4.0%	0.4840
	2036	3,025,179	30,610,723	1011.9%	1,172	1,407,995	14,247,001	1011.9%	4.0%	0.4654
	2037	2,453,594	26,879,620	1095.5%	969	1,098,043	12,029,281	1095.5%	4.0%	0.4475
	2038	1,980,367	23,415,423	1182.4%	796	852,175	10,075,932	1182.4%	4.0%	0.4303
	2039	1,590,483	20,196,451	1269.8%	650	658,080	8,356,510	1269.8%	4.0%	0.4138
	2040	1,270,826	17,230,352	1355.8%	528	505,595	6,855,051	1355.8%	4.0%	0.3978
	2041	1,010,053	14,518,317	1437.4%	426	386,391	5,553,918	1437.4%	4.0%	0.3825
	2042	798,403	12,105,789	1516.3%	342	293,678	4,452,900	1516.3%	4.0%	0.3678
	2043	627,501	9,993,141	1592.5%	272	221,938	3,534,423	1592.5%	4.0%	0.3537
	2044	490,236	8,142,105	1660.9%	215	166,720	2,768,980	1660.9%	4.0%	0.3401
	2045	380,606	6,557,662	1723.0%	169	124,459	2,144,366	1723.0%	4.0%	0.3270
2046	293,557	5,208,461	1774.3%	132	92,301	1,637,668	1774.3%	4.0%	0.3144	
2047	224,858	4,087,692	1817.9%	102	67,982	1,235,837	1817.9%	4.0%	0.3023	
2048	170,996	3,175,191	1856.9%	78	49,709	923,038	1856.9%	4.0%	0.2907	
2049	129,068	2,440,314	1890.7%	59	36,077	682,122	1890.7%	4.0%	0.2795	
2050	96,678	1,855,676	1919.4%	44	25,984	498,753	1919.4%	4.0%	0.2688	
2051	71,860	1,394,933	1941.2%	33	18,571	360,498	1941.2%	4.0%	0.2584	
2052	53,006	1,034,908	1952.5%	25	13,172	257,169	1952.5%	4.0%	0.2485	
2053	38,807	757,098	1950.9%	18	9,272	180,899	1950.9%	4.0%	0.2389	
2054	28,209	549,069	1946.4%	13	6,481	126,147	1946.4%	4.0%	0.2297	
2055	20,367	392,927	1929.2%	9	4,499	86,802	1929.2%	4.0%	0.2209	
2056	14,611	278,024	1902.8%	7	3,104	59,056	1902.8%	4.0%	0.2124	
Past		1,180,203,876	1,303,609,227	110.5%	618,395	1,933,775,838	1,750,535,711	90.5%		
Future		461,316,324	1,663,998,107	360.7%	140,552	368,530,737	1,187,772,478	322.3%		
Lifetime		1,641,520,201	2,967,607,333	180.8%	758,947	2,302,306,575	2,938,308,189	127.6%		

**Exhibit IV**  
**Brighthouse Life Insurance Company**  
**Nationwide Experience Projections with 15.0% Increase**  
**LTC3+ Comprehensive Policy Form**

	Calendar Year	Loss Ratio Demonstration						Interest Rate Factors		
		Without Interest			Life Years	With Interest			Calendar Year Effective Int Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio		Earned Premium	Incurred Claims	Loss Ratio		
Historical Experience	1993	117	0	0.0%	1	326	0	0.0%	4.5%	2.7866
	1994	1,422,870	0	0.0%	3,349	3,794,162	0	0.0%	4.5%	2.6666
	1995	13,183,106	585,628	4.4%	14,880	33,639,697	1,494,362	4.4%	4.5%	2.5517
	1996	37,127,086	1,948,172	5.2%	35,113	90,658,581	4,757,133	5.2%	4.5%	2.4418
	1997	57,428,703	11,510,630	20.0%	35,609	134,193,280	26,896,816	20.0%	4.4%	2.3367
	1998	59,242,599	9,591,097	16.2%	36,385	132,470,621	21,446,368	16.2%	4.4%	2.2361
	1999	59,470,760	14,408,874	24.2%	35,393	127,254,359	30,831,824	24.2%	4.4%	2.1398
	2000	58,280,297	19,573,694	33.6%	34,595	119,336,870	40,079,812	33.6%	4.4%	2.0476
	2001	57,686,952	25,218,093	43.7%	33,833	113,035,327	49,413,866	43.7%	4.4%	1.9595
	2002	57,034,186	29,251,514	51.3%	33,085	106,943,787	54,848,993	51.3%	4.4%	1.8751
	2003	56,166,151	33,430,653	59.5%	32,350	100,781,005	59,985,859	59.5%	4.4%	1.7943
	2004	55,153,896	42,281,735	76.7%	31,337	94,703,041	72,600,653	76.7%	4.4%	1.7171
	2005	57,956,935	46,764,091	80.7%	30,242	95,230,672	76,839,395	80.7%	4.4%	1.6431
	2006	59,493,684	49,713,398	83.6%	29,267	93,546,170	78,167,927	83.6%	4.4%	1.5724
	2007	58,493,640	58,197,756	99.5%	28,342	88,013,138	87,567,933	99.5%	4.4%	1.5047
	2008	57,369,401	73,068,235	127.4%	27,388	82,604,343	105,208,586	127.4%	4.4%	1.4399
	2009	56,106,525	79,162,001	141.1%	26,371	77,307,148	109,074,453	141.1%	4.4%	1.3779
2010	54,533,480	93,987,884	172.3%	25,302	71,904,025	123,925,836	172.3%	4.3%	1.3185	
2011	55,903,808	98,262,677	175.8%	24,024	70,536,691	123,983,041	175.8%	4.3%	1.2618	
2012	56,159,262	115,388,459	205.5%	22,899	67,807,666	139,322,026	205.5%	4.3%	1.2074	
2013	53,822,925	124,377,524	231.1%	21,741	62,188,261	143,708,687	231.1%	4.2%	1.1554	
2014	51,153,274	125,644,957	245.6%	20,330	56,558,549	138,921,635	245.6%	4.1%	1.1057	
2015	52,328,721	128,524,135	245.6%	18,869	55,499,635	136,312,192	245.6%	4.0%	1.0606	
2016	54,685,498	122,718,019	224.4%	17,690	55,768,484	125,148,315	224.4%	4.0%	1.0198	
Projected Future Experience	2017	54,682,663	113,339,921	207.3%	16,308	53,620,763	111,138,937	207.3%	4.0%	0.9806
	2018	56,567,947	111,705,316	197.5%	14,786	53,335,995	105,323,148	197.5%	4.0%	0.9429
	2019	54,355,373	108,450,735	199.5%	13,454	49,278,688	98,321,649	199.5%	4.0%	0.9066
	2020	48,390,338	105,421,962	217.9%	12,167	42,183,437	91,899,766	217.9%	4.0%	0.8717
	2021	42,787,962	101,502,726	237.2%	10,937	35,865,061	85,080,039	237.2%	4.0%	0.8382
	2022	37,592,221	96,859,772	257.7%	9,775	30,298,046	78,065,668	257.7%	4.0%	0.8060
	2023	32,824,224	91,932,320	280.1%	8,688	25,437,696	71,244,528	280.1%	4.0%	0.7750
	2024	28,487,463	87,174,234	306.0%	7,679	21,227,738	64,958,815	306.0%	4.0%	0.7452
	2025	24,576,262	82,665,952	336.4%	6,750	17,608,909	59,230,212	336.4%	4.0%	0.7165
	2026	21,077,741	77,831,348	369.3%	5,901	14,521,361	53,621,360	369.3%	4.0%	0.6889
	2027	17,973,545	72,788,422	405.0%	5,131	11,906,488	48,218,339	405.0%	4.0%	0.6624
	2028	15,240,973	67,575,151	443.4%	4,438	9,707,989	43,043,108	443.4%	4.0%	0.6370
	2029	12,853,988	62,230,132	484.1%	3,819	7,872,654	38,113,952	484.1%	4.0%	0.6125
	2030	10,784,044	56,912,801	527.8%	3,270	6,350,846	33,516,594	527.8%	4.0%	0.5889
	2031	9,001,455	51,708,430	574.4%	2,786	5,097,172	29,280,462	574.4%	4.0%	0.5663
	2032	7,476,411	46,786,756	625.8%	2,362	4,070,768	25,474,530	625.8%	4.0%	0.5445
	2033	6,179,865	42,216,983	683.1%	1,993	3,235,407	22,102,281	683.1%	4.0%	0.5235
	2034	5,084,036	37,948,635	746.4%	1,673	2,559,323	19,103,490	746.4%	4.0%	0.5034
	2035	4,162,866	33,917,998	814.8%	1,397	2,015,003	16,417,742	814.8%	4.0%	0.4840
	2036	3,392,504	30,037,782	885.4%	1,160	1,578,957	13,980,340	885.4%	4.0%	0.4654
	2037	2,751,516	26,376,515	958.6%	959	1,231,370	11,804,129	958.6%	4.0%	0.4475
	2038	2,220,828	22,977,157	1034.6%	788	955,649	9,887,341	1034.6%	4.0%	0.4303
	2039	1,783,604	19,818,434	1111.1%	644	737,986	8,200,101	1111.1%	4.0%	0.4138
	2040	1,425,133	16,907,852	1186.4%	523	566,986	6,726,745	1186.4%	4.0%	0.3978
	2041	1,132,697	14,246,578	1257.8%	422	433,308	5,449,965	1257.8%	4.0%	0.3825
	2042	895,347	11,879,206	1326.8%	338	329,338	4,369,555	1326.8%	4.0%	0.3678
	2043	703,694	9,806,100	1393.5%	269	248,886	3,468,269	1393.5%	4.0%	0.3537
	2044	549,762	7,989,709	1453.3%	213	186,964	2,717,153	1453.3%	4.0%	0.3401
	2045	426,820	6,434,922	1507.6%	167	139,571	2,104,230	1507.6%	4.0%	0.3270
	2046	329,201	5,110,975	1552.5%	130	103,509	1,607,016	1552.5%	4.0%	0.3144
2047	252,161	4,011,183	1590.7%	101	76,236	1,212,706	1590.7%	4.0%	0.3023	
2048	191,759	3,115,761	1624.8%	77	55,745	905,762	1624.8%	4.0%	0.2907	
2049	144,739	2,394,638	1654.4%	59	40,458	669,355	1654.4%	4.0%	0.2795	
2050	108,417	1,820,943	1679.6%	44	29,139	489,418	1679.6%	4.0%	0.2688	
2051	80,585	1,368,824	1698.6%	33	20,826	353,751	1698.6%	4.0%	0.2584	
2052	59,442	1,015,537	1708.5%	24	14,771	252,355	1708.5%	4.0%	0.2485	
2053	43,519	742,928	1707.1%	18	10,398	177,513	1707.1%	4.0%	0.2389	
2054	31,635	538,792	1703.2%	13	7,268	123,786	1703.2%	4.0%	0.2297	
2055	22,840	385,572	1688.1%	9	5,046	85,177	1688.1%	4.0%	0.2209	
2056	16,386	272,820	1665.0%	7	3,481	57,951	1665.0%	4.0%	0.2124	
Past		1,180,203,876	1,303,609,227	110.5%	618,395	1,933,775,838	1,750,535,711	90.5%		
Future		506,661,966	1,636,221,823	322.9%	139,309	402,969,236	1,168,797,238	290.0%		
Lifetime		1,686,865,842	2,939,831,049	174.3%	757,704	2,336,745,073	2,919,332,949	124.9%		

**Exhibit V**  
**Brighthouse Life Insurance Company**  
**Maryland-Specific Experience Projections with No Increase**  
**LTC3+ Comprehensive Policy Form**

	Loss Ratio Demonstration									Interest Rate Factors	
	Calendar Year	Without Interest			Life Years	With Interest			Calendar Year Effective Int Rate	Mid-Year Disc / Accum Factor	
		Earned Premium	Incurred Claims	Loss Ratio		Earned Premium	Incurred Claims	Loss Ratio			
Historical Experience	1993	0	0	0.0%	0	0	0	0.0%	0.0%	0.0000	
	1994	5,947	0	0.0%	43	15,858	0	0.0%	4.5%	2.6666	
	1995	379,882	106,177	27.9%	440	969,356	270,934	27.9%	4.5%	2.5517	
	1996	1,185,411	0	0.0%	1,249	2,894,590	0	0.0%	4.5%	2.4418	
	1997	2,092,272	31,368	1.5%	1,208	4,888,998	73,298	1.5%	4.4%	2.3367	
	1998	2,058,057	217,728	10.6%	1,184	4,601,961	486,855	10.6%	4.4%	2.2361	
	1999	2,049,166	21,329	1.0%	1,155	4,384,766	45,640	1.0%	4.4%	2.1398	
	2000	2,029,026	540,187	26.6%	1,136	4,154,709	1,106,107	26.6%	4.4%	2.0476	
	2001	2,026,336	555,599	27.4%	1,120	3,970,526	1,088,674	27.4%	4.4%	1.9595	
	2002	2,017,314	510,690	25.3%	1,101	3,782,630	957,586	25.3%	4.4%	1.8751	
	2003	2,006,461	1,301,114	64.8%	1,079	3,600,268	2,334,636	64.8%	4.4%	1.7943	
	2004	2,000,358	872,320	43.6%	1,054	3,434,753	1,497,834	43.6%	4.4%	1.7171	
	2005	2,156,526	1,728,540	80.2%	1,029	3,543,448	2,840,213	80.2%	4.4%	1.6431	
	2006	2,237,755	1,681,067	75.1%	1,006	3,518,583	2,643,262	75.1%	4.4%	1.5724	
	2007	2,209,037	1,323,889	59.9%	971	3,323,854	1,992,005	59.9%	4.4%	1.5047	
	2008	2,183,484	1,875,388	85.9%	945	3,143,927	2,700,310	85.9%	4.4%	1.4399	
	2009	2,156,480	2,542,471	117.9%	910	2,971,336	3,503,179	117.9%	4.4%	1.3779	
2010	2,120,414	3,243,397	153.0%	879	2,795,829	4,276,515	153.0%	4.3%	1.3185		
2011	2,236,097	3,127,227	139.9%	840	2,821,398	3,945,782	139.9%	4.3%	1.2618		
2012	2,254,344	7,523,609	333.7%	806	2,721,934	9,084,136	333.7%	4.3%	1.2074		
2013	2,180,608	3,967,792	182.0%	779	2,519,525	4,584,479	182.0%	4.2%	1.1554		
2014	2,134,880	7,118,652	333.4%	720	2,360,468	7,870,867	333.4%	4.1%	1.1057		
2015	2,236,568	5,499,895	245.9%	680	2,372,095	5,833,167	245.9%	4.0%	1.0606		
2016	2,325,577	4,407,503	189.5%	645	2,371,632	4,494,789	189.5%	4.0%	1.0198		
Projected Future Experience	2017	2,327,388	4,276,142	183.7%	595	2,282,192	4,193,102	183.7%	4.0%	0.9806	
	2018	2,322,877	4,279,026	184.2%	546	2,190,161	4,034,548	184.2%	4.0%	0.9429	
	2019	2,089,090	4,239,138	202.9%	499	1,893,973	3,843,210	202.9%	4.0%	0.9066	
	2020	1,867,120	4,165,681	223.1%	453	1,627,630	3,631,360	223.1%	4.0%	0.8717	
	2021	1,659,392	4,065,611	245.0%	409	1,390,910	3,407,814	245.0%	4.0%	0.8382	
	2022	1,466,955	3,940,712	268.6%	368	1,182,315	3,176,080	268.6%	4.0%	0.8060	
	2023	1,290,155	3,806,751	295.1%	329	999,828	2,950,107	295.1%	4.0%	0.7750	
	2024	1,128,766	3,675,216	325.6%	293	841,112	2,738,626	325.6%	4.0%	0.7452	
	2025	982,389	3,561,637	362.5%	260	703,883	2,551,915	362.5%	4.0%	0.7165	
	2026	850,446	3,425,261	402.8%	229	585,909	2,359,810	402.8%	4.0%	0.6889	
	2027	732,247	3,270,340	446.6%	201	485,074	2,166,421	446.6%	4.0%	0.6624	
	2028	627,002	3,104,100	495.1%	175	399,379	1,977,208	495.1%	4.0%	0.6370	
	2029	533,879	2,916,742	546.3%	152	326,984	1,786,410	546.3%	4.0%	0.6125	
	2030	451,966	2,722,348	602.3%	131	266,168	1,603,222	602.3%	4.0%	0.5889	
	2031	380,340	2,522,789	663.3%	112	215,372	1,428,557	663.3%	4.0%	0.5663	
	2032	318,097	2,324,300	730.7%	95	173,198	1,265,539	730.7%	4.0%	0.5445	
	2033	264,360	2,133,965	807.2%	81	138,403	1,117,216	807.2%	4.0%	0.5235	
	2034	218,279	1,946,936	891.9%	68	109,883	980,095	891.9%	4.0%	0.5034	
	2035	179,010	1,762,422	984.5%	56	86,648	853,087	984.5%	4.0%	0.4840	
	2036	145,767	1,573,168	1079.2%	47	67,844	732,192	1079.2%	4.0%	0.4654	
	2037	117,819	1,382,326	1173.3%	38	52,727	618,624	1173.3%	4.0%	0.4475	
	2038	94,495	1,204,183	1274.3%	31	40,662	518,174	1274.3%	4.0%	0.4303	
	2039	75,177	1,034,744	1376.4%	25	31,105	428,137	1376.4%	4.0%	0.4138	
	2040	59,304	875,428	1476.2%	20	23,594	348,287	1476.2%	4.0%	0.3978	
	2041	46,375	730,264	1574.7%	16	17,741	279,359	1574.7%	4.0%	0.3825	
	2042	35,936	599,932	1669.4%	13	13,218	220,674	1669.4%	4.0%	0.3678	
	2043	27,581	486,745	1764.8%	10	9,755	172,154	1764.8%	4.0%	0.3537	
	2044	20,957	386,607	1844.8%	8	7,127	131,478	1844.8%	4.0%	0.3401	
	2045	15,757	302,489	1919.6%	6	5,153	98,914	1919.6%	4.0%	0.3270	
	2046	11,719	231,728	1977.4%	4	3,685	72,861	1977.4%	4.0%	0.3144	
2047	8,615	174,266	2022.9%	3	2,604	52,686	2022.9%	4.0%	0.3023		
2048	6,257	129,031	2062.2%	2	1,819	37,510	2062.2%	4.0%	0.2907		
2049	4,488	93,747	2088.9%	2	1,254	26,204	2088.9%	4.0%	0.2795		
2050	3,177	67,542	2126.2%	1	854	18,153	2126.2%	4.0%	0.2688		
2051	2,218	47,798	2155.5%	1	573	12,353	2155.5%	4.0%	0.2584		
2052	1,526	33,509	2195.4%	1	379	8,327	2195.4%	4.0%	0.2485		
2053	1,036	22,994	2219.6%	0	248	5,494	2219.6%	4.0%	0.2389		
2054	694	15,647	2256.0%	0	159	3,595	2256.0%	4.0%	0.2297		
2055	458	10,419	2272.9%	0	101	2,302	2272.9%	4.0%	0.2209		
2056	299	6,848	2287.2%	0	64	1,455	2287.2%	4.0%	0.2124		
Past		44,282,000	48,195,942	108.8%	20,979	71,162,443	61,630,269	86.6%			
Future		20,369,415	71,548,531	351.3%	5,280	16,179,688	49,853,260	308.1%			
Lifetime		64,651,415	119,744,473	185.2%	26,259	87,342,131	111,483,530	127.6%			

**Exhibit V**  
**Brighthouse Life Insurance Company**  
**Maryland-Specific Experience Projections with 15.0% Increase**  
**LTC3+ Comprehensive Policy Form**

	Loss Ratio Demonstration								Interest Rate Factors	
	Calendar Year	Without Interest			Life Years	With Interest			Calendar Year Effective Int Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio		Earned Premium	Incurred Claims	Loss Ratio		
Historical Experience	1993	0	0	0.0%	0	0	0	0.0%	0.0%	0.0000
	1994	5,947	0	0.0%	43	15,858	0	0.0%	4.5%	2.6666
	1995	379,882	106,177	27.9%	440	969,356	270,934	27.9%	4.5%	2.5517
	1996	1,185,411	0	0.0%	1,249	2,894,590	0	0.0%	4.5%	2.4418
	1997	2,092,272	31,368	1.5%	1,208	4,888,998	73,298	1.5%	4.4%	2.3367
	1998	2,058,057	217,728	10.6%	1,184	4,601,961	486,855	10.6%	4.4%	2.2361
	1999	2,049,166	21,329	1.0%	1,155	4,384,766	45,640	1.0%	4.4%	2.1398
	2000	2,029,026	540,187	26.6%	1,136	4,154,709	1,106,107	26.6%	4.4%	2.0476
	2001	2,026,336	555,599	27.4%	1,120	3,970,526	1,088,674	27.4%	4.4%	1.9595
	2002	2,017,314	510,690	25.3%	1,101	3,782,630	957,586	25.3%	4.4%	1.8751
	2003	2,006,461	1,301,114	64.8%	1,079	3,600,268	2,334,636	64.8%	4.4%	1.7943
	2004	2,000,358	872,320	43.6%	1,054	3,434,753	1,497,834	43.6%	4.4%	1.7171
	2005	2,156,526	1,728,540	80.2%	1,029	3,543,448	2,840,213	80.2%	4.4%	1.6431
	2006	2,237,755	1,681,067	75.1%	1,006	3,518,583	2,643,262	75.1%	4.4%	1.5724
	2007	2,209,037	1,323,889	59.9%	971	3,323,854	1,992,005	59.9%	4.4%	1.5047
	2008	2,183,484	1,875,388	85.9%	945	3,143,927	2,700,310	85.9%	4.4%	1.4399
	2009	2,156,480	2,542,471	117.9%	910	2,971,336	3,503,179	117.9%	4.4%	1.3779
2010	2,120,414	3,243,397	153.0%	879	2,795,829	4,276,515	153.0%	4.3%	1.3185	
2011	2,236,097	3,127,227	139.9%	840	2,821,398	3,945,782	139.9%	4.3%	1.2618	
2012	2,254,344	7,523,609	333.7%	806	2,721,934	9,084,136	333.7%	4.3%	1.2074	
2013	2,180,608	3,967,792	182.0%	779	2,519,525	4,584,479	182.0%	4.2%	1.1554	
2014	2,134,880	7,118,652	333.4%	720	2,360,468	7,870,867	333.4%	4.1%	1.1057	
2015	2,236,568	5,499,895	245.9%	680	2,372,095	5,833,167	245.9%	4.0%	1.0606	
2016	2,325,577	4,407,503	189.5%	645	2,371,632	4,494,789	189.5%	4.0%	1.0198	
Projected Future Experience	2017	2,327,388	4,276,142	183.7%	595	2,282,192	4,193,102	183.7%	4.0%	0.9806
	2018	2,413,719	4,250,781	176.1%	541	2,275,813	4,007,917	176.1%	4.0%	0.9429
	2019	2,342,753	4,159,794	177.6%	494	2,123,944	3,771,277	177.6%	4.0%	0.9066
	2020	2,093,831	4,087,712	195.2%	448	1,825,261	3,563,392	195.2%	4.0%	0.8717
	2021	1,860,879	3,989,515	214.4%	405	1,559,797	3,344,030	214.4%	4.0%	0.8382
	2022	1,645,076	3,866,954	235.1%	364	1,325,875	3,116,633	235.1%	4.0%	0.8060
	2023	1,446,809	3,735,500	258.2%	326	1,121,230	2,894,890	258.2%	4.0%	0.7750
	2024	1,265,824	3,606,427	284.9%	290	943,242	2,687,368	284.9%	4.0%	0.7452
	2025	1,101,674	3,494,974	317.2%	257	789,350	2,504,151	317.2%	4.0%	0.7165
	2026	953,710	3,361,151	352.4%	227	657,052	2,315,641	352.4%	4.0%	0.6889
	2027	821,158	3,209,129	390.8%	199	543,972	2,125,872	390.8%	4.0%	0.6624
	2028	703,134	3,046,001	433.2%	173	447,873	1,940,200	433.2%	4.0%	0.6370
	2029	598,704	2,862,149	478.1%	150	366,687	1,752,974	478.1%	4.0%	0.6125
	2030	506,845	2,671,394	527.1%	129	298,487	1,573,214	527.1%	4.0%	0.5889
	2031	426,522	2,475,570	580.4%	111	241,523	1,401,819	580.4%	4.0%	0.5663
	2032	356,721	2,280,796	639.4%	94	194,228	1,241,852	639.4%	4.0%	0.5445
	2033	296,460	2,094,023	706.3%	80	155,209	1,096,305	706.3%	4.0%	0.5235
	2034	244,783	1,910,496	780.5%	67	123,225	961,751	780.5%	4.0%	0.5034
	2035	200,746	1,729,435	861.5%	56	97,169	837,119	861.5%	4.0%	0.4840
	2036	163,467	1,543,723	944.4%	46	76,081	718,488	944.4%	4.0%	0.4654
	2037	132,125	1,356,453	1026.6%	38	59,129	607,046	1026.6%	4.0%	0.4475
	2038	105,969	1,181,645	1115.1%	31	45,600	508,476	1115.1%	4.0%	0.4303
	2039	84,305	1,015,376	1204.4%	25	34,882	420,123	1204.4%	4.0%	0.4138
	2040	66,505	859,042	1291.7%	20	26,459	341,768	1291.7%	4.0%	0.3978
	2041	52,006	716,595	1377.9%	16	19,895	274,130	1377.9%	4.0%	0.3825
	2042	40,300	588,703	1460.8%	12	14,823	216,544	1460.8%	4.0%	0.3678
	2043	30,930	477,634	1544.2%	10	10,940	168,932	1544.2%	4.0%	0.3537
	2044	23,501	379,371	1614.2%	8	7,992	129,017	1614.2%	4.0%	0.3401
	2045	17,671	296,827	1679.8%	6	5,778	97,063	1679.8%	4.0%	0.3270
	2046	13,142	227,391	1730.3%	4	4,132	71,497	1730.3%	4.0%	0.3144
2047	9,661	171,004	1770.1%	3	2,921	51,700	1770.1%	4.0%	0.3023	
2048	7,017	126,616	1804.5%	2	2,040	36,808	1804.5%	4.0%	0.2907	
2049	5,033	91,992	1827.8%	2	1,407	25,714	1827.8%	4.0%	0.2795	
2050	3,562	66,278	1860.5%	1	957	17,814	1860.5%	4.0%	0.2688	
2051	2,487	46,903	1886.1%	1	643	12,121	1886.1%	4.0%	0.2584	
2052	1,712	32,881	1921.0%	1	425	8,171	1921.0%	4.0%	0.2485	
2053	1,162	22,563	1942.2%	0	278	5,391	1942.2%	4.0%	0.2389	
2054	778	15,354	1974.1%	0	179	3,528	1974.1%	4.0%	0.2297	
2055	514	10,224	1988.8%	0	114	2,259	1988.8%	4.0%	0.2209	
2056	336	6,720	2001.3%	0	71	1,427	2001.3%	4.0%	0.2124	
Past		44,282,000	48,195,942	108.8%	20,979	71,162,443	61,630,269	86.6%		
Future		22,368,917	70,341,240	314.5%	5,234	17,686,874	49,047,524	277.3%		
Lifetime		66,650,917	118,537,183	177.8%	26,213	88,849,317	110,677,793	124.6%		



**Exhibit VI**  
**Brighthouse Life Insurance Company**  
**Projection Model Description**

A large and complex Excel-based and Access-integrated model was used to project the earned premium, incurred claim, and end of year life values. A description of how the model works to project these values on a seriatim basis is provided below.

Enclosed with this actuarial memorandum is an Excel workbook of Exhibits IV and V. This workbook contains formulas for the projected earned premium, incurred claims, and life years using the illustrative factors, which are retained in this workbook.

The projection system performs calculations at a policy level.

Projection of Earned Premium – the following steps are performed in relation to the projection of earned premium:

- a) A lifetime policy year projection of earned premium is performed from issue for each policy, where each projection year's earned premium is developed based on the annualized premium issued for the policy and the current assumptions for lapse and mortality. The policy year projection is then converted to a calendar year projection based on the policy's issue date. From this calendar year projection, a set of calendar year "expected premium persistency factors" are calculated as the ratio of earned premium from one calendar year to the next. These "expected premium persistency factors" are later used to develop future calendar year earned premium projected from the actual earned premium amount in the last historical calendar year of experience for the policy (see b below).
- b) Beginning with the actual in-force premium earned for each policy as of the last historical calendar year of experience, a 40-year projection of earned premium on a calendar year basis is performed for each policy by multiplying the prior calendar year earned premium for in-force business on that policy by the "expected premium persistency factor" for the current calendar projection year (see a above).
- c) Total projected earned premium for each future calendar year for a policy form is then determined by adding the earned premium by calendar year from each policy.

Projection of Incurred Claims – the following steps are performed in relation to the projection of incurred claims:

- a) A lifetime policy year projection of incurred claims is performed from issue for each policy, where each projection year's incurred claims are developed based on the daily benefit issued for the policy and the current assumptions for lapse, mortality, and morbidity. The policy year projection for the policy is then converted to a calendar year projection based on the policy's issue date. From this projection of incurred claims and the earned premiums from step a above, a set of calendar year "current expected loss ratios" are developed based on the relationship of expected incurred claims to expected earned premium for each calendar year. These "current expected loss ratios" are later used to develop the future projected calendar year incurred claims based on the future projected calendar year earned premiums for the policy (see b below).
- b) A 40-year projection of incurred claims on a calendar year basis is developed for each policy by multiplying each future calendar year's projected earned premium (calculated as explained above) by the "current expected loss ratio" for the projection calendar year.
- c) Total projected incurred claims for each future calendar year for a policy form are then determined by adding the incurred claims by calendar year from each policy.

Projected Life Years – the following steps are performed in relation to the projection of life years:

- a) A lifetime policy year projection of life years is performed from issue for each policy, where each projection life year is developed based on the current assumptions for lapse and mortality. The policy year projection for the policy is then converted to a calendar year projection based on the policy's issue date. From this calendar year projection, a set of calendar year "expected life year persistency factors" are calculated as the ratio of the life years from one calendar year to the next. These "expected life year persistency factors" are later used to develop future calendar year life years projected from the actual life years amount in the last historical calendar year of experience for the policy (see b below).

**Exhibit VI**  
**Brighthouse Life Insurance Company**  
**Projection Model Description**

- b) Beginning with the actual in-force life years for each policy as of the last historical calendar year of experience, a 40-year projection of life years on a calendar year basis is performed for each policy by multiplying the prior calendar year life years for in-force business within that cell by the “expected life year persistency factor” for the current calendar projection year (see a above).
- c) Total projected life years for each future calendar year for a policy form are then determined by adding the life years by calendar year from each policy.

The projection system performs all calculations on a seriatim basis. The factors displayed in Exhibits IV and V are derived from the already-projected values and are displayed for illustrative purposes only. These factors do not influence the projection results, but can be used to reproduce them.

The before-increase projected values for earned premium, incurred claims, and life years can be reproduced using the factors that were displayed for illustrative purposes. The formulas are provided below.

- $(\text{Earned Premium})_t = (\text{Earned Premium})_{t-1} \times (\text{Premium Persistency})_t \times (\text{Premium Rate Increase Factor})_t$
- $(\text{Incurred Claims})_t = (\text{Incurred Claims})_{t-1} \times (\text{Claim Factor})_t \times (\text{Policy Persistency})_t \times [(\text{Adverse Selection})_t / (\text{Adverse Selection})_{t-1}]$
- $(\text{Life Years})_t = (\text{Life Years})_{t-1} \times (\text{Policy Persistency})_t$
- $t = \text{any calendar year in the projection period (2017+)}$

**Exhibit VII**  
**Brighthouse Life Insurance Company**  
**Status of Filings as of September 12, 2017**  
**All Jurisdictions in which these Forms are Active**  
**LTC+ Comprehensive Policy Form**

Jurisdiction	First Round			Second Round			Third Round			Third Round Follow-Up <sup>(1)</sup>			Second Third Round Follow-Up <sup>(2)</sup>				Cumulative Increase	Fourth Round						
	Requested Increase	Date Approved or Filed	Amount Approved or Filed	Requested Increase	Date Approved or Filed	Amount Approved or Filed	Requested Increase	Date Approved or Filed	Amount Approved or Filed	Requested Increase	Date Approved or Filed	Amount Approved or Filed	Requested Increase	Date of Submission	Date Approved or Filed	Amount Approved or Filed		Requested Increase	Date of Submission	Date Approved or Filed	Amount Approved or Filed	2016 Annualized Premium <sup>(3)</sup>	Proportion of Nationwide	
Alaska <sup>(1)</sup>	39.0%	5/14/2004	39.0%	30.0%	N/A	30.0%	50.0%	N/A	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	N/A	N/A	21.0%	14,193	0.02%	
Alabama	39.0%	6/15/2004	30.0%	30.0%	6/23/2010	30.0%	61.7%	1/14/2014	20.0%	34.8%	2/16/2016	20.0%	Not Filing				143.4%	35.9%	12/14/2016	6/7/2017	20.0%	264,439	0.42%	
Arkansas	39.0%	Disapproved	0.0%	39.0%	5/5/2010	10.0%	100.0%	1/29/2015	25.0%	60.0%	11/19/2015	25.0%	Not Filing				71.9%	70.9%	1/24/2017	Disapproved	0.0%	59,864	0.10%	
Arizona	39.0%	Disapproved	0.0%	39.0%	7/12/2010	15.0%	100.0%	12/20/2013	100.0%	Not Filing	Not Filing	Not Filing	Not Filing				130.0%	30.5%	12/7/2016	Disapproved	0.0%	401,271	0.64%	
California	39.0%	6/2/2004	30.0%	30.0%	10/24/2012	18.0%	77.3%	1/12/2015	35.0%	31.7%	1/12/2015	35.0%	Not Filing				53.4%	TBD				8,656,082	13.78%	
Colorado	39.0%	6/31/2004	39.0%	30.0%	11/22/2010	10.0%	77.8%	1/12/2015	10.0%	31.7%	1/12/2015	35.0%	Not Filing				106.4%	TBD				679,948	1.08%	
Connecticut	33.1%	Disapproved	0.0%	39.0%	9/3/2010	39.0%	91.7%	3/28/2014	20.0%	59.8%	3/20/2015	10.0%	45.3%	4/27/2016	10/13/2016	35.3%	148.2%	29.9%				10,747,798	17.11%	
District of Columbia	39.0%	Withdrawn	0.0%	39.0%	Disapproved	0.0%	10.0%	4/18/2014	10.0%	10.0%	5/13/2015	10.0%	10.0%	8/18/2016	8/31/2016	10.0%	33.1%	10.0%	9/5/2017				140,805	0.22%
Delaware	39.0%	9/8/2004	16.0%	30.7%	7/12/2010	25.0%	25.0%	2/25/2014	25.0%	25.0%	11/18/2015	25.0%	Not Filing				126.6%	25.0%	12/21/2016	2/23/2017	25.0%	74,159	0.12%	
Florida	39.0%	12/6/2004	12.0%	30.0%	11/13/2012	17.0%	75.4%	5/22/2015	9.4%	7.8%	7/8/2016	9.8%	Not Filing				57.4%	88.6%	8/15/2017				5,419,239	8.63%
Georgia	39.0%	2/4/2005	13.0%	30.0%	5/13/2010	15.0%	100.0%	7/16/2014	15.0%	73.9%	8/3/2015	13.0%	53.9%	6/9/2016	9/22/2016	15.0%	94.2%	62.6%	8/29/2017				614,024	0.98%
Hawaii	39.0%	12/21/2004	25.0%	30.0%	10/10/2011	30.0%	68.2%	7/7/2017	42.9%	Not Filing	Not Filing	Not Filing	Not Filing				132.2%	42.4%				481,353	0.77%	
Iowa	39.0%	6/23/2004	32.0%	30.0%	7/12/2010	17.5%	75.6%	4/7/2014	17.0%	50.0%	8/18/2015	17.5%	54.6%	8/24/2016	10/19/2016	17.5%	150.5%	31.5%				313,644	0.50%	
Idaho	39.0%	Disapproved	0.0%	39.0%	7/28/2010	10.0%	100.0%	10/31/2014	30.0%	53.8%	12/24/2015	20.0%	Not Filing				71.6%	71.2%				31,970	0.05%	
Illinois	39.0%	7/28/2004	39.0%	30.0%	8/2/2010	30.0%	50.0%	1/8/2015	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	11/10/2016	6/14/2017	21.0%	1,826,042	2.91%	
Indiana	39.0%	Disapproved	0.0%	39.0%	9/16/2011	10.0%	100.0%	2/25/2015	18.0%	59.5%	5/9/2016	15.0%	Not Filing				49.3%	96.8%	3/3/2017	8/29/2017	10.0%	718,165	1.14%	
Kansas	39.0%	7/15/2004	25.0%	30.0%	8/5/2010	10.0%	93.2%	5/21/2014	42.7%	Not Filing	Not Filing	Not Filing	Not Filing				96.2%	TBD				369,823	0.59%	
Kentucky	39.0%	9/20/2004	30.0%	30.0%	5/10/2010	7.0%	91.6%	3/4/2014	20.4%	47.4%	11/10/2015	13.5%	Not Filing				90.1%	69.7%	1/12/2017	4/18/2017	19.2%	142,645	0.23%	
Louisiana	39.0%	6/9/2004	39.0%	30.0%	Disapproved	0.0%	91.7%	1/14/2015	20.0%	53.4%	Disapproved	0.0%	Not Filing				66.8%	85.6%	2/16/2017	7/11/2017	25.0%	300,389	0.48%	
Massachusetts	23.2%	9/27/2004	23.2%	30.0%	12/5/2012	10.0%	95.2%	1/20/2017	40.0%	Not Filing	Not Filing	Not Filing	Not Filing				89.7%	Not Filing				4,488,779	7.15%	
Maryland	39.0%	8/19/2004	15.0%	15.0%	8/13/2010	15.0%	15.0%	2/4/2014	15.0%	15.0%	2/4/2014	15.0%	15.0%	6/23/2016	11/9/2016	15.0%	101.1%	15.0%				2,692,801	4.29%	
Maine	39.0%	6/22/2004	39.0%	13.5%	10/19/2010	13.5%	24.0%	12/19/2014	24.0%	Not Filing	Not Filing	Not Filing	Not Filing				95.6%	TBD				447,288	0.71%	
Michigan	39.0%	9/1/2004	39.0%	30.0%	3/19/2010	30.0%	50.0%	12/2/2013	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	11/11/2016	11/28/2016	21.0%	613,537	0.98%	
Minnesota	39.0%	7/26/2004	39.0%	30.0%	3/3/2015	26.5%	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing				75.8%	87.4%				1,928,143	3.07%	
Missouri	39.0%	7/15/2004	39.0%	30.0%	9/22/2010	30.0%	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	12/12/2016	1/18/2017	21.0%	590,878	0.94%	
Mississippi	39.0%	8/19/2004	25.0%	30.7%	5/6/2010	30.7%	25.0%	5/20/2014	25.0%	25.0%	10/28/2015	25.0%	Not Filing				153.3%	25.0%	1/25/2017	4/17/2017	25.0%	64,162	0.10%	
Montana	39.0%	7/9/2004	39.0%	30.0%	5/11/2010	30.0%	50.0%	2/6/2014	25.0%	20.0%	Withdrawn	Withdrawn	Not Filing				125.9%	45.2%	3/2/2017	Disapproved	0.0%	22,799	0.04%	
North Carolina	39.0%	6/9/2004	39.0%	30.0%	7/2/2010	30.0%	50.0%	3/14/2014	25.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	12/6/2016	5/9/2017	21.0%	2,550,822	4.06%	
North Dakota	39.0%	6/23/2004	20.0%	30.0%	7/21/2010	17.0%	90.3%	1/21/2014	15.0%	65.5%	3/20/2015	15.0%	43.9%	6/29/2016	7/20/2016	15.0%	113.5%	51.4%	8/29/2017				19,555	0.03%
Nebraska	39.0%	9/2/2004	25.0%	30.0%	12/14/2010	14.0%	88.2%	9/29/2014	25.0%	50.6%	9/9/2015	50.6%	Not Filing				168.3%	21.0%				170,369	0.27%	
New Hampshire	39.0%	Disapproved	0.0%	39.0%	8/26/2010	17.9%	100.0%	Disapproved	0.0%	Not Filing	Not Filing	Not Filing	Not Filing				17.9%	19.1%				183,636	0.29%	
New Jersey	39.0%	4/4/2005	10.0%	30.0%	7/16/2010	30.0%	87.7%	7/3/2014	52.1%	Not Filing	Not Filing	Not Filing	Not Filing				117.5%	49.3%	2/17/2017	6/15/2017	26.0%	8,121,398	12.93%	
New Mexico	39.0%	6/23/2004	39.0%	30.0%	8/10/2010	30.0%	50.0%	5/21/2014	15.0%	30.4%	7/31/2015	15.0%	Not Filing				138.9%	37.3%	2/1/2017	4/19/2017	15.0%	95,058	0.15%	
Nevada	39.0%	7/23/2004	10.0%	30.0%	11/30/2010	10.0%	100.0%	10/16/2014	40.0%	Not Filing	Not Filing	Not Filing	Not Filing				69.4%	81.2%	3/2/2017	7/12/2017	81.2%	16,488	0.03%	
Ohio	39.0%	6/10/2004	25.0%	34.1%	6/1/2010	34.1%	68.2%	3/31/2015	15.0%	46.3%	3/11/2016	15.0%	Not Filing				121.7%	15.0%	12/9/2016	3/20/2017	15.0%	1,592,760	2.54%	
Oklahoma	39.0%	8/25/2004	15.0%	30.0%	11/15/2010	10.0%	100.0%	3/17/2014	25.0%	60.0%	2/1/2016	10.0%	Not Filing				73.9%	79.7%	12/27/2016	2/9/2017	10.0%	82,201	0.13%	
Oregon	39.0%	7/15/2004	25.0%	30.0%	6/4/2010	15.0%	87.0%	4/21/2014	30.0%	43.8%	4/7/2016	43.8%	Not Filing				168.7%	21.0%				126,277	0.20%	
Pennsylvania	0.0%	Not Filing	0.0%	39.0%	7/28/2010	14.9%	100.0%	2/28/2014	15.0%	73.9%	7/21/2015	15.0%	83.0%	8/17/2016	12/13/2016	15.0%	74.8%	71.7%				2,098,710	3.34%	
Puerto Rico	39.0%	10/15/2004	39.0%	30.0%	4/7/2010	30.0%	50.0%	7/8/2014	25.0%	Not Filing	Not Filing	Not Filing	Not Filing				125.9%	45.2%	1/26/2017	5/10/2017	45.2%	24,373	0.04%	
Rhode Island	39.0%	10/11/2005	39.0%	30.0%	9/19/2011	25.0%	57.0%	2/16/2017	57.0%	Not Filing	Not Filing	Not Filing	Not Filing				172.8%	21.0%				517,848	0.82%	
South Carolina	39.0%	7/12/2004	39.0%	30.0%	11/12/2010	20.0%	63.9%	2/4/2014	20.0%	36.6%	5/4/2015	20.0%	Not Filing				140.2%	37.7%	11/10/2016	2/3/2017	20.0%	741,708	1.18%	
Tennessee	39.0%	6/25/2004	39.0%	30.0%	6/24/2010	10.0%	77.8%	4/14/2014	77.8%	Not Filing	Not Filing	Not Filing	Not Filing				171.9%	21.0%	11/16/2016	9/11/2017	12.0%	351,367	0.56%	
Texas	39.0%	9/15/2004	30.0%	30.0%	7/16/2010	20.0%	74.7%	4/28/2014	24.0%	70.5%	12/14/2016	38.0%	Not Filing				166.9%	23.5%				1,450,279	2.31%	
Utah	39.0%	10/28/2004	39.0%	30.0%	Disapproved	0.0%	91.7%	11/5/2014	30.0%	47.5%	Disapproved	0.0%	Not Filing				80.7%	78.4%	2/27/2017	5/1/2017	35.0%	71,030	0.11%	
Virginia	39.0%	5/20/2005	33.0%	30.0%	2/25/2011	30.0%	28.7%	1/20/2016	13.1%	Not Filing	Not Filing	Not Filing	Not Filing				95.5%	68.8%				1,342,306	2.14%	
Vermont	39.0%	7/19/2005	25.0%	30.0%	Disapproved	0.0%	100.0%	Disapproved	0.0%	Not Filing	Not Filing	Not Filing	Not Filing				25.0%	148.9%	12/12/2016				286,664	0.42%
Washington	39.0%	7/19/2004	31.8%	30.0%	8/17/2010	30.0%	54.5%	8/14/2014	54.5%	Not Filing	Not Filing	Not Filing	Not Filing				164.7%	Not Filing				413,935	0.66%	
Wisconsin	39.0%	5/21/2004	39.0%	30.0%	6/29/2010	30.0%	50.0%	2/27/2014	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	12/8/2016	6/29/2017	21.0%	386,803	0.62%	
West Virginia	39.0%	7/20/2004	39.0%	30.0%	5/24/2010	30.0%	50.0%	9/11/2014	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	2/22/2017	Disapproved	0.0%	78,350	0.12%	
Wyoming	39.0%	5/6/2004	39.0%	30.0%	6/4/2010	30.0%	50.0%	2/7/2014	50.0%	Not Filing	Not Filing	Not Filing	Not Filing				171.1%	21.0%	2/28/2017	3/1/2017	21.0%		0.00%	
<b>Total</b>																							<b>62,805,977</b>	<b>100.0%</b>

(1) Alaska does not require Long Term Care rates to be filed before use.  
(2) The company is generally filing in jurisdictions where the requested third round rate increase was not achieved.  
In some instances filings are not being pursued due to regulatory restrictions or because the third round rate increase was phased-in over multiple years.  
(3) The company is generally filing in jurisdictions where the requested third round and third round follow-up rate increases were not achieved.  
In some instances filings are not being pursued due to regulatory restrictions or because the third round rate increase was phased-in over multiple years.  
(4) Annualized premiums reflect all prior rate increases approved prior to March 21, 2017.

**Exhibit VIII**  
**Brighthouse Life Insurance Company**  
**Nationwide Experience Projections with 57.9% Increase**  
**LTC3+ Comprehensive Policy Form**

	Calendar Year	Loss Ratio Demonstration						Interest Rate Factors		
		Without Interest			Life Years	With Interest			Calendar Year Effective Int Rate	Mid-Year Disc / Accum Factor
		Earned Premium	Incurred Claims	Loss Ratio		Earned Premium	Incurred Claims	Loss Ratio		
Historical Experience	1993	117	0	0.0%	1	326	0	0.0%	4.5%	2.7866
	1994	1,422,870	0	0.0%	3,349	3,794,162	0	0.0%	4.5%	2.6666
	1995	13,183,106	585,628	4.4%	14,880	33,639,697	1,494,362	4.4%	4.5%	2.5517
	1996	37,127,086	1,948,172	5.2%	35,113	90,658,581	4,757,133	5.2%	4.5%	2.4418
	1997	57,428,703	11,510,630	20.0%	35,609	134,193,280	26,896,816	20.0%	4.4%	2.3367
	1998	59,242,599	9,591,097	16.2%	36,385	132,470,621	21,446,368	16.2%	4.4%	2.2361
	1999	59,470,760	14,408,874	24.2%	35,393	127,254,359	30,831,824	24.2%	4.4%	2.1398
	2000	58,280,297	19,573,694	33.6%	34,595	119,336,870	40,079,812	33.6%	4.4%	2.0476
	2001	57,686,952	25,218,093	43.7%	33,833	113,035,327	49,413,866	43.7%	4.4%	1.9595
	2002	57,034,186	29,251,514	51.3%	33,085	106,943,787	54,848,993	51.3%	4.4%	1.8751
	2003	56,166,151	33,430,653	59.5%	32,350	100,781,005	59,985,859	59.5%	4.4%	1.7943
	2004	55,153,896	42,281,735	76.7%	31,337	94,703,041	72,600,653	76.7%	4.4%	1.7171
	2005	57,956,935	46,764,091	80.7%	30,242	95,230,672	76,839,395	80.7%	4.4%	1.6431
	2006	59,493,684	49,713,398	83.6%	29,267	93,546,170	78,167,927	83.6%	4.4%	1.5724
	2007	58,493,640	58,197,756	99.5%	28,342	88,013,138	87,567,933	99.5%	4.4%	1.5047
	2008	57,369,401	73,068,235	127.4%	27,388	82,604,343	105,208,586	127.4%	4.4%	1.4399
	2009	56,106,525	79,162,001	141.1%	26,371	77,307,148	109,074,453	141.1%	4.4%	1.3779
2010	54,533,480	93,987,884	172.3%	25,302	71,904,025	123,925,836	172.3%	4.3%	1.3185	
2011	55,903,808	98,262,677	175.8%	24,024	70,536,691	123,983,041	175.8%	4.3%	1.2618	
2012	56,159,262	115,388,459	205.5%	22,899	67,807,666	139,322,026	205.5%	4.3%	1.2074	
2013	53,822,925	124,377,524	231.1%	21,741	62,188,261	143,708,687	231.1%	4.2%	1.1554	
2014	51,153,274	125,644,957	245.6%	20,330	56,558,549	138,921,635	245.6%	4.1%	1.1057	
2015	52,328,721	128,524,135	245.6%	18,869	55,499,635	136,312,192	245.6%	4.0%	1.0606	
2016	54,685,498	122,718,019	224.4%	17,690	55,768,484	125,148,315	224.4%	4.0%	1.0198	
Projected Future Experience	2017	54,682,663	113,339,921	207.3%	16,308	53,620,763	111,138,937	207.3%	4.0%	0.9806
	2018	63,485,607	109,778,124	172.9%	14,589	59,858,422	103,506,065	172.9%	4.0%	0.9429
	2019	70,432,930	103,812,591	147.4%	13,275	63,854,632	94,116,698	147.4%	4.0%	0.9066
	2020	62,703,520	100,913,351	160.9%	12,005	54,660,706	87,969,463	160.9%	4.0%	0.8717
	2021	55,444,041	97,161,730	175.2%	10,791	46,473,443	81,441,396	175.2%	4.0%	0.8382
	2022	48,711,473	92,717,343	190.3%	9,645	39,259,783	74,727,011	190.3%	4.0%	0.8060
	2023	42,533,169	88,000,624	206.9%	8,573	32,961,809	68,197,593	206.9%	4.0%	0.7750
	2024	36,913,654	83,446,028	226.1%	7,577	27,506,605	62,180,703	226.1%	4.0%	0.7452
	2025	31,845,575	79,130,553	248.5%	6,660	22,817,376	56,697,096	248.5%	4.0%	0.7165
	2026	27,312,240	74,502,712	272.8%	5,822	18,816,576	51,328,120	272.8%	4.0%	0.6889
	2027	23,289,867	69,675,459	299.2%	5,063	15,428,260	46,156,171	299.2%	4.0%	0.6624
	2028	19,749,038	64,685,145	327.5%	4,379	12,579,476	41,202,271	327.5%	4.0%	0.6370
	2029	16,656,017	59,568,718	357.6%	3,768	10,201,274	36,483,921	357.6%	4.0%	0.6125
	2030	13,973,812	54,478,795	389.9%	3,227	8,229,336	32,083,181	389.9%	4.0%	0.5889
	2031	11,663,959	49,497,001	424.4%	2,749	6,604,844	28,028,216	424.4%	4.0%	0.5663
	2032	9,687,828	44,785,814	462.3%	2,331	5,274,844	24,385,053	462.3%	4.0%	0.5445
	2033	8,007,782	40,411,477	504.7%	1,966	4,192,394	21,157,026	504.7%	4.0%	0.5235
	2034	6,587,822	36,325,675	551.4%	1,650	3,316,335	18,286,486	551.4%	4.0%	0.5034
	2035	5,394,183	32,467,417	601.9%	1,378	2,611,012	15,715,600	601.9%	4.0%	0.4840
	2036	4,395,959	28,753,148	654.1%	1,145	2,045,990	13,382,439	654.1%	4.0%	0.4654
	2037	3,565,376	25,248,463	708.2%	946	1,595,592	11,299,299	708.2%	4.0%	0.4475
	2038	2,877,718	21,994,486	764.3%	777	1,238,316	9,464,486	764.3%	4.0%	0.4303
	2039	2,311,169	18,970,854	820.8%	635	956,272	7,849,405	820.8%	4.0%	0.4138
	2040	1,846,668	16,184,749	876.4%	516	734,692	6,439,060	876.4%	4.0%	0.3978
	2041	1,467,732	13,637,290	929.1%	416	561,474	5,216,885	929.1%	4.0%	0.3825
	2042	1,160,178	11,371,164	980.1%	334	426,751	4,182,681	980.1%	4.0%	0.3678
	2043	911,837	9,386,719	1029.4%	266	322,503	3,319,941	1029.4%	4.0%	0.3537
	2044	712,373	7,648,011	1073.6%	210	242,265	2,600,948	1073.6%	4.0%	0.3401
	2045	553,067	6,159,718	1113.7%	165	180,854	2,014,238	1113.7%	4.0%	0.3270
	2046	426,574	4,892,392	1146.9%	128	134,125	1,538,288	1146.9%	4.0%	0.3144
2047	326,746	3,839,635	1175.1%	99	98,786	1,160,842	1175.1%	4.0%	0.3023	
2048	248,478	2,982,508	1200.3%	76	72,233	867,025	1200.3%	4.0%	0.2907	
2049	187,551	2,292,226	1222.2%	58	52,425	640,728	1222.2%	4.0%	0.2795	
2050	140,485	1,743,067	1240.7%	43	37,758	468,487	1240.7%	4.0%	0.2688	
2051	104,422	1,310,283	1254.8%	32	26,986	338,622	1254.8%	4.0%	0.2584	
2052	77,024	972,106	1262.1%	24	19,140	241,563	1262.1%	4.0%	0.2485	
2053	56,392	711,155	1261.1%	18	13,474	169,921	1261.1%	4.0%	0.2389	
2054	40,992	515,749	1258.2%	13	9,418	118,492	1258.2%	4.0%	0.2297	
2055	29,596	369,082	1247.1%	9	6,538	81,534	1247.1%	4.0%	0.2209	
2056	21,232	261,152	1230.0%	7	4,510	55,472	1230.0%	4.0%	0.2124	
Past		1,180,203,876	1,303,609,227	110.5%	618,395	1,933,775,838	1,750,535,711	90.5%		
Future		630,536,748	1,573,942,438	249.6%	137,674	497,047,994	1,126,251,364	226.6%		
Lifetime		1,810,740,624	2,877,551,664	158.9%	756,069	2,430,823,832	2,876,787,075	118.3%		