

**BRIGHTHOUSE 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-LTC3J, et al.  
H-5AI-2  
H-COLR-3  
H-NF3  
H-IBOR**

These policy forms are individual policy forms providing comprehensive long term care coverage. These forms were issued in Maryland from May 1993 through December 1994.

**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, Alzheimer's Facility Care, Hospice Facility Care, Bed Reservation, Home Health Care, Home Hospice Care, Adult Day Care, Assisted Living 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, and Care Coordination Benefit. The elimination period will start over if 180 consecutive days or more elapse without a covered expense.

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 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, which may be paid in a lump sum.

Premiums will be waived if benefits, other than Respite Care and Care Coordination, 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.

**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.

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**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%

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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:

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**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.

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**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	43.1%
Semi-Annual	0.51*AP	19.6%
Quarterly	0.26*AP	9.4%
Monthly	0.09*AP	27.9%

**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

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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 23.7% 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	61	23.7%
Nationwide	1,377	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

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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 121.6% 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 121.6%. As the current 15.0% rate increase request does not achieve the target loss ratio of 121.6%, future rate increase requests are likely.

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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: \$4,972  
After increase: \$5,718

**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	4.5%
48 - 52	7.1%
53 - 57	18.8%
58 - 62	25.5%
63 - 67	30.2%
68 - 72	12.5%
73 +	1.4%

By Elimination Period:

<b>Elimination Period</b>	<b>Percent Distribution</b>
20-day	41.4%
60-day	14.6%
90-day	0.7%
100-day	43.3%



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By Benefit Period:

<b>Benefit Period</b>	<b>Percent Distribution</b>
2-Year	3.4%
3-Year	23.8%
5-Year	33.7%
Unlimited	39.1%

By Inflation Protection Option:

<b>Inflation Option</b>	<b>Percent Distribution</b>
None	9.4%
Compound	42.0%
CPI	48.6%

By Home Care (HC) Daily Benefit:

<b>HC Benefit Option</b>	<b>Percent Distribution</b>
Reduced	24.6%
Standard	41.7%
Increased	33.7%

**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	68	\$338,127
Nationwide	1,482	\$6,353,647

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

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**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%
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80	0.376%	0.272%	98	10.202%	6.999%
81	0.482%	0.353%	99	11.503%	8.001%
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83	0.745%	0.547%	101+	12.907%	9.134%

**Exhibit I**  
**Brighthouse Life Insurance Company**  
**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**  
**Brighthouse Life Insurance Company**  
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**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	\$9,724	\$19,398	50%	\$9,724	\$19,398	50%
2	13,599	21,826	62%	23,322	41,224	57%
3	23,291	25,304	92%	46,613	66,528	70%
4	33,202	29,788	111%	79,815	96,317	83%
5	31,638	35,341	90%	111,453	131,658	85%
6	41,628	41,761	100%	153,082	173,418	88%
7	54,652	49,158	111%	207,734	222,576	93%
8	61,341	57,562	107%	269,075	280,139	96%
9	69,261	66,854	104%	338,336	346,992	98%
10	82,077	77,328	106%	420,413	424,320	99%
11	96,539	88,766	109%	516,952	513,086	101%
12	110,919	101,179	110%	627,871	614,265	102%
13	117,280	113,944	103%	745,151	728,209	102%
14	131,079	127,337	103%	876,230	855,547	102%
15	164,961	141,245	117%	1,041,191	996,791	104%
16	164,244	155,697	105%	1,205,435	1,152,488	105%
17	175,277	170,181	103%	1,380,712	1,322,669	104%
18	204,489	184,431	111%	1,585,201	1,507,100	105%
19	210,266	193,522	109%	1,795,467	1,700,622	106%
20	198,269	176,624	112%	1,993,737	1,877,247	106%
21	137,036	143,447	96%	2,130,772	2,020,694	105%
22	127,399	118,654	107%	2,258,171	2,139,348	106%
23	96,709	96,572	100%	2,354,880	2,235,920	105%
24	69,574	69,517	100%	2,424,454	2,305,437	105%
25	45,069	39,770	113%	2,469,523	2,345,208	105%
26	11,739	13,531	87%	2,481,262	2,358,739	105%
27	105	285	37%	2,481,367	2,359,023	105%
28	94	25	376%	2,481,461	2,359,049	105%

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	1,716,011	0	0.0%					
	1994	14,622,537	282,234	1.9%	34,305,423	2,603,271	7.6%		
	1995	17,966,874	2,321,037	12.9%					
	1996	16,346,096	626,110	3.8%					
	1997	15,157,018	5,193,613	34.3%	45,728,485	10,475,913	22.9%	3.02	1.45
	1998	14,225,371	4,656,190	32.7%					
	1999	13,357,313	2,505,033	18.8%					
	2000	12,578,001	8,635,268	68.7%	37,854,362	22,121,361	58.4%	2.55	1.37
	2001	11,919,048	10,981,060	92.1%					
	2002	11,240,266	12,074,452	107.4%					
	2003	10,569,950	8,619,928	81.6%	31,655,454	30,893,128	97.6%	1.67	1.19
	2004	9,845,237	10,198,748	103.6%					
	2005	8,999,313	10,101,526	112.2%					
	2006	8,310,448	8,440,238	101.6%	25,112,793	27,564,106	109.8%	1.12	1.04
	2007	7,803,033	9,022,342	115.6%					
	2008	7,184,126	12,980,881	180.7%					
2009	6,718,859	16,174,089	240.7%	20,084,821	44,152,042	219.8%	2.00	1.26	
2010	6,181,836	14,997,072	242.6%						
2011	5,465,356	15,216,159	278.4%						
2012	4,852,657	13,038,727	268.7%	14,773,645	45,831,990	310.2%	1.41	1.12	
2013	4,455,632	17,577,103	394.5%						
2014	4,034,807	12,399,666	307.3%						
2015	3,547,560	13,589,617	383.1%	10,623,259	38,850,125	365.7%	1.18	1.06	
2016	3,040,892	12,860,842	422.9%						
Projected Future Experience	2017	2,648,480	11,591,114	437.7%					
	2018	2,270,643	11,200,753	493.3%	6,851,893	33,478,759	488.6%	1.34	1.10
	2019	1,932,770	10,686,892	552.9%					
	2020	1,634,073	10,075,296	616.6%					
	2021	1,372,423	9,402,643	685.1%	4,151,637	28,175,835	678.7%	1.39	1.12
	2022	1,145,142	8,697,896	759.5%					
	2023	949,362	7,971,067	839.6%					
	2024	782,119	7,234,011	924.9%	2,371,901	21,708,951	915.3%	1.35	1.10
	2025	640,420	6,503,873	1015.6%					
	2026	521,313	5,794,389	1111.5%					
	2027	421,963	5,119,014	1213.1%	1,282,975	15,398,512	1200.2%	1.31	1.09
	2028	339,700	4,485,109	1320.3%					
	2029	272,053	3,901,290	1434.0%					
	2030	216,787	3,369,656	1554.4%	660,758	10,163,517	1538.2%	1.28	1.09
	2031	171,918	2,892,571	1682.5%					
	2032	135,709	2,468,010	1818.6%					
	2033	106,650	2,090,012	1959.7%	325,811	6,314,754	1938.2%	1.26	1.08
	2034	83,453	1,756,732	2105.1%					
	2035	65,027	1,462,951	2249.8%					
	2036	50,461	1,207,587	2393.1%	154,487	3,658,121	2367.9%	1.22	1.07
	2037	38,999	987,584	2532.3%					
	2038	30,020	801,227	2669.0%					
	2039	23,012	644,365	2800.1%	70,596	1,960,241	2776.7%	1.17	1.05
	2040	17,564	514,649	2930.1%					
	2041	13,343	408,496	3061.5%					
	2042	10,083	322,405	3197.4%	31,002	984,033	3174.1%	1.14	1.05
2043	7,576	253,133	3341.4%						
2044	5,655	197,413	3491.0%						
2045	4,192	152,351	3634.7%	12,930	466,063	3604.6%	1.14	1.04	
2046	3,083	116,298	3771.9%						
2047	2,249	87,462	3888.1%						
2048	1,627	64,880	3988.1%	5,042	199,452	3956.0%	1.10	1.03	
2049	1,165	47,111	4042.2%						
2050	826	33,526	4056.7%						
2051	580	23,211	4005.0%	1,807	72,363	4003.8%	1.01	1.00	
2052	401	15,626	3892.8%						
2053	274	10,304	3759.4%						
2054	184	6,642	3608.0%	579	21,142	3648.6%	0.91	0.97	
2055	121	4,197	3459.8%						
2056	78	2,578	3298.4%						
Past		220,138,242	222,491,936	101.1%					
Future		15,921,496	122,604,322	770.1%					
Lifetime		236,059,738	345,096,258	146.2%					



**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 81.7%. 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. 44.0%) is not equal to the sum of each changed assumptions' impact on the lifetime loss ratio (e.g. 26.2% = 5.9% + 2.3% + 0.6% + 17.4%).

**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 81.7%*
Original Pricing Assumptions	33.0%	N/A	N/A
Historical Experience & Projections with Original Pricing Assumptions	81.7%	N/A	0.0%
Historical Experience & Projections with Original Pricing Assumptions except for Current:			
Morbidity	87.6%	5.9%	201.2%
Mortality	84.0%	2.3%	55.4%
Lapse	82.3%	0.6%	18.2%
Interest	99.1%	17.4%	323.4%
Historical Experience & Projections with All Current Assumptions	125.7%	44.0%	509.0%

\* 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	15.00%
2	11.00%
3	9.00%
4	8.00%
5	7.00%
6	6.00%
7	5.00%
8+	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:** 8.0%

**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	615,819	0	0.0%	1,512	1,716,011	0	0.0%	4.5%	2.7866
	1994	5,483,680	105,842	1.9%	4,162	14,622,537	282,234	1.9%	4.5%	2.6666
	1995	7,041,062	909,594	12.9%	3,939	17,966,874	2,321,037	12.9%	4.5%	2.5517
	1996	6,694,159	256,409	3.8%	3,751	16,346,096	626,110	3.8%	4.5%	2.4418
	1997	6,486,523	2,222,633	34.3%	3,631	15,157,018	5,193,613	34.3%	4.4%	2.3367
	1998	6,361,773	2,082,309	32.7%	3,539	14,225,372	4,656,190	32.7%	4.4%	2.2361
	1999	6,242,376	1,170,696	18.8%	3,443	13,357,313	2,505,033	18.8%	4.4%	2.1398
	2000	6,142,692	4,217,188	68.7%	3,358	12,578,001	8,635,268	68.7%	4.4%	2.0476
	2001	6,082,767	5,604,123	92.1%	3,266	11,918,945	10,981,060	92.1%	4.4%	1.9595
	2002	5,994,408	6,439,425	107.4%	3,178	11,240,007	12,074,452	107.4%	4.4%	1.8751
	2003	5,890,728	4,803,963	81.6%	3,082	10,569,951	8,619,928	81.6%	4.4%	1.7943
	2004	5,735,898	5,939,627	103.6%	2,984	9,848,931	10,198,748	103.6%	4.4%	1.7171
	2005	5,944,501	6,147,741	103.4%	2,852	9,767,577	10,101,526	103.4%	4.4%	1.6431
	2006	6,078,089	5,367,840	88.3%	2,754	9,557,014	8,440,238	88.3%	4.4%	1.5724
	2007	5,963,790	5,996,259	100.5%	2,650	8,973,487	9,022,342	100.5%	4.4%	1.5047
	2008	5,737,850	9,015,329	157.1%	2,532	8,261,745	12,980,881	157.1%	4.4%	1.4399
	2009	5,607,729	11,738,526	209.3%	2,442	7,726,687	16,174,089	209.3%	4.4%	1.3779
2010	5,394,168	11,374,086	210.9%	2,296	7,112,371	14,997,072	210.9%	4.3%	1.3185	
2011	5,411,341	12,059,557	222.9%	2,143	6,827,766	15,216,159	222.9%	4.3%	1.2618	
2012	5,315,179	10,798,857	203.2%	2,005	6,417,639	13,038,727	203.2%	4.3%	1.2074	
2013	5,099,926	15,212,696	298.3%	1,901	5,892,573	17,577,103	298.3%	4.2%	1.1554	
2014	4,851,956	11,214,635	231.1%	1,776	5,364,653	12,399,666	231.1%	4.1%	1.1057	
2015	4,939,389	12,813,189	259.4%	1,608	5,238,697	13,589,617	259.4%	4.0%	1.0606	
2016	5,027,098	12,611,093	250.9%	1,482	5,126,654	12,860,842	250.9%	4.0%	1.0198	
Projected Future Experience	2017	5,002,156	11,820,663	236.3%	1,347	4,905,018	11,591,114	236.3%	4.0%	0.9806
	2018	4,837,636	11,879,474	245.6%	1,216	4,561,243	11,200,753	245.6%	4.0%	0.9429
	2019	4,285,542	11,787,855	275.1%	1,091	3,885,280	10,686,892	275.1%	4.0%	0.9066
	2020	3,768,181	11,557,782	306.7%	973	3,284,846	10,075,296	306.7%	4.0%	0.8717
	2021	3,291,426	11,217,601	340.8%	863	2,758,888	9,402,643	340.8%	4.0%	0.8382
	2022	2,856,226	10,791,891	377.8%	761	2,302,021	8,697,896	377.8%	4.0%	0.8060
	2023	2,462,656	10,285,684	417.7%	667	1,908,477	7,971,067	417.7%	4.0%	0.7750
	2024	2,110,008	9,707,987	460.1%	582	1,572,295	7,234,011	460.1%	4.0%	0.7452
	2025	1,796,873	9,077,274	505.2%	505	1,287,461	6,503,873	505.2%	4.0%	0.7165
	2026	1,521,223	8,410,550	552.9%	435	1,048,036	5,794,389	552.9%	4.0%	0.6889
	2027	1,280,596	7,727,453	603.4%	374	848,325	5,119,014	603.4%	4.0%	0.6624
	2028	1,072,204	7,041,357	656.7%	319	682,958	4,485,109	656.7%	4.0%	0.6370
	2029	893,061	6,369,789	713.3%	271	546,971	3,901,290	713.3%	4.0%	0.6125
	2030	740,127	5,721,839	773.1%	229	435,869	3,369,656	773.1%	4.0%	0.5889
	2031	610,439	5,108,195	836.8%	193	345,668	2,892,571	836.8%	4.0%	0.5663
	2032	501,159	4,532,770	904.5%	162	272,872	2,468,010	904.5%	4.0%	0.5445
	2033	409,614	3,992,076	974.6%	135	214,450	2,090,012	974.6%	4.0%	0.5235
	2034	333,350	3,489,708	1046.9%	112	167,810	1,756,732	1046.9%	4.0%	0.5034
	2035	270,146	3,022,362	1118.8%	92	130,762	1,462,951	1118.8%	4.0%	0.4840
	2036	218,025	2,594,588	1190.0%	76	101,474	1,207,587	1190.0%	4.0%	0.4654
	2037	175,247	2,206,771	1259.2%	62	78,427	987,584	1259.2%	4.0%	0.4475
	2038	140,296	1,861,968	1327.2%	50	60,371	801,227	1327.2%	4.0%	0.4303
	2039	111,850	1,557,335	1392.3%	41	46,279	644,365	1392.3%	4.0%	0.4138
	2040	88,784	1,293,585	1457.0%	33	35,323	514,649	1457.0%	4.0%	0.3978
	2041	70,145	1,067,836	1522.3%	26	26,834	408,496	1522.3%	4.0%	0.3825
	2042	55,130	876,499	1589.9%	21	20,279	322,405	1589.9%	4.0%	0.3678
	2043	43,076	715,701	1661.5%	16	15,236	253,133	1661.5%	4.0%	0.3537
	2044	33,441	580,488	1735.8%	13	11,373	197,413	1735.8%	4.0%	0.3401
	2045	25,779	465,903	1807.3%	10	8,430	152,351	1807.3%	4.0%	0.3270
	2046	19,721	369,877	1875.5%	7	6,201	116,298	1875.5%	4.0%	0.3144
2047	14,964	289,291	1933.3%	6	4,524	87,462	1933.3%	4.0%	0.3023	
2048	11,255	223,183	1983.0%	4	3,272	64,880	1983.0%	4.0%	0.2907	
2049	8,385	168,540	2009.9%	3	2,344	47,111	2009.9%	4.0%	0.2795	
2050	6,184	124,738	2017.1%	2	1,662	33,526	2017.1%	4.0%	0.2688	
2051	4,510	89,814	1991.4%	2	1,166	23,211	1991.4%	4.0%	0.2584	
2052	3,249	62,881	1935.6%	1	807	15,626	1935.6%	4.0%	0.2485	
2053	2,307	43,124	1869.2%	1	551	10,304	1869.2%	4.0%	0.2389	
2054	1,612	28,909	1793.9%	1	370	6,642	1793.9%	4.0%	0.2297	
2055	1,104	18,996	1720.2%	0	244	4,197	1720.2%	4.0%	0.2209	
2056	740	12,135	1640.0%	0	157	2,578	1640.0%	4.0%	0.2124	
Past		134,142,902	158,101,617	117.9%	66,286	235,813,919	222,491,936	94.4%		
Future		39,078,427	168,194,474	430.4%	10,701	31,584,571	122,604,322	388.2%		
Lifetime		173,221,329	326,296,092	188.4%	76,987	267,398,491	345,096,258	129.1%		

**Exhibit IV**  
**Brighthouse Life Insurance Company**  
**Nationwide 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	615,819	0	0.0%	1,512	1,716,011	0	0.0%	4.5%	2.7866
	1994	5,483,680	105,842	1.9%	4,162	14,622,537	282,234	1.9%	4.5%	2.6666
	1995	7,041,062	909,594	12.9%	3,939	17,966,874	2,321,037	12.9%	4.5%	2.5517
	1996	6,694,159	256,409	3.8%	3,751	16,346,096	626,110	3.8%	4.5%	2.4418
	1997	6,486,523	2,222,633	34.3%	3,631	15,157,018	5,193,613	34.3%	4.4%	2.3367
	1998	6,361,773	2,082,309	32.7%	3,539	14,225,372	4,656,190	32.7%	4.4%	2.2361
	1999	6,242,376	1,170,696	18.8%	3,443	13,357,313	2,505,033	18.8%	4.4%	2.1398
	2000	6,142,692	4,217,188	68.7%	3,358	12,578,001	8,635,268	68.7%	4.4%	2.0476
	2001	6,082,767	5,604,123	92.1%	3,266	11,918,945	10,981,060	92.1%	4.4%	1.9595
	2002	5,994,408	6,439,425	107.4%	3,178	11,240,007	12,074,452	107.4%	4.4%	1.8751
	2003	5,890,728	4,803,963	81.6%	3,082	10,569,951	8,619,928	81.6%	4.4%	1.7943
	2004	5,735,898	5,939,627	103.6%	2,984	9,848,931	10,198,748	103.6%	4.4%	1.7171
	2005	5,944,501	6,147,741	103.4%	2,852	9,767,577	10,101,526	103.4%	4.4%	1.6431
	2006	6,078,089	5,367,840	88.3%	2,754	9,557,014	8,440,238	88.3%	4.4%	1.5724
	2007	5,963,790	5,996,259	100.5%	2,650	8,973,487	9,022,342	100.5%	4.4%	1.5047
	2008	5,737,850	9,015,329	157.1%	2,532	8,261,745	12,980,881	157.1%	4.4%	1.4399
	2009	5,607,729	11,738,526	209.3%	2,442	7,726,687	16,174,089	209.3%	4.4%	1.3779
2010	5,394,168	11,374,086	210.9%	2,296	7,112,371	14,997,072	210.9%	4.3%	1.3185	
2011	5,411,341	12,059,557	222.9%	2,143	6,827,766	15,216,159	222.9%	4.3%	1.2618	
2012	5,315,179	10,798,857	203.2%	2,005	6,417,639	13,038,727	203.2%	4.3%	1.2074	
2013	5,099,926	15,212,696	298.3%	1,901	5,892,573	17,577,103	298.3%	4.2%	1.1554	
2014	4,851,956	11,214,635	231.1%	1,776	5,364,653	12,399,666	231.1%	4.1%	1.1057	
2015	4,939,389	12,813,189	259.4%	1,608	5,238,697	13,589,617	259.4%	4.0%	1.0606	
2016	5,027,098	12,611,093	250.9%	1,482	5,126,654	12,860,842	250.9%	4.0%	1.0198	
Projected Future Experience	2017	5,002,156	11,820,663	236.3%	1,347	4,905,018	11,591,114	236.3%	4.0%	0.9806
	2018	5,127,317	11,766,267	229.5%	1,204	4,834,373	11,094,013	229.5%	4.0%	0.9429
	2019	4,805,903	11,567,222	240.7%	1,080	4,357,041	10,486,866	240.7%	4.0%	0.9066
	2020	4,225,723	11,341,456	268.4%	964	3,683,700	9,886,717	268.4%	4.0%	0.8717
	2021	3,691,080	11,007,641	298.2%	855	3,093,879	9,226,654	298.2%	4.0%	0.8382
	2022	3,203,036	10,589,900	330.6%	754	2,581,538	8,535,097	330.6%	4.0%	0.8060
	2023	2,761,678	10,093,167	365.5%	661	2,140,210	7,821,873	365.5%	4.0%	0.7750
	2024	2,366,211	9,526,283	402.6%	576	1,763,207	7,098,612	402.6%	4.0%	0.7452
	2025	2,015,054	8,907,375	442.0%	500	1,443,788	6,382,140	442.0%	4.0%	0.7165
	2026	1,705,934	8,253,130	483.8%	431	1,175,291	5,685,936	483.8%	4.0%	0.6889
	2027	1,436,089	7,582,819	528.0%	370	951,330	5,023,201	528.0%	4.0%	0.6624
	2028	1,202,394	6,909,564	574.7%	316	765,885	4,401,161	574.7%	4.0%	0.6370
	2029	1,001,499	6,250,565	624.1%	268	613,386	3,828,270	624.1%	4.0%	0.6125
	2030	829,996	5,614,743	676.5%	227	488,794	3,306,586	676.5%	4.0%	0.5889
	2031	684,560	5,012,585	732.2%	191	387,640	2,838,431	732.2%	4.0%	0.5663
	2032	562,010	4,447,930	791.4%	160	306,004	2,421,816	791.4%	4.0%	0.5445
	2033	459,351	3,917,356	852.8%	133	240,489	2,050,893	852.8%	4.0%	0.5235
	2034	373,826	3,424,391	916.0%	111	188,186	1,723,852	916.0%	4.0%	0.5034
	2035	302,948	2,965,792	979.0%	91	146,640	1,435,569	979.0%	4.0%	0.4840
	2036	244,498	2,546,025	1041.3%	75	113,795	1,184,984	1041.3%	4.0%	0.4654
	2037	196,526	2,165,467	1101.9%	61	87,950	969,099	1101.9%	4.0%	0.4475
	2038	157,331	1,827,118	1161.3%	50	67,701	786,230	1161.3%	4.0%	0.4303
	2039	125,431	1,528,186	1218.3%	40	51,898	632,304	1218.3%	4.0%	0.4138
	2040	99,565	1,269,373	1274.9%	32	39,612	505,017	1274.9%	4.0%	0.3978
	2041	78,662	1,047,850	1332.1%	26	30,092	400,850	1332.1%	4.0%	0.3825
	2042	61,824	860,093	1391.2%	20	22,741	316,370	1391.2%	4.0%	0.3678
	2043	48,307	702,305	1453.8%	16	17,085	248,395	1453.8%	4.0%	0.3537
	2044	37,502	569,623	1518.9%	13	12,754	193,718	1518.9%	4.0%	0.3401
	2045	28,909	457,183	1581.5%	10	9,453	149,500	1581.5%	4.0%	0.3270
	2046	22,116	362,954	1641.2%	7	6,954	114,122	1641.2%	4.0%	0.3144
2047	16,780	283,876	1691.7%	6	5,073	85,825	1691.7%	4.0%	0.3023	
2048	12,621	219,005	1735.2%	4	3,669	63,666	1735.2%	4.0%	0.2907	
2049	9,404	165,385	1758.7%	3	2,629	46,229	1758.7%	4.0%	0.2795	
2050	6,935	122,404	1765.0%	2	1,864	32,899	1765.0%	4.0%	0.2688	
2051	5,058	88,133	1742.5%	2	1,307	22,777	1742.5%	4.0%	0.2584	
2052	3,643	61,704	1693.7%	1	905	15,333	1693.7%	4.0%	0.2485	
2053	2,587	42,317	1635.6%	1	618	10,111	1635.6%	4.0%	0.2389	
2054	1,807	28,368	1569.7%	1	415	6,517	1569.7%	4.0%	0.2297	
2055	1,238	18,641	1505.3%	0	274	4,118	1505.3%	4.0%	0.2209	
2056	830	11,908	1435.0%	0	176	2,529	1435.0%	4.0%	0.2124	
Past		134,142,902	158,101,617	117.9%	66,286	235,813,919	222,491,936	94.4%		
Future		42,918,339	165,376,769	385.3%	10,607	34,543,364	120,629,394	349.2%		
Lifetime		177,061,240	323,478,386	182.7%	76,893	270,357,283	343,121,331	126.9%		

**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	37,087	0	0.0%	84	103,346	0	0.0%	4.5%	2.7866
	1994	215,970	0	0.0%	159	575,895	0	0.0%	4.5%	2.6666
	1995	271,931	194	0.1%	154	693,895	495	0.1%	4.5%	2.5517
	1996	267,563	437	0.2%	149	653,348	1,067	0.2%	4.5%	2.4418
	1997	264,715	749	0.3%	147	618,557	1,750	0.3%	4.4%	2.3367
	1998	263,022	299,064	113.7%	143	588,136	668,729	113.7%	4.4%	2.2361
	1999	267,674	3,689	1.4%	141	572,764	7,894	1.4%	4.4%	2.1398
	2000	269,844	120,009	44.5%	139	552,543	245,734	44.5%	4.4%	2.0476
	2001	265,443	83,321	31.4%	135	520,126	163,265	31.4%	4.4%	1.9595
	2002	255,152	0	0.0%	134	478,432	0	0.0%	4.4%	1.8751
	2003	254,760	162,905	63.9%	125	457,125	292,306	63.9%	4.4%	1.7943
	2004	246,622	75,281	30.5%	123	423,467	129,262	30.5%	4.4%	1.7171
	2005	258,945	283,038	109.3%	119	425,480	465,068	109.3%	4.4%	1.6431
	2006	272,412	599,613	220.1%	116	428,332	942,815	220.1%	4.4%	1.5724
	2007	269,213	74,775	27.8%	112	405,074	112,512	27.8%	4.4%	1.5047
	2008	265,439	459,889	173.3%	107	382,197	662,179	173.3%	4.4%	1.4399
	2009	253,149	448,543	177.2%	99	348,805	618,032	177.2%	4.4%	1.3779
2010	240,993	1,027,347	426.3%	92	317,756	1,354,588	426.3%	4.3%	1.3185	
2011	247,701	747,590	301.8%	89	312,537	943,272	301.8%	4.3%	1.2618	
2012	259,945	430,060	165.4%	84	313,863	519,261	165.4%	4.3%	1.2074	
2013	256,629	493,479	192.3%	81	296,515	570,177	192.3%	4.2%	1.1554	
2014	252,584	25,858	10.2%	77	279,275	28,590	10.2%	4.1%	1.1057	
2015	262,461	566,940	216.0%	72	278,366	601,294	216.0%	4.0%	1.0606	
2016	283,443	594,091	209.6%	68	289,057	605,856	209.6%	4.0%	1.0198	
Projected Future Experience	2017	297,425	606,245	203.8%	62	291,649	594,472	203.8%	4.0%	0.9806
	2018	295,418	618,983	209.5%	57	278,539	583,618	209.5%	4.0%	0.9429
	2019	268,036	622,993	232.4%	52	243,002	564,807	232.4%	4.0%	0.9066
	2020	241,736	618,464	255.8%	47	210,730	539,135	255.8%	4.0%	0.8717
	2021	216,806	609,878	281.3%	42	181,728	511,202	281.3%	4.0%	0.8382
	2022	193,385	596,716	308.6%	38	155,862	480,933	308.6%	4.0%	0.8060
	2023	171,574	578,174	337.0%	33	132,964	448,066	337.0%	4.0%	0.7750
	2024	151,443	554,293	366.0%	30	112,849	413,038	366.0%	4.0%	0.7452
	2025	133,022	527,961	396.9%	26	95,310	378,285	396.9%	4.0%	0.7165
	2026	116,297	500,908	430.7%	23	80,122	345,097	430.7%	4.0%	0.6889
	2027	101,225	472,966	467.2%	20	67,056	313,314	467.2%	4.0%	0.6624
	2028	87,743	443,729	505.7%	18	55,889	282,641	505.7%	4.0%	0.6370
	2029	75,769	414,114	546.6%	16	46,406	253,631	546.6%	4.0%	0.6125
	2030	65,203	383,645	588.4%	14	38,399	225,933	588.4%	4.0%	0.5889
	2031	55,936	353,964	632.8%	12	31,675	200,436	632.8%	4.0%	0.5663
	2032	47,853	324,965	679.1%	10	26,055	176,938	679.1%	4.0%	0.5445
	2033	40,833	296,640	726.5%	9	21,378	155,303	726.5%	4.0%	0.5235
	2034	34,762	269,486	775.2%	8	17,499	135,660	775.2%	4.0%	0.5034
	2035	29,526	242,127	820.0%	7	14,292	117,200	820.0%	4.0%	0.4840
	2036	25,025	216,143	863.7%	6	11,647	100,598	863.7%	4.0%	0.4654
	2037	21,168	191,490	904.6%	5	9,473	85,697	904.6%	4.0%	0.4475
	2038	17,870	167,701	938.4%	4	7,690	72,164	938.4%	4.0%	0.4303
	2039	15,056	144,906	962.4%	3	6,230	59,956	962.4%	4.0%	0.4138
	2040	12,657	124,012	979.8%	3	5,035	49,338	979.8%	4.0%	0.3978
	2041	10,611	104,536	985.1%	2	4,059	39,990	985.1%	4.0%	0.3825
	2042	8,866	87,583	987.8%	2	3,261	32,216	987.8%	4.0%	0.3678
	2043	7,376	73,143	991.6%	2	2,609	25,870	991.6%	4.0%	0.3537
	2044	6,102	60,748	995.5%	1	2,075	20,659	995.5%	4.0%	0.3401
	2045	5,015	49,985	996.8%	1	1,640	16,345	996.8%	4.0%	0.3270
	2046	4,088	40,844	999.1%	1	1,285	12,842	999.1%	4.0%	0.3144
2047	3,303	32,909	996.4%	1	999	9,949	996.4%	4.0%	0.3023	
2048	2,642	26,152	989.9%	1	768	7,602	989.9%	4.0%	0.2907	
2049	2,091	20,444	977.7%	0	584	5,715	977.7%	4.0%	0.2795	
2050	1,637	15,562	950.8%	0	440	4,183	950.8%	4.0%	0.2688	
2051	1,267	11,537	910.6%	0	327	2,982	910.6%	4.0%	0.2584	
2052	969	8,251	851.5%	0	241	2,050	851.5%	4.0%	0.2485	
2053	731	5,798	792.8%	0	175	1,385	792.8%	4.0%	0.2389	
2054	544	3,955	727.4%	0	125	909	727.4%	4.0%	0.2297	
2055	397	2,648	666.9%	0	88	585	666.9%	4.0%	0.2209	
2056	284	1,726	608.6%	0	60	367	608.6%	4.0%	0.2124	
Past		6,002,698	6,496,873	108.2%	2,749	10,314,888	8,934,148	86.6%		
Future		2,771,687	10,426,326	376.2%	556	2,160,214	7,271,111	336.6%		
Lifetime		8,774,386	16,923,198	192.9%	3,305	12,475,102	16,205,258	129.9%		

**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	37,087	0	0.0%	84	103,346	0	0.0%	4.5%	2.7866
	1994	215,970	0	0.0%	159	575,895	0	0.0%	4.5%	2.6666
	1995	271,931	194	0.1%	154	693,895	495	0.1%	4.5%	2.5517
	1996	267,563	437	0.2%	149	653,348	1,067	0.2%	4.5%	2.4418
	1997	264,715	749	0.3%	147	618,557	1,750	0.3%	4.4%	2.3367
	1998	263,022	299,064	113.7%	143	588,136	668,729	113.7%	4.4%	2.2361
	1999	267,674	3,689	1.4%	141	572,764	7,894	1.4%	4.4%	2.1398
	2000	269,844	120,009	44.5%	139	552,543	245,734	44.5%	4.4%	2.0476
	2001	265,443	83,321	31.4%	135	520,126	163,265	31.4%	4.4%	1.9595
	2002	255,152	0	0.0%	134	478,432	0	0.0%	4.4%	1.8751
	2003	254,760	162,905	63.9%	125	457,125	292,306	63.9%	4.4%	1.7943
	2004	246,622	75,281	30.5%	123	423,467	129,262	30.5%	4.4%	1.7171
	2005	258,945	283,038	109.3%	119	425,480	465,068	109.3%	4.4%	1.6431
	2006	272,412	599,613	220.1%	116	428,332	942,815	220.1%	4.4%	1.5724
	2007	269,213	74,775	27.8%	112	405,074	112,512	27.8%	4.4%	1.5047
	2008	265,439	459,889	173.3%	107	382,197	662,179	173.3%	4.4%	1.4399
	2009	253,149	448,543	177.2%	99	348,805	618,032	177.2%	4.4%	1.3779
2010	240,993	1,027,347	426.3%	92	317,756	1,354,588	426.3%	4.3%	1.3185	
2011	247,701	747,590	301.8%	89	312,537	943,272	301.8%	4.3%	1.2618	
2012	259,945	430,060	165.4%	84	313,863	519,261	165.4%	4.3%	1.2074	
2013	256,629	493,479	192.3%	81	296,515	570,177	192.3%	4.2%	1.1554	
2014	252,584	25,858	10.2%	77	279,275	28,590	10.2%	4.1%	1.1057	
2015	262,461	566,940	216.0%	72	278,366	601,294	216.0%	4.0%	1.0606	
2016	283,443	594,091	209.6%	68	289,057	605,856	209.6%	4.0%	1.0198	
Projected Future Experience	2017	297,425	606,245	203.8%	62	291,649	594,472	203.8%	4.0%	0.9806
	2018	310,258	613,622	197.8%	56	292,532	578,563	197.8%	4.0%	0.9429
	2019	300,581	611,333	203.4%	51	272,508	554,236	203.4%	4.0%	0.9066
	2020	271,089	606,888	223.9%	46	236,317	529,044	223.9%	4.0%	0.8717
	2021	243,131	598,463	246.1%	42	203,793	501,634	246.1%	4.0%	0.8382
	2022	216,866	585,547	270.0%	37	174,787	471,931	270.0%	4.0%	0.8060
	2023	192,407	567,352	294.9%	33	149,109	439,679	294.9%	4.0%	0.7750
	2024	169,831	543,919	320.3%	29	126,551	405,307	320.3%	4.0%	0.7452
	2025	149,173	518,080	347.3%	26	106,883	371,204	347.3%	4.0%	0.7165
	2026	130,418	491,533	376.9%	23	89,851	338,638	376.9%	4.0%	0.6889
	2027	113,516	464,113	408.9%	20	75,198	307,450	408.9%	4.0%	0.6624
	2028	98,396	435,424	442.5%	18	62,675	277,350	442.5%	4.0%	0.6370
	2029	84,969	406,363	478.3%	15	52,041	248,884	478.3%	4.0%	0.6125
	2030	73,120	376,465	514.9%	13	43,061	221,704	514.9%	4.0%	0.5889
	2031	62,728	347,338	553.7%	12	35,521	196,684	553.7%	4.0%	0.5663
	2032	53,663	318,883	594.2%	10	29,219	173,626	594.2%	4.0%	0.5445
	2033	45,791	291,088	635.7%	9	23,974	152,396	635.7%	4.0%	0.5235
	2034	38,982	264,442	678.4%	8	19,624	133,121	678.4%	4.0%	0.5034
	2035	33,111	237,595	717.6%	7	16,027	115,006	717.6%	4.0%	0.4840
	2036	28,064	212,098	755.8%	6	13,062	98,716	755.8%	4.0%	0.4654
	2037	23,738	187,906	791.6%	5	10,623	84,093	791.6%	4.0%	0.4475
	2038	20,040	164,562	821.2%	4	8,623	70,813	821.2%	4.0%	0.4303
	2039	16,884	142,194	842.2%	3	6,986	58,834	842.2%	4.0%	0.4138
	2040	14,193	121,691	857.4%	3	5,647	48,415	857.4%	4.0%	0.3978
	2041	11,900	102,579	862.0%	2	4,552	39,241	862.0%	4.0%	0.3825
	2042	9,943	85,944	864.4%	2	3,657	31,613	864.4%	4.0%	0.3678
	2043	8,272	71,774	867.7%	2	2,926	25,385	867.7%	4.0%	0.3537
	2044	6,843	59,611	871.1%	1	2,327	20,273	871.1%	4.0%	0.3401
	2045	5,624	49,049	872.2%	1	1,839	16,039	872.2%	4.0%	0.3270
2046	4,584	40,079	874.2%	1	1,441	12,602	874.2%	4.0%	0.3144	
2047	3,704	32,293	871.9%	1	1,120	9,763	871.9%	4.0%	0.3023	
2048	2,963	25,663	866.2%	1	861	7,460	866.2%	4.0%	0.2907	
2049	2,345	20,061	855.6%	0	655	5,608	855.6%	4.0%	0.2795	
2050	1,835	15,270	831.9%	0	493	4,104	831.9%	4.0%	0.2688	
2051	1,421	11,321	796.8%	0	367	2,926	796.8%	4.0%	0.2584	
2052	1,087	8,096	745.1%	0	270	2,012	745.1%	4.0%	0.2485	
2053	820	5,689	693.7%	0	196	1,359	693.7%	4.0%	0.2389	
2054	610	3,881	636.5%	0	140	892	636.5%	4.0%	0.2297	
2055	445	2,598	583.6%	0	98	574	583.6%	4.0%	0.2209	
2056	318	1,694	532.5%	0	68	360	532.5%	4.0%	0.2124	
Past		6,002,698	6,496,873	108.2%	2,749	10,314,888	8,934,148	86.6%		
Future		3,051,089	10,248,748	335.9%	551	2,367,271	7,152,013	302.1%		
Lifetime		9,053,787	16,745,621	185.0%	3,300	12,682,159	16,086,161	126.8%		



**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  
 Bighthouse Life Insurance Company  
 Status of Filings as of September 12, 2017  
 All Jurisdictions in which these Forms are Active  
 LTC3 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
Alabama	39.0%	8/15/2004	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%	6,654	0.10%
Arkansas	39.0%	8/16/2004	39.0%	30.0%	5/5/2010	10.0%	77.8%	1/29/2015	25.0%	42.2%	11/19/2015	25.0%	Not Filing				138.9%	37.7%	1/24/2017	Disapproved	0.0%	11,119	0.17%
Arizona	39.0%	2/25/2005	15.0%	30.0%	7/12/2010	20.0%	92.7%	4/8/2014	38.6%	Not Filing			Not Filing				91.3%	68.2%	12/7/2016			103,423	1.63%
Colorado	39.0%	8/31/2004	39.0%	30.0%	11/22/2010	10.0%	77.8%	1/12/2015	36.0%	31.7%	Disapproved	0.0%	Not Filing				106.4%	TBD				126,756	2.00%
Connecticut	39.0%	Disapproved	0.0%	39.0%	9/3/2010	30.0%	100.0%	3/28/2014	20.0%	66.7%	3/20/2015	10.0%	51.5%	4/27/2016	10/13/2016	47.8%	153.6%	24.5%				1,560,204	24.56%
District of Columbia	39.0%	Withdrawn	0.0%	39.0%	Not Filing	Not Filing	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			8,609	0.14%
Delaware	39.0%	9/8/2004	16.0%	30.0%	7/12/2010	25.0%	25.0%	2/25/2014	25.0%	2.5%	11/18/2015	25.0%	Not Filing				126.6%	25.0%	12/21/2016	2/23/2017	25.0%	21,798	0.34%
Florida	39.0%	12/6/2004	12.0%	30.0%	11/13/2012	17.0%	75.4%	5/22/2015	6.7%	2.0%	7/8/2016	9.2%	Not Filing				52.7%	88.6%	8/15/2017			203,758	3.21%
Georgia	39.0%	2/4/2005	15.0%	30.0%	5/13/2010	15.0%	98.5%	7/16/2014	15.0%	72.6%	8/3/2015	13.0%	52.7%	6/9/2016	9/22/2016	15.0%	97.6%	60.7%	8/28/2017			26,467	0.42%
Hawaii	39.0%	12/21/2004	25.0%	30.0%	10/10/2011	30.0%	66.2%	7/7/2017	19.5%	Not Filing			Not Filing				94.2%	70.3%				37,014	0.58%
Iowa	39.0%	6/23/2004	32.0%	30.0%	7/12/2010	17.0%	76.3%	4/7/2014	17.0%	50.7%	8/18/2015	17.5%	55.2%	8/24/2016	10/19/2016	17.5%	149.5%	32.1%				22,530	0.36%
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				171.1%	21.0%	11/10/2016	6/30/2017	21.0%	190,607	3.00%
Indiana	39.0%	8/24/2004	35.0%	30.0%	6/24/2010	20.0%	68.7%	2/25/2015	10.3%	52.9%	5/9/2016	9.5%	Not Filing				69.0%	3/3/2017	8/29/2017	10.0%	179,627	2.83%	
Kansas	39.0%	7/15/2004	25.0%	30.0%	8/5/2010	10.0%	93.2%	5/21/2014	30.9%	Not Filing			Not Filing				80.0%	TBD				53,970	0.85%
Kentucky	39.0%	9/20/2004	30.0%	30.0%	5/10/2010	7.0%	91.6%	3/4/2014	23.5%	47.4%	11/10/2015	13.5%	Not Filing				95.0%	65.4%	1/12/2017	4/18/2017	18.2%	4,943	0.08%
Louisiana	39.0%	6/9/2004	39.0%	30.0%	Disapproved	0.0%	91.7%	Disapproved	0.0%	53.4%	Disapproved	0.0%	Not Filing				39.0%	85.8%	2/16/2017	7/11/2017	25.0%	19,609	0.31%
Massachusetts	39.0%	9/27/2004	39.0%	30.0%	12/5/2012	10.0%	74.5%	1/20/2017	40.0%	Not Filing			Not Filing				114.1%	Not Filing				234,872	3.70%
Maryland	39.0%	8/19/2004	15.0%	15.0%	8/13/2010	15.0%	15.0%	2/4/2014	15.0%	15.0%	6/16/2015	15.0%	15.0%	6/23/2016	11/9/2016	15.0%	101.1%	15.0%				338,127	5.32%
Maine	39.0%	6/22/2004	39.0%	3.0%	10/19/2010	3.0%	14.9%	12/8/2014	14.9%	Not Filing			Not Filing				64.5%	TBD				50,091	0.79%
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				171.1%	21.0%	11/11/2016	11/28/2016	21.0%	34,849	0.55%
Minnesota	39.0%	7/26/2004	39.0%	30.0%	3/3/2015	25.0%	Not Filing			Not Filing			Not Filing				75.8%	87.4%				43,640	0.69%
Missouri	39.0%	7/15/2004	39.0%	30.0%	10/22/2010	30.0%	Not Filing			50.0%	3/27/2015	25.0%	20.0%	6/24/2016	6/29/2016	20.0%	171.1%	21.0%	12/12/2016	1/18/2017	21.0%	148,149	2.33%
Mississippi	39.0%	8/19/2004	25.0%	30.0%	5/12/2010	30.7%	25.0%	5/20/2014	25.0%	25.0%	10/28/2015	25.0%	Not Filing				155.3%	25.0%	1/25/2017	4/17/2017	25.0%	5,763	0.09%
Montana	39.0%	7/9/2004	39.0%	30.0%	5/11/2010	30.0%	50.0%	2/6/2014	30.0%	15.4%	Withdrawn	Withdrawn	Not Filing				134.9%	39.6%	3/2/2017	Disapproved	0.0%	13,658	0.21%
North Carolina	39.0%	6/9/2004	39.0%	30.0%	7/2/2010	30.0%	50.0%	2/7/2014	11.0%	Not Filing			Not Filing				100.6%	63.5%	12/6/2016	5/18/2017	16.7%	271,272	4.27%
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%	9/29/2017			5,338	0.08%
Nebraska	39.0%	7/21/2004	39.0%	30.0%	12/14/2010	14.0%	72.2%	9/29/2014	25.0%	37.6%	11/13/2015	37.8%	Not Filing				172.9%	21.0%				16,608	0.29%
New Hampshire	39.0%	Disapproved	0.0%	39.0%	8/26/2010	17.9%	100.0%	Disapproved	0.0%	Not Filing			Not Filing				17.9%	15.9%				42,501	0.67%
New Jersey	39.0%	4/4/2005	12.0%	30.0%	7/16/2010	30.0%	85.1%	7/3/2014	52.1%	Not Filing			Not Filing				121.5%	47.3%	2/17/2017	6/15/2017	26.0%	1,415,382	22.28%
New Mexico	39.0%	6/23/2004	39.0%	30.0%	8/10/2010	26.1%	55.5%	5/21/2014	15.0%	35.2%	7/31/2015	15.0%	Not Filing				131.8%	42.3%	2/1/2017	4/19/2017	15.0%	26,395	0.42%
Nevada	39.0%	6/7/2004	39.0%	30.0%	Withdrawn	Withdrawn	91.7%	10/16/2014	35.0%	Not Filing			Not Filing				87.7%	71.8%	3/2/2017	7/12/2017		9,754	0.15%
Ohio	39.0%	6/10/2004	25.0%	34.5%	6/1/2010	34.5%	68.2%	3/31/2015	15.0%	46.3%	3/11/2016	15.0%	Not Filing				122.3%	15.0%	12/9/2016	3/20/2017	15.0%	207,128	3.26%
Oregon	39.0%	7/15/2004	25.0%	30.0%	6/4/2010	15.0%	87.0%	4/21/2014	30.0%	31.8%	4/7/2016	31.8%	Not Filing				146.3%	32.1%				37,062	0.58%
Pennsylvania	39.0%	8/10/2004	39.0%	30.0%	7/28/2010	14.9%	71.0%	2/28/2014	15.0%	48.7%	7/21/2015	15.0%	56.5%	8/17/2016	12/13/2016	15.0%	142.9%	36.0%				187,449	2.95%
Puerto Rico	39.0%	10/15/2004	39.0%	30.0%	4/7/2010	30.0%	50.0%	Disapproved	0.0%	Not Filing			Not Filing				80.7%	81.5%	1/26/2017	5/10/2017	81.5%	13,612	0.21%
Rhode Island	39.0%	4/8/2005	39.0%	30.0%	9/18/2011	25.0%	57.0%	2/16/2017	57.0%	Not Filing			Not Filing				172.8%	21.0%				176,532	2.78%
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				171.9%	21.0%	11/16/2016	9/11/2017	12.0%	96,572	0.57%
Texas	39.0%	9/15/2004	30.0%	30.0%	7/16/2010	12.0%	85.1%	4/28/2014	16.0%	93.1%	12/14/2016	38.0%	Not Filing				133.1%	39.9%				36,277	0.57%
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%	8,922	0.14%
Virginia	39.0%	Disapproved	0.0%	39.0%	2/25/2011	39.0%	91.7%	1/20/2016	38.4%	Not Filing			Not Filing				92.4%	67.6%	2/28/2017	5/26/2017	32.0%	191,568	3.02%
Virgin Islands	39.0%	10/15/2004	39.0%	30.0%	Disapproved	0.0%	91.7%	8/21/2014	40.0%	Not Filing			Not Filing				94.6%	65.7%				8,429	0.13%
Vermont	39.0%	7/19/2005	25.0%	30.0%	Disapproved	0.0%	100.0%	Disapproved	0.0%	Not Filing			Not Filing				25.0%	148.9%	12/12/2016			24,901	0.39%
Washington	39.0%	7/7/2004	39.0%	30.0%	3/22/2010	30.0%	25.6%	8/14/2014	25.6%	Not Filing			Not Filing				127.0%	38.2%				28,667	0.45%
Wisconsin	39.0%	5/21/2004	39.0%	30.0%	4/14/2010	30.0%	50.0%	2/27/2014	50.0%	Not Filing			Not Filing				171.1%	21.0%	12/8/2016	6/29/2017	21.0%	100,652	1.58%
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				171.1%	21.0%	2/22/2017	Disapproved	0.0%		0.00%

[1] 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.  
 [2] 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.  
 [3] Annualized premiums reflect all prior rate increases approved prior to March 21, 2017.

<b>Total</b>																							<b>6,353,647</b>	<b>100.00%</b>
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**Exhibit VIII**  
**Brighthouse Life Insurance Company**  
**Nationwide Experience Projections with 57.9% 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	615,819	0	0.0%	1,512	1,716,011	0	0.0%	4.5%	2.7866
	1994	5,483,680	105,842	1.9%	4,162	14,622,537	282,234	1.9%	4.5%	2.6666
	1995	7,041,062	909,594	12.9%	3,939	17,966,874	2,321,037	12.9%	4.5%	2.5517
	1996	6,694,159	256,409	3.8%	3,751	16,346,096	626,110	3.8%	4.5%	2.4418
	1997	6,486,523	2,222,633	34.3%	3,631	15,157,018	5,193,613	34.3%	4.4%	2.3367
	1998	6,361,773	2,082,309	32.7%	3,539	14,225,372	4,656,190	32.7%	4.4%	2.2361
	1999	6,242,376	1,170,696	18.8%	3,443	13,357,313	2,505,033	18.8%	4.4%	2.1398
	2000	6,142,692	4,217,188	68.7%	3,358	12,578,001	8,635,268	68.7%	4.4%	2.0476
	2001	6,082,767	5,604,123	92.1%	3,266	11,918,945	10,981,060	92.1%	4.4%	1.9595
	2002	5,994,408	6,439,425	107.4%	3,178	11,240,007	12,074,452	107.4%	4.4%	1.8751
	2003	5,890,728	4,803,963	81.6%	3,082	10,569,951	8,619,928	81.6%	4.4%	1.7943
	2004	5,735,898	5,939,627	103.6%	2,984	9,848,931	10,198,748	103.6%	4.4%	1.7171
	2005	5,944,501	6,147,741	103.4%	2,852	9,767,577	10,101,526	103.4%	4.4%	1.6431
	2006	6,078,089	5,367,840	88.3%	2,754	9,557,014	8,440,238	88.3%	4.4%	1.5724
	2007	5,963,790	5,996,259	100.5%	2,650	8,973,487	9,022,342	100.5%	4.4%	1.5047
	2008	5,737,850	9,015,329	157.1%	2,532	8,261,745	12,980,881	157.1%	4.4%	1.4399
	2009	5,607,729	11,738,526	209.3%	2,442	7,726,687	16,174,089	209.3%	4.4%	1.3779
	2010	5,394,168	11,374,086	210.9%	2,296	7,112,371	14,997,072	210.9%	4.3%	1.3185
	2011	5,411,341	12,059,557	222.9%	2,143	6,827,766	15,216,159	222.9%	4.3%	1.2618
	2012	5,315,179	10,798,857	203.2%	2,005	6,417,639	13,038,727	203.2%	4.3%	1.2074
2013	5,099,926	15,212,696	298.3%	1,901	5,892,573	17,577,103	298.3%	4.2%	1.1554	
2014	4,851,956	11,214,635	231.1%	1,776	5,364,653	12,399,666	231.1%	4.1%	1.1057	
2015	4,939,389	12,813,189	259.4%	1,608	5,238,697	13,589,617	259.4%	4.0%	1.0606	
2016	5,027,098	12,611,093	250.9%	1,482	5,126,654	12,860,842	250.9%	4.0%	1.0198	
Projected Future Experience	2017	5,002,156	11,820,663	236.3%	1,347	4,905,018	11,591,114	236.3%	4.0%	0.9806
	2018	5,918,666	11,512,435	194.5%	1,188	5,580,509	10,854,684	194.5%	4.0%	0.9429
	2019	6,227,422	11,072,523	177.8%	1,066	5,645,793	10,038,371	177.8%	4.0%	0.9066
	2020	5,475,632	10,856,412	198.3%	951	4,773,287	9,463,889	198.3%	4.0%	0.8717
	2021	4,782,849	10,536,874	220.3%	843	4,009,006	8,832,055	220.3%	4.0%	0.8382
	2022	4,150,449	10,136,998	244.2%	744	3,345,120	8,170,074	244.2%	4.0%	0.8060
	2023	3,578,543	9,661,510	270.0%	652	2,773,254	7,487,353	270.0%	4.0%	0.7750
	2024	3,066,103	9,118,870	297.4%	568	2,284,739	6,795,024	297.4%	4.0%	0.7452
	2025	2,611,079	8,526,431	326.5%	493	1,870,840	6,109,194	326.5%	4.0%	0.7165
	2026	2,210,525	7,900,166	357.4%	425	1,522,926	5,442,764	357.4%	4.0%	0.6889
	2027	1,860,864	7,258,522	390.1%	365	1,232,721	4,808,373	390.1%	4.0%	0.6624
	2028	1,558,046	6,614,061	424.5%	312	992,423	4,212,935	424.5%	4.0%	0.6370
	2029	1,297,728	5,983,246	461.1%	265	794,817	3,664,545	461.1%	4.0%	0.6125
	2030	1,075,497	5,374,616	499.7%	224	633,372	3,165,172	499.7%	4.0%	0.5889
	2031	887,043	4,798,210	540.9%	188	502,298	2,717,039	540.9%	4.0%	0.5663
	2032	728,245	4,257,705	584.7%	158	396,516	2,318,242	584.7%	4.0%	0.5445
	2033	595,220	3,749,822	630.0%	132	311,622	1,963,182	630.0%	4.0%	0.5235
	2034	484,399	3,277,939	676.7%	109	243,848	1,650,127	676.7%	4.0%	0.5034
	2035	392,556	2,838,953	723.2%	90	190,013	1,374,173	723.2%	4.0%	0.4840
	2036	316,817	2,437,138	769.3%	74	147,454	1,134,306	769.3%	4.0%	0.4654
	2037	254,656	2,072,856	814.0%	60	113,965	927,653	814.0%	4.0%	0.4475
	2038	203,867	1,748,977	857.9%	49	87,726	752,605	857.9%	4.0%	0.4303
	2039	162,532	1,462,830	900.0%	40	67,249	605,262	900.0%	4.0%	0.4138
	2040	129,014	1,215,085	941.8%	32	51,328	483,418	941.8%	4.0%	0.3978
	2041	101,930	1,003,036	984.0%	25	38,993	383,707	984.0%	4.0%	0.3825
	2042	80,111	823,309	1027.7%	20	29,468	302,840	1027.7%	4.0%	0.3678
	2043	62,595	672,269	1074.0%	16	22,139	237,771	1074.0%	4.0%	0.3537
	2044	48,595	545,262	1122.1%	12	16,526	185,434	1122.1%	4.0%	0.3401
	2045	37,460	437,631	1168.3%	10	12,249	143,106	1168.3%	4.0%	0.3270
	2046	28,657	347,431	1212.4%	7	9,010	109,241	1212.4%	4.0%	0.3144
2047	21,744	271,736	1249.7%	6	6,574	82,154	1249.7%	4.0%	0.3023	
2048	16,354	209,639	1281.8%	4	4,754	60,943	1281.8%	4.0%	0.2907	
2049	12,185	158,312	1299.2%	3	3,406	44,252	1299.2%	4.0%	0.2795	
2050	8,986	117,169	1303.9%	2	2,415	31,492	1303.9%	4.0%	0.2688	
2051	6,554	84,364	1287.3%	2	1,694	21,803	1287.3%	4.0%	0.2584	
2052	4,721	59,066	1251.2%	1	1,173	14,677	1251.2%	4.0%	0.2485	
2053	3,352	40,507	1208.3%	1	801	9,679	1208.3%	4.0%	0.2389	
2054	2,342	27,155	1159.6%	1	538	6,239	1159.6%	4.0%	0.2297	
2055	1,605	17,844	1112.0%	0	354	3,942	1112.0%	4.0%	0.2209	
2056	1,075	11,399	1060.1%	0	228	2,421	1060.1%	4.0%	0.2124	
Past		134,142,902	158,101,617	117.9%	66,286	235,813,919	222,491,936	94.4%		
Future		53,408,175	159,058,970	297.8%	10,484	42,626,168	116,201,254	272.6%		
Lifetime		187,551,076	317,160,588	169.1%	76,770	278,440,087	338,693,191	121.6%		