Continental Casualty Company (CCC)

Actuarial Memorandum

In Support of a Premium Rate Increase Request

Maryland

The following group long term care policy forms subject to this rate increase request were originally issued nationwide during the calendar years referenced below:

Policy Form	Product Name	Originally Issued	Closed to New Groups
P1-43636-A, et al	GLTC 1	1988	1994
SR-LTCP et al	GLTC 2	1994	2003
GLTC-3-P-xx-01 et al	Independent Solutions	2003	2011

This long term care insurance was provided under group policies issued to cover eligible employees of an employer, and at the option of the employer, retirees and/or family members of eligible employees who meet eligibility requirements. In addition, the SR-LTCP-Series form was marketed through a small number of associations.

1. Purpose and Justification of Filing

The purpose of this memorandum is to provide actuarial information supporting CCC's request for a 15.0% rate increase for the above-listed policy forms. This rate filing is not intended to be used for other purposes.

Although the company believes a 74.8% rate increase is needed, to comply with COMAR 31.14.01.04(A)(5), the company is limiting the request to a 15.0% rate increase for all forms included in this rate increase request.

In 2015, the company began a nationwide rate increase program for the above-listed policy forms due to significant deterioration of nationwide lifetime loss ratios based on the Company's best-estimate projections. This was the first time a rate increase had been requested on these policy forms. In this program, 95.5% was requested in every state[1]. It is the intent of the Company to submit follow-up filings, subject to the limits of COMAR 31.14.01.04(A)(5), until an actuarially equivalent increase amount is attained. In an effort to provide stability to rate indications, this follow-up filing does not consider experience development since the initial filing.

As part of this rate increase program, 15.0% was requested to comply with COMAR 31.14.01.04(A)(5), though the company believed a 95.5% rate increase was needed. 15.0% was approved in your state (see SERFF filing CNAB-130153854). The 74.8% noted above in this filing reflects the actuarially equivalent rate increase needed for your state to be consistent with the amount filed in the initial rate increase program, in 2015.

[1] Except in those jurisdictions that impose annual limits

Upon approval of this rate revision, CCC will communicate to certificate holders their options to reduce the impact of the rate increase. When insureds are notified of the rate increase, they will be encouraged to call our customer service staff and discuss these options if they so desire. Available options will depend upon the insured's current coverage level, benefit options available under their group plan, and any statutory minimum benefit levels in your state.

Although many insureds have contractual non-forfeiture benefits, the Company is making a non-forfeiture option available for all insureds in conjunction with this rate increase. This option provides a paid-up policy with benefits equal to the total of premiums paid, less any claims paid since the original policy was issued.

Although certain policy forms were originally priced prior to rate stability under the NAIC model regulation, certificates have been added after rate stability. Therefore, this filing is being made according to rate stability requirements. The rate increase being requested meets the 58/85 loss ratio test established in the 2000 LTC NAIC Model Regulation.

2. Description of Benefits

Form P1-43636-A (i.e. GLTC 1):

- This form provides a daily benefit for long term care received at home or a nursing facility. Qualification for benefits is met by the inability to perform at least two of a set of five activities of daily living (ADLs). The full daily benefit (facility benefit or home health care benefit, as applicable) is payable for each day that care is received by a covered provider. Benefits begin after the elimination period and are payable until impairment ends or the maximum benefit (expressed as a multiple times the facility daily benefit) are paid out. Available lifetime maximum benefits are (multiples of the daily facility benefit) 1,500x, 1,825x, 2,000x, 3,000x, 4,000x, 5,000x, and an option for an overall maximum of $1 million.

- *Optional Benefits*: The form was originally offered with options regarding whether prior hospitalization would be required to obtain benefits, or whether prior facility care would be required to receive home care benefits. No policies were sold with those restrictions. Other options offered were a respite benefit and a 10 year simple automatic inflation option.

Form SR-LTCP-Series (i.e. GLTC 2):

- This form provides a daily benefit for long term care received at home, an assisted living facility, or a nursing facility. Benefits are payable in the event the insured is impaired in a stated number of ADLs or is cognitively impaired after the appropriate elimination period has been satisfied. The policy form was available on an expense incurred (reimburse actual cost up to a daily benefit) or indemnity (pay a daily benefit for each day qualifying care was received) basis. Lifetime maximum benefits are defined as an aggregate dollar amount that is a multiple of the facility daily benefit. Available lifetime maximum benefits are (multiples of the daily facility benefit) 730x, 1,095x, 1,460x, 1,500x, 1,825x, 2,000x, 2,190x, 2,555x, 3,000x, 3,650x, 4,000x, or 5,000x, and an option for an unlimited lifetime maximum benefit. Benefits for home based care are available at 50% to 100% of the daily facility benefit, depending on the level chosen by the insured.

- *Other Benefits*: The form also includes benefits for bed reservation, respite care, waiver of premium, home medical technology, caregiver training, and alternate plan of care.

- *Optional Benefits*: The form may have also included benefit options for additional respite care, family respite care, informal caregiver, worldwide coverage, restoration of benefits, non-forfeiture, and refund of premium upon death. Insureds may have had the option of selecting an inflation protection option. If the insured did not elect an inflation protection option, a guarantee benefit increase option was provided. This option allows the insured to periodically buy-up additional amounts of coverage.

Form GLTC-3-P-xx-01 (i.e. Independent Solutions):

- This form is similar to SR-LTCP-Series. The most significant difference is that independent providers (e.g., certified nurses' aides, etc.) are included as covered providers.

3. Renewability

These forms provide the insured guaranteed renewable group long term care coverage.

4. Applicability of Rate Increase

The new premium rates will be applied to all insureds under group policies that were sitused in your state except insureds under the group policies sitused in your state that were issued certificates in another state that is an extraterritorial (ET) jurisdiction. These insureds are governed by the other ET state's laws and regulations and will be included in that state for rate increase purposes. The new premium rates will also be applied to insureds issued certificates in your state under associations and trusts sitused outside of your state.

The premium increase contained in this memorandum will be applicable to all insureds of the policy forms and riders described in Section 1 as well as all future periodic inflation protection offers.

5. Actuarial Assumptions

The actuarial assumptions used to project the future premiums and claims are described in this section. Exhibit 3 provides further details of the experience studies conducted that were used to develop the actuarial assumptions.

These current assumptions, developed in 2017, are CCC's best-estimate expectations of future experience and do not include any provisions for adverse experience. The assumptions are consistent with the assumptions being used in the company's GAAP and statutory reserve adequacy testing.

The liability assumptions that are part of the annual best-estimate experience studies are as follows:

a) Frequency (Incidence)

b) Severity (Recovery, Disabled Mortality, Utilization)
c) Persistency (Healthy Mortality, Voluntary Lapse, Shock Lapse and Reduced Benefit Options (RBOs))
d) Discount Rate
e) Expenses

a) Frequency

The frequency of claim is the probability that a healthy insured will go into disabled status, also known as 'claim incidence'. The final incidence rate that gets modeled is comprised of a base incidence table, adjustment factors based on policy features and demographics, adjustments for policyholder behavior to rate actions and incidence improvement.

Base Incidence

The base incidence rates are single-dimensional tables that vary by attained age. These base incidence tables vary by the following:

- Whether the policy covers comprehensive or facility only benefits
- The situs of the claim (Nursing Home or Home Health Care)
- Gender

A sample table is shown below:

Plan Type: Comprehensive
Gender: Female
Situs: Nursing Home

Attained Age	Annual Incidence Rate (%)
44 and Prior	0.0111%
45	0.0117%
46	0.0129%
47	0.0138%
…	…
55	0.0232%
56	0.0250%
57	0.0274%
…	…
65	0.0611%
66	0.0674%
67	0.0834%
…	…
75	0.3705%
76	0.4401%
77	0.5638%
…	…

85	2.2257%
86	2.5572%
87	2.8709%
…	…
95	6.3876%
96 to 120	7.1175%

Incidence Rate Adjustment Factors

There are a number of incidence rate adjustment factors that are applied to adjust the base incidence tables for various policy features. The annual experience study reviews these adjustment factors and provides updates as needed. The incidence adjustment factors are shown below:

Category	Variable/Benefit Feature	Adjustment Factor
Underwriting Type	Short Form	0.69
	Long Form	0.85
	Guaranteed Issue	1.05
Elimination Period	<90 Days	1.05
	90+ Days	0.96
Benefit Period	Lifetime	1.22
	Non-Lifetime	1.00
Plan Type	Comprehensive	1.10
	Facility Only	1.07

There is also an incidence adjustment factor to account for claims that open and close within the same month, thus these claims would be missing from point-in-time valuation files. This means these claims would be excluded from the experience study and a disabled life reserve would never be established. In order to appropriately account for these ‘intramonth’ claims in the projections, an incidence adjustment factor of 1.112 is applied, which was developed as part of the annual experience analysis.

Temporary Anti-Selection

As part of the company’s annual experience study, the relationship between premium rate actions and incidence rates were developed into an assumption set. When a rate increase is approved in a state, the company has observed an uptick in claims in that state, which is estimated to be driven by insureds that already qualify for their long term care benefits, but have not yet gone on claim. This observed uptick in claims following a rate action is theorized to be driven by this subset of insureds that currently qualify for benefits going on claim to avoid paying the increased premium, since their premium rates will be waived. This anti-selection is believed to be temporary in nature and that incidence rates will eventually return to a more normalized level.

The below tables outline the assumed incidence rate adjustment factors resulting from temporary anti-selection:

Years Since Rate Increase	Temporary Anti-Selection Factors
0	1.200
1	1.300
2	1.325
3	1.100
4	1.050
5	1.025
6+	1.000

Incidence Improvement

An incidence improvement factor is applied to the incidence rates to reflect studies that examine the improvement of population morbidity over time, with consideration for specific company experience. The incidence improvement factor is 1.0% per year for 10 years, beginning 1/1/2012.

b) Severity

In the projection system, the severity of claim is the associated length and cost of a claim once an insured becomes disabled (or is already disabled). The severity of a claim is driven by three key assumptions:

- Recovery
- Utilization
- Disabled Life Mortality

A further breakdown of these three components is described below.

Recovery

Once an insured is on claim, there is an associated probability that the insured will recover back in to a 'healthy' status prior to death or exhausting benefits. This is the recovery rate assumption in the projection model. The recovery tables are two-dimensional that vary by age of disability and disability duration. The first five years of the tables contain monthly rates and are annual thereafter. The recovery tables vary by the following:

- Benefit period (lifetime vs non-lifetime)
- Gender
- The situs of the claim (Nursing Home or Home Health Care)
- Diagnosis of the claim (for policies currently on claim)

Policies that are currently in claim status have a known situs of care, so the recovery rates will be different than a policy currently in healthy status, since the future claim situs is unknown.

A sample table is shown below for sample ages of disablement (rates shown are on a monthly basis):

Insured Status: Healthy
Benefit Period: Non-Lifetime
Gender: Male
Situs: Nursing Home (original, since policy is healthy)
Diagnosis: N/A (since policy is healthy)

Disability Month	Disablement Age			
	65	75	85	95
1	1.09%	0.92%	0.75%	0.76%
2	1.20%	0.93%	0.71%	0.73%
3	1.74%	1.31%	0.96%	1.00%
4	1.45%	1.05%	0.74%	0.78%
5	1.53%	1.08%	0.74%	0.78%
6	1.23%	0.84%	0.55%	0.59%
7	1.42%	0.91%	0.54%	0.58%
8	1.10%	0.70%	0.41%	0.45%
9	0.81%	0.52%	0.31%	0.33%
10	0.72%	0.46%	0.27%	0.29%
11	0.67%	0.43%	0.25%	0.27%
12	0.62%	0.40%	0.23%	0.26%
…	…	…	…	…

Utilization

The utilization assumption in the model for expense reimbursement policies represent the amounts, or severity, of paid claims and include components for cost of care, coverage available and the intensity of care ("health trend"). For example, if the initial benefit of $100 a day is available, the policy has been in force for 14 years with 3.0% cost of care inflation and the health trend factor is 80%, then $121 (100 x (1.03)^14 x 80%) will be projected as the paid claim. The available benefit is also considered by capping paid claims at the daily benefit amount.

Indemnity policies have separate utilization assumptions from expense reimbursement policies because they pay their full available benefits and are not dependent on cost or intensity of care. Although indemnity policies pay the full maximum daily benefit, utilization rates are still below 100% because insureds are not in facilities 100% of the time. For example, if an insured is only in a facility 28 out of the 30 days in each month, then they would have a utilization rate equal to 28/30 = 93%. This is because benefit periods are based on service days and not strictly calendar days.

The health trend component of utilization tables are two-dimensional that vary by age of disability and disability duration. The first five years of the tables contain monthly rates and are annual thereafter. These tables vary by the following:

- The situs of the claim (Nursing Home or Home Health Care)
- Inflation type (simple, compound, none)
- Home health care percentage
- Payment type (indemnity vs reimbursement)
- Diagnosis of the claim (for policies currently on claim)

Policies that are currently in claim status have a known situs of care, so the utilization rates will be different than a policy currently in healthy status, since the future claim situs is unknown.

A sample health trend table is shown below for sample ages of disablement (rates shown are on a monthly basis):

Insured Status: Healthy
Inflation Type: Compound
Home Health Care Percentage: 75%
Situs: Nursing Home (original, since policy is healthy)
Payment Type: Reimbursement
Diagnosis: N/A (since policy is healthy)

Disability Month	Disablement Age			
	65	75	85	95
1	99%	96%	154%	172%
2	49%	54%	90%	113%
3	44%	49%	62%	79%
4	49%	53%	65%	73%
5	59%	63%	77%	83%
6	65%	69%	80%	89%
7	66%	71%	83%	91%
8	67%	71%	83%	84%
9	70%	73%	86%	83%
10	72%	76%	90%	90%
11	73%	78%	91%	82%
12	75%	79%	92%	90%
…	…	…	…	…

Although some rates in the above table are greater than 100%, once combined with the below cost of care inflation rate, projected paid claims will never exceed an insured's available daily benefit (i.e. total utilization will not exceed 100%).

The cost of care inflation table varies by product, situs and policy inflation type (none, simple, or compound) for reimbursement policies. A sample cost of care inflation table is provided below:

Situs: Nursing Home
Inflation Type: Compound

Time Period	Cost of Care Inflation Rate
Historic (Prior to Projection Date)	2.72%
Prospective (After Projection Date)	3.55%

Disabled Life Mortality

Once an insured is on claim, there is an associated probability that the insured will decrement due to death, which influences the overall length of a claim. Generally, the probability of death from a currently disabled insured is greater than the probability associated with a currently healthy insured, so separate assumptions are developed and modeled. The disabled life mortality rates are two-dimensional tables that vary by age of disability and disability duration. Similar to the other severity assumptions, the first five years of the tables contain monthly rates and are annual thereafter. The disabled life mortality tables vary by the following:

- Benefit period (lifetime vs non-lifetime)
- The situs of the claim (Nursing Home or Home Health Care)
- Gender
- Diagnosis of the claim (for policies currently on claim)

Policies that are currently in claim status have a known situs of care, so the disabled life mortality rates will be different than a policy currently in healthy status, since the future claim situs is unknown.

A sample table is shown below for sample ages of disablement (rates shown are on a monthly basis):

Insured Status: Healthy
Benefit Period: Non-Lifetime
Gender: Female
Situs: Home Health Care (original, since policy is healthy)
Diagnosis: N/A

Disability Month	Disablement Age			
	65	75	85	95
1	1.27%	1.80%	1.84%	3.01%
2	1.70%	2.41%	2.45%	4.03%
3	1.85%	2.62%	2.67%	4.38%
4	2.16%	3.06%	3.12%	5.12%

5	2.65%	3.76%	3.84%	6.30%
6	1.99%	2.83%	2.88%	4.73%
7-12	1.50%	2.12%	2.16%	3.55%
13-24	0.89%	1.24%	1.34%	2.30%
25-36	1.09%	1.45%	1.65%	2.98%
37-48	1.20%	1.51%	1.81%	3.45%
49-60	1.28%	1.51%	1.90%	3.86%
…	…	…	…	…

Transitions of Situs

Following the annual claim reserve review, adjustments were made to the assumptions to account for transitions of situs. For 2017, a multiplier of 120% was applied to utilization and a multiplier of 90% was applied to disabled life mortality and recovery rates for current claims, producing smoother claim development.

c) Persistency

In the projection system, the persistency assumptions estimate the probability of a healthy insured remaining inforce from non-claim related decrements. The persistency of an insured is driven by four key assumptions:

- Voluntary Lapse
- Shock Lapse and Reduced Benefit Option (RBO)
- Healthy Life Mortality
- Healthy Life Mortality Improvement

A further breakdown of these three components is described below.

Voluntary Lapse

The voluntary lapse assumption reflects the probability associated with an insured voluntarily canceling their policy. The voluntary lapse rates differ from shock lapse rates in that the policy cancelation is not due to a rate increase notification. The voluntary lapse tables are two-dimensional varying by issue age and policy duration. The voluntary lapse assumptions vary by the following:

- Benefit Period (1 year, 2-6 years, or lifetime)
- Inflation type (yes or no)

A sample voluntary lapse table is shown below for sample issue ages:

Benefit Period: Lifetime
Inflation: Yes

Policy Duration	Issue Age				
	45	50	55	60	65
1	7.46%	5.75%	4.44%	4.73%	3.87%
2	5.42%	3.66%	2.83%	2.86%	2.35%
3	4.06%	2.94%	2.27%	2.06%	1.69%
4	3.46%	2.34%	1.81%	1.61%	1.32%
5	3.11%	2.29%	1.77%	1.43%	1.17%
6	2.93%	2.16%	1.67%	1.29%	1.06%
7	2.60%	2.09%	1.62%	1.07%	0.88%
8	2.36%	1.90%	1.46%	1.02%	0.84%
9	1.98%	1.50%	1.16%	0.75%	0.65%
10	1.70%	1.37%	1.06%	0.70%	0.65%
11	1.53%	1.25%	0.99%	0.69%	0.65%
12	1.65%	1.38%	1.13%	0.83%	0.79%
13	1.43%	1.23%	1.04%	0.82%	0.79%
14	1.55%	1.38%	1.22%	1.03%	1.01%
15	1.28%	1.19%	1.11%	1.02%	1.01%
16	1.01%	1.01%	1.01%	1.01%	1.01%
17	1.01%	1.01%	1.01%	1.01%	1.01%
18	1.01%	1.01%	1.01%	1.01%	1.01%
19	1.01%	1.01%	1.01%	1.01%	1.01%
20	0.86%	0.86%	0.86%	0.86%	0.86%
21+ (Ultimate)	0.72%	0.72%	0.72%	0.72%	0.72%

Shock Lapse and Reduced Benefit Option (RBO)

An assumption to estimate an insured's behavior related to this rate increase is included in the rate indication and is based on internal experience studies. This covers both the probability of a full lapse (shock lapse) and a reduction in benefit features (RBO). The assumed rates for each of these components are outlines in the below table:

Rate Increase	Shock Lapse %	Reduced Benefit Option (RBO) %	Total Additional Lapse % from Shock and RBO*
0%	0.00%	0.00%	0.00%
5%	0.75%	0.09%	0.84%
10%	1.50%	0.18%	1.67%
15%	2.25%	0.44%	2.68%
20%	3.00%	0.70%	3.68%
25%	3.75%	0.96%	4.68%
30%	4.50%	1.23%	5.67%
35%	5.25%	1.49%	6.66%
40%	6.00%	1.75%	7.65%
45%	6.75%	2.01%	8.63%

50%	7.50%	2.28%	9.60%
55%	8.25%	2.54%	10.58%
60%	9.00%	2.80%	11.55%
65%	9.75%	3.06%	12.51%
70%	10.50%	3.33%	13.48%
75%	11.25%	3.59%	14.43%
80%	12.00%	3.85%	15.39%
85%	12.75%	4.11%	16.34%
90%	13.50%	4.38%	17.28%
95%	14.25%	4.64%	18.23%
100%	15.00%	4.90%	19.17%
…	…	…	…

Total Additional Lapse % from Shock and RBO = 1 – (1 – Shock Lapse %)(1 – RBO %)

Healthy Life Mortality

The healthy life mortality assumption is the probability of death associated with currently healthy insureds. The base healthy life mortality tables are one-dimensional tables based on the 2012 IAM tables adjusted at the ages greater than 100 from the 2000 Annuity Table, which vary based on gender and attained age. There are additional multipliers to these base tables based on CCC’s experience as follows:

Gender	Adjustment Factors
Male	0.61
Female	0.66

Healthy Life Mortality Improvement

A healthy life mortality improvement factor is applied to the base healthy mortality table to reflect studies that examine the improvement of population mortality over time. The healthy life mortality improvement varies by gender and attained age with improvement beginning 1/1/2012 for 10 years. An example is shown below for reference:

Gender: Male

Attained Age	Annualized Improvement
<=50	1.00%
50	1.00%
60	1.50%
70	1.50%
80	1.50%
90	0.70%
100	0.20%
105	0.00%

d) *Discount Rate*

The inforce count-weighted average maximum statutory valuation interest rate for contract reserves of 4.34% is used to accumulate past actual experience and discount future experience.

e) *Expenses*

This filing is based on loss ratios and expense levels have not been considered. Commissions are not paid on rate increase premiums.

6. Marketing Method

These policies were sold directly to employer groups, through benefit consultants, or non-captive agents.

7. Underwriting Description

Actively-at-work employees were guaranteed issue during open enrollment periods; otherwise they were subject to short-form underwriting.

Generally, spouses of actively-at-work employees were subject to short-form underwriting. However, the older forms (P1-43636-A and SR-LTCP-Series) in some cases allowed spouses to enter subject to a simple ADL screen, conditional upon the actively-at-work employee also enrolling. This practice was generally phased out in the late 1990's.

All other eligible classes of insureds, such as parents and retirees, were subject to long-form underwriting.

Various underwriting tools in addition to the application may have included medical records, an attending physician's statement, telephone interviews, and/or face-to-face assessments.

The distribution of the inforce certificates by underwriting type at original issue is provided below:

Underwriting Type	Inforce at Dec. 31, 2017
Guarantee Issue	82%
Short Form	15%
Long Form	2%

8. Premiums

Premiums are unisex and payable for life unless the insured selected a limited pay option. Less than 0.5% of insureds inforce as of December 31, 2017 elected a limited pay option. Premiums are level except for a limited number of groups where premiums may increase annually, indexed to a 5% annual benefit inflation rate. Premiums may vary by issue age, elimination period, benefit period / lifetime maximum, initial daily benefit amount, and level of home health care coverage, inflation protection option, premium mode, underwriting class, marital status, group size, and the selection of any other options or riders.

9. Modal Premium Factors

The following modal factors remain unchanged and are applied to the annual premium to obtain the modal premium.

Payment Mode	P1-43636-A and SR-LTCP-Series	GLTC-3-P-xx-01	Nationwide Distribution at Dec. 31, 2017
Annual	1.00	1.00	13.9%
Semi-Annual	0.52	0.51	7.7%
Quarterly	0.27	0.261	30.9%
Monthly	0.09	0.087	25.1%
Semi-Monthly	0.045	0.0435	2.9%
Bi-Weekly	0.09*(12/26)	0.04015	19.3%
Weekly	0.09*(12/52)	0.02008	0.2%

10. Issue Age Range

Issue ages range from 17 to 90.

11. Area Factors

Area factors are not used for these policy forms.

12. Average Annualized Premium

The average annualized premium for the policy forms subject to the rate increase request, both before and after the impact of the requested rate increase, is included in Exhibit 1.

13. Number of Insureds

The current number of insureds as of December 31, 2017 can be found in Exhibit 1.

14. Distribution of Business

The historical experience reflects the actual distribution of policies during the experience period. The current distribution of business as of December 31, 2017 was used to project future experience. Exhibit 2 contains the distribution of the inforce insureds by key demographic and benefit characteristics.

15. Claim Liability and Reserves

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2017 have been discounted to the incurral date of each respective claim and included in historical incurred claims. Incurred but not reported reserve (“IBNR”) balances and terminated but not reported reserve ("TBNR") balances as of December 31, 2017 have been allocated to a calendar year of incurral and included in historical incurred claims.

16. Trend Assumptions

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

17. Experience – Past and Future

Earned premiums and incurred claims, projected through 2077 are developed from a first-principles actuarial model representing actual contracts in-force as of December 31, 2017. The assumptions described in Section 5 above are used to project earned premiums, incurred claims, and insured counts.

Waived premiums are not included as premiums nor claims in either the actual historical or the projected future experience.

Historical results reflect earned premium by calendar year with claims captured by incurral year. That is, incurred claims for a calendar year represent all payments through December 31, 2017 for a claim incurred in a particular calendar year plus any claim reserve held as of December 31, 2017. Incurred claims also include IBNR and TBNR held as of December 31, 2017.

Exhibit 4 presents nationwide experience through December 31, 2017 for all forms affected by this rate increase to ensure maximum credibility.

Annual loss ratios are calculated, with and without interest, as incurred claims divided by earned premiums.

A lifetime loss ratio as of December 31, 2017 is calculated as the sum of accumulated past experience and discounted future experience where accumulation and discounting use the nationwide inforce count-weighted average maximum statutory valuation interest rate for contract reserves of 4.34%.

18. History of Rate Adjustments

See Exhibit 1 for a history of prior rate adjustments in your state.

19. Ensuring No Cross-Subsidization Between States

We have ensured no state's rate increase approvals will subsidize other states' experience. Rate increases will vary by state, but only to reflect the timing and amount of prior rate increases approved by that state. This is accomplished by first backing-out all prior rate increases from our nationwide premium data. We then reintroduce prior rate increases with the amount and timing based on your state's prior approvals (as referenced in Section 17). The current proposed rate increase(s) are then determined.

Although some states may have capped our previous inforce rate increase filings, in each case this was done with the understanding that CCC would be refiling for the remainder at a later date.

20. Requested Rate Increase and Demonstration of Satisfaction of Requirements

Although the company believes a larger rate increase is needed, to comply with COMAR 31.14.01.04(A)(5), CCC is requesting a 15% increase for all policy forms included in this rate increase request. Corresponding rate schedules reflecting the 15% increase are included with this filing. It is the intent of CCC management to submit follow up filings, subject to the limits of COMAR 31.14.01.04(A)(5), such that an actuarially equivalent increase amount is attained. In an effort to provide stability to rate indications, this follow-up filing does not consider experience development since the initial filing. CCC will continue to monitor the experience of this block and take appropriate actions when necessary.

Upon approval of this rate revision, CCC will communicate to insureds their options to reduce the impact of the rate increase. When insureds are notified of the rate increase, they will be encouraged to call our customer service staff and discuss these options if they so desire. These options may include increasing the elimination period, reducing the lifetime maximum, reducing the daily benefit or eliminating optional riders. Available options will depend upon the insured's current coverage level, benefit options available under their group plan, and any statutory minimum benefit levels in your state.

Although many insureds have contractual non-forfeiture benefits, the Company is making a non-forfeiture option available for all insureds in conjunction with this rate increase. This option provides a paid-up policy with a shortened benefit period equal to the total of premiums paid, less any claims paid since the original policy was issued.

Note that the actual rates implemented may vary slightly from those filed due to implementation rounding algorithms.

Satisfaction of minimum required loss ratio requirements is demonstrated in Exhibit 1. This approach shows that with the requested rate increase, the expected lifetime loss ratio exceeds the minimum loss ratio requirement.

Exhibit 5 included with this memorandum provides a demonstration that the requested rate increase meets the 58/85 test required by your state's rate stability regulation.

The historical and future projected incurred claims in the 58/85 test were increased by 10% from the best estimate projections to reflect assumptions that include moderately adverse conditions (equates to a 10% deterioration in the lifetime loss ratio). Present and accumulated values in the demonstration are determined at the average maximum valuation interest rate for contract reserves over the issue period, which is 4.34%.

Because the Company is limiting the rate increase request to comply with COMAR 31.14.01.04(A)(5), we cannot certify that the rates with the full requested rate increase will be sufficient under moderately adverse conditions.

21. Proposed Effective Date

The rate increase will apply to certificates on their next premium due date following a notification period at least as long as required by your state following approval. No insured will receive more than one increase in a 12 month period.

22. Relationship of Renewal Premium to New Business Premium

CCC is no longer selling any new long term care business. Therefore, the comparison of renewal premium rates after the rate increase to the Company's current new business premium rate schedule is not applicable.

23. Actuarial Certification

I am an Associate 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 filing requirements for long term care insurance premium and rate increases.

This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice ("ASOP"), including the following:

- ASOP 7, "Analysis of Life, Health, or Property/Casualty Insurer Cash Flows";
- ASOP 8, "Regulatory Filings for Health Benefits, Accident and Health Insurance, and Entities Providing Health Benefits";
- ASOP 18, "Long Term Care Insurance";
- ASOP 23, "Data Quality"; and
- ASOP 41, "Actuarial Communications".

I have reviewed and considered the policy design and benefits, as well as the company's underwriting and claims adjudication processes, when developing the filed rates.

I hereby certify that, to the best of my knowledge and judgement, this rate filing is in compliance with the applicable laws and regulations of your state. In my opinion, the actuarial assumptions are appropriate and the rates are neither excessive nor unfairly discriminatory.

Louis Scarim, ASA, MAAA
Actuarial Consulting Director, LTC Pricing

September 13, 2018

Date

24. Exhibit Listing

- Exhibit 1: State Specific Information
- Exhibit 2: Distribution of the Inforce Policies
- Exhibit 3: 2017 Experience Analysis Summary
- Exhibit 4: Nationwide Experience and Projections
- Exhibit 5: Maryland Specific Experience and Projections
- Exhibit 6: Nationwide 58/85 Test

Exhibit 1
Continental Casualty Company
Maryland

12) Average Annualized Premium

	Nationwide	Maryland
Without Increase	$1,089	$1,215
With Increase	$1,252	$1,397

13) Insured Count and Premium

Insureds Eligible for Rate Increase

	Nationwide	Maryland
Insureds Not on Claim	182,716	1,742
Insureds on Claim	2,140	26
Total Insureds	184,856	1,768
2017 Annualized Premium	$201,309,912	$2,147,859

Insureds Not Eligible for Rate Increase

	Nationwide	Maryland
Non-Forfeiture Insureds Not on Claim	60,291	265
Non-Forfeiture Insureds on Claim	27	0
Paid-Up Limited Pay Insureds Not on Claim	400	0
Paid-Up Limited Pay Insureds on Claim	14	0
Total Non-Forfeiture and Paid-Up Insureds	60,732	265

18) History of Rate Adjustments

SERFF Number	Approval Date	Rate Increase Approved
CNAB-130153854	8/16/2016	15.0%

20) Satisfaction of Minimum Loss Ratio Requirements

1)	Expected Lifetime Loss Ratio with Increase	100%
2)	Minimum Required Loss Ratio	60%
Is 1 greater than 2?		Yes

Exhibit 2
Continental Casualty Company
Maryland
Distribution of Insureds Eligible for Rate Increase

	Nationwide				Maryland			
Issue Year	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
1987-1991	6,039	3%	$6,180,942	3%	2	0%	$3,613	0%
1992-1996	18,688	10%	$20,094,803	10%	146	8%	$153,261	7%
1997-2001	49,752	27%	$53,472,088	27%	574	32%	$629,031	29%
2002-2006	47,650	26%	$51,996,252	26%	746	42%	$898,876	42%
2007-2011	37,850	20%	$41,331,290	21%	169	10%	$217,590	10%
2012-2016	24,877	13%	$28,234,538	14%	131	7%	$245,488	11%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Issue Age	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
<35	18,380	10%	$6,210,292	3%	79	4%	$33,034	2%
35-39	18,762	10%	$9,888,311	5%	119	7%	$62,574	3%
40-44	25,800	14%	$18,003,714	9%	219	12%	$163,252	8%
45-49	33,738	18%	$30,548,846	15%	329	19%	$296,745	14%
50-54	38,822	21%	$45,456,092	23%	448	25%	$493,881	23%
55-59	29,865	16%	$46,678,274	23%	350	20%	$546,277	25%
60-64	14,126	8%	$28,813,212	14%	153	9%	$320,413	15%
65-69	4,295	2%	$11,494,483	6%	54	3%	$138,293	6%
70+	1,068	1%	$4,216,688	2%	17	1%	$93,389	4%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Attained Age	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
<45	13,115	7%	$4,246,907	2%	35	2%	$16,124	1%
45-49	12,126	7%	$6,036,294	3%	51	3%	$34,507	2%
50-54	17,980	10%	$11,592,416	6%	123	7%	$77,508	4%
55-59	26,799	14%	$21,985,775	11%	220	12%	$175,672	8%
60-64	33,342	18%	$34,730,786	17%	352	20%	$353,424	16%
65-69	33,981	18%	$42,119,116	21%	387	22%	$464,859	22%
70-74	25,985	14%	$38,348,430	19%	350	20%	$499,683	23%
75-79	13,407	7%	$23,591,357	12%	166	9%	$293,869	14%
80+	8,121	4%	$18,658,830	9%	84	5%	$232,212	11%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Gender	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
Male	79,593	43%	$90,269,178	45%	708	40%	$914,698	43%
Female	105,263	57%	$111,040,734	55%	1,060	60%	$1,233,161	57%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Inflation Option	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
None*	159,660	86%	$158,639,161	79%	1,182	67%	$1,265,471	59%
Simple	1,059	1%	$1,018,297	1%	0	0%	$0	0%
Compound	24,137	13%	$41,652,455	21%	586	33%	$882,388	41%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Elimination Period	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
30-Day	3,699	2%	$4,025,232	2%	217	12%	$173,316	8%
60-Day	30,740	17%	$34,116,824	17%	472	27%	$633,202	29%
90-Day	149,365	81%	$161,883,290	80%	1,079	61%	$1,341,341	62%
100-Day	1,052	1%	$1,284,566	1%	0	0%	$0	0%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Benefit Period	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
< 1500 days	39,124	21%	$36,380,860	18%	723	41%	$673,950	31%
1500 - 2000 days	131,461	71%	$147,048,529	73%	979	55%	$1,411,498	66%
> 2000 days	13,319	7%	$16,852,533	8%	66	4%	$62,411	3%
Lifetime	952	1%	$1,027,991	1%	0	0%	$0	0%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	
Home Health Care Reimbursement Level	Count	% of Count	Premium	% of Premium	Count	% of Count	Premium	% of Premium
0	1,049	1%	$923,831	0%	0	0%	$0	0%
50%	46,550	25%	$52,346,672	26%	241	14%	$237,016	11%
60%	88,626	48%	$87,866,717	44%	1,119	63%	$1,264,525	59%
75%	38,885	21%	$46,938,945	23%	399	23%	$630,561	29%
100%	5,645	3%	$7,010,194	3%	7	0%	$14,510	1%
Other	4,101	2%	$6,223,553	3%	2	0%	$1,246	0%
Total	**184,856**		**$201,309,912**		**1,768**		**$2,147,859**	

*Includes Insureds with Option to Purchase Additional **B**enefits at Attained Age

Continental Casualty Company (CCC)

Exhibit 3 – 2017 Experience Analysis Summary

Group Long Term Care

1. Background

CCC performs an annual experience study to develop new best-estimate assumptions that are primarily used for the company's GAAP and statutory reserve adequacy analysis. These assumptions are also used to determine the rate increases requested in this filing.

For the 2017 experience study, an actual to expected (A/E) experience study was performed using nationwide company data from 2010 to 2016. Adjustment factors were developed to produce A/E ratios close to 100% through an iterative calibration process.

The experience study is performed using the experience of CCC's group long-term care (GLTC) insurance.

Each section below summarizes the results of the annual experience study by each major assumption category.

2. Frequency (Incidence)

Base Incidence

A/E experience studies demonstrated increased incidence beginning in 2012, which coincided with the implementation of premium rate actions. Because of this, experience was bifurcated into pre-rate increase era and post-rate increase era. Base incidence assumptions were developed using pre-rate increase era experience to ensure the impact of rate increases are not included as base incidence but isolated as temporary anti-selection (described below).

Table 1 compares the actual historical and current best-estimate based pricing claim counts, incidence rates, and A/E ratios for all of CCC's GLTC business. Since the best-estimate assumptions reasonably match the historical actual experience, the assumptions are appropriate to use for inforce projections.

Exhibit 3 - Table 1						
Best-Estimate Base Incidence Actual-to-Expected Experience Analysis						
CCC Total Group Long Term Care						
Attained Age	**Exposures (Years)**	**Actual New Claim Count**	**Expected New Claim Count**	**Actual Incidence Rate**	**Expected Incidence Rate**	**Actual/Expected**
Under 50	449,668	82	139	0.02%	0.03%	59%
50-54	253,988	122	137	0.05%	0.05%	89%
50-59	308,577	212	242	0.07%	0.08%	88%
60-64	307,261	385	394	0.13%	0.13%	98%
65-69	223,171	540	571	0.24%	0.26%	94%
70-74	120,322	790	724	0.66%	0.60%	109%
75-79	55,478	884	842	1.59%	1.52%	105%
80-84	24,497	894	855	3.65%	3.49%	105%
85-89	8,300	575	577	6.93%	6.95%	100%
90 and Older	2,101	245	246	11.66%	11.72%	99%
Total	**1,753,362**	**4,729**	**4,729**	**0.27%**	**0.27%**	**100%**

Notes:
1. Base Incidence refers to incidence rates that exclude temporary anti-selection due to policyholder response to rate actions.
2. Based on an experience study period of 2009-2016 at the total GLTC level.
3. Best-estimate claim counts are developed by applying current best-estimate assumptions to historical exposures.
4. Incidence rates are calculated as new claim counts divided by exposures.
5. Actual/Expected ratios are calculated as actual new claim counts divided by expected claim counts.

Incidence Improvement

The incidence improvement assumption is based on the National Long-Term Care Survey results presented at the Society of Actuaries 2004 Spring Meeting, "Morbidity Improvement and Its Impact on LTC Insurance Pricing and Valuation". Progress updates of the research presented at the 2011 and 2014 Intercompany Long-Term Care Insurance Conferences further confirm the appropriateness of including incidence improvement. Further detail is provided in section 5 of the actuarial memorandum.

Temporary Anti-Selection

The temporary anti-selection assumption was developed from the observed spike in incidence actual-to-expected ratios during the post-rate increase era. This increase is believed to be temporary in nature and is assumed to ultimately revert to a steady state. Further detail is provided in section 5 of the actuarial memorandum.

3. Severity Assumptions

Severity assumptions include disabled mortality, claim recovery and benefit utilization rates, which were developed by fitting actual-to-expected ratios for the variables on which the assumption is based.

Table 2 compares the actual historical and current best-estimate death counts, mortality rates, and A/E ratios of all of CCC's GLTC business.

Exhibit 3 - Table 2						
Best-Estimate Future Claim Disabled Life Mortality Actual-to-Expected Experience Analysis						
CCC Total Group Long Term Care						
Calendar Year	**Exposures (Months)**	**Actual Disabled Deaths**	**Expected Disabled Deaths**	**Actual Disabled Mortality Rate**	**Expected Disabled Mortality Rate**	**Actual/Expected**
2010	14,380	258	276	21.53%	23.05%	93%
2011	15,544	299	303	23.08%	23.39%	99%
2012	16,683	310	328	22.30%	23.60%	94%
2013	19,063	358	390	22.54%	24.53%	92%
2014	20,939	365	427	20.92%	24.48%	85%
2015	22,695	467	474	24.69%	25.07%	98%
2016	25,573	576	554	27.03%	25.99%	104%
Total	**134,875**	**2,633**	**2,752**	**23.43%**	**24.49%**	**96%**

Notes:

1. Based on an experience study period of 2010-2016 at the total GLTC level.
2. Expected future claim disabled death counts are developed by applying current best-estimate assumptions to historical exposures.
3. Disabled Mortality rates are calculated as disabled death counts divided by exposures.
4. Actual/Expected ratios are calculated as actual disabled death counts divided by expected future disabled death counts.

Table 3 compares the actual historical and current best-estimate recovery counts, recovery rates, and A/E ratios of all of CCC's GLTC business.

Exhibit 3 - Table 3						
Best-Estimate Future Claim Recovery Actual-to-Expected Experience Analysis						
CCC Total Group Long Term Care						
Calendar Year	**Exposures (Months)**	**Actual Claim Recovery Count**	**Expected Claim Recovery Count**	**Actual Recovery Rate**	**Expected Recovery Rate**	**Actual/Expected**
2010	14,380	114	93	9.51%	7.74%	123%
2011	15,544	118	98	9.11%	7.54%	121%
2012	16,683	66	104	4.75%	7.47%	64%
2013	19,063	108	123	6.80%	7.77%	88%
2014	20,939	105	130	6.02%	7.46%	81%
2015	22,695	142	141	7.51%	7.48%	100%
2016	25,573	213	176	9.99%	8.26%	121%
Total	**134,875**	**866**	**865**	**7.70%**	**7.70%**	**100%**

Notes:

1. Based on an experience study period of 2010-2016 at the total GLTC level.
2. Expected future claim recovery assumptions are developed by applying current best-estimate assumptions to historical exposures.
3. Recovery rates are calculated as claim recovery counts divided by exposures.
4. Actual/Expected ratios are actual claim recovery counts divided by expected future claim recovery counts.

Table 4 compares the actual historical and current best-estimate paid claims, utilization rates, and A/E ratios of all of CCC's GLTC business.

Exhibit 3 - Table 4						
Best-Estimate Benefit Utilization Actual-to-Expected Experience Analysis						
CCC Total Group Long Term Care						
Calendar Year	**Exposures (Maximum Daily Benefit)**	**Actual Paid Claims**	**Expected Paid Claims**	**Actual Utilization Rate**	**Expected Utilization Rate**	**Actual/Expected**
2010	$51,320,501	$23,422,249	$23,405,869	45.64%	45.61%	100%
2011	$57,010,556	$26,438,936	$26,389,835	46.38%	46.29%	100%
2012	$62,916,062	$29,284,839	$29,687,557	46.55%	47.19%	99%
2013	$73,505,889	$34,267,663	$34,688,042	46.62%	47.19%	99%
2014	$84,284,084	$41,040,509	$40,903,542	48.69%	48.53%	100%
2015	$95,552,722	$46,503,044	$47,120,193	48.67%	49.31%	99%
Total	**$424,589,813**	**$200,957,240**	**$202,195,038**	**47.33%**	**47.62%**	**99%**

Notes:

1. Based on an experience study period of 2010-2015 at the total GLTC level. Experience period of 2016 was not included for GLTC because of processing lags from a TPA transition.
2. Best-estimate benefit utilization assumption for expense incurred certificates is developed based on initial benefits available, health trends and cost of care inflation.
3. Utilization rates are calculated as paid claims divided by maximum daily benefit.
4. Actual/Expected ratios are actual paid claims divided by expected paid claims.

4. Persistency

Due to there not being a precise method to distinguish lapses from unreported deaths, the termination assumptions were developed as follows:

- The 2012 IAM mortality table was used as the healthy-life base mortality assumption, with adjustments at ages above 100 from the 2000 annuity table.
- Develop the adjusted actual death counts by taking into account late-reporting of death.
- Shock lapses and unreported deaths were estimated.
- Adjust death and lapses to take into account estimated unreported deaths.
- Subtract developed deaths and shock lapses from total terminations to determine a base lapse rate.

- Adjustment factors were applied to healthy-life mortality to calibrate total termination A/E ratios.

A healthy life mortality improvement factor is applied to the base healthy mortality table to reflect studies that examine the improvement of population mortality over time. The healthy life mortality improvement varies by gender and attained age with improvement beginning 1/1/2012 for 10 years.

Table 5 compares the actual historical, current best-estimate counts, termination rates, and A/E ratios of all of CCC's GLTC business. Since the best-estimate assumptions reasonably match the historical actual experience, the assumptions are appropriate to use for inforce projections.

Exhibit 3 - Table 5						
Best-Estimate Policy Termination Actual-to-Expected Experience Analysis						
CCC Total Group Long Term Care						
Calendar Years	**Exposures (Years)**	**Actual Policy Termination Counts**	**Expected Policy Termination Counts**	**Actual Termination Rate**	**Expected Termination Rate**	**Actual/Expected**
2010	211,817	11,602	13,552	5.48%	6.40%	86%
2011	212,619	11,393	12,171	5.36%	5.72%	94%
2012	212,580	11,440	11,037	5.38%	5.19%	104%
2013	218,087	11,702	11,157	5.37%	5.12%	105%
2014	216,098	10,411	9,968	4.82%	4.61%	104%
2015	208,718	12,315	8,472	5.90%	4.06%	145%
Total	**1,279,919**	**68,863**	**66,358**	**5.38%**	**5.18%**	**104%**

Notes:

1. Policy termination refers to healthy mortality and base lapses.
2. Assumption is based on an experience study period of 2010-2015.
3. Best-estimate base lapse assumptions are set at GLTC level and vary by duration, inflation protection, and benefit period and issue age.
4. Best-estimate healthy mortality assumptions are set at aggregate LTC level and by gender and attained age.
5. Actual base lapse counts (by calendar year) are adjusted downward to account for late reporting of death.
6. Actual healthy death counts (by calendar year) are adjusted upward to account for late reporting of death.
7. Policy termination rates are calculated as policy termination counts divided by exposures.
8. Actual/Expected ratios are calculated as actual policy termination counts divided by expected policy termination counts.
9. For assumption setting purposes, estimated shock lapses are removed from the policy termination experience analysis.

Exhibit 4
Continental Casualty Company
Group Long Term Care - All Policy forms
Nationwide Historical and Projected Experience Restated to Maryland Rate Levels

Calendar Year	Without Rate Increase				With 15% Cumulative Rate Increase			
	Earned Premium	Incurred Claims	Annual Loss Ratio	Cumulative Loss Ratio	Earned Premium	Incurred Claims	Annual Loss Ratio	Cumulative Loss Ratio
Historical								
1989	395,287	-	0.0%	0.0%	395,287	-	0.0%	0.0%
1990	2,176,775	170,807	7.8%	6.6%	2,176,775	170,807	7.8%	6.6%
1991	6,475,562	551,263	8.5%	8.0%	6,475,562	551,263	8.5%	8.0%
1992	8,663,703	1,794,613	20.7%	14.2%	8,663,703	1,794,613	20.7%	14.2%
1993	13,915,846	1,453,094	10.4%	12.6%	13,915,846	1,453,094	10.4%	12.6%
1994	17,733,799	1,336,915	7.5%	10.8%	17,733,799	1,336,915	7.5%	10.8%
1995	19,725,185	2,497,993	12.7%	11.3%	19,725,185	2,497,993	12.7%	11.3%
1996	21,542,551	6,473,119	30.0%	15.8%	21,542,551	6,473,119	30.0%	15.8%
1997	36,754,782	4,994,045	13.6%	15.1%	36,754,782	4,994,045	13.6%	15.1%
1998	31,926,393	5,988,162	18.8%	15.9%	31,926,393	5,988,162	18.8%	15.9%
1999	39,935,644	10,466,009	26.2%	17.9%	39,935,644	10,466,009	26.2%	17.9%
2000	52,669,129	9,818,548	18.6%	18.1%	52,669,129	9,818,548	18.6%	18.1%
2001	74,390,049	12,044,329	16.2%	17.6%	74,390,049	12,044,329	16.2%	17.6%
2002	91,473,374	15,091,901	16.5%	17.4%	91,473,374	15,091,901	16.5%	17.4%
2003	106,566,657	20,121,437	18.9%	17.7%	106,566,657	20,121,437	18.9%	17.7%
2004	112,822,987	20,047,512	17.8%	17.7%	112,822,987	20,047,512	17.8%	17.7%
2005	114,030,370	23,926,974	21.0%	18.2%	114,030,370	23,926,974	21.0%	18.2%
2006	117,853,957	44,168,909	37.5%	20.8%	117,853,957	44,168,909	37.5%	20.8%
2007	121,780,926	34,639,346	28.4%	21.8%	121,780,926	34,639,346	28.4%	21.8%
2008	131,732,098	26,448,583	20.1%	21.6%	131,732,098	26,448,583	20.1%	21.6%
2009	135,831,967	32,943,036	24.3%	21.9%	135,831,967	32,943,036	24.3%	21.9%
2010	147,179,720	33,887,516	23.0%	22.0%	147,179,720	33,887,516	23.0%	22.0%
2011	151,030,154	37,177,333	24.6%	22.2%	151,030,154	37,177,333	24.6%	22.2%
2012	155,992,021	48,164,512	30.9%	23.0%	155,992,021	48,164,512	30.9%	23.0%
2013	165,709,773	52,996,885	32.0%	23.8%	165,709,773	52,996,885	32.0%	23.8%
2014	167,768,542	62,607,325	37.3%	24.9%	167,768,542	62,607,325	37.3%	24.9%
2015	169,322,114	69,237,867	40.9%	26.1%	169,322,114	69,237,867	40.9%	26.1%
2016	165,207,615	87,383,825	52.9%	28.0%	165,207,615	87,383,825	52.9%	28.0%
2017	162,058,191	95,774,592	59.1%	30.0%	162,058,191	95,774,592	59.1%	30.0%
Total Actual	2,542,665,171	762,206,451	30.0%	30.0%	2,542,665,171	762,206,451	30.0%	30.0%
Projected								
2018	162,518,433	116,565,239	71.7%	32.5%	162,518,433	116,565,239	71.7%	32.5%
2019	157,086,179	130,177,029	82.9%	35.2%	163,783,733	128,957,034	78.7%	35.1%
2020	151,857,397	118,514,552	78.0%	37.4%	169,959,848	115,341,135	67.9%	37.0%
2021	146,754,677	123,907,144	84.4%	39.6%	164,248,848	120,589,332	73.4%	38.8%
2022	141,729,370	133,259,574	94.0%	41.9%	158,624,491	129,691,336	81.8%	40.9%
2023	136,719,781	143,611,800	105.0%	44.4%	153,017,724	139,766,364	91.3%	43.0%
2024	131,688,425	158,307,574	120.2%	47.2%	147,386,596	154,068,635	104.5%	45.5%
2025	126,605,643	174,161,084	137.6%	50.3%	141,697,910	169,497,642	119.6%	48.3%
2026	121,461,428	190,899,659	157.2%	53.7%	135,940,470	185,788,015	136.7%	51.3%
2027	116,255,617	208,626,790	179.5%	57.4%	130,114,090	203,040,474	156.0%	54.7%
2028	111,004,564	227,298,700	204.8%	61.5%	124,237,075	221,212,414	178.1%	58.3%
2029	105,711,162	246,432,353	233.1%	65.8%	118,312,663	239,833,733	202.7%	62.3%
2030	100,381,469	265,771,433	264.8%	70.5%	112,347,634	258,654,978	230.2%	66.6%
2031	95,031,365	285,022,604	299.9%	75.6%	106,359,760	277,390,668	260.8%	71.1%
2032	89,671,192	304,038,330	339.1%	80.9%	100,360,618	295,897,217	294.8%	76.0%
2033	84,319,230	322,229,064	382.2%	86.5%	94,370,665	313,600,865	332.3%	81.1%
2034	78,995,925	339,004,534	429.1%	92.4%	88,412,785	329,927,145	373.2%	86.5%
2035	73,724,162	354,234,352	480.5%	98.5%	82,512,591	344,749,161	417.8%	92.0%
2036	68,528,526	367,641,594	536.5%	104.8%	76,697,600	357,797,403	466.5%	97.8%
2037	63,431,225	378,736,973	597.1%	111.3%	70,992,665	368,595,685	519.2%	103.7%
2038	58,458,369	387,014,023	662.0%	117.9%	65,427,011	376,651,103	575.7%	109.8%
2039	53,638,024	392,448,316	731.7%	124.6%	60,032,047	381,939,885	636.2%	115.9%
2040	48,995,871	395,232,033	806.7%	131.4%	54,836,517	384,649,063	701.4%	122.0%
2041	44,552,465	395,378,264	887.4%	138.1%	49,863,427	384,791,378	771.7%	128.2%
2042	40,325,856	392,822,608	974.1%	144.8%	45,132,977	382,304,154	847.1%	134.3%
2043	36,330,984	387,555,777	1066.7%	151.3%	40,661,888	377,178,351	927.6%	140.3%
2044	32,579,480	379,544,114	1165.0%	157.8%	36,463,179	369,381,213	1013.0%	146.2%
2045	29,080,457	369,371,713	1270.2%	164.1%	32,547,049	359,481,195	1104.5%	151.9%
2046	25,837,883	357,133,187	1382.2%	170.2%	28,917,938	347,570,375	1201.9%	157.5%
2047	22,851,467	343,200,879	1501.9%	176.0%	25,575,520	334,011,126	1306.0%	162.9%
2048	20,118,775	327,875,284	1629.7%	181.6%	22,517,072	319,095,899	1417.1%	168.0%
2049	17,632,936	311,408,698	1766.1%	186.9%	19,734,904	303,070,232	1535.7%	172.9%
2050	15,384,966	294,231,748	1912.5%	192.0%	17,218,960	286,353,222	1663.0%	177.5%
2051	13,364,476	276,528,100	2069.1%	196.8%	14,957,614	269,123,618	1799.2%	181.9%
2052	11,558,821	258,520,312	2236.6%	201.2%	12,936,712	251,598,017	1944.8%	186.0%
2053	9,953,821	240,568,644	2416.8%	205.4%	11,140,385	234,127,034	2101.6%	189.8%
2054	8,536,178	222,630,713	2608.1%	209.3%	9,553,750	216,669,420	2267.9%	193.3%
2055	7,289,550	205,007,904	2812.4%	212.9%	8,158,514	199,518,490	2445.5%	196.6%
2056	6,199,408	187,999,287	3032.5%	216.2%	6,938,420	182,965,305	2637.0%	199.6%
2057	5,250,404	171,671,420	3269.7%	219.2%	5,876,288	167,074,643	2843.2%	202.4%
2058	4,428,330	156,253,225	3528.5%	221.9%	4,956,217	152,069,295	3068.3%	204.9%
2059	3,719,663	141,520,249	3804.7%	224.4%	4,163,072	137,730,818	3308.4%	207.2%
2060	3,110,625	127,510,600	4099.2%	226.7%	3,481,433	124,096,300	3564.5%	209.3%
2061	2,590,367	114,228,635	4409.7%	228.7%	2,899,156	111,169,981	3834.6%	211.2%
2062	2,147,349	101,727,392	4737.3%	230.5%	2,403,328	99,003,478	4119.4%	212.8%
2063	1,772,657	90,258,198	5091.7%	232.2%	1,983,970	87,841,390	4427.6%	214.3%
2064	1,456,825	79,750,127	5474.2%	233.6%	1,630,489	77,614,690	4760.2%	215.6%
2065	1,190,980	70,072,593	5883.6%	234.9%	1,332,953	68,196,287	5116.2%	216.8%
2066	968,649	61,275,665	6325.9%	236.0%	1,084,119	59,634,911	5500.8%	217.8%
2067	783,264	53,128,650	6783.0%	236.9%	876,634	51,706,045	5898.2%	218.7%
2068	629,929	45,728,612	7259.3%	237.7%	705,021	44,504,155	6312.5%	219.5%
2069	503,814	39,022,973	7745.5%	238.5%	563,872	37,978,071	6735.2%	220.1%
2070	400,603	33,100,771	8262.7%	239.1%	448,357	32,214,445	7185.0%	220.7%
2071	316,560	27,930,091	8823.0%	239.6%	354,297	27,182,218	7672.2%	221.1%
2072	248,474	23,369,991	9405.4%	240.0%	278,094	22,744,222	8178.6%	221.5%
2073	193,629	19,389,439	10013.7%	240.3%	216,711	18,870,256	8707.6%	221.8%
2074	149,708	15,943,676	10649.9%	240.6%	167,554	15,516,759	9260.7%	222.1%
2075	114,775	12,966,049	11297.0%	240.9%	128,457	12,618,863	9823.5%	222.3%
2076	87,214	10,443,957	11975.0%	241.1%	97,611	10,164,303	10413.1%	222.5%
2077	65,660	8,311,747	12658.7%	241.2%	73,487	8,089,187	11007.6%	222.7%
Total Projected	2,796,295,036	12,116,516,050	433.3%	241.2%	3,098,231,202	11,797,463,871	380.8%	222.7%
Total Lifetime	5,338,960,207	12,878,722,502	241.2%	241.2%	5,640,896,373	12,559,670,322	222.7%	222.7%

Values Accumulated/Discounted to 12/31/17 at Maximum Statutory Valuation Interest Rate

Past	3,822,101,708	1,013,192,819	26.5%	26.5%	3,822,101,708	1,013,192,819	26.5%	26.5%
Future	1,795,794,592	4,897,126,583	272.7%	272.7%	1,979,613,992	4,771,179,623	241.0%	241.0%
Lifetime	5,617,896,300	5,910,319,402	105.2%	105.2%	5,801,715,700	5,784,372,442	99.7%	99.7%

Exhibit 5
Continental Casualty Company
Group Long Term Care - All Policy forms
Maryland Historical and Projected Experience Restated to Maryland Rate Levels

Calendar Year	Without Rate Increase				With 15% Cumulative Rate Increase			
	Earned Premium	Incurred Claims	Annual Loss Ratio	Cumulative Loss Ratio	Earned Premium	Incurred Claims	Annual Loss Ratio	Cumulative Loss Ratio
Historical								
1989	-	-	0.0%	0.0%	-	-	0.0%	0.0%
1990	7,553	-	0.0%	0.0%	7,553	-	0.0%	0.0%
1991	7,982	-	0.0%	0.0%	7,982	-	0.0%	0.0%
1992	22,589	-	0.0%	0.0%	22,589	-	0.0%	0.0%
1993	99,609	-	0.0%	0.0%	99,609	-	0.0%	0.0%
1994	114,938	-	0.0%	0.0%	114,938	-	0.0%	0.0%
1995	103,729	-	0.0%	0.0%	103,729	-	0.0%	0.0%
1996	105,262	-	0.0%	0.0%	105,262	-	0.0%	0.0%
1997	334,674	202,494	60.5%	25.4%	334,674	202,494	60.5%	25.4%
1998	334,228	-	0.0%	17.9%	334,228	-	0.0%	17.9%
1999	393,153	584	0.1%	13.3%	393,153	584	0.1%	13.3%
2000	601,008	47,032	7.8%	11.8%	601,008	47,032	7.8%	11.8%
2001	760,897	5,234	0.7%	8.8%	760,897	5,234	0.7%	8.8%
2002	890,651	171,622	19.3%	11.3%	890,651	171,622	19.3%	11.3%
2003	1,121,260	137,992	12.3%	11.5%	1,121,260	137,992	12.3%	11.5%
2004	1,393,771	49,092	3.5%	9.8%	1,393,771	49,092	3.5%	9.8%
2005	1,676,614	36,878	2.2%	8.2%	1,676,614	36,878	2.2%	8.2%
2006	1,700,948	29,715	1.7%	7.0%	1,700,948	29,715	1.7%	7.0%
2007	1,724,301	63,309	3.7%	6.5%	1,724,301	63,309	3.7%	6.5%
2008	1,752,015	179,416	10.2%	7.0%	1,752,015	179,416	10.2%	7.0%
2009	1,806,579	210,047	11.6%	7.6%	1,806,579	210,047	11.6%	7.6%
2010	1,813,061	489,006	27.0%	9.7%	1,813,061	489,006	27.0%	9.7%
2011	1,869,601	555,103	29.7%	11.7%	1,869,601	555,103	29.7%	11.7%
2012	2,078,295	779,649	37.5%	14.3%	2,078,295	779,649	37.5%	14.3%
2013	2,051,985	451,708	22.0%	15.0%	2,051,985	451,708	22.0%	15.0%
2014	2,036,957	811,294	39.8%	17.0%	2,036,957	811,294	39.8%	17.0%
2015	2,052,098	1,135,192	55.3%	19.9%	2,052,098	1,135,192	55.3%	19.9%
2016	1,903,730	875,130	46.0%	21.7%	1,903,730	875,130	46.0%	21.7%
2017	1,990,964	1,207,263	60.6%	24.2%	1,990,964	1,207,263	60.6%	24.2%
Total Actual	30,748,453	7,437,759	24.2%	24.2%	30,748,453	7,437,759	24.2%	24.2%
Projected								
2018	2,055,975	1,535,221	74.7%	27.4%	2,055,975	1,535,221	74.7%	27.4%
2019	1,986,915	1,743,838	87.8%	30.8%	2,071,629	1,727,495	83.4%	30.7%
2020	1,918,405	1,616,703	84.3%	33.6%	2,147,092	1,573,413	73.3%	33.2%
2021	1,850,725	1,720,902	93.0%	36.4%	2,071,344	1,674,822	80.9%	35.7%
2022	1,782,711	1,890,355	106.0%	39.5%	1,995,223	1,839,738	92.2%	38.4%
2023	1,714,545	2,076,098	121.1%	42.8%	1,918,930	2,020,507	105.3%	41.4%
2024	1,645,925	2,328,765	141.5%	46.6%	1,842,131	2,266,409	123.0%	44.8%
2025	1,576,781	2,597,844	164.8%	50.7%	1,764,744	2,528,283	143.3%	48.5%
2026	1,506,536	2,892,870	192.0%	55.2%	1,686,125	2,815,408	167.0%	52.6%
2027	1,435,161	3,207,595	223.5%	60.2%	1,606,242	3,121,707	194.3%	57.2%
2028	1,362,995	3,539,909	259.7%	65.7%	1,525,474	3,445,122	225.8%	62.2%
2029	1,290,138	3,887,604	301.3%	71.7%	1,443,931	3,783,507	262.0%	67.6%
2030	1,216,714	4,232,058	347.8%	78.1%	1,361,754	4,118,738	302.5%	73.5%
2031	1,143,061	4,587,522	401.3%	85.1%	1,279,322	4,464,684	349.0%	79.9%
2032	1,069,528	4,931,120	461.1%	92.5%	1,197,023	4,799,081	400.9%	86.7%
2033	996,494	5,269,281	528.8%	100.4%	1,115,283	5,128,187	459.8%	93.9%
2034	924,178	5,579,036	603.7%	108.6%	1,034,346	5,429,649	524.9%	101.4%
2035	853,081	5,845,279	685.2%	117.2%	954,775	5,688,762	595.8%	109.3%
2036	783,670	6,085,146	776.5%	126.2%	877,089	5,922,206	675.2%	117.5%
2037	716,307	6,275,531	876.1%	135.3%	801,696	6,107,494	761.8%	125.9%
2038	651,348	6,415,429	984.9%	144.7%	728,993	6,243,646	856.5%	134.5%
2039	589,171	6,503,172	1103.8%	154.1%	659,404	6,329,039	959.8%	143.1%
2040	530,068	6,537,971	1233.4%	163.6%	593,255	6,362,907	1072.5%	151.8%
2041	474,298	6,516,378	1373.9%	173.0%	530,837	6,341,891	1194.7%	160.4%
2042	422,026	6,439,255	1525.8%	182.4%	472,334	6,266,833	1326.8%	169.0%
2043	373,451	6,280,999	1681.9%	191.5%	417,969	6,112,815	1462.5%	177.3%
2044	328,669	6,079,090	1849.6%	200.3%	367,848	5,916,312	1608.4%	185.4%
2045	287,674	5,816,592	2021.9%	208.7%	321,967	5,660,844	1758.2%	193.1%
2046	250,417	5,531,925	2209.1%	216.7%	280,268	5,383,799	1920.9%	200.5%
2047	216,812	5,234,242	2414.2%	224.3%	242,658	5,094,087	2099.3%	207.4%
2048	186,689	4,913,459	2631.9%	231.4%	208,944	4,781,893	2288.6%	214.0%
2049	159,886	4,575,209	2861.5%	238.1%	178,946	4,452,701	2488.3%	220.1%
2050	136,169	4,224,184	3102.2%	244.3%	152,401	4,111,075	2697.5%	225.8%
2051	115,342	3,879,501	3363.5%	250.0%	129,092	3,775,622	2924.8%	231.0%
2052	97,212	3,542,004	3643.6%	255.2%	108,800	3,447,161	3168.4%	235.8%
2053	81,541	3,209,900	3936.6%	259.9%	91,261	3,123,949	3423.1%	240.1%
2054	68,108	2,893,807	4248.9%	264.2%	76,227	2,816,321	3694.7%	244.0%
2055	56,635	2,605,765	4601.0%	268.0%	63,386	2,535,991	4000.9%	247.6%
2056	46,888	2,346,371	5004.2%	271.5%	52,478	2,283,543	4351.4%	250.8%
2057	38,641	2,119,077	5484.0%	274.7%	43,247	2,062,335	4768.7%	253.7%
2058	31,711	1,899,376	5989.7%	277.5%	35,491	1,848,518	5208.4%	256.3%
2059	25,937	1,708,055	6585.4%	280.1%	29,029	1,662,320	5726.4%	258.7%
2060	21,141	1,526,110	7218.9%	282.4%	23,661	1,485,246	6277.3%	260.8%
2061	17,181	1,365,931	7950.1%	284.5%	19,229	1,329,356	6913.1%	262.7%
2062	13,915	1,215,477	8735.3%	286.3%	15,573	1,182,931	7595.9%	264.4%
2063	11,240	1,073,225	9548.5%	287.9%	12,580	1,044,487	8303.1%	265.9%
2064	9,056	947,066	10458.3%	289.4%	10,135	921,706	9094.1%	267.2%
2065	7,270	842,337	11586.4%	290.7%	8,137	819,782	10075.1%	268.4%
2066	5,812	749,606	12896.9%	291.8%	6,505	729,534	11214.7%	269.5%
2067	4,622	659,724	14274.4%	292.8%	5,173	642,059	12412.5%	270.4%
2068	3,657	564,737	15443.6%	293.7%	4,093	549,615	13429.2%	271.2%
2069	2,882	474,753	16470.9%	294.4%	3,226	462,041	14322.6%	271.9%
2070	2,262	397,581	17573.6%	295.0%	2,532	386,935	15281.4%	272.4%
2071	1,765	334,206	18934.3%	295.6%	1,975	325,257	16464.6%	272.9%
2072	1,367	279,348	20433.5%	296.0%	1,530	271,868	17768.3%	273.3%
2073	1,050	230,890	21987.1%	296.3%	1,175	224,708	19119.2%	273.6%
2074	800	185,645	23207.0%	296.6%	895	180,674	20180.0%	273.9%
2075	604	148,718	24604.0%	296.9%	676	144,736	21394.8%	274.1%
2076	452	117,432	25963.6%	297.0%	506	114,287	22577.0%	274.3%
2077	335	95,503	28534.4%	297.2%	375	92,945	24812.5%	274.4%
Total Projected	33,103,947	182,322,727	550.8%	297.2%	36,652,941	177,512,204	484.3%	274.4%
Total Lifetime	63,852,401	189,760,487	297.2%	297.2%	67,401,394	184,949,963	274.4%	274.4%

Values Accumulated/Discounted to 12/31/17 at Maximum Statutory Valuation Interest Rate

Past	45,046,093	9,040,482	20.1%	20.1%	45,046,093	9,040,482	20.1%	20.1%
Future	21,840,195	75,018,847	343.5%	343.5%	24,061,015	73,078,819	303.7%	303.7%
Lifetime	66,886,287	84,059,329	125.7%	125.7%	69,107,108	82,119,301	118.8%	118.8%

Exhibit 6
Continental Casualty Company
Nationwide 58/85 Test with Increase
Group Long Term Care - All Policy Forms

1	Accumulated value of initial earned premium	3,808,782,598	x 58% =	2,209,093,907
2a	Accumulated value of earned premium	3,822,101,708		
2b	Accumulated value of prior premium rate schedule increases (2a - 1)	13,319,110	x 85% =	11,321,243
3	Present value of future projected initial earned premium	1,561,560,515	x 58% =	905,705,099
4a	Present value of future projected premium	1,979,613,992		
4b	Present value of future projected premium in excess of the projected initial earned premiums (4a - 3)	418,053,477	x 85% =	355,345,456
5	**Lifetime Earned Premium Times Prescribed Factors: Sum of 1, 2b, 3, and 4b**			**3,481,465,705**
6a	Accumulated value of incurred claims without the inclusion of active life reserves			1,114,512,100
6b	Present value of future projected incurred claims without the inclusion of active life reserves			5,247,366,271
7	**Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b**			**6,361,878,371**
8	Test: 7 is not less than 5			TRUE

All values are accumulated or discounted at the average maximum valuation interest rate for contract reserves which averages 4.34%.
The incurred claims (items 6a and 6b) were increased by 10% to reflect moderately adverse experience.