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Policy Forms 7042MD, 7044MD, 7042MD Rev, 7044MD Rev

1. Scope of this Filing

This filing applies to the referenced policy forms issued in your state. Forms 7042 and 7044 are also referred to by Genworth Life Insurance Company (GLIC) as "Choice 2"; forms 7042 Rev and 7044 Rev are also referred to by GLIC as "Choice 2.1". Forms 7042 and 7042 Rev were marketed by the name "Classic Select" and the 7044 and 7044 Rev forms were marketed under the name "Privileged Choice". Privileged Choice policies have many features built into the base policy that were only available as riders for Classic Select policies. These forms are no longer being sold.

For all the policies issued in your state to which the current filing applies, refer to the Supplement for state and nationwide information on issue dates, number of issued and in-force lives, total and average premium, average issue and attained age, distributions and history of prior approved rate increases.

2. Purpose of this Filing

This actuarial memorandum has been prepared to request and support the approval of a premium rate increase in your state.

We demonstrate that the requested premium rate increases satisfy the minimum requirements and all applicable regulations in your state. This actuarial memorandum may not be suitable for other purposes.

In order to maintain adequate Cash Flow Testing (CFT) Margin and to strengthen the claim paying ability of the company, GLIC is differentiating its rate increases according to the projected experience, and resulting level of risk, associated with certain key policy features. The most significant risks are observed with policies with the richest potential benefits, meaning long benefit periods and large compound benefit increase options, and thus higher rate increases are appropriate for those cohorts.

In this filing, GLIC is requesting a premium rate increase according to the table below, applicable to the base rates and associated riders of all in-force policies referenced in Section 1 of this actuarial memorandum. The requested rate increases reflect updated assumptions and experience, and any remainder of the rate increase not approved in prior filings if applicable to your state.

Benefit Period	Benefit Increase Option (BIO)*	Requested Rate Increase
Lifetime	Low BIO	115%
Lifetime	High BIO	218%
Limited	High BIO	119%

^{*}Low BIO includes policies without BIO and 1% BIO if approved in your state. High BIO includes all other BIO options.

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Other combinations of Benefit period and BIO may be eligible for future rate increases where policies exist.

However, GLIC does recognize the limitations prescribed in Maryland regulation COMAR 31.14.01.04(5) and is willing to implement a rate increase according to the table below on the above-mentioned policy forms.

Benefit Period	Benefit Increase Option (BIO)*	Requested Rate Increase	Rate Increase To Be Implemented
Lifetime	Low BIO	115%	7 years of 15% and 4.4% in the last year
Lifetime	High BIO	218%	13 years of 15% and 4.7% in the last year
Limited	High BIO	119%	7 years of 15% and 11% in the last year

GLIC is using an approach for developing Margin for Moderately Adverse Experience (MAE) that serves as a threshold to trigger future rate increases as outlined in Section 8.F of this actuarial memorandum.

3. Justification of the Premium Rate Increase

GLIC actively monitors the impact of experience on projections and lifetime loss ratios. GLIC has observed that emerging experience continues to unfold unfavorably, and assumptions have been adjusted to that effect. Actual historical experience combined with revised best estimate assumptions have resulted in Lifetime Loss Ratios (LLR) with margin for MAE significantly greater than what was anticipated at pricing. Two key drivers of the increased LLRs have been increased claim costs and lower than expected healthy life terminations. These have impacted both historical experience and assumption development of future expectations. More detailed information is presented in Section 8 of this actuarial memorandum.

If experience emerges as currently expected, timely implementation of the requested premium rate increase may lessen the need for future premium rate increases. However, if rate increases are delayed due to late approvals, less future premium capacity will remain in these blocks to absorb the rate increase. As a result, a higher percentage future premium rate increase would need to be applied to fewer policyholders in order to protect claims paying ability. It is our intent to act in a timely manner, work diligently with regulators to obtain approval for the requested rate increase, and seek to avoid more significant premium rate increases when the average policyholder's attained age is higher.

Since your state has not approved the prior requested rate increase in full, demonstration that the margin for MAE included in the prior filing has been exceeded is not applicable to this filing.

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4. Marketing Method and Underwriting Description

Policies were sold by agents working through broker general agencies, financial advisors, and agents working through financial institutions.

The underwriting process included an assessment of functional and cognitive abilities at issue ages considered by GLIC to be appropriate. Various underwriting tools were used in accordance with our underwriting requirements, including an application, medical records, an attending physician's statement, telephone interview and/or face-to-face assessment.

5. Description of Benefits

These are federally tax-qualified, individually underwritten policies that provide comprehensive long-term care coverage. They cover the reimbursement of expenses incurred by the insured(s) subject to the amount of coverage purchased. Premium payments are waived after the elimination period has been satisfied.

The Privileged Choice (7044 and 7044 Rev) policy forms pay benefits on a monthly basis and include a 10-year survivorship benefit. The 10-year survivorship benefit waives future premium payments upon the death of one spouse if both spouses are insured and have met certain requirements. It also includes a waiver of elimination period for home health care benefits, and home health care service days are applied to the facility elimination period. The optional nonforfeiture benefit, restoration of benefit, 7-year survivorship benefit and return of premium riders were available for purchase for an additional premium.

The Classic Select (7042 and 7042 Rev) policy forms are comprehensive products with benefits payable on a daily basis. Riders include 7-year and 10-year survivorship, waiver of elimination period for home health care benefits, monthly maximum benefit (as opposed to daily), restoration of benefits and nonforfeiture benefits.

These policy forms can cover an individual or a couple (joint policy). The joint policy operates as two individual policies, except that the two insureds draw from one shared policy benefit pool.

These forms require an insured to meet benefit eligibility requirements that are triggered by Activities of Daily Living (ADL) deficiencies or cognitive impairment. The daily or monthly benefit, benefit period and elimination period are selected at issue. The majority of the policies were issued with a 90-day elimination period and limited benefit period.

In addition, a Benefit Increase Option (BIO) could be selected at issue. The simple BIO increases the original daily maximum by 5% each year starting with the second policy year and continuing for the life of the policy, unless terminated earlier by the insured. The compound BIO increases the prior year's daily maximum by 3% or 5% each year starting with the second policy year and continuing for the life of the policy, unless terminated earlier by the insured. The 3% compound BIO, as well as additional unique BIO options, i.e. 5% Compound to Age 75, Graded Compound and Adjusting Increases, were only made available on the Choice 2.1 (7042 Rev and 7044 Rev) versions of these policy forms.

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These are the benefits as initially priced, policyholders may have subsequently changed their benefits based on the alternatives available to them.

6. Alternatives to the Requested Rate Increase

GLIC will offer insureds impacted by rate filings several options for mitigating the impact of the rate increase while still providing meaningful coverage. These options will be provided in the policyholder notification letter. In addition, policyholders will have the ability to call a dedicated team of customer service representatives that can assist with providing customized quotes for any available benefit adjustments.

Reduced Benefit Options. Insureds can change benefit features or coverage limits in order to maintain reasonably equivalent pre- and post-rate increase premium levels or insureds can target a premium level they choose, and the optimal balance of coverage and cost based on their specific needs. The available benefit and rate combinations are consistent with the combinations presented in the rate tables approved as part of the original filing. To balance coverage and cost considerations, GLIC will offer policyholders, subject to rate increases on their long-term care policies, customized options to adjust their benefits, which may include any of the following options (where available):

- 1. Reduction in Daily/Monthly/Lifetime Maximum amount;
- 2. Reduction in Benefit Period;
- 3. Reduction or elimination of the BIO with the retention of any prior increases to their daily or monthly payment maximums;
- 4. Increases in Elimination Period; and
- 5. Elimination of policy riders.

In addition, we will continue to make available the previously approved 1% compound BIO to in-force policies issued in your state referenced in Section 1 of this actuarial memorandum who wish to reduce their BIO from a higher level.

Flexible Benefit Option (FBO). GLIC will offer this alternative to mitigate the requested premium increase, which features the following:

- 1. A premium rate guarantee until at least January 1, 2030;
- 2. \$250,000 benefit pool for non-shared, \$400,000 benefit pool for shared;
- 3. Monthly indemnity payments that vary by type of benefit. For each full month of qualification, the benefit amounts for each type of benefit are as follows:
 - Nursing Home Benefit monthly payments are 100% of the monthly maximum. Payments are designed to last three years if the policyholder is in a nursing home for the entire time and would be calculated by dividing the claimant's benefit pool by 36 months;
 - Assisted Care Facility Benefit monthly payments are 75% of the monthly maximum and are for care in an assisted care facility; and
 - Flexible Care Benefit monthly payments are 50% of the monthly maximum and are for other types of care, such as home care.

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- 4. GLIC will adjust monthly payment amounts when the insured qualifies for benefits for only part of a month:
- 5. GLIC will pay only one benefit in a calendar month. If more than one benefit could apply in a calendar month, then GLIC will pay the benefit (Nursing Home Benefit, Assisted Care Facility Benefit, or the Flexible Care Benefit) with the most days of qualification in that month;
- 6. A 180 day elimination period applies for the Nursing Home and Assisted Care Facility Benefits, and a 90 day elimination period applies to the Flexible Care Benefit; and
- 7. The benefit pool and monthly maximum will remain fixed, unless the 1% compound BIO is elected. If 1% compound BIO is elected, the benefit pool and monthly maximum will inflate by 1% compounded annually.

The benefits outlined above that comprise the FBO alternative option provide a meaningful set of benefits, including a meaningful premium rate guarantee for policyholders.

The FBO is not available for policies that currently have a benefit pool (net of past claims) less than \$250,000 for non-shared, \$400,000 for shared.

An industry study performed and published by PwC indicates that the average duration of a long-term care event is about three years and approximately 75%-80% of long-term care events will cost less than \$250,000.1

Under this option, policyholders with non-shared policies will have a benefit pool of \$250,000, with monthly payments designed to last three years in a nursing home situs (longer in other situses), and the option of 1% benefit inflation on the benefit pool and monthly maximum. The monthly payment also provides the policyholder more flexibility in managing their long-term care event, and a simpler process for receiving benefit payments.

Policyholders that elect the FBO will have their premium rates guaranteed until at least January 1, 2030. However, we reserve the right to adjust the pricing for the FBO in future filings for policyholders that have not previously elected that option.

Other Options. GLIC will continue to offer the applicable nonforfeiture option to each policyholder. Policyholders that are eligible for the Contingent Nonforfeiture Option will be presented with that as an option in their notification letter. Policyholders that have a nonforfeiture (NFO) rider with their policy may elect that option. For those policyholders that do not have either the Contingent Nonforfeiture or NFO rider available, GLIC will continue to offer its Optional Limited benefit, which provides a paid-up benefit equal to the total of premium paid, less any claims paid.

Choice 2_2.1 5 Maryland

¹The formal cost of long-term care services: How can society meet a growing need? was initially made available in 2016. The portion of the study relating to the cost of long-term care events was updated in 2021.

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7. Premiums

- a. These policies are guaranteed renewable for life, subject to policy terms and conditions;
- b. Geographic area factors are not used in rating these policies;
- c. Semi-annual, quarterly and monthly modal factors are applied to the annual premium, with the majority of policyholders selecting annual premium mode;
- d. For a history of previous rate revisions refer to the Supplement;
- e. The requested rate increase will apply to policies on their billing anniversary date, following a 60-day policyholder notification period. The rate increase requested in this filing will not be implemented until the implementation of previously approved rate increases (including increases that were approved to be implemented in phases over a multi-year period) have been completed, as well as the expiration of any other time period during which applicable state law or the terms of a prior rate increase approval precluded implementation of a subsequent rate increase;
- f. Premium rates are unisex, level (with the exception of approved rate increases) and payable for life (except for in-force policies with limited pay premium). Premiums generally vary by issue age, daily benefit, benefit period, elimination period, BIO, and any applicable riders selected;
- g. Certain underwriting discounts may have been applied to the premium rates. A preferred risk discount of 10% or 20% may have been provided to applicants in response to specified health underwriting criteria specified on the application. Where the criteria for a couple's discount were met, a discount of 40% was provided to both individuals when both submitted valid applications and both were issued coverage. If only one member of a couple was approved, the discount was reduced to 25%. Where a shared policy was issued, a couple's discount was factored into the shared policy form rates. If only one member of a couple applying for shared coverage was approved, an individual policy was issued and the couple's discount was reduced to 25%; and
- h. A description of the calculation of the current and proposed rate tables has been attached separately in the Rate document. A rate schedule by issue age will be submitted after the approval of this filing.

8. Actuarial Assumptions

GLIC actively monitors the impact of experience on projections and lifetime loss ratios. As experience emerges, assumptions have been adjusted. Historical updates have resulted in increases in the Disabled Life Reserves (DLR), continued strain to the CFT margin, and the continued need for premium rate adjustments. Genworth reviews experience and assumptions every year in connection with CFT.

Two key drivers for the premium rate adjustments have been increased claim costs and lower than expected healthy life terminations (lapse and healthy life mortality). These have impacted both actual historical experience and assumption development of future expectations. Lower than expected healthy life terminations has meant more policies in-force at ages when claims are more likely to occur.

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The table below summarizes the most impactful assumption updates made since 2014. Updated claim severity assumptions in 2014, 2016, and 2018 have led to the significant strengthening of GLIC's DLR.

Year	Update in Assumptions Due To
2014	Lower Claim Termination Rates (CTR) in later durations
	Higher Benefit Utilization Rate (BUR) in later durations
2015	Lower Lapse Lower Healthy Life Mortality
2016	Lower CTR
2016	BUR methodology enhancement
2017	Incidence differential for Lifetime and Non-Lifetime benefit periods
2018	Lower CTR
2010	BUR methodology enhancement: increase for Lifetime benefit periods
2019	New incidence assumption with improved fit by age and duration
2019	Lower Healthy Life Mortality
2020	Lower CTR
2020	Higher BUR
	Strengthened BUR Trend, reflecting higher cost of care inflation for
2021	LTC services
	Lower Healthy Life Mortality
2022	Smaller, more routine updates

Beginning with 2016 CFT, GLIC converted from a total life model to a first principles model in which the assumptions are split between healthy lives and disabled lives.

Both healthy life assumptions (lapse, mortality, incidence) and claim severity assumptions (benefit utilization, claim termination, situs mix) are based on Genworth nationwide experience, with differing assumptions by company. The assumptions include adjustments as considered appropriate for future projections and based on expected differences in experience due to either policyholder characteristics or underwriting criteria.

The Best Estimate (BE) assumptions described below for lapse, mortality, and morbidity are consistent with those used for GLIC's 2022 Cash Flow Testing (CFT) prior to any provision for contingency, adverse deviation or risk margin. The experience reviewed for 2022 CFT generally included data through December 31, 2021, for incurred experience through December 31, 2019. With the exception of benefit utilization rate base assumptions, incurred experience for 2020+ was not used in our 2022 studies in accordance with the companywide decision not to include 2020+ experience in our 2022 studies due to the uncertain future impact of COVID-19 on experience.

The assumptions were developed by Genworth's Long-term Care Experience Studies team in collaboration with other Genworth actuaries. Genworth's Assumption Review Committee approved these assumptions.

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A. Lapse:

<u>Original Filing</u>: The products included in this filing were originally priced in 2002 and 2007 using termination assumptions developed from experience prior to those dates. Originally filed Choice 2.1 lapse rates varied by marital status, issue age and duration. The original ultimate lapse rate for Choice 2 was 1.5% and the original ultimate lapse rate for Choice 2.1 was 1.0%.

<u>Current Filing:</u> The assumption setting process involves credibility weighting actual historical experience for the product with a long-term baseline assumption. This methodology reduces volatility in the assumption from year-to-year, especially in policy durations with limited experience. The actual historical experience and long-term baseline components of the 2022 CFT lapse assumption were unchanged from 2021 CFT. To help alleviate the pressure on the healthy life lapse assumption, in 2022 an update to the assumption development process was introduced which put more weight on the emerging experience and less weight on the baseline assumption.

The current best estimate assumptions for expected lapse rates for healthy lives vary by product, issue age, policy duration, BIO, marital status, underwriting class, benefit period, company and the issue year bands.

The Actual/Expected ratio of 97.8% for these policy forms shows a very good fit of the assumption to the historical experience through 2019.

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The following table is a sample of the GLIC lapse rate assumptions for cells with a lifetime benefit period, married status, compound BIO, and for issue years 2009 and earlier:

		Sample L	apse Rate A	ssumption		
UW Discount	Std	Std	Std	Pref	Pref	Pref
Issue Age	45	55	62	45	55	62
Duration						
1	7.20%	4.15%	3.75%	5.50%	3.26%	3.01%
2	5.13%	2.65%	2.26%	3.92%	2.08%	1.82%
3	3.86%	1.91%	1.60%	2.95%	1.50%	1.30%
4	3.01%	1.46%	1.22%	2.30%	1.16%	0.99%
5	2.40%	1.17%	0.98%	1.84%	0.92%	0.80%
6	1.96%	0.96%	0.80%	1.51%	0.76%	0.66%
7	1.64%	0.80%	0.69%	1.26%	0.64%	0.57%
8	1.39%	0.69%	0.62%	1.07%	0.55%	0.52%
9	1.20%	0.60%	0.57%	0.93%	0.48%	0.48%
10	1.05%	0.54%	0.55%	0.82%	0.43%	0.47%
11	0.90%	0.48%	0.54%	0.70%	0.39%	0.47%
12	0.77%	0.44%	0.53%	0.61%	0.36%	0.48%
13	0.68%	0.42%	0.54%	0.56%	0.36%	0.49%
14	0.61%	0.42%	0.55%	0.51%	0.36%	0.52%
15	0.55%	0.42%	0.57%	0.47%	0.37%	0.54%
16	0.52%	0.43%	0.60%	0.46%	0.39%	0.57%
17	0.49%	0.44%	0.63%	0.44%	0.41%	0.61%
18	0.48%	0.45%	0.66%	0.44%	0.42%	0.65%
19	0.47%	0.47%	0.70%	0.44%	0.44%	0.69%
20	0.47%	0.49%	0.74%	0.44%	0.46%	0.73%
21	0.48%	0.51%	0.81%	0.47%	0.49%	0.80%
22	0.51%	0.53%	0.90%	0.49%	0.51%	0.89%
23	0.53%	0.57%	0.99%	0.51%	0.55%	0.99%
24	0.55%	0.61%	1.10%	0.54%	0.59%	1.10%
25	0.58%	0.65%	1.22%	0.56%	0.63%	1.22%

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B. Mortality:

<u>Original Filing</u>: Original Total Life mortality assumptions were based on the Annuity 2000 Mortality Table, without mortality improvement. Selection factors in the original filing were based on data prior to 2002 and 2007 for Choice 2 and Choice 2.1, respectively.

<u>Current Filing:</u> No update was made in 2022 to the healthy life mortality assumptions. The current best estimate assumptions for expected mortality rates for healthy lives are derived from actual Genworth nationwide long-term care mortality data as of December 31, 2020, for incurred experience through December 31, 2019 (1-year reporting lag). Healthy life mortality assumptions vary by product, issue age, policy duration, gender, marital status, underwriting class, BIO, and company. The assumption setting process involves credibility weighting actual historical experience for the product with a long-term baseline assumption. This methodology reduces volatility in the assumption from year-to-year, especially in policy durations with limited experience.

The Actual/Expected ratio of 98.1% for these policy forms shows a very good fit of the assumption to the inception-to-date historical experience through 2019.

The mortality improvement assumption for healthy lives continues to apply to the first 10 projection years at a compound rate of 1% per year. Remaining projection years use the accumulated improvement of 10 years. This assumption is based on Genworth experience and is supported by the 2022 experience study.

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The following table is a sample of the GLIC healthy life mortality rate assumptions before improvements by married status, standard underwriting class, no BIO and issue age 65:

Sample Mortality Rate Assumption					
Gender	M	F			
Duration					
1	0.19%	0.10%			
2	0.31%	0.16%			
3	0.39%	0.21%			
4	0.45%	0.25%			
5	0.52%	0.29%			
6	0.59%	0.33%			
7	0.71%	0.40%			
8	0.80%	0.45%			
9	0.90%	0.52%			
10	1.03%	0.61%			
11	1.16%	0.70%			
12	1.31%	0.81%			
13	1.50%	0.94%			
14	1.72%	1.11%			
15	1.99%	1.32%			
16	2.32%	1.59%			
17	2.69%	1.93%			
18	3.18%	2.37%			
19	3.78%	2.93%			
20	4.40%	3.53%			
21	4.87%	4.04%			
22	5.34%	4.62%			
23	5.80%	5.26%			
24	6.36%	5.87%			
25	6.90%	6.47%			
26	7.52%	7.13%			
27	8.07%	7.81%			
28	8.57%	8.53%			
29	9.03%	9.03%			
30	9.38%	9.38%			

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C. Morbidity:

The morbidity assumption is composed of the following components: incidence, benefit utilization, claim termination (sometimes described as claim continuance), and claim situs mix. Incidence rates measure the likelihood of a policyholder going on claim. Benefit utilization rates measure the proportion of contractually available benefits that a policyholder uses while on claim, once eligibility requirements have been met. Claim termination rates refer to the length of time until a claimant leaves their claim status, once benefit eligibility requirements have been met, and are applied from the loss date of the claim. Claim termination rates consist of two components – disabled life mortality and claim recoveries. Because the benefit utilization and claim termination assumptions vary by original care situs, the morbidity assumption also includes a claim situs mix assumption to split newly incurred claims between Nursing Home (NH), Assisted Living Facility (ALF) and Home Care (HC) settings.

Prior to 2016, these assumptions were combined into total claim costs for use in the total life modeling approach. With the total life approach, an explicit assumption was needed to reflect policy terminations related to benefit exhaustions. Beginning in 2016, all projections were performed from first principles (i.e., incidence, benefit utilization and claim termination rates are individually reflected in the projection model) and benefit exhaustions are implicitly recognized.

Original Filing: Originally filed expected claim cost assumptions for Choice 2 were based on 2002 and prior claim cost data and did not include morbidity improvement. Originally filed expected claim cost assumptions for Choice 2.1 were based on 2006 and prior claim cost data and included morbidity improvement.

<u>Current Filing:</u> The main components of morbidity - incidence, benefit utilization, claim termination and claim situs mix - are described below.

1. Incidence

The current best estimate assumptions for expected incidence rates are derived from actual Genworth nationwide long-term care claim incidence data as of December 31, 2021, for incurred experience through December 31, 2019 (2-year reporting lag). Using incurred experience through December 31, 2019, is in accordance with the companywide decision not to include 2020+ incurred experience in our 2022 studies due to the uncertain future impact of COVID-19 on experience. The base incidence rates vary by product, issue age, policy duration, gender, benefit period, marital status, underwriting class, company, and NFO/non-NFO status.

A non-forfeiture option (NFO) topside adjustment has been applied in the past to reflect the lower incidence for NFO policies than policies in a non-NFO status. In 2022, we introduced NFO and non-NFO as an explanatory variable to the base incidence rate assumption. This update removed the need for the NFO/non-NFO topside. In addition to adding the NFO/non-NFO explanatory variable, a topside adjustment was developed to account for observed anti-selection on recent non-NFO incidence experience.

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The assumption setting process for the base incidence rates involves credibility weighting actual historical experience for the product with a long-term baseline assumption. This methodology reduces volatility in the assumption from year-to-year, especially in policy durations with limited experience.

The Actual/Expected ratio of 98.6% for these policy forms shows a very good fit of the assumption to the historical experience through 2019.

The morbidity improvement assumption for healthy lives continues to apply to the first 10 projection years at a compound rate of 1.6% per year. Remaining projection years use the accumulated improvement of 10 years. This assumption is based on Genworth experience and is supported by the 2022 experience study.

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The following table is a sample of the GLIC claim incidence rate assumptions for policies with a married status lifetime benefit period, and not in non-forfeiture status:

	Sa	ample Cla	im Incide	ence Rate	Assump	tion		
Gender	M	M	M	M	F	F	F	F
UW Discount	Std	Std	Pref	Pref	Std	Std	Pref	Pref
Issue Age	55	65	55	65	55	65	55	65
Duration								
1	0.05%	0.12%	0.03%	0.07%	0.05%	0.13%	0.04%	0.08%
2	0.09%	0.21%	0.05%	0.13%	0.09%	0.24%	0.06%	0.15%
3	0.11%	0.30%	0.07%	0.18%	0.11%	0.34%	0.08%	0.21%
4	0.14%	0.39%	0.08%	0.24%	0.14%	0.45%	0.09%	0.28%
5	0.16%	0.50%	0.10%	0.30%	0.17%	0.58%	0.11%	0.35%
6	0.19%	0.62%	0.11%	0.38%	0.19%	0.73%	0.13%	0.44%
7	0.21%	0.76%	0.13%	0.46%	0.22%	0.90%	0.14%	0.55%
8	0.24%	0.92%	0.15%	0.57%	0.26%	1.11%	0.16%	0.67%
9	0.27%	1.12%	0.16%	0.70%	0.29%	1.36%	0.19%	0.83%
10	0.31%	1.35%	0.19%	0.85%	0.34%	1.66%	0.21%	1.01%
11	0.35%	1.62%	0.21%	1.03%	0.39%	2.01%	0.24%	1.23%
12	0.40%	1.96%	0.24%	1.26%	0.45%	2.44%	0.28%	1.51%
13	0.47%	2.33%	0.28%	1.52%	0.53%	2.91%	0.32%	1.82%
14	0.54%	2.74%	0.33%	1.85%	0.63%	3.43%	0.36%	2.19%
15	0.62%	3.19%	0.37%	2.22%	0.74%	4.00%	0.42%	2.60%
16	0.71%	3.66%	0.43%	2.62%	0.87%	4.60%	0.48%	3.04%
17	0.85%	4.26%	0.51%	3.19%	1.05%	5.26%	0.57%	3.69%
18	1.01%	4.92%	0.61%	3.85%	1.25%	5.96%	0.68%	4.48%
19	1.19%	5.61%	0.74%	4.61%	1.48%	6.68%	0.83%	5.33%
20	1.37%	6.30%	0.87%	5.34%	1.72%	7.43%	1.00%	6.22%
21	1.55%	7.03%	0.99%	6.06%	1.95%	8.22%	1.20%	7.03%
22	1.90%	8.07%	1.25%	7.13%	2.36%	9.08%	1.50%	8.22%
23	2.27%	9.15%	1.60%	8.25%	2.80%	10.01%	1.84%	9.49%
24	2.66%	10.12%	1.93%	9.14%	3.27%	10.52%	2.19%	10.35%
25	3.06%	11.33%	2.26%	10.35%	3.77%	11.49%	2.55%	11.66%
26	3.47%	12.62%	2.60%	11.63%	4.29%	12.67%	2.92%	13.07%
27	4.18%	13.70%	3.28%	12.75%	5.03%	13.74%	3.70%	14.35%
28	4.91%	14.82%	3.98%	13.90%	5.81%	14.94%	4.52%	15.76%
29	5.67%	15.78%	4.71%	14.81%	6.66%	15.76%	5.41%	16.77%
30	6.46%	16.70%	5.47%	15.71%	7.58%	16.87%	6.37%	18.10%

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2. Benefit Utilization Rates (BUR)

The current best estimate assumptions for benefit utilization rates (BUR) were updated from the prior year's assumption to use the 3-year period that includes 2018, 2019, and 2021. 2020 was excluded due to perceived abnormally low BURs from the COVID-19 pandemic.

The BUR for CFT purposes is consistent with our Disabled Life Reserving (DLR) BUR assumption. The CFT BUR assumption variables are product, benefit period, company, BIO, claim age, claim duration and original claim situs. The DLR BUR assumptions also vary by diagnosis and daily maximum benefit amount. The less-granular CFT BUR assumptions are due to modeling constraints within AXIS.

The assumption is derived from actual Genworth nationwide long-term care paid claim experience. Genworth considers experience combined from all relevant product types when setting the BUR assumption with potential product-specific adjustments.

A utilization trend is used for reimbursement products. Long-term trending is accomplished by inflating each of the assumed starting BURs by the applicable inflation assumption and deflating it by the contractual BIO into the future. In 2021, the BUR trend was strengthened, reflecting higher cost of care inflation for LTC services. Recent experience suggests higher increases in the cost of long-term care, especially for policies with Simple and Compound BIO. There was no update to the BUR trend assumption in 2022. The best estimate cost of long-term care inflation rates ranges from 0% for no BIO to 3.1% for policies with compound BIO, varying by original claim situs and benefit period.

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The following table is a sample of the GLIC base benefit utilization rate assumptions (i.e. before the application of the utilization trend) for a reimbursement policy with a limited benefit period (4+ years), and compound BIO:

	Sample Benefit Utilization Rate Assumption							
Claim Age	81	81	81	86	86	86		
Claim Situs	ALF	НС	NH	ALF	НС	NH		
Claim Duration								
Month 1-6	63.64%	35.38%	77.19%	63.75%	37.14%	79.27%		
Month 7-12	64.90%	42.96%	76.54%	64.78%	44.96%	78.32%		
Year 2	67.93%	50.68%	76.91%	67.40%	52.69%	78.20%		
Year 3	71.16%	57.06%	78.43%	70.28%	59.07%	79.40%		
Year 4	70.28%	60.36%	75.70%	69.19%	62.27%	76.39%		
Year 5	67.44%	60.34%	71.55%	66.27%	62.14%	72.07%		
Year 6	63.63%	57.69%	67.00%	62.50%	59.40%	67.46%		
Year 7+	59.70%	53.39%	62.89%	58.71%	55.03%	63.39%		

3. Claim Termination Rates (CTR)

The current best estimate assumption for claim termination rates (CTR) are derived from actual Genworth nationwide long-term care data from inception through December 31, 2021, for incurred experience through June 30, 2019 (2.5 year-reporting lag). This is in accordance with the companywide decision not to include 2020+ incurred experience in our 2022 studies due to the uncertain future impact of COVID-19 on experience. The CTR assumption variables are product group, gender, benefit period, claim age, claim duration, company and original claim situs. Our experience suggests high terminations in early claim durations are the result of acute disabilities terminating due to death or recovery. The remaining lives are permanent, long-term disabilities where recovery is less likely. Claim terminations in later claim durations are driven by disabled life mortality rates.

In 2022, we introduced policy duration at date of loss modifiers for recovery rates and then refreshed the recovery top-side adjustments. This update not only improved the fit for the CFT assumption but also led to better alignment between DLR and CFT CTR assumptions.

The Actual/Expected ratio of 99.3% for these policy forms shows a very good fit of the assumption to the historical experience through 2019.

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The following table is a sample of the GLIC monthly disabled life mortality assumptions for ALF, female, limited benefit period, claim age 82, for the first 324 monthly claim durations:

	San	nple Monthly	Disabled Lif	e Mortality A	Assumption		
Duration	Rate	Duration	Rate	Duration	Rate	Duration	Rate
1	0.12%	16	1.25%	31	1.57%	145-156	2.44%
2	0.16%	17	1.26%	32	1.59%	157-168	2.62%
3	0.29%	18	1.27%	33	1.61%	169-180	2.82%
4	0.78%	19	1.28%	34	1.63%	181-192	3.00%
5	1.28%	20	1.29%	35	1.65%	193-204	3.16%
6	1.29%	21	1.30%	36	1.67%	205-216	3.32%
7	1.29%	22	1.31%	37-48	1.70%	217-228	3.49%
8	1.29%	23	1.33%	49-60	1.98%	229-240	3.67%
9	1.29%	24	1.34%	61-72	2.14%	241-252	3.84%
10	1.30%	25	1.47%	73-84	2.29%	253-264	3.99%
11	1.30%	26	1.49%	85-96	2.26%	265-276	4.12%
12	1.31%	27	1.50%	97-108	2.14%	277-288	4.23%
13	1.23%	28	1.52%	109-120	1.90%	289-300	4.30%
14	1.23%	29	1.54%	121-132	2.08%	301-312	4.31%
15	1.24%	30	1.56%	133-144	2.26%	313-324	4.31%

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The following table is a sample of the GLIC monthly recovery rate assumptions for ALF, female, limited benefit period, claim age 82, for the first monthly 324 claim durations:

	Sample Monthly Recovery Rate Assumption							
Duration	Rate	Duration	Rate	Duration	Rate	Duration	Rate	
1	0.08%	16	0.16%	31	0.09%	145-156	0.00%	
2	0.19%	17	0.15%	32	0.09%	157-168	0.00%	
3	0.23%	18	0.14%	33	0.09%	169-180	0.00%	
4	0.34%	19	0.13%	34	0.09%	181-192	0.00%	
5	0.45%	20	0.13%	35	0.09%	193-204	0.00%	
6	0.40%	21	0.12%	36	0.09%	205-216	0.00%	
7	0.36%	22	0.12%	37-48	0.09%	217-228	0.00%	
8	0.32%	23	0.11%	49-60	0.10%	229-240	0.00%	
9	0.29%	24	0.11%	61-72	0.11%	241-252	0.00%	
10	0.26%	25	0.10%	73-84	0.13%	253-264	0.00%	
11	0.24%	26	0.10%	85-96	0.11%	265-276	0.00%	
12	0.22%	27	0.10%	97-108	0.06%	277-288	0.00%	
13	0.20%	28	0.10%	109-120	0.00%	289-300	0.00%	
14	0.18%	29	0.09%	121-132	0.00%	301-312	0.00%	
15	0.17%	30	0.09%	133-144	0.00%	313-324	0.00%	

4. Claim Situs Mix

A claim situs mix assumption is used to split the incidence rates among the original care situses: NH, ALF and HC. The Situs Mix assumption variables are product, gender, benefit period, marital status, underwriting class, claim age and company.

The current best estimate assumptions for claim situs mix are derived from actual Genworth nationwide long-term care experience, using data as of December 31, 2021, for incurred experience from 2011 through 2019 (2-year reporting lag). Using incurred experience through 2019 is in accordance with the companywide decision not to include 2020+ incurred experience in our 2022 studies due to the uncertain future impact of COVID-19 on experience.

At the younger attained ages, the original situs is more likely to be in home health care. At the higher attained ages, the original situs is more evenly distributed between home care and facility.

The Actual/Expected ratio is 100.0% for ALF, 100.0% for HC, and 100.0% for NH. This is a very good fit to the experience used to set the assumption.

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The following table is the GLIC situs mix assumption for female, limited benefit period, and standard underwriting class for selected ages:

Sample Claim Situs Mix Rate Assumption					
Marital Status	Claim Age	ALF	НС	NH	
	60	4.2%	93.1%	2.7%	
	65	7.3%	88.7%	4.1%	
	70	11.4%	83.0%	5.5%	
Married	75	16.4%	76.9%	6.8%	
	80	21.5%	71.0%	7.6%	
	85	26.1%	66.1%	7.8%	
	90	29.7%	62.8%	7.5%	
	60	10.1%	86.5%	3.4%	
	65	15.5%	79.5%	5.0%	
	70	21.5%	71.9%	6.6%	
Single	75	27.2%	64.9%	7.9%	
	80	32.0%	59.1%	8.8%	
	85	35.5%	55.3%	9.2%	
,	90	37.5%	53.4%	9.1%	

D. Expenses:

Expenses do not affect the lifetime loss ratio projections or the rate increase requested in this memorandum. Expenses have not been explicitly projected.

E. Interest:

A 4.12% interest rate assumption is used to calculate historical, future and lifetime loss ratios. This is the average statutory valuation interest rate for all GLIC policies issued on these forms nationwide.

F. Margin for Moderately Adverse Experience (MAE):

A bottom-up approach has been developed to determine a margin for MAE, which proactively addresses the uncertainty in future experience rather than waiting to see how future experience actually emerges, at which time remaining premium runway will be shorter.

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The analysis begins with current best estimate assumptions and provides a reasonable estimation of where future experience might possibly emerge if potential adverse trends were to materialize. This sensitivity also illustrates which key policy features present the most risk, necessitate the most rate increase and eliminates or reduces the need for rate increases on policies that do not present comparable risk. The lifetime loss ratio reflecting the margin for MAE can be found in Exhibit I under "MAE Lifetime Loss Ratio".

The table below presents the changes to the best estimate assumptions in the MAE. Two of the assumptions below, BUR trend and morbidity improvement, are also risks currently being tracked as part of the GLIC monitoring plan developed with key regulators in conjunction with Actuarial Guideline 51 where key risks will be monitored as trends emerge.

Assumption	Moderately Adverse Experience Changes
BUR Trend	Updated cost of care inflation factors based on more conservative cost of care inflation factors which reflect more adverse future increases C-BIO: 3.6% HC, 4.3% ALF, 4.2% NH S-BIO: 1.4% HC, 2.3% ALF, 2.2% NH
Morbidity & Mortality Improvement	This change effectively delays both sets of improvement by 3 years
Healthy Life Mortality	More conservative rates reflect a heavier weighting towards observed experience, even in durations where experience is less credible

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9. Development of the Requested Rate Increase

In developing the requested premium rate increase, the following has been considered:

- a. In order to ensure maximum credibility, exhibits are based on GLIC nationwide experience through December 31, 2022. Projected earned premiums and incurred claims are based on the assumptions described in Section 8 of this actuarial memorandum;
- b. GLIC nationwide experience includes all Choice 2 and 2.1 policies. State specific experience only includes the policies affected by this filing, which are referenced in Section 1 of this actuarial memorandum;
- c. This rate action is considered to be subject to the Rate Stability regulation;
- d. The nationwide premium has been restated at your state level, only reflecting your state's approved rate increases, to address subsidization among states;
- e. For the projections the rate increase planned for this filing has been assumed to be implemented on August 31, 2024, however GLIC plans to implement the rate increase as soon as possible after the filing is dispositioned, recognizing completion of any prior approved actions and/or system constraints;
- f. The rate increase has been calculated to bring the MAE Lifetime Loss Ratio closer to the lifetime loss ratio at pricing, which complies with the 58%/85% test defined in the Rate Stability regulation as demonstrated in the Supplement;
- g. Lifetime projections of earned premiums and incurred claims reflecting all the prior approved rate increases in your state are set forth in Exhibit I. Lifetime projections of earned premiums and incurred claims reflecting all the prior approved rate increases in your state and the requested rate increase are set forth in Exhibit II;
- h. For the sake of modeling simplicity, approved rate increases were applied to 2-year benefit period and 365-day elimination period policies in Exhibits I and II, which is a conservative approach;
- i. Historical and projected earned premiums and incurred claims include provisions for waiver of premium:
- j. Please note that prior filings included the projection experience for Stable Premium Option (SPO) policies which have now been excluded due to known limitations in the data used to model SPO policies. The removal of these policies mostly impacts the Limited Low BIO cohort, where the Lifetime Loss Ratio has been materially impacted; other modeled cohorts are immaterially impacted following this change; and
- k. Refer to the Supplement for contingent benefit upon lapse information.

9.1 New Business Premium Rate Comparison

GLIC has compared premium rates on the referenced policy forms to the new business rates where the policy characteristics are similar. There are significant differences in benefits, underwriting and other product features between the Choice 2 and 2.1 products and the current form approved for sale in your state, Policy Form Number 8000R1. Where possible, adjustments have been made so that new business comparisons are meaningful. These differences affect the rate comparison in the following ways:

<u>Benefit Differences</u>: Several benefits, available in prior product generations, including Choice 2 and 2.1, are not offered in Policy Form Number 8000R1, including benefit periods of eight (8) years or longer, elimination period of zero (0) days, and limited premium payment options (none of these benefits are

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currently marketed). Policies with these benefit differences are not considered to exceed new business rates.

<u>Survivorship Benefit:</u> All 7044 and 7044Rev policies have a survivorship benefit. The current product does not have this feature, but GLIC did have a product that had this feature available as a rider. These rider rates were added to the currently marketed product rates, which enabled these policies to be part of the new business rate comparison.

<u>Underwriting:</u> Product Form Number 8000R1 is subject to several underwriting enhancements that did not apply to Choice 2 and 2.1. While these underwriting enhancements are not directly reflected in benefits, they impact both original and new business pricing. In addition, Product Form Number 8000R1 has four underwriting categories (Standard, Select, Preferred, and Best), while Choice 2 and 2.1 had only two such categories (Standard and Preferred). GLIC recently made the decision to discontinue sales of Preferred and Best. Ignoring Preferred policies would limit the comparison significantly. GLIC has made a good faith effort to compare these policies and map the two underwriting categories of Choice 2 and 2.1 to the four underwriting categories of Policy Form Number 8000R1 despite the differences.

<u>Issue Ages:</u> Current marketing limits issue ages to between 40 and 75. Policyholders with issue ages outside of this range are not considered to exceed new business rates.

<u>Policies with 50% Home Health Care:</u> Due to the small number of in-force policies with this benefit, these policies have not been included in the comparison and are not considered to exceed new business rates.

<u>Gender Based Pricing:</u> Product Form Number 8000R1 was priced on a gender-specific basis, as opposed to the unisex basis applicable to Choice 2 and 2.1. A blend of female/male rates based on pricing assumptions was used to develop approximate unisex rates.

<u>Informal Home Care:</u> Product Form Number 8000R1 covers services provided by informal caregivers to policyholders receiving care at home, but requires caregivers to be registered, and reimburses that care only up to 50% of the available nursing home benefit. Choice 2 and 2.1 covers services provided by informal caregivers to policyholders receiving care at home, but does not require caregivers to be registered, and reimburses that care up to 100% of the available nursing home benefit. An adjustment to rates for this difference could not be approximated.

<u>Claims Offset:</u> Product Form Number 8000R1 reduces available benefit by claims paid before benefit increases are calculated. Choice 2 and 2.1 products reduce available benefits by claims paid after benefit increases are calculated. An adjustment to rates for this difference could not be approximated.

Marketing and Distribution: Choice 2 and 2.1 were sold during the peak years of LTC production when sales and distribution channels were in a growing stage; the current environment is the exact opposite, with decreasing sales and distribution outlets. In 2004-2009 sales were conducted 66% by Independent Agents and Financial Advisors and 33% by Career Agents. Choice 2.1 was sold also through AARP. GLIC's lower ratings today also impact the current distribution and the amount of production of the currently marketed product is an insignificant fraction of the Choice 2 and 2.1 business sold.

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<u>Delay in Approvals and Unapproved Amounts:</u> The rate comparison is sensitive to the approval timing and amounts of prior rate increase request. Delays in approval of the full requested rate increase result in higher percentage future premium rate increases and increases the likelihood of proposed rate levels exceeding the new business rates.

In accordance with the Rate Stability regulation and the Long-term Care Rate Stability Practice Note issued by the American Academy of Actuaries in 2012, we believe the differences noted above sufficiently justify a rate level greater than the new business rates for some of the Choice 2 and 2.1 in-force policies in your state. Since GLIC prioritizes rate sufficiency and company solvency, the greater rate level is required in order to certify that, if experience emerges as expected, no further rate increases are anticipated.

10. Active Life Reserves and Claim Liability Reserves

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2022, have been discounted to the date of incurral of each respective claim and included in historical incurred claims. Incurred but not reported reserve balances as of December 31, 2022, have been allocated to a calendar year of incurral and included in historic incurred claims. Discounting occurs at 4.12%.

11. Trend Assumptions

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

12. Future Rate Increases

Policies to which this premium rate increase filing applies may also be subject to future additional rate increases if the full amount of the rate increases requested in this filing are not approved or if the underlying assumptions are not realized.

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13. Actuarial Certification

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the American Academy of Actuaries' qualification standards for rendering this opinion and am familiar with the requirements for filing for increases in long-term care insurance premiums.

This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 18, 23, 25, 41 and 56. Policy design, underwriting, and claims adjudication practices have been considered.

I have relied on historical cash flows and projections completed by GLIC's modeling team, which is part of IFA Execution & Strategic Messaging team. All future projections included in this memorandum, while based on GLIC's best estimates, are uncertain and may not emerge as expected.

I have relied on GLIC's modeling team, which is part of IFA Execution & Strategic Messaging team for exhibit generators, which develop the various exhibits submitted in the filing.

I have relied on the GLIC'S strategic pricing team, which is part of IFA Execution & Strategic Messaging team for the pricing, methodology and design of the alternative options presented in Section 6 of this actuarial memorandum.

I have relied on statutory valuations as of December 31, 2022, for Claim Reserves (i.e., Disabled Life Reserves, Pending Claims reserves, Incurred But Not Reported reserves, and Dead But Not Reported reserves) provided by GLIC's LTC reporting & analysis team, which is part of Actuarial team.

I have also relied on assumptions developed by GLIC's Long-Term Care Assumptions team, which is part of Actuarial team in collaboration with other GLIC actuaries, which assumptions were approved by Genworth's Assumption Review Committee. The assumptions present the actuaries' best judgement and are consistent with GLIC's business plan at the time of the filing. I have been unable to judge the reasonableness of assumptions and methods without performing substantial additional work and disclaim responsibility for material assumptions and methods selected by the issuer.

I hereby certify that, to the best of my knowledge and judgment, this rate submission is in compliance with the applicable laws of your state, in particular the Premium Rate Schedule Increases section of your long-term care insurance regulations. If the requested premium rate schedule increase is implemented and the underlying assumptions, which reflect a margin for moderately adverse experience, are realized, no further premium rate schedule increases are anticipated.

Elizabeth A. Foreman, FSA, MAAA

Consulting Actuary

Genworth Life Insurance Company

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Supplement for Lifetime Low BIO Policies

	Data as of 12/31/2022		
Section 1	In-force policies counts and distribution*	State	Nationwide
	First issued date	August 2005	August 2003
	Last issued date	January 2012	January 2013
	Issued Lives	77	3,739
	(1) In-force Lives	64	2,991
	(2) Total In-force Annualized Premium	\$253,223	\$9,707,177
	(3) Average Premium Before the Requested RI (2)/(1)	\$3,957	\$3,245
	Average Premium After the Requested RI (3) x (1 + Requested Rate Increase)	\$8,507	N/A
	Average Issue Age	57	57
	Average Attained Age	71	74
	Issue Age		
	<55		31.6%
	55-59		30.3%
	60-64		24.6%
	65-69		10.0%
	70-74		2.9%
	75-79		0.7%
	80+		0.0%
	Benefit Increase		
	None		62.7%
	Simple		0.0%
	Compound		37.3%
Section 7	Date of Approval	Approved Rate Increases**	
	5/27/2014	12.8%	
	1/23/2017	15%	
	9/26/2018	19.9%	
	1/4/2021	32.3%***	
	8/31/2023	0%	
	Cumulative RI	106%	
Section 9	Nationwide 58/85 Test		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		205,172,258
	(2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		125,977,973
	(3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		226,205,938
	$0.58 \times (1) + 0.85 \times (2) < (3)$		TRUE
	Contingent Benefit Upon Lapse****		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		205,172,258
	(2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		106,602,726
	(3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		222,566,002
	$0.643 \times (1) + 0.85 \times (2) < (3)$		TRUE

^{*}State specific inforce lives and premium reflect policies eligible for the rate increase, which are excluding SPO, FBO, and paid up policies, where applicable. Nationwide inforce lives, premiums, and distributions are excluding SPO policies only, where applicable.

^{**}Approved Rate Increases may vary by Benefit Inflation Option, Benefit Period, Issue Age, etc.

^{***}Excludes policies with 2-year BP, No inflation, or 365 days EP.

^{****}Includes all rate increases approved in your state applied to all policies nationwide, and a 85% rate increase

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Supplement for Lifetime High BIO Policies

	Data as of 12/31/2022		
Section 1	In-force policies counts and distribution*	State	Nationwide
	First issued date	November 2004	July 2003
	Last issued date	August 2012	September 2013
	Issued Lives	1,406	53,011
	(1) In-force Lives	875	40,140
	(2) Total In-force Annualized Premium	\$4,616,837	153,692,716
	(3) Average Premium Before the Requested RI		
	(2)/(1)	\$5,276	\$3,829
	Average Premium After the Requested RI	040.770	N1/A
	(3) x (1 + Requested Rate Increase)	\$16,779	N/A
	Average Issue Age	57	57
	Average Attained Age	71	74
	Issue Age		
	<55		49.3%
	55-59		31.0%
	60-64		15.1%
	65-69		4.0%
	70-74		0.6%
	75-79		0.0%
	80+		0.0%
	Benefit Increase		
	None		0.0%
	Simple		20.4%
	Compound		79.6%
Section 7	Date of Approval	Approved Rate Increases**	
	5/27/2014	12.8%	
	1/23/2017	15%	
	9/26/2018	19.9%	
	1/4/2021	32.3%***	
	8/31/2023	15%	
	Cumulative RI	137%	
Section 9	Nationwide 58/85 Test		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		3,274,907,620
	(2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		4,782,949,501
	(3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		5,970,283,677
	$0.58 \times (1) + 0.85 \times (2) < (3)$		TRUE
	Contingent Benefit Upon Lapse****		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		3,274,907,620
	(2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		4,465,473,291
	(3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		5,908,143,941
	$\mathcal{N}(I)$		

^{*}State specific inforce lives and premium reflect policies eligible for the rate increase, which are excluding SPO, FBO, and paid up policies, where applicable. Nationwide inforce lives, premiums, and distributions are excluding SPO policies only, where applicable.

^{**}Approved Rate Increases may vary by Benefit Inflation Option, Benefit Period, Issue Age, etc.

^{***}Excludes policies with 2-year BP, No inflation, or 365 days EP.

^{****}Includes all rate increases approved in your state applied to all policies nationwide, and a 198% rate increase

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Supplement for Limited High BIO Policies

Section 1	In-force policies counts and distribution*	State	Nationwide
	First issued date	November 2004	May 2003
	Last issued date	July 2012	January 2014
	Issued Lives	9,562	339,258
	(1) In-force Lives	6,659	260,011
	(2) Total In-force Annualized Premium	\$24,804,593	\$724,949,662
	(3) Average Premium Before the Requested RI		
	(2)/(1)	\$3,725	\$2,788
	Average Premium After the Requested RI		
	(3) x (1 + Requested Rate Increase)	\$8,158	N/A
	Average Issue Age	57	57
	Average Attained Age	71	74
	Issue Age		
	<55 		28.1%
	55-59		32.6%
	60-64		26.8%
	65-69		10.5%
	70-74		1.9%
	75-79		0.1%
	80+		0.0%
	Benefit Period in Years		
	1		0.0%
	2		6.7%
	3		14.6%
	4		26.8%
	5		12.6%
	6		15.4%
	7		0.0%
	8		15.8%
	10		6.9%
	12		0.8%
	16		0.1%
	20		0.3%
			0.070
	Benefit Increase		
	None		0.0%
	Simple		23.6%
	Compound		76.4%
Section 7	Date of Approval	Approved Rate Increase**	
	5/27/2014	12.8%	
	1/23/2017	15%	
	9/26/2018	19.9%	
	1/4/2021	32.3%***	
	8/31/2023	15%	
	Cumulative RI	137%	
Section 9	Nationwide 58/85 Test		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		14,690,752,517
	(2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		15,001,906,335
	(3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		21,273,583,011
	$0.58 \times (1) + 0.85 \times (2) < (3)$		TRUE
	Contingent Benefit Upon Lapse****		
			14,690,752,517
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis		14,030,732,317
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis (2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase		
	(1) PV of Future Premiums and Accumulated Past Premiums on Original Rate Basis (2) PV of Future Premiums and Accumulated Past Premiums Attributable to Rate Increase (3) PV of Future Incurred Claims and Accumulated Past Incurred Claims		13,545,011,826 20,960,090,164

^{*}State specific inforce lives and premium reflect policies eligible for the rate increase, which are excluding SPO, FBO, and paid up policies, where applicable. Nationwide inforce lives, premiums, and distributions are excluding SPO policies only, where applicable.

^{**}Approved Rate Increases may vary by Benefit Inflation Option, Benefit Period, Issue Age, etc.

^{***}Excludes policies with 2-year BP, No inflation, or 365 days EP.

^{****}Includes all rate increases approved in your state applied to all policies nationwide, and a 99.2% rate increase

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Exhibit Ia: Choice 2 & 2.1 Policy Forms - Nationwide Experience Lifetime Low BIO With Maryland Approved Rate Increase* without MAE

				4.12%	
Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Discount Factor	Lives
2003	37,096	-	0.0%	2.1974	107
2004	848,030	215,687	25.4%	2.1105	683
2005	2,111,760	99,449	4.7%	2.0270	1,275
2006	3,442,103	15,936	0.5%	1.9468	1,850
2007	4,781,415	223,585	4.7%	1.8697	2,393
2008	5,964,325	941,137	15.8%	1.7957	2,805
2009	6,560,089	1,119,820	17.1%	1.7247	2,950
2010	6,926,920	2,057,051	29.7%	1.6564	3,123
2011	7,447,240	1,365,682	18.3%	1.5909	3,374
2012	7,759,603	864,825	11.1%	1.5279	3,378
2013	7,704,458	2,736,006	35.5%	1.4675	3,339
2014	7,592,127	1,716,356	22.6%	1.4094	3,299
2015	8,251,369	3,587,169	43.5%	1.3536	3,267
2016	8,185,488	1,794,316	21.9%	1.3001	3,241
2017	8,108,927	3,110,376	38.4%	1.2486	3,208
2018	8,504,421	3,257,169	38.3%	1.1992	3,176
2019	8,084,643	4,751,656	58.8%	1.1518	3,145
2020	8,402,145	3,616,186	43.0%	1.1062	3,096
2021	8,226,747	2,812,423	34.2%	1.0624	3,044
2022	7,687,887	4,352,474	56.6%	1.0204	2,991
2023	7,869,937	7,080,466	90.0%	0.9800	2,917
2024	7,608,599	7,492,628	98.5%	0.9412	2,838
2025	7,338,876	7,947,244	108.3%	0.9040	2,753
2026	7,059,221	8,429,082	119.4%	0.8682	2,662
2027	6,768,550	8,922,251	131.8%	0.8339	2,566
2028	6,468,682	9,403,019	145.4%	0.8009	2,464
2029	6,160,674	9,854,323	160.0%	0.7692	2,357
2030	5,845,735	10,242,270	175.2%	0.7387	2,246
2031	5,525,081	10,568,730	191.3%	0.7095	2,130
2032	5,200,624	10,833,206	208.3%	0.6814	2,013
2033	4,874,688	11,100,128	227.7%	0.6545	1,892
2034	4,547,751	11,372,390	250.1%	0.6286	1,770
2035	4,220,904	11,518,844	272.9%	0.6037	1,647
2036	3,896,049		295.8%	0.5798	
		11,524,576			1,523
2037	3,575,492	11,395,644	318.7%	0.5569	1,401
2038	3,261,742	11,125,786	341.1%	0.5348	1,281
2039	2,957,219	10,744,622	363.3%	0.5137	1,163
2040	2,663,689	10,266,242	385.4%	0.4933	1,050
2041	2,383,966	9,679,969	406.0%	0.4738	942
2042	2,119,951	9,004,849	424.8%	0.4551	839
2043	1,872,512	8,267,884	441.5%	0.4371	743
2044	1,642,796	7,496,642	456.3%	0.4198	653
2045	1,431,673	6,751,898	471.6%	0.4032	570
2046	1,239,343	6,031,873	486.7%	0.3872	495
2047	1,065,641	5,335,899	500.7%	0.3719	427
2048	910,186	4,679,723	514.2%	0.3572	366
2049	772,284	4,045,539	523.8%	0.3430	311
2050	651,194	3,467,625	532.5%	0.3295	263
2051	545,722	2,949,884	540.5%	0.3164	222
2052	454,570	2,489,140	547.6%	0.3039	185
2053	376,384	2,093,402	556.2%	0.2919	154
2054	309,835	1,746,903	563.8%	0.2803	128
2055	253,636	1,453,439	573.0%	0.2692	105
2056	206,534	1,203,221	582.6%	0.2586	86
2057	167,325	991,111	592.3%	0.2484	70
2058	134,878	815,107	604.3%	0.2385	57
2059	108,207	663,404	613.1%	0.2291	46
2060	86,413	532,404	616.1%	0.2200	37
2061	68,697	429,143	624.7%	0.2113	30
2062	54,357	343,781	632.4%	0.2030	24
2063	42,819	273,004	637.6%	0.1949	19
2064	33,570	215,112	640.8%	0.1872	15
2065	26,198	166,192	634.4%	0.1798	12
2066	20,193	129,255	635.4%	0.1798	9
		·			
2067	15,714	100,345	638.6%	0.1659	7
2068	12,074	77,763	644.0%	0.1593	6
2069	9,228	59,767	647.7%	0.1530	4
2070	7,016	44,984	641.1%	0.1469	3
2071	5,305	33,795	637.0%	0.1411	3
2072	3,991	25,138	629.9%	0.1355	2
2073	2,984	18,581	622.6%	0.1302	2
2074	2,219	13,555	610.8%	0.1250	1
2075	1,642	9,624	586.1%	0.1201	1
					1
2076	1,205	6,612	548.6%	0.1153	1
2077	878	4,529	515.9%	0.1108	1
2078	633	3,136	495.2%	0.1064	0
2079	450	2,143	476.3%	0.1022	0
2080	316	1,446	457.0%	0.0981	0
2081	220	979	446.1%	0.0942	0
2082	149	655	438.2%	0.0905	0
		300	100.270	0.0000	J
ccumulated and Present ast:	Values as of 12/31/2022 178,328,537	49,943,554	28.0%		
uture:	79,073,076	155,679,078	196.9%		
fetime:	257,401,613	205,622,631	79.9%		
	,,,,,,,,,	, ,			
ifetime with MAE:	256,878,450	212,252,853	82.6%		

*Includes all rate increases approved in your state applied to all policies nationwide, but excludes the rate increase requested in this filing

Actuarial Memorandum September 2023

Exhibit Ib: Choice 2 & 2.1 Policy Forms - Nationwide Experience Lifetime High BIO With Maryland Approved Rate Increase* without MAE

				4.12%	
Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Discount Factor	Lives
		incurred Claims	0.0%		
2003	605,552	4.040		2.1974	1,683
2004	12,086,409	1,248	0.0%	2.1105	8,738
2005	29,900,768	1,350,111	4.5%	2.0270	16,640
2006	51,967,108	2,596,060	5.0%	1.9468	25,011
2007	74,767,386	2,274,551	3.0%	1.8697	33,263
2008	94,423,620	6,512,782	6.9%	1.7957	38,355
2009	103,491,937	11,775,663	11.4%	1.7247	40,194
2010	110,039,578	14,164,985	12.9%	1.6564	42,448
2011				1.5909	
	118,413,506	10,442,106	8.8%		45,180
2012	122,828,899	16,794,368	13.7%	1.5279	45,149
2013	122,028,830	20,120,356	16.5%	1.4675	44,526
2014	119,397,832	25,604,667	21.4%	1.4094	43,954
2015	128,203,827	28,883,376	22.5%	1.3536	43,494
2016	123,779,306	42,292,197	34.2%	1.3001	42,967
2017	119,093,623	54,030,191	45.4%	1.2486	42,473
2018	123,322,317	46,579,000	37.8%	1.1992	41,992
2019	116,447,044	59,063,645	50.7%	1.1518	41,544
2020	120,988,887	52,901,599	43.7%	1.1062	41,091
2021	123,474,345	71,671,527	58.0%	1.0624	40,599
2022	133,282,956	103,031,643	77.3%	1.0204	40,129
2023	148,811,322	99,314,429	66.7%	0.9800	39,453
2024	157,027,459	110,585,762	70.4%	0.9412	38,727
2025	162,639,451	123,855,689	76.2%	0.9040	37,932
2026	158,421,213	137,525,406	86.8%	0.8682	37,061
2027	153,884,578	152,271,685	99.0%	0.8339	36,113
2028	148,995,104	167,588,587	112.5%	0.8009	35,088
	·				
2029	143,791,969	182,968,291	127.2%	0.7692	33,986
2030	138,267,272	198,335,480	143.4%	0.7387	32,810
2031	132,468,670	213,498,226	161.2%	0.7095	31,562
2032	126,408,265	228,304,355	180.6%	0.6814	30,250
2033	120,137,284	244,160,325	203.2%	0.6545	28,876
2034	113,660,417	260,468,093	229.2%	0.6286	27,440
2035	107,005,813	274,572,298	256.6%	0.6037	25,951
2036	100,213,884	286,100,965	285.5%	0.5798	24,420
2037	93,344,768		315.5%	0.5569	
	·	294,534,767			22,859
2038	86,454,295	299,666,958	346.6%	0.5348	21,282
2039	79,603,781	301,868,638	379.2%	0.5137	19,705
2040	72,854,020	300,748,944	412.8%	0.4933	18,143
2041	66,271,551	296,403,903	447.3%	0.4738	16,608
2042	59,907,677	288,469,984	481.5%	0.4551	15,114
2043	53,810,563	277,486,217	515.7%	0.4371	13,673
2044	48,020,017	264,565,231	550.9%	0.4198	12,296
2045	42,576,333	250,701,629	588.8%	0.4032	10,992
2046	37,500,759	236,150,591	629.7%	0.3872	9,766
2047	32,808,679	220,667,054	672.6%	0.3719	8,625
2048	28,515,807	204,035,281	715.5%	0.3572	7,572
2049	24,620,219	186,391,441	757.1%	0.3430	6,608
2050	21,118,554	168,523,594	798.0%	0.3295	5,735
2051	17,999,753	151,198,771	840.0%	0.3164	4,949
2052	15,245,894	134,709,633	883.6%	0.3039	4,248
2053	12,834,981	119,426,419	930.5%	0.2919	3,627
2054	10,741,178	105,726,937	984.3%	0.2803	3,082
2055					
	8,937,862	93,474,000	1045.8%	0.2692	2,606
2056	7,396,856	82,538,374	1115.9%	0.2586	2,194
2057	6,087,198	72,742,347	1195.0%	0.2484	1,838
2058	4,985,780	63,937,081	1282.4%	0.2385	1,534
2059	4,064,487	55,933,233	1376.1%	0.2291	1,275
2060	3,298,459	48,731,619	1477.4%	0.2200	1,056
2061	2,665,049	42,255,538	1585.5%	0.2113	871
2062	2,143,977	36,346,339	1695.3%	0.2030	716
2063	1,717,473	31,021,109	1806.2%	0.2030	585
2064	1,369,679	26,322,273	1921.8%	0.1872	477
2065	1,086,959	22,145,506	2037.4%	0.1798	387
2066	858,008	18,408,671	2145.5%	0.1727	312
2067	673,433	15,134,069	2247.3%	0.1659	250
2068	525,360	12,342,367	2349.3%	0.1593	200
2069	407,157	9,941,764	2441.8%	0.1530	158
2070	313,282	7,927,829	2530.6%	0.1469	125
2071	239,195	6,229,254	2604.3%	0.1411	98
2071	·		2651.7%	0.1355	76
	181,226	4,805,587			
2073	136,228	3,649,521	2679.0%	0.1302	59
2074	101,602	2,735,344	2692.2%	0.1250	46
2075	75,185	2,023,753	2691.7%	0.1201	35
2076	55,221	1,474,887	2670.9%	0.1153	27
2077	40,253	1,066,653	2649.9%	0.1108	20
2078	29,115	764,517	2625.9%	0.1064	15
2079	20,909	545,114	2607.1%	0.1022	12
	-	•			
2080	14,913	386,127	2589.1%	0.0981	9
2081	10,578	271,046	2562.4%	0.0942	7
2082	7,450	188,077	2524.6%	0.0905	5
Accumulated and Present \	/alues as of 12/31/2022				
Past:	2,748,362,515	700,633,596	25.5%		
Future:	1,866,486,283	3,843,490,941	205.9%		
Lifetime:	4,614,848,797	4,544,124,537	98.5%		
-	.,0,0 .0,1 01	,= : :, := :,001	20.070		
Lifetime with MAE:	4,597,366,428	5,292,960,554	115.1%		
LIIGUIIIG WIUI WIAE.	4,097,300,428	5,292,900,554	115.1%		

*Includes all rate increases approved in your state applied to all policies nationwide, but excludes the rate increase requested in this filing

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Exhibit Ic: Choice 2 & 2.1 Policy Forms - Nationwide Experience Limited High BIO With Maryland Approved Rate Increase* without MAE

1	1	2	0/

Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Discount Factor	Lives
2003	1,754,550	-	0.0%	2.1974	6,77
2004 2005	35,825,103 93,496,337	583,304 159,863	1.6% 0.2%	2.1105 2.0270	35,56 73,44
2006	166,708,651	2,385,038	1.4%	1.9468	73,44 112,74
2007	246,289,733	5,738,877	2.3%	1.8697	157,77
2008	339,774,094	12,288,306	3.6%	1.7957	199,14
2009	402,382,023	11,600,119	2.9%	1.7247	223,21
2010	457,122,245	19,065,915	4.2%	1.6564	253,55
2011	535,047,569	30,796,901	5.8%	1.5909	293,88
2012	583,308,480	44,908,864	7.7%	1.5279	297,51
2013 2014	580,691,009 571,197,101	51,509,507 75,183,093	8.9% 13.2%	1.4675 1.4094	293,85 290,21
2015	618,814,903	98,877,833	16.0%	1.3536	286,65
2016	610,753,593	101,957,394	16.7%	1.3001	282,92
2017	600,067,981	145,010,776	24.2%	1.2486	279,31
2018	624,501,330	172,953,036	27.7%	1.1992	275,57
2019	589,366,024	191,070,008	32.4%	1.1518	271,84
2020	607,855,708	189,831,918	31.2%	1.1062	268,03
2021	617,111,684	279,240,175	45.2%	1.0624	264,24
2022	661,673,693	364,848,910	55.1%	1.0204	260,29
2023	734,654,375	372,584,369	50.7%	0.9800	254,91
2024 2025	772,017,415 796,329,130	426,175,598 488,421,869	55.2% 61.3%	0.9412 0.9040	249,17 242,93
2025	790,329,130	551,161,490	71.4%	0.8682	242,93
2027	745,372,512	617,726,288	82.9%	0.8339	228,74
2028	717,362,060	686,252,733	95.7%	0.8009	220,80
2029	687,679,783	754,110,815	109.7%	0.7692	212,3
2030	656,458,539	818,784,537	124.7%	0.7387	203,33
2031	623,908,388	878,674,923	140.8%	0.7095	193,92
2032	590,272,872	934,081,872	158.2%	0.6814	184,1
2033	555,873,772	990,693,818	178.2%	0.6545	174,0
2034	520,822,356	1,045,364,127	200.7%	0.6286	163,67
2035	485,258,345	1,088,799,284	224.4%	0.6037	153,00
2036	449,456,869	1,119,459,654	249.1%	0.5798	142,3
2037	413,723,692	1,137,072,497	274.8%	0.5569	131,54
2038	378,414,977	1,140,328,429	301.3%	0.5348	120,83
2039 2040	343,839,148 310,326,467	1,128,896,300 1,105,297,731	328.3% 356.2%	0.5137 0.4933	110,30 100,04
2041	278,162,410	1,070,523,892	384.9%	0.4738	90,1
2042	247,577,247	1,024,722,016	413.9%	0.4551	80,6
2043	218,787,374	969,333,561	443.0%	0.4371	71,73
2044	191,939,923	907,134,980	472.6%	0.4198	63,3
2045	167,172,057	842,720,025	504.1%	0.4032	55,57
2046	144,555,425	777,695,447	538.0%	0.3872	48,42
2047	124,072,687	710,755,622	572.9%	0.3719	41,89
2048	105,688,982	642,903,356	608.3%	0.3572	36,00
2049	89,352,754	574,953,460	643.5%	0.3430	30,72
2050	74,983,063	509,216,768	679.1%	0.3295	26,04
2051	62,469,153	447,487,402	716.3%	0.3164	21,9
2052 2053	51,665,019 42,418,542	389,670,728 336,478,881	754.2% 793.2%	0.3039 0.2919	18,39 15,29
2054	34,577,757	289,018,912	835.9%	0.2803	12,6
2055	27,993,503	246,813,933	881.7%	0.2692	10,3
2056	22,514,263	209,137,180	928.9%	0.2586	8,4
2057	17,989,587	176,134,824	979.1%	0.2484	6,8
2058	14,283,009	148,041,581	1036.5%	0.2385	5,5
2059	11,271,713	123,984,126	1100.0%	0.2291	4,4
2060	8,844,958	103,339,692	1168.3%	0.2200	3,5
2061	6,903,084	85,720,645	1241.8%	0.2113	2,8
2062	5,359,223	70,625,725	1317.8%	0.2030	2,2
2063	4,140,445	57,842,017	1397.0%	0.1949	1,7
2064	3,184,285	47,201,688	1482.3%	0.1872	1,3
2065	2,437,593	38,330,489	1572.5%	0.1798	1,0
2066	1,857,324	30,875,709	1662.4%	0.1727	8
2067 2068	1,408,458 1,062,872	24,733,996	1756.1% 1862.4%	0.1659 0.1593	6 5
2069	797,643	19,794,581 15,687,366	1966.7%	0.1530	3
2070	594,868	12,297,580	2067.3%	0.1469	3
2071	440,601	9,578,834	2174.0%	0.1411	2
2072	323,944	7,382,178	2278.8%	0.1355	1
2073	236,520	5,616,124	2374.5%	0.1302	1
2074	171,433	4,227,307	2465.9%	0.1250	
2075	123,318	3,143,131	2548.8%	0.1201	
2076	88,012	2,302,595	2616.2%	0.1153	
2077	62,329	1,653,616	2653.1%	0.1108	
2078	43,808	1,176,994	2686.7%	0.1064	
2079	30,550	832,761	2725.9%	0.1022	
2080	21,129	583,330	2760.8%	0.0981	
2081	14,483	404,457	2792.6%	0.0942	
2082	9,819	276,878	2819.8%	0.0905	
ccumulated and Present Vast:	alues as of 12/31/2022 12,326,955,421	2,143,653,738	17.4%		
	8,670,675,901	14,224,888,826	164.1%		
uture:					
uture: ifetime:	20,997,631,322	16,368,542,565	78.0%		

*Includes all rate increases approved in your state applied to all policies nationwide, but excludes the rate increase requested in this filing

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Exhibit IIa: Choice 2 & 2.1 Policy Forms - Nationwide Experience Lifetime Low BIO With Requested 115% Rate Increase* with MAE

4.12%

Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	4.12% Discount Factor	Lives
2003	37,096	-	0.0%	2.1974	107
2004	848,030	215,687	25.4%	2.1105	683
2005	2,111,760	99,449	4.7%	2.0270	1,275
2006	3,442,103	15,936	0.5%	1.9468	1,850
2007	4,781,415	223,585	4.7%	1.8697	2,393
2008	5,964,325	941,137	15.8%	1.7957	2,805
2009	6,560,089	1,119,820	17.1%	1.7247	2,950
2010	6,926,920	2,057,051	29.7%	1.6564	3,123
2011	7,447,240	1,365,682	18.3%	1.5909	3,374
2012			11.1%	1.5279	
	7,759,603	864,825			3,378
2013	7,704,458	2,736,006	35.5%	1.4675	3,339
2014	7,592,127	1,716,356	22.6%	1.4094	3,299
2015	8,251,369	3,587,169	43.5%	1.3536	3,267
2016	8,185,488	1,794,316	21.9%	1.3001	3,241
2017	8,108,927	3,110,376	38.4%	1.2486	3,208
2018	8,504,421	3,257,169	38.3%	1.1992	3,176
2019	8,084,643	4,751,656	58.8%	1.1518	3,145
	, ,			1.1062	
2020	8,402,145	3,616,186	43.0%		3,096
2021	8,226,747	2,812,423	34.2%	1.0624	3,044
2022	7,687,887	4,352,474	56.6%	1.0204	2,991
2023	7,867,441	7,288,166	92.6%	0.9800	2,917
2024	10,346,170	8,241,944	79.7%	0.9412	2,838
2025	15,346,707	9,598,644	62.5%	0.9040	2,752
2026	14,827,335	10,240,931	69.1%	0.8682	2,659
2027	14,267,722	10,802,380	75.7%	0.8339	2,561
2028	13,673,382	11,334,147	82.9%	0.8009	2,456
2029	13,048,542	11,818,717	90.6%	0.7692	2,347
2030	12,397,434	12,225,185	98.6%	0.7387	2,232
2031	11,724,753	12,555,190	107.1%	0.7095	2,114
2032	11,036,406	12,800,032	116.0%	0.6814	1,993
2033	10,338,462	12,931,754	125.1%	0.6545	1,871
2034	9,636,066	12,965,746	134.6%	0.6286	1,747
2035	8,934,269	12,866,859	144.0%	0.6037	1,622
2036	8,238,499	12,725,320	154.5%	0.5798	1,498
2037	7,552,357	12,542,277	166.1%	0.5569	1,376
2038	6,880,805	12,199,337	177.3%	0.5348	1,255
2039	6,229,447	11,731,963	188.3%	0.5137	1,138
2040	5,603,005				
	, ,	11,159,329	199.2%	0.4933	1,026
2041	5,006,922	10,473,259	209.2%	0.4738	919
2042	4,444,995	9,696,992	218.2%	0.4551	817
2043	3,919,599	8,862,531	226.1%	0.4371	722
2044	3,433,014	8,000,022	233.0%	0.4198	634
2045	2,986,741	7,175,176	240.2%	0.4032	553
2046	2,581,154	6,383,479	247.3%	0.3872	479
2047	2,215,744	5,623,632	253.8%	0.3719	412
2048	1,889,461	4,912,856	260.0%	0.3572	352
2049	1,600,680	4,230,788	264.3%	0.3430	299
2050	1,347,532	3,613,015	268.1%	0.3295	253
2051	1,127,515	3,062,768	271.6%	0.3164	213
2052	937,796	2,575,800	274.7%	0.3039	177
2053	775,384	2,159,385	278.5%	0.2919	147
2054	637,417	1,796,677	281.9%	0.2803	122
2055	521,130	1,490,890	286.1%	0.2692	100
2056	423,843	1,231,198	290.5%	0.2586	82
2057	342,994	1,011,766	295.0%	0.2484	67
2058	276,196	830,194	300.6%	0.2385	54
2059	221,368	674,182	304.6%	0.2291	44
2060	176,624	539,889	305.7%	0.2200	35
	·	,			
2061	140,295	434,372	309.6%	0.2113	28
2062	110,921	347,303	313.1%	0.2030	22
2063	87,307	275,214	315.2%	0.1949	18
2064	68,393	216,378	316.4%	0.1872	14
2065	53,331	166,710	312.6%	0.1798	11
2066	41,374	129,275	312.5%	0.1727	9
2067	31,935	100,072	313.4%	0.1659	7
	•	·			
2068	24,516	77,340	315.5%	0.1593	5
2069	18,719	59,241	316.5%	0.1530	4
2070	14,218	44,418	312.4%	0.1469	3
2071	10,739	33,234	309.5%	0.1411	2
2072	8,068	24,602	304.9%	0.1355	2
2073	6,024	18,086	300.2%	0.1302	1
2074	4,472	13,110	293.2%	0.1250	1
	•				l A
2075	3,302	9,240	279.8%	0.1201	1
2076	2,419	6,301	260.5%	0.1153	1
2077	1,757	4,282	243.7%	0.1108	0
2078	1,263	2,939	232.7%	0.1064	0
2079	895	1,992	222.7%	0.1022	0
2080	627	1,333	212.8%	0.0981	0
				0.0942	
2081	433	895	206.8%		0
2082	293	593	202.3%	0.0905	0

Accumulated and Present Values as of 12/31/2022

Past:178,328,53749,943,55428.0%Future:152,821,695176,262,384115.3%Lifetime:331,150,231226,205,93868.3%

*Includes all rate increases approved in your state applied to all policies nationwide, and the rate increase requested in this filing

Actuarial Memorandum September 2023

Exhibit IIb: Choice 2 & 2.1 Policy Forms - Nationwide Experience Lifetime High BIO With Requested 218% Rate Increase* with MAE

1	1	2	0/

2006 2006 2006 2006 2006 248 248 2007 2007 10,840 2007 20	4				4.12%	
2006	Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Discount Factor	Lives
2005		·	-			
2006						
2007 74,767,386 2,274,651 3.0% 1.897 33,263 2008 34,476,501 6,12,782 6,19% 1.795,653 2010 110,341,397 11,775,663 111,4% 1.7247 40,194 2011 110,303,781 11,416,985 11,49% 1.59% 1.590,404 2011 118,413,500 10,442,106 1.89% 1.590,404 2013 122,028,801 0.10,442,106 1.89% 1.590,404 2014 119,397,332 2,56,804,667 21,41% 14,49% 43,954 2015 128,003,877 28,803,776 22,50% 1.155,004 1.20,366 2014 119,397,332 2,56,804,667 21,41% 14,49% 43,954 2016 123,776,306 42,225,197 34,22% 1.3001 42,667 2017 119,003,623 40,003,194 45,47% 1.2466 42,473 2018 123,322,317 46,670,000 37,9% 1.1992 41,962 2019 116,477,444 39,808,645 30,77% 1.119,22 41,962 2019 116,477,444 39,808,645 30,77% 1.119,22 41,962 2022 13,262,250 11,67,763,27 59,00% 11,67,67 20,27 20,27 21,322,256 10,407,3001 70,00% 0.9800 39,444 2024 27,803,877 28,480 11,477,877 59,00% 11,67,67 40,579 2022 13,262,363 31,476,365 31,47		, ,				
2008 94.423.820 6.512.782 6.9% 1.7957 38.355 2009 103.481.937 11.775,693 11.496,965 12.9% 1.6564 42.448 2011 118.415.066 10.442,106 8.8% 1.5969 45.160 2013 122.282.893 21.20,358 13.7% 1.5779 4.5149 2013 122.282.893 21.20,358 13.7% 1.5779 4.45.263 2015 122.278.999 16.794,368 13.7% 1.5779 4.45.263 2016 127.793.06 42.292.197 22.556 1.4575 4.45.263 2017 119.003.623 54.030,101 45.4% 1.2486 42.473 2018 123.232.317 46.799.000 47.292.197 4.2% 1.3001 42.92.797 2017 119.003.623 54.030,101 45.4% 1.2486 42.473 2018 123.232.317 46.799.000 37.8% 1.1992 41.992 2019 13.473.945 71.071.527 58.07% 1.1518 41.944 2020 10.008.897 20.015.99 43.7% 1.1002 40.559 2021 123.473.345 71.071.527 58.07% 1.0024 40.559 2022 133.292.898 1.1992 40.1% 0.8484 0.9412 37.70 2024 267.003.898 1.1992 40.1% 0.8882 0.8972 2026 469.234.880 188.21.129 40.1% 0.8882 0.8970 2027 482.48.496 1.199.73.823 40.4% 0.9412 33.700 2027 482.48.496 1.199.73.823 40.1% 0.8882 0.8970 2028 451.14.291 23.48.898 1.199.73.823 24.5% 0.0543 3.5982 2029 451.14.291 23.898.389 36.892 1.29 40.1% 0.8882 36.970 2020 452.48.980 1.199.73.823 40.1% 0.8882 36.970 2020 453.781.120 23.883.898 3.84% 0.7602 3.3769 2020 451.14.291 23.893.899 3.59.882 20.294 40.1% 0.8882 3.6970 2020 451.14.291 23.893.899 3.59.882 20.294 40.1% 0.8882 3.6970 2021 452.48.890 1.199.73.823 40.1% 0.8882 3.6970 2022 451.14.291 23.893.899 3.59.882 20.294 40.1% 0.8882 3.6970 2023 451.14.291 23.893.899 3.59.882 20.294 40.1% 0.8882 3.6970 2024 457.14.2914 24.18.05.621 5.17% 0.0003 3.4994 2025 451.14.291 23.8989 3.8994 3.6994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.2994 3.29		·	· ·			
2009 103,491,937 11,775,683 11,41% 17,247 40,194 2011 110,095,789 11,146,985 12,095 1,6964 22,448 2011 112,005,899 16,194,106 8,895 1,5909 45,180 2011 122,028,899 16,194,366 10,442,106 8,895 1,5909 45,180 2013 122,028,890 20,103,366 10,095 14,675 44,526 2014 119,378,322 25,004,667 21,445 14,496 34,594 2015 112,3778,366 22,360,4667 21,445 14,496 34,594 2016 123,778,366 24,203,167 24,425 13,001 42,587 2016 123,778,366 24,203,167 24,425 13,001 42,587 2017 119,892,23 24,203,167 24,225 177 24,225 11,1518 14,1546 2018 123,322,317 48,579,000 37,895 11,1518 14,545 2019 116,447,044 59,003,845 50,785 11,1518 14,545 2010 120,888,887 52,001,599 43,785 11,1618 14,545 2020 120,888,887 52,001,599 43,785 11,1622 41,091 2021 123,472,345 71,471,527 38,095 10,002 40,599 2022 133,222,966 103,331,643 77,325 10,204 40,599 2022 148,769,999 104,472,501 70,895 0,988 10,895 34,444 2024 2074 20,545 20,415,599 43,785 10,204 40,129 2024 25,700,387 112,326,283 44,845 0,9410 35,700 2025 368,742,820 12,184,745,601 70,895 14,184 0,9410 37,270 2024 472,455,466 129,472,501 44,184 0,9410 37,270 2025 487,742,904 41,184,865 12,184,865 12,184 0,9410 37,270 2026 49,142,245 48,185 12,184 12,18		· ·	• •			
2010 110.039,578 14.1436,985 12.9% 1.6964 22.448 2011 1184,15.086 10.442,108 8.8% 1.5090 45.180 2012 122.628,899 16.794,988 13.7% 1.5279 44.526 2014 119.397,832 2.5560,667 21.14% 1.4094 43.964 2016 119.397,832 2.5560,667 21.14% 1.4094 43.964 2016 122.779,303 42.225,607,607 21.45% 1.3006 42.967 2016 122.779,303 42.225,607,607 21.45% 1.3006 42.967 2016 122.779,303 42.225,977 34.22 4.13006 42.967 2016 122.779,303 42.225,977 34.22 4.13006 42.967 2016 122.779,303 42.225,977 34.22 4.13006 42.967 2016 122.779,303 42.225,977 34.22 4.13006 42.967 2016 122.379,303 42.225,977 34.25 4.1390 42.967 2019 122.479,304 49.570,000 37.8% 1.1916 41.54 40.901 2016 122.379,303 42.225,177 45.20 4.13006 42.967 2019 122.479,304 59.000 45.50 4.1300 42.40 40.901 2016 122.479,304 59.000 45.20 4.100 42.20 40.129 2019 198.447 49.901,303 45.30 45.70 45.2						
2011 118,413,506 10,442,106 8,8% 1,5998 45,160 2012 122,228,890 20,120,356 16,9% 1,4675 44,526 2014 119,97,632 26,604,667 21,45% 14,009 44,526 2015 122,028,830 20,120,356 16,9% 1,4675 44,526 2016 123,023,827 28,833,376 22,9% 1,35,36 44,844 2016 123,223,137 44,222,197 34,22% 1,300 42,867 2018 123,223,137 44,222,197 34,22% 1,300 42,867 2018 123,223,137 44,570,000 37,8% 1,1992 44,392 2019 116,47,044 90,905,845 50,7% 1,1151 41,54% 2020 120,888,887 52,201,599 43,7% 1,1162 44,091 2021 123,473,45 71,671,527 58,00% 1,10624 40,599 2022 143,769,699 140,773,001 70,00% 1,000 33,444 2022 144,769,699 144,773,001 70,00% 1,000 33,444 2024 267,200,387 122,328,33 49,4% 0,8412 20,338,372,298 148,724,900 34,874,100,40 40,129 2025 156,772,79 178,180,796 35,700 40,700 35,700 30,700 48,700 30,700 30,700 48,700 30,700 30,700 48,700 30,700 30,700 48,700 30,700 30,700 30,700 48,700 30,700 3		103,491,937	11,775,663			40,194
2012 122,828,8989 16,794,368 13.7% 1.5279 45,149 2013 122,028,830 20,120,365 2014 119,367,832 25,004,867 21,4% 1.4094 43,964 2016 122,779,306 42,292,167 34,2% 1.3001 42,967 2017 110,036,232 35,4030,161 44,4% 1.2486 42,473 2016 122,779,306 42,292,167 34,2% 1.3001 42,967 2017 110,036,232 37,4 46,578,005 37,2% 1.1962 44,678 2018 112,322,217 46,578,005 37,2% 1.1962 44,678 2019 122,322,317 46,578,005 37,2% 1.1962 44,678 2010 123,322,317 46,578,005 37,2% 1.1962 44,678 2010 123,322,317 46,578,005 37,2% 1.1962 44,678 2011 2011 212,474,346 77,157,1527 56,0% 1.0624 40,599 2021 122,474,346 77,157,1527 56,0% 1.0624 40,599 2022 131,282,896 100,3031,843 77,3% 1.0024 40,259 2023 1448,760,869 164,673,601 70,6% 0,8900 39,444 2024 267,860,387 132,322,283 340,4% 0,9412 87,000 2024 467,840,840,840,840,840,840,840,840,840,840		110,039,578	14,164,985			
2013 122.028.830 20,120,368 16.5% 1.4675 44.526 2014 119,397.832 25.5046,687 21.41% 1.4094 4.594 2016 122.03.837.832 25.5046,687 21.41% 1.4094 4.594 2016 122.703.837 32.28.883,376 22.5% 1.36536 43.494 2016 122.779,306 42.292,197 34.22% 1.3001 42.967 2017 110,003,023 54.000,191 45.49% 1.2046 12.2018 123.322.317 46.5750.00 37.89% 1.1992 4.1992 4.1992 2.199 110.447.044 59.605.846 50.78% 1.1518 41.544 41.544 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 43.77% 1.1052 4.018 1.2020 12.098.837 52.2015.09 50.000 50.44 50.0000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.000 50.0	2011	118,413,506	10,442,106	8.8%	1.5909	45,180
2014 110,397,332 25,004,667 21,4% 1,4094 43,554 2016 120,3779,306 42,292,197 34,2% 13,001 42,967 2017 110,030,023 54,030,191 45,4% 1,2486 24,73 2018 123,322,317 45,700,00 37,8% 1,1992 41,992 2019 110,447,044 50,003,645 50,7% 1,1518 14,54% 2010 120,988,887 52,001,599 43,7% 1,1062 41,091 2012 120,988,887 52,001,599 43,7% 1,1062 41,091 2012 123,322,317 10,373,001 70,08 10,002 41,091 2022 133,262,856 103,031,643 77,3% 1,002 40,091 2022 140,086,887 52,001,599 43,7% 1,002 41,091 2022 140,086,887 52,001,599 43,7% 1,002 41,091 2022 140,086,887 52,001,599 43,7% 1,002 41,091 2022 140,703,890 100,473,801 70,08 10,000 34,44 22,202 140,703,890 103,473,601 70,08 10,000 34,44 22,202 140,703,890 103,473,801 70,08 10,000 34,44 22,202 140,703,890 103,473,801 70,08 10,000 34,44 22,202 140,2	2012	122,828,899	16,794,368	13.7%	1.5279	45,149
2015 122,203,227 28,883,376 22,5% 1,3538 43,494 2016 123,779,306 42,292,197 34,2% 1,3001 42,967 2017 1110,093,023 54,093,191 45,4% 1,3016 42,967 2018 123,322,317 46,579,000 37,8% 1,1992 41,992 41,992 2019 110,447,044 59,055,645 50,7% 1,1518 41,544 2020 120,988,887 52,201,599 45,7% 1,1062 41,991 2021 123,474,346 77,157,1567 55,0% 1,578 1,0024 40,559 2022 133,262,559 10,331,643 77,331 10,204 40,559 2022 133,262,559 10,331,643 77,331 10,204 40,559 2024 42,770,204 43,770,404 42,770,204 42,770,204 42,770,204 42,770,204 42,770,204 43,770,2	2013	122,028,830	20,120,356	16.5%	1.4675	44,526
2016 123,779,306 42,282,197 34,2% 13,001 42,867 2017 119,033,023 64,030,191 45,4% 1,2486 24,737 2018 123,322,317 46,579,000 37,8% 1,1992 41,992 2019 110,447,044 59,053,045 50,7% 1,1518 41,544 2020 120,088,887 52,001,509 43,7% 1,1062 41,091 2021 123,474,345 71,671,527 56,00% 1,0024 40,509 2022 133,282,565 103,031,643 77,3% 0,900 39,44 2024 207,900,837 132,326,833 49,4% 0,0412 38,700 2022 348,760,089 10,472,801 77,08% 0,900 39,44 2024 207,800,837 132,326,833 49,4% 0,0412 38,700 2022 306,679,279 31,78,100,768 35,00% 0,0012 33,700 2022 306,679,279 31,78,100,768 35,00% 0,0012 33,700 2022 306,679,279 31,78,100,768 35,00% 0,0012 33,700 2022 306,679,279 31,78,100,768 35,00% 0,0012 33,700 2022 442,495,489 49,100,77,691 44,6% 0,0412 32,700 2022 447,436 49,100,77,691 44,6% 0,0412 32,700 2022 447,430,46 21,405,621 51,7% 0,000 34,472,801 2022 447,430,48 49,100,77,691 44,6% 0,033,8 30,8 30,8 30,8 30,8 30,8 30,8 3	2014	119,397,832	25,604,667	21.4%	1.4094	43,954
2017	2015	128,203,827	28,883,376	22.5%	1.3536	43,494
2018	2016	123,779,306	42,292,197	34.2%	1.3001	42,967
2019	2017	119,093,623	54,030,191	45.4%	1.2486	42,473
2020	2018	123,322,317	46,579,000	37.8%	1.1992	41,992
2021	2019	116,447,044	59,063,645	50.7%	1.1518	41,544
2021 132,474,345 71,671,527 58.0% 1.0624 40,129 2024 227,800,987 103,031,643 77,3% 1.0204 0.120 2024 227,800,387 132,362,833 49.4% 0.9410 39,444 2024 227,800,387 178,180,796 35.0% 0.9400 37,877 2026 496,234,880 198,921,129 40.1% 0.6662 36,970 2027 482,496,486 219,373,629 45.6% 0.8339 35,982 2028 467,412,904 221,973,629 45.6% 0.8339 35,982 2028 467,412,904 221,973,629 45.6% 0.8339 35,982 2028 467,412,904 221,905,621 51,7% 0.8009 43,914 2029 451,149,261 283,687,033 58.4% 0.7692 33,769 2030 433,716,120 285,596,266 65.6% 0.7387 32,548 2031 415,300,008 307,296,415 74.0% 0.7095 31,258 2032 395,955,543 328,324,580 82.9% 0.6814 29,904 2033 375,818,1820 347,801,966 92.6% 0.6645 28,492 2034 355,119,984 365,091,825 102.8% 0.0626 27,031 2036 312,389,976 392,574,553 125,7% 0.7598 233,293,245,593 2037 200,673,549 404,996,979 139,3% 0.9599 22,432 2038 288,925,667 412,718,368 155,5% 0.5348 20,800 224,332,163 416,000,042 168,3% 0.1537 19,281 2041 205,416,153 498,736,261 199,004 244,332,163 416,000,042 168,3% 0.1537 19,281 2041 205,416,153 498,736,261 199,0% 0.4738 162,214 2041 205,416,153 498,736,261 199,0% 0.4738 162,214 2044 148,266,497 183,5% 0.3372 494,400,400 26,062,216 415,616,497 183,5% 0.3372 494,400,400 26,062,216 415,616,497 183,5% 0.3430 0.5572 7.337 2044 148,264,44 342,264,46 351,310,582 341,333,833 244,3% 0.4188 1.967 0.4371 13,323 2044 168,374,575 381,334,602 276,55% 0.3450 0.4371 13,323 2044 183,560,200 276,55% 0.3450 0.4371 13,323 2044 183,560,200 276,55% 0.3450 0.4371 13,323 2044 183,560,200 276,560,200 276,560 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 272,848 2	2020	120,988,887	52,901,599	43.7%	1.1062	41,091
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2058 15,151,915 78,539,508 518.3% 0.2385 1,474 2059 12,342,278 68,023,458 551.1% 0.2291 1,224 2060 10,008,744 58,676,429 586.3% 0.2200 1,013 2061 8,081,102 50,361,781 623.2% 0.2113 835 2062 6,496,712 42,863,640 659.8% 0.2030 685 2063 5,200,836 36,192,295 695.9% 0.1949 560 2064 4,144,808 30,372,545 732.8% 0.1872 456 2065 3,286,894 25,264,674 768.6% 0.1798 369 2066 2,592,549 20,754,539 800.5% 0.1727 297 2067 2,033,119 16,852,472 828.9% 0.1659 238 2068 1,584,608 13,568,676 856.3% 0.1530 150 2070 942,887 8,496,503 901.1% 0.1469 118 2071 719,005	2056	22,519,776	103,466,142	459.4%	0.2586	2,110
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2060 10,008,744 58,676,429 586.3% 0.2200 1,013 2061 8,081,102 50,361,781 623.2% 0.2113 835 2062 6,496,712 42,863,640 659.8% 0.2030 685 2063 5,200,836 36,192,295 695.9% 0.1949 560 2064 4,144,808 30,372,545 732.8% 0.1872 456 2065 3,286,894 25,264,674 768.6% 0.1798 369 2066 2,592,549 20,754,539 800.5% 0.1727 297 2067 2,033,119 16,852,472 828.9% 0.1659 238 2068 1,584,608 13,568,676 856.3% 0.1593 190 2069 1,226,815 10,793,231 879.8% 0.1530 150 2070 942,887 8,496,503 901.1% 0.1469 118 2071 719,005 6,586,688 916.1% 0.1302 56 2072 544,000	2058	15,151,915	78,539,508	518.3%	0.2385	1,474
2061 8,081,102 50,361,781 623.2% 0.2113 835 2062 6,496,712 42,863,640 659.8% 0.2030 685 2063 5,200,836 36,192,295 695.9% 0.1949 560 2064 4,144,808 30,372,545 732.8% 0.1872 456 2065 3,286,894 25,264,674 768.6% 0.1798 369 2066 2,592,549 20,754,539 800.5% 0.1727 297 2067 2,033,119 16,852,472 828.9% 0.1659 238 2068 1,584,608 13,568,676 856.3% 0.1593 190 2069 1,226,815 10,793,231 879.8% 0.1530 150 2070 942,887 8,496,503 901.1% 0.1469 118 2071 719,005 6,586,688 916.1% 0.1411 92 2072 544,000 5,011,122 921.2% 0.1355 72 2073 408,299 3,749,7	2059	12,342,278	68,023,458	551.1%	0.2291	1,224
2061 8,081,102 50,361,781 623.2% 0.2113 835 2062 6,496,712 42,863,640 659.8% 0.2030 685 2063 5,200,836 36,192,295 695.9% 0.1949 560 2064 4,144,808 30,372,545 732.8% 0.1872 456 2065 3,286,894 25,264,674 768.6% 0.1798 369 2066 2,592,549 20,754,539 800.5% 0.1727 297 2067 2,033,119 16,852,472 828.9% 0.1659 238 2068 1,584,608 13,568,676 856.3% 0.1593 190 2069 1,226,815 10,793,231 879.8% 0.1530 150 2070 942,887 8,496,503 901.1% 0.1469 118 2071 719,005 6,586,688 916.1% 0.1411 92 2072 544,000 5,011,122 921.2% 0.1355 72 2073 408,299 3,749,7	2060	10,008,744	58,676,429	586.3%	0.2200	
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Accumulated and Present Values as of 12/31/2022

Past:2,748,362,515700,633,59625.5%Future:5,309,494,6065,269,650,08099.2%Lifetime:8,057,857,1215,970,283,67774.1%

*Includes all rate increases approved in your state applied to all policies nationwide, and the rate increase requested in this filing

Actuarial Memorandum September 2023

Exhibit IIc: Choice 2 & 2.1 Policy Forms - Nationwide Experience Limited High BIO With Requested 119% Rate Increase* with MAE

4.12%

				4.12%	
Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Discount Factor	Lives
2003	1,754,550	-	0.0%	2.1974	6,771
2004	35,825,103	583,304	1.6%	2.1105	35,565
2005	93,496,337	159,863	0.2%	2.0270	73,444
2006	166,708,651	2,385,038	1.4%	1.9468	112,746
2007	246,289,733	5,738,877	2.3%	1.8697	157,770
2008	339,774,094	12,288,306	3.6%	1.7957	199,144
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2009	402,382,023	11,600,119	2.9%	1.7247	223,210
2010	457,122,245	19,065,915	4.2%	1.6564	253,550
2011	535,047,569	30,796,901	5.8%	1.5909	293,887
2012	583,308,480	44,908,864	7.7%	1.5279	297,519
2013	580,691,009	51,509,507	8.9%	1.4675	293,852
2014	571,197,101	75,183,093	13.2%	1.4094	290,217
2015	618,814,903	98,877,833	16.0%	1.3536	286,657
2016	610,753,593	101,957,394	16.7%	1.3001	282,929
2017	600,067,981	145,010,776	24.2%	1.2486	279,312
2018	624,501,330	172,953,036	27.7%	1.1992	275,573
2019	589,366,024	191,070,008	32.4%	1.1518	271,843
2020	607,855,708	189,831,918	31.2%	1.1062	268,033
2021	617,111,684	279,240,175	45.2%	1.0624	264,243
2022	, ,		55.1%	1.0204	•
	661,673,693	364,848,910			260,299
2023	734,492,064	401,126,668	54.6%	0.9800	254,970
2024	1,070,908,655	497,828,706	46.5%	0.9412	249,245
2025	1,727,349,356	646,957,908	37.5%	0.9040	242,960
2026	1,677,011,602	733,022,365	43.7%	0.8682	236,059
2027	1,621,795,583	820,871,474	50.6%	0.8339	228,576
2028	1,561,770,785	913,432,341	58.5%	0.8009	220,502
2029	1,497,334,511	1,007,157,343	67.3%	0.7692	211,877
2030	1,428,959,300	1,098,704,940	76.9%	0.7387	202,742
2031	1,357,184,007	1,185,345,551	87.3%	0.7095	193,157
2032	1,282,689,740	1,266,676,394	98.8%	0.6814	183,201
2033	1,206,241,328	1,339,676,688	111.1%	0.6545	172,935
2034	1,128,423,135	1,400,514,854	124.1%	0.6286	162,435
2035	1,049,831,197	1,447,419,488	137.9%	0.6037	151,780
2036	971,188,016	1,490,750,972	153.5%	0.5798	141,032
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2037	892,862,235	1,528,972,867	171.2%	0.5569	130,251
2038	815,505,606	1,547,262,667	189.7%	0.5348	119,539
2039	739,765,217	1,544,470,459	208.8%	0.5137	109,002
2040	666,395,807	1,523,653,602	228.6%	0.4933	98,744
2041	596,051,077	1,485,763,006	249.3%	0.4738	88,853
2042	529,256,730	1,430,405,783	270.3%	0.4551	79,411
2043	466,496,727	1,358,939,294	291.3%	0.4371	70,492
2044	408,134,915	1,274,695,493	312.3%	0.4198	62,154
2045	354,446,629	1,184,132,893	334.1%	0.4032	54,436
2046	305,570,640	1,090,717,425	356.9%	0.3872	47,352
2047	261,461,660	994,412,904	380.3%	0.3719	40,906
2048	222,025,186	897,225,465	404.1%	0.3572	35,095
2049	187,107,202	800,281,947	427.7%	0.3430	29,908
2050	156,511,496	706,784,534	451.6%	0.3295	25,321
2051	129,969,482	619,251,376	476.5%	0.3164	21,299
2052	107,147,965	537,392,073	501.5%	0.3039	17,799
2053					
	87,695,720	462,010,231	526.8%	0.2919	14,781
2054	71,266,189	394,591,313	553.7%	0.2803	12,200
2055	57,525,941	334,468,851	581.4%	0.2692	10,012
2056	46,136,579	280,877,245	608.8%	0.2586	8,171
2057	36,766,875	234,365,578	637.4%	0.2484	6,633
2058	29,118,298	195,214,656	670.4%	0.2385	5,356
2059	22,927,188	162,047,855	706.8%	0.2291	4,304
2060	17,953,466	133,875,406	745.7%	0.2200	3,443
2061	13,985,549	110,070,815	787.0%	0.2113	2,742
2062	10,839,507	89,878,678	829.2%	0.2030	2,175
2063	8,362,095	72,938,725	872.3%	0.1949	1,718
2064	6,422,563	58,971,767	918.2%	0.1872	1,352
2065	4,910,761	47,447,403	966.2%	0.1798	1,060
2066	3,737,561	37,854,305	1012.8%	0.1727	828
2067	2,831,119	30,027,733	1060.6%	0.1659	644
2068	2,133,873	23,793,511	1115.0%	0.1593	498
2069	1,599,148	18,661,082	1166.9%	0.1530	384
2070	1,190,606	14,472,907	1215.6%	0.1469	294
2071	880,116	11,150,602	1266.9%	0.1409	294 224
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2072	645,638	8,494,035	1315.6%	0.1355	169
2073	470,159	6,384,653	1358.0%	0.1302	128
2074	339,737	4,746,248	1397.0%	0.1250	96
2075	243,531	3,484,707	1430.9%	0.1201	71
2076	173,179	2,517,843	1453.9%	0.1153	53
2077	122,141	1,782,193	1459.1%	0.1108	39
2078	85,467	1,249,556	1462.0%	0.1064	29
2079	59,294	870,628	1468.3%	0.1022	21
2080	40,793	600,741	1472.6%	0.0981	15
2081	27,812	410,292	1475.3%	0.0942	11
2082	18,750	276,674	1475.6%	0.0905	8
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Accumulated and Present Values as of 12/31/2022

Past:12,326,955,4212,143,653,73817.4%Future:17,365,703,43119,129,929,273110.2%Lifetime:29,692,658,85221,273,583,01171.6%

*Includes all rate increases approved in your state applied to all policies nationwide, and the rate increase requested in this filing