Metropolitan Life Insurance Company 1300 Hall Boulevard, Bloomfield, CT 06002

Email: mark.newton@metlife.com
Mark D. Newton, FSA, MAAA



August 18, 2019

Maryland Insurance Administration 200 St. Paul Place, Suite 2700, Baltimore, MD 21202

Re: LTC-FAC-MD, LTC-VAL-MD, LTC-IDEAL-MD, LTC-PREM-MD

Issued by Metropolitan Life Insurance Company (MetLife)

Attached is the filing for the captioned forms. This letter provides an overview of the filing and notes on some of the content. After a careful review of earlier filings, we have endeavored to reflect in this filing additional content based on previous questions submitted by your Department. Hopefully, this will make your review easier and more effective.

Filing Overview

In addition to this overview, this filing consists of the Actuarial Memorandum and Attachments on specific aspects of the Maryland Administrative Code as well as supporting data based on earlier reviews. These documents are outlined and summarized here for your convenience.

Title	Description	
Actuarial Memorandum		
Exhibit I-A	Lifetime Loss Ratio ("LLR")	
	• Nationwide experience	
	Without/with proposed rate increase of 15.00%	
	 Weighted average statutory rate 4.48% 	
	LLR without rate increase – 112.5%	
	LLR with rate increase – 105.2%	
Exhibit II-A	Demonstration of rate action meeting Rate Stability	
	(58/85) limitations	
Exhibit I-B	Lifetime Loss Ratio ("LLR")	
	• <i>Maryland</i> experience	
	Without/with proposed rate increase of 15.00%	
	Weighted average statutory rate 4.48%	
	LLR without rate increase – 115.8%	
	LLR with rate increase – 108.0%	
Exhibit II-B	Demonstration of rate action meeting Rate Stability	
	(58/85) limitations	

Review of Prior Correspondence	Attachment 1 – Assumptions Summary
_	Attachment 2 – A/E Ratios (Policy Duration)
	Attachment 3 – A/E Ratios (Calendar Year)
	Attachment 4 – A/E Ratios (Lapse, Mortality,
	Incidence, Claim Termination)

Rationale for the Rate Increase Request

Exhibit I demonstrates that the combination of historical and projected experience using the most recent Best Estimate assumptions is clearly far beyond the expected loss ratio using the original pricing assumptions. Attachments 2 and 3 support the development of the experience by analyzing the Actual-to-Expected Ratios by Calendar Year and Policy Duration.

Attachment 1 compares the development of the changes in assumptions from the time of original pricing to the latest Experience Study. Generally, worse than expected morbidity and lower decrements are the primary reasons for the rate action.

Assumption Setting and Review

All projection assumptions are based on the Experience Study performed each year. In general, the assumptions used in all projections are those that reproduce historical experience within a non-material degree of tolerance. Attachment 4 shows the Actual-to-Expected Ratios comparing the latest Best Estimate assumptions with the set of actual experience for Lapse, Mortality, Incidence, and Claim Termination.

Some actuarial judgment is used in areas where credibility or trending requires adjustment. In any case, the methodology, results, conclusions and use are prescribed by MetLife internal Standards and Actuarial Standards of Practice and are reviewed and approved by MetLife management, internal auditors, and external auditors.

Calculation of the Rate Request

MetLife's evaluation of the Justifiable Rate Increase ("JRI") uses the industry standard "If Knew" basis. This method calculates the premium needed at time zero to achieve the original loss ratio if all current experience had been known at inception. Of course, the Company cannot retroactively charge such premiums, so all historical losses stemming from past premium shortfalls are taken by the Company.

Additional Notes

COMAR 31.14.01.04A(5) states, "An insurer may not charge a renewal premium rate for a long-term care policy which exceeds by more than 15 percent any premium charged for the policy during the preceding 12 months." The requested rate increase for this filing is 15.00%.

MetLife requests the rate action based on deviations from anticipated experience outlined in the Actuarial Memorandum and the supporting attachments. Lifetime Loss Ratios exceed all minimum requirements in Maryland as well as the application of rate stability standards even at the full requested rate action. In addition, though Maryland-only experience is not necessarily credible, the Maryland LLR's still meet the standards above at the full rate action level.

Despite the rate action requested, the experience of the block does not fully return to pricing levels. In general, the rate action restricts consideration of recovering historical losses by focusing on lifetime experience. We will continue, of course, to analyze and adjust experience assumptions and reserve the right to update those in the future along with requesting any resulting changes in premium rates.

The actuarial justification for experience analysis and projections, including assumptions and methods, are reflective of the Code of Professional Conduct and applicable Actuarial Standards of Practice. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for preparing health rate filings and to render the actuarial opinion contained herein.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,

Mark D. Newton, FSA, MAAA

Actuarial Director, Metropolitan Life Insurance Company

Mark Dleuton

New York, NY

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Policy Forms

The premium rate schedule increase for which we are seeking approval will apply to the following individual long-term care policy forms:

- LTC-FAC-MD
- LTC-VAL-MD
- LTC-IDEAL-MD
- LTC-PREM-MD

These forms were developed as part of a nationwide series and were issued in Maryland from August 2002 to June 2006, but are no longer being marketed in any state. Nationwide, the last policies under this series were issued in 2009.

Policy forms LTC-FAC-MD, LTC-VAL-MD, LTC-IDEAL-MD, and LTC-PREM-MD (subsequently referred to as LTC-FAC, LTC-VAL, LTC-IDEAL, and LTC-PREM, respectively) are existing individual tax-qualified policy forms and were previously approved in 2002, along with any rider or endorsement forms that were contemporaneously or subsequently approved for use with these policy forms.

Policy form LTC-FAC provides coverage for long-term care services received in a nursing home, assisted living facility (ALF), or hospice facility. Policy forms LTC-VAL, LTC-IDEAL and LTC-PREM provide comprehensive long-term care coverage.

1. Purpose of Filing

This actuarial memorandum has been prepared for the purpose of demonstrating that the anticipated loss ratio standard of this product meets the minimum requirements of your state and may not be suitable for other purposes.

2. Description of Benefits

<u>LTC-FAC</u> is part of a nationwide series of individually underwritten policy forms which reimburses 100% of charges, up to a maximum facility benefit amount, for confinement in a licensed nursing home or assisted living facility. Benefits are payable under skilled, intermediate, or custodial levels of care, as well as inpatient hospice care.

The daily benefit amount and the maximum benefit period are selected at issue. Additional benefits for needs assessment expenses and transition expenses are also provided. In addition, LTC-FAC provides benefits for international coverage, caregiver training, and alternate services. For married couples in which both spouses purchase identical primary policies, the policy of the surviving spouse will become paid-up on death of the other spouse, provided that both policies have been inforce, with no benefits paid, for at least ten years.

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<u>LTC-VAL</u> is part of a nationwide series of individually underwritten policy forms which reimburses 100% of charges, up to a maximum facility benefit amount, for confinement in a licensed nursing home. Benefits are payable under skilled, intermediate, or custodial levels of care, as well as inpatient hospice care.

LTC-VAL also includes an assisted living/home care/community-based care benefit which reimburses 100% of charges from formal caregivers, up to a maximum assisted living/home/community-based care benefit amount, for services received at home or assisted living facility or at an adult day care center for maintenance or personal care, including hospice care.

The daily benefit amount, assisted living/home care/adult day care percentage, and maximum benefit period are selected at issue. Additional benefits for needs assessment expenses are also provided. In addition, LTC-VAL provides benefits for respite care, international coverage, caregiver training, and alternate services.

<u>LTC-IDEAL</u> is part of a nationwide series of individually underwritten policy forms which reimburses 100% of charges, up to a maximum facility benefit amount, for confinement in a licensed nursing home or assisted living facility. Benefits are payable under skilled, intermediate, or custodial levels of care, as well as inpatient hospice care.

LTC-IDEAL also includes a home care/community-based care benefit which reimburses 100% of charges from formal caregivers, up to a maximum home care/community-based care benefit amount, for services received at home or at an adult day care center for maintenance or personal care, including hospice care.

The daily benefit amount, home care/adult day care percentage, and maximum benefit period are selected at issue. Additional benefits for needs assessment expenses and transition expenses are also provided. In addition, LTC-IDEAL provides benefits for respite care, international coverage, caregiver training, alternate services, and supportive services/specialized transportation. For married couples in which both spouses purchase identical primary policies, the policy of the surviving spouse will become paid-up on death of the other spouse, provided that both policies have been inforce, with no benefits paid, for at least ten years.

<u>LTC-PREM</u> is part of a nationwide series of individually underwritten policy forms which reimburses a maximum facility benefit amount, for confinement in a licensed nursing home. Benefits are payable under skilled, intermediate, or custodial levels of care, as well as inpatient hospice care.

LTC-PREM also includes a home/community-based care benefit which reimburses a maximum home/community-based care benefit amount, for services received at home or assisted living facility or at an adult day care center for maintenance or personal care, including hospice care.

The daily benefit amount, home care/adult day care percentage, and maximum benefit period are selected at issue. Additional benefits for needs assessment expenses and international coverage are

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also provided. For married couples in which both spouses purchase identical primary policies, the policy of the surviving spouse will become paid-up on death of the other spouse, provided that both policies have been inforce, with no benefits paid, for at least ten years.

LTC-FAC, LTC-VAL, LTC-IDEAL, and LTC-PREM

For all these policies, benefit eligibility is based on the inability to perform at least two of six activities of daily living (ADLs) including bathing, continence, dressing, eating, toileting, and transferring, for a period of at least 90 days due to loss of functional capacity; or due to severe cognitive impairment.

Benefit payments commence after a specified number of days in a waiting period, selected at issue, which accumulate over the lifetime of the policy. The waiting period need not be satisfied before receiving coverage for hospice care (except LTC-PREM) or (if covered under the policy form) respite care, needs assessment or caregiver training; however, receipt of these services does not count towards satisfying the waiting period. Waiver of premium is provided beginning on the first day of the policy month coincident with or following the day the insured becomes eligible for benefit payments (includes completion of the waiting period).

At issue, the insured had the option of choosing one of the following benefit increase riders: 5% Compound, 5% Simple, or Future Purchase (in some states, a 3% Compound Inflation Rider was also available).

At issue, the insured had the option of selecting the following riders: Nonforfeiture Coverage Rider, Return of Premium Rider, Restoration of Benefits Rider, Shared Care Rider, Home Care Plus Rider (LTC-IDEAL only), Indemnity Rider (LTC-VAL only), Ten Year Premium Payment Rider, or Paidup Rider. A Contingent Benefits Upon Lapse Rider is attached to all policies, except those that select the Nonforfeiture Coverage Rider, for no additional premium. The insured could also elect a Double Pay First Year or Reduced Pay at 65 Option.

3. Renewability

These policy forms are guaranteed renewable for life.

4. Applicability

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

5. Actuarial Assumptions

a. <u>Expected Claim Costs</u> are the product of attained age frequency rates and continuance curves, adjusted by utilization factors and underwriting selection factors based on actual experience through June 30, 2017.

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b. <u>Voluntary Termination Rates</u> vary by duration as developed from actual experience through June 30, 2017 and are shown in the following table:

Voluntary Termination Rates

Policy Duration	Lapse Rate
1	5.00%
2	4.50%
3	4.00%
4	3.50%
5	2.50%
6	2.00%
7	1.80%
8	1.50%
9	1.30%
10	1.10%
11+	0.90%

In the year of rate increase implementation, it is assumed that an additional 3.22% of policies lapse and there is 2.14% net reduction to future premiums and benefits due to benefit downgrades. There is no adverse selection assumed due to the additional lapse rates.

- c. Mortality 88% of Annuity 2000 Basic Table with selection consistent with experience.
- d. <u>Expenses</u> Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

The above assumptions are based on actual inforce experience of MetLife and are deemed reasonable for these particular policy forms. In establishing the assumptions described in this section, the policy design, underwriting, and claims adjudication practices for the above-referenced policy forms were taken into consideration.

6. Marketing Method

These policy forms were marketed by agents and brokers of MetLife.

7. Underwriting Description

These policy forms were fully underwritten with the use of various underwriting tools in addition to the application, which may have included medical records, an attending physician's statement, telephone interview and/or face-to-face assessment.

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8. Premiums

Premiums are unisex, but vary by issue age, rating class, benefit period, initial daily benefit, waiting period, home and community care percentage, inflation protection option, payment method, premium mode and the selection of any other options or riders.

9. Issue Age Range

These policy forms were issued up to age 84.

10. Area Factors

Area factors are not used for this product.

11. Premium Modalization Rules

The following modal factors are applied to the annual premium (AP):

Premium Mode	Modal Factors
Annual	1.00*AP
Semi-Annual	0.51*AP
Quarterly	0.265*AP
Monthly	0.09*AP

12. Reserves

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

13. Trend Assumptions

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

14. Past and Future Policy Experience

Nationwide and Maryland experience for policy form series LTC-FAC, LTC-VAL, LTC-IDEAL, and LTC-PREM are shown in Exhibit I-A and Exhibit I-B, respectively.

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Historical experience is shown by claim incurral year. Claim payments and reserves were discounted to the mid-point of the year of incurral at the weighted average maximum valuation interest rate for contract reserves which is 4.48%. Incurred but not reported reserve balances as of December 31, 2017 have been allocated to a calendar year of incurral and included in historical incurred claims.

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

A lifetime loss ratio as of December 31, 2017 is calculated as the sum of accumulated past experience and discounted future experience where accumulation and discounting occur at the weighted average maximum valuation interest rate for contract reserves, which is 4.48%.

15. Projected Earned Premiums and Incurred Claims

Earned premiums for projection years 2018 through 2098 are developed by multiplying each prior period's earned premium (starting with December 31, 2017 actual earned premium) by a persistency factor. For a year in which the rate increase is effective, the earned premium prior to the increase is multiplied by 1 plus the rate increase percent and an effectiveness factor.

Each projection year claim amount is calculated by multiplying incidence, continuance and utilization factors by the policy and rider benefits on a seriatim basis.

Present and accumulated values in the lifetime projections in Exhibit I-A and I-B are determined at the average maximum valuation interest rate for contract reserves applicable to LTC business issued in the years in which the applicable business of this filing were issued. The maximum valuation interest rate averages 4.48%.

The assumptions used in the projections in Exhibit I-A and I-B were developed from the company's LTC insurance experience.

Projections in Exhibit II-A and II-B provide a demonstration that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

- 1. Accumulated value of the initial earned premium times 58%;
- 2. 85% of the accumulated value of prior premium rate schedule increases;
- 3. Present value of future projected initial earned premium times 58%; and
- 4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

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16. History of Previous Inforce Rate Increases

Round	Authorized %	Authorization Date	Implementation Date
1	15.00%	8/21/2009	2/1/2010
2	15.00%	1/15/2016	6/1/2016
3	12.50%	11/15/2018	5/1/2019

The 1st round premium rate increase applied to policyholders with an issue age under 70, except when reduced by new business caps that were based on policies with similar benefits that were available for sale from MetLife.

The experience and projections in Exhibit I-A have been restated to reflect a rate level similar to that authorized in Maryland on a nationwide basis.

17. Requested Rate Increase

The company is requesting an increase of 15.00% for the policy forms listed above. Corresponding rate tables reflecting the 15.00% increase are included with this filing.

The rate tables reflect the prior authorized increases, but do not reflect any issue age and/or new business cap associated with the 1st round rate increase. Also note that the actual rates implemented may vary slightly from those filed due to implementation rounding algorithms.

18. Analysis Performed

The initial premium schedule was based on pricing assumptions believed to be appropriate, given the information available, at the time the initial rate schedule was developed. The original pricing assumptions for claim costs, voluntary termination rates and mortality were as follows:

a. Incidence and claim termination rates: The original pricing expected claim costs for nursing care were derived from the 1985 and 1995 National Nursing Home Surveys and adjusted to reflect: (1) surveys of nursing home resident cohorts indicate certain long-term residents would not meet the benefit eligibility under the contracts, and (2) the Medicaid population, which exhibits worse health status and greater LTC services use, is included in the survey.

Original pricing claim costs for home and community care benefit and additional benefits were derived from the 1989 and 1994 National Long-Term Care Survey of disable elders in the Community.

The original pricing expected claim costs for nursing care, home and community care, and additional benefits were also adjusted to reflect the benefits available under these policy forms.

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b. The original pricing expected voluntary termination rates varied by duration and issue age as shown in the following table:

Policy Duration	Up to Issue Age 64	Issue Age 65+
1	6.0%	8.0%
2	5.0%	6.0%
3	4.0%	4.0%
4+	3.0%	3.0%

c. The original pricing expected mortality rates were based on the 1983 Group Annuity Mortality Table.

As part of the in-force management of its long-term care insurance business, MetLife monitors its performance by completing periodic analyses of lapse rates, mortality rates, claim incidence rates, claim continuance rates and claim utilization rates. The findings from these analyses were used to determine the current experience assumptions. A model of this business was developed for use in the cash flow testing that is part of the company's annual statutory reporting requirements. Using this model, a future projection of these policies under the new experience assumptions was performed and the projected lifetime loss ratio for these policies was determined. For these policies, the past experience and future projections based on current experience assumptions combine to a resulting loss ratio that far exceeds both original pricing expectations and state minimum requirements.

Similar analyses were done for the prior premium rate increases. Since then, morbidity levels have been worse than that assumed in the prior rate increase.

The experience analysis, management's view of when a change to the original rate schedule may be considered, and the seriatim inforce and claim data used in developing the projections in Exhibit I and II have been relied upon by the actuary in the development of this memorandum.

19. Loss Ratio Requirement Compliance Demonstration

Projected experience reflecting the implementation of the actuarially equivalent single increase is shown in Exhibit I. As shown in Exhibit I, the expected lifetime loss ratio, both with and without the requested rate increase meet the requirements under rate stability regulations.

20. Average Annual Premium

The average September 30, 2018 annualized premiums for all premium-paying policies issued in Maryland, before and after the current requested increase of 15.00% are:

Before increase: \$2,561 After prior authorized 12.50% increase: \$2,881 After current requested 15.00% increase: \$3,313

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21. Proposed Effective Date

This rate increase will become effective on each policy's modal premium due date (monthly, quarterly, semi-annually and annually) following at least a 60-day advance written notification to the policyholder.

22. Nationwide Distribution of Business as of September 30, 2018 (based on premium-paying policies inforce count)

By Issue Age

Issue Age	%
<45	6%
45-49	10%
50-54	21%
55-59	29%
60-64	22%
65-69	9%
70-74	3%
75+	1%
Total	100%

By Benefit Period

Benefit Period	%
1 Year	0%
1.5 Year	0%
2 Year	7%
3 Year	20%
4 Year	16%
5 Year	27%
6 Year	0%
7 Year	6%
Lifetime	24%
Total	100%

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By Inflation Type

Inflation Type	%
Compound 3%	0%
Compound 5%	61%
Simple 5%	25%
FPO	3%
None	11%
Total	100%

By Home Care Percentage

Home Care Percentage	%
None (FC only)	3%
50%	5%
75%	8%
100%	84%
Total	100%

By Gender

Gender	%
Female	60%
Male	40%
Total	100%

By Premium Payment Option

Payment Option	%
Double Pay First Year	3%
Paid - Up	1%
Reduced Pay at 65	6%
Lifetime	90%
Ten Pay	0%
Total	100%

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23. Number of Policyholders

As of September 30, 2018, the number of premium-paying policies inforce and premiums that will be affected by this increase are:

		ed Before Rate gulation Effective Date	Issued On or After Rate Stability Regulation Effective Date				
	Number of Insured	2018 Annualized Premium	Number of Insured	2018 Annualized Premium			
Maryland	-	-	2,032	\$5,203,367			

24. Actuarial Certification

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

This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The projections contained in this actuarial memorandum are based on best estimate assumptions that do not reflect any margins for moderately adverse experience. I certify that (1) if the requested premium rate schedule increase is implemented and (2) unless underlying assumptions which reflect moderately adverse conditions are realized, no further premium rate schedule increases are anticipated. Moderately adverse conditions are interpreted as those conditions where aggregate experience deviates unfavorably from the aggregate experience assumptions used in determining the lifetime projections, such that the value of the deviation is equal to 5% of gross premiums or more.

I further certify that:

- the analysis described in Section 18 of this memorandum was used in determining the need for a rate increase;
- the policy design, underwriting and claims adjudication practices have been taken into consideration in this rate increase request;
- the actuarial assumptions are appropriate and the gross premiums bear reasonable relationship to the benefits; and
- the relationship between renewal premium rate schedules and new business premium rate schedules is not applicable because we are no longer marketing new business.

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Mark D. Newton, FSA, MAAA

Mark Deleuton

Actuarial Director, Metropolitan Life Insurance Company

Exhibit I-A

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

		\A#	thout Interest	Loss Ra	atio Demonstr		With Interest		Fact Premium	ors Derived fro	om Projected Value			Only	Interest Ra Calendar Year	te Factors Mid-Year
-	Calendar	Earned	Incurred	Loss	Life	Earned	Incurred	Loss	Rate Increase	Benefit	Policy	Persistency	Policy	Premium	Effective	Disc / Accum
	Year 1998	Premium -	Claims -	Ratio N/A	Years -	Premium -	Claims -	Ratio N/A	Factor	Downgrade	Lapse & Mortality	Shock Lapse	Persistency	Persistency	Int Rate 4.48%	Factor 2.3509
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.48% 4.48%	2.250 ⁻ 2.1536
	2000	-	-	N/A		-	-	N/A							4.48%	2.1536
	2002	1,509,990	-	0.0%	3,067	2,978,955	-	0.0%							4.48%	1.9728
	2003 2004	22,717,279 84,549,231	173,039 1,165,913	0.8% 1.4%	20,228 55,861	42,895,145 152,800,028	326,736 2,107,075	0.8% 1.4%							4.48% 4.48%	1.8882 1.8072
Historical	2005	189,377,165	6,727,005	3.6%	96,799	327,569,401	11,635,833	3.6%							4.48%	1.729
Experience	2006	237,139,037	9,147,328	3.9%	96,923	392,591,335	15,143,697	3.9%							4.48%	1.655
	2007 2008	232,250,395 226,734,335	15,954,639 15,104,879	6.9% 6.7%	94,163 91,295	368,006,985 343,857,765	25,280,554 22,907,558	6.9% 6.7%							4.48% 4.48%	1.5849 1.5160
	2009	220,281,395	18,639,466	8.5%	87,977	319,743,190	27,055,587	8.5%							4.48%	1.451
	2010 2011	212,251,681 223,191,306	21,759,404 24,126,933	10.3% 10.8%	85,168 82,943	294,874,059 296,773,177	30,229,601 32,081,118	10.3% 10.8%							4.48% 4.48%	1.389 1.329
	2012	217,286,403	26,819,664	12.3%	80,649	276,529,753	34,132,072	12.3%							4.48%	1.272
	2013	209,279,626	31,748,173	15.2%	79,153	254,916,653	38,671,409	15.2%							4.48%	1.218
	2014 2015	188,906,020 159,728,244	42,645,062 53,385,283	22.6% 33.4%	78,150 76,989	220,231,277 178,228,381	49,716,660 59,568,504	22.6% 33.4%							4.48% 4.48%	1.165 1.115
	2016	147,766,667	66,430,512	45.0%	75,905	157,809,653	70,945,472	45.0%							4.48%	1.068
Projected	2017 2018	153,703,477 147,691,468	75,879,441 68,570,142	49.4% 46.4%	74,899 73,097	157,109,599 144,489,530	77,560,955 67,083,547	49.4% 46.4%	1.3192	N/A	0.0241	N/A	0.976	0.955	4.48% 4.48%	1.022 0.978
Future	2019	146,997,601	79,900,582	54.4%	71,232	137,642,693	74,815,719	54.4%	1.3650	N/A	0.0255	N/A		0.962	4.48%	0.936
Experience	2020	152,799,339	93,026,225	60.9%	69,302	136,938,742	83,370,087	60.9%	1.4789	N/A	0.0271	N/A	0.973	0.959	4.48%	0.8962
	2021 2022	146,870,530 140,392,067	108,134,483 125,387,212	73.6% 89.3%	67,306 65,244	125,979,959 115,258,061	92,753,650 102,939,485	73.6% 89.3%	1.4841 1.4841	N/A N/A	0.0288 0.0306	N/A N/A		0.958 0.956	4.48% 4.48%	0.857 0.821
	2023	133,874,317	144,913,816	108.2%	63,114	105,193,269	113,867,681	108.2%	1.4841	N/A	0.0326	N/A	0.967	0.954	4.48%	0.785
	2024	127,264,977	166,709,971	131.0% 158.1%	60,918	95,710,929	125,375,941 137,316,657	131.0%	1.4841	N/A N/A	0.0348	N/A		0.951	4.48%	0.752
	2025 2026	120,670,164 114,021,003	190,769,372 216,931,272	158.1% 190.3%	58,659 56,339	86,858,930 78,552,746	137,316,657 149,450,948	158.1% 190.3%	1.4841 1.4841	N/A N/A	0.0371 0.0395	N/A N/A	0.963 0.960	0.948 0.945	4.48% 4.48%	0.719 0.688
	2027	107,303,970	244,886,977	228.2%	53,964	70,754,530	161,474,574	228.2%	1.4841	N/A	0.0422	N/A	0.958	0.941	4.48%	0.659
	2028 2029	100,603,958 93,905,426	274,446,286 305,208,771	272.8% 325.0%	51,539 49,071	63,491,482 56,722,195	173,203,936 184,356,881	272.8% 325.0%	1.4841 1.4841	N/A N/A	0.0449 0.0479	N/A N/A		0.938 0.933	4.48% 4.48%	0.631 0.604
	2030	87,286,551	336,533,698	385.6%	46,568	50,462,831	194,559,679	385.6%	1.4841	N/A	0.0510	N/A		0.930	4.48%	0.578
	2031	80,773,592	367,685,228	455.2%	44,040	44,694,658	203,452,209	455.2%	1.4841	N/A	0.0543	N/A		0.925	4.48%	0.553
	2032 2033	74,398,817 68,162,360	398,146,572 427,185,131	535.2% 626.7%	41,497 38,951	39,401,631 34,550,531	210,858,518 216,534,070	535.2% 626.7%	1.4841 1.4841	N/A N/A	0.0577 0.0613	N/A N/A		0.921 0.916	4.48% 4.48%	0.529 0.506
	2034	62,128,155	453,899,833	730.6%	36,415	30,141,198	220,207,485	730.6%	1.4841	N/A	0.0651	N/A		0.911	4.48%	0.485
	2035 2036	56,313,721 50,753,933	477,452,279 497,003,218	847.8% 979.2%	33,902 31,426	26,148,587 22,556,185	221,699,119 220,879,363	847.8% 979.2%	1.4841 1.4841	N/A N/A	0.0690 0.0730	N/A N/A	0.931 0.927	0.906 0.901	4.48% 4.48%	0.4643 0.4444
	2036	45,484,184	512,601,585	1127.0%	29,000	19,347,207	218,040,830	1127.0%	1.4841	N/A N/A	0.0730			0.896	4.48%	0.4254
	2038	40,511,584	523,376,772	1291.9%	26,638	16,492,977	213,075,870	1291.9%	1.4841	N/A	0.0815	N/A		0.891	4.48%	0.407
	2039 2040	35,865,930 31,559,999	528,659,755 528,810,652	1474.0% 1675.6%	24,353 22,156	13,975,388 11,770,115	205,995,636 197,216,799	1474.0% 1675.6%	1.4841 1.4841	N/A N/A	0.0858 0.0902	N/A N/A		0.885 0.880	4.48% 4.48%	0.3897 0.3729
	2041	27,600,142	523,985,137	1898.5%	20,059	9,851,831	187,035,748	1898.5%	1.4841	N/A	0.0947	N/A		0.875	4.48%	0.3569
	2042 2043	23,985,688 20,715,386	514,310,773 500,421,843	2144.2% 2415.7%	18,070 16,197	8,194,449 6,773,647	175,708,681 163,631,080	2144.2% 2415.7%	1.4841 1.4841	N/A N/A	0.0991 0.1036	N/A N/A		0.869 0.864	4.48% 4.48%	0.3416 0.3270
	2043	17,779,153	482,563,020	2714.2%	14,445	5,564,198	151,023,844	2714.2%	1.4841	N/A N/A	0.1030			0.858	4.48%	0.327
	2045	15,163,976	461,443,818	3043.0%	12,817	4,542,203	138,220,435	3043.0%	1.4841	N/A	0.1127	N/A		0.853	4.48%	0.299
	2046 2047	12,855,503 10,832,839	437,345,721 411,081,278	3402.0% 3794.8%	11,315 9,939	3,685,568 2,972,484	125,383,460 112,798,937	3402.0% 3794.8%	1.4841 1.4841	N/A N/A	0.1171 0.1216	N/A N/A		0.848 0.843	4.48% 4.48%	0.286 0.274
	2048	9,074,330	383,222,808	4223.2%	8,686	2,383,163	100,644,629	4223.2%	1.4841	N/A	0.1261	N/A		0.838	4.48%	0.2620
	2049	7,557,069	354,479,464	4690.7%	7,552	1,899,567	89,102,990	4690.7%	1.4841	N/A	0.1306	N/A		0.833		0.2514
	2050 2051	6,257,350 5,152,562	325,452,774 296,477,883	5201.1% 5754.0%	6,533 5,624	1,505,406 1,186,447	78,298,081 68,268,032	5201.1% 5754.0%	1.4841 1.4841	N/A N/A	0.1349 0.1392	N/A N/A	0.865 0.861	0.828 0.823	4.48% 4.48%	0.240 0.230
	2052	4,219,448	268,222,238	6356.8%	4,817	929,914	59,112,837	6356.8%	1.4841	N/A	0.1435	N/A	0.857	0.819	4.48%	0.220
	2053 2054	3,436,927 2,785,196	240,906,255 214,763,999	7009.3% 7710.9%	4,105 3,482	724,969 562,298	50,815,598 43,358,315	7009.3% 7710.9%	1.4841 1.4841	N/A N/A	0.1479 0.1518	N/A N/A		0.815 0.810	4.48% 4.48%	0.210 0.201
	2055	2,246,371	190,173,493	8465.8%	2,939	434,065	36,747,080	8465.8%	1.4841	N/A	0.1559	N/A	0.844	0.807	4.48%	0.193
	2056	1,803,470	167,155,158	9268.5%	2,469	333,537	30,913,955	9268.5% 10126.5%	1.4841	N/A	0.1597	N/A		0.803	4.48%	0.184
	2057 2058	1,442,218 1,149,423	146,045,903 126,783,789	10126.5% 11030.2%	2,064 1,718	255,286 194,733	25,851,522 21,479,413	10126.5% 11030.2%	1.4841 1.4841	N/A N/A	0.1643 0.1674	N/A N/A	0.836 0.833	0.800 0.797	4.48% 4.48%	0.177 0.169
	2059	913,050	109,461,643	11988.6%	1,425	148,052	17,749,355	11988.6%	1.4841	N/A	0.1706	N/A	0.829	0.794	4.48%	0.162
	2060 2061	723,108 571,051	93,995,299 80,246,289	12998.8% 14052.4%	1,177 969	112,224 84,824	14,587,763 11,919,814	12998.8% 14052.4%	1.4841 1.4841	N/A N/A	0.1738 0.1769	N/A N/A		0.792 0.790	4.48% 4.48%	0.155 0.148
	2062	449,858	68,161,186	15151.7%	795	63,956	9,690,442	15151.7%	1.4841	N/A N/A	0.1800	N/A N/A		0.788	4.48%	0.142
	2063	353,534	57,651,649	16307.3%	649	48,106	7,844,768	16307.3%	1.4841	N/A	0.1830	N/A	0.817	0.786	4.48%	0.136
	2064 2065	277,331 217,177	48,551,636 40,732,692	17506.7% 18755.5%	529 429	36,118 27,071	6,323,160 5,077,330	17506.7% 18755.5%	1.4841 1.4841	N/A N/A	0.1857 0.1889	N/A N/A		0.784 0.783	4.48% 4.48%	0.130 0.124
	2066	169,781	33,987,021	20018.2%	347	20,256	4,054,780	20018.2%	1.4841	N/A	0.1906	N/A	0.809	0.782	4.48%	0.119
	2067	132,475 103 172	28,243,797 23,345,478	21320.1% 22627.6%	280	15,127 11,276	3,225,071 2,551,414	21320.1% 22627.6%	1.4841 1.4841	N/A N/A	0.1924 0.1963	N/A N/A		0.780 0.779	4.48% 4.48%	0.114 0.109
	2068 2069	103,172 80,172	23,345,478 19,205,546	23955.5%	225 181	11,276 8,386	2,551,414 2,008,939	23955.5%	1.4841 1.4841	N/A N/A	0.1963	N/A N/A		0.779 0.777	4.48% 4.48%	0.109 0.104
	2070	62,154	15,722,156	25295.6%	144	6,223	1,574,034	25295.6%	1.4841	N/A	0.2016	N/A	0.798	0.775	4.48%	0.100
	2071 2072	48,079 37,105	12,829,091 10,462,668	26683.4% 28197.7%	115 91	4,607 3,403	1,229,306 959,552	26683.4% 28197.7%	1.4841 1.4841	N/A N/A	0.2054 0.2090	N/A N/A		0.774 0.772		0.095 0.091
	2072	28,560	8,519,584	29830.2%	71	2,507	747,836	29830.2%	1.4841	N/A	0.2115			0.772	4.48%	0.087
	2074	21,917	6,927,633	31607.9%	56	1,841	582,016	31607.9%	1.4841	N/A	0.2162	N/A	0.784	0.767	4.48%	0.084
	2075 2076	16,776 12,788	5,630,480 4,579,301	33562.9% 35809.9%	44 34	1,349 984	452,749 352,430	33562.9% 35809.9%	1.4841 1.4841	N/A N/A	0.2164 0.2195	N/A N/A		0.765 0.762	4.48% 4.48%	0.080 0.077
	2077	9,694	3,710,381	38274.4%	27	714	273,309	38274.4%	1.4841	N/A	0.2254	N/A	0.775	0.758	4.48%	0.073
-	2078-2098	23,676	12,081,663	51029.4%	21	1,669	851,774	51029.4%	1.4841	N/A	0.2265	N/A	0.773	N/A	4.48%	0.070
	Past	2,726,672,250	409,706,741	15.0%	1,180,169	3,786,915,358	497,362,830	13.1%								
	Future	2,343,942,152	13,799,120,377	588.7%	1,275,166	1,579,726,831	5,538,979,162	350.6%								
ote:	Lifetime	5,070,614,403	14,208,827,118	280.2%	2,455,335	5,366,642,189	6,036,341,993	112.5%								

⁻ The premiums shown in this exhibit are normalized to reflect prior rate inreases authorized by Maryland rather than that authorized by other states.
- There were three prior authorized increases for a cumulative total of approximately 48.41%.

⁻ The projections are based on the assumptions derived using experience data through 6/30/2017.

Exhibit I-A

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 15.00% Future Increase Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

August Section Secti				-	Loss R	atio Demonstr	ation				ors Derived fr	om Projected Value			nly	Interest Ra	
100 100		Calendar			Loss	Life	Earned		Loss	1	Benefit	Policy			Premium		Mid-Year Disc / Accum
1902		Year	Premium		Ratio	I	Premium	Claims	Ratio	Factor		1	,			Int Rate	Factor
2001 1,000			-	-		-	-	-									2.3509 2.2501
1,000			-	-		-	-	-									2.1536 2.0612
Temporary 1997 19			1,509,990			3,067	2,978,955	-									1.9728
Mary																	1.8882
Decretor 200 27 1907 3 1,000 3 27 9000 32 1,000 1,000 3 1,000	Historical					· · · · · · · · · · · · · · · · · · ·											1.8072 1.7297
200 25074302 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Experience	2006	237,139,037	9,147,328	3.9%	96,923	392,591,335	15,143,697	3.9%							4.48%	1.6555
200 20031956																	1.5845 1.5166
201 220114568 A 1478438 1 608					8.5%				8.5%								1.4515
201 2-175-64-130 2-16-1-10-1-10-1-10-1-10-1-10-1-10-1-10-						I											1.3893 1.3297
2014 1988/E00																	1.2727
2010 1977_264 53.80(288) 33.40 70.000 73.20(288) 55.50(2604 33.40) 4.60 1.90 1						I											1.2181
Part						· ·											1.1658 1.1158
Processon 200																	1.0680
### Professor 1.000 146.07.26 7.70.03.25 54.40 7.72 17.66.07.05 7.46.	Projected										1.0000	0.0241	1.0000	0.976	0.955		1.0222 0.9783
2002 157,685 33 133,75 66 65 96 90 90 155,000 65 65 65 66 77 96 77 97 97 98 98 98 98 98	Future	2019	146,997,601	79,900,582	54.4%	71,232	137,642,693	74,815,719	54.4%	1.3650	1.0000	0.0255	1.0000	0.974	0.962	4.48%	0.9364
2022 110,000,000 110,000,000 110,000,000 110,000 10,00	Experience																0.8962 0.8578
2004 138-00-081 157-288, 105 159.06 15		2022		118,752,860	77.7%	I	125,533,599	97,492,862	77.7%	1.7067	0.9786	0.0361	0.9678	0.964	0.956	4.48%	0.8210
2005 134-867-16 156-67												1					0.7858 0.7521
2007 116,873.867 221,997.87 168,956 52.268 77,664,469 162,899.869 198,956 1700 0.04079 0.0408 0.0505 0.																	
2200 150,753,046 229,952,081 277,256 48,079 62,151,000 14,000,050 220,055 1,7007 0,0709 0,0779 0,0779 0,0779 0,0779 0,00079																	0.6889
2006 102.277.304 289.069.894 282.895 47.490 85.091.7797 171.781.791.77 174.902.300 282.895 17007 0.0786 0.0576 0.0578 0.0																	
2003 67 974 755 348,208 64 05.5% 4.11 42 4214.25 55 05.5% 17.007 0.776 0		2029	102,277,324	289,059,894	282.6%	47,490	61,779,117	174,602,389	282.6%	1.7067	0.9786	0.0479	0.9678	0.952	0.933	4.48%	0.6040
2032 91,331,655 77,709,770 465,785 49,181 42,94,382 199,770,890 465,576 17007 0,9786 0,0877 0,9878 0,9870 0,98						I											0.5781 0.5533
2034 BY, 6F, 6F, 031 42, 225, 268, 37.5 BS, 37.5 BS, 35.4 SS, 35.4 SS, 200, 200 200, 200, 200, 200, 200, 2		2032		377,080,270	465.3%	40,161	42,914,382	199,701,800	465.3%	1.7067	0.9786	0.0577	0.9678	0.942		4.48%	0.5296
2005 0.134.27 470.708.00 737.96 22.811 22.479.797 22.479.897 73.76 1.7007 0.9786 0.0987 0.0397																	0.5069 0.4851
2007 48.558.210 48.578.263 580.0% 20.086 21.072.058 22.076.258 20.086 21.072.058 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058 20.086 21.072.058						I											
2008 4,123.29 49 68,684.426 112.4 %, 25,760 17,963.366 201.801.803 112.4 % 17.007 0.9786 0.0615 0.9786 0.9978 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.865 0.9678 0.914 0.91																	0.4444
2009 38,083.465 500.887,681 1281.7% 23,586 15.221,328 180,096.217 1281 176,076 0,9786 0,09878 0,09678 0,0967 0,096						I						1					0.4254 0.4071
2044 30,060,762 496,260,001 169,09% 19,413 10,730,146 17,739,515 169,09% 1,7607 0,0786 0,0947 0,9678 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078 0,9078 0,901 0,9078 0,901 0,9078 0,901 0,9078		2039	39,063,465	500,687,881	1281.7%	23,568	15,221,328	195,096,217	1281.7%	1.7067	0.9786	0.0858	0.9678	0.914	0.885	4.48%	0.3897
2042 26,124,071 487,081,177 1894,89 17,488 8,025,005 196,411,773 1894,096 1,7067 0,9786 0,0091 0,9878 0,001 0,880 4,48% 1004 21,005,005,005,005,005,005,005,005,005,00						I											0.3729 0.3569
2044 [19,384,208] 467,001,07 2800,2% 13,800 6,060,299 143,033,033 2800,2% 1,7067 0,9786 0,1082 0,9872 0,9872 0,8873 0,8873 0,9874		2042	26,124,071	487,098,117	1864.6%	17,488	8,925,005	166,411,773	1864.6%	1.7067	0.9786	0.0991	0.9678	0.901	0.869	4.48%	0.3416
2046 14.016.03 414.02.05.56 258.53.4 10.951 4.947.151 139.907.06 2246.11% 1.7067 0.9786 0.1171 0.9678 0.887 0.887 0.885 4.48% 0.244 1.106.05 414.01.41 4.106 1.106.05 414.02.05 258.35 1.7067 0.9786 0.1171 0.9678 0.887 0.883 0.348 4.48% 0.244 1.1761 1.1761 1.1761 0.9786 0.1216 0.9786						I											0.3270 0.3130
2047 11,798,613 389,330,589 39,919 3,293,748 9,619 2,595,829 9,319,429 3672,3% 1,7067 0,9786 0,1261 0,9878 0,874 0,838 4,48% 0,248 9,851,832 82,484 1,248 1,						I											0.2995
2048 9,883,328 362,946,136 3672,3% 8,406 2,505,628 95,319,429 3672,3% 1,7067 0,0786 0,1067 0,0978 0,0978 0,0978 0,833 4,49% 0 2050 6,515,208 309,232,768 4522,7% 6,323 1,309,616 74,155,257 4522,7% 1,7067 0,9786 0,109 0,9678 0,865 0,828 4,449% 0 2051 5,515,925 209,709,696 500,55% 5,43 1,282,221 64,655,003,5% 1,7067 0,9786 0,1399 0,9678 0,865 0,828 4,449% 0 2052 4,595,622 256,030,352 552,77% 4,682 1,102,818 1,282,221 64,655,003,5% 1,7067 0,9786 0,1399 0,9678 0,857 0,819 1,448% 0 2053 3,743,38 228,159,683 0,606,1% 3,973 789,602 48,126,989 1,7067 0,9786 0,1435 0,9678 0,857 0,819 1,448% 0 2056 2,466,40 180,11,239 7361 6% 2,944 472,762 34,802,758 1,7067 0,9786 0,1599 0,9678 0,844 0,807 4,48% 0 2056 1,604,604 180,11,239 7361 6% 2,944 472,762 34,802,758 1,7067 0,9786 0,1599 0,9678 0,844 0,807 4,48% 0 2056 1,1604,254 159,310,825 8059,6% 2,330 363,272 29,278,279 8059,6% 1,7067 0,9786 0,1697 0,9678 0,940 0,803 4,48% 0 2056 1,1604,254 159,310,825 8059,6% 2,330 363,272 29,278,279 8059,6% 1,7067 0,9786 0,1697 0,9678 0,940 0,803 4,48% 0 2058 1,251,897 120,075,542 9991,5% 1,683 1,220,24 2,340,425 8,527,5% 1,7067 0,9786 0,1697 0,9678 0,380 0,800 4,48% 0 2059 99,460 10,569,837 1042,488 1,379 1612,51 18,810,221 1,303,3% 1,7067 0,9786 0,1706 0,9786 0,1706 0,9786 0,1697 0,9678 0,330 0,300 4,48% 0 2050 787,575 88,071,821 1303,3% 1,139 1612,51 1,810,235 1,129,55 1,7067 0,9786 0,1706 0,9786 0,1706 0,9786 0,1697 0,9678 0,330 0,300 4,48% 0 2050 488,594 15 1,200,084 12,11303,3% 1,139 1612,51 1,810,221 1,1303,3% 1,7067 0,9786 0,1706 0,9786 0,170						I											0.2867
2049 8,320,800 335,732,629 4078,9% 7,309 2,068,318 84,384,684 4078,9% 1,7067 0,9766 0,1392 0,9678 0,869 0,833 4,48% 4050 1,515,008 1,515						I											0.2744 0.2626
2051 5,611,925 280,790,966 5003,5% 5,443 1,282,221 64,655,068 5003,5% 1,7067 0,9786 0,1392 0,9678 0,867 0,819 4,48% 0,805 0,9678 0,867 0,819 4,48% 0,9678 0,9		2049	8,230,800	335,723,629	4078.9%	7,309	2,068,918	84,388,468	4078.9%	1.7067	0.9786	0.1306		0.869	0.833	4.48%	0.2514
2005 4,595,622 254,003,032 5527,7% 4,662 1,012,818 55,985,123 5527,7% 1,7067 0,9766 0,1435 0,9678 0,857 0,819 4,48% 0,2054 0,374,338 222,159,838 0,609,1% 3,389 612,429 41,064,186 6705,1% 1,7067 0,9766 0,1518 0,9678 0,828 0,816 4,48% 0,2055 2,446,640 180,111,239 7,2816,5% 2,944 47,762 34,802,768 7,361,6% 1,7067 0,9766 0,1518 0,9678 0,848 0,801 4,48% 0,2056 1,964,254 158,310,825 8098,6% 2,390 363,272 29,278,270 8069,8% 1,7067 0,9766 0,1597 0,9678 0,844 0,807 4,48% 0,2057 1,570,795 1,3318,400 800,65% 1,297 2,760.66 24,483,694 805,65% 1,7067 0,9766 0,1597 0,9678 0,840 0,803 4,48% 0,2059 1,251,897 120,075,642 9691,5% 1,663 212,004 20,342,917 9,911,5% 1,7067 0,9766 0,1643 0,9678 0,836 0,800 4,48% 0,2059 1,251,897 120,075,642 9691,5% 1,663 212,004 20,342,917 9,911,5% 1,7067 0,9766 0,1674 0,9678 0,833 0,797 4,48% 0,2059 0,9764 4,500 1,006,693,27						I											0.2406 0.2303
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2065 236,539 38,577,487 16309.2% 415 29,485 4,808,684 16309.2% 1.7067 0.9786 0.1889 0.9678 0.811 0.783 4.48% 0.2066 184,917 32,188,737 17407.1% 336 22,061 3,840,238 17407.1% 1.7067 0.9786 0.1906 0.9678 0.809 0.782 4.48% 0.2067 144,285 26,748,392 18539.2% 271 16,475 3.054,429 18539.2% 1.7067 0.9786 0.1924 0.9678 0.808 0.780 4.48% 0.2068 112,370 22,110,247 19676.2% 218 12,281 2,416,416 19676.2% 1.7067 0.9786 0.1924 0.9678 0.804 0.779 4.48% 0.2069 87,319 18,189,363 20830.9% 175 9,134 1,902,644 20830.9% 1.7067 0.9786 0.1984 0.9678 0.802 0.777 4.48% 0.2070 67,695 14,890,282 21996.2% 140 6,777 1,490,750 21996.2% 1.7067 0.9786 0.2016 0.9678 0.798 0.775 4.48% 0.2071 52,365 12,150,292 23203.0% 111 5.018 1,164,262 23203.0% 1.7067 0.9786 0.2016 0.9678 0.795 0.774 4.48% 0.2072 40,413 9,909,079 24519.7% 88 3,706 908,781 24519.7% 1.7067 0.9786 0.2009 0.9678 0.795 0.774 4.48% 0.2073 31,106 8,068,805 27485.1% 54 2,006 551,221 27485.1% 1.7067 0.9786 0.2115 0.9678 0.788 0.770 4.48% 0.2074 23,871 6,561,085 27485.1% 54 2,006 551,221 27485.1% 1.7067 0.9786 0.2115 0.9678 0.784 0.767 4.48% 0.2075 18,272 5,332,566 27485.1% 54 2,006 551,221 27485.1% 1.7067 0.9786 0.2162 0.9678 0.784 0.767 4.48% 0.2076 13,928 4,337,006 31139.0% 33 1.072 333,783 31139.0% 1.7067 0.9786 0.2162 0.9678 0.784 0.765 4.48% 0.2076 13,928 4,337,006 31139.0% 33 1.072 333,783 31139.0% 1.7067 0.9786 0.2164 0.9678 0.784 0.765 4.48% 0.2076 13,928 4,337,006 31139.0% 33 1.072 333,783 31139.0% 1.7067 0.9786 0.2164 0.9678 0.784 0.765 4.48% 0.2076 13,928 4,337,006 31139.0% 33 1.072 333,783 31139.0% 1.7067 0.9786 0.2164 0.9678 0.775 0.758 4.48% 0.2078 2077 10,558 3,514,062 33282.1% 26 7778 258,848 33282.1% 1.7067 0.9786 0.2164 0.9678 0.775 0.758 4.48% 0.2078 2077 10,558 3,514,062 33282.1% 26 7778 258,848 33282.1% 1.7067 0.9786 0.2164 0.9678 0.775 0.758 4.48% 0.2078 2078 2098 25,787 11,442,411 44373.4% 20 1.818 806,706 44373.4% 1.7067 0.9786 0.2265 0.9678 0.775 0.758 4.48% 0.2078 2078 2098 25,787 11,442,411 44373.4% 20 1.818 806,706 44373.4% 1.7067 0.9786 0.2265 0.9678 0.775						I											0.1361 0.1302
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2068						I											0.1193 0.1142
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2071 52,365 12,150,292 23203.0% 111 5,018 1,164,262 23203.0% 1.7067 0.9786 0.2054 0.9678 0.795 0.774 4.48% 0.2072 40,413 9,909,079 24519.7% 88 3,706 908,781 24519.7% 1.7067 0.9786 0.2090 0.9678 0.791 0.772 4.48% 0.2073 31,106 8,068,805 25939.3% 69 2,730 708,267 25939.3% 1.7067 0.9786 0.2115 0.9678 0.788 0.770 4.48% 0.2074 23,871 6,561,085 27485.1% 54 2,006 551,221 27485.1% 1.7067 0.9786 0.2162 0.9678 0.784 0.767 4.48% 0.2075 18,272 5,332,566 29185.1% 42 1,469 428,793 29185.1% 1.7067 0.9786 0.2164 0.9678 0.784 0.765 4.48% 0.2076 13,928 4,337,006 31139.0% 33 1,072 333,783 31139.0% 1.7067 0.9786 0.2164 0.9678 0.781 0.762 4.48% 0.2077 10,558 3,514,062 33282.1% 26 778 258,848 33282.1% 1.7067 0.9786 0.2195 0.9678 0.775 0.758 4.48% 0.2078-2098 25,787 11,442,411 44373.4% 20 1,818 806,706 44373.4% 1.7067 0.9786 0.2254 0.9678 0.775 0.758 4.48% 0.2078-2098 25,787 11,442,411 44373.4% 20 1,818 806,706 44373.4% 1.7067 0.9786 0.2265 0.9678 0.773 N/A 4.48% 0.2078-2098 12,726,672,250 409,706,741 15.0% 1,180,169 3,786,915,358 497,362,830 13.1% Future 2,512,156,069 13,082,321,905 520.8% 1,241,168 1,682,511,716 5,258,279,864 312.5% 1.5669 13,042,028,646 257.5% 2,421,337 5,469,427,074 5,755,642,694 105.2%						I						1					0.1046
2072																	0.1001 0.0958
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2075												1					0.0878 0.0840
2077 10,558 3,514,062 33282.1% 26 778 258,848 33282.1% 1.7067 0.9786 0.2254 0.9678 0.775 0.758 4.48% 0.2078-2098 25,787 11,442,411 44373.4% 20 1,818 806,706 44373.4% 1.7067 0.9786 0.2265 0.9678 0.773 N/A 4.48% 0.2078-2098 25,787 11,442,411 44373.4% 20 1,818 806,706 44373.4% 1.7067 0.9786 0.2265 0.9678 0.773 N/A 4.48% 0.2078-2098 2,726,672,250 409,706,741 15.0% 1,180,169 3,786,915,358 497,362,830 13.1% Future 2,512,156,069 13,082,321,905 520.8% 1,241,168 1,682,511,716 5,258,279,864 312.5% Lifetime 5,238,828,319 13,492,028,646 257.5% 2,421,337 5,469,427,074 5,755,642,694 105.2%		2075	18,272	5,332,566	29185.1%	42	1,469	428,793	29185.1%	1.7067	0.9786	0.2164	0.9678	0.784	0.765	4.48%	0.0804
2078-2098						I											0.0770 0.0737
Future 2,512,156,069 13,082,321,905 520.8% 1,241,168 1,682,511,716 5,258,279,864 312.5% Lifetime 5,238,828,319 13,492,028,646 257.5% 2,421,337 5,469,427,074 5,755,642,694 105.2%						I											
Future 2,512,156,069 13,082,321,905 520.8% 1,241,168 1,682,511,716 5,258,279,864 312.5% Lifetime 5,238,828,319 13,492,028,646 257.5% 2,421,337 5,469,427,074 5,755,642,694 105.2%		Pact	2 726 672 250	400 706 744	1E 00/	1 190 160	2 706 045 250	407 262 920	12 10/								
Lifetime 5,238,828,319 13,492,028,646 257.5% 2,421,337 5,469,427,074 5,755,642,694 105.2%		l_				I											
	Note:					I											

⁻ The premiums shown in this exhibit are normalized to reflect prior rate inreases authorized by Maryland rather than that authorized by other states.
- There were three prior authorized increases for a cumulative total of approximately 48.41%.

⁻ The projections are based on the assumptions derived using experience data through 6/30/2017.
- The current requested increase of 15.00% is assumed to be implemented starting 9/1/2020.

Exhibit II-A

Demonstration that Lifetime Incurred Claims with Requested Increase are Not Less than Lifetime Earned Premium with Prescribed Factors Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

Accumulated value of initial earned premium	3,551,434,356	x 58%	= 2,059,	831,926
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	3,786,915,358 235,481,002	85%	= 200	,158,852
3 Present value of future projected initial earned premium	1,085,021,177	58%	= 629	,312,283
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	1,682,511,716 597,490,538	85%	= 507	7,866,958
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b			3,397,	170,019
6a Accumulated value of incurred claims without the inclusion of active life reserves 6b Present value of future projected incurred claims without the inclusion of active life reserves				7,362,830 5,279,864
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b			5,755	,642,694
8 Test: 7 is not less than 5				TRUE

Exhibit I-B Metropolitan Life Insurance Company

Maryland Experience Projections (Premium Normalized to Include Prior Authorized Increases) Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

		14.0	thout Interest	Loss Ra	tio Demonstra	ation	With Interest			ors Derived fro	om Projected Value			Only	Interest Ra	
-	Calendar	Earned	Incurred	Loss	Life	Earned	With Interest Incurred	Loss	Premium Rate Increase	Benefit	Policy	Persistency Policy	Policy	Premium	Calendar Year Effective	Mid-Year Disc / Accum
	Year 1998	Premium -	Claims -	Ratio N/A	Years -	Premium -	Claims -	Ratio N/A	Factor	Downgrade	Lapse & Mortality	Shock Lapse	Persistency	Persistency	Int Rate 4.48%	Factor 2.3509
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.48% 4.48%	2.250 ² 2.1536
	2001	-	-	N/A	-	-	-	N/A							4.48%	2.0612
	2002 2003	- 388,547	-	N/A 0.0%	464	733,661	-	N/A 0.0%							4.48% 4.48%	1.9728 1.8882
Historical	2004 2005	2,277,982 5,680,440	- 1,119	0.0% 0.0%	1,482 3,008	4,116,840 9,825,568	- 1,935	0.0% 0.0%							4.48% 4.48%	1.8072 1.7297
Experience	2006	7,888,372	-	0.0%	3,054	13,059,454	1,935	0.0%							4.48%	1.6555
	2007 2008	7,680,649 7,514,752	- 577,139	0.0% 7.7%	2,949 2,868	12,170,195 11,396,624	- 875,270	0.0% 7.7%							4.48% 4.48%	1.5845 1.5166
	2009	7,334,661	1,102,579	15.0%	2,758	10,646,418	1,600,418	15.0%							4.48%	1.451
	2010 2011	6,441,093 6,805,232	31,814 2,358,591	0.5% 34.7%	2,589 2,527	8,948,393 9,048,786	44,199 3,136,173	0.5% 34.7%							4.48% 4.48%	1.3893 1.3297
	2012 2013	6,697,376 6,598,497	306,529 731,075	4.6% 11.1%	2,458 2,418	8,523,422 8,037,413	390,105 890,499	4.6% 11.1%							4.48% 4.48%	1.2727 1.218
	2014	6,230,249	549,225	8.8%	2,380	7,263,378	640,300	8.8%							4.48%	1.1658
	2015 2016	5,328,959 4,970,872	1,130,154 1,046,296	21.2% 21.0%	2,350 2,331	5,946,173 5,308,718	1,261,051 1,117,407	21.2% 21.0%							4.48% 4.48%	1.1158 1.0680
Desirated	2017	5,257,198	2,681,967	51.0%	2,309	5,373,699	2,741,401	51.0%	4 0400	NI/A	0.0004	N1/A	0.070	0.000	4.48%	1.0222
Projected Future	2018 2019	5,122,135 5,115,170	2,001,175 2,360,981	39.1% 46.2%	2,257 2,203	5,011,087 4,789,642	1,957,790 2,210,728	39.1% 46.2%	1.3192 1.3650	N/A N/A	0.0224 0.0238	N/A N/A	0.978 0.976	0.968 0.965		0.9783 0.9364
Experience	2020 2021	5,345,187 5,156,918	2,784,974 3,282,063	52.1% 63.6%	2,148 2,090	4,790,356 4,423,408	2,495,894 2,815,228	52.1% 63.6%	1.4789 1.4841	N/A N/A	0.0253 0.0269	N/A N/A	0.975 0.973	0.964 0.961	4.48% 4.48%	0.8962 0.8578
	2022	4,950,499	3,854,557	77.9%	2,030	4,064,225	3,164,487	77.9%	1.4841	N/A	0.0287	N/A	0.971	0.960	4.48%	0.8210
	2023 2024	4,720,879 4,502,535	4,508,385 5,250,306	95.5% 116.6%	1,968 1,904	3,709,484 3,386,178	3,542,515 3,948,546	95.5% 116.6%	1.4841 1.4841	N/A N/A	0.0305 0.0326	N/A N/A	0.969 0.967	0.954 0.954	4.48% 4.48%	0.7858 0.752
	2025	4,285,996	6,076,709	141.8%	1,837	3,085,079	4,374,042	141.8%	1.4841 1.4841	N/A	0.0348	N/A	0.965	0.952		0.7198
	2026 2027	4,071,772 3,846,981	6,981,496 7,954,644	171.5% 206.8%	1,769 1,699	2,805,175 2,536,638	4,809,778 5,245,166	171.5% 206.8%	1.4841	N/A N/A	0.0372 0.0397	N/A N/A	0.963 0.960	0.950 0.945	4.48%	0.6889 0.6594
	2028 2029	3,619,925 3,395,515	8,991,913 10,086,989	248.4% 297.1%	1,627 1,553	2,284,546 2,051,011	5,674,825 6,092,898	248.4% 297.1%	1.4841 1.4841	N/A N/A	0.0424 0.0453	N/A N/A	0.958 0.955	0.941 0.938	4.48% 4.48%	0.631 ² 0.6040
	2030	3,170,688	11,211,005	353.6%	1,478	1,833,065	6,481,400	353.6%	1.4841	N/A	0.0483	N/A	0.952	0.934	4.48%	0.578
	2031 2032	2,944,547 2,722,298	12,335,660 13,455,065	418.9% 494.3%	1,402 1,325	1,629,314 1,441,729	6,825,723 7,125,805	418.9% 494.3%	1.4841 1.4841	N/A N/A	0.0515 0.0549	N/A N/A	0.949 0.945	0.929 0.925	4.48% 4.48%	0.5533 0.5296
	2033 2034	2,507,054 2,297,777	14,535,605 15,538,396	579.8% 676.2%	1,248 1,170	1,270,790 1,114,756	7,367,892 7,538,384	579.8% 676.2%	1.4841 1.4841	N/A N/A	0.0584 0.0621	N/A N/A	0.942 0.938	0.921 0.917	4.48% 4.48%	0.5069 0.485
	2035	2,094,466	16,447,855	785.3%	1,093	972,539	7,637,360	785.3%	1.4841	N/A	0.0659	N/A	0.934	0.912	4.48%	0.4643
	2036 2037	1,898,662 1,711,415	17,221,102 17,867,361	907.0% 1044.0%	1,017 942	843,808 727,970	7,653,444 7,600,082	907.0% 1044.0%	1.4841 1.4841	N/A N/A	0.0699 0.0740	N/A N/A	0.930 0.926	0.907 0.901	4.48% 4.48%	0.4444 0.4254
	2038	1,533,680	18,338,953	1195.7%	868	624,388	7,466,110	1195.7%	1.4841	N/A	0.0781	N/A	0.922	0.896	4.48%	0.407
	2039 2040	1,366,519 1,210,329	18,650,465 18,754,815	1364.8% 1549.6%	797 727	532,473 451,385	7,267,272 6,994,497	1364.8% 1549.6%	1.4841 1.4841	N/A N/A	0.0824 0.0868	N/A N/A	0.918 0.913	0.891 0.886	4.48% 4.48%	0.3897 0.3729
	2041 2042	1,065,892 933,254	18,687,479 18,460,324	1753.2% 1978.1%	661 598	380,469 318,836	6,670,469 6,306,769	1753.2% 1978.1%	1.4841 1.4841	N/A N/A	0.0910 0.0955	N/A N/A	0.909 0.904	0.881 0.876	4.48% 4.48%	0.3569 0.3416
	2043	812,355	18,081,559	2225.8%	538	265,629	5,912,422	2225.8%	1.4841	N/A	0.0998	N/A	0.900	0.870	4.48%	0.3270
	2044 2045	703,113 605,159	17,531,602 16,895,111	2493.4% 2791.8%	482 430	220,048 181,269	5,486,724 5,060,745	2493.4% 2791.8%	1.4841 1.4841	N/A N/A	0.1042 0.1087	N/A N/A	0.896 0.891	0.866 0.861	4.48% 4.48%	0.3130 0.2995
	2046	517,984	16,147,792	3117.4%	381	148,502	4,629,441	3117.4%	1.4841	N/A	0.1131	N/A	0.887	0.856	4.48%	0.2867
	2047 2048	440,979 373,590	15,305,095 14,413,335	3470.7% 3858.1%	336 295	121,003 98,115	4,199,652 3,785,330	3470.7% 3858.1%	1.4841 1.4841	N/A N/A	0.1174 0.1218	N/A N/A	0.883 0.878	0.851 0.847	4.48% 4.48%	0.274 0.2626
	2049 2050	314,964 264,263	13,461,983 12,490,332	4274.1% 4726.5%	258 225	79,170 63,577	3,383,843 3,004,949	4274.1% 4726.5%	1.4841 1.4841	N/A N/A	0.1260 0.1303	N/A N/A	0.874 0.870	0.843 0.839	4.48% 4.48%	0.2514 0.2406
	2051	220,709	11,494,710	5208.1%	194	50,821	2,646,812	5208.1%	1.4841	N/A	0.1347	N/A	0.865	0.835	4.48%	0.2303
	2052 2053	183,546 152,013	10,505,676 9,560,607	5723.7% 6289.3%	167 143	40,451 32,065	2,315,320 2,016,668	5723.7% 6289.3%	1.4841 1.4841	N/A N/A	0.1387 0.1429	N/A N/A	0.861 0.857	0.832 0.828	4.48% 4.48%	0.220 ⁴ 0.2109
	2054	125,389	8,623,647	6877.5% 7490.4%	122	25,315	1,741,013	6877.5% 7490.4%	1.4841 1.4841	N/A	0.1470		0.853 0.849	0.825 0.822	4.48%	0.2019 0.1932
	2055 2056	103,090 84,481	7,721,837 6,880,830	8144.9%	104 88	19,920 15,624	1,492,085 1,272,552	8144.9%	1.4841	N/A N/A	0.1512 0.1547	N/A	0.845	0.822	4.48% 4.48%	0.1849
	2057 2058	69,068 56,390	6,065,888 5,314,167	8782.4% 9423.9%	74 62	12,226 9,554	1,073,720 900,314	8782.4% 9423.9%	1.4841 1.4841	N/A N/A	0.1584 0.1632	N/A N/A	0.842 0.837	0.818 0.816		0.1770 0.1694
	2059	45,983	4,625,956	10060.1%	52	7,456	750,105	10060.1%	1.4841	N/A	0.1660	N/A	0.834	0.815	4.48%	0.1622
	2060 2061	37,486 30,561	3,990,180 3,422,028	10644.5% 11197.4%	43 36	5,818 4,540	619,263 508,309	10644.5% 11197.4%	1.4841 1.4841	N/A N/A	0.1669 0.1722	N/A N/A	0.833 0.828	0.815 0.815		0.1552 0.1485
	2062	24,945	2,919,865 2,480,275	11705.1% 12159.3%	29	3,546 2,776	415,116	11705.1% 12159.3%	1.4841 1.4841	N/A N/A	0.1743 0.1764		0.826 0.824	0.816 0.818	4.48% 4.48%	0.1422 0.136
	2063 2064	20,398 16,724	2,093,960	12520.7%	24 20	2,178	337,496 272,709	12520.7%	1.4841	N/A	0.1757	N/A	0.824	0.820	4.48%	0.1302
	2065 2066	13,766 11,370	1,766,549 1,483,518	12832.5% 13047.4%	16 13	1,716 1,357	220,200 176,989	12832.5% 13047.4%	1.4841 1.4841	N/A N/A	0.1830 0.1786	N/A N/A	0.817 0.821	0.823 0.826	4.48% 4.48%	0.1240 0.1193
	2067	9,415	1,244,311	13216.1%	11	1,075	142,084	13216.1%	1.4841	N/A	0.1824	N/A	0.818	0.828	4.48%	0.1142
	2068 2069	7,812 6,493	1,040,456 872,537	13319.2% 13438.8%	9 7	854 679	113,711 91,269	13319.2% 13438.8%	1.4841 1.4841	N/A N/A	0.1846 0.1861	N/A N/A	0.815 0.814	0.830 0.831	4.48% 4.48%	0.1093 0.1046
	2070 2071	5,398 4,485	723,300 604,427	13400.6% 13475.6%	6	540 430	72,414 57,917	13400.6% 13475.6%	1.4841 1.4841	N/A N/A	0.1832 0.1838	N/A N/A	0.817 0.816	0.831 0.831	4.48% 4.48%	0.100 0.095
	2072	3,722	502,130	13491.6%	4	341	46,051	13491.6%	1.4841	N/A	0.1901	N/A	0.810	0.830	4.48%	0.091
	2073 2074	3,081 2,537	424,272 355,253	13770.2% 14004.6%	3 3	270 213	37,242 29,846	13770.2% 14004.6%	1.4841 1.4841	N/A N/A	0.1939 0.1835	N/A N/A	0.806 0.816	0.828 0.823	4.48% 4.48%	0.087 0.084
	2075	2,079	299,815	14419.4%	2	167	24,108	14419.4%	1.4841	N/A	0.2016	N/A	0.798	0.820	4.48%	0.080
	2076 2077	1,694 1,369	258,554 220,253	15261.3% 16088.6%	1	130 101	19,899 16,224	15261.3% 16088.6%	1.4841 1.4841	N/A N/A	0.1942 0.1867	N/A N/A	0.806 0.813	0.815 0.808	4.48% 4.48%	0.0770 0.0737
-	2078-2098	4,039	876,956	21710.5%	1	285	61,827	21710.5%	1.4841	N/A	0.1926	N/A	0.807	N/A	4.48%	0.070
- -	Past	87,094,879 84,870,543	10,516,489 496,337,046	12.1%	35,945	120,398,741	12,698,757	10.5%								
	Future	0.4.070 F.40	400 007 040	584.8%	40,601	56,496,111	192,201,472	340.2%								

Note

<sup>The premiums shown in this exhibit reflect prior rate inreases authorized by Maryland.
There were three prior authorized increases for a cumulative total of approximately 48.41%.</sup>

<sup>There were three prior authorized increases for a cumulative total of approximately 48.41%.
The projections are based on the assumptions derived using experience data through 6/30/2017.</sup>

Exhibit I-B

Metropolitan Life Insurance Company Maryland Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 15.00% Future Increase Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

	L		th and but	Loss Ra	tio Demonstr	ation	MPAL Inc.			ors Derived fro	om Projected Value			Only	Interest Ra	
}	Calendar	Earned	Incurred	Loss	Life	Earned	With Interest Incurred	Loss	Premium Rate Increase	Benefit	Policy	Persistency	Policy	Premium	Calendar Year Effective	Mid-Year Disc / Accum
	Year 1998	Premium -	Claims -	Ratio N/A	Years -	Premium -	Claims -	Ratio N/A	Factor	Downgrade	Lapse & Mortality	Shock Lapse	Persistency	Persistency	Int Rate 4.48%	Factor 2.3509
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.48% 4.48%	2.2501 2.1536
	2001	-	-	N/A	-	-	-	N/A							4.48%	2.0612
	2002 2003	- 388,547	-	N/A 0.0%	464	733,661	-	N/A 0.0%							4.48% 4.48%	1.9728 1.8882
Listorical	2004	2,277,982	-	0.0%	1,482	4,116,840	4.025	0.0%							4.48%	1.8072
Historical Experience	2005 2006	5,680,440 7,888,372	1,119 -	0.0% 0.0%	3,008 3,054	9,825,568 13,059,454	1,935 -	0.0% 0.0%							4.48% 4.48%	1.7297 1.6555
	2007 2008	7,680,649 7,514,752	- 577,139	0.0% 7.7%	2,949 2,868	12,170,195 11,396,624	- 875,270	0.0% 7.7%							4.48% 4.48%	1.5845 1.5166
	2009	7,334,661	1,102,579	15.0%	2,758	10,646,418	1,600,418	15.0%							4.48%	1.4515
	2010 2011	6,441,093 6,805,232	31,814 2,358,591	0.5% 34.7%	2,589 2,527	8,948,393 9,048,786	44,199 3,136,173	0.5% 34.7%							4.48% 4.48%	1.3893 1.3297
	2012	6,697,376	306,529	4.6%	2,458	8,523,422	390,105	4.6%							4.48%	1.2727
	2013 2014	6,598,497 6,230,249	731,075 549,225	11.1% 8.8%	2,418 2,380	8,037,413 7,263,378	890,499 640,300	11.1% 8.8%							4.48% 4.48%	1.2181 1.1658
	2015 2016	5,328,959 4,970,872	1,130,154 1,046,296	21.2% 21.0%	2,350 2,331	5,946,173 5,308,718	1,261,051 1,117,407	21.2% 21.0%							4.48% 4.48%	1.1158 1.0680
	2017	5,257,198	2,681,967	51.0%	2,309	5,373,699	2,741,401	51.0%							4.48%	1.0222
Projected Future	2018 2019	5,122,135 5,115,170	2,001,175 2,360,981	39.1% 46.2%	2,257 2,203	5,011,087 4,789,642	1,957,790 2,210,728	39.1% 46.2%	1.3192 1.3650	1.0000 1.0000	0.0224 0.0238	1.0000 1.0000	0.978 0.976		4.48% 4.48%	0.9783 0.9364
Experience	2020	5,387,854	2,772,548	51.5%	2,142	4,828,594	2,484,757	51.5%	1.4974	0.9982	0.0279	0.9973	0.972	0.964	4.48%	0.8962
	2021 2022	5,543,663 5,391,848	3,137,632 3,650,609	56.6% 67.7%	2,034 1,965	4,755,143 4,426,560	2,691,342 2,997,051	56.6% 67.7%	1.6688 1.7067	0.9822 0.9786	0.0504 0.0341	0.9733 0.9678	0.950 0.966	0.961 0.960	4.48% 4.48%	0.8578 0.8210
	2023	5,141,757	4,269,842	83.0%	1,905	4,040,194	3,355,077	83.0%	1.7067	0.9786	0.0305	0.9678	0.969	0.954	4.48%	0.7858
	2024 2025	4,903,947 4,668,103	4,972,507 5,755,184	101.4% 123.3%	1,842 1,778	3,688,064 3,360,122	3,739,625 4,142,608	101.4% 123.3%	1.7067 1.7067			0.9678 0.9678	0.967 0.965	0.954 0.952		
	2026 2027	4,434,781 4,189,949	6,612,099 7,533,756	149.1% 179.8%	1,712 1,644	3,055,264 2,762,786	4,555,288 4,967,639	149.1% 179.8%	1.7067 1.7067	0.9786 0.9786		0.9678 0.9678	0.963 0.960	0.950 0.945	4.48% 4.48%	0.6889 0.6594
	2028	3,942,650	8,516,142	216.0%	1,575	2,488,219	5,374,565	216.0%	1.7067	0.9786	0.0424	0.9678	0.958	0.941	4.48%	0.6311
	2029 2030	3,698,234 3,453,363	9,553,277 10,617,820	258.3% 307.5%	1,503 1,431	2,233,864 1,996,487	5,770,517 6,138,463	258.3% 307.5%	1.7067 1.7067	0.9786 0.9786	0.0453 0.0483	0.9678 0.9678	0.955 0.952	0.938 0.934	4.48% 4.48%	0.6040 0.5781
	2031	3,207,061	11,682,969	364.3%	1,357	1,774,571	6,464,567	364.3%	1.7067	0.9786	0.0515	0.9678	0.949	0.929	4.48%	0.5533
	2032 2033	2,964,997 2,730,564	12,743,145 13,766,513	429.8% 504.2%	1,283 1,208	1,570,263 1,384,084	6,748,773 6,978,050	429.8% 504.2%	1.7067 1.7067	0.9786 0.9786	0.0549 0.0584	0.9678 0.9678	0.945 0.942	0.925 0.921	4.48% 4.48%	0.5296 0.5069
	2034 2035	2,502,629 2,281,192	14,716,246 15,577,584	588.0% 682.9%	1,133 1,058	1,214,139 1,059,244	7,139,521 7,233,260	588.0% 682.9%	1.7067 1.7067	0.9786 0.9786	0.0621 0.0659	0.9678 0.9678	0.938 0.934	0.917 0.912	4.48% 4.48%	0.4851 0.4643
	2036	2,067,933	16,309,918	788.7%	984	919,036	7,248,493	788.7%	1.7067	0.9786	0.0699	0.9678	0.930	0.907	4.48%	0.4444
	2037 2038	1,863,992 1,670,411	16,921,983 17,368,622	907.8% 1039.8%	911 840	792,870 680,054	7,197,955 7,071,071	907.8% 1039.8%	1.7067 1.7067	0.9786 0.9786	0.0740 0.0781	0.9678 0.9678	0.926 0.922	0.901 0.896	4.48% 4.48%	0.4254 0.4071
	2039	1,488,348	17,663,652	1186.8%	771	579,944	6,882,754	1186.8%	1.7067	0.9786	0.0824	0.9678	0.918	0.891	4.48%	0.3897
	2040 2041	1,318,233 1,160,919	17,762,480 17,698,707	1347.4% 1524.5%	704 640	491,627 414,388	6,624,412 6,317,528	1347.4% 1524.5%	1.7067 1.7067	0.9786 0.9786	0.0868 0.0910	0.9678 0.9678	0.913 0.909	0.886 0.881	4.48% 4.48%	0.3729 0.3569
	2042 2043	1,016,455 884,778	17,483,571 17,124,847	1720.1% 1935.5%	579 521	347,261 289,310	5,973,072 5,599,590	1720.1% 1935.5%	1.7067 1.7067	0.9786 0.9786	0.0955 0.0998	0.9678 0.9678	0.904 0.900	0.876 0.870	4.48% 4.48%	0.3416 0.3270
	2044	765,797	16,603,989	2168.2%	467	239,665	5,196,416	2168.2%	1.7067	0.9786	0.1042	0.9678	0.896	0.866	4.48%	0.3130
	2045 2046	659,110 564,163	16,001,175 15,293,398	2427.7% 2710.8%	416 369	197,429 161,741	4,792,976 4,384,493	2427.7% 2710.8%	1.7067 1.7067	0.9786 0.9786	0.1087 0.1131	0.9678 0.9678	0.891 0.887	0.861 0.856	4.48% 4.48%	0.2995 0.2867
	2047	480,293	14,495,289	3018.0%	326	131,790	3,977,445	3018.0%	1.7067	0.9786	0.1174	0.9678	0.883	0.851	4.48%	0.2744
	2048 2049	406,896 343,044	13,650,712 12,749,697	3354.8% 3716.6%	286 250	106,862 86,228	3,585,045 3,204,801	3354.8% 3716.6%	1.7067 1.7067	0.9786 0.9786	0.1218 0.1260	0.9678 0.9678	0.878 0.874	0.847 0.843	4.48% 4.48%	0.2626 0.2514
	2050 2051	287,822 240,386	11,829,457 10,886,515	4110.0% 4528.8%	217 188	69,245 55,352	2,845,954 2,506,767	4110.0% 4528.8%	1.7067 1.7067	0.9786 0.9786	0.1303 0.1347	0.9678 0.9678	0.870 0.865	0.839 0.835	4.48% 4.48%	0.2406 0.2303
	2052	199,909	9,949,811	4977.2%	162	44,058	2,192,814	4977.2%	1.7067	0.9786	0.1387	0.9678	0.861	0.832	4.48%	0.2204
	2053 2054	165,566 136,568	9,054,746 8,167,362	5469.0% 5980.4%	139 118	34,924 27,572	1,909,964 1,648,894	5469.0% 5980.4%	1.7067 1.7067	0.9786 0.9786	0.1429 0.1470	0.9678 0.9678	0.857 0.853	0.828 0.825	4.48% 4.48%	0.2109 0.2019
	2055	112,280	7,313,268	6513.4%	101	21,696	1,413,137	6513.4%	1.7067	0.9786	0.1512	0.9678	0.849	0.822	4.48%	0.1932
	2056 2057	92,012 75,226	6,516,759 5,744,936	7082.5% 7636.9%	85 72	17,017 13,316	1,205,220 1,016,909	7082.5% 7636.9%	1.7067 1.7067	0.9786 0.9786	0.1547 0.1584	0.9678 0.9678	0.845 0.842	0.819 0.818		0.1849 0.1770
	2058 2059	61,418 50,083	5,032,989 4,381,192	8194.7% 8747.9%	60 50	10,405 8,121	852,677 710,416	8194.7% 8747.9%	1.7067 1.7067	0.9786 0.9786		0.9678 0.9678	0.837 0.834	0.816 0.815		0.1694 0.1622
	2060	40,828	3,779,056	9256.1%	42	6,336	586,497	9256.1%	1.7067	0.9786	0.1669	0.9678	0.833	0.815	4.48%	0.1552
	2061 2062	33,285 27,169	3,240,966 2,765,373	9736.9% 10178.3%	34 28	4,944 3,863	481,414 393,152	9736.9% 10178.3%	1.7067 1.7067	0.9786 0.9786			0.828 0.826	0.815 0.816	4.48% 4.48%	0.1485 0.1422
	2063	22,217	2,349,041	10573.3%	23	3,023	319,638	10573.3%	1.7067	0.9786	0.1764	0.9678	0.824	0.818	4.48%	0.1361
	2064 2065	18,215 14,994	1,983,167 1,673,080	10887.6% 11158.7%	19 16	2,372 1,869	258,279 208,549	10887.6% 11158.7%	1.7067 1.7067	0.9786 0.9786	0.1757 0.1830	0.9678 0.9678	0.824 0.817	0.820 0.823	4.48% 4.48%	0.1302 0.1246
	2066 2067	12,384 10,255	1,405,023 1,178,473	11345.6% 11492.2%	13 11	1,477 1,171	167,625 134,566	11345.6% 11492.2%	1.7067 1.7067	0.9786 0.9786	0.1786	0.9678 0.9678	0.821 0.818	0.826 0.828	4.48% 4.48%	0.1193 0.1142
	2068	8,508	985,405	11581.9%	9	930	107,694	11581.9%	1.7067	0.9786	0.1846	0.9678	0.815	0.830	4.48%	0.1093
	2069 2070	7,071 5,879	826,370 685,030	11685.9% 11652.7%	7 6	740 589	86,440 68,582	11685.9% 11652.7%	1.7067 1.7067	0.9786 0.9786	0.1861 0.1832	0.9678 0.9678	0.814 0.817	0.831 0.831	4.48% 4.48%	0.1046 0.1001
	2071	4,885	572,446	11717.9%	5	468	54,853	11717.9%	1.7067	0.9786	0.1838	0.9678	0.816	0.831	4.48%	0.0958
	2072 2073	4,054 3,356	475,561 401,824	11731.9% 11974.1%	4 3	372 295	43,615 35,271	11731.9% 11974.1%	1.7067 1.7067	0.9786 0.9786	0.1901 0.1939	0.9678 0.9678	0.810 0.806	0.830 0.828	4.48% 4.48%	0.0917 0.0878
	2074	2,763	336,457	12177.9%	2	232	28,267	12177.9%	1.7067	0.9786	0.1835	0.9678	0.816	0.823	4.48%	0.0840
	2075 2076	2,265 1,845	283,952 244,873	12538.6% 13270.7%	2 2	182 142	22,833 18,846	12538.6% 13270.7%	1.7067 1.7067		0.1942	0.9678	0.798 0.806	0.820 0.815	4.48% 4.48%	0.0804 0.0770
	2077 2078-2098	1,491 4,399	208,599 830,555	13990.1% 18878.7%	1	110 310	15,366 58,555	13990.1% 18878.7%	1.7067 1.7067	0.9786 0.9786		0.9678 0.9678	0.813 0.807	0.808 N/A		0.0737 0.0705
<u> </u>									1.1001	0.0700	1 0.1920	0.0010	0.007	14/ 🔨	I 7.70/0	0.0700
	Past Future	87,094,879 91,017,402	10,516,489 470,470,358	12.1% 516.9%	35,945 39,512	120,398,741 60,207,662	12,698,757 182,398,468	10.5% 302.9%								
	_ifetime	178,112,281	480,986,847	270.0%	75,457	180,606,403	195,097,226	108.0%								

⁻ The premiums shown in this exhibit reflect prior rate inreases authorized by Maryland.

⁻ There were three prior authorized increases for a cumulative total of approximately 48.41%.

<sup>The projections are based on the assumptions derived using experience data through 6/30/2017.
The current requested increase of 15.00% is assumed to be implemented starting 9/1/2020.</sup>

Exhibit II-B

Demonstration that Lifetime Incurred Claims with Requested Increase are Not Less than Lifetime Earned Premium with Prescribed Factors Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

Accumulated value of initial earned premium	112,819,283	х :	8%	=	65,435,184
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	120,398,741 7,579,458	8	5%	=	6,442,539
3 Present value of future projected initial earned premium	38,782,615	į	8%	=	22,493,917
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	60,207,662 21,425,047	8	5%	=	18,211,290
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b					112,582,930
6a Accumulated value of incurred claims without the inclusion of active life reserves 6b Present value of future projected incurred claims without the inclusion of active life reserves					12,698,757 182,398,468
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b					195,097,226
8 Test: 7 is not less than 5					TRUE

Attachment 1 Metropolitan Life Insurance Company Policy Forms: LTC-FAC, LTC-FAC-P, LTC-VAL, LTC-VAL-P, LTC-IDEAL, LTC-IDEAL-P and LTC-PREM Assumptions Summary

	Original Pricing Assumptions	Current Best Estimate Assumptions							
nterest Rate:	4.50%	Maximum valuation interest rate for contract reserves, which average to 4.48%							
Mortality:	1983 GAM Basic Mortality Table No Mortality Selection Factors were applied	88% of Annuity 2000 Basic table With Mortality Selection Factors of: Duration							
		10 95% 11+ 100%							
oluntary Lapse Rates:	Ssue Age Duration Up to age 65 65+	Duration Lapse Rate 1 5.00% 2 4.50% 3 4.00% 4 3.50% 5 2.50% 6 2.00% 7 1.80% 8 1.50% 9 1.30% 10 1.10% 11+ 0.90%							
orbidity:	Morbidity underwriting savings vary by duration. However, we do not have the actual rates.	Current IB block experience with morbidity U/W Selection Factors of:							
	Morbidity underwriting savings vary by duration. However, we do not have the actual rates.	Duration U/W Selection 1 64% 2 77% 3 100% 4+ 100%							
ncidence:	Incidence rates for nursing home care were based on a study published by the Society of Actuaries based on the 1985 NNHS with modifications.	Sample Ultimate Smoothed Incidence Rates (before gross-up to zero-day elimination) ³							
		Attained Male Female Age Facility Care Home Care Facility Care Home Care 81 1.19% 1.06% 1.65% 1.11% 82 1.40% 1.23% 1.99% 1.29% 83 1.64% 1.41% 2.36% 1.48% 84 1.90% 1.60% 2.78% 1.67% 85 2.18% 1.81% 3.24% 1.87%							
Continuance:	Continuance rates for nursing home care were based on a study published by the Society of Actuaries based on the 1985 NNHS with modifications.	Change In 2018, incidence curves were reshaped to better reflect the emerged experience over the years. In 2016, termination curves were constructed separately for deaths and recoveries, gender and care path. Coefficients to an exponential-shaped curve were based on experience adjusted to minimize differences between actual and expected terminations in total as well as at periodic duration points along the curves. Death and recovery termination rates were recombined into a single termination							
Itilization:	Home care prevalence rates were based on 1982-1984 National Long Term Care Surveys with modifications. Note that the actual utilization assumption at original pricing is not available.	table for modelling and valuation uses. Minor adjustments made to Male Facility and Male Home Care. Home Care Facility Care 61% 79%							

Attachment 2

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Actual to Expected Ratios

Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

		/ Projected Experi			ted Pricing Experie		
		erience through 12		•	d based on Origina	•	
	Projections ba	ased on Current A			ptions since incept		1
	A	В	C = B / A	D	E	F = E / D	G = C / F
D	Earned	Incurred	Loss	Earned	Incurred	Loss	Actual to
Duration	Premium	Claims	Ratio	Premium	Claims	Ratio	Expected Ratio
1	125,540,322	1,174,542	0.9%	125,540,322	1,267,885	1.0%	0.93
2	244,699,423	7,035,378	2.9%	244,699,423	3,696,883	1.5%	1.90
3 4	236,386,893 229,967,180	11,993,267	5.1% 4.8%	232,972,286	4,888,451	2.1% 3.0%	2.42 1.61
4 5	223,735,151	11,039,031 18,371,083	8.2%	223,906,563 216,263,107	6,659,966 8,251,864	3.0%	2.15
6	211,533,177	16,276,329	7.7%	208,380,618	10,503,107	5.0%	1.53
7	207,349,200	19,755,757	9.5%	200,376,883	12,501,435	6.2%	1.53
8	206,737,456	30,494,105	14.8%	192,421,465	14,029,617	7.3%	2.02
9	206,762,936	26,975,819	13.0%	184,577,681	17,320,353	9.4%	1.39
10	202,507,893	34,623,366	17.1%	176,859,078	19,480,459	11.0%	1.55
11	186,962,199	43,323,238	23.2%	124,406,207	21,661,575	17.4%	1.33
12	165,942,545	55,976,634	33.7%	117,316,251	24,395,834	20.8%	1.62
13	165,806,491	63,607,127	38.4%	110,373,107	27,505,903	24.9%	1.54
14	166,893,685	74,628,356	44.7%	103,601,476	33,974,872	32.8%	1.36
15	162,902,181	74,853,660	46.0%	97,043,608	38,220,703	39.4%	1.17
16	156,798,989	85,546,593	54.6%	90,641,069	44,808,235	49.4%	1.10
17	149,989,940	96,580,616	64.4%	84,415,785	50,307,126	59.6%	1.08
18	143,600,499	112,366,656	78.2%	78,544,271	56,308,184	71.7%	1.09
19	137,180,868	130,342,696	95.0%	72,895,927	66,551,959	91.3%	1.04
20	130,717,172	150,632,932	115.2%	67,477,925	73,685,897	109.2%	1.06
21	124,191,502	173,268,159	139.5%	62,300,755	86,483,723	138.8%	1.01
22	117,604,309	198,155,893	168.5%	57,387,584	95,075,411	165.7%	1.02
23	110,991,022	225,109,112	202.8%	52,659,469	104,231,457	197.9%	1.02
24	104,337,756	253,841,376	243.3%	48,138,010	123,372,899	256.3%	0.95
25	97,677,752	284,114,943	290.9%	43,863,210	133,657,864	304.7%	0.95
26	91,067,885	315,448,923	346.4%	39,812,164	145,743,514	366.1%	0.95
27	84,537,113	347,167,475	410.7%	35,985,515	155,140,691	431.1%	0.95
28	78,099,333	378,584,122	484.7%	32,405,107	164,308,228	507.0%	0.96
29	71,782,188	409,040,947	569.8%	29,068,291	174,284,217	599.6%	0.95
30	65,645,071	437,674,046	666.7%	25,958,408	181,809,668	700.4%	0.95
31	59,712,072	463,826,306	776.8%	23,074,914	223,338,340	967.9%	0.80
32	54,009,451	486,560,777	900.9%	20,418,661	230,762,457	1130.2%	0.80
33	48,569,448	505,272,128	1040.3%	17,987,115	235,701,767	1310.4%	0.79
34	43,418,282	519,433,048	1196.3%	15,764,869	239,730,121	1520.7%	0.79
35	38,580,410	528,466,801	1369.8%	13,737,793	237,092,261	1725.8%	0.79
36	34,071,261	532,254,871	1562.2%	11,913,075	234,095,309	1965.0%	0.79
37	29,903,290	530,873,820	1775.3%	10,270,778	226,540,335	2205.7%	0.80
38	26,081,699	524,347,080	2010.4%	8,800,775	214,913,458	2442.0%	0.82
39	22,605,324	513,098,798	2269.8%	7,497,327	201,667,949	2689.9%	0.84
40	19,468,004	497,625,899	2556.1%	6,353,364	192,315,249	3027.0%	0.84
41	16,660,827	478,419,577	2871.5%	5,351,201	211,984,517	3961.4%	0.72
42	14,168,850	455,877,971	3217.5%	4,474,900	201,247,474	4497.3%	0.72
43	11,975,669	430,596,331	3595.6%	3,722,374	189,374,870	5087.5%	0.71
44	10,060,895	403,279,526	4008.4%	3,081,607	176,719,524	5734.7%	0.70
45 46	8,401,720	374,661,292	4459.3%	2,540,107	163,139,660	6422.5%	0.69
46	6,974,907	345,413,857	4952.2%	2,085,557	147,656,797	7080.0%	0.70
47	5,757,452	316,037,546	5489.2%	1,706,844	133,872,972	7843.3%	0.70
48	4,725,755	286,892,861	6070.8%	1,393,347	119,397,015	8569.1%	0.71
49 50	3,857,665	258,601,962	6703.6%	1,135,181	106,008,404	9338.5%	0.72
50 51	3,132,115	231,377,204	7387.3%	924,024	96,087,824	10398.8%	0.71
51 52	2,530,279	205,589,315	8125.2%	750,722 287,721	87,095,640 37,240,899	11601.6%	0.70 0.69
52 53	2,034,458 1,628,643	181,308,307 158,817,466	8911.9% 9751.5%	287,721 110,271	37,240,899 15,923,697	12943.4% 14440.5%	0.69
53 54	1,298,762	138,248,233	10644.6%	42,262	6,808,754	16110.6%	0.66
54 55	1,031,998	119,638,126	11592.9%	42,262 16,197	2,911,330	17974.0%	0.66
56	817,373	102,971,840	12597.9%	6,208	1,244,845	20052.9%	0.64
56 57	645,441	88,126,371	13653.7%	2,379	532,278	20032.9%	0.63
58	508,239	74,971,583	14751.2%	912	227,595	24959.8%	0.59
59	399,141	63,496,834	15908.4%	349	97,316	27846.6%	0.59
60	312,744	53,556,944	17124.8%	134	41,611	31067.3%	0.55
	012,177	33,000,044	11 12 7.0 /0	107	71,011	0.007.070	0.00
fetime	5,081,290,300	13,957,644,856	274.7%	3,543,742,534	5,833,898,251	164.6%	1.67
ifatima*	2 881 823 270	3 222 354 910		2 263 500 186	1 426 645 637	63.0%	1 77

Lifetime* Note: 111.8%

2,881,823,270

3,222,354,910

2,263,599,186

1,426,645,637

63.0%

1.77

⁻ Figures in column A are normalized to reflect the prior rate action authorized by Maryland rather than the prior rate action approved by other states.

⁻ Figures in column D do not reflect any rate action.

^{*} Columns A and B are discounted back to the inception date at an interest rate of 4.48%, which is the weighted average maximum valuation interest rate for contract reserves. Columns D and E are discounted back to the inception date at the original pricing interest rate of 4.5%.

Attachment 3

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Actual to Expected Ratios

Policy Forms: LTC-FAC, LTC- VAL, LTC-IDEAL and LTC- PREM

			Projected Experie			xpected Pricing				ve Loss Ratio as of	
		A	B	C = B / A	D	E	F = E / D	G=C/F	H	<u> </u>	J = H / I
	Calendar	Earned	Incurred	Loss	Earned	Incurred	Loss	Actual to	Actual/Projected	Expected at 4.5%	Actual to
I Pata Zaal	Year	Premium	Claims	Ratio	Premium	Claims	Ratio	Expected Ratio	` ′	(on F)	Expected Ratio
Historical	2002	1,509,990	0	0.0%	1,509,990	15,250	1.0%	0.00	0.0%	1.0%	0.00
Experience	2003	22,717,279	173,039	0.8%	15,185,863	176,175	1.2%	0.66	0.7%	1.1%	0.62
	2004	84,549,231	1,165,913	1.4%	64,170,724	840,946	1.3%	1.05	1.2%	1.3%	0.96
	2005	189,377,165	6,727,005	3.6%	153,756,840	2,306,513	1.5%	2.37	2.7%	1.4%	1.88
	2006	237,139,037	9,147,328	3.9%	228,355,116	4,197,468	1.8%	2.10	3.2%	1.6%	1.96
	2007	232,250,395	15,954,639	6.9%	226,020,789	5,638,532	2.5%	2.75	4.2%	1.9%	2.24
	2008	226,734,335	15,104,879	6.7%	218,194,622	7,282,201	3.3%	2.00	4.7%	2.2%	2.14
	2009	220,281,395	18,639,466	8.5%	210,930,540	9,056,093	4.3%	1.97	5.4%	2.6%	2.08
	2010	212,251,681	21,759,404	10.3%	203,541,511	10,986,945	5.4%	1.90	6.0%	3.0%	2.03
	2011	223,191,306	24,126,933	10.8%	196,087,343	12,912,719	6.6%	1.64	6.6%	3.4%	1.95
	2012	217,286,403	26,819,664	12.3%	187,566,626	15,083,691	8.0%	1.53	7.1%	3.8%	1.88
	2013	209,279,626	31,748,173	15.2%	173,428,128	17,595,792	10.1%	1.50	7.8%	4.3%	1.82
	2014	188,906,020	42,645,062	22.6%	149,897,922	19,819,032	13.2%	1.71	8.8%	4.8%	1.83
	2015	159,728,244	53,385,283	33.4%	123,247,261	22,340,372	18.1%	1.84	10.0%	5.4%	1.86
	2016	147,766,667	66,430,512	45.0%	114,763,818	25,651,664	22.4%	2.01	11.6%	6.0%	1.91
	2017	153,703,477	75,879,441	49.4%	108,101,777	30,031,371	27.8%	1.78	13.1%	6.8%	1.94
Projected	2018	147,691,468	68,570,142	46.4%	101,591,664	35,369,794	34.8%	1.33	14.4%	7.6%	1.89
Experience	2019	146,997,601	79,900,582	54.4%	95,240,320	40,599,646	42.6%	1.28	15.7%	8.5%	1.86
·	2020	152,799,339	93,026,225	60.9%	89,056,959	46,538,390	52.3%	1.17	17.2%	9.4%	1.82
	2021	146,870,530	108,134,483	73.6%	83,095,985	52,851,206	63.6%	1.16	18.8%	10.5%	1.79
	2022	140,392,067	125,387,212	89.3%	77,391,689	60,511,072	78.2%	1.14	20.6%	11.6%	1.77
	2022	133,874,317	144,913,816	108.2%	71,899,517	69,629,764	96.8%	1.12	22.7%	12.9%	1.76
	2023	127,264,977	166,709,971	131.0%	66,625,054	79,021,308	118.6%	1.10	24.9%	14.3%	1.74
	2024	120,670,164	190,769,372	151.0%	61,572,027	89,566,586	145.5%	1.09	27.3%	15.8%	1.74
	2025	114,021,003	216,931,272	190.3%	56,727,930	100,053,732	176.4%	1.08	30.0%	17.4%	1.73
	2020	107,303,970	244,886,977	228.2%	52,073,632	112,915,389	216.8%	1.05	32.9%	19.1%	1.73
					1						
	2028	100,603,958	274,446,286	272.8%	47,629,009	127,155,168	267.0%	1.02	36.0%	21.0%	1.71
	2029	93,905,426	305,208,771	325.0%	43,406,849	138,337,935	318.7%	1.02	39.2%	22.9%	1.71
	2030	87,286,551	336,533,698	385.6%	39,403,809	149,060,892	378.3%	1.02	42.7%	24.9%	1.71
	2031	80,773,592	367,685,228	455.2%	35,628,611	158,748,597	445.6%	1.02	46.3%	27.0%	1.72
	2032	74,398,817	398,146,572	535.2%	32,089,520	169,033,291	526.8%	1.02	50.1%	29.0%	1.72
	2033	68,162,360	427,185,131	626.7%	28,781,717	183,052,998	636.0%	0.99	53.9%	31.2%	1.73
	2034	62,128,155	453,899,833	730.6%	25,699,230	203,086,313	790.2%	0.92	57.8%	33.5%	1.73
	2035	56,313,721	477,452,279	847.8%	22,842,554	225,122,718	985.5%	0.86	61.8%	35.9%	1.72
	2036	50,753,933	497,003,218	979.2%	20,210,113	232,727,004	1151.5%	0.85	65.7%	38.4%	1.71
	2037	45,484,184	512,601,585	1127.0%	17,794,572	236,720,159	1330.3%	0.85	69.6%	40.7%	1.71
	2038	40,511,584	523,376,772	1291.9%	15,585,623	237,690,541	1525.1%	0.85	73.4%	43.0%	1.71
	2039	35,865,930	528,659,755	1474.0%	13,577,059	234,837,662	1729.7%	0.85	77.1%	45.1%	1.71
	2040	31,559,999	528,810,652	1675.6%	11,763,760	229,266,393	1948.9%	0.86	80.7%	47.2%	1.71
	2041	27,600,142	523,985,137	1898.5%	10,133,189	220,048,708	2171.6%	0.87	84.0%	49.0%	1.71
	2042	23,985,688	514,310,773	2144.2%	8,677,410	209,557,492	2415.0%	0.89	87.2%	50.7%	1.72
	2043	20,715,386	500,421,843	2415.7%	7,388,638	203,228,900	2750.6%	0.88	90.1%	52.2%	1.73
	2044	17,779,153	482,563,020	2714.2%	6,255,016	204,430,922	3268.3%	0.83	92.9%	53.8%	1.73
	2045	15,163,976	461,443,818	3043.0%	5,262,181	207,200,848	3937.5%	0.77	95.4%	55.2%	1.73
	2046	12,855,503	437,345,721	3402.0%	4,399,838	197,137,728	4480.6%	0.76	97.7%	56.6%	1.73
	2047	10,832,839	411,081,278	3794.8%	3,660,232	184,895,392	5051.5%	0.75	99.7%	57.8%	1.73
	2047	9,074,330	383,222,808	4223.2%	3,031,208	171,604,817	5661.3%	0.75	101.5%	58.8%	1.73
	2049	7,557,069	354,479,464	4690.7%	2,500,124	157,343,425	6293.4%	0.75	103.2%	59.8%	1.73
	2050	6,257,350	325,452,774	5201.1%	2,054,851	142,672,980	6943.2%	0.75	104.6%	60.6%	1.73
	2051	5,152,562	296,477,883	5754.0%	1,684,074	128,607,097	7636.7%	0.75	105.8%	61.3%	1.73
	2052	4,219,448	268,222,238	6356.8%	1,377,176	115,189,358	8364.2%	0.76	106.9%	61.9%	1.73
	2053	3,436,927	240,906,255	7009.3%	1,115,548	102,562,343	9193.9%	0.76	107.9%	62.4%	1.73
	2054	2,785,196	214,763,999	7710.9%	851,785	86,140,794	10113.0%	0.76	108.7%	62.8%	1.73
	2055	2,246,371	190,173,493	8465.8%	540,839	59,621,692	11023.9%	0.77	109.3%	63.1%	1.73
	2056	1,803,470	167,155,158	9268.5%	224,382	27,337,810	12183.6%	0.76	109.9%	63.2%	1.74
	2057	1,442,218	146,045,903	10126.5%	86,231	11,721,071	13592.6%	0.74	110.4%	63.2%	1.75
	2058	1,149,423	126,783,789	11030.2%	33,138	5,025,221	15164.7%	0.73	110.8%	63.3%	1.75
	2059	913,050	109,461,643	11988.6%	12,734	2,154,483	16918.7%	0.71	111.1%	63.3%	1.76
	2060	723,108	93,995,299	12998.8%	4,894	923,700	18875.5%	0.69	111.4%	63.3%	1.76
	2061	571,051	80,246,289	14052.4%	1,881	396,021	21058.7%	0.67	111.6%	63.3%	1.76
	2062	449,858	68,161,186	15151.7%	723	169,788	23494.3%	0.64	111.8%	63.3%	1.77
	2063	353,534	57,651,649	16307.3%	278	72,794	26211.7%	0.62	111.9%	63.3%	1.77
	2064	277,331	48,551,636	17506.7%	107	31,209	29243.3%	0.60	112.0%	63.3%	1.77
	2065	217,177	40,732,692	18755.5%	41	13,380	32625.6%	0.57	112.1%	63.3%	1.77
	2066	169,781	33,987,021	20018.2%	16	5,737	36399.1%	0.55	112.2%	63.3%	1.77
	2067	132,475	28,243,797	21320.1%	6	2,459	40609.0%	0.53	112.3%	63.3%	1.77
	2068	103,172	23,345,478	22627.6%	2	1,054	45305.8%	0.50	112.3%	63.3%	1.77
	2069	80,172	19,205,546	23955.5%	1	452	50545.9%	0.47	112.3%	63.3%	1.78
,	2070	62,154	15,722,156	25295.6%	0	194	56392.1%	0.45	112.4%	63.3%	1.78
	2070				•	•					
	Past	2,726,672,250	409,706,741	15.0%	2,374,758,871	183,934,765	7.7%	1.94	13.1%	6.8%	1.94

Note

Lifetime

2,343,743,557

5,070,415,808

3,543,742,617 5,833,929,189

5,649,994,424

164.6%

1.21

1.69

112.4%

289.9%

63.0%

1.78

1,168,983,745

586.0%

279.0%

13,734,379,576

14,144,086,317

⁻ Figures in column A are normalized to reflect the prior rate action authorized by Maryland rather than the prior rate action approved by other states. - Figures in column D do not reflect any rate action.

Attachment 4
Metropolitan Life Insurance Company
Actual to Expected Lapse/Mortality
Individual Business

	La	ıpse	
Policy			
Duration	Actual	Expected *	A/E%
1	10,950	12,042	90.93%
2	13,842	10,123	136.73%
3	9,571	8,558	111.83%
4	6,947	7,167	96.92%
5	5,555	4,621	120.22%
6	3,723	3,359	110.82%
7	2,835	2,838	99.88%
8	2,094	2,165	96.73%
9	1,647	1,644	100.18%
10+	3,441	4,031	85.35%

	Mortality											
Policy Duration	Actual	Expected *	A/E%									
1	536	541	99.05%									
2	924	1,129	81.85%									
3	1,110	1,318	84.25%									
4	1,316	1,663	79.11%									
5	1,532	1,922	79.72%									
6	1,703	2,213	76.97%									
7	1,903	2,520	75.52%									
8	2,125	2,801	75.86%									
9	2,218	3,068	72.30%									
10	2,416	3,259	74.13%									
11	2,462	3,388	72.67%									
12	2,476	3,260	75.95%									
13	2,305	2,836	81.28%									
14+	6,736	7,196	93.61%									

^{*} The expecteds are based on current best estimate assumptions.

Attachment 4
Metropolitan Life Insurance Company
Actual to Expected Incidence
Individual Business

	Female						Male					
	Facility Care			Home Care			Facility Care			Home Care		
Attained Age	Actual Claims ¹	Expected Claims ²	A/E%	Actual Claims ¹	Expected Claims ²	A/E%	Actual Claims ¹	Expected Claims ²	A/E%	Actual Claims ¹	Expected Claims ²	A/E%
under 50	0	11	0%	7	13	56%	5	6	90%	6	8	72%
50 to 54	5	20	25%	15	27	56%	2	10	20%	14	17	84%
55 to 59	21	53	40%	71	75	94%	17	26	66%	46	48	96%
60 to 64	73	101	73%	148	157	94%	36	52	70%	97	108	89%
65 to 69	152	140	109%	220	213	104%	101	87	116%	173	163	106%
70 to 74	308	263	117%	261	251	104%	173	171	101%	234	218	107%
75 to 79	433	418	104%	320	328	97%	244	231	106%	225	239	94%
80 to 84	476	500	95%	299	315	95%	192	202	95%	173	175	99%
85 to 89	354	363	97%	183	181	101%	106	103	103%	81	79	102%
over 89	125	124	101%	65	48	135%	36	25	145%	21	17	121%
Total	1,947	1,991	98%	1,589	1,609	99%	912	912	100%	1,070	1,072	100%

¹ Based on actual experience through 6/30/2017 including adjustments for incurred but not reported claims.

² The expected claims are based on current best estimate assumptions.

Attachment 4
Metropolitan Life Insurance Company
Actual to Expected Claim Termination
All Business (exclude AARP-Pru)

Claim Duration (Months)	Actual Deaths	Expected Deaths ¹	Actual Recoveries	Expected Recoveries ¹	Deaths A/E%	Recoveries A/E%	Total A/E%
1	881	542	64	85	163%	76%	151%
2	766	1,329	163	260	58%	63%	58%
3	822	1,155	251	247	71%	102%	77%
4	928	1,272	324	281	73%	115%	81%
5	926	1,047	288	230	88%	125%	95%
6	806	916	212	199	88%	106%	91%
7	703	760	193	164	93%	118%	97%
8	631	654	143	136	96%	105%	98%
9	613	575	123	114	107%	108%	107%
10	541	519	120	97	104%	124%	107%
11	491	478	91	84	103%	108%	104%
12	536	449	87	74	119%	118%	119%
13	442	423	78	66	104%	118%	106%
14+	13,138	11,830	1,272	1,427	111%	89%	109%
Total	22,224	21,949	3,409	3,461	101%	98%	101%

¹ The expected deaths and recoveries are based on current best estimate assumptions.