

#### Mark D. Newton, FSA, MAAA

August 18, 2019

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

#### Re: LTC2-FAC-MD, LTC2-VAL-MD, LTC2-IDEAL-MD, LTC2-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")	
	• <i>Nationwide</i> experience	
	• Without/with proposed rate increase of 15.00%	
	• Weighted average statutory rate 4.02%	
	LLR without rate increase – 108.3%	
	LLR with rate increase – 99.8%	
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 4.02%	
	LLR without rate increase – 109.3%	
	LLR with rate increase – 100.7%	
Exhibit II-B	Demonstration of rate action meeting Rate Stability	
	(58/85) limitations	

<b>Review of Prior Correspondence</b>	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 Dlbuton

Mark D. Newton, FSA, MAAA Actuarial Director, Metropolitan Life Insurance Company

### New York, NY

#### **Actuarial Memorandum for VIP2 Series**

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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:

- LTC2-FAC-MD
- LTC2-VAL-MD
- LTC2-IDEAL-MD
- LTC2-PREM-MD

These forms were developed as part of a nationwide series and were issued in Maryland from March 2005 to July 2009, but are no longer being marketed in any state. Nationwide, the last policies under this series were issued in 2010.

Policy forms LTC2-FAC-MD, LTC2-VAL-MD, LTC2-IDEAL-MD, and LTC2-PREM-MD (subsequently referred to as LTC2-FAC, LTC2-VAL, LTC2-IDEAL, and LTC2-PREM, respectively) are existing individual tax-qualified policy forms and were previously approved in 2005, along with any rider or endorsement forms that were contemporaneously or subsequently approved for use with these policy forms. Note, however, that the increase will only apply to those policies issued to policyholders in your state in connection with policy applications dated on or before January 15, 2009, because policies issued in connection with later applications were subject to a revised premium rate schedule.

Policy form LTC2-FAC provides coverage for long-term care services received in a nursing home, assisted living facility (ALF), or hospice facility. Policy forms LTC2-VAL, LTC2-IDEAL and LTC2-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>LTC2-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, LTC2-FAC provides benefits for international coverage, caregiver training, and alternate services.

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<u>LTC2-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.

LTC2-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, LTC2-VAL provides benefits for respite care, international coverage, caregiver training, and alternate services.

<u>LTC2-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.

LTC2-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, LTC2-IDEAL provides benefits for respite care, international coverage, caregiver training, alternate services, and supportive services/specialized transportation.

<u>LTC2-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.

LTC2-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 also provided.

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#### LTC2-FAC, LTC2-VAL, LTC2-IDEAL, and LTC2-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 LTC2-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 Elimination Period Waiver Rider (except LTC2-PREM), Indemnity Rider (LTC2-VAL only), Calendar Day Elimination Period Rider (except LTC2-FAC and LTC2-PREM), Ten Year Premium Payment Rider, (except LTC2-FAC and LTC2-PREM), Paid-up Rider, Double Pay First Year Rider or Reduced Pay at 65 Rider. A Contingent Benefits Upon Lapse Rider is attached to all policies, except those that select the Nonforfeiture Coverage Rider, for no additional premium.

#### 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. Note, however, that the increase will only apply to those policies issued to policyholders in your state in connection with policy applications dated on or before January 15, 2009, because policies issued in connection with later applications were subject to a revised premium rate schedule.

#### 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:

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%

#### Voluntary Termination Rates

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	<b>Modal Factors</b>
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 LTC2-FAC, LTC2-VAL, LTC2-IDEAL, and LTC2-PREM are shown in Exhibit I-A and 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 4.02%. 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 4.02%.

#### **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 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 4.02%.

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 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 %	<b>Authorization Date</b>	Implementation Date
1	15.00%	3/5/2014	8/1/2014
2	15.00%	5/4/2016	9/1/2016
3	12.50%	11/15/2018	5/1/2019

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 actual rates implemented may vary slightly from those filed due to implementation rounding algorithms. Also note that the increase will only apply to those policies issued to policyholders in your state in connection with policy applications dated on or before January 15, 2009, because policies issued in connection with later applications were subject to a revised premium rate schedule.

#### **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 continuance rates: The basis for the morbidity assumptions used in pricing was that contained in the SOA LTC valuation diskette. These were based on the results of the 1985 National Nursing Home Survey and the 1982-84 National Long Term Care Survey.

Modifications to the SOA LTC valuation assumptions were made based on the actual experience of MetLife's block of business. Additional modifications were made based on the results of an internal analysis of MetLife's Competitors' Rate Structure.

The additional modification was required due to the make-up of MetLife's block of business, which consisted of two large blocks of group business (Employer Group and Association Group). This business was issued under drastically different underwriting requirements than those that are used to issue business under this policy form.

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

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Policy Duration	Lapse Rate
1	6.25%
2	3.50%
3-7	3.00%
8	2.50%
9	2.25%
10-12	2.00%
13-14	1.75%
15+	1.50%

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c. The original pricing expected mortality rates were equal to 105% of the Annuity 2000 Basic Mortality Table modified by Projection Scale H. There were additional modifications to reflect the selection effects of underwriting.

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 have been relied upon by the actuary in the development of this memorandum.

#### **19. Loss Ratio Requirement Compliance Demonstration**

Projected experience assuming the increase is implemented 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:

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Before increase:	\$2,826
After prior authorized 12.50% increase:	\$3,180
After current requested 15.00% increase:	\$3,657

#### 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)

Issue Age	%
<45	8%
45-49	9%
50-54	19%
55-59	28%
60-64	23%
65-69	10%
70-74	3%
75+	1%
Total	100%

#### By Issue Age

#### By Benefit Period

Benefit Period	%
2 Year	12%
3 Year	32%
4 Year	16%
5 Year	25%
7 Year	3%
Lifetime	11%
Total	100%

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### By Inflation Type

Inflation Type	%
Compound 3%	0%
Compound 5%	48%
Simple 5%	36%
FPO	5%
None	11%
Total	100%

### By Home Care Percentage

Home Care Percentage	%
None (FC only)	1%
50%	4%
75%	4%
100%	90%
Total	100%

## By Gender

Gender	%
Female	58%
Male	42%
Total	100%

### **By Premium Payment Option**

Payment Option	%
Double Pay	1%
Paid - Up	0%
Reduced Pay	1%
Standard	97%
Ten Year	1%
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	-	-	1,195	\$3,377,283			

#### 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.

I hereby certify that, to the best of my knowledge and judgment, this rate submission is in compliance with the applicable laws and regulations of Maryland.

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.

New York, NY

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Mark D leuton\_

Mark D. Newton, FSA, MAAA Actuarial Director, Metropolitan Life Insurance Company

		Loss Ratio Demonstration					Fact	ors Derived fro	om Projected Value	s for Illustrat	ive Purposes O	Only	Interest Ra	te Factors		
	Ostastas		lithout Interest				With Interest	1	Premium			Persistency	Factors		Calendar Year	Mid-Year
	Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency	Effective Int Rate	Disc / Accum Factor
	1998	-	-	N/A	-	-	-	N/A						·	4.02%	
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	2.0732 1.9930
	2001	-	-	N/A	-	-	-	N/A							4.02%	1.9160
	2002 2003	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	1.8420 1.7708
	2003	-	-	N/A	-	-	-	N/A							4.02%	1.7024
Historical	2005	2,359,204	-	0.0%	4,073	3,861,054	-	0.0%							4.02%	1.6366
Experience	2006 2007	31,432,207 84,063,648	939,324 1,065,734	3.0% 1.3%	24,490 48,807	49,453,847 127,150,538	1,477,885 1,611,976	3.0% 1.3%							4.02% 4.02%	1.5733 1.5126
	2008	143,533,823	3,306,789	2.3%	74,322	208,712,753	4,808,407	2.3%							4.02%	1.4541
	2009 2010	181,540,498 182,330,816	5,010,427 6,345,007	2.8% 3.5%	79,892 77,056	253,777,446 245,032,866	7,004,130 8,527,003	2.8% 3.5%							4.02% 4.02%	1.3979 1.3439
	2010	175,197,106	7,950,151	4.5%	73,652	226,347,633	10,271,276	4.5%							4.02%	1.2920
	2012 2013	169,491,317	14,345,981	8.5% 7.0%	69,694	210,514,128	17,818,209	8.5% 7.0%							4.02% 4.02%	1.2420 1.1940
	2013	163,498,609 161,094,334	11,415,541 15,053,062	9.3%	67,889 66,808	195,223,737 184,919,874	13,630,602 17,279,381	9.3%							4.02%	1.1940
	2015	168,149,560	19,955,661	11.9%	65,567	185,559,769	22,021,871	11.9%							4.02%	1.1035
	2016 2017	162,660,239 166,954,928	26,045,305 31,108,166	16.0% 18.6%	64,452 63,481	172,565,613 170,277,341	27,631,362 31,727,221	16.0% 18.6%							4.02% 4.02%	1.0609 1.0199
Projected	2018	160,131,493	35,018,100	21.9%	62,105	157,007,043	34,334,834	21.9%	1.3225	N/A	0.0217	N/A		0.941	4.02%	0.9805
Future Experience	2019 2020	156,798,048 164,045,105	41,251,801 48,535,816	26.3% 29.6%	60,718 59,290	147,797,742 148,653,517	38,883,921 43,981,926	26.3% 29.6%	1.3684 1.4826	N/A N/A	0.0223 0.0235	N/A N/A		0.946 0.966		
	2020	159,356,955	48,535,816 57,084,220	29.6% 35.8%	59,290 57,815	138,825,005	43,981,926 49,729,346	29.6% 35.8%	1.4878	N/A N/A	0.0235	N/A N/A		0.968		
	2022	153,967,651	67,112,266	43.6%	56,289	128,946,906	56,206,086	43.6%	1.4878	N/A	0.0264	N/A		0.966		0.8375
	2023 2024	148,429,802 142,735,484	78,791,366 92,206,915	53.1% 64.6%	54,712 53,082	119,505,341 110,479,811	63,437,321 71,369,798	53.1% 64.6%	1.4878 1.4878	N/A N/A	0.0280 0.0298	N/A N/A		0.964 0.962	4.02% 4.02%	0.8051 0.7740
	2025	136,910,520	107,440,420	78.5%	51,400	101,876,158	79,947,232	78.5%	1.4878	N/A	0.0317	N/A	0.968	0.959	4.02%	0.7441
	2026 2027	131,003,613 124,975,425	124,531,693 143,435,581	95.1% 114.8%	49,665 47,878	93,713,849 85,946,835	89,084,140 98,642,066	95.1% 114.8%	1.4878 1.4878	N/A N/A	0.0338 0.0360	N/A N/A		0.957 0.954	4.02% 4.02%	
	2028	118,811,931	164,053,075	138.1%	46,042	78,550,705	108,461,200	138.1%	1.4878	N/A	0.0383	N/A		0.951	4.02%	
	2029	112,551,861	186,218,028	165.5%	44,160	71,536,465	118,357,700	165.5%	1.4878	N/A	0.0409	N/A		0.947		
	2030 2031	106,238,580 99,871,471	209,672,833 234,065,752	197.4% 234.4%	42,235 40,274	64,914,515 58,665,905	128,115,514 137,493,510	197.4% 234.4%	1.4878 1.4878	N/A N/A	0.0436 0.0465	N/A N/A		0.944 0.940	4.02% 4.02%	
	2032	93,473,270	259,017,370	277.1%	38,280	52,785,729	146,270,915	277.1%	1.4878	N/A	0.0495	N/A	0.951	0.936	4.02%	0.5647
	2033 2034	87,110,795 80,806,572	284,044,577 308,354,647	326.1% 381.6%	36,263 34,231	47,291,799 42,174,050	154,205,675 160,934,486	326.1% 381.6%	1.4878 1.4878	N/A N/A	0.0527 0.0561	N/A N/A		0.932 0.928		
	2035	74,569,833	331,153,212	444.1%	32,191	37,415,069	166,154,595	444.1%	1.4878	N/A	0.0596	N/A		0.923		
	2036	68,472,307	351,944,958	514.0%	30,156	33,028,064	169,762,944	514.0%	1.4878 1.4878	N/A	0.0632	N/A N/A		0.918	4.02%	0.4824 0.4637
	2037 2038	62,560,671 56,856,260	370,562,230 385,986,942	592.3% 678.9%	28,134 26,139	29,010,440 25,346,381	171,835,965 172,072,034	592.3% 678.9%	1.4878	N/A N/A	0.0670 0.0709	N/A		0.914 0.909	4.02% 4.02%	
	2039	51,383,622	397,487,723	773.6%	24,181	22,021,513	170,351,578	773.6%	1.4878	N/A	0.0749	N/A		0.904	4.02%	0.4286
	2040 2041	46,179,954 41,276,504	404,889,048 408,195,862	876.8% 988.9%	22,271 20,420	19,026,579 16,349,139	166,818,126 161,681,590	876.8% 988.9%	1.4878 1.4878	N/A N/A	0.0790 0.0831	N/A N/A		0.899 0.894	4.02% 4.02%	
	2042	36,687,887	407,534,875	1110.8%	18,638	13,970,098	155,182,062	1110.8%	1.4878	N/A	0.0872	N/A		0.889		
	2043 2044	32,429,359 28,501,091	403,019,499 394,656,776	1242.8% 1384.7%	16,935 15,317	11,871,343 10,030,157	147,532,452 138,888,354	1242.8% 1384.7%	1.4878 1.4878	N/A N/A	0.0914 0.0955	N/A N/A		0.884 0.879	4.02% 4.02%	
	2044	24,911,741	382,834,207	1536.8%	13,791	8,428,205	129,521,471	1536.8%	1.4878	N/A	0.0996	N/A		0.879	4.02%	0.3383
	2046	21,656,518	368,124,418	1699.8%	12,362	7,043,758	119,732,051	1699.8%	1.4878	N/A	0.1037	N/A		0.869		
	2047 2048	18,729,687 16,115,024	350,877,570 331,633,984	1873.4% 2057.9%	11,031 9,802	5,856,405 4,844,135	109,712,514 99,688,338	1873.4% 2057.9%	1.4878 1.4878	N/A N/A	0.1076 0.1115	N/A N/A		0.865 0.860		
	2049	13,795,046	310,767,653	2252.7%	8,672	3,986,513	89,806,113	2252.7%	1.4878	N/A	0.1153	N/A	0.885	0.856	4.02%	0.2890
	2050 2051	11,751,164 9,964,598	288,812,924 266,469,267	2457.7% 2674.2%	7,641 6,705	3,264,643 2,661,334	80,236,408 71,168,325	2457.7% 2674.2%	1.4878 1.4878	N/A N/A	0.1189 0.1225	N/A N/A		0.852 0.848		
	2052	8,412,273	244,064,883	2901.3%	5,861	2,159,920	62,665,669	2901.3%	1.4878	N/A	0.1260	N/A		0.844		
	2053	7,071,464	221,945,962	3138.6%	5,103	1,745,495	54,784,335	3138.6%	1.4878	N/A	0.1292	N/A		0.841		
	2054 2055	5,920,612 4,938,644	200,498,000 179,858,788	3386.4% 3641.9%	4,429 3,831	1,404,949 1,126,643	47,577,756 41,030,834	3386.4% 3641.9%	1.4878 1.4878	N/A N/A	0.1322 0.1349	N/A N/A		0.837 0.834	4.02% 4.02%	0.2373 0.2281
	2056	4,104,985	160,395,684	3907.3%	3,303	900,275	35,176,783	3907.3%	1.4878	N/A	0.1378	N/A	0.862	0.831	4.02%	0.2193
	2057 2058	3,401,917 2,811,843	142,442,708 125,817,893	4187.1% 4474.6%	2,838 2,433	717,252 569,933	30,032,289 25,502,067	4187.1% 4474.6%	1.4878 1.4878	N/A N/A	0.1409 0.1427	N/A N/A		0.829 0.827		
	2059	2,318,609	110,664,570		2,081	451,799	21,563,852	4772.9%	1.4878	N/A	0.1446	N/A		0.825		
	2060	1,907,684	96,961,359	5082.7%	1,777	357,363	18,163,569	5082.7%	1.4878	N/A	0.1462	N/A		0.823		
	2061 2062	1,566,103 1,283,232	84,650,074 73,676,820	5405.1% 5741.5%	1,514 1,287	282,038 222,166	15,244,550 12,755,659	5405.1% 5741.5%	1.4878 1.4878	N/A N/A	0.1483 0.1495	N/A N/A		0.821 0.819	4.02% 4.02%	0.1801 0.1731
	2063	1,049,630	64,034,887	6100.7%	1,093	174,700	10,657,944	6100.7%	1.4878	N/A	0.1514	N/A	0.849	0.818	4.02%	0.1664
	2064 2065	857,033 698,720	55,513,985 48,008,447	6477.5% 6870.9%	926 784	137,132 107,480	8,882,679 7,384,889	6477.5% 6870.9%	1.4878 1.4878	N/A N/A	0.1522 0.1537	N/A N/A		0.817 0.815	4.02% 4.02%	0.1600 0.1538
	2066	568,754	41,518,512	7299.9%	662	84,108	6,139,781	7299.9%	1.4878	N/A	0.1551	N/A	0.845	0.814	4.02%	0.1479
	2067 2068	462,168 374,946	35,856,686 30,922,398	7758.4% 8247.2%	558 470	65,705 51,245	5,097,603 4,226,236	7758.4% 8247.2%	1.4878 1.4878	N/A N/A	0.1567 0.1580	N/A N/A		0.813 0.811	4.02% 4.02%	0.1422 0.1367
	2068	303,495	26,593,706	8762.5%	395	39,876	4,220,230 3,494,172	8762.5%	1.4878	N/A N/A	0.1580	N/A		0.811		0.1307
	2070	245,044	22,837,616	9319.8%	331	30,952	2,884,702	9319.8%	1.4878	N/A	0.1619	N/A		0.807		0.1263
	2071 2072	197,292 158,387	19,581,968 16,732,604	9925.4% 10564.4%	277 231	23,958 18,490	2,377,887 1,953,364	9925.4% 10564.4%	1.4878 1.4878	N/A N/A	0.1644 0.1664	N/A N/A		0.805 0.803		0.1214 0.1167
	2073	126,739	14,304,584	11286.6%	191	14,224	1,605,387	11286.6%	1.4878	N/A	0.1704	N/A	0.830	0.800	4.02%	0.1122
	2074 2075	101,043 80,208	12,171,880 10,336,889	12046.2% 12887.6%	158 130	10,902 8,319	1,313,248 1,072,170	12046.2% 12887.6%	1.4878 1.4878	N/A N/A	0.1733 0.1771	N/A N/A		0.797 0.794		0.1079 0.1037
	2076	63,384	8,761,181	13822.4%	107	6,320	873,618	13822.4%	1.4878	N/A N/A	0.1798	N/A		0.794		0.1037
	2077	49,860	7,411,298		87 70	4,780	710,457	14864.1%	1.4878 1.4878	N/A	0.1869	N/A		0.787 N/A		1
	2078-2098	142,948	28,781,751	20134.4%	70	13,174	2,652,439	20134.4%	1.48/8	N/A	0.1888	N/A	0.811	N/A	4.02%	0.0922
	Past Futuro	1,792,306,288	142,541,148	8.0%	780,183	2,233,396,598	163,809,324	7.3%								
	Future Lifetime	2,842,276,861 4,634,583,149	10,680,130,742 10,822,671,890	375.8% 233.5%	1,179,756 1,959,939	1,913,554,348 4,146,950,946	4,325,424,533 4,489,233,857	226.0% 108.3%								
Note:		. ,,	. ,- ,•			. , ,	. ,,	/	•							

- 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 48.78%.

- 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) Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2-PREM

				Loss Ra	atio Demonstr	ation			Fact	ors Derived fr	om Projected Value	es for Illustrati	ve Purposes O	only	Interest Ra	te Factors
	Colondor		/ithout Interest			Earned	With Interest	1.000	Premium			Persistency	Factors	-	Calendar Year	Mid-Year
	Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Life Years	Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency	Effective Int Rate	Disc / Accum Factor
	1998 1999	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	2.1565 2.0732
	2000	-	-	N/A	-	-	-	N/A							4.02%	1.9930
	2001 2002	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	1.9160 1.8420
	2003	-	-	N/A	-	-	-	N/A							4.02%	1.7708
Historical	2004 2005	- 2,359,204	-	N/A 0.0%	- 4,073	- 3,861,054	-	N/A 0.0%							4.02% 4.02%	1.7024 1.6366
Experience	2006	31,432,207	939,324	3.0%	24,490	49,453,847	1,477,885	3.0%							4.02%	1.5733
	2007 2008	84,063,648 143,533,823	1,065,734 3,306,789	1.3% 2.3%	48,807 74,322	127,150,538 208,712,753		1.3% 2.3%							4.02% 4.02%	1.5126 1.4541
	2009	181,540,498	5,010,427	2.8%	79,892	253,777,446	7,004,130	2.8%							4.02%	1.3979
	2010 2011	182,330,816 175,197,106	6,345,007 7,950,151	3.5% 4.5%	77,056 73,652	245,032,866 226,347,633		3.5% 4.5%							4.02% 4.02%	1.3439 1.2920
	2012	169,491,317	14,345,981	8.5%	69,694	210,514,128	17,818,209	8.5%							4.02%	1.2420
	2013 2014	163,498,609 161,094,334	11,415,541 15,053,062	7.0% 9.3%	67,889 66,808	195,223,737 184,919,874	13,630,602 17,279,381	7.0% 9.3%							4.02% 4.02%	1.1940 1.1479
	2015	168,149,560	19,955,661	11.9%	65,567	185,559,769	22,021,871	11.9%							4.02%	1.1035
	2016 2017	162,660,239 166,954,928	26,045,305 31,108,166	16.0% 18.6%	64,452 63,481	172,565,613 170,277,341	27,631,362 31,727,221	16.0% 18.6%							4.02% 4.02%	1.0609 1.0199
Projected	2018	160,131,493	35,018,100	21.9%	62,105	157,007,043	34,334,834	21.9%	1.3225	1.0000	0.0217	1.0000		0.941	4.02%	0.9805
Future Experience	2019 2020	156,798,048 165,354,570	41,251,801 48,319,255	26.3% 29.2%	60,718 59,131	147,797,742 149,840,120		26.3% 29.2%	1.3684 1.5012	1.0000 0.9982	0.0223 0.0261	1.0000 0.9973	0.978 0.974	0.946 0.966		0.9426 0.9062
	2021	171,307,982	54,572,171	31.9%	56,270	149,236,232	47,540,956	31.9%	1.6730	0.9822	0.0484	0.9733	0.952	0.968	4.02%	0.8712
	2022 2023	167,694,243 161,662,681	63,561,294 74,622,443	37.9% 46.2%	54,477 52,950	140,442,837 130,159,534	53,232,170 60,080,794	37.9% 46.2%	1.7110 1.7110		0.0319 0.0280	0.9678 0.9678	0.968 0.972	0.966 0.964		0.8375 0.8051
	2024	155,460,701	87,328,163	56.2%	51,373	120,329,356	67,593,556	56.2%	1.7110	0.9786	0.0298	0.9678	0.970	0.962	4.02%	0.7740
	2025 2026	149,116,427 142,682,905	101,755,649 117,942,606	68.2% 82.7%	49,745 48,065	110,958,666 102,068,667	75,717,151 84,370,616	68.2% 82.7%	1.7110 1.7110	0.9786 0.9786	0.0317 0.0338	0.9678 0.9678	0.968 0.966	0.959 0.957	4.02% 4.02%	0.7441 0.7154
	2027	136,117,290	135,846,272	99.8%	46,336	93,609,205	93,422,824	99.8%	1.7110	0.9786	0.0360	0.9678	0.964	0.954	4.02%	0.6877
	2028 2029	129,404,305 122,586,135	155,372,876 176,365,060	120.1% 143.9%	44,559 42,738	85,553,692 77,914,116	102,722,418 112,095,285	120.1% 143.9%	1.7110 1.7110		0.0383 0.0409	0.9678 0.9678	0.962 0.959	0.951 0.947	4.02% 4.02%	0.6611 0.6356
	2030	115,710,008	198,578,850	171.6%	40,875	70,701,802	121,336,804	171.6%	1.7110	0.9786	0.0436	0.9678	0.956	0.944	4.02%	0.6110
	2031 2032	108,775,257 101,806,640	221,681,117 245,312,523	203.8% 241.0%	38,977 37,048	63,896,113 57,491,706	130,218,601 138,531,586	203.8% 241.0%	1.7110 1.7110	0.9786 0.9786	0.0465 0.0495	0.9678 0.9678	0.954 0.951	0.940 0.936	4.02% 4.02%	0.5874 0.5647
	2033	94,876,935	269,015,517	283.5%	35,096	51,507,978	146,046,511	283.5%	1.7110	0.9786	0.0527	0.9678	0.947	0.932	4.02%	0.5429
	2034 2035	88,010,676 81,217,916	292,039,319 313,631,591	331.8% 386.2%	33,128 31,155	45,933,969 40,750,714	152,419,294 157,363,202	331.8% 386.2%	1.7110 1.7110	0.9786 0.9786	0.0561 0.0596	0.9678 0.9678	0.944 0.940	0.928 0.923	4.02% 4.02%	0.5219 0.5017
	2036	74,576,781	333,323,227	447.0%	29,185	35,972,596	160,780,630	447.0%	1.7110	0.9786	0.0632	0.9678	0.937	0.918	4.02%	0.4824
	2037 2038	68,138,107 61,925,134	350,955,442 365,564,018	515.1% 590.3%	27,229 25,297	31,596,791 27,606,073	162,743,966 162,967,544	515.1% 590.3%	1.7110 1.7110	0.9786 0.9786	0.0670 0.0709	0.9678 0.9678	0.933 0.929	0.914 0.909	4.02% 4.02%	0.4637 0.4458
	2039	55,964,597	376,456,282	672.7%	23,402	23,984,785	161,338,120	672.7%	1.7110	0.9786	0.0749	0.9678	0.925	0.904	4.02%	0.4286
	2040 2041	50,297,010 44,956,405	383,465,996 386,597,844	762.4% 859.9%	21,553 19,762	20,722,845 17,806,705	157,991,625 153,126,868	762.4% 859.9%	1.7110 1.7110	0.9786 0.9786	0.0790 0.0831	0.9678 0.9678	0.921 0.917	0.899 0.894		0.4120 0.3961
	2042	39,958,702	385,971,830	965.9%	18,038	15,215,566	146,971,236	965.9%	1.7110	0.9786	0.0872	0.9678	0.913	0.889	4.02%	0.3808
	2043 2044	35,320,515 31,042,033	381,695,367 373,775,123	1080.7% 1204.1%	16,390 14,824	12,929,702 10,924,370	139,726,375 131,539,643	1080.7% 1204.1%	1.7110 1.7110	0.9786 0.9786	0.0914 0.0955	0.9678 0.9678	0.909 0.904	0.884 0.879	4.02% 4.02%	0.3661 0.3519
	2045	27,132,684	362,578,097	1336.3%	13,347	9,179,601	122,668,371	1336.3%	1.7110	0.9786	0.0996	0.9678	0.900	0.874	4.02%	0.3383
	2046 2047	23,587,249 20,399,484	348,646,617 332,312,315	1478.1% 1629.0%	11,964 10,676	7,671,726 6,378,517	113,396,918 103,907,524	1478.1% 1629.0%	1.7110 1.7110	0.9786 0.9786	0.1037 0.1076	0.9678 0.9678	0.896 0.892	0.869 0.865		0.3252 0.3127
	2048	17,551,717	314,086,925	1789.5%	9,486	5,276,002	94,413,736	1789.5%	1.7110	0.9786	0.1115	0.9678	0.889	0.860	4.02%	0.3006
	2049 2050	15,024,908 12,798,809	294,324,651 273,531,567	1958.9% 2137.2%	8,393 7,395	4,341,921 3,555,694	85,054,389 75,991,026	1958.9% 2137.2%	1.7110 1.7110	0.9786 0.9786	0.1153 0.1189	0.9678 0.9678	0.885 0.881	0.856 0.852	4.02% 4.02%	0.2890 0.2778
	2051	10,852,966	252,370,133	2325.4%	6,489	2,898,598	67,402,744	2325.4%	1.7110	0.9786	0.1225	0.9678	0.878	0.848	4.02%	0.2671
	2052 2053	9,162,248 7,701,903	231,151,186 210,202,597	2522.9% 2729.2%	5,672 4,939	2,352,483 1,901,110	59,349,971 51,885,646	2522.9% 2729.2%	1.7110 1.7110	0.9786 0.9786	0.1260 0.1292	0.9678 0.9678	0.874 0.871	0.844 0.841	4.02% 4.02%	0.2568 0.2468
	2054	6,448,449	189,889,466	2944.7%	4,286	1,530,204	45,060,374	2944.7%	1.7110	0.9786	0.1322	0.9678	0.868	0.837	4.02%	0.2373
	2055 2056	5,378,936 4,470,955	170,342,294 151,909,001	3166.8% 3397.7%	3,708 3,197	1,227,086 980,536		3166.8% 3397.7%	1.7110 1.7110	0.9786 0.9786	0.1349 0.1378	0.9678 0.9678	0.865 0.862	0.834 0.831	4.02% 4.02%	0.2281 0.2193
	2057	3,705,206	134,905,933	3641.0%	2,747	781,197	28,443,253	3641.0%	1.7110	0.9786	0.1409	0.9678	0.859	0.829	4.02%	0.2108
	2058 2059	3,062,526 2,525,319	119,160,753 104,809,206	3890.9% 4150.3%	2,355 2,014	620,744 492,078	24,152,729 20,422,889	3890.9% 4150.3%	1.7110 1.7110	0.9786 0.9786	0.1427 0.1446	0.9678 0.9678	0.857 0.855	0.827 0.825	4.02% 4.02%	0.2027 0.1949
	2060	2,077,759	91,831,045	4419.7%	1,720	389,222	17,202,518	4419.7%	1.7110	0.9786	0.1462	0.9678	0.854	0.823	4.02%	0.1873
	2061 2062	1,705,725 1,397,635	80,171,161 69,778,512	4700.1% 4992.6%	1,465 1,246	307,182 241,972		4700.1% 4992.6%	1.7110 1.7110		0.1483 0.1495	0.9678 0.9678	0.852 0.850	0.821 0.819		0.1801 0.1731
	2063	1,143,207	60,646,742	5305.0%	1,057	190,275	10,094,023	5305.0%	1.7110	0.9786	0.1514	0.9678	0.849	0.818	4.02%	0.1664
	2064 2065	933,439 761,012	52,576,689 45,468,276	5632.6% 5974.7%	896 759	149,358 117,063		5632.6% 5974.7%	1.7110 1.7110		0.1522 0.1537	0.9678 0.9678	0.848 0.846	0.817 0.815		0.1600 0.1538
	2066	619,460	39,321,730	6347.7%	641	91,606	5,814,919	6347.7%	1.7110	0.9786	0.1551	0.9678	0.845	0.814	4.02%	0.1479
	2067 2068	503,372 408,374	33,959,476 29,286,266	6746.4% 7171.4%	541 455	71,562 55,813		6746.4% 7171.4%	1.7110 1.7110		0.1567 0.1580	0.9678 0.9678		0.813 0.811	4.02% 4.02%	0.1422 0.1367
	2069	330,552	25,186,609	7619.6%	382	43,432	3,309,292	7619.6%	1.7110	0.9786	0.1597	0.9678	0.840	0.809	4.02%	0.1314
	2070 2071	266,891 214,881	21,629,257 18,545,868	8104.2% 8630.8%	320 268	33,712 26,094		8104.2% 8630.8%	1.7110 1.7110		0.1619 0.1644	0.9678 0.9678	0.838 0.836	0.807 0.805		0.1263 0.1214
	2072	172,507	15,847,267	9186.4%	223	20,139	1,850,010	9186.4%	1.7110	0.9786	0.1664	0.9678	0.834	0.803	4.02%	0.1167
	2073 2074	138,039 110,051	13,547,715 11,527,854	9814.4% 10475.0%	185 153	15,492 11,874		9814.4% 10475.0%	1.7110 1.7110		0.1704 0.1733	0.9678 0.9678	0.830 0.827	0.800 0.797		0.1122 0.1079
	2075	87,358		10475.0% 11206.6%	153	9,061	1,243,763	10475.0%	1.7110		0.1733	0.9678	0.827	0.797 0.794	4.02%	0.1079
	2076 2077	69,035 54,305		12019.5% 12925.3%	103 84	6,884 5,206		12019.5% 12925.3%	1.7110 1.7110		0.1798 0.1869	0.9678 0.9678		0.790 0.787		0.0997 0.0959
	2077 2078-2098	54,305 155,692	27,258,882		84 68	5,206 14,348		12925.3% 17508.2%	1.7110			0.9678		0.787 N/A		0.0959
	Past	1,792,306,288	142,541,148	8.0%	780,183	2,233,396,598	163,809,324	7.3%								
	Future	3,051,846,150	10,121,930,553	331.7%	1,147,789	2,042,946,719	4,103,010,131	200.8%								
Note:	Lifetime	4,844,152,438	10,264,471,701	211.9%	1,927,972	4,276,343,317	4,266,819,455	99.8%								

Note:

- 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 48.78%.

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 I-A

Metropolitan Life Insurance Company Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 15.00% Future Increase Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2-PREM

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#### 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

1 Accumulated value of initial earned premium	2,141,073,703 x	58% =	1,241,822,748
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	2,233,396,598 92,322,896	85% =	78,474,461
3 Present value of future projected initial earned premium	1,308,359,279	58% =	758,848,382
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	2,042,946,719 734,587,439	85% =	624,399,323
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b			2,703,544,914
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			163,809,324 4,103,010,131
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b			4,266,819,455
8 Test: 7 is not less than 5			TRUE

				Loss Ra	atio Demonst	ration			Fact	ors Derived fro	om Projected Value	es for Illustrativ	/e Purposes (	Dnly	Interest Ra	te Factors
	Octoortes		ithout Interest				With Interest	1	Premium			Persistency F	actors	-	Calendar Year	Mid-Year
	Calendar Year	Earned Premium	Incurred Claims	Loss Ratio	Life Years	Earned Premium	Incurred Claims	Loss Ratio	Rate Increase Factor	Benefit Downgrade	Policy Lapse & Mortality	Policy Shock Lapse	Policy Persistency	Premium Persistency	Effective Int Rate	Disc / Accum Factor
	1998	-	-	N/A	-	-	-	N/A					-		4.02%	2.1565
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	2.0732 1.9930
	2001	-	-	N/A	-	-	-	N/A							4.02%	1.9160
	2002 2003	-	-	N/A N/A	-	-	-	N/A N/A							4.02% 4.02%	1.8420 1.7708
	2003	-	-	N/A	-	-	-	N/A							4.02%	1.7024
Historical	2005	22	-	0.0%	1	36	-	0.0%							4.02%	1.6366 1.5733
Experience	2006 2007	546,742 1,842,220	-	0.0% 0.0%	496 1,092	860,216 2,786,451	-	0.0% 0.0%							4.02% 4.02%	1.5735
	2008	3,211,973	-	0.0%	1,640	4,670,535	-	0.0%							4.02%	1.4541
	2009 2010	3,843,955 3,693,945	14,540 405,813	0.4% 11.0%	1,642 1,539	5,373,506 4,964,262	20,325 545,368	0.4% 11.0%							4.02% 4.02%	1.3979 1.3439
	2011	3,550,772	-	0.0%	1,449	4,587,455	-	0.0%							4.02%	1.2920
	2012 2013	3,433,984 3,391,376	6,138 299,237	0.2% 8.8%	1,368 1,331	4,265,127 4,049,436	7,623 357,300	0.2% 8.8%							4.02% 4.02%	1.2420 1.1940
	2010	3,381,256	759,867	22.5%	1,319	3,881,337	872,250	22.5%							4.02%	1.1479
	2015	3,570,113 3,489,569	1,544,452	43.3% 15.7%	1,293	3,939,763	1,704,364	43.3%							4.02% 4.02%	1.1035 1.0609
	2016 2017	3,489,569 3,500,698	548,276 831,971	23.8%	1,275 1,253	3,702,070 3,570,362	581,664 848,527	15.7% 23.8%							4.02%	1.0609
Projected	2018	3,372,840	721,037	21.4%	1,226	3,307,030	706,968	21.4%	1.3225	N/A	0.0212	N/A	0.979	0.945		0.9805
Future Experience	2019 2020	3,347,816 3,519,331	844,677 989,007	25.2% 28.1%	1,200 1,172	3,155,650 3,189,128	796,192 896,213	25.2% 28.1%	1.3684 1.4826	N/A N/A	0.0219 0.0232	N/A N/A	0.978 0.977	0.959 0.970	4.02% 4.02%	0.9426 0.9062
	2021	3,419,979	1,160,204	33.9%	1,143	2,979,340	1,010,720	33.9%	1.4878	N/A	0.0245	N/A	0.976	0.968	4.02%	0.8712
	2022 2023	3,305,893 3,191,698	1,361,855 1,597,140	41.2% 50.0%	1,113 1,083	2,768,664 2,569,733	1,140,544 1,285,906	41.2% 50.0%	1.4878 1.4878	N/A N/A	0.0259 0.0274	N/A N/A	0.974 0.973	0.967 0.965	4.02% 4.02%	0.8375 0.8051
	2024	3,074,174	1,867,869	60.8%	1,051	2,379,466	1,445,764	60.8%	1.4878	N/A	0.0291	N/A	0.971	0.963	4.02%	0.7740
	2025 2026	2,953,247 2,829,260	2,177,836 2,526,831	73.7% 89.3%	1,019 985	2,197,533 2,023,920	1,620,544 1,807,576	73.7% 89.3%	1.4878 1.4878	N/A N/A	0.0309 0.0329	N/A N/A	0.969 0.967	0.961 0.958	4.02% 4.02%	0.7441 0.7154
	2027	2,703,223	2,911,988	107.7%	951	1,859,033	2,002,603	107.7%	1.4878	N/A	0.0349	N/A	0.965	0.955	4.02%	0.6877
	2028 2029	2,572,702 2,439,811	3,334,534 3,797,974	129.6% 155.7%	916 879	1,700,903 1,550,711	2,204,577 2,413,942	129.6% 155.7%	1.4878 1.4878	N/A N/A	0.0372 0.0396	N/A N/A	0.963 0.960	0.952 0.948	4.02% 4.02%	0.6611 0.6356
	2029	2,307,541	4,286,706	185.8%	842	1,409,967	2,619,288	185.8%	1.4878	N/A	0.0390	N/A	0.960	0.948		0.6350
	2031	2,174,339	4,794,437	220.5%	805	1,277,237	2,816,320	220.5%	1.4878	N/A	0.0448	N/A	0.955	0.942		0.5874
	2032 2033	2,040,694 1,907,199	5,320,542 5,847,799	260.7% 306.6%	766 727	1,152,410 1,035,404	3,004,588 3,174,726	260.7% 306.6%	1.4878 1.4878	N/A N/A	0.0477 0.0507	N/A N/A	0.952 0.949	0.939 0.935	4.02% 4.02%	0.5647 0.5429
	2034	1,774,484	6,368,540	358.9%	688	926,128	3,323,828	358.9%	1.4878	N/A	0.0539	N/A	0.946	0.930	4.02%	0.5219
	2035 2036	1,643,314 1,514,502	6,861,197 7,317,080	417.5% 483.1%	649 609	824,525 730,530	3,442,574 3,529,441	417.5% 483.1%	1.4878 1.4878	N/A N/A	0.0572 0.0607	N/A N/A	0.943 0.939	0.926 0.922		0.5017 0.4824
	2037	1,388,937	7,731,369	556.6%	570	644,074	3,585,166	556.6%	1.4878	N/A	0.0643	N/A	0.936	0.917	4.02%	0.4637
	2038 2039	1,267,322 1,150,509	8,070,665 8,329,912	636.8% 724.0%	531 493	564,969 493,074	3,597,882 3,569,956	636.8% 724.0%	1.4878 1.4878	N/A N/A	0.0680 0.0717	N/A N/A	0.932 0.928	0.912 0.908	4.02% 4.02%	0.4458 0.4286
	2039	1,039,152	8,519,109	819.8%	456	428,140	3,509,954	819.8%	1.4878	N/A	0.0757	N/A	0.920	0.903		0.4120
	2041 2042	933,692 834,367	8,632,866 8,652,394	924.6% 1037.0%	420 385	369,824 317,712	3,419,377 3,294,678	924.6% 1037.0%	1.4878 1.4878	N/A N/A	0.0795 0.0835	N/A N/A	0.921 0.917	0.899 0.894	4.02% 4.02%	0.3961 0.3808
	2042	741,780	8,601,939	1159.6%	351	271,542		1159.6%	1.4878	N/A	0.0833	N/A	0.917	0.889	4.02%	0.3661
	2044	656,079	8,452,956	1288.4%	319	230,889	2,974,780	1288.4%	1.4878	N/A	0.0913	N/A	0.909	0.884		0.3519
	2045 2046	577,475 505,869	8,241,980 7,968,254	1427.2% 1575.2%	289 260	195,373 164,533	2,788,448 2,591,666	1427.2% 1575.2%	1.4878 1.4878	N/A N/A	0.0951 0.0988	N/A N/A	0.905 0.901	0.880 0.876	4.02% 4.02%	0.3383 0.3252
	2047	441,023	7,632,049	1730.5%	233	137,899	2,386,392	1730.5%	1.4878	N/A	0.1026	N/A	0.897	0.872	4.02%	0.3127
	2048 2049	382,803 330,747	7,266,105 6,857,329	1898.1% 2073.3%	209 186	115,070 95,580	2,184,173 1,981,641	1898.1% 2073.3%	1.4878 1.4878	N/A N/A	0.1060 0.1101	N/A N/A	0.894 0.890	0.868 0.864	4.02% 4.02%	0.3006 0.2890
	2050	284,655	6,400,926	2248.7%	165	79,081	1,778,270	2248.7%	1.4878	N/A	0.1131	N/A	0.887	0.861	4.02%	0.2778
	2051 2052	244,068 208,508	5,928,389 5,458,578	2429.0% 2617.9%	145 128	65,185 53,536		2429.0% 2617.9%	1.4878 1.4878	N/A N/A	0.1166 0.1199	N/A N/A	0.883 0.880	0.857 0.854	4.02% 4.02%	0.2671 0.2568
	2053	177,534	4,989,207	2810.3%	112	43,822	1,231,518	2810.3%	1.4878	N/A	0.1230	N/A	0.877	0.851	4.02%	0.2468
	2054 2055	150,692 127,572	4,527,876 4,080,470	3004.7% 3198.6%	98 86	35,759 29,103	1,074,456 930,870	3004.7% 3198.6%	1.4878 1.4878	N/A N/A	0.1259 0.1287	N/A N/A	0.874 0.871	0.849 0.847	4.02% 4.02%	0.2373 0.2281
	2056	107,756	3,654,804	3391.7%	74	23,632	801,544	3391.7%	1.4878	N/A	0.1312	N/A	0.869	0.845	4.02%	0.2193
	2057 2058	90,816 76,369	3,259,060 2,890,159	3588.6% 3784.5%	64 56	19,147 15,479	687,133 585,807	3588.6% 3784.5%	1.4878 1.4878	N/A N/A	0.1345 0.1353	N/A N/A	0.866 0.865	0.843 0.841	4.02% 4.02%	0.2108 0.2027
	2058 2059	76,369 64,100	2,890,159 2,555,427	3784.5% 3986.6%	56 48	15,479 12,490	585,807 497,945	3784.5% 3986.6%	1.4878	N/A N/A	0.1353	N/A N/A	0.865	0.841		0.2027 0.1949
	2060	53,728	2,244,424	4177.4%	41	10,065	420,443	4177.4%	1.4878	N/A	0.1398	N/A	0.860	0.838		0.1873
	2061 2062	44,983 37,638	1,960,495 1,709,998	4358.3% 4543.3%	35 30	8,101 6,516	353,064 296,052	4358.3% 4543.3%	1.4878 1.4878	N/A N/A	0.1416 0.1418	N/A N/A	0.858 0.858	0.837 0.837	4.02% 4.02%	0.1801 0.1731
	2063	31,474	1,489,906	4733.7%	26	5,239	247,980	4733.7%	1.4878	N/A	0.1452	N/A	0.855	0.836	4.02%	0.1664
	2064 2065	26,296 21,968	1,289,289 1,109,916	4903.0% 5052.4%	22 19	4,208 3,379	206,296 170,733	4903.0% 5052.4%	1.4878 1.4878	N/A N/A	0.1445 0.1477	N/A N/A	0.856 0.852	0.835 0.835		0.1600 0.1538
	2066	18,356	957,338	5215.4%	16	2,714	141,572	5215.4%	1.4878	N/A	0.1458	N/A	0.854	0.836	4.02%	0.1479
	2067 2068	15,348 12,849	827,008 712,851	5388.5% 5548.0%	14 12	2,182 1,756	117,572 97,427	5388.5% 5548.0%	1.4878 1.4878	N/A N/A	0.1497 0.1513	N/A N/A	0.850 0.849	0.836 0.837	4.02% 4.02%	0.1422 0.1367
	2069	10,763	617,081	5733.3%	12	1,414	81,079	5733.3%	1.4878	N/A	0.1542	N/A	0.846	0.838	4.02%	0.1314
	2070 2071	9,017 7,555	533,706 463,502	5919.1% 6135.0%	8 7	1,139 917	67,414 56,284	5919.1% 6135.0%	1.4878 1.4878	N/A N/A	0.1489 0.1548	N/A N/A	0.851 0.845	0.838 0.838	4.02% 4.02%	0.1263 0.1214
	2071	6,332	403,502	6428.4%	6	739		6428.4%	1.4878	N/A N/A	0.1548	N/A	0.845	0.838		0.1167
	2073	5,300	357,306	6741.3%	5	595	40,100	6741.3% 7222 5%	1.4878	N/A	0.1575	N/A	0.843	0.837	4.02%	0.1122
	2074 2075	4,430 3,692	320,018 281,314	7223.5% 7619.1%	4	478 383	34,527 29,179	7223.5% 7619.1%	1.4878 1.4878	N/A N/A	0.1571 0.1627	N/A N/A	0.843 0.837	0.836 0.833	4.02% 4.02%	0.1079 0.1037
	2076	3,068	247,725	8075.1%	3	306	24,702	8075.1%	1.4878	N/A	0.1662	N/A	0.834	0.831	4.02%	0.0997
	2077 2078-2098	2,539 8,819	219,402 1,097,000	8640.0% 12438.5%	2 2	243 813		8640.0% 12438.5%	1.4878 1.4878	N/A N/A	0.1689 0.1748	N/A N/A	0.831 0.825	0.828 N/A	4.02% 4.02%	0.0959 0.0922
					-											
	Past Future	37,456,624 62,198,023	4,410,292 229,634,388	11.8% 369.2%	15,698 23,770	46,650,556 41,494,413	4,937,422 91,401,814	10.6% 220.3%								
	Lifetime	99,654,647	234,044,680	234.9%	39,468	88,144,968	96,339,236	109.3%								

Note:

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 48.78%.

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

## Exhibit I-B Metropolitan Life Insurance Company Maryland Experience Projections (Premium Normalized to Include Prior Authorized Increases) Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2-PREM

International fractional fractinal fractional fractional fractional fractional fraction		Loss Ratio Demonstr Without Interest										
Year     Premium     Claims     Ratio     Years       1999     -     -     -     N/A     -       1999     -     -     N/A     -       2000     -     -     N/A     -       2001     -     -     N/A     -       2002     -     -     N/A     -       2003     -     -     N/A     -       2004     -     -     0.0%     1.062       2005     5.467.42     -     0.0%     1.062       2006     3.343.955     14.540     0.4%     1.642       2010     3.363.784     0.2%     1.388     1.283       2011     3.357.7840     721.037     1.286     1.226       2016     3.377.840     721.037     1.286     1.108       2016     3.347.816     644.276     2.78%     1.108       2016     3.347.816     644.577     2.52%     1.206       20202     3.347.816     644.577		Calendar			Loss	Life						
Historical     1999     -     -     N/A     -       2000     -     -     N/A     -       2002     -     -     N/A     -       2004     -     -     N/A     -       2005     546,742     -     0.0%     1.062       2006     3,343,955     1.45,40     0.0%     1.062       2010     3,363,955     14.540     0.0%     1.062       2011     3,363,766     292,27     8.0%     1.331       2012     3,371,76     292,47     1.280     1.283       2016     3,377,840     721,037     1.28     1.283       2016     3,377,840     721,037     1.28     1.283       2016     3,377,840     721,037     1.28     1.103       2020     3,377,840     721,037     1.28     1.28       2021     3,377,840     721,037     1.48     1.103       2022     3,676,461     1.109,148     30,277     1.020       2022												
Book     Construction     Construction       Historical     Experience     0.00%     1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0			-	-		-						
Historical     2000     -     -     NAA     -       2000     -     -     -     NAA     -       2000     -     -     0.0%     1       2000     5.56 7.42     -     0.0%     1.60       2000     3.843.955     14.540     0.0%     1.640       2000     3.843.955     14.540     0.0%     1.453       2010     3.831.926     709.867     22.5%     1.338       2011     3.550.998     631.971     23.86     1.253       2016     3.372.840     721.037     21.4%     1.225       2017     3.500.998     631.971     22.8%     1.201       Experience     2020     3.574.742     984.534     27.6%     1.108       2021     3.377.816     64.977     12.25%     1.202       2022     3.660.621     1.202,443     3.8%     1.078       2023     3.600.621     1.208,748     3.8%     1.048       2024     3.372.846     4.50.758			-	-		-						
Historical     2002     ·     ·     ·     N/A     ·       Experience     2005     5.62     ·     0.0%     1.02       2005     5.62,742     ·     0.0%     1.062       2006     5.62,742     ·     0.0%     1.062       2000     3.819.95     1.6440     0.4%     1.642       2010     3.839.945     4.05,813     11.0%     1.642       2011     3.550,772     -     0.0%     1.449       2013     3.391,276     7.25,8%     1.235       2016     3.499,569     548,276     15,7%     1.235       2016     3.372,840     721.037     2.4%     1.225       2017     3.500,661     1.109,148     3.02%     1.113       2022     3.676,461     1.109,148     3.02%     1.163       2024     3.372,440     1.252,784     3.55%     1.046       2025     3.266,536     2.062,141,479,789     3.2%     1.163       20262     3.673,26     3.158,110			-	-		-						
Historical     2003     -     -     NAA     -       Exparience     2006     5-86,742     -     0.0%     1.002       2007     1,842,220     -     0.0%     1.062       2008     3,831,955     14,540     0.0%     1.640       2009     3,833,955     14,540     0.0%     1.453       2010     3,831,926     405,613     1.0%     1.398       2011     3,550,698     679,867     1.575     1.376       2016     3,372,840     721,037     21,4%     1.225       2017     3,350,698     631,971     22,8%     1.201       2018     3,372,840     721,037     21,4%     1.202       2020     3,567,440     1,108,144     30,2%     1,108       2021     3,574,743     984,594     27,6%     1,108       2022     3,567,440     1,108,144     30,2%     1,017       2023     3,660,621     1,289,786     38,5%     1,017       2024     3,347,816     64,616			-	-		-						
Bistorical     2005     2.2      0.0%     1       Experience     2006     546,742      0.0%     1,062       2007     1,142,200      0.0%     1,642       2009     3,843,955     14,540     0.4%     1,642       2010     3,633,954     405,813     11,0%     1,533       2011     3,339,1376     299,237     8,8%     1,331       2016     3,570,113     1,544,452     43,3%     1,225       2016     3,570,113     1,544,452     43,3%     1,225       2017     3,500,608     631,971     22,5%     1,205       2018     3,372,840     721,037     21,4%     1,528       2019     3,372,840     721,037     21,4%     1,528       Frojectied     2018     3,372,840     721,037     1,248,7%     1,528       2020     2,573,363     3,597,020     1,54,44     1,512,634     4,558     1,017       2022     2,573,263     3,557,020     1,358,101     <			-	-		-						
Historical Experience     2005     5.46,742      0.0%     1.090       2000     3.84,395     14.540     0.0%     1.640       2001     3.83,945     406,813     11.0%     1.539       2011     3.550,772     -     0.0%     1.331       2014     3.331,376     298,277     2.8.5%     1.331       2014     3.312,376     298,277     2.8.5%     1.331       2014     3.321,376     298,277     2.8.5%     1.331       2016     3.469,569     544,276     15.7%     1.228       Projected     2017     3.500,668     231,971     2.8.8%     1.1201       Experience     2020     3.567,461     1.109,144     3.0.2%     1.200       Experience     2020     3.567,461     1.109,144     3.0.2%     1.113       2022     3.667,461     1.109,144     3.0.2%     1.0.101       2022     3.567,461     1.109,144     3.0.2%     1.0.101       Experience     2.020     3.567,461     1.512,544 <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td>			-	-		-						
Experience     2000     546,742	Historical		22	-		1						
2008     3,211,973      0.0%     1.642       2009     3,843,955     16,540     0.4%     1.642       2011     3,550,772     -     0.0%     1.449       2012     3,33,91,376     299,237     8,8%     1.331       2015     3,570,113     1.544,452     43,3%     1.225       2016     3,372,840     770,337     21,4%     1.226       2017     3,500,698     831,971     22,8%     1.226       Future     2019     3,372,840     721,137     1.4%     1.226       2022     3,676,461     1.109,148     30,2%     1.113       2022     3,676,461     1.109,148     30,2%     1.017       2022     3,266,266     4.1%     966     2067     2.944,222     2.777,912     93,7%     920       2026     3,261,361     1.127,79     94     2027     2.944,222     2.757,912     93,7%     920       2026     2,2626     5,399,702     135,4%     851     1.077				-		496						
2000     3,843,955     14,540     0.4%     1,642       2011     3,650,772     -     0.0%     1,363       2012     3,433,964     61,38     0.2%     1,331       2014     3,381,376     299,237     8,6%     1,331       2014     3,381,376     299,237     8,6%     1,331       2016     3,499,669     548,276     15.7%     1,226       Forjected     2017     3,500,669     831,477     25.2%     1,220       Experience     2020     3,647,423     984,594     27.8%     1,163       2022     3,600,621     1.289,788     35.8%     1,078       2022     3,600,621     1.299,788     35.8%     1,078       2022     3,676,736     2,082,065     64.11%     908       2022     3,246,536     2,082,065     64.11%     908       2023     2,267,326     3,587,001     112.7%     886       2024     3,842,44     1,769,033     52,87%     741       2025     2,265,7	-	2007	1,842,220	-	0.0%	1,092						
2010     3.693,945     405,813     11.0%     1.539       2011     3.550,772     -     0.0%     1.449       2013     3.391,376     299,237     8,8%     1.331       2014     3.381,376     299,237     8,8%     1.331       2015     3.570,113     1.544,452     15,7%     1.233       2016     3.372,340     721,137     21.4%     1.226       Fruure     2019     3.372,340     721,137     21.4%     1.226       Experience     2020     3.676,461     1.109,148     30.2%     1.103       20223     3.476,246     1.512,634     43.5%     1.048       20224     3.676,246     1.512,634     43.5%     1.048       20225     3.216,536     2.062,605     64.1%     896       20267     2.944,222     2.767,912     93.7%     920       2026     3.618     4.540,759     111.7%     741       2030     2.513.264     4.059,892     161.5%     815       2033     1.		2008	3,211,973	-	0.0%	1,640						
2011     3,550,772      0.0%     1,449       2012     3,331,376     299,237     8,8%     1,331       2014     3,381,256     759,867     22,5%     1,313       2015     3,499,569     548,276     15,7%     1,225       Projected     2016     3,472,840     721,037     21,4%     1,226       Future     2012     3,647,423     984,594     2,78%     1,200       Experience     2022     3,600,621     1,289,798     35,8%     1,048       2022     3,600,621     1,289,798     35,8%     1,048       2022     3,2476,246     1,512,634     43,5%     1,048       2022     3,246,246     1,512,645     2,082,055     641,986       2026     3,216,456     2,082,055     641,986     1,017       2026     3,267,736     3,557,020     135,4%     651       2030     2,222,626     5,039,077     26,7%     741       2033     2,222,62     5,039,077     26,7%     741 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td></tr<>												
2012     3.43.984     6.138     0.2%     1.368       2013     3.391.376     299.867     22.5%     1.319       2016     3.570.113     1.544.452     43.3%     1.233       2017     3.500.698     581.971     2.23%     1.253       Projected     2018     3.372.404     721.037     21.4%     1.225       Experience     2020     3.676.461     1.109.148     30.2%     1.103       2022     3.667.641     1.109.148     30.2%     1.046       2022     3.246.536     2.062.605     64.1%     986       2022     3.246.536     2.062.605     64.1%     986       2022     3.266.53     3.597.001     135.4%     1.048       2023     3.266.34     1.679.91     17.7%     984       2024     2.067.33.57     1.066     63.157     72.53       2025     3.266.34     1.699.524     6.529.57     72.4%     741       2033     2.077.230     5.53.387     266.6%     7044     7203				405,813								
2013     3.331.376     299.237     8.8%     1.331       2014     3.381.266     759.867     22.5%     1.319       2015     3.570.113     1.544.452     43.3%     1.223       2017     3.500.698     831.971     23.4%     1.225       Frojected     2018     3.347.816     844.677     25.2%     1.200       Experience     2020     3.647.423     984.594     2.7.8%     1.017       2022     3.660.621     1.109.148     30.2%     1.017       2022     3.676.461     1.109.148     30.2%     1.017       2022     3.676.361     1.029.784     43.5%     1.048       2022     3.2465.263     3.597.020     135.4%     151       2030     2.2482.264     5.039.027     226.7%     741       2033     2.077.230     5.538.387     266.6%     774       2034     1.932.684     6.031.575     312.1%     6666       2033     1.276.277     7.2295     440.0%     552       2036				- 6 138								
2014     3.381,256     759,867     22.5%     1.319       2015     3.570,113     1.544,452     43.3%     1.283       Projected Future     2016     3.500,688     831,971     2.3.8%     1.223       Projected Future     2019     3.372,840     721,037     2.1.4%     1.2253       2020     3.676,461     1.109,148     30.2%     1.103       20223     3.476,246     1.512,634     43.5%     1.048       20224     3.676,246     1.512,634     43.5%     1.048       20225     3.216,536     2.062,033     5.44%     986       20207     2.944,222     2.757,912     93.7%     920       20208     2.062,064     3.158,101     112,7%     854       2030     2.4657,326     3.597,020     135.4%     651       2032     2.022,626     3.597,020     135.4%     651       2033     1.738,284     4.603,759     911,7%     774       2033     1.738,284     6.031,575     312,1%     6666 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td></tr<>												
2016     3,570,113     1,544,452     43,3%     1,293       Projected     2017     3,500,688     831,971     23,8%     1,225       Future     2019     3,347,816     844,677     25,2%     1,220       Experience     2020     3,647,423     984,594     27,8%     1,113       2022     3,600,621     1,289,798     35,8%     1,048       2022     3,600,621     1,289,798     35,8%     1,048       2022     3,216,534     20,520,55     41,1%     986,52       2026     3,081,495     2,333,134     77,7%     984       2027     2,944,222     2,757,912     93,7%     921       2028     2,602,644     3,168,101     112,7%     886       2030     2,222,64     5,039,072     226,7%     741       2033     2,222,64     5,039,072     226,7%     741       2033     2,222,64     5,039,77     266,7%     741       2033     1,789,820     6,488,165     363,1%     628												
2017     3.500.698     831.971     23.8%     1.253       Projected     2016     3.372.840     721.037     21.4%     1.226       Experience     2020     3.547,423     984.594     27.8%     1.169       2022     3.600.621     1.289,798     35.8%     1.078       2022     3.600.621     1.289,798     35.8%     1.044       2024     3.448,244     1.769.038     52.8%     1.047       2025     3.216,536     2.082.605     64.1%     986       2026     2.802.644     3.158.101     112.7%     886       2027     2.944.222     2.757.912     93.7%     821       2033     2.222,626     5.039.027     226.7%     741       2033     2.077.203     5.58.387     26.6%     704       2034     1.932.664     6.031.575     312.1%     666       2035     1.649.524     6.929.927     420.1%     552       2036     1.649.524     6.929.927     420.1%     559       2035		2015			43.3%							
Projected Future     2018     3.372,840     721.037     21.4%     1.226       Future     2019     3.347,423     984,594     27.8%     1.169       2020     3.676,461     1.109,148     30.2%     1.113       2022     3.600,621     1.289,788     33.88%     1.017       2023     3.476,246     1.512,634     43.5%     1.017       2024     3.246,244     1.760,038     52.85%     1.017       2025     3.216,536     2.062,605     64.1%     996       2026     3.061,495     2.393,134     77.7%     956       2027     2.944,222     2.757,912     93.7%     920       2028     2.802,064     4,059,892     161.5%     815       2030     2.513,264     4,059,892     161.5%     815       2031     1.932,884     6.031,575     312.1%     666       2035     1.769,820     6.498,165     363.1%     628       2036     1.649,524     6.929,927     420.1%     590       2037		2016	3,489,569	548,276	15.7%	1,275						
Future Experience     2019     3.347,816     844,677     22.2%     1.200       2020     3.547,423     984,594     27.8%     1.109       2021     3.676,641     1.109,148     30.2%     1.113       2022     3.600,621     1.289,788     35.8%     1.078       2023     3.476,246     1.512,634     435.5%     1.048       2026     3.246,536     2.062,605     64.1%     986       20202     2.661,364     3.597,020     135.4%     651       2031     2.2862,064     3.597,020     135.4%     651       2033     2.077,230     5.538,387     286,6%     704       2033     2.077,230     5.538,387     286,6%     704       2033     1.263,077     7.643,638     551.3%     628       2036     1.649,524     6.929,927     420.1%     690       2037     1.512,765     7.322,285     484.0%     552       2038     1.300,307     7.643,638     553.8%     514       2040     1.1												
Experience     2020     3.677.423     944.594     27.8%     1.168       2021     3.676.461     1.109,148     30.2%     1.113       2023     3.476.246     1.512.634     43.5%     1.078       2024     3.348.244     1.769.038     52.2%%     1.0171       2025     3.216.536     2.062.605     64.1%     996       2026     2.002.064     3.158.101     1112.7%     896       20203     2.567.326     3.597.020     135.4%     851       2030     2.513.264     4.059.892     161.5%     815       2033     2.077.30     5.583.67     266.7     744       2033     2.077.30     5.583.67     266.7     744       2033     1.694.524     6.92.927     420.1%     569       2036     1.789.820     6.438.165     363.1%     628       2038     1.253.079     7.889.168     629.6%     477       2040     1.131.794     8.066.355     712.9%     441       2041     1.046.524												
2021     3.676.461     1.109.148     30.2%     1.113       2022     3.600.621     1.289.788     35.8%     1.078       2023     3.476.246     1.512.634     43.5%     1.048       2024     3.348.244     1.769.038     52.8%     1.017       2025     3.014.95     2.333.134     77.7%     954       2026     3.001.495     2.333.134     77.7%     954       2028     2.802.064     3.158.101     112.7%     886       2033     2.077.230     5.538.387     266.6%     704       2033     2.077.230     5.538.387     266.6%     704       2033     2.077.230     5.538.387     266.6%     704       2033     1.799.820     6.498.165     363.1%     628       2036     1.693.284     6.031.575     312.4%     6031.755       2038     1.390.307     7.643.638     553.8%     514       2039     1.253.079     7.889.168     622.6%     471       2040     1.31.794     8.068.355												
2022     3.476,246     1.289,788     35.8%     1.078       2023     3.476,246     1.512,634     43.5%     1.048       2024     3.348,244     1.799,038     52.8%     1.017       2025     3.216,536     2.062,605     64.1%     986       2027     2.944,222     2.757,912     93.7%     920       2038     2.802,064     3.158,101     112.7%     886       2030     2.513,264     4.059,882     161.5%     815       2031     2.368,166     4.504,759     191.7%     779       2032     2.222,626     5.039,027     228.7%     741       2033     1.798,820     6.498,165     363.1%     628       2035     1.799,820     6.498,165     363.1%     628       2033     1.52,765     7.322,295     484.0%     552       2033     1.52,765     7.322,295     480.0%     562       2033     1.283,079     7.889,168     628.6%     477       2040     1.317,9820     6.498,165	⊨xperience											
2023     3,476,246     1,512,634     43.5%     1,048       2024     3,348,244     1,769,038     52.8%     1,017       2025     3,216,536     2,062,605     64.1%     986       2027     2,944,222     2,757,912     93.7%     920       2028     2,802,064     3,158,101     112.7%     886       2030     2,151,3264     4,059,892     161.5%     815       2033     2,077,230     5,538,387     266.6%     704       2033     2,077,230     6,489,165     366.1%     628       2035     1,769,820     6,489,165     366.1%     628       2036     1,649,524     6,329,927     420.1%     690       2037     1,512,765     7,322,285     484.0%     552       2038     1,330,307     7,643,638     653.8%     614       2040     1,131,794     8,066,355     712.9%     441       2041     1,016,933     804,0%     600     7.822,801     150.0%       2043     807,911												
2024     3,348,244     1,769,038     52.8%     1,017       2025     3,216,536     2,062,605     64.1%     986       2027     2,944,222     2,757,912     93,7%     920       2028     2,802,064     3,158,101     1112,7%     6886       2029     2,657,326     3,597,020     135,4%     6815       2030     2,251,264     4,059,892     161,5%     815       2031     2,328,186     4,460,759     191,7%     779       2032     2,222,626     5,039,027     2266,7%     741       2033     1,789,820     6,498,165     363,1%     628       2036     1,789,820     6,498,165     363,1%     628       2037     1,512,765     7,322,295     444,0%     552       2038     1,30,79     7,889,168     629,5%     477       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,33     8,176,093     804,0%     406       2044     714,570     8,005,702												
2025     3,216,536     2,062,005     64,1%     986       2026     3,081,495     2,393,134     77,7%     954       2027     2,944,222     2,757,912     33,7%     920       2028     2,802,064     3,155,101     112,7%     886       2030     2,513,264     4,058,992     161,5%     815       2031     2,368,186     4,50,799     191,7%     774       2033     2,077,230     5,533,387     266,6%     704       2034     1,380,264     6,031,575     312,1%     6666       2035     1,769,820     6,498,165     363,1%     652       2036     1,649,524     6,929,927     420,1%     550       2037     1,512,765     7,322,295     444,0%     552       2038     1,380,307     7,643,638     553,8%     514       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,933     8,176,093     804,0%     406       2044     744,570     8,005,702												
2027     2,944,222     2,757,912     93.7%     920       2028     2,802,064     3,158,101     112.7%     886       2030     2,513,264     4,058,982     1161.5%     815       2031     2,368,186     4,540,759     191.7%     779       2032     2,222,626     5,039,027     226.7%     741       2033     2,077,230     5,538,387     266.6%     704       2034     1,382,684     6,031,575     512.1%     6666       2035     1,789,820     6,498,165     363.1%     628       2036     1,649,524     6,929,927     420.1%     590       2037     1,517,765     7,322,295     484.0%     406       2040     1,131,794     8,068,355     712.9%     441       2040     1,31,794     8,068,355     712.9%     441       2041     1,016,333     8,176,093     804.0%     406       2044     714,570     8,005,702     1120.4%     309       2045     628,958     7,806,647												
2028     2,802,064     3,158,101     112.7%     886       2029     2,657,326     3,597,020     135.4%     851       2031     2,368,186     4,540,759     191.7%     779       2032     2,222,66     5,039,027     226.7%     741       2033     2,077,230     5,538,387     266.6%     704       2034     1,932,064     6,031,575     312,1%     666       2035     1,789,820     6,498,165     363,1%     628       2036     1,649,524     6,929,927     420,1%     590       2037     1,512,765     7,322,295     494,0%     552       2038     1,380,007     7,484,583     501,7%     372       2043     1,016,933     8,176,093     804,0%     406       2044     1,13,174     8,068,355     712,9%     441       2044     7,45,70     8,005,702     1120,4%     309       2045     580,969     7,546,647     1369,7%     252       2046     550,969     7,546,647			3,081,495	2,393,134	77.7%	954						
2029     2,667,326     3,597,020     135,4%     861       2030     2,513,264     4,059,892     161,5%     815       2031     2,328,186     4,540,759     191,7%     779       2032     2,222,626     5,039,027     226,7%     741       2033     1,789,820     6,498,165     363,1%     628       2036     1,649,624     6,029,927     420,1%     590       2037     1,512,765     7,322,295     484,0%     552       2038     1,380,307     7,643,633     553,3%     514       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,333     8,176,093     804,0%     300       2042     908,752     8,194,588     901,7%     372       2043     807,911     8,146,802     1008,4%     300       2044     714,570     8,067,02     1120,4%     309       2045     628,958     7,806,889     1241,1%     279       2046     550,969     7,846,647												
2030     2,513,264     4,059,892     161,5%     815       2031     2,266     5,039,027     226,7%     741       2033     2,077,230     5,538,387     266,6%     704       2034     1,932,684     6,031,575     312,1%     666       2035     1,789,820     6,498,165     563,1%     628       2036     1,649,524     6,929,927     420,1%     599       2037     1,517,765     7,322,295     484,0%     552       2038     1,380,307     7,643,638     553,8%     514       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,933     8,176,093     804,0%     406       2043     807,911     8,146,803     100,87     2102,4%     309       2044     50,6969     7,546,647     1369,7%     252     2047     480,342     7,228,230     1504,4%     206       2044     50,6969     7,546,471     1369,7%     252     2047     480,629     180 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
2031     2.368.186     4.540,759     191.7%     779       2032     2.222.626     5.039.027     226.7%     741       2033     2.077.230     5.538.37     266.6%     704       2035     1.789.820     6.498.165     363.1%     628       2036     1.649.524     6.929.927     420.1%     590       2037     1.512.765     7.322.295     484.0%     552       2038     1.380.307     7.643.638     553.8%     514       2039     1.253.079     7.889.168     629.6%     477       2040     1.016.933     8.176.093     804.0%     406       2042     908.752     8.194.588     901.7%     372       2043     807.911     8.146.802     1008.4%     340       2044     74.4570     8.005.702     1120.4%     309       2045     628.958     7.805.789     1241.1%     279       2046     550.969     7.546.471     1369.7%     252       2047     480.342     7.228.230												
2032     2.222,626     5,039,027     226,7%     741       2033     2,077,230     5,538,387     266,6%     704       2034     1,932,864     6,031,575     312,1%     666       2035     1,789,820     6,488,165     363,1%     628       2036     1,649,524     6,929,927     420,1%     590       2037     1,512,765     7,322,295     484,0%     552       2038     1,253,079     7,889,168     629,6%     477       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,933     8,176,093     804,0%     400       2043     807,911     8,146,802     1008,4%     340       2044     714,570     8,005,702     1120,4%     309       2045     628,958     7,305,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     40,342     7,228,20     150,48%     159       2055     310,032     6,062,247												
2033     2,077,230     5,538,387     266,6%     704       2034     1,932,684     6,031,575     312,1%     666       2035     1,789,820     6,498,165     533,1%     628       2036     1,649,524     6,929,927     420,1%     590       2037     1,512,765     7,322,295     484,0%     552       2038     1,380,307     7,643,638     53,8%     514       2040     1,11,794     8,068,355     712.9%     441       2044     1,016,933     8,176,093     804,0%     406       2042     908,752     8,194,588     901,7%     372       2043     807,911     8,146,802     1008,4%     340       2044     714,4570     8,005,702     1120,4%     308       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504,8%     205       2046     360,234     6,494,501     1802,9%     180       2055     139,362     4,725,224     <												
2034     1,932,684     6,031,575     312.1%     6666       2035     1,769,820     6,498,165     363.1%     628       2036     1,649,524     6,929,927     420.1%     590       2037     1,512,765     7,322,295     484.0%     552       2038     1,380,307     7,643,638     553.8%     514       2040     1,131,794     8,068,355     712.9%     4411       2041     1,016,933     8,176,093     804.0%     406       2042     908,752     8,194,568     901.7%     372       2043     807,911     8,146,802     1008.4%     340       2044     714,570     8,005,702     1120.4%     309       2045     622,958     7,805,889     1241.1%     279       2046     550,969     7,546,647     1369.7%     252       2047     480,342     7,282,303     1504,8%     205       2050     310,332     6,042,501     1802.9%     180       2055     138,945     3,864,569												
2036     1,649,524     6,929,927     420.1%     590       2037     1,512,765     7,322,295     484.0%     552       2039     1,253,079     7,889,168     629,6%     477       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,933     8,176,039     804.0%     406       2042     908,752     8,194,588     901.7%     372       2043     807,911     8,146,802     1008.4%     340       2044     714,570     8,005,702     1120.4%     309       2045     628,958     7,805,889     1241.1%     279       2046     550,969     7,546,647     1369.7%     252       2047     480,342     7,228,230     1504.8%     226       2048     416,931     6,861,648     1650.5%     202       2051     265,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     2276.5%     124       2053     193,362     4,725,224 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
2037     1,512,765     7,322,295     484.0%     552       2038     1,380,307     7,643,638     553.8%     514       2039     1,253,079     7,893,168     626.6%     477       2040     1,131,794     8,068,355     712.9%     441       2041     1,016,933     8,176,093     804.0%     406       2042     908,752     8,194,588     901.7%     372       2043     807,911     8,146,802     1008.4%     340       2044     714,570     8,005,702     1120.4%     309       2045     622,958     7,805,899     124.1%     279       2046     550,969     7,546,647     1369,7%     252       20447     480,342     7,228,230     1504.8%     205       2050     310,032     6,062,247     1955.4%     159       2051     266,827     5,614,7712     2112.2%     141       2052     227,097     5,169,760     2276,5%     124       2053     133,362     4,725,224 <t< td=""><td></td><td></td><td>1,789,820</td><td>6,498,165</td><td>363.1%</td><td>628</td></t<>			1,789,820	6,498,165	363.1%	628						
2038     1,380,307     7,643,638     553.8%     514       2039     1,253,079     7,889,168     629.6%     477       2040     1,131,794     8,068,355     712.9%     441       2041     1,016,933     8,176,093     804.0%     406       2042     908,752     8,194,588     901.7%     372       2043     807,911     8,146,802     1008.4%     309       2044     714,570     8,005,702     1120.4%     309       2045     628,958     7,805,889     1241.1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504.8%     205       2050     310,032     6,062,247     1955.4%     159       2051     266,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     276.5%     124       2053     139,362     4,725,224     243,37%     109       2054     164,126     4,288,302     2												
2039     1,253,079     7,889,168     629,6%     477       2040     1,131,794     8,068,355     712,9%     441       2041     1,016,933     8,176,093     804,0%     406       2042     908,752     8,194,588     901,7%     372       2043     807,911     8,146,802     1008,4%     340       2044     714,570     8,005,702     1120,4%     309       2045     622,958     7,805,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504,8%     202       2048     416,931     6,881,648     1680,5%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     193       2051     2656,827     5,161,712     2112,2%     141       2052     227,097     5,169,760     2276,5%     124       2053     138,945     3,864,569												
2040     1,131,794     8,068,355     712.9%     441       2041     1,016,933     8,176,093     804.0%     406       2042     906,752     8,194,588     901,7%     372       2043     807,911     8,146,802     1008.4%     309       2044     628,958     7,805,889     1241,1%     279       2045     628,958     7,805,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504.8%     226       2048     416,931     6,881,648     1650.5%     202       2050     310,032     6,062,247     1955,4%     159       2051     265,827     5,614,712     2112,2%     144       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612,8%     62       2055     138,945     3,66,620     3120,6%     62       2055     69,815     2,420,217     3466,6												
2041     1,016,933     8,176,093     804.0%     406       2042     908,752     8,194,588     901.7%     372       2043     807,911     8,146,802     1008,4%     340       2044     714,570     8,005,702     1120,4%     399       2045     628,958     7,806,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504.8%     226       2048     416,931     6,881,648     1650.5%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     159       2051     265,827     5,614,712     2112,2%     141       2052     227,097     5,168,760     2276,5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,002     2612,8%     95       2055     138,945     3,864,569     2781												
2042     908,752     8,194,588     901.7%     372       2043     807,911     8,146,802     1008,4%     340       2044     714,570     8,005,702     1120,4%     309       2045     622,958     7,805,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504,8%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     159       2051     265,827     5,614,712     2112,2%     141       2052     227,097     5,166,760     2276,5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612,8%     95       2055     138,945     3,864,699     2781,4%     83       2056     138,945     3,464,142     2494,3%     72       2057     98,912     3,086,620     3120,6%<												
2044     714,570     8,005,702     1120,4%     309       2045     628,958     7,805,899     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504,8%     226       2048     416,931     6,881,648     1650,5%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     159       2051     2265,827     5,614,712     2112,2%     141       2052     227,097     5,169,760     2276,5%     124       2053     193,362     4,725,224     2443,3%     72       2054     164,126     4,288,302     2612,8%     95       2055     138,945     3,664,569     2781,4%     83       2056     117,363     3,461,424     2949,3%     72       2057     98,912     3,066,620     3120,6%     64       2059     69,815     2,420,217     3466,6% </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												
2045     628,958     7,805,889     1241,1%     279       2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504,8%     202       2048     416,931     6,881,648     1650,5%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     159       2051     265,827     5,614,712     2112,2%     141       2052     227,097     5,169,760     2276,5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612,8%     95       2055     138,945     3,864,569     2781,4%     83       2056     117,363     3,461,424     2949,3%     72       2057     98,912     3,086,620     3120,6%     62       2058     83,177     2,737,238     3290,8%     54       2059     69,815     2,420,217     3466,6% <td></td> <td></td> <td>807,911</td> <td>8,146,802</td> <td>1008.4%</td> <td>340</td>			807,911	8,146,802	1008.4%	340						
2046     550,969     7,546,647     1369,7%     252       2047     480,342     7,228,230     1504.8%     226       2048     416,931     6,881,648     1650.5%     202       2049     360,234     6,494,501     1802.9%     180       2050     310,032     6,062,247     1955.4%     159       2051     265,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     2276.5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120,6%     62       2058     83,177     2,737,238     3290.8%     54       2060     58,518     2,125,669     363.5%     40       2061     489.93     1,656,763     379.8%												
2047     480,342     7,228,230     1504.8%     226       2048     416,931     6,881,648     1650.5%     202       2049     360,234     6,494,501     1802.9%     180       2050     310,032     6,062,247     1955.4%     159       2051     265,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     2276.5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     66       2059     69,815     2,420,217     3466,6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%												
2048     416,931     6,881,648     1650.5%     202       2049     360,234     6,494,501     1802,9%     180       2050     310,032     6,062,247     1955,4%     159       2051     265,827     5,614,712     2112,2%     141       2052     227,097     5,169,760     2276,5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612,8%     95       2055     138,945     3,864,569     2781,4%     83       2056     117,363     3,461,424     2949,3%     72       2057     98,912     3,086,269     212,6%     62       2058     83,177     2,737,238     3290,8%     54       2060     58,518     2,125,669     3632,5%     40       2061     48,993     1,656,763     3789,8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116,3%												
2049     360,234     6,494,501     1802.9%     180       2050     310,032     6,062,247     1955.4%     159       2051     265,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     2276.5%     124       2053     193,362     4,725,224     2443.7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2061     48,993     1,856,763     378.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%												
2050     310,032     6,062,247     1955.4%     159       2051     265,827     5,614,712     2112.2%     141       2052     227,097     5,169,760     2276,5%     124       2053     193,362     4,725,224     2443,7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%												
2052     227,097     5,169,760     2276.5%     124       2053     193,362     4,725,224     2443.7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13 </td <td></td> <td>2050</td> <td>310,032</td> <td>6,062,247</td> <td>1955.4%</td> <td>159</td>		2050	310,032	6,062,247	1955.4%	159						
2053     193,362     4,725,224     2443.7%     109       2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     416.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11												
2054     164,126     4,288,302     2612.8%     95       2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11												
2055     138,945     3,864,569     2781.4%     83       2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8												
2056     117,363     3,461,424     2949.3%     72       2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8												
2057     98,912     3,086,620     3120.6%     62       2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7  <												
2058     83,177     2,737,238     3290.8%     54       2059     69,815     2,420,217     3466.6%     46       2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6												
2060     58,518     2,125,669     3632.5%     40       2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     3338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4		2058	83,177			54						
2061     48,993     1,856,763     3789.8%     34       2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3												
2062     40,993     1,619,520     3950.7%     29       2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     333,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078												
2063     34,280     1,411,074     4116.3%     25       2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-209												
2064     28,640     1,221,071     4263.5%     21       2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2 <td cols<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td></td>	<td></td> <td></td> <td></td> <td></td> <td></td> <td></td>											
2065     23,927     1,051,189     4393.4%     18       2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       2078-2098     9,606     1,038,956     10816.1%     2												
2066     19,992     906,684     4535.1%     16       2067     16,716     783,250     4685.6%     13       2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       9     5     207,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123												
2068     13,994     675,134     4824.3%     11       2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       9     9,606     1,038,956     10816.1%     2       9     9,606     1,038,956     10816.1%     2       9     9,606     1,038,956     10816.1%     2       9     104,266,508     222,035,605     213.0%     38,821												
2069     11,723     584,431     4985.5%     10       2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       9     666,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2070     9,821     505,467     5147.0%     8       2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2071     8,229     438,978     5334.8%     7       2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2072     6,896     385,499     5589.9%     6       2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2073     5,773     338,400     5862.0%     5       2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2074     4,825     303,086     6281.3%     4       2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2075     4,021     266,429     6625.3%     3       2076     3,341     234,618     7021.9%     3       2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2077     2,766     207,793     7513.0%     2       2078-2098     9,606     1,038,956     10816.1%     2       Past       37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
2078-2098     9,606     1,038,956     10816.1%     2       Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
Past     37,456,624     4,410,292     11.8%     15,698       Future     66,809,885     217,625,312     325.7%     23,123       Lifetime     104,266,508     222,035,605     213.0%     38,821												
Future66,809,885217,625,312325.7%23,123Lifetime104,266,508222,035,605213.0%38,821		2018-2098	9,006	1,038,956	10010.1%	2						
Future66,809,885217,625,312325.7%23,123Lifetime104,266,508222,035,605213.0%38,821		Past	37,456,624	4,410,292	11.8%	15,698						
		Future	66,809,885	217,625,312	325.7%							
	NLett	Lifetime	104,266,508	222,035,605	213.0%	38,821						

Note:

- 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 48.78%.

- 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 I-B Metropolitan Life Insurance Company

Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2-PREM

Maryland Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 15.00% Future Increase

Factors Derived from Projected Values for Illustrative Purposes Only Interest Rate Factors ation With Interest Calendar Year Mid-Year Premium Persistency Factors Earned Incurred Loss Policy Premium Disc / Accum Rate Increase Benefit Policy Policy Effective Ratio Factor Downgrade Lapse & Mortality Shock Lapse Persistency Persistency Int Rate Factor Premium Claims N/A 4.02% 2.1565 N/A 2.0732 4.02% N/A 4.02% 1.9930 N/A 1.9160 4.02% 4.02% 1.8420 N/A N/A 4.02% 1.7708 4.02% 1.7024 N/A 0.0% 4.02% 1.6366 36 -4.02% 1.5733 860,216 0.0% 4.02% 1.5126 2,786,451 0.0% -4,670,535 4.02% 1.4541 0.0% 5,373,506 20,325 4.02% 1.3979 0.4% 4,964,262 545,368 4.02% 1.3439 11.0% 1.2920 4,587,455 0.0% 4.02% 4,265,127 7,623 0.2% 4.02% 1.2420 4.02% 1.1940 4,049,436 357,300 8.8% 3,881,337 872,250 22.5% 4.02% 1.1479 4.02% 1.1035 3,939,763 1,704,364 43.3% 3,702,070 581,664 15.7% 4.02% 1.0609 4.02% 3,570,362 848,527 23.8% 1.0199 3,307,030 706,968 21.4% 1.3225 1.0000 0.0212 1.0000 0.979 0.945 4.02% 0.9805 0.978 0.959 3,155,650 796,192 25.2% 1.3684 1.0000 0.0219 1.0000 4.02% 0.9426 0.970 892,214 27.8% 1.5012 0.9982 0.9973 0.974 4.02% 0.9062 3,214,585 0.0258 3,202,777 1.6730 0.9822 0.9733 0.968 4.02% 0.8712 966,243 30.2% 0.0480 0.952 1.7110 0.967 3,015,497 1,080,197 35.8% 0.9786 0.9678 0.969 4.02% 0.8375 0.0314 2,798,831 1,217,867 43.5% 1.7110 0.9786 0.0274 0.9678 0.973 0.965 4.02% 0.8051 0.963 0.7740 2,591,601 1,369,267 52.8% 1.7110 0.9786 0.0291 0.9678 0.971 4.02% 2,393,449 1,534,800 64.1% 1.7110 0.9786 0.0309 0.9678 0.969 0.961 4.02% 0.7441 2,204,357 1,711,936 77.7% 1.7110 0.9786 0.0329 0.9678 0.967 0.958 4.02% 0.7154 2,024,771 1,896,643 93.7% 1.7110 0.965 0.955 4.02% 0.6877 0.9786 0.0349 0.9678 1,852,542 2,087,931 112.7% 1.7110 0.9786 0.9678 0.963 0.952 4.02% 0.6611 0.0372 0.9786 0.948 0.6356 1,688,961 2,286,218 135.4% 1.7110 0.0396 0.9678 0.960 4.02% 1,535,669 2,480,699 161.5% 1.7110 0.9786 0.0421 0.9678 0.958 0.946 4.02% 0.6110 1,391,106 2,667,306 1.7110 0.9786 0.9678 0.955 0.942 4.02% 0.5874 191.7% 0.0448 1,255,150 2,845,613 226.7% 1.7110 0.9786 0.0477 0.9678 0.952 0.939 4.02% 0.5647 1,127,713 3,006,749 1.7110 0.9786 0.9678 0.949 0.935 4.02% 0.5429 266.6% 0.0507 1,008,694 3,147,961 312.1% 1.7110 0.9786 0.0539 0.9678 0.946 0.930 4.02% 0.5219 898,034 3,260,424 363.1% 1.7110 0.9786 0.0572 0.9678 0.943 0.926 4.02% 0.5017 795,659 3,342,695 420.1% 1.7110 0.9786 0.0607 0.9678 0.939 0.922 4.02% 0.4824 701,494 3,395,472 484.0% 1.7110 0.9786 0.0643 0.9678 0.936 0.917 4.02% 0.4637 615,337 3,407,515 1.7110 0.9786 0.9678 0.932 0.912 4.02% 0.4458 553.8% 0.0680 0.908 0.4286 537,033 3,381,066 629.6% 1.7110 0.9786 0.0717 0.9678 0.928 4.02% 466,310 1.7110 0.9786 0.4120 3,324,239 0.0757 0.9678 0.924 0.903 4.02% 712.9% 402,795 0.899 0.3961 3,238,455 804.0% 1.7110 0.9786 0.0795 0.9678 0.921 4.02% 346,037 3,120,354 901.7% 1.7110 0.9786 0.0835 0.9678 0.917 0.894 4.02% 0.3808 0.9786 0.889 1.7110 0.913 4.02% 0.3661 295,750 2,982,282 1008.4% 0.0873 0.9678 251,473 2,817,382 1120.4% 1.7110 0.9786 0.0913 0.9678 0.909 0.884 4.02% 0.3519 2,640,909 1.7110 4.02% 212,791 1241.1% 0.9786 0.0951 0.9678 0.905 0.880 0.3383 179,202 2,454,538 1369.7% 1.7110 0.9786 0.0988 0.9678 0.901 0.876 4.02% 0.3252 150,193 2,260,125 1504.8% 1.7110 0.9786 0.1026 0.9678 0.897 0.872 4.02% 0.3127 0.9786 0.868 4.02% 0.3006 125,328 2,068,606 1650.5% 1.7110 0.1060 0.9678 0.894 104,101 1,876,791 1802.9% 1.7110 0.9786 0.1101 0.9678 0.890 0.864 4.02% 0.2890 0.2778 86,131 1,684,180 1.7110 0.9786 0.887 0.861 4.02% 1955.4% 0.1131 0.9678 70,997 1,499,571 0.883 0.857 0.2671 2112.2% 1.7110 0.9786 0.1166 0.9678 4.02% 0.854 58,309 1,327,378 1.7110 0.9786 0.9678 0.880 4.02% 0.2568 2276.5% 0.1199 47,729 1,166,357 2443.7% 1.7110 0.9786 0.9678 0.877 0.851 4.02% 0.2468 0.1230 38,947 1,017,605 1.7110 0.849 0.2373 2612.8% 0.9786 0.1259 0.9678 0.874 4.02% 31,697 0.847 881,617 2781.4% 1.7110 0.9786 0.1287 0.9678 0.871 4.02% 0.2281 0.845 25,739 759,134 2949.3% 1.7110 0.9786 0.1312 0.9678 0.869 4.02% 0.2193 0.843 20,854 650,776 1.7110 0.9786 0.9678 0.866 4.02% 0.2108 3120.6% 0.1345 16,859 554,812 3290.8% 1.7110 0.9786 0.1353 0.9678 0.865 0.841 4.02% 0.2027 13,604 471,598 0.9786 0.1949 3466.6% 1.7110 0.1379 0.9678 0.862 0.839 4.02% 10,962 398,197 3632.5% 1.7110 0.9786 0.1398 0.9678 0.860 0.838 4.02% 0.1873 8,823 0.9786 0.837 0.1801 334,383 3789.8% 1.7110 0.9678 0.858 4.02% 0.1416 7,097 280,387 3950.7% 1.7110 0.9786 0.1418 0.9678 0.858 0.837 4.02% 0.1731 5,706 234,859 1.7110 0.9786 0.9678 0.855 0.836 4.02% 0.1664 4116.3% 0.1452 4,583 195,381 1.7110 0.856 0.835 4.02% 0.1600 4263.5% 0.9786 0.1445 0.9678 3,681 161,699 0.835 4.02% 0.1538 4393.4% 1.7110 0.9786 0.1477 0.9678 0.852 2,957 0.9786 0.9678 0.854 0.836 4.02% 0.1479 134,081 4535.1% 1.7110 0.1458 2,376 111,352 4685.6% 1.7110 0.9786 0.1497 0.9678 0.850 0.836 4.02% 0.1422 92,272 0.1367 1,913 1.7110 0.9786 0.9678 0.849 0.837 4.02% 4824.3% 0.1513 1,540 76,789 4985.5% 1.7110 0.9786 0.1542 0.9678 0.846 0.838 4.02% 0.1314 1,240 63,847 1.7110 0.9786 0.9678 0.851 0.838 4.02% 0.1263 5147.0% 0.1489 999 53,306 0.9786 0.845 0.838 4.02% 0.1214 5334.8% 1.7110 0.1548 0.9678 805 45,003 5589.9% 1.7110 0.9786 0.1592 0.9678 0.841 0.838 4.02% 0.1167 648 37,978 0.837 5862.0% 1.7110 0.9786 0.1575 0.9678 0.843 4.02% 0.1122 521 32,701 0.9678 0.836 4.02% 0.1079 6281.3% 1.7110 0.9786 0.1571 0.843 417 0.837 0.833 0.1037 27,635 6625.3% 1.7110 0.9786 0.1627 0.9678 4.02% 333 23,395 7021.9% 1.7110 0.9786 0.1662 0.9678 0.834 0.831 4.02% 0.0997 19,919 7513.0% 265 1.7110 0.9786 0.9678 0.828 0.0959 0.1689 0.831 4.02% 885 95,747 10816.1% 1.7110 0.9786 0.1748 0.9678 0.825 N/A 4.02% 0.0922 46,650,556 4,937,422 10.6% 44,316,536 86,697,615 195.6% 90,967,092 91,635,037 100.7%

#### 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

1 Accumulated value of initial earned premium	44,696,296	х	58%	=	25,923,852
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	46,650,556 1,954,260		85%	=	1,661,121
3 Present value of future projected initial earned premium	28,359,910		58%	=	16,448,748
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	44,316,536 15,956,627		85%	=	13,563,133
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b					57,596,853
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					4,937,422 86,697,615
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b					91,635,037
8 Test: 7 is not less than 5					TRUE

## Attachment 1 Metropolitan Life Insurance Company Policy Forms: LTC2-FAC, LTC2-VAL, LTC2-IDEAL, LTC2-PREM, LTC2-FAC-P and LTC2-IDEAL-P Assumptions Summary

	Original Pricing Assumptions		Current	t Best Estimate	Assumptions
Interest Rate:	4.00%	Maximum valuation interest	t rate for contract reserves, v	vhich average to	4.02%
Mortality:	105% of Annuity 2000 Basic table     With Mortality Improvement using Projection Scale H     Mortality Selection Factors of:     Duration   Mortality Selection     1   67%     2   78%     3   85%     4   88%     5   91%     6   95%     7   98%     8+   100%	1 25 2 50 3 55 4 65 5 70 6 75 7 80 8 85 9 90 10 95			
Voluntary Lapse Rates:	$\begin{tabular}{ c c c c c } \hline Duration & Lapse Rate \\ \hline 1 & 6.25\% \\ \hline 2 & 3.50\% \\ \hline 3.77 & 3.00\% \\ \hline 8 & 2.50\% \\ \hline 9 & 2.25\% \\ \hline 10.12 & 2.00\% \\ \hline 13.14 & 1.75\% \\ \hline 15+ & 1.50\% \\ \hline \end{tabular}$	1     5.0       2     4.5       3     4.0       4     3.5       5     2.5       6     2.0       7     1.8       8     1.5       9     1.3       10     1.1	e Rate 00% 50% 00% 50% 50% 30% 50% 30% 10% 90%		
Morbidity:	Morbidity underwriting savings vary by duration. However, we do not have the actual rates.		e with morbidity U/W Selectic	on Factors of:	
		Duration     U/W S       1     64       2     77       3     10	election 4% 7% 90%		
Incidence:	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	I Incidence Rates (before gro	oss-up to zero-da	ay elimination) <sup>3</sup>
		Attained	Male		male
		81 1.1 82 1.4 83 1.6 84 1.9	ty Care     Home Care       19%     1.06%       40%     1.23%       54%     1.41%       90%     1.60%       18%     1.81%	Facility Care 1.65% 1.99% 2.36% 2.78% 3.24%	Home Care 1.11% 1.29% 1.48% 1.67% 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.	In 2016, termination curves Coefficients to an exponent differences between actual along the curves. Death an	vere reshaped to better reflect were constructed separately tial-shaped curve were based and expected terminations in d recovery termination rates uation uses. Minor adjustmer	y for deaths and d on experience n total as well as were recombine	recoveries, gend adjusted to minim at periodic durat d into a single ter
Utilization:	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.		ty Care 9%		

he years.

der and care path. nize tion points rmination le Home Care.

#### Attachment 2 Metropolitan Life Insurance Company Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Actual to Expected Ratios Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2- PREM

		Projected Experi Prience through 12			ed Pricing Experier based on Original		-
	•	ased on Current A		Assum	ptions since incept	ion	
	Α	В	C = B / A	D	E	F = E / D	G = C / F
	Earned	Incurred	Loss	Earned	Incurred	Loss	Actual to
Duration	Premium	Claims	Ratio 0.7%	Premium	Claims 3,769,937	Ratio 3.6%	Expected Ratio 0.21
2	105,242,679 200,183,807	777,532 3,594,339	1.8%	105,242,679 200,182,929	3,769,937 10,896,075	3.6% 5.4%	0.21
3	188,924,186	4,743,891	2.5%	187,820,473	13,445,335	7.2%	0.35
4	179,993,060	6,246,343	3.5%	176,507,732	18,952,721	10.7%	0.32
5	173,147,427	9,032,285	5.2%	165,394,252	21,753,260	13.2%	0.40
6	167,861,088	13,314,267	7.9%	154,571,134	24,360,818	15.8%	0.50
7	165,260,493	16,494,116	10.0%	144,012,955	27,136,029	18.8%	0.53
8	165,149,803	12,948,110	7.8%	133,738,679	29,661,806	22.2%	0.35
9	167,741,267	18,809,672	11.2%	124,363,668	38,419,753	30.9%	0.36
10	171,215,557	30,709,467	17.9%	115,554,490	41,295,478	35.7%	0.50
11	171,854,089	30,623,784	17.8%	107,418,608	44,922,787	41.8%	0.43
12 13	166,122,543 166,232,783	36,840,398 42,115,389	22.2% 25.3%	99,590,896 92,054,710	47,324,780 49,556,568	47.5% 53.8%	0.47 0.47
13	161,432,334	42,115,389 50,119,070	25.3% 31.0%	92,034,710 84,939,480	49,556,568 60,425,163	53.8% 71.1%	0.47
14	156,175,974	59,066,715	37.8%	78,060,736	62,844,304	80.5%	0.47
16	150,806,767	69,541,288	46.1%	71,764,707	65,313,925	91.0%	0.51
10	145,248,496	81,709,058	56.3%	65,782,705	67,321,293	102.3%	0.55
18	139,559,252	95,675,011	68.6%	60,095,253	68,968,551	114.8%	0.60
19	133,795,791	111,499,508	83.3%	54,652,927	78,716,891	144.0%	0.58
20	127,904,535	129,222,558	101.0%	49,513,432	80,003,737	161.6%	0.63
21	121,871,855	148,793,346	122.1%	44,739,992	83,698,927	187.1%	0.65
22	115,737,622	170,095,498	147.0%	40,311,792	84,324,234	209.2%	0.70
23	109,530,782	192,921,890	176.1%	36,192,050	84,579,443	233.7%	0.75
24	103,239,021	216,941,279	210.1%	32,365,445	89,801,558	277.5%	0.76
25	96,897,446	241,780,672	249.5%	28,851,404	89,324,057	309.6%	0.81
26 27	90,553,576	267,171,590	295.0%	25,640,197	93,419,833	364.3%	0.81
27 28	84,244,840 77,993,452	292,349,798 316,598,703	347.0% 405.9%	22,712,574 20,056,505	92,076,398 90,197,610	405.4% 449.7%	0.86 0.90
28	71,836,681	339,282,821	405.9%	17,647,772	87,747,109	449.7%	0.90
30	65,840,846	359,764,421	546.4%	15,497,735	84,989,433	548.4%	1.00
31	60,025,113	377,638,612	629.1%	13,565,129	90,182,647	664.8%	0.95
32	54,432,735	392,315,433	720.7%	11,812,779	86,995,782	736.5%	0.98
33	49,077,847	402,856,668	820.9%	10,246,606	83,468,784	814.6%	1.01
34	44,002,585	409,251,697	930.1%	8,846,959	78,494,442	887.2%	1.05
35	39,230,155	411,531,563	1049.0%	7,615,565	74,182,965	974.1%	1.08
36	34,781,384	409,759,854	1178.1%	6,522,839	71,706,854	1099.3%	1.07
37	30,661,572	403,999,668	1317.6%	5,560,053	66,656,435	1198.8%	1.10
38	26,876,145	394,344,795	1467.3%	4,711,407	61,263,979	1300.3%	1.13
39 40	23,426,331	381,244,383	1627.4%	3,968,724	55,654,099	1402.3%	1.16 1.20
40 41	20,305,707 17,509,236	365,422,515 347,242,865	1799.6% 1983.2%	3,329,435 2,778,708	50,111,834 45,562,599	1505.1% 1639.7%	1.20
42	15,018,987	327,048,549	2177.6%	2,312,849	40,677,324	1758.8%	1.24
43	12,817,236	305,405,675	2382.8%	1,921,981	36,085,514	1877.5%	1.27
44	10,884,866	282,856,335	2598.6%	1,590,935	31,847,910	2001.8%	1.30
45	9,201,033	260,033,851	2826.1%	1,307,282	27,968,908	2139.5%	1.32
46	7,743,233	237,325,083	3064.9%	1,067,567	24,773,765	2320.6%	1.32
47	6,489,189	215,036,198	3313.8%	872,617	21,576,023	2472.6%	1.34
48	5,416,812	193,441,420	3571.1%	713,514	18,739,095	2626.3%	1.36
49	4,505,106	172,973,628	3839.5%	582,836	16,299,545	2796.6%	1.37
50	3,734,257	153,765,599	4117.7%	475,004	14,129,906	2974.7%	1.38
51	3,086,098	135,970,764	4405.9%	385,756	12,241,881	3173.5%	1.39
52 53	2,543,944	119,682,400 104 843 809	4704.6% 5011.4%	312,717	10,593,921	3387.7% 3602.5%	1.39 1.39
53 54	2,092,119 1,716,873	104,843,809 91,520,788	5011.4% 5330.7%	253,213 204,367	9,122,078 7,818,999	3602.5% 3826.0%	1.39
54 55	1,406,118	91,520,788 79,652,206	5664.7%	204,387 163,507	6,649,997	3826.0% 4067.1%	1.39
55 56	1,149,618	69,171,812	6016.9%	129,386	5,711,973	4007.1%	1.39
57	938,378	59,929,420	6386.5%	101,790	4,850,751	4765.4%	1.34
58	764,789	51,796,934	6772.7%	79,579	4,097,551	5149.0%	1.32
59	622,309	44,738,883	7189.2%	61,773	3,436,385	5562.9%	1.29
60	505,578	38,628,210	7640.4%	47,554	2,861,205	6016.7%	1.27
Lifetime	4,632,563,405	10,608,212,438	229.0%	2,646,820,340	2,799,010,964	105.7%	2.17
Lifetime*	2,670,031,623	2,869,223,323	107.5%	1,796,424,020	1,077,205,144	60.0%	1.79

Note:

- 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 4.02%, 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%.

#### Attachment 3 Metropolitan Life Insurance Company Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Actual to Expected Ratios Policy Forms: LTC2-FAC, LTC2- VAL, LTC2-IDEAL and LTC2- PREM

			Projected Experie			xpected Pricing				ve Loss Ratio as of	
		<u>A</u>	В	C = B / A	D	E	F=E/D	G = C / F	H	 	J = H/I
	Calendar Year	Earned Premium	Incurred	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	Actual to Expected Ratio	Actual/Projected	Expected at 4%	Actual to
Historical	2005	2,359,204	Claims 0	0.0%	2,359,204	84,510	3.6%		at 4.02% (on C) 0.0%	(on F) 3.6%	Expected Rati
Experience	2005	31,432,207	939,324	3.0%	20,961,531	887,257	3.0 <i>%</i> 4.2%	0.71	2.8%	4.2%	0.00
Experience											
	2007	84,063,648	1,065,734	1.3%	68,825,280	3,393,960	4.9%	0.26	1.7%	4.7%	0.36
	2008	143,533,823	3,306,789	2.3%	122,392,675	7,011,316	5.7%	0.40	2.0%	5.3%	0.38
	2009	181,540,498	5,010,427	2.8%	168,022,548	11,721,834	7.0%	0.40	2.3%	6.0%	0.39
	2010	182,330,816	6,345,007	3.5%	175,474,870	15,529,211	8.8%	0.39	2.6%	6.9%	0.38
	2011	175,197,106	7,950,151	4.5%	167,210,354	18,933,732	11.3%	0.40	3.0%	7.8%	0.39
	2012	169,491,317	14,345,981	8.5%	157,003,132	21,779,554	13.9%	0.61	3.9%	8.8%	0.44
	2013	163,498,609	11,415,541	7.0%	147,022,362	24,629,767	16.8%	0.42	4.3%	9.8%	0.44
	2014	161,094,334	15,053,062	9.3%	137,398,322	28,526,233	20.8%	0.45	4.8%	10.9%	0.44
	2015	168,149,560	19,955,661	11.9%	128,240,435	32,764,161	25.5%	0.46	5.5%	12.2%	0.45
	2016	162,660,239	26,045,305	16.0%	119,664,168	37,398,733	31.3%	0.51	6.4%	13.5%	0.47
	2017	166,954,928	31,108,166	18.6%	111,581,312	40,898,592	36.7%	0.51	7.3%	14.9%	0.49
Projected	2018	160,131,493	35,018,100	21.9%	103,901,855	44,163,890	42.5%	0.51	8.3%	16.3%	0.51
Experience	2019	156,798,048	41,251,801	26.3%	96,538,564	48,582,175	50.3%	0.52	9.3%	17.8%	0.53
	2020	164,045,105	48,535,816	29.6%	89,460,988	53,276,662	59.6%	0.50	10.5%	19.3%	0.54
	2021	159,356,955	57,084,220	35.8%	82,725,125	58,276,536	70.4%	0.51	11.7%	20.9%	0.56
	2022	153,967,651	67,112,266	43.6%	76,323,945	61,580,172	80.7%	0.54	13.1%	22.6%	0.58
	2022	148,429,802	78,791,366	43.0 <i>%</i> 53.1%	70,269,627		91.6%	0.54	14.7%	24.2%	0.60
						64,332,960 68,206,210					0.60
	2024	142,735,484	92,206,915	64.6% 78.5%	64,500,542	68,206,210 72,222,271	105.7%	0.61	16.4%	25.9%	
	2025	136,910,520	107,440,420	78.5%	58,991,295	72,333,371	122.6%	0.64	18.3%	27.6%	0.66
	2026	131,003,613	124,531,693	95.1%	53,754,683	77,006,557	143.3%	0.66	20.4%	29.4%	0.70
	2027	124,975,425	143,435,581	114.8%	48,819,066	79,926,901	163.7%	0.70	22.8%	31.2%	0.73
	2028	118,811,931	164,053,075	138.1%	44,199,045	82,125,000	185.8%	0.74	25.3%	32.9%	0.77
	2029	112,551,861	186,218,028	165.5%	39,886,017	84,315,983	211.4%	0.78	28.1%	34.7%	0.81
	2030	106,238,580	209,672,833	197.4%	35,869,872	86,381,588	240.8%	0.82	31.1%	36.4%	0.85
	2031	99,871,471	234,065,752	234.4%	32,147,010	89,138,985	277.3%	0.85	34.3%	38.1%	0.90
	2032	93,473,270	259,017,370	277.1%	28,716,880	90,650,819	315.7%	0.88	37.7%	39.8%	0.95
	2033	87,110,795	284,044,577	326.1%	25,571,716	91,371,824	357.3%	0.91	41.2%	41.5%	0.99
	2034	80,806,572	308,354,647	381.6%	22,698,397	90,513,431	398.8%	0.96	44.9%	43.1%	1.04
	2035	74,569,833	331,153,212	444.1%	20,087,085	89,105,328	443.6%	1.00	48.7%	44.6%	1.09
	2036	68,472,307	351,944,958	514.0%	17,721,832	88,763,581	500.9%	1.03	52.6%	46.0%	1.14
	2037	62,560,671	370,562,230	592.3%	15,584,434	88,488,967	567.8%	1.04	56.5%	47.4%	1.19
	2038	56,856,260	385,986,942	678.9%	13,653,401	88,150,377	645.6%	1.04	60.5%	48.7%	1.24
	2038	51,383,622	397,487,723	773.6%	11,910,380	85,595,602	718.7%	1.03	64.4%	50.0%	1.24
		46,179,954								51.2%	
	2040		404,889,048	876.8%	10,347,339	81,922,821	791.7%	1.11	68.2%		1.33
	2041	41,276,504	408,195,862	988.9%	8,952,038	78,105,708	872.5%	1.13	71.9%	52.2%	1.38
	2042	36,687,887	407,534,875	1110.8%	7,712,336	74,190,050	962.0%	1.15	75.5%	53.2%	1.42
	2043	32,429,359	403,019,499	1242.8%	6,612,205	70,046,575	1059.4%	1.17	78.8%	54.1%	1.46
	2044	28,501,091	394,656,776	1384.7%	5,639,314	65,096,768	1154.3%	1.20	82.0%	54.9%	1.49
	2045	24,911,741	382,834,207	1536.8%	4,783,956	59,731,457	1248.6%	1.23	85.0%	55.6%	1.53
	2046	21,656,518	368,124,418	1699.8%	4,037,537	54,423,893	1347.9%	1.26	87.8%	56.3%	1.56
	2047	18,729,687	350,877,570	1873.4%	3,392,889	49,290,804	1452.8%	1.29	90.3%	56.8%	1.59
	2048	16,115,024	331,633,984	2057.9%	2,840,739	44,441,111	1564.4%	1.32	92.6%	57.3%	1.62
	2049	13,795,046	310,767,653	2252.7%	2,370,934	39,751,044	1676.6%	1.34	94.7%	57.7%	1.64
	2050	11,751,164	288,812,924	2457.7%	1,971,656	35,328,522	1791.8%	1.37	96.6%	58.0%	1.66
	2051	9,964,598	266,469,267	2674.2%	1,631,964	31,298,841	1917.9%	1.39	98.2%	58.3%	1.68
	2052	8,412,273	244,064,883	2901.3%	1,344,541	27,627,709	2054.8%	1.41	99.7%	58.6%	1.70
	2053	7,071,464	221,945,962	3138.6%	1,104,301	24,317,406	2202.1%	1.43	101.0%	58.8%	1.72
	2053	5,920,612	200,498,000	3386.4%	906,143	21,291,265	2349.7%	1.44	102.1%	59.0%	1.73
	2054	4,938,644	179,858,788	3641.9%	743,054	18,579,203	2500.4%	1.44	103.1%	59.1%	1.74
	2055	4,938,644 4,104,985		3641.9% 3907.3%	608,367		2500.4% 2661.6%			59.1% 59.3%	1.74
			160,395,684			16,192,306		1.47	103.9% 104.6%		
	2057	3,401,917	142,442,708	4187.1%	496,986	14,090,008	2835.1%	1.48	104.6%	59.4%	1.76
	2058	2,811,843	125,817,893	4474.6%	405,027	12,235,254	3020.9%	1.48	105.2%	59.4%	1.77
	2059	2,318,609	110,664,570	4772.9%	329,304	10,592,559	3216.7%	1.48	105.7%	59.5%	1.78
	2060	1,907,684	96,961,359	5082.7%	266,812	9,131,399	3422.4%	1.49	106.1%	59.6%	1.78
	2061	1,566,103	84,650,074	5405.1%	214,952	7,849,305	3651.7%	1.48	106.5%	59.6%	1.79
	2062	1,283,232	73,676,820	5741.5%	171,854	6,725,883	3913.7%	1.47	106.8%	59.7%	1.79
	2063	1,049,630	64,034,887	6100.7%	136,284	5,751,556	4220.3%	1.45	107.0%	59.7%	1.79
	2064	857,033	55,513,985	6477.5%	107,316	4,890,395	4557.0%	1.42	107.3%	59.7%	1.80
	2065	698,720	48,008,447	6870.9%	83,921	4,125,324	4915.7%	1.40	107.4%	59.8%	1.80
	2066	568,754	41,518,512	7299.9%	65,119	3,435,519	5275.8%	1.38	107.6%	59.8%	1.80
	2000	462,168	35,856,686	7758.4%	50,094	2,828,310	5646.0%	1.37	107.7%	59.8%	1.80
	2067	374,946	30,922,398	8247.2%	38,162	2,828,310 2,293,846	6010.8%	1.37	107.8%	59.8%	1.80
	2069	303,495	26,593,706	8762.5%	28,750	1,846,979	6424.2%	1.36	107.9%	59.8%	1.80
	2070	245,044	22,837,616	9319.8%	21,342	1,465,874	6868.5%	1.36	108.0%	59.8%	1.80
	Past	1,792,306,288	142,541,148	8.0%	1,526,156,192	243,558,862	16.0%	0.50	7.3%	14.9%	0.49
	Future	1,792,306,288 2,841,357,000	142,541,148 10,562,048,587	8.0% 371.7%	1,526,156,192	243,558,862 2,561,184,614	16.0% 228.5%	1.63	7.3% 225.4%	14.9% 163.3%	0.49 1.38

Note:

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	ipse	
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		I	Facility Care		Home Care		
Attained Age	Actual Claims <sup>1</sup>	Expected Claims <sup>2</sup>	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%

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

<sup>2</sup> 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 <sup>1</sup>	Actual Recoveries	Expected Recoveries <sup>1</sup>	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%

<sup>1</sup> The expected deaths and recoveries are based on current best estimate assumptions.