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

Email: mark.newton@metlife.com

Mark D. Newton, FSA, MAAA



August 18, 2019

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

Re: LTC2007

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 4.00% 	
	LLR without rate increase – 94.5%	
	LLR with rate increase – 86.4%	
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 4.00% 	
	LLR without rate increase – 84.9%	
	LLR with rate increase – 78.1%	
Exhibit II-B	Demonstration of rate action meeting Rate Stability	
	(58/85) limitations	

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

Rationale for the Rate Increase Request

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

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

Assumption Setting and Review

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

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

Calculation of the Rate Request

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

Additional Notes

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

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

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

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

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

Sincerely,

Mark D. Newton, FSA, MAAA

Mark Debuton

Actuarial Director, Metropolitan Life Insurance Company

New York, NY

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Policy Forms

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

LTC2007

These forms were developed as part of a nationwide series and were issued in Maryland from July 2009 to May 2011, but are no longer being marketed in any state. Nationwide, the last policies under this series were issued in 2011.

Policy forms LTC2007-MD (subsequently referred to as LTC2007) is an existing individual tax-qualified policy forms and were previously approved in 2009, 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 after April 30, 2009.

Policy form LTC2007 provides 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

LTC2007 is part of a nationwide series of individually underwritten policy forms which reimburses 100% of charges, up to a maximum benefit amount, for qualified long-term care services. Benefits are payable for room and board and the following services received in and provided by nursing home, hospice and assisted living facilities: nursing care, maintenance or personal care, therapy services and hospice care. The policy form also covers adult day care and home care service, including hospice care, therapy services and services provided by an independent caregiver and a social worker. Additionally, the policy provides additional benefits for alternate services, international coverage, and return of earned premium upon death.

Coverage is expressed as a combination of a monthly benefit amount and a total benefit amounts. Monthly benefit amount represents the maximum amount a policyholder may receive for covered services in a calendar month. Total benefit amount represents the maximum amount a policyholder may receive for covered services in the lifetime of the policy. Premium rates are determined on benefit duration. Benefit duration (in years) is defined as the ratio between the total benefit amount and the monthly benefit amount, divided by 12.

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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 needs assessment; 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).

Contingent Benefit upon Lapse provides limited benefits if the insured lapses, or cancels the policy within 120 days of a substantial premium increase as defined in the policy.

At issue, the insured had the option of choosing one of the following benefit increase riders: 5% Automatic Compound Inflation Protection Rider, 3% Automatic Compound Inflation Protection Rider, 5% Simple Inflation Protection Rider, Graded Automatic Compound Inflation Protection Rider, Graded Automatic Compound Inflation Protection through Age 75 Rider, or Urban CPI Compound Inflation Protection Rider, Future Purchase Rider, Guaranteed Purchase Option Rider, Annual Purchase Inflation Protection Rider or Convertible Inflation Protection Rider.

At issue, the insured had the option of selecting the following riders: Cash Benefit Rider, Nonforfeiture Coverage Rider, Shared Care Rider and Ten Year Premium Payment Rider.

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 after April 30, 2009.

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.
- 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:

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Voluntary Termination Rates

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

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

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

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

6. Marketing Method

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

7. Underwriting Description

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

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8. Premiums

Premiums are unisex, but vary by issue age, rating class, coverage amount, benefit duration the waiting period, the payment method, premium mode and the selection of any other options or riders. Benefit duration, in years, is defined as (Total Benefit Amount/Monthly Benefit Amount)/12.

9. Issue Age Range

These policy forms were issued up to age 84.

10. Area Factors

Area factors are not used for this product.

11. Premium Modalization Rules

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

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

12. Reserves

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

13. Trend Assumptions

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

14. Past and Future Policy Experience

Nationwide and Maryland experience for policy form series LTC2007 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 4.00%. 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 4.00%.

15. Projected Earned Premiums and Incurred Claims

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

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

Present and accumulated values in the lifetime projections in Exhibit I-A and I-B are determined at the average maximum valuation interest rate for contract reserves applicable to LTC business issued in the years in which the applicable business of this filing were issued. The maximum valuation interest rate averages 4.00%.

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 %	Authorization Date	Implementation Date
1	15.00%	10/10/2017	4/1/2018
2	5.00%	11/14/2018	4/1/2019

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 after April 30, 2009.

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 morbidity assumptions used in the pricing were primarily based on the company's own experience. Since the company's own individual block of business was relatively new, these assumptions were modified to reflect the experience of other long term care business that MetLife issued or administered, and to incorporate industry expectation and competitive rate information. Morbidity selection factors were also applied to reflect the effect of underwriting. Due to lack of actual experience of the individual business, we used industry standard selection factors developed by our consultants. These issue-age and duration dependent selection factors are expected to be consistent with our underwriting methods in early durations. Due to lack of actual data, late duration selection factors primarily reflect industry expectations.
- b. The original pricing expected voluntary termination rates varied by duration as shown in the following table:

Policy Duration	Lapse Rate
1	5.50%
2	3.00%
3	1.75%
4	1.50%
5	1.40%
6	1.20%

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7	1.05%
8	0.95%
9+	0.90%

c. The original pricing expected mortality rates were based on the company's own experience. The mortality rates used in the pricing were equal to 88% of the Annuity 2000 Basic Mortality Table with 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 and II 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 these exhibits, the expected lifetime loss ratio, both with and without the requested rate increase, exceeds the minimum requirements under rate stability regulations.

20. Average Annual Premium

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

Before increase: \$2,414 After prior authorized 15%/5% increases: \$2,725 After current requested 15.00% increase: \$3,134

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21. Proposed Effective Date

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

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

By Issue Age

Issue Age	%
<45	9%
45-49	10%
50-54	19%
55-59	26%
60-64	22%
65-69	10%
70-74	3%
75+	1%
Total	100%

By Benefit Period

Benefit Period (in days)	%
750-1,000	30%
1,250-1,500	23%
1,667-2,500	31%
2,667-3,000	8%
> 3,000	7%
Total	100%

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By Inflation Type

Inflation Type	%
Compound 3%	32%
Compound 5%	17%
FPO	19%
GPO	5%
None	27%
Total	100%

By Gender

Gender	%
Female	60%
Male	40%
Total	100%

By Premium Payment Option

Payment Option	%
Standard	98%
Ten Year	2%
Total	100%

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	-	-	82	\$197,937		

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24. Actuarial Certification

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

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

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

I further certify that:

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

Mark D. Newton, FSA, MAAA

Mark Debuton

Actuarial Director, Metropolitan Life Insurance Company

Exhibit I-A

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) Policy Forms: LTC2007

				Loss Ra	atio Demonst				Fact	ors Derived fr	om Projected Values	s for Illustrati	ve Purposes (Only	Interest Ra	te Factors
	Calendar	Wit Earned	thout Interest Incurred	Loss	Life	Earned	With Interest Incurred	Loss	Premium Rate Increase	Benefit	Policy	Persistency Policy	Factors Policy	Premium	Calendar Year Effective	Mid-Year Disc / Accum
	Year	Premium	Claims	Ratio	Years	Premium	Claims	Ratio	Factor	Downgrade	Lapse & Mortality	•		Persistency	Int Rate	Factor
	1998	-	-	N/A	-	-	-	N/A							4.00%	
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	
	2001	-	-	N/A	-	-	-	N/A							4.00%	
	2002	-	-	N/A	-	-	-	N/A							4.00%	1
	2003 2004	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1.7660 1.6980
Historical	2005	-	-	N/A	-	-	-	N/A							4.00%	
Experience	2006	-	-	N/A	-	-	-	N/A							4.00%	
	2007 2008	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	
	2009	904,206	-	0.0%	1,613	1,261,976	-	0.0%							4.00%	
	2010	6,471,612	471,938	7.3%	5,645	8,684,853	633,337	7.3%							4.00%	
	2011 2012	12,943,235 12,768,074	192,502 35,323	1.5% 0.3%	6,857 6,518	16,701,657 15,841,954	248,400 43,827	1.5% 0.3%							4.00% 4.00%	
	2013	12,624,976	958,098	7.6%	6,261	15,061,928	1,143,036	7.6%							4.00%	1.1930
	2014	12,338,858	781,271	6.3%	6,116	14,154,407	896,227	6.3%							4.00%	1
	2015 2016	12,036,604 11,864,837	904,646 1,831,626	7.5% 15.4%	6,004 5,892	13,276,614 12,583,799	997,843 1,942,615	7.5% 15.4%							4.00% 4.00%	1.1030 1.0606
	2017	11,488,619	2,133,522	18.6%	5,783	11,716,138	2,175,775	18.6%							4.00%	
Projected	2018	11,780,897	1,972,500	16.7%	5,650	11,552,120	1,934,195	16.7%	1.0516	N/A	0.0229	N/A		0.975		
Future Experience	2019 2020	12,702,647 12,477,233	2,261,362 2,604,001	17.8% 20.9%	5,525 5,406	11,976,894 11,311,884	2,132,162 2,360,792	17.8% 20.9%	1.1676 1.2067	N/A N/A	0.0221 0.0216	N/A N/A			4.00% 4.00%	
	2020	11,859,339	3,008,501	25.4%	5,288	10,338,173	2,622,609	25.4%	1.2075	N/A	0.0217	N/A				1
	2022	11,515,758	3,485,213	30.3%	5,168	9,652,560	2,921,321	30.3%	1.2075	N/A	0.0228	N/A		0.971	4.00%	1
	2023 2024	11,173,026 10,819,713	4,043,020 4,685,547	36.2% 43.3%	5,044 4,916	9,005,078 8,384,922	3,258,536 3,631,145	36.2% 43.3%	1.2075 1.2075	N/A N/A	0.0240 0.0253	N/A N/A				1
	2025	10,455,475	5,416,745	51.8%	4,784	7,791,009	4,036,346	51.8%	1.2075	N/A	0.0253	N/A				1
	2026	10,080,075	6,239,113	61.9%	4,648	7,222,381	4,470,329	61.9%	1.2075		0.0284	N/A				1
	2027 2028	9,693,728 9,296,386	7,151,499 8,148,044	73.8% 87.6%	4,507 4,362	6,678,426 6,158,346	4,926,975 5,397,632	73.8% 87.6%	1.2075 1.2075	N/A N/A	0.0303 0.0322	N/A N/A	0.970 0.968			
	2029	8,888,935	9,228,338	103.8%	4,213	5,661,954	5,878,142	103.8%	1.2075	N/A	0.0342	N/A				
	2030	8,472,136	10,378,004	122.5%	4,059	5,188,911	6,356,193	122.5%	1.2075	N/A	0.0365	N/A		0.953		
	2031 2032	8,047,480 7,616,454	11,590,394 12,847,129	144.0% 168.7%	3,902 3,741	4,739,252 4,312,900	6,825,715 7,274,827	144.0% 168.7%	1.2075 1.2075	N/A N/A	0.0388 0.0412	N/A N/A		0.950 0.946		
	2033	7,180,994	14,132,752	196.8%	3,576	3,909,919	7,695,024	196.8%	1.2075	N/A	0.0440	N/A				
	2034	6,742,921	15,412,722	228.6%	3,409	3,530,189	8,069,177	228.6%	1.2075	N/A	0.0468	N/A				
	2035 2036	6,304,694 5,868,973	16,654,612 17,839,708	264.2% 304.0%	3,239 3,068	3,173,807 2,840,831	8,383,996 8,635,171	264.2% 304.0%	1.2075 1.2075	N/A N/A	0.0498 0.0529	N/A N/A		0.935 0.931	4.00% 4.00%	
	2037	5,438,269	18,945,786	348.4%	2,896	2,531,107	8,817,846	348.4%	1.2075	N/A	0.0561	N/A		0.927		
	2038	5,015,237	19,937,670	397.5%	2,724	2,244,440	8,922,590	397.5%	1.2075	N/A	0.0595	N/A		0.922		
	2039 2040	4,602,502 4,202,712	20,765,026 21,440,311	451.2% 510.2%	2,552 2,382	1,980,511 1,738,920	8,935,434 8,871,171	451.2% 510.2%	1.2075 1.2075	N/A N/A	0.0630 0.0666	N/A N/A		0.918 0.913		
	2041	3,818,208	21,936,429	574.5%	2,215	1,519,064	8,727,351	574.5%	1.2075	N/A	0.0702	N/A				
	2042	3,450,917	22,256,473	644.9%	2,051	1,320,133	8,514,115	644.9%	1.2075	N/A	0.0740	N/A N/A				
	2043 2044	3,102,448 2,774,293	22,366,819 22,283,374	720.9% 803.2%	1,891 1,737	1,141,181 981,226	8,227,238 7,881,293	720.9% 803.2%	1.2075 1.2075	N/A N/A	0.0778 0.0817	N/A N/A				
	2045	2,467,614	22,020,872	892.4%	1,588	839,190	7,488,894	892.4%	1.2075	N/A	0.0856	N/A	0.914	0.889	4.00%	0.3401
	2046 2047	2,183,112 1,921,058	21,563,513 20,971,095	987.7% 1091.6%	1,446 1,311	713,881 604,028	7,051,303 6,593,828	987.7% 1091.6%	1.2075 1.2075	N/A N/A	0.0894 0.0934	N/A N/A		0.885 0.880	4.00% 4.00%	1
	2047	1,681,240	20,230,488	1203.3%	1,184	508,292	6,116,310	1203.3%	1.2075	N/A N/A	0.0934	N/A				
	2049	1,463,509	19,328,565	1320.7%	1,064	425,447	5,618,876	1320.7%	1.2075	N/A	0.1010	N/A	0.899	0.870	4.00%	0.2907
	2050 2051	1,266,916 1,091,033	18,341,225 17,265,985	1447.7% 1582.5%	952 849	354,131 293,239	5,126,782 4,640,604	1447.7% 1582.5%	1.2075 1.2075	N/A N/A	0.1048 0.1087	N/A N/A		0.866 0.861	4.00% 4.00%	
	2052	934,758	16,117,787	1724.3%	754	241,573	4,165,386	1724.3%	1.2075	N/A	0.1087	N/A			4.00%	
	2053	796,861	14,934,255	1874.1%	666	198,015	3,711,077	1874.1%	1.2075	N/A	0.1160	N/A				
	2054 2055	675,944 570,642	13,733,596 12,546,233	2031.8% 2198.6%	587 515	161,508 131,103	3,281,462 2,882,459	2031.8% 2198.6%	1.2075 1.2075	N/A N/A	0.1191 0.1226	N/A N/A		0.848 0.844		1
	2056	479,676	11,394,815	2375.5%	450	105,966	2,517,235	2375.5%	1.2075	N/A	0.1259	N/A			4.00%	1
	2057	401,507	10,283,153	2561.1%	392	85,286	2,184,286	2561.1%	1.2075	N/A	0.1289	N/A			4.00%	1
	2058 2059	334,740 277,923	9,234,014 8,234,278	2758.6% 2962.8%	340 294	68,369 54,581	1,885,994 1,617,119	2758.6% 2962.8%	1.2075 1.2075	N/A N/A	0.1319 0.1348	N/A N/A		0.834 0.830		1
	2060	229,883	7,309,759	3179.8%	254	43,410	1,380,340	3179.8%	1.2075	N/A		N/A	0.863	0.827		1
	2061	189,444	6,446,098	3402.6%	219	34,398	1,170,433	3402.6%	1.2075	N/A	0.1398	N/A		0.824		
	2062 2063	155,598 127,423	5,655,950 4,937,295	3635.0% 3874.7%	187 160	27,166 21,391	987,465 828,843	3635.0% 3874.7%	1.2075 1.2075	N/A N/A	0.1422 0.1454	N/A N/A			4.00% 4.00%	1
	2064	104,023	4,276,661	4111.3%	137	16,791	690,326	4111.3%	1.2075	N/A	0.1470	N/A		0.816		
	2065	84,694	3,688,088	4354.6%	116	13,145	572,424	4354.6%	1.2075	N/A	0.1485	N/A		0.814	4.00%	1
	2066 2067	68,730 55,627	3,167,867 2,713,642	4609.2% 4878.3%	99 84	10,257 7,982	472,770 389,406	4609.2% 4878.3%	1.2075 1.2075	N/A N/A	0.1519 0.1539	N/A N/A				0.1492 0.1435
	2068	44,874	2,314,407	5157.6%	70	6,192	319,342	5157.6%	1.2075	N/A	0.1565	N/A	0.843		4.00%	0.1380
	2069	36,100	1,966,923	5448.5%	59	4,790	260,958	5448.5%	1.2075	N/A	0.1570	N/A				0.1327
	2070 2071	28,953 23,137	1,670,698 1,414,070	5770.4% 6111.8%	50 42	3,694 2,838	213,131 173,455	5770.4% 6111.8%	1.2075 1.2075	N/A N/A	0.1593 0.1655	N/A N/A		0.802 0.799		1
	2072	18,411	1,192,436	6476.7%	35	2,172	140,643	6476.7%	1.2075	N/A	0.1647	N/A	0.835	0.796	4.00%	0.1179
	2073	14,587	999,407	6851.2%	29	1,654	113,342	6851.2%	1.2075	N/A	0.1707	N/A				0.1134
	2074 2075	11,512 9,030	835,227 696,463	7255.5% 7712.7%	24 20	1,255 947	91,080 73,027	7255.5% 7712.7%	1.2075 1.2075	N/A N/A	0.1674 0.1736	N/A N/A				1
	2076	7,040	580,466	8245.8%	16	710	58,523	8245.8%	1.2075	N/A	0.1819	N/A	0.818	0.780	4.00%	0.1008
	2077	5,447	482,516	8858.3%	13	528 1 365	46,776 187,750	8858.3%	1.2075	N/A	0.1743	N/A				1
	2078-2098	14,640	2,014,272	13758.6%	11	1,365	187,759	13758.6%	1.2075	N/A	0.1924	N/A	0.808	N/A	4.00%	0.0932
	Past	93,441,021	7,308,926	7.8%	50,689	109,283,326	8,081,060	7.4%								
	Future Lifetime	231,157,137 324,598,158	615,593,212	266.3% 191.9%	116,973 167,662	151,871,429 261,154,756	238,758,984	157.2% 94.5%								
	LIIEUIIIE	JZ4,DY8, 158	622,902,138	191.9%	107,002	261,154,756	246,840,044	94.5%	l							

⁻ 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 two prior authorized increases for a cumulative total of approximately 20.75%.

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

Exhibit I-A

Metropolitan Life Insurance Company

Nationwide Experience Projections (Premium Normalized to Include Prior Authorized Increases) and With 15.00% Future Increase Policy Forms: LTC2007

	Ţ			Loss R	atio Demonstr					ors Derived from	om Projected Value			Only	Interest Ra	
-	Calendar	Earned W	ithout Interest Incurred	Loss	Life	Earned	With Interest Incurred	Loss	Premium Rate Increase	Benefit	Policy	Persistency F Policy	Factors Policy	Premium	Calendar Year Effective	Mid-Year Disc / Accum
	Year	Premium	Claims	Ratio	Years	Premium	Claims	Ratio	Factor	Downgrade	Lapse & Mortality		Persistency	Persistency	Int Rate	Factor
	1998 1999	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	2.1486 2.0659
	2000	-	-	N/A	-	-	-	N/A							4.00%	1.9865
	2001 2002	-	-	N/A N/A	-	-	-	N/A N/A							4.00%	1.9101
	2002	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1.8366 1.7660
	2004	-	-	N/A	-	-	-	N/A							4.00%	1.6980
Historical Experience	2005 2006	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1.6327 1.5699
	2007	-	-	N/A	-	-	-	N/A							4.00%	1.5096
	2008 2009	904,206	-	N/A 0.0%	- 1,613	1,261,976	-	N/A 0.0%							4.00% 4.00%	1.4515 1.3957
	2010	6,471,612	471,938	7.3%	5,645	8,684,853	633,337	7.3%							4.00%	1.3420
	2011 2012	12,943,235 12,768,074	192,502 35,323	1.5% 0.3%	6,857 6,518	16,701,657 15,841,954	248,400 43,827	1.5% 0.3%							4.00% 4.00%	1.2904 1.2407
	2013	12,624,976	958,098	7.6%	6,261	15,061,928	1,143,036	7.6%							4.00%	1.1930
	2014 2015	12,338,858 12,036,604	781,271 904,646	6.3% 7.5%	6,116 6,004	14,154,407 13,276,614	896,227 997,843	6.3% 7.5%							4.00% 4.00%	1.1471 1.1030
	2015	11,864,837	1,831,626	15.4%	5,892	12,583,799	1,942,615	15.4%							4.00%	1.0606
Decision 1	2017	11,488,619	2,133,522	18.6%	5,783	11,716,138	2,175,775	18.6%	4.0540	4.0000	0.0000	4 0000	0.077	0.075	4.00%	1.0198
Projected Future	2018 2019	11,780,897 12,702,647	1,972,500 2,261,362	16.7% 17.8%	5,650 5,525	11,552,120 11,976,894	1,934,195 2,132,162	16.7% 17.8%	1.0516 1.1676	1.0000 1.0000	0.0229 0.0221	1.0000 1.0000	0.977 0.978	0.975 0.971	4.00% 4.00%	0.9806 0.9429
Experience	2020	12,622,055	2,587,065	20.5%	5,385	11,443,180	2,345,438	20.5%	1.2287	0.9974	0.0254	0.9961	0.975	0.950	4.00%	0.9066
	2021 2022	12,793,751 12,542,416	2,868,990 3,300,807	22.4% 26.3%	5,139 5,002	11,152,730 10,513,110	2,500,992 2,766,751	22.4% 26.3%	1.3660 1.3886	0.9813 0.9786	0.0456 0.0268	0.9718 0.9678	0.954 0.973	0.950 0.971	4.00% 4.00%	0.8717 0.8382
	2023	12,169,129	3,829,100	31.5%	4,881	9,807,902	3,086,124	31.5%	1.3886	0.9786	0.0240	0.9678	0.976	0.970	4.00%	0.8060
	2024 2025	11,784,317 11,387,606	4,437,630 5,130,140	37.7% 45.1%	4,758 4,630	9,132,458 8,485,597	3,439,018 3,822,779	37.7% 45.1%	1.3886 1.3886	0.9786 0.9786	0.0253 0.0269	0.9678 0.9678	0.975 0.973	0.968 0.966	4.00% 4.00%	0.7750 0.7452
	2026	10,978,738	5,908,996	53.8%	4,498	7,866,273	4,233,800	53.8%	1.3886	0.9786	0.0284	0.9678	0.972	0.964	4.00%	0.7165
	2027 2028	10,557,948 10,125,182	6,773,106 7,716,923	64.2% 76.2%	4,362 4,222	7,273,824 6,707,378	4,666,284 5,112,039	64.2% 76.2%	1.3886 1.3886	0.9786 0.9786	0.0303 0.0322	0.9678 0.9678	0.970 0.968	0.962 0.959	4.00% 4.00%	0.6889 0.6624
	2029	9,681,405	8,740,058	90.3%	4,222	6,166,731	5,712,039	90.3%	1.3886	0.9786	0.0322	0.9678	0.966	0.959	4.00%	0.6370
	2030	9,227,448	9,828,894	106.5%	3,929	5,651,515	6,019,881	106.5%	1.3886	0.9786	0.0365	0.9678	0.964	0.953	4.00%	0.6125
	2031 2032	8,764,932 8,295,480	10,977,136 12,167,376	125.2% 146.7%	3,776 3,620	5,161,768 4,697,406	6,464,560 6,889,909	125.2% 146.7%	1.3886 1.3886	0.9786 0.9786	0.0388 0.0412	0.9678 0.9678	0.961 0.959	0.950 0.946	4.00% 4.00%	0.5889 0.5663
	2033	7,821,197	13,384,976	171.1%	3,461	4,258,498	7,287,873	171.1%	1.3886	0.9786	0.0440	0.9678	0.956	0.943	4.00%	0.5445
	2034 2035	7,344,069 6,866,773	14,597,221 15,773,401	198.8% 229.7%	3,299 3,135	3,844,914 3,456,760	7,642,229 7,940,391	198.8% 229.7%	1.3886 1.3886	0.9786 0.9786	0.0468 0.0498	0.9678 0.9678	0.953 0.950	0.939 0.935	4.00% 4.00%	0.5235 0.5034
	2036	6,392,207	16,895,792	264.3%	2,969	3,094,098	8,178,276	264.3%	1.3886	0.9786	0.0529	0.9678	0.947	0.931	4.00%	0.4840
	2037 2038	5,923,104 5,462,358	17,943,347 18,882,749	302.9% 345.7%	2,803 2,636	2,756,762 2,444,538	8,351,286 8,450,488	302.9% 345.7%	1.3886 1.3886	0.9786 0.9786	0.0561 0.0595	0.9678 0.9678	0.944 0.941	0.927 0.922	4.00% 4.00%	0.4654 0.4475
	2039	5,012,827	19,666,329	392.3%	2,470	2,157,078	8,462,652	392.3%	1.3886	0.9786	0.0630	0.9678	0.937	0.918		0.4303
	2040 2041	4,577,394 4,158,610	20,305,885 20,775,752	443.6% 499.6%	2,306 2,144	1,893,948 1,654,492	8,401,789 8,265,579	443.6% 499.6%	1.3886 1.3886	0.9786 0.9786	0.0666 0.0702	0.9678 0.9678	0.933 0.930	0.913 0.909		0.4138 0.3978
	2041	3,758,575	21,078,862	560.8%	1,985	1,437,826	8,063,626	560.8%	1.3886	0.9786	0.0740	0.9678	0.930	0.909	4.00%	0.3825
	2043	3,379,039	21,183,370	626.9%	1,831	1,242,920	7,791,927	626.9%	1.3886	0.9786	0.0778	0.9678	0.922	0.899	4.00%	0.3678
	2044 2045	3,021,628 2,687,608	21,104,340 20,855,727	698.4% 776.0%	1,681 1,537	1,068,704 914,006	7,464,286 7,092,650	698.4% 776.0%	1.3886 1.3886	0.9786 0.9786	0.0817 0.0856	0.9678 0.9678	0.918 0.914	0.894 0.889	4.00% 4.00%	0.3537 0.3401
	2046	2,377,742	20,422,568	858.9%	1,400	777,525	6,678,212	858.9%	1.3886	0.9786	0.0894	0.9678	0.911	0.885	4.00%	0.3270
	2047 2048	2,092,325 1,831,127	19,861,496 19,160,074	949.3% 1046.4%	1,269 1,145	657,878 553,607	6,244,942 5,792,691	949.3% 1046.4%	1.3886 1.3886	0.9786 0.9786	0.0934 0.0973	0.9678 0.9678	0.907 0.903	0.880 0.875	4.00% 4.00%	0.3144 0.3023
	2049	1,593,984	18,305,872	1148.4%	1,030	463,376	5,321,576	1148.4%	1.3886	0.9786	0.1010	0.9678	0.899	0.870	4.00%	0.2907
	2050 2051	1,379,865 1,188,302	17,370,774 16,352,426	1258.9% 1376.1%	922 822	385,703 319,382	4,855,519 4,395,065	1258.9% 1376.1%	1.3886 1.3886	0.9786 0.9786	0.1048 0.1087	0.9678 0.9678	0.895 0.891	0.866 0.861	4.00% 4.00%	0.2795 0.2688
	2052	1,018,094	15,264,980	1499.4%	729	263,110	3,944,991	1499.4%	1.3886	0.9786	0.1123	0.9678	0.888	0.857	4.00%	0.2584
	2053 2054	867,903 736,206	14,144,070 13,006,939	1629.7% 1766.8%	645 568	215,669 175,907	3,514,721 3,107,837	1629.7% 1766.8%	1.3886 1.3886	0.9786 0.9786	0.1160 0.1191	0.9678 0.9678	0.884 0.881	0.852 0.848	4.00% 4.00%	0.2485 0.2389
	2054	621,516	11,882,400	1911.8%	498	142,791	2,729,945	1911.8%	1.3886	0.9786	0.1191	0.9678	0.877	0.844	4.00%	0.2297
	2056	522,441 437,302	10,791,905	2065.7% 2227.1%	436	115,413	2,384,046	2065.7% 2227.1%	1.3886	0.9786 0.9786	0.1259 0.1289	0.9678 0.9678	0.874 0.871	0.841	4.00%	0.2209
	2057 2058	437,302 364,583	9,739,062 8,745,434	2398.8%	379 329	92,889 74,464	2,068,713 1,786,204	2398.8%	1.3886 1.3886	0.9786	0.1289	0.9678	0.871	0.837 0.834	4.00% 4.00%	0.2124 0.2042
	2059	302,700	7,798,595	2576.3%	285	59,447	1,531,556	2576.3%	1.3886	0.9786	0.1348	0.9678	0.865	0.830	4.00%	0.1964
	2060 2061	250,378 206,333	6,922,993 6,105,029	2765.0% 2958.8%	246 212	47,280 37,464	1,307,305 1,108,504	2765.0% 2958.8%	1.3886 1.3886	0.9786 0.9786	0.1369 0.1398	0.9678 0.9678	0.863 0.860	0.827 0.824	4.00% 4.00%	0.1888 0.1816
	2062	169,470	5,356,688	3160.8%	181	29,588	935,218	3160.8%	1.3886	0.9786	0.1422	0.9678	0.858	0.821	4.00%	0.1746
	2063 2064	138,783 113,297	4,676,058 4,050,378	3369.3% 3575.0%	155 132	23,298 18,288	784,988 653,801	3369.3% 3575.0%	1.3886 1.3886	0.9786 0.9786	0.1454 0.1470	0.9678 0.9678	0.855 0.853	0.819 0.816		0.1679 0.1614
	2065	92,244	3,492,948	3786.6%	113	14,317	542,136	3786.6%	1.3886	0.9786	0.1485	0.9678	0.851	0.814	4.00%	0.1552
	2066 2067	74,857 60,586	3,000,252 2,570,061	4008.0% 4242.0%	96 81	11,172 8,694	447,755 368,802	4008.0% 4242.0%	1.3886 1.3886	0.9786 0.9786	0.1519 0.1539	0.9678 0.9678	0.848 0.846	0.812 0.809		0.1492 0.1435
	2068	48,874	2,191,950	4484.9%	68	6,744	302,445	4484.9%	1.3886	0.9786	0.1565	0.9678	0.843	0.807	4.00%	0.1380
	2069 2070	39,319 31,534	1,862,852 1,582,300	4737.8% 5017.8%	57 48	5,217 4,023	247,150 201,855	4737.8% 5017.8%	1.3886 1.3886	0.9786 0.9786	0.1570 0.1593	0.9678 0.9678	0.843 0.841	0.804 0.802	4.00% 4.00%	0.1327 0.1276
	2070	25,200	1,339,250	5314.6%	48	3,091	164,278	5314.6%	1.3886	0.9786	0.1593	0.9678	0.841	0.802		0.1276
	2072	20,053	1,129,343	5631.9%	34	2,365	133,201	5631.9%	1.3886	0.9786	0.1647	0.9678	0.835	0.796	4.00%	0.1179
	2073 2074	15,888 12,538	946,528 791,035	5957.6% 6309.2%	28 23	1,802 1,367	107,345 86,260	5957.6% 6309.2%	1.3886 1.3886	0.9786 0.9786	0.1707 0.1674	0.9678 0.9678	0.829 0.833	0.792 0.789	4.00% 4.00%	0.1134 0.1090
	2075	9,835	659,613	6706.7%	19	1,031	69,163	6706.7%	1.3886	0.9786	0.1736	0.9678	0.826	0.784	4.00%	0.1049
	2076 2077	7,667 5,933	549,753 456,985	7170.3% 7702.8%	16 13	773 575	55,427 44,302	7170.3% 7702.8%	1.3886 1.3886	0.9786 0.9786	0.1819 0.1743	0.9678 0.9678	0.818 0.826	0.780 0.774	4.00% 4.00%	0.1008 0.0969
	2078-2098	15,945	1,907,695	11964.0%	10	1,486	177,825	11964.0%	1.3886	0.9786		0.9678	0.808	N/A		0.0932
	Past	93,441,021	7,308,926	7.8%	50,689	109,283,326	8,081,060	7.4%								
	Future	248,492,161	583,386,141	234.8%	113,740	162,329,167	226,467,887	139.5%								
Note:	Lifetime	341,933,182	590,695,068	172.8%	164,429	271,612,493	234,548,947	86.4%								

⁻ 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 two prior authorized increases for a cumulative total of approximately 20.75%.

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 8/1/2020.

Exhibit II-A

Demonstration that Lifetime Incurred Claims with Requested Increase are Not Less than Lifetime Earned Premium with Prescribed Factors Policy Forms: LTC2007

1 Accumulated value of initial earned premium	109,283,326 x	58% =	63,384,329
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	109,283,326 0	85% =	0
3 Present value of future projected initial earned premium	127,536,880	58% =	73,971,391
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	162,329,167 34,792,286	85% =	29,573,443
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b			166,929,163
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			8,081,060 226,467,887
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b			234,548,947
8 Test: 7 is not less than 5			TRUE

Exhibit I-B

Metropolitan Life Insurance Company Maryland Experience Projections (Premium Normalized to Include Prior Authorized Increases) Policy Forms: LTC2007

				Loss Ra	atio Demonstr	ation			Fact	ors Derived fr	om Projected Value	es for Illustrati	ve Purposes C	Only	Interest Ra	te Factors
			thout Interest				With Interest		Premium			Persistency			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				Chicon Lapor		· creierency	4.00%	2.1486
	1999	-	-	N/A	-	-	-	N/A							4.00%	1
	2000 2001	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	
	2002	-	-	N/A	-	-	-	N/A							4.00%	
	2003	-	-	N/A	-	-	-	N/A							4.00%	1
Historical	2004 2005	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1
Experience	2006	-	-	N/A	-	-	-	N/A							4.00%	
	2007	-	-	N/A	-	-	-	N/A							4.00%	
	2008 2009	- 8,682	-	N/A 0.0%	24	- 12,117	-	N/A 0.0%							4.00% 4.00%	1
	2010	118,499	-	0.0%	83	159,024	-	0.0%							4.00%	
	2011	225,618	172,961	76.7%	101	291,132	223,185	76.7%							4.00%	1
	2012 2013	211,260 236,331	-	0.0% 0.0%	99 94	262,121 281,949	-	0.0% 0.0%							4.00% 4.00%	1
	2014	204,095	-	0.0%	92	234,125	-	0.0%							4.00%	1
	2015	197,205	-	0.0%	91	217,521	-	0.0%							4.00%	
	2016 2017	194,523 187,076	209,021 17,196	107.5% 9.2%	88 84	206,311 190,781	221,687 17,537	107.5% 9.2%							4.00% 4.00%	
Projected	2018	192,984	34,087	17.7%	82	189,236	33,425	17.7%	1.0516	N/A	0.0233	N/A	0.977	0.981	4.00%	
Future	2019	208,347	39,348	18.9%	80	196,443	37,100	18.9%	1.1676	N/A	0.0228	N/A		0.972	4.00%	1
Experience	2020 2021	198,468 191,864	45,529 52,760	22.9% 27.5%	78 77	179,931 167,254	41,277 45,993	22.9% 27.5%	1.2067 1.2075	N/A N/A	0.0225 0.0226	N/A N/A	0.978 0.977	0.922 0.966	4.00% 4.00%	
	2022	186,110	61,115	32.8%	75	155,999	51,227	32.8%	1.2075	N/A	0.0239	N/A	0.976	0.970	4.00%	1
	2023	180,193	70,694	39.2%	73	145,230	56,977	39.2%	1.2075	N/A	0.0261	N/A	0.974	0.968	4.00%	1
	2024 2025	174,087 167,769	81,931 93,738	47.1% 55.9%	71 69	134,912 125,015	63,494 69,850	47.1% 55.9%	1.2075 1.2075	N/A N/A	0.0269 0.0291	N/A N/A	0.973 0.971	0.966 0.964	4.00% 4.00%	
	2026	161,269	106,657	66.1%	67	115,549	76,420	66.1%	1.2075	N/A	0.0307	N/A	0.969	0.961	4.00%	
	2027	154,586	120,303	77.8%	65	106,501	82,882	77.8%	1.2075	N/A	0.0327	N/A	0.967	0.959	4.00%	
	2028 2029	147,735 140,727	134,862 149,918	91.3% 106.5%	62 60	97,866 89,639	89,339 95,492	91.3% 106.5%	1.2075 1.2075	N/A N/A	0.0350 0.0369	N/A N/A	0.965 0.963	0.956 0.953	4.00% 4.00%	1
	2030	133,587	165,193	123.7%	58	81,818	101,175	123.7%	1.2075	N/A	0.0399	N/A	0.960	0.949	4.00%	1
	2031	126,331	180,382	142.8%	55	74,398	106,229	142.8%	1.2075	N/A	0.0424	N/A	0.958	0.946	4.00%	
	2032 2033	118,998 111,632	194,982 210,485	163.9% 188.6%	53 50	67,384 60,781	110,411 114,605	163.9% 188.6%	1.2075 1.2075	N/A N/A	0.0454 0.0475	N/A N/A	0.955 0.952	0.942 0.938	4.00% 4.00%	1
	2034	104,246	224,634	215.5%	48	54,577	117,605	215.5%	1.2075	N/A	0.0513		0.949	0.934	4.00%	
	2035	96,903	235,656	243.2%	45	48,781	118,630	243.2%	1.2075	N/A	0.0549	N/A	0.945	0.930	4.00%	
	2036 2037	89,679 82,608	245,571 255,311	273.8% 309.1%	42 40	43,408 38,448	118,867 118,828	273.8% 309.1%	1.2075 1.2075	N/A N/A	0.0581 0.0617	N/A N/A	0.942 0.938	0.925 0.921	4.00% 4.00%	
	2038	75,716	264,667	349.6%	37	33,885	118,445	349.6%	1.2075	N/A	0.0652	N/A	0.935	0.917	4.00%	1
	2039	69,033	268,331	388.7%	35	29,706	115,466	388.7%	1.2075	N/A	0.0681	N/A	0.932	0.912	4.00%	1
	2040 2041	62,651 56,556	272,233 274,298	434.5% 485.0%	32 30	25,923 22,501	112,639 109,129	434.5% 485.0%	1.2075 1.2075	N/A N/A	0.0737 0.0761	N/A N/A	0.926 0.924	0.908 0.903	4.00% 4.00%	
	2042	50,771	273,680	539.0%	27	19,422	104,695	539.0%	1.2075	N/A	0.0804	N/A	0.920	0.898	4.00%	
	2043	45,321	271,534	599.1%	25	16,671	99,879	599.1%	1.2075	N/A	0.0856	N/A	0.914	0.893	4.00%	1
	2044 2045	40,220 35,463	269,106 262,956	669.1% 741.5%	23 21	14,225 12,060	95,179 89,426	669.1% 741.5%	1.2075 1.2075	N/A N/A	0.0904 0.0936	N/A N/A	0.910 0.906	0.887 0.882	4.00% 4.00%	
	2046	31,075	253,197	814.8%	18	10,161	82,796	814.8%	1.2075	N/A	0.0994	N/A	0.901	0.876	4.00%	1
	2047	27,049	242,258	895.6%	17	8,505	76,172	895.6%	1.2075	N/A	0.1022	N/A	0.898	0.870	4.00%	1
	2048 2049	23,385 20,053	232,412 217,271	993.9% 1083.5%	15 13	7,070 5,829	70,266 63,161	993.9% 1083.5%	1.2075 1.2075	N/A N/A	0.1096 0.1130	N/A N/A	0.890 0.887	0.865 0.858	4.00% 4.00%	1
	2050	17,076	205,044	1200.7%	12	4,773	57,314	1200.7%	1.2075	N/A	0.1190	N/A	0.881	0.852	4.00%	1
	2051	14,415	189,932	1317.6%	10	3,874	51,048	1317.6%	1.2075	N/A	0.1264	N/A	0.874	0.844	4.00%	
	2052 2053	12,067 10,030	171,772 155,160	1423.4% 1547.0%	9 8	3,119 2,492	44,392 38,556	1423.4% 1547.0%	1.2075 1.2075	N/A N/A	0.1259 0.1406	N/A N/A	0.874 0.859	0.837 0.831	4.00% 4.00%	1
	2053	8,268	137,516	1663.3%	7	1,975	32,858	1663.3%	1.2075	N/A N/A	0.1398	N/A N/A	0.859	0.831	4.00%	
	2055	6,764	120,427	1780.5%	6	1,554	27,668	1780.5%	1.2075	N/A	0.1426	N/A	0.857	0.818	4.00%	0.2297
	2056 2057	5,492 4,427	105,510 90,994	1921.1% 2055.6%	5 4	1,213 940	23,308 19,328	1921.1% 2055.6%	1.2075 1.2075	N/A N/A	0.1485 0.1597	N/A N/A	0.852 0.840	0.812 0.806	4.00% 4.00%	1
	2057	4,427 3,545	77,606	2055.6% 2189.2%	3	724	15,851	2055.6%	1.2075	N/A N/A	0.1650	N/A N/A	0.840	0.806	4.00% 4.00%	1
	2059	2,820	65,333	2317.1%	3	554	12,831	2317.1%	1.2075	N/A	0.1707	N/A	0.829	0.795	4.00%	0.1964
	2060 2061	2,226 1,749	54,390 44,341	2443.1% 2535.8%	2 2	420 317	10,271	2443.1% 2535.8%	1.2075 1.2075	N/A N/A	0.1625 0.1810	N/A N/A	0.838 0.819	0.790 0.785	4.00% 4.00%	1
	2061	1,749	35,710	2612.4%	2	239	8,051 6,235	2612.4%	1.2075	N/A N/A	0.1789	N/A N/A	0.819	0.783	4.00%	0.1746
	2063	1,064	28,479	2677.1%	1	179	4,781	2677.1%	1.2075	N/A	0.1923	N/A	0.808	0.778	4.00%	0.1679
	2064 2065	830 648	22,115 16,970	2665.9% 2618.1%	1	134	3,570 2,634	2665.9% 2618.1%	1.2075	N/A	0.1984 N/A	N/A N/A	0.802 N/A	0.780 N/A	4.00% 4.00%	1
	2065	505	12,489	2472.2%	1	101 75	2,634 1,864	2618.1% 2472.2%	1.2075 1.2075	N/A N/A	N/A N/A	N/A N/A	N/A N/A		4.00% 4.00%	0.1552
	2067	393	8,919	2269.1%	1	56	1,280	2269.1%	1.2075	N/A	N/A	N/A	N/A		4.00%	0.1435
	2068	307	6,329	2063.6%	0	42	873 585	2063.6%	1.2075	N/A	N/A	N/A	N/A	N/A	4.00%	1
	2069 2070	242 193	4,412 3,709	1824.7% 1923.0%	0	32 25	585 473	1824.7% 1923.0%	1.2075 1.2075	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	4.00% 4.00%	0.1327 0.1276
	2071	155	2,779	1791.2%	0	19	341	1791.2%	1.2075	N/A	N/A	N/A	N/A	N/A	4.00%	0.1227
	2072	126 103	2,211	1755.1% 1674.4%	0	15	261 106	1755.1%	1.2075	N/A	N/A	N/A	N/A	N/A	4.00%	0.1179
	2073 2074	103 84	1,726 1,374	1674.4% 1635.1%	0	12 9	196 150	1674.4% 1635.1%	1.2075 1.2075	N/A N/A		N/A N/A	N/A N/A	N/A N/A	4.00% 4.00%	
	2075	68	1,123	1643.9%	0	7	118	1643.9%	1.2075	N/A		N/A	N/A	N/A	4.00%	
	2076	56	992	1781.9%	0	6	100	1781.9%	1.2075	N/A	N/A	N/A	N/A	N/A	4.00%	1
	2077 2078-2098	45 127	812 2,718	1807.5% 2134.0%	0	4 12	79 253	1807.5% 2134.0%	1.2075 1.2075	N/A N/A		N/A N/A	N/A N/A	N/A N/A	4.00% 4.00%	1
			-		<u>'</u>				2010	1 19/7	13/73	14/13	14//1	14/11	1.5070	0.0002
	Past	1,583,290	399,178	25.2%	756 1.617	1,855,082	462,408	24.9%								
	Future Lifetime	3,600,606 5,183,896	7,375,995 7,775,173	204.9% 150.0%	1,617 2,373	2,402,051 4,257,133	3,152,347 3,614,755	131.2% 84.9%								
Note:		5,.55,555	. ,. , 0, , , 0	. 55.570	_,070	.,_0,,100	5,511,700	0 1.0 /0								

<sup>The premiums shown in this exhibit reflect prior rate inreases authorized by Maryland.
There were two prior authorized increases for a cumulative total of approximately 20.75%.</sup>

⁻ 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) and With 15.00% Future Increase Policy Forms: LTC2007

				Loss Ra	tio Demonst	ration			Fact	ors Derived fr	om Projected Value	s for Illustrati	ve Purposes C	Only	Interest Ra	te Factors
			ithout Interest				With Interest		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		· ·		·	, i	·	4.00%	2.1486
	1999 2000	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	2.0659 1.9865
	2001	-	-	N/A	-	-	-	N/A							4.00%	1.9101
	2002 2003	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1.8366 1.7660
	2004	-	-	N/A	-	-	-	N/A							4.00%	1.6980
Historical Experience	2005 2006	-	-	N/A N/A	-	-	-	N/A N/A							4.00% 4.00%	1.6327 1.5699
Experience	2007	-	-	N/A	-	-	-	N/A							4.00%	1.5096
	2008 2009	- 8,682	-	N/A 0.0%	-	- 12,117	-	N/A 0.0%							4.00% 4.00%	1.4515 1.3957
	2009	118,499	-	0.0%	24 83	159,024	-	0.0%							4.00%	1.3420
	2011 2012	225,618	172,961	76.7% 0.0%	101	291,132	223,185	76.7% 0.0%							4.00% 4.00%	1.2904 1.2407
	2012	211,260 236,331	-	0.0%	99 94	262,121 281,949	-	0.0%							4.00%	1.1930
	2014	204,095	-	0.0%	92	234,125	-	0.0%							4.00%	1.1471
	2015 2016	197,205 194,523	209,021	0.0% 107.5%	91 88	217,521 206,311	- 221,687	0.0% 107.5%							4.00% 4.00%	1.1030 1.0606
Duningtod	2017	187,076	17,196	9.2%	84	190,781	17,537	9.2%	4.0540	4 0000	0.0000	4.0000	0.077	0.004	4.00%	1.0198
Projected Future	2018 2019	192,984 208,347	34,087 39,348	17.7% 18.9%	82 80	189,236 196,443	33,425 37,100	17.7% 18.9%	1.0516 1.1676	1.0000 1.0000	0.0233 0.0228	1.0000 1.0000		0.981 0.972	4.00% 4.00%	0.9806 0.9429
Experience	2020	200,771	45,233	22.5%	78	182,020	41,008	22.5%	1.2287	0.9974	0.0263	0.9961	0.974	0.922	4.00%	0.9066
	2021 2022	206,981 202,703	50,314 57,882	24.3% 28.6%	74 72	180,432 169,906	43,860 48,517	24.3% 28.6%	1.3660 1.3886	0.9813 0.9786	1	0.9718 0.9678		0.966 0.970	4.00% 4.00%	0.8717 0.8382
	2023	196,258	66,954	34.1%	70	158,177	53,962	34.1%	1.3886	0.9786	0.0261	0.9678	0.974	0.968	4.00%	0.8060
	2024 2025	189,607 182,726	77,596 88,778	40.9% 48.6%	69 67	146,939 136,160	60,134 66,154	40.9% 48.6%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.966 0.964	4.00% 4.00%	0.7750 0.7452
	2026	175,646	101,014	57.5%	65	125,851	72,376	57.5%	1.3886	0.9786	0.0307	0.9678	0.969	0.961	4.00%	0.7165
	2027 2028	168,368 160,906	113,937 127,727	67.7% 79.4%	62 60	115,996 106,591	78,496 84,612	67.7% 79.4%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.959 0.956	4.00% 4.00%	0.6889 0.6624
	2029	153,274	141,985	92.6%	58	97,630	90,440	92.6%	1.3886	0.9786	0.0369	0.9678	0.963	0.953	4.00%	0.6370
	2030 2031	145,497 137,593	156,452 170,838	107.5% 124.2%	56 53	89,112 81,030	95,822 100,608	107.5% 124.2%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.949 0.946	4.00% 4.00%	0.6125 0.5889
	2032	129,607	184,666	142.5%	51	73,392	104,569	142.5%	1.3886	0.9786	0.0454	0.9678	0.955	0.942	4.00%	0.5663
	2033 2034	121,584 113,540	199,348 212,748	164.0% 187.4%	49 46	66,200 59,443	108,541 111,382	164.0% 187.4%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.938 0.934	4.00% 4.00%	0.5445 0.5235
	2035	105,542	223,188	211.5%	43	53,130	112,353	211.5%	1.3886	0.9786	0.0549	0.9678		0.930	4.00%	0.5034
	2036 2037	97,674 89,972	232,577 241,802	238.1% 268.8%	41 38	47,278 41,875	112,577 112,541	238.1% 268.8%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.925 0.921	4.00% 4.00%	0.4840 0.4654
	2038	82,466	250,663	304.0%	36	36,906	112,178	304.0%	1.3886	0.9786	1	0.9678		0.917	4.00%	0.4475
	2039 2040	75,188 68,236	254,134 257,829	338.0% 377.8%	33	32,354	109,357 106,679	338.0% 377.8%	1.3886 1.3886	0.9786 0.9786	1	0.9678 0.9678		0.912 0.908	4.00% 4.00%	0.4303 0.4138
	2040	61,598	259,785	421.7%	31 29	28,234 24,507	103,355	421.7%	1.3886	0.9786		0.9678		0.908	4.00%	0.4136
	2042	55,298	259,199 257,166	468.7%	26	21,154	99,155	468.7%	1.3886	0.9786 0.9786		0.9678		0.898	4.00%	0.3825 0.3678
	2043 2044	49,362 43,805	254,867	521.0% 581.8%	24 22	18,157 15,493	94,594 90,143	521.0% 581.8%	1.3886 1.3886	0.9786		0.9678 0.9678		0.893 0.887	4.00% 4.00%	0.3537
	2045	38,625	249,042	644.8%	20	13,136	84,695	644.8%	1.3886	0.9786	1	0.9678		0.882	4.00%	0.3401
	2046 2047	33,845 29,461	239,800 229,440	708.5% 778.8%	18 16	11,067 9,263	78,415 72,142	708.5% 778.8%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.876 0.870	4.00% 4.00%	0.3270 0.3144
	2048	25,469	220,115	864.2%	14	7,700	66,548	864.2%	1.3886	0.9786		0.9678		0.865	4.00%	0.3023
	2049 2050	21,841 18,599	205,775 194,195	942.2% 1044.1%	13 11	6,349 5,199	59,820 54,282	942.2% 1044.1%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.858 0.852	4.00% 4.00%	0.2907 0.2795
	2051	15,700	179,882	1145.8%	10	4,220	48,347	1145.8%	1.3886	0.9786	1	0.9678		0.844	4.00%	0.2688
	2052 2053	13,143 10,924	162,684 146,951	1237.8% 1345.2%	9 7	3,397 2,714	42,043 36,516	1237.8% 1345.2%	1.3886 1.3886	0.9786 0.9786	1	0.9678 0.9678		0.837 0.831	4.00% 4.00%	0.2584 0.2485
	2054	9,005	130,240	1446.3%	6	2,152	31,119	1446.3%	1.3886	0.9786	0.1398	0.9678	0.860	0.824	4.00%	0.2389
	2055 2056	7,367 5,982	114,055 99,927	1548.3% 1670.5%	5 5	1,692 1,321	26,204 22,075	1548.3% 1670.5%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.818 0.812	4.00% 4.00%	0.2297 0.2209
	2057	4,821	86,180	1787.5%	4	1,024	18,306	1787.5%	1.3886	0.9786	0.1597	0.9678	0.840	0.806	4.00%	0.2124
	2058 2059	3,861 3,071	73,500 61,877	1903.7% 2014.9%	3	789 603	15,012 12,152	1903.7% 2014.9%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.801 0.795	4.00% 4.00%	0.2042 0.1964
	2060	2,425	51,513	2124.4%	2	458	9,727	2124.4%	1.3886	0.9786	0.1625	0.9678	0.838	0.790	4.00%	0.1888
	2061 2062	1,904 1,489	41,994 33,820	2205.0% 2271.6%	2	346 260	7,625 5,905	2205.0% 2271.6%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.785 0.782		0.1816 0.1746
	2063	1,159	26,972	2327.9%	1	195	4,528	2327.9%	1.3886	0.9786	0.1923	0.9678	0.808	0.778	4.00%	0.1679
	2064 2065	903 706	20,945 16,072	2318.2% 2276.6%	1	146 110	3,381 2,495	2318.2% 2276.6%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		0.780 N/A	4.00% 4.00%	0.1614 0.1552
	2066	550	11,828	2149.8%	1	82	1,765	2149.8%	1.3886	0.9786	N/A	0.9678	N/A	N/A	4.00%	0.1492
	2067 2068	428 334	8,447 5,994	1973.1% 1794.4%	1 0	61 46	1,212 827	1973.1% 1794.4%	1.3886 1.3886	0.9786 0.9786	1	0.9678 0.9678		N/A N/A	4.00% 4.00%	0.1435 0.1380
	2069	263	4,179	1586.7%	0	35	554	1586.7%	1.3886	0.9786	N/A	0.9678	N/A	N/A	4.00%	0.1327
	2070 2071	210 169	3,512 2,632	1672.2% 1557.6%	0	27 21	448 323	1672.2% 1557.6%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		N/A N/A	4.00% 4.00%	0.1276 0.1227
	2072	137	2,094	1526.2%	0	16	247	1526.2%	1.3886	0.9786	N/A	0.9678	N/A	N/A	4.00%	0.1179
	2073	112	1,635 1,301	1456.0%	0	13 10	185 142	1456.0%	1.3886	0.9786		0.9678		N/A	4.00%	0.1134
	2074 2075	91 74	1,301 1,064	1421.9% 1429.5%	0	10 8	142 112	1421.9% 1429.5%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		N/A N/A	4.00% 4.00%	0.1090 0.1049
	2076	61	940	1549.5%	0	6	95	1549.5%	1.3886	0.9786	N/A	0.9678	N/A	N/A	4.00%	0.1008
	2077 2078-2098	49 139	769 2,574	1571.8% 1855.6%	0	5 13	75 240	1571.8% 1855.6%	1.3886 1.3886	0.9786 0.9786		0.9678 0.9678		N/A N/A	4.00% 4.00%	0.0969 0.0932
					750	4 055 000										
	Past Future	1,583,290 3,868,451	399,178 6,992,067	25.2% 180.7%	756 1,572	1,855,082 2,566,130	462,408 2,991,501	24.9% 116.6%								
Note:	Lifetime	5,451,741	7,391,246	135.6%	2,328	4,421,212	3,453,909	78.1%								

<sup>The premiums shown in this exhibit reflect prior rate inreases authorized by Maryland.
There were two prior authorized increases for a cumulative total of approximately 20.75%.</sup>

<sup>The projections are based on the assumptions derived using experience data through 6/30/2017.
The current requested increase of 15.00% is assumed to be implemented starting 8/1/2020.</sup>

Exhibit II-B

Demonstration that Lifetime Incurred Claims with Requested Increase are Not Less than Lifetime Earned Premium with Prescribed Factors Policy Forms: LTC2007

1 Accumulated value of initial earned premium	1,855,082 x	58% =	1,075,948
2a Accumulated value of earned premium 2b Accumulated value of prior premium rate schedule increases (2a-1)	1,855,082 0	85% =	0
3 Present value of future projected initial earned premium	2,018,168	58% =	1,170,537
4a Present value of future projected premium 4b Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	2,566,130 547,962	85% =	465,768
5 Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b			2,712,253
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			462,408 2,991,501
7 Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b			3,453,909
8 Test: 7 is not less than 5			TRUE

Attachment 1

Metropolitan Life Insurance Company

Policy Forms: LTC2007 with Application Dates After April 30, 2009 on New Rate Basis Assumptions Summary

	Original Pricing Assumptions	Current Best Estimate Assumptions
erest Rate:	6.00%	Maximum valuation interest rate for contract reserves, which average to 4.0%
ortality:	90% of Annuity 2000 Basic table With Mortality Selection Factors of: Duration	88% of Annuity 2000 Basic table With Mortality Selection Factors of: Duration
oluntary apse Rates:	Duration Lapse Rate 1 5.50% 2 3.00% 3 1.75% 4 1.55% 5 1.40% 6 1.20% 7 1.00% 8 0.95% 9+ 0.90%	Duration Lapse Rate 1 5.00% 2 4.50% 3 4.00% 4 3.50% 5 2.50% 6 2.00% 7 1.80% 8 1.50% 9 1.30% 10 1.10% 11+ 0.90%
orbidity:	The bases for the morbidity assumptions used in pricing are based on MetLife's internal data and experience studies. These studies analyzed incidence rates, claim continuance rates and utilization for MetLife's existing block of Long Term Care business including individually underwritten business. The results of the studies were modified to reflect specific plan feautres. Duration U/W Selection 1 64% 2 77% 3 100%	Current IB block experience with morbidity U/W Selection Factors of: Duration U/W Selection
ncidence:	Sample Incidence Rates (before gross-up to zero-day elimination) Attained Male Female Age Facility Care Home Care 81 1.01% 0.35% 1.31% 0.58% 82 1.22% 0.39% 1.64% 0.61% 83 1.39% 0.48% 1.88% 0.63% 84 1.60% 0.56% 2.26% 0.77% 85 1.90% 0.67% 2.94% 1.01%	Sample Ultimate Smoothed Incidence Rates (before gross-up to zero-day elimination) ³ Attained Male Female Age Facility Care Home Care 81 1.19% 1.06% 1.65% 1.11% 82 1.40% 1.23% 1.99% 1.29% 83 1.64% 1.41% 2.36% 1.48% 84 1.90% 1.60% 2.78% 1.67% 85 2.18% 1.81% 3.24% 1.87%
ontinuance:	Continuance rates were based on MetLife's experience study.	In 2018, incidence curves were reshaped to better reflect the emerged experience over the years. In 2016, termination curves were constructed separately for deaths and recoveries, gender and care path. Coefficients to an exponential-shaped curve were based on experience adjusted to minimize differences between actual and expected terminations in total as well as at periodic duration points along the curves. Death and recovery termination rates were recombined into a single termination table for modelling and valuation uses. Minor adjustments made to Male Facility and Male Home Care.
tilization:	Home Care Facility Care 100% 100%	Home Care Facility Care 61% 79%

Attachment 2

Metropolitan Life Insurance Company

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

Policy Forms: LTC2007

		/ Projected Experi		Expec		4	
	•	erience through 1			d based on Original		
	•	ased on Current A			ptions since incept		
	A	B	C = B / A	D Earned	E	F = E / D	G = C / F
Duration	Earned	Incurred	Loss Ratio		Incurred Claims	Loss	Actual to Expected Ratio
1	Premium 6,965,827	Claims 0	0.0%	Premium 6,965,827	766,209	Ratio 11.0%	0.00
2	13,340,586	651,903	4.9%	13,340,586	2,017,823	15.1%	0.32
3	12,789,112	462,852	3.6%	12,635,697	2,912,094	23.0%	0.32
4	12,577,039	143,110	1.1%	12,039,694	3,556,804	29.4%	0.04
5	12,314,899	961,874	7.8%	11,529,997	3,933,295	34.1%	0.23
6	12,055,805	1,050,105	8.7%	10,980,636	4,482,522	40.8%	0.23
7	11,839,970	1,716,933	14.5%	10,433,406	4,844,733	46.4%	0.21
8	11,991,619	2,180,673	18.2%	9,883,629	5,339,858	54.0%	0.34
9	12,929,187	2,092,105	16.2%	9,310,780	6,057,206	65.1%	0.25
10	13,051,059	2,261,192	17.3%	8,709,865	6,403,630	73.5%	0.24
11	12,333,057	2,603,764	21.1%	8,089,572	6,835,215	73.5% 84.5%	0.25
12			25.6%	, ,		93.9%	0.25
13	11,745,882	3,010,675		7,469,487	7,011,555		
	11,414,876	3,488,588	30.6%	6,867,472	7,272,024	105.9%	0.29
14	11,075,037	4,045,995	36.5%	6,284,732	7,575,871	120.5%	0.30
15	10,725,128	4,690,833	43.7%	5,721,740	7,643,282	133.6%	0.33
16	10,364,374	5,427,396	52.4%	5,189,882	7,772,130	149.8%	0.35
17	9,992,506	6,254,536	62.6%	4,687,899	7,701,394	164.3%	0.38
18	9,609,702	7,171,561	74.6%	4,214,706	7,687,554	182.4%	0.41
19	9,216,055	8,175,332	88.7%	3,772,122	7,527,997	199.6%	0.44
20	8,812,332	9,261,806	105.1%	3,361,632	7,340,734	218.4%	0.48
21	8,399,453	10,423,901	124.1%	2,986,784	7,143,893	239.2%	0.52
22	7,978,592	11,648,699	146.0%	2,644,431	6,816,342	257.8%	0.57
23	7,551,329	12,914,087	171.0%	2,331,867	6,571,092	281.8%	0.61
24	7,119,609	14,211,365	199.6%	2,049,707	6,069,203	296.1%	0.67
25	6,685,230	15,510,097	232.0%	1,797,873	5,740,283	319.3%	0.73
26	6,250,563	16,764,031	268.2%	1,574,586	5,440,389	345.5%	0.78
27	5,818,229	17,960,915	308.7%	1,376,591	5,048,405	366.7%	0.84
28	5,390,829	19,077,686	353.9%	1,201,395	4,751,386	395.5%	0.89
29	4,970,905	20,068,238	403.7%	1,048,386	4,212,317	401.8%	1.00
30	4,561,141	20,898,959	458.2%	916,231	3,928,359	428.8%	1.07
31	4,164,381	21,575,088	518.1%	802,013	3,677,716	458.6%	1.13
32	3,782,653	22,070,285	583.5%	702,504	3,386,739	482.1%	1.21
33	3,418,010	22,382,929	654.9%	616,016	3,158,457	512.7%	1.28
34	3,072,047	22,486,923	732.0%	541,732	2,797,509	516.4%	1.42
35	2,746,338	22,382,215	815.0%	478,275	2,572,112	537.8%	1.52
36	2,441,982	22,103,831	905.2%	423,413	2,424,441	572.6%	1.58
37	2,159,700	21,650,221	1002.5%	375,697	2,250,017	598.9%	1.67
38	1,899,738	21,041,437	1107.6%	334,394	2,112,694	631.8%	1.75
39	1,661,847	20,248,274	1218.4%	298,708	1,919,705	642.7%	1.90
40	1,445,715	19,327,159	1336.9%	267,780	1,849,905	690.8%	1.94
41	1,251,157	18,330,214	1465.1%	240,749	1,753,540	728.4%	2.01
42	1,076,972	17,232,675	1600.1%	216,618	1,690,144	780.2%	2.05
43	922,217	16,059,623	1741.4%	195,110	1,640,707	840.9%	2.07
44	785,782	14,857,154	1890.7%	175,715	1,600,597	910.9%	2.08
45	666,228	13,642,923	2047.8%	158,200	1,552,359	981.3%	2.09
46	562,157	12,455,472	2215.7%	142,407	1,494,624	1049.5%	2.11
47	472,222	11,286,384	2390.1%	127,989	1,423,370	1112.1%	2.15
48	395,072	10,180,964	2577.0%	114,820	1,381,757	1203.4%	2.14
49	329,140	9,118,498	2770.4%	102,761	1,315,320	1280.0%	2.16
50	273,138	8,131,811	2977.2%	91,708	1,310,874	1429.4%	2.08
51	225,785	7,206,791	3191.9%	81,612	1,246,846	1527.8%	2.09
52	185,917	6,346,223	3413.5%	72,254	1,219,952	1688.4%	2.02
53	152,607	5,561,090	3644.1%	63,684	1,179,031	1851.4%	1.97
54	124,860	4,843,943	3879.5%	55,748	1,146,573	2056.7%	1.89
55	101,835	4,187,176	4111.7%	48,455	1,089,066	2247.6%	1.83
56	82,808	3,610,298	4359.9%	41,808	1,005,204	2404.4%	1.81
57	67,128	3,097,962	4615.0%	35,822	926,342	2586.0%	1.78
58	54,253	2,653,248	4890.5%	30,471	844,543	2771.6%	1.76
59	43,705	2,257,376	5165.0%	25,660	755,292	2943.5%	1.75
60	35,085	1,917,878	5466.4%	21,378	700,286	3275.7%	1.67
	,	, ,		, , , , , ,	1 3		
etime	324,470,411	613,375,277	189.0%	186,340,624	221,829,327	119.0%	1.59
fotimo*	197 564 200	176 430 692	04 19/	107 571 316	76 217 027	71.00/	1 22

Lifetime* Note: 94.1%

187,564,200

176,439,682

107,571,316

76,217,927

71.0%

1.32

⁻ 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%, 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 6%.

Attachment 3

Metropolitan Life Insurance Company

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

Policy Forms: LTC2007

		Actual / F	Projected Experie			xpected Pricing				ve Loss Ratio as of	
		Α	В	C = B / A	D	E	F = E / D	G = C / F	Н	<u>l</u>	J = H/I
	Calendar	Earned	Incurred	Loss	Earned	Incurred	Loss	Actual to	Actual/Projected	Expected at 6%	Actual to
	Year	Premium	Claims	Ratio	Premium	Claims	Ratio	Expected Ratio		(on F)	Expected Ratio
Historical	2009	904,206	0	0.0%	904,206	99,459	11.0%	0.00	0.0%	11.0%	0.00
Experience	2010	6,471,612	471,938	7.3%	5,103,353	634,696	12.4%	0.59	6.4%	12.2%	0.52
	2011	12,943,235	192,502	1.5%	10,673,256	1,623,572	15.2%	0.10	3.3%	14.1%	0.23
	2012	12,768,074	35,323	0.3%	12,073,039	2,468,495	20.4%	0.01	2.2%	16.6%	0.13
	2013	12,624,976	958,098	7.6%	11,596,033	3,042,970	26.2%	0.29	3.6%	19.2%	0.19
	2014	12,338,858	781,271	6.3%	11,146,197	3,477,770	31.2%	0.20	4.1%	21.5%	0.19
	2015	12,036,604	904,646	7.5%	10,691,292	3,918,493	36.7%	0.21	4.7%	23.8%	0.20
	2016	11,864,837	1,831,626	15.4%	10,230,020	4,329,583	42.3%	0.36	6.1%	26.0%	0.23
	2017	11,488,619	2,133,522	18.6%	9,755,706	4,820,905	49.4%	0.38	7.4%	28.3%	0.26
Projected	2018	11,780,897	1,972,500	16.7%	9,254,469	5,386,188	58.2%	0.29	8.3%	30.6%	0.27
Experience	2019	12,702,647	2,261,362	17.8%	8,720,422	5,828,262	66.8%	0.27	9.1%	33.0%	0.28
	2020	12,477,233	2,604,001	20.9%	8,161,117	6,197,048	75.9%	0.27	10.1%	35.4%	0.28
	2021	11,859,339	3,008,501	25.4%	7,593,236	6,470,995	85.2%	0.30	11.1%	37.7%	0.29
	2022	11,515,758	3,485,213	30.3%	7,031,650	6,750,580	96.0%	0.32	12.2%	40.0%	0.31
	2023	11,173,026	4,043,020	36.2%	6,481,361	7,025,951	108.4%	0.33	13.5%	42.2%	0.32
	2024	10,819,713	4,685,547	43.3%	5,945,808	7,199,911	121.1%	0.36	14.8%	44.4%	0.33
	2024	10,455,475	5,416,745	51.8%	5,431,977	7,199,911	134.8%	0.38	16.4%	46.4%	0.35
	2026	10,080,075	6,239,113	61.9%	4,941,999	7,357,442	148.9%	0.42	18.0%	48.4%	0.37
	2027	9,693,728	7,151,499	73.8%	4,475,943	7,354,598	164.3%	0.45	19.9%	50.3%	0.39
	2028	9,296,386	8,148,044	87.6%	4,035,595	7,277,306	180.3%	0.49	21.9%	52.1%	0.42
	2029	8,888,935	9,228,338	103.8%	3,623,734	7,150,595	197.3%	0.53	24.0%	53.8%	0.45
	2030	8,472,136	10,378,004	122.5%	3,242,831	6,982,730	215.3%	0.57	26.3%	55.3%	0.48
	2031	8,047,480	11,590,394	144.0%	2,891,858	6,754,292	233.6%	0.62	28.8%	56.8%	0.51
	2032	7,616,454	12,847,129	168.7%	2,569,229	6,485,427	252.4%	0.67	31.5%	58.1%	0.54
	2033	7,180,994	14,132,752	196.8%	2,275,327	6,121,548	269.0%	0.73	34.2%	59.2%	0.58
	2034	6,742,921	15,412,722	228.6%	2,010,488	5,801,880	288.6%	0.79	37.1%	60.3%	0.62
	2035	6,304,694	16,654,612	264.2%	1,773,436	5,511,710	310.8%	0.85	40.1%	61.2%	0.66
	2036	5,868,973	17,839,708	304.0%	1,561,672	5,190,988	332.4%	0.91	43.2%	62.1%	0.70
	2037	5,438,269	18,945,786	348.4%	1,373,215	4,846,523	352.9%	0.99	46.4%	62.9%	0.74
	2038	5,015,237	19,937,670	397.5%	1,207,250	4,432,675	367.2%	1.08	49.6%	63.5%	0.74
										64.1%	
	2039	4,602,502	20,765,026	451.2%	1,062,533	4,117,288	387.5%	1.16	52.7%		0.82
	2040	4,202,712	21,440,311	510.2%	936,471	3,865,812	412.8%	1.24	55.9%	64.6%	0.87
	2041	3,818,208	21,936,429	574.5%	826,172	3,608,244	436.7%	1.32	59.0%	65.1%	0.91
	2042	3,450,917	22,256,473	644.9%	729,833	3,344,874	458.3%	1.41	62.1%	65.5%	0.95
	2043	3,102,448	22,366,819	720.9%	646,434	3,042,570	470.7%	1.53	65.0%	65.8%	0.99
	2044	2,774,293	22,283,374	803.2%	574,541	2,806,525	488.5%	1.64	67.8%	66.1%	1.03
	2045	2,467,614	22,020,872	892.4%	512,149	2,640,717	515.6%	1.73	70.5%	66.4%	1.06
	2046	2,183,112	21,563,513	987.7%	457,698	2,482,934	542.5%	1.82	73.1%	66.6%	1.10
	2047	1,921,058	20,971,095	1091.6%	410,267	2,326,371	567.0%	1.93	75.5%	66.9%	1.13
	2048	1,681,240	20,230,488	1203.3%	369,034	2,170,844	588.3%	2.05	77.7%	67.1%	1.16
	2049	1,463,509	19,328,565	1320.7%	333,089	2,071,658	622.0%	2.12	79.7%	67.2%	1.19
	2050	1,266,916	18,341,225	1447.7%	301,442	1,991,972	660.8%	2.19	81.6%	67.4%	1.21
	2051	1,091,033	17,265,985	1582.5%	273,168	1,929,307	706.3%	2.24	83.3%	67.5%	1.23
	2052	934,758	16,117,787	1724.3%	247,734	1,885,214	761.0%	2.27	84.8%	67.7%	1.25
	2053	796,861	14,934,255	1874.1%	224,694	1,847,958	822.4%	2.28	86.2%	67.8%	1.27
	2054	675,944	13,733,596	2031.8%	203,749	1,804,644	885.7%	2.29	87.4%	67.9%	1.29
	2055	570,642	12,546,233	2198.6%	184,670	1,748,807	947.0%	2.29	88.4%	68.0%	1.29
					•						
	2056	479,676	11,394,815	2375.5%	167,162	1,688,176	1009.9%	2.35	89.4%	68.1%	1.31
	2057	401,507	10,283,153	2561.1%	151,029	1,636,758	1083.7%	2.36	90.2%	68.2%	1.32
	2058	334,740	9,234,014	2758.6%	136,136	1,591,356	1168.9%	2.36	90.9%	68.3%	1.33
	2059	277,923	8,234,278	2962.8%	122,377	1,565,686	1279.4%	2.32	91.5%	68.4%	1.34
	2060	229,883	7,309,759	3179.8%	109,650	1,524,441	1390.3%	2.29	92.0%	68.4%	1.34
	2061	189,444	6,446,098	3402.6%	97,809	1,488,917	1522.3%	2.24	92.4%	68.5%	1.35
	2062	155,598	5,655,950	3635.0%	86,804	1,455,104	1676.3%	2.17	92.8%	68.6%	1.35
	2063	127,423	4,937,295	3874.7%	76,555	1,416,216	1849.9%	2.09	93.1%	68.6%	1.36
	2064	104,023	4,276,661	4111.3%	67,041	1,354,059	2019.8%	2.04	93.3%	68.7%	1.36
	2065	84,694	3,688,088	4354.6%	58,287	1,266,666	2173.1%	2.00	93.6%	68.7%	1.36
	2066	68,730	3,167,867	4609.2%	50,319	1,173,552	2332.2%	1.98	93.7%	68.7%	1.36
	2067	55,627	2,713,642	4878.3%	43,108	1,076,229	2496.6%	1.95	93.9%	68.8%	1.36
	2068	44,874	2,314,407	5157.6%	36,583	980,736	2680.8%	1.92	94.0%	68.8%	1.37
	2069	36,100	1,966,923	5448.5%	30,709	891,659	2903.5%	1.88	94.1%	68.8%	1.37
	2070	28,953	1,670,698	5770.4%	25,463	784,669	3081.6%	1.87	94.2%	68.9%	1.37
	Past	93,441,021	7,308,926	7.8%	82,173,101	24,415,942	29.7%	0.26	7.4%	28.3%	0.26
	Future	231,053,333	607,378,353	262.9%	104,155,327	197,026,503	189.2%	1.39	156.6%	131.8%	1.19
		324,494,354	614,687,279	189.4%	186,328,428	221,442,444	118.8%	1.59	94.2%	69.0%	1.36

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

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

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

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

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

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

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

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

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

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