

April 25, 2017

Re: Group long-term policy G.LTC1697 (including GCLTCAARP04-OP in Maryland)
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 all the 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 supporting Attachments based on earlier reviews. These documents are outlined and summarized here for your convenience.

Title	Description
Actuarial Memorandum Exhibit I	Lifetime Loss Ratio (“LLR”) <ul style="list-style-type: none">• Without/with proposed phase-in rate increase of 23.12%• <i>Nationwide</i> earned premium and incurred claims experience• Weighted average statutory discount rate 4.20% LLR without proposed rate increase – 117.5% With proposed rate increase – 109.3%
Exhibit II	Demonstration of rate action meeting Rate Stability requirements
Attachment 1	Lifetime Loss Ratio (“LLR”) <ul style="list-style-type: none">• Without/with proposed phase-in rate increase of 23.12%• <i>Maryland</i> earned premium and incurred claims experience• Weighted average statutory discount rate 4.20% LLR without proposed rate increase – 115.4% With proposed rate increase – 106.9%
Attachment 2	Comparison of Original Pricing and Current Best Estimate Assumptions
Attachment 3	Actual-to-Expected results for Lapse, Mortality, Incidence and Claim Termination assumptions

Attachment 4	Actual-to-Expected Loss Ratios by Duration LLR without rate increase – 117.6%; A/E – 1.57
Attachment 5	Actual-to-Expected Loss Ratios by Calendar Year LLR without rate increase – 117.5%; A/E – 1.57

Additional Notes

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, it is provided in this filing for your information only.

We note that, despite the rate action requested, the experience of the block does not fully return to pricing levels. In general, the rate action addresses primarily future experience and does not seek to recover historical losses. We will continue, of course, to monitor and adjust experience assumptions and reserve the right to update those in the future along with requesting any resulting changes in premium rates.

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

Sincerely,



William P. Bigelow, FSA, MAAA
Vice President and Actuary, Metropolitan Life Insurance Company

METROPOLITAN LIFE INSURANCE COMPANY

New York, NY

Actuarial Memorandum for AARP Group Policy

April 25, 2017

This actuarial memorandum pertains to long-term care insurance provided under a group policy issued to AARP (previously known as “American Association of Retired Persons”) to cover eligible members and their spouses (including domestic partners) who meet the eligibility requirements specified in the policy.

Policy Forms

The premium rate schedule increase for which we are seeking approval will apply to the following certificate forms approved by your Department and that were issued under the group long-term care policy G.LTC1697 (situated in District of Columbia):

- GCLTCAARP-04-OP

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

There are two options available: the Comprehensive Monthly Reimbursement Plan and the Facility-only Monthly Reimbursement Plan. Both plans provide benefits for Primary Services equal to the lesser of:

- a. the actual expenses incurred for the receipt of one month’s services
- b. the Monthly Benefit Amount (“MBA”) times a percentage that varies based on the site of care

MBA = Daily Benefit Amount (“DBA”) times the number of days in the month.

Reimbursement Percentages by Site of Care

- I. Nursing Home, Hospice, or Assisted Living Facility – 100%
- II. Home Health Care (for Comprehensive Coverage Option only) – optional 50%, 80% or 100%
- III. Informal Care (for Comprehensive Coverage Option only) – 50% of the selected Home Health Care coverage

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Respite Service

Both plans reimburse the actual incurred expenses for Respite Services provided by a Formal or Informal Caregiver, up to the DBA corresponding to the type of service. Benefits are limited to 30 days per calendar year.

3. Renewability

These policy forms are guaranteed renewable for life.

4. Applicability

This filing is applicable to the group long-term care insurance certificates shown on the first page issued to AARP from July 1, 2005 to January 22, 2007 with a group policy situs within District of Columbia. No in-force premium rate schedule increase has been previously implemented for these forms.

We will only implement a premium rate schedule increase for certificates issued to residents of your state after we have received approval from your Department. We will implement the amount of the increase approved by your Department irrespective of the amount of the increase approved by the District of Columbia (where the long-term care insurance policy issued to AARP was situated). These policy forms are no longer being marketed to AARP members and spouses.

5. Actuarial Assumptions

- a. Expected Claim Costs 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, 2015.
- b. Voluntary Termination Rates vary by duration as developed from actual experience through June 30, 2015 and are shown in the following table:

Voluntary Termination Rates

Policy Duration	Lapse Rate
1	5.50%
2	3.50%
3	2.50%
4	2.00%
5	1.50%
6	1.25%
7+	1.00%

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In the year of rate increase implementation, it is assumed that an additional 1.1% of policies lapse and there is 0.3% net reduction to 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. Expenses 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 the group policy form, including certificate forms issued under such group policy. 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.

The assumptions described above were developed from the actual historical experience on these forms and supplemented, as needed, based on the experience of other forms. The projections contained in this actuarial memorandum are based on the best estimate assumptions, as described above, except the projections include a margin for moderately adverse experience equal to 5% of projected future incurred claims.

6. Marketing Method

These policy forms were issued to provide coverage to eligible AARP members and spouses. The primary method of marketing was direct mail.

7. Underwriting Description

Certain health information was required of applicants at the time of enrollment, including answering questions on the enrollment form regarding medical history, supplemented by contacting health care providers for medical records, as well as telephone and face-to-face interviews as needed.

8. Premiums

Premium rates varied based upon the age of the insured at issue and the particular benefit variations selected. A preferred risk discount was applied to insured persons that qualified based on underwriting criteria. If two or more members of the same household purchased coverage, then a household discount was applied. Additionally, monthly EFT Premium was equal to the monthly premium less \$2 and annual premium was equal to monthly premium times 12 less \$24.

9. Issue Age Range

The issue age is 18 and over.

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10. Area Factors

Area factors are not used for this product.

11. Reserves

Active life reserves have not been used in this rate increase analysis. Claim reserves as of December 31, 2015 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, 2015 have been allocated to a calendar year of incurral and included in historical incurred claims.

12. Trend Assumptions

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

13. Past and Future Policy Experience

Nationwide experience and specific experience for those certificates issued in Maryland are shown in Exhibit I and Attachment 1, respectively.

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 4.20%. Incurred but not reported reserves were allocated based on a historical analysis of claim development pattern.

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

A lifetime loss ratio as of December 31, 2015 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 4.20%.

14. Projected Earned Premiums and Incurred Claims

Earned premiums for projection years 2016 through 2096 are developed by multiplying each prior period's earned premium (starting with December 31, 2015 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.

Incurred claims for each projection year combine the impact of incidence rates, claim continuance rates and utilization factors by the policy benefits on a seriatim basis.

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Present and accumulated values in the lifetime projections in Exhibit I and II 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 4.20%.

The assumptions used in Exhibit I and II projections are developed from the company's LTC insurance experience, plus a margin for moderately adverse 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.

15. History of Previous Inforce Rate Increases

There has not been any rate increase on these policy forms.

16. Requested Rate Increase

The company is requesting a phased-in series of rate increases (two phases of 10% each and a final phase of 1.75%), resulting in a cumulative compounded increase of 23.12% after the final phase. These phased increases are actuarially equivalent to a single one-time increase of 20.80%. Although a larger premium rate increase is currently supportable under loss ratio regulation, MetLife agreed with AARP to reduce the impact on AARP members by seeking the rate increase shown above.

Corresponding rate tables reflecting each of the three phases for the 23.12% cumulative compounded increase are included with this filing. Please note that the actual rates implemented may vary slightly from those filed due to implementation rounding algorithms.

17. 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 for nursing home care and home health care rates were based on studies from the 1985 and 1997 National Nursing Home Survey and 1982/1984/1989 National

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Long Term Care Survey, respectively, supplemented with the 1984-1999 Long Term Care Experience Committee Inter-Company Study and with modifications to incorporate experience of other long-term care business that MetLife issued or administered.

- b. Voluntary termination rates by duration were assumed to be 6.25% in year one, grading down to 1.5% in year fifteen and thereafter.
- c. Mortality was based on 105% of the Annuity 2000 Basic Mortality Table modified using Projection Scale H.

As part of the inforce management of the business, MetLife monitors the performance of the business 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 on a best estimate basis. A margin for moderately adverse experience equal to 5% of projected future incurred claims was added to the best estimate 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 moderately adverse 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 moderately adverse assumptions combine to a resulting loss ratio that exceeds both original pricing expectations and state minimum requirements.

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.

18. Loss Ratio Requirement Compliance Demonstration

Projected experience assuming the increase is implemented is shown in Exhibit I and II. As shown in these exhibits, the expected lifetime loss ratios, with and without the requested rate increase, exceed the minimum loss ratio requirement.

19. Average Annual Premium

The average September 30, 2016 annualized premium for all premium-paying certificate holders before and after the current requested increase are:

Before increase:	\$1,766
After Phase 1:	\$1,943
After Phase 2:	\$2,137
After Phase 3:	\$2,174

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20. Proposed Effective Date

The rate increase will apply to certificate holders on the anniversary of their original coverage effective date, following at least a 60-day notification period after the increase is approved.

21. Nationwide Distribution of Business as of September 30, 2016 (based on premium-paying certificates inforce count)

By Issue Age:

Issue Age	Percent
<45	<1%
45-49	1%
50-54	11%
55-59	25%
60-64	29%
65-69	24%
70-74	8%
75+	1%
Total	100%

By Benefit Period:

Benefit Period	Percent
2 Year	6%
3 Year	28%
4 Year	49%
5 Year	6%
7 Year	1%
Unlimited	9%
Total	100%

By Inflation Option:

Inflation	Percent
Optional	74%
Auto 5% Compound	26%
Total	100%

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By Home Care Percentage:

Home Care %	Percent
0% (FC Only)	16%
50%	55%
80%	6%
100%	22%
Total	100%

By Elimination Period:

Days	Percent
20	2%
30	53%
45	-
60	29%
90	16%
Total	100%

By Gender:

Gender	Percent
Female	60%
Male	40%
Total	100%

22. Number of Insured Lives

As of September 30, 2016, the number of premium-paying insured lives inforce and their premiums that will be affected by this increase are:

	Issued Before Rate Stability Regulation Effective Date		Issued On or After Rate Stability Regulation Effective Date	
	Number of Insured Lives	2016 Annualized Premium	Number of Insured Lives	2016 Annualized Premium
Certificates issued in Maryland	-	-	144	\$272,815
Certificates issued nationwide	3,594	\$6,582,693	5,002	\$8,600,936

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23. 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.

I further certify that:

- if the requested premium rate schedule increase is implemented and the underlying assumptions, which reflect moderately adverse conditions, are realized, no further premium rate schedule increases are anticipated;
- the analysis described in Section 17 of this memorandum was used in determining the need for a rate increase;
- the policy design, underwriting and claims adjudication practices have been reviewed and taken into consideration in this rate increase request;
- the actuarial assumptions used 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 MetLife is no longer issuing new business on these policy forms.



William P. Bigelow, FSA, MAAA
Vice President and Actuary, Metropolitan Life Insurance Company

Exhibit II
Demonstration that Lifetime Incurred Claims with Requested Increase are
Not Less than Lifetime Earned Premium with Prescribed Factors
Group Policy Form: G.LTC.1697

1. Accumulated value of initial earned premium	196,014,988	x	58%	=	113,688,693
2a. Accumulated value of earned premium	196,014,988				
2b. Accumulated value of prior premium rate schedule increases (2a-1)	0		85%	=	0
3. Present value of future projected initial earned premium	141,131,546		58%	=	81,856,297
4a. Present value of future projected premium	162,045,630				
4b. Present value of future projected premium in excess of the projected initial earned premiums (4a-3)	20,914,084		85%	=	17,776,972
5. Lifetime Earned Premium Times Prescribed Factor: Sum of 1, 2b, 3, and 4b					213,321,961
6a. Accumulated value of incurred claims without the inclusion of active life reserves					30,001,059
6b. Present value of future projected incurred claims without the inclusion of active life reserves					361,371,466
7. Lifetime Incurred Claims with Rate Increase: Sum of 6a and 6b					391,372,525
8. Test: 7 is not less than 5					TRUE

Attachment 2
Metropolitan Life Insurance Company
Group Policy Form: G.LTC1697, Certificate Form: GCLTCAARP-04-OP
Comparison of Original Pricing and Current Best Estimate Assumptions

Original Pricing Assumptions

Current Best Estimate Assumptions

Discount Rate

5.50%

4.20%

Voluntary Lapse Rates

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%

Policy Duration	Lapse Rate
1	5.50%
2	3.50%
3	2.50%
4	2.00%
5	1.50%
6	1.25%
7+	1.00%

Active Life Mortality Rates

Mortality was based on 105% of the Annuity 2000 Basic mortality table with Projection Scale H.

88% Annuity 2000 Basic Table with Mortality Selection Factors of:

Policy Duration	Mortality Selection
1	25.00%
2	50.00%
3	55.00%
4	65.00%
5	70.00%
6	75.00%
7	80.00%
8	85.00%
9	90.00%
10	95.00%
11+	100.00%

Morbidity:

Incidence

Incidence rates for nursing home care and home health care were based on studies from the 1985 and 1997 National Nursing Home Survey and 1982-84-89 National Long Term Care Survey, respectively, supplemented with the 1984-1999 Long Term Care Experience Committee Inter-Company Study and with modifications to incorporate experience of other long-term care business that MetLife issued or administered.

Sample Ultimate Smoothed Incidence Rates (before gross-up to zero-day elimination)

Attained Age	Facility Care		Home Care	
	Male	Female	Male	Female
81	1.62%	1.89%	1.49%	1.48%
82	1.93%	2.31%	1.79%	1.65%
83	2.25%	2.75%	1.92%	1.85%
84	2.44%	3.31%	2.24%	2.05%
85	2.55%	3.85%	2.43%	2.30%

Continuance

Continuance rates for nursing home care and home health care were based on studies from the 1985 and 1997 National Nursing Home Survey and 1982-84-89 National Long Term Care Survey, respectively, supplemented with the 1984-1999 Long Term Care Experience Committee Inter-Company Study and with modifications to incorporate experience of other long-term care business that MetLife issued or administered.

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.

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.

Home Care	Facility Care
72%	87%

Attachment 3
Metropolitan Life Insurance Company
Group Policy Form: G.LTC1697
Actual-to-Expected Results - Lapse

Lapse (AARP-Met)			
Policy Duration	Actual	Expected *	A/E%
1	6,624	6,653	99.57%
2	3,765	4,040	93.19%
3	2,702	2,795	96.67%
4	2,056	2,177	94.44%
5	1,545	1,595	96.86%
6	1,410	1,301	108.39%
7	1,207	1,018	118.54%
8	1,052	991	106.11%
9	906	937	96.67%
10	845	864	97.78%
11	752	772	97.42%
12	557	657	84.75%
13	438	512	85.51%
14+	703	780	90.18%

Attachment 3
Metropolitan Life Insurance Company
Group Policy Form: G.LTC1697
Actual-to-Expected Results - Mortality

Mortality (AARP-Met)			
Policy Duration	Actual	Expected *	A/E%
1	535	534	100.22%
2	923	1,113	82.96%
3	1,110	1,297	85.55%
4	1,316	1,637	80.39%
5	1,529	1,874	81.59%
6	1,656	2,093	79.11%
7	1,798	2,308	77.89%
8	1,931	2,475	78.03%
9	1,976	2,597	76.08%
10	2,042	2,655	76.90%
11	1,926	2,463	78.18%
12	1,714	2,058	83.30%
13	1,473	1,673	88.07%
14+	2,710	2,829	95.80%

* The expecteds are based on current best estimate assumptions.

Attachment 3
Metropolitan Life Insurance Company
Group Policy Form: G.LTC1697
Actual-to-Expected Results - Incidence

Incidence (AARP-Met)												
Calendar Year	Female						Male					
	Facility Care			Home Care			Facility Care			Home Care		
	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%
2001	4	2	169%	5	2	227%	2	2	124%	1	1	69%
2002	21	15	144%	13	13	100%	10	9	111%	7	9	82%
2003	50	41	123%	52	35	147%	24	24	100%	24	22	109%
2004	72	71	102%	63	61	103%	43	42	103%	48	38	127%
2005	111	100	111%	83	83	100%	57	59	96%	49	52	94%
2006	139	138	101%	126	109	115%	99	81	122%	83	70	119%
2007	189	178	106%	153	135	113%	102	104	98%	92	87	106%
2008	243	222	109%	178	159	112%	117	127	92%	106	103	103%
2009	285	266	107%	180	181	100%	143	148	97%	97	117	83%
2010	295	309	95%	214	200	107%	169	169	100%	121	131	93%
2011	352	352	100%	180	216	83%	216	189	114%	116	140	83%
2012	411	398	103%	233	232	101%	212	208	102%	134	150	89%
2013	418	445	94%	241	245	98%	235	228	103%	169	158	107%
2014	464	482	96%	238	260	92%	225	243	93%	175	167	105%
2015	448	504	89%	221	266	83%	216	254	85%	165	170	97%
Total	3,502	3,523	99%	2,180	2,198	99%	1,870	1,886	99%	1,387	1,413	98%

¹ Based on actual experience through 12/31/2015 including adjustments for incurred but not reported claims.

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

Attachment 3
Metropolitan Life Insurance Company
Group Policy Form: G.LTC1697
Actual-to-Expected Results - Claim Termination

Claim Termination (AARP-Met)							
Calendar Year	Actual Deaths	Expected Deaths ¹	Actual Recoveries	Expected Recoveries ¹	Deaths A/E%	Recoveries A/E%	Total A/E%
1991	1	1	1	0	84%	393%	138%
1992	6	4	2	1	138%	221%	153%
1993	10	9	6	2	107%	332%	143%
1994	22	25	5	5	88%	110%	91%
1995	37	38	7	7	96%	106%	97%
1996	59	56	13	9	106%	138%	111%
1997	73	73	25	12	100%	200%	114%
1998	106	90	20	16	118%	129%	120%
1999	122	118	110	19	104%	564%	169%
2000	125	157	34	26	79%	130%	87%
2001	217	211	33	35	103%	94%	102%
2002	291	297	51	49	98%	103%	99%
2003	374	394	73	67	95%	109%	97%
2004	507	515	101	88	98%	115%	101%
2005	619	633	128	110	98%	117%	101%
2006	771	788	173	133	98%	130%	102%
2007	895	923	143	152	97%	94%	97%
2008	1,069	1,091	173	184	98%	94%	97%
2009	1,251	1,258	163	211	99%	77%	96%
2010	1,430	1,433	226	238	100%	95%	99%
2011	1,621	1,589	210	262	102%	80%	99%
2012	1,728	1,780	209	294	97%	71%	93%
2013	2,015	1,985	268	334	102%	80%	98%
2014	2,222	2,113	358	356	105%	101%	105%
2015 (through Q2)	1,162	1,257	300	213	92%	141%	99%
Total	16,733	16,839	2,832	2,823	99%	100%	100%

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

Attachment 4
Metropolitan Life Insurance Company
Nationwide Experience Projections With No Rate Increase
Group Policy Form: G.LTC1697, Certificate Forms: GCLTCARP-04-OP
Actual to Expected Loss Ratios by Duration

Duration	Actual / Projected Experience			Expected Pricing Experience			G = C / F Actual to Expected Ratio
	Actual Experience through 12/31/2015			Reproduced based on Original Pricing			
	Projections based on Current Assumptions			Assumptions since inception			
	A	B	C = B / A	D	E	F = E / D	
	Earned Premium	Incurred Claims	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	
1	9,162,973	398,560	4.3%	9,162,973	312,908	3.4%	1.27
2	17,358,587	418,757	2.4%	17,358,587	1,399,634	8.1%	0.30
3	16,868,590	919,738	5.5%	16,537,023	1,956,432	11.8%	0.46
4	16,519,059	1,316,179	8.0%	15,819,508	2,513,197	15.9%	0.50
5	16,192,942	2,282,938	14.1%	15,112,878	3,154,328	20.9%	0.68
6	15,918,581	2,613,786	16.4%	14,418,043	4,109,630	28.5%	0.58
7	15,689,061	2,691,608	17.2%	13,734,096	4,630,578	33.7%	0.51
8	15,459,102	3,027,134	19.6%	13,060,140	4,988,522	38.2%	0.51
9	15,235,787	4,808,459	31.6%	12,458,206	5,475,164	43.9%	0.72
10	15,079,001	5,421,921	36.0%	11,889,596	5,909,242	49.7%	0.72
11	14,776,553	7,047,826	47.7%	11,349,665	6,305,880	55.6%	0.86
12	14,304,306	7,896,524	55.2%	10,811,258	6,893,911	63.8%	0.87
13	13,748,785	9,058,265	65.9%	10,274,612	7,383,222	71.9%	0.92
14	13,176,873	10,292,783	78.1%	9,765,954	7,768,749	79.5%	0.98
15	12,587,903	11,629,788	92.4%	9,257,847	8,389,627	90.6%	1.02
16	11,982,868	13,071,735	109.1%	8,774,372	8,910,620	101.6%	1.07
17	11,369,326	14,604,928	128.5%	8,291,110	9,341,855	112.7%	1.14
18	10,746,282	16,223,831	151.0%	7,809,180	9,975,781	127.7%	1.18
19	10,114,576	17,895,249	176.9%	7,330,102	10,436,372	142.4%	1.24
20	9,477,718	19,588,931	206.7%	6,855,533	10,825,378	157.9%	1.31
21	8,839,104	21,279,901	240.7%	6,387,227	11,415,920	178.7%	1.35
22	8,202,531	22,919,955	279.4%	5,926,967	11,888,745	200.6%	1.39
23	7,573,731	24,489,492	323.3%	5,476,271	12,256,552	223.8%	1.44
24	6,955,386	25,945,950	373.0%	5,036,960	12,749,800	253.1%	1.47
25	6,352,368	27,227,007	428.6%	4,610,947	13,145,126	285.1%	1.50
26	5,768,720	28,335,462	491.2%	4,200,007	13,504,015	321.5%	1.53
27	5,207,403	29,224,294	561.2%	3,805,723	13,966,891	367.0%	1.53
28	4,671,520	29,870,347	639.4%	3,429,573	14,348,833	418.4%	1.53
29	4,163,938	30,262,511	726.8%	3,072,775	14,504,276	472.0%	1.54
30	3,686,368	30,371,521	823.9%	2,735,982	14,936,327	545.9%	1.51
31	3,241,719	30,200,606	931.6%	2,420,118	15,168,920	626.8%	1.49
32	2,831,487	29,746,273	1050.6%	2,125,760	15,312,699	720.3%	1.46
33	2,455,614	29,016,049	1181.6%	1,853,175	15,497,435	836.3%	1.41
34	2,114,034	28,039,395	1326.3%	1,602,301	15,283,044	953.8%	1.39
35	1,805,938	26,826,018	1485.4%	1,372,975	15,180,805	1105.7%	1.34
36	1,530,369	25,403,512	1660.0%	1,165,203	14,965,728	1284.4%	1.29
37	1,286,541	23,805,302	1850.3%	978,575	14,477,476	1479.4%	1.25
38	1,072,612	22,088,383	2059.3%	812,633	13,462,919	1656.7%	1.24
39	886,546	20,280,496	2287.6%	666,740	12,603,833	1890.4%	1.21
40	726,257	18,422,569	2536.6%	540,006	12,074,279	2236.0%	1.13
41	589,682	16,565,946	2809.3%	431,807	9,655,000	2236.0%	1.26
42	474,302	14,735,855	3106.8%	340,575	7,615,100	2236.0%	1.39
43	377,656	12,959,300	3431.5%	264,894	5,922,902	2236.0%	1.53
44	297,519	11,273,017	3789.0%	203,170	4,542,791	2236.0%	1.69
45	231,825	9,692,815	4181.1%	153,405	3,430,065	2236.0%	1.87
46	178,782	8,243,270	4610.8%	114,260	2,554,795	2236.0%	2.06
47	136,403	6,929,619	5080.3%	83,625	1,869,815	2236.0%	2.27
48	102,931	5,746,750	5583.1%	60,069	1,343,119	2236.0%	2.50
49	76,848	4,698,963	6114.7%	42,245	944,587	2236.0%	2.73
50	56,661	3,782,311	6675.3%	28,820	644,404	2236.0%	2.99
51	41,205	2,997,760	7275.3%	19,325	432,093	2236.0%	3.25
52	29,537	2,337,622	7914.3%	12,557	280,770	2236.0%	3.54
53	20,880	1,792,657	8585.4%	7,905	176,755	2236.0%	3.84
54	14,540	1,353,240	9307.2%	4,839	108,197	2236.0%	4.16
55	9,972	1,007,683	10104.8%	2,908	65,014	2236.0%	4.52
56	6,738	739,157	10970.2%	1,744	38,985	2236.0%	4.91
57	4,486	535,498	11937.6%	857	19,170	2236.0%	5.34
58	2,947	384,525	13046.4%	609	13,608	2236.0%	5.83
59	1,914	273,526	14289.1%	420	9,383	2236.0%	6.39
60	1,238	196,820	15903.6%	0	0	0.0%	0.00
Lifetime	357,797,124	781,210,316	218.3%	290,064,633	437,091,205	150.7%	1.45
Lifetime*	216,107,954	254,049,829	117.6%	161,037,647	120,703,015	75.0%	1.57

Note:

* Columns A and B are discounted back to the inception date at an interest rate of 4.2%, 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 5.5%.

Attachment 5
Metropolitan Life Insurance Company
Nationwide Experience Projections With No Rate Increase
Group Policy Form: G.LTC1697, Certificate Forms: GLCTCAARP-04-OP
Actual to Expected Loss Ratios by Calendar Year

	Calendar Year	Actual / Projected Experience			Expected Pricing Experience			Accumulative Loss Ratio as of 12/31/2015				
		A	B	C = B / A	D	E	F = E / D	G = C / F	H	I	J = H / I	
		Earned Premium	Incurred Claims	Loss Ratio	Earned Premium	Incurred Claims	Loss Ratio	Actual to Expected Ratio	Actual/Projected at 4.2% (on C)	Expected at 5.5% (on F)	Actual to Expected Ratio	
Historical Experience	2004	15,224	0	0.0%	15,224	520	3.4%	0.00	0.0%	3.4%	0.00	
	2005	3,076,123	33,317	1.1%	863,801	35,085	4.1%	0.27	1.1%	4.0%	0.27	
	2006	11,982,912	712,014	5.9%	7,705,612	538,703	7.0%	0.85	4.9%	6.7%	0.74	
	2007	16,480,471	169,533	1.0%	15,070,717	1,338,270	8.9%	0.12	2.9%	8.0%	0.36	
	2008	16,825,909	1,717,173	10.2%	15,918,904	1,910,032	12.0%	0.85	5.4%	9.6%	0.56	
	2009	16,436,280	1,142,196	6.9%	15,383,174	2,459,998	16.0%	0.43	5.7%	11.2%	0.51	
	2010	16,141,283	3,014,752	18.7%	14,753,805	3,157,256	21.4%	0.87	8.1%	13.2%	0.61	
	2011	15,777,213	1,851,844	11.7%	14,130,654	3,852,239	27.3%	0.43	8.6%	15.3%	0.57	
	2012	15,649,539	3,747,043	23.9%	13,513,726	4,326,376	32.0%	0.75	10.5%	17.2%	0.61	
	2013	15,363,757	2,971,292	19.3%	12,924,994	4,740,260	36.7%	0.53	11.4%	19.1%	0.60	
	2014	15,236,645	4,125,517	27.1%	12,381,289	5,179,980	41.8%	0.65	12.8%	21.0%	0.61	
	2015	14,944,196	6,671,657	44.6%	11,867,774	5,597,479	47.2%	0.95	15.3%	22.8%	0.67	
	Projected Experience	2016	14,732,422	7,152,934	48.6%	11,368,323	6,067,019	53.4%	0.91	17.6%	24.5%	0.72
		2017	14,130,830	8,242,011	58.3%	10,869,034	6,588,289	60.6%	0.96	20.0%	26.4%	0.76
		2018	13,570,499	9,415,991	69.4%	10,377,731	7,048,340	67.9%	1.02	22.6%	28.2%	0.80
2019		12,992,930	10,675,876	82.2%	9,896,815	7,542,972	76.2%	1.08	25.3%	30.0%	0.84	
2020		12,399,692	12,042,718	97.1%	9,424,617	8,104,178	86.0%	1.13	28.2%	31.8%	0.88	
2021		11,794,324	13,511,907	114.6%	8,961,119	8,611,679	96.1%	1.19	31.2%	33.7%	0.93	
2022		11,179,614	15,069,100	134.8%	8,496,542	9,148,457	107.7%	1.25	34.4%	35.6%	0.97	
2023		10,554,484	16,704,858	158.3%	8,029,844	9,710,990	120.9%	1.31	37.8%	37.5%	1.01	
2024		9,921,523	18,383,239	185.3%	7,562,459	10,187,902	134.7%	1.38	41.4%	39.4%	1.05	
2025		9,284,604	20,081,942	216.3%	7,096,180	10,695,825	150.7%	1.44	45.1%	41.3%	1.09	
2026		8,646,696	21,759,144	251.6%	6,632,909	11,251,257	169.6%	1.48	48.9%	43.2%	1.13	
2027		8,012,302	23,380,719	291.8%	6,174,498	11,733,213	190.0%	1.54	52.9%	45.1%	1.17	
2028		7,386,275	24,920,009	337.4%	5,722,822	12,206,175	213.3%	1.58	56.9%	47.0%	1.21	
2029		6,772,709	26,317,035	388.6%	5,279,962	12,695,183	240.4%	1.62	61.0%	48.8%	1.25	
2030		6,175,289	27,554,198	446.2%	4,848,051	13,137,990	271.0%	1.65	65.1%	50.7%	1.28	
2031		5,598,242	28,604,319	511.0%	4,429,113	13,598,150	307.0%	1.66	69.2%	52.5%	1.32	
2032		5,044,414	29,415,759	583.1%	4,025,042	14,075,578	349.7%	1.67	73.2%	54.4%	1.35	
2033		4,516,673	29,992,377	664.0%	3,637,569	14,439,008	396.9%	1.67	77.2%	56.2%	1.37	
2034		4,018,155	30,298,589	754.0%	3,268,053	14,793,539	452.7%	1.67	81.1%	57.9%	1.40	
2035		3,549,328	30,332,734	854.6%	2,917,658	15,186,611	520.5%	1.64	84.8%	59.7%	1.42	
2036		3,115,003	30,071,412	965.4%	2,587,494	15,472,464	598.0%	1.61	88.4%	61.4%	1.44	
2037		2,714,925	29,529,685	1087.7%	2,278,385	15,711,105	689.6%	1.58	91.8%	63.0%	1.46	
2038		2,349,358	28,726,325	1222.7%	1,990,813	15,801,589	793.7%	1.54	94.9%	64.6%	1.47	
2039		2,017,897	27,680,729	1371.8%	1,725,005	15,736,952	912.3%	1.50	97.8%	66.1%	1.48	
2040		1,719,493	26,404,427	1535.6%	1,481,165	15,641,226	1056.0%	1.45	100.5%	67.6%	1.49	
2041		1,453,460	24,923,157	1714.7%	1,259,393	15,378,020	1221.1%	1.40	103.0%	68.9%	1.49	
2042		1,218,909	23,289,293	1910.7%	1,059,551	14,745,013	1391.6%	1.37	105.2%	70.1%	1.50	
2043		1,013,555	21,546,176	2125.8%	881,337	13,871,903	1574.0%	1.35	107.2%	71.2%	1.50	
2044		835,524	19,723,650	2360.6%	724,224	13,137,286	1814.0%	1.30	108.9%	72.2%	1.51	
2045		682,567	17,866,298	2617.5%	587,617	11,795,144	2007.3%	1.30	110.4%	73.1%	1.51	
2046		552,654	16,020,655	2898.9%	470,601	9,643,700	2049.2%	1.41	111.7%	73.7%	1.52	
2047		443,232	14,211,015	3206.2%	371,799	7,632,135	2052.8%	1.56	112.8%	74.2%	1.52	
2048		351,812	12,458,753	3541.3%	289,703	5,946,972	2052.8%	1.73	113.8%	74.6%	1.53	
2049		276,352	10,803,432	3909.3%	222,504	4,567,597	2052.8%	1.90	114.6%	74.8%	1.53	
2050		214,553	9,265,875	4318.7%	168,401	3,457,081	2052.9%	2.10	115.2%	75.0%	1.54	
2051	164,989	7,856,258	4761.7%	125,549	2,577,377	2052.9%	2.32	115.7%	75.1%	1.54		
2052	125,389	6,582,785	5249.9%	92,005	1,888,751	2052.9%	2.56	116.2%	75.2%	1.54		
2053	94,419	5,442,980	5764.7%	66,148	1,357,936	2052.9%	2.81	116.5%	75.3%	1.55		
2054	70,294	4,432,350	6305.5%	46,465	953,870	2052.9%	3.07	116.8%	75.3%	1.55		
2055	51,635	3,555,672	6886.1%	31,842	653,686	2052.9%	3.35	117.0%	75.4%	1.55		
2056	37,420	2,804,770	7495.4%	21,322	437,717	2052.9%	3.65	117.1%	75.4%	1.55		
2057	26,736	2,180,517	8155.8%	13,872	284,773	2052.9%	3.97	117.2%	75.4%	1.55		
2058	18,844	1,668,908	8856.7%	8,759	179,818	2052.9%	4.31	117.3%	75.4%	1.56		
2059	13,096	1,258,250	9607.7%	5,391	110,663	2052.9%	4.68	117.4%	75.4%	1.56		
2060	8,968	935,345	10429.6%	3,263	66,991	2052.9%	5.08	117.4%	75.4%	1.56		
2061	6,065	685,101	11296.3%	1,876	38,518	2052.9%	5.50	117.5%	75.4%	1.56		
2062	4,030	497,327	12340.1%	1,061	21,788	2052.9%	6.01	117.5%	75.4%	1.56		
2063	2,656	355,956	13404.2%	699	14,357	2052.9%	6.53	117.5%	75.4%	1.56		
2064	1,724	255,865	14837.8%	341	6,991	2052.9%	7.23	117.5%	75.4%	1.56		
2065	1,129	184,464	16340.9%	56	1,147	2052.9%	7.96	117.5%	75.4%	1.56		
2066	752	134,335	17863.9%	4	76	2052.9%	8.70	117.5%	75.4%	1.56		
2067	519	95,973	18497.2%	0	1	2052.9%	9.01	117.5%	75.4%	1.56		
2068	362	68,701	18956.8%	0	1	2052.9%	9.23	117.5%	75.4%	1.56		
2069	253	47,899	18952.6%	0	1	2052.9%	9.23	117.5%	75.4%	1.56		
2070	173	31,798	18348.6%	0	0	N/A	N/A	117.5%	75.4%	1.56		
Past	157,929,550	26,156,338	16.6%	134,529,674	33,136,199	24.6%	0.67	12.8%	21.0%	0.61		
Future	199,869,754	755,451,594	378.0%	155,534,989	403,955,006	259.7%	1.46	238.5%	156.4%	1.53		
Lifetime	357,799,304	781,607,932	218.4%	290,064,663	437,091,205	150.7%	1.45	117.5%	75.0%	1.57		