

April 2, 2018

Actuarial Memorandum Supporting Rate Revision for Senior Health Insurance Company of Pennsylvania Long-Term Care Insurance Plan

1. PURPOSE OF FILING

This is a rate increase filing for Senior Health Insurance Company of Pennsylvania's (SHIP) policy forms outlined below. SHIP is requesting a 15% rate increase for policyholders with a 5% compound lifetime inflation rider. In lieu of the rate increase, an option is provided to policyholders to freeze future inflation increases and receive a 40% decrease in their current premium. The rate increase is necessary because the current estimate of the nationwide lifetime loss ratio is in excess of expected. This rate filing is not intended to be used for other purposes.

2. SCOPE OF FILING

This filing applies to Long Term Care active policies with a 5% compound lifetime inflation rider. This includes the following policy and rider forms:

Series 10955 & 11001

Policy Forms: 10955, 11001
Benefit Increase Rider Forms: 10955-IPR, 11001-IPR
Return of Premium Benefit Rider Forms: 11001-ROP
Home Health Care Rider Forms: 10955-HHC, 11001-HHC
Originally Issued by Transport Life Insurance Company

10956 Series

Policy Forms: 10956
Benefit Increase Rider Forms: 10956-IPR
Home Health Care Rider Forms: 10956-HHC
Originally Issued by Transport Life Insurance Company

CSHIC 5000 Series

Policy Forms: CSHIC-5003-MD-2
Benefit Increase Rider Forms: CSHIC-6004(5%), CSHIC-6006(5%)
Original Issued by Conesco Senior Health Insurance Company

FQ Series

Policy Forms: ATL-FQ-LTC
Benefit Increase Rider Forms: ATL-BIR-FQ, ATL-BIR-FQ.1
Originally Issued by American Travellers Life Insurance Company

HHC Series

Policy Forms: ATL-HHC-3, ATL-HHC-4
Benefit Increase Rider Forms: ATL-BIR-HHC-3, ATL-BIR-HHC-4
Originally Issued by American Travellers Life Insurance Company

LTC-1 Series

Policy Forms: ATL-LTC-1(MD), ATL-LTC-1-MD-93
Benefit Increase Rider Forms: ATL-BIR-LTC-1(MD), ATL-BIR-LTC-1-MD-93
Originally Issued by American Travellers Life Insurance Company

LTC-6

Policy Forms: ATL-LTC-6
Benefit Increase Rider Forms: ATL-BIR-LTC-6
Originally Issued by American Travellers Life Insurance Company

The rate increase will apply to all insureds issued coverage under the above referenced forms in this State. The number of lives inforce and average premiums before and after the rate increase are shown in Exhibit A.

The rate increase will apply to in-force business only, as SHIP no longer markets these policy forms. Given that State specific experience is not credible, nationwide experience is being used in this rate increase filing. However, Florida experience is excluded from nationwide experience to eliminate the subsidy Florida would require due to its unfavorable experience and difficulty in getting rate increases approved. Please note that while nationwide experience encompasses all policy forms listed above, SHIP may no longer have some policy forms inforce in Maryland.

3. REASON FOR RATE INCREASE REQUEST

This rate filing is a request for a 15% increase. The purpose of the requested rate increase is to mitigate future losses and to assist in maintaining the solvency of SHIP so that future policyholder obligations can be met. SHIP operates as an independent trust for the exclusive benefit of its policyholders and does not have a profit motive.

This request is part of an overall plan that SHIP has developed to maintain its solvency while minimizing the impact to policyholders as a whole.

The rate increase is justified because the actual lifetime loss ratio is 101% and higher than the required minimum loss ratio for these forms.

4. POLICYHOLDER OPTIONS TO MITIGATE IMPACT OF RATE INCREASE

SHIP will offer the following options to policyholders to mitigate the impact of the premium increase:

Benefit Reduction Offer

The Company will give policyholders Benefit Reduction Offers to help mitigate the impact to policyholders of the premium rate increase on the Base policy and Riders. The Benefit Reduction Offers will allow the policyholder with a 5% compound lifetime inflation protection rider to freeze the inflation protection at the current level by electing a new rider option. Along with the benefit reduction, policyholders will receive a 40% premium reduction to all premium due prior to the benefit reduction offer (including all rider premium).

The benefit reduction offer is not intended to be actuarial equivalent to the rate increase.

Non-Forfeiture Offer

Upon approval of the requested 15% rate increase, SHIP agrees to offer a nonforfeiture benefit to policyholders impacted by the rate increase. This offer will be made to all active policyholders regardless of issue age or premium rate increase history. The nonforfeiture benefit will provide a pool of benefits for long term care expenses equal to the sum of premiums paid-to-date less the sum of claims paid-to-date.

5. UNDERWRITING

All policies subject to this rate revision were subject to full medical underwriting in accordance with Company standards in place at the time of issue. Those underwriting standards were taken into consideration when projecting future experience. An insurer shall request approval of a pending premium rate schedule increase, including an exceptional increase, to the Commissioner at least 45 days before the notice to the policyholders.



6. PROPOSED EFFECTIVE DATE

The proposed effective date is as soon as possible following approval and fulfillment of all statutory, contractual, and operational requirements. The projection assumes a 1/1/2019 effective date.

7. APPLICABILITY

The revised rates contained in the rate filing will be applicable to all renewals of the policy form and riders described in Section 1 as well as all future periodic inflation protection offers. The revised premium rate schedules can be found as part of the filing. The rate revision will be applied as a consistent percentage to all premium classes. The modal premium factors will remain unchanged from the current factors.

8. PROJECTION ASSUMPTIONS

Mortality, lapse, and morbidity assumptions used in the lifetime loss ratio projection are consistent with the assumptions used in SHIP's 2016 cash flow testing. They are based on best estimate assumptions and do not include any margin for adverse deviation.

Interest

A 4.96% net annual rate of interest has been assumed for accumulating historical experience and for discounting projected future experience. This is a weighted average of the valuation rate based on the policy issue date of all policies subject to this filing.

Mortality

Projected future experience assumes 85% of the 1983 Group Annuitant Mortality (GAM), graded up to 100% over 10 years. In addition, a 0.6% per year mortality improvement assumption was used for 15 years.

Lapse Rates

On average, the projected lapse rate is 2.6% (benefit exhaust is not modeled explicitly, but implied in the lapse rate). Projected future experience assumes best estimate lapse rates, which vary by policy form and issue age. There is also an additional lapse applied, which increases by attained age, starting with attained age 80 at zero and increasing to 5% at age 100.

Morbidity

Projected future experience uses morbidity assumptions which are based on SHIP experience. Claim costs were calculated by attained age, sex, marital status, policy duration, benefit period, and elimination period. Adjustment factors were applied to estimated claim costs to reflect actual experience.

9. ISSUE AGE RANGE

These products were available for issue ages 38 to 86. Premiums are based on issue age.

10. AREA FACTORS

The Company did not use area factors within the State in the premium scale for these products.



11. CLAIM LIABILITY AND RESERVE

Claim reserves were calculated using appropriate actuarial methods for IBNR and using continuance curves validated for the company's experience for open claims on a disabled life basis. The claim reserves were discounted to the date of incurral for each claim and have been included in the historical incurred claims. The valuation rate for the claim reserve is consistent with the rate used to produce the historical loss ratios.

12. ACTIVE LIFE RESERVES

We have provided supporting evidence for the justification of the proposed increase based on the relationship of incurred claims divided by earned premium compared to the minimum loss ratio. Incurred claims are calculated without the impact of the change in active life reserves.

13. DISTRIBUTION OF BUSINESS

The historical experience reflects the actual distribution of policies during the experience period. The projected future experience is based on a seriatim projection of the current inforce policies. See Exhibit E for the distribution of the inforce policies by key demographic and benefit characteristics.

The historical and projected loss ratio data is stated on an incurred basis, including both accrued and unaccrued portions of the liability and reserves. The loss ratio is calculated using a 4.96% interest rate.

The historical and projected earned premium is stated on a Nationwide rate basis.

14. NUMBER OF POLICYHOLDERS

Please refer to Exhibit A for the projected number of policyholders as of December 31, 2017 in this State.

15. AVERAGE ANNUAL PREMIUM

The average annual premium for this product, both prior to the impact of the requested rate increase and after, is indicated in Exhibit A to this memorandum.

16. MINIMUM REQUIRED LIFETIME LOSS RATIO

The minimum required lifetime loss ratio for these forms is 60%.

17. HISTORICAL EXPERIENCE

Exhibit C provides nationwide experience since inception by incurral year. This data includes claim payments through 12/31/2016. The following table summarizes the nationwide historical loss ratio accumulated at 4.96% interest to 12/31/2016:

Table 1		
Senior Health Insurance Company of Pennsylvania		
Nationwide (Excluding FL) Historical Actual Experience		
5% Compound Inflation		
Earned Premiums	Incurred Claims	Loss Ratio
\$3,046,371,478	\$2,391,109,582	78.5%

18. PROJECTED FUTURE EXPERIENCE

Future experience, which has been projected for forty years using the best estimate assumptions described in Section 5, is shown in Exhibit C. Projected earned premiums include all rate increases effective as of 12/31/2017. The following table summarizes the nationwide anticipated future loss ratio discounted at 4.96% without the requested rate increases.

Table 2 Senior Health Insurance Company of Pennsylvania Nationwide (Excluding FL) Future Experience 5% Compound Inflation Best Estimate Assumptions Without Rate Increases		
Earned Premiums	Incurred Claims	Loss Ratio
\$221,472,160	\$923,682,348	417.1%

19. LIFETIME ANTICIPATED LOSS RATIO

The lifetime anticipated loss ratio is defined as the present value of the historical and projected future incurred claims divided by the present value of the historical and projected future earned premium. Exhibit C also provides a projection of these values with all planned rate increase requests included in SHIP's solvency plan. Nationwide results are summarized below:

Table 3a Senior Health Insurance Company of Pennsylvania Nationwide (Excluding FL) - 5% Compound Inflation Anticipated Lifetime Loss Ratio Best Estimate Assumptions Without Rate Increases			
Time Period	Earned Premiums	Incurred Claims	Loss Ratio
Future	\$221,472,160	\$923,682,348	417.1%
Lifetime	\$3,267,843,638	\$3,314,791,930	101.4%

Table 3b Senior Health Insurance Company of Pennsylvania Nationwide (Excluding FL) - 5% Compound Inflation Anticipated Lifetime Loss Ratio With Planned Rate Increases, Effective as of 1/1/2019			
Time Period	Earned Premiums	Incurred Claims	Loss Ratio
Future	\$242,984,580	\$929,792,327	382.7%
Lifetime	\$3,289,356,058	\$3,320,901,909	101.0%



Table 3c
Senior Health Insurance Company of Pennsylvania
Nationwide (Excluding FL) - 5% Compound Inflation
Anticipated Lifetime Loss Ratio
With Downgrade, Effective as of 1/1/2019

Time Period	Earned Premiums*	Incurred Claims*	Loss Ratio
Future	\$163,850,502	\$757,327,863	462.2%
Lifetime	\$3,210,221,981	\$3,148,437,445	98.1%

**Assumes inflation benefit frozen and 40% Premium Decrease.*

20. RELATIONSHIP OF RENEWAL PREMIUM TO NEW BUSINESS PREMIUM

The company is no longer selling any new proprietary long-term care products. Therefore, the comparison of renewal premium rates after the rate increases to the Company's current new business premium rate schedule is not applicable.

21. 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 rendering this opinion and am familiar with the requirements for filing long-term care insurance rate filings.

To the best of my knowledge and judgment, this rate filing is in compliance with the applicable laws and regulations of this State as they relate to premium rate developments and revisions. This memorandum complies with all applicable Actuarial Standards of Practice, including ASOP No. 8.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. The assumptions are consistent with the Company's current business plan.

I have reviewed and taken into consideration the policy design and coverage provided, and the Company's original underwriting and claims adjudication processes.



The projected experience shown in this Memorandum is based on best estimate assumptions and does not include any provision for moderately adverse experience. The rate increase being filed is lower than what would be required to meet any minimum lifetime loss ratio requirements or to do a certification of adequacy under rate stability requirements. If the experience does not improve, the Company will need to file for future rate increases. In my opinion, the rates are not excessive or unfairly discriminatory.

Juliet M. Spector

Juliet Spector, FSA, MAAA
Principal and Consulting Actuary

Attachments

- Exhibit A - Nationwide (Excluding Florida) Average Annualized Premiums
- Exhibit B - Maryland Rate Increase History
- Exhibit C - Nationwide (Excluding Florida) Lifetime Experience Without and With All Planned Rate Increases
- Exhibit D - Policy Form map to Projection Policy Form Groupings
- Exhibit E - Distribution of Inforce business

Exhibit A
Senior Health Insurance Company of Pennsylvania
Nationwide (Excluding Florida) Average Annualized Premiums

Exhibit A
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Lives & Premium

	Lives Inforce as of 12/31/2017	Average Annualized Premiums (as of 1/1/2020) Per Inforce		
		Baseline	With Downgrade	With Rate Increase
Nationwide Excluding Florida	12,718	\$2,942	\$1,783	\$3,376
Maryland Only	665	\$3,437	\$2,062	\$3,952

Exhibit B
Senior Health Insurance Company of Pennsylvania
Maryland Rate Increase History, Approval Percentages

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES 10955 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1994	1995	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	2018	Cumulative Increase
AR		24					25		19	11			15	20		12			40		343
AZ		15			25*		25		10			10	10		10	25	25				311
CA				13*			25	25		18		18			35			25			315
CO	24						25		19	11		25	25	40		25			5		488
DE		15			25		25		10				12	15		15	15	9			267
GA	24						6			15		12	7	15		10	12	12	20		245
HI				25*			25		10	11							25				138
IA	24								25		25		20		25		18		18		304
IL	24				25*		25	10		11		25	25	40	25	15			40		941
IN									25			25	25	35	25		15				279
KY	15						15		15	15		15				15	25		40		305
LA	24			25*		25		10						25			25				233
MD		12					15		15	15		15	15	15	15	15	15		15		353
ME		24					25	19	11			25									156
MI				25			25	19		11		25	25	40	25	25			40		888
MO	24			25			25		10		11	25	25	25	25	25					622
MS	24			17					19	18		25	25	25							298
MT			24	25			25		10	11				25		25					270
NC	19			23				20	25			11	25	25		25				25	495
ND	24						25		15	15		15	25	20	20	20				20	511
NE	18			25		25		10	11			25	25		25						340
NH	24								25			25	25	25		25	25				373
NM	15			25					19			25		40							199
NV	25															15	25				80
OH	18			25			25		10	11		25	25	20		20	20		40		751
OK	24			12			15		15	11		15	15	15		25		25	10		433
PA		24		19			5		19				25		20	20	20				298
SC							25		25	25		25	25	25		20	20		10		504
SD		24					25		19	11		25	25	40	25						460
TN	20			25			25		10	11		10			40	25				40	517
TX	15						25	19				18				21		25	40		327
UT	24						25	19		11		25		25						40	348
VA							15		25			25		40			25				214
WA	24																				24
WV							25		25	25		25	25	40	25						434

* Composite rate

**SENIOR HEALTH INSURANCE COMPANY OF
PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING
STATUS
POLICY FORM SERIES 10956 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS
EXCLUDING FLORIDA**

Issue State	1994	2017	Cumulative Increase
MA	24		24
MD	24	15	70
NJ	24		24

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES 11001 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1993	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	2018	Cumulative Increase
AR											15		20		12			40		116
AZ			23*			20		15			10	10		10	25	25				253
CA			25				20	25	15		5			35			25			282
CO		12										25	40	25				5		157
DE		12		25		20		10				12	15		15	15	9			243
GA		12						14	17		10	7	15		10	12	12	20		235
HI		12		23*		20		18	10							25				168
IA		12						15			16	20		25	18			18		212
IL		12		23*		20		18	10		25	25	40	25	15			40		845
KY		6				15			15		15				15	25		40		224
LA		12	23*		20		18						25			25				205
MD						15		15	15		15	15	15	15		15	15	15		305
MI			23*			20		25	15		25	25	40	25	25			40		915
MO		12	23			20			15	15	8	25	25	25	25					476
MT		12	23			20		18	10					25	25					235
NC			23			20	25				11		25		25				25	300
ND						20		15	15		15	25	20	20	20				20	373
NH		12						28	20			25	25	25	25					320
NM		6				20					25			40						123
NV		12					5		15		25			15		25				143
OH		12	23			20		18	10		25	25	20		20	20		40		711
OK		12	15					15	15		15	15	15			25	25	10		345
PA		12				20		25				25	20		20	20				263
SC		10		24		17		16	9			25		34	20	20		10		435
SD		12				20		15	15		25	25	40	25						386
TN		12	23			20	18		10		5			40	25				40	452
TX	18	12						15	20			14			21		25	40		340
UT		12				20	25		15		25		25						40	323
VA								28				25	40			25				180
WV												25	40		25					119
WY		12		23		20		18	18		25	25	40	25						529

* Composite rate

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES CSHIC-5000 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	2010	2011	2012	2013	2014	2017	2018	Cumulative Increase
AZ		25	25					56
CO						5		5
GA		12	15			20		55
IA		20						20
IL		25	25			40		119
KS		15						15
KY			15	15				32
MD		15	15	15		15		75
ME			22					22
MI	25		25			40		119
MN	25			25		15		80
MO	25	25						56
NC							25	25
ND		15	15					32
NJ		25	25					56
NV		25	19					49
OH		15	20			40		93
OK			25	25		10		72
OR		25			10			38
PA		25	20					50
SC		20		10				31
TN		25	25				40	119
TX			16			40		62
UT		25					40	75
VA			25					25
WA		25	25					56
WI		25	25			40*		119

* Composite rate

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-FQ-LTC AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	2018	Cumulative Increase
AK		25		25									56
AR		25			15	20	10				40		166
AZ		10		10		10		25	25				108
CA		25		18			20		20				112
CO		25		25		40					5		130
DE				12		18			25	25			107
GA		12		10		10	15	13	11		20		135
HI					20				25				50
IA		20			20		25	15			18		144
ID							10		25				48
IL		25		25		40					40		206
IN				25		35	25						111
KS		15			15			25		20	40		178
KY		15		15			25	18			40		173
LA	25					25			25				95
MA					20	20	20			10			90
MD		15		15		15	15		15		15		131
ME		25		25									56
MI	25			25	40						40		206
MN	25					40	20				15		142
MO		25		25			25	11					117
MS	25			25		25	11						117
MT						25		25					56
NC		25		25		40						25	173
ND	15			15		20	20	10				20	151
NE	25			25			25						95
NH	25					25		25					95
NJ					10		25	25					72
NM	25			25		40							119
NV							25		25				56
OH	25			25	40						40		206
OK		15		15				25		25	10		127
OR		10		10		18	18			10			85
PA			25		23	20	20						121
SC	25			25	20		17				10		141
SD		25		25		40							119
TN	25			25		20	11					40	191
TX		25		25				17		16	40		197
UT		25		25		25						40	173
VA				25		40			25				119
WA	25			25		40							119
WI		25		12			25		25		40*		206
WV	25			25		25	11						117
WY		25		25		40							119

* Composite rate

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-HHC-3 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1999	2000	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013	2014	2017	Cumulative Increase
AR			18		20		15	20	13						120
AZ			18	20			10	10		25	25				168
CA	20	25	25	25					25			25			266
CO			18		20		25	40	8						168
HI			18	20			25								77
IA			18	20			15		25						104
ID			18		20		25	10							95
IL			18	20			25	40	16					40	302
IN			18	20			25	35							139
KS			15		20		15			15					83
KY			15	15			15	15	25					40	206
LA			18	20				25							77
MD			15	15			15	15	15					15	131
ME			18	20		25									77
MI			18	20			25	40	12						178
MO			18	20			25	25	25						177
MS			18	20			25	25	25						177
MT			18	20				25							77
NC			18	20				40							98
ND			18	15		20		20	20						134
NE			18	20			25		25						121
NM			18				25	40							107
NV			18	20					20						70
OH			18	20			25	20	20					40	257
OK			15	15		15		15			19				108
OR			18			10			18	18			10		99
PA			18	20			15	20	20						134
SC			18	20		25		25							121
SD				16			25	40	25						153
TN			18	20			10	25		5					104
TX			18				15			19		25		40	183
UT				20		25			25						88
VA			18	20			25	40							148
WA			18	15			40			8					105
WV			18	20		25		40	25						210

**SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-HHC-4 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA**

Issue State	2003	2004	2005	2007	2008	2009	2010	2011	2012	2014	2017	2018	Cumulative Increase
AR	18		20		15	20	13						120
AZ	18	20			10	10		25	25				168
CO	18		20		25	40	8				5		181
GA	10				10	10	10				20		76
HI	18	20			25								77
IA	18	20			15		25				18		140
ID	18	20			25	10	10						114
IL	18	20			25	40	16				40		302
IN	18	20			25	35							139
KS	15		20		15			15			40		156
KY	15	15			15	15	25				40		206
LA	18	20				25							77
MD	15	15			15	15	15				15		131
ME	18	20		25									77
MI	18	20			25	40	12				40		289
MO	18	20			25	25	25						177
MS	18	20			25	25	25						177
MT	18	20					25						77
NC	18	20				40						25	148
ND	18	15		20		20	20						134
NE	18	20			25		25						121
NM	18				25	40							107
NV	18	20					25						77
OH	18	20			25	20	20				40		257
OK	15	15		15		15			19		10		129
OR	18			10			18	18		10			99
PA	18	20			15	20	20						134
SC	18	20		25		25							121
SD		16			25	40	25						153
TN	18	20			10	25		5				40	186
UT		20		25			25						88
VA	18	20			25	40							148
WI	18	20			18		25		25		40*		266
WV	18	20		25		40	25						210

* Composite rate

**SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-LTC-1 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA**

Issue State	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	Cumulative Increase
AK	14*										25	25							78
AR		14*	25		25		11	11			15	25	20		10				316
AZ		14*			25	25	11		11			13		10	25	25			324
CA		14*	25		25		11	11			20			25			25		312
CO		14*			15		20		17		25	25	40	10					343
GA		14*						15	18		10	10	7	15	13	11			189
HI		14*	25																43
IA		14*		25		25		11	11		25	15		25	8				326
IL		14*	25		25		11		11		25	25	25						329
IN		7			18		25		17	25		25	35	9					325
KS		10		10	15		15		15		15	15			15		20		236
KY		14*	10		15			15	15		15	15		25	25				294
LA		15	25		25			11						25		25			212
MD			9	15		15		15	15		15	15	15	15		15	15	15	407
ME				25	12		18		17		25	25							202
MI	14		25		25		11	11		25		25	25						329
MO	25		25		25		9		11		25	25	25						362
MS		15		25	25		11		11		25		25	25					331
MT		15	25		25			11	11				25		25				246
NC				25	25			14	17				40	25					265
ND		8		12	15		20		15	20	20	20		20		10			338
NE		25	25		25		9		11	25	25		40						417
NJ											25		15		25	25			125
NM	14		25		25		11				25	25	25						286
NV		15			25	25		11	11		25								177
OH	14		25		25		11	11		25		25	20	20					394
OK	14		15	15			14	15		15	15	15			25		10		313
PA		14		25	25			11	11			20	20	20	14				332
SD		25	25		25		9		11	25	25		40						417
TN	14		25		25		11	11			16			25	25				298
TX		15		25			25	11	11		25					18	25		308
UT					25			18	17		25	25	25						237
VA			7		25		16				25	25				40			239
WA		10			14		18	17		25			40		25	21			358
WI		14			25		16			10		10			25*		22	40*	327
WV		10		15		25	14	17			25	25		5					315
WY		14	25		20		14		11	25	25	25	25						428

* Composite rate

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-LTC-6 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1997	1998	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2017	2018	Cumulative Increase
AK		16*					25			25	25	40					217
AR		16*						25		15	25	20			40		250
AZ		19			25	12					10		10				102
CA		16*			25	12	16			15		25					171
CO		16*			25	12				25	25	26	5		5		252
DC			16*														16
DE		16*					15					20					60
GA								7		10		10	10		20		71
HI		16*			25	12		16									88
IA						18	15			23	20		25		18		195
ID		16*			25	12		16	25	25	25	9	5				321
IL		16*			25	12		16		25	25	25			40		415
IN						15	15		25	25		35	19				232
KS						15		15		15	15			15	40		182
KY		15			15		15	15		15	15		25		40		305
LA		16			25			25				25					127
MA						18	15				20	20	20	20			181
MD					15		15	15	15	15	15		15		15		206
ME					25	15	25		25	25							181
MI					25	15	25		25	25	25				40		391
MO	16				25	12		16		25	25	25					268
MS	16				25	12	16			25		25	17				244
MT		16*		25			11	11				25					123
NC					25	15			15	25		25				25	223
ND						25	16		20	20	20	18				20	255
NE	16				25	12	16		25	25	9		3				230
NM			20		25	15			25	25	25						237
NV													25				25
OH		16			25	12		16	25	25		9			40		349
OK	18				15	15	15			15	15	15			10		200
OR		18				10		18		10		15	18	18			170
PA					25	15	25				20	20	20				211
SC		16*			25	12	16		25	25	25				10		305
SD	16				25	12	16		25	25		9	3				230
TN	16				25	12	16		12			25	25			40	362
TX		16			25	12	16			25					40		230
UT					25	15	25		25	25						40	293
VA					15		15			25	25	40					189
WA			10		10	15		10	25		40						168
WI		19			25	12			10			10	25		40*		253
WV					25		15	25		25	25	14	4				233
WY	16*				25	12	16		25	25	25	25					360

* Composite rate

Exhibit C
Senior Health Insurance Company of Pennsylvania
Nationwide (Excluding Florida) Lifetime Experience Without and With
Planned Rate Increases

Exhibit C-1
 Senior Health Insurance Company of Pennsylvania (SHIP)
 Historical and Projected Experience
 Nationwide Experience (Excluding Florida)
 5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	512,703,257	143,667,476	28%
2001	89,299,244	48,362,307	54%
2002	87,698,930	53,203,205	61%
2003	86,711,673	55,043,158	63%
2004	85,134,638	65,018,093	76%
2005	83,457,427	67,703,387	81%
2006	81,612,125	81,366,368	100%
2007	77,550,760	85,722,962	111%
2008	77,113,310	91,469,637	119%
2009	74,248,768	109,333,796	147%
2010	70,525,637	112,944,195	160%
2011	63,271,423	111,063,532	176%
2012	59,202,178	117,504,704	198%
2013	54,488,800	116,934,164	215%
2014	50,634,168	129,495,590	256%
2015	45,389,900	118,164,961	260%
2016	40,839,529	110,336,859	270%

Inforce	Interest Rate
	4.96%
47,518	4.96%
44,266	4.96%
41,134	4.96%
38,587	4.96%
36,050	4.96%
34,200	4.96%
32,017	4.96%
29,838	4.96%
27,554	4.96%
24,944	4.96%
22,812	4.96%
20,943	4.96%
19,187	4.96%
17,451	4.96%
15,700	4.96%
14,105	4.96%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	39,654,797	121,352,695	306%
2018	38,035,021	120,208,715	316%
2019	33,874,538	112,061,801	331%
2020	29,579,154	105,054,195	355%
2021	25,600,695	97,254,531	380%
2022	21,999,968	91,056,200	414%
2023	18,782,737	84,564,930	450%
2024	15,930,841	77,826,455	489%
2025	13,422,447	70,987,457	529%
2026	11,233,955	65,553,446	584%
2027	9,348,130	58,035,056	621%
2028	7,742,722	50,721,107	655%
2029	6,383,041	44,449,420	696%
2030	5,237,699	39,175,957	749%
2031	4,278,188	33,689,461	787%
2032	3,477,262	29,350,006	844%
2033	2,810,304	25,642,276	912%
2034	2,258,303	22,236,289	985%
2035	1,804,395	19,153,355	1061%
2036	1,433,593	16,779,630	1170%
2037	1,132,767	14,072,043	1242%
2038	890,262	11,741,358	1319%
2039	696,071	9,800,852	1408%
2040	541,636	8,209,274	1516%
2041	419,453	6,733,396	1605%
2042	323,282	5,515,366	1706%
2043	247,998	4,522,729	1824%
2044	189,397	3,715,067	1962%
2045	144,031	3,035,929	2108%
2046	109,100	2,526,732	2316%
2047	82,340	1,995,673	2424%
2048	61,926	1,587,641	2564%
2049	46,415	1,261,293	2717%
2050	34,691	1,008,096	2906%
2051	25,871	789,111	3050%
2052	19,263	621,593	3227%
2053	14,314	487,956	3409%
2054	10,619	382,128	3598%
2055 & Later	29,440	1,293,214	4393%

Projection with Rate Increase Only (1/1/2019)			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	39,654,797	121,352,695	306%
2018	38,035,021	120,208,715	316%
2019	37,984,637	113,604,917	299%
2020	33,938,643	107,321,600	316%
2021	29,374,546	98,397,378	335%
2022	25,243,650	91,475,316	362%
2023	21,552,628	84,946,864	394%
2024	18,280,673	78,179,676	428%
2025	15,402,762	71,322,096	463%
2026	12,891,834	66,083,491	513%
2027	10,728,127	58,420,005	545%
2028	8,886,119	50,938,166	573%
2029	7,326,015	44,598,402	609%
2030	6,011,796	39,346,271	654%
2031	4,910,793	33,785,301	688%
2032	3,991,715	29,431,771	737%
2033	3,226,332	25,714,361	797%
2034	2,592,836	22,300,411	860%
2035	2,071,882	19,211,645	927%
2036	1,646,276	16,890,464	1026%
2037	1,300,958	14,138,705	1087%
2038	1,022,559	11,776,467	1152%
2039	799,601	9,822,611	1228%
2040	622,268	8,233,754	1323%
2041	481,950	6,745,611	1400%
2042	371,491	5,525,415	1487%
2043	285,010	4,531,270	1590%
2044	217,685	3,722,259	1710%
2045	165,560	3,042,408	1838%
2046	125,418	2,541,608	2027%
2047	94,662	2,001,385	2114%
2048	71,197	1,590,429	2234%
2049	53,368	1,262,883	2366%
2050	39,889	1,010,449	2533%
2051	29,748	789,840	2655%
2052	22,151	622,233	2809%
2053	16,461	488,498	2968%
2054	12,212	382,577	3133%
2055 & Later	33,855	1,294,866	3825%

Inforce	Interest Rate
12,718	4.96%
11,878	4.96%
10,756	4.96%
9,668	4.96%
8,636	4.96%
7,671	4.96%
6,773	4.96%
5,944	4.96%
5,184	4.96%
4,492	4.96%
3,874	4.96%
3,324	4.96%
2,839	4.96%
2,413	4.96%
2,040	4.96%
1,715	4.96%
1,433	4.96%
1,190	4.96%
983	4.96%
807	4.96%
659	4.96%
535	4.96%
432	4.96%
347	4.96%
278	4.96%
221	4.96%
175	4.96%
137	4.96%
107	4.96%
84	4.96%
65	4.96%
50	4.96%
38	4.96%
29	4.96%
22	4.96%
17	4.96%
12	4.96%
9	4.96%
	4.96%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	3,046,371,478	2,391,109,582	78%	3,046,371,478	2,391,109,582	78%
Present Value of Future to 12/31/2016	221,472,159	923,682,348	417%	242,984,580	929,792,327	383%
Total Values (Discounted at 4.96%)	3,267,843,638	3,314,791,930	101%	3,289,356,058	3,320,901,909	101%
Projected Lifetime Loss Ratio			101%			101%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			1019%			
Requested Rate Increase			15%			

Exhibit C-2
Senior Health Insurance Company of Pennsylvania (SHIP)
Historical and Projected Experience
Nationwide Experience (Excluding Florida)
5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	512,703,257	143,667,476	28%
2001	89,299,244	48,362,307	54%
2002	87,698,930	53,203,205	61%
2003	86,711,673	55,043,158	63%
2004	85,134,638	65,018,093	76%
2005	83,457,427	67,703,387	81%
2006	81,612,125	81,366,368	100%
2007	77,550,760	85,722,962	111%
2008	77,113,310	91,469,637	119%
2009	74,248,768	109,333,796	147%
2010	70,525,637	112,944,195	160%
2011	63,271,423	111,063,532	176%
2012	59,202,178	117,504,704	198%
2013	54,488,800	116,934,164	215%
2014	50,634,168	129,495,590	256%
2015	45,389,900	118,164,961	260%
2016	40,839,529	110,336,859	270%

Inforce	Interest Rate
47,518	4.96%
44,266	4.96%
41,134	4.96%
38,587	4.96%
36,050	4.96%
34,200	4.96%
32,017	4.96%
29,838	4.96%
27,554	4.96%
24,944	4.96%
22,812	4.96%
20,943	4.96%
19,187	4.96%
17,451	4.96%
15,700	4.96%
14,105	4.96%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	39,654,797	121,352,695	306%
2018	38,035,021	120,208,715	316%
2019	33,874,538	112,061,801	331%
2020	29,579,154	105,054,195	355%
2021	25,600,695	97,254,531	380%
2022	21,999,968	91,056,200	414%
2023	18,782,737	84,564,930	450%
2024	15,930,841	77,826,455	489%
2025	13,422,447	70,987,457	529%
2026	11,233,955	65,553,446	584%
2027	9,348,130	58,035,056	621%
2028	7,742,722	50,721,107	655%
2029	6,383,041	44,449,420	696%
2030	5,237,699	39,175,957	749%
2031	4,278,188	33,689,461	787%
2032	3,477,262	29,350,006	844%
2033	2,810,304	25,642,276	912%
2034	2,258,303	22,236,289	985%
2035	1,804,395	19,153,355	1061%
2036	1,433,593	16,779,630	1170%
2037	1,132,767	14,072,043	1242%
2038	890,262	11,741,358	1319%
2039	696,071	9,800,852	1408%
2040	541,636	8,209,274	1516%
2041	419,453	6,733,396	1605%
2042	323,282	5,515,366	1706%
2043	247,998	4,522,729	1824%
2044	189,397	3,715,067	1962%
2045	144,031	3,035,929	2108%
2046	109,100	2,526,732	2316%
2047	82,340	1,995,673	2424%
2048	61,926	1,587,641	2564%
2049	46,415	1,261,293	2717%
2050	34,691	1,008,096	2906%
2051	25,871	789,111	3050%
2052	19,263	621,593	3227%
2053	14,314	487,956	3409%
2054	10,619	382,128	3598%
2055 & Later	29,440	1,293,214	4393%

Projection with Downgrade Only 1/1/2019*			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	39,654,797	121,352,695	306%
2018	38,035,021	120,208,715	316%
2019	22,877,923	105,052,172	459%
2020	17,913,615	94,028,011	525%
2021	15,492,939	83,246,859	537%
2022	13,310,445	74,342,871	559%
2023	11,361,501	66,326,116	584%
2024	9,634,197	58,664,315	609%
2025	8,115,222	51,449,383	634%
2026	6,790,210	45,577,254	671%
2027	5,648,663	38,934,508	689%
2028	4,677,066	32,844,813	702%
2029	3,854,372	27,768,172	720%
2030	3,161,540	23,608,765	747%
2031	2,581,296	19,600,095	759%
2032	2,097,103	16,489,530	786%
2033	1,694,043	13,923,648	822%
2034	1,360,585	11,677,184	858%
2035	1,086,505	9,734,065	896%
2036	862,718	8,300,707	962%
2037	681,264	6,729,095	988%
2038	535,075	5,425,841	1014%
2039	418,085	4,385,741	1049%
2040	325,108	3,570,531	1098%
2041	251,601	2,833,587	1126%
2042	193,785	2,253,009	1163%
2043	148,557	1,793,567	1207%
2044	113,377	1,430,416	1262%
2045	86,161	1,135,861	1318%
2046	65,220	933,587	1431%
2047	49,188	707,752	1439%
2048	36,966	544,963	1474%
2049	27,687	420,325	1518%
2050	20,676	329,026	1591%
2051	15,407	248,229	1611%
2052	11,462	189,251	1651%
2053	8,510	142,770	1678%
2054	6,308	106,377	1686%
2055 & Later	33,855	1,294,866	3825%

Inforce	Interest Rate
12,718	4.96%
11,878	4.96%
10,756	4.96%
9,668	4.96%
8,636	4.96%
7,671	4.96%
6,773	4.96%
5,944	4.96%
5,184	4.96%
4,492	4.96%
3,874	4.96%
3,324	4.96%
2,839	4.96%
2,413	4.96%
2,040	4.96%
1,715	4.96%
1,433	4.96%
1,190	4.96%
983	4.96%
807	4.96%
659	4.96%
535	4.96%
432	4.96%
347	4.96%
278	4.96%
221	4.96%
175	4.96%
137	4.96%
107	4.96%
84	4.96%
65	4.96%
50	4.96%
38	4.96%
29	4.96%
22	4.96%
17	4.96%
12	4.96%
9	4.96%
4.96%	4.96%

*Assumes inflation benefit frozen and 40% Premium Decrease

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	3,046,371,478	2,391,109,582	78%	3,046,371,478	2,391,109,582	78%
Present Value of Future to 12/31/2016	221,472,159	923,682,348	417%	163,850,502	757,327,863	462%
Total Values (Discounted at 4.96%)	3,267,843,638	3,314,791,930	101%	3,210,221,981	3,148,437,445	98%
Projected Lifetime Loss Ratio			101%			98%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			1019%			
Requested Rate Increase			15%			

Exhibit C-3
 Senior Health Insurance Company of Pennsylvania (SHIP)
 Historical and Projected Experience
 Maryland Experience
 5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	21,291,143	5,478,848	26%
2001	4,095,387	1,159,255	28%
2002	4,106,676	3,280,770	80%
2003	3,987,677	1,923,800	48%
2004	3,893,218	1,660,203	43%
2005	3,906,641	2,132,651	55%
2006	4,029,490	4,058,500	101%
2007	3,822,553	2,180,680	57%
2008	3,838,036	3,679,410	96%
2009	3,911,773	3,235,071	83%
2010	3,793,882	3,701,591	98%
2011	3,529,883	4,793,394	136%
2012	3,282,419	5,516,181	168%
2013	3,142,679	8,356,877	266%
2014	2,971,251	7,010,851	236%
2015	2,696,526	8,239,881	306%
2016	2,479,302	4,560,863	184%

Inforce	Interest Rate
2,112	4.96%
1,967	4.96%
1,776	4.96%
1,656	4.96%
1,564	4.96%
1,485	4.96%
1,401	4.96%
1,323	4.96%
1,261	4.96%
1,175	4.96%
1,102	4.96%
1,016	4.96%
945	4.96%
874	4.96%
810	4.96%
744	4.96%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	2,315,755	8,094,829	350%
2018	2,305,454	7,944,954	345%
2019	2,061,473	7,426,756	360%
2020	1,806,147	6,874,975	381%
2021	1,570,549	6,372,742	406%
2022	1,357,080	5,967,710	440%
2023	1,165,436	5,528,867	474%
2024	994,592	5,104,317	513%
2025	843,433	4,635,183	550%
2026	710,730	4,609,697	649%
2027	595,594	3,808,890	640%
2028	496,853	3,276,568	659%
2029	412,605	2,860,613	693%
2030	341,100	2,483,076	728%
2031	280,702	2,147,084	765%
2032	229,851	1,878,272	817%
2033	187,115	1,648,018	881%
2034	151,425	1,441,222	952%
2035	121,837	1,248,847	1025%
2036	97,472	1,232,839	1265%
2037	77,566	957,364	1234%
2038	61,409	795,957	1296%
2039	48,379	678,430	1402%
2040	37,953	573,682	1512%
2041	29,651	489,482	1651%
2042	23,077	418,248	1812%
2043	17,913	358,753	2003%
2044	13,888	309,507	2229%
2045	10,761	266,675	2478%
2046	8,350	256,909	3077%
2047	6,507	195,382	3003%
2048	5,088	161,608	3176%
2049	4,000	137,164	3429%
2050	3,169	116,207	3667%
2051	2,530	99,242	3923%
2052	2,041	85,129	4172%
2053	1,658	72,759	4387%
2054	1,356	61,979	4571%
2055 & Later	5,752	294,254	5115%

Projection with Rate Increase Only (1/1/2019)			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	2,315,755	8,094,829	350%
2018	2,305,454	7,944,954	345%
2019	2,313,345	7,526,412	325%
2020	2,077,068	7,014,709	338%
2021	1,806,132	6,444,622	357%
2022	1,560,642	5,993,656	384%
2023	1,340,252	5,553,452	414%
2024	1,143,781	5,132,684	449%
2025	969,948	4,661,770	481%
2026	817,339	4,700,596	575%
2027	684,933	3,845,261	561%
2028	571,381	3,294,464	577%
2029	474,496	2,873,122	606%
2030	392,265	2,491,416	635%
2031	322,807	2,152,911	667%
2032	264,328	1,884,096	713%
2033	215,182	1,653,698	769%
2034	174,139	1,447,351	831%
2035	140,113	1,254,462	895%
2036	112,093	1,261,171	1125%
2037	89,201	966,361	1083%
2038	70,620	799,825	1133%
2039	55,635	681,166	1224%
2040	43,646	574,972	1317%
2041	34,098	490,512	1439%
2042	26,538	419,347	1580%
2043	20,600	359,841	1747%
2044	15,971	310,572	1945%
2045	12,376	267,792	2164%
2046	9,603	262,244	2731%
2047	7,483	196,448	2625%
2048	5,851	161,889	2767%
2049	4,600	137,408	2987%
2050	3,644	116,323	3192%
2051	2,909	99,328	3414%
2052	2,347	85,242	3633%
2053	1,907	72,874	3821%
2054	1,559	62,063	3981%
2055 & Later	6,615	294,632	4454%

Inforce	Interest Rate
665	4.96%
620	4.96%
561	4.96%
504	4.96%
450	4.96%
400	4.96%
354	4.96%
311	4.96%
272	4.96%
236	4.96%
204	4.96%
176	4.96%
151	4.96%
129	4.96%
110	4.96%
93	4.96%
79	4.96%
66	4.96%
55	4.96%
46	4.96%
38	4.96%
32	4.96%
26	4.96%
22	4.96%
18	4.96%
15	4.96%
12	4.96%
10	4.96%
8	4.96%
6	4.96%
5	4.96%
4	4.96%
3	4.96%
3	4.96%
2	4.96%
2	4.96%
1	4.96%
1	4.96%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	140,539,587	99,881,384	71%	140,539,587	99,881,384	71%
Present Value of Future to 12/31/2016	13,579,486	61,087,970	450%	14,938,564	61,538,988	412%
Total Values (Discounted at 4.96%)	154,119,073	160,969,354	104%	155,478,152	161,420,372	104%
Projected Lifetime Loss Ratio			104%			104%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			841%			
Requested Rate Increase			15%			

Exhibit C-4
 Senior Health Insurance Company of Pennsylvania (SHIP)
 Historical and Projected Experience
 Maryland Experience
 5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	21,291,143	5,478,848	26%
2001	4,095,387	1,159,255	28%
2002	4,106,676	3,280,770	80%
2003	3,987,677	1,923,800	48%
2004	3,893,218	1,660,203	43%
2005	3,906,641	2,132,651	55%
2006	4,029,490	4,058,500	101%
2007	3,822,553	2,180,680	57%
2008	3,838,036	3,679,410	96%
2009	3,911,773	3,235,071	83%
2010	3,793,882	3,701,591	98%
2011	3,529,883	4,793,394	136%
2012	3,282,419	5,516,181	168%
2013	3,142,679	8,356,877	266%
2014	2,971,251	7,010,851	236%
2015	2,696,526	8,239,881	306%
2016	2,479,302	4,560,863	184%

Inforce	Interest Rate
2,112	4.96%
1,967	4.96%
1,776	4.96%
1,656	4.96%
1,564	4.96%
1,485	4.96%
1,401	4.96%
1,323	4.96%
1,261	4.96%
1,175	4.96%
1,102	4.96%
1,016	4.96%
945	4.96%
874	4.96%
810	4.96%
744	4.96%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	2,315,755	8,094,829	350%
2018	2,305,454	7,944,954	345%
2019	2,061,473	7,426,756	360%
2020	1,806,147	6,874,975	381%
2021	1,570,549	6,372,742	406%
2022	1,357,080	5,967,710	440%
2023	1,165,436	5,528,867	474%
2024	994,592	5,104,317	513%
2025	843,433	4,635,183	550%
2026	710,730	4,609,697	649%
2027	595,594	3,808,890	640%
2028	496,853	3,276,568	659%
2029	412,605	2,960,813	693%
2030	341,100	2,483,076	728%
2031	280,702	2,147,084	765%
2032	229,851	1,878,272	817%
2033	187,115	1,648,018	881%
2034	151,425	1,441,222	952%
2035	121,837	1,248,847	1025%
2036	97,472	1,232,839	1265%
2037	77,566	957,364	1234%
2038	61,409	795,957	1296%
2039	48,379	678,430	1402%
2040	37,953	573,682	1512%
2041	29,651	489,482	1651%
2042	23,077	418,248	1812%
2043	17,913	358,753	2003%
2044	13,888	309,507	2229%
2045	10,761	266,675	2478%
2046	8,350	256,909	3077%
2047	6,507	195,382	3003%
2048	5,088	161,608	3176%
2049	4,000	137,164	3429%
2050	3,169	116,207	3667%
2051	2,530	99,242	3923%
2052	2,041	85,129	4172%
2053	1,658	72,759	4387%
2054	1,356	61,979	4571%
2055 & Later	5,752	294,254	5115%

Projection with Downgrade Only 1/1/2019*			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	2,315,755	8,094,829	350%
2018	2,305,454	7,944,954	345%
2019	1,388,168	6,977,422	503%
2020	1,083,688	6,181,140	570%
2021	942,330	5,459,378	579%
2022	814,248	4,862,985	597%
2023	699,262	4,318,865	618%
2024	596,755	3,819,101	640%
2025	506,060	3,329,124	658%
2026	426,438	3,140,718	737%
2027	357,356	2,520,512	705%
2028	298,112	2,091,695	702%
2029	247,563	1,758,775	710%
2030	204,660	1,470,780	719%
2031	168,421	1,226,049	728%
2032	137,910	1,035,348	751%
2033	112,269	878,865	783%
2034	90,855	745,644	821%
2035	73,102	628,192	859%
2036	58,483	621,819	1063%
2037	46,540	463,459	996%
2038	36,845	375,973	1020%
2039	29,027	316,184	1089%
2040	22,772	264,592	1162%
2041	17,790	225,208	1266%
2042	13,846	192,356	1394%
2043	10,748	166,099	1545%
2044	8,333	143,892	1727%
2045	6,457	124,490	1928%
2046	5,010	124,141	2478%
2047	3,904	92,095	2359%
2048	3,053	76,170	2495%
2049	2,400	65,343	2722%
2050	1,901	56,018	2946%
2051	1,518	48,251	3179%
2052	1,224	41,336	3376%
2053	995	34,662	3484%
2054	814	28,285	3477%
2055 & Later	3,451	84,920	2460%

Inforce	Interest Rate
665	4.96%
620	4.96%
561	4.96%
504	4.96%
450	4.96%
400	4.96%
354	4.96%
311	4.96%
272	4.96%
236	4.96%
204	4.96%
176	4.96%
151	4.96%
129	4.96%
110	4.96%
93	4.96%
79	4.96%
66	4.96%
55	4.96%
46	4.96%
38	4.96%
32	4.96%
26	4.96%
22	4.96%
18	4.96%
15	4.96%
12	4.96%
10	4.96%
8	4.96%
6	4.96%
5	4.96%
4	4.96%
3	4.96%
3	4.96%
2	4.96%
2	4.96%
1	4.96%
1	4.96%

*Assumes inflation benefit frozen and 40% Premium Decrease

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	140,539,587	99,881,384	71%	140,539,587	99,881,384	71%
Present Value of Future to 12/31/2016	13,579,486	61,087,970	450%	9,953,887	49,944,847	502%
Total Values (Discounted at 4.96%)	154,119,073	160,969,354	104%	150,493,474	149,826,231	100%
Projected Lifetime Loss Ratio			104%			100%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			841%			
Requested Rate Increase			15%			

Exhibit D
Senior Health Insurance Company of Pennsylvania
Policy Form map to Projection Policy Form Groupings

Exhibit D Senior Health Insurance Company of Pennsylvania ATL, TLI, CLI, UGL only Policy Form and Series Mapping	
Milliman Grouping	Policy Form
A_Bser	500003
A_Bser	500104
A_Bser	500205
A_FQSe	FQ-HHC
A_FQSe	FQ-LTC
A_FQSe	FQ-LTC PAR
A_FQSe	FQ-NH
A_FQSe	NFQ-HHC
A_FQSe	NFQ-LTC
A_FQSe	NFQ-NH
A_HHC1	HHC-1
A_HHC1	HHC-5
A_HHC1	HHC-6
A_HHC1	HHC-87
A_HHC2	HHC-2
A_HHC3	HHC-3
A_HHC4	HHC-4
A_LT89	LTC-89
A_LTC1	LTC
A_LTC1	LTC-1
A_LTC1	LTC-2
A_LTC1	LTC-5
A_LTC1	LTC-7
A_LTC1	LTC-8
A_LTC1	LTCIT
A_LTC3	LTC-3
A_LTC3	LTC-3 PAR
A_LTC6	LTC-6
A_MISC	AI
A_MISC	AIG
A_MISC	CIS-85
A_MISC	CSN
A_MISC	GRPB
A_MISC	NCP
A_MISC	NCP2
A_Misc	NH 701
A_Misc	NHP-1
A_Misc	NHP-ME
A_Misc	WD
A_Misc	WDIT
A_UGLI	660
A_UGLI	665
A_UGLI	666
A_UGLI	668
T10770	10770
T10770	10902
T10853	10773
T10853	10853
T10853	10855
T10853	10860
T10853	10921
T10955	10955
T10955	10967
T11001	11001
T11001	11006
T_Misc	10576
T_Misc	10618
T_Misc	10669
T_Misc	10674
T_Misc	10840
T_Misc	10841
T_Misc	10854
T_Misc	10869
T_Misc	10886
T_Misc	10918
T_Misc	10922
T_Misc	10956
T_Misc	10990
T_Misc	11003

Exhibit E
Senior Health Insurance Company of Pennsylvania
Distribution of Inforce Business

Exhibit E-1 (Nationwide Excluding Florida)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue Year	Count	% of Count	Premium	% of Premium
1986	3	0.02%	\$10,687	0.03%
1987	12	0.09%	\$47,341	0.13%
1988	17	0.13%	\$70,829	0.20%
1989	63	0.50%	\$231,414	0.66%
1990	608	4.78%	\$1,635,753	4.66%
1991	1,334	10.49%	\$4,023,556	11.47%
1992	1,474	11.59%	\$4,568,598	13.02%
1993	907	7.13%	\$2,876,620	8.20%
1994	796	6.26%	\$2,542,604	7.25%
1995	305	2.40%	\$866,541	2.47%
1996	1,408	11.07%	\$3,405,228	9.71%
1997	1,722	13.54%	\$4,245,268	12.10%
1998	1,322	10.39%	\$3,239,158	9.23%
1999	1,251	9.84%	\$3,213,768	9.16%
2000	948	7.45%	\$2,598,747	7.41%
2001	382	3.00%	\$1,141,751	3.25%
2002	118	0.93%	\$266,790	0.76%
2003	48	0.38%	\$99,439	0.28%
Total	12,718	100.00%	\$35,084,091	100.00%

Issue Age	Count	% of Count	Premium	% of Premium
39 -	21	0.17%	\$41,031	0.12%
40-44	107	0.84%	\$199,938	0.57%
45-49	389	3.06%	\$778,733	2.22%
50-54	1,190	9.36%	\$2,559,125	7.29%
55-59	3,334	26.21%	\$7,417,999	21.14%
60-64	4,951	38.93%	\$13,713,349	39.09%
65-69	2,255	17.73%	\$8,115,915	23.13%
70-74	428	3.37%	\$2,006,696	5.72%
75-79	42	0.33%	\$242,027	0.69%
80-84	1	0.01%	\$9,278	0.03%
85-89	0	0.00%	\$0	0.00%
90+	0	0.00%	\$0	0.00%
Total	12,718	100.00%	\$35,084,091	100.00%

Exhibit E-1 (Nationwide Excluding Florida)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Attained Age	Count	% of Count	Premium	% of Premium
39 -	0	0.00%	\$0	0.00%
40-44	0	0.00%	\$0	0.00%
45-49	1	0.01%	\$2,074	0.01%
50-54	5	0.04%	\$8,673	0.02%
55-59	27	0.21%	\$47,172	0.13%
60-64	101	0.79%	\$185,026	0.53%
65-69	326	2.56%	\$661,754	1.89%
70-74	900	7.08%	\$1,991,852	5.68%
75-79	1,773	13.94%	\$4,052,712	11.55%
80-84	3,638	28.61%	\$8,640,129	24.63%
85-89	3,739	29.40%	\$10,561,714	30.10%
90+	2,208	17.36%	\$8,932,985	25.46%
Total	12,718	100.00%	\$35,084,091	100.00%

Gender	Count	% of Count	Premium	% of Premium
Male	4,280	33.65%	\$12,093,130	34.47%
Female	8,438	66.35%	\$22,990,961	65.53%
Total	12,718	100.00%	\$35,084,091	100.00%

BP	Count	% of Count	Premium	% of Premium
1 YEAR	343	2.70%	\$408,504	1.16%
2 YEARS	1,155	9.08%	\$2,062,590	5.88%
3 YEARS	2,494	19.61%	\$5,598,199	15.96%
4 YEARS	1,784	14.03%	\$4,870,971	13.88%
5 YEARS	818	6.43%	\$2,085,141	5.94%
Lifetime	6,124	48.15%	\$20,058,686	57.17%
Total	12,718	100%	\$35,084,091	100%

EP	Count	% of Count	Premium	% of Premium
0 days	8,011	62.99%	\$23,239,868	66.24%
7 days	52	0.41%	\$152,068	0.43%
20 days	136	1.07%	\$385,491	1.10%
30 days	65	0.51%	\$201,653	0.57%
60 days	61	0.48%	\$158,598	0.45%
90 days	1,566	12.31%	\$3,921,374	11.18%
100 days	2,824	22.20%	\$7,016,552	20.00%
180 days	3	0.02%	\$8,487	0.02%
Total	12,718	100%	\$35,084,091	100%

Marital Status	Count	% of Count	Premium	% of Premium
Married	4,086	32.13%	\$8,321,272	23.72%
Single	8,632	67.87%	\$26,762,819	76.28%
Total	12,718	100%	\$35,084,091	100%

Exhibit E-1 (Nationwide Excluding Florida)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue State	Count	% of Count	Premium	% of Premium
AK	1	0.01%	\$2,403	0.01%
AL	2	0.02%	\$3,224	0.01%
AR	142	1.12%	\$245,193	0.70%
AZ	433	3.40%	\$1,174,416	3.35%
CA	1,898	14.92%	\$5,579,399	15.90%
CO	97	0.76%	\$222,885	0.64%
CT	28	0.22%	\$32,264	0.09%
DC	6	0.05%	\$4,842	0.01%
DE	64	0.50%	\$156,301	0.45%
FL	0	0.00%	\$0	0.00%
GA	188	1.48%	\$442,487	1.26%
HI	35	0.28%	\$80,684	0.23%
IA	237	1.86%	\$538,261	1.53%
ID	12	0.09%	\$28,400	0.08%
IL	845	6.64%	\$3,632,763	10.35%
IN	125	0.98%	\$332,608	0.95%
KS	191	1.50%	\$398,213	1.14%
KY	108	0.85%	\$279,740	0.80%
LA	63	0.50%	\$121,406	0.35%
MA	147	1.16%	\$434,902	1.24%
MD	665	5.23%	\$2,118,568	6.04%
ME	106	0.83%	\$209,234	0.60%
MI	362	2.85%	\$1,364,913	3.89%
MN	139	1.09%	\$333,747	0.95%
MO	158	1.24%	\$427,852	1.22%
MS	12	0.09%	\$36,722	0.10%
MT	52	0.41%	\$99,714	0.28%
NC	702	5.52%	\$2,127,040	6.06%
ND	87	0.68%	\$226,413	0.65%
NE	71	0.56%	\$176,911	0.50%
NH	13	0.10%	\$42,827	0.12%
NJ	402	3.16%	\$1,071,090	3.05%
NM	51	0.40%	\$138,167	0.39%
NV	32	0.25%	\$38,180	0.11%
NY	0	0.00%	\$0	0.00%
OH	547	4.30%	\$2,016,818	5.75%
OK	200	1.57%	\$412,389	1.18%
OR	60	0.47%	\$116,031	0.33%
PA	1,189	9.35%	\$3,219,688	9.18%
RI	1	0.01%	\$2,366	0.01%
SC	112	0.88%	\$377,339	1.08%
SD	58	0.46%	\$176,336	0.50%
TN	272	2.14%	\$686,278	1.96%
TX	1,715	13.48%	\$3,411,408	9.72%
UT	121	0.95%	\$208,506	0.59%
VA	440	3.46%	\$1,095,154	3.12%
VI	0	0.00%	\$0	0.00%
VT	13	0.10%	\$14,866	0.04%
WA	241	1.89%	\$599,994	1.71%
WI	245	1.93%	\$521,481	1.49%
WV	19	0.15%	\$70,901	0.20%
WY	11	0.09%	\$32,770	0.09%
Total	12,718	100.00%	\$35,084,091	100.00%

Exhibit E-2 (Maryland)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue Year	Count	% of Count	Premium	% of Premium
1986	0	0.00%	\$0	0.00%
1987	2	0.30%	\$6,770	0.32%
1988	1	0.15%	\$4,371	0.21%
1989	1	0.15%	\$2,697	0.13%
1990	40	6.02%	\$133,147	6.28%
1991	59	8.87%	\$193,964	9.16%
1992	52	7.82%	\$178,311	8.42%
1993	93	13.98%	\$289,488	13.66%
1994	46	6.92%	\$172,987	8.17%
1995	24	3.61%	\$101,122	4.77%
1996	62	9.32%	\$262,712	12.40%
1997	86	12.93%	\$248,031	11.71%
1998	64	9.62%	\$157,981	7.46%
1999	60	9.02%	\$147,149	6.95%
2000	61	9.17%	\$182,712	8.62%
2001	11	1.65%	\$29,756	1.40%
2002	3	0.45%	\$7,370	0.35%
2003	0	0.00%	\$0	0.00%
Total	665	100.00%	\$2,118,568	100.00%

Issue Age	Count	% of Count	Premium	% of Premium
39 -	1	0.15%	\$2,182	0.10%
40-44	9	1.35%	\$15,380	0.73%
45-49	30	4.51%	\$80,330	3.79%
50-54	69	10.38%	\$209,187	9.87%
55-59	183	27.52%	\$476,727	22.50%
60-64	235	35.34%	\$788,570	37.22%
65-69	113	16.99%	\$442,439	20.88%
70-74	23	3.46%	\$100,079	4.72%
75-79	2	0.30%	\$3,674	0.17%
80-84	0	0.00%	\$0	0.00%
85-89	0	0.00%	\$0	0.00%
90+	0	0.00%	\$0	0.00%
Total	665	100.00%	\$2,118,568	100.00%

Exhibit E-2 (Maryland)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Attained Age	Count	% of Count	Premium	% of Premium
39 -	0	0.00%	\$0	0.00%
40-44	0	0.00%	\$0	0.00%
45-49	0	0.00%	\$0	0.00%
50-54	1	0.15%	\$2,182	0.10%
55-59	2	0.30%	\$3,541	0.17%
60-64	7	1.05%	\$8,109	0.38%
65-69	21	3.16%	\$58,239	2.75%
70-74	51	7.67%	\$152,240	7.19%
75-79	94	14.14%	\$269,503	12.72%
80-84	197	29.62%	\$540,629	25.52%
85-89	176	26.47%	\$586,021	27.66%
90+	116	17.44%	\$498,103	23.51%
Total	665	100.00%	\$2,118,568	100.00%

Gender	Count	% of Count	Premium	% of Premium
Male	241	36.24%	\$783,593	36.99%
Female	424	63.76%	\$1,334,975	63.01%
Total	665	100.00%	\$2,118,568	100.00%

BP	Count	% of Count	Premium	% of Premium
1 YEAR	3	0.45%	\$313	0.01%
2 YEARS	44	6.62%	\$89,011	4.20%
3 YEARS	191	28.72%	\$519,276	24.51%
4 YEARS	114	17.14%	\$365,848	17.27%
5 YEARS	28	4.21%	\$111,132	5.25%
Lifetime	285	42.86%	\$1,032,988	48.76%
Total	665	100%	\$2,118,568	100%

EP	Count	% of Count	Premium	% of Premium
0 days	499	75.04%	\$1,681,718	79.38%
7 days	1	0.15%	\$2,058	0.10%
20 days	3	0.45%	\$5,790	0.27%
30 days	0	0.00%	\$0	0.00%
60 days	0	0.00%	\$0	0.00%
90 days	17	2.56%	\$54,445	2.57%
100 days	144	21.65%	\$369,185	17.43%
180 days	1	0.15%	\$5,372	0.25%
Total	665	100%	\$2,118,568	100%

Marital Status	Count	% of Count	Premium	% of Premium
Married	244	36.69%	\$639,562	30.19%
Single	421	63.31%	\$1,479,006	69.81%
Total	665	100%	\$2,118,568	100%

Exhibit E-2 (Maryland)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue State	Count	% of Count	Premium	% of Premium
AK	0	0.00%	\$0	0.00%
AL	0	0.00%	\$0	0.00%
AR	0	0.00%	\$0	0.00%
AZ	0	0.00%	\$0	0.00%
CA	0	0.00%	\$0	0.00%
CO	0	0.00%	\$0	0.00%
CT	0	0.00%	\$0	0.00%
DC	0	0.00%	\$0	0.00%
DE	0	0.00%	\$0	0.00%
FL	0	0.00%	\$0	0.00%
GA	0	0.00%	\$0	0.00%
HI	0	0.00%	\$0	0.00%
IA	0	0.00%	\$0	0.00%
ID	0	0.00%	\$0	0.00%
IL	0	0.00%	\$0	0.00%
IN	0	0.00%	\$0	0.00%
KS	0	0.00%	\$0	0.00%
KY	0	0.00%	\$0	0.00%
LA	0	0.00%	\$0	0.00%
MA	0	0.00%	\$0	0.00%
MD	665	100.00%	\$2,118,568	100.00%
ME	0	0.00%	\$0	0.00%
MI	0	0.00%	\$0	0.00%
MN	0	0.00%	\$0	0.00%
MO	0	0.00%	\$0	0.00%
MS	0	0.00%	\$0	0.00%
MT	0	0.00%	\$0	0.00%
NC	0	0.00%	\$0	0.00%
ND	0	0.00%	\$0	0.00%
NE	0	0.00%	\$0	0.00%
NH	0	0.00%	\$0	0.00%
NJ	0	0.00%	\$0	0.00%
NM	0	0.00%	\$0	0.00%
NV	0	0.00%	\$0	0.00%
NY	0	0.00%	\$0	0.00%
OH	0	0.00%	\$0	0.00%
OK	0	0.00%	\$0	0.00%
OR	0	0.00%	\$0	0.00%
PA	0	0.00%	\$0	0.00%
RI	0	0.00%	\$0	0.00%
SC	0	0.00%	\$0	0.00%
SD	0	0.00%	\$0	0.00%
TN	0	0.00%	\$0	0.00%
TX	0	0.00%	\$0	0.00%
UT	0	0.00%	\$0	0.00%
VA	0	0.00%	\$0	0.00%
VI	0	0.00%	\$0	0.00%
VT	0	0.00%	\$0	0.00%
WA	0	0.00%	\$0	0.00%
WI	0	0.00%	\$0	0.00%
WV	0	0.00%	\$0	0.00%
WY	0	0.00%	\$0	0.00%
Total	665	100.00%	\$2,118,568	100.00%