

March 16, 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 individual policyholders with non-zero elimination periods who do not have 5% compound lifetime inflation. 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 individual policies without a 0-day elimination period or 5% compound inflation. This includes policy forms and the original issuing company:

10618 Series

Policy Forms: 10618

Originally Issued by Transport Life Insurance Company

10770 Series

Policy Forms: 10770

Originally Issued by Transport Life Insurance Company

10853 Series

Policy Forms: 10853, 10855

Originally Issued by Transport Life Insurance Company

109 Series

Policy Forms: 10902, 10922, 10955, 10956

Originally Issued by Transport Life Insurance Company

11001 Series

Policy Form: 11001

Originally Issued by Transport Life Insurance Company

CSHIC 5000 Series

Policy Forms: CSHIC-5000, CSHIC-5003

Original Issued by Conesco Senior Health Insurance Company

FQ Series

Policy Forms: ATL-FQ-LTC

Originally Issued by American Travellers Life Insurance Company

HHC Series

Policy Forms: ATL-HHC-1 , ATL-HHC-2, ATL-HHC-3, ATL-HHC-4

Originally Issued by American Travellers Life Insurance Company

LTC-1 Series

Policy Forms: ATL-LTC-1

Originally Issued by American Travellers Life Insurance Company

LTC-3 Series

Policy Forms: ATL-LTC-3

Originally Issued by American Travellers Life Insurance Company



LTC-6 Series

Policy Forms: ATL-LTC-6
Originally Issued by American Travellers Life Insurance Company

LTC-89 Series

Policy Form: ACL-LTC-89
Originally Issued by American Citizens Life Insurance Company

WD Series

Policy Form: WL-NH-225, WL-CAH-231, 2100-5
Originally Issued by World Life and Health Insurance Company of Pennsylvania

The rate increase will apply to all insureds issued individual 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. 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 for individual policies with elimination periods other than 0-day that do not have 5% compound lifetime inflation. 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 70% 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:

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.

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 factor.

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 4.92% 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 4.92% 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 4.92% interest to 12/31/2016:

Table 1 Senior Health Insurance Company of Pennsylvania Nationwide Historical Actual Experience Non-0-day Elimination Period Excluding 5% Compound Inflation		
Earned Premiums	Incurred Claims	Loss Ratio
\$2,207,387,489	\$1,420,579,633	64.4%

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 12/31/16. The following table summarizes the nationwide anticipated future loss ratio discounted at 4.92% without the requested rate increases.

Table 2 Senior Health Insurance Company of Pennsylvania Nationwide Future Experience Non-0-day Elimination Period Excluding 5% Compound Inflation Best Estimate Assumptions Without Rate Increases		
Earned Premiums	Incurred Claims	Loss Ratio
\$86,738,180	\$188,976,832	217.9%

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 - Non-0-day Elimination Period Excluding 5% Compound Inflation Anticipated Lifetime Loss Ratio Best Estimate Assumptions Without Rate Increases			
Time Period	Earned Premiums	Incurred Claims	Loss Ratio
Future	\$86,738,180	\$188,976,832	217.9%
Lifetime	\$2,294,125,669	\$1,609,556,464	70.2%

Table 3b Senior Health Insurance Company of Pennsylvania Nationwide - Non-0-day Elimination Period Excluding 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	\$94,572,329	\$192,131,884	203.2%
Lifetime	\$2,301,959,818	\$1,612,711,517	70.1%



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 Average Annualized Premiums
- Exhibit B - Maryland Rate Increase History
- Exhibit C - Nationwide 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 Average Annualized Premiums

Exhibit A
Senior Health Insurance Company of Pennsylvania
ATL & Transport
Non-0-day Elimination Period Excluding 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 Rate Increase
Nationwide	10,162	\$1,579	\$1,816
Maryland Only	143	\$1,767	\$2,032

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 10618 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1994	1995	Cumulative Increase
AL	24		24
GA	24		24
IA	24		24
IL	24		24
IN	24		24
MD	24		24
MI	24		24
MO	25		25
NE	25		25
OH	25		25
SD		25	25
TX	25		25
VA	25		25

**SENIOR HEALTH INSURANCE COMPANY OF
PENNSYLVANIA**

**LTC COMPOSITE RATE INCREASE HISTORY AND FILING
STATUS**

**POLICY FORM SERIES 10770 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS
EXCLUDING FLORIDA**

Issue State	1991	1992	1993	1994	1995	2008	2011	2012	2013	Cumulative Increase
AL			24	24						54
AR			23	24						53
AZ			24	24						54
CO			24	24						54
GA			24	24			12	9		87
HI			24	24						54
IA			24	24		20	25			130
ID			24	24						54
IL			24	24			25		25	140
IN			24	24				15		77
KY			24	24			25	13		116
LA	25		25	25						95
MA			25							25
MD	25									25
MO			25	25			25	15	10	147
MS			25	25		25				95
MT			24	24			25	13		117
NC							25			25
NE			25	25						56
NJ			25				25			56
NM			25							25
OH	24		24	24		25				138
OK			25	25			25			95
SD			24	24						54
TN			25	25			25	25		144
TX			25	25			16			81
VA			25	25						56
WV		25		25	25					95
WY			24		24					54

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA

LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS

POLICY FORM SERIES 10853 AND ASSOCIATED RIDERS

NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1990	1991	1992	1994	1995	1996	1999	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative Increase		
AR				24					25		16				25							125	
AZ					15			27*	25		16		10										133
CA		25					25		25		16	15					25						226
CO		25		24					25		16				25								181
DE		25		24					25		10					12				25	15		243
ID					15			12*	25		16	10			25								157
IL				24				27	25		16	10			25				25	25			391
KY				15					15		15	15			15				25	13			183
LA				25																			25
MD				12					15		15	15		15									96
MI						12*			25		16	15		25			25						192
MO				24			12*		25		16		10	25					25	15	10		339
MS				24			12*		25		16	10			25*								177
MT				24							16	25		15	10								127
NH							24		25		16	15							25	25			223
NM				15			12*				16			25									87
OH				24			12*		25		16	10			25								177
OK				24			12*		15		15	10		15					25		25		264
PA			25		24			12*			7				20				25	20			235
SC							27*		25		16	15			25					20	20		281
SD		25		25					25		16	15		25									226
TN	25			20		12			25		16	10		25					25	25			319
TX				15			12*			12	16	10			19				16		10		180
VA		25									16												45
WV		25							25		16	20	20		25								226

* Composite rate

**SENIOR HEALTH INSURANCE COMPANY OF
PENNSYLVANIA**

**LTC COMPOSITE RATE INCREASE HISTORY AND FILING
STATUS**

**POLICY FORM SERIES 10902 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS
EXCLUDING FLORIDA**

Issue State	1993	1994	1995	2010	2011	2012	2013	2014	Cumulative Increase
AR	24	24							54
AZ	24	24							54
CO	24	24							54
DE						25			25
GA	24	24			12	9			87
IA	24	24			25				92
ID	24	24							54
IL	24				25	25			93
IN	24	24				15			77
KY	24	24			25	13			116
MA	24								24
MD	24								24
MI	24			25					55
MO	25		25			24	15	10	145
MS	23	23							51
MT					25	13			41
NJ	25				25				56
NM	25	25							56
OH	25	25							56
OK	25	25				25			95
TN	25	25			25	25			144
TX	25	25			16				81
UT	25								50
VA	25	25							56
WV	25	25							56
WY	24	24							54

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

Rate	1994	1995	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2017	2018	Cumulative Increase
R		24					25		19	11			15	20		12			40		343
Z		15			25*		25		10			10	10		10	25	25				311
A				13*			25	25		18		18			35			25			315
D	24						25		19	11		25	25	40		25			5		488
E		15			25		25		10				12	15		15	15	9			267
A	24						6			15		12	7	15		10	12	12	20		245
I				25*			25		10	11							25				138
A	24								25		25		20		25		18		18		304
L	24				25*		25	10		11		25	25	40	25	15			40		941
I									25			25	25	35	25		15				279
Y	15						15		15	15		15				15	25		40		305
A	24			25*		25		10						25			25				233
D		12					15		15	15		15	15	15	15	15	15		15		353
E		24					25	19	11			25									156
I				25			25	19		11		25	25	40	25	25			40		888
D	24			25			25		10		11	25	25	25	25	25					622
S	24			17					19	18		25	25	25							298
T			24	25			25		10	11				25		25					270
C	19			23				20	25			11	25	25		25				25	495
D	24						25		15	15		15	25	20	20	20				20	511
E	18			25		25		10	11			25	25		25						340
H	24								25			25	25	25		25	25				373
M	15			25					19			25		40							199
V	25															15	25				80
H	18			25			25		10	11		25	25	20		20	20		40		751
K	24			12			15		15	11		15	15	15		25		25	10		433
A		24		19			5		19				25		20	20	20				298
C							25		25	25		25	25	25		20	20		10		504
D		24					25		19	11		25	25	40	25						460
N	20			25			25		10	11		10			40	25				40	517
K	15						25	19				18				21		25	40		327
T	24						25	19		11		25		25						40	348
A							15		25			25		40			25				214
A	24																				24
V							25		25	25		25	25	40	25						434

**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 CSHIC-5003 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

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

Issue State	1995	1996	1997	1999	2000	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013	Cumulative Increase
AK						18	20									42
AR	12					18		20		15	20	13				146
AZ	12					18	20			10	10		25	25		200
CA			18	20	25	25	25					25			25	332
CO		12				18		20		25	40	8				200
DC		12														12
DE		12														12
GA	14		25	25		10				10	10	10				161
HI		12				18	20			25						98
IA	12					18	20			15		25				128
ID		12				18	20			25	10		10			140
IL	12					18	20			25	40	16				222
IN						18	20			25	35					139
KS	12					15	20			15			15			104
KY	12					15	15			15	15	25				145
LA	12					18		20			25					98
MA	12						20									34
MD						15	15			15	15	15				101
ME	12					18	20		25							98
MI	12					18	20			25	40	12				211
MO	12					18	20			25	25	25				210
MS	12					18	20			25	25	25				210
MT	12					18	20				25					98
NC	12					18	20				40					122
ND	12					18	15		20		20	20				163
NE						18	20			25		25				121
NM	12					18				25	40					131
NV	12					18	20					25				98
OH	12					18	20			25	20	20				185
OK		12				15	15		15		15			19		133
OR		12				18			10							45
PA						18	20			15	20	20				134
SC						18	20		25		25					121
SD								16		25	40	25				153
TN	12					18	20			10	25		5			129
TX						18				25			19		25	119
UT	12						20		25			25				110
VA						18	20			25	40					148
WA						18	15			40			8			105

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-3 AND ASSOCIATED RIDERS

NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2017	Cumulative Increase
AK		20		25	15			25	25	40							277
AR		20			25	15		15		20	10						162
AZ		25		25		10		10		10		25	25				225
CA	25*		-20	25		25		17			30						138
CO		20			25			25	25	40							228
GA				15		15		11	8	5	10	10		12			126
IA				25		25		22	15		7						133
ID				25		25		25	25	10	25						236
IL	11*		-20	20	25	15		25	25	40							235
IN		10			25			25	25	35		15	9				264
KS				15		15		15		25		15		9			138
KY	11		-10	15	15		15		15			25					119
LA			20	25	25	15				25			10				196
MA							20										20
MD		15		15	15			15	15	15	15						166
ME			20	25		15		25									116
MI				20	25	15		25	25	40							277
MO				20	25		15	25	25	25		12					277
MS				20	25	15			25	25	25						237
MT	25			25		25				25		25					205
NC				25	25			8		25		14					139
ND		20		25	15			15	20	25	20						257
NE		20		25	15			25	25		25						237
NJ			20									25	25				88
NM		20		25				25			40						163
OH			20	25	14			25	25	20							221
OK		15		15	15			15	15			20					141
OR				10	15			10	15		18	18			6		136
PA		11		25			20		16	20	20						178
SC		20		25	15			25	15		20						198
SD				20	25	15		25	25	40							277
TN		20		25	15			10				40					166
TX			25	20	15			16				17					134
UT			25	20	15			25									116
VA		10		25					25	40			25				201
WA				23	11					40		25					140
WI		20		10		20		10		10	25					40*	235
WV		20		25	15			25	25	30	25						338

* 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

SENIOR HEALTH INSURANCE COMPANY OF PENNSYLVANIA
LTC COMPOSITE RATE INCREASE HISTORY AND FILING STATUS
POLICY FORM SERIES ATL-LTC-89 AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS EXCLUDING FLORIDA

Issue State	1996	1997	1998	1999	2000	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative Increase
AL	10			15		20	20	12			25	25	40					346
AR	10			15		20			17		15							104
AZ	10			15		20	20	12			10		10		25	25		286
CO	10					20	20	17			25	25		25				262
GA							13	15			10	12	12	10	10			117
HI	10			15		20												52
IA				15		20	20		17		25	15		10				205
ID	10			15		20	20					25	25		7			205
IL	10			15		20	20		12					25	22			211
IN				15		20	20		12		25	25		35				291
KY		10		15		15	15	15			15		15	25				217
LA	10		15		20		20	12										104
MD						15	15	15		15	15		15	15				166
MI	10		15			20	20	12			25	25	40					346
MO	10		15		20		20	12			25	10		25				251
MS	10		15			20	20	12			25	25	25					298
MT	10			15		20	20	12					25		24			216
NC	10					20	20		17				40		21			214
ND				8		20	20	15			20	20	25	20				286
NE	10		15			20	20	12			25	25		25				298
NM			15			20	20				25			25				159
NV	10		15			20	20	12										104
OH	10		15		20		20	12			25			20	20			267
OK				15	15		15	15			15	15			25		10	218
PA				15		20	20	17				15	20	20				221
SC				12		20	20	20			25	20		20				248
SD				15		20	17	17			25	25	40					313
TN	10			15		20	20	12			18		10	25				231
TX							20				19				25		25	123
UT							20	25			25							88
VA	10					20	20		17			25	40			18		283
WA						20	12	15			9		40		25	5		211
WV				15		20	20	17			25	25	40					324
WY	10		15			20	20	12			25	25	40					346

**SENIOR HEALTH INSURANCE COMPANY OF
PENNSYLVANIA**

**LTC COMPOSITE RATE INCREASE HISTORY AND FILING
STATUS**

**POLICY FORM SERIES WD AND ASSOCIATED RIDERS
NATIONWIDE EXPERIENCE FOR ACTIVE MEMBERS
EXCLUDING FLORIDA**

Issue State	1989	1990	2007	2008	2009	2010	2011	2012	Cumulative Increase
AZ				15	10		25	25	98
IN				25	35		15	12	117
MD		20		15	15	15			52
ME			25						25
MO	22			25	25				56
MT						25			25
NE				25					25
OK				15	15				32
PA				5		25		15	51

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

Exhibit C-1
Senior Health Insurance Company of Pennsylvania (SHIP)
Historical and Projected Experience
Nationwide Experience
Non-90-day Elimination Period Excluding 5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	401,149,957	167,554,549	42%
2001	74,773,657	44,122,139	59%
2002	71,888,528	43,381,849	60%
2003	67,254,337	41,790,024	62%
2004	61,002,313	36,586,624	60%
2005	56,995,512	38,833,343	68%
2006	53,880,759	51,783,251	96%
2007	49,261,847	43,524,790	88%
2008	46,823,078	44,029,634	94%
2009	43,583,565	42,511,160	98%
2010	41,201,497	45,889,518	111%
2011	40,230,881	47,311,800	118%
2012	36,331,372	47,557,928	131%
2013	32,696,067	45,202,845	138%
2014	29,195,702	42,258,442	145%
2015	25,246,480	34,426,763	136%
2016	21,906,429	35,935,160	164%

Inforce	Interest Rate
49,519	4.92%
47,128	4.92%
43,956	4.92%
41,070	4.92%
37,956	4.92%
35,335	4.92%
32,350	4.92%
29,428	4.92%
26,593	4.92%
23,837	4.92%
21,159	4.92%
19,009	4.92%
16,948	4.92%
15,058	4.92%
13,078	4.92%
11,434	4.92%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	19,322,418	33,109,538	171%
2018	16,425,202	29,392,930	179%
2019	13,880,875	26,373,969	190%
2020	11,659,758	23,986,191	206%
2021	9,732,202	21,357,966	219%
2022	8,070,747	18,985,609	235%
2023	6,647,741	16,789,455	253%
2024	5,436,989	14,745,517	271%
2025	4,414,115	12,813,707	290%
2026	3,556,507	10,901,862	307%
2027	2,846,465	9,260,877	325%
2028	2,265,977	7,527,294	332%
2029	1,794,050	6,208,489	346%
2030	1,412,859	5,176,769	366%
2031	1,106,818	4,181,477	378%
2032	862,270	3,427,638	398%
2033	667,588	2,821,664	423%
2034	513,753	2,312,290	450%
2035	393,213	1,877,117	477%
2036	299,451	1,503,754	502%
2037	227,006	1,217,457	536%
2038	171,361	944,010	551%
2039	128,885	742,375	576%
2040	96,659	589,600	610%
2041	72,325	452,597	626%
2042	54,024	349,596	647%
2043	40,294	271,074	673%
2044	30,023	210,913	702%
2045	22,368	163,340	730%
2046	16,664	126,687	760%
2047	12,423	98,263	791%
2048	9,269	73,910	797%
2049	6,920	56,556	817%
2050	5,172	43,704	845%
2051	3,874	33,214	857%
2052	2,910	25,652	882%
2053	2,191	19,905	909%
2054	1,654	15,481	936%
2055 & Later	5,185	50,642	977%

Projection with Rate Increase Only (1/1/2019)			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	19,322,418	33,109,538	171%
2018	16,425,202	29,392,930	179%
2019	15,614,419	27,344,461	175%
2020	13,408,722	25,381,749	189%
2021	11,192,032	21,996,145	197%
2022	9,281,359	19,154,196	206%
2023	7,644,902	16,948,173	222%
2024	6,252,537	14,902,005	238%
2025	5,076,233	12,965,453	255%
2026	4,089,983	11,028,899	270%
2027	3,273,435	9,377,023	286%
2028	2,605,874	7,589,977	291%
2029	2,063,158	6,253,401	303%
2030	1,624,788	5,222,326	321%
2031	1,272,840	4,210,618	331%
2032	991,610	3,450,963	348%
2033	767,726	2,841,403	370%
2034	590,816	2,330,093	394%
2035	452,195	1,892,436	419%
2036	344,368	1,515,356	440%
2037	261,056	1,229,184	471%
2038	197,066	949,912	482%
2039	148,217	746,589	504%
2040	111,157	593,943	534%
2041	83,174	454,914	547%
2042	62,127	351,319	565%
2043	46,338	272,414	588%
2044	34,527	211,952	614%
2045	25,723	164,126	638%
2046	19,164	127,386	665%
2047	14,287	98,927	692%
2048	10,659	74,200	696%
2049	7,958	56,767	713%
2050	5,948	43,915	738%
2051	4,455	33,315	748%
2052	3,346	25,726	769%
2053	2,519	19,961	792%
2054	1,902	15,523	816%
2055 & Later	5,963	50,765	851%

Inforce	Interest Rate
10,162	4.92%
9,097	4.92%
8,061	4.92%
7,101	4.92%
6,218	4.92%
5,410	4.92%
4,676	4.92%
4,013	4.92%
3,418	4.92%
2,890	4.92%
2,429	4.92%
2,030	4.92%
1,687	4.92%
1,394	4.92%
1,144	4.92%
933	4.92%
756	4.92%
608	4.92%
486	4.92%
386	4.92%
305	4.92%
240	4.92%
188	4.92%
146	4.92%
114	4.92%
88	4.92%
68	4.92%
52	4.92%
40	4.92%
31	4.92%
24	4.92%
19	4.92%
14	4.92%
11	4.92%
9	4.92%
7	4.92%
5	4.92%
4	4.92%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	2,207,387,489	1,420,579,633	64%	2,207,387,489	1,420,579,633	64%
Present Value of Future to 12/31/2016	86,738,180	188,976,832	218%	94,572,329	192,131,884	203%
Total Values (Discounted at 4.92%)	2,294,125,669	1,609,556,464	70%	2,301,959,818	1,612,711,517	70%
Projected Lifetime Loss Ratio			70%			70%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			448%			
Requested Rate Increase			15%			

Exhibit C-2
 Senior Health Insurance Company of Pennsylvania (SHIP)
 Historical and Projected Experience
 Maryland Experience
 Non-9-day Elimination Period Excluding 5% Compound Lifetime Inflation

Historical			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	5,253,922	1,314,982	25%
2001	1,058,700	549,074	52%
2002	1,011,300	231,370	23%
2003	1,005,846	1,005,498	100%
2004	928,311	466,793	50%
2005	881,660	903,210	102%
2006	854,079	776,781	91%
2007	823,729	655,247	80%
2008	782,885	379,524	48%
2009	744,474	602,504	81%
2010	754,843	490,351	65%
2011	748,019	637,349	85%
2012	611,023	1,004,421	164%
2013	526,116	698,123	133%
2014	449,331	321,973	72%
2015	391,859	288,571	74%
2016	341,682	484,271	142%

Inforce	Interest Rate
660	4.92%
631	4.92%
599	4.92%
558	4.92%
528	4.92%
493	4.92%
454	4.92%
413	4.92%
382	4.92%
346	4.92%
316	4.92%
271	4.92%
236	4.92%
214	4.92%
190	4.92%
160	4.92%

Baseline Projection			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	295,555	406,580	138%
2018	252,323	437,932	174%
2019	214,155	328,948	154%
2020	180,743	293,678	162%
2021	151,713	262,015	173%
2022	126,674	232,990	184%
2023	105,228	205,240	195%
2024	86,988	188,709	217%
2025	71,559	159,382	223%
2026	58,582	151,527	259%
2027	47,773	113,764	238%
2028	38,843	112,954	291%
2029	31,493	80,838	257%
2030	25,451	68,286	268%
2031	20,496	57,323	280%
2032	16,446	48,509	295%
2033	13,133	41,001	312%
2034	10,437	35,016	336%
2035	8,246	28,775	349%
2036	6,474	26,298	406%
2037	5,046	19,109	379%
2038	3,902	16,219	416%
2039	2,991	12,394	414%
2040	2,271	9,846	433%
2041	1,708	7,656	448%
2042	1,270	5,794	456%
2043	933	4,273	458%
2044	678	3,067	453%
2045	486	2,141	440%
2046	345	2,118	615%
2047	241	904	374%
2048	168	571	341%
2049	116	352	304%
2050	80	214	269%
2051	55	129	234%
2052	38	86	226%
2053	27	58	221%
2054	19	42	228%
2055 & Later	37	114	309%

Projection with Rate Increase Only (1/1/2019)			
Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	295,555	406,580	138%
2018	252,323	437,932	174%
2019	238,892	341,351	143%
2020	207,854	310,316	149%
2021	174,469	269,221	154%
2022	145,675	235,031	161%
2023	121,012	207,096	171%
2024	100,036	191,776	192%
2025	82,293	161,425	196%
2026	67,370	155,446	231%
2027	54,939	114,743	209%
2028	44,670	116,197	260%
2029	36,217	81,332	225%
2030	29,268	68,701	235%
2031	23,571	57,671	245%
2032	18,913	48,828	258%
2033	15,103	41,279	273%
2034	12,002	35,359	295%
2035	9,483	29,020	306%
2036	7,445	26,890	361%
2037	5,803	19,225	331%
2038	4,487	16,410	366%
2039	3,440	12,443	362%
2040	2,612	9,883	378%
2041	1,964	7,683	391%
2042	1,460	5,817	398%
2043	1,073	4,291	400%
2044	779	3,081	395%
2045	559	2,155	385%
2046	396	2,231	563%
2047	278	906	326%
2048	193	573	297%
2049	133	353	265%
2050	92	215	234%
2051	63	129	204%
2052	44	87	200%
2053	30	60	198%
2054	21	44	208%
2055 & Later	42	125	295%

Inforce	Interest Rate
143	4.92%
126	4.92%
111	4.92%
98	4.92%
86	4.92%
75	4.92%
64	4.92%
55	4.92%
47	4.92%
40	4.92%
34	4.92%
28	4.92%
24	4.92%
20	4.92%
16	4.92%
13	4.92%
11	4.92%
9	4.92%
7	4.92%
6	4.92%
5	4.92%
4	4.92%
3	4.92%
2	4.92%
2	4.92%
1	4.92%
1	4.92%
1	4.92%
0	4.92%
0	4.92%
0	4.92%
0	4.92%
0	4.92%
0	4.92%
0	4.92%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	31,614,019	17,316,536	55%	31,614,019	17,316,536	55%
Present Value of Future to 12/31/2016	1,363,745	2,446,972	179%	1,487,245	2,488,767	167%
Total Values (Discounted at 4.92%)	32,977,764	19,763,508	60%	33,101,264	19,805,303	60%
Projected Lifetime Loss Ratio			60%			60%
Minimum Lifetime Loss Ratio			60%			
Maximum Allowable Increase			-3%			
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)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue Year	Count	% of Count	Premium	% of Premium
1975	0	0.00%	\$0	0.00%
1976	0	0.00%	\$0	0.00%
1977	0	0.00%	\$0	0.00%
1978	0	0.00%	\$0	0.00%
1979	0	0.00%	\$0	0.00%
1980	0	0.00%	\$0	0.00%
1981	0	0.00%	\$0	0.00%
1982	0	0.00%	\$0	0.00%
1983	0	0.00%	\$0	0.00%
1984	0	0.00%	\$0	0.00%
1985	1	0.01%	\$323	0.00%
1986	5	0.05%	\$10,589	0.06%
1987	2	0.02%	\$1,413	0.01%
1988	21	0.21%	\$19,949	0.11%
1989	66	0.65%	\$92,486	0.52%
1990	128	1.26%	\$179,950	1.02%
1991	119	1.17%	\$182,511	1.03%
1992	184	1.81%	\$331,451	1.87%
1993	383	3.77%	\$704,173	3.97%
1994	456	4.49%	\$910,281	5.14%
1995	690	6.79%	\$1,362,687	7.69%
1996	1,172	11.53%	\$2,234,797	12.61%
1997	1,384	13.62%	\$2,550,280	14.39%
1998	1,218	11.99%	\$2,080,020	11.73%
1999	1,307	12.86%	\$2,229,764	12.58%
2000	1,361	13.39%	\$2,358,511	13.30%
2001	749	7.37%	\$1,256,784	7.09%
2002	725	7.13%	\$971,720	5.48%
2003	191	1.88%	\$248,853	1.40%
Total	10,162	100.00%	\$17,726,543	100.00%

Issue Age	Count	% of Count	Premium	% of Premium
39 -	8	0.08%	\$2,768	0.02%
40-44	18	0.18%	\$14,381	0.08%
45-49	66	0.65%	\$66,429	0.37%
50-54	315	3.10%	\$344,198	1.94%
55-59	1,067	10.50%	\$1,352,361	7.63%
60-64	3,338	32.85%	\$4,915,528	27.73%
65-69	3,316	32.63%	\$6,081,803	34.31%
70-74	1,563	15.38%	\$3,504,267	19.77%
75-79	423	4.16%	\$1,217,553	6.87%
80-84	43	0.42%	\$197,900	1.12%
85-89	5	0.05%	\$29,355	0.17%
90+	0	0.00%	\$0	0.00%
Total	10,162	100.00%	\$17,726,543	100.00%

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	2	0.02%	\$824	0.00%
50-54	2	0.02%	\$933	0.01%
55-59	9	0.09%	\$3,389	0.02%

Exhibit E-1 (Nationwide)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

60-64	27	0.27%	\$23,724	0.13%
65-69	104	1.02%	\$106,175	0.60%
70-74	348	3.42%	\$367,068	2.07%
75-79	991	9.75%	\$1,244,537	7.02%
80-84	2,519	24.79%	\$3,615,370	20.40%
85-89	3,613	35.55%	\$6,231,103	35.15%
90+	2,547	25.06%	\$6,133,420	34.60%
Total	10,162	100.00%	\$17,726,543	100.00%

Gender	Count	% of Count	Premium	% of Premium
Male	3,185	31.34%	\$5,800,890	32.72%
Female	6,977	68.66%	\$11,925,653	67.28%
Total	10,162	100.00%	\$17,726,543	100.00%

BP	Count	% of Count	Premium	% of Premium
1 YEAR	669	6.58%	\$565,748	3.19%
2 YEARS	1,673	16.46%	\$2,424,370	13.68%
3 YEARS	2,619	25.77%	\$4,086,013	23.05%
4 YEARS	1,378	13.56%	\$2,563,562	14.46%
5 YEARS	1,052	10.35%	\$2,130,590	12.02%
Lifetime	2,771	27.27%	\$5,956,259	33.60%
Total	10,162	100%	\$17,726,543	100%

EP	Count	% of Count	Premium	% of Premium
0 days	0	0.00%	\$0	0.00%
7 days	210	2.07%	\$365,476	2.06%
14 days	4	0.04%	\$11,685	0.07%
15 days	0	0.00%	\$0	0.00%
20 days	826	8.13%	\$1,032,687	5.83%
30 days	100	0.98%	\$209,389	1.18%
60 days	182	1.79%	\$344,089	1.94%
75 days	2	0.02%	\$2,046	0.01%
90 days	2,846	28.01%	\$4,654,055	26.25%
100 days	5,975	58.80%	\$11,083,318	62.52%
150 days	2	0.02%	\$3,099	0.02%
180 days	11	0.11%	\$13,104	0.07%
365 days	4	0.04%	\$7,596	0.04%
Total	10,162	100%	\$17,726,543	100%

Marital Status	Count	% of Count	Premium	% of Premium
Married	4,404	43.34%	\$6,313,347	35.62%
Single	5,758	56.66%	\$11,413,196	64.38%
Total	10,162	100%	\$17,726,543	100%

Issue State	Count	% of Count	Premium	% of Premium
AK	7	0.07%	\$12,688	0.07%
AL	29	0.29%	\$34,638	0.20%
AR	49	0.48%	\$87,225	0.49%

Exhibit E-1 (Nationwide) Senior Health Insurance Company of Pennsylvania ATL & Transport Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation Distribution of Inforce Business as of December 31, 2017				
AZ	171	1.68%	\$277,468	1.57%
CA	506	4.98%	\$1,059,278	5.98%
CO	142	1.40%	\$274,684	1.55%
CT	0	0.00%	\$0	0.00%
DC	0	0.00%	\$0	0.00%
DE	15	0.15%	\$16,612	0.09%
FL	359	3.53%	\$571,991	3.23%
GA	178	1.75%	\$279,852	1.58%
HI	14	0.14%	\$31,514	0.18%
IA	316	3.11%	\$611,848	3.45%
ID	28	0.28%	\$37,807	0.21%
IL	584	5.75%	\$1,260,593	7.11%
IN	255	2.51%	\$525,662	2.97%
KS	358	3.52%	\$495,946	2.80%
KY	175	1.72%	\$307,943	1.74%
LA	80	0.79%	\$139,189	0.79%
MA	138	1.36%	\$295,007	1.66%
MD	143	1.41%	\$282,391	1.59%
ME	108	1.06%	\$194,028	1.09%
MI	230	2.26%	\$444,781	2.51%
MN	354	3.48%	\$654,561	3.69%
MO	411	4.04%	\$691,882	3.90%
MS	83	0.82%	\$173,849	0.98%
MT	39	0.38%	\$49,151	0.28%
NC	182	1.79%	\$367,118	2.07%
ND	127	1.25%	\$252,959	1.43%
NE	177	1.74%	\$333,977	1.88%
NH	1	0.01%	\$1,494	0.01%
NJ	215	2.12%	\$440,490	2.48%
NM	71	0.70%	\$109,945	0.62%
NV	18	0.18%	\$23,804	0.13%
NY	0	0.00%	\$0	0.00%
OH	512	5.04%	\$1,001,922	5.65%
OK	223	2.19%	\$339,689	1.92%
OR	58	0.57%	\$57,086	0.32%
PA	1,059	10.42%	\$1,793,032	10.11%
RI	0	0.00%	\$0	0.00%
SC	171	1.68%	\$430,790	2.43%
SD	72	0.71%	\$174,303	0.98%
TN	180	1.77%	\$321,409	1.81%
TX	1,479	14.55%	\$1,955,739	11.03%
UT	91	0.90%	\$137,035	0.77%
VA	119	1.17%	\$227,690	1.28%
VI	1	0.01%	\$656	0.00%
VT	0	0.00%	\$0	0.00%
WA	257	2.53%	\$420,499	2.37%
WI	343	3.38%	\$472,773	2.67%
WV	22	0.22%	\$37,077	0.21%
WY	12	0.12%	\$16,468	0.09%
Total	10,162	100.00%	\$17,726,543	100.00%

Exhibit E-2 (Maryland)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

Issue Year	Count	% of Count	Premium	% of Premium
1975	0	0.00%	\$0	0.00%
1976	0	0.00%	\$0	0.00%
1977	0	0.00%	\$0	0.00%
1978	0	0.00%	\$0	0.00%
1979	0	0.00%	\$0	0.00%
1980	0	0.00%	\$0	0.00%
1981	0	0.00%	\$0	0.00%
1982	0	0.00%	\$0	0.00%
1983	0	0.00%	\$0	0.00%
1984	0	0.00%	\$0	0.00%
1985	0	0.00%	\$0	0.00%
1986	0	0.00%	\$0	0.00%
1987	0	0.00%	\$0	0.00%
1988	0	0.00%	\$0	0.00%
1989	0	0.00%	\$0	0.00%
1990	1	0.70%	\$2,442	0.86%
1991	1	0.70%	\$1,360	0.48%
1992	1	0.70%	\$3,159	1.12%
1993	5	3.50%	\$16,197	5.74%
1994	6	4.20%	\$12,681	4.49%
1995	11	7.69%	\$22,971	8.13%
1996	22	15.38%	\$50,105	17.74%
1997	27	18.88%	\$43,227	15.31%
1998	21	14.69%	\$32,290	11.43%
1999	24	16.78%	\$45,232	16.02%
2000	13	9.09%	\$27,674	9.80%
2001	7	4.90%	\$13,377	4.74%
2002	2	1.40%	\$5,925	2.10%
2003	2	1.40%	\$5,751	2.04%
Total	143	100.00%	\$282,391	100.00%

Issue 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	7	4.90%	\$8,582	3.04%
55-59	17	11.89%	\$25,475	9.02%
60-64	55	38.46%	\$88,621	31.38%
65-69	34	23.78%	\$86,464	30.62%
70-74	22	15.38%	\$47,530	16.83%
75-79	7	4.90%	\$23,731	8.40%
80-84	1	0.70%	\$1,987	0.70%
85-89	0	0.00%	\$0	0.00%
90+	0	0.00%	\$0	0.00%
Total	143	100.00%	\$282,391	100.00%

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	0	0.00%	\$0	0.00%
55-59	0	0.00%	\$0	0.00%

Exhibit E-2 (Maryland)
Senior Health Insurance Company of Pennsylvania
ATL & Transport
Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation
Distribution of Inforce Business as of December 31, 2017

60-64	0	0.00%	\$0	0.00%
65-69	0	0.00%	\$0	0.00%
70-74	8	5.59%	\$11,383	4.03%
75-79	13	9.09%	\$15,708	5.56%
80-84	42	29.37%	\$77,460	27.43%
85-89	42	29.37%	\$74,026	26.21%
90+	38	26.57%	\$103,815	36.76%
Total	143	100.00%	\$282,391	100.00%

Gender	Count	% of Count	Premium	% of Premium
Male	47	32.87%	\$91,521	32.41%
Female	96	67.13%	\$190,870	67.59%
Total	143	100.00%	\$282,391	100.00%

BP	Count	% of Count	Premium	% of Premium
1 YEAR	2	1.40%	\$2,873	1.02%
2 YEARS	44	30.77%	\$62,106	21.99%
3 YEARS	39	27.27%	\$86,391	30.59%
4 YEARS	24	16.78%	\$55,386	19.61%
5 YEARS	16	11.19%	\$21,576	7.64%
Lifetime	18	12.59%	\$54,059	19.14%
Total	143	100%	\$282,391	100%

EP	Count	% of Count	Premium	% of Premium
0 days	0	0.00%	\$0	0.00%
7 days	0	0.00%	\$0	0.00%
14 days	0	0.00%	\$0	0.00%
15 days	0	0.00%	\$0	0.00%
20 days	5	3.50%	\$6,900	2.44%
30 days	2	1.40%	\$5,171	1.83%
60 days	4	2.80%	\$10,337	3.66%
75 days	0	0.00%	\$0	0.00%
90 days	6	4.20%	\$7,479	2.65%
100 days	126	88.11%	\$252,504	89.42%
150 days	0	0.00%	\$0	0.00%
180 days	0	0.00%	\$0	0.00%
365 days	0	0.00%	\$0	0.00%
Total	143	100%	\$282,391	100%

Marital Status	Count	% of Count	Premium	% of Premium
Married	91	63.64%	\$142,032	50.30%
Single	52	36.36%	\$140,359	49.70%
Total	143	100%	\$282,391	100%

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%

Exhibit E-2 (Maryland) Senior Health Insurance Company of Pennsylvania ATL & Transport Non-0-day Elimination Period Excluding 5% Compound Lifetime Inflation Distribution of Inforce Business as of December 31, 2017				
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	143	100.00%	\$282,391	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	143	100.00%	\$282,391	100.00%