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**Long-Term Care Terminations
Work Group Report of the
American Academy of Actuaries**

**Presented to the National Association of Insurance Commissioners'
Long-Term Care Actuarial Task Force**

November 2015

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Long-Term Care Terminations Work Group

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Clark Heitkamp, MAAA, FSA

EXECUTIVE SUMMARY

The National Association of Insurance Commissioners (NAIC) Long-Term Care Actuarial Working Group made the initial request to review long-term care (LTC) policy terminations in December 2012. The request was to review (1) LTC mortality, and (2) separately, individual and group lapse. The request specified the data to use as the LTC Intercompany Experience data 1984-2007. A subsequent request specified we review the 2012 Individual Annuity Reserving (IAR) Table.

A technical challenge of this request was the issue of miscoded deaths in the Intercompany Experience data. This is due to deaths being coded as “lapse” when the reporting company has no death certificate. The Academy’s Long-Term Care Terminations Work Group (WG) addressed this issue through data selection.

DATA SELECTION

The LTC Intercompany Experience data 1984-2007 was summarized by MIB Group, Inc. using criteria specified by the WG. The data was then contributing company de-identified by the Society of Actuaries (SOA) staff. The WG was able to view summary level data during a webcast meeting with the SOA staff. During this webcast, the WG identified data that appeared to have less miscoded deaths than the remaining data. This selection became the basis for the validation of the mortality. The selection was:

- The top 9 companies by exposures
- Experience years 1993 – 2006 only

The SOA then provided the summary data to the WG in Microsoft Excel® pivot table format. This is the data that was used for the review of mortality and lapse.

METHODOLOGY

The experience mortality was compared to both the 1994 Group Annuity Mortality (GAM) table and the 2012 Individual Annuity Mortality (IAM) table. The WG determined that there was not credible data in the Intercompany Experience to validate the projection scale used for the 2012 IAR. It was determined by the WG that the 2012 IAM was a better fit to the actual experience than the 1994 GAM, the current valuation standard.

In order to address the miscoded deaths, lapses were calculated as the total terminations less the deaths implied by the 2012 IAM table. Lapses were calculated both with and without the observed selection applied to the 2012 IAM. Lapses calculated using the observed mortality selection provides a better indication of the experience lapses. However, when combined with the 2012 IAM, lapses calculated without using the observed mortality selection provides a better indication of total terminations. This is because the 2012 IAM is an aggregate table without selection.

MORTALITY

As noted above, the WG compared the actual LTC mortality against both the 1994 GAM and 2012 IAM and found that the 2012 IAM was a better fit to the actual experience. The results showed that

by age (issue and attained), policy duration and benefit period the 2012 IAM compared more favorably to the actual LTC deaths.

The results by policy duration using the 2012 IAM show for females the actual-to-expected (A/E) ratio increasing from 38.1% in duration 1 to 94.2% for durations 16+. The same pattern exists for males increasing from 31.4% in duration 1 to 93.4% for durations 16+. A similar pattern is revealed when the data is analyzed by benefit period (limited vs. lifetime). When only limited benefit periods are included, the female ratios increase from 37.2% in duration 1 to 93.1% in durations 16+. The corresponding male ratios increase from 30.4% in duration 1 to 92.5% in durations 16+. For the lifetime benefit period, the pattern is not as linear. There is a dip in the ratios for both females and males in the durations 11-15 group. Some of this may result from the limited data as you move to the later durations.

When comparing the ratios by attained age groupings for both females and males, the results for the limited benefit period are fairly flat in the mid 60% to 70% for younger ages and then jump up at attained ages 70+ to mid 70% to mid 80%. For the lifetime benefit period, the ratios by attained age groupings for both females and males follow a similar pattern although the older attained age ratios are 90 to 100%.

The issue age results were compiled for the lifetime benefit period only and show a similar increasing pattern as the attained age for both the females and males. The female ratios are slightly higher than 100% at the older issue ages (65+) while the male ratios are less than 100% at all issue ages.

LAPSE

As previously noted, the experience lapses were determined by subtracting from total terminations the expected deaths. The expected deaths were based on the 2012 IAM table with and without selection factors. The selection factors were based on the A/E mortality ratio for individual (non-group) and group separately. The purpose of starting with the total terminations is to address the issue of miscoded deaths.

The following are the variables examined by duration and in total.

- Individual vs. group;
- Policy duration;
- Calendar Year for duration 10+;
- Annual inflation vs. all other;
- Without mortality selection vs. with mortality selection;
- Top 9 companies vs. all companies;
- Excluding lifetime benefit period and issue ages 80+; and,
- Attained age group for individual.

The WG determined that the better measure for individual lapses is with mortality selection. The variables that appear to have a significant impact to the resulting lapse rates were group vs. individual, by policy duration, and with and without annual inflation benefit. There were nearly no differences between the Top 9 Companies and All Companies experienced lapses except for the early duration group policies.

The WG removed issue age 80+ from many of the lapse studies because today's LTC insurance sales do not offer coverage to those over 79 years old. Likewise, the lifetime benefit period option is generally no longer available, and the WG also removed these benefit options from many of the lapse studies. There is a trend in the industry to also issue less inflation or plans with lower levels of inflation protection, and as a result the WG reviewed the lapse experience between those with annual increases and those without. The resulting lapse rates with annual increases have significantly lower experienced lapse rates except for later duration group policies where they are close to the same level.

To determine if some older attained ages were causing the individual lapses to remain higher in the later durations, lapses were reviewed by duration and attained age groups. Attained ages 60-69 and 70-79 both have the overall lowest lapse rates, and this trend continued through all durations beyond the second duration.



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American Academy of Actuaries
Long-Term Care (LTC) Terminations Work Group
Update to LTC Actuarial Working Group

August 15, 2014

Warren Jones, MAAA, FSA, FCA
Chairperson, LTC Terminations Work Group



Tables Used

- Actual-to-expected mortality calculated for:
 - 1994 Group Annuity Mortality
 - 2012 Individual Annuity Mortality (IAM) Basic Table (without margin)
 - Both tables are age-near-birthday basis. LTC is sold on age-last-birthday basis.



2012 Individual Annuity Reserving

- Generational mortality table includes:
 - Margin (2012 Individual Annuity Mortality period table)
 - Projection factors scale G2 (mortality improvement factors)
 - Projection factors developed from the Social Security Administration data
 - LTC data too limited to validate projection factors



Data

- LTC intercompany experience data 1984-2007
- Work group specified data that was compiled by the Medical Information Bureau (MIB)
- Data summarized and company de-identified by SOA
- Limited to top 9 companies by exposures and experience years 1993 - 2006 to address data quality
- Work group feels comfortable that the resulting experience is an accurate representation of LTC insured mortality

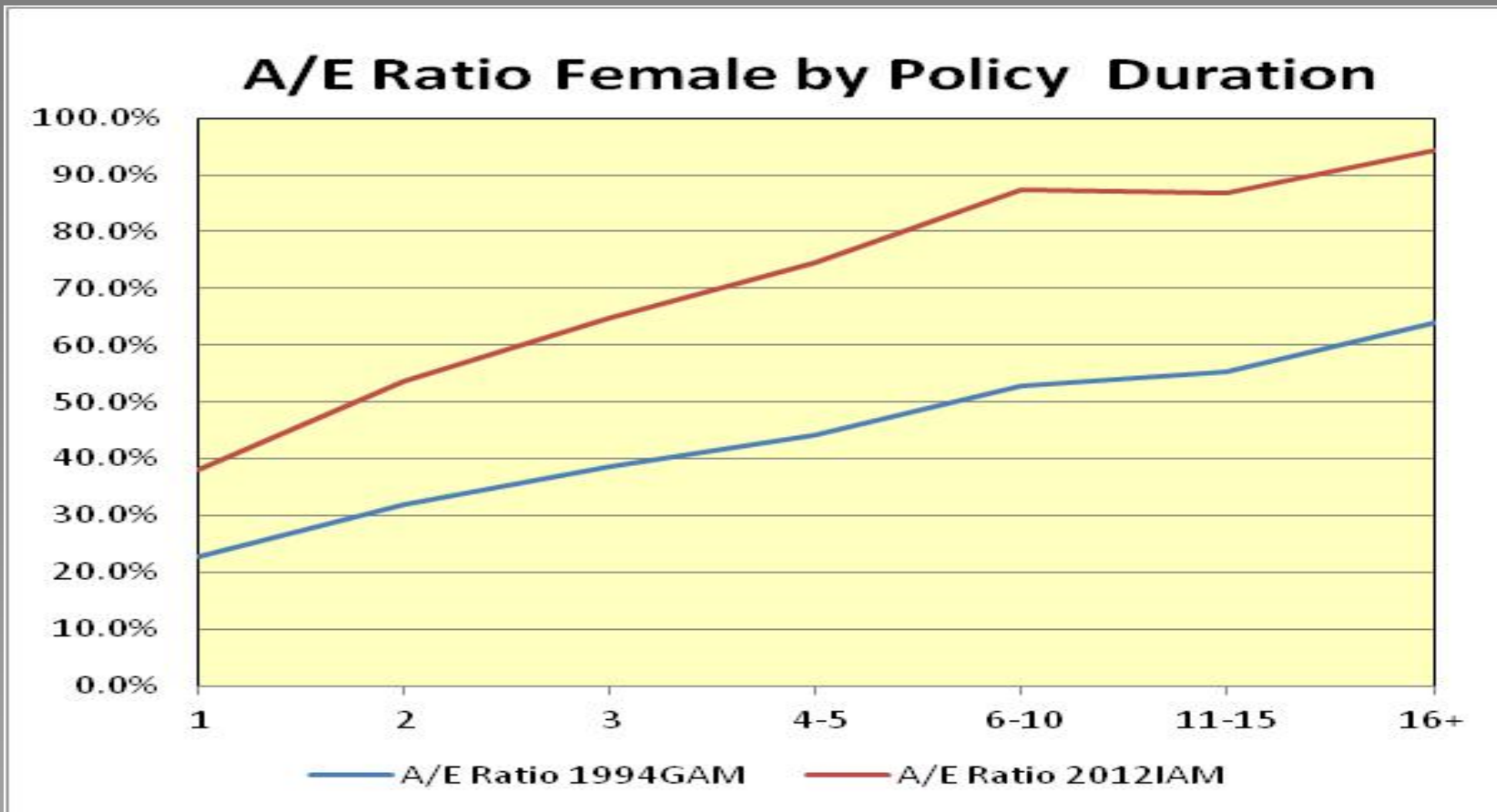


By Policy Duration

- Underwriting selection is observed in actual deaths
- Both 1994 GAM and 2012 IAM are aggregate tables
- 2012 IAM is a better fit than 1994 GAM

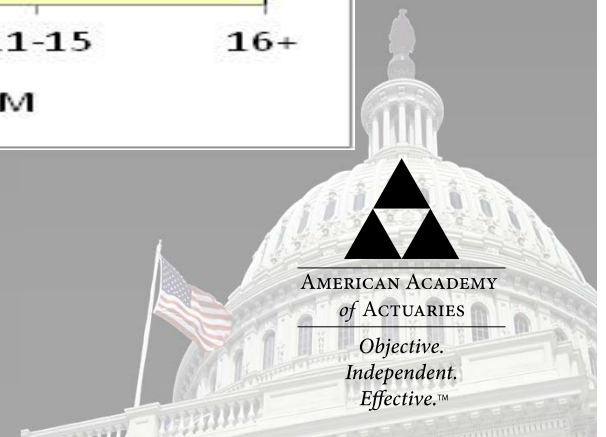


Female by Policy Duration

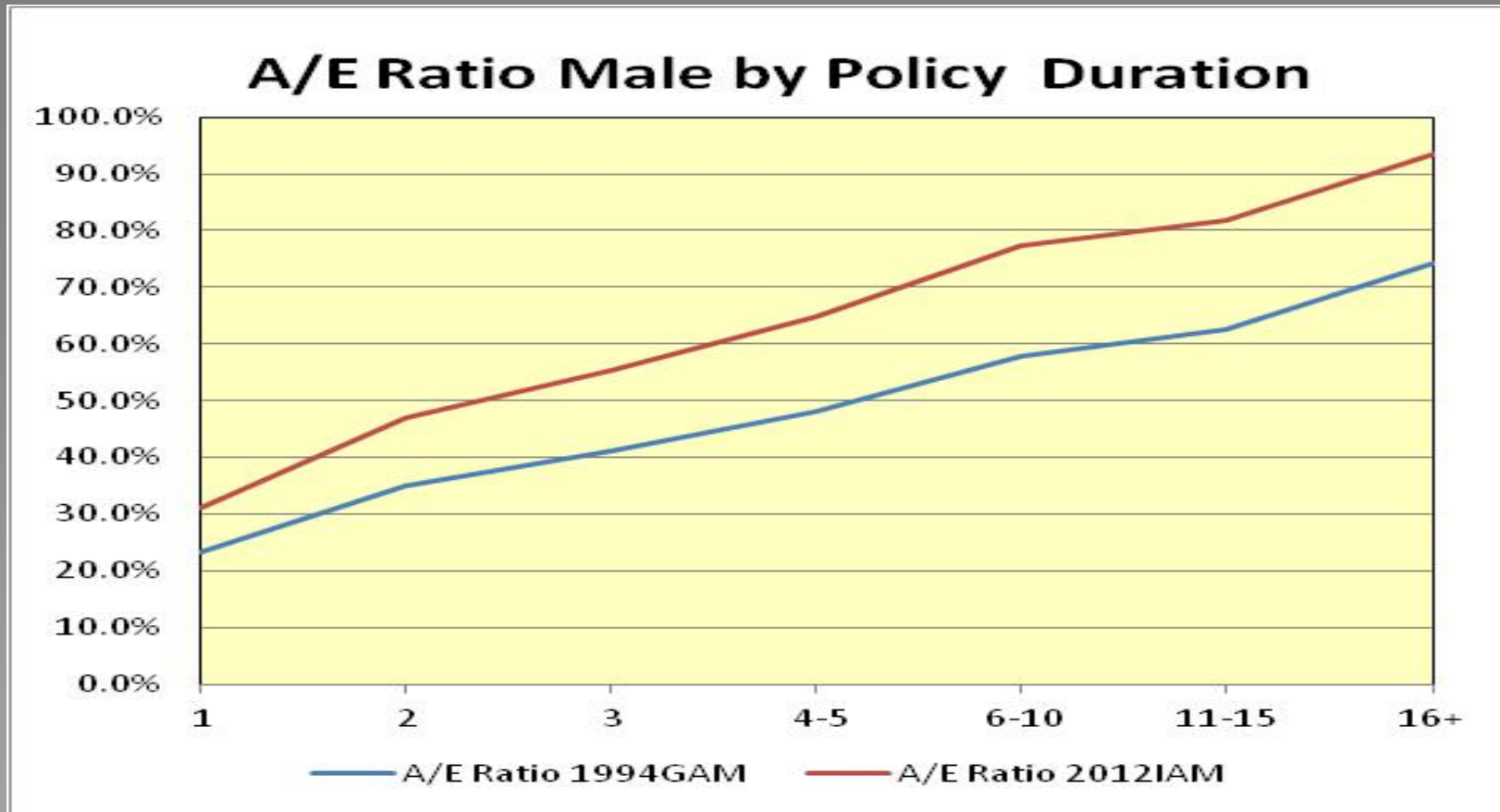


Data compiled by MIB

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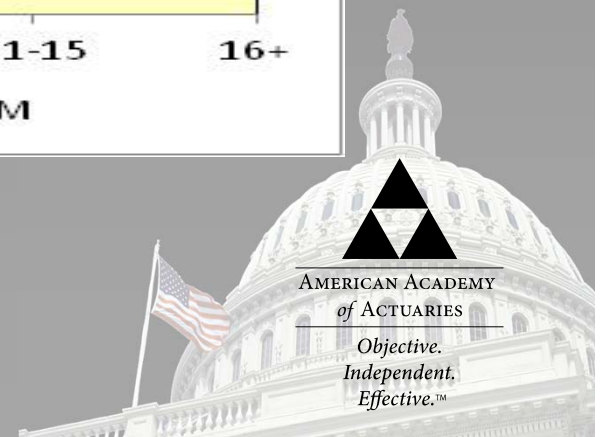


Male by Policy Duration



Data compiled by MIB

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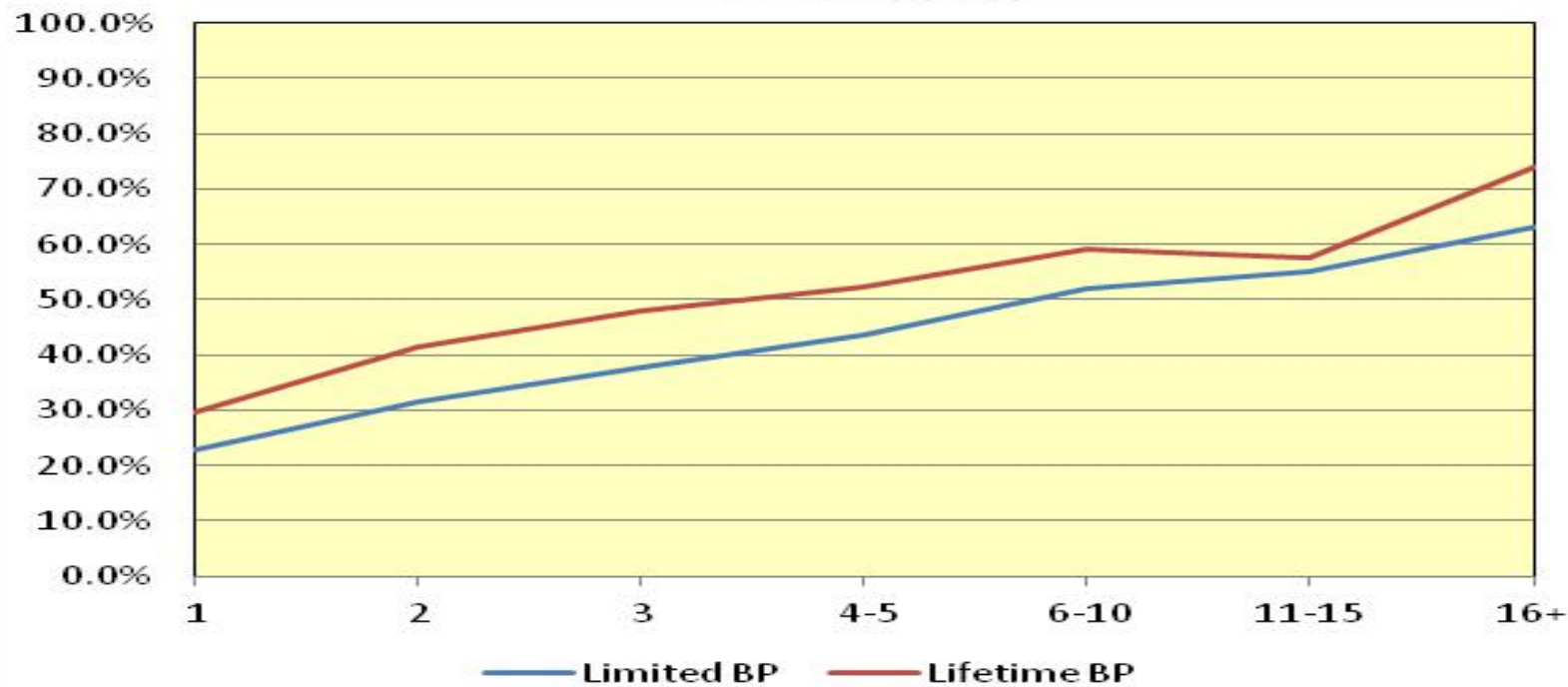
By Policy Duration

- Limited benefit period versus lifetime benefit period
- Benefit exhaustion eliminates some deaths in limited benefit period experience
- 2012 IAM is a better fit than 1994 GAM



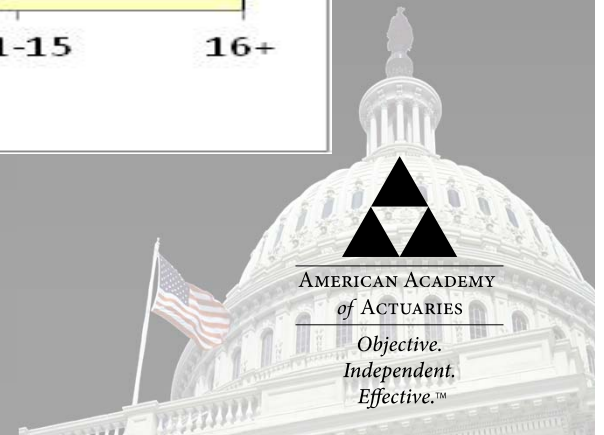
1994 GAM Female by Policy Duration

A/E Ratio 1994 GAM Female by Policy Duration



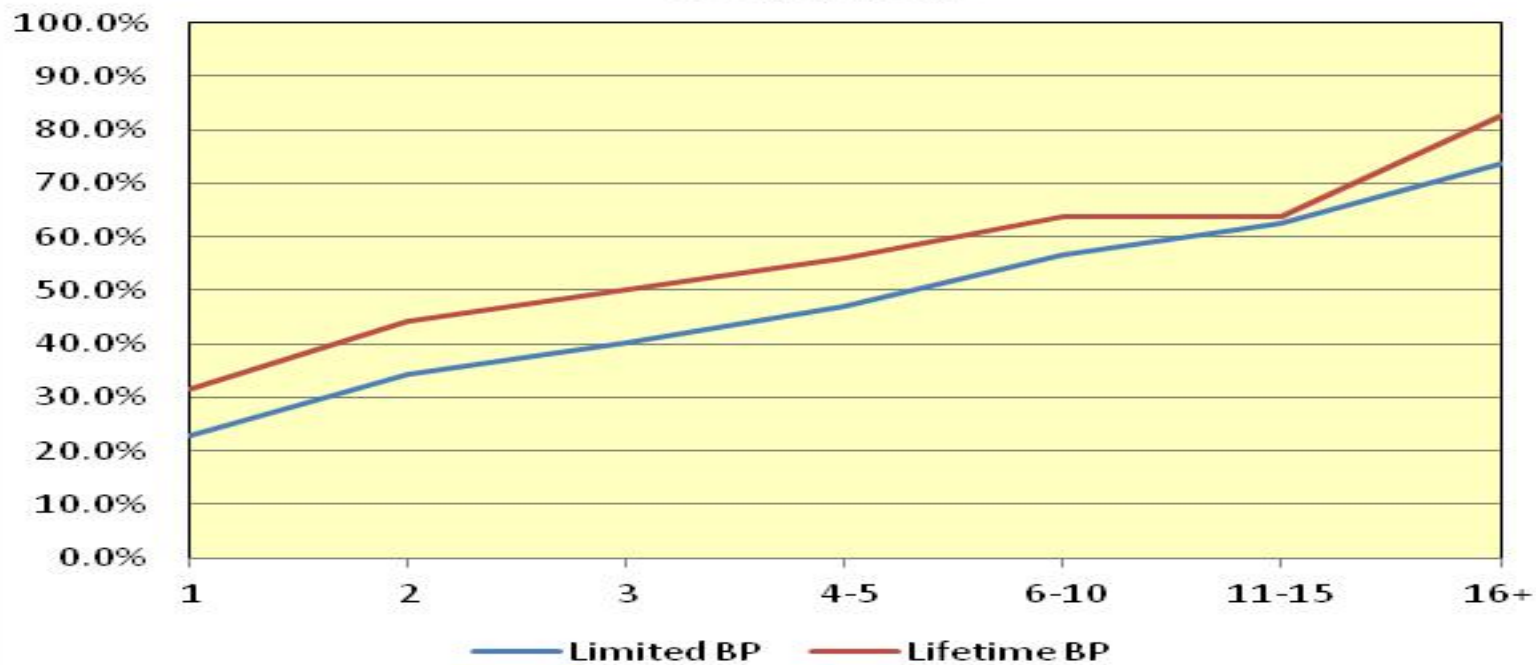
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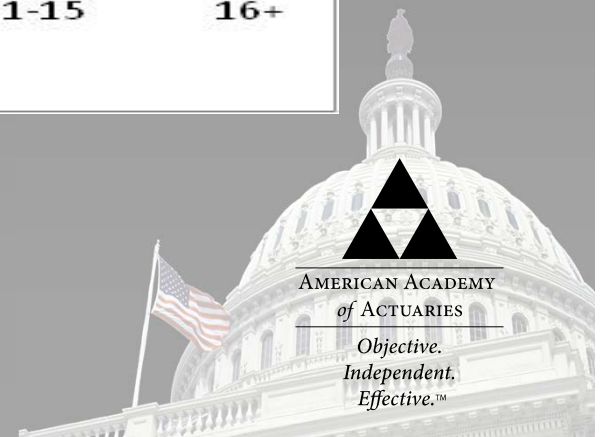
1994 GAM Male by Policy Duration

A/E Ratio 1994 GAM Male by Policy Duration



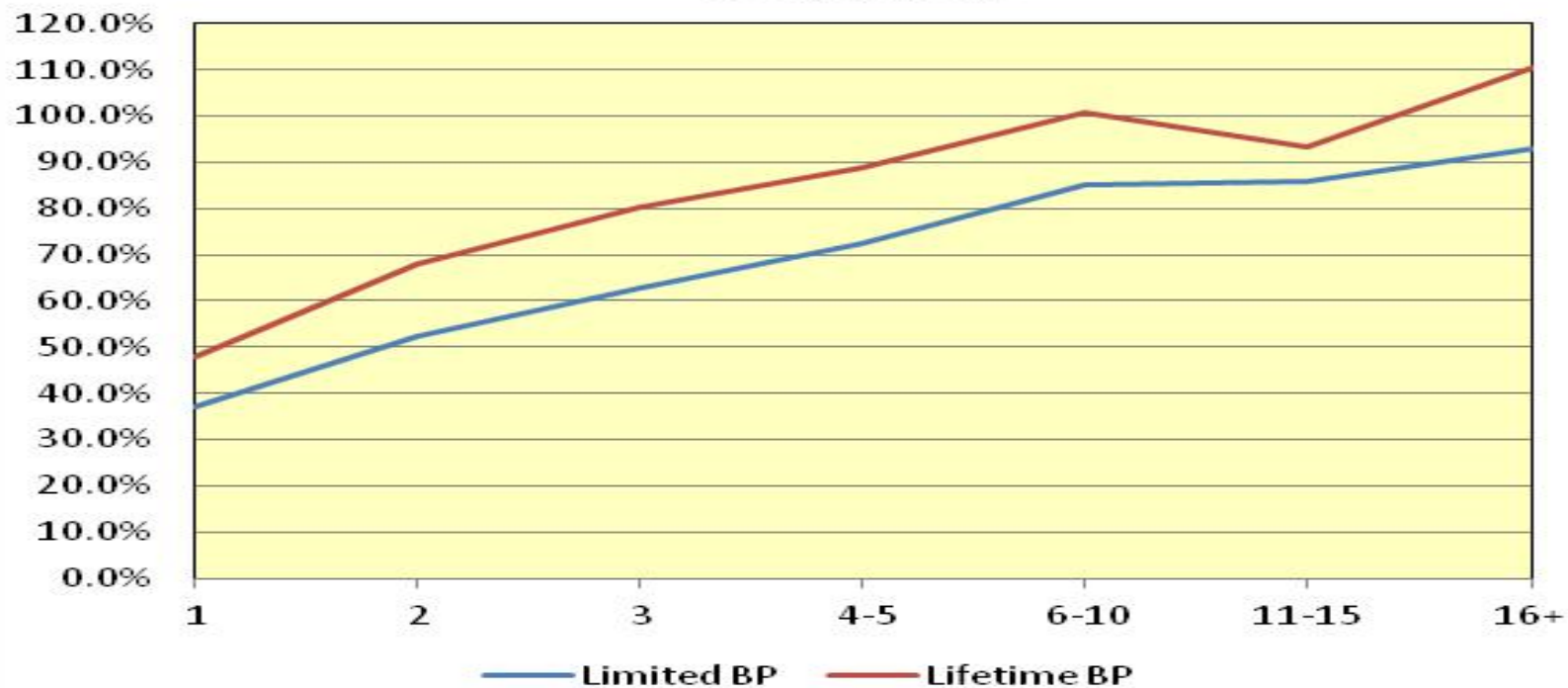
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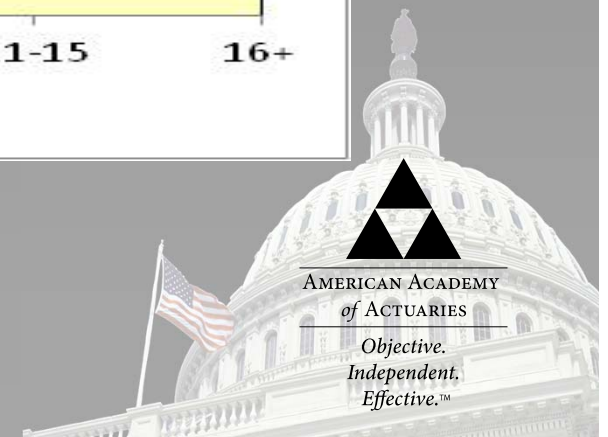
2012 IAM Female by Policy Duration

A/E Ratio 2012 IAM Female by Policy Duration



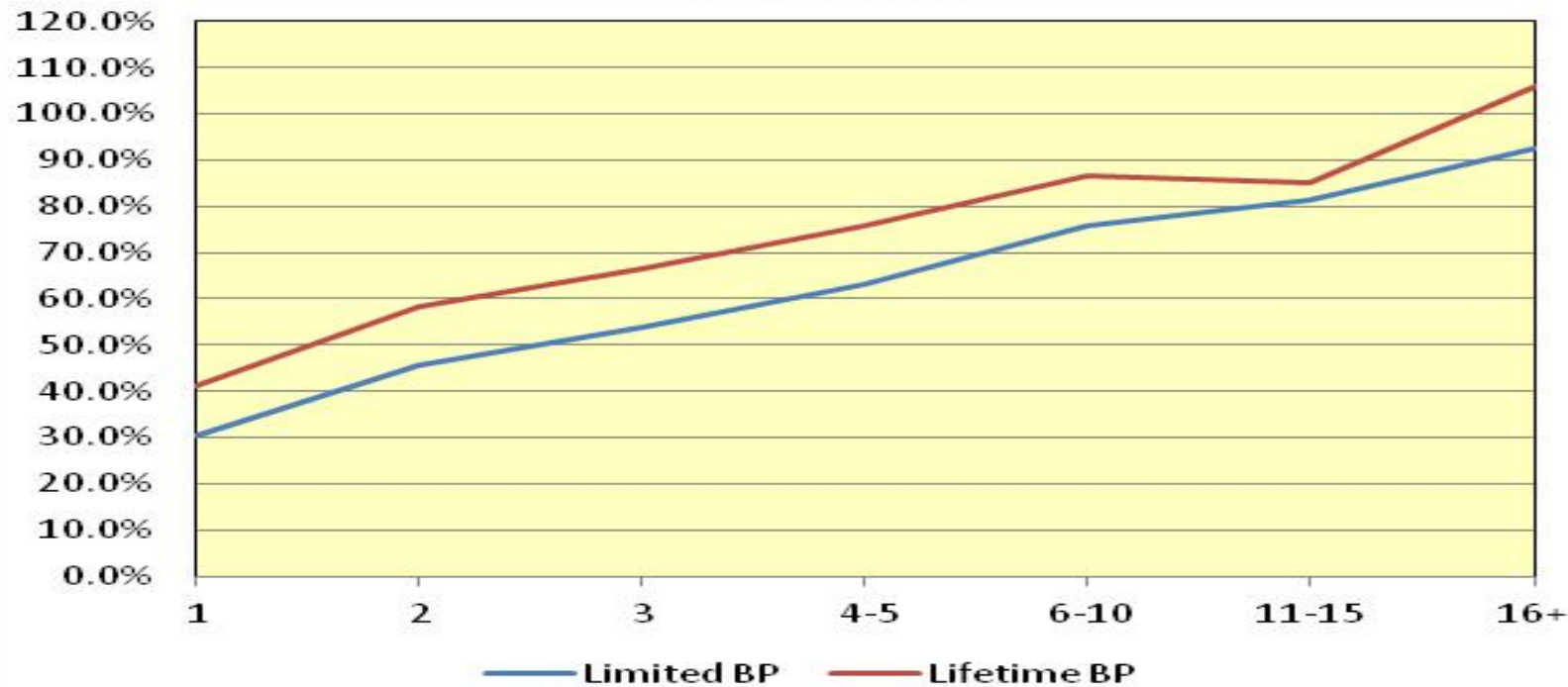
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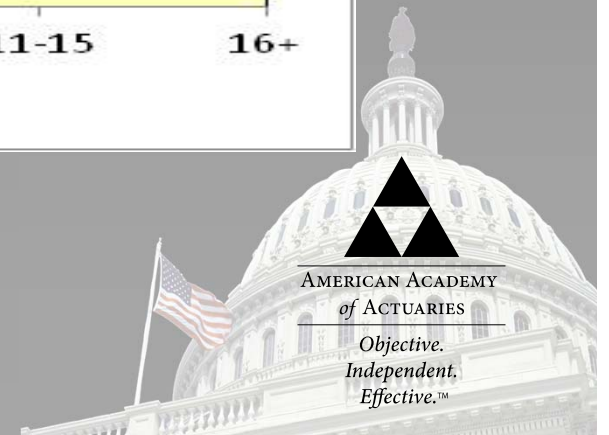
2012 IAM Male by Policy Duration

A/E Ratio 2012 IAM Male by Policy Duration



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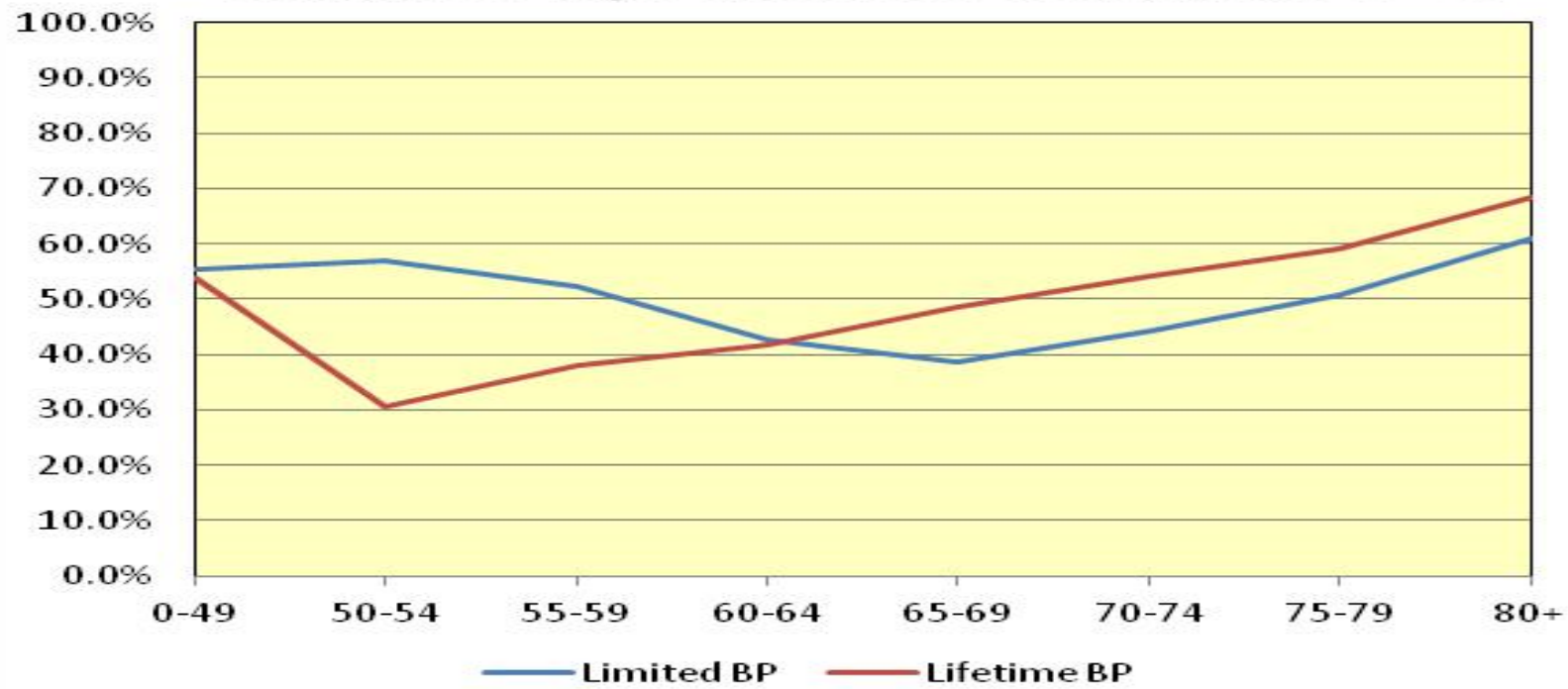
By Attained Age

- Limited benefit period versus lifetime benefit period
- Policy durations 1 – 5 years excluded to reduce the impact of underwriting selection
- 2012 IAM is a better fit than 1994 GAM



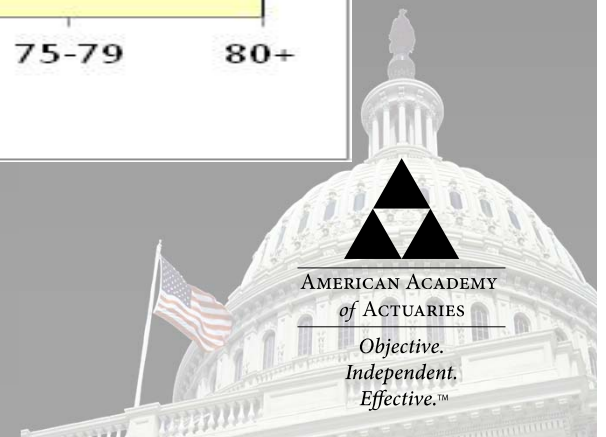
1994 GAM Female by Attained Age

A/E Ratio 1994 GAM Female by Attained Age Excludes Durations 1 - 5



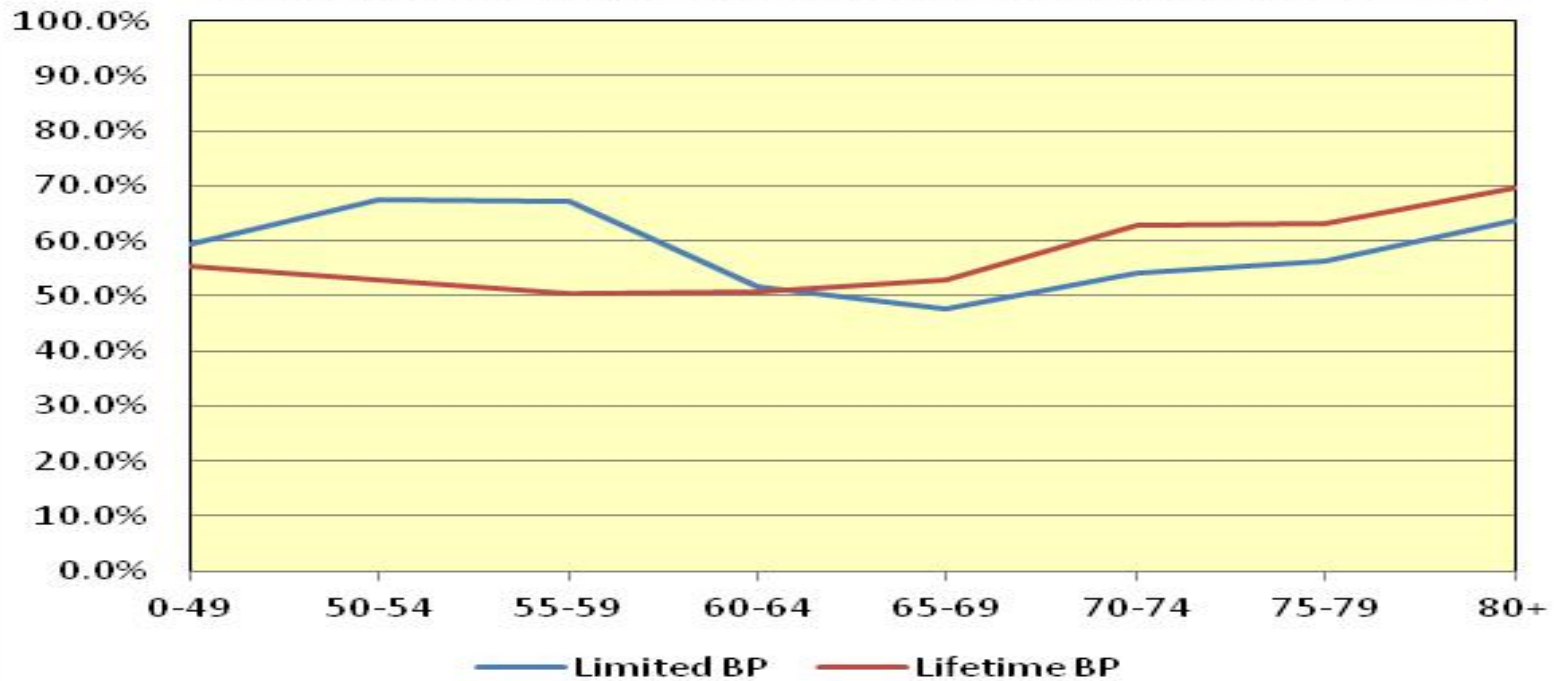
Data compiled by MIB

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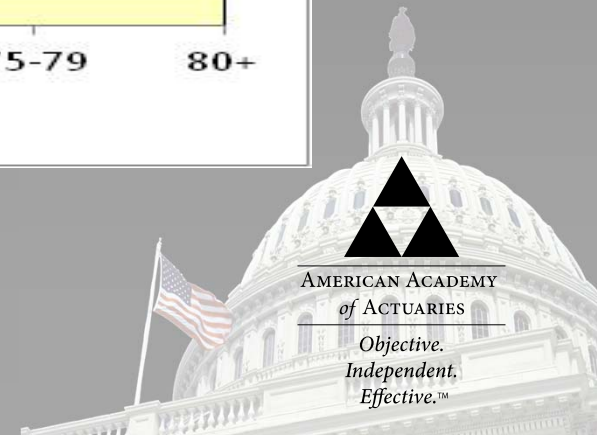
1994 GAM Male by Attained Age

A/E Ratio 1994 GAM Male by Attained Age Excludes Durations 1 - 5

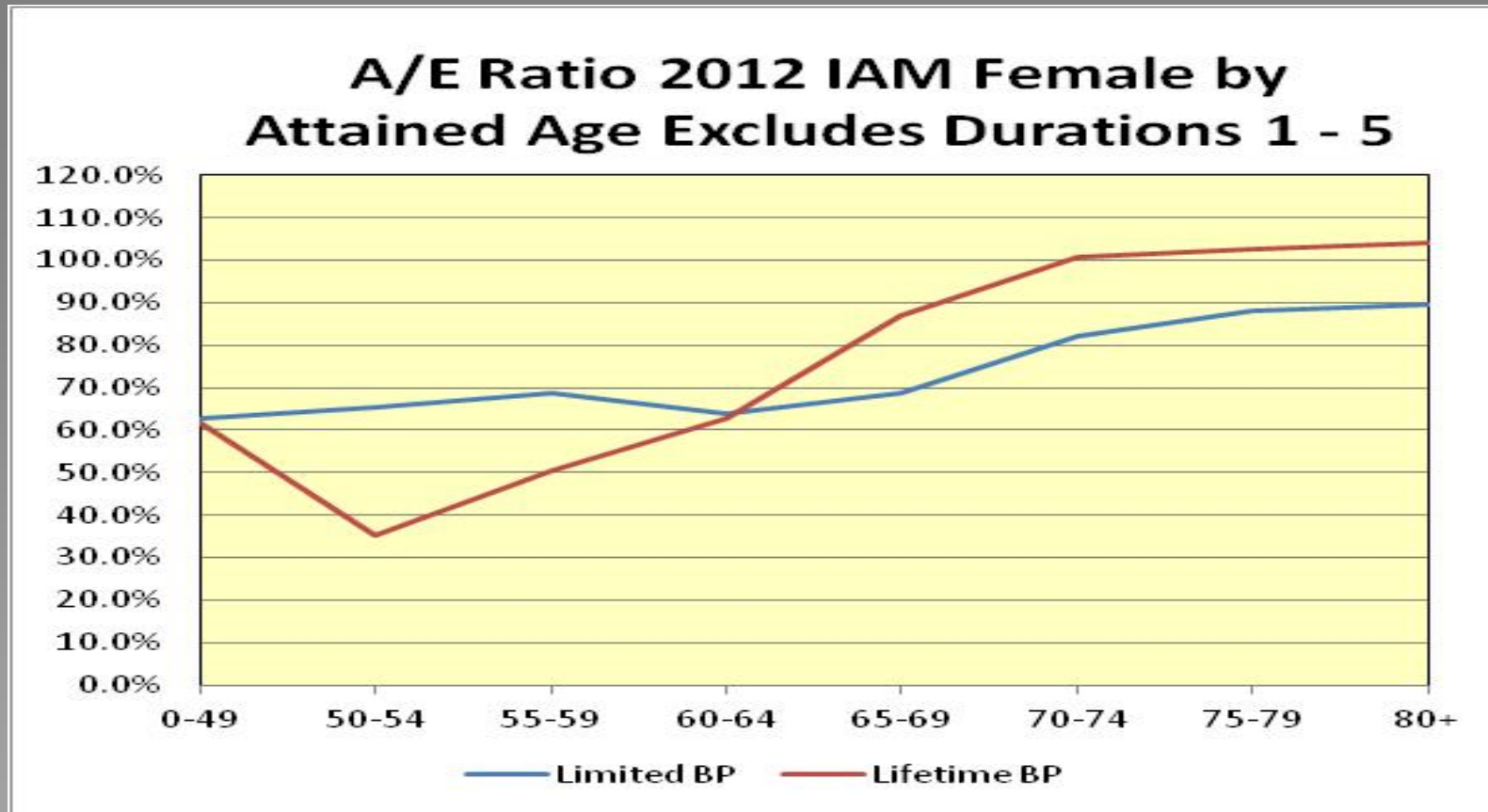


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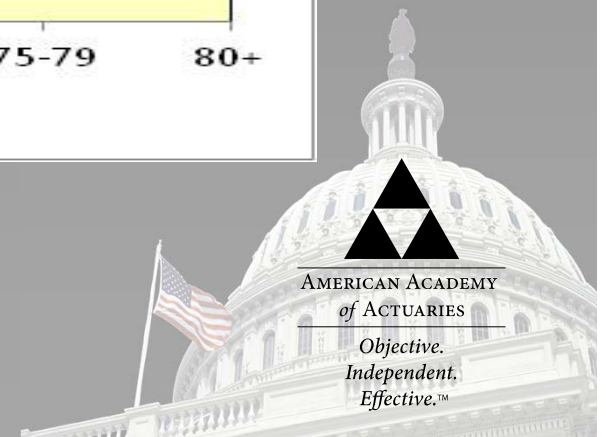


2012 IAM Female by Attained Age



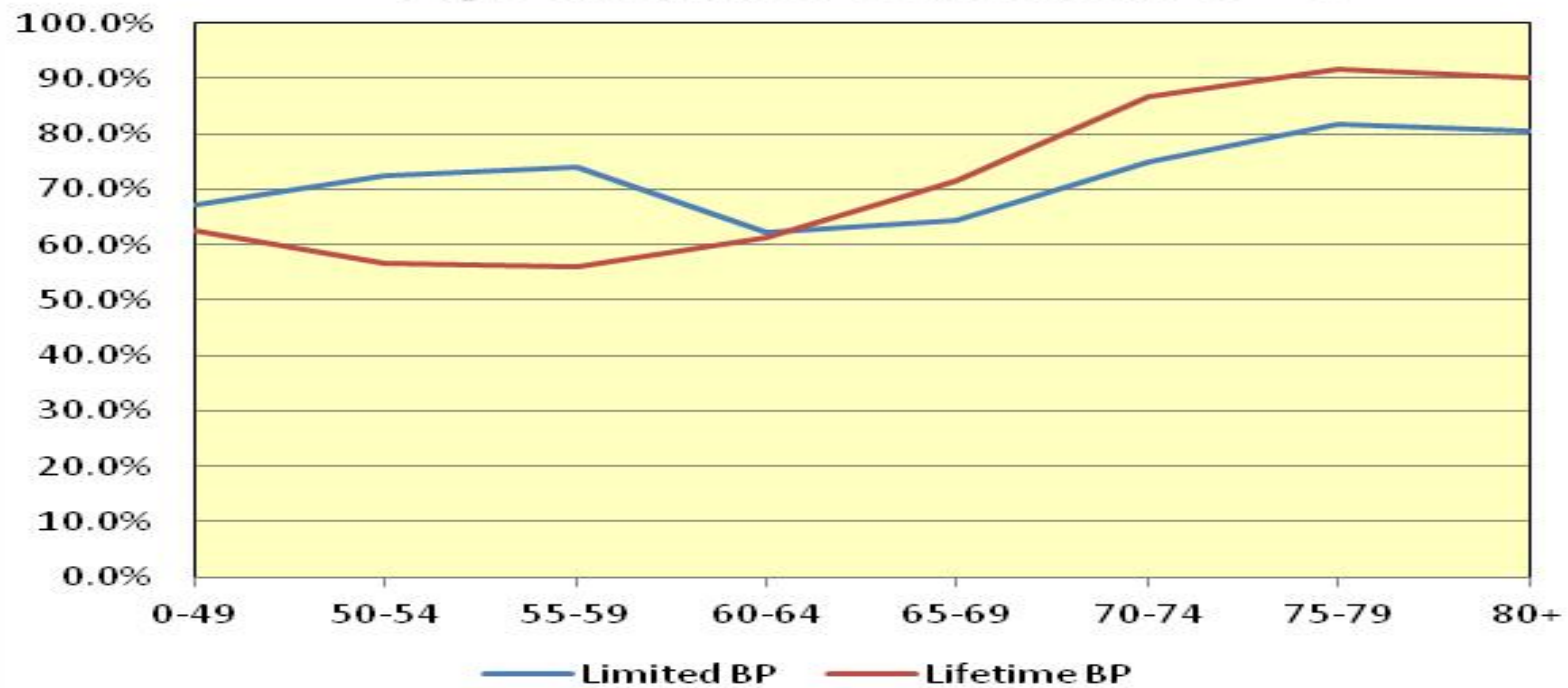
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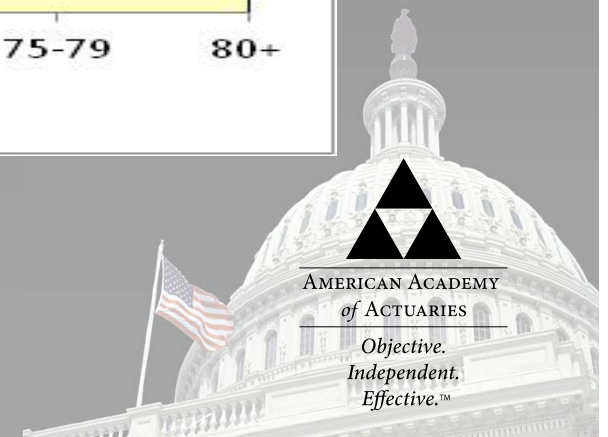
2012 IAM Male by Attained Age

A/E Ratio 2012 IAM Male by Attained Age Excludes Durations 1 - 5



Data compiled by MIB

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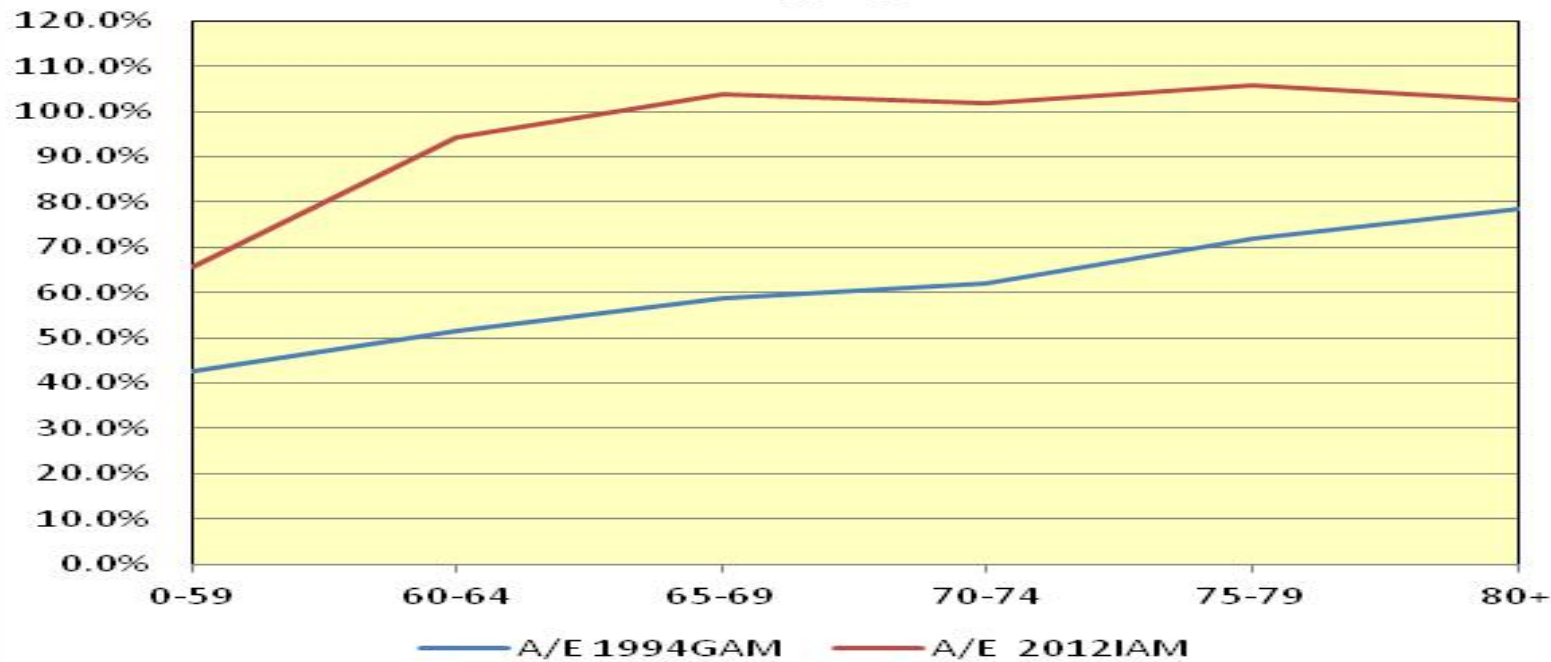
By Issue Age

- Lifetime benefit period only
- Policy durations 1 – 5 years excluded to reduce the impact of underwriting selection
- Compares experience of exposed lives summarized to issue ages relevant to LTC
- 2012 IAM is a better fit than 1994 GAM



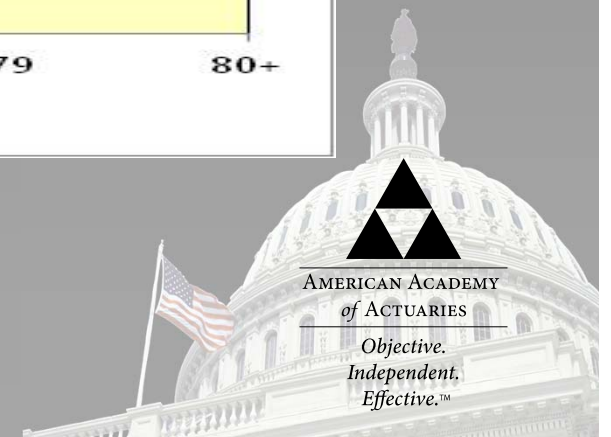
Female by Issue Age

**A/E Ratio Female by Issue Age
Lifetime Benefits Excludes Durations
1 - 5**

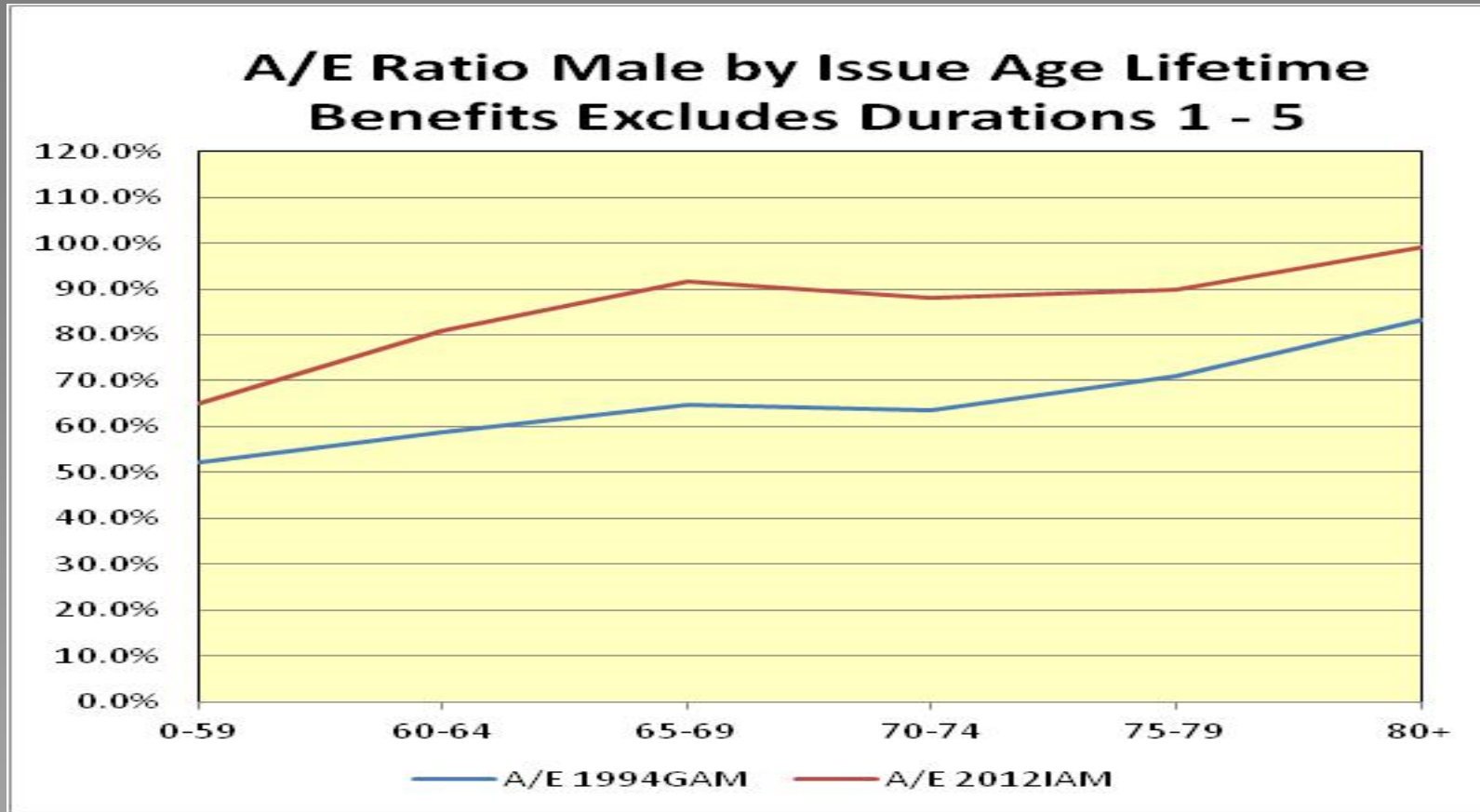


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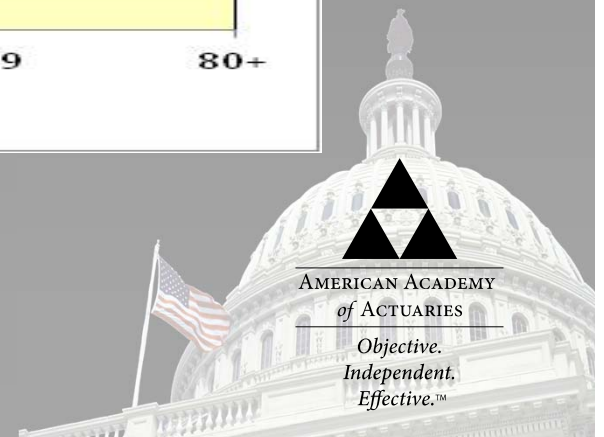


Male by Issue Age



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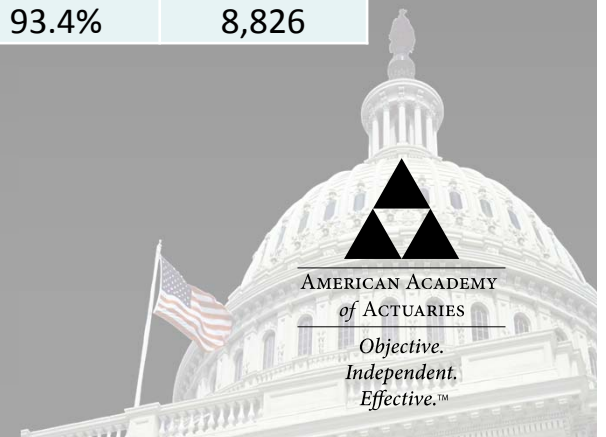
Appendix



Policy Duration

	Female				Male		
	1994 GAM	2012 IAM			1994 GAM	2012 IAM	
Duration	A:E	A:E	Deaths		A:E	A:E	Deaths
1	23.3%	38.1%	7,432		23.6%	31.4%	6,245
2	32.4%	53.6%	10,100		35.3%	47.0%	9,213
3	38.9%	64.5%	11,828		41.4%	55.4%	10,833
4-5	44.5%	74.3%	25,574		48.2%	64.7%	24,805
6-10	52.9%	87.0%	55,217		57.8%	77.1%	58,871
11-15	55.3%	86.7%	25,918		62.6%	81.7%	31,700
16+	63.9%	94.2%	5,963		74.2%	93.4%	8,826

Data compiled by MIB

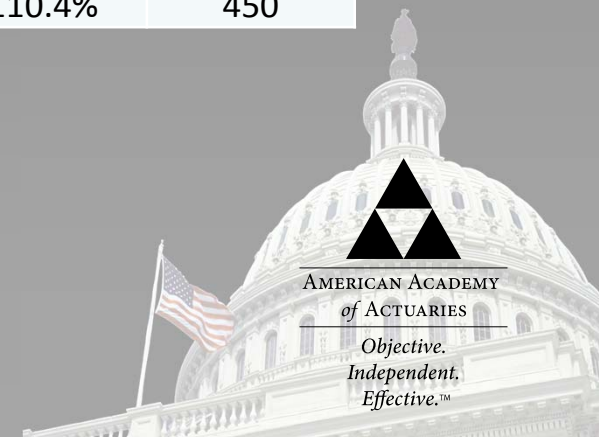


Female Policy Duration/Benefit Period

Duration	Female					
	Limited BP			Lifetime BP		
	1994 GAM	2012 IAM	Deaths	1994 GAM	2012 IAM	Deaths
	A:E	A:E		A:E	A:E	
1	22.7%	37.2%	6,687	29.5%	47.8%	745
2	31.6%	52.2%	8,993	41.3%	67.9%	1,107
3	37.9%	62.9%	10,410	48.0%	80.1%	1,418
4-5	43.5%	72.4%	22,131	52.2%	88.9%	3,443
6-10	52.0%	85.0%	47,194	59.1%	100.7%	8,023
11-15	55.1%	85.9%	23,051	57.6%	93.3%	2,867
16+	63.2%	93.1%	5,513	74.1%	110.4%	450

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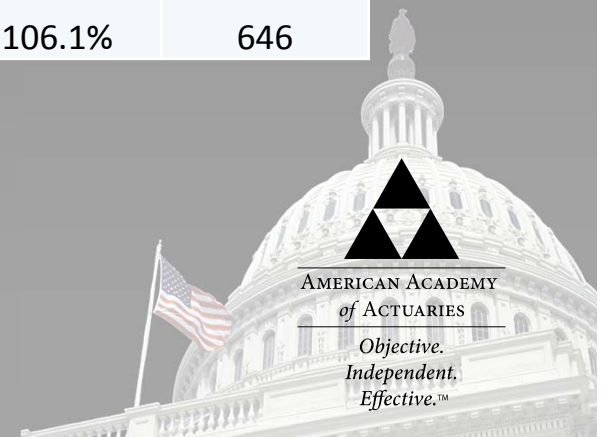


Male Policy Duration/Benefit Period

Duration	Male					
	Limited BP			Lifetime BP		
	1994 GAM A:E	2012 IAM A:E	Deaths	1994 GAM A:E	2012 IAM A:E	Deaths
1	22.9%	30.4%	5,493	31.5%	41.3%	752
2	34.3%	45.8%	8,085	44.1%	58.2%	1,128
3	40.3%	54.0%	9,400	50.1%	66.6%	1,433
4-5	47.0%	63.1%	21,132	56.1%	75.7%	3,673
6-10	56.8%	75.6%	49,738	63.7%	86.5%	9,133
11-15	62.5%	81.3%	27,999	63.7%	85.0%	3,701
16+	73.6%	92.5%	8,180	82.8%	106.1%	646

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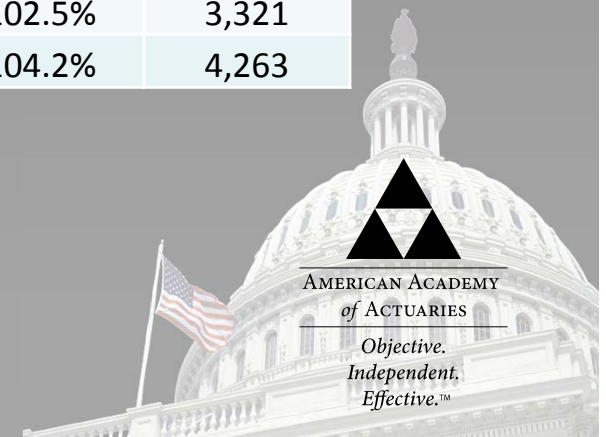


Female Attained Age/Benefit Period/Excludes Durations 1 - 5

	Female - Excludes Durations 1 - 5						
	Limited BP				Lifetime BP		
Attained	1994 GAM	2012 IAM			1994 GAM	2012 IAM	
Age	A:E	A:E	Deaths		A:E	A:E	Deaths
0-49	55.3%	62.9%	303		53.8%	61.5%	16
50-54	56.8%	65.5%	353		30.5%	35.2%	15
55-59	52.2%	68.6%	723		38.1%	50.3%	61
60-64	42.6%	63.9%	1,390		41.7%	62.8%	232
65-69	38.5%	68.9%	3,584		48.5%	86.9%	919
70-74	44.1%	82.0%	10,523		54.2%	100.6%	2,513
75-79	50.9%	88.2%	18,324		59.1%	102.5%	3,321
80+	61.1%	89.7%	40,558		68.5%	104.2%	4,263

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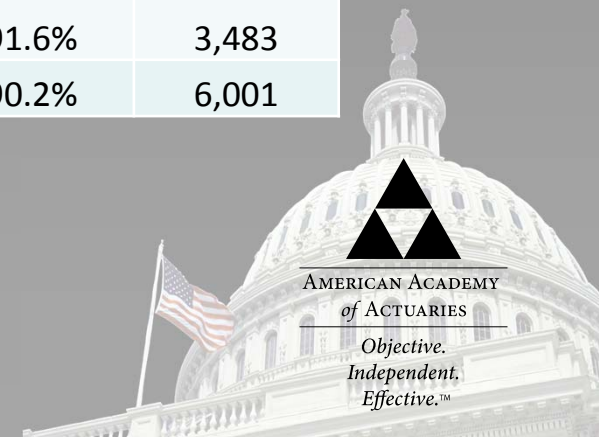


Male Attained Age/Benefit Period/Excludes Durations 1 - 5

	Male - Excludes Durations 1 - 5					
	Limited BP			Lifetime BP		
Attained	1994 GAM	2012 IAM		1994 GAM	2012 IAM	
Age	A:E	A:E	Deaths	A:E	A:E	Deaths
0-49	59.5%	67.2%	221	55.4%	62.6%	13
50-54	67.5%	72.3%	221	53.1%	56.8%	23
55-59	67.2%	74.1%	611	50.5%	55.9%	80
60-64	51.7%	62.3%	1,298	50.8%	61.3%	307
65-69	47.5%	64.5%	3,608	52.8%	71.7%	1,003
70-74	54.3%	75.1%	9,948	62.8%	86.8%	2,570
75-79	56.5%	81.7%	17,471	63.3%	91.6%	3,483
80+	63.7%	80.5%	52,487	69.7%	90.2%	6,001

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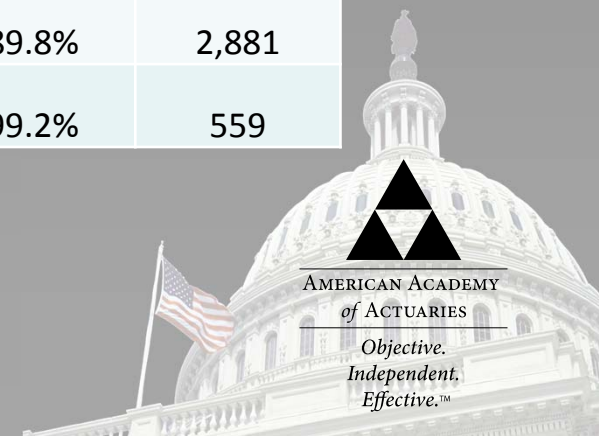


Issue Age/Lifetime Benefit Period/Excludes Durations 1 - 5

Lifetime BP - Excludes Durations 1 - 5						
	Female			Male		
Issue	1994 GAM	2012 IAM		1994 GAM	2012 IAM	
Age	A:E	A:E	Deaths	A:E	A:E	Deaths
0-59	42.6%	65.8%	592	52.2%	65.0%	796
60-64	51.5%	94.3%	1,848	58.7%	81.0%	2,014
65-69	58.7%	104.0%	3,806	64.8%	91.5%	3,823
70-74	62.1%	102.0%	3,005	63.7%	88.1%	3,407
75-79	72.0%	105.9%	1,848	71.0%	89.8%	2,881
80+	78.6%	102.6%	241	83.3%	99.2%	559

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Update to NAIC LTC Actuarial Working Group

August 14, 2015

Warren Jones, MAAA, FSA, FCA
Chairperson, LTC Terminations Work Group



Table Used

- Implied lapse rates calculated using:
 - 2012 Individual Annuity Mortality (IAM) Basic Table (without margin)
 - 2012 IAM is age-near-birthday basis
 - LTC is sold on age-last-birthday basis
 - Total terminations less validated mortality used to address issue of miscoded deaths



Data

- LTC intercompany experience data 1984-2007
- Work group specified data that was compiled by the Medical Information Bureau (MIB)
- Data summarized and company de-identified by SOA
- Limited to experience years 1993 - 2006 to address data quality
- Work group believes that the resulting experience is an accurate representation of LTC insured lapse



Granularity of Analysis

- Individual vs. group
- Policy duration
- Without mortality selection vs. with mortality selection
- Top 9 companies by exposure vs. all companies
- Excludes lifetime benefit period (BP) and issue ages 80+
- Attained age group for Individual business



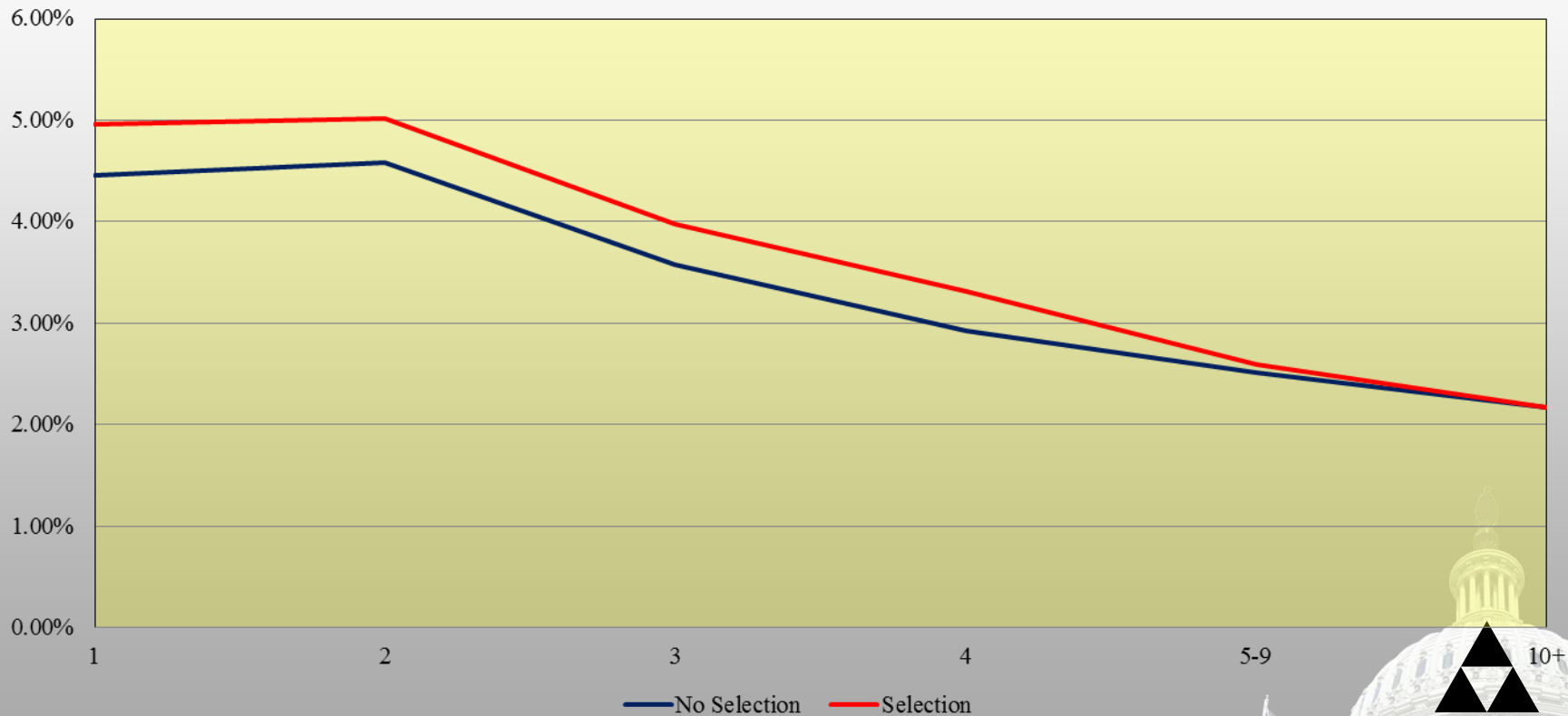
Mortality Selection

- Underwriting selection is observed in actual deaths
- Used mortality selection from validation of 2012 IAM
- With mortality selection is better measure of lapse
- Without mortality selection provides better measure of total terminations

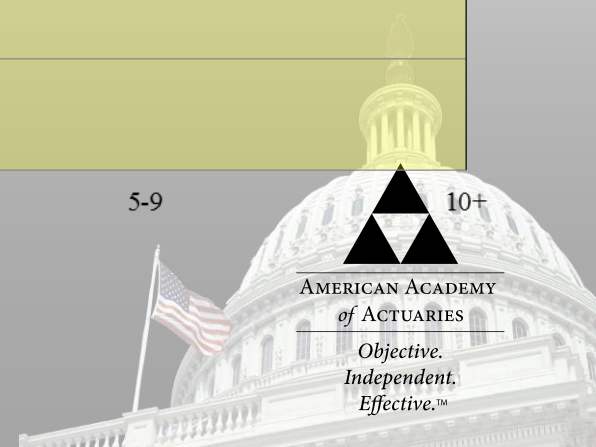


Individual for Top 9 Companies

Top 9 Companies Individual Business Exclude Lifetime BP and IA 80+

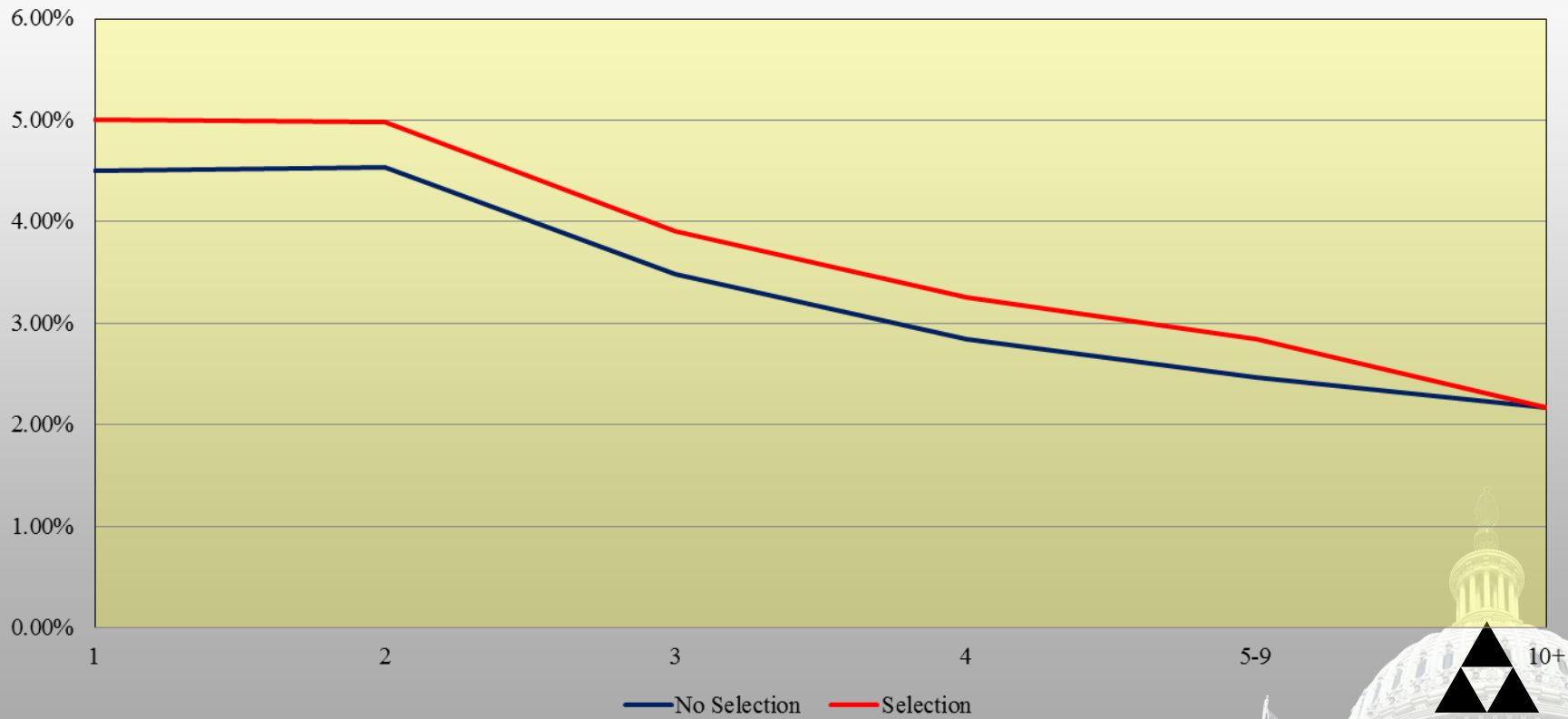


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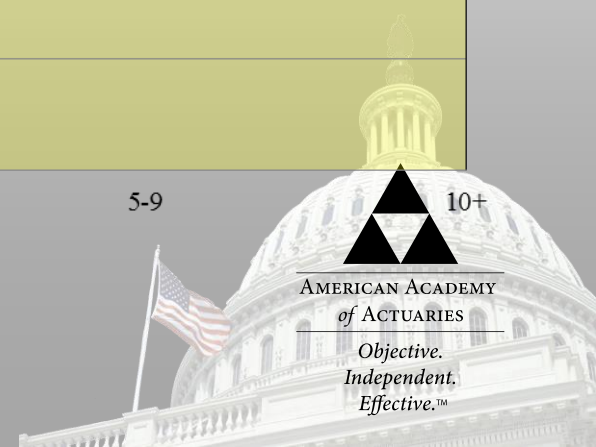


Individual for All Companies

**All Companies
Individual Business
Exclude Lifetime BP and IA 80+**

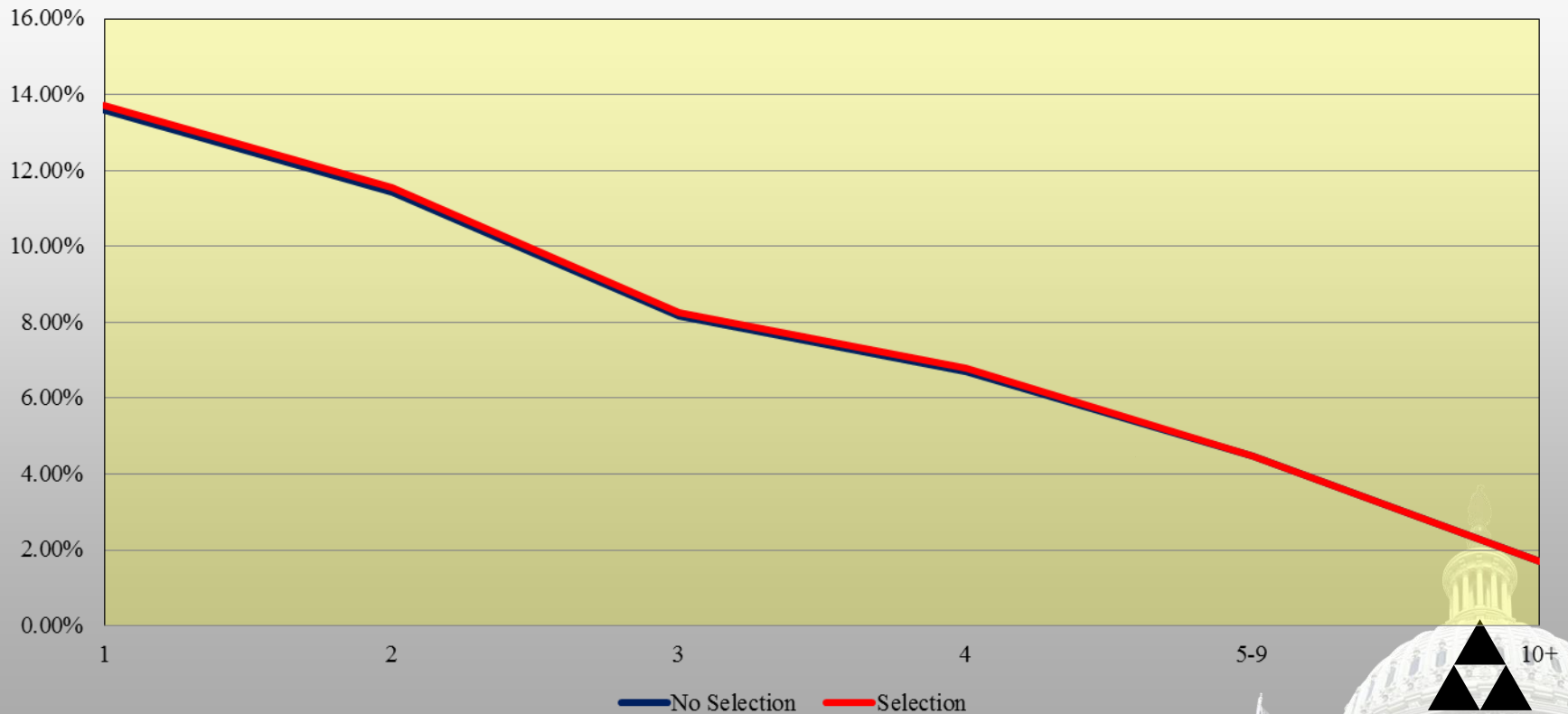


Data compiled by MIB



Group for Top 9 Companies

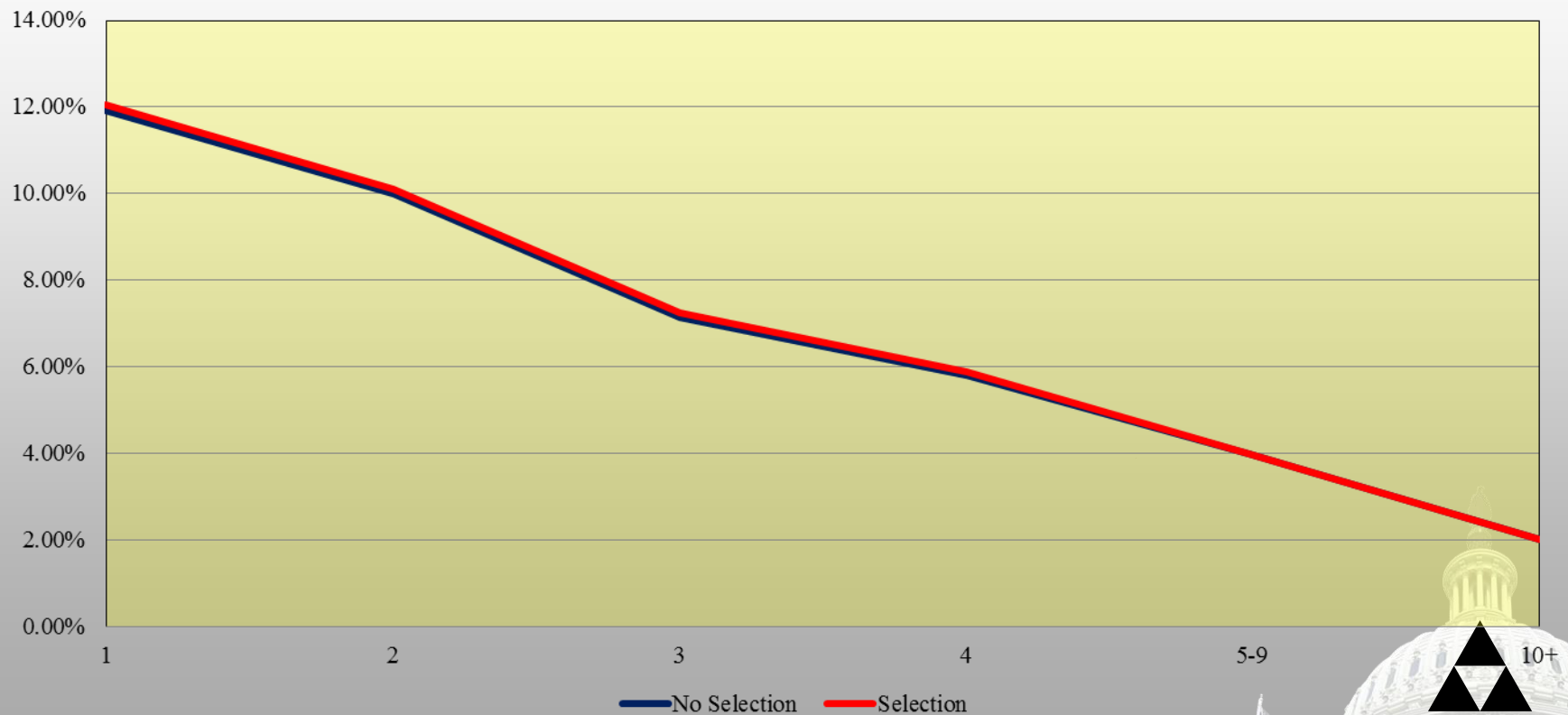
Top 9 Companies Group Business Exclude Lifetime BP and IA 80+



Data compiled by MIB

Group for All Companies

All Companies Group Business Exclude Lifetime BP and IA 80+



Data compiled by MIB

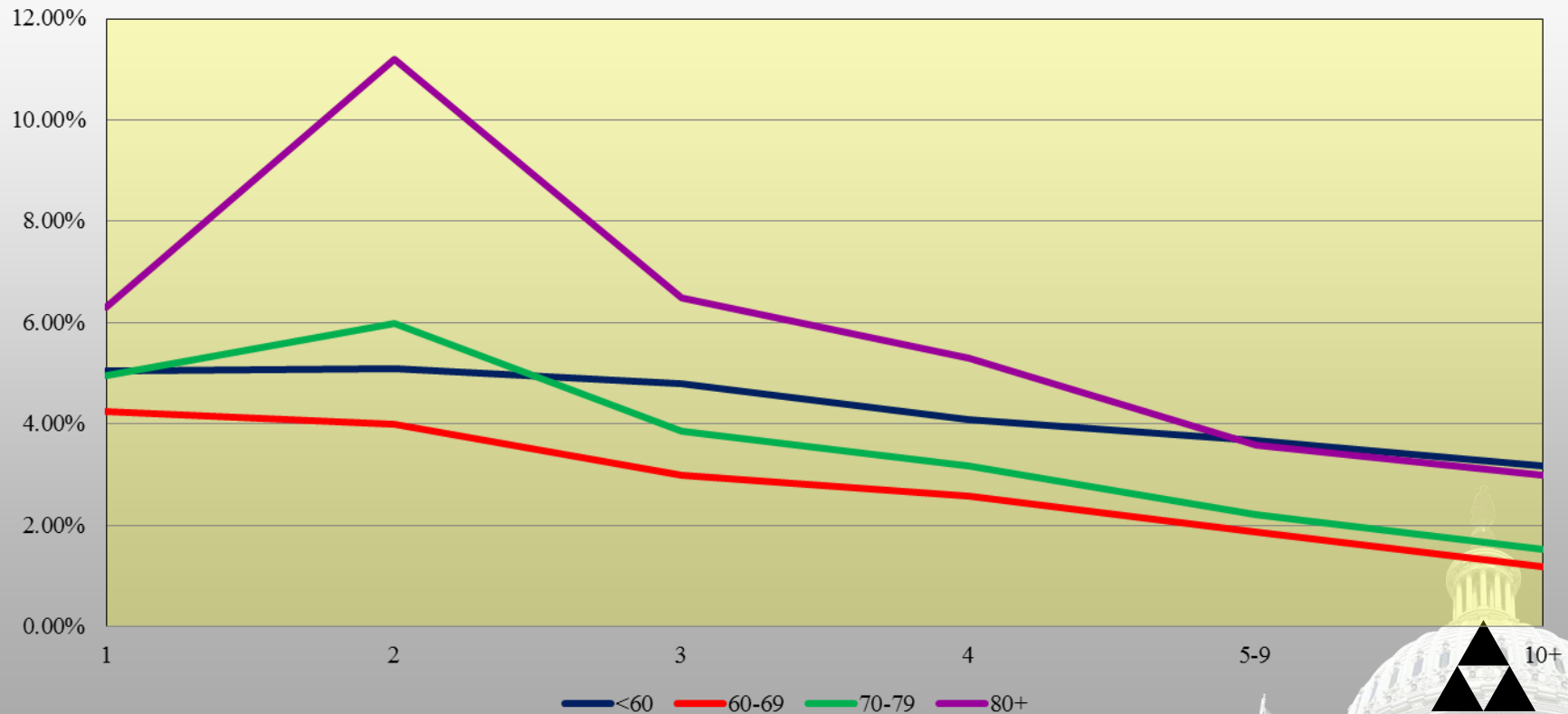
Individual for Attained Age Group

- All companies
- Includes lifetime BP and issue ages 80+
- Oldest and youngest attained age groups have higher lapse rates



Individual for Attained Age Group

All Companies - Attained Age Groups Individual Business With Mortality Selection



Data compiled by MIB

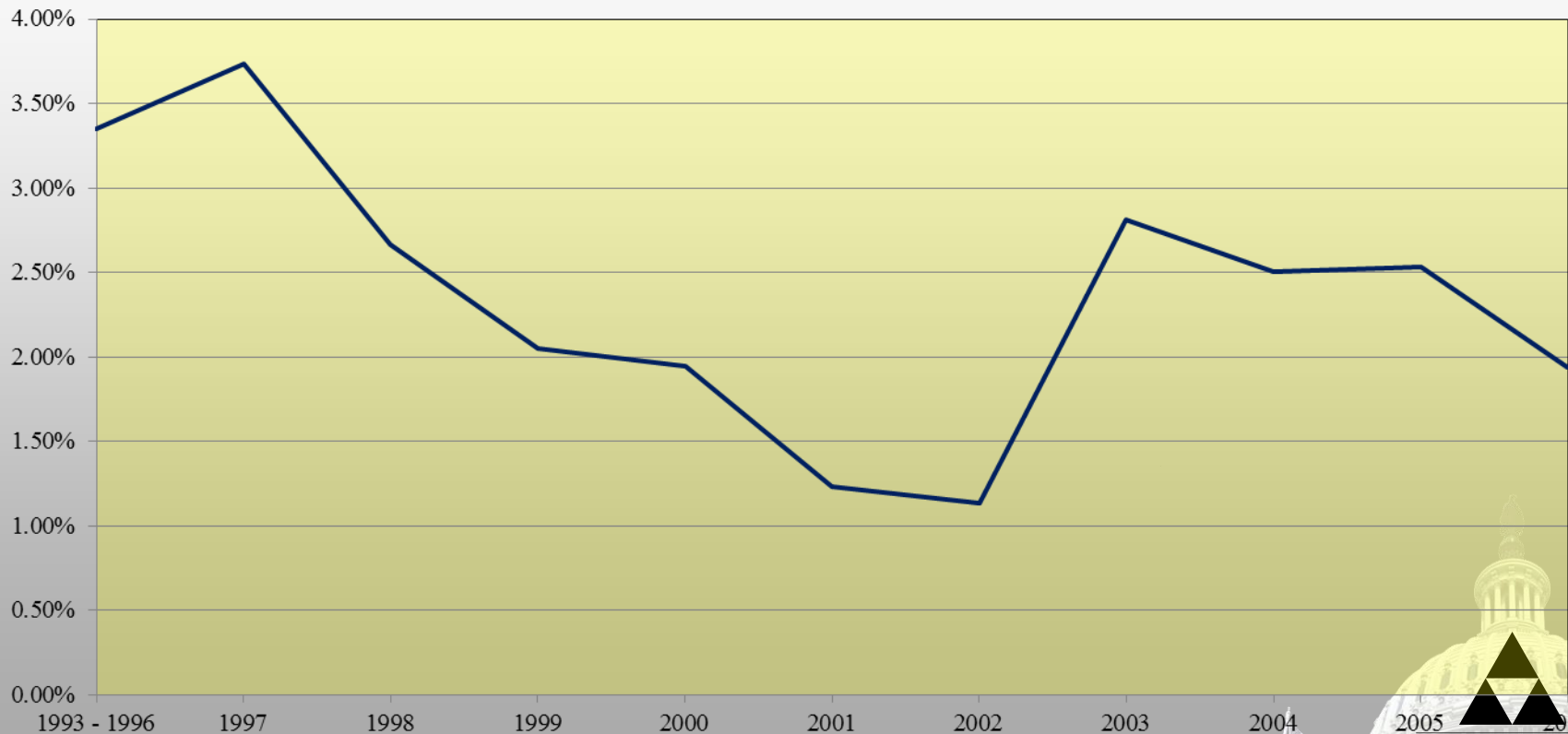
Individual By Calendar Year

- All companies
- Includes lifetime BP and issue ages 80+
- Policy durations 10+



Individual By Calendar Year

All Companies - Calendar Year Individual Business Policy Durations 10+



Data compiled by MIB

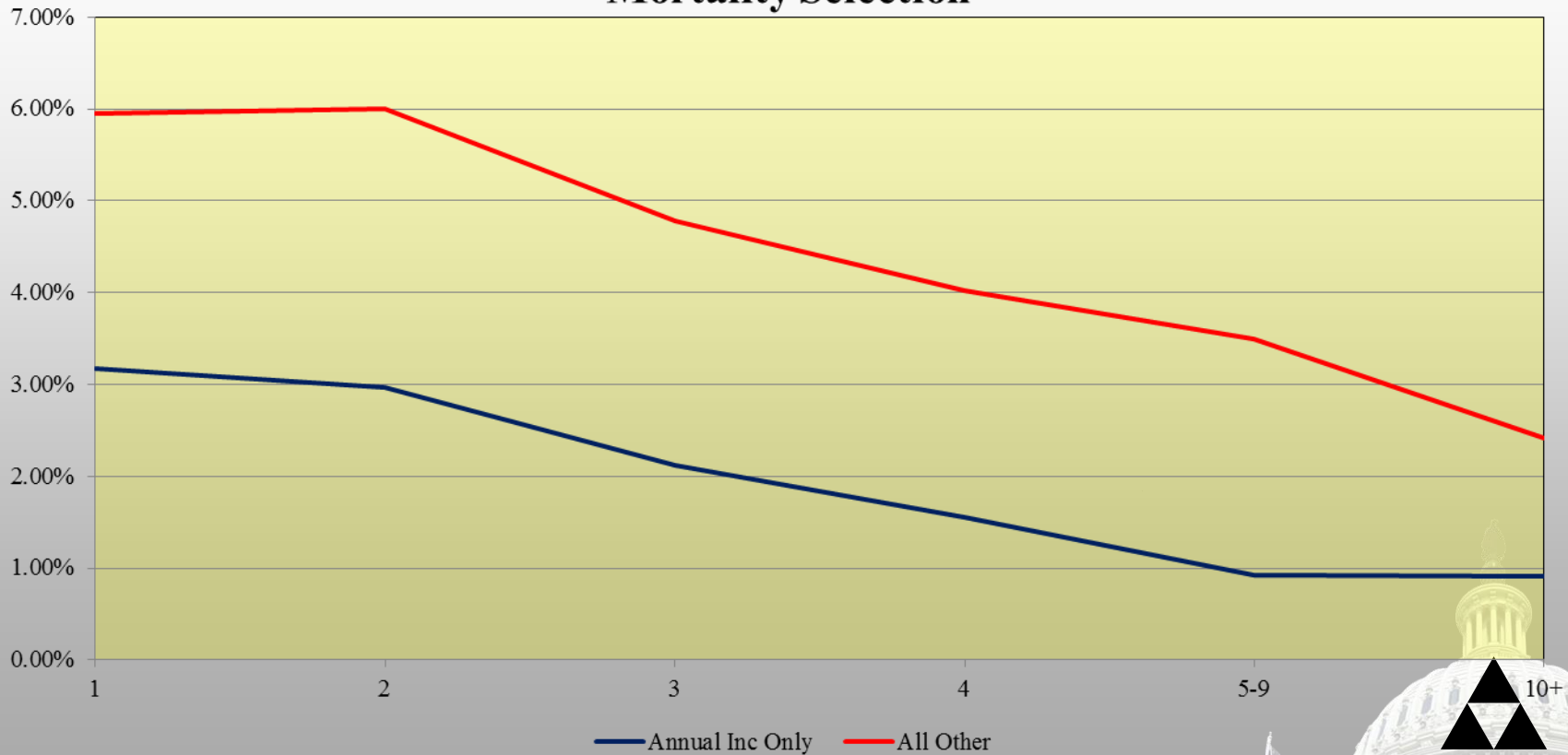
Individual By Inflation Benefit

- All companies
- Excludes lifetime BP and issue ages 80+
- Annual inflation vs. all other by policy duration

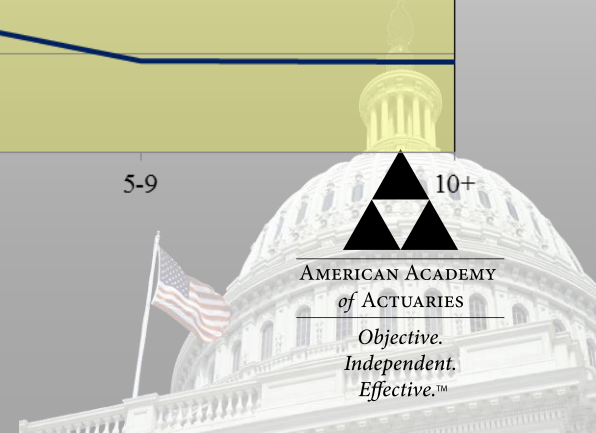


Individual By Inflation Benefit

All Companies - Inflation Benefit Individual Business Mortality Selection



Data compiled by MIB



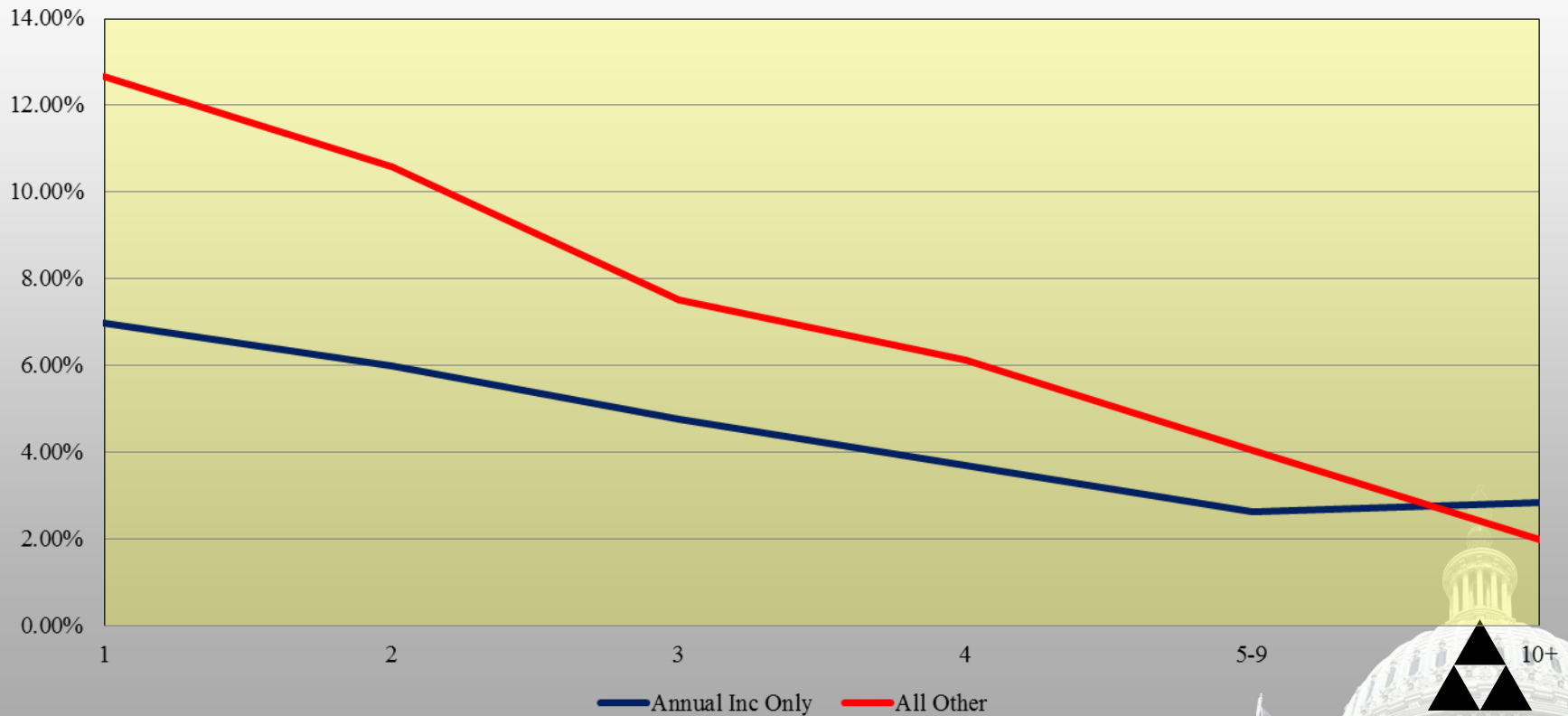
Group By Inflation Benefit

- All companies
- Excludes lifetime BP and Issue ages 80+
- Annual inflation vs. all other by policy duration



Group By Inflation Benefit

All Companies - Inflation Benefit Group Business With Mortality Selection



Data compiled by MIB

Appendix



Individual Top 9 Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

No Mortality Selection

Duration	All	Exclude	Exclude	Exclude
		Lifetime BP	IA 80+	LT BP & IA 80+
1	4.31%	4.42%	4.33%	4.46%
2	4.88%	4.83%	4.66%	4.59%
3	3.70%	3.66%	3.63%	3.58%
4	3.06%	2.99%	3.00%	2.93%
5-9	2.54%	2.59%	2.47%	2.51%
10+	2.17%	2.25%	2.10%	2.17%

Data compiled by MIB

Individual Top 9 Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

With Mortality Selection

Duration	Mortality Selection	All	Exclude Lifetime BP	Exclude IA 80+	Exclude LT BP & IA 80+
1	33.9%	4.89%	5.02%	4.82%	4.96%
2	49.3%	5.36%	5.33%	5.07%	5.01%
3	59.1%	4.15%	4.12%	4.01%	3.98%
4	65.6%	3.49%	3.44%	3.37%	3.31%
5-9	77.6%	2.64%	2.69%	2.55%	2.59%
10+	100.0%	2.17%	2.25%	2.10%	2.17%

Data compiled by MIB

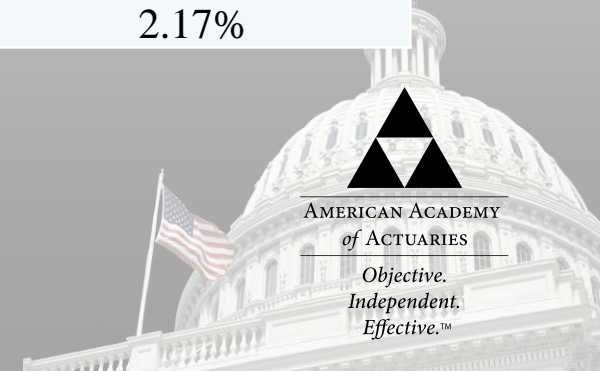
Individual All Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

No Mortality Selection

Duration	All	Exclude	Exclude	Exclude
		Lifetime BP	IA 80+	LT BP & IA 80+
1	4.21%	4.46%	4.23%	4.50%
2	4.70%	4.75%	4.50%	4.54%
3	3.48%	3.55%	3.42%	3.48%
4	2.86%	2.89%	2.82%	2.84%
5-9	2.42%	2.54%	2.36%	2.46%
10+	2.13%	2.24%	2.06%	2.17%

Data compiled by MIB



Individual All Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

With Mortality Selection

Duration	Mortality Selection	All	Exclude Lifetime BP	Exclude IA 80+	Exclude LT BP & IA 80+
1	32.60%	4.77%	5.05%	4.72%	5.00%
2	47.40%	5.18%	5.27%	4.93%	4.98%
3	56.20%	3.95%	4.04%	3.83%	3.91%
4	62.70%	3.32%	3.38%	3.21%	3.25%
5-9	76.10%	2.83%	2.98%	2.72%	2.84%
10+	100.00%	2.13%	2.24%	2.06%	2.17%

Data compiled by MIB



Group Top 9 Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

No Mortality Selection

Duration	All	Exclude	Exclude	Exclude
		Lifetime BP	IA 80+	LT BP & IA 80+
1	13.59%	13.58%	13.60%	13.59%
2	11.45%	11.43%	11.46%	11.44%
3	8.20%	8.15%	8.20%	8.16%
4	6.76%	6.70%	6.77%	6.71%
5-9	4.50%	4.47%	4.51%	4.48%
10+	1.72%	1.69%	1.72%	1.68%

Data compiled by MIB

Group Top 9 Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

With Mortality Selection

Duration	Selection	All	Exclude	Exclude	Exclude
			Lifetime BP	IA 80+	LT BP & IA 80+
1	44.3%	13.71%	13.70%	13.72%	13.71%
2	60.8%	11.56%	11.53%	11.57%	11.54%
3	69.1%	8.30%	8.25%	8.30%	8.26%
4	75.3%	6.86%	6.80%	6.86%	6.80%
5-9	100.0%	4.50%	4.47%	4.51%	4.48%
10+	100.0%	1.72%	1.69%	1.72%	1.68%

Data compiled by MIB

Group All Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

No Mortality Selection

Duration	All	Exclude	Exclude	Exclude
		Lifetime BP	IA 80+	LT BP & IA 80+
1	11.95%	11.91%	11.96%	11.92%
2	10.02%	9.98%	10.03%	9.99%
3	7.18%	7.14%	7.19%	7.15%
4	5.86%	5.80%	5.86%	5.80%
5-9	3.98%	3.95%	3.99%	3.95%
10+	2.03%	2.01%	2.03%	2.01%

Data compiled by MIB

Group All Companies

Implied Lapse Rates – Total Terminations Less 2012 IAM Mortality

With Mortality Selection

Duration	Selection	All	Exclude Lifetime BP	Exclude IA 80+	Exclude LT BP & IA 80+
1	42.7%	12.08%	12.04%	12.09%	12.05%
2	63.6%	10.12%	10.09%	10.13%	10.09%
3	71.7%	7.27%	7.24%	7.28%	7.25%
4	78.8%	5.94%	5.89%	5.94%	5.89%
5-9	94.3%	3.99%	3.95%	3.99%	3.96%
10+	100.0%	2.03%	2.01%	2.03%	2.01%

Data compiled by MIB

Individual Lapse Counts

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality

Excludes Lifetime BP and Issue Ages 80+

Duration	Top 9 Companies		All Companies	
	Selection	No Selection	Selection	No Selection
1	174,477	156,788	199,632	179,503
2	154,026	140,855	172,818	157,530
3	104,206	93,827	114,956	102,580
4	72,991	64,554	80,424	70,214
5-9	164,689	159,443	200,054	173,285
10+	53,634	53,634	57,539	57,539

Data compiled by MIB



Group Lapse Counts

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality
Excludes Lifetime BP and Issue Ages 80+

Duration	Top 9 Companies		All Companies	
	Selection	No Selection	Selection	No Selection
1	181,849	180,229	199,596	197,489
2	118,975	117,921	133,815	132,461
3	67,350	66,555	76,991	75,936
4	45,207	44,623	50,968	50,237
5-9	85,550	85,550	95,956	95,823
10+	15,543	15,543	22,440	22,440

Data compiled by MIB

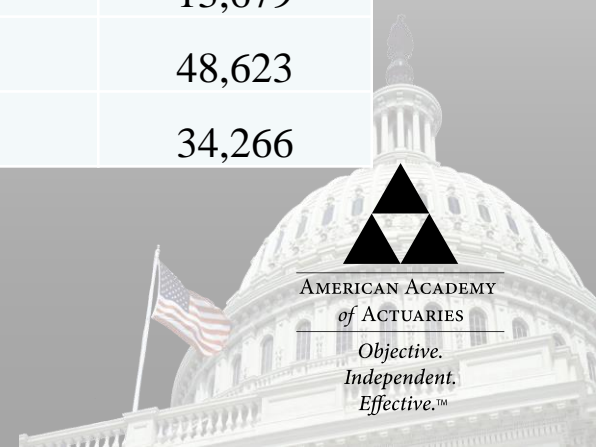
Individual Lapse Counts By Attained Age Groups

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality

Includes Lifetime BP and Issue Ages 80+

Duration	< 60	60 - 69	70 - 79	80 - 89
1	96,265	80,961	51,792	11,076
2	73,528	68,454	63,414	24,464
3	50,851	43,968	40,214	15,351
4	29,902	31,317	32,355	13,679
5 - 9	45,050	49,109	87,535	48,623
10+	7,424	4,588	21,681	34,266

Data compiled by MIB



Individual Lapse Counts By Calendar Year – Policy Duration 10+

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality
Includes Lifetime BP and Issue Ages 80+
Policy Duration 10+

Calendar Year	Count
1993 - 1996	2,302
1997	3,152
1998	4,224
1999	5,151
2000	6,714
2001	5,225
2002	4,347
2003	12,427
2004	12,708
2005	6,063
2006	5,645

Data compiled by MIB



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Individual Lapse Counts by Inflation

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality
 All Companies - With Mortality Selection
 Excludes Lifetime BP and Issue Ages 80+

Duration	Ann Inc Only	All Other	Total
1	43,207	156,425	199,632
2	34,823	137,995	172,818
3	20,459	94,497	114,956
4	11,874	68,550	80,424
5 - 9	16,436	183,617	200,054
10+	3,986	53,552	57,539

Data compiled by MIB



Group Lapse Counts By Inflation

Count of Implied Lapses – Total Terminations Less 2012 IAM Mortality
 All Companies - With Mortality Selection
 Excludes Lifetime BP and Issue Ages 80+

Duration	Ann Inc Only	All Other	Total
1	12,349	187,247	199,596
2	8,505	125,310	133,815
3	4,916	72,075	76,991
4	3,033	47,935	50,968
5-9	4,418	91,538	95,956
10+	620	21,820	22,440

Data compiled by MIB



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