

**Draft: 8/31/12**

**The NAIC solicits comments on this draft. Comments should be sent to Reggie Mazyck, NAIC, at [RMazyck@naic.org](mailto:RMazyck@naic.org) , and Eric King, NAIC, at [EKing@naic.org](mailto:EKing@naic.org) by 9/30/12.**

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# SOCIETY OF ACTUARIES

July 30, 2012

To: Mike Boerner, NAIC

From: Steven Siegel  
Society of Actuaries (SOA) Research Actuary

cc: Sam Gutterman, Tim Harris co-chairs, SOA Committee on Life Insurance Company Expenses (CLICE)

Re: SOA 2013 Generally Recognized Expense Table (GRET) Analysis

As in previous years, the Society of Actuaries expresses its thanks to the NAIC for its help and responsiveness in providing Annual Statement expense data for our 2013 GRET Analysis for use with individual life insurance sales illustrations (based on expense and expense related information reported on companies' 2010 and 2011 Annual Statements). This analysis has been completed to assist the Life Actuarial Task Force (LATF) in its consideration of potential revisions to the GRET that could become effective for calendar year 2013. This memo describes our analysis and resulting calculations.

NAIC staff provided Annual Statement data by life insurance company for calendar years 2010 and 2011. This included data from 826 companies in 2010 and 808 companies in 2011. The primary reason for the lower number of companies in 2011 is that some companies had not submitted their data to the NAIC by the date the data extract was provided to us. Note that this difference in number of companies is consistent with prior experience with this data. Because we subsequently excluded certain companies' experience because of outlier and reinsurance exclusion tests, the absence of these late reporting companies is not expected to significantly affect the results. Of the total companies, 244 passed the outlier and reinsurance exclusion tests and were included as a base for the GRET factors.

The methodology we followed for calculating GRET factors based on this data is similar to that followed last year. Please refer to the submission for the previous year for a more complete description of the overall process followed. The following is a description of several items that were done this year:

- (1) A two stage survey of information regarding the distribution channels<sup>1</sup> from each company that passed our criteria in order to increase the number of companies for which we have distribution channel information. This additional survey was issued in an attempt to reduce the number of companies that were included in the 'other' distribution channel category. This reduced the number of companies in the 'other' category from 124 (out of

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<sup>1</sup> A description of distribution channels used in this and prior reports is given in Appendix 1



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299 in 2009) to 118 (out of 288 in 2010). In 2011 there were only 89 (out of 244 in 2011) such companies.

- (2) The overall approach reflects the percentage of business written by each category (for example, if 50% of a company's business was derived from category A and 50% was from category B, 50% of that company's factors was used in obtaining the average of the factors for both category A and category B). Note that each company's aggregate values were used for each category, as channel specific expenses and units are not available. Of the 244 companies included in the 2010 and 2011 results, 36 companies indicated that they had more than one distribution channel.

In order to calculate updated GRET factors, the average of the two most recent years (2010 and 2011) of Annual Statement data was used. For each company an actual to expected ratio is calculated. Seed factors derived from a previous LOMA expense study are used to compute expected expenses (note that the seeds for all categories other than Branch Office are the same). These seed factors were used to allocate expenses between acquisition and maintenance expenses and among the three acquisition expense factors. Companies are excluded from the analysis if their actual to expected ratios are considered outliers, often due to low business volume or they have a relatively large amount of ceded reinsurance. To derive the overall GRET factors, the unweighted average of the remaining companies' actual to expected ratios for each respective category is calculated. The resulting factors are rounded as shown in the tables.

In an effort to reduce volatility in the results, two additional steps are included in the methodology. First, only companies that passed all outlier tests for *both* 2010 and 2011 are included in the averages in the following tables; that is, the same set of companies for 2010 and 2011 are used for all categories. Companies that pass the outlier tests represent 44.6% of industry first year premium. Secondly, a limit of plus or minus 10% (before rounding) has been imposed on any change in GRET factors from the prior year. This year, this limitation was applied for the Home Service and PPGA categories. Without this limitation, the factor changes for Home Service and PPGA would be approximately 23% and 17%, respectively.

Employing this methodology results in the proposed 2013 GRET values, as shown in Table 1 below. The current 2012 GRET factors and the percentage change represented by each proposed factor are shown in Table 2.

Further characteristics of the type of companies represented in each category are included in Table 1, including the average premium per policy issued and average face amount (\$000s) per policy issued.



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**TABLE 1**  
**PROPOSED 2013 GRET FACTORS, based on average of 2010/2011 data**

Distribution Channel	Acquisition Per Policy	Acquisition Per Unit	Acquisition Per Prem	Maintenance Per Policy	Company Count*	Average Premium Per Policy Issued During Year	Average Face Amount Per Policy Issued During Year
Branch Office	66	1.2	.73	33	15	\$ 3,366	\$ 433
Direct Marketing	82	1.5	.45	41	13	1,127	40
Home Service	86	1.5	.47	44	15	612	18
Career General Agency	96	1.7	.53	48	31	1,907	147
Brokerage	96	1.7	.53	48	18	4,649	151
PPGA	101	1.8	.56	51	46	1,653	99
Multiline	141	2.5	.78	71	17	1,242	161
Other	90	1.6	.49	45	89	2,196	83
Total					244		

**TABLE 2**  
**Current 2012 Factors**

Distribution Channel	Acquisition Per Policy	Acquisition Per Unit	Acquisition Per Prem	Maintenance Per Policy
Branch Office	64	1.10	0.71	32
Direct Marketing	80	1.40	0.45	41
Home Service	78	1.40	0.43	40
Career General Agency	101	1.80	0.55	50
Brokerage	98	1.70	0.54	49
PPGA	92	1.60	0.51	46
Multiline	127	2.30	0.70	64
Other	85	1.50	0.47	42

**TABLE 3**  
**Percent Change between the proposed 2013 and current 2012 factors**

Distribution Channel	Acquisition Per Policy	Acquisition Per Unit	Acquisition Per Prem	Maintenance Per Policy
Branch Office	3%	9%	3%	3%
Direct Marketing	2	7	0	0
Home Service	10	7	9	10
Career General Agency	-5	-6	-4	-4
Brokerage	-2	0	-2	-2
PPGA	10	13	10	11
Multiline	11	9	11	11
Other	6	7	5	7



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A question raised by LATF in 2011 was what are the distribution of results by distribution channel. Appendix 2 contains such a distribution for (1) all companies that had an Annual Statement filed with the NAIC at the time that data was provided for 2010 and 2011 and (2) for those companies included in the GRET calculation. Clearly a wide range of experience exists.

Another question raised by LATF related to the seed used in the GRET calculations. The currently used seed, as mentioned above, was derived from an old study conducted by LOMA. This seed has been used in the calculation of all prior GRET calculations. For the last decade the Society of Actuaries has conducted an annual study of life insurance company expenses for individual life and annuity contracts sold in the United States. The results of the two most recently published studies (2007 and 2008) have resulted in unit expenses allocated using the same metrics (per policy, percent of premium and per unit of insurance) as is used in the GRET calculations, although an insufficient number of contributors to permit a comparison by distribution channel. The findings in these studies, compared with the LOMA seed, are shown in Appendix 3.

It is clear that the relative size of the seed by metric currently differs between the two sources. If it is desired to move toward more recent parameter factors, a sudden shift may have a significant effect for many companies that use the GRET. Although the limit of annual change (10%) would reduce this effect, we believe that such a change should not be taken without allowing study by and discussion with those companies affected. In addition, since not only the relativity to the seed would change (the current approach), but also the relativity among the unit parameters would be affected, there are more than one approach that could be taken to setting the maximum annual change, it is not straightforward to determine the effect this change would represent, that would vary by product type for the companies affected. Thus, we recommend that further information be developed (updated by the upcoming 2009 SOA expense study), and exposed in the next six months as to whether it would be desirable to make a change and what an appropriate and acceptable method of change would be (e.g., a transition over a three or five year period).

We hope you find this information helpful and sufficient for LATF's consideration of potential changes to the GRET table.

If you require further analysis or have questions, please contact me at 847-706-3578.

Sincerely,

Steven Siegel  
Society of Actuaries Research Actuary



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## Appendix 1 -- Distribution channels

The following is a description of distribution channels used in the development of GRET values:

- **Branch Office** - A company or division which operates an agency building system featuring field management that are employees although their compensation may be largely based on production. The company provides significant employee benefits to field employees in addition to direct compensation.
- **Direct Marketing** - A company or division that markets directly to the public through printed or other media. No direct field compensation is involved.
- **Home Service** - A company or division that markets smaller insurance policies through an organization that resembles the Branch Office system in organizational and compensation structure but focuses on smaller policies and agent collections of premiums. Note that this request focuses only on the distribution of ordinary life business, not considering any industrial business written by a company.
- **Career General Agency** - An agency-building system using full-time agents who report to managers who are company employees or general agents who are independent contractors.
- **Brokerage** - A system that uses independent producers (brokers) who are contracted with multiple companies. The bulk of their income comes from overrides rather than personal production. This includes managing general agents and independent marketing organizations.
- **PPGA** - A system that uses independent personal producing general agents (PPGAs) who are often contracted with multiple companies. The bulk of their income comes from personal production rather than overrides.
- **Multi-Line** - A system that uses full-time agents licensed to write property-casualty, life, health, annuities, and equity products and who primarily represent one company.
- **Other** - Companies or divisions other than those described above. If you choose this category, please provide a brief description of the distribution system for your company's ordinary life business.



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## Appendix 2 -- Distribution of unit expenses by distribution channels

### 2013 GRET recommendation study

#### Distribution of companies by distribution channel, based on Annual Statements of 2010 and 2011

##### All companies

2010	Branch Office (a)	Direct Marketing (b)	Home Service (c)	Career Gen Agen (d)	Brokerage (e)	PPGA (f)	Multi Line (g)	Other (h)	Total
A/E Range									
<=50%	14	15	6	13	30	20	6	226	330
>50<=75%	6	2	2	7	9	8	1	24	59
75<90%	4	1	1	4	7	7	0	15	39
90<100%	3	1	0	5	6	2	1	10	28
100<110%	2	1	1	3	1	6	0	3	17
110<125%	3	1	1	3	6	8	0	12	34
125<150%	3	2	2	5	12	11	2	24	61
150+%	14	18	10	24	30	44	16	102	258
Total	49	41	23	64	101	106	26	416	826

2011	Branch Office (a)	Direct Marketing (b)	Home Service (c)	Career Gen Agen (d)	Brokerage (e)	PPGA (f)	Multi Line (g)	Other (h)	Total
A/E Range									
<=50%	16	13	7	14	26	13	6	218	313
>50<=75%	8	2	2	7	12	10	1	16	58
75<90%	1	2	0	1	5	8	1	23	41
90<100%	1	0	0	4	8	3	0	6	22
100<110%	2	1	1	3	4	5	0	3	19
110<125%	2	2	3	4	3	10	0	11	35
125<150%	2	2	1	3	6	9	2	21	46
150+%	17	19	9	28	35	44	16	106	274
Total	49	41	23	64	99	102	26	404	808



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## 2013 GRET recommendation study

### Distribution of companies by distribution channel, based on Annual Statements of 2010 and 2011

#### Matched qualified companies

2010	Branch Office (a)	Direct Marketing (b)	Home Service (c)	Career Gen Agen (d)	Brokerage (e)	PPGA (f)	Multi Line (g)	Other (h)	Total
A/E Range									
<=50%	3	2	0	2	1	2	0	10	20
>50<=75%	1	2	2	4	1	4	1	13	28
75<90%	3	1	1	1	4	5	0	8	23
90<100%	3	1	0	2	0	0	1	2	9
100<110%	1	0	1	3	0	4	0	1	10
110<125%	2	0	1	3	2	4	0	8	20
125<150%	1	2	2	4	3	6	2	15	35
150+%	1	5	8	12	7	21	13	31	98
Total	15	13	15	31	18	46	17	88	243

2011	Branch Office (a)	Direct Marketing (b)	Home Service (c)	Career Gen Agen (d)	Brokerage (e)	PPGA (f)	Multi Line (g)	Other (h)	Total
A/E Range									
<=50%	3	2	0	2	2	2	0	7	18
>50<=75%	1	1	2	4	3	4	1	10	26
75<90%	4	1	0	1	0	2	1	14	23
90<100%	0	0	0	2	2	1	0	3	8
100<110%	0	0	1	2	2	3	0	1	9
110<125%	1	1	3	3	1	6	0	4	19
125<150%	2	2	1	3	0	6	2	14	30
150+%	4	6	8	14	8	22	13	35	110
Total	15	13	15	31	18	46	17	88	243





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## Appendix 3 -- Seed calculations

### SOA CLICE studies

2007	# of companies	/ policy	Acquisition		Non-acquisition	
			/\$1,000	%Premium	/ policy	/ claim
Term	23	\$ 173	\$ 0.52	46.0%	\$ 59	\$ 149
Perm	24	\$ 219	\$ 1.34	50.3%	\$ 58	\$ 112
Variable	12	\$ 244	\$ 0.88	32.2%	\$ 237	\$ 272
Total	24	\$ 196	\$ 0.73	47.3%	\$ 63	\$ 119

  

2008	# of companies	/ policy	Acquisition		Non-acquisition	
			/\$1,000	%Premium	/ policy	/ claim
Term	16	\$ 154	\$ 0.73	34.9%	\$ 56	\$ 232
Perm	19	\$ 157	\$ 1.64	31.0%	\$ 48	\$ 147
Variable	8	\$ 365	\$ 1.63	37.6%	\$ 147	\$ 337
Total	21	\$ 159	\$ 0.96	32.5%	\$ 57	\$ 158

  

Average 2007&8	# of companies	/ policy	Acquisition		Non-acquisition	
			/\$1,000	%Premium	/ policy	/ claim
Term		\$ 163.50	\$ 0.63	40.5%	\$ 57.50	\$190.50
Perm		\$ 188.00	\$ 1.49	40.7%	\$ 53.00	\$129.50
Variable		\$ 304.50	\$ 1.26	34.9%	\$192.00	\$304.50
Total		\$ 177.50	\$ 0.85	39.9%	\$ 60.00	\$138.50

### LOMA Seed Factors used in 2013 GRET recommendations

Code	Description	Acquisition	Acquisition	Acquisition	Maintenance
		Per Policy	Per FA unit	Per Prem	Per Policy
a	Branch Office	63.13	1.123	0.699	31.59
b	Direct Marketing	63.13	1.123	0.348	31.59
c	Home Service	63.13	1.123	0.348	31.59
d	Career General Agency	63.13	1.123	0.348	31.59
e	Brokerage	63.13	1.123	0.348	31.59
f	PPGA	63.13	1.123	0.348	31.59
g	Multiline	63.13	1.123	0.348	31.59
h	Other	63.13	1.123	0.348	31.59

### SOA studies as a % of LOMA seed (other than branch office)

	/ policy	Acquisition /\$1,000	%Premium	Non-acquisition / policy
2007	310.5%	65.0%	135.9%	199.4%
2008	251.9%	85.5%	93.4%	180.4%
2007&2008	281.2%	75.2%	114.7%	189.9%