

# Memorandum

From: Div 66 Actuarial  
Michael Tranfaglia  
Emily Turek

To: E. Allen, S. Leeret, B. Harris, R. D'Alfonso, J. Parker, R. O'Neil, G. Scarborough

CC: J. Johnson, K. Hanna, J. Heaney, C. Steinbach, R. Cole, B. McCoy,  
I. Robbin, A. Markham, J. Stracher

Date: 8/18/2014

Re: Division 66 - 2014 Preferred Aviation US Profitability Study

## I. Executive Summary

### A. Introduction -

The Preferred Aviation program offers commercial property, general liability, and auto liability for aviation related risks. The analysis is segmented by line of business into General Liability, Auto Liability, Property, and Auto Physical Damage.

Last year's analysis resulted in an overall PY 2014 Ultimate Loss Ratio indication of 39.8% which yielded a RAP neutral rate need of -33.6% based on 2013 RAP values.

The year to date rate change for 2014 is -0.5% for all lines of business.

### B. Summary of Results

IL and LAE evaluated as of: 2<sup>nd</sup> Quarter 2014  
Currency Employed: USD

#### Exhibit 1:

Line of Business	Sub-Segment	Policy Year	2014		Projected		RAP	
			Budgeted GWP (000)	Ultimate IL and LAE Ratio*	Combined Ratio*	Breakeven Target Combined Ratio	RAP Rate Need	Projected RAP \$ **
GL	N/A	2014	313	50.8%	85.8%	98.2%	-18.7%	26
AL	N/A	2014	4,592	54.0%	84.0%	97.8%	-19.6%	423
Property	N/A	2014	10,038	40.7%	75.6%	92.7%	-28.3%	1,208
APD	N/A	2014	751	57.0%	87.5%	97.3%	-13.7%	49
TOTAL			15,694	45.5%	78.8%	94.5%	-24.5%	1,705

\* Includes PY 2014 rate change achieved

\*\* Assumes a tax rate of 35%

II. Discussion of Material Findings- The program remains very profitable despite prior policy year adverse development of approximately 2% from the prior profitability study performed as of 1Q13. The deterioration in Property line was partially offset by better than expected experience in AL. In 2013 the property line of business had a large paid loss (over \$800K). This loss, associated with the Worldwide Aeros policy, was paid in error. This was taken into account when selections were made.

## III. Assumptions/Limitations/Data Quality/Other

A. Assumptions - For purposes of this analysis, the loss ratio indications are based on a 3.5% trend assumption for GL, 4% for AL, and 0.0% for Property and APD. Division 66 factors in addition to program experience were the basis for the selected development patterns.

B. Limitations/Weakness - The projected PY 2014 loss ratio shown in Exhibit 1 of this report assumes that the YTD rate change achieved in 2014 will be consistent throughout the remainder of the year. To the extent that the annual rate change does not equal the YTD rate change, then the results of this report will vary. Besides that, there are no significant limitations/weaknesses with regards to this study outside of standard actuarial caveats that normally apply to projecting future losses. These include, but are not limited to, actual emerged actuarial parameters (LDF's, ILFs, ELR's, trend, etc.) not being in line with selected parameters; miss-coding/inaccurate representation of the data relied upon in this analysis; and future regulatory/judicial changes affecting the frequency/severity of the results.

Data Quality - The data for all lines of business in this analysis is pulled from Sandbox which aggregates the data from CRS.

C. Other - Data from the previous PA was included to maximize the credibility of the analysis.

#### IV. **Methodology**

A review of several claim diagnostics shows no clear evidence of case reserve strengthening for this book of business (no consistent increase in average outstanding or decrease in paid to incurred ratios). In addition, a review of implied claim disposal rate does not show any clear evidence of claims closure rate changes.

Several methodologies have been used to project loss & legal expenses to ultimate. This includes the following: paid and incurred loss development and Bornhuetter-Ferguson methods (on a paid and incurred basis) all for losses uncapped and at varying capped levels. Frequency and severity is employed along with ultimate ILAE ratio selections to select a final PY 2014 ultimate loss ratio. The selected frequency and severities are somewhat consistent in comparison to the prior profit study.

The commissions and underwriting expenses are program specific. The RAP neutral ratio is calculated based program specific RAP profit loads. Rate need is based on a ratio of the ultimate ILAE ratio and the target ILAE ratio.

V. **Actuarial Next Steps** - We will continue to monitor these results through quarterly actual versus expected analyses.

VI. **Underwriting Action Plans** - Below is the response provided by Gary Scarborough from an email dated 08/28/2014

I see no issues with this analysis. The PA is seeing more aggressive inroads into the marketplace by their primary competitor, Travelers National Hanger Program. Their plan is to counter with better representation with mid-west and western producers as well as providing a more comprehensive product and better overall customer service.

## Appendix - Methodology:

Please note that the analysis has seven sections:

- Section I - General Liability
- Section II - Auto Liability
- Section III - Property
- Section IV - Auto Physical Damage

Exhibit 1 - Summarizes PY 2014 ultimate ILAE ratios and PY 2014 rate need.

Exhibit 2 - PY reported incurred and paid loss and LAE ratios in triangle format.

Exhibit 3 - Indexing PY 2004 - 2014 ultimate ILAE (incurred + LAE) ratios to PY 2014 and selection of PY 2014 ultimate ILAE ratios.

Exhibit 4 - Frequency/Severity method used to calculate an indicated PY 2014 ultimate ILAE ratio

Exhibit 5 - Summarizes various methods (Exhibit 6a - Exhibit 8f) used to calculate ultimate + LAE & ratios for PY's 2004 - 2014.

- a) Policy Limits
- b) Capped at \$250,000
- c) Capped at \$100,000

Exhibit 6 - Bornhuetter-Ferguson methods

- a) Methodology
- b) A Priori Loss Ratios

Exhibit 7 - ILF selections

Exhibit 8 - Loss development methods. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 loss development factors as well as historical results of the program.

- a) Uncapped Incurred
- b) Incurred Capped at \$250,000
- c) Incurred Capped at \$100,000
- d) Uncapped Paid
- e) Paid Capped at \$250,000
- f) Paid Capped at \$100,000

Exhibit 9 - Gross Written Premium developed to an ultimate PY basis. In general, the selected age to age premium development factors are determined by giving weight to the overall Division 66 premium development factors as well as the historical results of the program.

Exhibit 10 - Total claim counts (excluding closed w/no-pay) developed to ultimate. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 claim development factors as well as the historical results of the program.

Exhibit 11 - Open claim count, closed with payment claim count, closed without payment claim count and total claim count development.

Exhibits 12 - Key diagnostic triangles.

- a) Case Reserves per Open Claim  
Paid & Legal per Closed With Payment  
Paid per Closed With Payment
- b) Paid & Legal to Incurred & Legal  
Paid to Incurred  
Closed W/Pay to Total Claim Count (Ex CWNP)
- c) Legal to Indemnity
- d) Total Claim Count to Total Policy Count  
Average Account Size - Total - GWP to Total Policy Count  
Average Account Size - New- GWP to New Policy Count  
Average Account Size - Renewal - GWP to Renewal Policy Count

Exhibit 13 - Large loss listing (Incurred + LAE > \$100,000 and >\$250,000 for Excess).

Please let me know if you have any questions or comments regarding this study.

Program Summary by LOB - PY 2014

LOB	PY 2014 GWP	Direct	Before 2014	RAP Neutral		After 2014
			Rate Change PY 2014 Ultimate ILAE Ratio	Target Ratio	Before 2014 Rate Change PY 2014 Rate Need	PY 2014 Rate Achieved
GL	313	3.0%	50.9%	63.2%	-18.6%	50.8%
AL	4,592	3.0%	53.0%	67.9%	-20.9%	54.0%
Property	10,038	2.9%	40.9%	57.8%	-27.8%	40.7%
APD	751	4.3%	52.2%	66.7%	-20.5%	57.0%
Total Casualty	4,905	3.0%	52.9%	67.6%	-20.8%	53.8%
Total Property	10,789	3.0%	41.7%	58.4%	-27.2%	41.8%
All Lines Combined	15,694	3.0%	45.2%	61.3%	-25.0%	45.5%

Program Summary by LOB - PY 2015

LOB	PY 2014 GWP	Direct	After 2014 Rate Change PY 2015 Ultimate ILAE Ratio	RAP Neutral	
				Target Ratio	After 2014 Rate Change PY 2015 Rate Need
GL	313	3.0%	52.6%	63.2%	-16.0%
AL	4,592	3.0%	56.2%	67.9%	-16.5%
Property	10,038	2.9%	40.7%	57.8%	-28.3%
APD	751	4.3%	57.0%	66.7%	-13.7%
Total Casualty	4,905	3.0%	55.9%	67.6%	-16.5%
Total Property	10,789	3.0%	41.8%	58.4%	-27.1%
All Lines Combined	15,694	3.0%	46.2%	61.3%	-23.5%

Program Summary by LOB

PY	GL					AL					Property - ex Cat Load & Reinsurance Charges					APD				
	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio
2004	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2005	0	0	-	0	-	105	3	3.2%	3	2.8%	470	39	8.4%	39	8.3%	24	15	62.0%	14	60.8%
2006	1	0	0.0%	0	0.0%	363	48	13.2%	51	14.0%	3,248	90	2.8%	90	2.8%	83	24	28.5%	24	28.3%
2007	66	0	0.0%	0	0.0%	461	584	126.7%	582	126.4%	4,175	466	11.2%	466	11.2%	95	12	12.3%	12	12.3%
2008	109	0	0.3%	0	0.0%	700	34	4.8%	39	5.5%	4,239	332	7.8%	332	7.8%	129	30	23.6%	30	23.5%
2009	132	14	10.7%	19	14.4%	749	139	18.6%	148	19.8%	4,216	1,767	41.9%	1,767	41.9%	143	21	15.0%	22	15.3%
2010	180	0	0.0%	28	15.5%	981	201	20.5%	238	24.2%	4,689	2,226	47.5%	2,230	47.6%	188	99	52.8%	100	53.0%
2011	215	1	0.5%	49	22.7%	1,437	378	26.3%	560	39.0%	5,185	1,459	28.1%	1,460	28.2%	254	191	75.2%	191	75.3%
2012	248	9	3.6%	84	33.9%	2,650	818	30.9%	1,363	51.4%	8,036	2,530	31.5%	2,580	32.1%	438	256	58.6%	258	58.9%
2013	268	0	0.2%	99	36.9%	3,442	319	9.3%	1,539	44.7%	9,107	2,360	25.9%	3,290	36.1%	585	199	34.0%	230	39.4%
2014	313	0	0.0%	150	48.0%	4,592	5	0.1%	2,434	53.0%	10,038	12	0.1%	3,112	31.0%	751	19	2.6%	421	56.0%

PY	Total Casualty					Total Property - ex Cat Load & Reinsurance					All Lines Combined				
	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio	GWP	Reported ILAE	Reported ILAE Ratio	Selected Ultimate ILAE	Ultimate ILAE Ratio
2004	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2005	105	3	3.2%	3	2.8%	494	54	11.0%	53	10.8%	599	58	9.6%	56	9.4%
2006	364	48	13.2%	51	14.0%	3,331	114	3.4%	114	3.4%	3,695	162	4.4%	164	4.4%
2007	527	584	110.7%	582	110.5%	4,270	477	11.2%	478	11.2%	4,797	1,061	22.1%	1,060	22.1%
2008	809	34	4.2%	39	4.8%	4,368	363	8.3%	362	8.3%	5,177	397	7.7%	401	7.7%
2009	881	153	17.4%	167	19.0%	4,360	1,789	41.0%	1,789	41.0%	5,241	1,942	37.1%	1,956	37.3%
2010	1,161	201	17.3%	266	22.9%	4,877	2,326	47.7%	2,330	47.8%	6,039	2,526	41.8%	2,595	43.0%
2011	1,653	379	22.9%	609	36.9%	5,439	1,651	30.3%	1,651	30.4%	7,092	2,029	28.6%	2,260	31.9%
2012	2,898	827	28.5%	1,447	49.9%	8,473	2,787	32.9%	2,838	33.5%	11,372	3,613	31.8%	4,285	37.7%
2013	3,710	319	8.6%	1,638	44.1%	9,692	2,559	26.4%	3,520	36.3%	13,402	2,878	21.5%	5,158	38.5%
2014	4,905	5	0.1%	2,584	52.7%	10,789	31	0.3%	3,533	32.7%	15,694	36	0.2%	6,116	39.0%

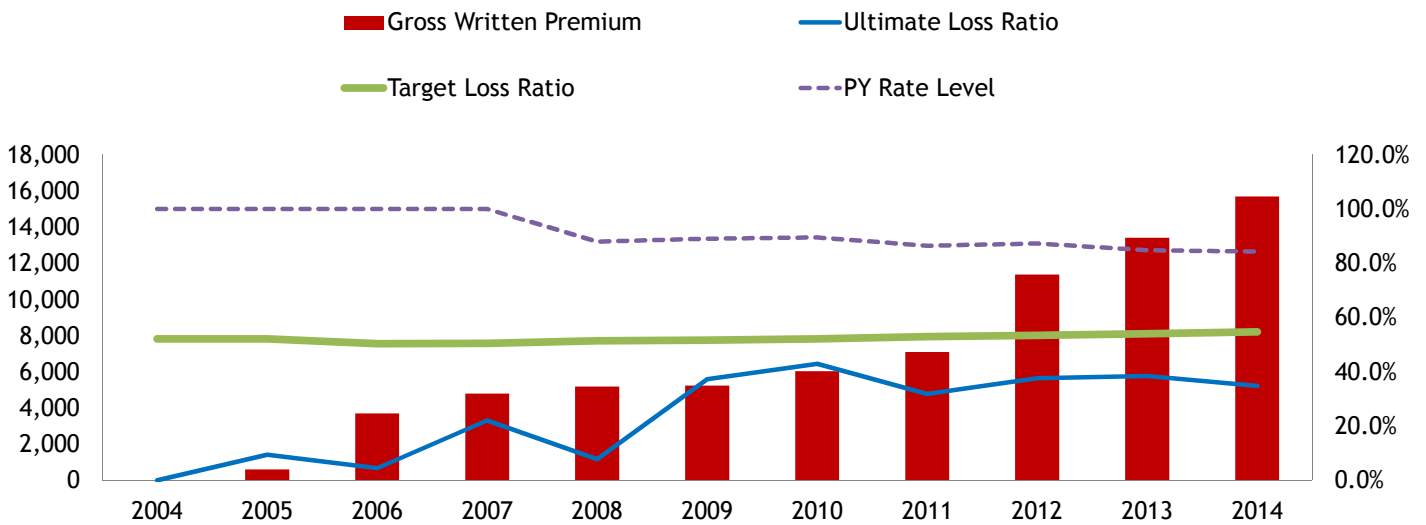
Program Summary by LOB - Prior Profitability Study Indications

PY	GL			AL			Property - ex Cat Load & Reinsurance Charges			APD		
	GWP	2013	2014	GWP	2013	2014	GWP	2013	2014	GWP	2013	2014
		Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio
2004	0	-	-	0	-	-	0	-	-	0	-	-
2005	0	-	-	105	2.9%	2.8%	470	10.0%	8.3%	24	20.8%	60.8%
2006	1	0.0%	0.0%	363	14.0%	14.0%	3,248	3.7%	2.8%	83	7.2%	28.3%
2007	66	0.0%	0.0%	461	131.7%	126.4%	4,175	12.5%	11.2%	95	7.4%	12.3%
2008	109	3.7%	0.0%	700	5.6%	5.5%	4,239	9.2%	7.8%	129	3.9%	23.5%
2009	132	40.3%	14.4%	749	22.4%	19.8%	4,216	43.3%	41.9%	143	4.9%	15.3%
2010	180	24.9%	15.5%	981	29.4%	24.2%	4,689	49.2%	47.6%	188	53.7%	53.0%
2011	215	28.4%	22.7%	1,437	38.2%	39.0%	5,185	31.3%	28.2%	254	76.0%	75.3%
2012	248	38.8%	33.9%	2,650	65.2%	51.4%	8,036	20.4%	32.1%	438	34.3%	58.9%
2013	268	50.0%	36.9%	3,442	53.0%	44.7%	9,107	24.0%	36.1%	585	42.0%	39.4%
2014	313	48.0%	48.0%	4,592	53.0%	53.0%	10,038	31.0%	31.0%	751	56.0%	56.0%
		32.2%	22.9%		48.3%	41.5%		24.6%	28.3%		37.1%	45.4%
			-9.4%			-6.7%			3.7%			8.3%

PY	Total Casualty			Total Property - ex Cat Load & Reinsurance			All Lines Combined		
	GWP	2013	2014	GWP	2013	2014	GWP	2013	2014
		Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	
2004	0	-	-	0	-	-	0	-	-
2005	105	2.9%	2.8%	494	10.5%	10.8%	599	9.2%	9.4%
2006	364	14.0%	14.0%	3,331	3.8%	3.4%	3,695	4.8%	4.4%
2007	527	115.1%	110.5%	4,270	12.3%	11.2%	4,797	23.6%	22.1%
2008	809	5.3%	4.8%	4,368	9.0%	8.3%	5,177	8.4%	7.7%
2009	881	25.1%	19.0%	4,360	42.0%	41.0%	5,241	39.2%	37.3%
2010	1,161	28.7%	22.9%	4,877	49.4%	47.8%	6,039	45.4%	43.0%
2011	1,653	36.9%	36.9%	5,439	33.3%	30.4%	7,092	34.2%	31.9%
2012	2,898	63.0%	49.9%	8,473	21.2%	33.5%	11,372	31.8%	37.7%
2013	3,710	52.8%	44.1%	9,692	25.1%	36.3%	13,402	32.8%	38.5%
2014	4,905	52.7%	52.7%	10,789	32.7%	32.7%	15,694	32.8%	39.0%
		46.7%	39.7%		25.1%	29.0%		29.7%	31.2%

Total Program Summary

PY	GWP	-----Loss Ratio-----			-----Combined Ratio-----			Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR					
2004	0	0.0%	0.0%	52.2%	51.1%	93.8%	0	0.0%	1.00	#DIV/0!	
2005	599	9.6%	9.4%	52.2%	51.1%	93.8%	177	0.0%	1.00	0.23	
2006	3,695	4.4%	4.4%	50.4%	47.4%	93.3%	1,182	0.0%	1.00	0.23	
2007	4,797	22.1%	22.1%	50.5%	65.0%	93.4%	948	0.0%	1.00	0.23	
2008	5,177	7.7%	7.7%	51.4%	50.0%	93.7%	1,568	-12.0%	0.88	0.23	
2009	5,241	37.1%	37.3%	51.6%	79.4%	93.7%	520	1.2%	0.89	0.23	
2010	6,039	41.8%	43.0%	52.1%	84.7%	93.9%	382	0.5%	0.90	0.23	
2011	7,092	28.6%	31.9%	53.0%	73.0%	94.1%	1,033	-3.5%	0.86	0.23	
2012	11,372	31.8%	37.7%	53.5%	78.4%	94.2%	1,238	1.0%	0.87	0.23	
2013	13,402	21.5%	38.5%	54.0%	78.9%	94.3%	1,430	-2.8%	0.85	0.22	
2014	15,694	0.2%	34.8%	54.7%	74.6%	94.5%	2,151	-0.5%	0.84	0.22	
Total	73,108	20.1%	32.0%				10,629				



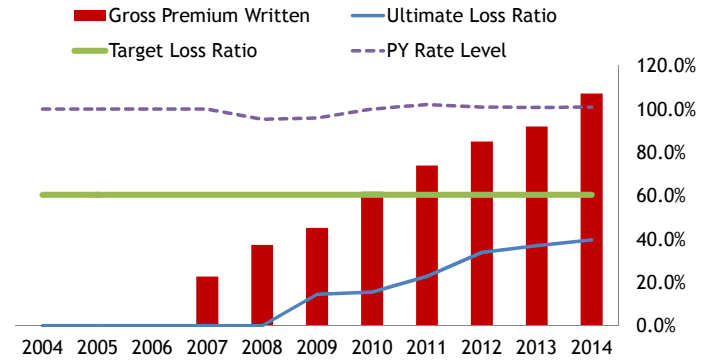
\* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

\* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

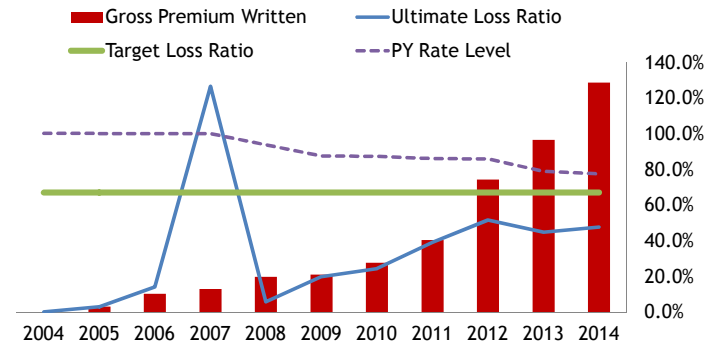


Program Summary by LOB - Casualty Lines

PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2004	0	0.0%	0.0%	60.4%	37.8%	98.2%	0	0.0%	1.00	24.0%
2005	0	0.0%	0.0%	60.4%	37.8%	98.2%	0	0.0%	1.00	24.0%
2006	1	0.0%	0.0%	60.4%	37.8%	98.2%	1	0.0%	1.00	24.0%
2007	66	0.0%	0.0%	60.4%	37.8%	98.2%	27	0.0%	1.00	24.0%
2008	109	0.3%	0.0%	60.4%	37.8%	98.2%	43	-4.7%	0.95	24.0%
2009	132	10.7%	14.4%	60.4%	52.2%	98.2%	40	0.6%	0.96	24.0%
2010	180	0.0%	15.5%	60.4%	53.3%	98.2%	54	4.3%	1.00	24.0%
2011	215	0.5%	22.7%	60.4%	60.5%	98.2%	54	2.1%	1.02	24.0%
2012	248	3.6%	33.9%	60.4%	71.6%	98.2%	44	-1.2%	1.01	24.0%
2013	268	0.2%	36.9%	60.4%	74.7%	98.2%	42	-0.2%	1.01	24.0%
2014	313	0.0%	39.6%	60.4%	77.4%	98.2%	43	0.2%	1.01	24.0%
Total	1,533	1.6%	26.3%				346			



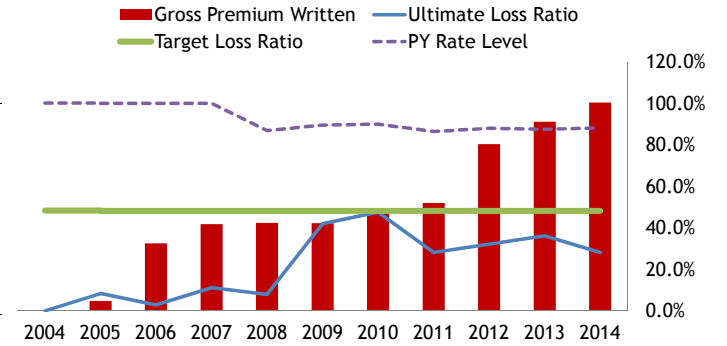
PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2004	0	0.0%	0.0%	66.9%	31.0%	97.8%	0	0.0%	1.00	19.0%
2005	105	3.2%	2.8%	66.9%	33.8%	97.8%	45	0.0%	1.00	19.0%
2006	363	13.2%	14.0%	66.9%	45.0%	97.8%	127	0.0%	1.00	19.0%
2007	461	126.7%	126.4%	66.9%	157.4%	97.8%	-182	0.0%	1.00	19.0%
2008	700	4.8%	5.5%	66.9%	36.5%	97.8%	285	-6.3%	0.94	19.0%
2009	749	18.6%	19.8%	66.9%	50.7%	97.8%	234	-6.7%	0.87	19.0%
2010	981	20.5%	24.2%	66.9%	55.2%	97.8%	278	-0.2%	0.87	19.0%
2011	1,437	26.3%	39.0%	66.9%	69.9%	97.8%	266	-1.4%	0.86	19.0%
2012	2,650	30.9%	51.4%	66.9%	82.4%	97.8%	272	-0.2%	0.86	19.0%
2013	3,442	9.3%	44.7%	66.9%	75.7%	97.8%	507	-8.1%	0.79	19.0%
2014	4,592	0.1%	47.6%	66.9%	78.5%	97.8%	589	-1.8%	0.77	19.0%
Total	15,481	16.3%	43.3%				2,421			



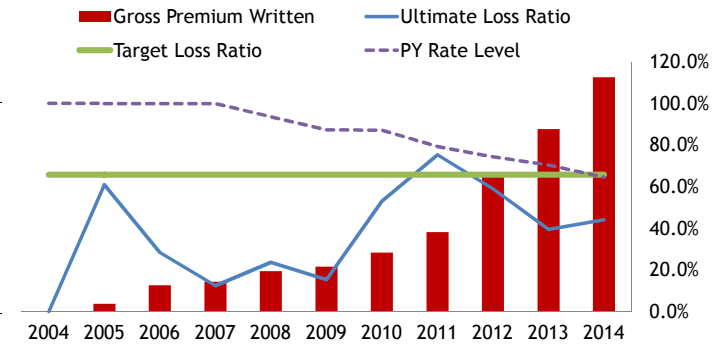
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 \* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

Program Summary by LOB - Property Lines

PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2004	0	0.0%	0.0%	48.2%	44.6%	92.7%	0	0.0%	1.00	24.0%
2005	470	8.4%	8.3%	48.2%	52.9%	92.7%	131	0.0%	1.00	24.0%
2006	3,248	2.8%	2.8%	48.2%	47.3%	92.7%	1,033	0.0%	1.00	24.0%
2007	4,175	11.2%	11.2%	48.2%	55.7%	92.7%	1,083	0.0%	1.00	24.0%
2008	4,239	7.8%	7.8%	48.2%	52.4%	92.7%	1,198	-13.2%	0.87	24.0%
2009	4,216	41.9%	41.9%	48.2%	86.5%	92.7%	185	3.1%	0.90	24.0%
2010	4,689	47.5%	47.6%	48.2%	92.1%	92.7%	20	0.5%	0.90	24.0%
2011	5,185	28.1%	28.2%	48.2%	72.7%	92.7%	727	-4.0%	0.86	24.0%
2012	8,036	31.5%	32.1%	48.2%	76.7%	92.7%	904	1.9%	0.88	24.0%
2013	9,107	25.9%	36.1%	48.2%	80.7%	92.7%	768	-0.6%	0.88	24.0%
2014	10,038	0.1%	28.1%	48.2%	72.7%	92.7%	1,412	0.7%	0.88	24.0%
Total	53,404	21.1%	28.2%				7,463			



PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2004	0	0.0%	0.0%	65.7%	31.5%	97.3%	0	0.0%	1.00	19.0%
2005	24	62.0%	60.8%	65.7%	92.3%	97.3%	1	0.0%	1.00	19.0%
2006	83	28.5%	28.3%	65.7%	59.9%	97.3%	21	0.0%	1.00	19.0%
2007	95	12.3%	12.3%	65.7%	43.8%	97.3%	34	0.0%	1.00	19.0%
2008	129	23.6%	23.5%	65.7%	55.1%	97.3%	36	-6.3%	0.94	19.0%
2009	143	15.0%	15.3%	65.7%	46.8%	97.3%	48	-6.7%	0.87	19.0%
2010	188	52.8%	53.0%	65.7%	84.5%	97.3%	16	-0.2%	0.87	19.0%
2011	254	75.2%	75.3%	65.7%	106.8%	97.3%	-16	-9.0%	0.79	19.0%
2012	438	58.6%	58.9%	65.7%	90.4%	97.3%	20	-6.3%	0.74	19.0%
2013	585	34.0%	39.4%	65.7%	70.9%	97.3%	103	-5.3%	0.70	19.0%
2014	751	2.6%	44.1%	65.7%	75.6%	97.3%	109	-8.5%	0.64	19.0%
Total	2,690	32.2%	45.1%				372			



\* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

\* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

GL

Rate Need Indications

	Target Combined Ratio	Target ILAE Ratio	Before 2014 Rate Change PY 2014 Ultimate ILAE Ratio	Before 2014 Rate Change PY 2014 Rate Need	PY 2014 Rate Achieved	After 2014 Rate Change PY 2014 Ultimate ILAE Ratio	PY 2015 Ultimate ILAE Ratio	PY 2015 Rate Need
RAP Neutral:	98.2%	63.2%	50.9%	-18.6%	0.2%	50.8%	52.6%	-16.0%

Expense Ratio calculated as follows:

Commission:	24.0%
Prem Tax:	3.2%
Other Acquisition Fees:	0.7%
Direct Expense:	3.0%
Indirect Expense:	4.1%
	<u>35.0%</u>



GL

Indexing - PY 2014 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 250k			Capped @ 100k		
					Ultimate ILAE Ratio	3.5% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.3% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio
2004	0	0.0%	1.000	-	-	1.411	-	-	1.377	-	-	1.344	-
2005	0	0.0%	1.000	-	-	1.363	-	-	1.334	-	-	1.305	-
2006	1	0.0%	1.000	1	0.0%	1.317	0.0%	0.0%	1.292	-	-	1.267	-
2007	66	0.0%	1.000	67	0.0%	1.272	0.0%	0.0%	1.251	-	-	1.230	-
2008	109	-4.7%	0.953	115	0.0%	1.229	0.0%	0.0%	1.212	-	-	1.194	-
2009	132	0.6%	0.959	139	14.4%	1.188	16.3%	13.7%	1.173	15.2%	12.9%	1.159	14.2%
2010	180	4.3%	1.000	182	15.5%	1.148	17.6%	9.4%	1.136	10.6%	6.1%	1.126	6.8%
2011	215	2.1%	1.021	213	22.7%	1.109	25.5%	14.9%	1.101	16.5%	10.7%	1.093	11.8%
2012	248	-1.2%	1.009	248	33.9%	1.071	36.3%	23.8%	1.066	25.3%	18.9%	1.061	20.1%
2013	268	-0.2%	1.007	269	36.9%	1.035	38.1%	26.9%	1.033	27.7%	21.3%	1.030	21.9%
2014	313	0.2%	1.009	313	39.6%	1.000	39.6%	29.7%	1.000	29.7%	24.6%	1.000	24.6%
All Yr Wtd ex 2014:							24.4%			17.3%			13.4%
Last 7 Wtd ex 2014:							24.5%			17.3%			13.5%
Last 5 Wtd ex 2014:							28.7%			20.3%			15.8%
Last 3 Wtd ex 2014:							33.8%			23.6%			18.3%
Selected Ultimate:							38.0%			28.0%			22.0%
ILF:							1.00			1.31			1.62
Policy Limits Ultimate:							38.0%			36.8%			35.7%
Weight:							3%	Weight:					48%
								Frequency/Severity Indication:					48.0%
								Weighted Average:					36.3%
								PY 2014 Selected:					48.0%
								Adjustment:					0.0%
								PY 2014:					48.0%
								ULE:					2.8%
								Claims Fees:					0.0%
								PY 2014 Ultimate ILAE Ratio:					50.8%

AL

Rate Need Indications

	Target Combined Ratio	Target ILAE Ratio	Before 2014 Rate Change PY 2014 Ultimate ILAE Ratio	Before 2014 Rate Change PY 2014 Rate Need	PY 2014 Rate Achieved	After 2014 Rate Change PY 2014 Ultimate ILAE Ratio	PY 2015 Ultimate ILAE Ratio	PY 2015 Rate Need
RAP Neutral:	97.8%	67.9%	53.0%	-20.9%	-1.8%	54.0%	56.2%	-16.5%

Expense Ratio calculated as follows:

Commission:	19.0%
Prem Tax:	3.2%
Other Acquisition Fees:	0.7%
Direct Expense:	3.0%
Indirect Expense:	4.1%
	<u>30.0%</u>



AL

Indexing - PY 2014 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 250k			Capped @ 100k		
					Ultimate ILAE Ratio	4.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.5% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio
2004	0	0.0%	1.000	-	-	1.480	-	-	1.411	-	-	1.344	-
2005	105	0.0%	1.000	82	2.8%	1.423	5.2%	2.8%	1.363	5.0%	2.8%	1.305	4.8%
2006	363	0.0%	1.000	281	14.0%	1.369	24.8%	14.0%	1.317	23.9%	14.0%	1.267	22.9%
2007	461	0.0%	1.000	357	126.4%	1.316	214.9%	126.4%	1.272	207.8%	85.2%	1.230	135.3%
2008	700	-6.3%	0.937	579	5.5%	1.265	8.5%	5.5%	1.229	8.3%	5.5%	1.194	8.0%
2009	749	-6.7%	0.874	664	19.8%	1.217	27.1%	19.8%	1.188	26.5%	19.8%	1.159	25.9%
2010	981	-0.2%	0.872	871	24.2%	1.170	31.9%	23.2%	1.148	30.0%	21.2%	1.126	26.8%
2011	1,437	-1.4%	0.860	1,294	39.0%	1.125	48.7%	35.5%	1.109	43.7%	27.1%	1.093	32.9%
2012	2,650	-0.2%	0.858	2,391	51.4%	1.082	61.7%	34.4%	1.071	40.9%	22.0%	1.061	25.9%
2013	3,442	-8.1%	0.788	3,381	44.7%	1.040	47.3%	35.9%	1.035	37.8%	27.1%	1.030	28.4%
2014	4,592	-1.8%	0.774	4,592	47.6%	1.000	47.6%	40.8%	1.000	40.8%	29.4%	1.000	29.4%
				All Yr Wtd ex 2014:			51.0%			41.6%			30.4%
				Last 7 Wtd ex 2014:			52.2%			42.5%			30.8%
				Last 5 Wtd ex 2014:			48.4%			37.9%			28.0%
				Last 3 Wtd ex 2014:			52.4%			39.9%			28.4%
				Selected Ultimate:			51.0%			41.0%			30.0%
				ILF:			1.00			1.38			1.74
				Policy Limits Ultimate:			51.0%			56.6%			52.1%
				Weight:			31%			34%			34%
										Frequency/Severity Indication:			52.5%
										Weighted Average:			53.3%
										PY 2014 Selected:			53.0%
										Adjustment:			0.0%
										PY 2014:			53.0%
										ULE:			1.0%
										Claims Fees:			0.0%
										PY 2014 Ultimate ILAE Ratio:			54.0%



**AL**

Large Losses - Incurred + Legal > 100k

PY	DSP	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	Legal	I+Legal	Acc State	Description
2007	Florida	4078304	6337	6/22/2007	Cambata Aviation I	174	-	63	237	Florida	Alvie Barron Rear Ended ANN Linehans C
2007	New York	3783667	6148	10/5/2008	Panorama Flight SE	59	16	87	162	New York	OV States While Proceeding Straight SB
2010	Montana	6143485	6450	1/5/2011	Montana Aero, Inc.	90	-	15	104	Montana	Insured Vehicle Turning AT Green Light
2011	Louisiana	9349295	7904	4/23/2012	Southern Helicopte	134	-	19	152	Louisiana	IV Rearended CV CV Pushed Into Another
2012	Louisiana	6268982	9941	6/11/2012	Richard Flying Ser	500	-	64	564	Louisiana	Insured Turned Left In Front To The C

Property

Rate Need Indications

	Target Combined Ratio	Target ILAE Ratio	Before 2014 Rate Change PY 2014 Ultimate ILAE Ratio	Before 2014 Rate Change PY 2014 Rate Need	PY 2014 Rate Achieved	After 2014 Rate Change PY 2014 Ultimate ILAE Ratio	PY 2015 Ultimate ILAE Ratio	PY 2015 Rate Need
RAP Neutral:	92.7%	57.8%	40.9%	-27.8%	0.7%	40.7%	40.7%	-28.3%

Expense Ratio calculated as follows:

Commission:	24.0%
Prem Tax:	3.2%
Other Acquisition Fees:	0.7%
Reinsurance:	0.0%
Direct Expense:	2.9%
Indirect Expense:	4.1%
	<u>34.9%</u>



Property

Indexing - PY 2014 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 1M			Capped @ 250k			Capped @ 100k		
					Ultimate ILAE Ratio	0.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY Rate Chg	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio
2004	0	0.0%	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-
2005	470	0.0%	1.000	414	8.3%	1.000	9.4%	8.3%	1.000	9.4%	8.3%	1.000	9.4%	8.3%	1.000	9.4%
2006	3,248	0.0%	1.000	2,862	2.8%	1.000	3.1%	2.8%	1.000	3.1%	2.8%	1.000	3.1%	2.8%	1.000	3.1%
2007	4,175	0.0%	1.000	3,678	11.2%	1.000	12.7%	11.2%	1.000	12.7%	11.2%	1.000	12.7%	11.1%	1.000	12.6%
2008	4,239	-13.2%	0.868	4,303	7.8%	1.000	7.7%	7.8%	1.000	7.7%	7.8%	1.000	7.7%	7.8%	1.000	7.7%
2009	4,216	3.1%	0.895	4,150	41.9%	1.000	42.6%	41.9%	1.000	42.6%	30.5%	1.000	30.9%	19.0%	1.000	19.3%
2010	4,689	0.5%	0.900	4,592	47.6%	1.000	48.6%	47.6%	1.000	48.6%	26.9%	1.000	27.4%	17.3%	1.000	17.6%
2011	5,185	-4.0%	0.864	5,288	28.2%	1.000	27.6%	28.2%	1.000	27.6%	23.7%	1.000	23.3%	20.3%	1.000	19.9%
2012	8,036	1.9%	0.880	8,044	32.1%	1.000	32.1%	32.0%	1.000	31.9%	22.3%	1.000	22.3%	15.9%	1.000	15.9%
2013	9,107	-0.6%	0.875	9,169	36.1%	1.000	35.9%	34.6%	1.000	34.4%	23.9%	1.000	23.8%	16.6%	1.000	16.5%
2014	10,038	0.7%	0.881	10,038	28.1%	1.000	28.1%	25.3%	1.000	25.3%	19.0%	1.000	19.0%	14.1%	1.000	14.1%
All Yr Wtd ex 2014:					28.8%			28.5%			20.4%			15.0%		
Last 7 Wtd ex 2014:					30.9%			30.5%			21.8%			15.9%		
Last 5 Wtd ex 2014:					36.3%			35.8%			24.8%			17.5%		
Last 3 Wtd ex 2014:					32.6%			31.9%			23.1%			17.1%		
Selected Ultimate:					31.0%			30.0%			22.0%			16.0%		
ILF:					1.00			1.11			1.43			1.90		
Policy Limits Ultimate:					31.0%			33.2%			31.4%			30.4%		
Weight:					50%			17%			17%			17%		

Frequency/Severity Indication:	30.0%
Weighted Average:	31.3%
PY 2014 Selected:	31.0%
Adjustment:	0.0%
PY 2014:	31.0%

All Year Avg Empirical Cat Load:	6.0%
Program Specific AAL Cat Load:	6.7%
Selected Cat Load:	6.7%
Corporate Cat Charge:	0.0%
XOL Loss Cost:	1.1%
Indicated XOL Cost:	0.0%
ULE:	1.9%
Claims Fees:	0.0%

PY 2014 Ultimate ILAE Ratio Including AAL Cat Load and Cost of Reinsurance: 40.7%

Property

Large Losses - Incurred + LAE > 100k

PY	DSP	Cat #	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	LAE	ILAE	Acc State	Description
2007	1-1-137		9272941	2594	3/4/2008	Aerial Viewpoint H	101	-	2	103	Texas	Changing OUT The Filter ON ONE Of The
2008	1-1-137	6008	9271776	2367	9/13/2008	American JET Inter	1,943	-	82	2,026	Texas	Hurricane IKE
2008	1-1-137	6008	9274039	2558	9/14/2008	Moraine AIR Park,	181	-	14	195	Ohio	Strong Winds Dmgd Bldg And Grounds HUR
2009	1-1-137		3234347	5830	12/6/2009	DEL Martin	520	-	14	534	Texas	Aircraft Hangar Total OS DUE To Fire R
2009	1-1-137		2849769	1109	3/25/2010	ONE Stop Aviation,	408	-	46	454	California	Fire Started In Shop
2009	1-1-137		4414456	3732	6/1/2009	S.L. Horizons, LLC	150	-	60	210	Texas	Bldg 1 Roof Heavily Dmgd By Hail Deal
2009	1-1-137		2849418	1654	4/5/2010	Eric Richardson	158	-	20	177	Michigan	Windstorm Damage To Hangar Insured SUS
2010	1-1-216	4611	9710790	1468	4/24/2011	Abilene Aero, Inc.	723	-	22	745	Texas	Large Hail Damage To Insured Buildings
2010	1-1-137		6478524	1548	10/1/2010	Skytech Aviation I	605	-	131	736	Florida	Sprinkler Damage To Building And BBP
2010	1-1-137		2851279	2989	4/21/2010	Johnson County Avi	249	-	16	265	Tennessee	Theft Of 2 Trailers Containing Helicop
2011	1-1-137	9012	9657926	4584	10/29/2012	SKY Manor Airport	666	-	41	708	New Jersey	CAT Hurricane Sandy-ONE Building Down
2011	1-1-137		6142831	6211	11/24/2012	Newone Hangars, LL	473	-	13	486	Texas	Fire In Hangar
2011	1-1-137		2849252	2960	9/1/2012	AG AIR Maintenance	125	-	3	128	Arkansas	Tornado Occured Damaging Insureds Buil
2012	1-1-137	9313	9274792	9279	3/18/2013	Mark And Yuri Pyan	404	146	31	581	Mississippi	Heavy Hail Damage To Building DUE To S
2012	1-1-137		9271786	8831	12/31/2012	Freeman Holdings,	360	135	34	529	California	Insured Suffered Wind Damage To The RO
2012	1-1-216		6481898	7126	12/20/2012	Erickson AIR-Crane	357	-	54	411	Oregon	Smoke And Water Damage DUE To Fire.
2012	1-1-137		8995085	131	6/19/2012	Key Lime AIR Inc.,	132	-	14	146	Colorado	Hail Damage To The Roof
2013	1-1-137		4062157	3478	10/7/2013	Worldwide Aeros Co	840	1	27	868	California	The Roof Of The Facility Caved In And
2013	1-1-137		9907232	8265	12/15/2013	Hospers Family Tru	264	-	16	280	Texas	Natural Perils - Ice ICE Damaged AC
2013	1-1-137	2913	9906555	6326	11/17/2013	Dean Baldwin Paint	256	-	5	261	Indiana	Natural Perils - Tornado - Airplane HA
2013	1-1-137		8997484	4571	4/25/2013	Carolina Avionics	202	-	7	209	North Carolina	Battery Catch Fire In The Office.
2013	1-1-137		6142044	9631	4/7/2014	JON D. Tanner & TI	-	106	3	109	Alaska	Fire - Mechanical Breakdown (Non Elect

APD

Rate Need Indications

	Target Combined Ratio	Target ILAE Ratio	Before 2014 Rate Change PY 2014 Ultimate ILAE Ratio	Before 2014 Rate Change PY 2014 Rate Need	PY 2014 Rate Achieved	After 2014 Rate Change PY 2014 Ultimate ILAE Ratio	PY 2015 Ultimate ILAE Ratio	PY 2015 Rate Need
RAP Neutral:	97.3%	66.7%	52.2%	-20.5%	-8.5%	57.0%	57.0%	-13.7%

Expense Ratio calculated as follows:

Commission:	19.0%
Prem Tax:	3.2%
Other Acquisition Fees:	0.7%
Direct Expense:	4.3%
Indirect Expense:	3.4%
	<u>30.5%</u>



APD

Indexing - PY 2014 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP
2004	0	0.0%	1.000	-
2005	24	0.0%	1.000	15
2006	83	0.0%	1.000	54
2007	95	0.0%	1.000	61
2008	129	-6.3%	0.937	88
2009	143	-6.7%	0.874	106
2010	188	-0.2%	0.872	139
2011	254	-9.0%	0.793	206
2012	438	-6.3%	0.744	379
2013	585	-5.3%	0.704	535
2014	751	-8.5%	0.644	751
All Yr Wtd ex 2014:				55.6%
Last 7 Wtd ex 2014:				55.6%
Last 5 Wtd ex 2014:				58.7%
Last 3 Wtd ex 2014:				60.6%
Frequency/Severity Indication:				55.9%

Policy Limits		
Ultimate ILAE Ratio	0.0% Trend to PY 2014	On-Level Ultimate ILAE Ratio
-	1.000	-
60.8%	1.000	94.3%
28.3%	1.000	44.0%
12.3%	1.000	19.1%
23.5%	1.000	34.2%
15.3%	1.000	20.7%
53.0%	1.000	71.7%
75.3%	1.000	92.7%
58.9%	1.000	68.0%
39.4%	1.000	43.0%
44.1%	1.000	44.1%
		55.6%
		55.6%
		58.7%
		60.6%
		55.9%

PY 2014 Selected:

Adjustment:

PY 2014:

ULE: 1.0%

Claims Fees: 0.0%

PY 2014 Ultimate ILAE Ratio: 57.0%