

# Memorandum

From: Div 66 Actuarial  
Michael Tranfaglia  
Emily Turek  
Conner Billings

To: E. Allen, S. Leeret, B. Harris, J. Parker, S. Cook, T. Donnelly, R. O'Neil, H. Warren

CC: J. Johnson, K. Hanna, J. Heaney, C. Steinbach, B. McCoy, J. Stracher, T. Peterson, J. Baier

Date: 9/23/2015

Re: Division 66 - 2015 CTC Transportation Profitability Study

---

## I. Executive Summary

### A. Introduction -

The CTC Transportation program offers Motor Truck Cargo and Auto Physical Damage for permanent-lease owner-operators and company owned vehicles in the for hire motor carrier segment. Truckers GL coverage for small office exposures and minimal warehouse exposure is also offered but there has not been any written premium as of the date of this report.

Last year's analysis resulted in an overall PY 2015 Ultimate Loss Ratio indication of 61.9% which yielded a RAP neutral rate need of 6.7% based on **2014** RAP values.

For purposes of this analysis we have used a 2015 forecasted rate change of **10.2%**.

### B. Summary of Results

IL and LAE evaluated as of: 2<sup>nd</sup> Quarter 2015  
Currency Employed: USD

#### Exhibit 1:

Line of Business	Sub-Segment	Policy Year	2015	Projected	RAP			
			Forecasted GWP (000)	Ultimate IL and LAE Ratio*	Combined Ratio*	Target Combined Ratio	RAP Rate Need	Projected RAP \$ **
Property	N/A	2015	5,650	64.6%	95.6%	95.9%	-0.4%	11

---

\* Includes PY 2015 rate change achieved

\*\* Assumes a tax rate of 35%

- I. Discussion of Material Findings-This program began writing business with AIG in 2013. Prior to inception with AIG, this program's experience was reviewed and the results were used in deriving our Initial Expected Loss Ratios (IELR's). This is the second profitability study, and results continue to deteriorate. Consistent deterioration was observed in our Actual vs. Expected reports in each of the previous three quarters. The program recently began writing General Liability, however not enough experience was available at the time of this study to provide any meaningful profitability indication.

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

- A. Assumptions - For purposes of this analysis, the loss ratio indications are based on a 0.0% for Property. LDF selections were based on the historical experience, to the extent credible, and on the overall Division 66 factors. For the rate changes used in this analysis, we relied on the best estimate of rate expected to be achieved for PY 2015.
- B. Limitations/Weakness - The projected PY 2015 loss ratio shown in Exhibit 1 of this report assumes that the YTD rate change achieved in 2015 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. There have been no material adjustments made to the data.

- C. Other - NA

## III. Methodology

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.

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.

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

- V. **Underwriting Action Plans** - Below is the response provided by H Warren.

I have reviewed the study and have no further information to provide that would affect the report.

## Appendix - Methodology:

Please note that the analysis has three sections:

Summary 1 - Program Summary by LOB - PY 2015

Summary 2 - Program Summary by LOB - PY 2016

Summary 3 - Program Summary by LOB

Section III - Property

Exhibit 1 - Summarizes calculations of PY 2015 ultimate ILAE ratios at each policy limit and the final selection.

Exhibit 2 - PY ULR calculation and selection for Incurred methods by policy limit.

Exhibit 3 - PY ULR calculation and selection for Paid methods by policy limit.

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

Program Summary by LOB - PY 2015

(1) LOB	(2) PY 2015 Forecasted GWP	Direct	(3) Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	RAP Neutral		(6) PY 2015 Rate Achieved	(7) After 2015 Rate Change PY 2015 Ultimate ILAE Ratio
				(4) Target Ratio	(5) Before 2015 Rate Change PY 2015 Rate Need		
Property	5,650	2.8%	71.2%	64.9%	9.3%	10.2%	64.6%
Total Property	5,650	2.8%	71.2%	64.9%	9.3%	10.2%	64.6%
All Lines Combined	5,650	2.8%	71.2%	64.9%	9.3%	10.2%	64.6%

- (1) = Input
- (2) = Exhibit 2
- (3) = (7) \* [1 + (6)]
- (4) = Exhibit 1
- (5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1
- (6) = Exhibit 1
- (7) = Exhibit 1

Program Summary by LOB - PY 2016

(1) LOB	(2) PY 2015 Forecasted GWP	Direct	(3) After 2015 Rate Change PY 2016 Ultimate ILAE Ratio	RAP Neutral	
				(4) Target Ratio	(5) After 2015 Rate Change PY 2016 Rate Need
Property	5,650	2.8%	64.6%	64.9%	-0.4%
Total Property	5,650	2.8%	64.6%	64.9%	-0.4%
All Lines Combined	5,650	2.8%	64.6%	64.9%	-0.4%

- (1) = Input
- (2) = Exhibit 2
- (3) = Exhibit 1
- (4) = Exhibit 1
- (5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1

**Program Summary by LOB**

**Property - ex Cat Load & Reinsurance Charges**

PY	GWP	Reported	Reported	Selected	Ultimate
		ILAE	ILAE Ratio	Ultimate	Ultimate
		ILAE	ILAE Ratio	ILAE	ILAE Ratio
2005	0	0	-	0	0.0%
2006	0	0	-	0	0.0%
2007	0	0	-	0	0.0%
2008	0	0	-	0	0.0%
2009	0	0	-	0	0.0%
2010	0	0	-	0	0.0%
2011	0	0	-	0	0.0%
2012	0	0	-	0	0.0%
2013	170	475	278.4%	476	278.9%
2014	4,708	3,566	75.7%	4,077	86.6%
2015	5,650	354	6.3%	3,492	61.8%

**Program Summary by LOB - Prior Profitability Study Indications**

**Property**

PY	2014		2015
	GWP	Ultimate ILAE Ratio	Ultimate ILAE Ratio
2005	0	0.0%	0.0%
2006	0	0.0%	0.0%
2007	0	0.0%	0.0%
2008	0	0.0%	0.0%
2009	0	0.0%	0.0%
2010	0	0.0%	0.0%
2011	0	0.0%	0.0%
2012	0	0.0%	0.0%
2013	170	225.4%	278.9%
2014	4,708	60.0%	86.6%
2015	5,650		61.8%

Div 66 - Programs  
CTC Transportation  
As of 6/30/2015  
Property

Section III  
Exhibit I

2015 Ultimate Loss Ratio

	Incurred	Selected
Capped @ 100K & ILF	62.4%	62.4%
Capped @ 250K & ILF	62.7%	62.7%
Uncapped	62.0%	62.0%

Selected 2015 Ult LR:

AAL:

XOL:

ULE:

Selected Ult ILAE LR:

Combined Ratio:

RAP BECR: 95.9%

<u>Expense Ratio calculated as follows:</u>	
Commission:	22.50%
Prem Tax:	0.01%
Other Acq:	0.76%
Direct:	2.77%
Indirect:	4.88%
Total:	30.91%



**Prop - Inc Capped @ \$100k**

PY	Age	Premium	Rate Change	Cum Rate Level	On-Level Premium	Cumulative Inc+PropAE	LDF	Reported Loss Development	Born Ferg	Selected Ultimate	6/30/0.0% Trend	Trended On-Level Ultimate Loss Ratio	Selected On-Level Ultimate Inc+ALAE LR
2005	126	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2006	114	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2007	102	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2008	90	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2009	78	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2010	66	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2011	54	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2012	42	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2013	30	170	0.0%	1.000	188	414	1.007	417	414	414	1.000	220.5%	220.5%
2014	18	4,708	0.0%	1.000	5,188	3,515	1.181	4,151	3,879	3,879	1.000	74.8%	74.8%
2015	6	5,650	10.2%	1.102	5,650	354	4.235	1,498	2,530	2,530	1.000	44.8%	44.8%

Propl Years - Weighted 61.0%  
 5 Year Weighted 61.0%  
 3 Year Weighted 61.0%  
 Capped at \$100K:   
 Selected ILF: 1.20  
 Ult LR:

**Prop - Inc Capped @ \$250k**

PY	Age	Premium	Rate Change	Cum Rate Level	On-Level Premium	Cumulative Inc+PropAE	LDF	Reported Loss Development	Born Ferg	Selected Ultimate	0.0% Trend	Trended On-Level Ultimate Loss Ratio	Selected On-Level Ultimate Inc+ALAE LR
2005	126	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2006	114	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2007	102	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2008	90	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2009	78	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2010	66	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2011	54	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2012	42	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2013	30	170	0.0%	1.000	188	475	1.008	478	475	475	1.000	253.0%	253.0%
2014	18	4,708	0.0%	1.000	5,188	3,566	1.190	4,244	3,980	3,980	1.000	76.7%	76.7%
2015	6	5,650	10.2%	1.102	5,650	354	4.302	1,522	2,739	2,739	1.000	48.5%	48.5%

Propl Years - Weighted 64.4%  
 5 Year Weighted 64.4%  
 3 Year Weighted 64.4%  
 Capped at \$250K:   
 Selected ILF: 1.10  
 Ult LR:

**Prop - Inc Uncapped**

PY	Age	Premium	Rate Change	Cum Rate Level	On-Level Premium	Cumulative Inc+PropAE	LDF	Reported Loss Development	Born Ferg	Selected Ultimate	0.0% Trend	Trended On-Level Ultimate Loss Ratio	Selected On-Level Ultimate Inc+ALAE LR
2005	126	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2006	114	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2007	102	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2008	90	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2009	78	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2010	66	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2011	54	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2012	42	0	0.0%	1.000	0	0	1.000	-	-	-	1.000	0.0%	0.0%
2013	30	170	0.0%	1.000	188	475	1.008	479	476	476	1.000	253.1%	253.1%
2014	18	4,708	0.0%	1.000	5,188	3,566	1.218	4,345	4,077	4,077	1.000	78.6%	78.6%
2015	6	5,650	10.2%	1.102	5,650	354	4.519	1,598	3,016	3,016	1.000	53.4%	53.4%

Propl Years - Weighted 67.9%  
 5 Year Weighted 67.9%  
 3 Year Weighted 67.9%  
 Ult LR: