

APPENDIX A: AUTO INDICATION

The following exhibits show an example of an overall rate level indication using the loss ratio approach. This example is for the property damage liability coverage of personal automobile insurance in State XX. All policies are semi-annual, and the proposed effective date for the revised rates is January 1, 2017. Rates are expected to be in effect for one year.

The individual exhibits are as follows:

- **LR Indication:** summarizes the calculation of the overall indicated premium change using the loss ratio method on five accident years of State XX experience evaluated as of March 31, 2016.
- **Credibility:** derives the credibility measure and complement of credibility to be applied to the experience period indicated rate change using the classical credibility approach and the square-root rule.
- **Current Rate Level:** details the calculation of the current rate level factors using the parallelogram method.
- **Premium Trend:** derives premium trend factors using the two-step trending approach.
- **Loss Development:** displays the selection of the reported loss and ALAE development factors using the chain ladder method.
- **Loss Trend:** supports the selection of the loss trend factors based on the pattern of historical changes in frequency, severity, and pure premium.
- **ULAE Ratio:** shows the determination of the ULAE factor based on the historical relationship of paid ULAE to paid losses and ALAE.
- **Expense:** derives the fixed and variable expense provisions using the premium-based projection method.

LR (LOSS RATIO) INDICATION EXHIBIT

The overall rate level indication on the LR Indication Exhibit is calculated based on the latest five accident years evaluated as of March 31, 2016. A projected loss and LAE ratio is selected and added to the fixed expense provision. This ratio is compared to the variable permissible loss ratio to obtain the overall indicated rate change, which is credibility-weighted with the complement, the trended present rates indication from the prior rate change analysis. Each column of the exhibit is described in detail below. Some inputs are calculated on later exhibits, as noted in the exhibit footnotes.

Columns 1 through 4 show the calculation of the projected earned premium at current rate level. Column 1 includes the earned premium for each of the historical accident years. Column 2 displays the current rate level adjustment factors required to convert the historical earned premium to current rate level. Column 3 includes the premium trend factors used to project the historical earned premium to the levels expected during the period the rates will be in effect. Column 4 is the projected earned premium at current rates, which is calculated as the product of Columns 1 through 3.

Columns 5 through 9 show the calculation of the projected ultimate loss and LAE. Column 5 displays the reported losses and ALAE for each accident year. Column 6 shows the loss development factors used to

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develop the losses and ALAE to ultimate levels. Column 7 contains the trend factors that will adjust the ultimate losses and ALAE from historical levels to the projected level expected during the period the rates will be in effect. Column 8 contains the ULAE factors used to adjust the reported losses and ALAE for the ULAE. Column 9 shows the ultimate loss and LAE expected during the period the rates will be in effect, which is the product of Columns 5 through 8.

Column 10 is the calculation of the projected loss and LAE ratio for each accident year, and is calculated by dividing the projected ultimate loss and LAE (Column 9) by the projected earned premium at current rate level (Column 4). The 5-year average projected loss ratio is calculated by dividing the sum of Column 9 by the sum of Column 4; this is equivalent to weighting the individual years by the earned premium at current rate level in each year. The selected projected ultimate loss and LAE ratio is based on the five-year average, and is included in Row 11.

Rows 12 through 15 show the underwriting expense and profit items. Row 12 displays the projected fixed expense ratio (as a percentage of premium). Rows 13 through 15 show the calculation of the variable permissible loss ratio. Row 13 contains the variable expense provision (i.e., the variable expenses as a percentage of premium), and Row 14 includes the underwriting profit provision (i.e., target profit as a percentage of premium). Row 15 is the variable permissible loss ratio, which is calculated as 100% minus the sum of Rows 13 and 14; this figure represents the percentage of each premium dollar that is available to pay for losses, LAE, and fixed expenses.

Row 16 is the calculation of the indicated rate change using the formula:

$$\begin{aligned}\text{Indicated Change} &= \frac{\text{Loss \& LAE Ratio} + \text{Fixed Expense Ratio}}{\text{Variable Permissible Loss Ratio}} - 1.0 \\ &= \frac{[\text{Row 11} + \text{Row 12}]}{[\text{Row 15}]} - 1.0.\end{aligned}$$

Row 17 shows the credibility to be applied to the indicated rate change. Row 18 shows the trended present rates indication from the prior review, which is used as the complement of credibility. Row 19, the credibility-weighted indication, is the result of weighting the actuarial indication from this review with the complement of credibility based on the trended present rates approach. The selected rate change, shown in Row 20, is the credibility-weighted indicated rate change.

CREDIBILITY EXHIBIT

The credibility measure and the complement of credibility are derived on the Credibility Exhibit. The credibility measure is calculated based on a full credibility standard of 1,082 claims, and the complement of credibility is the residual indication based on the latest rate change and indication (i.e., the “trended present rates” approach to derive complement of credibility, as discussed in Chapter 12).

Rows 1 through 3 show the calculation of the credibility measure. Row 1 displays the number of claims in the experience period. Row 2 shows the full credibility standard for private passenger auto calculated using the classical credibility approach. Row 3 shows the credibility assigned to the historical loss ratio

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indication. Since the number of claims exceeds the number of claims needed for full credibility, the credibility is 100%.

Rows 4 through 11 display the derivation of the complement of credibility. Rows 4 and 5 show the last indicated rate change and the last rate change taken. Row 6 divides the sum of one plus Row 4 by the sum of one plus Row 5 and then subtracts one; this represents the residual indication. The residual indication is adjusted by the net trend factor. The net trend is calculated by dividing the sum of one and the loss trend (Row 7) by the sum of one and the premium trend (Row 8) and then subtracting one. The trend period is measured from the last rate change effective date (January 1, 2016) to the proposed effective date (January 1, 2017). The trended present rates indication is shown in Row 11 and is used as the complement of credibility.

CURRENT RATE LEVEL EXHIBIT

Historical premium needs to be adjusted to account for any rate changes that have taken place during or after the historical experience period; in other words, the historical premium needs to be adjusted to the rate level currently in effect. The Current Rate Level Exhibit shows the calculation of the current rate level factors using the parallelogram method for each year.

Sheet 1

Sheet 1 shows the derivation of the cumulative rate level indices for each rate level group during or after the historical period. The rate change history is displayed in Columns 1 and 2. The rate level index in Column 3 is the rate change added to one, and the cumulative rate level index in Column 4 is the cumulative product of the indices in Column 3.

Sheet 2

Sheet 2 calculates the current rate level factors. The columns in 1a display the portion of premium earned during each calendar year for each of the individual rate level groups. These figures are calculated based on the assumption that the six-month policies are written uniformly throughout the year. Column 2 shows the average cumulative rate level for each calendar year, which is the cumulative rate level associated with each rate level group weighted by the portion of the calendar year premium represented by the rate level group. Column 3 displays the current rate level index, which is the cumulative rate level in the most recent rate level group. Column 4 is the factor to be applied to earned premium in each calendar year to bring it to current rate level, and is the ratio of Column 3 to Column 2.

PREMIUM TREND EXHIBIT

Historical premium also needs to be adjusted to account for the change in average premium level due to distributional changes in the book of business. The Premium Trend Exhibit shows the calculation of the premium trend factors used in the indication using a two-step trending approach. This exhibit is described in detail below.

Sheets 1-2

Sheet 1 shows the historical annual changes in average written premium at current rate level. Column 3 is the average written premium at current rate level for the 12-month period ending each quarter, and is calculated by dividing the written premium at current rate level (Column 1) by the written exposures (Column 2). It would have been preferable to use the average written premium at current rate level for each quarter (rather than the 12-month rolling quarter), but that data was not readily available. Column 4 calculates an annual trend of average written premium at current rate level (i.e., the percentage change from the prior year). Exponential trends based on various lengths of time are calculated and displayed at the bottom of the sheet. Sheet 2 displays the data in graphical format. The selected projected premium trend is included on Sheet 2. The trend selection is based on the more recent data because this projection is going to be applied to historical premium already trended to the most recent period.

Sheet 3

Sheet 3 shows the derivation of the premium trend factors. Columns 1 and 2 show calendar year earned premium at current rate level and earned exposures, respectively. Average earned premium at current rate level is calculated in Column 3 by dividing Column 1 by Column 2. Column 4 is the most recent average written premium at current rate level from Sheet 1. Column 5 shows the current trend factor, which adjusts the earned premium for each calendar year to the most recent average written premium level; these factors are calculated by dividing Column 4 by Column 3. Column 6 is the selected projected premium trend. Column 7 is the projected trend period, measured from the average written date of the 12 month period ending December 31, 2015 (this is June 30, 2015) to the average written date of PY2017 (June 30, 2017). The projected trend factor is calculated in Column 8 as one plus Column 6, raised to the power of Column 7. Column 9 is the total trend factor that brings historical earned premium at current rate level to the projected level when rates will be in effect, and is calculated as the product of Columns 5 and 8.

LOSS DEVELOPMENT EXHIBIT

Since losses and ALAE in the historical data are not fully mature, they need to be developed. The Loss Development Exhibit shows the calculation of the loss and ALAE development factors using the chain ladder technique. In this exhibit, the historical reported loss and paid ALAE are shown for each accident year at each valuation point. Each row represents the reported loss and paid ALAE for a given accident year with each column representing a specific age of development.

The age-to-age factors, or link ratios, are calculated for each accident year by dividing the reported loss and paid ALAE at one valuation point by the value at the previous valuation point. Rows 1 through 5 show various averages used as guides for selections. The three-, four-, and all-year averages represent straight averages of the link ratios. The average excluding hi-lo represents the straight average of all link ratios after excluding the highest and lowest link ratios. The geometric average is the n^{th} root of the product of the n link ratios used in the average.

Row 6 shows the selected age-to-age factors. Row 7 converts the selected age-to-age factors to age-to-ultimate factors by multiplying each age-to-age factor by all of the subsequent age-to-age factors. For

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example, the 39-ultimate factor is the product of the selected 39-51, 51-63, and 63-ultimate age-to-age factors.

LOSS TREND EXHIBIT

Because the proposed rates will be in effect in a period later than the historical period, the loss and ALAE need to be adjusted to account for expected trends in the frequency and severity of claims between the two periods. A two-step loss trending approach is used. Regional data is used to determine appropriate trends.

Sheets 1-4

Sheet 1 shows the historical frequencies, severities, and pure premiums. Columns 1 through 3 are the earned exposures, closed claim counts, and paid losses on a rolling 12-month basis (i.e., 12 month period ending each quarter). Changes in paid losses are used as the best estimate of the trend as the use of paid losses eliminates any distortions caused by changes in overall reserve adequacy. LAE are not included with the losses in the trend data, and are therefore assumed to be affected by the same trend. Columns 4 through 6 display the frequency (Column 2 divided by Column 1), severity (Column 3 divided by Column 2), and pure premium (Column 3 divided by Column 1) for each 12-month ending period. Exponential trends are fit to the frequency, severity, and pure premiums columns for various durations. While not displayed, some actuaries may view the *R-squared* statistic to gauge the goodness of fit of the exponential trends, and consider that when making selections.

Sheets 2 through 4 are the graphical representation of this data and the selected trends.

Sheet 5

Sheet 5 shows the derivation of the total loss trend factor. Column 1 shows the selected current loss trend factor, and Column 2 shows the current cost trend period for each accident year, which is the number of years between the average date of loss in the accident year (June 30, 20XX) to the average date of loss for the most recent period used to select the loss trends (June 30, 2015). Column 3 is the sum of one and the selected current pure premium trend from Column 1 trended for the length of time in Column 2. Columns 4 through 6 show a similar calculation to determine the projected pure premium trend factor. In this case, the selected projected pure premium trend is used to trend losses and ALAE from June 30, 2015, to the average date of loss for the projected period (September 30, 2017). Column 7 is the total pure premium loss trend factor and is calculated as the product of Columns 3 and 6.

ULAE RATIO EXHIBIT

In this example, three calendar years of countrywide data are used to determine the factor needed to adjust the State XX reported loss and paid ALAE to include ULAE. Column 1 includes the countrywide calendar year paid loss and ALAE, and Column 2 shows the countrywide calendar year paid ULAE. Calendar year paid information is used as it is readily available accounting data and is not susceptible to changes in reserving practices. Column 3 (Column 2 divided by Column 1) is the paid ULAE as a percentage of paid loss and ALAE. The selection in Row 4 is based on the historical ratios. The selected percentage is converted into a factor in Row 5 by adding one.

EXPENSE EXHIBIT

The underwriting expense ratios are determined using the premium-based projection method. This method assumes that the historical relationship between expenses and premium is expected to continue during the projected period.

The expenses are divided into five categories: general, other acquisition, licenses and fees, commissions and brokerage, and taxes. The calculations and selections are performed for each category separately.

For each of the five categories, Row “a” shows the expense associated with the category for each of the three calendar years. The expense is aggregated either at the state or countrywide level, depending on the category. Row “b” displays the corresponding premium. The premium used in this calculation is either state or countrywide and either written or earned depending on the nature of the expense category. Row “c” is the calculation of the expense ratio for each expense category for each year, as well as the premium-weighted average of the three years; the selected percentage is displayed in the last column. Row “d” contains the percentage selected to split each expense ratio between fixed and variable. Rows “e” and “f” are the resulting fixed and variable expense ratios, respectively, using the selected percentage shown in Row “d.”

Rows 6 and 7 at the bottom of the exhibit are the totals of the fixed and variable expense ratios from summing the individual categories. No expense trend is applied to the fixed expense ratio. This assumes the expenses and premium will trend at the same rate and the ratio will remain constant.

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Indicated Rate Change - Loss Ratio Method

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Projected Earned						
Calendar Accident Year	Earned Premium	Current Rate Level Factor	Premium Trend Factor	Premium at Current Rate Level	Reported Losses and Paid ALAE	Loss Development Factor	Loss Trend Factor	ULAE Factor	Projected Ultimate Losses and LAE	Projected Loss and LAE Ratio
2011	\$ 1,122,372	1.2161	1.1342	\$ 1,548,088	\$ 856,495	1.0000	0.9912	1.143	\$ 970,359	62.7%
2012	\$ 1,154,508	1.2176	1.1116	\$ 1,562,608	\$ 867,184	0.9799	0.9962	1.143	\$ 967,578	61.9%
2013	\$ 1,280,545	1.1311	1.0879	\$ 1,575,741	\$ 835,120	1.0003	1.0012	1.143	\$ 955,974	60.7%
2014	\$ 1,369,976	1.0892	1.0663	\$ 1,591,109	\$ 821,509	1.0282	1.0062	1.143	\$ 971,450	61.1%
2015	\$ 1,397,750	1.0991	1.0452	\$ 1,605,706	\$ 797,866	1.0966	1.0113	1.143	\$ 1,011,357	63.0%
Total	\$ 6,325,151			\$ 7,883,252	\$ 4,178,174				\$ 4,876,718	61.9%

(11) Selected Projected Loss and LAE Ratio	61.9%
(12) Fixed Expense Provision	11.3%
(13) Variable Expense Provision	17.0%
(14) UW Profit Provision	5.0%
(15) Variable Permissible Loss Ratio	78.0%
(16) Indicated Rate Change	-6.2%
(17) Credibility	100.0%
(18) Trended Present Rates Indication	6.2%
(19) Credibility-Weighted Indicated Rate Change	-6.2%
(20) Selected Rate Change	-6.2%

(2) From Current Rate Level Exhibit - 2

(3) From Premium Trend Exhibit - 3

(4) = (1) x (2) x (3)

(5) Case Incurred Losses and ALAE Evaluated As Of 03/31/2016

(6) From Loss Development Exhibit

(7) From Loss Trend Exhibit - 5

(8) From ULAE Ratio Exhibit

(9) = (5) x (6) x (7) x (8)

(10) = (9) / (4)

(12) From Expense Exhibit

(13) From Expense Exhibit

(14) Selected profit provision

(15) = 100% - (13) - (14)

(16) = { [(11) + (12)] / (15) } - 1.0

(17) From Credibility Exhibit

(18) From Credibility Exhibit

(19) = (16) x (17) + (18) x [1.0 - (17)]

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Credibility Calculations

(1) Total Number of Claims in Historical Period	3,612
(2) Number of Claims for Full Credibility	1,082
(3) Credibility Min{ [(1) / (2)] ^ 0.5, 1.0 }	100.0%
(4) Latest Indicated Rate Change	13.2%
(5) Last Rate Change Taken From Current Rate Level Exhibit - 1	5.0%
(6) Residual Indication { [1.0 + (4)] / [1.0 + (5)] } - 1.0	7.8%
(7) Projected Loss Trend From Loss Trend Exhibit - 1	0.5%
(8) Projected Premium Trend From Premium Trend Exhibit - 1	2.0%
(9) Net Trend { [1.0 + (7)] / [1.0 + (8)] } - 1.0	-1.5%
(10) Trend Period From Last Rate Change Effective Date (01/01/2016) to Proposed Effective Date (01/01/2017)	1.0
(11) Trended Present Rates Indication { [1.0 + (6)] x [1.0 + (9)] ^ (10) } - 1.0	6.2%

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Rate Change History

	(1)	(2)	(3)	(4)
Rate Level Group	Effective Date	Rate Change	Rate Level Index	Cumulative Rate Level Index
A			1.0000	1.0000
B	04/01/2011	-5.0%	0.9500	0.9500
C	07/01/2012	10.0%	1.1000	1.0450
D	10/01/2013	5.0%	1.0500	1.0973
E	07/01/2014	-2.0%	0.9800	1.0754
F	10/01/2015	5.0%	1.0500	1.1292
G	01/01/2016	5.0%	1.0500	1.1857

(3) = 1.0 + (2)

(4) = Cumulative Product of (3)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Calculation of Current Rate Level Factors

	(1a)							(2)	(3)	(4)
	Portion of Earned Premium Assumed in Each Rate Level Group							Average	Current	
Calendar Year	A	B	C	D	E	F	G	Cumulative Rate Level	Rate Level Index	CRL Factor
2011	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.9750	1.1857	1.2161
2012	0.00%	75.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.9738	1.1857	1.2176
2013	0.00%	0.00%	93.75%	6.25%	0.00%	0.00%	0.00%	1.0483	1.1857	1.1311
2014	0.00%	0.00%	6.25%	68.75%	25.00%	0.00%	0.00%	1.0886	1.1857	1.0892
2015	0.00%	0.00%	0.00%	0.00%	93.75%	6.25%	0.00%	1.0788	1.1857	1.0991
(1b) Cumulative Rate Level	1.0000	0.9500	1.0450	1.0973	1.0754	1.1292	1.1857			

(1a) Portion of Each Calendar Year's Earned Premium by Rate Level Group

(1b) Cumulative Rate Level for each Rate Level Group

(2) (1b) Weighted by (1a) Within Each Calendar Year

(4) = (3) / (2)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Premium Trend Selection

Year Ending Quarter - X	(1) Written Premium at CRL	(2) Written Exposure	(3) Average Written Premium at CRL	(4) Annual Trend
2010 - 2	\$1,314,117	12,752	\$103.05	
2010 - 3	\$1,323,381	12,776	\$103.58	
2010 - 4	\$1,333,726	12,806	\$104.15	
2011 - 1	\$1,343,014	12,825	\$104.72	
2011 - 2	\$1,354,391	12,863	\$105.29	2.2%
2011 - 3	\$1,364,644	12,893	\$105.84	2.2%
2011 - 4	\$1,374,283	12,917	\$106.39	2.2%
2012 - 1	\$1,384,951	12,953	\$106.92	2.1%
2012 - 2	\$1,393,570	12,973	\$107.42	2.0%
2012 - 3	\$1,403,987	13,005	\$107.96	2.0%
2012 - 4	\$1,415,881	13,044	\$108.55	2.0%
2013 - 1	\$1,428,087	13,082	\$109.16	2.1%
2013 - 2	\$1,438,647	13,108	\$109.75	2.2%
2013 - 3	\$1,448,311	13,128	\$110.32	2.2%
2013 - 4	\$1,458,540	13,155	\$110.87	2.1%
2014 - 1	\$1,468,617	13,183	\$111.40	2.1%
2014 - 2	\$1,479,666	13,217	\$111.95	2.0%
2014 - 3	\$1,492,537	13,262	\$112.54	2.0%
2014 - 4	\$1,503,294	13,292	\$113.10	2.0%
2015 - 1	\$1,514,903	13,325	\$113.69	2.1%
2015 - 2	\$1,524,242	13,341	\$114.25	2.1%
2015 - 3	\$1,536,215	13,383	\$114.79	2.0%
2015 - 4	\$1,547,368	13,414	\$115.35	2.0%

Exponential Trend

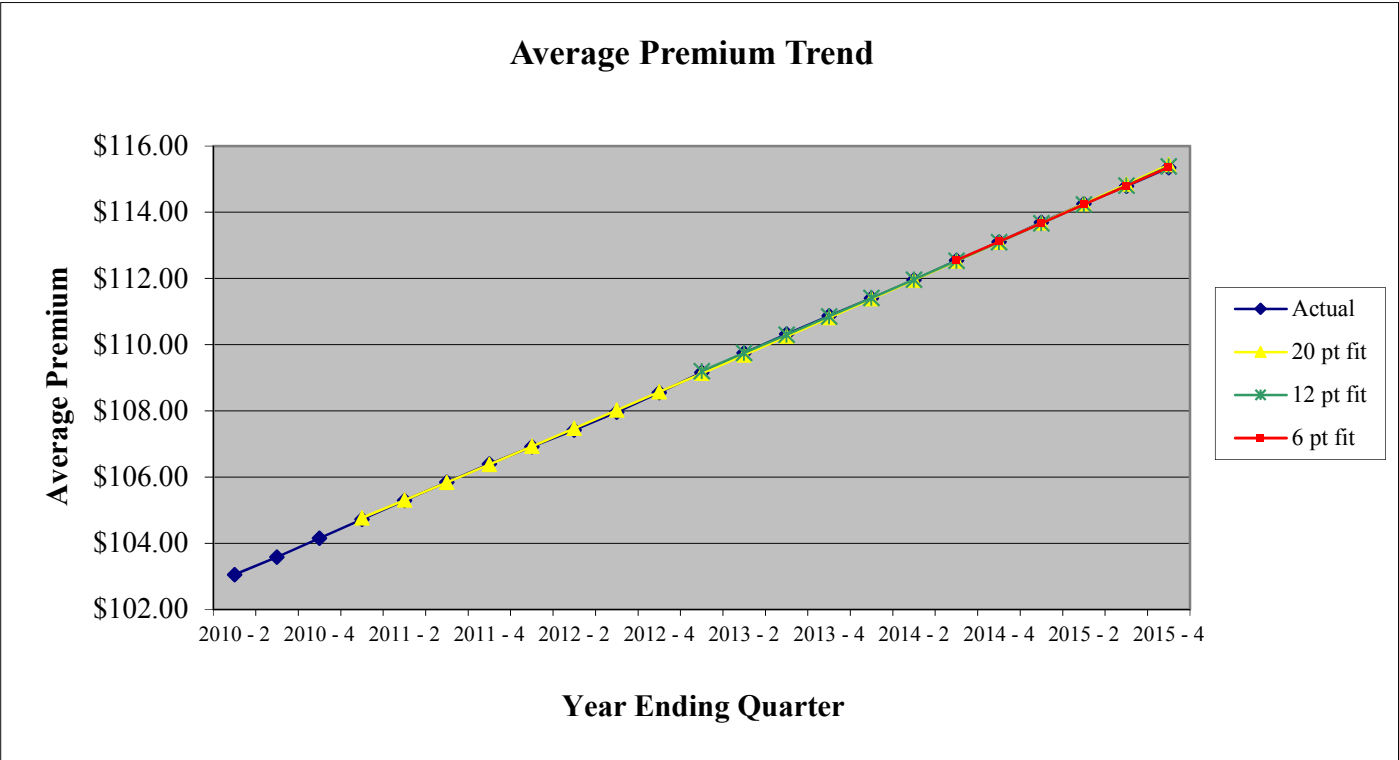
20 pt	2.1%
16 pt	2.1%
12 pt	2.0%
8 pt	2.0%
6 pt	2.0%
4 pt	1.9%

Selected Projected Premium Trend 2.0%

(3) = (1) / (2)

(4) Percent Change in Avg WP at CRL From Prior Year

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Premium Trend



Exponential Trend	
20 pt	2.1%
12 pt	2.0%
6 pt	2.0%

Selection
2.0%

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Premium Trend Calculation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Earned	Earned	Average Earned	Most Recent	Current	Selected	Projected	Projected	
Calendar	Premium at	Exposure	Premium at CRL	Average Written	Trend	Premium	Trend	Trend	Total Trend
Year	CRL			Premium at CRL	Factor	Trend	Period	Factor	Factor
2011	\$1,364,916.59	12,900	\$105.81	\$115.35	1.0902	2.0%	2.0000	1.0404	1.1342
2012	\$1,405,728.94	13,020	\$107.97	\$115.35	1.0684	2.0%	2.0000	1.0404	1.1116
2013	\$1,448,424.45	13,130	\$110.31	\$115.35	1.0457	2.0%	2.0000	1.0404	1.0879
2014	\$1,492,177.86	13,258	\$112.55	\$115.35	1.0249	2.0%	2.0000	1.0404	1.0663
2015	\$1,536,267.03	13,380	\$114.82	\$115.35	1.0046	2.0%	2.0000	1.0404	1.0452

(1) = [LR Indication Exhibit (1)] x [Current Rate Level Exhibit - 2 (4)]

(3) = (1) / (2)

(4) Average Written Premium for Year Ending 2015, Quarter 4
 [From Premium Trend Exhibit - 1]

(5) = (4) / (3)

(6) From Premium Trend Exhibit - 1

(7) From 06/30/2017 to 06/30/2017

(8) = [1.0 + (6)] ^ (7)

(9) = (5) x (8)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Loss Development

Reported Losses and Paid ALAE Evaluated As Of					
<u>Accident Year</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>
2009	705,088	725,592	738,686	753,027	732,239
2010	712,475	753,295	782,248	800,258	813,949
2011	714,196	763,913	855,150	874,106	856,495
2012	764,101	861,114	884,498	867,184	
2013	774,384	846,167	835,120		
2014	785,068	821,509			
2015	797,866				
<u>Age-to-Age Factors</u>	<u>15-27</u>	<u>27-39</u>	<u>39-51</u>	<u>51-63</u>	<u>63-Ult</u>
2009	1.0291	1.0180	1.0194	0.9724	
2010	1.0573	1.0384	1.0230	1.0171	
2011	1.0696	1.1194	1.0222	0.9799	
2012	1.1270	1.0272	0.9804		
2013	1.0927	0.9869			
2014	1.0464				
(1) All-Year Average	1.0704	1.0380	1.0113	0.9898	
(2) 3-Year Average	1.0887	1.0445	1.0085	0.9898	
(3) 4-Year Average	1.0839	1.0430	1.0113		
(4) Average Excluding Hi-Lo	1.0665	1.0279	1.0208	0.9799	
(5) Geometric Average	1.0699	1.0371	1.0111	0.9896	
(6) Selected Age-to-Age	1.0665	1.0279	1.0208	0.9799	1.0000
(7) Age-to-Ultimate	1.0966	1.0282	1.0003	0.9799	1.0000
(1) Straight Average					
(2) Straight Average					
(3) Straight Average					
(4) Straight Average Excluding Highest and Lowest Values					
(5) = (Product of Age-to-Age Factors) ^ (1.0 / Number of Age-to-Age Factors)					
(7) = Cumulative Product of (6)					

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Loss Trend Selections - Regional Data

Year Ending Quarter - X	(1) Earned Exposure	(2) Closed Claim Count	(3) Paid Losses	(4) Frequency	(5) Severity	(6) Pure Premium
2011 - 1	131,911	7,745	\$8,220,899	0.0587	\$1,061.45	\$62.32
2011 - 2	132,700	7,785	\$8,381,016	0.0587	\$1,076.56	\$63.16
2011 - 3	133,602	7,917	\$8,594,389	0.0593	\$1,085.56	\$64.33
2011 - 4	135,079	7,928	\$8,705,108	0.0587	\$1,098.02	\$64.44
2012 - 1	137,384	7,997	\$8,816,379	0.0582	\$1,102.46	\$64.17
2012 - 2	138,983	8,037	\$8,901,163	0.0578	\$1,107.52	\$64.04
2012 - 3	140,396	7,939	\$8,873,491	0.0565	\$1,117.71	\$63.20
2012 - 4	140,997	7,831	\$8,799,730	0.0555	\$1,123.70	\$62.41
2013 - 1	140,378	7,748	\$8,736,859	0.0552	\$1,127.63	\$62.24
2013 - 2	139,682	7,719	\$8,676,220	0.0553	\$1,124.01	\$62.11
2013 - 3	138,982	7,730	\$8,629,925	0.0556	\$1,116.42	\$62.09
2013 - 4	138,984	7,790	\$8,642,835	0.0560	\$1,109.48	\$62.19
2014 - 1	139,155	7,782	\$8,602,105	0.0559	\$1,105.38	\$61.82
2014 - 2	139,618	7,741	\$8,535,327	0.0554	\$1,102.61	\$61.13
2014 - 3	139,996	7,720	\$8,466,272	0.0551	\$1,096.67	\$60.48
2014 - 4	140,141	7,691	\$8,412,159	0.0549	\$1,093.77	\$60.03
2015 - 1	140,754	7,735	\$8,513,679	0.0550	\$1,100.67	\$60.49
2015 - 2	141,534	7,769	\$8,614,224	0.0549	\$1,108.79	\$60.86
2015 - 3	141,800	7,755	\$8,702,135	0.0547	\$1,122.13	\$61.37
2015 - 4	142,986	7,778	\$8,761,588	0.0544	\$1,126.46	\$61.28

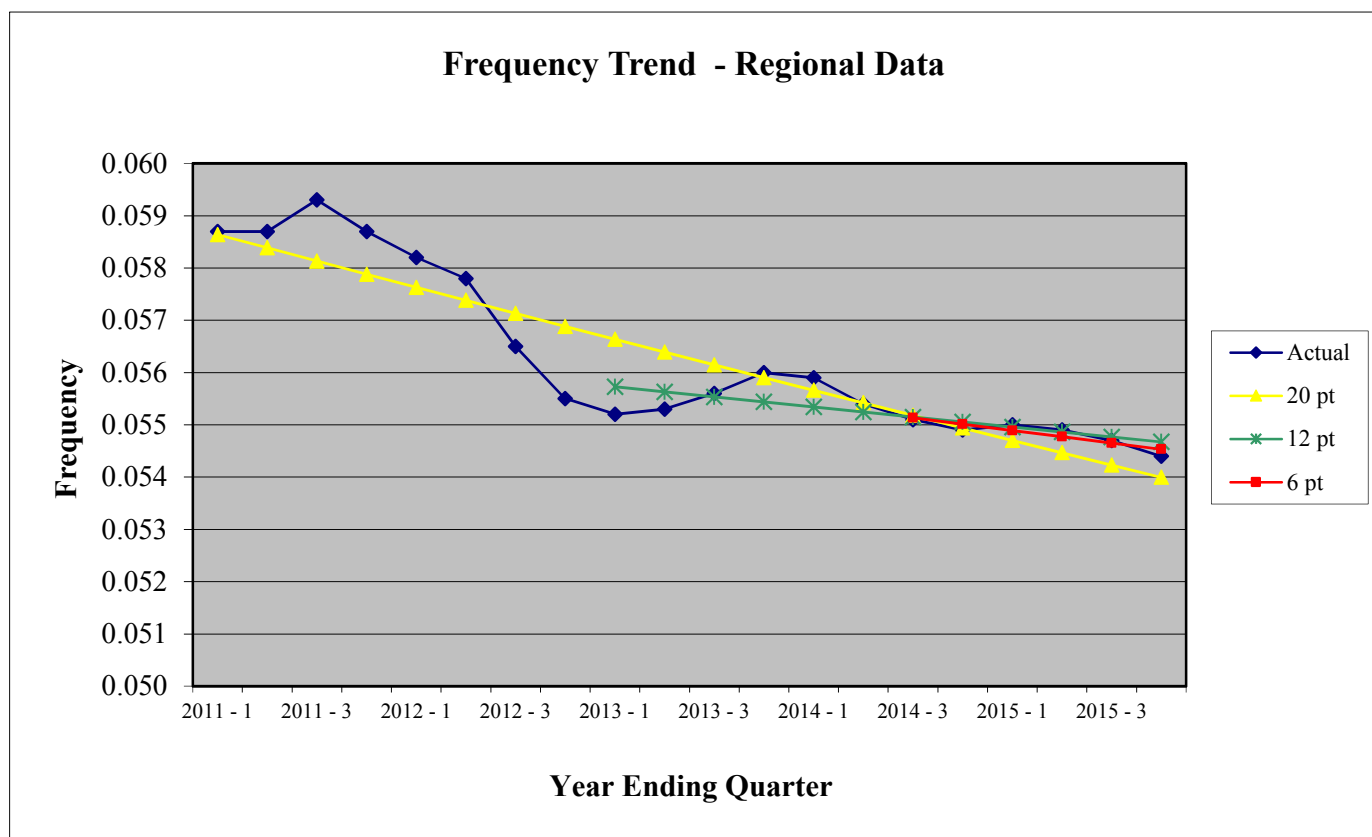
Exponential Trend	Frequency	Severity	Pure Premium
20 pt	-1.7%	0.5%	-1.2%
16 pt	-1.3%	-0.1%	-1.4%
12 pt	-0.7%	-0.2%	-0.9%
8 pt	-1.2%	1.2%	-0.1%
6 pt	-0.9%	2.5%	1.6%
4 pt	-1.5%	3.3%	1.9%

Selections

Current	-1.0%	0.5%	-0.5%
Projected	-1.0%	1.5%	0.5%

- (1) Shown on a 4-Quarter Rolling Total Basis
(2) Shown on a 4-Quarter Rolling Total Basis
(3) Shown on a 4-Quarter Rolling Total Basis
(4) = (2) / (1)
(5) = (3) / (2)
(6) = (3) / (1)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Frequency Trend - Regional Data



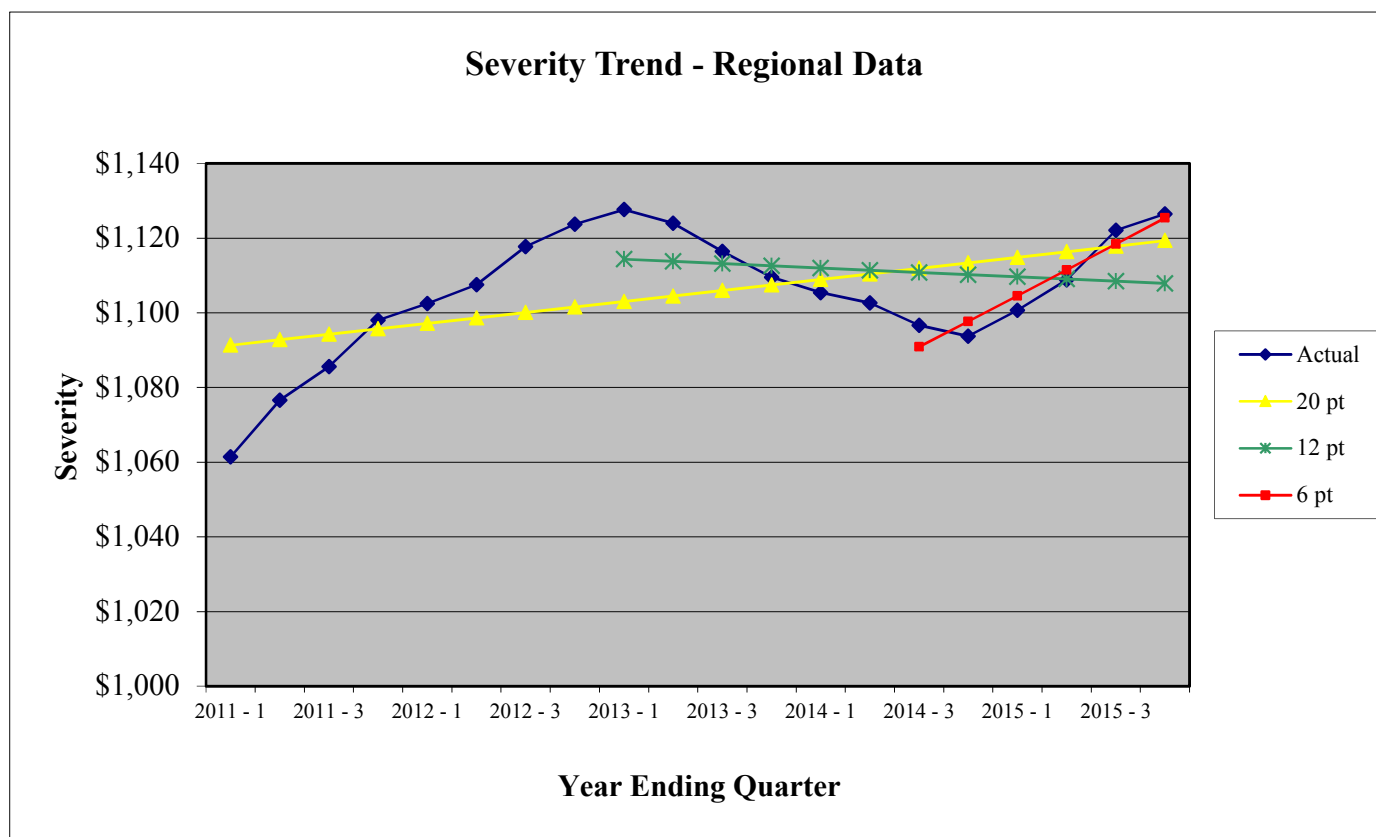
Exponential Trend

20 pt	-1.7%
12 pt	-0.7%
6 pt	-0.9%

Selections

Current	-1.0%
Projected	-1.0%

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Severity Trend -Regional Data



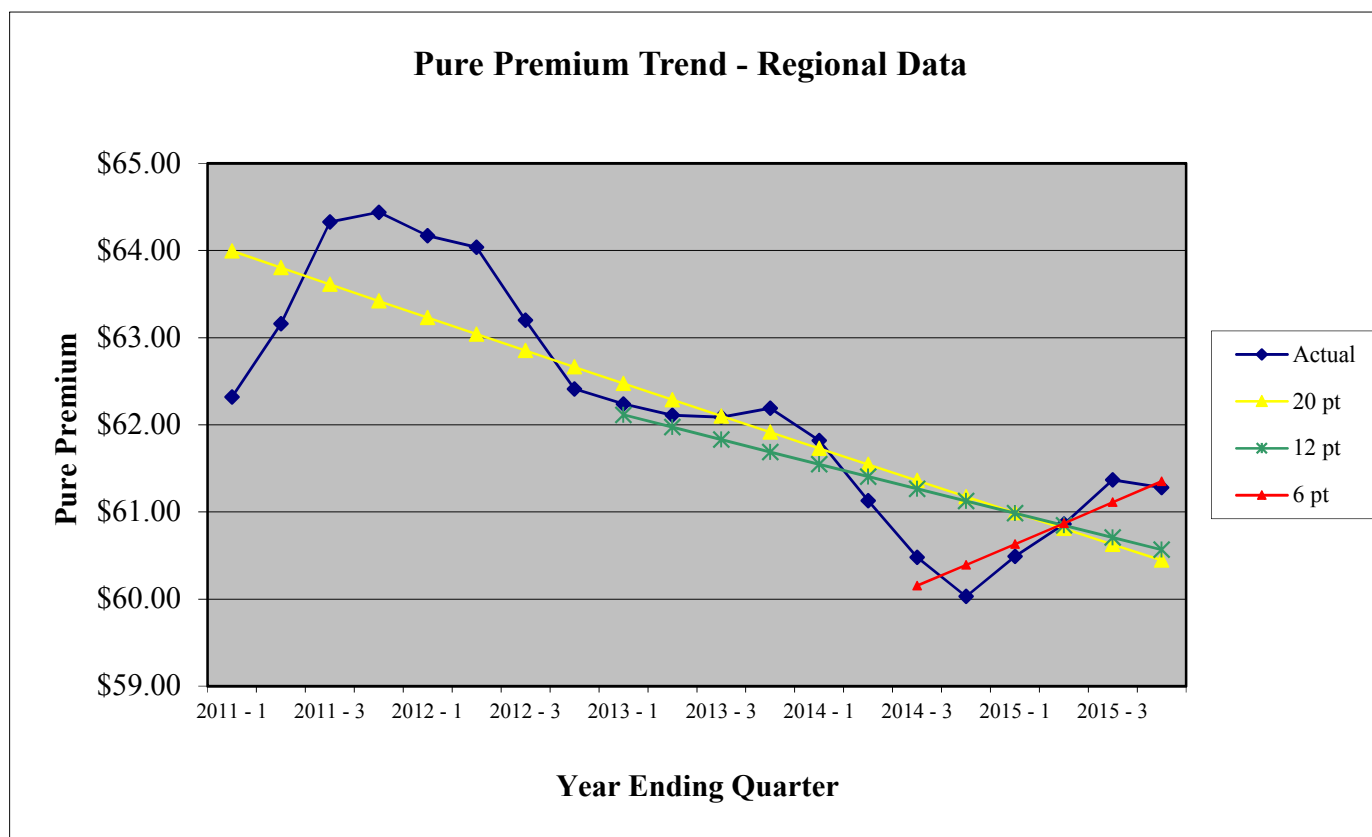
Exponential Trend

20 pt	0.5%
12 pt	-0.2%
6 pt	2.5%

Selections

Current	0.5%
Projected	1.5%

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Pure Premium Trend - Regional Data



Exponential Trend

20 pt	-1.2%
12 pt	-0.9%
6 pt	1.6%

Selections*

Current	-0.5%
Projected	0.5%

* Calculated Using Frequency and Severity Trend Selections

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Loss Trend

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Accident Year	Selected Current Trend	Current Cost Trend Period	Current Trend Factor	Selected Projected Trend	Projected Cost Trend Period	Projected Trend Factor	Loss Trend Factor
2011	-0.5%	4.00	0.9801	0.5%	2.25	1.0113	0.9912
2012	-0.5%	3.00	0.9851	0.5%	2.25	1.0113	0.9962
2013	-0.5%	2.00	0.9900	0.5%	2.25	1.0113	1.0012
2014	-0.5%	1.00	0.9950	0.5%	2.25	1.0113	1.0062
2015	-0.5%	0.00	1.0000	0.5%	2.25	1.0113	1.0113

- (1) From Loss Trend Exhibit - 1
(2) From 07/01/20XX to 06/30/2015
(3) = $[1.0 + (1)]^{(2)}$
(4) From Loss Trend Exhibit - 1
(5) From 07/01/2015 to 09/30/2017
(6) = $[1.0 + (4)]^{(5)}$
(7) = (3) x (6)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
ULAE Ratio

	(1)	(2)	(3)
	Countrywide		
Calendar Year	Paid Losses and ALAE	Countrywide Paid ULAE	ULAE Ratio
2013	\$ 283,299,252	\$ 41,170,520	14.5%
2014	\$ 290,213,410	\$ 41,262,210	14.2%
2015	\$ 293,934,810	\$ 41,959,671	14.3%
Total	\$ 867,447,472	\$ 124,392,401	14.3%

(4) Selected Ratio **14.3%**

(5) ULAE Factor 1.143

(3) = (2) / (1)

(5) = 1.0 + (4)

State XX
Wicked Good Insurance Company
Private Passenger Auto: Property Damage Liability
Expense Calculation

	2013	2014	2015	3-Year Weighted Average	Selected
(1) General Expenses					
a Countrywide Expenses	\$ 29,143,368	\$ 29,940,978	\$ 30,763,160		
b Countrywide Earned Premium	\$ 466,001,205	\$ 478,971,842	\$ 491,904,082		
c Ratio[(a)/(b)]	6.3%	6.3%	6.3%	6.3%	6.3%
d % Assumed Fixed					75.0%
e Fixed Expense % [(c)x(d)]					4.7%
f Variable Expense % [(c)x(1.0-(d))]					1.6%
(2) Other Acquisition					
a Countrywide Expenses	\$ 40,158,296	\$ 40,912,479	\$ 41,652,543		
b Countrywide Written Premium	\$ 468,850,020	\$ 482,345,783	\$ 495,356,701		
c Ratio[(a)/(b)]	8.6%	8.5%	8.4%	8.5%	8.5%
d % Assumed Fixed					75.0%
e Fixed Expense % [(c)x(d)]					6.4%
f Variable Expense % [(c)x(1.0-(d))]					2.1%
(3) Licenses and Fees					
a State Expenses	\$ 3,124	\$ 3,190	\$ 3,229		
b State Written Premium	\$ 1,289,484	\$ 1,380,129	\$ 1,407,811		
c Ratio[(a)/(b)]	0.2%	0.2%	0.2%	0.2%	0.2%
d % Assumed Fixed					100.0%
e Fixed Expense % [(c)x(d)]					0.2%
f Variable Expense % [(c)x(1.0-(d))]					0.0%
(4) Commission and Brokerage					
a State Expenses	\$ 145,073	\$ 154,235	\$ 158,712		
b State Written Premium	\$ 1,289,484	\$ 1,380,129	\$ 1,407,811		
c Ratio[(a)/(b)]	11.3%	11.2%	11.3%	11.2%	11.2%
d % Assumed Fixed					0.0%
e Fixed Expense % [(c)x(d)]					0.0%
f Variable Expense % [(c)x(1.0-(d))]					11.2%
(5) Taxes					
a State Expenses	\$ 27,338	\$ 27,549	\$ 29,853		
b State Written Premium	\$ 1,289,484	\$ 1,380,129	\$ 1,407,811		
c Ratio[(a)/(b)]	2.1%	2.0%	2.1%	2.1%	2.1%
d % Assumed Fixed					0.0%
e Fixed Expense % [(c)x(d)]					0.0%
f Variable Expense % [(c)x(1.0-(d))]					2.1%
(6) Fixed Expense Provision	(1e) + (2e) + (3e) + (4e) + (5e)				11.3%
(7) Variable Expense Provision	(1f) + (2f) + (3f) + (4f) + (5f)				17.0%