

National Council On Compensation Insurance

Loss Cost Filing Review Missouri Workers' Compensation January 1, 2013

Firm: AMI Risk Consultants, Inc.
11410 N. Kendall Drive, Suite 208
Miami, Florida 33176
(305) 273-1589

Contact: Aguedo (Bob) M. Ingco, FCAS, MAAA, CPCU, ARM

Date: November 7, 2012

TABLE OF CONTENTS

<i>I. EXECUTIVE SUMMARY</i>	<u>PAGE</u>
Introduction & Scope	1
Conclusions	2-4
Sources Relied Upon & Acknowledgment of Qualifications	5
Overview of Filing	6-7
<i>II. ACTUARIAL REPORT</i>	<u>PAGE</u>
Statewide Indication	8-15
Experience Rating Discussion	16-19
Attached Exhibits	20
<i>III. ACTUARIAL EXHIBITS</i>	<u>EXHIBIT</u>
Statewide Indication – AMI Compared to NCCI	I
AMI Selected Ultimate Premium & Losses	II
Selected Loss Development Factors	III
Selected Trend Rates	IV
Derivation of Loss Adjustment Expense Provision	V
Estimated Impact on LAE Provision of Including MEM LAE	VI
Retrospective Test of Advisory Loss Costs	VII
<i>IV. APPENDIX</i>	
Information Received from NCCI	Appendix A

National Council on Compensation Insurance

Loss Cost Filing Review Missouri Workers' Compensation Effective January 1, 2013

INTRODUCTION AND SCOPE

AMI Risk Consultants Inc. (AMI) has been retained by the Missouri Department of Insurance, Financial Institutions, and Professional Regulation (DIFP) to review the 2013 Workers' Compensation Loss Cost filing submitted by the National Council on Compensation Insurance (NCCI).

This report summarizes the results of our review of the calculations and assumptions used by NCCI to derive the advisory loss costs effective January 1, 2013.

In particular we reviewed the following components of the filing:

- NCCI's statewide pure premium level indication
- Revisions to the 19th-to-ultimate report loss development tail factors
- Revisions to the Expected Loss Rates (ELR's) and D-ratios that will be used in calculating experience rating mods
- Revisions to the intrastate experience rating off-balance adjustment to premiums used in developing the statewide pure premium level indication.

Specifically excluded from the scope of our review are loss costs for special groups such as F-Classifications and Underground Coal Mine workers.

Furthermore we did not audit the premium or loss data underlying the loss cost development, nor did we verify the accuracy of NCCI's detail calculations.

CONCLUSIONS

The summarized results of our review are as follows:

Statewide Indicated Change

We find that the statewide indicated pure premium level change developed by NCCI recognizes the appropriate, standard ratemaking elements. Our opinion of the various selections made by NCCI in developing the statewide indication is that selections of ultimate losses are somewhat conservative. In addition NCCI's inclusion of assigned risk experience in developing the statewide indication, and their exclusion of Missouri Employers Mutual from the loss adjustment expense provision tend to mildly overstate the statewide loss cost level.

AMI's calculated statewide indicated change compared to NCCI's is:

2013 Missouri Statewide Indicated Change	
Filed by NCCI	Estimated by AMI
2.1%	0.0%

See Pages 8-14 for details of this adjustment.

CONCLUSIONS
(continued)

Loss Development Tail Factors

Our opinion is that the changes NCCI implemented this year to the calculation of the loss development tail factors represent an improvement over the previous approach. See Page 16 for further discussion.

National Council on Compensation Insurance

CONCLUSIONS (continued)

Experience Rating

In our opinion the proposed revisions to the *D-ratios* are necessary due to the increase in split-point from \$5,000 to \$7,500 this year. Furthermore, the D-ratio changes appear reasonable. See Page 17 for additional discussion.

In our opinion the proposed *ELR's* and *Experience Rating Off-Balance* are reasonable and are consistent with the experience for small Missouri risks. See Pages 17 – 19 for additional discussion.

National Council on Compensation Insurance

SOURCES RELIED UPON

In performing our review we relied on information from the following sources:

- NCCI 2013 Advisory Loss Cost Filing for Missouri
- NCCI 2012 Advisory Loss Cost Filing for Missouri
- Data and explanatory notes provided by NCCI in response to our questions (attached here as Appendix A)
- Missouri State Page history provided by the DIFP.

Acknowledgment of Qualifications

Aguedo M. (Bob) Ingco is a consulting actuary and President of AMI Risk Consultants, Inc. He is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. Mr. Ingco meets the qualification standards of the American Academy of Actuaries to provide the estimates in this report.

National Council on Compensation Insurance

OVERVIEW OF FILING

Statewide Average Loss Cost Change

With this filing NCCI is proposing a 2.1% increase in overall loss costs to be distributed by Industry Group as follows:

INDUSTRY GROUP	LOSS COST CHANGE	MISSOURI EXPOSURE DISTRIBUTION**
Manufacturing	0.6%	11%
Contracting	1.9%	6%
Office and Clerical	2.7%	59%
Goods and Services	2.8%	19%
Miscellaneous	2.4%	5%
Overall	2.1%	100%

** exposure distribution based on 7/1/2009 - 6/30/2010 payroll

Of the top twenty classes based on premium, the largest changes in classification loss costs are:

Large Classes with Loss Cost Increases > 5%			
Class	Class Description	Size Rank based on Premium **	Loss Cost Change
8868	College: Professional Employees & Clerical	15th	+9.4%
8742	Salespersons Or Collectors-Outside	5th	+9.1%
9015	Building or Property Mgmt – A/O Employees	19th	+6.8%
8810	Clerical Office Employees Noc	1st	+5.9%
7229	Trucking-Long Distance Hauling-& Drivers	2nd	+5.2%

** rank based on 7/1/2009 - 6/30/2010 payroll x 1/1/2013 proposed loss costs

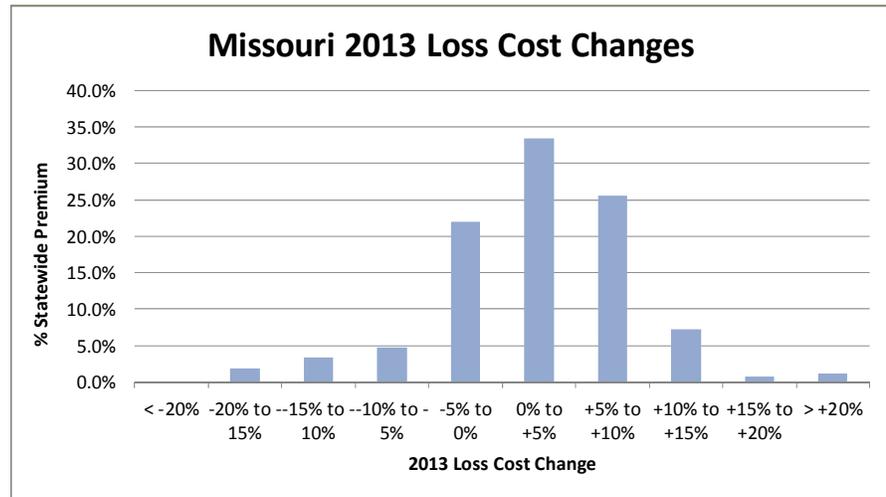
Large Classes with Loss Cost Decreases > -5%			
Class	Class Description	Size Rank based on Premium **	Loss Cost Change
8833	Hospital: Professional Employees	12th	-7.1%

** rank based on 7/1/2009 - 6/30/2010 payroll x 1/1/2013 proposed loss costs

OVERVIEW OF FILING (continued)

Distribution of Loss Cost Changes by Size of Change

As shown in the chart below, the proposed loss cost changes result in an increase between +0% and +5% for 33% of statewide premium, and an increase between +5% and +10% for 26% of statewide premium. An additional 22% of statewide premium will receive small reductions between 0% and -5%.



Loss Development Tail Factors

The loss development tail factors for the 19th to ultimate period were calculated differently than in past filings. This was necessary because certain loss reserve data previously used is no longer reported by carriers to NCCI.

Experience Rating

The *D-ratios* for Experience Rating were revised based on the new \$7,500 split point.

The *ELR's* for Experience Rating were recalculated to produce a targeted average experience rating mod for 2013. Coordinated with the ELR's the *Experience Rating Off-Balance* included in the statewide indication was adjusted to the same target. This is the process aimed at shifting premium between experience-rated and non-rated insureds in an overall revenue-neutral manner. The ELR's lower the mods and the off-balance raises the loss costs.

National Council on Compensation Insurance

STATEWIDE INDICATION

In this section we will describe and comment upon NCCI's statewide loss cost level indication, including the approach applied and the actuarial selections made. In addition we show the results of our own calculations.

Description of NCCI Approach

Provision for Benefits

The statewide indicated change in the provision for benefits is determined using premium and loss data for policy years 2009 and 2010. Standard earned premiums are developed to ultimate and adjusted to current pure premium level. Limited losses are likewise developed to ultimate and adjusted to current benefit level. Ultimate on-level losses are further adjusted for frequency and severity trend and for proposed benefit level changes, and are also loaded for average excess losses.

Separate indications are derived for medical and indemnity and are then summed to a combined indication for each policy year.

Equal weight is assigned to the combined (medical + indemnity) indications from the two policy years.

Statewide Indicated Change

Policy Year	Projected Losses / Projected Premium		
	Indemnity	Medical	Combined
2009	0.359	0.611	0.970
2010	0.384	0.688	1.072
Average			1.021

The indication excludes LAE. The current (2012) provision for LAE is loaded to losses so that the resulting indication is effectively before any consideration for indicated change in LAE provision.

The indicated loss cost level change this year is 1.021 or **+2.1% before considering loss adjustment expenses.**

National Council on Compensation Insurance

**STATEWIDE
INDICATION
(continued)**

Provision for Loss Adjustment Expenses

A loss adjustment expense (LAE) provision is derived from countrywide developed ratios of expenses to incurred losses for the past five accident years. Separate countrywide ratios are selected for defense and cost containment (DCC) expenses and for adjusting and other (A&O) expenses.

A Missouri relativity is applied to the countrywide DCC ratio. That relativity is determined from ratio of paid DCC to paid loss for Missouri and countrywide during the most recent three calendar years.

Loss Adjustment Expense Provision Ratios LAE to Losses			
	DCC	A&O	Total LAE
Countrywide Selected	12.5%	7.3%	19.8%
Missouri DCC Relativity to Cwide	1.063	-	-
Indicated Missouri DCC	13.3%	-	-
NCCI Selected Missouri	13.3%	7.3%	20.6%

Thus the Missouri provision for DCC expense is 6.3% higher than countrywide, and the provision for A&O expense is equal to countrywide. The total allowance for LAE this year is 20.6% which is equal to the 2012 provision.

Statewide Indicated Change Proposed by NCCI

The combined indication for benefits and LAE is therefore:

+2.1%	Benefits indicated change
<u>+0.0%</u>	LAE indicated change
+2.1%	Statewide indicated change.

**STATEWIDE
INDICATION
(continued)**

Comments on NCCI Approach

The NCCI approach to determining the statewide indication recognizes the appropriate, standard ratemaking elements. The use of policy year data, though not common in the industry, is considered the best possible match between premiums and losses. The general approach applied for the 2013 filing is the same as that applied in the 2012 filing. Furthermore, NCCI has indicated in past years that the Missouri approach is similar, but not identical to the approach used by NCCI in other states.

The Inclusion of Assigned Risk Experience

NCCI includes the experience of assigned risks in setting the loss cost level for the voluntary market. It is the DIFP's position that in doing so NCCI violates the scope of their undertaking which is to provide statewide loss costs for the *voluntary* market.

Missouri statutes do allow for the inclusion of assigned risk *assessments*, if any, in the determination of voluntary loss costs. The assigned risk program, however, is self-supporting and has been for a number of years. Therefore the increase in the voluntary loss cost level that results from NCCI's approach is unacceptable from a regulatory perspective.

The treatment of assigned risk experience is a source of long-standing disagreement between NCCI and the DIFP. NCCI has indicated that in their opinion including assigned risk experience:

- 1) Utilizes the largest available volume of credible data,
- 2) Produces consistent loss costs from year to year independent of the size of the assigned risk program, and
- 3) Encourages companies to write as much of the market as possible on a voluntary basis.

Impact: Including assigned risk experience, as NCCI does, increases the overall statewide indication by **0.1%**.

AMI Adjustments: In our adjustments to the NCCI statewide indication (discussed further below) we have lowered our adjusted indication by **0.1%** to reflect the exclusion of assigned risks.

National Council on Compensation Insurance

**STATEWIDE
INDICATION
(continued)**

The Exclusion of Missouri Employers Mutual LAE Costs

In determining the Missouri DCC Relativity to countrywide, NCCI excludes the losses and DCC expenses of the state's largest carrier, Missouri Employers Mutual (MEM). Because MEM's ratio of DCC to losses is consistently lower than the average of other carriers in Missouri, excluding MEM has the effect of increasing the indicated LAE provision and consequently the statewide indication.

It is the DIFP's position that advisory loss costs should reflect the average LAE expense of the *statewide* voluntary market, and should therefore necessarily include MEM.

Impact:

If NCCI had included MEM's DCC expenses in developing the Missouri LAE provision, the *indicated* LAE provision would have decreased by **-0.5%** (See Exhibit VI.)

Missouri LAE Provision Comparison			
Current (2012)	Indicated Per Filing (2013) Excl. MEM	Adjusted Indicated (2013) Incl. MEM	NCCI Selected (2013)
20.6%	20.6%	20.0%	20.6%

AMI Adjustments:

Our selected LAE provision of **20.0%** is developed on Exhibit V. This LAE estimate **includes MEM's DCC experience**, and represents a **-0.5%** change from the provision underlying the current loss costs and from NCCI's selected provision.

National Council on Compensation Insurance

**STATEWIDE
INDICATION
(continued)**

NCCI Selections

The ratemaking approach utilized by NCCI necessitates the selection of various factors and provisions based on available information. Since actuarial judgment is involved at these junctures, it is possible, and even likely, that opinions will vary as to the appropriate selection. NCCI's selections for key factors are shown in the tables below for both the 2012 filing and the 2013 filing.

NCCI Factors Applied to Most Recent Policy Year		
	2013 Filing	2012 Filing
Premium Development Factor	0.996	0.999
Paid Loss Development Factor - Indemnity	3.349	3.452
Incurred Loss Development Factor - Indemnity	1.229	1.218
Paid Loss Development Factor - Medical	1.630	1.621
Incurred Loss Development Factor - Medical	1.109	1.118
Indemnity Trend	0.885	0.871
Medical Trend	1.015	1.015
Loss Adjustment Expense	1.206	1.206
Excess Loss Loading	1.025	1.021

NCCI Factors Applied to Penultimate Policy Year		
	2013 Filing	2012 Filing
Premium Development Factor	1.001	1.000
Paid Loss Development Factor - Indemnity	1.866	1.908
Incurred Loss Development Factor - Indemnity	1.110	1.106
Paid Loss Development Factor - Medical	1.334	1.320
Incurred Loss Development Factor - Medical	1.066	1.075
Indemnity Trend	0.849	0.832
Medical Trend	1.020	1.020
Loss Adjustment Expense	1.206	1.206
Excess Loss Loading	1.025	1.021

National Council on Compensation Insurance

**STATEWIDE
INDICATION
(continued)**

Comments on NCCI Selections

Shown below are the changes in NCCI's selected factors and provisions between the 2012 and 2013 filings. The individual changes are generally minor.

NCCI Ratemaking Factors – Statewide Indication % Changes Between 2012 and 2013 Filings		
	Most Recent PY	Penultimate PY
Premium Development Factor	-0.3%	0.1%
Paid Loss Development Factor - Indemnity	-3.0%	-2.2%
Incurred Loss Development Factor - Indemnity	0.9%	0.4%
Paid Loss Development Factor - Medical	0.6%	1.1%
Incurred Loss Development Factor - Medical	-0.8%	-0.8%
Indemnity Trend	1.6%	2.0%
Medical Trend	0.0%	0.0%
Loss Adjustment Expense	0.0%	0.0%
Excess Loss Loading	0.4%	0.4%

AMI's selections differ from NCCI's as follows:

AMI Selections Compared to NCCI			
	AMI	NCCI	% Difference
Ultimate Losses – Indem - 2010	180,335,875	178,766,580	0.9%
Ultimate Losses – Indem - 2009	169,360,932	168,787,589	0.3%
Ultimate Losses – Med - 2010	281,781,024	283,077,106	-0.5%
Ultimate Losses – Med - 2009	242,139,397	242,631,781	-0.2%
Annual Indemnity Trend	-4.00%	-4.00%	0.0%
Annual Medical Trend	0.50%	0.50%	0.0%
Loss Adjustment Expense	1.200	1.206	-0.5%

The development of the AMI selections is shown on Exhibits II – V.

National Council on Compensation Insurance

**STATEWIDE
INDICATION
(continued)**

AMI Adjusted Statewide Indication

The adjustments/selections proposed by the DIFP and AMI lower the statewide indication from NCCI's proposed 2.1% to 0.0% as shown on Exhibit I. Therefore the proposed loss costs appear **overstated by 2.1%**. The components of the overstatement are:

AMI Adjustments To January 1, 2013 Advisory Loss Costs	
Item	AMI Adjustment
Ultimate Losses	-1.5%
Trend	0.0%
Loss Adjustment Expense Provision	-0.5%
Assigned Risk Exclusion	-0.1%
Total	-2.1%

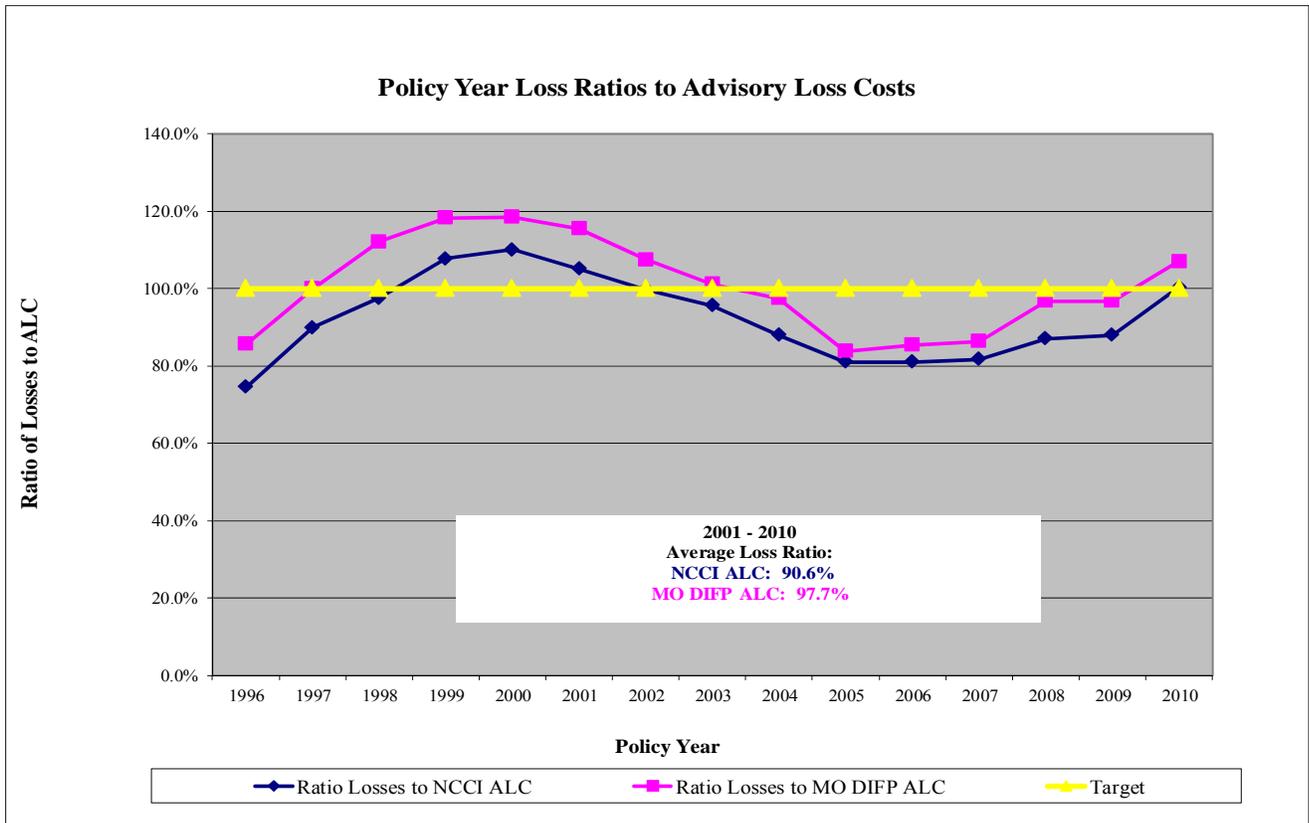
STATEWIDE INDICATION (continued)

History of DIFP Reviewer Alternate Statewide Indications

The graph below shows a retrospective test of advisory loss costs. It compares the Missouri statewide ultimate losses by policy year to those anticipated by:

- NCCI Advisory Loss Costs (blue line)
- NCCI Advisory Loss Costs as adjusted by Missouri DIFP reviewer (pink line).

We note that in 9 years of the most recent 15-year history the DIFP reviewer's adjusted loss costs produced loss ratios closer to the 100% target than the NCCI ALC's, while in the other 6 years NCCI loss costs came closer to the target. Over the last ten years, the NCCI Advisory Loss Costs have produced a loss ratio of 90.6%, i.e. overstating the average voluntary loss cost level by 9.4%. The DIFP reviewer's adjusted loss costs, on the other hand, have overstated the voluntary average loss cost level by 2.3%, producing a loss ratio of 97.7%.



National Council on Compensation Insurance

DISCUSSION

Loss Development Tail Factors

Our opinion is that the changes NCCI implemented this year to the calculation of the loss development tail factors represent an improvement over the previous approach.

The revised approach:

- 1) No longer incorporates bulk + IBNR reserves reported by carriers. These reserves could cause distortions and instability as carriers strengthen or weaken their reserve position.
- 2) Uses policy year losses rather than accident year losses. This change creates tail factors on a consistent basis with the other loss development factors. The resulting tail factors no longer require an adjustment to eliminate overlap with the other development factors.
- 3) Uses 10 years rather than 5 years of losses to adjust losses for prior policy years based on the comparison of average annual losses to those of recent years at 19th report.

Compared to tail factors from last year's filing, this year's **tail factor's declined slightly.**

Loss Development Tail Factor Comparison

	Indemnity		Medical		Change	
	1/1/12	1/1/13	1/1/12	1/1/13	Indemnity	Medical
Incurred	1.010	1.004	1.030	1.025	-0.6%	-0.5%
Paid	1.033	1.026	1.067	1.057	-0.7%	-1.0%

National Council on Compensation Insurance

DISCUSSION

Experience Rating

D-ratios

In this filing the **D-ratios** that determine the primary portion of expected losses for experience rating are increasing on average by **29.4%**. Average changes by industry group are shown below.

D-Ratio Changes			
Industry Group	Average D-Ratio Current	Average D-Ratio Proposed 1/1/13	Change
Manufacturing	.20	.25	27.5%
Contracting	.13	.17	34.7%
Office & Clerical	.19	.25	29.0%
Good & Services	.22	.27	24.9%
Miscellaneous	.15	.20	32.3%
Total			29.4%

The **split-point** that separates actual losses into primary and excess portions for experience rating is increasing by **50%** from **\$5,000 to \$7,500** effective 1/1/2013. Consequently the D-ratios were recalculated assuming the revised split-point of \$7,500. The magnitude of the change in D-ratio is less than the 50% increase in split point because not all losses exceed \$7,500. The proportion of losses under \$5,000 and between \$5,000 and \$7,500 for each industry group will determine how far below 50% the change in D-ratio will fall.

In our opinion the revisions to the D-ratios are necessary and appear reasonable.

ELR's

The **ELR's** are determined using three years of classification experience. The final step in the ELR calculation involves an iterative adjustment of preliminary ELR's until a **targeted average intrastate experience mod** is reached. Setting the ELR's slightly higher each year through this process results in slightly lower experience mods on average and offsets (for experience rated insureds) the increase in loss costs achieved through the Experience Rating Off-balance.

National Council on Compensation Insurance

DISCUSSION (continued)

Experience Rating Off-Balance

This is the second year that NCCI has targeted an experience rating off-balance as part of the plan to slowly shift a greater percentage of premium collected to non-experience-rated insureds. The impetus to initiate and continue this plan is the observation that smaller insureds (in terms of annual premium) as a group produce higher loss ratios than larger insureds.

The impact of the procedure this year is to produce loss costs that are **0.6% higher**, and average experience mods (via the ELR's) that are equally lower.

Average Impact of Off-Balance Approach This Year	
Experience-Rated Insureds	Slightly higher loss costs (increasing by 2.1% instead of 1.5%) offset by slightly lower experience mods
Non-Experience-Rated Insureds	Slightly higher loss costs (increasing by 2.1% instead of 1.5%) with no offset

The cumulative effect of last year's adjustment and this year's on non-experience rated insureds is an increase of **+1.4%**.

National Council on Compensation Insurance

DISCUSSION (continued)

Small Risk Experience

Countrywide experience by policy size suggests the following adjustments are appropriate for small risks:

NCCI Indication Based on Pure Premium Relativity to Overall Countrywide Policy Size \$1 to \$10,000		
Industry Group	Indicated Change	Missouri Premium Distribution*
Manufacturing	-0.8%	6%
Contracting	+30.1%	29%
Office/Clerical	-4.5%	16%
Goods & Services	-0.5%	41%
Miscellaneous	+24.9%	8%
Countrywide Indicated Change	+9.0%	100%

*Missouri standard premium for policy size \$10,000 or less

As shown above the countrywide indicated adjustment for small risks is **+9.0%**. The comparable statewide indication for Missouri small risks, as provided by an NCCI state-specific study is **+15.9%**. (See last page of attached Appendix.) Therefore the cumulative small risk adjustment to date of **+1.4%** (achieved via ELR's and targeted experience rating off-balance in 1/1/12 and 1/1/13 loss cost filings) is small relative to the indicated change.

In our opinion the ELR's and Experience Rating Off-Balance in this filing are reasonable and are consistent with the Missouri small risk indication shown above.

**ATTACHED
EXHIBITS**

The following exhibits are attached to this report:

- Exhibit I – Statewide Indication – AMI Compared to NCCI
- Exhibit II – AMI Selected Ultimate Premium and Losses
- Exhibit III – Selected Loss Development Factors
- Exhibit IV – Selected Trend Rates
- Exhibit V – Derivation of Loss Adjustment Expense Provision
- Exhibit VI – Estimated Impact on LAE Provision of Including MEM
- Exhibit VII – Retrospective Test of Advisory Loss Costs

Attached as Appendix A are answers and data received from NCCI in response to our questions. The only exclusions are the lists of payroll, loss costs, D-ratios and ELR changes by class which were deleted due to length.

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
STATEWIDE INDICATION
AMI COMPARED TO NCCI

	AMI			NCCI		
	PY 2009	PY 2010	Combined	PY 2009	PY 2010	Combined
Premium						
(1) Standard Premium Developed to Ultimate	\$556,555,349	\$563,473,822		\$556,555,349	\$563,473,822	
(2) Premium On Level Factor	0.901	0.916		0.901	0.916	
(3) Premium Available for Benefit Costs = (1) x (2)	\$501,456,369	\$516,142,021		\$501,456,369	\$516,142,021	
Indemnity Benefit Cost						
(4) Limited Indemnity Developed to Ultimate	\$169,185,630	\$179,050,589		\$168,787,589	\$178,766,580	
(5) Indemnity Loss On-level Factor	1.007	1.007		1.007	1.007	
(6) Factor to Include Loss-based Expenses (Current Factor)	1.206	1.206		1.206	1.206	
(7) Composite Adjustment Factor = (5) x (6)	1.214	1.214		1.214	1.214	
(8) Adjusted Limited Indemnity Losses = (4) x (7)	\$205,391,355	\$217,367,415		\$204,908,133	\$217,022,628	
(9) Adjusted Limited Indemnity Cost Ratio excl Trend & Benefits = (8)/(3)	0.410	0.421		0.409	0.420	
(10) Factor To Reflect Indemnity Trend	0.849	0.885		0.849	0.885	
(11) Projected Limited Indemnity Cost Ratio = (9) x (10)	0.348	0.373		0.347	0.372	
(12) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis	1.025	1.025		1.025	1.025	
(13) Projected Indemnity Cost Ratio = (11) x (12)	0.357	0.382		0.356	0.381	
(14) Factor to Reflect Proposed Changes in Benefits	1.008	1.008		1.008	1.008	
(15) Projected Indemnity Cost Ratio including Benefit Changes = (13) x (14)	0.359	0.385		0.359	0.384	
Medical Benefit Cost						
(16) Limited Medical Developed to Ultimate	\$237,420,127	\$275,514,599		\$242,631,781	\$283,077,106	
(17) Medical Loss On-level Factor	1.000	1.000		1.000	1.000	
(18) Factor to Include Loss-based Expenses	1.206	1.206		1.206	1.206	
(19) Composite Adjustment Factor = (17) x (18)	1.206	1.206		1.206	1.206	
(20) Adjusted Limited Medical Losses = (16) x (19)	\$286,328,673	\$332,270,606		\$292,613,928	\$341,390,990	
(21) Adjusted Limited Medical Cost Ratio excl Trend & Benefits = (20)/(3)	0.571	0.644		0.584	0.661	
(22) Factor To Reflect Medical Trend	1.020	1.015		1.020	1.015	
(23) Projected Limited Medical Cost Ratio = (21) x (22)	0.583	0.653		0.596	0.671	
(24) Factor to Adjust Medical Cost Ratio to an Unlimited Basis	1.025	1.025		1.025	1.025	
(25) Projected Medical Cost Ratio = (23) x (24)	0.597	0.670		0.611	0.688	
(26) Factor to Reflect Proposed Changes in Benefits	1.000	1.000		1.000	1.000	
(27) Projected Medical Ratio including Benefit Changes = (25) x (26)	0.597	0.670		0.611	0.688	
Total Benefit Cost						
(28) Indicated Change Based on Experience, Trend and Benefits = (15) + (27)	0.956	1.055		0.970	1.072	
(29) Indicated Change in Benefit Provision			1.006			1.021
(30) Indicated Change in LAE Provision			0.995			1.000
(31) Adjustment to Exclude Assigned Risk			0.999			N/A
(32) Indicated Statewide Change			1.000			1.021
			0.0%			2.1%
(33) AMI Indicated Change to NCCI Proposed January 1, 2013 Advisory Loss Costs			-2.1%			N/A

Notes on AMI Columns:

(4) & (16) - Per Exhibit II.

(10) & (22) - Per Exhibit IV.

(30) - Per Exhibit V.

(31) = ((1 - .021) / (1 - 0.020)) - 1.

(32) = (29) x (30) x (31).

(33) = [(32) AMI / (32) NCCI] - 1

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
 EFFECTIVE JANUARY 1, 2013
 AMI SELECTED ULTIMATE PREMIUM AND LOSSES
 AMI COMPARED TO NCCI

Standard Premium

Policy Year	Earned Premium	Development Factor	AMI Ultimate Earned Premium	NCCI Ultimate Earned Premium
2009	555,999,350	1.001	556,555,349	556,555,349
2010	565,736,769	0.996	563,473,822	563,473,822
Total	1,121,736,119		1,120,029,171	1,120,029,171

Indemnity Losses

Policy Year	Limited Paid	Paid LDF	PLDA Ultimate	Limited Paid+Case	Paid+Case LDF	ILDA Ultimate	
2009	91,153,256	1.839	167,634,005	150,885,768	1.122	169,319,797	
2010	53,140,987	3.313	176,080,675	146,105,773	1.254	183,167,505	
Total	144,294,243		343,714,681	296,991,541		352,487,302	
Policy Year	Expected Ultimate	Percent Unpaid	BFPLA Ultimate	Percent Unrepd	BFILA Ultimate	AMI Selected Ultimate	NCCI Ultimate
2009	172,975,378	45.6%	170,070,934	10.9%	169,717,784	169,185,630	168,787,589
2010	175,125,614	69.8%	175,413,851	20.2%	181,540,326	179,050,589	178,766,580
Total	348,100,991		345,484,785		351,258,109	348,236,219	347,554,169

Medical Losses

Policy Year	Limited Paid	Paid LDF	PLDA Ultimate	Limited Paid+Case	Paid+Case LDF	ILDA Ultimate	
2009	187,512,272	1.276	239,250,783	220,564,907	1.058	233,255,671	
2010	174,856,088	1.570	274,535,033	253,506,573	1.106	280,469,354	
Total	362,368,360		513,785,816	474,071,480		513,725,025	
Policy Year	Expected Ultimate	Percent Unpaid	BFPLA Ultimate	Percent Unrepd	BFILA Ultimate	AMI Selected Ultimate	NCCI Ultimate
2009	255,290,964	21.6%	242,719,508	5.4%	234,454,547	237,420,127	242,631,781
2010	258,464,456	36.3%	268,700,083	9.6%	278,353,924	275,514,599	283,077,106
Total	513,755,420		511,419,591		512,808,472	512,934,726	525,708,887

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
INCURRED LOSS DEVELOPMENT FACTORS
AMI COMPARED TO NCCI

Limited Incurred Indemnity Loss Development Factors

Policy Year	Report									
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11
Avg	1.121	1.049	1.024	1.012	1.010	1.006	1.002	1.005	1.001	1.001
Avg ex Hi-Lo	1.120	1.048	1.024	1.012	1.010	1.006	1.002	1.004	1.001	1.001
3-Yr Avg	1.117	1.037	1.028	1.016	1.010	1.003	1.006	1.004	1.000	1.002
5-Yr Avg ex Hi-Lo	1.110	1.041	1.029	1.014	1.009	1.002	1.002	1.002	1.000	1.001
NCCI Selected	1.107	1.039	1.029	1.011	1.009	1.004	1.001	1.002	1.001	1.001
AMI Selected	1.117	1.044	1.026	1.013	1.010	1.005	1.003	1.004	1.001	1.001
AMI LDF to ULT.	1.254	1.122	1.075	1.048	1.034	1.024	1.019	1.017	1.013	1.012

Policy Year	Report								
	11th/12th	12th/13th	13th/14th	14th/15th	15th/16th	16th/17th	17th/18th	18th/19th	19th/Ult
Avg	1.000	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.000
Avg ex Hi-Lo	1.000	1.002	1.000	1.000	1.001	1.001	1.000	1.000	1.000
3-Yr Avg	1.002	1.004	0.999	0.999	1.000	1.001	1.002	1.001	1.001
5-Yr Avg ex Hi-Lo	1.001	1.003	1.000	1.000	1.000	1.001	1.001	1.000	1.000
NCCI Selected	1.001	1.003	0.999	1.000	1.000	1.001	1.001	1.000	1.004
AMI Selected	1.001	1.003	1.000	1.000	1.001	1.001	1.001	1.000	1.005
AMI LDF to ULT.	1.011	1.010	1.008	1.008	1.008	1.007	1.006	1.005	1.005

Limited Incurred Medical Loss Development Factors

Policy Year	Report									
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11
Avg	1.052	1.008	1.004	0.999	1.005	1.001	0.999	1.004	1.003	1.001
Avg ex Hi-Lo	1.051	1.008	1.003	0.999	1.005	1.001	0.999	1.003	1.003	1.001
3-Yr Avg	1.048	1.004	1.001	1.001	0.996	1.004	1.001	1.005	1.005	0.996
5-Yr Avg ex Hi-Lo	1.034	1.013	1.001	1.006	1.003	1.002	1.001	1.003	1.007	1.001
NCCI Sel	1.040	1.008	1.001	1.006	1.002	1.001	1.001	1.004	1.007	0.999
AMI Selected	1.046	1.008	1.002	1.001	1.002	1.002	1.000	1.004	1.004	1.000
AMI LDF to ULT.	1.106	1.058	1.049	1.046	1.045	1.042	1.040	1.040	1.036	1.032

Policy Year	Report								
	11th/12th	12th/13th	13th/14th	14th/15th	15th/16th	16th/17th	17th/18th	18th/19th	19th/Ult
Avg	1.004	1.005	1.001	1.001	1.001	1.000	1.002	1.004	1.004
Avg ex Hi-Lo	1.004	1.004	1.001	1.001	1.002	1.001	1.002	1.004	1.004
3-Yr Avg	1.005	1.004	0.998	0.996	1.001	1.001	1.002	1.000	1.000
5-Yr Avg ex Hi-Lo	1.002	1.002	1.000	0.999	1.002	1.001	1.001	1.002	1.002
NCCI Selected	1.004	1.004	1.000	0.998	1.001	1.001	1.001	1.003	1.025
AMI Selected	1.004	1.004	1.000	0.999	1.002	1.001	1.002	1.002	1.018
AMI LDF to ULT.	1.032	1.028	1.024	1.024	1.025	1.023	1.022	1.021	1.018

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
PAID LOSS DEVELOPMENT FACTORS
AMI COMPARED TO NCCI

Limited Paid Indemnity Loss Development Factors

Policy Year	Report									
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11
Avg	1.804	1.275	1.122	1.068	1.045	1.028	1.019	1.013	1.009	1.007
Avg ex Hi-Lo	1.804	1.274	1.122	1.068	1.045	1.028	1.019	1.012	1.009	1.007
3-Yr Avg	1.805	1.263	1.128	1.073	1.051	1.031	1.025	1.013	1.010	1.010
5-Yr Avg ex Hi-Lo	1.794	1.265	1.125	1.071	1.049	1.033	1.025	1.014	1.010	1.007
NCCI Selected	1.795	1.260	1.121	1.075	1.048	1.033	1.026	1.015	1.009	1.012
AMI Selected	1.802	1.269	1.124	1.070	1.047	1.030	1.022	1.013	1.010	1.008
AMI LDF to ULT.	3.313	1.839	1.449	1.289	1.204	1.150	1.116	1.092	1.078	1.068

Policy Year	Report								
	11th/12th	12th/13th	13th/14th	14th/15th	15th/16th	16th/17th	17th/18th	18th/19th	19th/Ult
Avg	1.005	1.005	1.005	1.004	1.004	1.003	1.002	1.002	1.002
Avg ex Hi-Lo	1.006	1.005	1.004	1.003	1.004	1.003	1.002	1.002	1.002
3-Yr Avg	1.006	1.007	1.005	1.005	1.005	1.004	1.003	1.003	1.003
5-Yr Avg ex Hi-Lo	1.006	1.006	1.005	1.004	1.004	1.003	1.002	1.002	1.002
NCCI Selected	1.007	1.007	1.005	1.006	1.005	1.005	1.003	1.004	1.026
AMI Selected	1.006	1.006	1.005	1.004	1.004	1.003	1.002	1.002	1.026
AMI LDF to ULT.	1.059	1.053	1.047	1.043	1.039	1.034	1.031	1.028	1.026

Limited Paid Medical Loss Development Factors

Policy Year	Report									
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11
Avg	1.236	1.064	1.032	1.018	1.013	1.010	1.008	1.005	1.006	1.004
Avg ex Hi-Lo	1.235	1.063	1.031	1.018	1.013	1.010	1.007	1.005	1.006	1.004
3-Yr Avg	1.225	1.061	1.035	1.023	1.017	1.013	1.011	1.007	1.010	1.006
5-Yr Avg ex Hi-Lo	1.226	1.065	1.033	1.021	1.013	1.012	1.009	1.008	1.011	1.006
NCCI Selected	1.222	1.065	1.033	1.023	1.018	1.015	1.013	1.007	1.010	1.007
AMI Selected	1.231	1.063	1.033	1.020	1.014	1.011	1.009	1.006	1.008	1.005
AMI LDF to ULT.	1.570	1.276	1.200	1.162	1.139	1.123	1.111	1.101	1.094	1.085

Policy Year	Report								
	11th/12th	12th/13th	13th/14th	14th/15th	15th/16th	16th/17th	17th/18th	18th/19th	19th/Ult
Avg	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003
Avg ex Hi-Lo	1.004	1.003	1.003	1.003	1.003	1.003	1.002	1.003	1.003
3-Yr Avg	1.008	1.007	1.005	1.004	1.004	1.004	1.003	1.002	1.002
5-Yr Avg ex Hi-Lo	1.005	1.004	1.004	1.004	1.004	1.002	1.002	1.002	1.002
NCCI Selected	1.010	1.010	1.006	1.005	1.005	1.006	1.003	1.002	1.057
AMI Selected	1.005	1.005	1.004	1.004	1.003	1.003	1.002	1.002	1.050
AMI LDF to ULT.	1.080	1.074	1.069	1.065	1.061	1.058	1.055	1.052	1.050

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
SELECTED TREND RATES
AMI COMPARED TO NCCI

Policy Year	Indemnity LR Paid+Case	Medical LR Paid + Case
1996	0.687	0.495
1997	0.661	0.521
1998	0.664	0.494
1999	0.679	0.538
2000	0.670	0.550
2001	0.641	0.529
2002	0.588	0.530
2003	0.610	0.591
2004	0.510	0.542
2005	0.432	0.518
2006	0.397	0.513
2007	0.404	0.519
2008	0.368	0.532
2009	0.339	0.484
2010	0.349	0.548
Calc Trend		
all	-5.65%	0.10%
last 5	-4.24%	0.62%
last 3	-2.62%	1.49%
AMI Selected	-4.00%	0.50%
NCCI Selected	-4.00%	0.50%

Notes:

Loss Ratios per NCCI 2013 filing, Appendix A-III.

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
DERIVATION OF LOSS ADJUSTMENT EXPENSE PROVISION
AMI COMPARED TO NCCI

Countrywide						
Accident Year	AMI			NCCI		
	Ultimate DCCE Ratio	Ultimate A&O Ratio	Total LAE Ratio	Ultimate DCCE Ratio	Ultimate A&O Ratio	Total LAE Ratio
2000	9.7%	6.3%				
2001	10.1%	6.5%				
2002	10.5%	6.7%				
2003	10.6%	7.5%				
2004	10.7%	7.1%				
2005	10.8%	7.9%				
2006	10.6%	8.0%				
2007	10.9%	8.3%		10.9%	8.3%	
2008	11.3%	7.6%		11.3%	7.6%	
2009	11.8%	7.8%		11.8%	7.8%	
2010	12.1%	7.5%		12.1%	7.5%	
2011	12.9%	7.0%		12.9%	7.0%	
(1) Selected Countrywide LAE Ratios	12.5%	7.4%		12.5%	7.3%	
(2) Missouri DCC Relativity	1.009	-		1.063	-	
(3) Indicated Missouri LAE Ratios (1) x (2)	12.6%	-		13.3%	-	
(4) Selected Missouri LAE Ratios	12.6%	7.4%	20.0%	13.3%	7.3%	20.6%
(5) Current Missouri LAE Ratios	13.1%	7.5%	20.6%	13.1%	7.5%	20.6%
(6) Change in Missouri LAE Ratios			-0.5%			0.0%

Notes:

(2 - NCCI) - Per NCCI 2013 Loss Cost Filing, Exhibit II-C. Relativity excludes Missouri Employers Mutual (MEM).

(2 - AMI) - Per Exhibit VI, Item (5), Including MEM.

STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
ESTIMATED IMPACT ON LAE PROVISION OF INCLUDING MEM LAE
AMI COMPARED TO NCCI
(\$AMTS IN THOUSANDS)

	EXCLUDING MEM	MEM	INCLUDING MEM
(1) 3-YR Missouri Paid Losses	1,187,732	189,356	1,377,088
(2) 3-YR Missouri Paid DCC	141,298	13,715	155,013
(3) Missouri Ratio (2) / (1)	11.9%	7.2%	11.3%
(4) 3-YR Countrywide DCC Ratio	11.2%	11.2%	11.2%
(5) Missouri Relativity to Countywide (3) / (4)	1.063	N/A	1.009
(6) NCCI Selected Countrywide DCC Provison	12.5%	N/A	12.5%
(7) NCCI Indicated Missouri DCC Provision (5) x (6)	13.3%	N/A	12.7%
(8) NCCI Selected Missouri A&O Provision	7.3%	N/A	7.3%
(9) NCCI Indicated Missouri LAE Provision (7) + (8)	20.6%		20.0%
IMPACT OF INCLUDING MEM DCC		-0.6%	

Notes:

Column "Excluding MEM" per NCCI 2013 Loss Cost Filing, Exhibit II.

"MEM" column provided by DIFP.

**STATE OF MISSOURI
2013 NCCI LOSS COST FILING REVIEW
EFFECTIVE JANUARY 1, 2013
RETROSPECTIVE TEST OF ADVISORY LOSS COSTS
PREMIUMS, LOSSES AND LAE EXCLUDING ASSIGNED RISK**

Policy Year	Statewide Premium (ALC) (1)	Assigned Risk Premium (2)	Voluntary Premium (3)	Statewide		Assigned Risk		Voluntary	
				Paid + Case Losses		Paid + Case Losses		Paid + Case Losses	
				Indemnity (4)	Medical (5)	Indemnity (6)	Medical (7)	Indemnity (8)	Medical (9)
1994	513,339,093	N/A	N/A	167,241,378	153,341,503	N/A	N/A	N/A	N/A
1995	455,910,143	N/A	N/A	143,067,160	135,302,786	N/A	N/A	N/A	N/A
1996	425,050,398	25,538,126	399,512,272	150,530,363	129,792,313	15,018,176	16,667,597	135,512,187	113,124,716
1997	423,987,345	15,351,854	408,635,491	160,513,704	152,392,065	6,343,446	5,286,400	154,170,258	147,105,665
1998	448,356,210	7,697,608	440,658,602	197,473,926	168,564,124	5,657,071	5,387,205	191,816,855	163,176,919
1999	426,151,465	5,422,324	420,729,141	200,424,021	179,350,651	3,555,437	2,520,732	196,868,584	176,829,919
2000	439,469,069	6,427,926	433,041,143	212,209,693	197,192,278	6,178,270	6,752,189	206,031,423	190,440,089
2001	481,042,488	13,358,851	467,683,637	228,360,546	203,519,267	8,988,325	7,481,526	219,372,221	196,037,741
2002	491,219,461	25,028,061	466,191,400	212,849,602	204,051,738	13,606,421	11,990,505	199,243,181	192,061,233
2003	563,905,063	37,908,780	525,996,283	228,093,989	233,524,703	21,172,217	23,691,868	206,921,772	209,832,835
2004	608,942,057	37,236,067	571,705,990	210,892,150	230,250,566	15,548,318	14,722,935	195,343,832	215,527,631
2005	632,735,096	28,576,602	604,158,494	183,994,468	237,695,014	11,323,924	19,039,423	172,670,544	218,655,591
2006	662,152,502	17,808,543	644,343,959	180,502,759	244,496,512	6,274,238	9,135,694	174,228,521	235,360,818
2007	719,062,952	13,326,952	705,736,000	198,836,061	264,137,862	5,522,580	9,785,879	193,313,481	254,351,983
2008	624,016,188	9,601,078	614,415,110	168,718,545	265,249,930	4,269,575	12,747,986	164,448,970	252,501,944
2009	555,999,350	7,547,392	548,451,958	150,885,768	220,564,907	2,082,716	4,096,158	148,803,052	216,468,749
2010	565,736,769	6,603,640	559,133,129	146,105,773	253,506,573	1,484,593	2,530,878	144,621,180	250,975,695

Calendar Year	Missouri State Page Direct Incurred Loss			Missouri State Page Direct DCC Incurred			Voluntary Ratio DCC to Loss (16)	Policy Year	Estimated Voluntary Ratio DCC to Loss (17)	Countrywide Ratio A&O to Loss (18)	Voluntary LAE Factor (19)
	Statewide (10)	Assigned Risk (11)	Voluntary (12)	Statewide (13)	Assigned Risk (14)	Voluntary (15)					
1994	399,784,379	N/A	N/A	31,943,333	N/A	N/A	N/A				
1995	373,003,787	5,268,747	367,735,040	30,589,929	323,632	30,266,297	8.2%				
1996	284,523,019	30,920,902	253,602,117	32,816,590	2,659,854	30,156,736	11.9%	1996	9.2%	5.9%	1.151
1997	315,499,272	21,340,142	294,159,130	36,971,113	673,722	36,297,391	12.3%	1997	11.1%	6.1%	1.172
1998	334,417,606	11,545,924	322,871,682	31,105,042	1,069,474	30,035,568	9.3%	1998	10.2%	6.2%	1.164
1999	398,635,376	8,470,871	390,164,505	43,561,232	522,307	43,038,925	11.0%	1999	10.0%	6.2%	1.162
2000	491,331,605	9,372,076	481,959,529	34,649,320	1,509,079	33,140,241	6.9%	2000	8.6%	6.3%	1.149
2001	522,946,159	15,673,013	507,273,146	34,796,065	1,457,297	33,338,768	6.6%	2001	6.6%	6.5%	1.131
2002	565,429,657	40,228,731	525,200,926	41,628,120	4,168,988	37,459,132	7.1%	2002	6.5%	6.7%	1.132
2003	592,204,109	45,831,911	546,372,198	49,525,667	5,592,425	43,933,242	8.0%	2003	7.0%	7.5%	1.145
2004	589,472,136	43,564,525	545,907,611	63,306,565	3,524,196	59,782,369	11.0%	2004	8.8%	7.1%	1.159
2005	592,988,058	47,046,874	545,941,184	64,242,316	4,606,468	59,635,848	10.9%	2005	10.1%	7.9%	1.180
2006	542,562,472	28,909,434	513,653,038	74,581,800	3,637,756	70,944,044	13.8%	2006	11.5%	8.0%	1.195
2007	535,271,667	20,519,657	514,752,010	58,684,645	2,736,237	55,948,408	10.9%	2007	11.8%	8.3%	1.201
2008	556,887,603	16,280,546	540,607,057	61,091,056	1,513,680	59,577,376	11.0%	2008	10.6%	7.6%	1.182
2009	411,268,430	(4,135,441)	415,403,871	49,378,827	(11,821)	49,390,648	11.9%	2009	11.3%	7.8%	1.191
2010	462,853,417	1,515,360	461,338,057	49,637,936	481,506	49,156,430	10.7%	2010	11.3%	7.5%	1.188
2011	445,367,087	5,901,278	439,465,809	50,684,889	583,446	50,101,443	11.4%	2011	10.9%	7.0%	1.179

Notes:
(1), (4) & (5) - Per NCCI Trend Analysis Exhibit (Appendix A of this report)
(2), (6) & (7) - Per NCCI
(3) = (1) - (2); (8) = (4) - (6); (9) = (5) - (7).
(10) - (15) - Per Missouri State Page
(16) = (15) / (12).
(17) = weighted average of (16) for two calendar years.
(18) - Per NCCI 2013 Loss Cost Filing - Exhibit II. Years prior to 1999 are approximated by detrending.
(19) = 1 + (17) + (18).

APPENDIX A
INFORMATION RECEIVED FROM NCCI

Missouri Filing Effective January 1, 2013

Responses to AMI Request Received September 14, 2012

Question 1

From Exhibit II-B – Derivation of Missouri DCCE relativity, items (1a) and (1b) for Missouri Employers Mutual Insurance Company.

Response 1

Total losses for Calendar Years 2009 – 2011:

(1a) Missouri Employers Mutual paid losses (in '000s)	189,357
(1b) Missouri Employers Mutual paid DCCE (in '000s)	13,715

Question 2

Current and proposed loss costs by industry group, hazard group and class (in Excel) together with 7/09 – 6/10 payroll.

Response 2

Please see attachment labeled as Response 2.

Question 3

An update to the attached exhibit: “Response 3” showing Policy Year Loss Ratios – Missouri 1/1/2013 Filing, Paid Data.

Response 3

Please see attachment labeled as Response 3.

Question 4

An update to the attached file: "Response 4" of Missouri Assigned Risk Data through 2010.

Response 4

Please see attachment labeled as Response 4.

Data Valued as of 12/31/2011

Missouri - Assigned Risk Data

Policy Year	Premium at NCCI DSR Level	Limited Indemnity Paid + Case Losses	Limited Medical Paid + Case Losses
1996	25,538,126	15,018,176	16,667,597
1997	15,351,854	6,343,446	5,286,400
1998	7,697,608	5,657,071	5,387,205
1999	5,422,324	3,555,437	2,520,732
2000	6,427,926	6,178,270	6,752,189
2001	13,358,851	8,988,325	7,481,526
2002	25,028,061	13,606,421	11,990,505
2003	37,908,780	21,172,217	23,691,868
2004	37,236,067	15,548,318	14,722,935
2005	28,576,602	11,323,924	19,039,423
2006	17,808,543	6,274,238	9,135,694
2007	13,326,952	5,522,580	9,785,879
2008	9,601,078	4,269,575	12,747,986
2009	7,547,392	2,082,716	4,096,158
2010	6,603,640	1,484,593	2,530,878

Missouri Filing Effective January 1, 2013

Responses to AMI Request Received October 3, 2012

Question 1

What would the statewide rate level indication be for Missouri if Assigned Risks were excluded?

Response 1

Excluding the Assigned Risk experience from the indication but utilizing the same development factors and selected trends would have resulted in an overall indication of +2.0% instead of the filed indication of +2.1%.

Question 2

The targeted experience rating off-balance decreased this year. By how much will this increase the loss costs for non-experience rated employers?

Response 2

The target off-balance for the 1/1/2013 loss cost filing is 0.970. If the intrastate experience modification was maintained from last year's filing, the target off-balance would have been 0.976. Targeting a 0.976 off-balance, the loss cost indication would have decreased by 0.6%.

Question 3

Please provide an exhibit in Excel that shows the change in ELR's and D-ratio's by class, with a statewide weighted average change. Please provide a short written explanation of how these revisions are determined, and how they are coordinated with the change in split-point.

Response 3

Please see attached excel file for the change in ELRs and D-ratios by class code.

Partial D-ratio factors are calculated by hazard group based on the latest three reports of NCCI's Unit Statistical Plan data as used in the 1/1/2013 filing. Losses are limited to the proposed state accident limit and medical only losses are reduced by 70%, consistent with the calculation of experience rating modifications under ERA. Since this data is from a slightly different period from that which will be used for experience rating modifications in the effective period of the filing, the dollar amounts are trended for severity from the midpoint of these three reports to the midpoint of the experience rating period. The ratio of primary to total loss is then calculated by hazard group in order to determine the portion of primary losses, or partial d-ratio factors, separately for indemnity

and medical. The primary portion of losses are those that are less than or equal to the split point of \$7,500 in the 1/1/2013 filing. These factors are then adjusted to account for the difference in the distribution of indemnity and medical losses in the experience rating period compared to that of the proposed pure premiums, to which the d-ratio factors are applied. The appropriate hazard group d-ratio factors are then utilized along with the underlying pure premiums to calculate d-ratios by class code. The resulting weighted average change in D-ratios from 1/1/2012 to 1/1/2013 is +29.4%.

Similarly, indemnity and medical ELR factors are also calculated by hazard group. Converted losses for the most recent three policy periods underlying the proposed class rates are adjusted to reflect the benefit, experience, trend and maturity level of the experience rating period, loss adjustment expenses are removed and medical only losses are adjusted to remove 70%, consistent with the calculation of experience rating modifications calculated under ERA. Additionally, excess loss factors by hazard group are utilized to adjust the losses from the unlimited loss provision provided for in the class rates to the proposed state accident limit. These calculations result in preliminary ELR factors by hazard group. These ELR factors are used along with the underlying pure premiums to determine preliminary ELRs by class.

Intrastate experience rating modifications for the most recent year of rating effective dates available at the time of the production of the filing are calculated based on these d-ratios and preliminary ELRs by class and unit statistical plan data that has been adjusted for trend and to the appropriate benefit level of the data that will be used for ratings effective in 2013. An average of these intrastate experience modifications is calculated and an iterative process follows where the ELR factors are adjusted up or down, class ELRs recalculated and experience rating modifications restated until the target average intrastate experience modification is achieved. The resulting weighted average change in ELRs from 1/1/2012 to 1/1/2013 is +5.8%.

Missouri Filing Effective January 1, 2013

Responses to AMI Request Received October 4, 2012

Question 1

Could we please request the following:

The loss development triangles supporting the factors show in in Appendix A-II, Section C, D, E, and F.

Response 1

Please see the attachment labeled Response 1-Development_10_4.xlsx

MISSOURI
Policy Year - Private Carrier + State Fund - Limited Statewide
Indemnity Paid Development Factors

PY	Half/1	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
1984															1.004	1.006	1.002	1.001	1.003
1985														1.004	1.004	1.001	1.003	1.003	1.004
1986													1.003	1.011	1.005	1.004	1.003	1.002	1.002
1987												1.007	1.005	1.006	1.002	1.002	1.002	1.000	1.002
1988											1.006	1.003	1.005	1.002	1.002	1.007	1.002	1.002	1.002
1989										1.011	1.006	1.007	1.005	1.003	1.005	1.004	1.004	1.002	1.001
1990									1.010	1.009	1.004	1.003	1.003	1.003	1.002	1.002	1.003	1.003	1.001
1991								1.012	1.010	1.007	1.007	1.004	1.004	1.005	1.002	1.003	1.003	1.002	1.003
1992							1.015	1.013	1.015	1.009	1.004	1.004	1.002	1.003	1.003	1.003	1.003	1.004	1.004
1993					1.034	1.030	1.014	1.013	1.009	1.006	1.006	1.004	1.002	1.003	1.003	1.005	1.005	1.002	
1994					1.055	1.040	1.030	1.014	1.012	1.006	1.008	1.007	1.003	1.006	1.004	1.005	1.004		
1995				1.107	1.059	1.035	1.020	1.014	1.010	1.008	1.008	1.006	1.006	1.005	1.008	1.004			
1996			1.269	1.135	1.075	1.039	1.020	1.016	1.012	1.011	1.007	1.006	1.008	1.005	1.004				
1997		1.732	1.285	1.117	1.066	1.040	1.023	1.017	1.009	1.008	1.007	1.005	1.006	1.004					
1998	4.217	1.765	1.309	1.126	1.076	1.047	1.031	1.022	1.013	1.011	1.007	1.007	1.007						
1999	4.383	1.830	1.283	1.124	1.063	1.055	1.028	1.028	1.019	1.013	1.015	1.006							
2000	4.521	1.830	1.287	1.118	1.072	1.047	1.039	1.020	1.011	1.008	1.008								
2001	4.700	1.882	1.286	1.123	1.061	1.052	1.034	1.024	1.011	1.010									
2002	4.796	1.838	1.260	1.104	1.073	1.044	1.027	1.028	1.018										
2003	5.627	1.848	1.263	1.120	1.069	1.057	1.034	1.024											
2004	5.157	1.769	1.254	1.132	1.071	1.050	1.032												
2005	4.768	1.757	1.287	1.142	1.081	1.045													
2006	4.976	1.792	1.268	1.117	1.068														
2007	5.431	1.824	1.273	1.124															
2008	5.033	1.793	1.247																
2009	4.813	1.797																	
2010	4.989																		

MISSOURI
Policy Year - Private Carrier + State Fund - Limited Statewide
Medical Paid Development Factors

PY	Half/1	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	
1984																1.002	1.001	1.001	1.002	1.002
1985														1.001	1.005	1.002	1.001	1.003	1.004	
1986													1.002	1.001	1.001	1.001	1.002	1.002	1.003	
1987												1.010	1.008	1.005	1.003	1.004	1.010	1.007	1.006	
1988											1.002	1.002	1.002	1.003	1.003	1.002	1.002	1.002	1.004	
1989										1.003	1.001	1.006	1.001	1.002	1.005	1.003	1.003	1.002	1.002	
1990									1.002	1.003	1.003	1.004	1.001	1.001	1.002	1.003	0.999	1.001	1.002	
1991								1.003	1.004	1.001	1.002	1.001	1.002	1.001	1.001	1.001	1.002	1.002	1.002	
1992							1.005	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.004	1.001	1.002	1.001	
1993					1.011	1.014	1.006	1.006	1.004	1.003	1.003	1.003	1.003	1.003	1.006	1.004	1.003	1.004		
1994				1.011	1.010	1.006	1.003	1.004	1.005	1.007	1.005	1.004	1.004	1.004	1.004	1.004	1.008			
1995			1.020	1.006	1.008	1.008	1.021	1.003	1.007	1.003	1.003	1.002	1.003	1.005	1.005					
1996			1.053	1.021	1.009	1.001	1.003	1.002	1.003	1.007	1.001	1.003	1.002	1.006	1.004					
1997		1.211	1.057	1.026	1.015	1.014	1.009	1.008	1.008	1.013	1.010	1.004	1.007	1.005						
1998	3.410	1.238	1.076	1.035	1.021	1.014	1.011	1.011	1.007	1.008	1.005	1.011	1.012							
1999	4.117	1.265	1.057	1.038	1.022	1.023	1.011	1.009	1.008	1.012	1.007	1.008								
2000	4.297	1.258	1.071	1.045	1.025	1.016	1.011	1.007	1.008	1.012	1.006									
2001	4.055	1.249	1.067	1.035	1.011	1.011	1.012	1.007	1.004	1.007										
2002	3.633	1.241	1.066	1.025	1.018	1.014	1.009	1.012	1.010											
2003	3.952	1.244	1.062	1.027	1.023	1.014	1.015	1.014												
2004	3.934	1.226	1.066	1.033	1.023	1.010	1.014													
2005	3.500	1.222	1.068	1.041	1.028	1.026														
2006	3.777	1.235	1.055	1.032	1.017															
2007	3.759	1.232	1.065	1.033																
2008	3.427	1.221	1.064																	
2009	3.699	1.223																		
2010	4.026																			

MISSOURI
Policy Year - Private Carrier + State Fund - Limited Statewide
Indemnity Paid+Case Development Factors

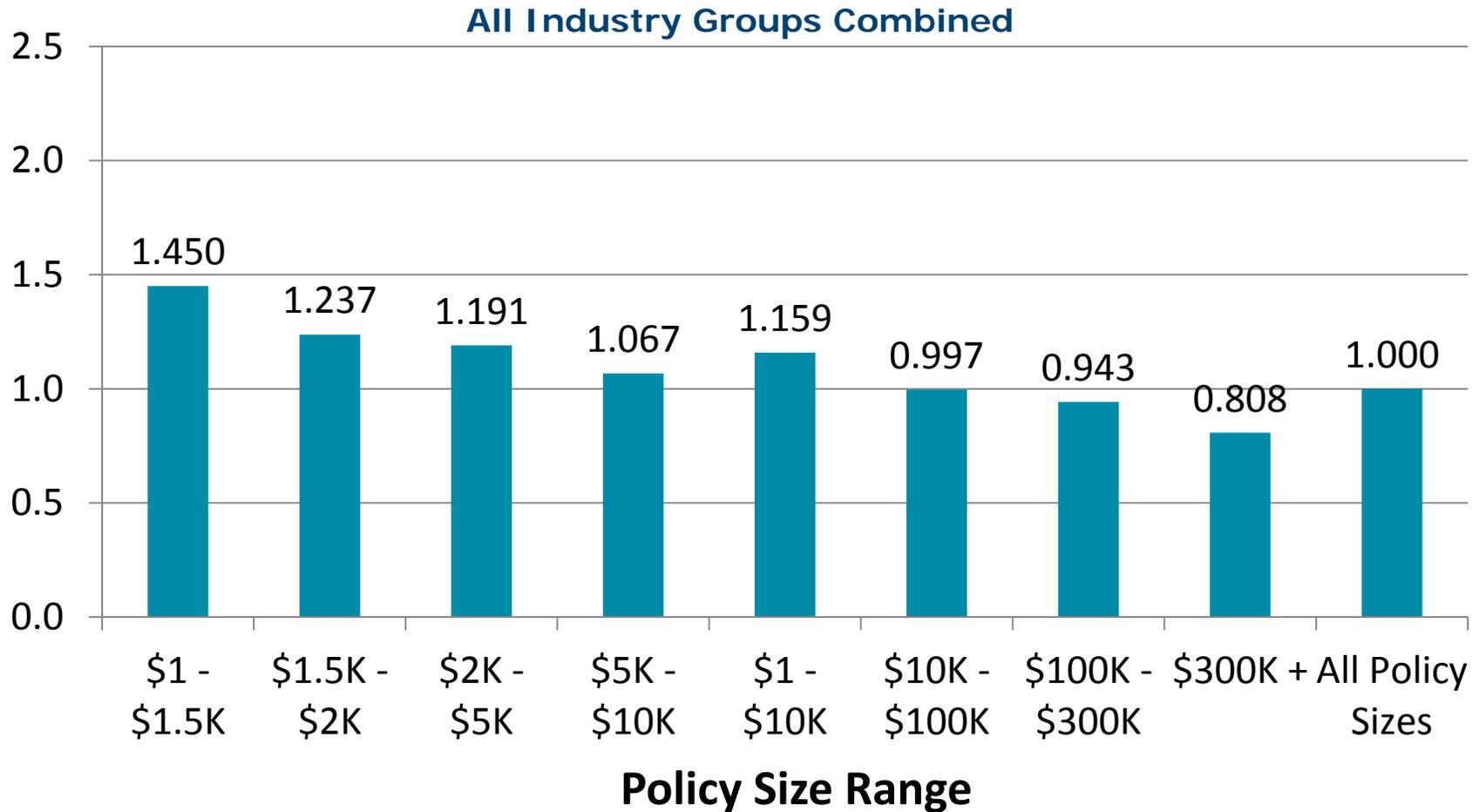
PY	Half/1	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
1984															0.998	1.000	1.001	0.999	1.000
1985														1.002	1.004	1.001	1.006	0.998	1.002
1986													1.003	1.005	1.000	1.002	1.002	1.000	1.000
1987												1.001	1.001	1.001	1.000	1.002	1.002	0.999	0.999
1988											1.000	0.997	1.005	1.003	1.000	1.004	1.000	1.001	0.999
1989										1.004	0.999	1.003	0.999	1.000	1.004	1.001	1.001	0.999	1.000
1990									1.007	1.002	1.002	1.000	1.001	0.998	1.001	1.001	1.002	1.001	1.000
1991								1.003	1.006	0.996	0.999	1.002	1.002	1.002	0.999	1.000	1.001	1.001	1.002
1992							1.004	1.002	1.007	0.998	1.005	0.995	1.000	0.999	1.002	1.001	1.002	1.002	1.001
1993					1.005	1.003	1.001	1.016	1.006	1.001	0.999	1.003	1.001	0.999	0.999	1.001	1.000	1.003	
1994				1.016	1.004	1.011	1.006	1.010	1.002	1.001	0.998	1.002	0.999	1.000	1.001	1.000			
1995			1.011	1.009	1.010	1.018	1.001	1.001	1.000	1.002	0.999	1.000	1.001	0.998	1.000				
1996			1.036	1.019	1.007	1.018	1.001	1.005	1.004	1.001	1.000	1.001	1.005	0.996	1.000				
1997		1.117	1.062	1.025	1.014	1.006	1.002	1.004	0.998	1.001	1.002	1.005	1.001	0.999					
1998	2.235	1.139	1.091	1.038	1.017	1.016	1.008	0.995	1.000	1.001	1.000	1.002	1.005						
1999	2.278	1.176	1.068	1.010	1.015	1.017	1.015	0.994	0.998	0.996	1.002	0.999							
2000	2.423	1.175	1.067	1.024	1.011	1.005	1.004	0.995	1.004	0.998	1.003								
2001	2.118	1.131	1.050	1.016	1.004	1.010	1.006	1.008	1.002	1.007									
2002	2.401	1.105	1.041	1.026	0.997	1.002	0.997	1.004	1.006										
2003	2.358	1.116	1.026	1.034	1.013	1.001	1.016	1.006											
2004	2.308	1.084	1.035	1.026	1.019	1.014	0.997												
2005	2.292	1.087	1.049	1.038	1.015	1.016													
2006	2.509	1.098	1.022	1.027	1.013														
2007	2.475	1.117	1.048	1.020															
2008	2.596	1.116	1.041																
2009	2.273	1.118																	
2010	2.451																		

MISSOURI
Policy Year - Private Carrier + State Fund - Limited Statewide
Medical Paid+Case Development Factors

PY	Half/1	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19
1984															1.002	1.000	0.992	1.003	1.000
1985														1.001	1.005	1.003	1.001	1.002	1.007
1986													1.001	1.004	1.000	1.001	1.000	1.005	1.003
1987												1.007	1.001	0.996	1.008	1.003	0.999	0.999	1.009
1988											1.009	0.998	1.004	1.002	1.004	0.999	0.999	1.006	1.012
1989										1.003	0.999	1.011	1.017	1.001	1.002	1.005	1.006	0.998	1.003
1990									0.999	0.997	1.005	1.006	1.012	0.996	1.001	1.000	1.002	1.002	1.001
1991								0.988	0.999	1.000	0.999	1.000	1.002	1.010	0.999	1.000	1.000	1.000	0.997
1992							1.000	0.996	1.003	1.002	1.001	1.000	1.001	1.000	0.998	1.003	1.002	1.003	1.002
1993						1.002	1.006	0.995	1.023	1.004	0.999	1.001	1.005	1.007	1.004	1.003	1.001	1.002	
1994					1.015	0.997	1.017	0.996	1.016	0.991	1.002	1.007	1.002	1.001	0.997	0.996	1.001		
1995				1.010	1.004	1.002	0.989	0.994	1.001	0.999	1.004	1.000	1.003	1.001	1.001	1.004			
1996			0.996	0.994	0.985	1.017	0.992	1.007	1.000	1.002	1.002	1.005	1.001	0.999	0.991				
1997		1.071	0.976	1.004	0.988	1.002	1.001	1.013	0.998	1.014	1.002	1.000	1.002	0.993					
1998	2.080	1.047	1.010	1.009	0.984	1.023	1.006	0.993	1.001	1.008	0.986	1.014	1.010						
1999	2.294	1.090	1.013	1.003	0.990	1.005	1.003	1.003	1.001	1.002	1.000	1.002							
2000	2.459	1.060	1.045	1.030	1.004	1.011	1.005	0.997	1.006	1.011	1.003								
2001	2.310	1.074	1.009	1.001	0.992	1.009	0.989	1.001	1.009	1.001									
2002	2.276	1.050	1.013	0.997	1.011	1.013	0.997	1.002	1.001										
2003	2.193	1.049	1.008	0.989	1.017	1.005	1.009	1.001											
2004	2.342	1.032	1.007	1.010	0.996	0.995	1.005												
2005	2.322	1.025	1.019	1.010	1.009	0.988													
2006	2.351	1.030	0.972	0.996	0.997														
2007	2.347	1.038	1.014	0.998															
2008	2.070	1.071	1.026																
2009	2.322	1.035																	
2010	2.604																		

Pure Premium Relativities by Policy Size

Missouri Pure Premium Relativities/Intrastate Policies



Based on the most recent five policy periods of Statistical Plan (combined voluntary and assigned risk market) data used in the 2010 filing cycle. Figures are on a standard premium basis at the NCCI 2010 filing cycle loss cost level. Claims have been limited to \$500,000. Cancelled policies (less than 12 months) have been excluded. Policy size ranges less than \$10K exclude minimum premium policies and the "All Policy Sizes" group includes minimum premium policies after the minimum premium formula has been applied.

