

National Council On Compensation Insurance

Loss Cost Filing Review Missouri Workers' Compensation January 1, 2011

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**Loss Cost Filing Review
Missouri Workers' Compensation
Effective January 1, 2011**

**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 2011 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, 2011.

In particular we reviewed the NCCI's 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.

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CONCLUSIONS

The summarized results of our review are as follows:

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 and of trend rates are somewhat conservative. In addition NCCI's inclusion of assigned risk experience in developing the statewide indication further overstates the statewide loss cost level.

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

2011 Missouri Statewide Indicated Change	
Filed by NCCI	Estimated by AMI
-4.4%	-11.1%

NCCI's proposed statewide average loss cost is, therefore, 6.7 percentage points higher than our own estimate. The difference is broken down as follows:

Break Down of Difference Between NCCI and AMI Estimated Loss Costs	
Source of Difference	Excess of NCCI over AMI
Premium & Loss Development	2.7%
LAE Provision	0.1%
Trend	2.0%
Assigned Risk Inclusion	1.9%
Total	6.7%

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SOURCES RELIED UPON

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

- NCCI 2010 Advisory Loss Cost Filing for Missouri
 - NCCI 2011 Advisory Loss Cost Filing for Missouri
 - Data and explanatory notes provided by NCCI in response to our questions (attached here as Appendix A)
 - Premium and Loss Data for Missouri Employers Mutual provided by DIFP.
-

OVERVIEW OF FILING

Summary of Proposed Changes

NCCI is proposing a reduction to its advisory loss costs based on an analysis of emerging trends in premium and loss experience from recent years. Aside from the determination of the overall statewide change needed in the advisory loss cost and revision of classification relativities no other major changes are being proposed. In particular, the advisory loss elimination ratios and the following retrospective rating plan parameters are not being updated: state hazard group differentials, expected loss ranges, excess loss pure premium factors, and excess loss and allocated expense pure premium factors.

With this filing NCCI is proposing a -4.4% reduction in overall loss cost to be distributed by Industry Group as follows:

INDUSTRY GROUP	LOSS COST CHANGE	MISSOURI EXPOSURE DISTRIBUTION**
Manufacturing	-3.9%	11%
Contracting	-6.3%	7%
Office and Clerical	-7.7%	56%
Goods and Services	-2.2%	20%
Miscellaneous	-3.9%	5%
Overall	-4.4%	100%

** exposure distribution based on 7/07-6/08 payroll

The largest three classes based on payroll with a proposed increase in loss cost are:

Large Classes with Loss Cost Increases			
Class	Class Description	Rank based on Payroll **	Loss Cost Change
8829	Convalescent & Nursing Home – All Employees	13th	0.5%
8861	Charitable or Welfare Organization – Professional Employees & Clerical	26th	1.7%
9014	Buildings – Operations by Contractors	28th	2.5%

** rank based on 7/07-6/08 payroll

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**OVERVIEW OF
FILING
(continued)**

The largest three classes based on payroll with a proposed decrease in loss cost are:

Large Classes with Loss Cost Increases			
Class	Class Description	Rank based on Payroll **	Loss Cost Change
8810	Clerical Office Employees NOC	1st	-9.5%
8742	Salespersons, Collectors or Messengers - Outside	2nd	-8.1%
8868	College – Professional Employees & Clerical	3rd	-8.3%

** rank based on 7/07-6/08 payroll

**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

The statewide indicated change in the provision for benefits is determined using premium and loss data for policy years 2007 and 2008. For each policy year, standard premiums are then developed to ultimate and adjusted to reflect changes in the advisory loss cost implemented during the experience period. Limited losses are likewise developed to ultimate and adjusted to current benefit levels. In addition, losses are adjusted to include loss-based expenses (LAE). Limited cost ratio is calculated as the ratio of adjusted limited losses to adjusted standard premium.

The limited cost ratio is then converted to a projected cost ratio through the application of the following:

- factor to reflect trend;
- factor to adjust limited cost ratio to unlimited basis; and
- factor to reflect proposed changes in benefits.

For each policy year, separate loss calculations are done for medical and indemnity resulting in a projected indemnity cost ratio and a projected medical cost ratio. These cost ratios are then summed to a combined projected cost ratio for each policy year. The average of the combined projected cost ratios for the two policy years is then used to represent the factor to be applied to the current overall advisory loss cost to arrive at the proposed overall advisory loss cost.

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STATEWIDE INDICATION (continued)

Below is a summary of the results of NCCI's calculations.

Statewide Indicated Change

Policy Year	Projected Cost Ratio		
	Indemnity	Medical	Combined
2007	0.374	0.593	0.967
2008	0.356	0.588	0.944
Average			0.956

The factor to be applied to the current overall advisory loss cost to arrive at the proposed overall advisory loss cost is .956 or an overall decrease of 4.4% in the advisory lost costs.

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 approach applied for the 2011 filing is the same as that applied in the 2010 filing. Per NCCI, the Missouri approach is similar, but not identical to the approach used by NCCI in other states.

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 ten 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 two calendar years.

Below is a summary of NCCI's provision for LAE.

Loss Adjustment Expense Provision Ratios LAE to Losses			
	DCC	A&O	Total LAE
Countrywide Selected	12.2%	7.8%	20.0%
Missouri DCC Relativity to Cwide	1.083	-	-
Indicated Missouri DCC	13.5%	-	-
NCCI Selected Missouri	13.3%	7.8%	21.1%

Thus the Missouri provision for DCC expense is 9.0% higher than countrywide, and the provision for A&O expense is equal to countrywide. The total allowance for LAE this year is 21.1% which is unchanged from the 2010 provision.

NCCI's provision for LAE is based on expense experience that excludes experience from the state's largest carrier, Missouri Employers Mutual (MEM). We estimate that including MEM reduces the provision from 21.1% to 21.0%.

The Inclusion of Assigned Risk Experience

NCCI includes the experience of assigned risks in setting the loss cost level 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.

Including assigned risk experience, as NCCI does, increases the overall statewide indication by 1.9% (from -6.2% to the -4.4% that was filed) per NCCI's estimate. (See Appendix A, Response 3.)

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**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 2011 filing and the 2010 filing.

NCCI Factors Applied to Most Recent Policy Year		
	2011 Filing	2010 Filing
Premium Development Factor	1.008	1.010
Paid Loss Development Factor - Indemnity	3.450	3.335
Incurred Loss Development Factor - Indemnity	1.213	1.215
Paid Loss Development Factor - Medical	1.628	1.603
Incurred Loss Development Factor - Medical	1.120	1.148
Indemnity Trend	0.871	0.857
Medical Trend	1.015	1.015
Loss Adjustment Expense	1.211	1.211
Excess Loss Loading	1.019	1.019

NCCI Factors Applied to Penultimate Policy Year		
	2011 Filing	2010 Filing
Premium Development Factor	1.003	1.001
Paid Loss Development Factor - Indemnity	1.907	1.878
Incurred Loss Development Factor - Indemnity	1.102	1.107
Paid Loss Development Factor - Medical	1.319	1.305
Incurred Loss Development Factor - Medical	1.080	1.105
Indemnity Trend	0.832	0.814
Medical Trend	1.020	1.020
Loss Adjustment Expense	1.211	1.211
Excess Loss Loading	1.019	1.019

**STATEWIDE
INDICATION
(continued)**

Comments on NCCI Selections

Shown below are the changes in NCCI's selected factors and provisions between the 2010 and 2011 filings. The individual changes are generally minor, the largest being the 1.5 to 3.4% increases in indemnity paid loss development factors and the 2.3 to 2.4% drop in medical incurred loss development factors.

NCCI Ratemaking Factors – Statewide Indication % Changes Between 2010 and 2011 Filings		
	Most Recent PY	Penultimate PY
Premium Development Factor	-0.2%	0.2%
Paid Loss Development Factor - Indemnity	3.4%	1.5%
Incurred Loss Development Factor - Indemnity	-0.2%	-0.5%
Paid Loss Development Factor - Medical	1.6%	1.1%
Incurred Loss Development Factor - Medical	-2.4%	-2.3%
Indemnity Trend	1.6%	2.2%
Medical Trend	0.0%	0.0%
Loss Adjustment Expense	0.0%	0.0%
Excess Loss Loading	0.0%	0.0%

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

AMI Selections Compared to NCCI			
	AMI	NCCI	% Difference
Ultimate Losses – Indem – 2007	200,333,656	212,542,343	-5.7%
Ultimate Losses – Indem – 2008	186,757,660	190,748,503	-2.1%
Ultimate Losses – Med – 2007	277,418,526	283,733,994	-2.2%
Ultimate Losses – Med – 2008	267,765,292	274,142,127	-2.3%
Annual Indemnity Trend	-5.30%	-4.50%	-0.8%
Annual Medical Trend	0.00%	0.50%	-0.5%
Loss Adjustment Expense	1.210	1.211	-0.1%

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

AMI trend selections give partial weight to short-run (3-year) loss ratio trends, and partial weight to the more negative medium-run (5 and 8-year) loss ratio trends.

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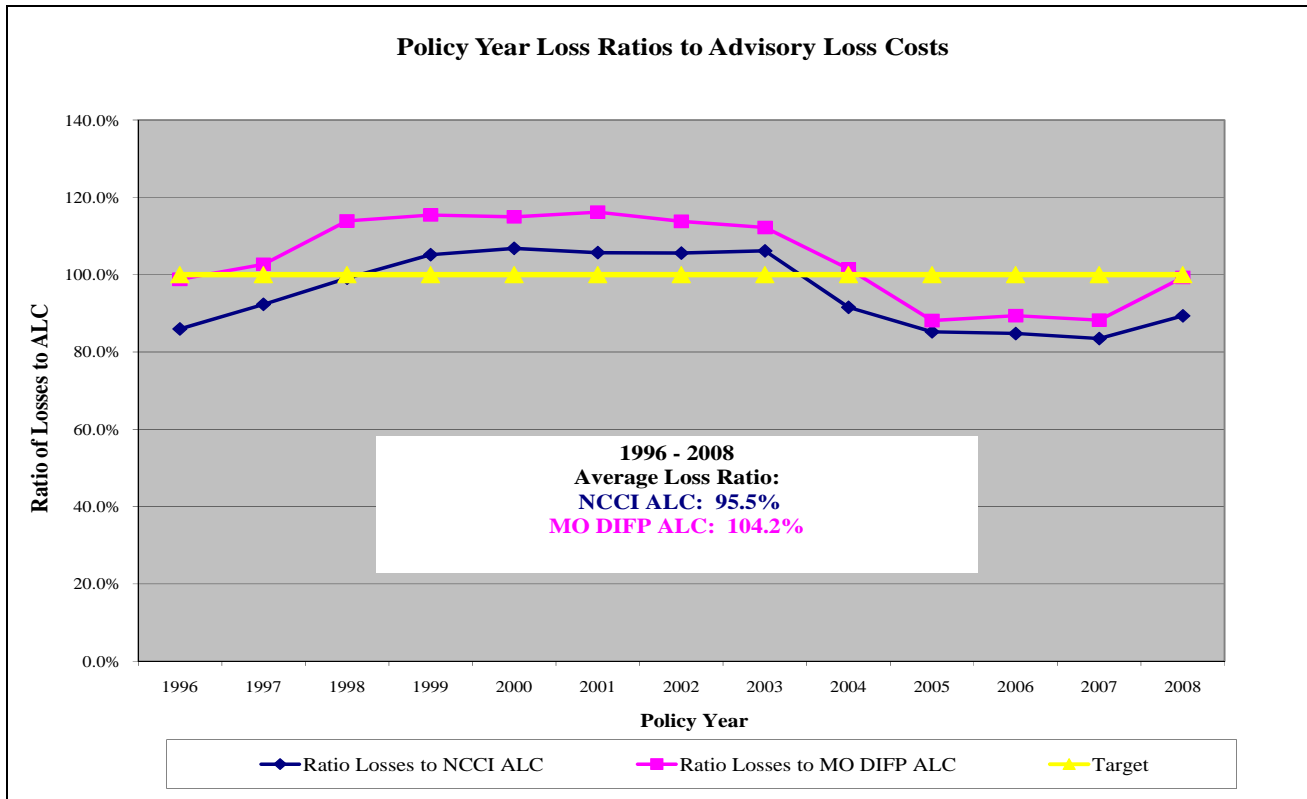
STATEWIDE INDICATION (continued)

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 7 years of the 13-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 7 years NCCI loss costs came closer to the target. Over the long-run, the NCCI Advisory Loss Costs have produced a 95.5% loss ratio, i.e. overstating the average loss cost level by 4.5%. The DIFP reviewer's adjusted loss costs, on the other hand, have understated the average loss cost level by 4.2%, producing a loss ratio of 104.2%.



**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 exclusion is the list of payroll by class which was deleted due to length.

**MISSOURI 2011 NCCI LOSS COST FILING REVIEW
STATEWIDE INDICATION
AMI COMPARED TO NCCI**

	AMI			NCCI		
	PY 2007	PY 2008	Combined	PY 2007	PY 2008	Combined
Premium						
(1) Standard Premium Developed to Ultimate	\$722,985,128	\$633,656,010		\$722,982,965	\$633,014,819	
(2) Premium On Level Factor	0.832	0.923		0.832	0.923	
(3) Premium Available for Benefit Costs = (1) x (2)	\$601,523,626	\$584,864,497		\$601,521,827	\$584,272,678	
Indemnity Benefit Cost						
(4) Limited Indemnity Developed to Ultimate	\$200,333,656	\$186,757,660		\$212,542,343	\$190,748,503	
(5) Indemnity Loss On-level Factor	1.035	1.019		1.035	1.019	
(6) Factor to Include Loss-based Expenses	1.210	1.210		1.211	1.211	
(7) Composite Adjustment Factor = (5) x (6)	1.252	1.233		1.253	1.234	
(8) Adjusted Limited Indemnity Losses = (4) x (7)	\$250,817,738	\$230,272,195		\$266,315,556	\$235,383,653	
(9) Adjusted Limited Indemnity Cost Ratio excl Trend & Benefits = (8)/(3)	0.417	0.394		0.443	0.403	
(10) Factor To Reflect Indemnity Trend	0.804	0.849		0.832	0.871	
(11) Projected Limited Indemnity Cost Ratio = (9) x (10)	0.335	0.335		0.369	0.351	
(12) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis	1.019	1.019		1.019	1.019	
(13) Projected Indemnity Cost Ratio = (11) x (12)	0.341	0.341		0.376	0.358	
(14) Factor to Reflect Proposed Changes in Benefits	0.995	0.995		0.995	0.995	
(15) Projected Indemnity Cost Ratio including Benefit Changes = (13) x (14)	0.339	0.339		0.374	0.356	
Medical Benefit Cost						
(16) Limited Medical Developed to Ultimate	\$277,418,526	\$267,765,292		\$283,733,994	\$274,142,127	
(17) Medical Loss On-level Factor	1.000	1.000		1.000	1.000	
(18) Factor to Include Loss-based Expenses	1.210	1.210		1.211	1.211	
(19) Composite Adjustment Factor = (17) x (18)	1.210	1.210		1.211	1.211	
(20) Adjusted Limited Medical Losses = (16) x (19)	\$335,676,417	\$323,996,004		\$343,601,867	\$331,986,116	
(21) Adjusted Limited Medical Cost Ratio excl Trend & Benefits = (20)/(3)	0.558	0.554		0.571	0.568	
(22) Factor To Reflect Medical Trend	1.000	1.000		1.020	1.015	
(23) Projected Limited Medical Cost Ratio = (21) x (22)	0.558	0.554		0.582	0.577	
(24) Factor to Adjust Medical Cost Ratio to an Unlimited Basis	1.019	1.019		1.019	1.019	
(25) Projected Medical Cost Ratio = (23) x (24)	0.569	0.565		0.593	0.588	
(26) Factor to Reflect Proposed Chnges in Benefits	1.000	1.000		1.000	1.000	
(27) Projected Medical Ratio including Benefit Changes = (25) x (26)	0.569	0.565		0.593	0.588	
Total Benefit Cost						
(28) Indicated Change Based on Experience, Trend and Benefits = (15) + (27)	0.908	0.904		0.967	0.944	
(29) Indicated Change in Benefit Provision			0.906			0.956
(30) Adjustment to Exclude Assigned Risk			0.981			N/A
(31) Indicated Statewide Change			0.889			0.956
			-11.1%			-4.4%
(32) Difference AMI Indicated to NCCI Proposed Change			-6.7%			N/A

Notes on AMI Columns:

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

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

(30) = $((1 - .062) / (1 - .019))$. See Appendix A, Page 1.

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

(32) = (31) AMI - (32) NCCI

**MISSOURI 2011 NCCI LOSS COST FILING REVIEW
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
2007	720,820,503	1.003	722,985,128	722,982,965
2008	627,990,892	1.009	633,656,010	633,014,819
Total	1,348,811,395		1,356,641,137	1,355,997,784

Indemnity Losses

Policy Year	Limited Paid	Paid LDF	PLDA Ultimate	Limited Paid+Case	Paid+Case LDF	ILDA Ultimate		
2007	113,265,219	1.844	208,895,690	171,916,880	1.114	191,554,443		
2008	57,434,413	3.288	188,867,156	151,152,745	1.226	185,260,330		
Total	170,699,632		397,762,846	323,069,625		376,814,773		
Policy Year	Expected Ultimate	Percent Unpaid	BFPLA Ultimate	Percent Unrepd	BFILA Ultimate	AMI Selected Ultimate	NCCI Ultimate	
2007	206,395,075	45.8%	207,750,932	10.3%	193,075,858	200,333,656	212,542,343	
2008	180,893,734	69.6%	183,318,448	18.4%	184,456,412	186,757,660	190,748,503	
Total	387,288,810		391,069,380		377,532,270	387,091,316	403,290,846	

Medical Losses

Policy Year	Limited Paid	Paid LDF	PLDA Ultimate	Limited Paid+Case	Paid+Case LDF	ILDA Ultimate		
2007	216,980,046	1.253	271,827,236	260,436,395	1.078	280,876,323		
2008	166,946,344	1.540	257,040,743	246,871,077	1.121	276,629,961		
Total	383,926,390		528,867,979	507,307,472		557,506,284		
Policy Year	Expected Ultimate	Percent Unpaid	BFPLA Ultimate	Percent Unrepd	BFILA Ultimate	AMI Selected Ultimate	NCCI Ultimate	
2007	289,476,861	20.2%	275,388,441	7.3%	281,502,201	277,418,526	283,733,994	
2008	253,710,271	35.1%	255,873,392	10.8%	274,164,340	267,765,292	274,142,127	
Total	543,187,132		531,261,833		555,666,541	545,183,819	557,876,121	

Indemnity+Medical Combined

Policy Year	Limited Paid	Paid LDF	PLDA Ultimate	Limited Paid+Case	Paid+Case LDF	ILDA Ultimate	Indicated Ult. Combined Dev't	AMI Selected Ultimate	NCCI Ultimate
2007	330,245,265	1.480	488,828,200	432,353,275	1.080	466,744,968	477,786,584	477,752,183	496,276,337
2008	224,380,757	2.040	457,672,143	398,023,822	1.150	457,614,276	457,643,210	454,522,953	464,890,630
Total	554,626,022		946,500,343	830,377,097		924,359,244	935,429,794	932,275,135	961,166,967

MISSOURI 2011 NCCI LOSS COST FILING REVIEW
INCURRED LOSS DEVELOPMENT FACTORS
AMI COMPARED TO NCCI

Limited Combined Incurred Indemnity and 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	1.066	1.020	1.017	1.005	1.010	1.003	1.001	1.001	1.001	1.000
Avg ex Hi-Lo	1.065	1.023	1.016	1.005	1.009	1.003	1.001	1.001	1.001	1.001
Prior	1.065	1.025	1.013	1.005	1.009	1.004	1.001	1.001	1.002	1.001
NCCI Selected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AMI Selected	1.065	1.023	1.015	1.005	1.009	1.003	1.001	1.001	1.001	1.001
LDF to Ult.	1.150	1.080	1.055	1.040	1.035	1.025	1.022	1.021	1.020	1.019

Policy Year	Report								
	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/Ult
Avg	1.001	1.002	1.002	1.001	1.001	1.001	1.000	1.002	
Avg ex Hi-Lo	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.002	
Prior	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.003	1.008
NCCI Selected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AMI Selected	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.003	
LDF to Ult.	1.018	1.017	1.015	1.013	1.012	1.011	1.010	1.009	1.006

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	1.101	1.038	1.027	1.010	1.008	1.005	1.000	1.001	1.000	1.001
Avg ex Hi-Lo	1.102	1.038	1.027	1.010	1.008	1.005	1.000	1.001	1.001	1.001
Prior	1.098	1.041	1.025	1.008	1.010	1.007	1.000	1.001	1.001	1.001
NCCI Selected	1.101	1.035	1.028	1.009	1.007	1.006	0.999	1.001	1.000	1.001
AMI Selected	1.100	1.039	1.027	1.009	1.009	1.006	1.000	1.001	1.001	1.001
LDF to Ult.	1.226	1.114	1.072	1.044	1.035	1.026	1.020	1.020	1.019	1.018

Policy Year	Report								
	11	12	13	14	15	16	17	18	19
Avg	0.999	1.002	1.000	1.001	1.001	1.001	1.000	1.000	
Avg ex Hi-Lo	0.999	1.002	1.000	1.001	1.001	1.001	1.000	1.000	
Prior	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.000	1.014
NCCI Selected	1.000	1.002	1.000	1.000	1.000	1.001	1.000	1.000	1.010
AMI Selected	1.000	1.002	1.000	1.001	1.001	1.001	1.000	1.000	1.011
LDF to Ult.	1.016	1.016	1.014	1.014	1.013	1.012	1.011	1.011	1.011

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	1.039	1.005	1.007	1.001	1.011	1.001	1.003	1.001	1.003	0.998
Avg ex Hi-Lo	1.039	1.009	1.005	1.001	1.009	1.001	1.002	1.001	1.003	1.001
Prior	1.039	1.011	1.003	1.002	1.010	1.001	1.003	1.001	1.003	1.002
NCCI Sel	1.039	1.012	1.006	1.002	1.012	1.001	1.003	1.000	1.003	1.002
AMI Selected	1.039	1.008	1.005	1.001	1.010	1.001	1.002	1.001	1.003	1.001
LDF to Ult.	1.121	1.078	1.070	1.065	1.064	1.053	1.052	1.050	1.049	1.046

Policy Year	Report								
	11	12	13	14	15	16	17	18	19
Avg	1.002	1.003	1.004	1.001	1.002	1.001	1.001	1.006	
Wtd Avg	1.002	1.002	1.004	1.000	1.001	1.001	1.001	1.005	
Avg ex Hi-Lo	1.003	1.003	1.004	1.001	1.001	1.001	1.001	1.007	1.037
NCCI Selected	1.003	1.003	1.003	1.001	1.001	1.001	1.001	1.005	1.043
AMI Selected	1.002	1.003	1.004	1.001	1.001	1.001	1.001	1.006	1.025
LDF to Ult.	1.045	1.043	1.039	1.035	1.034	1.033	1.032	1.031	1.025

Notes: AMI 19-Ultimate factors selected by fitting inverse power curve to the link ratios and credibility weighing the result with prior tail factor.

MISSOURI 2011 NCCI LOSS COST FILING REVIEW
PAID LOSS DEVELOPMENT FACTORS
AMI COMPARED TO NCCI

Limited Combined Paid Indemnity and Medical Loss Development Factors

Policy Year	1/2	2/3	3/4	4/5	5/6	Report 6/7	7/8	8/9	9/10	10/11
Avg	1.380	1.138	1.075	1.044	1.031	1.022	1.016	1.011	1.011	1.006
Prior	1.376	1.142	1.071	1.044	1.030	1.025	1.016	1.012	1.010	1.006
NCCI Selected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AMI Selected	1.378	1.140	1.073	1.044	1.031	1.024	1.016	1.012	1.010	1.006
LDF	2.040	1.480	1.298	1.210	1.159	1.124	1.098	1.081	1.068	1.057

Policy Year	11/12	12/13	13/14	14/15	15/16	Report 16/17	17/18	18/19	19/Ult
Avg	1.006	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.030
Prior	1.005	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.030
NCCI Selected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AMI Selected	1.005	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.030
LDF	1.051	1.046	1.042	1.037	1.034	1.031	1.029	1.027	1.025

Limited Paid Indemnity Loss Development Factors

Policy Year	1/2	2/3	3/4	4/5	5/6	Report 6/7	7/8	8/9	9/10	10/11
Avg	1.791	1.271	1.132	1.071	1.051	1.034	1.024	1.014	1.010	1.007
Prior	1.775	1.273	1.126	1.071	1.048	1.037	1.024	1.016	1.009	1.007
NCCI Selected	1.809	1.279	1.138	1.070	1.051	1.032	1.022	1.016	1.012	1.007
AMI Selected	1.783	1.272	1.129	1.071	1.049	1.035	1.024	1.015	1.010	1.007
LDF to Ult.	3.288	1.844	1.450	1.284	1.199	1.143	1.104	1.079	1.063	1.052

Policy Year	11/12	12/13	13/14	14/15	15/16	Report 16/17	17/18	18/19	19/Ult
Avg	1.006	1.006	1.004	1.003	1.004	1.003	1.002	1.001	1.017
Prior	1.006	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.017
NCCI Selected	1.006	1.007	1.006	1.004	1.004	1.003	1.003	1.001	1.034
AMI Selected	1.006	1.005	1.004	1.003	1.003	1.003	1.002	1.002	1.016
LDF to Ult.	1.045	1.039	1.033	1.029	1.026	1.023	1.020	1.018	1.016

Limited Paid Medical Loss Development Factors

Policy Year	1/2	2/3	3/4	4/5	5/6	Report 6/7	7/8	8/9	9/10	10/11
Avg	1.230	1.063	1.034	1.021	1.013	1.011	1.007	1.008	1.011	1.006
Wid Avg	1.228	1.067	1.030	1.020	1.013	1.012	1.007	1.007	1.010	1.006
NCCI Selected	1.234	1.062	1.038	1.023	1.014	1.011	1.007	1.009	1.010	1.008
AMI Selected	1.229	1.065	1.032	1.021	1.013	1.011	1.007	1.007	1.010	1.006
LDF to Ult.	1.540	1.253	1.176	1.140	1.116	1.102	1.090	1.083	1.075	1.064

Policy Year	11/12	12/13	13/14	14/15	15/16	Report 16/17	17/18	18/19	19/Ult
Avg	1.005	1.003	1.004	1.003	1.003	1.001	1.002	1.002	1.046
Wid Avg	1.003	1.003	1.004	1.003	1.002	1.000	1.002	1.003	1.046
NCCI Selected	1.006	1.002	1.004	1.005	1.004	1.002	1.002	1.001	1.076
AMI Selected	1.004	1.003	1.004	1.003	1.003	1.000	1.002	1.003	1.035
LDF to Ult.	1.058	1.054	1.051	1.046	1.043	1.040	1.040	1.038	1.035

Notes: AMI 19-Ultimate factors selected by fitting inverse power curve to the link ratios and credibility weighing the result with prior tail factor.

**MISSOURI 2011 NCCI LOSS COST FILING REVIEW
SELECTED TREND RATES**

Policy Year	Indemnity LR Paid	Indemnity LR Paid+Case	Medical LR Paid	Medical LR Paid + Case
2001	0.577	0.578	0.494	0.486
2002	0.530	0.525	0.490	0.491
2003	0.545	0.541	0.532	0.538
2004	0.457	0.466	0.495	0.504
2005	0.390	0.386	0.459	0.489
2006	0.371	0.357	0.470	0.480
2007	0.372	0.360	0.476	0.468
2008	0.346	0.320	0.465	0.473
Calc Trend				
all	-7.62%	-8.50%	-1.20%	-0.95%
last 5	-5.86%	-7.89%	-0.88%	-1.69%
last 3	-3.43%	-5.32%	-0.53%	-0.73%
AMI Selected		-5.30%		0.00%
NCCI Selected		-4.50%		0.50%

Notes:

Loss Ratios are from NCCI 2011 filing and are excess of wage growth.

**MISSOURI 2011 NCCI LOSS COST FILING REVIEW
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
1999	9.2%	6.2%		9.2%	6.2%	
2000	9.6%	6.1%		9.6%	6.1%	
2001	10.0%	6.4%		10.0%	6.4%	
2002	10.6%	6.6%		10.6%	6.6%	
2003	10.7%	7.4%		10.7%	7.4%	
2004	10.7%	7.0%		10.7%	7.0%	
2005	10.9%	7.8%		10.9%	7.8%	
2006	11.1%	8.1%		11.1%	8.1%	
2007	11.8%	8.1%		11.8%	8.1%	
2008	12.5%	7.6%		12.5%	7.6%	
2009	13.5%	7.8%		13.5%	7.8%	
(1) Selected Countrywide LAE Ratios	13.1%	7.7%		12.5%	7.8%	
(2) Missouri DCC Relativity	1.009	-		1.083	-	
(3) Indicated Missouri LAE Ratios (1) x (2)	13.2%	-		13.5%	-	
(4) Selected Missouri LAE Ratios	13.2%	7.7%	21.0%	13.3%	7.8%	21.1%

Notes:

(2 - NCCI) - Per NCCI 2011 Loss Cost Filing, Exhibit II-B. Relativity excludes Missouri Employers Mutual (MEM).

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

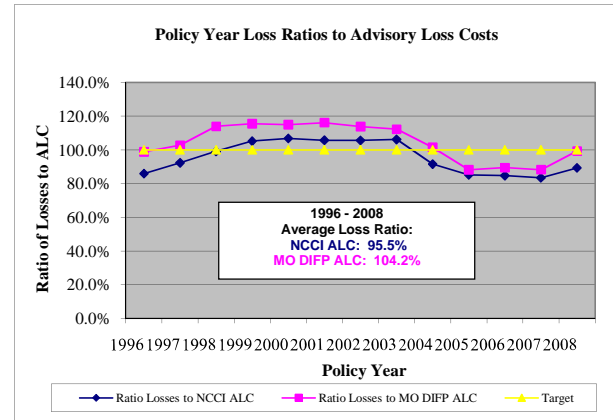
**MISSOURI 2011 NCCI LOSS COST FILING REVIEW
ESTIMATED IMPACT ON LAE PROVISION OF INCLUDING MEM LAE**

	EXCLUDING MEM	MEM	INCLUDING MEM
(1) 2-YR Missouri Paid Losses	822,603	127,276	949,879
(2) 2-YR Missouri Paid DCC	94,335	9,765	104,100
(3) Missouri Ratio (2) / (1)	11.5%	7.7%	11.0%
(4) 2-YR Countrywide DCC Ratio	10.9%	10.9%	10.9%
(5) Missouri Relativity to Countywide (3) / (4)	1.055	N/A	1.009
(6) NCCI Selected Countrywide DCC Provison	0.125	N/A	0.125
(7) NCCI Indicated Missouri DCC Provision (5) x (6)	13.2%	N/A	12.6%
(8) NCCI Selected Missouri A&O Provision	7.8%	N/A	7.8%
(9) NCCI Indicated Missouri LAE Provision (7) + (8)	21.0%		20.4%
IMPACT OF INCLUDING MEM DCC		-0.5%	

**MISSOURI 2010 NCCI LOSS COST FILING REVIEW
RETROSPECTIVE TEST OF ADVISORY LOSS COSTS
NCCI ALC COMPARED TO MISSOURI DIFP ALC**

Policy Year	Premium (ALC) (1)	AMI Selected Prem Dev. Factor (2)	Ultimate Premium (3)	Paid + Case Losses		AMI Selected LDF		LAE Factor (8)	Excess Provision (9)	Ultimate Losses & LAE (10)
				Indemnity (4)	Medical (5)	Indemnity (6)	Medical (7)			
1994	N/A	1.000	N/A	169,468,017	155,631,597	1.018	1.047	N/A	1.019	N/A
1995	N/A	1.000	N/A	146,154,333	137,995,006	1.019	1.048	N/A	1.019	N/A
1996	416,973,449	1.000	416,973,449	156,166,556	134,897,142	1.020	1.053	1.167	1.019	358,389,541
1997	428,021,308	1.000	428,021,308	165,367,719	157,062,630	1.021	1.056	1.159	1.019	395,112,599
1998	466,562,070	1.000	466,562,070	204,036,673	172,858,879	1.022	1.059	1.159	1.019	462,268,407
1999	461,452,474	1.000	461,452,474	209,644,464	188,231,115	1.023	1.061	1.150	1.019	485,282,071
2000	471,380,679	1.000	471,380,679	217,944,761	201,325,234	1.024	1.064	1.129	1.019	503,423,623
2001	500,329,338	1.000	500,329,338	232,203,174	206,130,594	1.025	1.065	1.134	1.019	528,852,779
2002	491,026,493	1.000	491,026,493	216,002,871	209,795,722	1.020	1.069	1.145	1.019	518,384,956
2003	542,255,340	1.000	542,255,340	226,902,663	233,953,435	1.026	1.070	1.169	1.019	575,546,609
2004	610,226,714	1.000	610,226,714	207,627,299	231,949,363	1.035	1.080	1.178	1.019	558,648,314
2005	634,880,726	1.001	635,515,607	180,635,622	234,758,705	1.044	1.082	1.200	1.019	541,490,979
2006	653,940,605	1.002	655,249,140	174,495,191	244,365,079	1.072	1.086	1.205	1.019	555,378,247
2007	720,820,399	1.003	722,985,023	189,750,731	260,443,443	1.114	1.098	1.191	1.019	603,367,350
2008	627,990,892	1.009	633,656,010	151,152,745	246,871,077	1.226	1.140	1.190	1.019	566,099,617

Policy Year	Missouri DIFP Reviewer Relativity to NCCI ALC (11)	Missouri Statewide Loss & LAE Ratio	
		NCCI ALC (12)	Missouri DIFP ALC (13)
1994	0.790	N/A	N/A
1995	0.823	N/A	N/A
1996	0.870	86.0%	98.8%
1997	0.899	92.3%	102.7%
1998	0.870	99.1%	113.9%
1999	0.911	105.2%	115.4%
2000	0.929	106.8%	115.0%
2001	0.910	105.7%	116.2%
2002	0.928	105.6%	113.8%
2003	0.946	106.1%	112.2%
2004	0.902	91.5%	101.5%
2005	0.967	85.2%	88.1%
2006	0.948	84.8%	89.4%
2007	0.946	83.5%	88.2%
2008	0.900	89.3%	99.3%
2009	0.909		
2010	0.937		
2011	0.930		



1996-2008 Average	95.5%	104.2%
1996-2008 Wtd Average	94.6%	102.7%

Notes:

(1), (2), (4), (5) & (9) - Per NCCI 2011 filing

(2) - Per Exhibit II

(3) = (1) x (2).

(6) & (7) - Per Exhibit III, Page 1.

(8) - Based on data from Missouri State Page

(10) = [(4) x (6) + (5) x (7)] x (8) x (9).

(11) - 1994 - 2010 Per Prior Year's Report, Exhibit 7, Sheet 1. For 2011 (11) = Exhibit 1, (31) AMI / (31) NCCI.

Missouri Filing Effective January 1, 2011

Responses to AMI Requests Received November 1, 2010 and November 4, 2010

Question 1

Missouri payroll for the year 7/07 – 6/08 sorted by industry group, hazard group and class, with subtotals for each hazard group within industry group.

Response 1

Please see attachment labeled as Response 1.

Question 2

The latest diagonal of the loss development triangle for: indemnity-likely-to-develop, indemnity-not-likely-to-develop, medical-likely-to-develop and medical-not-likely-to-develop.

Response 2

Please see attachment labeled as Response 2.

Question 3

The effect on the overall rate level indication of excluding assigned risks.

Response 3

If assigned risk data is excluded, the resulting loss cost level change is -6.2%. This indication utilizes the same development, trend, benefit changes and LAE selections used by NCCI in the 1/1/2011 Missouri loss cost filing.

Question 4

For Appendix A-II, Section G please provide support for the values identified as "Factor to Adjust 19th-to-Ultimate LDF to a Limited Basis".

Response 4

This value is derived from Countrywide excess ratios and RAA data based excess development factors. Please see attachment labeled as Response 4 for details.

Question 5

The graph on page 9 shows that the indemnity loss ratio decreased from 2007 to 2008 and at seemingly greater rate than the prior two years yet your selected indemnity trend increased slightly from .95 to .955. Please provide additional information on the thought process behind the selected trend including an explanation of the apparent contradiction.

Response 5

Please note that a variety of fits and actuarial judgment are used when selecting trend. We do recognize that the decrease in the latest indemnity loss ratio is greater than that of the prior two policy years. However, it must also be recognized that the more recent changes in indemnity loss ratios over the last several policy years are nowhere near the magnitude of those seen in policy years 2004 and 2005. For example, the policy year 2007 indemnity loss ratio actually *increased* slightly over 2006. The small increase in the indemnity loss ratio trend in the 1/1/2011 filing is recognition of the fact that the large decreases in indemnity loss ratios seen in prior years are no longer as relevant, given the smaller changes seen since that time.

It should also be noted that the 4-point exponential loss ratio trend fit results in -3.4% when based on paid data and -5.4% when based on paid+case data. The -4.5% selection incorporated in the 1/1/2011 filing clearly falls in the middle of that range.



Missouri
1/1/2011

**Missouri Industrial Classes
Payroll by Industry and Hazard Group
Policies Effective 7/1/2007 - 6/31/2008**

Hazard Group	Industry Group					
	Manufacturing	Contracting	Office and Clerical	Goods and Services	Miscellaneous	
A	101,302,199	0	65,437,390	2,332,311,584	7,898,465	
B	2,273,736,684	480,920	3,271,619,090	4,388,187,899	9,082,198	
C	2,404,793,259	22,183,070	25,682,290,184	4,239,743,881	479,180,159	
D	1,726,219,213	148,860,160	3,134,838,394	1,618,916,687	559,376,092	
E	718,675,682	2,023,424,567	6,312,612,503	953,636,203	1,300,859,471	
F	232,803,295	2,311,231,134	0	111,122,989	997,217,437	
G	131,391,596	553,613,955	0	6,298,266	143,260,417	
Subtotal:	7,588,921,928	5,059,793,806	38,466,797,561	13,650,217,509	3,496,874,239	

**LIMITED INDEMNITY LOSS
DEVELOPMENT**

Missouri

01/01/11

Likely

1st Report Start: 7/1/2007
1st Report End: 6/30/2008

PY Data	1st Report	2nd Report	3rd Report	4th Report	5th Report	6th Report
7/00-6/01			139,474,941	147,587,093	151,596,815	153,766,935
7/01-6/02		121,019,042	132,316,570	138,306,035	141,660,088	142,980,419
7/02-6/03	105,339,138	124,767,266	133,963,200	140,857,718	145,035,294	148,498,728
7/03-6/04	103,779,205	118,011,191	126,751,436	134,503,446	138,939,304	
7/04-6/05	84,442,902	98,061,453	107,009,908	114,596,198		
7/05-6/06	79,312,896	93,882,157	104,806,639			
7/06-6/07	78,818,482	90,867,200				
7/07-6/08	80,137,275					

Link Ratios	1:2	2:3	3:4	4:5	5:6
7/00-6/01			1.058	1.027	1.014
7/01-6/02		1.093	1.045	1.024	1.009
7/02-6/03	1.184	1.074	1.051	1.030	1.024
7/03-6/04	1.137	1.074	1.061	1.033	
7/04-6/05	1.161	1.091	1.071		
7/05-6/06	1.184	1.116			
7/06-6/07	1.153				

AVERAGE DEV.	1:2	2:3	3:4	4:5	5:6
2 Year Averages	1.169	1.104	1.066	1.032	1.017

AVG DEV. TO 6TH	1:6	2:6	3:6	4:6	5:6	6th:Ult
2 Year Averages	1.444	1.235	1.119	1.050	1.017	1.039

Selected Development for Pure Premium	1:U	2:U	3:U	4:U	5:U	6:U
	1.501	1.284	1.163	1.091	1.057	1.039

**LIMITED INDEMNITY LOSS
DEVELOPMENT**
Not-Likely

01/01/11

1st Report Start: 7/1/2007
1st Report End: 6/30/2008

PY Data	1st Report	2nd Report	3rd Report	4th Report	5th Report	6th Report
7/00-6/01			209,820,092	210,642,388	211,147,571	211,283,175
7/01-6/02		199,041,932	204,876,148	206,826,104	207,115,217	206,974,693
7/02-6/03	184,385,057	202,931,358	208,334,266	208,832,037	209,636,451	209,889,407
7/03-6/04	180,885,361	189,083,599	193,653,341	196,322,380	196,228,115	
7/04-6/05	148,880,399	157,570,621	161,655,914	162,963,733		
7/05-6/06	145,875,135	156,564,080	161,774,833			
7/06-6/07	148,576,821	160,822,188				
7/07-6/08	148,572,960					

Link Ratios	1:2	2:3	3:4	4:5	5:6
7/00-6/01			1.004	1.002	1.001
7/01-6/02		1.029	1.010	1.001	0.999
7/02-6/03	1.101	1.027	1.002	1.004	1.001
7/03-6/04	1.045	1.024	1.014	1.000	
7/04-6/05	1.058	1.026	1.008		
7/05-6/06	1.073	1.033			
7/06-6/07	1.082				

AVERAGE DEV.	1:2	2:3	3:4	4:5	5:6
2 Year Averages	1.078	1.030	1.011	1.002	1.000

AVG DEV. TO 6TH	1:6	2:6	3:6	4:6	5:6	6th:Ult
2 Year Averages	1.124	1.043	1.013	1.002	1.000	1.007

Selected Development for Pure Premium	1:U	2:U	3:U	4:U	5:U	6:U
	1.133	1.051	1.020	1.009	1.007	1.007

01/01/11

**LIMITED MEDICAL LOSS
DEVELOPMENT**

Likely

1st Report Start: 7/1/2007
1st Report End: 6/30/2008

PY Data	1st Report	2nd Report	3rd Report	4th Report	5th Report	6th Report
7/00-6/01			113,516,460	117,246,552	117,589,475	118,115,428
7/01-6/02		106,752,548	111,491,438	112,572,259	111,355,450	112,449,104
7/02-6/03	106,701,625	119,371,493	122,405,781	124,829,484	125,926,675	126,809,316
7/03-6/04	109,236,762	118,972,219	121,709,517	123,838,892	125,001,932	
7/04-6/05	101,842,461	108,578,099	111,767,011	112,731,154		
7/05-6/06	99,826,779	106,588,236	111,410,268			
7/06-6/07	102,228,707	107,478,624				
7/07-6/08	105,439,423					

Link Ratios	1:2	2:3	3:4	4:5	5:6
7/00-6/01			1.033	1.003	1.004
7/01-6/02		1.044	1.010	0.989	1.010
7/02-6/03	1.119	1.025	1.020	1.009	1.007
7/03-6/04	1.089	1.023	1.017	1.009	
7/04-6/05	1.066	1.029	1.009		
7/05-6/06	1.068	1.045			
7/06-6/07	1.051				

AVERAGE DEV.	1:2	2:3	3:4	4:5	5:6
2 Year Averages	1.060	1.037	1.013	1.009	1.009

AVG DEV. TO 6TH	1:6	2:6	3:6	4:6	5:6	6th:Ult
2 Year Averages	1.133	1.069	1.031	1.018	1.009	1.152

Selected Development for Pure Premium	1:U	2:U	3:U	4:U	5:U	6:U
	1.305	1.231	1.187	1.172	1.162	1.152

01/01/11

**LIMITED MEDICAL LOSS
DEVELOPMENT
Not-Likely**

1st Report Start: 7/1/2007
1st Report End: 6/30/2008

PY Data	1st Report	2nd Report	3rd Report	4th Report	5th Report	6th Report
7/00-6/01			218,300,380	218,568,955	217,810,847	217,382,986
7/01-6/02		222,016,454	223,394,110	221,894,519	221,622,028	221,067,027
7/02-6/03	225,982,888	233,523,530	232,905,460	231,657,985	231,668,529	231,556,388
7/03-6/04	230,517,802	230,466,535	229,835,679	230,701,503	229,890,111	
7/04-6/05	215,986,252	217,099,047	217,461,123	216,692,383		
7/05-6/06	230,033,378	232,237,292	232,134,917			
7/06-6/07	239,001,981	240,476,061				
7/07-6/08	244,209,618					

Link Ratios	1:2	2:3	3:4	4:5	5:6
7/00-6/01			1.001	0.997	0.998
7/01-6/02		1.006	0.993	0.999	0.997
7/02-6/03	1.033	0.997	0.995	1.000	1.000
7/03-6/04	1.000	0.997	1.004	0.996	
7/04-6/05	1.005	1.002	0.996		
7/05-6/06	1.010	1.000			
7/06-6/07	1.006				

AVERAGE DEV.	1:2	2:3	3:4	4:5	5:6
2 Year Averages	1.008	1.001	1.000	0.998	0.999

AVG DEV. TO 6TH	1:6	2:6	3:6	4:6	5:6	6th:Ult
2 Year Averages	1.006	0.998	0.997	0.997	0.999	1.018

Selected Development for Pure Premium	1:U	2:U	3:U	4:U	5:U	6:U
	1.024	1.016	1.015	1.015	1.017	1.018

**Calculation of Tail Adjustment Factors (F_T) by Threshold
Rate Filing Season 2008 - 2009
ULDF = 1.051**

<u>ThresholdT</u>	<u>Interpolated F_T</u>			
9,575,686	0.737			
<u>ThresholdT</u>	<u>ELF_T</u>	<u>ELDFT</u>	<u>CLDFT</u>	<u>F_T</u>
1,000,000	0.107	1.518	1.014	0.266
2,000,000	0.061	1.749	1.024	0.480
3,000,000	0.044	2.015	1.028	0.555
4,000,000	0.035	2.320	1.031	0.598
5,000,000	0.029	2.673	1.032	0.629
6,000,000	0.024	3.078	1.034	0.668
7,000,000	0.021	3.546	1.035	0.690
8,000,000	0.019	4.084	1.036	0.710
9,000,000	0.017	4.704	1.037	0.728
10,000,000	0.015	5.418	1.038	0.743
11,000,000	0.013	6.240	1.040	0.775
12,000,000	0.012	7.187	1.040	0.789
13,000,000	0.011	8.278	1.041	0.802
14,000,000	0.010	9.534	1.041	0.813
15,000,000	0.009	10.981	1.042	0.823
16,000,000	0.009	12.648	1.042	0.833
17,000,000	0.008	14.567	1.043	0.842
18,000,000	0.008	16.777	1.043	0.850
19,000,000	0.007	19.322	1.044	0.857
20,000,000	0.007	22.254	1.044	0.864
21,000,000	0.007	25.631	1.044	0.871
22,000,000	0.006	29.516	1.045	0.877
23,000,000	0.006	33.990	1.045	0.883
24,000,000	0.006	39.147	1.045	0.888
25,000,000	0.005	45.086	1.046	0.893
26,000,000	0.005	51.935	1.046	0.898
27,000,000	0.005	59.809	1.046	0.903
28,000,000	0.005	68.871	1.046	0.907
29,000,000	0.004	79.334	1.046	0.911
30,000,000	0.004	91.366	1.047	0.915
31,000,000	0.004	105.208	1.047	0.919
32,000,000	0.004	121.139	1.047	0.923
33,000,000	0.004	139.470	1.047	0.926
34,000,000	0.003	160.643	1.047	0.930
35,000,000	0.003	185.014	1.048	0.933
36,000,000	0.003	212.993	1.048	0.936
37,000,000	0.003	245.399	1.048	0.939
38,000,000	0.003	282.486	1.048	0.942
39,000,000	0.003	325.733	1.048	0.945
40,000,000	0.003	374.532	1.048	0.948

Notes:

- (1) ULDF = Uncapped 19th to ultimate tail factor (weighted average of state ULDFs)
- (2) EL F_T = Excess ratio for threshold T
- (3) ELDF T = Excess paid+case tail factor, 19th to ultimate, for threshold T
- (4) CLDF T = Capped paid+case tail factor = $ULDF((1-ELF)/(1-(ULDF/ELDF)ELF))$
- (5) F_T = Factor to apply to state-specific ULDF = $(CLDF-1)/(ULDF-1)$

**ACCIDENT YEAR LOSS DEVELOPMENT FACTORS
CASE INCURRED**

**EXHIBIT IX
COUNTRYWIDE**

INDEMNITY								
Year	1st/2nd	2nd/3rd	3rd/4th	4th/5th	5th/6th	6th/7th	7th/8th	8th/Ult.
1995								1.033
1996							1.007	1.055
1997						1.008	1.009	1.045
1998					1.021	1.011	1.008	1.047
1999				1.033	1.015	1.014	1.006	1.042
2000			1.074	1.031	1.017	1.012	1.008	
2001		1.158	1.064	1.029	1.014	1.012		
2002	1.483	1.148	1.060	1.028	1.021			
2003	1.460	1.148	1.060	1.031				
2004	1.426	1.146	1.064					
2005	1.465	1.150						
2006	1.477							
AVG. 2yr.	1.471	1.148	1.062	1.030	1.018	1.012	1.007	1.045
AVG. 5yr.	1.462	1.150	1.064	1.030	1.018	1.011	1.008	1.044
CUM. 2yr.	2.004	1.362	1.186	1.117	1.084	1.065	1.052	1.045
CUM. 5yr.	1.994	1.364	1.186	1.115	1.083	1.064	1.052	1.044
MEDICAL								
Year	1st/2nd	2nd/3rd	3rd/4th	4th/5th	5th/6th	6th/7th	7th/8th	8th/Ult.
1995								1.258
1996							1.009	1.236
1997						1.014	1.015	1.162
1998					1.020	1.014	1.013	1.142
1999				1.024	1.021	1.019	1.012	1.216
2000			1.033	1.025	1.017	1.014	1.010	
2001		1.052	1.036	1.021	1.013	1.017		
2002	1.265	1.047	1.027	1.018	1.021			
2003	1.238	1.048	1.021	1.019				
2004	1.232	1.042	1.023					
2005	1.228	1.037						
2006	1.206							
AVG. 2yr.	1.217	1.040	1.022	1.019	1.017	1.016	1.011	1.179
AVG. 5yr.	1.234	1.045	1.028	1.021	1.018	1.016	1.012	1.203
CUM. 2yr.	1.623	1.334	1.283	1.255	1.232	1.211	1.192	1.179
CUM. 5yr.	1.702	1.379	1.320	1.284	1.258	1.236	1.217	1.203
TOTAL								
Year	1st/2nd	2nd/3rd	3rd/4th	4th/5th	5th/6th	6th/7th	7th/8th	8th/Ult.
1995								1.123
1996							1.008	1.130
1997						1.011	1.012	1.096
1998					1.020	1.013	1.010	1.086
1999				1.028	1.018	1.016	1.009	1.117
2000			1.054	1.028	1.017	1.013	1.009	
2001		1.101	1.050	1.025	1.013	1.014		
2002	1.354	1.093	1.043	1.023	1.021			
2003	1.328	1.093	1.039	1.025				
2004	1.308	1.086	1.042					
2005	1.316	1.084						
2006	1.305							
AVG. 2yr.	1.311	1.085	1.041	1.024	1.017	1.014	1.009	1.102
AVG. 5yr.	1.322	1.091	1.046	1.026	1.018	1.013	1.010	1.110
CUM. 2yr.	1.740	1.327	1.223	1.175	1.147	1.128	1.112	1.102
CUM. 5yr.	1.790	1.354	1.241	1.186	1.156	1.136	1.121	1.110

Includes all states in this exhibit except California, Massachusetts, Michigan, Minnesota, Nevada, New York, Texas, and Wisconsin.

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Fitted Values (new fitted values using RAA 2005 loss study):

Threshold	Fitted -2006	1/Fitted - 2006	Fitted - 2003	1/Fitted - 2003	Fitted - Selected	1/Fitted - Selected
1,000,000	0.689	1.451	0.628	1.593	0.659	1.518
2,000,000	0.597	1.675	0.546	1.830	0.572	1.749
3,000,000	0.517	1.934	0.476	2.102	0.496	2.015
4,000,000	0.448	2.233	0.414	2.416	0.431	2.320
5,000,000	0.388	2.577	0.360	2.775	0.374	2.673
6,000,000	0.336	2.976	0.314	3.189	0.325	3.078
7,000,000	0.291	3.435	0.273	3.664	0.282	3.546
8,000,000	0.252	3.966	0.238	4.209	0.245	4.084
9,000,000	0.218	4.579	0.207	4.836	0.213	4.704
10,000,000	0.189	5.286	0.180	5.556	0.185	5.418
11,000,000	0.164	6.103	0.157	6.384	0.160	6.240
12,000,000	0.142	7.046	0.136	7.335	0.139	7.187
13,000,000	0.123	8.134	0.119	8.427	0.121	8.278
14,000,000	0.106	9.391	0.103	9.681	0.105	9.534
15,000,000	0.092	10.841	0.090	11.123	0.091	10.981
16,000,000	0.080	12.517	0.078	12.781	0.079	12.648
17,000,000	0.069	14.451	0.068	14.684	0.069	14.567
18,000,000	0.060	16.683	0.059	16.872	0.060	16.777
19,000,000	0.052	19.260	0.052	19.384	0.052	19.322
20,000,000	0.045	22.237	0.045	22.272	0.045	22.254
21,000,000	0.039	25.674	0.039	25.589	0.039	25.631
22,000,000	0.034	29.638	0.034	29.394	0.034	29.516
23,000,000	0.029	34.211	0.030	33.772	0.029	33.990
24,000,000	0.025	39.494	0.026	38.805	0.026	39.147
25,000,000	0.022	45.600	0.022	44.583	0.022	45.086
26,000,000	0.019	52.659	0.020	51.230	0.019	51.935
27,000,000	0.016	60.790	0.017	58.858	0.017	59.809
28,000,000	0.014	70.175	0.015	67.613	0.015	68.871
29,000,000	0.012	81.037	0.013	77.700	0.013	79.334
30,000,000	0.011	93.545	0.011	89.286	0.011	91.366
31,000,000	0.009	107.991	0.010	102.564	0.010	105.208
32,000,000	0.008	124.688	0.008	117.786	0.008	121.139
33,000,000	0.007	143.885	0.007	135.318	0.007	139.470
34,000,000	0.006	166.113	0.006	155.521	0.006	160.643
35,000,000	0.005	191.939	0.006	178.571	0.005	185.014
36,000,000	0.005	221.239	0.005	205.339	0.005	212.993
37,000,000	0.004	255.754	0.004	235.849	0.004	245.399
38,000,000	0.003	294.985	0.004	271.003	0.004	282.486
39,000,000	0.003	341.297	0.003	311.526	0.003	325.733
40,000,000	0.003	393.701	0.003	357.143	0.003	374.532

CW Per Claim Excess Ratios

As of 4/3/09

Loss Limit	FATAL		PT		PP		TT		MO		Unadjusted		Adjusted	
	entry	excess	entry	excess	entry	excess	entry	excess	entry	excess	excess	Ratio	Ratio	
500,000	1.244	0.435	0.448	0.653	4.226	0.161	27.548	0.002	358.166	0.005	0.17803	0.18250		
1,000,000	2.488	0.255	0.897	0.484	8.452	0.074	55.096	0.000	716.332	0.001	0.10139	0.10709		
2,000,000	4.977	0.136	1.793	0.327	16.905	0.032	110.193	0.000	1432.665	0.000	0.05612	0.06095		
3,000,000	7.465	0.092	2.690	0.251	25.357	0.019	165.289	0.000	2148.997	0.000	0.03923	0.04411		
4,000,000	9.953	0.070	3.587	0.204	33.809	0.012	220.386	0.000	2865.330	0.000	0.03016	0.03507		
5,000,000	12.441	0.056	4.483	0.172	42.262	0.009	275.482	0.000	3581.662	0.000	0.02439	0.02932		
6,000,000	14.930	0.047	5.380	0.148	50.714	0.007	330.579	0.000	4297.994	0.000	0.02032	0.02426		
7,000,000	17.418	0.041	6.277	0.129	59.167	0.005	385.675	0.000	5014.327	0.000	0.01726	0.02121		
8,000,000	19.906	0.036	7.173	0.114	67.619	0.004	440.771	0.000	5730.659	0.000	0.01488	0.01884		
9,000,000	22.395	0.032	8.070	0.102	76.071	0.003	495.868	0.000	6446.991	0.000	0.01299	0.01695		
10,000,000	24.883	0.029	8.967	0.092	84.524	0.002	550.964	0.000	7163.324	0.000	0.01145	0.01542		
11,000,000	27.371	0.027	9.863	0.083	92.976	0.002	606.061	0.000	7879.656	0.000	0.01019	0.01308		
12,000,000	29.859	0.025	10.760	0.076	101.428	0.001	661.157	0.000	8595.989	0.000	0.00914	0.01196		
13,000,000	32.348	0.024	11.657	0.070	109.881	0.001	716.253	0.000	9312.321	0.000	0.00826	0.01101		
14,000,000	34.836	0.022	12.553	0.064	118.333	0.001	771.350	0.000	10028.653	0.000	0.00751	0.01018		
15,000,000	37.324	0.021	13.450	0.059	126.786	0.001	826.446	0.000	10744.986	0.000	0.00686	0.00947		
16,000,000	39.812	0.020	14.347	0.055	135.238	0.000	881.543	0.000	11461.318	0.000	0.00631	0.00884		
17,000,000	42.301	0.019	15.244	0.051	143.690	0.000	936.639	0.000	12177.650	0.000	0.00582	0.00828		
18,000,000	44.789	0.018	16.140	0.047	152.143	0.000	991.736	0.000	12893.983	0.000	0.00539	0.00778		
19,000,000	47.277	0.017	17.037	0.044	160.595	0.000	1046.832	0.000	13610.315	0.000	0.00502	0.00733		
20,000,000	49.766	0.016	17.934	0.042	169.047	0.000	1101.928	0.000	14326.648	0.000	0.00468	0.00692		
21,000,000	52.254	0.016	18.830	0.039	177.500	0.000	1157.025	0.000	15042.980	0.000	0.00438	0.00654		
22,000,000	54.742	0.015	19.727	0.037	185.952	0.000	1212.121	0.000	15759.312	0.000	0.00411	0.00620		
23,000,000	57.230	0.015	20.624	0.035	194.405	0.000	1267.218	0.000	16475.645	0.000	0.00387	0.00588		
24,000,000	59.719	0.014	21.520	0.033	202.857	0.000	1322.314	0.000	17191.977	0.000	0.00365	0.00559		
25,000,000	62.207	0.014	22.417	0.031	211.309	0.000	1377.410	0.000	17908.309	0.000	0.00345	0.00531		
26,000,000	64.695	0.013	23.314	0.029	219.762	0.000	1432.507	0.000	18624.642	0.000	0.00326	0.00505		
27,000,000	67.184	0.013	24.210	0.028	228.214	0.000	1487.603	0.000	19340.974	0.000	0.00310	0.00481		
28,000,000	69.672	0.012	25.107	0.026	236.666	0.000	1542.700	0.000	20057.307	0.000	0.00294	0.00458		
29,000,000	72.160	0.012	26.004	0.025	245.119	0.000	1597.796	0.000	20773.639	0.000	0.00280	0.00437		
30,000,000	74.648	0.012	26.900	0.024	253.571	0.000	1652.893	0.000	21489.971	0.000	0.00267	0.00416		
31,000,000	77.137	0.011	27.797	0.023	262.023	0.000	1707.989	0.000	22206.304	0.000	0.00255	0.00397		
32,000,000	79.625	0.011	28.694	0.022	270.476	0.000	1763.085	0.000	22922.636	0.000	0.00244	0.00378		
33,000,000	82.113	0.011	29.590	0.021	278.928	0.000	1818.182	0.000	23638.968	0.000	0.00233	0.00360		
34,000,000	84.602	0.010	30.487	0.020	287.381	0.000	1873.278	0.000	24355.301	0.000	0.00224	0.00343		
35,000,000	87.090	0.010	31.384	0.019	295.833	0.000	1928.375	0.000	25071.633	0.000	0.00215	0.00327		
36,000,000	89.578	0.010	32.280	0.018	304.285	0.000	1983.471	0.000	25787.966	0.000	0.00206	0.00311		
37,000,000	92.066	0.009	33.177	0.018	312.738	0.000	2038.567	0.000	26504.298	0.000	0.00198	0.00295		
38,000,000	94.555	0.009	34.074	0.017	321.190	0.000	2093.664	0.000	27220.630	0.000	0.00191	0.00280		
39,000,000	97.043	0.009	34.970	0.016	329.642	0.000	2148.760	0.000	27936.963	0.000	0.00184	0.00266		
40,000,000	99.531	0.009	35.867	0.016	338.095	0.000	2203.857	0.000	28653.295	0.000	0.00177	0.00252		