AIS RISK CONSULTANTS, INC.

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Date: October 6, 2015

To: Fred A. Townsend III
Ratepayer Advocate of the State of Delaware

From: Allan I. Schwartz

Re: Delaware Compensation Rating Bureau Filing No. 1502; Dated August 28, 2015

In accordance with your request, I have reviewed the Delaware Compensation Rating Bureau (DCRB) filing No. 1502; dated August 28, 2015; proposed effective December 1, 2015. Based upon my analysis I have concluded that the increases proposed by the DCRB are not warranted and a smaller increase in voluntary market loss costs and residual market rates is indicated.[1] A comparison of the values from my analysis and those contained in the DCRB filing is set forth in the following table.

Comparison of AIS and DCRB Rate & Loss Cost Changes

	AIS	DCRB	Difference AIS - DCRB
Change in Residual Market Rate Level	2.2%	14.9%	-12.7%
Change in Voluntary Market Loss Costs	2.3%	15.0%	-12.7%

The calculations underlying our values are set forth in Schedule AIS-1.

The difference between the AIS and DCRB values relate to the: (i) projected ultimate losses for historical periods along with the impact on the loss trend calculation, (ii) consideration of the Medical Data Call Overview Report through December 31, 2014 in the selection of the medical severity trend and (iii) evaluation of HB 175.

[1] Our analysis is based upon the information currently available, and is subject to revision if additional relevant information becomes available. Furthermore, our lack of comment on particular aspects of the DCRB filing should not be taken to mean that we agree with those procedures.

1. Projected Ultimate Losses for Historical Periods

The procedure used by the DCRB to derive the projected ultimate losses for the historical periods involves:

(i) Deriving average paid and case incurred loss development factors based upon the most recent four calendar years of experience

(ii) Fitting the factors to a mathematical curve

(iii) Use the fitted factors to derive paid and case incurred development factors to ultimate

(iv) Multiply the paid and case incurred development factors to ultimate by the reported paid and case incurred losses to derive project ultimate losses based upon paid experience and case incurred experience, respectively

(v) Select the average of those two indications for the projected ultimate losses

We made two changes to the method used by the DCRB.[2] Instead of using only the loss development reserve procedure in step 4, we used a combination of the loss development and B-F reserve procedures. Also, we gave more weight to the results based upon case incurred data than paid data.

Both the loss development reserve procedure and B-F reserve procedure can be actuarially acceptable methods for calculating ultimate loss projections, depending on the circumstances of a particular situation. The loss development procedure tends to be more responsive but subject to a larger degree of variability, whereas the B-F procedure tends to be more stable with a smaller degree of variability.

[2] The calculations are set forth in Schedule AIS-3.

After reviewing the reported experience included in the DCRB filing, we believe that in the current circumstances it is appropriate to reflect both the loss development and the B-F reserve procedures. This provides a reasonable balance between responsiveness and stability for this filing. Our analysis is based upon giving 50% weight to the loss development reserve procedure and 50% to the B-F reserve procedure.

The loss development procedure used in the DCRB filing gives equal weight to the paid development and case incurred development methods. This results in an annual increase in indemnity claims severity of more than 10% in each year from 2010 to 2013. This is a total increase of 42.8% over this three-year period in indemnity claim severity, which is an average annual increase of 12.6% a year. No reasonable explanation has been provided for this unusually large increase in indemnity claim severity.

In discussing this issue with people involved with the workers compensation claims process, there is some indication that the rate at which claims are settled / paid has increased in recent years. This could cause a distortion in the results from the paid development method.

Taking these considerations into account, we gave twice at much weight to the incurred data as the paid data, in both the development and B-F methods.

The revision to the projected ultimate losses for the historical periods also impacts the trend calculation.[3] Our loss cost and rate calculations are based upon the same historical trend time periods used by the DCRB.

2. Medical Data Call Overview Report

We the reviewed Medical Data Call Overview Report from the DCRB to the Workers Compensation Oversight Panel dated July 9, 2015. That contained time series data both for Medical Procedure Data and Prescription Drug Data for a number of items, including the average payment per claim. That data is shown by year ending periods in Schedule AIS-4. Trend calculations performed on that data indicate average payment per claim annual trends in the range of about 2% to 3% a year for medical procedures and prescription drugs combined. A summary of the results is shown in the following table.

[3] Schedule AIS-2

Summary of Claim Severity Trends from DCRB Medical Call 4Q2014

	Average Annual Claim Severity Trend During Time Period for		
Time Period	Medical	Drugs	Combined
June 2011 to December 2014	3.1%	0.8%	2.8%
Sept 2011 to December 2014	2.7%	0.3%	2.4%
Dec 2011 to December 2014	2.4%	-0.3%	2.1%
March 2012 to December 2014	2.7%	-1.0%	2.3%
June 2012 to December 2014	2.6%	-1.8%	2.1%
Sept 2012 to December 2014	2.6%	-2.7%	2.0%
Dec 2012 to December 2014	3.6%	-4.3%	2.7%
March 2013 to December 2014	3.3%	-5.8%	2.3%
June 2013 to December 2014	3.7%	-7.0%	2.5%
Sept 2013 to December 2014	3.2%	-8.3%	1.9%
Dec 2013 to December 2014	-0.7%	-8.1%	-1.5%
March 2014 to December 2014	-0.7%	-6.9%	-1.4%
Average	2.4%	-3.8%	1.7%

Source: Schedule AIS-4
Combined based on 89% weight to Medical and 11% to Drugs

These data are consistent with the lower trend in medical costs in more recent years from 2010 to 2013 shown in the financial data.[4]

Based upon these data, we adjusted the selected medical severity trend downward by an additional 3% a year more than that used by the DCRB after 1/31/13.[5] The resulting annual medical severity trend is 6.1% for time periods after 1/31/13. This value is still considerably higher than increases in medical inflation. It is also higher than that indicated from the medical financial call data trends after 2010 and the trends indicated by Medical Data Call information. Using a lower annual medical claim severity trend would result in a lower rate indication.

3. Evaluation of HB 175

The DCRB's analysis of HB 175 is based upon the assumption that the legislation had no impact on payments that are subject to network contracts. This can be seen from the DCRB filing, Exhibit 34, which shows "Network Savings" as 0% (displayed as a blank "–").[6]

For payments subject to network contracts, the savings will likely be smaller than for payments made under the fee schedule. However, network contracts can be tied into the fee schedule, such that a reduction in the fee schedule can also reduce network contract payments.

Detailed information regarding the specific relationship between the impacts of reductions in fee schedule payments to reductions in network contract payments is not available. It is my understanding that neither the DCRB nor insurance companies have that level of information.

For the purpose of this analysis, we have assumed that the payments under network contracts will decrease by ½ (i.e., 50%) of the decrease in payments subject to the fee schedule.

Based upon this, we derived an impact for HB 175 on medical costs of -9.4% as opposed to the value of -6.03% used by the DCRB.[7]

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[4] Schedule AIS-2, Sheets 9 and 10

[5] The DCRB filing used a -1.8% downward adjustment to account for the fee schedule impact on medical trends. We used a combined downward adjustment of -4.8%.

[6] An exception to this is the savings for Drug Testing. In that instance the DCRB assigned savings for the Cap of 4 times per year, but not for the $100 Per Test value.

[7] Schedule AIS-5

4. Conclusion

Based upon my analysis I have concluded that an increase of about 2% in the residual market rates and 2% in the voluntary loss costs is within the range of reasonable values.

Please feel free to contact me if there is anything you would care to discuss.

Enclosures

DELAWARE WORKERS' COMPENSATION

Analysis of DCRB Filing Proposed Effective December 1, 2015

Voluntary Market Loss Cost and Residual Market Rates

		Indemnity	Medical	Total
(1a)	Policy Year 2010 Loss and Loss Adjustment Expense Ratio	0.2681	0.6096	0.8777
(1b)	Policy Year 2011 Loss and Loss Adjustment Expense Ratio	0.2761	0.6329	0.9090
(1c)	Policy Year 2012 Loss and Loss Adjustment Expense Ratio	0.2770	0.5977	0.8747
(1d)	Policy Year 2013 Loss and Loss Adjustment Expense Ratio	0.3127	0.6515	0.9642
(1e)	Average (Midpoint = 7/1/2012)	0.2835	0.6229	0.9064
(2a)	Policy Year 2010 Loss and LAE Ratio Trended to 12/1/2016	0.2792	0.6678	
(2b)	Policy Year 2011 Loss and LAE Ratio Trended to 12/1/2016	0.2855	0.6693	
(2c)	Policy Year 2012 Loss and LAE Ratio Trended to 12/1/2016	0.2846	0.6102	
(2d)	Policy Year 2013 Loss and LAE Ratio Trended to 12/1/2016	0.3191	0.6603	
(2e)	Average at 12/1/2016	0.2921	0.6519	0.9440
(3ai)	Senate Bill 1 Adjustment	1.0000	0.8260	
(3aii)	Senate Bill 238 Adjustment	1.0000	0.9958	
(3aiii)	House Bill 175 Adjustment	1.0000	0.9060	
(3aiv)	House Bill 373 Adjustment	1.0000	0.6707	
(3a)	Combined Legislative Adjustment	1.0000	0.4998	
(3b)	Average Trended Loss and LAE Ratio Post-Legislation (2e) X (3a)	0.2921	0.3258	0.6179
(4a)	Excess Loss Factor at $1,632,672 (Post-Legislative Basis)			0.1155
(4b)	Provision for Excess Loss (5a)-(3b)			0.0807
(5a)	Total Trended Loss and LAE Ratio (3b)/(1.0-(4a))	0.2969	0.4017	0.6986
(5b)	Percentage of Total	42.50%	57.50%	
(6)	Permissible Loss and Loss Adjustment Ratio			0.6880
(7)	Indicated Change in Rates (5a) / (6)			1.0154
(8)	Estimated Effect of the 7/1/16 Benefit Change			1.0064
(9)	Change in Residual Market Rate Level (7) * (8)			1.0219
(10)	Change in Voluntary Market Loss Costs (9) * [0.7102 / 0.7095]			1.0229

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Indemnity Loss Ratio Trend

Policy Year	Indemnity Proj Ult Loss Ratio	Change From Prior Year	Fitted Indemnity Loss Ratio 10 Year	9 Year	8 Year	7 Year	6 Year	5 Year	4 Year	3 Year
2004	0.3062		0.2856							
2005	0.2973	-2.9%	0.2847	0.2760						
2006	0.2903	-2.3%	0.2838	0.2767	0.2666					
2007	0.2783	-4.1%	0.2828	0.2774	0.2694	0.2566				
2008	0.2405	-13.6%	0.2819	0.2781	0.2723	0.2625	0.2487			
2009	0.2753	14.5%	0.2810	0.2788	0.2752	0.2686	0.2586	0.2657		
2010	0.2681	-2.6%	0.2801	0.2796	0.2781	0.2747	0.2689	0.2734	0.2639	
2011	0.2761	3.0%	0.2792	0.2803	0.2810	0.2810	0.2795	0.2814	0.2765	0.2707
2012	0.2770	0.3%	0.2783	0.2810	0.2840	0.2875	0.2906	0.2896	0.2896	0.2881
2013	0.3127	12.9%	0.2774	0.2817	0.2870	0.2941	0.3021	0.2981	0.3034	0.3067
Annual Percent Change			-0.3%	0.3%	1.1%	2.3%	4.0%	2.9%	4.8%	6.4%

Average of 4 year to 6 year = 3.9%

Average of 4 year to 7 year = 3.5%

Average of 4 year to 7 year excluding maximum and minimum = 3.4%

Average of 3 year to 8 year = 3.6%

Average of 3 year to 8 year excluding maximum and minimum = 3.5%

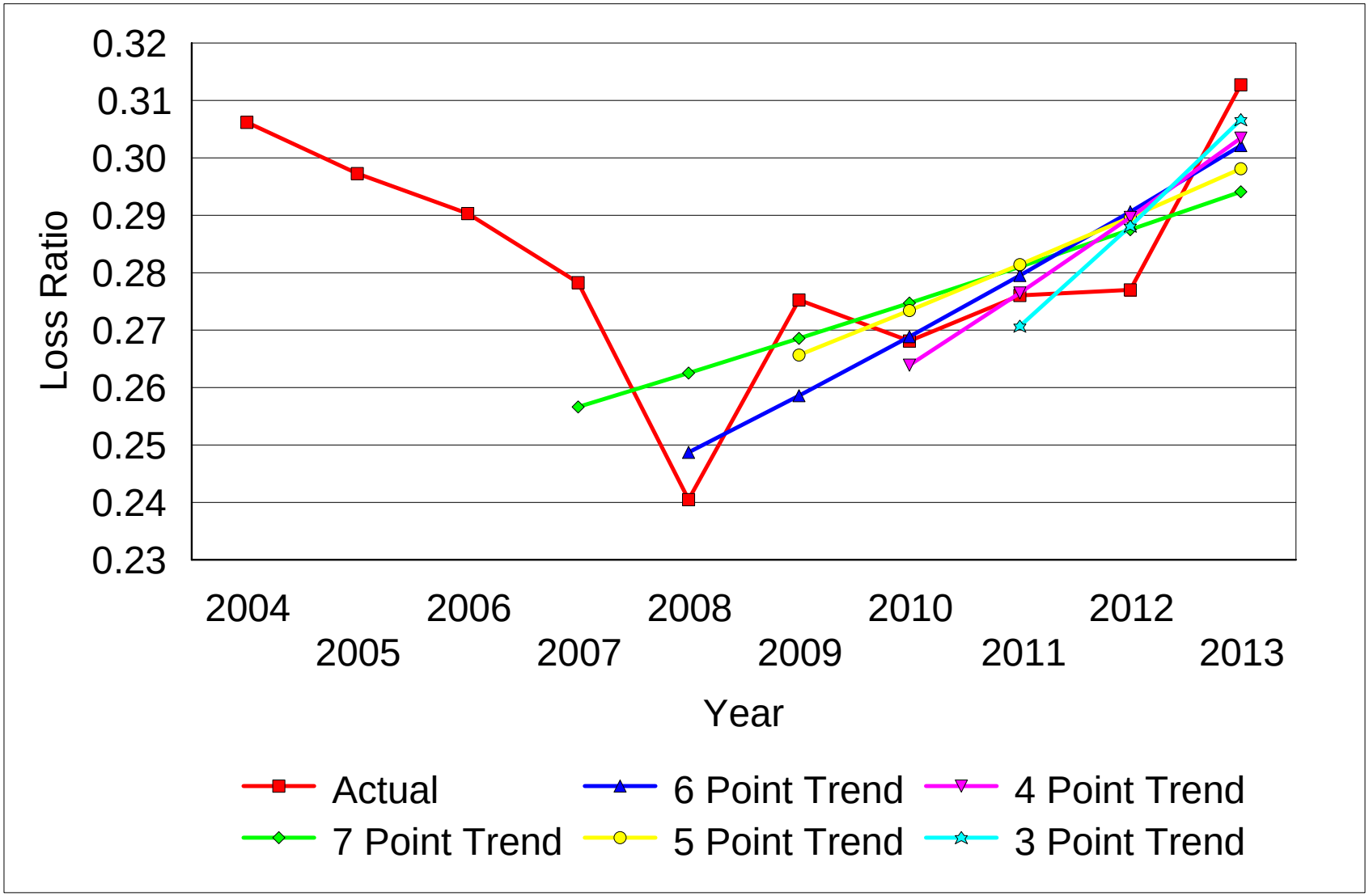
Median of 3 year to 10 year = 2.6%

Regression Output

Constant	5.2	-6.5	-22.5	-46.9	-79.5	-59.2	-94.9	-126.8
Std Err of Y Est	0.079	0.078	0.075	0.065	0.047	0.046	0.040	0.048
R Squared	2%	1%	12%	41%	75%	57%	77%	77%
Adjusted R Squared	-11%	-13%	-2%	29%	69%	42%	66%	54%
No. of Observations	10	9	8	7	6	5	4	3
Degrees of Freedom	8	7	6	5	4	3	2	1
X Coefficient(s)	-0.0032	0.0026	0.0105	0.0227	0.0389	0.0288	0.0465	0.0624
Std Err of Coef.	0.0087	0.0100	0.0115	0.0122	0.0111	0.0145	0.0178	0.0340
T-Statistic	-0.4	0.3	0.9	1.9	3.5	2.0	2.6	1.8
Probability	72.0%	80.4%	39.5%	12.2%	2.5%	14.1%	12.0%	31.8%

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Indemnity Loss Ratio Trend



Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Medical Loss Ratio Trend

Policy Year	Medical Proj Ult Loss Ratio	Change From Prior Year	Fitted Medical Loss Ratio 10 Year	9 Year	8 Year	7 Year	6 Year	5 Year	4 Year	3 Year
2004	0.4447		0.4108							
2005	0.4369	-1.8%	0.4325	0.4175						
2006	0.4386	0.4%	0.4552	0.4424	0.4325					
2007	0.4562	4.0%	0.4792	0.4688	0.4605	0.4568				
2008	0.4557	-0.1%	0.5044	0.4967	0.4903	0.4874	0.4879			
2009	0.5178	13.6%	0.5310	0.5263	0.5221	0.5200	0.5203	0.5495		
2010	0.6096	17.7%	0.5589	0.5577	0.5559	0.5548	0.5550	0.5742	0.6095	
2011	0.6329	3.8%	0.5883	0.5909	0.5919	0.5919	0.5919	0.6001	0.6182	0.6180
2012	0.5977	-5.6%	0.6193	0.6261	0.6302	0.6315	0.6313	0.6270	0.6270	0.6270
2013	0.6515	9.0%	0.6519	0.6634	0.6710	0.6737	0.6734	0.6552	0.6360	0.6361
Annual Percent Change			5.3%	6.0%	6.5%	6.7%	6.7%	4.5%	1.4%	1.5%

Average of 4 year to 6 year = 4.2%

Average of 4 year to 7 year = 4.8%

Average of 4 year to 7 year excluding maximum and minimum = 5.6%

Average of 3 year to 8 year = 4.5%

Average of 3 year to 8 year excluding maximum and minimum = 4.8%

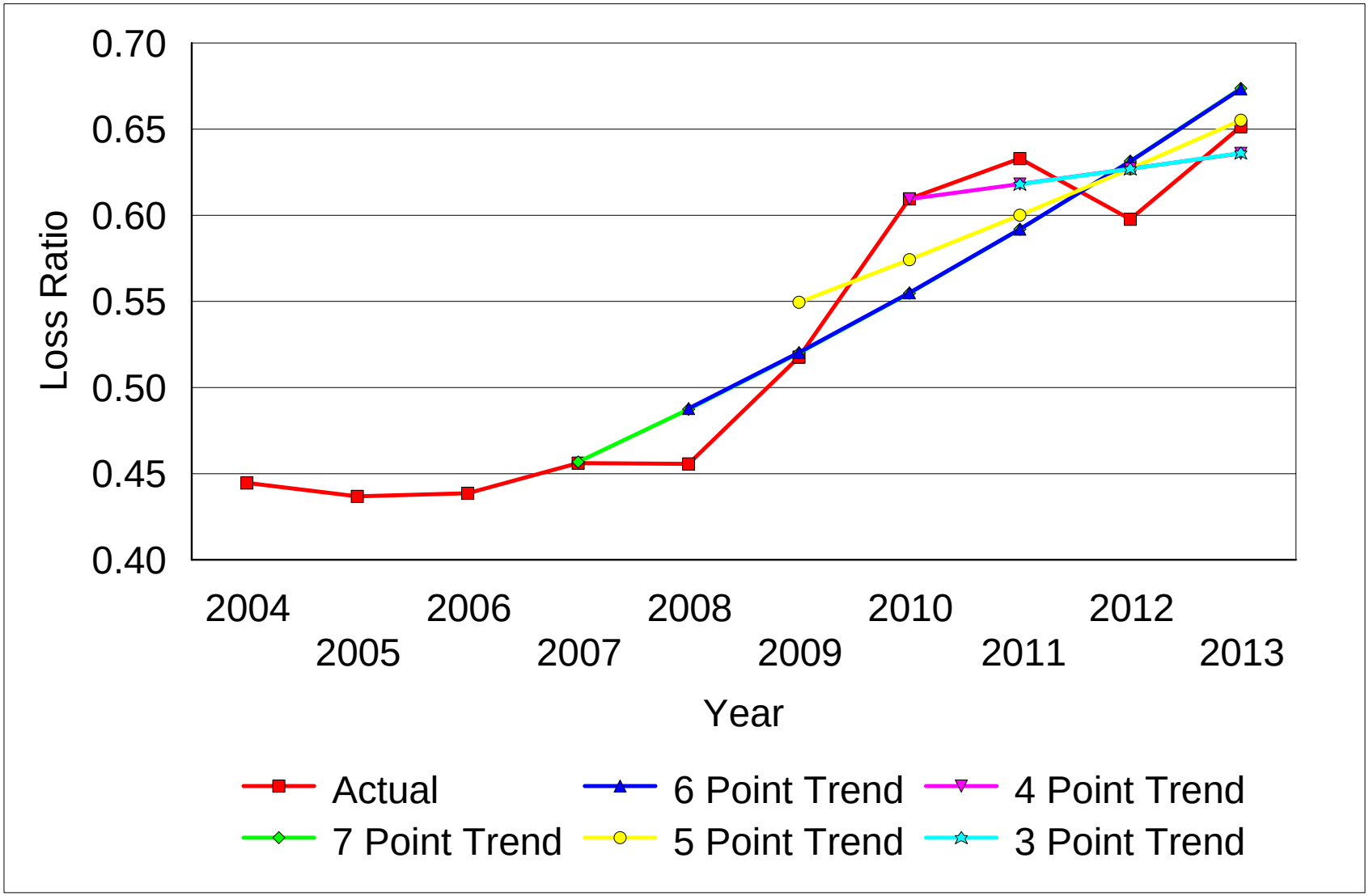
Median of 3 year to 10 year = 5.6%

Regression Output

Constant	-103.7	-116.9	-126.7	-130.7	-130.1	-88.9	-29.0	-29.5
Std Err of Y Est	0.066	0.061	0.061	0.066	0.074	0.064	0.041	0.059
R Squared	86%	89%	88%	84%	77%	61%	23%	11%
Adjusted R Squared	84%	87%	86%	81%	71%	48%	-16%	-78%
No. of Observations	10	9	8	7	6	5	4	3
Degrees of Freedom	8	7	6	5	4	3	2	1
X Coefficient(s)	0.0513	0.0579	0.0627	0.0647	0.0644	0.0440	0.0142	0.0144
Std Err of Coef.	0.0073	0.0078	0.0094	0.0126	0.0178	0.0202	0.0185	0.0414
T-Statistic	7.0	7.4	6.7	5.2	3.6	2.2	0.8	0.3
Probability	0.0%	0.0%	0.1%	0.4%	2.2%	11.8%	52.4%	78.6%

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Medical Loss Ratio Trend



Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Normalized Claim Frequency Trend

Policy Year	Normalized Claim Frequency	Change From Prior Year	Fitted Normalized Claim Frequency 10 Year	9 Year	8 Year	7 Year	6 Year	5 Year	4 Year	3 Year
2001	1.0000									
2002	1.0131	1.3%								
2003	0.9694	-4.3%								
2004	0.8537	-11.9%	0.8004							
2005	0.7635	-10.6%	0.7587	0.7373						
2006	0.7191	-5.8%	0.7192	0.7027	0.6905					
2007	0.6682	-7.1%	0.6817	0.6697	0.6605	0.6454				
2008	0.5940	-11.1%	0.6462	0.6382	0.6319	0.6210	0.6068			
2009	0.5918	-0.4%	0.6126	0.6082	0.6044	0.5975	0.5879	0.5980		
2010	0.5925	0.1%	0.5807	0.5796	0.5782	0.5748	0.5695	0.5756	0.5816	
2011	0.5583	-5.8%	0.5504	0.5524	0.5531	0.5531	0.5518	0.5541	0.5570	0.5434
2012	0.5023	-10.0%	0.5217	0.5264	0.5291	0.5321	0.5346	0.5335	0.5335	0.5302
2013	0.5314	5.8%	0.4946	0.5017	0.5061	0.5120	0.5179	0.5135	0.5109	0.5172
2015.917			0.4231	0.4360	0.4446	0.4575	0.4722	0.4596	0.4504	0.4813
Annual Percent Change			-5.2%	-4.7%	-4.3%	-3.8%	-3.1%	-3.7%	-4.2%	-2.4%

Average of 4 year to 6 year = -3.7%

Average of 4 year to 7 year = -3.7%

Average of 4 year to 7 year excluding maximum and minimum = -3.8%

Average of 3 year to 8 year = -3.6%

Average of 3 year to 8 year excluding maximum and minimum = -3.7%

Median of 3 year to 10 year = -4.0%

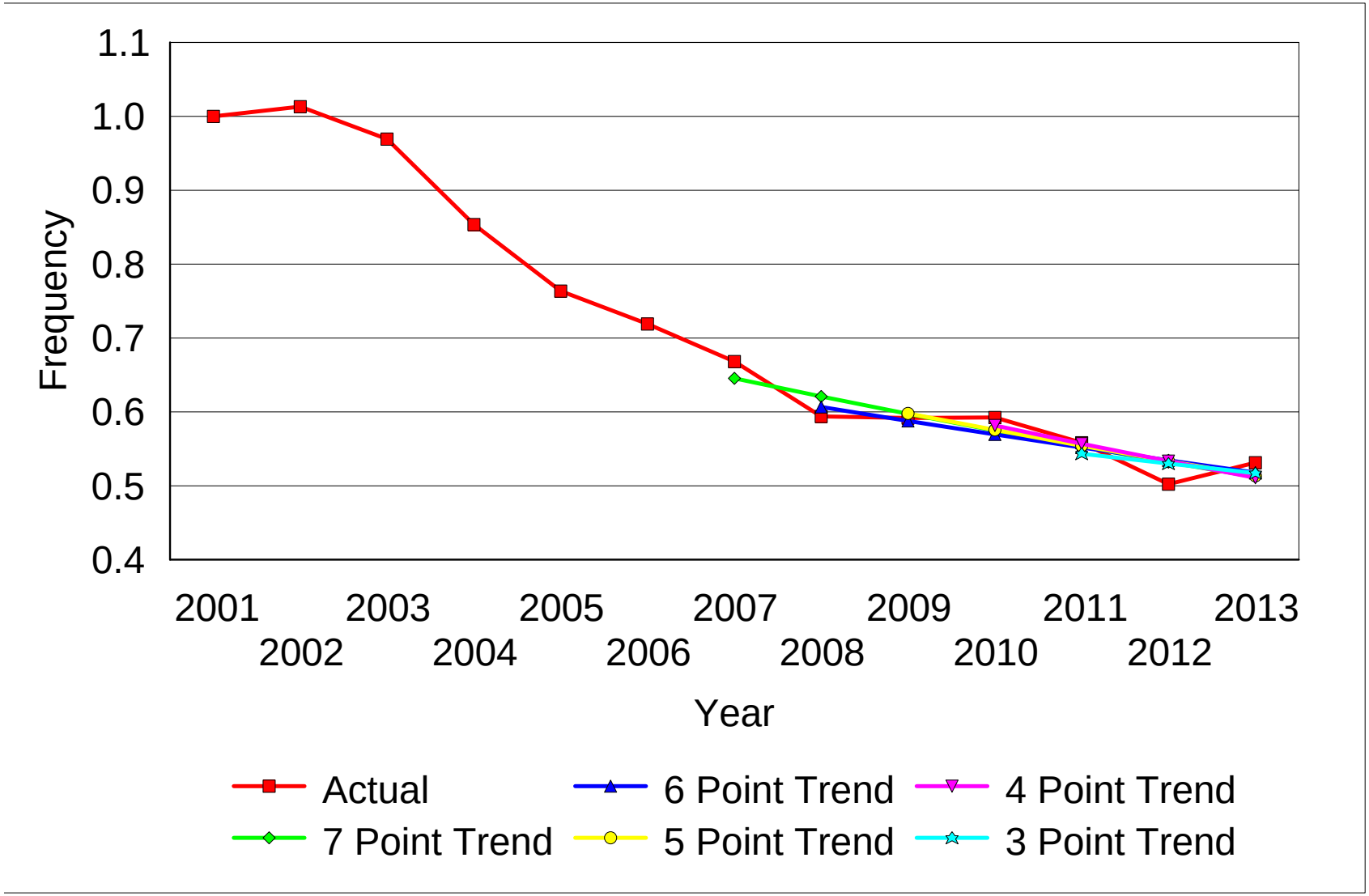
	AIS	DCRB
Selected	**-5.3%**	**-5.3%**

Regression Output

Constant	107.0	96.2	88.7	77.0	63.1	75.9	86.3	49.0
Std Err of Y Est	0.050	0.044	0.044	0.042	0.041	0.044	0.053	0.066
R Squared	92%	91%	88%	82%	72%	71%	63%	22%
Adjusted R Squared	91%	90%	85%	79%	65%	62%	44%	-56%
No. of Observations	10	9	8	7	6	5	4	3
Degrees of Freedom	8	7	6	5	4	3	2	1
X Coefficient(s)	-0.0535	-0.0481	-0.0444	-0.0386	-0.0317	-0.0380	-0.0432	-0.0247
Std Err of Coef.	0.0055	0.0057	0.0068	0.0080	0.0098	0.0139	0.0235	0.0468
T-Statistic	-9.7	-8.4	-6.5	-4.8	-3.2	-2.7	-1.8	-0.5
Probability	0.0%	0.0%	0.1%	0.5%	3.2%	7.1%	20.7%	69.1%

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Normalized Claim Frequency Trend



Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Indemnity Severity Loss Ratio Trend

Policy Year	Indemnity Severity Loss Ratio	Change From Prior Year	Fitted Indemnity Severity Loss Ratio 10 Year	9 Year	8 Year	7 Year	6 Year	5 Year	4 Year	3 Year
2004	0.3587		0.3568							
2005	0.3894	8.6%	0.3752	0.3743						
2006	0.4037	3.7%	0.3945	0.3938	0.3861					
2007	0.4165	3.2%	0.4149	0.4143	0.4079	0.3976				
2008	0.4048	-2.8%	0.4363	0.4358	0.4309	0.4228	0.4099			
2009	0.4651	14.9%	0.4588	0.4585	0.4553	0.4495	0.4399	0.4443		
2010	0.4525	-2.7%	0.4824	0.4823	0.4810	0.4779	0.4721	0.4750	0.4537	
2011	0.4945	9.3%	0.5073	0.5074	0.5081	0.5081	0.5066	0.5078	0.4963	0.4981
2012	0.5515	11.5%	0.5334	0.5338	0.5368	0.5403	0.5436	0.5429	0.5429	0.5434
2013	0.5885	6.7%	0.5609	0.5616	0.5672	0.5744	0.5834	0.5805	0.5939	0.5929
Annual Percent Change			5.2%	5.2%	5.6%	6.3%	7.3%	6.9%	9.4%	9.1%

Average of 4 year to 6 year =	7.9%
Average of 4 year to 7 year =	7.5%
Average of 4 year to 7 year excluding maximum and minimum =	7.1%
Average of 3 year to 8 year =	7.4%
Average of 3 year to 8 year excluding maximum and minimum =	7.4%
Median of 3 year to 10 year =	6.6%

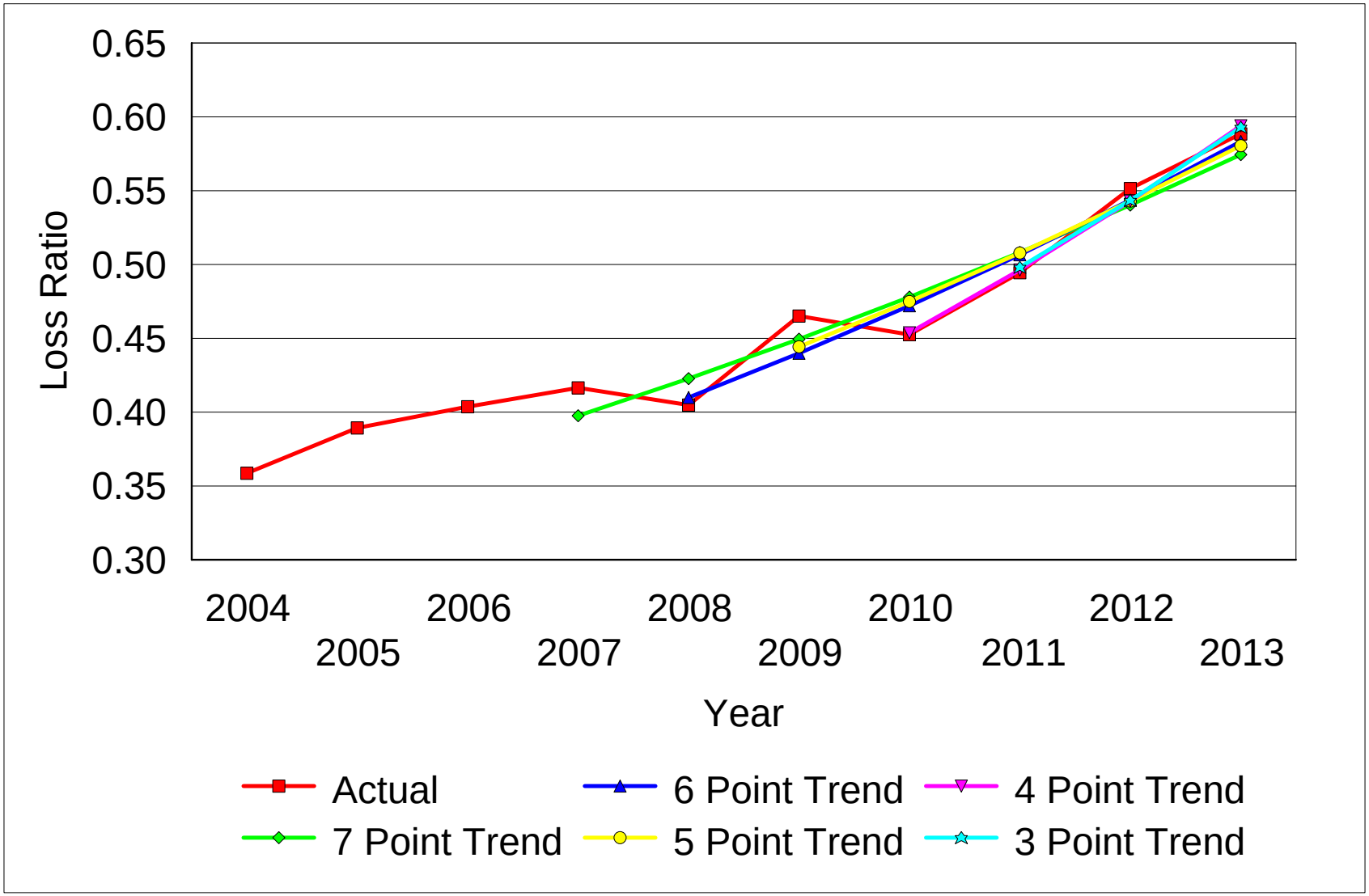
	AIS	DCRB
Selected	**6.3%**	**7.7%**

Regression Output

Constant	-101.8	-102.7	-111.2	-124.0	-142.6	-135.1	-181.2	-175.8
Std Err of Y Est	0.045	0.048	0.047	0.045	0.038	0.043	0.013	0.018
R Squared	93%	91%	90%	91%	94%	89%	99%	98%
Adjusted R Squared	92%	89%	89%	90%	92%	85%	99%	96%
No. of Observations	10	9	8	7	6	5	4	3
Degrees of Freedom	8	7	6	5	4	3	2	1
X Coefficient(s)	0.0503	0.0507	0.0549	0.0613	0.0706	0.0669	0.0898	0.0871
Std Err of Coef.	0.0049	0.0061	0.0073	0.0084	0.0092	0.0137	0.0059	0.0128
T-Statistic	10.2	8.3	7.5	7.3	7.7	4.9	15.2	6.8
Probability	0.0%	0.0%	0.0%	0.1%	0.2%	1.6%	0.4%	9.3%

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Indemnity Severity Loss Ratio Trend



Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Medical Severity Loss Ratio Trend

Policy Year	Medical Severity Loss Ratio	Change From Prior Year	Fitted Medical Severity Loss Ratio 10 Year	9 Year	8 Year	7 Year	6 Year	5 Year	4 Year	3 Year
2004	0.5209		0.5133							
2005	0.5722	9.8%	0.5700	0.5663						
2006	0.6100	6.6%	0.6330	0.6296	0.6264					
2007	0.6827	11.9%	0.7029	0.7000	0.6972	0.7078				
2008	0.7671	12.4%	0.7805	0.7783	0.7760	0.7849	0.8040			
2009	0.8749	14.0%	0.8668	0.8654	0.8638	0.8703	0.8851	0.9190		
2010	1.0289	17.6%	0.9625	0.9621	0.9614	0.9651	0.9744	0.9976	1.0479	
2011	1.1337	10.2%	1.0689	1.0698	1.0702	1.0702	1.0727	1.0829	1.1098	1.1372
2012	1.1899	5.0%	1.1870	1.1894	1.1912	1.1867	1.1809	1.1754	1.1754	1.1826
2013	1.2260	3.0%	1.3181	1.3224	1.3258	1.3158	1.3001	1.2759	1.2449	1.2298
Annual Percent Change			11.0%	11.2%	11.3%	10.9%	10.1%	8.5%	5.9%	4.0%

Average of 4 year to 6 year =	8.2%
Average of 4 year to 7 year =	8.9%
Average of 4 year to 7 year excluding maximum and minimum =	9.3%
Average of 3 year to 8 year =	8.5%
Average of 3 year to 8 year excluding maximum and minimum =	8.9%
Median of 3 year to 10 year =	10.5%

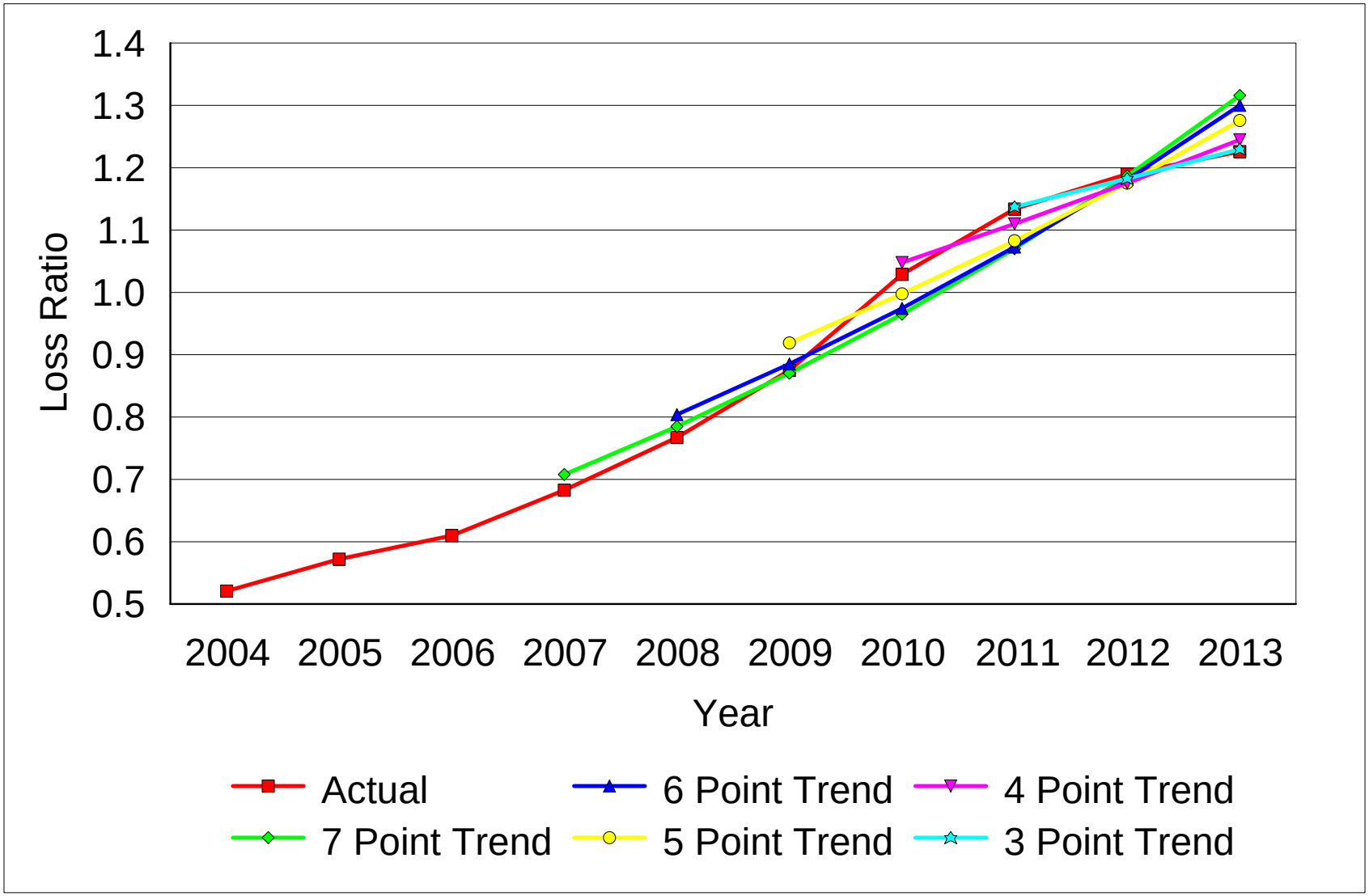
	AIS	DCRB	
Selected	**10.9%**	**10.8%**	
Annual Adjustment After 9/1/2008	**-1.5%**	**-1.5%**	Applied to 1/31/13
to Reflect Medical Fee Schedule	**-4.8%**	**-1.8%**	Applied after 1/31/13
and Medical Data Call Information			

Regression Output

Constant	-210.7	-213.1	-215.4	-207.7	-193.2	-164.9	-115.4	-78.6
Std Err of Y Est	0.045	0.047	0.051	0.053	0.054	0.049	0.024	0.008
R Squared	98%	98%	97%	95%	93%	90%	93%	98%
Adjusted R Squared	98%	97%	96%	95%	91%	87%	90%	96%
No. of Observations	10	9	8	7	6	5	4	3
Degrees of Freedom	8	7	6	5	4	3	2	1
X Coefficient(s)	0.1048	0.1060	0.1071	0.1033	0.0961	0.0820	0.0574	0.0391
Std Err of Coef.	0.0049	0.0061	0.0078	0.0101	0.0130	0.0155	0.0108	0.0054
T-Statistic	21.3	17.4	13.7	10.2	7.4	5.3	5.3	7.3
Probability	0.0%	0.0%	0.0%	0.0%	0.2%	1.3%	3.4%	8.7%

Analysis of DCRB Filing Proposed Effective December 1, 2015

Analysis of Medical Severity Loss Ratio Trend



Analysis of Delaware Compensation Rating Bureau Filing Proposed Effective December 1, 2015

Derivation of Projected Ultimate Losses - Indemnity
(Amounts in Millions)

Policy Year	Standard Earned Premium	Premium Development Factor	Developed Earned Premium	Expected Loss Ratio	Expected Losses	Reported Losses Paid	Reported Losses Incurred
2004	$147.89	1.0000	$147.89	27.31%	$40.38	$36.59	$37.71
2005	$182.29	1.0000	$182.29	23.36%	$42.59	$37.66	$40.25
2006	$201.63	1.0001	$201.65	21.98%	$44.32	$38.27	$42.16
2007	$194.90	1.0002	$194.94	22.66%	$44.17	$35.93	$40.84
2008	$147.84	1.0004	$147.90	27.55%	$40.74	$31.81	$35.56
2009	$115.78	1.0002	$115.80	37.34%	$43.25	$32.12	$40.71
2010	$104.28	1.0002	$104.30	40.79%	$42.54	$29.01	$36.13
2011	$105.05	0.9999	$105.04	43.83%	$46.04	$26.35	$33.88
2012	$113.38	1.0011	$113.50	35.80%	$40.63	$15.92	$28.72
2013	$131.21	1.0031	$131.62	28.48%	$37.48	$9.99	$23.91

Policy Year	Development Factor Paid	Development Factor Incurred	Projected Ultimate Losses Paid Dev	Projected Ultimate Losses Inc Dev	Projected Ultimate Losses Paid BF	Projected Ultimate Losses Inc BF	AIS Selected	DCRB Selected
2004	1.1179	1.0160	$40.90	$38.31	$40.85	$38.35	$39.20	$39.61
2005	1.1417	1.0227	$43.00	$41.16	$42.95	$41.20	$41.79	$42.08
2006	1.1735	1.0311	$44.91	$43.47	$44.82	$43.50	$43.95	$44.19
2007	1.2177	1.0425	$43.75	$42.58	$43.83	$42.64	$43.01	$43.16
2008	1.2810	1.0584	$40.75	$37.64	$40.75	$37.81	$38.75	$39.19
2009	1.3766	1.0832	$44.22	$44.10	$43.95	$44.03	$44.07	$44.16
2010	1.5322	1.1267	$44.45	$40.71	$43.79	$40.91	$41.94	$42.58
2011	1.8298	1.2147	$48.22	$41.15	$47.23	$42.02	$43.67	$44.68
2012	2.7145	1.4186	$43.21	$40.74	$41.59	$40.71	$41.30	$41.98
2013	5.4790	1.8693	$54.74	$44.69	$40.63	$41.34	$44.60	$49.72
Combined			$448.14	$414.56	$430.37	$412.50	$422.28	$431.35
AIS Weight to Method			17%	33%	17%	33%		
DCRB Weight to Method			50%	50%	0%	0%		

Analysis of Delaware Compensation Rating Bureau Filing Proposed Effective December 1, 2015

Derivation of Projected Ultimate Losses - Medical
(Amounts in Millions)

Policy Year	Standard Earned Premium	Premium Development Factor	Developed Earned Premium	Expected Loss Ratio	Expected Losses	Reported Losses Paid	Reported Losses Incurred
2004	$147.89	1.0000	$147.89	45.03%	$66.59	$50.34	$57.05
2005	$182.29	1.0000	$182.29	39.01%	$71.12	$50.88	$60.40
2006	$201.63	1.0001	$201.65	35.61%	$71.80	$51.19	$63.68
2007	$194.90	1.0002	$194.94	40.37%	$78.69	$52.90	$62.37
2008	$147.84	1.0004	$147.90	52.77%	$78.05	$51.47	$62.17
2009	$115.78	1.0002	$115.80	73.91%	$85.59	$54.21	$67.43
2010	$104.28	1.0002	$104.30	99.15%	$103.42	$60.05	$71.04
2011	$105.05	0.9999	$105.04	102.71%	$107.89	$56.78	$69.40
2012	$113.38	1.0011	$113.50	84.14%	$95.50	$43.12	$53.83
2013	$131.21	1.0031	$131.62	71.91%	$94.65	$32.29	$44.45

Policy Year	Development Factor Paid	Development Factor Incurred	Projected Ultimate Losses Paid Dev	Projected Ultimate Losses Inc Dev	Projected Ultimate Losses Paid BF	Projected Ultimate Losses Inc BF	AIS Selected	DCRB Selected
2004	1.3208	1.1057	$66.49	$63.08	$66.51	$63.42	$64.35	$64.78
2005	1.3588	1.1226	$69.14	$67.81	$69.66	$68.17	$68.47	$68.47
2006	1.4034	1.1453	$71.84	$72.93	$71.83	$72.79	$72.51	$72.39
2007	1.4563	1.1761	$77.04	$73.35	$77.56	$74.15	$74.96	$75.20
2008	1.5207	1.2189	$78.27	$75.78	$78.19	$76.19	$76.75	$77.02
2009	1.6016	1.2795	$86.82	$86.28	$86.36	$86.13	$86.33	$86.55
2010	1.7094	1.3661	$102.65	$97.05	$102.97	$98.76	$99.57	$99.85
2011	1.8680	1.4884	$106.07	$103.29	$106.91	$104.80	$104.88	$104.68
2012	2.1538	1.6734	$92.87	$90.08	$94.28	$92.26	$91.99	$91.48
2013	2.9886	2.0751	$96.50	$92.24	$95.27	$93.49	$93.89	$94.37
Combined			$847.68	$821.89	$849.54	$830.14	$833.70	$834.79
AIS Weight to Method			17%	33%	17%	33%		
DCRB Weight to Method			50%	50%	0%	0%		

Analysis of Delaware Compensation Rating Bureau Filing Proposed Effective December 1, 2015

Calculation of Projected Ultimate Loss Ratio from AIS Analysis of DCRB 2014 Filing
(Amounts in Millions)

Policy Year	Standard Earned Premium	Premium Development Factor	Developed Earned Premium	Projected Ultimate Losses		Projected Ultimate Loss Ratio	
				Indemnity	Medical	Indemnity	Medical
2004	$151.80	1.0000	$151.80	$41.45	$68.35	27.31%	45.03%
2005	$187.18	0.9998	$187.14	$43.72	$73.01	23.36%	39.01%
2006	$206.32	0.9999	$206.30	$45.34	$73.46	21.98%	35.61%
2007	$199.16	1.0001	$199.18	$45.13	$80.40	22.66%	40.37%
2008	$150.51	0.9998	$150.48	$41.45	$79.41	27.55%	52.77%
2009	$117.55	0.9998	$117.53	$43.89	$86.86	37.34%	73.91%
2010	$105.45	1.0004	$105.49	$43.03	$104.60	40.79%	99.15%
2011	$106.14	1.0015	$106.30	$46.59	$109.18	43.83%	102.71%
2012	$114.67	0.9980	$114.44	$40.97	$96.29	35.80%	84.14%

Source: AIS Analysis of DCRB 2014 Filing 1404; Schedule AIS-3, Sheets 1 and 2

Analysis of Delaware Compensation Rating Bureau Filing Proposed Effective December 1, 2015

Derivation of Expected Loss Ratio for Policy Year 2014

Indemnity

		Loss Factors		Premium Factors			
Policy Year	Expected Loss Ratio	Benefit Level	Trend to 12/14 Rates	Factor to 12/1/14 Rates	Expense Constant Factor	DCCPAP Factor	Adjusted Expected Loss Ratio
2009	37.34%	1.0414	0.8847	1.7075	0.9971	1.0147	19.92%
2010	40.79%	1.0442	0.9029	1.8583	0.9970	1.0141	20.47%
2011	43.83%	1.0474	0.9221	1.8716	0.9968	1.0145	22.37%
2012	35.80%	1.0324	0.9410	1.6093	0.9967	1.0142	21.38%
Average							21.03%
2013	28.48%	1.0105	0.9603	1.2989	0.9973	1.0142	21.03%

Medical

		Loss Factors		Premium Factors			
Policy Year	Expected Loss Ratio	Benefit Level	Trend to 12/14 Rates	Factor to 12/1/14 Rates	Expense Constant Factor	DCCPAP Factor	Adjusted Expected Loss Ratio
2009	73.91%	1.0000	1.1725	1.7075	0.9971	1.0147	50.16%
2010	99.15%	1.0000	1.1255	1.8583	0.9970	1.0141	59.40%
2011	102.71%	1.0000	1.0804	1.8716	0.9968	1.0145	58.63%
2012	84.14%	1.0000	1.0370	1.6093	0.9967	1.0142	53.64%
Average							55.46%
2013	71.91%	1.0000	1.0132	1.2989	0.9973	1.0142	55.46%

Delaware Compensation Rating Bureau, Inc.

Medical Data Call Overview Report

Medical Procedure Data

Year Ending	Number of Claims with Payment(s)	Number of Procedures	Procedure Units	Medical Amount Charged	Medical Amount Paid	Average Procedures per Claim	Average Units per Procedure	Average Procedure Units per Claim	Average Payment per Procedure	Average Payment per Unit	Average Payment per Claim
Jun-11	17,925	331,271	760,792	71,919,055	53,987,450	18.48	2.30	42.44	$162.97	$70.96	$3,011.85
Sep-11	17,876	327,657	774,275	72,719,171	54,930,497	18.33	2.36	43.31	$167.65	$70.94	$3,072.86
Dec-11	17,869	327,031	821,876	76,703,632	57,914,848	18.30	2.51	45.99	$177.09	$70.47	$3,241.08
Mar-12	18,007	323,832	837,607	75,617,637	57,165,926	17.98	2.59	46.52	$176.53	$68.25	$3,174.65
Jun-12	18,217	323,745	854,189	77,147,242	58,508,750	17.77	2.64	46.89	$180.72	$68.50	$3,211.77
Sep-12	18,153	322,800	862,986	79,488,767	60,294,841	17.78	2.67	47.54	$186.79	$69.87	$3,321.48
Dec-12	17,902	315,113	817,614	75,600,779	57,076,307	17.60	2.59	45.67	$181.13	$69.81	$3,188.26
Mar-13	17,903	314,194	826,760	78,016,141	58,655,135	17.55	2.63	46.18	$186.68	$70.95	$3,276.27
Jun-13	17,843	309,232	841,005	77,249,348	57,853,608	17.33	2.72	47.13	$187.09	$68.79	$3,242.37
Sep-13	17,927	313,097	856,683	77,027,978	57,465,661	17.47	2.74	47.79	$183.54	$67.08	$3,205.54
Dec-13	17,922	320,737	913,265	82,069,677	61,247,905	17.90	2.85	50.96	$190.96	$67.06	$3,417.47
Mar-14	17,857	319,934	922,890	81,554,103	60,523,586	17.92	2.88	51.68	$189.18	$65.58	$3,389.35
Jun-14	17,994	326,957	948,550	83,801,846	61,308,484	18.17	2.90	52.71	$187.51	$64.63	$3,407.16
Sep-14	17,944	325,149	968,818	86,113,839	62,369,773	18.12	2.98	53.99	$191.82	$64.38	$3,475.80
Dec-14	17,906	318,691	955,916	83,714,003	59,933,124	17.80	3.00	53.39	$188.06	$62.70	$3,347.10

Average Annual Trend During Time Period

June 2011 to December 2014	-0.6%	7.0%	6.4%	3.7%	-3.1%	3.1%
Sept 2011 to December 2014	-0.3%	6.5%	6.2%	3.0%	-3.2%	2.7%
Dec 2011 to December 2014	0.0%	5.9%	5.9%	2.3%	-3.4%	2.4%
March 2012 to December 2014	0.5%	5.9%	6.4%	2.2%	-3.5%	2.7%
June 2012 to December 2014	0.9%	6.1%	7.1%	1.7%	-4.2%	2.6%
Sept 2012 to December 2014	1.2%	6.8%	8.1%	1.4%	-5.1%	2.6%
Dec 2012 to December 2014	1.8%	7.9%	9.7%	1.8%	-5.6%	3.6%
March 2013 to December 2014	2.1%	7.7%	10.0%	1.1%	-6.1%	3.3%
June 2013 to December 2014	2.4%	7.1%	9.8%	1.2%	-5.5%	3.7%
Sept 2013 to December 2014	1.7%	7.1%	8.9%	1.5%	-5.3%	3.2%
Dec 2013 to December 2014	0.0%	5.6%	5.6%	-0.7%	-5.9%	-0.7%
March 2014 to December 2014	-0.9%	5.9%	5.0%	0.2%	-5.4%	-0.7%

Source: DCC Qtrly Report Pkg July 2015

Delaware Compensation Rating Bureau, Inc.

Medical Data Call Overview Report

Prescription Drug Data

Year Ending	Number of Claims with Payment(s)	Number of Scripts	Script Units	Medical Amount Charged	Medical Amount Paid	Average Scripts per Claim	Average Units per Script	Average Script Units per Claim	Average Payment per Script	Average Payment per Unit	Average Payment per Claim
Jun-11	7,003	39,452	2,809,415	7,730,616	6,540,527	5.63	71.21	401.17	$165.78	$2.33	$933.96
Sep-11	7,055	40,098	2,797,653	7,613,505	6,647,653	5.68	69.77	396.55	$165.79	$2.38	$942.26
Dec-11	7,181	42,390	2,918,769	7,858,535	6,838,063	5.90	68.86	406.46	$161.31	$2.34	$952.24
Mar-12	7,208	43,716	2,977,954	8,063,510	6,958,350	6.06	68.12	413.15	$159.17	$2.34	$965.36
Jun-12	7,279	44,500	3,024,897	8,309,064	7,113,112	6.11	67.98	415.56	$159.85	$2.35	$977.21
Sep-12	7,415	44,893	3,037,929	8,447,765	7,231,641	6.05	67.67	409.70	$161.09	$2.38	$975.27
Dec-12	7,299	43,702	2,968,401	8,584,209	7,301,806	5.99	67.92	406.69	$167.08	$2.46	$1,000.38
Mar-13	7,438	44,842	3,058,203	8,902,584	7,609,929	6.03	68.20	411.16	$169.71	$2.49	$1,023.11
Jun-13	7,494	44,760	3,144,154	9,047,397	7,702,390	5.97	70.24	419.56	$172.08	$2.45	$1,027.81
Sep-13	7,504	45,136	3,206,187	9,200,689	7,802,312	6.01	71.03	427.26	$172.86	$2.43	$1,039.75
Dec-13	7,503	44,966	3,220,199	8,989,059	7,657,127	5.99	71.61	429.19	$170.29	$2.38	$1,020.54
Mar-14	7,465	43,711	3,153,473	8,717,536	7,407,443	5.86	72.14	422.43	$169.46	$2.35	$992.29
Jun-14	7,473	42,976	3,084,570	8,453,085	7,230,329	5.75	71.77	412.76	$168.24	$2.34	$967.53
Sep-14	7,358	41,079	2,939,947	8,063,722	6,913,826	5.58	71.57	399.56	$168.31	$2.35	$939.63
Dec-14	7,332	40,044	2,871,698	8,019,052	6,920,743	5.46	71.71	391.67	$172.83	$2.41	$943.91

Average Annual Trend During Time Period

June 2011 to December 2014	-1.0%	1.3%	0.4%	1.7%	0.4%	0.8%
Sept 2011 to December 2014	-1.7%	1.9%	0.1%	2.1%	0.2%	0.3%
Dec 2011 to December 2014	-2.7%	2.3%	-0.4%	2.5%	0.1%	-0.3%
March 2012 to December 2014	-3.4%	2.7%	-0.8%	2.5%	-0.2%	-1.0%
June 2012 to December 2014	-3.8%	2.9%	-1.0%	2.1%	-0.8%	-1.8%
Sept 2012 to December 2014	-4.1%	3.0%	-1.2%	1.4%	-1.6%	-2.7%
Dec 2012 to December 2014	-4.6%	2.8%	-1.9%	0.3%	-2.5%	-4.3%
March 2013 to December 2014	-5.5%	2.3%	-3.3%	-0.3%	-2.6%	-5.8%
June 2013 to December 2014	-6.3%	1.1%	-5.3%	-0.7%	-1.9%	-7.0%
Sept 2013 to December 2014	-7.8%	0.5%	-7.4%	-0.5%	-1.0%	-8.3%
Dec 2013 to December 2014	-8.9%	-0.2%	-9.1%	0.9%	1.1%	-8.1%
March 2014 to December 2014	-9.1%	-0.8%	-9.9%	2.4%	3.3%	-6.9%

Source: DCC Qtrly Report Pkg July 2015

ESTIMATED COST SAVINGS OF HOUSE BILL 175 OF 2013

	Base Payments	% of Total Medical Payments	Savings	% Savings (-) To Base Payments	% Savings (-) To Total Medical	% Savings (-) To Total Indemnity & Medical
HB175 - Adjustments to Reimbursement Rates						
Services moving to 85% of 90% of 75th percentile	10,606,989	7.2%	(685,434)	-6.46%	-0.47%	-0.33%
Pharmaceuticals (paid at a % of AWP plus handling fee)	16,157,215	11.0%	(1,487,769)	-9.21%	-1.01%	-0.73%
Drug Tests ($100 per test, maximum of 4 times)	1,011,565	0.7%	(705,729)	-69.77%	-0.48%	-0.34%
Anesthesia ($100 Northern Zips, $76 Southern Zips)	3,309,173	2.3%	(1,156,762)	-34.96%	-0.79%	-0.56%
Professional - Other - Total	26,923,383	18.4%	(1,048,813)	-3.90%	-0.71%	-0.51%
Hospitals (CPI-U replaces CPI-M as Index)	37,274,003	25.4%	(3,992,681)	-10.71%	-2.72%	-1.95%
Drug Repackaging	2,614,267	1.8%	(901,098)	-34.47%	-0.61%	-0.44%
Hot & Cold Packs (limit of 12 and 1 per day)	1,998,144	1.4%	(489,945)	-24.52%	-0.33%	-0.24%
All Medical	146,707,507		(10,468,233)	-7.14%	-7.14%	-5.11%
HB175 - Impact of 2 Year Freeze in Reimbursement Rates						
Professional (service reimbursed at 90/75)	47,217,483	32.2%	(910,961)	-1.93%	-0.62%	-0.44%
Professional (services reimbursed at 85% of 90/75)	10,606,989	7.2%	(211,413)	-1.99%	-0.14%	-0.10%
Professional - Other - Total	26,923,383	18.4%	(472,196)	-1.75%	-0.32%	-0.23%
Facility Fees for hospitals, ambulatory surgical services)	45,802,437	31.2%	(1,976,563)	-4.32%	-1.35%	-0.97%
Pharmaceuticals (freeze not applicable)	16,157,215	11.0%	-	0.00%	0.00%	0.00%
All Medical	146,707,507		(3,571,134)	-2.43%	-2.43%	-1.74%
Combine Medical Savings					-9.40%	

Weight to Indemnity of 28.36%. Weight to Medical of 71.64%.

Relative Savings on Networks 0.5

Schedule AIS-5