

ADDITIONAL RETROSPECTIVE PREMIUM PROJECTIONS AS OF JUNE 30, 2014

USING DATA AS OF JUNE 30, 2014

OHIO BUREAU OF WORKERS' COMPENSATION
AUGUST 22, 2014

Mr. Christopher Carlson, FCAS, MAAA
 Chief Actuarial Officer
 Ohio Bureau of Workers' Compensation
 30 W. Spring Street
 Columbus, Ohio 43215

August 22, 2014

Subject: Additional Retrospective Premium Projections

Dear Mr. Carlson:

Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) has completed the actuarial study of the projections as of June 30, 2014 for the State Insurance Fund's retrospective premium receivable for the Ohio Bureau of Workers' Compensation (BWC). The attached calculations provide estimates of the additional premiums to be collected for rating years effective July 1, 2004 through July 1, 2013 for private employers (PA) and for rating years effective January 1, 2005 through January 1, 2014 for public employer - taxing districts (PEC). The retrospective premium receivable as of June 30, 2014 is based on actual data as of June 30, 2014 (PA) and December 31, 2013 (PEC) and additional information provided to us through August 18, 2014. This letter and its attachments constitute our report.

We have used the actual loss development history for retrospectively rated employers to determine loss development patterns for future loss payments under these rating plans. Reserves shown in BWC Retrospective Rating Plan summaries (i.e., BWC's "MIRA Reserves") for the policy years effective 7/1/00 through 7/1/03 (for PA) and 1/1/01 through 1/1/04 (for PEC) were used to determine the expected remaining premiums to be collected at the end of the tenth year. For PA, we have also incorporated specific assumptions regarding the amounts that may become uncollectable as a result of lapses or cancellations of coverage.

Conclusions

The following table summarizes the indicated retrospective premium receivable as of June 30, 2014.

	Ultimate Limited Loss	Limited Payments and Awards Charged	Nominal Unbilled Costs	Discounted Unbilled Costs
Private Employers (PA)	118,733	85,477	33,256	30,265
Public Employers – Taxing District (PEC)	653,065	369,463	254,126	221,657
Total	771,798	454,940	287,382	251,922

For policy years beginning 7/1/04 – 13 for PA and 1/1/05 -14 for PEC. Losses are in \$000s.

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The detail by policy year can be found in Exhibit 1, Page 1 for PA and PEC. Exhibit 1, Page 2 summarizes the relationships of discounted ultimate limited losses plus minimum premiums to experience premiums for retrospectively rated employers.

Methodology

Our methodology uses the available experience to estimate the ultimate losses for retrospectively-rated employers. Based on the ultimate loss projections, estimates are then made of the unpaid loss and subsequent unbilled premiums.

The pertinent historical data for retrospectively rated employers are shown by policy year and by year of development in Exhibits 2 and 3. This information was obtained from summary reports produced by BWC. The particular data obtained from the reports, labeled as "Costs Chargeable to Policy," includes the medical and other compensation payments plus the awards for Permanent Total Disability (PTD) and Death claims, limited by any per claim and maximum premiums applicable under the plans. These loss amounts, which we refer to as "limited" losses, are also net of surplus charges as well as costs charged to handicaps. In our report, "paid losses" refer to the limited losses excluding BWC's MIRA reserves (except for the 10th year) and "incurred losses" include BWC's MIRA reserves.

The limited losses are used in six different methods to project ultimate limited losses and the related premiums to be paid under the retrospective rating plans. Exhibits 2 and 3 project ultimate limited losses for retrospectively-rated employers using age-to-age development factors applied to incurred and paid losses, respectively. Exhibit 4 relates incremental limited paid losses as percentages of the experience rated premiums and projects ultimate limited losses using the historical percentages of premiums. Exhibit 5 uses methodology which combines the loss development pattern selected in Exhibit 3 with a loss ratio assumption to produce an estimate of unpaid losses. This method, referred to as the Bornhuetter-Ferguson Method, has the advantage that it is less sensitive than the loss development method in Exhibit 3 to the volatility that is present in the loss amounts for the early stages of development. Exhibit 6 uses a similar Bornhuetter-Ferguson methodology which combines the loss development pattern selected in Exhibit 3 with a loss rate assumption (based on payroll) to produce an estimate of unpaid losses. The "hindsight" method presented in Exhibit 7 relates the projected unpaid losses for past policy years at each age of development (where unpaid losses are equal to the ultimate losses produced by the average of the methods contained in Exhibits 2 and 3 minus the cumulative payments at each age of development) to BWC's MIRA reserves at these same ages of development. This method attempts to use the current MIRA reserves as an indicator of the remaining loss payments.

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The estimated receivable as of June 30, 2014 is calculated by first subtracting the retrospective premiums already paid (i.e. the limited payments and awards as of the latest billing) from the projected ultimate losses (i.e., the projected ultimate premiums to be paid by retrospectively rated employers). This calculation is shown in column (9) for PA and column (10) for PEC of Exhibit 1. Column (11) for PA and column (13) for PEC calculates the present value of the premium receivable.

Caveats

Our projections are based on the information available to us at this time. Since loss projections and the resulting premium projections for retrospectively-rated employers are subject to many future contingent events, the actual payments may vary significantly from our projections. The caveats and limitations contained in our actuarial analysis of the loss reserves for the SIF also apply to the projections contained in this report.

If we can be of further assistance, please let us know.

Sincerely,



Jeffery J. Scott, FCAS, MAAA



Jeffery W. Scholl, FCAS, MAAA

Enclosure

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Exhibits - PA

**Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)**

**EXHIBIT PA-1
PAGE 1
6/30/2014**

Summary

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Policy Year	Incurring Loss Development Method Ult. Loss	Cum. Paid Loss Development Method Ult. Loss	Incr. Paid % Premium Method Ult. Loss	Premium Bornhuetter Ferguson Method Ult. Loss	Payroll Bornhuetter Ferguson Method Ult. Loss	Hindsight Method Ult. Loss	Selected Ultimate Limited Loss
2001	23,978	23,978	23,978	23,978	23,978	23,978	23,978
2002	18,001	18,001	18,001	18,001	18,001	18,001	18,001
2003	13,660	13,660	13,660	13,660	13,660	13,660	13,660
2004	11,705	11,705	11,705	11,705	10,764	11,705	11,705
2005	17,391	15,920	16,028	15,808	15,882	16,299	16,206
2006	22,069	17,710	17,814	17,146	17,188	19,226	18,525
2007	18,401	15,645	15,962	15,069	15,024	16,192	16,020
2008	10,818	11,855	12,501	11,931	11,824	10,257	11,786
2009	13,805	12,828	12,680	11,883	12,482	13,516	12,736
2010	10,604	9,258	9,555	8,692	8,763	9,798	9,374
2011	9,667	9,642	9,298	8,218	8,447	8,624	9,054
2012	6,249	6,469	7,143	5,401	5,821	5,331	6,216
2013	<u>7,449</u>	<u>7,277</u>	<u>8,294</u>	<u>5,870</u>	<u>6,660</u>	<u>6,546</u>	<u>7,110</u>
Total	183,797	173,946	176,618	167,361	168,492	173,133	174,371
Total 05-14							118,733

	(8)	(9)	(10)	(11)
Policy Year	Limited Payments and Awards @ 6/30/13	Nominal Losses Receivable @ 6/30/2014	Discount Factor to @ 6/30/2014	Retrospective Premium Receivable @ 6/30/2014
2001	23,978	0	1.000	0
2002	18,001	0	1.000	0
2003	13,660	0	1.000	0
2004	10,764	941	0.990	932
2005	14,428	1,778	0.960	1,706
2006	15,405	3,120	0.936	2,920
2007	12,944	3,076	0.922	2,837
2008	9,469	2,317	0.911	2,111
2009	9,314	3,421	0.898	3,073
2010	5,972	3,402	0.891	3,032
2011	5,274	3,780	0.888	3,358
2012	1,906	4,311	0.900	3,881
2013	<u>0</u>	<u>7,110</u>	<u>0.902</u>	<u>6,414</u>
Total	141,115	33,256		30,265
Total 04-13	85,477	33,256		30,265

Notes by Column:

- (1) to (6) From respective Exhibits 2, 3, 4, 5, 6 and 7.
- (7) Selected based on columns (1) to (6).
- (8) From BWC Retrospective Rating Plan Summaries as of June 30, 2013.
- (9) Column (7) - column (8).
- (10) Based on selected payment pattern in Exhibit 3 and interest rate of 4.00%.
- (11) Column (9) * column (10).

**Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)**

**EXHIBIT PA-1
PAGE 2**

Loss Ratio Summary

	(1)	(2)	(3)	(4)	(5)
Policy Year	Discounted to 6/XX+1 Ultimate <u>Limited Loss</u>	Experience <u>Premium</u>	Minimum <u>Premium</u>	Minimum <u>Premium %</u>	Limited <u>Loss %</u>
2002	16,713	46,393	16,261	35.1%	36.0%
2003	12,649	43,217	15,172	35.1%	29.3%
2004	11,570	50,989	17,606	34.5%	22.7%
2005	15,162	55,797	19,670	35.3%	27.2%
2006	17,257	56,248	23,079	41.0%	30.7%
2007	15,226	55,434	23,093	41.7%	27.5%
2008	11,293	48,188	19,967	41.4%	23.4%
2009	12,322	38,441	16,945	44.1%	32.1%
2010	9,273	32,906	14,468	44.0%	28.2%
2011	9,266	27,818	11,966	43.0%	33.3%
2012	7,185	25,253	10,489	41.5%	28.5%
2013	<u>8,586</u>	<u>28,026</u>	<u>11,409</u>	<u>40.7%</u>	<u>30.6%</u>
Total	146,503	508,708	200,125	39.3%	28.8%

Notes by Column:

- (1) Based on Exhibit 1 Page 1, column (11) and payments from Exhibit 4, after discounting.
- (2) From Exhibit 5, Column (2).
- (3) From BWC Retrospective Rating Plan Summaries as of June 30, 2014.
- (4) Column (3) / column (2).
- (5) Column (1) / column (2).

**Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)**

EXHIBIT PA-2

Cumulative Incurred Loss Development Method

Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy) + MIRA Reserves

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2001	25,059	26,677	28,717	27,909	27,040	28,366	28,897	26,490	26,713	23,978
2002	23,108	22,887	23,278	22,049	21,774	21,560	19,608	20,378	20,699	18,001
2003	17,620	15,310	16,453	17,070	17,793	14,859	15,445	15,962	16,746	13,660
2004	14,821	13,348	15,514	14,472	11,962	11,867	12,146	12,447	12,366	11,705
2005	19,553	18,372	19,437	16,774	18,851	19,934	18,829	17,929	18,801	
2006	17,249	19,438	17,346	18,718	18,984	20,192	20,769	23,074		
2007	15,535	11,651	14,742	15,512	16,898	17,784	18,862			
2008	6,978	10,280	11,241	11,225	10,726	10,872				
2009	8,305	11,346	12,135	12,698	13,237					
2010	5,282	8,186	8,499	9,813						
2011	6,704	8,533	8,452							
2012	4,067	5,215								
2013	4,550									

Age-to-Age Development Factors

Policy Year	Development Year								
	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	<u>8-9</u>	<u>9-10</u>
2001	1.065	1.076	0.972	0.969	1.049	1.019	0.917	1.008	0.898
2002	0.990	1.017	0.947	0.988	0.990	0.909	1.039	1.016	0.870
2003	0.869	1.075	1.037	1.042	0.835	1.039	1.033	1.049	0.816
2004	0.901	1.162	0.933	0.827	0.992	1.024	1.025	0.993	0.947
2005	0.940	1.058	0.863	1.124	1.057	0.945	0.952	1.049	
2006	1.127	0.892	1.079	1.014	1.064	1.029	1.111		
2007	0.750	1.265	1.052	1.089	1.052	1.061			
2008	1.473	1.093	0.999	0.956	1.014				
2009	1.366	1.069	1.046	1.042					
2010	1.550	1.038	1.155						
2011	1.273	0.991							
2012	1.282								
									<u>Tail</u>
All Yr \$ Wtd Avg	1.042	1.059	0.993	1.005	1.010	1.000	1.005	1.023	0.880
3 Yr \$ Wtd Avg	1.366	1.036	1.058	1.036	1.048	1.009	1.033	1.034	0.871
All Excl Hi Low	1.129	1.064	1.008	1.014	1.026	1.011	1.012	1.024	0.884
Selected	1.366	1.048	1.058	1.036	1.048	1.020	1.020	1.034	0.925
Cumulative	1.637	1.198	1.144	1.081	1.043	0.995	0.976	0.956	0.925

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	7,449	6,249	9,667	10,604	13,805	10,818	18,401	22,069	17,391	11,705	128,159

Notes:
 -- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
 -- Tail factor includes consideration of potential for uncollectable premiums.

Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)

EXHIBIT PA-3

Cumulative Paid Loss Development Method

Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy)

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2001	5,161	10,958	14,408	17,231	18,534	20,500	21,814	21,917	22,629	23,978
2002	4,795	9,577	12,085	13,134	14,292	14,723	15,323	15,837	16,363	18,001
2003	3,932	7,088	8,583	9,630	10,490	10,976	11,692	12,192	12,616	13,660
2004	3,775	6,221	7,916	8,611	9,206	9,806	10,096	10,481	10,764	11,705
2005	5,022	8,476	10,583	11,826	12,833	13,480	14,046	14,428	14,590	
2006	4,370	8,957	11,195	12,679	13,270	14,520	15,405	15,860		
2007	3,905	7,630	9,808	11,075	12,141	12,944	13,620			
2008	3,652	7,017	8,088	9,062	9,469	9,810				
2009	3,710	6,974	8,356	9,314	9,933					
2010	2,911	5,213	5,972	6,674						
2011	3,091	5,274	6,195							
2012	1,906	3,445								
2013	2,129									

Age-to-Age Development Factors

Policy Year	Development Year									Tail
	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	<u>8-9</u>	<u>9-10</u>	
2001	2.123	1.315	1.196	1.076	1.106	1.064	1.005	1.032	1.060	
2002	1.997	1.262	1.087	1.088	1.030	1.041	1.034	1.033	1.100	
2003	1.803	1.211	1.122	1.089	1.046	1.065	1.043	1.035	1.083	
2004	1.648	1.273	1.088	1.069	1.065	1.030	1.038	1.027	1.087	
2005	1.688	1.249	1.117	1.085	1.050	1.042	1.027	1.011		
2006	2.050	1.250	1.133	1.047	1.094	1.061	1.029			
2007	1.954	1.285	1.129	1.096	1.066	1.052				
2008	1.921	1.153	1.120	1.045	1.036					
2009	1.880	1.198	1.115	1.066						
2010	1.791	1.146	1.117							
2011	1.706	1.175								
2012	1.808									
All Yr \$ Wtd Avg	1.878	1.238	1.126	1.074	1.065	1.052	1.026	1.028	1.080	
3 Yr \$ Wtd Avg	1.762	1.175	1.117	1.071	1.069	1.052	1.031	1.023	1.091	
All Excl Hi Low	1.860	1.228	1.118	1.074	1.060	1.052	1.032	1.031	1.085	
Selected	1.820	1.206	1.122	1.074	1.069	1.052	1.029	1.023	1.091	
Cumulative	3.417	1.878	1.556	1.387	1.291	1.208	1.149	1.117	1.091	

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	7,277	6,469	9,642	9,258	12,828	11,855	15,645	17,710	15,920	11,705	118,308

Notes:

- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
- Tail factor includes consideration of potential for uncollectable premiums.

Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)

EXHIBIT PA-4

Incremental Payments and Awards as Percent of Premium Method

Incremental (Limited) Payments and Awards

Policy Year	Development Year									Experience Rated Premiums	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>		
2001	5,161	5,796	3,450	2,823	1,304	1,966	1,314	103	712	1,348	46,341
2002	4,795	4,782	2,508	1,049	1,157	432	600	514	526	1,638	46,393
2003	3,932	3,156	1,495	1,047	860	486	716	501	424	1,044	43,217
2004	3,775	2,445	1,695	695	596	600	290	385	282	941	50,989
2005	5,022	3,454	2,107	1,243	1,007	648	565	382	162		55,797
2006	4,370	4,587	2,238	1,484	591	1,250	885	454			56,248
2007	3,905	3,725	2,178	1,268	1,065	804	675				55,434
2008	3,652	3,365	1,071	975	407	341					48,188
2009	3,710	3,263	1,383	958	619						38,441
2010	2,911	2,303	759	702							32,906
2011	3,091	2,183	921								27,818
2012	1,906	1,539									25,253
2013	2,129										28,026

Percent of Premiums

Policy Year	Development Year									Tail
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	
2001	11.1%	12.5%	7.4%	6.1%	2.8%	4.2%	2.8%	0.2%	1.5%	2.9%
2002	10.3%	10.3%	5.4%	2.3%	2.5%	0.9%	1.3%	1.1%	1.1%	3.5%
2003	9.1%	7.3%	3.5%	2.4%	2.0%	1.1%	1.7%	1.2%	1.0%	2.4%
2004	7.4%	4.8%	3.3%	1.4%	1.2%	1.2%	0.6%	0.8%	0.6%	1.8%
2005	9.0%	6.2%	3.8%	2.2%	1.8%	1.2%	1.0%	0.7%	0.3%	
2006	7.8%	8.2%	4.0%	2.6%	1.1%	2.2%	1.6%	0.8%		
2007	7.0%	6.7%	3.9%	2.3%	1.9%	1.5%	1.2%			
2008	7.6%	7.0%	2.2%	2.0%	0.8%	0.7%				
2009	9.7%	8.5%	3.6%	2.5%	1.6%					
2010	8.8%	7.0%	2.3%	2.1%						
2011	11.1%	7.8%	3.3%							
2012	7.5%	6.1%								
2013	7.6%									
Average	8.8%	7.7%	3.9%	2.6%	1.7%	1.6%	1.5%	0.8%	0.9%	2.7%
3 Yr \$ Wtd Avg	8.8%	7.0%	3.1%	2.2%	1.5%	1.5%	1.3%	0.7%	0.6%	2.6%
Selected	8.8%	7.4%	3.5%	2.4%	1.6%	1.6%	1.4%	0.7%	0.9%	2.6%
Cumulative	30.8%	22.0%	14.6%	11.2%	8.8%	7.1%	5.6%	4.2%	3.5%	2.6%

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	8,294	7,143	9,298	9,555	12,680	12,501	15,962	17,814	16,028	11,705	120,980

Notes:

- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
- Tail factor includes consideration of potential for uncollectable premiums.

Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)

EXHIBIT PA-5

Bornhuetter Ferguson Method with Premium Base

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Policy Year	Preliminary Ultimate Loss	Experience Rated Premium	Preliminary Ult. Collectible Premium Ratio	Selected Collectible Premium Ratio	Cumulative Development Factor	Percent Unpaid	Indicated Ultimate Loss
2003	13,660	43,217	31.6%	29.6%	1.000	0.000	13,660
2004	11,705	50,989	23.0%	29.6%	1.000	0.000	10,764
2005	16,655	55,797	29.9%	29.6%	1.091	0.084	15,808
2006	19,889	56,248	35.4%	29.6%	1.117	0.104	17,146
2007	17,023	55,434	30.7%	29.6%	1.149	0.129	15,069
2008	11,337	48,188	23.5%	29.6%	1.208	0.173	11,931
2009	13,316	38,441	34.6%	29.6%	1.291	0.226	11,883
2010	9,931	32,906	30.2%	29.6%	1.387	0.279	8,692
2011	9,654	27,818	34.7%	29.6%	1.556	0.357	8,218
2012	6,359	25,253	25.2%	29.6%	1.878	0.467	5,401
2013	<u>7,363</u>	<u>28,026</u>	<u>26.3%</u>	29.6%	3.417	0.707	<u>5,870</u>
Total	136,893	462,315	29.6%				124,442

Notes by Column:

- (1) Average of columns (1) and (2) from Exhibit 1, page 1.
- (2) From BWC Retrospective Rating Plan Summaries as of June 30, 2014.
- (3) Column (1) / column (2).
- (4) Selected based on column (3) and judgment.
- (5) Based on selected payment pattern in Exhibit 3.
- (6) 1.00 minus 1.00 / column (5).
- (7) Column (2) * column (4) * column (6) plus Exhibit 1, page 1, column (8).

Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)

EXHIBIT PA-6

Bornhuetter Ferguson Method with Payroll Base

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Policy Year	Preliminary Ultimate Loss	Payroll (\$00's)	Preliminary Loss Rate	0% Trend	Trended Loss Rate	Selected Loss Rate	Cumulative Development Factor	Percent Unpaid	Indicated Ultimate Loss
2003	13,660	8,537,063	1.60	1.00	1.60	1.44	1.000	0.000	13,660
2004	11,705	9,088,368	1.29	1.00	1.29	1.44	1.000	0.000	10,764
2005	16,655	12,089,332	1.38	1.00	1.38	1.44	1.091	0.084	15,882
2006	19,889	11,847,647	1.68	1.00	1.68	1.44	1.117	0.104	17,188
2007	17,023	11,157,481	1.53	1.00	1.53	1.44	1.149	0.129	15,024
2008	11,337	9,480,082	1.20	1.00	1.20	1.44	1.208	0.173	11,824
2009	13,316	9,750,146	1.37	1.00	1.37	1.44	1.291	0.226	12,482
2010	9,931	9,789,057	1.01	1.00	1.01	1.02	1.387	0.279	8,763
2011	9,654	8,692,950	1.11	1.00	1.11	1.02	1.556	0.357	8,447
2012	6,359	8,202,980	0.78	1.00	0.78	1.02	1.878	0.467	5,821
2013	<u>7,363</u>	<u>9,219,320</u>	<u>0.80</u>	1.00	<u>0.80</u>	1.02	3.417	0.707	<u>6,660</u>
Total	136,893	107,854,427	1.27		1.27				126,514
		Selected 2010-13	1.02		1.02				
		Selected 2003-09	1.45		1.44				

Notes by Column:

- (1) Average of columns (1) and (2) from Exhibit 1, page 1.
- (2) From BWC Retrospective Rating Plan Summaries as of June 30, 2014.
- (3) Column (1) / column (2) * 1,000.
- (5) Column (3) * column (4).
- (6) Selected based on column (5) and judgment, detrended.
- (7) Based on selected payment pattern in Exhibit 3.
- (8) 1.00 minus 1.00 / column (6).
- (9) Column (2) / 1,000 * column (6) * column (8) plus Exhibit 1, page 1, column (8).

Ohio Bureau of Workers' Compensation
Retrospective Premium Analysis
PA Retro Rated Risks
(\$000's)

EXHIBIT PA-7

Hindsight Development as Percent of BWC MIRA Reserves

BWC MIRA Reserve for Retro Rated Risks

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2001	19,898	15,720	14,309	10,678	8,506	7,866	7,083	4,573	4,084	2,838
2002	18,313	13,310	11,193	8,914	7,483	6,836	4,285	4,542	4,336	2,106
2003	13,688	8,222	7,870	7,440	7,303	3,883	3,753	3,769	4,130	1,582
2004	11,046	7,127	7,598	5,861	2,756	2,061	2,049	1,966	1,602	1,036
2005	14,531	9,896	8,854	4,948	6,018	6,454	4,783	3,501	4,211	
2006	12,879	10,481	6,150	6,039	5,714	5,672	5,364	7,214		
2007	11,630	4,022	4,934	4,437	4,758	4,840	5,242			
2008	3,326	3,264	3,153	2,163	1,257	1,062				
2009	4,595	4,373	3,778	3,384	3,304					
2010	2,371	2,972	2,526	3,139						
2011	3,613	3,259	2,257							
2012	2,161	1,770								
2013	2,421									

Hindsight Unpaid Loss as a Percent of BWC MIRA Reserves

Policy Year	Development Year								
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
2001	94.6%	82.8%	66.9%	63.2%	64.0%	44.2%	30.5%	45.1%	33.0%
2002	72.1%	63.3%	52.9%	54.6%	49.6%	47.9%	62.5%	47.7%	37.8%
2003	71.1%	79.9%	64.5%	54.2%	43.4%	69.1%	52.4%	38.9%	25.3%
2004	71.8%	76.9%	49.9%	52.8%	90.7%	92.2%	78.5%	62.2%	58.7%
2005	74.2%	74.1%	59.0%	80.5%	49.4%	36.1%	36.8%	39.4%	
2006	99.2%	78.1%	96.7%	74.0%	67.8%	46.3%	32.4%		
2007	96.0%	185.0%	106.6%	90.0%	61.6%	43.9%			
2008	248.9%	150.6%	121.9%	132.6%	195.9%				
2009	177.9%	112.3%	93.3%	75.9%					
2010	243.8%	117.0%	107.7%						
2011	141.9%	90.3%							
2012	161.7%								
Average	129.4%	100.9%	81.9%	75.3%	77.8%	54.2%	48.9%	46.7%	38.7%
3 Year Average	182.5%	106.5%	107.6%	99.5%	108.4%	42.1%	49.3%	46.9%	40.6%
Selected	182.5%	106.5%	107.6%	99.5%	108.4%	42.1%	49.1%	46.7%	40.6%

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	6,546	5,331	8,624	9,798	13,516	10,257	16,192	19,226	16,299	11,705	117,494

Notes:

- BWC comp reserves are from BWC Retrospective Rating Plan annual summaries.
- Example of calculation for policy year 2003 at year 7:
52.4% = Exhibit 1, page 1 col. (4) minus Exhibit 3 @ year 7 divided by reserves of 3,753 from this exhibit.

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EXHIBIT PA-8

Diagnostic – Case Reserves as a Percent of Cumulative Payments

Case Reserves / Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy)

<u>Policy Year</u>	<u>Development Year</u>									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2002	381.93%	138.97%	92.62%	67.87%	52.36%	46.43%	27.96%	28.68%	26.50%	11.70%
2003	348.11%	116.00%	91.69%	77.25%	69.62%	35.38%	32.10%	30.91%	32.73%	11.58%
2004	292.58%	114.58%	95.98%	68.07%	29.93%	21.01%	20.30%	18.76%	14.89%	8.85%
2005	289.34%	116.75%	83.66%	41.84%	46.89%	47.88%	34.05%	24.26%	28.86%	
2006	294.74%	117.01%	54.94%	47.63%	43.06%	39.06%	34.82%	45.49%		
2007	297.84%	52.71%	50.31%	40.06%	39.19%	37.39%	38.49%			
2008	91.07%	46.51%	38.99%	23.87%	13.27%	10.82%				
2009	123.84%	62.71%	45.22%	36.33%	33.27%					
2010	81.46%	57.01%	42.30%	47.04%						
2011	116.89%	61.79%	36.43%							
2012	113.42%	51.37%								
2013	113.67%									

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Exhibits - PEC

**Ohio Bureau of Workers' Compensation
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(\$000's)**

**EXHIBIT PEC-1
Page 1**

Summary

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Policy Year	Incurred Loss Development Method Ult. Loss	Cum. Paid Loss Development Method Ult. Loss	Incr. Paid % Premium Method Ult. Loss	Premium Bornhuetter Ferguson Method Ult. Loss	Payroll Bornhuetter Ferguson Method Ult. Loss	Hindsight Method Ult. Loss	Selected Ultimate Limited Loss
2002	47,126	47,126	47,126	47,126	47,126	47,126	47,126
2003	53,494	53,494	53,494	53,494	53,494	53,494	53,494
2004	50,054	50,054	50,054	50,054	50,054	50,054	50,054
2005	56,671	55,791	58,722	55,722	55,799	54,237	56,157
2006	62,589	61,992	66,885	62,855	62,255	59,638	62,702
2007	76,281	71,013	75,500	71,211	69,601	74,347	72,992
2008	71,841	69,862	76,818	72,413	70,080	69,251	71,711
2009	69,040	72,642	79,192	74,707	74,121	66,380	72,680
2010	72,597	73,071	71,958	74,104	71,797	71,460	72,498
2011	65,131	66,723	64,665	67,134	66,943	64,254	65,809
2012	61,767	59,907	56,985	59,776	61,196	64,056	60,615
2013	<u>63,651</u>	<u>56,221</u>	<u>53,559</u>	<u>56,395</u>	<u>59,477</u>	<u>64,400</u>	<u>58,951</u>
Subtotal 2014	750,242	737,896	754,956	744,991	741,942	738,696	744,787
Total							<u>58,951</u>
Total 05-14							803,738
							653,065

	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Policy Year	Limited Payments and Awards @ 12/31/13	Nominal Losses Receivable @ 12/31/14	Nominal Losses Receivable @ 6/30/14	Discount Factor to @ 6/30/14	Retrospective Premium Receivable @ 12/31/14	Retrospective Premium Receivable @ 6/30/14	Claims Costs 1/1/13 - 12/31/13
2002	47,126	0	0	1.000	0	0	0
2003	53,494	0	0	1.000	0	0	0
2004	50,054	0	0	1.000	0	0	5,804
2005	46,090	10,067	10,067	0.990	9,969	9,776	1,646
2006	49,258	13,444	13,444	0.958	12,880	12,629	2,101
2007	53,833	19,159	19,159	0.932	17,848	17,501	1,572
2008	50,510	21,200	21,200	0.908	19,244	18,870	2,805
2009	49,234	23,446	23,446	0.889	20,850	20,446	3,968
2010	45,203	27,294	27,294	0.876	23,911	23,447	4,618
2011	36,736	29,073	29,073	0.865	25,140	24,652	7,115
2012	26,374	34,240	34,240	0.863	29,542	28,968	13,438
2013	12,224	46,727	46,727	0.875	40,901	40,107	12,224
2014	<u>NA</u>	<u>58,951</u>	<u>29,475</u>	0.874	<u>51,521</u>	<u>25,260</u>	<u>NA</u>
Total	520,136	283,601	254,126		251,807	221,657	55,292
Total 05-14	369,463	283,601	254,126		251,807	221,657	

Notes by Column:

- (1) to (6) From respective Exhibits 2, 3, 4, 5, 6 and 7.
- (7) Selected based on columns (1) to (6); 2014 selected equal to 2013.
- (8) From BWC Retrospective Rating Plan Summaries as of December 31, 2013.
- (9) Column (7) - column (8).
- (10) Column (7) - column (8), 2014 is [column (7) - column (8)]/2.
- (11) Based on selected payment pattern in Exhibit 3 and interest rate of 4.00%.
- (12) Column (9) * column (10).
- (13) Column (11) / 1.0400^{0.5} (considers one-half year accumulation of interest from 2014 is adjusted to reflect a half year's exposure).
- (14) From BWC Retrospective Rating Plan Summaries as of December 31, 2013.

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**EXHIBIT PEC-1
Page 2**

Loss Ratio Summary

	(1)	(2)	(3)	(4)	(5)
Policy Year	Discounted to 12/XX Ultimate Limited Loss	Experience Premium	Minimum Premium	Minimum Premium %	Limited Loss %
2002	41,284	78,003	18,353	23.5%	52.9%
2003	48,362	125,407	33,083	26.4%	38.6%
2004	45,611	132,897	34,275	25.8%	34.3%
2005	43,322	140,070	36,322	25.9%	30.9%
2006	46,628	167,385	44,509	26.6%	27.9%
2007	51,415	181,643	59,198	32.6%	28.3%
2008	48,537	199,945	63,464	31.7%	24.3%
2009	47,795	199,890	63,122	31.6%	23.9%
2010	44,341	155,825	50,196	32.2%	28.5%
2011	36,346	139,086	45,198	32.5%	26.1%
2012	26,370	122,709	39,606	32.3%	21.5%
2013	<u>12,467</u>	<u>116,066</u>	<u>37,811</u>	<u>32.6%</u>	<u>10.7%</u>
Total	492,478	1,758,926	525,137	29.9%	28.0%

Selected modification factor for B/F for policy years 1997 and subsequent:

Notes by Column:

- (1) Based on Exhibit 1 Page 1, Column (10) and payments from Exhibit 4, after discounting.
- (2) From Exhibit 5, Column (2).
- (3) From BWC Retrospective Rating Plan Summaries as of December 31, 2013.
- (4) Column (3) / column (2).
- (5) Column (1) / column (2).

**Ohio Bureau of Workers' Compensation
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EXHIBIT PEC-2

Cumulative Incurred Loss Development Method

Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy) + MIRA Reserves

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2002	39,774	39,516	46,627	45,599	45,931	49,403	45,669	50,881	53,939	47,126
2003	53,728	53,901	58,000	56,173	58,706	52,338	59,219	66,381	68,113	53,494
2004	49,977	47,048	57,515	54,385	45,398	48,200	50,172	54,391	55,249	50,054
2005	50,933	53,074	59,874	47,769	52,701	56,693	59,669	60,181	62,276	
2006	50,444	54,481	44,737	50,199	56,762	59,360	62,782	66,505		
2007	53,262	43,695	55,959	62,557	70,855	75,102	76,175			
2008	24,728	44,418	51,116	59,005	63,484	69,037				
2009	25,122	43,398	52,343	57,931	62,332					
2010	30,003	49,106	55,900	59,865						
2011	36,505	44,384	48,357							
2012	30,697	40,064								
2013	29,790									

Age-to-Age Development Factors

Policy Year	Development Year								
	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	<u>8-9</u>	<u>9-10</u>
2002	0.994	1.180	0.978	1.007	1.076	0.924	1.114	1.060	0.874
2003	1.003	1.076	0.969	1.045	0.892	1.131	1.121	1.026	0.785
2004	0.941	1.222	0.946	0.835	1.062	1.041	1.084	1.016	0.906
2005	1.042	1.128	0.798	1.103	1.076	1.052	1.009	1.035	
2006	1.080	0.821	1.122	1.131	1.046	1.058	1.059		
2007	0.820	1.281	1.118	1.133	1.060	1.014			
2008	1.796	1.151	1.154	1.076	1.087				
2009	1.727	1.206	1.107	1.076					
2010	1.637	1.138	1.071						
2011	1.216	1.090							
2012	1.305								
									<u>Tail</u>
All Yr St. Avg	1.233	1.129	1.029	1.051	1.043	1.037	1.077	1.034	0.855
3 Yr St. Avg	1.386	1.145	1.111	1.095	1.064	1.041	1.051	1.026	0.855
All Excl Hi Lov	1.216	1.149	1.044	1.073	1.064	1.041	1.086	1.030	0.874
Selected	1.386	1.145	1.111	1.095	1.064	1.039	1.064	1.034	0.910
Cumulative	2.137	1.542	1.347	1.213	1.108	1.041	1.001	0.941	0.910

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	63,651	61,767	65,131	72,597	69,040	71,841	76,281	62,589	56,671	50,054	649,622

Notes:

- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
- Tail factor includes consideration of potential for uncollectable premiums.

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EXHIBIT PEC-3

Cumulative Loss Development Method

Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy)

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2001	6,971	15,005	19,604	22,314	24,725	26,573	28,391	29,604	30,935	38,241
2002	7,646	17,233	22,113	25,355	27,654	29,959	31,861	33,507	34,970	47,126
2003	11,623	23,740	30,314	33,679	36,544	39,298	41,600	43,976	45,910	53,494
2004	11,223	23,155	29,133	32,516	35,863	38,316	40,743	42,741	44,249	50,054
2005	13,211	25,071	30,994	34,580	37,435	39,997	42,389	44,444	46,090	
2006	12,906	26,721	34,243	38,668	42,766	45,109	47,157	49,258		
2007	15,140	30,979	39,013	44,132	48,478	52,261	53,833			
2008	14,571	30,202	37,995	43,328	47,705	50,510				
2009	15,423	32,333	40,605	45,266	49,234					
2010	16,412	32,972	40,585	45,203						
2011	15,068	29,621	36,736							
2012	12,937	26,374								
2013	12,224									

Age-to-Age Development Factors

Policy Year	Development Year									
	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	<u>8-9</u>	<u>9-10</u>	<u>Tail</u>
2001	2.152	1.307	1.138	1.108	1.075	1.068	1.043	1.045	1.236	
2002	2.254	1.283	1.147	1.091	1.083	1.064	1.052	1.044	1.348	
2003	2.042	1.277	1.111	1.085	1.075	1.059	1.057	1.044	1.165	
2004	2.063	1.258	1.116	1.103	1.068	1.063	1.049	1.035	1.131	
2005	1.898	1.236	1.116	1.083	1.068	1.060	1.048	1.037		
2006	2.070	1.281	1.129	1.106	1.055	1.045	1.045			
2007	2.046	1.259	1.131	1.098	1.078	1.030				
2008	2.073	1.258	1.140	1.101	1.059					
2009	2.096	1.256	1.115	1.088						
2010	2.009	1.231	1.114							
2011	1.966	1.240								
2012	2.039									
All Yr \$ Wtd Avg	2.047	1.259	1.125	1.096	1.069	1.053	1.049	1.041	1.210	
3 Yr \$ Wtd Avg	2.003	1.242	1.123	1.096	1.064	1.044	1.047	1.039	1.204	
All Excl Hi Low	2.056	1.261	1.125	1.096	1.071	1.058	1.048	1.042	1.201	
Selected	2.025	1.251	1.124	1.096	1.067	1.049	1.048	1.040	1.210	
Cumulative	4.599	2.271	1.816	1.616	1.475	1.383	1.319	1.259	1.210	

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	56,221	59,907	66,723	73,071	72,642	69,862	71,013	61,992	55,791	50,054	637,277

Notes:

- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
- Tail factor includes consideration of potential for uncollectable premiums.

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(\$000's)

EXHIBIT PEC-4

Incremental Payments and Awards as Percent of Premium Method

Incremental (Limited) Payments and Awards (Costs Chargeable to Policy)

Policy Year	Development Year										Experience Rated Prem
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
2001	6,971	8,034	4,599	2,711	2,411	1,847	1,818	1,213	1,331	7,306	72,523
2002	7,646	9,587	4,880	3,242	2,299	2,305	1,902	1,646	1,462	12,156	78,003
2003	11,623	12,117	6,574	3,365	2,865	2,754	2,302	2,377	1,933	7,584	125,407
2004	11,223	11,932	5,979	3,383	3,347	2,453	2,427	1,998	1,508	5,804	132,897
2005	13,211	11,860	5,923	3,585	2,856	2,561	2,392	2,055	1,646		140,070
2006	12,906	13,815	7,522	4,425	4,098	2,343	2,048	2,101			167,385
2007	15,140	15,839	8,034	5,119	4,347	3,783	1,572				181,643
2008	14,571	15,631	7,793	5,333	4,377	2,805					199,945
2009	15,423	16,911	8,271	4,662	3,968						199,890
2010	16,412	16,560	7,613	4,618							155,825
2011	15,068	14,552	7,115								139,086
2012	12,937	13,438									122,709
2013	12,224										116,066

Percent of Premiums

Policy Year	Development Year										Tail
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
2001	9.6%	11.1%	6.3%	3.7%	3.3%	2.5%	2.5%	1.7%	1.8%	10.1%	
2002	9.8%	12.3%	6.3%	4.2%	2.9%	3.0%	2.4%	2.1%	1.9%	15.6%	
2003	9.3%	9.7%	5.2%	2.7%	2.3%	2.2%	1.8%	1.9%	1.5%	6.0%	
2004	8.4%	9.0%	4.5%	2.5%	2.5%	1.8%	1.8%	1.5%	1.1%	4.4%	
2005	9.4%	8.5%	4.2%	2.6%	2.0%	1.8%	1.7%	1.5%	1.2%		
2006	7.7%	8.3%	4.5%	2.6%	2.4%	1.4%	1.2%	1.3%			
2007	8.3%	8.7%	4.4%	2.8%	2.4%	2.1%	0.9%				
2008	7.3%	7.8%	3.9%	2.7%	2.2%	1.4%					
2009	7.7%	8.5%	4.1%	2.3%	2.0%						
2010	10.5%	10.6%	4.9%	3.0%							
2011	10.8%	10.5%	5.1%								
2012	10.5%	11.0%									
2013	10.5%										
Average	9.2%	9.6%	4.9%	2.9%	2.5%	2.0%	1.8%	1.7%	1.5%	9.0%	
3 Yr \$ Wtd Avg	10.6%	10.7%	4.6%	2.6%	2.2%	1.6%	1.2%	1.4%	1.3%	7.6%	
Selected	10.6%	10.7%	4.9%	2.9%	2.2%	1.8%	1.2%	1.4%	1.5%	9.0%	
Cumulative	46.3%	35.6%	24.9%	20.1%	17.2%	15.0%	13.2%	11.9%	10.5%	9.0%	

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	53,559	56,985	64,665	71,958	79,192	76,818	75,500	66,885	58,722	50,054	654,337

Notes:

- Limited payments and awards are from BWC Retrospective Rating Plan annual summaries.
- Tail factor includes consideration of potential for uncollectable premiums.

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EXHIBIT PEC-5

Bornhuetter Ferguson Method with Premium Base

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Policy Year	Preliminary Ultimate Loss	Experience Rated Premium	Preliminary Ult. Collectible Premium Ratio	Selected Collectible Premium Ratio	Cumulative Development Factor	Percent Unpaid	Indicated Ultimate Loss
2002	47,126	78,003	60.4%	60.4%	1.000	0.000	47,126
2003	53,494	125,407	42.7%	42.7%	1.000	0.000	53,494
2004	50,054	132,897	37.7%	37.7%	1.000	0.000	50,054
2005	56,231	140,070	40.1%	39.5%	1.210	0.174	55,722
2006	62,291	167,385	37.2%	39.5%	1.259	0.205	62,855
2007	73,647	181,643	40.5%	39.5%	1.319	0.242	71,211
2008	70,851	199,945	35.4%	39.5%	1.383	0.277	72,413
2009	70,841	199,890	35.4%	39.5%	1.475	0.322	74,707
2010	72,834	155,825	46.7%	48.6%	1.616	0.381	74,104
2011	65,927	139,086	47.4%	48.6%	1.816	0.449	67,134
2012	60,837	122,709	49.6%	48.6%	2.271	0.560	59,776
2013	<u>59,936</u>	<u>116,066</u>	<u>51.6%</u>	48.6%	4.599	0.783	<u>56,395</u>
Total	744,069	1,758,926	42.3%				744,991
		Selected 2010-13	48.6%				
		Selected 2005-09	39.5%				

Notes by Column:

- (1) Average of columns (1) and (2) from Exhibit 1, page 1.
- (2) From BWC Retrospective Rating Plan Summaries as of December 31, 2013.
- (3) Column (1) / column (2).
- (4) Selected based on column (3) and judgment.
- (5) Based on selected payment pattern in Exhibit 3.
- (6) 1.00 minus 1.00 / column (5).
- (7) Column (2) * column (4) * column (6) plus Exhibit 1, page 1, column (7).

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EXHIBIT PEC-6

Bornhuetter Ferguson Method with Premium Base

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Policy Year	Preliminary Ultimate Loss	Payroll (00's)	Preliminary Loss Rate	0% Trend	Trended Loss Rate	Selected Loss Rate	Cumulative Development Factor	Percent Unpaid	Indicated Ultimate Loss
2002	47,126	39,186,300	1.20	1.00	1.20	1.10	1.000	0.000	47,126
2003	53,494	49,058,309	1.09	1.00	1.09	1.10	1.000	0.000	53,494
2004	50,054	50,356,710	0.99	1.00	0.99	1.10	1.000	0.000	50,054
2005	56,231	50,790,431	1.11	1.00	1.11	1.10	1.210	0.174	55,799
2006	62,291	57,551,482	1.08	1.00	1.08	1.10	1.259	0.205	62,255
2007	73,647	59,289,242	1.24	1.00	1.24	1.10	1.319	0.242	69,601
2008	70,851	64,265,553	1.10	1.00	1.10	1.10	1.383	0.277	70,080
2009	70,841	70,251,502	1.01	1.00	1.01	1.10	1.475	0.322	74,121
2010	72,834	70,987,462	1.03	1.00	1.03	0.98	1.616	0.381	71,797
2011	65,927	68,424,894	0.96	1.00	0.96	0.98	1.816	0.449	66,943
2012	60,837	63,331,733	0.96	1.00	0.96	0.98	2.271	0.560	61,196
2013	<u>59,936</u>	<u>61,470,665</u>	<u>0.98</u>	1.00	<u>0.98</u>	0.98	4.599	0.783	<u>59,477</u>
Total	744,069	704,964,283	1.06		1.06				741,942
		Selected 2010-13	0.98		0.98				
		Selected 2002-09	1.10		1.10				

Notes by Column:

- (1) Average of columns (1) and (2) from Exhibit 1, page 1.
- (2) From BWC Retrospective Rating Plan Summaries as of December 31, 2013.
- (3) Column (1) / column (2).
- (5) Column (3) * column (4).
- (6) Selected based on column (5) and judgment, detrended.
- (7) Based on selected payment pattern in Exhibit 3.
- (8) 1.00 minus 1.00 / column (7).
- (9) Column (2) / 1,000 * column (6) * column (8) plus Exhibit 1, page 1, column (7).

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EXHIBIT PEC-7

Hindsight Development as Percent of BWC Comp Reserves

Policy Year	<u>BWC Unpaid Loss for Retro Rated Risks</u>									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Development Year					
					<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2002	32,127	22,282	24,514	20,244	18,277	19,444	13,808	17,374	18,970	11,628
2003	42,104	30,161	27,686	22,494	22,162	13,040	17,619	22,404	22,204	9,559
2004	38,754	23,893	28,381	21,869	9,535	9,884	9,428	11,650	11,000	5,720
2005	37,722	28,003	28,880	13,190	15,265	16,696	17,281	15,737	16,186	
2006	37,537	27,761	10,495	11,531	13,996	14,251	15,625	17,247		
2007	38,122	12,716	16,946	18,425	22,376	22,841	22,342			
2008	10,156	14,216	13,121	15,678	15,779	18,527				
2009	9,700	11,064	11,738	12,664	13,098					
2010	13,591	16,133	15,314	14,662						
2011	21,437	14,763	11,621							
2012	17,760	13,689								
2013	17,566									

Hindsight Unpaid Loss as a Percent of BWC Comp Reserves

Policy Year	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	
2002	122.9%	134.2%	102.0%	107.5%	106.5%	88.3%	110.6%	78.4%	64.1%	
2003	99.4%	98.6%	83.7%	88.1%	76.5%	108.9%	67.5%	42.5%	34.2%	
2004	100.2%	112.6%	73.7%	80.2%	148.8%	118.8%	98.8%	62.8%	52.8%	
2005	112.7%	109.5%	85.6%	160.3%	119.8%	94.2%	77.2%			
2006	133.1%	130.2%	272.6%	209.8%	143.5%	124.5%	100.5%			
2007	147.1%	316.4%	190.0%	147.0%	101.6%	83.0%				
2008	569.5%	296.9%	262.3%	185.5%	156.6%					
2009	611.2%	383.0%	290.5%	232.5%						
2010	424.5%	254.9%	218.9%							
2011	242.9%	254.1%								
2012	263.7%									
Average	257.0%	209.0%	175.5%	151.4%	121.9%	102.9%	90.9%	63.8%	50.3%	
3 Year Average	310.4%	297.3%	257.2%	188.3%	133.9%	100.6%	92.1%	59.0%	50.3%	
Selected	297.0%	275.3%	236.8%	179.1%	130.9%	101.2%	91.8%	60.2%	50.3%	

Policy Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Total
Ultimate Loss	64,400	64,056	64,254	71,460	66,380	69,251	74,347	59,638	54,237	50,054	638,076

Notes:

- BWC comp reserves are from BWC Retrospective Rating Plan annual summaries.
- Example of calculation for policy year 2004 at year 7:
98.8% = Exhibit 1, page 1, col. (4) minus Exhibit 3 @ year 7 divided by reserves of 9,428 from this exhibit.

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EXHIBIT PEC-8

Diagnostic – Case Reserves as a Percent of Cumulative Payments

Case Reserves / Cumulative (Limited) Payments and Awards (Costs Chargeable to Policy)

<u>Policy Year</u>	Development Year									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
2003	362.24%	127.05%	91.33%	66.79%	60.65%	33.18%	42.35%	50.95%	48.36%	17.87%
2004	345.31%	103.19%	97.42%	67.26%	26.59%	25.80%	23.14%	27.26%	24.86%	11.43%
2005	285.55%	111.69%	93.18%	38.14%	40.78%	41.74%	40.77%	35.41%	35.12%	
2006	290.85%	103.89%	30.65%	29.82%	32.73%	31.59%	33.13%	35.01%		
2007	251.79%	41.05%	43.44%	41.75%	46.16%	43.71%	41.50%			
2008	69.70%	47.07%	34.53%	36.18%	33.08%	36.68%				
2009	62.89%	34.22%	28.91%	27.98%	26.60%					
2010	82.81%	48.93%	37.73%	32.44%						
2011	142.26%	49.84%	31.63%							
2012	137.29%	51.90%								
2013	143.70%									



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