Exhibit 1
As Filed

PENNSYLVANIA COMPENSATION RATING BUREAU

Indicated Change in Loss Costs

Page 1 presents the overall indicated change in loss costs.

For this filing, loss costs resulting from PCRB Filing No. C-369 were used to calculate expected losses on Page 1 and actual loss ratios on Page 2.

Derivation of the indemnity and medical trend factors and trended loss ratios shown on Page 1 is presented on Page 2. Severity ratios, defined as loss ratios adjusted by dividing out the frequency component, for both indemnity and medical, have been fitted using a seven-point exponential curve. Severity trend factors are calculated by fitting severity ratios to curves using a least squares regression analysis and comparing the fitted values at 4/1/19 to the fitted values at the midpoints of the latest three available policy years. Frequency trend factors are derived on Page 3. The resulting severity and frequency trend factors are then applied to the latest three available policy year loss ratios to generate projected ultimate trended loss ratios.

As described in Exhibit 8, staff has selected an annual frequency trend of -5.6%. Page 3 shows the derivation of overall frequency trend factors for each of the latest three available policy years.

Due to the impact of House Bill 1846 of 2014 (HB1846), medical severity trend is separated between pre-HB1846 and post-HB1846 trends. The difference between the two trend rates is a reduction of 0.2 point in medical trend reflecting the evaluation of HB1846's ongoing effect on medical costs after 1/1/2015. (HB1846 became effective on 12/26/2014. The PCRB used the 1/1/2015 date, for convenience, as an approximation in its evaluation of savings for the law.)

In addition, staff is also taking into account the impact of direct savings attributable to HB1846 as well as the impact of the Pennsylvania Supreme Court ruling in Protz v. WCAB (*Derry Area School District)*.

INDICATED CHANGE IN LOSS COSTS

		Indemnity	Medical	Total
(1)	Policy Year 2013 Ratio of Loss to Expected Loss	0.5023	0.5420	1.0443
(2)	Policy Year 2014 Ratio of Loss to Expected Loss	0.4902	0.5288	1.0190
(3)	Policy Year 2015 Ratio of Loss to Expected Loss	0.4896	0.4954	0.9850
(4)	Average (Midpoint = 1/1/2015)	0.4940	0.5221	1.0161
(5)	Policy Year 2013 Ratio Trended to 4/1/2019 +	0.4591	0.5029	0.9620
(6)	Policy Year 2014 Ratio Trended to 4/1/2019 +	0.4557	0.4970	0.9527
(7)	Policy Year 2015 Ratio Trended to 4/1/2019 +	0.4631	0.4725	0.9356
(8)	Average at 4/1/2019	0.4593	0.4908	0.9501
(9a)	House Bill 1846 Adjustment	1.0000	0.9908	
(9b)	Protz Adjustment	1.1337	1.0000	
(10)	Indicated Change in Loss Costs	0.5207	0.4863	1.0070

CHANGES IN MANUAL LOSS COST LEVEL BY INDUSTRY GROUP

		Mfg.	Cont.	Other	Total
(11)	Current Collectible Premium Ratio	1.0362	1.1145	0.9915	
(12)	Anticipated Collectible Premium Ratio	1.0389	1.1238	0.9931	
(13)	Final Indicated Change in Manual Loss Cost Level (10T) * (12) / (11)	1.0096	1.0154	1.0086	1.0101

+ Refer to pages 1.2 and 1.3

DETERMINATION OF TREND

INDEMNITY

Policy Year	2009	2010	2011	2012	2013	2014	2015
Actual Loss Ratio	0.5428	0.5320	0.5061	0.4841	0.5023	0.4902	0.4896
Normalized Frequency	0.7528	0.7419	0.6955	0.6508	0.6360	0.5829	0.5340
Severity Loss Ratio	0.7210	0.7171	0.7277	0.7439	0.7898	0.8410	0.9169
x	1	2	3	4	5	6	7
y	0.7210	0.7171	0.7277	0.7439	0.7898	0.8410	0.9169

7 Point Exponential Regression: y = 0.661663 * 1.040875 ^ x

Selected Annual Severity Trend Factor = 4.09%

Policy Year	Annual Severity Trend Factor (1)	Trend Period # of Years to 4/1/19 (2)	Severity Trend Factor (3) = (1) ^ (2)	Frequency Trend Factor (4) #
2013	1.0409	5.2500	1.2341	0.7405
2014	1.0409	4.2500	1.1856	0.7841
2015	1.0409	3.2500	1.1391	0.8303

Trended Loss Ratio

Policy Year	Actual Loss Ratio (5)	Combined Trend Factor (6) = (3) * (4)	Trended Loss Ratio (7) = (5) * (6)
2013	0.5023	0.9139	0.4591
2014	0.4902	0.9296	0.4557
2015	0.4896	0.9458	0.4631

MEDICAL

Policy Year	2009	2010	2011	2012	2013	2014	2015
Actual Loss Ratio	0.5374	0.5577	0.5461	0.5188	0.5420	0.5288	0.4954
Normalized Frequency	0.7528	0.7419	0.6955	0.6508	0.6360	0.5829	0.5340
Severity Loss Ratio	0.7138	0.7517	0.7852	0.7972	0.8522	0.9072	0.9278
x	1	2	3	4	5	6	7
y	0.7138	0.7517	0.7852	0.7972	0.8522	0.9072	0.9278

7 Point Exponential Regression: y = 0.683092 * 1.045452 ^ x

Selected Annual Severity Trend Factor to 1/1/15 = 4.55%

HB1846 Adjustment to Annual Severity Trend from 1/1/15 and later = -0.19%

Selected Annual Severity Trend Factor from 1/1/15 and later = 4.36%

Policy Year	Annual Severity Trend Factor to 1/1/15 (1)	Trend Period # of Years to 1/1/15 (2)	Severity Trend Factor to 1/1/15 (3) = (1) ^ (2)	Annual Severity Trend Factor from 1/1/15 to 4/1/19 (4)	Trend Period # of Years to 4/1/19 (5)	Severity Trend Factor from 1/1/15 to 4/1/19 (6) = (4) ^ (5)	Frequency Trend Factor (7) #
2013	1.0455	1.0000	1.0455	1.0436	4.2500	1.1986	0.7405
2014	1.0455	0.0000	1.0000	1.0436	4.2500	1.1986	0.7841
2015	1.0455	0.0000	1.0000	1.0436	3.2500	1.1486	0.8303

Trended Loss Ratio

Policy Year	Actual Loss Ratio (8)	Combined Trend Factor (9) = (3) * (6) * (7)	Trended Loss Ratio (10) = (8) * (9)
2013	0.5420	0.9279	0.5029
2014	0.5288	0.9398	0.4970
2015	0.4954	0.9537	0.4725

See page 1.3

DETERMINATION OF TREND

CLAIM FREQUENCY

Policy Year Frequency per $1 million of Expected Losses
{1 = PY 2004, 12 = PY 2015}

Policy Year	Claim Frequency	Normalized Frequency
2004	23.71	1.0000
2005	22.03	0.9291
2006	21.22	0.8950
2007	19.98	0.8427
2008	18.46	0.7786
2009	17.85	0.7528
2010	17.59	0.7419
2011	16.49	0.6955
2012	15.43	0.6508
2013	15.08	0.6360
2014	13.82	0.5829
2015	12.66	0.5340

Policy Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
x	1	2	3	4	5	6	7
y	0.7528	0.7419	0.6955	0.6508	0.6360	0.5829	0.5340

7 Point Exponential Regression: y = 0.819613 * 0.944375 ^ x

Selected Annual Frequency Trend Factor = **-5.6%**

Policy Year	Annual Frequency Trend Factor (1)	Trend Period # of Years to 4/1/19 (2)	Frequency Trend Factor (3) = (1) ^ (2)
2013	0.9444	5.2500	0.7405
2014	0.9444	4.2500	0.7841
2015	0.9444	3.2500	0.8303