April 24, 2020

PCRB CIRCULAR NO. 1739

To All Members of the PCRB:

RE: THE PENNSYLVANIA WORKERS COMPENSATION PRICING SYSTEM

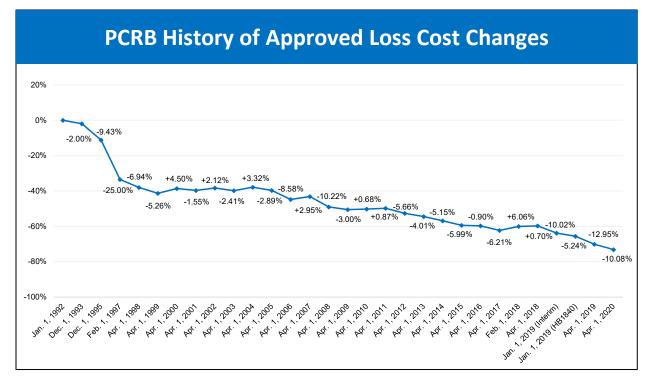
The PCRB held its Annual Meeting on Wednesday, April 22, 2020. Traditionally, during and following that meeting, an update on the state of the Pennsylvania Workers Compensation marketplace is provided. A brief version of the State of the Line was previewed at this meeting and a report by the same name is now posted with additional information.

Also at this time, we customarily provide this circular, which highlights key elements of the Pennsylvania workers compensation system, including background and discussion regarding loss cost revisions, trends in claim costs and several dynamics affecting the system. This is provided for the benefit of PCRB members and other interested parties, and updates information provided in prior circular versions, most recently PCRB Circular No. 1723 dated April 29, 2019. The appendix of this circular provides the data underlying the charts.

As mentioned above and in addition to the information contained in this circular, please be directed to the recently released reports providing detailed Pennsylvania workers compensation marketplace activity metrics and actuarial results for the past year. Readers are encouraged to obtain the just published reports from the PCRB website: 2019 State Activity Report, the 2019 State of the Line Report and the 2019 Medical Activity Report. These noted reports are available on the left side of the Homepage via the "Data Reports / Special Studies" link and, additionally, the 2019 PCRB Annual Report is found via the "Organization" link.

Loss Cost Changes

The average change in collectible loss costs approved by the Insurance Commissioner, effective April 1, 2020, was a decrease of 10.08%. The system of filing loss costs was implemented as a result of Act 44 of 1993, and Act 44, along with Act 57 of 1996, introduced significant changes in the Pennsylvania workers compensation system. Resulting from these changes is a history of loss cost changes in Pennsylvania since the inception of the present pricing system, as shown in the following chart:



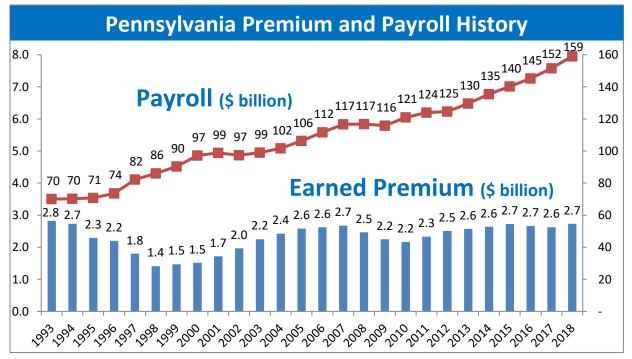
Over this 28-year period, the primary factors underlying the long-term downward trend in Pennsylvania are the improvement in claim frequency, which is decreasing by 6.4% annually, along with the fundamental changes due to Acts 44 and 57. The downward frequency trend has been sufficient to counter upward claim severity trends for indemnity and medical benefits. The approved April 1, 2020 loss costs contemplate that claim frequency will continue to show declines through the end of 2020. The following chart shows the trends underlying the approved April 1, 2020 loss cost filing.

Pennsylvania Claim Cost Trends				
	Frequency	Severity	Pure Premium	
Indemnity	-6.4%	+1.3%	-5.2%	
Medical	-0.4%	+2.2%	-4.4%	

Premium and Payroll History

The size of the Pennsylvania workers compensation insurance market, as measured by Direct Earned Premium, has fluctuated over the last several decades. Ironically, 2018 shows the same level as 1994 at \$2.7 billion. Since 2003, the premium has been relatively consistent fluctuating from a low of \$2.2 billion in 2004 and 2010 to a high of \$2.7 billion in 2007, 2015/16, and 2018. In contrast, effective payroll¹ has more than doubled over the entire time frame and is up 60% since 2003. The chart below illustrates the different growth patterns. The pattern of premium growth and decline displayed for Pennsylvania is similar to patterns seen in broader, multi-state studies.

¹ Payroll in this chart is adjusted to an "effective" level by subtracting an amount that reflects the retained exposure, measured by the premium discount on deductible policies. This provides a better comparison to earned premium in company financial statements, which is net of deductible credits.



Notes: Payroll for large deductible policies is reduced in proportion to the premium reductions due to deductibles.

Payroll for 2017 and 2018 is estimated based on PA Department of Labor & Industry payroll data.

Premium data is the aggregate direct earned premium from insurer financial statements, from A.M. Best Database Services.

Payroll is based on policy year data. Earned premium is based on calendar year data.

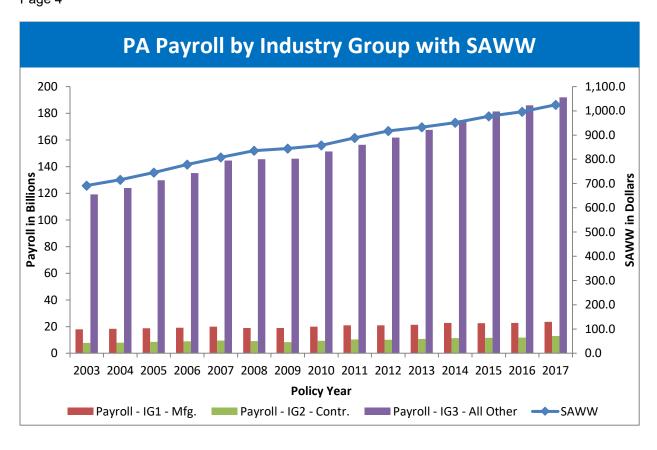
The difference in growth rates for payroll and premium appears to result from several dynamics in Pennsylvania, some of which are similar to trends across the country.

First, total payroll reported by insurers to the PCRB, adjusted to reflect large deductible policies, has risen every year except 2002 and 2009. The cumulative increase in effective payroll since 1993 is 127%.

Second, as shown in the first chart of this circular, loss costs have generally declined since they were first implemented in 1993. The cumulative loss cost change since then is a decrease of 73%.

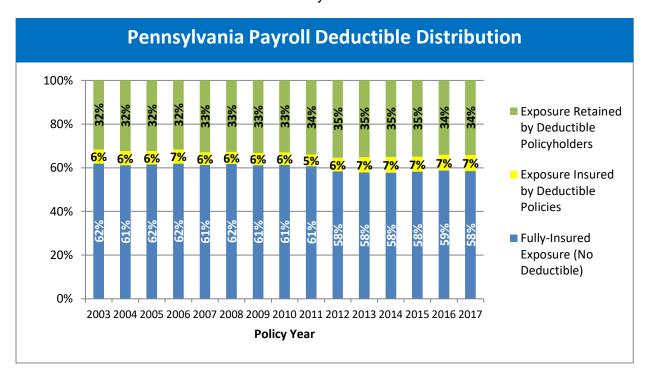
Third, payroll growth differs among the three PCRB industry groups, with manufacturing payroll lagging the other sectors which have kept pace with the growth in the Statewide Average Weekly Wage (SAWW). In the next chart, payroll is included at its full value for deductible policies (i.e., not at the "effective" level), to be comparable to the wage data. The chart shows SAWW growth from 2003 to 2017 of 48%.

For the three PCRB industry groups, the growth over that same period varies. For Industry Group 1 – Manufacturing, payroll rose from \$17.9 billion to \$23.5 billion, or by 31%. For Industry Group 2 – Contracting, payroll grew from \$7.6 billion to \$12.8 billion, or by 68%. For Industry Group 3 – All Other, payroll grew from \$119.2 billion to \$191.9 billion, an increase of 61%. The growth rate for Manufacturing is well below that of the other industry groups and the SAWW.



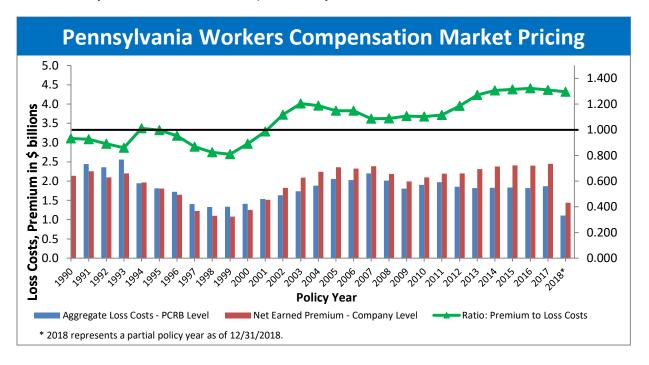
Growth in Use of Large Deductible Policies

A fourth dynamic is the growth in the use of large deductible policies. In 2017, 41% of payroll was reported on large deductible policies, where the average portion of risk retained by policyholders is about 82%. The next chart shows the history from 2003 to 2017.



Loss Costs and Industry Earned Premium

Another factor to consider is the pricing strategy across the industry in Pennsylvania and the country. Pricing strategy is impacted by market cycles, competitiveness, legislation, investment income and many other factors. The chart below shows the relationship between aggregate loss costs at PCRB level and net earned premium at company level by policy year from 1990 through the first half of Policy Year 2018. Prior to 2002, carriers wrote business in Pennsylvania at levels below, and sometimes significantly below, PCRB loss costs. The ratio of carrier prices to PCRB loss costs reached a low point in 1999 at 0.81. Since 2002, the ratios rose to its highest level of 1.32 in Policy Year 2016. The incomplete Policy Year 2018 shows a decrease to a 1.30 ratio.



PCRB loss cost filings, which address only the provision for claim payment, represent the projected average cost for each classification. They do not provide indications of either past or prospective price trends. Insurance carriers must independently evaluate information and factors beyond PCRB filings to determine the rates they will use in the Pennsylvania market, subject to regulatory approval.

As previously noted in PCRB circulars and further reinforced by the above narrative and information, PCRB rating values can serve as meaningful benchmarks within an overall pricing approach. However, numerous other very important factors must also be carefully accounted for on an ongoing basis in each carrier's pricing analysis.

Questions regarding the information in this circular should be directed to Brent Otto, Vice President & Chief Actuary, at extension 4451, botto@pcrb.com or Ken Creighton, Director of Actuarial Services, at extension 4924, kcreighton@pcrb.com.

William V. Taylor President

WVT/dn

Appendix

Data Underlying the Charts

History of Approved Loss Cost Changes in Pennsylvania				
Policy Year Effective Date	Average Change in Loss Costs	Cumulative Change in Loss Costs		
Dec. 1, 1993	-2.00%	-2.00%		
Dec. 1, 1995	-9.43%	-11.24%		
Feb. 1, 1997	-25.00%	-33.43%		
Apr. 1, 1998	-6.94%	-38.05%		
Apr. 1, 1999	-5.26%	-41.31%		
Apr. 1, 2000	4.50%	-38.67%		
Apr. 1, 2001	-1.55%	-39.62%		
Apr. 1, 2002	2.12%	-38.34%		
Apr. 1, 2003	-2.41%	-39.82%		
Apr. 1, 2004	3.32%	-37.83%		
Apr. 1, 2005	-2.89%	-39.62%		
Apr. 1, 2006	-8.58%	-44.80%		
Apr. 1, 2007	2.95%	-43.18%		
Apr. 1, 2008	-10.22%	-48.98%		
Apr. 1, 2009	-3.00%	-50.51%		
Apr. 1, 2010	0.68%	-50.18%		
Apr. 1, 2011	0.87%	-49.74%		
Apr. 1, 2012	-5.66%	-52.59%		
Apr. 1, 2013	-4.01%	-54.49%		
Apr. 1, 2014	-5.15%	-56.83%		
Apr. 1, 2015	-5.99%	-59.42%		
Apr. 1, 2016	-0.90%	-59.78%		
Apr. 1, 2017	-6.21%	-62.28%		
Feb. 1, 2018	6.06%	-60.00%		
Apr. 1, 2018	0.70%	-59.72%		
Jan. 1, 2019	40.000/	00.75%		
(Interim)	-10.02%	-63.75%		
Jan. 1, 2019 (HB1840)	-5.24%	-65.65%		
Apr. 1, 2019	-12.95%	-70.10%		
Apr. 1, 2019 Apr. 1, 2020	-10.08%	-73.11%		

Pennsylvania Premium and Payroll History			
Policy/ Calendar Year	Direct Earned Premium by Calendar Year (\$000)*	Effective Payroll by Policy Year (\$000)	
1993	2,817,651	69,982,125	
1994	2,730,858	70,247,895	
1995	2,290,920	70,649,222	
1996	2,196,055	73,588,426	
1997	1,794,790	82,120,076	
1998	1,408,597	86,056,936	
1999	1,469,706	90,266,811	
2000	1,514,995	97,173,836	
2001	1,712,165	98,756,549	
2002	1,966,766	97,391,574	
2003	2,249,933	98,925,416	
2004	2,421,470	101,602,471	
2005	2,581,581	106,245,713	
2006	2,620,364	111,638,653	
2007	2,672,758	116,612,491	
2008	2,465,389	116,804,892	
2009	2,244,791	115,708,890	
2010	2,167,273	121,007,130	
2011	2,328,257	123,976,940	
2012	2,504,225	124,559,037	
2013	2,569,218	129,579,944	
2014	2,634,727	135,434,503	
2015	2,717,988	140,138,047	
2016	2,666,022	145,152,589	
2017	2,625,831	151,577,096	
2018	2,727,143	159,082,113	
*A.M. Best Databas	se Services		

Pennsylvania Payroll by Industry Group with Statewide Average Weekly Wage					
Payroll Gross of Deductible (\$000)					
Policy Year	IG1 - Manufacturing	IG2 - Contracting	IG3 - All Other	Total	SAWW
2003	17,851,827	7,646,779	119,181,853	144,680,459	692.0
2004	18,319,959	7,974,733	123,920,949	150,215,641	716.0
2005	18,712,863	8,488,241	129,829,208	157,030,312	745.0
2006	19,079,163	9,000,584	135,147,107	163,226,854	779.0
2007	19,922,916	9,426,348	144,491,089	173,840,353	808.0
2008	18,971,265	9,118,939	145,604,315	173,694,519	836.0
2009	18,835,204	8,396,693	145,859,985	173,091,882	845.0
2010	19,824,921	9,269,944	151,356,251	180,451,116	858.0
2011	20,854,429	10,379,093	156,386,005	187,619,527	888.0
2012	20,933,545	10,209,120	161,738,280	192,880,945	917.0
2013	21,382,261	10,726,818	167,613,141	199,722,220	932.0
2014	22,630,059	11,377,496	174,648,837	208,656,392	951.0
2015	22,569,212	11,449,247	181,253,581	215,272,040	978.0
2016	22,649,799	11,675,639	185,929,071	220,254,509	996.0
2017	23,451,941	12,818,657	191,926,022	228,196,620	1,025.0

Pennsylvania Payroll Deductible Distribution (\$000)				
Policy Year	Total Gross of Deductible	Fully Insured Exposure (No Deductible)	Exposure Insured by Deductible Policies	Exposure Retained by Deductible Policyholders
2003	144,680,459	89,553,901	9,371,515	45,755,044
2004	150,215,641	91,926,469	9,676,003	48,613,170
2005	157,030,312	96,716,061	9,529,652	50,784,599
2006	163,226,854	100,997,420	10,641,233	51,588,200
2007	173,840,353	106,513,456	10,099,035	57,227,863
2008	173,694,519	107,234,674	9,570,218	56,889,626
2009	173,091,882	105,977,272	9,731,619	57,382,992
2010	180,451,116	110,681,180	10,325,951	59,443,986
2011	187,619,527	113,788,219	10,188,720	63,642,587
2012	192,880,945	112,502,230	12,056,807	68,321,907
2013	199,722,220	115,517,807	14,062,137	70,142,276
2014	208,656,392	120,543,409	14,891,094	73,221,888
2015	215,272,040	125,291,209	14,846,837	75,133,994
2016	220,254,509	129,332,087	15,820,501	75,101,920
2017	228,196,620	133,343,027	16,978,793	77,874,800

Pennsylvania Workers Compensation Market Pricing				
Policy Year	Collectible Loss Costs at Bureau Level (\$000)	Net Earned Premium at Company Level (\$000)	Ratio	
1990	2,297,856	2,140,289	0.931	
1991	2,439,641	2,257,410	0.925	
1992	2,356,351	2,097,550	0.890	
1993	2,559,529	2,198,127	0.859	
1994	1,946,272	1,967,134	1.011	
1995	1,814,227	1,807,381	0.996	
1996	1,725,140	1,643,579	0.953	
1997	1,407,104	1,220,946	0.868	
1998	1,330,354	1,096,313	0.824	
1999	1,336,014	1,081,454	0.809	
2000	1,410,090	1,254,680	0.890	
2001	1,538,725	1,517,599	0.986	
2002	1,634,139	1,825,235	1.117	
2003	1,737,688	2,092,293	1.204	
2004	1,884,874	2,238,159	1.187	
2005	2,055,350	2,357,088	1.147	
2006	2,028,438	2,326,576	1.147	
2007	2,198,331	2,384,192	1.085	
2008	2,011,392	2,188,338	1.088	
2009	1,803,078	1,995,656	1.107	
2010	1,900,514	2,096,530	1.103	
2011	1,971,762	2,195,600	1.114	
2012	1,855,093	2,197,855	1.185	
2013	1,821,236	2,314,095	1.271	
2014	1,823,365	2,379,342	1.305	
2015	1,833,145	2,406,515	1.313	
2016	1,817,987	2,403,706	1.322	
2017	1,870,559	2,450,175	1.310	
2018*	1,109,805	1,437,592	1.295	
* 2018 is an incomplete policy year.				