

PENNSYLVANIA COMPENSATION RATING BUREAU

Claim Frequencies

The attached exhibits examine historical Workers Compensation claim frequencies in Pennsylvania.

Claim frequencies per \$1 million of expected losses are shown on Page 1 based on statistics gathered by the PCRB. For informational purposes, claim frequencies are also shown at constant (2002) wage levels. The data excludes the experience of deductible business.

Staff is proposing an annual change in claim frequency of -6.3%. This is based on a claim frequency trend line of the form  $y=a*b^x$  using the most recent seven points.

The second page shows a graph of the frequencies appearing in column (5) of Page 1.

The third and fourth pages are comparable to Pages 1 and 2 but include the experience of deductible policies.

The fifth page shows a graph comparing claim frequencies presented on Pages 2 and 4, all indexed to a common value of 1.0 at January 1, 2002.

Page 6 presents the Unit Statistical Plan claim frequencies of Page 1 by industry group and Page 7 shows a graph of those industry group claim frequencies.

**Pennsylvania W.C - Claim Frequencies**

PCRB Unit Statistical Plan  
(Excluding Deductible Business)

Policy Year	# of Claim Indemnity (1)	% Change Counts (2)	Expected Losses (3)	% Change Exp Loss (4)	Claim Frequency (#Claims per \$1 million) (5)	% Change Claim Freq (6)
2002	30,091		960,537,964		31.33	
2003	27,981	-7.0%	973,488,915	1.3%	28.74	-8.3%
2004	27,588	-1.4%	1,011,131,524	3.9%	27.28	-5.1%
2005	26,898	-2.5%	1,061,097,220	4.9%	25.35	-7.1%
2006	26,895	0.0%	1,101,335,048	3.8%	24.42	-3.7%
2007	26,510	-1.4%	1,151,679,274	4.6%	23.02	-5.7%
2008	24,073	-9.2%	1,131,317,881	-1.8%	21.28	-7.6%
2009	22,379	-7.0%	1,086,181,249	-4.0%	20.60	-3.2%
2010	23,317	4.2%	1,148,668,722	5.8%	20.30	-1.5%
2011	22,817	-2.1%	1,197,386,026	4.2%	19.06	-6.1%
2012	21,058	-7.7%	1,181,423,429	-1.3%	17.82	-6.5%
2013	21,070	0.1%	1,209,979,185	2.4%	17.41	-2.3%
2014	20,188	-4.2%	1,266,049,894	4.6%	15.95	-8.4%
2015	19,565	-3.1%	1,330,488,665	5.1%	14.71	-7.8%
2016 *	18,615	-4.9%	1,355,434,268	1.9%	13.73	-6.7%
2016 **					13.62	-7.4%

Period	Annual % Change In Claim Frequency	Period	Annual % Change In Claim Frequency
PY02-PY16	-5.4%	PY02-PY15	-5.2%
PY03-PY16	-5.3%	PY03-PY15	-5.1%
PY04-PY16	-5.3%	PY04-PY15	-5.1%
PY05-PY16	-5.3%	PY05-PY15	-5.0%
PY06-PY16	-5.3%	PY06-PY15	-5.1%
PY07-PY16	-5.4%	PY07-PY15	-5.1%
PY08-PY16	-5.5%	PY08-PY15	-5.1%
PY09-PY16	-5.9%	PY09-PY15	-5.5%
PY10-PY16	-6.3%	PY10-PY15	-6.0%
PY11-PY16	-6.5%	PY11-PY15	-6.1%
PY12-PY16	-6.5%	PY12-PY15	-6.4%
PY13-PY16	-7.8%	PY13-PY15	-8.1%
PY14-PY16	-7.6%	PY14-PY15	-7.8%
PY15-PY16	-7.4%		

\* Includes approximately 1st 10 months and 23 days of PY2016.

\*\* Projected value for complete PY 2016 is 13.62 based on an annual change in claim frequency of -7.4%

Policy Year	SAWW	% Change SAWW	SAWW Index	Adjusted Claim Frequency * # Claims per \$1 million (1)	% Change Adj Claim Frequency
2002	691.4		1.0000	31.33	
2003	716.4	3.6%	1.0362	29.78	-4.9%
2004	745.6	4.1%	1.0785	29.43	-1.2%
2005	778.3	4.4%	1.1257	28.54	-3.0%
2006	807.1	3.7%	1.1674	28.51	-0.1%
2007	833.5	3.3%	1.2056	27.75	-2.7%
2008	845.5	1.4%	1.2229	26.02	-6.2%
2009	860.1	1.7%	1.2441	25.63	-1.5%
2010	887.9	3.2%	1.2842	26.07	1.7%
2011	915.3	3.1%	1.3238	25.23	-3.2%
2012	932.5	1.9%	1.3488	24.04	-4.7%
2013	952.0	2.1%	1.3770	23.98	-0.2%
2014	976.9	2.6%	1.4129	22.53	-6.0%
2015	997.4	2.1%	1.4426	21.21	-5.9%
2016	1,021.6	2.4%	1.4776	20.29	-4.3%
2016 (2)	1,024.4		1.4817	20.18	-4.9%

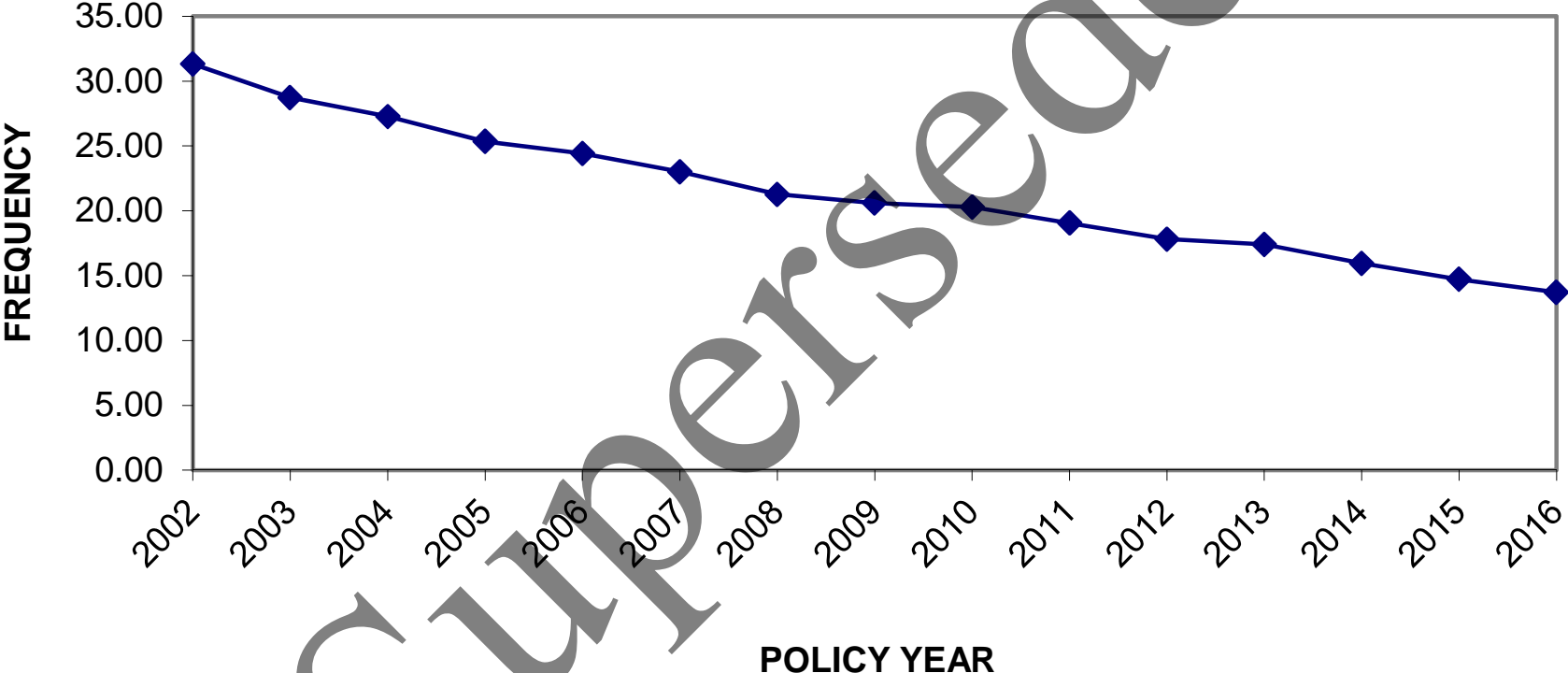
Period	Annual % Change In Adjusted Claim Frequency	Period	Annual % Change in SAWW
PY02-PY16	-2.8%	PY02-PY16	2.7%
PY03-PY16	-2.8%	PY03-PY16	2.6%
PY04-PY16	-2.9%	PY04-PY16	2.5%
PY05-PY16	-2.9%	PY05-PY16	2.4%
PY06-PY16	-3.1%	PY06-PY16	2.4%
PY07-PY16	-3.1%	PY07-PY16	2.4%
PY08-PY16	-3.1%	PY08-PY16	2.4%
PY09-PY16	-3.5%	PY09-PY16	2.4%
PY10-PY16	-4.1%	PY10-PY16	2.3%
PY11-PY16	-4.3%	PY11-PY16	2.3%
PY12-PY16	-4.6%	PY12-PY16	2.4%
PY13-PY16	-5.6%	PY13-PY16	2.4%
PY14-PY16	-5.4%	PY14-PY16	2.4%
PY15-PY16	-4.8%	PY15-PY16	2.7%

(1) Adjusted claim frequency is claim frequency per \$1 million expected losses at constant (2002) wages

(2) Includes approximately 1st 10 months and 23 days of PY2016. ( Full Year=1024.4-Average of CY 2016 and 2017 )

Projected Annual Change in Claim Frequency : -6.3% (See PY10-PY16)

**PA W.C. - CLAIM FREQUENCIES**  
**PCRB Unit Statistical Plan (Excl. Deductible Business)**



—◆— Claim Freq per \$1 Million Expected Losses

**Pennsylvania W.C - Claim Frequencies**  
 PCRB Unit Statistical Plan  
 All Business Including Deductible Business

Policy Year	# of Claim Indemnity (1)	% Change Counts (2)	Expected Losses (3)	% Change Exp Loss (4)	Claim Frequency (#Claims per \$1 million) (5)	% Change Claim Freq (6)
2002	45,275		1,477,219,137		30.65	
2003	43,693	-3.5%	1,526,994,575	3.4%	28.61	-6.7%
2004	42,761	-2.1%	1,595,552,764	4.5%	26.80	-6.3%
2005	41,674	-2.5%	1,665,666,082	4.4%	25.02	-6.6%
2006	40,700	-2.3%	1,717,663,751	3.1%	23.69	-5.3%
2007	40,827	0.3%	1,818,976,367	5.9%	22.45	-5.2%
2008	36,441	-10.7%	1,770,703,094	-2.7%	20.58	-8.3%
2009	34,297	-5.9%	1,721,586,485	-2.8%	19.92	-3.2%
2010	35,187	2.6%	1,819,625,354	5.7%	19.34	-2.9%
2011	34,492	-2.0%	1,917,627,093	5.4%	17.99	-7.0%
2012	32,748	-5.1%	1,939,818,056	1.2%	16.88	-6.2%
2013	33,510	2.3%	2,013,720,951	3.8%	16.64	-1.4%
2014	32,594	-2.7%	2,122,572,899	5.4%	15.36	-7.7%
2015	31,493	-3.4%	2,204,104,607	3.8%	14.29	-7.0%
2016 *	30,098	-4.4%	2,231,718,124	1.3%	13.49	-5.6%
2016 **					13.40	-6.2%

Period	Annual % Change In Claim Frequency	Period	Annual % Change In Claim Frequency
PY02-PY16	-5.5%	PY02-PY15	-5.5%
PY03-PY16	-5.4%	PY03-PY15	-5.4%
PY04-PY16	-5.4%	PY04-PY15	-5.3%
PY05-PY16	-5.3%	PY05-PY15	-5.2%
PY06-PY16	-5.3%	PY06-PY15	-5.2%
PY07-PY16	-5.3%	PY07-PY15	-5.2%
PY08-PY16	-5.3%	PY08-PY15	-5.1%
PY09-PY16	-5.5%	PY09-PY15	-5.3%
PY10-PY16	-5.7%	PY10-PY15	-5.6%
PY11-PY16	-5.7%	PY11-PY15	-5.4%
PY12-PY16	-5.9%	PY12-PY15	-5.6%
PY13-PY16	-7.0%	PY13-PY15	-7.3%
PY14-PY16	-6.6%	PY14-PY15	-7.0%
PY15-PY16	-6.2%		

\* Includes approximately 1st 10 months and 23 days of PY2016.

\*\* Projected value for complete PY 2016 is 13.40 based on an annual change in claim frequency of -6.2%.

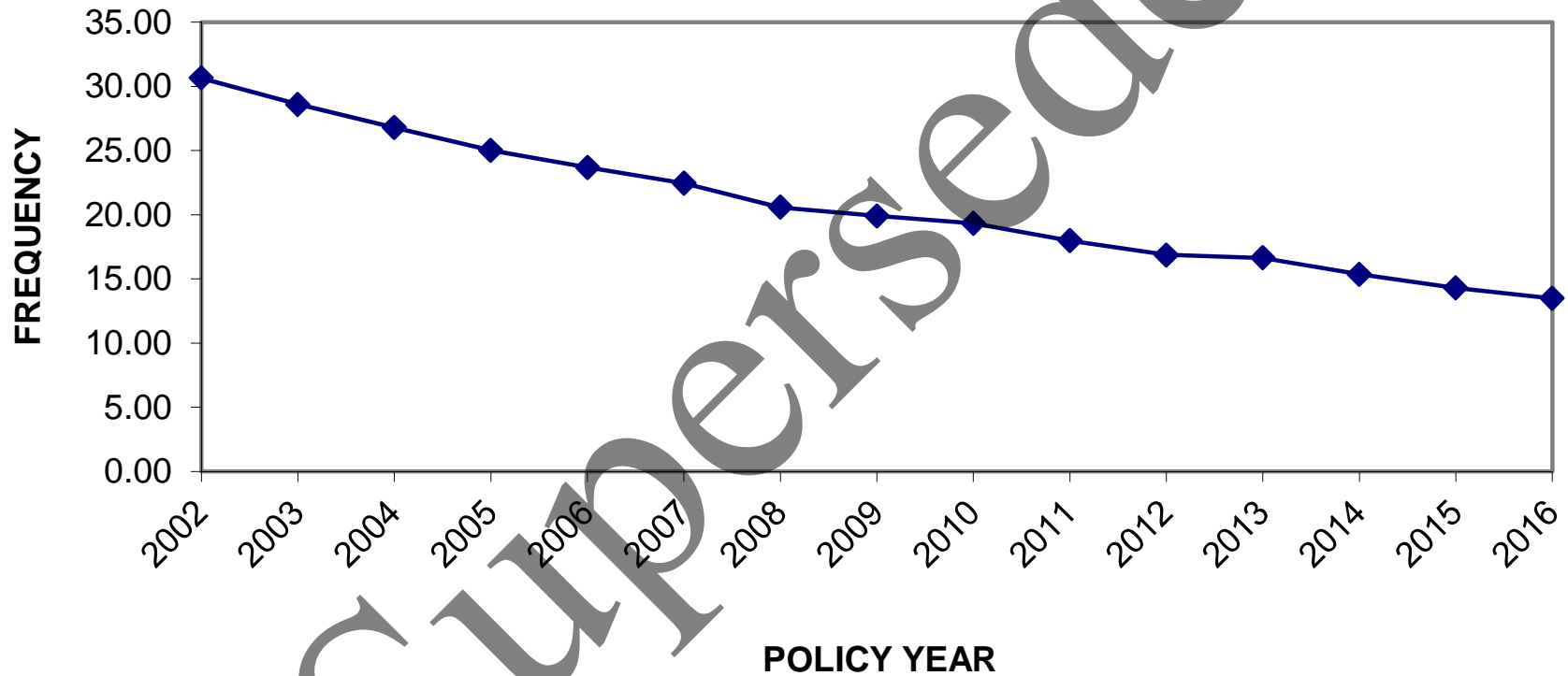
Policy Year	SAWW (1)	% Change SAWW (2)	SAWW Index (3)	Adjusted Claim Frequency * (# Claims per \$1 million) (4)	% Change Adj Claim Frequency (5)
2002	691.4		1.0000	30.65	
2003	716.4	3.6%	1.0362	29.65	-3.3%
2004	745.6	4.1%	1.0784	28.90	-2.5%
2005	778.3	4.4%	1.1257	28.16	-2.6%
2006	807.1	3.7%	1.1673	27.66	-1.8%
2007	833.5	3.3%	1.2055	27.06	-2.2%
2008	845.5	1.4%	1.2229	25.17	-7.0%
2009	860.1	1.7%	1.2440	24.78	-1.5%
2010	887.9	3.2%	1.2842	24.83	0.2%
2011	915.3	3.1%	1.3238	23.81	-4.1%
2012	932.5	1.9%	1.3487	22.77	-4.4%
2013	952.0	2.1%	1.3769	22.91	0.6%
2014	976.9	2.6%	1.4129	21.70	-5.3%
2015	997.4	2.1%	1.4426	20.61	-5.0%
2016	1,021.6	2.4%	1.4775	19.93	-3.3%
2016 (2)	1,024.4		1.4816	19.85	-3.7%

Period	Annual % Change In Adjusted Claim Frequency	Period	Annual % Change in SAWW
PY02-PY16	-2.9%	PY02-PY16	2.7%
PY03-PY16	-2.9%	PY03-PY16	2.6%
PY04-PY16	-3.0%	PY04-PY16	2.5%
PY05-PY16	-3.0%	PY05-PY16	2.4%
PY06-PY16	-3.1%	PY06-PY16	2.4%
PY07-PY16	-3.1%	PY07-PY16	2.4%
PY08-PY16	-3.0%	PY08-PY16	2.4%
PY09-PY16	-3.2%	PY09-PY16	2.4%
PY10-PY16	-3.5%	PY10-PY16	2.3%
PY11-PY16	-3.5%	PY11-PY16	2.3%
PY12-PY16	-3.7%	PY12-PY16	2.4%
PY13-PY16	-4.7%	PY13-PY16	2.4%
PY14-PY16	-4.4%	PY14-PY16	2.4%
PY15-PY16	-3.7%	PY15-PY16	2.7%

(1) Adjusted claim frequency is claim frequency per \$1 million expected losses at constant (2002) wages

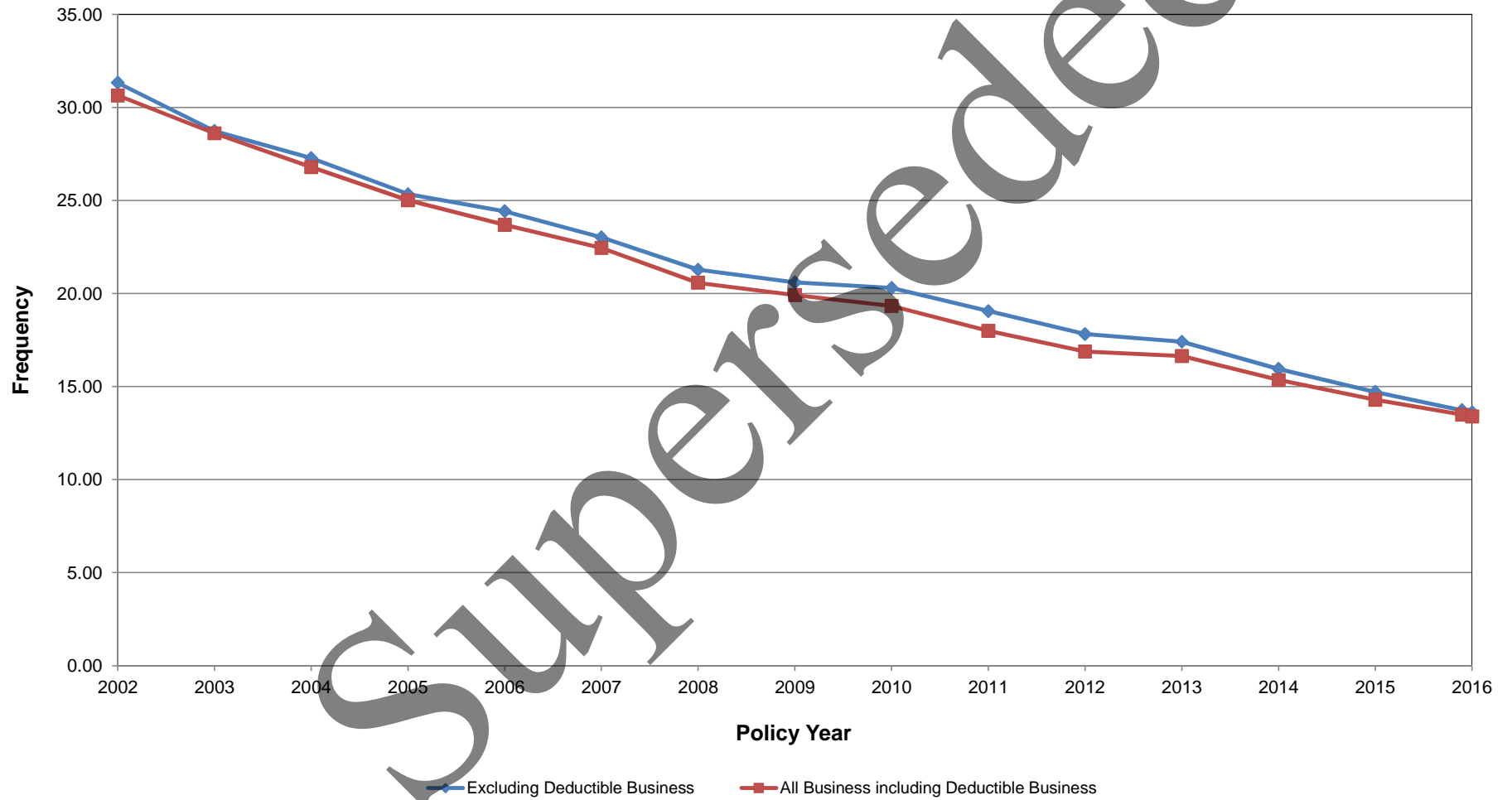
(2) Includes approximately 1st 10 months and 23 days of PY2016. ( Full Year=1024.4-Average of CY 2016 and 2017 )

### PA W.C. - CLAIM FREQUENCIES PCRB Unit Statistical Plan (All Business Incl. Deductible Business)



—◆— Claim Freq per \$1 Million Expected Losses

### PA W.C. - COMPARISON OF CLAIM FREQUENCIES (Claim Frequencies per \$1 Million Expected Losses)



**Pennsylvania W.C. - Claim Frequencies**  
 PCRB Unit Statistical Plan  
 (Excluding Deductible Business)

Policy Year	Industry Group	# of Claim Indemnity (1)	% Change Counts (2)	Expected Losses (3)	% Change Exp Loss (4)	Claim Frequency (#Claims per \$1 million) (5)	% Change Frequency (6)	Period	Annual % Change In Claim Frequency
2002	1 (MFG)	6,172		215,528,843		28.64		PY02-PY16	-5.6%
2003	1	5,914	-4.2%	211,014,361	-2.1%	28.03	-2.1%	PY03-PY16	-5.7%
2004	1	5,960	0.8%	215,437,754	2.1%	27.66	-1.3%	PY04-PY16	-5.7%
2005	1	5,604	-6.0%	220,583,265	2.4%	25.41	-8.1%	PY05-PY16	-5.5%
2006	1	5,746	2.5%	231,806,847	5.1%	24.79	-2.4%	PY06-PY16	-5.4%
2007	1	5,212	-9.3%	235,910,025	1.8%	22.09	-10.9%	PY07-PY16	-4.9%
2008	1	4,373	-16.1%	225,379,215	-4.5%	19.40	-12.2%	PY08-PY16	-4.5%
2009	1	3,801	-13.1%	209,414,985	-7.1%	18.15	-6.4%	PY09-PY16	-4.6%
2010	1	4,134	8.8%	225,239,781	7.6%	18.35	1.1%	PY10-PY16	-5.1%
2011	1	4,183	1.2%	233,782,775	3.8%	17.89	-2.5%	PY11-PY16	-5.2%
2012	1	3,625	-13.3%	222,384,546	-4.9%	16.30	-8.9%	PY12-PY16	-4.4%
2013	1	3,556	-1.9%	229,116,234	3.0%	15.52	-4.8%	PY13-PY16	-4.2%
2014	1	3,447	-3.1%	236,630,103	3.3%	14.57	-6.1%	PY14-PY16	-3.5%
2015	1	3,478	0.9%	243,203,924	2.8%	14.30	-1.9%	PY15-PY16	-5.4%
2016 *	1	3,329	-4.3%	244,529,935	0.5%	13.61	-4.8%		
2016 **	1					13.53	-5.4%		
2002	2 (Contracting)	5,926		295,448,708		20.06		PY02-PY16	-6.7%
2003	2	5,573	-6.0%	300,981,732	1.9%	18.52	-7.7%	PY03-PY16	-6.8%
2004	2	5,459	-2.0%	315,330,972	4.8%	17.31	-6.5%	PY04-PY16	-6.8%
2005	2	5,590	2.4%	333,971,037	5.9%	16.74	-3.3%	PY05-PY16	-6.9%
2006	2	5,315	-4.9%	347,565,152	4.1%	15.29	-8.7%	PY06-PY16	-6.8%
2007	2	5,259	-1.1%	366,542,985	5.5%	14.35	-6.1%	PY07-PY16	-6.9%
2008	2	4,335	-17.6%	344,415,248	-6.0%	12.59	-12.3%	PY08-PY16	-6.8%
2009	2	3,754	-13.4%	308,400,502	-10.5%	12.17	-3.3%	PY09-PY16	-7.4%
2010	2	3,842	2.3%	320,785,038	4.0%	11.98	-1.6%	PY10-PY16	-8.1%
2011	2	3,840	-0.1%	343,106,887	7.0%	11.19	-6.6%	PY11-PY16	-8.3%
2012	2	3,482	-9.3%	342,620,442	-0.1%	10.16	-9.2%	PY12-PY16	-8.5%
2013	2	3,390	-2.6%	349,059,253	1.9%	9.71	-4.4%	PY13-PY16	-9.7%
2014	2	3,318	-2.1%	373,392,921	7.0%	8.89	-8.4%	PY14-PY16	-10.2%
2015	2	3,137	-5.5%	395,148,388	5.8%	7.94	-10.7%	PY15-PY16	-9.6%
2016 *	2	2,972	-5.3%	409,919,659	3.7%	7.25	-8.7%		
2016 **	2					7.17	-9.6%		
2002	3 (Other)	17,993		613,758,804		29.32		PY02-PY16	-5.0%
2003	3	16,494	-8.3%	627,772,990	2.3%	26.27	-10.4%	PY03-PY16	-4.8%
2004	3	16,169	-2.0%	652,935,080	4.0%	24.76	-5.7%	PY04-PY16	-4.8%
2005	3	15,704	-2.9%	687,584,890	5.3%	22.84	-7.8%	PY05-PY16	-4.8%
2006	3	15,834	0.8%	709,693,397	3.2%	22.31	-2.3%	PY06-PY16	-5.0%
2007	3	16,039	1.3%	745,837,751	5.1%	21.50	-3.6%	PY07-PY16	-5.2%
2008	3	15,365	-4.2%	754,642,474	1.2%	20.36	-5.3%	PY08-PY16	-5.3%
2009	3	14,824	-3.5%	754,179,846	-0.1%	19.66	-3.4%	PY09-PY16	-5.6%
2010	3	15,341	3.5%	798,260,235	5.8%	19.22	-2.2%	PY10-PY16	-6.0%
2011	3	14,794	-3.6%	827,206,832	3.6%	17.88	-7.0%	PY11-PY16	-6.2%
2012	3	13,951	-5.7%	820,363,355	-0.8%	17.01	-4.9%	PY12-PY16	-6.8%
2013	3	14,124	1.2%	840,654,211	2.5%	16.80	-1.2%	PY13-PY16	-8.1%
2014	3	13,423	-5.0%	874,602,576	4.0%	15.35	-8.6%	PY14-PY16	-7.8%
2015	3	12,950	-3.5%	921,758,374	5.4%	14.05	-8.5%	PY15-PY16	-7.0%
2016 *	3	12,314	-4.9%	934,693,038	1.4%	13.17	-6.3%		
2016 **	3					13.07	-7.0%		

\* Includes approximately 1st 10 months and 23 days of PY2016.

\*\* Projected complete PY 2016

## PA W.C. - CLAIM FREQUENCIES BY INDUSTRY GROUP PCRB Unit Statistical Plan (Excl. Deductible Business)

