

PENNSYLVANIA COMPENSATION RATING BUREAU

State and Hazard Group Relativities

The attached exhibit pages present an analysis of Pennsylvania State and Hazard Group relativities.

The PCRБ is proposing to expand the number of hazard groups from four (I – IV) to seven (A – G), consistent with the changes implemented in many other jurisdictions. The seven hazard groups can also be combined into the more traditional, although quite different, four hazard groups now designated by 1, 2, 3 and 4.

The first page shows the derivation of the April 1, 2009 proposed relativities. PCRБ and NCCI average costs are shown by hazard group and in total. A credibility weight is calculated for each hazard group based on the number of claims. A credibility weighted average cost is then calculated and these average costs are related to the NCCI overall average cost to generate the indicated (and selected) relativities.

The second page is shown for comparative purposes and presents results that would have been achieved in the April 1, 2008 filing had the new hazard group assignments been in effect at the time. These results can also be compared to the actual April 1, 2008 relativities listed as “Current Definition” and designated I, II, III and IV.

**Derivation of State Hazard Group Relativities
April 1, 2009 Filing**

Hazard Group	PCRB Ave Cost	Ratio to PCRB Total	Ratio to NCCI Total	NCCI Ave Cost	Ratio to NCCI Total	# Claims	Cred *	Cred Wtd Ave Cost	Ratio to NCCI Total	Selected St & HG Relativity
A	38,248	1.75	1.50	33,011	1.74	10,472	0.260	34,373	1.67	1.67
B	50,926	1.32	1.13	44,215	1.30	42,448	0.523	47,725	1.20	1.20
C	58,889	1.14	0.97	49,899	1.15	86,203	0.746	56,606	1.01	1.01
D	66,206	1.01	0.87	55,494	1.03	33,176	0.463	60,454	0.95	0.95
E	74,496	0.90	0.77	64,458	0.89	61,419	0.629	70,772	0.81	0.81
F	99,682	0.67	0.58	79,499	0.72	29,454	0.436	88,299	0.65	0.65
G	120,912	0.55	0.47	105,328	0.54	5,380	0.186	108,227	0.53	0.53
	67,016			57,375		268,552	1.000			
	PCRB Ave Cost	Ratio to PCRB Total	Ratio to NCCI Total					Combined Cred Wtd Ave Cost	Ratio to NCCI Total	Selected St & HG Relativity
1	(A-B)	48,418	1.38	1.18				45,083	1.27	1.27
2	(C-D)	60,923	1.10	0.94				57,675	0.99	0.99
3	(E-F)	82,660	0.81	0.69				76,453	0.75	0.75
4	(G)	120,912	0.55	0.47				108,227	0.53	0.53

* Credibility = [# claims by TOI / 155,000]^0.5

Derivation of State Hazard Group Relativities
April 1, 2008 Filing

Hazard Group	PCRB Ave Cost	Ratio to PCRB Total	Ratio to NCCI Total	NCCI Ave Cost	Ratio to NCCI Total	# Claims	Cred *	Cred Wtd Ave Cost	Ratio to NCCI Total	Selected St & HG Relativity
A	34,732	1.66	1.60	32,539	1.71	10,458	0.260	33,109	1.68	1.68
B	43,008	1.34	1.29	43,252	1.28	37,052	0.489	43,133	1.29	1.29
C	51,855	1.11	1.07	48,807	1.14	79,912	0.718	50,995	1.09	1.09
D	58,935	0.98	0.94	54,134	1.03	31,573	0.451	56,299	0.99	0.99
E	62,853	0.92	0.88	62,589	0.89	63,723	0.641	62,758	0.89	0.89
F	79,950	0.72	0.70	77,298	0.72	23,002	0.385	78,319	0.71	0.71
G	94,823	0.61	0.59	100,992	0.55	8,996	0.241	99,505	0.56	0.56
	57,549			55,578		254,716	1.000			
	PCRB Ave Cost	Ratio to PCRB Total	Ratio to NCCI Total					Combined Cred Wtd Ave Cost	Ratio to NCCI Total	Selected St & HG Relativity
1	(A-B)	41,187	1.40	1.35				40,926	1.36	1.36
2	(C-D)	53,860	1.07	1.03				52,498	1.06	1.06
3	(E-F)	67,388	0.85	0.82				66,885	0.83	0.83
4	(G)	94,823	0.61	0.59				99,505	0.56	0.56
Current Definition										Approved Relativity
I										1.50
II										1.09
III										0.87
IV										0.62

* Credibility = [# claims by TOI / 155,000]^0.5