

DELAWARE COMPENSATION RATING BUREAU, INC.

Loss Development Triangles – Limited Losses

Pages 1 through 3 of this exhibit display indemnity triangles for incurred and paid to thirtieth loss development factors and the ratios of incurred to paid losses. Reported indemnity losses are not adjusted to a post-House Bill 373 basis.

Pages 4 through 6 of this exhibit display medical triangles on a post-House Bill 373 basis for incurred and paid to thirtieth loss development factors and the ratios of incurred to paid losses.

The number of diagonals shown in this exhibit are limited due to the change from a pre-Senate Bill 1 basis to a post-House Bill 373 basis in the rate and loss cost filing effective December 1, 2017.

Policy Year	INDEMNITY INCURRED																												
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
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AVERAGES																													
3 Year	1.4104	1.1093	1.0448	1.0274	1.0113	1.0240	1.0068	1.0135	1.0106	1.0023	1.0009	1.0020	1.0026	1.0004	0.9963	0.9987	1.0004	0.9996	1.0003	1.0001	0.9978	0.9994	1.0013	0.9991	0.9986	1.0000	0.9992	0.9996	1.0020
4 Year	1.3771	1.1209	1.0550	1.0266	1.0139	1.0216	1.0059	1.0117	1.0100	1.0012	1.0020	1.0015	1.0018	1.0001	0.9962	1.0004	1.0005	0.9992	1.0004	0.9983	0.9969	0.9993	1.0004	0.9985	0.9986	0.9998	0.9991	0.9994	1.0000
5 Year	1.3583	1.1180	1.0529	1.0184	1.0177	1.0180	1.0067	1.0121	1.0082	1.0013	1.0017	1.0002	1.0012	0.9994	0.9966	1.0003	0.9997	0.9999	1.0001	1.0006	0.9981	0.9992	1.0005	1.0017	0.9980	1.0002	0.9991	0.9994	1.0000
All Available	1.3387	1.1444	1.0522	1.0283	1.0207	1.0234	1.0088	1.0103	1.0079	1.0040	1.0004	1.0053	1.0011	0.9993	0.9984	1.0004	0.9965	1.0054	0.9972	0.9995	0.9981	1.0003	1.0006	1.0013	0.9975	0.9999	0.9993	0.9994	1.0000
Last Year Selected	1.3655	1.1152	1.0507	1.0269	1.0160	1.0103	1.0070	1.0050	1.0037	1.0028	1.0022	1.0018	1.0014	1.0012	1.0010	1.0008	1.0007	1.0006	1.0005	1.0005	1.0004	1.0003	1.0003	1.0003	1.0002	1.0002	1.0002	1.0002	0.9957
Last Year Cumulative	1.7326	1.2688	1.1378	1.0829	1.0545	1.0379	1.0273	1.0202	1.0151	1.0113	1.0085	1.0063	1.0045	1.0031	1.0019	1.0009	1.0001	0.9994	0.9988	0.9983	0.9978	0.9974	0.9971	0.9968	0.9965	0.9963	0.9961	0.9959	0.9957
Selected*	1.3774	1.1185	1.0561	1.0314	1.0193	1.0126	1.0085	1.0060	1.0042	1.0031	1.0023	1.0017	1.0013	1.0010	1.0007	1.0006	1.0004	1.0003	1.0003	1.0002	1.0002	1.0001	1.0001	1.0001	1.0001	1.0001	1.0000	1.0000	0.9958
Cumulative	1.7795	1.2919	1.1551	1.0937	1.0604	1.0403	1.0274	1.0187	1.0127	1.0084	1.0053	1.0030	1.0013	1.0000	0.9990	0.9983	0.9977	0.9973	0.9970	0.9967	0.9965	0.9963	0.9962	0.9961	0.9960	0.9959	0.9958	0.9958	0.9958

*Y = a*b^x*c
a = 0.446745 b = 0.844693 c = -1.427285

Policy Year	INDEMNITY PAID																												
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
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3 Year	1.9915	1.3861	1.1751	1.0826	1.0458	1.0472	1.0414	1.0252	1.0187	1.0170	1.0075	1.0065	1.0065	1.0030	1.0017	1.0039	1.0014	1.0042	1.0020	1.0016	1.0017	1.0002	1.0028	1.0012	1.0005	0.9996	0.9992	1.0001	1.0022
4 Year	1.9798	1.3848	1.1898	1.0755	1.0473	1.0503	1.0358	1.0283	1.0197	1.0199	1.0068	1.0067	1.0052	1.0037	1.0019	1.0056	1.0017	1.0029	1.0022	1.0012	1.0035	1.0005	1.0017	1.0011	1.0007	0.9997	0.9995	0.9997	1.0014
5 Year	1.9515	1.3973	1.1845	1.0779	1.0558	1.0481	1.0326	1.0309	1.0194	1.0174	1.0069	1.0071	1.0060	1.0043	1.0019	1.0060	1.0020	1.0031	1.0021	1.0015	1.0038	0.9998	1.0022	1.0014	0.9999	1.0007	0.9997	1.0002	1.0014
All Available	1.9656	1.4343	1.1891	1.0942	1.0612	1.0464	1.0349	1.0297	1.0182	1.0185	1.0089	1.0086	1.0089	1.0051	1.0048	1.0058	1.0025	1.0031	1.0072	1.0014	1.0028	1.0024	1.0023	1.0018	0.9984	1.0008	1.0001	1.0002	1.0014
Last Year Selected	1.9797	1.3857	1.1838	1.1036	1.0648	1.0435	1.0308	1.0226	1.0171	1.0132	1.0105	1.0084	1.0069	1.0057	1.0048	1.0041	1.0036	1.0031	1.0027	1.0025	1.0022	1.0020	1.0019	1.0017	1.0016	1.0015	1.0015	1.0098	
Last Year Cumulative	4.6392	2.3434	1.6911	1.4286	1.2944	1.2157	1.1650	1.1302	1.1052	1.0866	1.0725	1.0613	1.0525	1.0453	1.0393	1.0344	1.0302	1.0265	1.0233	1.0205	1.0180	1.0158	1.0137	1.0118	1.0101	1.0085	1.0070	1.0055	
Selected*	1.9799	1.3851	1.1784	1.0972	1.0591	1.0388	1.0270	1.0196	1.0148	1.0114	1.0090	1.0073	1.0060	1.0050	1.0042	1.0036	1.0031	1.0026	1.0023	1.0020	1.0018	1.0016	1.0014	1.0013	1.0011	1.0010	1.0009	1.0009	1.0095**
Cumulative	4.4527	2.2490	1.6237	1.3779	1.2558	1.1857	1.1414	1.1114	1.0901	1.0742	1.0621	1.0526	1.0450	1.0387	1.0336	1.0292	1.0255	1.0224	1.0197	1.0174	1.0154	1.0135	1.0119	1.0105	1.0092	1.0081	1.0071	1.0062	1.0053

*Y = exp(a+b/x+c*ln(x))
a = 1.751642 b = -1.771941 c = -2.625722
** Paid-Incurred four-year average

Policy Year	INDEMNITY PAID-INCURRED																													
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	
1986																										1.0232	1.0191	1.0167	1.0175	1.0076
1987																									1.0096	0.9995	1.0154	1.0121	1.0098	1.0206
1988																								1.0146	1.0170	1.0086	1.0097	1.0029	1.0021	1.0020
1989																								1.0115	1.0140	1.0082	1.0039	1.0065	1.0040	1.0074
1990																								1.0225	1.0192	1.0186	1.0308	1.0257	1.0273	1.0252
1991																								1.0402	1.0312	1.0389	1.0187	1.0064	1.0028	1.0007
1992																								0.9988	0.9996	1.0001	1.0008	1.0008	1.0005	0.9996
1993																								1.0086	1.0294	1.0272	1.0299	1.0154	1.0148	1.0077
1994																								1.0438	1.0272	1.0394	1.0257	1.0187	1.0222	1.0206
1995																								1.0470	1.0771	1.0708	1.0394	1.0257	1.0187	1.0222
1996																								1.0294	1.0272	1.0299	1.0154	1.0148	1.0077	1.0053
1997																								1.0086	1.0257	1.0394	1.0257	1.0187	1.0222	1.0206
1998																								1.0258	1.0284	1.0244	1.0215	1.0112	1.0055	
1999																								1.0277	1.0169	1.0170	1.0127	1.0137		
2000																								1.0140	1.0118	1.0069	1.0057			
2001																								1.0091	1.0015	1.0005				
2002																								1.0057	1.0077	1.0072	1.0048			
2003																								1.0048	1.0072	1.0072	1.0048			
2004																								1.0048	1.0072	1.0072	1.0048			
2005																								1.0048	1.0072	1.0072	1.0048			
2006																								1.0048	1.0072	1.0072	1.0048			
2007																								1.0048	1.0072	1.0072	1.0048			
2008																								1.0048	1.0072	1.0072	1.0048			
2009																								1.0048	1.0072	1.0072	1.0048			
2010																								1.0048	1.0072	1.0072	1.0048			
2011																								1.0048	1.0072	1.0072	1.0048			
2012																								1.0048	1.0072	1.0072	1.0048			
2013																								1.0048	1.0072	1.0072	1.0048			
2014																								1.0048	1.0072	1.0072	1.0048			
2015																								1.0048	1.0072	1.0072	1.0048			
2016																								1.0048	1.0072	1.0072	1.0048			
2017																								1.0048	1.0072	1.0072	1.0048			
AVERAGES																														
3 Year	3.1984	1.8104	1.3628	1.2202	1.1427	1.1229	1.0999	1.0854	1.0826	1.0587	1.0360	1.0282	1.0297	1.0202	1.0188	1.0191	1.0165	1.0106	1.0081	1.0133	1.0108	1.0105	1.0139	1.0097	1.0029	1.0092	1.0105	1.0116	1.0101	
4 Year	3.1905	1.8425	1.3980	1.2116	1.1473	1.1468	1.0980	1.0943	1.0818	1.0565	1.0342	1.0341	1.0245	1.0246	1.0226	1.0186	1.0159	1.0122	1.0122	1.0120	1.0145	1.0117	1.0107	1.0089	1.0086	1.0085	1.0086	1.0111	1.0095	
5 Year	3.1692	1.8743	1.3873	1.2162	1.1793	1.1438	1.1069	1.0982	1.0799	1.0514	1.0396	1.0309	1.0293	1.0293	1.0207	1.0197	1.0182	1.0154	1.0138	1.0175	1.0176	1.0094	1.0123	1.0133	1.0076	1.0088	1.0093	1.0124	1.0095	
All Available	3.2924	1.9663	1.4364	1.2649	1.1940	1.1600	1.1158	1.0966	1.0767	1.0617	1.0475	1.0427	1.0380	1.0327	1.0292	1.0260	1.0236	1.0276	1.0222	1.0192	1.0177	1.0146	1.0136	1.0126	1.0087	1.0112	1.0105	1.0124	1.0095	
Last Year Selected	3.2522	1.8384	1.4071	1.2243	1.1894	1.1462	1.1220	1.1088	1.0782	1.0511	1.0388	1.0290	1.0316	1.0318	1.0204	1.0247	1.0187	1.0166	1.0191	1.0227	1.0201	1.0142	1.0175	1.0154	1.0098	1.0124	1.0118	1.0098		
Selected	3.1905	1.8425	1.3980	1.2116	1.1473	1.1468	1.0980	1.0943	1.0818	1.0565	1.0342	1.0341	1.0245	1.0246	1.0226	1.0186	1.0159	1.0122	1.0122	1.0120	1.0145	1.0117	1.0107	1.0089	1.0086	1.0085	1.0086	1.0111	1.0095	

$$*Y = 1 - \exp(-a * b^x)$$
$$a = 0.222050 \quad b = 0.772059$$

Policy Year	MEDICAL PAID-INCURRED (POST-HB373)																													
	1/2	2/3	3/4	4/5	5/6	6/7	7/8	8/9	9/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	
1986																										1.0756	1.0466	1.0371	1.0327	1.0269
1987																									1.1111	1.1157	1.0771	1.0729	1.0832	1.0862
1988																							1.0245	1.0204	1.0069	1.0097	1.0091	1.0107	1.0105	
1989																					1.1146	1.0497	1.0480	1.0437	1.0384	1.0255	1.0353	1.0129	1.0122	
1990																				1.0704	1.0579	1.0347	1.0297	1.0179	1.0188	1.0196	1.0142			
1991																			1.0324	1.0218	1.0180	1.0213	1.0222	1.0235	1.0115	1.0130				
1992																														
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AVERAGES																														
3 Year	1.8415	1.4336	1.2714	1.2929	1.2149	1.2038	1.2352	1.2723	1.2651	1.2047	1.1599	1.1661	1.1984	1.1626	1.1412	1.1303	1.1089	1.0787	1.0772	1.1043	1.0907	1.0670	1.0643	1.0563	1.0305	1.0428	1.0474	1.0364	1.0363	
4 Year	1.8311	1.4264	1.2754	1.2761	1.2268	1.2158	1.2451	1.2635	1.2600	1.2170	1.1641	1.1808	1.1780	1.1764	1.1375	1.1160	1.1052	1.0854	1.0978	1.1006	1.0832	1.0715	1.0538	1.0467	1.0485	1.0385	1.0379	1.0481	1.0340	
5 Year	1.8209	1.4268	1.2761	1.2753	1.2448	1.2247	1.2410	1.2622	1.2570	1.2076	1.1739	1.1726	1.1802	1.1680	1.1296	1.1094	1.1068	1.1034	1.0939	1.0957	1.0839	1.0615	1.0489	1.0546	1.0464	1.0327	1.0449	1.0450	1.0340	
All Available	1.7884	1.4217	1.2876	1.2822	1.2573	1.2417	1.2458	1.2493	1.2432	1.2097	1.1839	1.1709	1.1598	1.1472	1.1398	1.1279	1.1186	1.1088	1.0868	1.0823	1.0762	1.0609	1.0474	1.0561	1.0538	1.0410	1.0436	1.0450	1.0340	
Last Year Selected	1.7828	1.3729	1.2755	1.2256	1.2473	1.2411	1.2403	1.2398	1.2274	1.1952	1.1794	1.1804	1.1760	1.1600	1.1219	1.1186	1.0963	1.1080	1.0969	1.0981	1.0777	1.0491	1.0444	1.0471	1.0375	1.0318	1.0471	1.0312		
Selected	1.8311	1.4264	1.2754	1.2761	1.2268	1.2158	1.2451	1.2635	1.2600	1.2170	1.1641	1.1808	1.1780	1.1764	1.1375	1.1160	1.1052	1.0854	1.0978	1.1006	1.0832	1.0715	1.0538	1.0467	1.0485	1.0385	1.0379	1.0481	1.0340	