

DELAWARE COMPENSATION RATING BUREAU, INC.

Loss Development Triangles – Unlimited 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 reported basis and a post-House Bill 373 basis for incurred and paid to thirtieth loss development factors and the ratios of incurred to paid losses.

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		
1986																					0.9846	1.0019	1.0219	1.0006	1.0013	0.9996	1.0013	1.0008	0.9999		
1987																				1.0072	1.0103	1.0068	1.0045	1.0048	0.9911	1.0011	1.0007	1.0010	1.0094		
1988																			0.9962	1.0047	1.0038	0.9940	1.0017	1.0059	1.0026	1.0031	0.9989	1.0012	1.0000		
1989																	0.9967	1.0169	1.0050	1.0046	1.0007	1.0156	1.0101	1.0006	0.9969	0.9978	0.9991	1.0014			
1990															0.9749	1.0350	0.9992	1.0019	0.9996	1.0032	0.9998	1.0195	0.9997	1.0030	0.9983	1.0003					
1991														1.0043	1.0029	1.0199	1.0019	0.9983	0.9996	1.0119	1.0009	0.9960	0.9991	1.0029	1.0023						
1992														1.0011	1.0046	1.0041	1.0013	1.0123	0.9901	1.0037	1.0034	1.0004	1.0007	0.9984	1.0095						
1993													1.0126	1.0064	1.0041	1.0013	1.0123	0.9901	1.0037	1.0034	1.0004	1.0007	0.9984	1.0095							
1994												1.0108	1.0060	1.0205	1.0077	1.0263	0.9812	1.0251	0.9932	1.0123	0.9968	1.0051	1.0074	1.0025							
1995												1.0082	1.0082	0.9936	1.0042	1.0003	1.0006	1.0174	0.9999	0.9998	1.0006	1.0009	0.9995								
1996												1.0032	1.0121	1.0189	1.0057	1.0059	1.0014	0.9951	1.0029	1.0009	1.0001	0.9979	0.9989								
1997											1.0111	0.9903	1.0016	1.0013	1.0042	0.9991	0.9985	0.9820	1.0013	1.0015	1.0008	1.0029									
1998											1.0019	1.0022	1.0080	1.0069	1.0053	0.9980	1.0016	1.0037	1.0021	1.0003	1.0031	1.0001									
1999											0.9945	1.0129	1.0033	0.9902	1.0256	0.9965	0.9956	1.0014	1.0019	1.0029	0.9955	1.0000									
2000											1.0209	1.0407	0.9880	0.9915	0.9982	1.0201	1.0027	0.9998	0.9972	0.9993	0.9998	0.9984									
2001											0.9990	1.0249	1.0173	1.0161	1.0002	1.0026	1.0023	1.0001	1.0000	0.9960	1.0003	1.0012									
2002											1.0345	1.0168	1.0068	1.0144	1.0120	1.0033	1.0085	0.9980	1.0004	1.0000	1.0013	0.9993									
2003											1.0462	1.0065	1.0319	1.0197	1.0122	1.0080	1.0233	1.0012	1.0017	0.9988	0.9984	0.9947									
2004											1.0468	1.0301	1.0139	1.0073	1.0219	1.0029	1.0058	0.9927	1.0069	1.0035											
2005											1.1680	1.0903	1.0375	1.0161	1.0051	1.0058	1.0032	1.0013	0.9985	1.0039	1.0012	1.0057									
2006											1.3367	1.1782	1.0736	1.0702	1.0148	1.0321	1.0129	1.0168	1.0092	0.9971	0.9965	1.0047									
2007											1.4039	1.1861	0.9955	1.0177	1.0288	1.0376	1.0137	1.0067	0.9963	1.0015	1.0050										
2008											1.4027	1.1910	1.0364	1.0532	1.0329	1.0054	1.0064	1.0074	1.0273	1.0033											
2009											1.3447	1.2597	1.0617	1.0535	1.0045	1.0141	1.0173	1.0229	1.0136												
2010											1.3262	1.2546	1.0599	0.9715	1.0207	1.0324	1.0040	1.0223													
2011											1.2877	1.1019	1.0396	1.0233	1.0096	1.0188	0.9996														
2012											1.3206	1.1074	1.0844	1.0263	1.0100	1.0227															
2013											1.2829	1.1557	1.0302	1.0238	1.0144																
2014											1.2684	1.0984	1.0548	1.0294																	
2015											1.4364	1.0745	1.0317																		
2016											1.4224	1.1314																			
2017											1.3255																				

AVERAGES	Tail Factor																														
3 year	1.3948	1.1014	1.0389	1.0265	1.0113	1.0246	1.0070	1.0175	1.0124	1.0006	1.0018	0.9995	1.0038	1.0006	0.9973	0.9996	1.0013	0.9981	1.0015	1.0003	1.0005	1.0016	1.0025	1.0002	1.0029	1.0021	0.9995	1.0002	1.0036		
4 year	1.3632	1.1150	1.0503	1.0257	1.0137	1.0220	1.0068	1.0148	1.0116	1.0001	1.0028	1.0001	1.0030	1.0005	0.9973	1.0002	1.0015	0.9989	1.0014	1.0002	0.9996	1.0013	1.0022	0.9992	1.0021	1.0008	0.9993	1.0004	1.0027		
5 year	1.3471	1.1135	1.0481	1.0149	1.0118	1.0187	1.0082	1.0152	1.0095	1.0007	1.0025	0.9997	1.0024	1.0003	0.9981	1.0009	0.9976	0.9997	1.0011	1.0026	1.0003	1.0016	1.0019	1.0032	1.0018	1.0013	0.9996	1.0005	1.0027		
All Available	1.3465	1.1589	1.0504	1.0319	1.0172	1.0186	1.0128	1.0134	1.0079	1.0032	1.0011	1.0065	1.0042	1.0027	1.0014	1.0037	0.9957	1.0092	1.0002	1.0028	1.0004	1.0024	1.0053	1.0042	1.0005	1.0010	0.9999	1.0005	1.0027		
Last Year Selected	1.3522	1.1106	1.0448	1.0238	1.0148	1.0102	1.0076	1.0059	1.0047	1.0038	1.0032	1.0027	1.0023	1.0019	1.0017	1.0014	1.0012	1.0011	1.0009	1.0008	1.0007	1.0006	1.0005	1.0004	1.0003	1.0002	1.0002	1.0001	0.9981		
Last Year Cumulative	1.7144	1.2678	1.1416	1.0926	1.0672	1.0517	1.0410	1.0332	1.0271	1.0223	1.0184	1.0152	1.0125	1.0101	1.0082	1.0065	1.0051	1.0039	1.0028	1.0019	1.0011	1.0004	0.9998	0.9993	0.9989	0.9986	0.9984	0.9982	0.9981		
Selected*	1.3633	1.1136	1.0521	1.0291	1.0183	1.0125	1.0090	1.0068	1.0052	1.0042	1.0034	1.0028	1.0024	1.0020	1.0017	1.0015	1.0013	1.0011	1.0010	1.0009	1.0008	1.0007	1.0007	1.0006	1.0006	1.0005	1.0005	1.0004	1.0004	0.9925	
Cumulative	1.7654	1.2950	1.1629	1.1053	1.0740	1.0547	1.0417	1.0324	1.0254	1.0201	1.0159	1.0124	1.0096	1.0072	1.0052	1.0035	1.0020	1.0007	0.9996	0.9986	0.9977	0.9969	0.9962	0.9955	0.9949	0.9943	0.9938	0.9933	0.9929	0.9925	

*Y = exp(a+b/x+c*ln(x))
a = -0.216073 b = -0.796489 c = -2.251746

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	
1986																					1.0049	1.0113	1.0165	1.0024	1.0027	1.0013	1.0024	1.0027	1.0025	
1987																					1.0006	1.0112	1.0041	1.0096	1.0016	0.9864	1.0028	1.0022	1.0012	1.0087
1988																					1.0032	1.0032	1.0064	1.0032	1.0024	1.0080	1.0022	1.0070	1.0013	1.0013
1989																		1.0043	1.0052	1.0071	1.0127	1.0045	1.0083	1.0053	1.0064	1.0023	1.0116	1.0021	1.0035	
1990																	1.0198	1.0587	1.0036	1.0025	1.0034	1.0067	1.0033	1.0038	1.0033	1.0034	1.0059	1.0022		
1991																1.0032	1.0126	1.0050	1.0016	1.0058	1.0034	1.0239	1.0061	1.0013	1.0027	1.0032	1.0030			
1992															1.0032	1.0105	1.0099	1.0006	1.0087	1.0010	1.0006	1.0006	1.0014	1.0006	1.0004	1.0004	1.0004			
1993															1.0174	1.0153	1.0067	1.0068	1.0076	1.0032	1.0097	1.0055	1.0020	1.0035	1.0024	1.0024				
1994															1.0158	1.0084	1.0063	1.0080	1.0055	1.0030	1.0473	1.0033	1.0154	1.0023	1.0057	1.0021				
1995															1.0025	1.0077	1.0117	1.0071	1.0030	1.0042	1.0013	1.0024	1.0022	1.0023	1.0023	1.0022				
1996															1.0066	1.0107	1.0232	1.0162	1.0113	1.0128	1.0035	1.0035	1.0030	1.0027	1.0024	1.0025				
1997															1.0147	1.0221	1.0092	1.0100	1.0140	1.0136	1.0089	1.0037	1.0028	1.0055	1.0025	1.0043				
1998															1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016					
1999															1.0300	1.0233	1.0093	1.0031	1.0106	1.0254	1.0079	1.0020	1.0104	1.0041	1.0010	1.0000				
2000															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2001															1.0147	1.0221	1.0092	1.0100	1.0140	1.0136	1.0089	1.0037	1.0028	1.0055	1.0025	1.0043				
2002															1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016					
2003															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2004															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2005															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2006															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2007															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2008															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2009															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2010															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2011															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2012															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2013															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2014															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2015															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2016															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				
2017															1.0220	1.0144	1.0194	1.0157	1.0101	1.0028	1.0101	1.0153	1.0025	1.0066	1.0010	1.0016				

AVERAGES																															Tail Factor
3 year	1.9736	1.3740	1.1706	1.0826	1.0464	1.0477	1.0428	1.0273	1.0187	1.0170	1.0077	1.0069	1.0070	1.0040	1.0025	1.0051	1.0013	1.0044	1.0022	1.0023	1.0030	1.0024	1.0038	1.0017	1.0018	1.0023	1.0068	1.0017	1.0045		
4 year	1.9663	1.3757	1.1864	1.0755	1.0481	1.0507	1.0368	1.0299	1.0197	1.0200	1.0074	1.0070	1.0062	1.0045	1.0024	1.0064	1.0016	1.0040	1.0024	1.0023	1.0061	1.0023	1.0032	1.0016	1.0022	1.0023	1.0055	1.0016	1.0040		
5 year	1.9407	1.3899	1.1820	1.0783	1.0564	1.0486	1.0334	1.0321	1.0194	1.0178	1.0074	1.0078	1.0068	1.0056	1.0023	1.0082	1.0020	1.0039	1.0024	1.0025	1.0060	1.0019	1.0038	1.0020	1.0030	1.0033	1.0048	1.0018	1.0040		
All Available	1.9923	1.4391	1.1859	1.0979	1.0636	1.0460	1.0352	1.0329	1.0207	1.0170	1.0124	1.0093	1.0112	1.0089	1.0066	1.0081	1.0060	1.0083	1.0071	1.0035	1.0060	1.0058	1.0059	1.0031	1.0008	1.0029	1.0044	1.0018	1.0040		
Last Year Selected	1.9722	1.3785	1.1812	1.1030	1.0652	1.0444	1.0319	1.0239	1.0185	1.0148	1.0120	1.0100	1.0085	1.0073	1.0064	1.0057	1.0051	1.0047	1.0043	1.0040	1.0038	1.0036	1.0034	1.0033	1.0032	1.0031	1.0030	1.0262**	0.9981		
Last Year Cumulative	4.8279	2.4480	1.7758	1.5034	1.3630	1.2796	1.2252	1.1873	1.1596	1.1385	1.1219	1.1086	1.0977	1.0884	1.0805	1.0737	1.0676	1.0621	1.0572	1.0527	1.0485	1.0445	1.0407	1.0372	1.0338	1.0305	1.0273	1.0243	0.9981		
Selected*	1.9663	1.3779	1.1713	1.0950	1.0597	1.0408	1.0295	1.0223	1.0174	1.0140	1.0115	1.0096	1.0082	1.0070	1.0062	1.0054	1.0048	1.0044	1.0040	1.0036	1.0033	1.0031	1.0029	1.0027	1.0025	1.0024	1.0022	1.0021	1.0272**	0.9925	
Cumulative	4.6218	2.3505	1.7059	1.4564	1.3300	1.2551	1.2059	1.1713	1.1458	1.1262	1.1106	1.0980	1.0876	1.0787	1.0712	1.0646	1.0589	1.0539	1.0492	1.0451	1.0413	1.0379	1.0347	1.0317	1.0289	1.0263	1.0239	1.0216	1.0195	0.9925	

*Y = a+b/x+c/x^2+d/x^3+e/x^4
a = 0.001306 b = -0.032185 c = 1.533155 d = 0.687116 e = -1.223128
** Paid-Incurred four-year average

INDEMNITY PAID - INCURRED

Policy Year	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																					1.0469	1.0438	1.0553	1.0388	1.0374	1.0343	1.0334	1.0346	1.0317	
1987																					1.0298	1.0397	1.0352	1.0357	1.0306	1.0199	1.0329	1.0335	1.0323	1.0407
1988																				1.0280	1.0296	1.0309	1.0183	1.0168	1.0206	1.0160	1.0163	1.0081	1.0081	1.0073
1989																			1.0507	1.0638	1.0639	1.0613	1.0484	1.0600	1.0634	1.0574	1.0474	1.0427	1.0299	1.0292
1990																														
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AVERAGES																														
3 year	3.2073	1.8216	1.3646	1.2261	1.1453	1.1284	1.1068	1.0953	1.0927	1.0667	1.0449	1.0336	1.0390	1.0373	1.0347	1.0361	1.0237	1.0164	1.0242	1.0326	1.0413	1.0346	1.0361	1.0217	1.0197	1.0259	1.0358	1.0243	1.0257	
4 year	3.2090	1.8509	1.4004	1.2175	1.1518	1.1524	1.1044	1.1062	1.0912	1.0634	1.0463	1.0407	1.0400	1.0386	1.0376	1.0315	1.0234	1.0264	1.0268	1.0365	1.0425	1.0327	1.0294	1.0231	1.0264	1.0313	1.0289	1.0263	1.0272	
5 year	3.1840	1.8831	1.3915	1.2241	1.1846	1.1487	1.1142	1.1091	1.0878	1.0615	1.0507	1.0433	1.0424	1.0429	1.0336	1.0324	1.0305	1.0286	1.0316	1.0398	1.0405	1.0279	1.0310	1.0286	1.0326	1.0283	1.0298	1.0280	1.0272	
All Available	3.4608	2.0421	1.4839	1.3016	1.2132	1.1682	1.1376	1.1199	1.0967	1.0861	1.0720	1.0648	1.0636	1.0572	1.0501	1.0495	1.0429	1.0487	1.0418	1.0391	1.0400	1.0354	1.0358	1.0329	1.0295	1.0298	1.0304	1.0280	1.0272	
Last Year Selected	3.2720	1.8397	1.4160	1.2306	1.1964	1.1527	1.1301	1.1164	1.0865	1.0611	1.0474	1.0440	1.0463	1.0462	1.0337	1.0319	1.0307	1.0289	1.0394	1.0462	1.0376	1.0291	1.0283	1.0264	1.0338	1.0338	1.0314	1.0262		
Selected	3.2090	1.8509	1.4004	1.2175	1.1518	1.1524	1.1044	1.1062	1.0912	1.0634	1.0463	1.0407	1.0400	1.0386	1.0376	1.0315	1.0234	1.0264	1.0268	1.0365	1.0425	1.0327	1.0294	1.0231	1.0264	1.0313	1.0289	1.0263	1.0272	

