

PENNSYLVANIA COMPENSATION RATING BUREAU

Paid and Incurred Loss Development and Trend

Page 1 of the attachment shows the calculation of expected losses. Standard Earned Premiums are developed to ultimate, adjusted to current rate level, adjusted to remove expense constants, adjusted for the Pennsylvania Construction Classification Premium Adjustment Program, multiplied by the permissible loss ratio underlying the 12/1/92 rate level, adjusted to remove loss based assessments included in manual loss costs, and then multiplied by the factor representing the cumulative loss cost change to 01/01/19 to yield expected losses at current levels.

Pages 2 through 13 present indemnity losses.

Page 2 shows incurred and paid loss development factors and ratios of incurred to paid losses. Data for the latest two sets of factors (2015-2016 and 2016-2017) are based on the current Table I. Ratios for earlier periods are also shown for comparison purposes. With the exception of the “tail” factor and the 29-30 medical incurred loss development factor, an average of the latest two factors has been selected. A curve fitting approach was used to select the 29-30 factor due to the presence of a large claim. The “tail” factor has been calculated by a method that uses a four-year average and incorporates an adjustment to account for the fact that the tail factor calculation methodology traditionally understates the true result. Tail factor calculations are presented in Exhibit 1c.

Page 3 arranges the factors according to the loss development approach shown. There are two methods shown: case incurred and paid to thirtieth.

Page 4 shows on-level factors that adjust indemnity benefits to a post-Act 57 basis. Loss adjustment expense is not included in this analysis.

Page 5 shows the loss base (paid or incurred losses depending on the method) to which the development factors apply and also the projected ultimate level of losses. Note that staff has added a column showing the average of the case incurred and the paid to thirtieth methods.

The top portion of Page 6 presents ultimate loss ratios (ratios of projected loss to expected loss) by policy year for each methodology. Expected losses include provisions for both indemnity and medical combined.

The middle portion of Page 6 presents information on claim frequencies, which are discussed further in Exhibit 8. The first column shows frequencies by policy year. The second column shows normalized values for claim frequency with policy year 2005 set equal to unity. Staff has selected an annual frequency trend factor of -6.3%.

The lower portion of Page 6 shows severity ratios which are defined herein as loss ratios adjusted to a common underlying claim frequency level. The severity ratios are calculated by dividing the loss ratios in the top section of Page 6 by the normalized claim frequencies in the middle portion of Page 6 for each policy year and loss development approach.

Page 7 shows fitted values for severity ratios fitted to a straight line for each loss development approach and using from 4 to 10 points. The top portion of Page 8 shows those same straight lines trended to the midpoint of the prospective rating period (4/1/20). The second section of Page 8 shows severity trend factors by policy year calculated by dividing the trended points on Page 8 by the fitted values on Page 7.

Pages 9 and 10 present the analogous exponential severity trend factor calculation. Page 11 shows the loss ratio trend factors by policy year, which are the product of the severity (Page 10) and frequency (Page 6) trend factors that were previously calculated.

Pages 12 and 13 show averages of the three latest policy years trended to the midpoint of the prospective rating period (4/1/20) on a linear and an exponential basis respectively.

Pages 14 through 25 show experience for medical losses laid out the same way as Pages 2 through 13. Page 26 shows a summary of annualized severity trend factors and Page 27 shows annualized loss ratio trend factors.

PREMIUMS	PDF 12-13	PDF 13-14	PDF 14-15	PDF 15-16	PDF 16-17	4 Year Average	Selected PDF
29-30				1.0000	1.0000		1.0000
28-29			1.0000	1.0000	1.0000		1.0000
27-28		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
26-27	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000
25-26	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
24-25	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
23-24	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
22-23	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
21-22	1.0000	1.0000	1.0000	1.0002	1.0000	1.0001	1.0000
20-21	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
19-20	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
18-19	1.0000	1.0000	1.0001	0.9999	1.0000	1.0000	1.0000
17-18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
16-17	1.0000	1.0000	1.0000	0.9999	1.0000	1.0000	1.0000
15-16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
14-15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
13-14	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000
12-13	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
11-12	0.9999	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000
10-11	1.0000	0.9999	1.0000	1.0000	1.0000	1.0000	1.0000
9-10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
8-9	0.9999	1.0000	1.0000	1.0002	0.9988	0.9998	0.9998
7-8	1.0000	1.0000	1.0000	0.9999	0.9999	1.0000	1.0000
6-7	1.0000	0.9999	1.0000	1.0011	1.0003	1.0003	1.0003
5-6	1.0000	0.9997	0.9997	1.0002	1.0002	1.0000	1.0000
4-5	1.0001	0.9997	1.0001	0.9999	0.9995	0.9998	0.9998
3-4	0.9992	1.0002	1.0002	0.9996	1.0006	1.0002	1.0002
2-3	0.9987	1.0003	0.9994	1.0012	1.0007	1.0004	1.0004
1-2	1.0094	1.0073	1.0099	1.0084	1.0092	1.0087	1.0087

PREMIUMS	Policy Year	Reported SEP	Cum PDF	Ultimate SEP	Premium On-Level To 12/1/92	ECRF	PCCPAP Factor
29-30	1988	1,892,967,737	1.0000	1,892,967,737	1.7528	0.9894	1.0000
28-29	1989	2,028,267,129	1.0000	2,028,267,129	1.6199	0.9902	1.0000
27-28	1990	2,290,233,534	1.0000	2,290,233,534	1.4862	0.9913	1.0000
26-27	1991	2,398,359,195	1.0000	2,398,359,195	1.2445	0.9913	1.0051
25-26	1992	2,244,461,757	1.0000	2,244,461,757	1.2271	0.9916	1.0048
24-25	1993	2,410,370,517	1.0000	2,410,370,517	1.0000	0.9936	1.0048
23-24	1994	1,821,555,070	1.0000	1,821,555,070	1.0000	1.0000	1.0050
22-23	1995	1,680,387,566	1.0000	1,680,387,566	1.0000	1.0000	1.0038
21-22	1996	1,596,668,963	1.0000	1,596,668,963	1.0000	1.0000	0.9963
20-21	1997	1,313,191,877	1.0000	1,313,191,877	1.0000	1.0000	0.9937
19-20	1998	1,259,209,776	1.0000	1,259,209,776	1.0000	1.0000	0.9919
18-19	1999	1,271,772,492	1.0000	1,271,772,492	1.0000	1.0000	0.9919
17-18	2000	1,334,908,458	1.0000	1,334,908,458	1.0000	1.0000	0.9966
16-17	2001	1,430,998,196	1.0000	1,430,998,196	1.0000	1.0000	0.9974
15-16	2002	1,499,188,529	1.0000	1,499,188,529	1.0000	1.0000	0.9988
14-15	2003	1,566,149,453	1.0000	1,566,149,453	1.0000	1.0000	0.9992
13-14	2004	1,674,833,631	1.0000	1,674,833,631	1.0000	1.0000	1.0000
12-13	2005	1,839,505,833	1.0000	1,839,505,833	1.0000	1.0000	1.0016
11-12	2006	1,813,987,513	1.0000	1,813,987,513	1.0000	1.0000	1.0019
10-11	2007	1,875,078,635	1.0000	1,875,078,635	1.0000	1.0000	1.0013
9-10	2008	1,726,572,321	1.0000	1,726,572,321	1.0000	1.0000	0.9989
8-9	2009	1,532,188,924	0.9998	1,531,882,486	1.0000	1.0000	0.9987
7-8	2010	1,602,977,986	0.9998	1,602,657,390	1.0000	1.0000	1.0055
6-7	2011	1,650,529,182	1.0001	1,650,694,235	1.0000	1.0000	1.0057
5-6	2012	1,539,247,581	1.0001	1,539,401,506	1.0000	1.0000	1.0067
4-5	2013	1,502,866,414	0.9999	1,502,716,127	1.0000	1.0000	1.0067
3-4	2014	1,513,882,133	1.0001	1,514,033,521	1.0000	1.0000	1.0066
2-3	2015	1,507,408,015	1.0005	1,508,161,719	1.0000	1.0000	1.0076
1-2	2016	1,492,574,056	1.0092	1,506,305,737	1.0000	1.0000	1.0078

PREMIUMS	Policy Year	On-Level SEP	Expected Loss Ratio 12/1/92 Level	Expected Losses 12/1/92 Level	Loss Cost On-Level To 1/1/19	Expected Losses Current Level
	1988	3,282,823,115	0.7815	2,565,526,264	0.3435	881,258,272
	1989	3,253,391,141	0.7815	2,542,525,177	0.3435	873,357,398
	1990	3,374,132,496	0.7815	2,636,884,546	0.3435	905,769,842
	1991	2,973,880,456	0.7815	2,324,087,576	0.3435	798,324,082
	1992	2,744,152,929	0.7815	2,144,555,514	0.3435	736,654,819
	1993	2,406,439,878	0.79162914	1,905,007,931	0.34393035	655,190,044
	1994	1,830,662,845	0.9869	1,806,681,162	0.3505	633,241,747
	1995	1,686,773,039	0.9864	1,663,832,926	0.3525	586,501,106
	1996	1,590,761,288	0.9789	1,557,196,225	0.3870	602,634,939
	1997	1,304,918,768	0.9725	1,269,033,502	0.4768	605,075,174
	1998	1,249,010,177	0.9660	1,206,543,831	0.5424	654,429,374
	1999	1,261,471,135	0.9651	1,217,445,792	0.5756	700,761,798
	2000	1,330,369,769	0.9925	1,320,391,996	0.5672	748,926,340
	2001	1,427,277,601	0.9923	1,416,287,563	0.5662	801,902,018
	2002	1,497,389,503	0.9929	1,486,758,038	0.5606	833,476,556
	2003	1,564,896,533	0.9910	1,550,812,464	0.5665	878,535,261
	2004	1,674,833,631	0.9906	1,659,090,195	0.5580	925,772,329
	2005	1,842,449,042	0.9912	1,826,235,490	0.5638	1,029,631,569
	2006	1,817,434,089	0.9897	1,798,714,518	0.6041	1,086,603,440
	2007	1,877,516,237	0.9873	1,853,671,781	0.6098	1,130,369,052
	2008	1,724,673,091	0.9862	1,700,872,602	0.6492	1,104,206,493
	2009	1,529,891,039	0.9859	1,508,319,575	0.6877	1,037,271,372
	2010	1,611,472,006	0.9859	1,588,750,251	0.6909	1,097,667,548
	2011	1,660,103,192	0.9862	1,637,193,768	0.6852	1,121,805,170
	2012	1,549,715,496	0.9858	1,527,709,536	0.7114	1,086,812,564
	2013	1,512,784,325	0.9853	1,490,546,395	0.7452	1,110,755,174
	2014	1,524,026,142	0.9857	1,502,232,568	0.7825	1,175,496,984
	2015	1,519,623,748	0.9853	1,497,285,279	0.8299	1,242,597,053
	2016	1,518,054,922	0.9853	1,495,739,515	0.8518	1,274,070,919

INDEMNITY	Inc. LDF 12-13	Inc. LDF 13-14	Inc. LDF 14-15	Inc. LDF 15-16	Inc. LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected Inc. LDF
Beyond	1.0010	1.0010	1.0017	1.0004	1.0011	1.0008	1.0011	1.0010	1.0010
29-30				1.0004	1.0005	1.0005	1.0005	1.0005	1.0005
28-29			1.0010	0.9992	0.9996	0.9994	0.9999	0.9999	0.9994
27-28		1.0001	1.0005	1.0004	1.0002	1.0003	1.0004	1.0003	1.0003
26-27	1.0010	1.0006	0.9996	1.0005	1.0001	1.0003	1.0001	1.0004	1.0003
25-26	0.9994	1.0002	1.0019	1.0006	1.0000	1.0003	1.0008	1.0004	1.0003
24-25	0.9999	0.9996	1.0002	1.0008	0.9993	1.0001	1.0001	1.0000	1.0001
23-24	1.0009	1.0001	1.0006	1.0011	1.0006	1.0009	1.0008	1.0007	1.0009
22-23	1.0009	1.0000	0.9989	1.0002	0.9997	1.0000	0.9996	0.9999	1.0000
21-22	0.9990	0.9995	1.0003	1.0017	1.0009	1.0013	1.0010	1.0003	1.0013
20-21	0.9992	1.0017	1.0008	0.9984	0.9997	0.9991	0.9996	1.0000	0.9991
19-20	1.0011	1.0002	1.0004	0.9999	1.0004	1.0002	1.0002	1.0004	1.0002
18-19	1.0025	1.0011	0.9970	1.0021	0.9996	1.0009	0.9996	1.0005	1.0009
17-18	1.0009	1.0002	0.9996	1.0003	1.0009	1.0006	1.0003	1.0004	1.0006
16-17	0.9998	0.9983	0.9996	1.0005	1.0011	1.0008	1.0004	0.9999	1.0008
15-16	1.0014	1.0010	0.9995	0.9999	1.0001	1.0000	0.9998	1.0004	1.0000
14-15	1.0005	1.0004	0.9998	1.0013	1.0014	1.0014	1.0008	1.0007	1.0014
13-14	0.9997	0.9993	0.9996	1.0016	1.0016	1.0016	1.0009	1.0004	1.0016
12-13	1.0015	1.0014	0.9986	1.0007	1.0009	1.0008	1.0001	1.0006	1.0008
11-12	1.0051	1.0007	0.9998	1.0014	1.0011	1.0013	1.0008	1.0016	1.0013
10-11	1.0020	1.0024	0.9996	1.0014	1.0011	1.0013	1.0007	1.0013	1.0013
9-10	1.0022	1.0018	1.0013	1.0025	1.0032	1.0029	1.0023	1.0022	1.0029
8-9	1.0050	1.0026	0.9989	1.0013	1.0010	1.0012	1.0004	1.0018	1.0012
7-8	1.0025	1.0035	1.0003	0.9999	1.0041	1.0020	1.0014	1.0021	1.0020
6-7	1.0068	1.0025	1.0028	1.0058	1.0062	1.0060	1.0049	1.0048	1.0060
5-6	1.0000	1.0034	1.0112	1.0002	1.0078	1.0040	1.0064	1.0045	1.0040
4-5	1.0089	1.0037	1.0060	1.0040	1.0054	1.0047	1.0051	1.0056	1.0047
3-4	1.0291	1.0337	1.0240	1.0319	1.0106	1.0213	1.0222	1.0259	1.0213
2-3	1.1100	1.0992	1.1086	1.0948	1.0876	1.0912	1.0970	1.1000	1.0912
1-2	1.3937	1.3808	1.3936	1.3303	1.3390	1.3347	1.3543	1.3675	1.3347

INDEMNITY	Paid LDF 12-13	Paid LDF 13-14	Paid LDF 14-15	Paid LDF 15-16	Paid LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected Paid LDF
29-30				1.0024	1.0015	1.0020	1.0020	1.0020	1.0020
28-29			1.0031	1.0016	1.0016	1.0016	1.0021	1.0021	1.0016
27-28		1.0026	1.0021	1.0019	1.0026	1.0023	1.0022	1.0023	1.0023
26-27	1.0031	1.0020	1.0021	1.0030	1.0023	1.0027	1.0025	1.0025	1.0027
25-26	1.0030	1.0025	1.0031	1.0029	1.0030	1.0030	1.0030	1.0029	1.0030
24-25	1.0024	1.0033	1.0032	1.0036	1.0031	1.0034	1.0033	1.0031	1.0034
23-24	1.0037	1.0030	1.0034	1.0040	1.0039	1.0040	1.0038	1.0036	1.0040
22-23	1.0033	1.0033	1.0039	1.0041	1.0039	1.0040	1.0040	1.0037	1.0040
21-22	1.0037	1.0049	1.0043	1.0046	1.0028	1.0037	1.0039	1.0041	1.0037
20-21	1.0052	1.0049	1.0045	1.0039	1.0027	1.0033	1.0037	1.0042	1.0033
19-20	1.0053	1.0054	1.0034	1.0028	1.0020	1.0024	1.0027	1.0038	1.0024
18-19	1.0068	1.0043	1.0028	1.0019	1.0016	1.0018	1.0021	1.0035	1.0018
17-18	1.0039	1.0034	1.0029	1.0020	1.0016	1.0018	1.0022	1.0028	1.0018
16-17	1.0049	1.0039	1.0026	1.0017	1.0020	1.0019	1.0021	1.0030	1.0019
15-16	1.0026	1.0024	1.0013	1.0021	1.0028	1.0025	1.0021	1.0022	1.0025
14-15	1.0024	1.0019	1.0031	1.0020	1.0033	1.0027	1.0028	1.0025	1.0027
13-14	1.0022	1.0037	1.0040	1.0045	1.0042	1.0044	1.0042	1.0037	1.0044
12-13	1.0051	1.0049	1.0054	1.0045	1.0061	1.0053	1.0053	1.0052	1.0053
11-12	1.0074	1.0057	1.0071	1.0068	1.0051	1.0060	1.0063	1.0064	1.0060
10-11	1.0108	1.0083	1.0094	1.0081	1.0072	1.0077	1.0082	1.0088	1.0077
9-10	1.0100	1.0118	1.0083	1.0088	1.0076	1.0082	1.0082	1.0093	1.0082
8-9	1.0138	1.0125	1.0131	1.0104	1.0069	1.0087	1.0101	1.0113	1.0087
7-8	1.0175	1.0152	1.0144	1.0111	1.0121	1.0121	1.0129	1.0143	1.0121
6-7	1.0266	1.0184	1.0131	1.0220	1.0166	1.0193	1.0172	1.0193	1.0193
5-6	1.0272	1.0291	1.0356	1.0275	1.0226	1.0251	1.0286	1.0284	1.0251
4-5	1.0494	1.0465	1.0493	1.0380	1.0362	1.0371	1.0412	1.0439	1.0371
3-4	1.1150	1.1133	1.1011	1.0979	1.0813	1.0896	1.0934	1.1017	1.0896
2-3	1.2987	1.2852	1.2606	1.2582	1.2325	1.2454	1.2504	1.2670	1.2454
1-2	1.9079	1.9105	1.9193	1.8713	1.7883	1.8298	1.8596	1.8795	1.8298

INDEMNITY	Pd-Inc. LDF 12-13	Pd-Inc. LDF 13-14	Pd-Inc. LDF 14-15	Pd-Inc. LDF 15-16	Pd-Inc. LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected LDF
29-30				1.0191	1.0125	1.0158	1.0158	1.0158	1.0158
28-29			1.0218	1.0134	1.0152	1.0143	1.0168	1.0168	1.0143
27-28		1.0229	1.0165	1.0173	1.0213	1.0193	1.0184	1.0195	1.0193
26-27	1.0260	1.0178	1.0192	1.0243	1.0207	1.0225	1.0214	1.0216	1.0225
25-26	1.0200	1.0216	1.0267	1.0238	1.0283	1.0261	1.0263	1.0241	1.0261
24-25	1.0237	1.0274	1.0261	1.0323	1.0299	1.0311	1.0294	1.0279	1.0311
23-24	1.0316	1.0278	1.0345	1.0353	1.0323	1.0338	1.0340	1.0323	1.0338
22-23	1.0309	1.0356	1.0374	1.0366	1.0365	1.0366	1.0368	1.0354	1.0366
21-22	1.0393	1.0417	1.0402	1.0416	1.0277	1.0347	1.0365	1.0381	1.0347
20-21	1.0472	1.0429	1.0443	1.0321	1.0258	1.0290	1.0341	1.0385	1.0290
19-20	1.0466	1.0465	1.0359	1.0302	1.0154	1.0228	1.0272	1.0349	1.0228
18-19	1.0531	1.0379	1.0318	1.0170	1.0110	1.0140	1.0199	1.0302	1.0140
17-18	1.0407	1.0358	1.0175	1.0135	1.0136	1.0136	1.0149	1.0242	1.0136
16-17	1.0407	1.0205	1.0156	1.0148	1.0154	1.0151	1.0153	1.0214	1.0151
15-16	1.0248	1.0167	1.0151	1.0170	1.0169	1.0170	1.0163	1.0181	1.0170
14-15	1.0182	1.0168	1.0198	1.0194	1.0285	1.0240	1.0226	1.0205	1.0240
13-14	1.0186	1.0220	1.0213	1.0334	1.0323	1.0329	1.0290	1.0255	1.0329
12-13	1.0281	1.0252	1.0355	1.0375	1.0445	1.0410	1.0392	1.0342	1.0410
11-12	1.0314	1.0406	1.0409	1.0495	1.0347	1.0421	1.0417	1.0394	1.0421
10-11	1.0510	1.0484	1.0577	1.0427	1.0398	1.0413	1.0467	1.0479	1.0413
9-10	1.0563	1.0699	1.0476	1.0492	1.0417	1.0455	1.0462	1.0529	1.0455
8-9	1.0820	1.0588	1.0581	1.0499	1.0394	1.0447	1.0491	1.0576	1.0447
7-8	1.0744	1.0747	1.0617	1.0513	1.0404	1.0459	1.0511	1.0605	1.0459
6-7	1.0994	1.0812	1.0627	1.0606	1.0555	1.0581	1.0596	1.0719	1.0581
5-6	1.1078	1.0899	1.0897	1.0809	1.0762	1.0786	1.0823	1.0889	1.0786
4-5	1.1398	1.1271	1.1311	1.1108	1.1227	1.1168	1.1215	1.1263	1.1168
3-4	1.2520	1.2518	1.2155	1.2155	1.1798	1.2026	1.2069	1.2249	1.2026
2-3	1.5712	1.5243	1.4941	1.4786	1.4243	1.4515	1.4657	1.4985	1.4515
1-2	2.6447	2.5785	2.5626	2.4607	2.2672	2.3640	2.4302	2.5027	2.3640

INDEMNITY	Selected	Selected	Selected
	Paid	Pd-Incur	Incurred
	LDF	LDF	LDF
Beyond			1.0010
29-30	1.0020	1.0158	1.0005
28-29	1.0016	1.0143	0.9994
27-28	1.0023	1.0193	1.0003
26-27	1.0027	1.0225	1.0003
25-26	1.0030	1.0261	1.0003
24-25	1.0034	1.0311	1.0001
23-24	1.0040	1.0338	1.0009
22-23	1.0040	1.0366	1.0000
21-22	1.0037	1.0347	1.0013
20-21	1.0033	1.0290	0.9991
19-20	1.0024	1.0228	1.0002
18-19	1.0018	1.0140	1.0009
17-18	1.0018	1.0136	1.0006
16-17	1.0019	1.0151	1.0008
15-16	1.0025	1.0170	1.0000
14-15	1.0027	1.0240	1.0014
13-14	1.0044	1.0329	1.0016
12-13	1.0053	1.0410	1.0008
11-12	1.0060	1.0421	1.0013
10-11	1.0077	1.0413	1.0013
9-10	1.0082	1.0455	1.0029
8-9	1.0087	1.0447	1.0012
7-8	1.0121	1.0459	1.0020
6-7	1.0193	1.0581	1.0060
5-6	1.0251	1.0786	1.0040
4-5	1.0371	1.1168	1.0047
3-4	1.0896	1.2026	1.0213
2-3	1.2454	1.4515	1.0912
1-2	1.8298	2.3640	1.3347

INDEMNITY	Policy	Incurred	Paid to 30th
	Year	LDF	LDF
Beyond		1.0010	1.0010
29-30	1988	1.0005	1.0158
28-29	1989	0.9994	1.0016
27-28	1990	1.0003	1.0023
26-27	1991	1.0003	1.0027
25-26	1992	1.0003	1.0030
24-25	1993	1.0001	1.0034
23-24	1994	1.0009	1.0040
22-23	1995	1.0000	1.0040
21-22	1996	1.0013	1.0037
20-21	1997	0.9991	1.0033
19-20	1998	1.0002	1.0024
18-19	1999	1.0009	1.0018
17-18	2000	1.0006	1.0018
16-17	2001	1.0008	1.0019
15-16	2002	1.0000	1.0025
14-15	2003	1.0014	1.0027
13-14	2004	1.0016	1.0044
12-13	2005	1.0008	1.0053
11-12	2006	1.0013	1.0060
10-11	2007	1.0013	1.0077
9-10	2008	1.0029	1.0082
8-9	2009	1.0012	1.0087
7-8	2010	1.0020	1.0121
6-7	2011	1.0060	1.0193
5-6	2012	1.0040	1.0251
4-5	2013	1.0047	1.0371
3-4	2014	1.0213	1.0896
2-3	2015	1.0912	1.2454
1-2	2016	1.3347	1.8298

INDEMNITY	Policy	Incurred	Paid to 30th
	Year	Cum LDF	Cum LDF
Beyond		1.0010	1.0010
29-30	1988	1.0015	1.0168
28-29	1989	1.0008	1.0184
27-28	1990	1.0011	1.0207
26-27	1991	1.0015	1.0234
25-26	1992	1.0018	1.0265
24-25	1993	1.0018	1.0299
23-24	1994	1.0027	1.0340
22-23	1995	1.0026	1.0381
21-22	1996	1.0039	1.0419
20-21	1997	1.0030	1.0454
19-20	1998	1.0031	1.0479
18-19	1999	1.0040	1.0497
17-18	2000	1.0046	1.0516
16-17	2001	1.0054	1.0536
15-16	2002	1.0054	1.0561
14-15	2003	1.0067	1.0589
13-14	2004	1.0083	1.0635
12-13	2005	1.0091	1.0692
11-12	2006	1.0104	1.0755
10-11	2007	1.0117	1.0838
9-10	2008	1.0145	1.0927
8-9	2009	1.0157	1.1021
7-8	2010	1.0177	1.1154
6-7	2011	1.0238	1.1370
5-6	2012	1.0279	1.1655
4-5	2013	1.0328	1.2087
3-4	2014	1.0547	1.3170
2-3	2015	1.1509	1.6401
1-2	2016	1.5361	3.0011

INDEMNITY	Policy Year	Benefit Level Factor	LAE
Beyond			
29-30	1988	0.9943	1.0000
28-29	1989	0.9943	1.0000
27-28	1990	0.9943	1.0000
26-27	1991	0.9943	1.0000
25-26	1992	0.9946	1.0000
24-25	1993	0.9987	1.0000
23-24	1994	1.0000	1.0000
22-23	1995	1.0000	1.0000
21-22	1996	1.0000	1.0000
20-21	1997	1.0000	1.0000
19-20	1998	1.0000	1.0000
18-19	1999	1.0000	1.0000
17-18	2000	1.0000	1.0000
16-17	2001	1.0000	1.0000
15-16	2002	1.0000	1.0000
14-15	2003	1.0000	1.0000
13-14	2004	1.0000	1.0000
12-13	2005	1.0000	1.0000
11-12	2006	1.0000	1.0000
10-11	2007	1.0000	1.0000
9-10	2008	1.0000	1.0000
8-9	2009	1.0000	1.0000
7-8	2010	1.0000	1.0000
6-7	2011	1.0000	1.0000
5-6	2012	1.0000	1.0000
4-5	2013	1.0000	1.0000
3-4	2014	1.0000	1.0000
2-3	2015	1.0000	1.0000
1-2	2016	1.0000	1.0000

INDEMNITY		Policy Year	Incurred Base	Paid to 30th Base
Beyond				
29-30	1988		979,588,821	966,472,224
28-29	1989		1,142,110,456	1,121,185,339
27-28	1990		1,166,247,884	1,145,284,577
26-27	1991		1,011,749,304	986,836,071
25-26	1992		855,050,848	832,797,450
24-25	1993		746,615,911	726,072,048
23-24	1994		691,263,631	669,464,524
22-23	1995		587,334,801	573,086,417
21-22	1996		505,560,965	494,205,518
20-21	1997		514,132,168	507,328,183
19-20	1998		514,723,208	509,937,775
18-19	1999		586,761,348	579,813,076
17-18	2000		624,014,355	615,828,881
16-17	2001		634,059,265	625,285,886
15-16	2002		664,994,362	648,714,310
14-15	2003		649,749,346	632,027,395
13-14	2004		688,128,676	662,796,389
12-13	2005		693,974,966	674,126,170
11-12	2006		713,046,040	690,652,695
10-11	2007		750,610,425	726,048,352
9-10	2008		700,250,984	678,358,010
8-9	2009		634,354,346	617,701,546
7-8	2010		654,448,556	630,380,745
6-7	2011		629,011,884	597,630,706
5-6	2012		571,753,520	527,719,678
4-5	2013		578,028,628	529,754,399
3-4	2014		564,960,436	488,886,040
2-3	2015		496,705,992	391,792,076
1-2	2016		359,295,065	207,070,815

INDEMNITY		Policy Year	Proj Ult Incurred (Avg Pd & Inc)	Proj Ult Incurred (Incur)	Proj Ult Incurred (Pd-30)
Beyond					
29-30	1988		981,883,581	981,058,204	982,708,957
28-29	1989		1,142,419,647	1,143,024,144	1,141,815,149
27-28	1990		1,168,261,363	1,167,530,757	1,168,991,968
26-27	1991		1,011,597,482	1,013,266,928	1,009,928,035
25-26	1992		855,728,261	856,589,940	854,866,582
24-25	1993		747,870,711	747,959,820	747,781,602
23-24	1994		692,678,181	693,130,043	692,226,318
22-23	1995		591,891,440	588,861,871	594,921,009
21-22	1996		511,222,691	507,532,653	514,912,729
20-21	1997		523,017,724	515,674,565	530,360,883
19-20	1998		525,341,322	516,318,850	534,363,794
18-19	1999		598,869,090	589,108,393	608,629,786
17-18	2000		637,245,236	626,884,821	647,605,651
16-17	2001		648,142,197	637,483,185	658,801,209
15-16	2002		676,846,258	668,585,332	685,107,183
14-15	2003		661,678,238	654,102,667	669,253,809
13-14	2004		699,362,052	693,840,144	704,883,960
12-13	2005		710,532,920	700,290,138	720,775,701
11-12	2006		731,629,346	720,461,719	742,796,973
10-11	2007		773,141,886	759,392,567	786,891,204
9-10	2008		725,823,211	710,404,623	741,241,798
8-9	2009		662,541,292	644,313,709	680,768,874
7-8	2010		684,579,489	666,032,295	703,126,683
6-7	2011		661,744,240	643,982,367	679,506,113
5-6	2012		601,381,364	587,705,443	615,057,285
4-5	2013		618,651,055	596,987,967	640,314,142
3-4	2014		619,863,344	595,863,772	643,862,915
2-3	2015		607,118,555	571,658,926	642,578,184
1-2	2016		586,676,686	551,913,149	621,440,223

INDEMNITY		Policy Year	Adjusted Incurred (Avg Pd & Inc)	Adjusted Incurred (Incur)	Adjusted Incurred (Pd-30)
Beyond					
29-30	1988		976,286,844	975,466,172	977,107,516
28-29	1989		1,135,907,855	1,136,508,906	1,135,306,803
27-28	1990		1,161,602,273	1,160,875,832	1,162,328,714
26-27	1991		1,005,831,376	1,007,491,307	1,004,171,445
25-26	1992		851,107,328	851,964,354	850,250,302
24-25	1993		746,898,479	746,987,472	746,809,486
23-24	1994		692,678,181	693,130,043	692,226,318
22-23	1995		591,891,440	588,861,871	594,921,009
21-22	1996		511,222,691	507,532,653	514,912,729
20-21	1997		523,017,724	515,674,565	530,360,883
19-20	1998		525,341,322	516,318,850	534,363,794
18-19	1999		598,869,090	589,108,393	608,629,786
17-18	2000		637,245,236	626,884,821	647,605,651
16-17	2001		648,142,197	637,483,185	658,801,209
15-16	2002		676,846,258	668,585,332	685,107,183
14-15	2003		661,678,238	654,102,667	669,253,809
13-14	2004		699,362,052	693,840,144	704,883,960
12-13	2005		710,532,920	700,290,138	720,775,701
11-12	2006		731,629,346	720,461,719	742,796,973
10-11	2007		773,141,886	759,392,567	786,891,204
9-10	2008		725,823,211	710,404,623	741,241,798
8-9	2009		662,541,292	644,313,709	680,768,874
7-8	2010		684,579,489	666,032,295	703,126,683
6-7	2011		661,744,240	643,982,367	679,506,113
5-6	2012		601,381,364	587,705,443	615,057,285
4-5	2013		618,651,055	596,987,967	640,314,142
3-4	2014		619,863,344	595,863,772	643,862,915
2-3	2015		607,118,555	571,658,926	642,578,184
1-2	2016		586,676,686	551,913,149	621,440,223

INDEMNITY

Policy Year	Loss Ratio (Avg Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-30)
1988	1.1078	1.1069	1.1088
1989	1.3006	1.3013	1.2999
1990	1.2824	1.2816	1.2832
1991	1.2599	1.2620	1.2578
1992	1.1554	1.1565	1.1542
1993	1.1400	1.1401	1.1398
1994	1.0939	1.0946	1.0931
1995	1.0092	1.0040	1.0144
1996	0.8483	0.8422	0.8544
1997	0.8644	0.8522	0.8765
1998	0.8027	0.7890	0.8165
1999	0.8546	0.8407	0.8685
2000	0.8509	0.8370	0.8647
2001	0.8083	0.7950	0.8215
2002	0.8121	0.8022	0.8220
2003	0.7532	0.7445	0.7618
2004	0.7554	0.7495	0.7614
2005	0.6901	0.6801	0.7000
2006	0.6733	0.6630	0.6836
2007	0.6840	0.6718	0.6961
2008	0.6573	0.6434	0.6713
2009	0.6387	0.6212	0.6563
2010	0.6237	0.6068	0.6406
2011	0.5899	0.5741	0.6057
2012	0.5533	0.5408	0.5659
2013	0.5570	0.5375	0.5765
2014	0.5273	0.5069	0.5477
2015	0.4886	0.4601	0.5171
2016	0.4605	0.4332	0.4878

INDEMNITY FREQUENCY

Policy Year	Claim Frequency	Normalized Frequency	Trend Factor to 1/1/17	Selected Ann Trend Factor	Trend Period # Years	Trend 1/1/17-4/1/20	Combined Trend Factor
				-6.3%	1		
				-6.3%	1		
				-6.3%	1.25		
2005	25.35	1.0000					
2006	24.42	0.9633					
2007	23.02	0.9081					
2008	21.28	0.8394					
2009	20.60	0.8126					
2010	20.30	0.8008					
2011	19.06	0.7519					
2012	17.82	0.7030					
2013	17.41	0.6868					
2014	15.95	0.6292	0.8777			0.8090	0.7101
2015	14.71	0.5803	0.9369			0.8090	0.7579
2016	13.62	0.5373	1.0000			0.8090	0.8090

INDEMNITY SEVERITY RATIOS

Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
2005	0.6901	0.6801	0.7000
2006	0.6989	0.6882	0.7096
2007	0.7532	0.7398	0.7666
2008	0.7830	0.7665	0.7997
2009	0.7860	0.7644	0.8076
2010	0.7789	0.7578	0.8000
2011	0.7846	0.7636	0.8056
2012	0.7871	0.7693	0.8050
2013	0.8110	0.7826	0.8394
2014	0.8381	0.8056	0.8705
2015	0.8420	0.7929	0.8911
2016	0.8571	0.8063	0.9079

INDEMNITY Linear FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.8157	0.7881	0.8433
	2014	0.8299	0.7939	0.8659
	2015	0.8442	0.7998	0.8885
	2016	0.8584	0.8056	0.9111
5 Point	2012	0.7929	0.7745	0.8113
	2013	0.8100	0.7829	0.8370
	2014	0.8271	0.7913	0.8628
	2015	0.8442	0.7998	0.8885
	2016	0.8613	0.8082	0.9143
6 Point	2011	0.7804	0.7648	0.7960
	2012	0.7962	0.7735	0.8189
	2013	0.8121	0.7823	0.8418
	2014	0.8279	0.7911	0.8647
	2015	0.8437	0.7999	0.8876
	2016	0.8596	0.8087	0.9105
7 Point	2010	0.7712	0.7568	0.7856
	2011	0.7855	0.7654	0.8056
	2012	0.7998	0.7740	0.8256
	2013	0.8141	0.7826	0.8456
	2014	0.8284	0.7912	0.8657
	2015	0.8427	0.7998	0.8857
	2016	0.8570	0.8083	0.9057
8 Point	2009	0.7690	0.7550	0.7831
	2010	0.7809	0.7622	0.7996
	2011	0.7928	0.7695	0.8161
	2012	0.8047	0.7767	0.8326
	2013	0.8165	0.7839	0.8491
	2014	0.8284	0.7912	0.8657
	2015	0.8403	0.7984	0.8822
	2016	0.8522	0.8057	0.8987
9 Point	2008	0.7669	0.7548	0.7791
	2009	0.7771	0.7608	0.7934
	2010	0.7872	0.7668	0.8077
	2011	0.7974	0.7728	0.8220
	2012	0.8075	0.7788	0.8363
	2013	0.8177	0.7848	0.8506
	2014	0.8278	0.7908	0.8649
	2015	0.8380	0.7967	0.8792
	2016	0.8481	0.8027	0.8935
10 Point	2007	0.7555	0.7457	0.7654
	2008	0.7659	0.7522	0.7796
	2009	0.7762	0.7587	0.7938
	2010	0.7866	0.7652	0.8080
	2011	0.7969	0.7716	0.8222
	2012	0.8073	0.7781	0.8364
	2013	0.8176	0.7846	0.8506
	2014	0.8280	0.7911	0.8648
	2015	0.8383	0.7976	0.8791
	2016	0.8487	0.8040	0.8933

INDEMNITY Linear TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9046	0.8246	0.9846
5 Point	Fitted	0.9168	0.8356	0.9980
6 Point	Fitted	0.9110	0.8372	0.9848
7 Point	Fitted	0.9035	0.8362	0.9707
8 Point	Fitted	0.8908	0.8292	0.9523
9 Point	Fitted	0.8811	0.8222	0.9400
10 Point	Fitted	0.8823	0.8251	0.9394

INDEMNITY Linear Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.0900	1.0386	1.1371
	2015	1.0716	1.0310	1.1081
	2016	1.0538	1.0236	1.0806
5 Point	2014	1.1085	1.0559	1.1567
	2015	1.0861	1.0448	1.1232
	2016	1.0645	1.0339	1.0915
6 Point	2014	1.1004	1.0583	1.1389
	2015	1.0798	1.0467	1.1096
	2016	1.0599	1.0353	1.0817
7 Point	2014	1.0906	1.0570	1.1213
	2015	1.0721	1.0456	1.0960
	2016	1.0542	1.0345	1.0718
8 Point	2014	1.0753	1.0480	1.1001
	2015	1.0601	1.0385	1.0795
	2016	1.0453	1.0292	1.0597
9 Point	2014	1.0644	1.0398	1.0868
	2015	1.0515	1.0319	1.0691
	2016	1.0389	1.0242	1.0520
10 Point	2014	1.0656	1.0430	1.0862
	2015	1.0525	1.0345	1.0687
	2016	1.0396	1.0262	1.0517

INDEMNITY Expon'l FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.8158	0.7880	0.8435
	2014	0.8298	0.7939	0.8656
	2015	0.8440	0.7997	0.8883
	2016	0.8586	0.8056	0.9115
5 Point	2012	0.7930	0.7745	0.8117
	2013	0.8097	0.7828	0.8365
	2014	0.8267	0.7912	0.8620
	2015	0.8440	0.7997	0.8883
	2016	0.8618	0.8083	0.9154
6 Point	2011	0.7808	0.7648	0.7970
	2012	0.7961	0.7735	0.8187
	2013	0.8116	0.7822	0.8410
	2014	0.8275	0.7910	0.8638
	2015	0.8436	0.7999	0.8873
	2016	0.8601	0.8089	0.9114
7 Point	2010	0.7719	0.7570	0.7870
	2011	0.7855	0.7654	0.8058
	2012	0.7994	0.7738	0.8250
	2013	0.8136	0.7824	0.8446
	2014	0.8280	0.7910	0.8648
	2015	0.8426	0.7997	0.8854
	2016	0.8575	0.8086	0.9065
8 Point	2009	0.7698	0.7552	0.7847
	2010	0.7811	0.7623	0.8001
	2011	0.7926	0.7693	0.8158
	2012	0.8042	0.7765	0.8318
	2013	0.8160	0.7837	0.8481
	2014	0.8280	0.7910	0.8648
	2015	0.8401	0.7984	0.8817
	2016	0.8525	0.8058	0.8991
9 Point	2008	0.7678	0.7551	0.7808
	2009	0.7774	0.7609	0.7941
	2010	0.7872	0.7668	0.8076
	2011	0.7970	0.7726	0.8214
	2012	0.8070	0.7786	0.8354
	2013	0.8172	0.7846	0.8496
	2014	0.8274	0.7906	0.8640
	2015	0.8378	0.7967	0.8787
	2016	0.8483	0.8028	0.8937
10 Point	2007	0.7565	0.7460	0.7673
	2008	0.7663	0.7523	0.7805
	2009	0.7762	0.7586	0.7938
	2010	0.7862	0.7650	0.8074
	2011	0.7964	0.7714	0.8212
	2012	0.8066	0.7779	0.8353
	2013	0.8171	0.7844	0.8496
	2014	0.8276	0.7910	0.8641
	2015	0.8383	0.7976	0.8789
	2016	0.8491	0.8043	0.8939

INDEMNITY Expon'l TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9075	0.8251	0.9915
5 Point	Fitted	0.9220	0.8369	1.0092
6 Point	Fitted	0.9159	0.8388	0.9945
7 Point	Fitted	0.9078	0.8380	0.9786
8 Point	Fitted	0.8938	0.8304	0.9577
9 Point	Fitted	0.8833	0.8230	0.9441
10 Point	Fitted	0.8853	0.8264	0.9446

INDEMNITY Expon'l Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.0936	1.0394	1.1455
	2015	1.0752	1.0318	1.1162
	2016	1.0570	1.0242	1.0877
5 Point	2014	1.1153	1.0578	1.1708
	2015	1.0924	1.0465	1.1362
	2016	1.0699	1.0354	1.1025
6 Point	2014	1.1069	1.0605	1.1512
	2015	1.0857	1.0487	1.1208
	2016	1.0649	1.0370	1.0911
7 Point	2014	1.0964	1.0594	1.1316
	2015	1.0774	1.0478	1.1053
	2016	1.0586	1.0363	1.0796
8 Point	2014	1.0795	1.0498	1.1075
	2015	1.0639	1.0401	1.0861
	2016	1.0485	1.0305	1.0652
9 Point	2014	1.0676	1.0410	1.0927
	2015	1.0544	1.0331	1.0744
	2016	1.0413	1.0252	1.0564
10 Point	2014	1.0697	1.0448	1.0931
	2015	1.0560	1.0361	1.0747
	2016	1.0426	1.0275	1.0567

INDEMNITY Linear LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7740	0.7375	0.8075
	2015	0.8122	0.7814	0.8398
	2016	0.8525	0.8281	0.8742
5 Point	2014	0.7871	0.7498	0.8214
	2015	0.8232	0.7919	0.8513
	2016	0.8612	0.8364	0.8830
6 Point	2014	0.7814	0.7515	0.8087
	2015	0.8184	0.7933	0.8410
	2016	0.8575	0.8376	0.8751
7 Point	2014	0.7744	0.7506	0.7962
	2015	0.8125	0.7925	0.8307
	2016	0.8528	0.8369	0.8671
8 Point	2014	0.7636	0.7442	0.7812
	2015	0.8034	0.7871	0.8182
	2016	0.8456	0.8326	0.8573
9 Point	2014	0.7558	0.7384	0.7717
	2015	0.7969	0.7821	0.8103
	2016	0.8405	0.8286	0.8511
10 Point	2014	0.7567	0.7406	0.7713
	2015	0.7977	0.7840	0.8100
	2016	0.8410	0.8302	0.8508

INDEMNITY Expon'l LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7766	0.7381	0.8134
	2015	0.8149	0.7820	0.8460
	2016	0.8551	0.8286	0.8799
5 Point	2014	0.7920	0.7511	0.8314
	2015	0.8279	0.7931	0.8611
	2016	0.8655	0.8376	0.8919
6 Point	2014	0.7860	0.7531	0.8175
	2015	0.8229	0.7948	0.8495
	2016	0.8615	0.8389	0.8827
7 Point	2014	0.7786	0.7523	0.8035
	2015	0.8166	0.7941	0.8377
	2016	0.8564	0.8384	0.8734
8 Point	2014	0.7666	0.7455	0.7864
	2015	0.8063	0.7883	0.8232
	2016	0.8482	0.8337	0.8617
9 Point	2014	0.7581	0.7392	0.7759
	2015	0.7991	0.7830	0.8143
	2016	0.8424	0.8294	0.8546
10 Point	2014	0.7596	0.7419	0.7762
	2015	0.8003	0.7853	0.8145
	2016	0.8435	0.8312	0.8549

INDEMNITY Linear TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4081	0.3738	0.4423
	2015	0.3968	0.3595	0.4343
	2016	0.3926	0.3587	0.4264
	3 Yr Ave	0.3992	0.3640	0.4343
5 Point	2014	0.4150	0.3801	0.4499
	2015	0.4022	0.3644	0.4402
	2016	0.3966	0.3623	0.4307
	3 Yr Ave	0.4046	0.3689	0.4403
6 Point	2014	0.4120	0.3809	0.4429
	2015	0.3999	0.3650	0.4349
	2016	0.3949	0.3628	0.4269
	3 Yr Ave	0.4023	0.3696	0.4349
7 Point	2014	0.4083	0.3805	0.4361
	2015	0.3970	0.3646	0.4296
	2016	0.3927	0.3625	0.4230
	3 Yr Ave	0.3993	0.3692	0.4296
8 Point	2014	0.4026	0.3772	0.4279
	2015	0.3925	0.3621	0.4231
	2016	0.3894	0.3607	0.4182
	3 Yr Ave	0.3948	0.3667	0.4231
9 Point	2014	0.3985	0.3743	0.4227
	2015	0.3894	0.3598	0.4190
	2016	0.3871	0.3589	0.4152
	3 Yr Ave	0.3917	0.3643	0.4190
10 Point	2014	0.3990	0.3754	0.4224
	2015	0.3898	0.3607	0.4189
	2016	0.3873	0.3596	0.4150
	3 Yr Ave	0.3920	0.3652	0.4188

INDEMNITY Expon'l TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4095	0.3741	0.4455
	2015	0.3982	0.3598	0.4375
	2016	0.3938	0.3589	0.4292
	3 Yr Ave	0.4005	0.3643	0.4374
5 Point	2014	0.4176	0.3807	0.4554
	2015	0.4045	0.3649	0.4453
	2016	0.3986	0.3628	0.4351
	3 Yr Ave	0.4069	0.3695	0.4453
6 Point	2014	0.4145	0.3817	0.4477
	2015	0.4021	0.3657	0.4393
	2016	0.3967	0.3634	0.4306
	3 Yr Ave	0.4044	0.3703	0.4392
7 Point	2014	0.4106	0.3813	0.4401
	2015	0.3990	0.3654	0.4332
	2016	0.3944	0.3632	0.4260
	3 Yr Ave	0.4013	0.3700	0.4331
8 Point	2014	0.4042	0.3779	0.4307
	2015	0.3940	0.3627	0.4257
	2016	0.3906	0.3612	0.4203
	3 Yr Ave	0.3963	0.3673	0.4256
9 Point	2014	0.3997	0.3747	0.4250
	2015	0.3904	0.3603	0.4211
	2016	0.3879	0.3593	0.4169
	3 Yr Ave	0.3927	0.3648	0.4210
10 Point	2014	0.4005	0.3761	0.4251
	2015	0.3910	0.3613	0.4212
	2016	0.3884	0.3601	0.4170
	3 Yr Ave	0.3933	0.3658	0.4211

MEDICAL	Inc. LDF 12-13	Inc. LDF 13-14	Inc. LDF 14-15	Inc. LDF 15-16	Inc. LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected Inc. LDF
Beyond	1.0058	1.0201	0.9954	1.0141	1.0036	1.0089	1.0044	1.0078	1.0071
29-30				1.0086	1.0181	1.0134	1.0134	1.0134	1.0057
28-29			0.9984	1.0013	0.9980	0.9997	0.9992	0.9992	0.9997
27-28		1.0035	1.0022	1.0017	1.0010	1.0014	1.0016	1.0021	1.0014
26-27	1.0057	1.0054	0.9993	1.0067	0.9996	1.0032	1.0019	1.0033	1.0032
25-26	1.0097	1.0061	1.0095	1.0055	1.0025	1.0040	1.0058	1.0067	1.0040
24-25	1.0107	1.0042	1.0037	0.9988	0.9995	0.9992	1.0007	1.0034	0.9992
23-24	1.0054	1.0088	1.0041	1.0045	1.0047	1.0046	1.0044	1.0055	1.0046
22-23	1.0065	1.0018	1.0017	1.0057	1.0032	1.0045	1.0035	1.0038	1.0045
21-22	1.0100	1.0052	1.0067	1.0053	1.0013	1.0033	1.0044	1.0057	1.0033
20-21	1.0093	1.0108	1.0079	0.9991	1.0078	1.0035	1.0049	1.0070	1.0035
19-20	1.0061	1.0095	1.0113	1.0060	0.9980	1.0020	1.0051	1.0062	1.0020
18-19	1.0058	1.0016	0.9932	1.0052	1.0082	1.0067	1.0022	1.0028	1.0067
17-18	1.0081	1.0130	1.0026	1.0010	0.9944	0.9977	0.9993	1.0038	0.9977
16-17	1.0121	1.0065	1.0001	1.0035	1.0022	1.0029	1.0019	1.0049	1.0029
15-16	1.0098	1.0042	0.9998	1.0048	1.0006	1.0027	1.0017	1.0038	1.0027
14-15	1.0077	1.0140	1.0054	1.0019	1.0058	1.0039	1.0044	1.0070	1.0039
13-14	1.0066	1.0043	1.0038	1.0033	1.0046	1.0040	1.0039	1.0045	1.0040
12-13	1.0081	1.0044	1.0094	1.0069	1.0033	1.0051	1.0065	1.0064	1.0051
11-12	1.0072	1.0164	1.0063	0.9996	1.0073	1.0035	1.0044	1.0074	1.0035
10-11	1.0102	1.0100	1.0012	1.0083	1.0046	1.0065	1.0047	1.0069	1.0065
9-10	1.0026	1.0115	1.0032	1.0041	1.0022	1.0032	1.0032	1.0047	1.0032
8-9	1.0141	1.0108	1.0072	1.0062	0.9978	1.0020	1.0037	1.0072	1.0020
7-8	1.0131	1.0211	0.9987	0.9991	0.9973	0.9982	0.9984	1.0059	0.9982
6-7	1.0065	1.0061	1.0082	1.0162	1.0082	1.0122	1.0109	1.0090	1.0122
5-6	1.0114	1.0073	0.9982	0.9987	1.0085	1.0036	1.0018	1.0048	1.0036
4-5	1.0125	1.0164	1.0061	1.0088	1.0308	1.0198	1.0152	1.0149	1.0198
3-4	1.0144	1.0139	0.9925	1.0047	0.9974	1.0011	0.9982	1.0046	1.0011
2-3	1.0340	1.0316	1.0252	1.0201	1.0200	1.0201	1.0218	1.0262	1.0201
1-2	1.0904	1.0682	1.0874	1.0717	1.0479	1.0598	1.0690	1.0731	1.0598

MEDICAL	Paid LDF 12-13	Paid LDF 13-14	Paid LDF 14-15	Paid LDF 15-16	Paid LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected Paid LDF
29-30				1.0087	1.0093	1.0090	1.0090	1.0090	1.0090
28-29			1.0056	1.0084	1.0049	1.0067	1.0063	1.0063	1.0067
27-28		1.0123	1.0070	1.0058	1.0088	1.0073	1.0072	1.0085	1.0073
26-27	1.0105	1.0084	1.0067	1.0100	1.0060	1.0080	1.0076	1.0083	1.0080
25-26	1.0106	1.0086	1.0087	1.0077	1.0063	1.0070	1.0076	1.0084	1.0070
24-25	1.0075	1.0082	1.0063	1.0059	1.0081	1.0070	1.0068	1.0072	1.0070
23-24	1.0105	1.0070	1.0067	1.0118	1.0094	1.0106	1.0093	1.0091	1.0106
22-23	1.0088	1.0080	1.0102	1.0080	1.0118	1.0099	1.0100	1.0094	1.0099
21-22	1.0097	1.0113	1.0110	1.0125	1.0105	1.0115	1.0113	1.0110	1.0115
20-21	1.0120	1.0126	1.0140	1.0067	1.0097	1.0082	1.0101	1.0110	1.0082
19-20	1.0145	1.0121	1.0082	1.0117	1.0090	1.0104	1.0096	1.0111	1.0104
18-19	1.0135	1.0091	1.0111	1.0115	1.0082	1.0099	1.0103	1.0107	1.0099
17-18	1.0133	1.0110	1.0098	1.0092	1.0068	1.0080	1.0086	1.0100	1.0080
16-17	1.0192	1.0098	1.0105	1.0080	1.0080	1.0080	1.0088	1.0111	1.0080
15-16	1.0113	1.0076	1.0079	1.0081	1.0056	1.0069	1.0072	1.0081	1.0069
14-15	1.0111	1.0134	1.0104	1.0092	1.0110	1.0101	1.0102	1.0110	1.0101
13-14	1.0115	1.0109	1.0067	1.0149	1.0082	1.0116	1.0099	1.0104	1.0116
12-13	1.0126	1.0086	1.0141	1.0107	1.0077	1.0092	1.0108	1.0107	1.0092
11-12	1.0120	1.0156	1.0108	1.0095	1.0102	1.0099	1.0102	1.0116	1.0099
10-11	1.0151	1.0124	1.0109	1.0097	1.0094	1.0096	1.0100	1.0115	1.0096
9-10	1.0128	1.0131	1.0137	1.0146	1.0113	1.0130	1.0132	1.0131	1.0130
8-9	1.0165	1.0142	1.0148	1.0139	1.0095	1.0117	1.0127	1.0138	1.0117
7-8	1.0162	1.0150	1.0135	1.0110	1.0113	1.0110	1.0120	1.0134	1.0113
6-7	1.0215	1.0215	1.0128	1.0134	1.0142	1.0138	1.0135	1.0167	1.0138
5-6	1.0194	1.0169	1.0160	1.0157	1.0148	1.0153	1.0155	1.0166	1.0153
4-5	1.0248	1.0248	1.0203	1.0177	1.0158	1.0168	1.0179	1.0207	1.0168
3-4	1.0403	1.0390	1.0350	1.0372	1.0298	1.0335	1.0340	1.0363	1.0335
2-3	1.0828	1.0831	1.0695	1.0776	1.0632	1.0704	1.0701	1.0752	1.0704
1-2	1.2548	1.2529	1.2528	1.2608	1.2492	1.2550	1.2543	1.2541	1.2550

MEDICAL	Pd-Inc. LDF 12-13	Pd-Inc. LDF 13-14	Pd-Inc. LDF 14-15	Pd-Inc. LDF 15-16	Pd-Inc. LDF 16-17	2 Yr. Avg. LDF	3 Yr. Avg. LDF	5 Yr. Avg. LDF	Selected LDF
29-30				1.0658	1.0877	1.0768	1.0768	1.0768	1.0768
28-29			1.0626	1.0736	1.0561	1.0649	1.0641	1.0641	1.0649
27-28		1.0799	1.0828	1.0637	1.0740	1.0689	1.0735	1.0751	1.0689
26-27	1.0880	1.0884	1.0693	1.0841	1.0498	1.0670	1.0677	1.0759	1.0670
25-26	1.0938	1.0783	1.0856	1.0573	1.0617	1.0595	1.0682	1.0753	1.0595
24-25	1.0796	1.0827	1.0590	1.0657	1.0627	1.0642	1.0625	1.0699	1.0642
23-24	1.0893	1.0613	1.0734	1.0751	1.0695	1.0723	1.0727	1.0737	1.0723
22-23	1.0612	1.0760	1.0810	1.0706	1.0793	1.0750	1.0770	1.0736	1.0750
21-22	1.0843	1.0901	1.0787	1.0865	1.0748	1.0807	1.0800	1.0829	1.0807
20-21	1.0973	1.0835	1.0981	1.0822	1.0920	1.0871	1.0908	1.0906	1.0871
19-20	1.0872	1.1001	1.0897	1.0975	1.0798	1.0887	1.0890	1.0909	1.0887
18-19	1.1040	1.0843	1.1004	1.0979	1.0862	1.0921	1.0948	1.0946	1.0921
17-18	1.0968	1.1154	1.0993	1.0889	1.0676	1.0783	1.0853	1.0936	1.0783
16-17	1.1221	1.1014	1.0970	1.0831	1.0648	1.0740	1.0816	1.0937	1.0740
15-16	1.1066	1.0968	1.0858	1.0719	1.0495	1.0607	1.0691	1.0821	1.0607
14-15	1.1042	1.1050	1.0753	1.0591	1.0712	1.0652	1.0685	1.0830	1.0652
13-14	1.1019	1.0782	1.0612	1.0814	1.0608	1.0711	1.0678	1.0767	1.0711
12-13	1.0868	1.0638	1.0905	1.0667	1.0622	1.0645	1.0731	1.0740	1.0645
11-12	1.0715	1.0936	1.0693	1.0690	1.0782	1.0736	1.0722	1.0763	1.0736
10-11	1.0918	1.0770	1.0791	1.0825	1.0709	1.0767	1.0775	1.0803	1.0767
9-10	1.0796	1.0917	1.0850	1.0822	1.0604	1.0713	1.0759	1.0798	1.0713
8-9	1.0969	1.0968	1.0914	1.0737	1.0574	1.0656	1.0742	1.0832	1.0656
7-8	1.1026	1.0997	1.0789	1.0704	1.0720	1.0712	1.0738	1.0847	1.0712
6-7	1.1000	1.1035	1.0843	1.0921	1.0957	1.0939	1.0907	1.0951	1.0939
5-6	1.1180	1.0935	1.0899	1.1177	1.0866	1.1022	1.0981	1.1011	1.1022
4-5	1.1124	1.1191	1.1348	1.0971	1.1226	1.1099	1.1182	1.1172	1.1099
3-4	1.1453	1.1723	1.1205	1.1315	1.1537	1.1426	1.1352	1.1442	1.1426
2-3	1.2486	1.2201	1.1943	1.2551	1.1814	1.2183	1.2103	1.2199	1.2183
1-2	1.4869	1.4602	1.5148	1.4681	1.4811	1.4746	1.4880	1.4822	1.4746

MEDICAL	Selected Paid LDF	Selected Pd-Incur LDF	Selected Incurred LDF
Beyond			1.0071
29-30	1.0090	1.0768	1.0057
28-29	1.0067	1.0649	0.9997
27-28	1.0073	1.0689	1.0014
26-27	1.0080	1.0670	1.0032
25-26	1.0070	1.0595	1.0040
24-25	1.0070	1.0642	0.9992
23-24	1.0106	1.0723	1.0046
22-23	1.0099	1.0750	1.0045
21-22	1.0115	1.0807	1.0033
20-21	1.0082	1.0871	1.0035
19-20	1.0104	1.0887	1.0020
18-19	1.0099	1.0921	1.0067
17-18	1.0080	1.0783	0.9977
16-17	1.0080	1.0740	1.0029
15-16	1.0069	1.0607	1.0027
14-15	1.0101	1.0652	1.0039
13-14	1.0116	1.0711	1.0040
12-13	1.0092	1.0645	1.0051
11-12	1.0099	1.0736	1.0035
10-11	1.0096	1.0767	1.0065
9-10	1.0130	1.0713	1.0032
8-9	1.0117	1.0656	1.0020
7-8	1.0113	1.0712	0.9982
6-7	1.0138	1.0939	1.0122
5-6	1.0153	1.1022	1.0036
4-5	1.0168	1.1099	1.0198
3-4	1.0335	1.1426	1.0011
2-3	1.0704	1.2183	1.0201
1-2	1.2550	1.4746	1.0598

MEDICAL	Policy Year	Incurred LDF	Paid to 30th LDF
Beyond		1.0071	1.0071
29-30	1988	1.0057	1.0768
28-29	1989	0.9997	1.0067
27-28	1990	1.0014	1.0073
26-27	1991	1.0032	1.0080
25-26	1992	1.0040	1.0070
24-25	1993	0.9992	1.0070
23-24	1994	1.0046	1.0106
22-23	1995	1.0045	1.0099
21-22	1996	1.0033	1.0115
20-21	1997	1.0035	1.0082
19-20	1998	1.0020	1.0104
18-19	1999	1.0067	1.0099
17-18	2000	0.9977	1.0080
16-17	2001	1.0029	1.0080
15-16	2002	1.0027	1.0069
14-15	2003	1.0039	1.0101
13-14	2004	1.0040	1.0116
12-13	2005	1.0051	1.0092
11-12	2006	1.0035	1.0099
10-11	2007	1.0065	1.0096
9-10	2008	1.0032	1.0130
8-9	2009	1.0020	1.0117
7-8	2010	0.9982	1.0113
6-7	2011	1.0122	1.0138
5-6	2012	1.0036	1.0153
4-5	2013	1.0198	1.0168
3-4	2014	1.0011	1.0335
2-3	2015	1.0201	1.0704
1-2	2016	1.0598	1.2550

MEDICAL	Policy Year	Incurred Cum LDF	Paid to 30th Cum LDF
Beyond		1.0071	1.0071
29-30	1988	1.0128	1.0844
28-29	1989	1.0125	1.0916
27-28	1990	1.0139	1.0996
26-27	1991	1.0170	1.1084
25-26	1992	1.0211	1.1161
24-25	1993	1.0202	1.1239
23-24	1994	1.0249	1.1359
22-23	1995	1.0295	1.1471
21-22	1996	1.0329	1.1603
20-21	1997	1.0365	1.1698
19-20	1998	1.0385	1.1819
18-19	1999	1.0455	1.1936
17-18	2000	1.0431	1.2031
16-17	2001	1.0461	1.2127
15-16	2002	1.0489	1.2210
14-15	2003	1.0529	1.2334
13-14	2004	1.0571	1.2476
12-13	2005	1.0625	1.2591
11-12	2006	1.0661	1.2715
10-11	2007	1.0730	1.2836
9-10	2008	1.0764	1.3003
8-9	2009	1.0785	1.3155
7-8	2010	1.0766	1.3303
6-7	2011	1.0897	1.3486
5-6	2012	1.0937	1.3692
4-5	2013	1.1153	1.3921
3-4	2014	1.1165	1.4388
2-3	2015	1.1389	1.5401
1-2	2016	1.2070	1.9328

MEDICAL	Policy Year	Benefit Level Factor	LAE
Beyond			
29-30	1988	1.0000	1.0000
28-29	1989	1.0000	1.0000
27-28	1990	1.0000	1.0000
26-27	1991	1.0000	1.0000
25-26	1992	1.0000	1.0000
24-25	1993	1.0000	1.0000
23-24	1994	1.0000	1.0000
22-23	1995	1.0000	1.0000
21-22	1996	1.0000	1.0000
20-21	1997	1.0000	1.0000
19-20	1998	1.0000	1.0000
18-19	1999	1.0000	1.0000
17-18	2000	1.0000	1.0000
16-17	2001	1.0000	1.0000
15-16	2002	1.0000	1.0000
14-15	2003	1.0000	1.0000
13-14	2004	1.0000	1.0000
12-13	2005	1.0000	1.0000
11-12	2006	1.0000	1.0000
10-11	2007	1.0000	1.0000
9-10	2008	1.0000	1.0000
8-9	2009	1.0000	1.0000
7-8	2010	1.0000	1.0000
6-7	2011	1.0000	1.0000
5-6	2012	1.0000	1.0000
4-5	2013	1.0000	1.0000
3-4	2014	1.0000	1.0000
2-3	2015	1.0000	1.0000
1-2	2016	1.0000	1.0000

MEDICAL	Policy Year	Incurred Base	Paid to 30th Base
Beyond			
29-30	1988	531,644,703	505,825,828
28-29	1989	652,174,133	612,553,295
27-28	1990	672,810,097	644,783,537
26-27	1991	624,824,128	592,197,669
25-26	1992	551,850,822	523,495,677
24-25	1993	432,557,841	408,255,169
23-24	1994	407,092,853	381,638,691
22-23	1995	374,821,900	352,423,286
21-22	1996	376,983,430	348,560,947
20-21	1997	393,373,140	367,596,686
19-20	1998	424,372,325	393,889,797
18-19	1999	449,660,093	424,031,014
17-18	2000	483,494,029	457,712,491
16-17	2001	476,555,529	456,603,866
15-16	2002	537,363,133	507,194,708
14-15	2003	553,079,321	525,618,743
13-14	2004	607,795,211	576,635,051
12-13	2005	636,308,992	596,206,243
11-12	2006	646,488,471	609,399,839
10-11	2007	695,328,858	663,090,515
9-10	2008	626,418,940	598,014,414
8-9	2009	556,677,803	525,267,841
7-8	2010	604,879,879	559,862,860
6-7	2011	596,687,478	557,259,255
5-6	2012	556,010,152	503,111,608
4-5	2013	579,531,357	517,270,705
3-4	2014	584,417,377	525,968,802
2-3	2015	534,288,608	450,619,207
1-2	2016	491,373,811	358,709,085

MEDICAL	Policy Year	Proj Ult Incurred (Avg Pd & Inc)	Proj Ult Incurred (Incur)	Proj Ult Incurred (Pd-30)
Beyond				
29-30	1988	543,483,642	538,449,755	548,517,528
28-29	1989	664,494,744	660,326,310	668,663,177
27-28	1990	695,583,067	682,162,157	709,003,977
26-27	1991	645,919,017	635,446,138	656,391,896
25-26	1992	573,884,200	563,494,874	584,273,525
24-25	1993	450,066,747	441,295,509	458,837,984
23-24	1994	425,366,427	417,229,465	433,503,389
22-23	1995	395,071,949	385,879,146	404,264,751
21-22	1996	396,910,726	389,386,185	404,435,267
20-21	1997	418,872,932	407,731,260	430,014,603
19-20	1998	453,124,506	440,710,660	465,538,351
18-19	1999	488,121,523	470,119,627	506,123,418
17-18	2000	527,503,260	504,332,622	550,673,898
16-17	2001	526,124,124	498,524,739	553,723,508
15-16	2002	591,462,464	563,640,190	619,284,738
14-15	2003	615,317,688	582,337,217	648,298,158
13-14	2004	680,955,104	642,500,318	719,409,890
12-13	2005	713,380,793	676,078,304	750,683,281
11-12	2006	732,036,627	689,221,359	774,851,895
10-11	2007	798,615,425	746,087,865	851,142,985
9-10	2008	725,937,745	674,277,347	777,598,143
8-9	2009	645,683,428	600,377,011	690,989,845
7-8	2010	697,999,621	651,213,678	744,785,563
6-7	2011	700,865,088	650,210,345	751,519,831
5-6	2012	648,484,359	608,108,303	688,860,414
4-5	2013	683,221,935	646,351,322	720,092,548
3-4	2014	704,632,957	652,502,001	756,763,912
2-3	2015	651,249,969	608,501,296	693,998,641
1-2	2016	643,200,555	593,088,190	693,312,919

MEDICAL	Policy Year	Adjusted Incurred (Avg Pd & Inc)	Adjusted Incurred (Incur)	Adjusted Incurred (Pd-30)
Beyond				
29-30	1988	543,483,642	538,449,755	548,517,528
28-29	1989	664,494,744	660,326,310	668,663,177
27-28	1990	695,583,067	682,162,157	709,003,977
26-27	1991	645,919,017	635,446,138	656,391,896
25-26	1992	573,884,200	563,494,874	584,273,525
24-25	1993	450,066,747	441,295,509	458,837,984
23-24	1994	425,366,427	417,229,465	433,503,389
22-23	1995	395,071,949	385,879,146	404,264,751
21-22	1996	396,910,726	389,386,185	404,435,267
20-21	1997	418,872,932	407,731,260	430,014,603
19-20	1998	453,124,506	440,710,660	465,538,351
18-19	1999	488,121,523	470,119,627	506,123,418
17-18	2000	527,503,260	504,332,622	550,673,898
16-17	2001	526,124,124	498,524,739	553,723,508
15-16	2002	591,462,464	563,640,190	619,284,738
14-15	2003	615,317,688	582,337,217	648,298,158
13-14	2004	680,955,104	642,500,318	719,409,890
12-13	2005	713,380,793	676,078,304	750,683,281
11-12	2006	732,036,627	689,221,359	774,851,895
10-11	2007	798,615,425	746,087,865	851,142,985
9-10	2008	725,937,745	674,277,347	777,598,143
8-9	2009	645,683,428	600,377,011	690,989,845
7-8	2010	697,999,621	651,213,678	744,785,563
6-7	2011	700,865,088	650,210,345	751,519,831
5-6	2012	648,484,359	608,108,303	688,860,414
4-5	2013	683,221,935	646,351,322	720,092,548
3-4	2014	704,632,957	652,502,001	756,763,912
2-3	2015	651,249,969	608,501,296	693,998,641
1-2	2016	643,200,555	593,088,190	693,312,919

MEDICAL	Policy Year	Loss Ratio (Avg Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-30)
	1988	0.6167	0.6110	0.6224
	1989	0.7609	0.7561	0.7656
	1990	0.7679	0.7531	0.7828
	1991	0.8091	0.7960	0.8222
	1992	0.7790	0.7649	0.7931
	1993	0.6869	0.6735	0.7003
	1994	0.6717	0.6589	0.6846
	1995	0.6736	0.6579	0.6893
	1996	0.6586	0.6461	0.6711
	1997	0.6923	0.6739	0.7107
	1998	0.6924	0.6734	0.7114
	1999	0.6966	0.6709	0.7222
	2000	0.7043	0.6734	0.7353
	2001	0.6561	0.6217	0.6905
	2002	0.7096	0.6763	0.7430
	2003	0.7004	0.6629	0.7379
	2004	0.7356	0.6940	0.7771
	2005	0.6929	0.6566	0.7291
	2006	0.6737	0.6343	0.7131
	2007	0.7065	0.6600	0.7530
	2008	0.6574	0.6106	0.7042
	2009	0.6225	0.5788	0.6662
	2010	0.6359	0.5933	0.6785
	2011	0.6248	0.5796	0.6699
	2012	0.5967	0.5595	0.6338
	2013	0.6151	0.5819	0.6483
	2014	0.5994	0.5551	0.6438
	2015	0.5241	0.4897	0.5585
	2016	0.5048	0.4655	0.5442

MEDICAL FREQUENCY	Policy Year	Claim Frequency	Normalized Frequency	Trend Factor to 1/1/17	Selected Ann Trend Factor	Trend Period # Years	Trend 1/1/17-4/1/20	Combined Trend Factor
					-6.3%	1		
					-6.3%	1		
					-6.3%	1.25		
	2005	25.35	1.0000					
	2006	24.42	0.9633					
	2007	23.02	0.9081					
	2008	21.28	0.8394					
	2009	20.60	0.8126					
	2010	20.30	0.8008					
	2011	19.06	0.7519					
	2012	17.82	0.7030					
	2013	17.41	0.6868					
	2014	15.95	0.6292	0.8777			0.8090	0.7101
	2015	14.71	0.5803	0.9369			0.8090	0.7579
	2016	13.62	0.5373	1.0000			0.8090	0.8090

MEDICAL SEVERITY RATIOS	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
	2005	0.6929	0.6566	0.7291
	2006	0.6994	0.6585	0.7403
	2007	0.7780	0.7268	0.8292
	2008	0.7831	0.7274	0.8389
	2009	0.7660	0.7123	0.8198
	2010	0.7941	0.7409	0.8473
	2011	0.8310	0.7709	0.8910
	2012	0.8488	0.7959	0.9016
	2013	0.8956	0.8473	0.9440
	2014	0.9527	0.8822	1.0232
	2015	0.9032	0.8439	0.9625
	2016	0.9396	0.8664	1.0129

MEDICAL Linear FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.9104	0.8571	0.9638
	2014	0.9187	0.8590	0.9784
	2015	0.9269	0.8609	0.9930
	2016	0.9352	0.8628	1.0076
5 Point	2012	0.8701	0.8196	0.9206
	2013	0.8891	0.8334	0.9447
	2014	0.9080	0.8471	0.9688
	2015	0.9269	0.8609	0.9930
	2016	0.9458	0.8747	1.0171
6 Point	2011	0.8406	0.7875	0.8936
	2012	0.8624	0.8063	0.9185
	2013	0.8842	0.8251	0.9434
	2014	0.9061	0.8438	0.9683
	2015	0.9279	0.8626	0.9932
	2016	0.9497	0.8813	1.0181
7 Point	2010	0.8073	0.7558	0.8588
	2011	0.8318	0.7776	0.8860
	2012	0.8563	0.7993	0.9132
	2013	0.8807	0.8211	0.9404
	2014	0.9052	0.8428	0.9676
	2015	0.9296	0.8646	0.9947
	2016	0.9541	0.8863	1.0219
8 Point	2009	0.7759	0.7250	0.8267
	2010	0.8017	0.7486	0.8549
	2011	0.8276	0.7721	0.8830
	2012	0.8534	0.7957	0.9112
	2013	0.8793	0.8193	0.9394
	2014	0.9052	0.8428	0.9676
	2015	0.9310	0.8664	0.9957
2016	0.9569	0.8899	1.0239	
9 Point	2008	0.7625	0.7113	0.8138
	2009	0.7862	0.7331	0.8392
	2010	0.8098	0.7549	0.8647
	2011	0.8335	0.7767	0.8902
	2012	0.8571	0.7986	0.9157
	2013	0.8808	0.8204	0.9412
	2014	0.9044	0.8422	0.9667
	2015	0.9281	0.8641	0.9921
	2016	0.9517	0.8859	1.0176
10 Point	2007	0.7524	0.7023	0.8024
	2008	0.7739	0.7221	0.8257
	2009	0.7954	0.7419	0.8489
	2010	0.8169	0.7617	0.8722
	2011	0.8384	0.7815	0.8954
	2012	0.8600	0.8013	0.9187
	2013	0.8815	0.8211	0.9419
	2014	0.9030	0.8409	0.9652
	2015	0.9245	0.8607	0.9884
	2016	0.9461	0.8805	1.0117

MEDICAL Linear TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9620	0.8690	1.0550
5 Point	Fitted	1.0073	0.9194	1.0954
6 Point	Fitted	1.0205	0.9423	1.0990
7 Point	Fitted	1.0336	0.9570	1.1103
8 Point	Fitted	1.0410	0.9665	1.1155
9 Point	Fitted	1.0286	0.9568	1.1004
10 Point	Fitted	1.0160	0.9448	1.0872

MEDICAL Linear Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.0471	1.0116	1.0783
	2015	1.0378	1.0094	1.0625
	2016	1.0287	1.0072	1.0471
5 Point	2014	1.1094	1.0853	1.1306
	2015	1.0868	1.0679	1.1032
	2016	1.0650	1.0511	1.0770
6 Point	2014	1.1264	1.1167	1.1350
	2015	1.0999	1.0924	1.1065
	2016	1.0746	1.0692	1.0795
7 Point	2014	1.1419	1.1354	1.1476
	2015	1.1118	1.1069	1.1162
	2016	1.0833	1.0797	1.0865
8 Point	2014	1.1500	1.1468	1.1529
	2015	1.1181	1.1156	1.1203
	2016	1.0878	1.0860	1.0894
9 Point	2014	1.1373	1.1361	1.1384
	2015	1.1083	1.1074	1.1092
	2016	1.0808	1.0801	1.0814
10 Point	2014	1.1251	1.1236	1.1265
	2015	1.0989	1.0977	1.1000
	2016	1.0739	1.0731	1.0747

MEDICAL Expon'l FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.9100	0.8569	0.9631
	2014	0.9183	0.8588	0.9777
	2015	0.9266	0.8608	0.9925
	2016	0.9351	0.8627	1.0075
5 Point	2012	0.8696	0.8190	0.9202
	2013	0.8882	0.8327	0.9437
	2014	0.9072	0.8466	0.9678
	2015	0.9266	0.8608	0.9925
	2016	0.9465	0.8752	1.0179
6 Point	2011	0.8407	0.7872	0.8940
	2012	0.8616	0.8054	0.9177
	2013	0.8831	0.8240	0.9421
	2014	0.9051	0.8431	0.9671
	2015	0.9277	0.8626	0.9928
	2016	0.9509	0.8825	1.0192
7 Point	2010	0.8080	0.7560	0.8598
	2011	0.8310	0.7767	0.8853
	2012	0.8547	0.7978	0.9115
	2013	0.8790	0.8196	0.9384
	2014	0.9041	0.8420	0.9662
	2015	0.9299	0.8649	0.9948
	2016	0.9564	0.8885	1.0242
8 Point	2009	0.7774	0.7260	0.8287
	2010	0.8012	0.7479	0.8545
	2011	0.8258	0.7703	0.8812
	2012	0.8511	0.7935	0.9087
	2013	0.8772	0.8174	0.9370
	2014	0.9041	0.8420	0.9662
	2015	0.9318	0.8673	0.9963
	2016	0.9604	0.8934	1.0274
9 Point	2008	0.7650	0.7133	0.8168
	2009	0.7865	0.7332	0.8398
	2010	0.8086	0.7536	0.8636
	2011	0.8313	0.7747	0.8879
	2012	0.8547	0.7963	0.9130
	2013	0.8787	0.8185	0.9388
	2014	0.9033	0.8414	0.9653
	2015	0.9287	0.8648	0.9925
	2016	0.9548	0.8890	1.0206
10 Point	2007	0.7556	0.7051	0.8062
	2008	0.7750	0.7229	0.8270
	2009	0.7948	0.7412	0.8484
	2010	0.8152	0.7600	0.8703
	2011	0.8360	0.7793	0.8928
	2012	0.8574	0.7990	0.9159
	2013	0.8794	0.8192	0.9395
	2014	0.9019	0.8399	0.9638
	2015	0.9250	0.8612	0.9887
	2016	0.9486	0.8830	1.0142

MEDICAL Expon'l TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9630	0.8690	1.0579
5 Point	Fitted	1.0139	0.9236	1.1048
6 Point	Fitted	1.0301	0.9506	1.1099
7 Point	Fitted	1.0478	0.9697	1.1260
8 Point	Fitted	1.0595	0.9837	1.1352
9 Point	Fitted	1.0448	0.9722	1.1172
10 Point	Fitted	1.0298	0.9578	1.1018

MEDICAL Expon'l Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.0487	1.0119	1.0820
	2015	1.0392	1.0096	1.0659
	2016	1.0299	1.0073	1.0500
5 Point	2014	1.1176	1.0909	1.1416
	2015	1.0941	1.0730	1.1131
	2016	1.0712	1.0553	1.0854
6 Point	2014	1.1381	1.1275	1.1476
	2015	1.1104	1.1020	1.1179
	2016	1.0834	1.0771	1.0890
7 Point	2014	1.1590	1.1517	1.1654
	2015	1.1269	1.1211	1.1319
	2016	1.0956	1.0914	1.0994
8 Point	2014	1.1718	1.1683	1.1749
	2015	1.1370	1.1342	1.1394
	2016	1.1031	1.1011	1.1049
9 Point	2014	1.1565	1.1555	1.1574
	2015	1.1249	1.1241	1.1256
	2016	1.0942	1.0936	1.0947
10 Point	2014	1.1419	1.1403	1.1432
	2015	1.1134	1.1121	1.1145
	2016	1.0856	1.0846	1.0864

MEDICAL Linear LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7435	0.7183	0.7657
	2015	0.7865	0.7650	0.8053
	2016	0.8322	0.8148	0.8471
5 Point	2014	0.7878	0.7707	0.8028
	2015	0.8237	0.8094	0.8361
	2016	0.8616	0.8503	0.8713
6 Point	2014	0.7999	0.7930	0.8060
	2015	0.8336	0.8279	0.8386
	2016	0.8694	0.8650	0.8733
7 Point	2014	0.8109	0.8062	0.8149
	2015	0.8426	0.8389	0.8460
	2016	0.8764	0.8735	0.8790
8 Point	2014	0.8166	0.8143	0.8187
	2015	0.8474	0.8455	0.8491
	2016	0.8800	0.8786	0.8813
9 Point	2014	0.8076	0.8067	0.8084
	2015	0.8400	0.8393	0.8407
	2016	0.8744	0.8738	0.8749
10 Point	2014	0.7989	0.7979	0.7999
	2015	0.8329	0.8319	0.8337
	2016	0.8688	0.8681	0.8694

MEDICAL Expon'l LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7447	0.7186	0.7683
	2015	0.7876	0.7652	0.8078
	2016	0.8332	0.8149	0.8495
5 Point	2014	0.7936	0.7746	0.8107
	2015	0.8292	0.8132	0.8436
	2016	0.8666	0.8537	0.8781
6 Point	2014	0.8082	0.8006	0.8149
	2015	0.8416	0.8352	0.8473
	2016	0.8765	0.8714	0.8810
7 Point	2014	0.8230	0.8178	0.8276
	2015	0.8541	0.8497	0.8579
	2016	0.8863	0.8829	0.8894
8 Point	2014	0.8321	0.8296	0.8343
	2015	0.8617	0.8596	0.8636
	2016	0.8924	0.8908	0.8939
9 Point	2014	0.8212	0.8205	0.8219
	2015	0.8526	0.8520	0.8531
	2016	0.8852	0.8847	0.8856
10 Point	2014	0.8109	0.8097	0.8118
	2015	0.8438	0.8429	0.8447
	2016	0.8783	0.8774	0.8789

MEDICAL Linear TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4457	0.3987	0.4930
	2015	0.4122	0.3746	0.4498
	2016	0.4201	0.3793	0.4610
	3 Yr Ave	0.4260	0.3842	0.4679
5 Point	2014	0.4722	0.4278	0.5168
	2015	0.4317	0.3964	0.4670
	2016	0.4349	0.3958	0.4742
	3 Yr Ave	0.4463	0.4067	0.4860
6 Point	2014	0.4795	0.4402	0.5189
	2015	0.4369	0.4054	0.4684
	2016	0.4389	0.4027	0.4752
	3 Yr Ave	0.4518	0.4161	0.4875
7 Point	2014	0.4861	0.4475	0.5246
	2015	0.4416	0.4108	0.4725
	2016	0.4424	0.4066	0.4784
	3 Yr Ave	0.4567	0.4216	0.4918
8 Point	2014	0.4895	0.4520	0.5271
	2015	0.4441	0.4140	0.4742
	2016	0.4442	0.4090	0.4796
	3 Yr Ave	0.4593	0.4250	0.4936
9 Point	2014	0.4841	0.4478	0.5204
	2015	0.4402	0.4110	0.4695
	2016	0.4414	0.4068	0.4761
	3 Yr Ave	0.4552	0.4219	0.4887
10 Point	2014	0.4789	0.4429	0.5150
	2015	0.4365	0.4074	0.4656
	2016	0.4386	0.4041	0.4731
	3 Yr Ave	0.4513	0.4181	0.4846

MEDICAL Expon'l TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4464	0.3989	0.4946
	2015	0.4128	0.3747	0.4512
	2016	0.4206	0.3793	0.4623
	3 Yr Ave	0.4266	0.3843	0.4694
5 Point	2014	0.4757	0.4300	0.5219
	2015	0.4346	0.3982	0.4712
	2016	0.4375	0.3974	0.4779
	3 Yr Ave	0.4493	0.4085	0.4903
6 Point	2014	0.4844	0.4444	0.5246
	2015	0.4411	0.4090	0.4732
	2016	0.4425	0.4056	0.4794
	3 Yr Ave	0.4560	0.4197	0.4924
7 Point	2014	0.4933	0.4540	0.5328
	2015	0.4476	0.4161	0.4791
	2016	0.4474	0.4110	0.4840
	3 Yr Ave	0.4628	0.4270	0.4986
8 Point	2014	0.4988	0.4605	0.5371
	2015	0.4516	0.4209	0.4823
	2016	0.4505	0.4147	0.4865
	3 Yr Ave	0.4670	0.4320	0.5020
9 Point	2014	0.4922	0.4555	0.5291
	2015	0.4468	0.4172	0.4765
	2016	0.4468	0.4118	0.4819
	3 Yr Ave	0.4619	0.4282	0.4958
10 Point	2014	0.4861	0.4495	0.5226
	2015	0.4422	0.4128	0.4718
	2016	0.4434	0.4084	0.4783
	3 Yr Ave	0.4572	0.4236	0.4909

INDEMNITY Severity Annual Trend		(Avg Pd & Inc)	(Incur)	(Pd-30)
4 Point	Linear	1.6%	0.7%	2.4%
5 Point	Linear	2.0%	1.0%	2.8%
6 Point	Linear	1.8%	1.1%	2.5%
7 Point	Linear	1.6%	1.1%	2.2%
8 Point	Linear	1.4%	0.9%	1.8%
9 Point	Linear	1.2%	0.7%	1.6%
10 Point	Linear	1.2%	0.8%	1.6%
4 Point	Expon'l	1.7%	0.7%	2.6%
5 Point	Expon'l	2.1%	1.1%	3.0%
6 Point	Expon'l	2.0%	1.1%	2.7%
7 Point	Expon'l	1.8%	1.1%	2.4%
8 Point	Expon'l	1.5%	0.9%	2.0%
9 Point	Expon'l	1.3%	0.8%	1.7%
10 Point	Expon'l	1.3%	0.8%	1.7%

MEDICAL Severity Annual Trend		(Avg Pd & Inc)	(Incur)	(Pd-30)
4 Point	Linear	0.9%	0.2%	1.4%
5 Point	Linear	2.0%	1.6%	2.3%
6 Point	Linear	2.3%	2.1%	2.4%
7 Point	Linear	2.5%	2.4%	2.6%
8 Point	Linear	2.7%	2.6%	2.7%
9 Point	Linear	2.4%	2.4%	2.5%
10 Point	Linear	2.2%	2.2%	2.2%
4 Point	Expon'l	0.9%	0.2%	1.5%
5 Point	Expon'l	2.1%	1.7%	2.6%
6 Point	Expon'l	2.5%	2.3%	2.7%
7 Point	Expon'l	2.8%	2.7%	3.0%
8 Point	Expon'l	3.1%	3.0%	3.1%
9 Point	Expon'l	2.8%	2.8%	2.8%
10 Point	Expon'l	2.6%	2.5%	2.6%

INDEMNITY		(Avg Pd & Inc)	(Incur)	(Pd-30)
Loss Ratio				
Annual Trend				
4 Point	Linear	-4.81%	-5.68%	-4.04%
5 Point	Linear	-4.50%	-5.38%	-3.73%
6 Point	Linear	-4.63%	-5.34%	-4.01%
7 Point	Linear	-4.80%	-5.37%	-4.29%
8 Point	Linear	-5.05%	-5.52%	-4.63%
9 Point	Linear	-5.23%	-5.66%	-4.85%
10 Point	Linear	-5.21%	-5.61%	-4.86%
4 Point	Expon'l	-4.73%	-5.66%	-3.88%
5 Point	Expon'l	-4.38%	-5.35%	-3.48%
6 Point	Expon'l	-4.51%	-5.30%	-3.79%
7 Point	Expon'l	-4.69%	-5.32%	-4.10%
8 Point	Expon'l	-4.97%	-5.48%	-4.50%
9 Point	Expon'l	-5.17%	-5.63%	-4.74%
10 Point	Expon'l	-5.14%	-5.57%	-4.74%

MEDICAL		(Avg Pd & Inc)	(Incur)	(Pd-30)
Loss Ratio				
Annual Trend				
4 Point	Linear	-5.54%	-6.16%	-5.01%
5 Point	Linear	-4.50%	-4.90%	-4.16%
6 Point	Linear	-4.22%	-4.38%	-4.09%
7 Point	Linear	-3.98%	-4.09%	-3.89%
8 Point	Linear	-3.85%	-3.91%	-3.81%
9 Point	Linear	-4.06%	-4.07%	-4.03%
10 Point	Linear	-4.25%	-4.28%	-4.22%
4 Point	Expon'l	-5.51%	-6.16%	-4.94%
5 Point	Expon'l	-4.35%	-4.80%	-3.96%
6 Point	Expon'l	-4.02%	-4.19%	-3.86%
7 Point	Expon'l	-3.68%	-3.80%	-3.58%
8 Point	Expon'l	-3.48%	-3.54%	-3.43%
9 Point	Expon'l	-3.72%	-3.74%	-3.71%
10 Point	Expon'l	-3.96%	-3.98%	-3.93%