

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. An average of the latest five age-to-age factors has been selected for incurred loss development, where available. Averages of the latest three age-to-age factors have been selected for paid loss development and for the ratio of incurred to paid losses. The “tail” factor has been calculated by a method that uses a five-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 7.

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.

Superseded

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
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	PCOPAP Factor
29-30	1988	1,892,967,737	1.0000	1,892,967,737	1.7528	0.9994	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	1.0009
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	0.9999
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	1.0004
25-26	0.9994	1.0002	1.0019	1.0006	1.0000	1.0003	1.0008	1.0004	1.0004
24-25	0.9999	0.9996	1.0002	1.0008	0.9993	1.0001	1.0001	1.0000	1.0000
23-24	1.0009	1.0001	1.0006	1.0011	1.0006	1.0009	1.0008	1.0007	1.0007
22-23	1.0009	1.0000	0.9989	1.0002	0.9997	1.0000	0.9996	0.9999	0.9999
21-22	0.9990	0.9995	1.0003	1.0017	1.0009	1.0013	1.0010	1.0003	1.0003
20-21	0.9992	1.0017	1.0008	0.9984	0.9997	0.9991	0.9996	1.0000	1.0000
19-20	1.0011	1.0002	1.0004	0.9999	1.0004	1.0002	1.0002	1.0004	1.0004
18-19	1.0025	1.0011	0.9970	1.0021	0.9996	1.0009	0.9996	1.0005	1.0005
17-18	1.0009	1.0002	0.9996	1.0003	1.0009	1.0006	1.0003	1.0004	1.0004
16-17	0.9998	0.9983	0.9996	1.0005	1.0011	1.0008	1.0004	0.9999	0.9999
15-16	1.0014	1.0010	0.9995	0.9999	1.0001	1.0000	0.9998	1.0004	1.0004
14-15	1.0005	1.0004	0.9998	1.0013	1.0014	1.0014	1.0008	1.0007	1.0007
13-14	0.9997	0.9993	0.9996	1.0016	1.0016	1.0016	1.0009	1.0004	1.0004
12-13	1.0015	1.0014	0.9986	1.0007	1.0009	1.0008	1.0001	1.0006	1.0006
11-12	1.0051	1.0007	0.9998	1.0014	1.0011	1.0013	1.0008	1.0016	1.0016
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	1.0022
8-9	1.0050	1.0026	0.9989	1.0013	1.0010	1.0012	1.0004	1.0018	1.0018
7-8	1.0025	1.0035	1.0003	0.9999	1.0041	1.0020	1.0014	1.0021	1.0021
6-7	1.0068	1.0025	1.0028	1.0058	1.0062	1.0060	1.0049	1.0048	1.0048
5-6	1.0000	1.0034	1.0112	1.0002	1.0078	1.0040	1.0064	1.0045	1.0045
4-5	1.0089	1.0037	1.0060	1.0040	1.0054	1.0047	1.0051	1.0056	1.0056
3-4	1.0291	1.0337	1.0240	1.0319	1.0106	1.0213	1.0222	1.0259	1.0259
2-3	1.1100	1.0992	1.1086	1.0948	1.0876	1.0912	1.0970	1.1000	1.1000
1-2	1.3937	1.3808	1.3936	1.3303	1.3390	1.3347	1.3543	1.3675	1.3675

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	1.0021
27-28		1.0026	1.0021	1.0019	1.0026	1.0023	1.0022	1.0023	1.0022
26-27	1.0031	1.0020	1.0021	1.0030	1.0023	1.0027	1.0025	1.0025	1.0025
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	1.0033
23-24	1.0037	1.0030	1.0034	1.0040	1.0039	1.0040	1.0038	1.0036	1.0038
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	1.0039
20-21	1.0052	1.0049	1.0045	1.0039	1.0027	1.0033	1.0037	1.0042	1.0037
19-20	1.0053	1.0054	1.0034	1.0028	1.0020	1.0024	1.0027	1.0038	1.0027
18-19	1.0068	1.0043	1.0028	1.0019	1.0016	1.0018	1.0021	1.0035	1.0021
17-18	1.0039	1.0034	1.0029	1.0020	1.0016	1.0018	1.0022	1.0028	1.0022
16-17	1.0049	1.0039	1.0026	1.0017	1.0020	1.0019	1.0021	1.0030	1.0021
15-16	1.0026	1.0024	1.0013	1.0021	1.0028	1.0025	1.0021	1.0022	1.0021
14-15	1.0024	1.0019	1.0031	1.0020	1.0033	1.0027	1.0028	1.0025	1.0028
13-14	1.0022	1.0037	1.0040	1.0045	1.0042	1.0044	1.0042	1.0037	1.0042
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	1.0063
10-11	1.0108	1.0083	1.0094	1.0081	1.0072	1.0077	1.0082	1.0088	1.0082
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	1.0101
7-8	1.0175	1.0152	1.0144	1.0111	1.0131	1.0121	1.0129	1.0143	1.0129
6-7	1.0266	1.0184	1.0131	1.0220	1.0166	1.0193	1.0172	1.0193	1.0172
5-6	1.0272	1.0291	1.0356	1.0275	1.0226	1.0251	1.0286	1.0284	1.0286
4-5	1.0494	1.0465	1.0493	1.0380	1.0362	1.0371	1.0412	1.0439	1.0412
3-4	1.1150	1.1133	1.1011	1.0979	1.0813	1.0896	1.0934	1.1017	1.0934
2-3	1.2987	1.2852	1.2606	1.2582	1.2325	1.2454	1.2504	1.2670	1.2504
1-2	1.9079	1.9105	1.9193	1.8713	1.7883	1.8298	1.8596	1.8795	1.8596

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	1.0168
27-28		1.0229	1.0165	1.0173	1.0213	1.0193	1.0184	1.0195	1.0184
26-27	1.0260	1.0178	1.0192	1.0243	1.0207	1.0225	1.0214	1.0216	1.0214
25-26	1.0200	1.0216	1.0267	1.0238	1.0283	1.0261	1.0263	1.0241	1.0263
24-25	1.0237	1.0274	1.0261	1.0323	1.0299	1.0311	1.0294	1.0279	1.0294
23-24	1.0316	1.0278	1.0345	1.0353	1.0323	1.0338	1.0340	1.0323	1.0340
22-23	1.0309	1.0356	1.0374	1.0366	1.0365	1.0366	1.0368	1.0354	1.0368
21-22	1.0393	1.0417	1.0402	1.0416	1.0277	1.0347	1.0365	1.0381	1.0365
20-21	1.0472	1.0429	1.0443	1.0321	1.0258	1.0290	1.0341	1.0385	1.0341
19-20	1.0466	1.0465	1.0359	1.0302	1.0154	1.0228	1.0272	1.0349	1.0272
18-19	1.0531	1.0379	1.0318	1.0170	1.0110	1.0140	1.0199	1.0302	1.0199
17-18	1.0407	1.0358	1.0175	1.0135	1.0136	1.0136	1.0149	1.0242	1.0149
16-17	1.0407	1.0205	1.0156	1.0148	1.0154	1.0151	1.0153	1.0214	1.0153
15-16	1.0248	1.0167	1.0151	1.0170	1.0169	1.0170	1.0163	1.0181	1.0163
14-15	1.0182	1.0168	1.0198	1.0194	1.0285	1.0240	1.0226	1.0205	1.0226
13-14	1.0186	1.0220	1.0213	1.0334	1.0323	1.0329	1.0290	1.0253	1.0290
12-13	1.0281	1.0252	1.0355	1.0375	1.0445	1.0410	1.0392	1.0342	1.0392
11-12	1.0314	1.0406	1.0409	1.0495	1.0347	1.0421	1.0417	1.0394	1.0417
10-11	1.0510	1.0484	1.0577	1.0427	1.0398	1.0413	1.0467	1.0479	1.0467
9-10	1.0563	1.0699	1.0476	1.0492	1.0417	1.0455	1.0462	1.0529	1.0462
8-9	1.0820	1.0588	1.0581	1.0499	1.0394	1.0447	1.0491	1.0576	1.0491
7-8	1.0744	1.0747	1.0617	1.0513	1.0404	1.0459	1.0511	1.0605	1.0511
6-7	1.0994	1.0812	1.0627	1.0606	1.0555	1.0581	1.0596	1.0719	1.0596
5-6	1.1078	1.0899	1.0897	1.0809	1.0762	1.0786	1.0823	1.0889	1.0823
4-5	1.1398	1.1271	1.1311	1.1108	1.1227	1.1168	1.1215	1.1263	1.1215
3-4	1.2520	1.2518	1.2155	1.2253	1.1798	1.2026	1.2069	1.2249	1.2069
2-3	1.5712	1.5243	1.4941	1.4786	1.4243	1.4515	1.4657	1.4985	1.4657
1-2	2.6447	2.5785	2.5626	2.4607	2.2672	2.3640	2.4302	2.5027	2.4302

INDEMNITY	Selected Paid LDF	Selected Pd-Incur LDF	Selected Incurred LDF
Beyond			1.0009
29-30	1.0020	1.0158	1.0005
28-29	1.0021	1.0168	0.9999
27-28	1.0022	1.0184	1.0003
26-27	1.0025	1.0214	1.0004
25-26	1.0030	1.0263	1.0004
24-25	1.0033	1.0294	1.0000
23-24	1.0038	1.0340	1.0007
22-23	1.0040	1.0368	0.9999
21-22	1.0039	1.0365	1.0003
20-21	1.0037	1.0341	1.0000
19-20	1.0027	1.0272	1.0004
18-19	1.0021	1.0199	1.0005
17-18	1.0022	1.0149	1.0004
16-17	1.0021	1.0153	0.9999
15-16	1.0021	1.0163	1.0004
14-15	1.0028	1.0226	1.0007
13-14	1.0042	1.0290	1.0004
12-13	1.0053	1.0392	1.0006
11-12	1.0063	1.0417	1.0016
10-11	1.0082	1.0467	1.0013
9-10	1.0082	1.0462	1.0022
8-9	1.0101	1.0491	1.0018
7-8	1.0129	1.0511	1.0021
6-7	1.0172	1.0596	1.0048
5-6	1.0286	1.0823	1.0045
4-5	1.0412	1.1215	1.0056
3-4	1.0934	1.2069	1.0259
2-3	1.2504	1.4657	1.1000
1-2	1.8596	2.4302	1.3675

INDEMNITY	Policy Year	Incurred LDF	Paid to 30th LDF
Beyond		1.0009	1.0009
29-30	1988	1.0005	1.0158
28-29	1989	0.9999	1.0021
27-28	1990	1.0003	1.0022
26-27	1991	1.0004	1.0025
25-26	1992	1.0004	1.0030
24-25	1993	1.0000	1.0033
23-24	1994	1.0007	1.0038
22-23	1995	0.9999	1.0040
21-22	1996	1.0003	1.0039
20-21	1997	1.0000	1.0037
19-20	1998	1.0004	1.0027
18-19	1999	1.0005	1.0021
17-18	2000	1.0004	1.0022
16-17	2001	0.9999	1.0021
15-16	2002	1.0004	1.0021
14-15	2003	1.0007	1.0028
13-14	2004	1.0004	1.0042
12-13	2005	1.0006	1.0053
11-12	2006	1.0016	1.0063
10-11	2007	1.0013	1.0082
9-10	2008	1.0022	1.0082
8-9	2009	1.0018	1.0101
7-8	2010	1.0021	1.0129
6-7	2011	1.0048	1.0172
5-6	2012	1.0045	1.0286
4-5	2013	1.0056	1.0412
3-4	2014	1.0259	1.0934
2-3	2015	1.1000	1.2504
1-2	2016	1.3675	1.8596

INDEMNITY	Policy Year	Incurred Cum LDF	Paid to 30th Cum LDF
Beyond		1.0009	1.0009
29-30	1988	1.0014	1.0167
28-29	1989	1.0013	1.0188
27-28	1990	1.0016	1.0211
26-27	1991	1.0019	1.0236
25-26	1992	1.0024	1.0267
24-25	1993	1.0023	1.0301
23-24	1994	1.0030	1.0339
22-23	1995	1.0029	1.0380
21-22	1996	1.0032	1.0421
20-21	1997	1.0032	1.0460
19-20	1998	1.0036	1.0488
18-19	1999	1.0040	1.0510
17-18	2000	1.0044	1.0533
16-17	2001	1.0043	1.0555
15-16	2002	1.0047	1.0577
14-15	2003	1.0053	1.0606
13-14	2004	1.0057	1.0651
12-13	2005	1.0063	1.0708
11-12	2006	1.0080	1.0776
10-11	2007	1.0093	1.0865
9-10	2008	1.0115	1.0954
8-9	2009	1.0133	1.1065
7-8	2010	1.0153	1.1208
6-7	2011	1.0202	1.1401
5-6	2012	1.0249	1.1726
4-5	2013	1.0306	1.2209
3-4	2014	1.0572	1.3350
2-3	2015	1.1630	1.6693
1-2	2016	1.5904	3.1043

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

Superseded

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	981,786,278	980,960,245	982,612,310
28-29	1989	1,142,929,412	1,143,595,200	1,142,263,623
27-28	1990	1,168,781,982	1,168,113,881	1,169,450,082
26-27	1991	1,011,898,515	1,013,671,628	1,010,425,402
25-26	1992	856,068,056	857,102,970	855,033,142
24-25	1993	748,129,973	748,333,128	747,926,817
23-24	1994	692,748,397	693,337,422	692,159,371
22-23	1995	591,950,887	589,038,072	594,863,701
21-22	1996	511,095,165	507,178,760	515,011,570
20-21	1997	523,221,335	515,777,391	530,665,279
19-20	1998	525,699,475	516,576,212	534,822,738
18-19	1999	599,245,968	589,108,393	609,383,543
17-18	2000	637,706,289	626,760,018	648,652,560
16-17	2001	648,387,487	636,785,720	659,989,253
15-16	2002	677,132,481	668,119,836	686,145,126
14-15	2003	661,760,637	653,193,018	670,328,255
13-14	2004	698,997,722	692,051,009	705,944,434
12-13	2005	710,100,656	698,347,008	721,854,303
11-12	2006	731,498,876	718,750,408	744,247,344
10-11	2007	773,221,318	757,591,102	788,851,534
9-10	2008	725,688,617	708,303,870	743,073,364
8-9	2009	663,139,010	642,791,259	683,486,761
7-8	2010	685,496,179	664,461,619	706,530,739
6-7	2011	661,538,346	641,717,924	681,358,768
5-6	2012	602,397,139	585,990,183	618,804,094
4-5	2013	621,246,725	595,716,304	646,777,146
3-4	2014	624,969,518	597,276,173	652,662,863
2-3	2015	615,843,791	577,669,069	654,018,512
1-2	2016	607,116,401	571,422,871	642,809,931

INDEMNITY

	Policy Year	Adjusted Incurred (Avg Pd & Inc)	Adjusted Incurred (Incur)	Adjusted Incurred (Pd-30)
Beyond				
29-30	1988	976,190,096	975,368,772	977,011,420
28-29	1989	1,136,414,714	1,137,076,707	1,135,752,720
27-28	1990	1,162,119,925	1,161,455,632	1,162,784,217
26-27	1991	1,006,130,694	1,007,893,700	1,004,367,687
25-26	1992	851,445,289	852,474,614	850,415,963
24-25	1993	747,157,404	747,360,295	746,954,512
23-24	1994	692,748,397	693,337,422	692,159,371
22-23	1995	591,950,887	589,038,072	594,863,701
21-22	1996	511,095,165	507,178,760	515,011,570
20-21	1997	523,221,335	515,777,391	530,665,279
19-20	1998	525,699,475	516,576,212	534,822,738
18-19	1999	599,245,968	589,108,393	609,383,543
17-18	2000	637,706,289	626,760,018	648,652,560
16-17	2001	648,387,487	636,785,720	659,989,253
15-16	2002	677,132,481	668,119,836	686,145,126
14-15	2003	661,760,637	653,193,018	670,328,255
13-14	2004	698,997,722	692,051,009	705,944,434
12-13	2005	710,100,656	698,347,008	721,854,303
11-12	2006	731,498,876	718,750,408	744,247,344
10-11	2007	773,221,318	757,591,102	788,851,534
9-10	2008	725,688,617	708,303,870	743,073,364
8-9	2009	663,139,010	642,791,259	683,486,761
7-8	2010	685,496,179	664,461,619	706,530,739
6-7	2011	661,538,346	641,717,924	681,358,768
5-6	2012	602,397,139	585,990,183	618,804,094
4-5	2013	621,246,725	595,716,304	646,777,146
3-4	2014	624,969,518	597,276,173	652,662,863
2-3	2015	615,843,791	577,669,069	654,018,512
1-2	2016	607,116,401	571,422,871	642,809,931

INDEMNITY

Policy Year	Loss Ratio (Avg Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-30)
1988	1.1077	1.1068	1.1087
1989	1.3012	1.3020	1.3004
1990	1.2830	1.2823	1.2838
1991	1.2603	1.2625	1.2581
1992	1.1558	1.1572	1.1544
1993	1.1404	1.1407	1.1401
1994	1.0940	1.0949	1.0930
1995	1.0093	1.0043	1.0143
1996	0.8481	0.8416	0.8546
1997	0.8647	0.8524	0.8770
1998	0.8033	0.7894	0.8172
1999	0.8551	0.8407	0.8696
2000	0.8515	0.8369	0.8661
2001	0.8086	0.7941	0.8230
2002	0.8124	0.8016	0.8232
2003	0.7533	0.7435	0.7630
2004	0.7550	0.7475	0.7625
2005	0.6897	0.6782	0.7011
2006	0.6732	0.6615	0.6849
2007	0.6840	0.6702	0.6979
2008	0.6572	0.6415	0.6729
2009	0.6393	0.6197	0.6589
2010	0.6245	0.6053	0.6437
2011	0.5897	0.5720	0.6074
2012	0.5543	0.5392	0.5694
2013	0.5593	0.5363	0.5823
2014	0.5317	0.5081	0.5552
2015	0.4956	0.4649	0.5263
2016	0.4765	0.4485	0.5045

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	0.6897	0.6782	0.7011
2006	0.6988	0.6867	0.7110
2007	0.7532	0.7380	0.7685
2008	0.7828	0.7642	0.8016
2009	0.7867	0.7626	0.8108
2010	0.7799	0.7559	0.8038
2011	0.7843	0.7608	0.8078
2012	0.7885	0.7670	0.8100
2013	0.8144	0.7809	0.8479
2014	0.8451	0.8075	0.8824
2015	0.8541	0.8012	0.9070
2016	0.8869	0.8348	0.9390



INDEMNITY Linear FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.8162	0.7828	0.8494
	2014	0.8388	0.7983	0.8792
	2015	0.8615	0.8139	0.9090
	2016	0.8841	0.8294	0.9388
5 Point	2012	0.7905	0.7671	0.8138
	2013	0.8142	0.7827	0.8456
	2014	0.8378	0.7983	0.8773
	2015	0.8615	0.8139	0.9090
	2016	0.8851	0.8295	0.9407
6 Point	2011	0.7760	0.7564	0.7956
	2012	0.7971	0.7706	0.8236
	2013	0.8183	0.7849	0.8517
	2014	0.8395	0.7992	0.8797
	2015	0.8606	0.8134	0.9077
	2016	0.8818	0.8277	0.9358
7 Point	2010	0.7665	0.7485	0.7844
	2011	0.7849	0.7613	0.8085
	2012	0.8034	0.7741	0.8327
	2013	0.8219	0.7869	0.8568
	2014	0.8404	0.7997	0.8810
	2015	0.8588	0.8124	0.9052
	2016	0.8773	0.8252	0.9293
8 Point	2009	0.7641	0.7469	0.7813
	2010	0.7794	0.7575	0.8012
	2011	0.7946	0.7680	0.8212
	2012	0.8099	0.7786	0.8411
	2013	0.8251	0.7891	0.8611
	2014	0.8404	0.7997	0.8810
	2015	0.8556	0.8102	0.9009
	2016	0.8709	0.8208	0.9209
9 Point	2008	0.7617	0.7469	0.7766
	2009	0.7747	0.7556	0.7938
	2010	0.7877	0.7643	0.8111
	2011	0.8007	0.7730	0.8283
	2012	0.8136	0.7817	0.8456
	2013	0.8266	0.7903	0.8628
	2014	0.8396	0.7990	0.8801
	2015	0.8526	0.8077	0.8974
	2016	0.8656	0.8164	0.9146
10 Point	2007	0.7503	0.7381	0.7625
	2008	0.7630	0.7468	0.7792
	2009	0.7758	0.7555	0.7960
	2010	0.7885	0.7642	0.8127
	2011	0.8012	0.7729	0.8295
	2012	0.8140	0.7816	0.8463
	2013	0.8267	0.7903	0.8630
	2014	0.8394	0.7990	0.8798
	2015	0.8522	0.8077	0.8965
	2016	0.8649	0.8165	0.9133

INDEMNITY Linear TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9577	0.8799	1.0356
5 Point	Fitted	0.9620	0.8801	1.0437
6 Point	Fitted	0.9505	0.8740	1.0269
7 Point	Fitted	0.9373	0.8668	1.0078
8 Point	Fitted	0.9204	0.8550	0.9857
9 Point	Fitted	0.9077	0.8447	0.9707
10 Point	Fitted	0.9063	0.8447	0.9677

INDEMNITY Linear Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.1418	1.1022	1.1779
	2015	1.1117	1.0811	1.1393
	2016	1.0833	1.0609	1.1031
5 Point	2014	1.1482	1.1025	1.1898
	2015	1.1167	1.0814	1.1483
	2016	1.0868	1.0611	1.1096
6 Point	2014	1.1323	1.0937	1.1674
	2015	1.1045	1.0745	1.1313
	2016	1.0780	1.0560	1.0974
7 Point	2014	1.1154	1.0839	1.1440
	2015	1.0914	1.0669	1.1134
	2016	1.0684	1.0504	1.0845
8 Point	2014	1.0952	1.0692	1.1188
	2015	1.0757	1.0553	1.0941
	2016	1.0569	1.0418	1.0704
9 Point	2014	1.0812	1.0571	1.1029
	2015	1.0647	1.0457	1.0817
	2016	1.0487	1.0346	1.0613
10 Point	2014	1.0797	1.0572	1.1000
	2015	1.0635	1.0458	1.0794
	2016	1.0479	1.0346	1.0596

Superseded

INDEMNITY Expon'l FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.8164	0.7829	0.8498
	2014	0.8385	0.7982	0.8787
	2015	0.8611	0.8137	0.9085
	2016	0.8844	0.8295	0.9393
5 Point	2012	0.7911	0.7674	0.8148
	2013	0.8138	0.7825	0.8449
	2014	0.8371	0.7979	0.8761
	2015	0.8611	0.8137	0.9085
	2016	0.8858	0.8297	0.9421
6 Point	2011	0.7770	0.7569	0.7972
	2012	0.7970	0.7706	0.8234
	2013	0.8176	0.7846	0.8505
	2014	0.8387	0.7988	0.8784
	2015	0.8603	0.8132	0.9073
	2016	0.8825	0.8280	0.9371
7 Point	2010	0.7678	0.7492	0.7865
	2011	0.7851	0.7614	0.8088
	2012	0.8029	0.7738	0.8318
	2013	0.8210	0.7864	0.8554
	2014	0.8396	0.7992	0.8797
	2015	0.8585	0.8123	0.9047
	2016	0.8779	0.8255	0.9303
8 Point	2009	0.7656	0.7477	0.7836
	2010	0.7798	0.7577	0.8020
	2011	0.7944	0.7679	0.8207
	2012	0.8091	0.7782	0.8399
	2013	0.8242	0.7886	0.8596
	2014	0.8396	0.7992	0.8797
	2015	0.8552	0.8100	0.9003
	2016	0.8711	0.8209	0.9213
9 Point	2008	0.7633	0.7476	0.7791
	2009	0.7754	0.7559	0.7949
	2010	0.7877	0.7643	0.8110
	2011	0.8001	0.7727	0.8274
	2012	0.8128	0.7812	0.8442
	2013	0.8257	0.7899	0.8613
	2014	0.8388	0.7986	0.8788
	2015	0.8521	0.8074	0.8966
	2016	0.8656	0.8164	0.9148
10 Point	2007	0.7520	0.7390	0.7653
	2008	0.7638	0.7472	0.7805
	2009	0.7758	0.7555	0.7961
	2010	0.7880	0.7640	0.8119
	2011	0.8004	0.7725	0.8281
	2012	0.8130	0.7811	0.8446
	2013	0.8257	0.7899	0.8614
	2014	0.8387	0.7987	0.8786
	2015	0.8519	0.8076	0.8961
	2016	0.8653	0.8166	0.9139

INDEMNITY Expon'l TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9644	0.8830	1.0469
5 Point	Fitted	0.9711	0.8840	1.0600
6 Point	Fitted	0.9587	0.8777	1.0409
7 Point	Fitted	0.9440	0.8701	1.0189
8 Point	Fitted	0.9250	0.8572	0.9932
9 Point	Fitted	0.9110	0.8461	0.9764
10 Point	Fitted	0.9103	0.8466	0.9744

INDEMNITY Expon'l Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.1501	1.1063	1.1914
	2015	1.1199	1.0852	1.1524
	2016	1.0905	1.0645	1.1145
5 Point	2014	1.1601	1.1078	1.2099
	2015	1.1277	1.0864	1.1668
	2016	1.0963	1.0655	1.1252
6 Point	2014	1.1431	1.0989	1.1850
	2015	1.1143	1.0793	1.1473
	2016	1.0863	1.0601	1.1108
7 Point	2014	1.1244	1.0886	1.1583
	2015	1.0996	1.0711	1.1263
	2016	1.0753	1.0540	1.0952
8 Point	2014	1.1017	1.0726	1.1291
	2015	1.0816	1.0584	1.1033
	2016	1.0618	1.0443	1.0780
9 Point	2014	1.0861	1.0594	1.1111
	2015	1.0691	1.0478	1.0890
	2016	1.0524	1.0364	1.0674
10 Point	2014	1.0853	1.0600	1.1091
	2015	1.0685	1.0483	1.0874
	2016	1.0520	1.0367	1.0662

INDEMNITY Linear LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.8108	0.7827	0.8364
	2015	0.8426	0.8194	0.8635
	2016	0.8764	0.8583	0.8924
5 Point	2014	0.8153	0.7829	0.8449
	2015	0.8463	0.8196	0.8703
	2016	0.8792	0.8584	0.8977
6 Point	2014	0.8040	0.7766	0.8290
	2015	0.8371	0.8144	0.8574
	2016	0.8721	0.8543	0.8878
7 Point	2014	0.7920	0.7697	0.8124
	2015	0.8272	0.8086	0.8438
	2016	0.8643	0.8498	0.8774
8 Point	2014	0.7777	0.7592	0.7945
	2015	0.8153	0.7998	0.8292
	2016	0.8550	0.8428	0.8660
9 Point	2014	0.7678	0.7506	0.7832
	2015	0.8069	0.7925	0.8198
	2016	0.8484	0.8370	0.8586
10 Point	2014	0.7667	0.7507	0.7811
	2015	0.8060	0.7926	0.8181
	2016	0.8478	0.8370	0.8572

INDEMNITY Expon'l LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.8167	0.7856	0.8460
	2015	0.8488	0.8225	0.8734
	2016	0.8822	0.8612	0.9016
5 Point	2014	0.8238	0.7866	0.8591
	2015	0.8547	0.8234	0.8843
	2016	0.8869	0.8620	0.9103
6 Point	2014	0.8117	0.7803	0.8415
	2015	0.8445	0.8180	0.8695
	2016	0.8788	0.8576	0.8986
7 Point	2014	0.7984	0.7730	0.8225
	2015	0.8334	0.8118	0.8536
	2016	0.8699	0.8527	0.8860
8 Point	2014	0.7823	0.7617	0.8018
	2015	0.8197	0.8022	0.8362
	2016	0.8590	0.8448	0.8721
9 Point	2014	0.7712	0.7523	0.7890
	2015	0.8103	0.7941	0.8254
	2016	0.8514	0.8384	0.8635
10 Point	2014	0.7707	0.7527	0.7876
	2015	0.8098	0.7945	0.8241
	2016	0.8511	0.8387	0.8626

INDEMNITY Linear TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4311	0.3977	0.4644
	2015	0.4176	0.3809	0.4545
	2016	0.4176	0.3849	0.4502
	3 Yr Ave	0.4221	0.3878	0.4564
5 Point	2014	0.4335	0.3978	0.4691
	2015	0.4194	0.3810	0.4580
	2016	0.4189	0.3850	0.4529
	3 Yr Ave	0.4239	0.3879	0.4600
6 Point	2014	0.4275	0.3946	0.4603
	2015	0.4149	0.3786	0.4512
	2016	0.4156	0.3832	0.4479
	3 Yr Ave	0.4193	0.3855	0.4531
7 Point	2014	0.4211	0.3911	0.4510
	2015	0.4100	0.3759	0.4441
	2016	0.4118	0.3811	0.4426
	3 Yr Ave	0.4143	0.3827	0.4459
8 Point	2014	0.4135	0.3857	0.4411
	2015	0.4041	0.3718	0.4364
	2016	0.4074	0.3780	0.4369
	3 Yr Ave	0.4083	0.3785	0.4381
9 Point	2014	0.4082	0.3814	0.4348
	2015	0.3999	0.3684	0.4315
	2016	0.4043	0.3754	0.4332
	3 Yr Ave	0.4041	0.3751	0.4332
10 Point	2014	0.4077	0.3814	0.4337
	2015	0.3995	0.3685	0.4306
	2016	0.4040	0.3754	0.4325
	3 Yr Ave	0.4037	0.3751	0.4323

Superseded

INDEMNITY Expon'l TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4342	0.3992	0.4697
	2015	0.4207	0.3824	0.4597
	2016	0.4204	0.3862	0.4549
	3 Yr Ave	0.4251	0.3893	0.4614
5 Point	2014	0.4380	0.3997	0.4770
	2015	0.4236	0.3828	0.4654
	2016	0.4226	0.3866	0.4592
	3 Yr Ave	0.4281	0.3897	0.4672
6 Point	2014	0.4316	0.3965	0.4672
	2015	0.4185	0.3803	0.4576
	2016	0.4187	0.3846	0.4533
	3 Yr Ave	0.4229	0.3871	0.4594
7 Point	2014	0.4245	0.3928	0.4567
	2015	0.4130	0.3774	0.4492
	2016	0.4145	0.3824	0.4470
	3 Yr Ave	0.4173	0.3842	0.4510
8 Point	2014	0.4159	0.3870	0.4452
	2015	0.4062	0.3729	0.4401
	2016	0.4093	0.3789	0.4400
	3 Yr Ave	0.4105	0.3796	0.4418
9 Point	2014	0.4100	0.3822	0.4381
	2015	0.4016	0.3692	0.4344
	2016	0.4057	0.3760	0.4356
	3 Yr Ave	0.4058	0.3758	0.4360
10 Point	2014	0.4098	0.3824	0.4373
	2015	0.4013	0.3694	0.4337
	2016	0.4055	0.3762	0.4352
	3 Yr Ave	0.4055	0.3760	0.4354

Superseded

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	0.9925	1.0141	1.0036	1.0089	1.0034	1.0072	1.0057
29-30				1.0086	1.0181	1.0134	1.0134	1.0134	1.0093
28-29			0.9979	1.0013	0.9980	0.9997	0.9997	0.9991	0.9991
27-28		1.0035	1.0016	1.0017	1.0010	1.0014	1.0014	1.0020	1.0020
26-27	1.0057	1.0054	0.9988	1.0067	0.9996	1.0032	1.0017	1.0032	1.0032
25-26	1.0097	1.0061	1.0090	1.0055	1.0025	1.0040	1.0057	1.0066	1.0066
24-25	1.0107	1.0042	1.0033	0.9988	0.9995	0.9992	1.0005	1.0033	1.0033
23-24	1.0054	1.0088	1.0037	1.0045	1.0047	1.0046	1.0043	1.0054	1.0054
22-23	1.0065	1.0018	1.0011	1.0057	1.0032	1.0045	1.0033	1.0037	1.0037
21-22	1.0100	1.0052	1.0062	1.0053	1.0013	1.0033	1.0043	1.0056	1.0056
20-21	1.0093	1.0108	1.0073	0.9991	1.0078	1.0035	1.0047	1.0069	1.0069
19-20	1.0061	1.0095	1.0109	1.0060	0.9980	1.0020	1.0050	1.0061	1.0061
18-19	1.0058	1.0016	0.9924	1.0052	1.0082	1.0067	1.0019	1.0026	1.0026
17-18	1.0081	1.0130	1.0020	1.0010	0.9944	0.9977	0.9991	1.0037	1.0037
16-17	1.0121	1.0065	0.9995	1.0035	1.0022	1.0029	1.0017	1.0048	1.0048
15-16	1.0098	1.0042	0.9993	1.0048	1.0006	1.0027	1.0016	1.0037	1.0037
14-15	1.0077	1.0140	1.0049	1.0019	1.0058	1.0039	1.0042	1.0069	1.0069
13-14	1.0066	1.0043	1.0035	1.0033	1.0046	1.0040	1.0038	1.0045	1.0045
12-13	1.0081	1.0044	1.0088	1.0069	1.0033	1.0051	1.0063	1.0063	1.0063
11-12	1.0072	1.0164	1.0059	0.9996	1.0073	1.0035	1.0043	1.0073	1.0073
10-11	1.0102	1.0100	1.0006	1.0083	1.0046	1.0065	1.0045	1.0067	1.0067
9-10	1.0026	1.0115	1.0026	1.0041	1.0022	1.0032	1.0030	1.0046	1.0046
8-9	1.0141	1.0108	1.0066	1.0062	0.9978	1.0020	1.0035	1.0071	1.0071
7-8	1.0131	1.0211	0.9981	0.9991	0.9973	0.9982	0.9982	1.0057	1.0057
6-7	1.0065	1.0061	1.0077	1.0162	1.0082	1.0122	1.0107	1.0089	1.0089
5-6	1.0114	1.0073	0.9975	0.9987	1.0085	1.0036	1.0016	1.0047	1.0047
4-5	1.0125	1.0164	1.0052	1.0088	1.0308	1.0198	1.0149	1.0147	1.0147
3-4	1.0144	1.0139	0.9913	1.0047	0.9974	1.0011	0.9978	1.0043	1.0043
2-3	1.0340	1.0316	1.0238	1.0201	1.0200	1.0201	1.0213	1.0259	1.0259
1-2	1.0904	1.0682	1.0841	1.0717	1.0479	1.0598	1.0679	1.0725	1.0725

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

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			1.0633	1.0736	1.0561	1.0649	1.0643	1.0643	1.0643
27-28		1.0799	1.0837	1.0637	1.0740	1.0689	1.0738	1.0753	1.0738
26-27	1.0880	1.0884	1.0701	1.0841	1.0498	1.0670	1.0680	1.0761	1.0680
25-26	1.0938	1.0783	1.0866	1.0573	1.0617	1.0595	1.0685	1.0755	1.0685
24-25	1.0796	1.0827	1.0596	1.0657	1.0627	1.0642	1.0627	1.0701	1.0627
23-24	1.0893	1.0613	1.0742	1.0751	1.0695	1.0723	1.0729	1.0739	1.0729
22-23	1.0612	1.0760	1.0818	1.0706	1.0793	1.0750	1.0772	1.0738	1.0772
21-22	1.0843	1.0901	1.0795	1.0865	1.0748	1.0807	1.0803	1.0830	1.0803
20-21	1.0973	1.0835	1.0992	1.0822	1.0920	1.0871	1.0911	1.0908	1.0911
19-20	1.0872	1.1001	1.0907	1.0975	1.0798	1.0887	1.0893	1.0911	1.0893
18-19	1.1040	1.0843	1.1015	1.0979	1.0862	1.0921	1.0952	1.0948	1.0952
17-18	1.0968	1.1154	1.1004	1.0889	1.0676	1.0783	1.0856	1.0938	1.0856
16-17	1.1221	1.1014	1.0980	1.0831	1.0648	1.0740	1.0820	1.0939	1.0820
15-16	1.1066	1.0968	1.0868	1.0719	1.0495	1.0607	1.0694	1.0823	1.0694
14-15	1.1042	1.1050	1.0761	1.0591	1.0712	1.0652	1.0688	1.0831	1.0688
13-14	1.1019	1.0782	1.0618	1.0814	1.0608	1.0711	1.0680	1.0768	1.0680
12-13	1.0868	1.0638	1.0915	1.0667	1.0622	1.0645	1.0735	1.0742	1.0735
11-12	1.0715	1.0936	1.0700	1.0690	1.0782	1.0736	1.0724	1.0765	1.0724
10-11	1.0918	1.0770	1.0799	1.0825	1.0709	1.0767	1.0778	1.0804	1.0778
9-10	1.0796	1.0917	1.0858	1.0822	1.0604	1.0713	1.0761	1.0799	1.0761
8-9	1.0969	1.0968	1.0924	1.0737	1.0574	1.0656	1.0745	1.0834	1.0745
7-8	1.1026	1.0997	1.0797	1.0704	1.0720	1.0712	1.0740	1.0849	1.0740
6-7	1.1000	1.1035	1.0851	1.0921	1.0957	1.0939	1.0910	1.0953	1.0910
5-6	1.1180	1.0935	1.0908	1.1177	1.0866	1.1022	1.0984	1.1013	1.0984
4-5	1.1124	1.1191	1.1362	1.0971	1.1226	1.1099	1.1186	1.1175	1.1186
3-4	1.1453	1.1723	1.1215	1.1315	1.1537	1.1426	1.1356	1.1449	1.1356
2-3	1.2486	1.2201	1.1959	1.2551	1.1814	1.2183	1.2108	1.2202	1.2108
1-2	1.4869	1.4602	1.5180	1.4681	1.4811	1.4746	1.4891	1.4829	1.4891

MEDICAL	Selected Paid LDF	Selected Pd-Incur LDF	Selected Incurred LDF
Beyond			1.0057
29-30	1.0090	1.0768	1.0093
28-29	1.0063	1.0643	0.9991
27-28	1.0072	1.0738	1.0020
26-27	1.0076	1.0680	1.0032
25-26	1.0076	1.0685	1.0066
24-25	1.0068	1.0627	1.0033
23-24	1.0093	1.0729	1.0054
22-23	1.0100	1.0772	1.0037
21-22	1.0113	1.0803	1.0056
20-21	1.0101	1.0911	1.0069
19-20	1.0096	1.0893	1.0061
18-19	1.0103	1.0952	1.0026
17-18	1.0086	1.0856	1.0037
16-17	1.0088	1.0820	1.0048
15-16	1.0072	1.0694	1.0037
14-15	1.0102	1.0688	1.0069
13-14	1.0099	1.0680	1.0045
12-13	1.0108	1.0735	1.0063
11-12	1.0102	1.0724	1.0073
10-11	1.0100	1.0778	1.0067
9-10	1.0132	1.0761	1.0046
8-9	1.0127	1.0745	1.0071
7-8	1.0120	1.0740	1.0057
6-7	1.0135	1.0910	1.0089
5-6	1.0155	1.0984	1.0047
4-5	1.0179	1.1186	1.0147
3-4	1.0340	1.1356	1.0043
2-3	1.0701	1.2108	1.0259
1-2	1.2543	1.4891	1.0725

MEDICAL	Policy Year	Incurred LDF	Paid to 30th LDF
Beyond		1.0057	1.0057
29-30	1988	1.0093	1.0768
28-29	1989	0.9991	1.0063
27-28	1990	1.0020	1.0072
26-27	1991	1.0032	1.0076
25-26	1992	1.0066	1.0076
24-25	1993	1.0033	1.0068
23-24	1994	1.0054	1.0098
22-23	1995	1.0037	1.0100
21-22	1996	1.0056	1.0113
20-21	1997	1.0069	1.0101
19-20	1998	1.0061	1.0096
18-19	1999	1.0026	1.0103
17-18	2000	1.0037	1.0086
16-17	2001	1.0048	1.0088
15-16	2002	1.0037	1.0072
14-15	2003	1.0069	1.0102
13-14	2004	1.0045	1.0099
12-13	2005	1.0063	1.0108
11-12	2006	1.0073	1.0102
10-11	2007	1.0067	1.0100
9-10	2008	1.0046	1.0132
8-9	2009	1.0071	1.0127
7-8	2010	1.0057	1.0120
6-7	2011	1.0089	1.0135
5-6	2012	1.0047	1.0155
4-5	2013	1.0147	1.0179
3-4	2014	1.0043	1.0340
2-3	2015	1.0259	1.0701
1-2	2016	1.0725	1.2543

MEDICAL	Policy Year	Incurred Cum LDF	Paid to 30th Cum LDF
Beyond		1.0057	1.0057
29-30	1988	1.0150	1.0829
28-29	1989	1.0141	1.0897
27-28	1990	1.0160	1.0976
26-27	1991	1.0193	1.1059
25-26	1992	1.0260	1.1142
24-25	1993	1.0294	1.1218
23-24	1994	1.0350	1.1322
22-23	1995	1.0388	1.1435
21-22	1996	1.0446	1.1565
20-21	1997	1.0518	1.1682
19-20	1998	1.0582	1.1795
18-19	1999	1.0610	1.1916
17-18	2000	1.0649	1.2018
16-17	2001	1.0700	1.2124
15-16	2002	1.0740	1.2212
14-15	2003	1.0813	1.2336
13-14	2004	1.0861	1.2459
12-13	2005	1.0930	1.2594
11-12	2006	1.1009	1.2722
10-11	2007	1.1084	1.2849
9-10	2008	1.1135	1.3018
8-9	2009	1.1214	1.3184
7-8	2010	1.1278	1.3342
6-7	2011	1.1379	1.3522
5-6	2012	1.1432	1.3732
4-5	2013	1.1601	1.3978
3-4	2014	1.1651	1.4453
2-3	2015	1.1953	1.5466
1-2	2016	1.2819	1.9399

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

Superseded

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	543,689,082	539,619,374	547,758,789
28-29	1989	664,434,557	661,369,788	667,499,326
27-28	1990	695,644,735	683,575,059	707,714,410
26-27	1991	645,897,318	636,883,234	654,911,402
25-26	1992	574,738,913	566,198,943	583,278,883
24-25	1993	451,627,846	445,275,042	457,980,649
23-24	1994	426,716,215	421,341,103	432,091,326
22-23	1995	396,180,509	389,364,990	402,996,028
21-22	1996	398,453,813	393,796,891	403,110,735
20-21	1997	421,588,159	413,749,869	429,426,449
19-20	1998	456,831,905	449,070,794	464,593,016
18-19	1999	491,182,358	477,089,359	505,275,356
17-18	2000	532,475,832	514,872,791	550,078,872
16-17	2001	531,750,472	509,914,416	553,586,527
15-16	2002	598,257,091	577,128,005	619,386,177
14-15	2003	623,223,976	598,044,670	648,403,281
13-14	2004	689,277,995	660,126,379	718,429,610
12-13	2005	723,173,935	695,485,728	750,862,142
11-12	2006	743,498,817	711,719,158	775,278,475
10-11	2007	811,353,755	770,702,506	852,005,003
9-10	2008	738,006,327	697,517,490	778,495,164
8-9	2009	658,385,805	624,258,488	692,513,122
7-8	2010	714,576,278	682,183,528	746,969,028
6-7	2011	716,248,323	678,970,681	753,525,965
5-6	2012	663,251,833	635,630,806	690,872,860
4-5	2013	697,677,659	672,314,327	723,040,991
3-4	2014	720,543,698	680,904,686	760,182,710
2-3	2015	667,781,420	638,635,173	696,927,666
1-2	2016	662,875,921	629,892,088	695,859,754

MEDICAL

Policy Year	Adjusted Incurred (Avg Pd & Inc)	Adjusted Incurred (Incur)	Adjusted Incurred (Pd-30)	
Beyond				
29-30	1988	543,689,082	539,619,374	547,758,789
28-29	1989	664,434,557	661,369,788	667,499,326
27-28	1990	695,644,735	683,575,059	707,714,410
26-27	1991	645,897,318	636,883,234	654,911,402
25-26	1992	574,738,913	566,198,943	583,278,883
24-25	1993	451,627,846	445,275,042	457,980,649
23-24	1994	426,716,215	421,341,103	432,091,326
22-23	1995	396,180,509	389,364,990	402,996,028
21-22	1996	398,453,813	393,796,891	403,110,735
20-21	1997	421,588,159	413,749,869	429,426,449
19-20	1998	456,831,905	449,070,794	464,593,016
18-19	1999	491,182,358	477,089,359	505,275,356
17-18	2000	532,475,832	514,872,791	550,078,872
16-17	2001	531,750,472	509,914,416	553,586,527
15-16	2002	598,257,091	577,128,005	619,386,177
14-15	2003	623,223,976	598,044,670	648,403,281
13-14	2004	689,277,995	660,126,379	718,429,610
12-13	2005	723,173,935	695,485,728	750,862,142
11-12	2006	743,498,817	711,719,158	775,278,475
10-11	2007	811,353,755	770,702,506	852,005,003
9-10	2008	738,006,327	697,517,490	778,495,164
8-9	2009	658,385,805	624,258,488	692,513,122
7-8	2010	714,576,278	682,183,528	746,969,028
6-7	2011	716,248,323	678,970,681	753,525,965
5-6	2012	663,251,833	635,630,806	690,872,860
4-5	2013	697,677,659	672,314,327	723,040,991
3-4	2014	720,543,698	680,904,686	760,182,710
2-3	2015	667,781,420	638,635,173	696,927,666
1-2	2016	662,875,921	629,892,088	695,859,754

MEDICAL

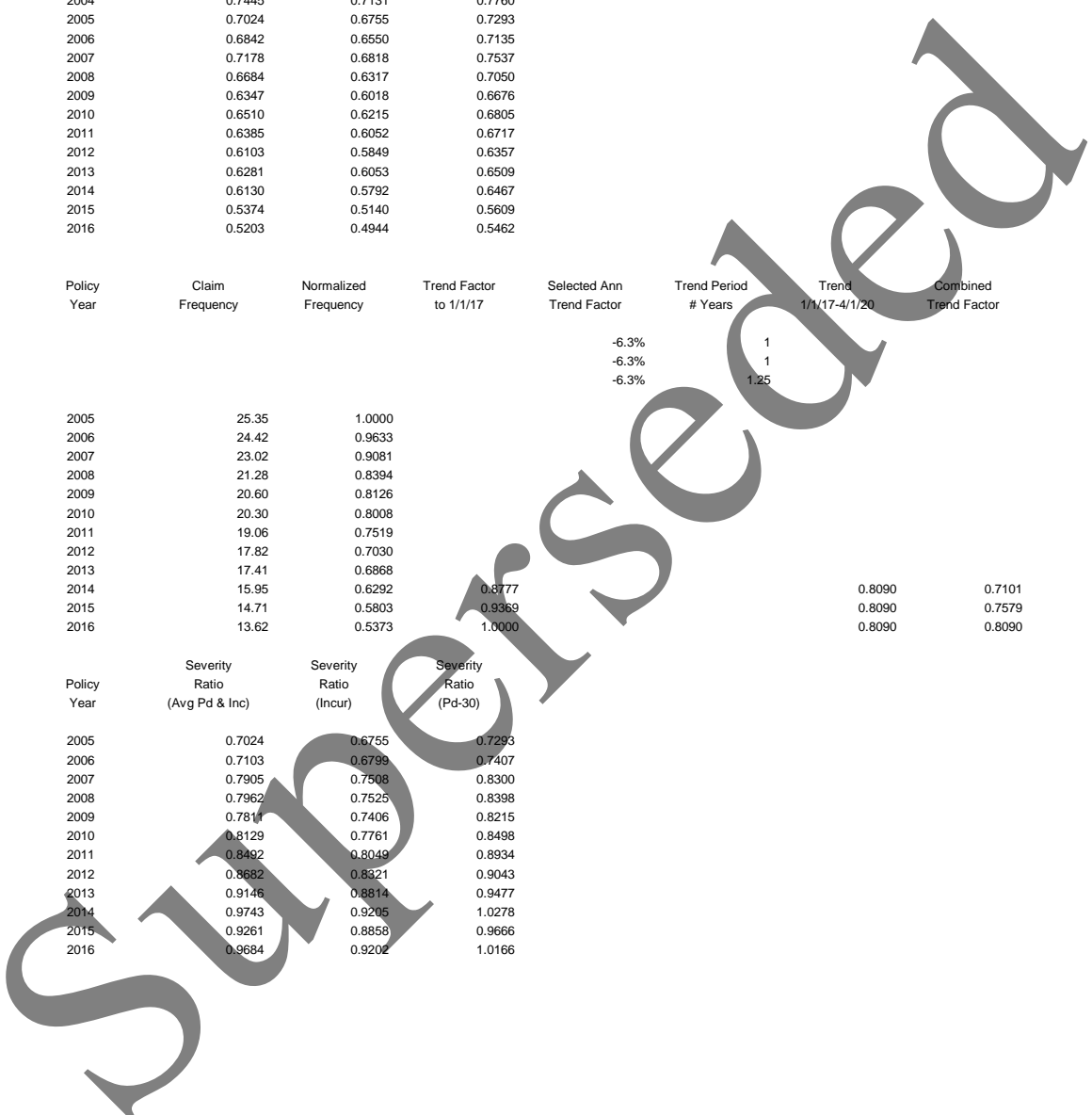
Policy Year	Loss Ratio (Avg Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-30)
1988	0.6169	0.6123	0.6216
1989	0.7608	0.7573	0.7643
1990	0.7680	0.7547	0.7813
1991	0.8091	0.7978	0.8204
1992	0.7802	0.7686	0.7918
1993	0.6893	0.6796	0.6990
1994	0.6739	0.6654	0.6823
1995	0.6755	0.6639	0.6871
1996	0.6612	0.6535	0.6689
1997	0.6968	0.6838	0.7097
1998	0.6981	0.6862	0.7099
1999	0.7009	0.6808	0.7210
2000	0.7110	0.6875	0.7345
2001	0.6631	0.6359	0.6903
2002	0.7178	0.6924	0.7431
2003	0.7094	0.6807	0.7381
2004	0.7445	0.7131	0.7760
2005	0.7024	0.6755	0.7293
2006	0.6842	0.6550	0.7135
2007	0.7178	0.6818	0.7537
2008	0.6684	0.6317	0.7050
2009	0.6347	0.6018	0.6676
2010	0.6510	0.6215	0.6805
2011	0.6385	0.6052	0.6717
2012	0.6103	0.5849	0.6357
2013	0.6281	0.6053	0.6509
2014	0.6130	0.5792	0.6467
2015	0.5374	0.5140	0.5609
2016	0.5203	0.4944	0.5462

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
2005				-6.3%	1		
2006				-6.3%	1		
2007				-6.3%	1.25		
2008	25.35	1.0000					
2009	24.42	0.9633					
2010	23.02	0.9081					
2011	21.28	0.8394					
2012	20.60	0.8126					
2013	20.30	0.8008					
2014	19.06	0.7519					
2015	17.82	0.7030					
2016	17.41	0.6868					
2017	15.95	0.6292	0.8777			0.8090	0.7101
2018	14.71	0.5803	0.9369			0.8090	0.7579
2019	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	0.7024	0.6755	0.7293
2006	0.7103	0.6799	0.7407
2007	0.7905	0.7508	0.8300
2008	0.7962	0.7525	0.8398
2009	0.7811	0.7406	0.8215
2010	0.8129	0.7761	0.8498
2011	0.8492	0.8049	0.8934
2012	0.8682	0.8321	0.9043
2013	0.9146	0.8814	0.9477
2014	0.9743	0.9205	1.0278
2015	0.9261	0.8858	0.9666
2016	0.9684	0.9202	1.0166



MEDICAL Linear FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.9289	0.8897	0.9679
	2014	0.9402	0.8979	0.9824
	2015	0.9515	0.9061	0.9970
	2016	0.9628	0.9142	1.0115
5 Point	2012	0.8879	0.8519	0.9239
	2013	0.9091	0.8699	0.9483
	2014	0.9303	0.8880	0.9726
	2015	0.9515	0.9061	0.9970
	2016	0.9727	0.9241	1.0213
6 Point	2011	0.8576	0.8187	0.8963
	2012	0.8813	0.8409	0.9216
	2013	0.9050	0.8631	0.9468
	2014	0.9286	0.8852	0.9720
	2015	0.9523	0.9074	0.9972
	2016	0.9760	0.9296	1.0225
7 Point	2010	0.8241	0.7870	0.8612
	2011	0.8501	0.8114	0.8887
	2012	0.8760	0.8358	0.9162
	2013	0.9020	0.8601	0.9437
	2014	0.9279	0.8845	0.9713
	2015	0.9538	0.9089	0.9988
	2016	0.9798	0.9333	1.0263
8 Point	2009	0.7911	0.7535	0.8286
	2010	0.8184	0.7797	0.8571
	2011	0.8458	0.8059	0.8857
	2012	0.8732	0.8321	0.9142
	2013	0.9005	0.8583	0.9427
	2014	0.9279	0.8845	0.9713
	2015	0.9553	0.9107	0.9998
	2016	0.9826	0.9369	1.0283
9 Point	2008	0.7760	0.7368	0.8151
	2009	0.8012	0.7613	0.8410
	2010	0.8264	0.7858	0.8669
	2011	0.8516	0.8104	0.8927
	2012	0.8768	0.8349	0.9186
	2013	0.9020	0.8594	0.9445
	2014	0.9272	0.8840	0.9704
	2015	0.9524	0.9085	0.9963
	2016	0.9776	0.9330	1.0221
10 Point	2007	0.7645	0.7256	0.8033
	2008	0.7875	0.7480	0.8270
	2009	0.8106	0.7704	0.8506
	2010	0.8336	0.7929	0.8743
	2011	0.8566	0.8153	0.8979
	2012	0.8797	0.8377	0.9216
	2013	0.9027	0.8601	0.9452
	2014	0.9257	0.8826	0.9689
	2015	0.9488	0.9050	0.9925
	2016	0.9718	0.9274	1.0162

MEDICAL Linear TRENDED		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	Fitted	0.9996	0.9408	1.0588
5 Point	Fitted	1.0416	0.9828	1.1004
6 Point	Fitted	1.0531	1.0018	1.1045
7 Point	Fitted	1.0641	1.0125	1.1157
8 Point	Fitted	1.0716	1.0221	1.1210
9 Point	Fitted	1.0595	1.0127	1.1062
10 Point	Fitted	1.0467	1.0003	1.0931

MEDICAL Linear Severity Trend Factor		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
4 Point	2014	1.0632	1.0478	1.0778
	2015	1.0506	1.0383	1.0620
	2016	1.0382	1.0290	1.0467
5 Point	2014	1.1196	1.1068	1.1314
	2015	1.0946	1.0847	1.1038
	2016	1.0708	1.0635	1.0775
6 Point	2014	1.1340	1.1316	1.1363
	2015	1.1058	1.1039	1.1075
	2016	1.0789	1.0776	1.0802
7 Point	2014	1.1468	1.1447	1.1487
	2015	1.1156	1.1140	1.1171
	2016	1.0861	1.0849	1.0871
8 Point	2014	1.1548	1.1556	1.1542
	2015	1.1218	1.1223	1.1213
	2016	1.0905	1.0909	1.0902
9 Point	2014	1.1427	1.1457	1.1400
	2015	1.1125	1.1147	1.1104
	2016	1.0838	1.0854	1.0823
10 Point	2014	1.1306	1.1334	1.1282
	2015	1.1032	1.1053	1.1013
	2016	1.0770	1.0786	1.0757

MEDICAL Expon'l FITTED	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
4 Point	2013	0.9285	0.8896	0.9672
	2014	0.9398	0.8977	0.9818
	2015	0.9512	0.9059	0.9965
	2016	0.9628	0.9142	1.0115
5 Point	2012	0.8875	0.8515	0.9234
	2013	0.9083	0.8693	0.9472
	2014	0.9295	0.8874	0.9715
	2015	0.9512	0.9059	0.9965
	2016	0.9734	0.9248	1.0221
6 Point	2011	0.8578	0.8187	0.8967
	2012	0.8805	0.8400	0.9207
	2013	0.9037	0.8619	0.9454
	2014	0.9276	0.8844	0.9708
	2015	0.9522	0.9074	0.9969
	2016	0.9774	0.9311	1.0236
7 Point	2010	0.8250	0.7877	0.8623
	2011	0.8493	0.8106	0.8880
	2012	0.8744	0.8342	0.9145
	2013	0.9002	0.8585	0.9418
	2014	0.9267	0.8835	0.9699
	2015	0.9541	0.9092	0.9988
	2016	0.9822	0.9357	1.0286
8 Point	2009	0.7929	0.7550	0.8307
	2010	0.8180	0.7791	0.8568
	2011	0.8439	0.8040	0.8838
	2012	0.8707	0.8297	0.9116
	2013	0.8983	0.8562	0.9403
	2014	0.9267	0.8835	0.9699
	2015	0.9561	0.9117	1.0004
	2016	0.9864	0.9409	1.0319
9 Point	2008	0.7789	0.7394	0.8182
	2009	0.8016	0.7616	0.8416
	2010	0.8251	0.7845	0.8656
	2011	0.8492	0.8080	0.8904
	2012	0.8741	0.8323	0.9159
	2013	0.8997	0.8572	0.9420
	2014	0.9260	0.8830	0.9690
	2015	0.9531	0.9095	0.9967
	2016	0.9810	0.9367	1.0252
10 Point	2007	0.7682	0.7291	0.8072
	2008	0.7888	0.7491	0.8284
	2009	0.8100	0.7697	0.8501
	2010	0.8317	0.7909	0.8724
	2011	0.8540	0.8126	0.8952
	2012	0.8769	0.8350	0.9187
	2013	0.9004	0.8579	0.9428
	2014	0.9245	0.8815	0.9675
	2015	0.9493	0.9058	0.9928
	2016	0.9748	0.9307	1.0189

MEDICAL Expon'l		Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-30)
TRENDED				
4 Point	Fitted	1.0013	0.9415	1.0617
5 Point	Fitted	1.0493	0.9889	1.1100
6 Point	Fitted	1.0639	1.0123	1.1156
7 Point	Fitted	1.0795	1.0272	1.1317
8 Point	Fitted	1.0917	1.0421	1.1412
9 Point	Fitted	1.0774	1.0312	1.1236
10 Point	Fitted	1.0623	1.0164	1.1082

MEDICAL Expon'l		Sev Trend Factor (Avg Pd & Inc)	Sev Trend Factor (Incur)	Sev Trend Factor (Pd-30)
Severity Trend Factor				
4 Point	2014	1.0654	1.0488	1.0815
	2015	1.0527	1.0393	1.0654
	2016	1.0400	1.0300	1.0497
5 Point	2014	1.1289	1.1144	1.1426
	2015	1.1031	1.0916	1.1139
	2016	1.0779	1.0693	1.0860
6 Point	2014	1.1469	1.1446	1.1492
	2015	1.1173	1.1155	1.1191
	2016	1.0885	1.0872	1.0899
7 Point	2014	1.1648	1.1626	1.1669
	2015	1.1315	1.1297	1.1331
	2016	1.0991	1.0977	1.1003
8 Point	2014	1.1780	1.1795	1.1767
	2015	1.1418	1.1430	1.1408
	2016	1.1067	1.1076	1.1060
9 Point	2014	1.1635	1.1679	1.1595
	2015	1.1304	1.1339	1.1273
	2016	1.0983	1.1009	1.0960
10 Point	2014	1.1490	1.1530	1.1455
	2015	1.1190	1.1222	1.1162
	2016	1.0898	1.0921	1.0877

Superseded

MEDICAL Linear LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7550	0.7440	0.7653
	2015	0.7962	0.7869	0.8049
	2016	0.8399	0.8325	0.8468
5 Point	2014	0.7950	0.7859	0.8034
	2015	0.8296	0.8221	0.8366
	2016	0.8663	0.8604	0.8717
6 Point	2014	0.8053	0.8035	0.8069
	2015	0.8381	0.8366	0.8394
	2016	0.8728	0.8718	0.8739
7 Point	2014	0.8143	0.8129	0.8157
	2015	0.8455	0.8443	0.8467
	2016	0.8787	0.8777	0.8795
8 Point	2014	0.8200	0.8206	0.8196
	2015	0.8502	0.8506	0.8498
	2016	0.8822	0.8825	0.8820
9 Point	2014	0.8114	0.8136	0.8095
	2015	0.8432	0.8448	0.8416
	2016	0.8768	0.8781	0.8756
10 Point	2014	0.8028	0.8048	0.8011
	2015	0.8361	0.8377	0.8347
	2016	0.8713	0.8726	0.8702

MEDICAL Expon'l LR Trend Factor		LR Trend Factor (Avg Pd & Inc)	LR Trend Factor (Incur)	LR Trend Factor (Pd-30)
4 Point	2014	0.7565	0.7448	0.7680
	2015	0.7978	0.7877	0.8075
	2016	0.8414	0.8333	0.8492
5 Point	2014	0.8016	0.7913	0.8114
	2015	0.8360	0.8273	0.8442
	2016	0.8720	0.8651	0.8786
6 Point	2014	0.8144	0.8128	0.8160
	2015	0.8468	0.8454	0.8482
	2016	0.8806	0.8795	0.8817
7 Point	2014	0.8271	0.8256	0.8286
	2015	0.8576	0.8562	0.8588
	2016	0.8892	0.8880	0.8901
8 Point	2014	0.8365	0.8376	0.8356
	2015	0.8654	0.8663	0.8646
	2016	0.8953	0.8960	0.8948
9 Point	2014	0.8262	0.8293	0.8234
	2015	0.8567	0.8594	0.8544
	2016	0.8885	0.8906	0.8867
10 Point	2014	0.8159	0.8187	0.8134
	2015	0.8481	0.8505	0.8460
	2016	0.8816	0.8835	0.8799

MEDICAL Linear TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4628	0.4309	0.4949
	2015	0.4279	0.4045	0.4515
	2016	0.4370	0.4116	0.4625
	3 Yr Ave	0.4426	0.4157	0.4696
5 Point	2014	0.4873	0.4552	0.5196
	2015	0.4458	0.4226	0.4692
	2016	0.4507	0.4254	0.4761
	3 Yr Ave	0.4613	0.4344	0.4883
6 Point	2014	0.4936	0.4654	0.5218
	2015	0.4504	0.4300	0.4708
	2016	0.4541	0.4310	0.4773
	3 Yr Ave	0.4660	0.4421	0.4900
7 Point	2014	0.4992	0.4708	0.5275
	2015	0.4544	0.4340	0.4749
	2016	0.4572	0.4339	0.4804
	3 Yr Ave	0.4703	0.4462	0.4943
8 Point	2014	0.5027	0.4753	0.5300
	2015	0.4569	0.4372	0.4767
	2016	0.4590	0.4363	0.4817
	3 Yr Ave	0.4729	0.4496	0.4961
9 Point	2014	0.4974	0.4712	0.5235
	2015	0.4531	0.4342	0.4721
	2016	0.4562	0.4341	0.4783
	3 Yr Ave	0.4689	0.4465	0.4913
10 Point	2014	0.4921	0.4661	0.5181
	2015	0.4493	0.4306	0.4682
	2016	0.4533	0.4314	0.4753
	3 Yr Ave	0.4649	0.4427	0.4872

Superseded

MEDICAL Expon'l TRENDED LR	Base Policy Year	Trended LR (Avg Pd & Inc)	Trended LR (Incur)	Trended LR (Pd-30)
4 Point	2014	0.4637	0.4314	0.4967
	2015	0.4287	0.4049	0.4529
	2016	0.4378	0.4120	0.4638
	3 Yr Ave	0.4434	0.4161	0.4711
5 Point	2014	0.4914	0.4583	0.5247
	2015	0.4493	0.4252	0.4735
	2016	0.4537	0.4277	0.4799
	3 Yr Ave	0.4648	0.4371	0.4927
6 Point	2014	0.4992	0.4708	0.5277
	2015	0.4551	0.4345	0.4758
	2016	0.4582	0.4348	0.4816
	3 Yr Ave	0.4708	0.4467	0.4950
7 Point	2014	0.5070	0.4782	0.5359
	2015	0.4609	0.4401	0.4817
	2016	0.4627	0.4390	0.4862
	3 Yr Ave	0.4769	0.4524	0.5013
8 Point	2014	0.5128	0.4851	0.5404
	2015	0.4651	0.4453	0.4850
	2016	0.4658	0.4430	0.4887
	3 Yr Ave	0.4812	0.4578	0.5047
9 Point	2014	0.5065	0.4803	0.5325
	2015	0.4604	0.4417	0.4792
	2016	0.4623	0.4403	0.4843
	3 Yr Ave	0.4764	0.4541	0.4987
10 Point	2014	0.5001	0.4742	0.5260
	2015	0.4558	0.4372	0.4745
	2016	0.4587	0.4368	0.4806
	3 Yr Ave	0.4715	0.4494	0.4937

Superseded

INDEMNITY
Severity
Annual Trend

		(Avg Pd & Inc)	(Incur)	(Pd-30)
4 Point	Linear	2.5%	1.9%	3.1%
5 Point	Linear	2.6%	1.9%	3.3%
6 Point	Linear	2.4%	1.7%	2.9%
7 Point	Linear	2.1%	1.5%	2.5%
8 Point	Linear	1.7%	1.3%	2.1%
9 Point	Linear	1.5%	1.0%	1.8%
10 Point	Linear	1.4%	1.1%	1.8%
4 Point	Expon'l	2.7%	1.9%	3.4%
5 Point	Expon'l	2.9%	2.0%	3.7%
6 Point	Expon'l	2.6%	1.8%	3.3%
7 Point	Expon'l	2.3%	1.6%	2.8%
8 Point	Expon'l	1.9%	1.3%	2.3%
9 Point	Expon'l	1.6%	1.1%	2.0%
10 Point	Expon'l	1.6%	1.1%	2.0%

MEDICAL
Severity
Annual Trend

		(Avg Pd & Inc)	(Incur)	(Pd-30)
4 Point	Linear	1.2%	0.9%	1.4%
5 Point	Linear	2.1%	1.9%	2.3%
6 Point	Linear	2.4%	2.4%	2.4%
7 Point	Linear	2.6%	2.6%	2.6%
8 Point	Linear	2.7%	2.8%	2.7%
9 Point	Linear	2.5%	2.6%	2.5%
10 Point	Linear	2.3%	2.4%	2.3%
4 Point	Expon'l	1.2%	0.9%	1.5%
5 Point	Expon'l	2.3%	2.1%	2.6%
6 Point	Expon'l	2.6%	2.6%	2.7%
7 Point	Expon'l	2.9%	2.9%	3.0%
8 Point	Expon'l	3.2%	3.2%	3.1%
9 Point	Expon'l	2.9%	3.0%	2.9%
10 Point	Expon'l	2.7%	2.7%	2.6%

Superseded

INDEMNITY (Avg Pd & Inc) (Incur) (Pd-30)
Loss Ratio
Annual Trend

4 Point	Linear	-3.96%	-4.61%	-3.40%
5 Point	Linear	-3.87%	-4.60%	-3.22%
6 Point	Linear	-4.11%	-4.74%	-3.56%
7 Point	Linear	-4.38%	-4.90%	-3.93%
8 Point	Linear	-4.71%	-5.15%	-4.33%
9 Point	Linear	-4.94%	-5.35%	-4.58%
10 Point	Linear	-4.97%	-5.35%	-4.62%
4 Point	Expon'l	-3.80%	-4.52%	-3.15%
5 Point	Expon'l	-3.64%	-4.50%	-2.87%
6 Point	Expon'l	-3.92%	-4.65%	-3.25%
7 Point	Expon'l	-4.22%	-4.81%	-3.67%
8 Point	Expon'l	-4.59%	-5.08%	-4.14%
9 Point	Expon'l	-4.85%	-5.31%	-4.43%
10 Point	Expon'l	-4.87%	-5.30%	-4.46%

MEDICAL (Avg Pd & Inc) (Incur) (Pd-30)
Loss Ratio
Annual Trend

4 Point	Linear	-5.26%	-5.52%	-5.02%
5 Point	Linear	-4.33%	-4.54%	-4.15%
6 Point	Linear	-4.11%	-4.14%	-4.07%
7 Point	Linear	-3.90%	-3.93%	-3.87%
8 Point	Linear	-3.77%	-3.76%	-3.79%
9 Point	Linear	-3.97%	-3.92%	-4.01%
10 Point	Linear	-4.16%	-4.11%	-4.20%
4 Point	Expon'l	-5.22%	-5.50%	-4.95%
5 Point	Expon'l	-4.16%	-4.40%	-3.94%
6 Point	Expon'l	-3.87%	-3.91%	-3.84%
7 Point	Expon'l	-3.58%	-3.62%	-3.55%
8 Point	Expon'l	-3.38%	-3.35%	-3.40%
9 Point	Expon'l	-3.61%	-3.54%	-3.67%
10 Point	Expon'l	-3.84%	-3.77%	-3.90%

Superseded