

PENNSYLVANIA COMPENSATION RATING BUREAU

Retrospective Test of Trend Projections for Loss Ratios

Attached is a retrospective test of the predictive accuracy of various trend procedures.

Results for both indemnity and medical are shown using both linear and exponential fits. All possible combinations of from four to ten data points, which permitted a test of the projected loss ratio three years hence, were used. Our current review trends policy year 2007 3.25 years, policy year 2006 4.25 years, and policy year 2005 5.25 years. An average of those three values is then calculated.

Current estimates of policy year ultimate loss (to expected loss) ratios are compared with predicted values based on trending through earlier years. The results are shown for three loss development approaches: incurred, paid to twentieth and the average of the incurred and the paid to twenty-first methods.

As an illustration, the incurred loss development approach generated an indemnity loss ratio of 0.5512 for policy year 2002. Fitting the loss ratios for policy years 1996 to 1999 using a straight line and projecting that to 2002 yielded a loss ratio of 0.5795, which understates our current estimate for 2002 by 0.0283.

Please note that the boxed numbers correspond to those numbers that do not have a comparable value in Exhibit 11b, Retrospective Test of Trend Projections for Severity Ratios.

Indemnity
Actual Ultimate Loss Ratios
Including Average of Paid and Incurred

INDEMNITY	Policy Year	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
	1990	0.8845	0.8843	0.8846
	1991	0.8697	0.8721	0.8673
	1992	0.8019	0.8066	0.7972
	1993	0.7967	0.7999	0.7935
	1994	0.7587	0.7595	0.7578
	1995	0.7075	0.7022	0.7128
	1996	0.5622	0.5547	0.5698
	1997	0.5895	0.5728	0.6062
	1998	0.5651	0.5459	0.5844
	1999	0.6008	0.5763	0.6253
	2000	0.6205	0.5943	0.6467
	2001	0.5839	0.5530	0.6148
	2002	0.5757	0.5512	0.6003
	2003	0.5425	0.5143	0.5707
	2004	0.5614	0.5363	0.5865
	2005	0.5284	0.4997	0.5572
	2006	0.5337	0.5025	0.5648
	2007	0.5684	0.5434	0.5935

Trend # Years = 3

**Indemnity
Linear Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	0.6892	0.6973	0.6811
91-94(4)	1997	0.6546	0.6545	0.6545
92-95 (4)	1998	0.6217	0.6079	0.6353
93-96(4)	1999	0.3667	0.3473	0.3862
94-97 (4)	2000	0.3607	0.3289	0.3926
95-98 (4)	2001	0.4261	0.3910	0.4613
96-99 (4)	2002	0.6205	0.5795	0.6615
97-00 (4)	2003	0.6519	0.6150	0.6887
98-01 (4)	2004	0.6268	0.5851	0.6685
99-02 (4)	2005	0.5449	0.5162	0.5737
00-03 (4)	2006	0.4717	0.4444	0.4990
01-04 (4)	2007	0.5206	0.4996	0.5416
90-94 (5)	1997	0.6600	0.6636	0.6564
91-95 (5)	1998	0.6031	0.5946	0.6115
92-96 (5)	1999	0.4411	0.4238	0.4585
93-97 (5)	2000	0.3775	0.3483	0.4067
94-98 (5)	2001	0.3840	0.3487	0.4195
95-99 (5)	2002	0.4998	0.4601	0.5395
96-00 (5)	2003	0.6516	0.6102	0.6929
97-01(5)	2004	0.6141	0.5729	0.6552
98-02 (5)	2005	0.5914	0.5578	0.6250
99-03 (5)	2006	0.5040	0.4743	0.5338
00-04 (5)	2007	0.4970	0.4725	0.5216
90-95 (6)	1998	0.6109	0.6069	0.6150
91-96 (6)	1999	0.4574	0.4442	0.4706
92-97 (6)	2000	0.4173	0.3910	0.4436
93-98 (6)	2001	0.3787	0.3451	0.4125
94-99 (6)	2002	0.4437	0.4038	0.4838
95-00 (6)	2003	0.5536	0.5122	0.5950
96-01 (6)	2004	0.6243	0.5797	0.6687
97-02 (6)	2005	0.5904	0.5548	0.6260
98-03 (6)	2006	0.5461	0.5127	0.5795
99-04 (6)	2007	0.5118	0.4848	0.5388
90-96 (7)	1999	0.4828	0.4737	0.4920
91-97 (7)	2000	0.4246	0.4027	0.4466
92-98 (7)	2001	0.4000	0.3686	0.4315
93-99 (7)	2002	0.4202	0.3815	0.4590
94-00 (7)	2003	0.4952	0.4531	0.5375
95-01 (7)	2004	0.5522	0.5074	0.5969
96-02 (7)	2005	0.6035	0.5637	0.6434
97-03 (7)	2006	0.5533	0.5179	0.5887
98-04 (7)	2007	0.5416	0.5111	0.5721
90-97 (8)	2000	0.4427	0.4251	0.4604
91-98 (8)	2001	0.4008	0.3732	0.4286
92-99 (8)	2002	0.4237	0.3870	0.4606
93-00 (8)	2003	0.4626	0.4211	0.5043
94-01 (8)	2004	0.5023	0.4567	0.5479
95-02 (8)	2005	0.5476	0.5062	0.5891
96-03 (8)	2006	0.5699	0.5306	0.6092
97-04 (8)	2007	0.5473	0.5145	0.5801
90-98 (9)	2001	0.4127	0.3892	0.4364
91-99 (9)	2002	0.4150	0.3816	0.4485
92-00 (9)	2003	0.4548	0.4146	0.4951
93-01 (9)	2004	0.4705	0.4253	0.5158
94-02 (9)	2005	0.5045	0.4613	0.5477
95-03 (9)	2006	0.5271	0.4860	0.5682
96-04 (9)	2007	0.5616	0.5249	0.5984
90-99 (10)	2002	0.4181	0.3885	0.4478
91-00 (10)	2003	0.4390	0.4016	0.4765
92-01 (10)	2004	0.4594	0.4152	0.5036
93-02 (10)	2005	0.4744	0.4307	0.5182
94-03 (10)	2006	0.4910	0.4480	0.5342
95-04 (10)	2007	0.5252	0.4863	0.5641

Indemnity
Linear Fit
Differences: (Actual - Trended)

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	-0.1270	-0.1426	-0.1113
91-94(4)	1997	-0.0651	-0.0817	-0.0483
92-95 (4)	1998	-0.0566	-0.0620	-0.0509
93-96(4)	1999	0.2341	0.2290	0.2391
94-97 (4)	2000	0.2598	0.2654	0.2541
95-98 (4)	2001	0.1578	0.1620	0.1535
96-99 (4)	2002	-0.0448	-0.0283	-0.0612
97-00 (4)	2003	-0.1094	-0.1007	-0.1180
98-01 (4)	2004	-0.0654	-0.0488	-0.0820
99-02 (4)	2005	-0.0165	-0.0165	-0.0165
00-03 (4)	2006	0.0620	0.0581	0.0658
01-04 (4)	2007	0.0478	0.0439	0.0519
90-94 (5)	1997	-0.0705	-0.0908	-0.0502
91-95 (5)	1998	-0.0380	-0.0487	-0.0271
92-96 (5)	1999	0.1597	0.1525	0.1668
93-97 (5)	2000	0.2430	0.2460	0.2400
94-98 (5)	2001	0.1999	0.2043	0.1953
95-99 (5)	2002	0.0759	0.0911	0.0608
96-00 (5)	2003	-0.1091	-0.0959	-0.1222
97-01(5)	2004	-0.0527	-0.0366	-0.0687
98-02 (5)	2005	-0.0630	-0.0581	-0.0677
99-03 (5)	2006	0.0297	0.0282	0.0310
00-04 (5)	2007	0.0714	0.0709	0.0720
90-95 (6)	1998	-0.0458	-0.0610	-0.0306
91-96 (6)	1999	0.1434	0.1321	0.1547
92-97 (6)	2000	0.2032	0.2033	0.2031
93-98 (6)	2001	0.2052	0.2079	0.2023
94-99 (6)	2002	0.1320	0.1474	0.1165
95-00 (6)	2003	-0.0111	0.0021	-0.0243
96-01 (6)	2004	-0.0629	-0.0434	-0.0822
97-02 (6)	2005	-0.0620	-0.0551	-0.0688
98-03 (6)	2006	-0.0124	-0.0102	-0.0147
99-04 (6)	2007	0.0566	0.0586	0.0547
90-96 (7)	1999	0.1180	0.1026	0.1333
91-97 (7)	2000	0.1959	0.1916	0.2001
92-98 (7)	2001	0.1840	0.1844	0.1833
93-99 (7)	2002	0.1555	0.1697	0.1413
94-00 (7)	2003	0.0473	0.0612	0.0332
95-01 (7)	2004	0.0092	0.0289	-0.0104
96-02 (7)	2005	-0.0751	-0.0640	-0.0862
97-03 (7)	2006	-0.0196	-0.0154	-0.0239
98-04 (7)	2007	0.0268	0.0323	0.0214
90-97 (8)	2000	0.1778	0.1692	0.1863
91-98 (8)	2001	0.1831	0.1798	0.1862
92-99 (8)	2002	0.1520	0.1642	0.1397
93-00 (8)	2003	0.0799	0.0932	0.0664
94-01 (8)	2004	0.0591	0.0796	0.0386
95-02 (8)	2005	-0.0192	-0.0065	-0.0319
96-03 (8)	2006	-0.0362	-0.0281	-0.0444
97-04 (8)	2007	0.0211	0.0289	0.0134
90-98 (9)	2001	0.1712	0.1639	0.1784
91-99 (9)	2002	0.1607	0.1696	0.1518
92-00 (9)	2003	0.0877	0.0997	0.0756
93-01 (9)	2004	0.0909	0.1110	0.0707
94-02 (9)	2005	0.0239	0.0384	0.0095
95-03 (9)	2006	0.0066	0.0165	-0.0034
96-04 (9)	2007	0.0068	0.0185	-0.0049
90-99 (10)	2002	0.1576	0.1627	0.1525
91-00 (10)	2003	0.1035	0.1127	0.0942
92-01 (10)	2004	0.1020	0.1211	0.0829
93-02 (10)	2005	0.0540	0.0690	0.0390
94-03 (10)	2006	0.0427	0.0545	0.0306
95-04 (10)	2007	0.0432	0.0571	0.0294

**Indemnity
Exponential Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	0.7010	0.7082	0.6939
91-94(4)	1997	0.6682	0.6684	0.6678
92-95 (4)	1998	0.6322	0.6205	0.6439
93-96(4)	1999	0.4238	0.4107	0.4373
94-97 (4)	2000	0.4166	0.3943	0.4396
95-98 (4)	2001	0.4551	0.4266	0.4843
96-99 (4)	2002	0.6216	0.5794	0.6647
97-00 (4)	2003	0.6539	0.6161	0.6921
98-01 (4)	2004	0.6280	0.5851	0.6712
99-02 (4)	2005	0.5465	0.5182	0.5750
00-03 (4)	2006	0.4807	0.4538	0.5077
01-04 (4)	2007	0.5223	0.5008	0.5438
90-94 (5)	1997	0.6740	0.6771	0.6708
91-95 (5)	1998	0.6212	0.6142	0.6283
92-96 (5)	1999	0.4753	0.4627	0.4884
93-97 (5)	2000	0.4309	0.4103	0.4521
94-98 (5)	2001	0.4294	0.4033	0.4566
95-99 (5)	2002	0.5132	0.4786	0.5488
96-00 (5)	2003	0.6543	0.6110	0.6984
97-01(5)	2004	0.6141	0.5724	0.6563
98-02 (5)	2005	0.5914	0.5577	0.6253
99-03 (5)	2006	0.5080	0.4789	0.5373
00-04 (5)	2007	0.5025	0.4779	0.5271
90-95 (6)	1998	0.6294	0.6258	0.6331
91-96 (6)	1999	0.4931	0.4830	0.5033
92-97 (6)	2000	0.4586	0.4392	0.4785
93-98 (6)	2001	0.4292	0.4049	0.4545
94-99 (6)	2002	0.4725	0.4408	0.5053
95-00 (6)	2003	0.5600	0.5220	0.5990
96-01 (6)	2004	0.6251	0.5794	0.6718
97-02 (6)	2005	0.5901	0.5545	0.6260
98-03 (6)	2006	0.5461	0.5130	0.5793
99-04 (6)	2007	0.5152	0.4885	0.5420
90-96 (7)	1999	0.5146	0.5070	0.5224
91-97 (7)	2000	0.4685	0.4519	0.4854
92-98 (7)	2001	0.4446	0.4214	0.4685
93-99 (7)	2002	0.4583	0.4289	0.4887
94-00 (7)	2003	0.5131	0.4776	0.5496
95-01 (7)	2004	0.5579	0.5162	0.6005
96-02 (7)	2005	0.6036	0.5633	0.6446
97-03 (7)	2006	0.5529	0.5180	0.5880
98-04 (7)	2007	0.5422	0.5119	0.5726
90-97 (8)	2000	0.4838	0.4697	0.4981
91-98 (8)	2001	0.4495	0.4288	0.4707
92-99 (8)	2002	0.4619	0.4339	0.4907
93-00 (8)	2003	0.4901	0.4570	0.5244
94-01 (8)	2004	0.5178	0.4786	0.5581
95-02 (8)	2005	0.5529	0.5142	0.5924
96-03 (8)	2006	0.5690	0.5299	0.6087
97-04 (8)	2007	0.5474	0.5151	0.5800
90-98 (9)	2001	0.4602	0.4418	0.4789
91-99 (9)	2002	0.4595	0.4342	0.4855
92-00 (9)	2003	0.4852	0.4537	0.5178
93-01 (9)	2004	0.4952	0.4583	0.5333
94-02 (9)	2005	0.5185	0.4810	0.5572
95-03 (9)	2006	0.5325	0.4942	0.5715
96-04 (9)	2007	0.5612	0.5247	0.5980
90-99 (10)	2002	0.4640	0.4411	0.4874
91-00 (10)	2003	0.4771	0.4482	0.5068
92-01 (10)	2004	0.4878	0.4526	0.5242
93-02 (10)	2005	0.4970	0.4609	0.5343
94-03 (10)	2006	0.5051	0.4676	0.5437
95-04 (10)	2007	0.5304	0.4940	0.5675

**Indemnity
Exponential Fit
Differences: (Actual - Trended)**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	-0.1388	-0.1535	-0.1241
91-94(4)	1997	-0.0787	-0.0956	-0.0616
92-95 (4)	1998	-0.0671	-0.0746	-0.0595
93-96(4)	1999	0.1770	0.1656	0.1880
94-97 (4)	2000	0.2039	0.2000	0.2071
95-98 (4)	2001	0.1288	0.1264	0.1305
96-99 (4)	2002	-0.0459	-0.0282	-0.0644
97-00 (4)	2003	-0.1114	-0.1018	-0.1214
98-01 (4)	2004	-0.0666	-0.0488	-0.0847
99-02 (4)	2005	-0.0181	-0.0185	-0.0178
00-03 (4)	2006	0.0530	0.0487	0.0571
01-04 (4)	2007	0.0461	0.0426	0.0497
90-94 (5)	1997	-0.0845	-0.1043	-0.0646
91-95 (5)	1998	-0.0561	-0.0683	-0.0439
92-96 (5)	1999	0.1255	0.1136	0.1369
93-97 (5)	2000	0.1896	0.1840	0.1946
94-98 (5)	2001	0.1545	0.1497	0.1582
95-99 (5)	2002	0.0625	0.0726	0.0515
96-00 (5)	2003	-0.1118	-0.0967	-0.1277
97-01(5)	2004	-0.0527	-0.0361	-0.0698
98-02 (5)	2005	-0.0630	-0.0580	-0.0681
99-03 (5)	2006	0.0257	0.0236	0.0275
00-04 (5)	2007	0.0659	0.0655	0.0664
90-95 (6)	1998	-0.0643	-0.0799	-0.0487
91-96 (6)	1999	0.1077	0.0933	0.1220
92-97 (6)	2000	0.1619	0.1551	0.1682
93-98 (6)	2001	0.1547	0.1481	0.1603
94-99 (6)	2002	0.1032	0.1104	0.0950
95-00 (6)	2003	-0.0175	-0.0077	-0.0283
96-01 (6)	2004	-0.0637	-0.0431	-0.0853
97-02 (6)	2005	-0.0617	-0.0548	-0.0688
98-03 (6)	2006	-0.0124	-0.0105	-0.0145
99-04 (6)	2007	0.0532	0.0549	0.0515
90-96 (7)	1999	0.0862	0.0693	0.1029
91-97 (7)	2000	0.1520	0.1424	0.1613
92-98 (7)	2001	0.1393	0.1316	0.1463
93-99 (7)	2002	0.1174	0.1223	0.1116
94-00 (7)	2003	0.0294	0.0367	0.0211
95-01 (7)	2004	0.0035	0.0201	-0.0140
96-02 (7)	2005	-0.0752	-0.0636	-0.0874
97-03 (7)	2006	-0.0192	-0.0155	-0.0232
98-04 (7)	2007	0.0262	0.0315	0.0209
90-97 (8)	2000	0.1367	0.1246	0.1486
91-98 (8)	2001	0.1344	0.1242	0.1441
92-99 (8)	2002	0.1138	0.1173	0.1096
93-00 (8)	2003	0.0524	0.0573	0.0463
94-01 (8)	2004	0.0436	0.0577	0.0284
95-02 (8)	2005	-0.0245	-0.0145	-0.0352
96-03 (8)	2006	-0.0353	-0.0274	-0.0439
97-04 (8)	2007	0.0210	0.0283	0.0135
90-98 (9)	2001	0.1237	0.1112	0.1359
91-99 (9)	2002	0.1162	0.1170	0.1148
92-00 (9)	2003	0.0573	0.0606	0.0529
93-01 (9)	2004	0.0662	0.0780	0.0532
94-02 (9)	2005	0.0099	0.0187	0.0000
95-03 (9)	2006	0.0012	0.0083	-0.0067
96-04 (9)	2007	0.0072	0.0187	-0.0045
90-99 (10)	2002	0.1117	0.1101	0.1129
91-00 (10)	2003	0.0654	0.0661	0.0639
92-01 (10)	2004	0.0736	0.0837	0.0623
93-02 (10)	2005	0.0314	0.0388	0.0229
94-03 (10)	2006	0.0286	0.0349	0.0211
95-04 (10)	2007	0.0380	0.0494	0.0260

Medical
Actual Ultimate Loss Ratios
Including Average of Paid and Incurred

MEDICAL	Policy Year	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
	1990	0.5322	0.5255	0.5390
	1991	0.5629	0.5613	0.5646
	1992	0.5523	0.5521	0.5524
	1993	0.5411	0.5351	0.5471
	1994	0.5270	0.5251	0.5288
	1995	0.5274	0.5274	0.5274
	1996	0.4787	0.4792	0.4783
	1997	0.5133	0.5100	0.5165
	1998	0.5252	0.5298	0.5205
	1999	0.5338	0.5314	0.5362
	2000	0.5455	0.5413	0.5498
	2001	0.5080	0.4909	0.5250
	2002	0.5180	0.5070	0.5291
	2003	0.5107	0.4951	0.5264
	2004	0.5430	0.5237	0.5622
	2005	0.5029	0.4877	0.5180
	2006	0.4829	0.4615	0.5043
	2007	0.5166	0.5003	0.5329

Trend # Years = 3

**Medical
Linear Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	0.5544	0.5523	0.5562
91-94(4)	1997	0.4923	0.4869	0.4975
92-95 (4)	1998	0.4970	0.4971	0.4969
93-96(4)	1999	0.4345	0.4423	0.4269
94-97 (4)	2000	0.4712	0.4684	0.4741
95-98 (4)	2001	0.5238	0.5287	0.5186
96-99 (4)	2002	0.5925	0.5920	0.5928
97-00 (4)	2003	0.5768	0.5711	0.5828
98-01 (4)	2004	0.5102	0.4753	0.5451
99-02 (4)	2005	0.4881	0.4620	0.5143
00-03 (4)	2006	0.4781	0.4535	0.5028
01-04 (4)	2007	0.5639	0.5431	0.5847
90-94 (5)	1997	0.5270	0.5263	0.5274
91-95 (5)	1998	0.4940	0.4928	0.4951
92-96 (5)	1999	0.4449	0.4470	0.4429
93-97 (5)	2000	0.4656	0.4673	0.4638
94-98 (5)	2001	0.5055	0.5103	0.5006
95-99 (5)	2002	0.5453	0.5449	0.5457
96-00 (5)	2003	0.5964	0.5911	0.6016
97-01(5)	2004	0.5300	0.5073	0.5528
98-02 (5)	2005	0.5060	0.4770	0.5351
99-03 (5)	2006	0.4864	0.4597	0.5132
00-04 (5)	2007	0.5239	0.4961	0.5516
90-95 (6)	1998	0.5180	0.5195	0.5164
91-96 (6)	1999	0.4515	0.4523	0.4506
92-97 (6)	2000	0.4633	0.4624	0.4642
93-98 (6)	2001	0.4922	0.4989	0.4854
94-99 (6)	2002	0.5273	0.5281	0.5265
95-00 (6)	2003	0.5627	0.5585	0.5670
96-01 (6)	2004	0.5570	0.5380	0.5759
97-02 (6)	2005	0.5214	0.4993	0.5437
98-03 (6)	2006	0.4988	0.4692	0.5286
99-04 (6)	2007	0.5189	0.4896	0.5482
90-96 (7)	1999	0.4766	0.4793	0.4739
91-97 (7)	2000	0.4626	0.4613	0.4638
92-98 (7)	2001	0.4839	0.4877	0.4800
93-99 (7)	2002	0.5124	0.5156	0.5092
94-00 (7)	2003	0.5462	0.5436	0.5488
95-01 (7)	2004	0.5394	0.5235	0.5553
96-02 (7)	2005	0.5448	0.5250	0.5648
97-03 (7)	2006	0.5118	0.4870	0.5367
98-04 (7)	2007	0.5220	0.4902	0.5538
90-97 (8)	2000	0.4797	0.4803	0.4790
91-98 (8)	2001	0.4785	0.4814	0.4756
92-99 (8)	2002	0.5017	0.5033	0.5002
93-00 (8)	2003	0.5312	0.5311	0.5313
94-01 (8)	2004	0.5303	0.5174	0.5432
95-02 (8)	2005	0.5331	0.5155	0.5508
96-03 (8)	2006	0.5327	0.5098	0.5558
97-04 (8)	2007	0.5286	0.5006	0.5567
90-98 (9)	2001	0.4895	0.4934	0.4855
91-99 (9)	2002	0.4939	0.4950	0.4928
92-00 (9)	2003	0.5194	0.5184	0.5203
93-01 (9)	2004	0.5202	0.5108	0.5295
94-02 (9)	2005	0.5266	0.5116	0.5418
95-03 (9)	2006	0.5249	0.5040	0.5460
96-04 (9)	2007	0.5440	0.5176	0.5704
90-99 (10)	2002	0.5007	0.5030	0.4983
91-00 (10)	2003	0.5100	0.5090	0.5110
92-01 (10)	2004	0.5113	0.5023	0.5203
93-02 (10)	2005	0.5185	0.5065	0.5305
94-03 (10)	2006	0.5205	0.5020	0.5392
95-04 (10)	2007	0.5362	0.5116	0.5608

Medical**Linear Fit****Differences: (Actual - Trended)**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	-0.0757	-0.0731	-0.0779
91-94(4)	1997	0.0210	0.0231	0.0190
92-95 (4)	1998	0.0282	0.0327	0.0236
93-96(4)	1999	0.0993	0.0891	0.1093
94-97 (4)	2000	0.0743	0.0730	0.0758
95-98 (4)	2001	-0.0158	-0.0378	0.0065
96-99 (4)	2002	-0.0745	-0.0850	-0.0637
97-00 (4)	2003	-0.0661	-0.0760	-0.0564
98-01 (4)	2004	0.0328	0.0484	0.0171
99-02 (4)	2005	0.0148	0.0257	0.0037
00-03 (4)	2006	0.0048	0.0081	0.0015
01-04 (4)	2007	-0.0473	-0.0428	-0.0518
90-94 (5)	1997	-0.0137	-0.0163	-0.0109
91-95 (5)	1998	0.0312	0.0370	0.0254
92-96 (5)	1999	0.0890	0.0844	0.0934
93-97 (5)	2000	0.0800	0.0740	0.0860
94-98 (5)	2001	0.0025	-0.0194	0.0245
95-99 (5)	2002	-0.0273	-0.0379	-0.0166
96-00 (5)	2003	-0.0857	-0.0960	-0.0752
97-01(5)	2004	0.0130	0.0164	0.0095
98-02 (5)	2005	-0.0031	0.0107	-0.0171
99-03 (5)	2006	-0.0034	0.0018	-0.0089
00-04 (5)	2007	-0.0073	0.0042	-0.0187
90-95 (6)	1998	0.0072	0.0103	0.0041
91-96 (6)	1999	0.0823	0.0791	0.0856
92-97 (6)	2000	0.0822	0.0789	0.0856
93-98 (6)	2001	0.0158	-0.0080	0.0396
94-99 (6)	2002	-0.0093	-0.0211	0.0026
95-00 (6)	2003	-0.0520	-0.0634	-0.0406
96-01 (6)	2004	-0.0140	-0.0143	-0.0137
97-02 (6)	2005	-0.0185	-0.0116	-0.0257
98-03 (6)	2006	-0.0159	-0.0077	-0.0243
99-04 (6)	2007	-0.0023	0.0107	-0.0153
90-96 (7)	1999	0.0572	0.0521	0.0623
91-97 (7)	2000	0.0829	0.0800	0.0860
92-98 (7)	2001	0.0241	0.0032	0.0450
93-99 (7)	2002	0.0056	-0.0086	0.0199
94-00 (7)	2003	-0.0355	-0.0485	-0.0224
95-01 (7)	2004	0.0036	0.0002	0.0069
96-02 (7)	2005	-0.0419	-0.0373	-0.0468
97-03 (7)	2006	-0.0289	-0.0255	-0.0324
98-04 (7)	2007	-0.0054	0.0101	-0.0209
90-97 (8)	2000	0.0658	0.0610	0.0708
91-98 (8)	2001	0.0295	0.0095	0.0494
92-99 (8)	2002	0.0163	0.0037	0.0289
93-00 (8)	2003	-0.0205	-0.0360	-0.0049
94-01 (8)	2004	0.0127	0.0063	0.0190
95-02 (8)	2005	-0.0302	-0.0278	-0.0328
96-03 (8)	2006	-0.0498	-0.0483	-0.0515
97-04 (8)	2007	-0.0120	-0.0003	-0.0238
90-98 (9)	2001	0.0185	-0.0025	0.0395
91-99 (9)	2002	0.0241	0.0120	0.0364
92-00 (9)	2003	-0.0087	-0.0233	0.0061
93-01 (9)	2004	0.0228	0.0129	0.0327
94-02 (9)	2005	-0.0237	-0.0239	-0.0238
95-03 (9)	2006	-0.0420	-0.0425	-0.0417
96-04 (9)	2007	-0.0274	-0.0173	-0.0375
90-99 (10)	2002	0.0173	0.0040	0.0308
91-00 (10)	2003	0.0007	-0.0139	0.0154
92-01 (10)	2004	0.0317	0.0214	0.0419
93-02 (10)	2005	-0.0156	-0.0188	-0.0125
94-03 (10)	2006	-0.0376	-0.0405	-0.0349
95-04 (10)	2007	-0.0196	-0.0113	-0.0279

**Medical
Exponential Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	0.5546	0.5526	0.5564
91-94(4)	1997	0.4946	0.4895	0.4995
92-95 (4)	1998	0.4985	0.4985	0.4985
93-96(4)	1999	0.4392	0.4457	0.4330
94-97 (4)	2000	0.4723	0.4697	0.4750
95-98 (4)	2001	0.5241	0.5290	0.5190
96-99 (4)	2002	0.5996	0.5991	0.6000
97-00 (4)	2003	0.5788	0.5730	0.5851
98-01 (4)	2004	0.5097	0.4758	0.5451
99-02 (4)	2005	0.4893	0.4646	0.5146
00-03 (4)	2006	0.4802	0.4571	0.5039
01-04 (4)	2007	0.5650	0.5442	0.5860
90-94 (5)	1997	0.5271	0.5265	0.5275
91-95 (5)	1998	0.4960	0.4948	0.4971
92-96 (5)	1999	0.4490	0.4508	0.4473
93-97 (5)	2000	0.4675	0.4689	0.4661
94-98 (5)	2001	0.5053	0.5099	0.5006
95-99 (5)	2002	0.5463	0.5458	0.5466
96-00 (5)	2003	0.6029	0.5971	0.6087
97-01(5)	2004	0.5295	0.5063	0.5531
98-02 (5)	2005	0.5060	0.4781	0.5351
99-03 (5)	2006	0.4876	0.4623	0.5135
00-04 (5)	2007	0.5238	0.4967	0.5512
90-95 (6)	1998	0.5184	0.5199	0.5168
91-96 (6)	1999	0.4555	0.4562	0.4548
92-97 (6)	2000	0.4659	0.4650	0.4668
93-98 (6)	2001	0.4926	0.4988	0.4864
94-99 (6)	2002	0.5272	0.5279	0.5264
95-00 (6)	2003	0.5644	0.5600	0.5688
96-01 (6)	2004	0.5589	0.5382	0.5795
97-02 (6)	2005	0.5211	0.4990	0.5439
98-03 (6)	2006	0.4992	0.4708	0.5286
99-04 (6)	2007	0.5187	0.4902	0.5477
90-96 (7)	1999	0.4776	0.4801	0.4752
91-97 (7)	2000	0.4657	0.4645	0.4669
92-98 (7)	2001	0.4850	0.4885	0.4815
93-99 (7)	2002	0.5123	0.5153	0.5092
94-00 (7)	2003	0.5464	0.5438	0.5490
95-01 (7)	2004	0.5398	0.5230	0.5565
96-02 (7)	2005	0.5460	0.5251	0.5673
97-03 (7)	2006	0.5117	0.4873	0.5368
98-04 (7)	2007	0.5216	0.4906	0.5536
90-97 (8)	2000	0.4809	0.4814	0.4803
91-98 (8)	2001	0.4804	0.4829	0.4778
92-99 (8)	2002	0.5021	0.5035	0.5006
93-00 (8)	2003	0.5309	0.5309	0.5309
94-01 (8)	2004	0.5301	0.5168	0.5434
95-02 (8)	2005	0.5334	0.5153	0.5518
96-03 (8)	2006	0.5334	0.5097	0.5575
97-04 (8)	2007	0.5283	0.5005	0.5568
90-98 (9)	2001	0.4903	0.4939	0.4866
91-99 (9)	2002	0.4949	0.4958	0.4938
92-00 (9)	2003	0.5192	0.5183	0.5200
93-01 (9)	2004	0.5199	0.5102	0.5294
94-02 (9)	2005	0.5266	0.5112	0.5421
95-03 (9)	2006	0.5251	0.5039	0.5468
96-04 (9)	2007	0.5448	0.5176	0.5725
90-99 (10)	2002	0.5011	0.5032	0.4988
91-00 (10)	2003	0.5102	0.5093	0.5111
92-01 (10)	2004	0.5113	0.5022	0.5203
93-02 (10)	2005	0.5184	0.5062	0.5305
94-03 (10)	2006	0.5205	0.5017	0.5396
95-04 (10)	2007	0.5364	0.5115	0.5618

Medical
Exponential Fit
Differences: (Actual - Trended)

Years Used (# Yrs)	3 Yr Trend To	Loss Ratio Average (Pd & Inc)	Loss Ratio (Incur)	Loss Ratio (Pd-21)
90-93 (4)	1996	-0.0759	-0.0734	-0.0781
91-94(4)	1997	0.0187	0.0205	0.0170
92-95 (4)	1998	0.0267	0.0313	0.0220
93-96(4)	1999	0.0946	0.0857	0.1032
94-97 (4)	2000	0.0732	0.0716	0.0748
95-98 (4)	2001	-0.0161	-0.0381	0.0060
96-99 (4)	2002	-0.0816	-0.0921	-0.0709
97-00 (4)	2003	-0.0681	-0.0779	-0.0587
98-01 (4)	2004	0.0333	0.0479	0.0171
99-02 (4)	2005	0.0136	0.0231	0.0034
00-03 (4)	2006	0.0027	0.0044	0.0004
01-04 (4)	2007	-0.0484	-0.0439	-0.0531
90-94 (5)	1997	-0.0138	-0.0165	-0.0110
91-95 (5)	1998	0.0292	0.0350	0.0234
92-96 (5)	1999	0.0848	0.0806	0.0889
93-97 (5)	2000	0.0780	0.0724	0.0837
94-98 (5)	2001	0.0027	-0.0190	0.0244
95-99 (5)	2002	-0.0283	-0.0388	-0.0175
96-00 (5)	2003	-0.0922	-0.1020	-0.0823
97-01(5)	2004	0.0135	0.0174	0.0091
98-02 (5)	2005	-0.0031	0.0096	-0.0171
99-03 (5)	2006	-0.0047	-0.0008	-0.0092
00-04 (5)	2007	-0.0072	0.0036	-0.0183
90-95 (6)	1998	0.0068	0.0099	0.0037
91-96 (6)	1999	0.0783	0.0752	0.0814
92-97 (6)	2000	0.0796	0.0763	0.0830
93-98 (6)	2001	0.0154	-0.0079	0.0386
94-99 (6)	2002	-0.0092	-0.0209	0.0027
95-00 (6)	2003	-0.0537	-0.0649	-0.0424
96-01 (6)	2004	-0.0159	-0.0145	-0.0173
97-02 (6)	2005	-0.0182	-0.0113	-0.0259
98-03 (6)	2006	-0.0163	-0.0093	-0.0243
99-04 (6)	2007	-0.0021	0.0101	-0.0148
90-96 (7)	1999	0.0562	0.0513	0.0610
91-97 (7)	2000	0.0798	0.0768	0.0829
92-98 (7)	2001	0.0230	0.0024	0.0435
93-99 (7)	2002	0.0057	-0.0083	0.0199
94-00 (7)	2003	-0.0357	-0.0487	-0.0226
95-01 (7)	2004	0.0032	0.0007	0.0057
96-02 (7)	2005	-0.0431	-0.0374	-0.0493
97-03 (7)	2006	-0.0288	-0.0258	-0.0325
98-04 (7)	2007	-0.0050	0.0097	-0.0207
90-97 (8)	2000	0.0646	0.0599	0.0695
91-98 (8)	2001	0.0276	0.0080	0.0472
92-99 (8)	2002	0.0159	0.0035	0.0285
93-00 (8)	2003	-0.0202	-0.0358	-0.0045
94-01 (8)	2004	0.0129	0.0069	0.0188
95-02 (8)	2005	-0.0305	-0.0276	-0.0338
96-03 (8)	2006	-0.0505	-0.0482	-0.0532
97-04 (8)	2007	-0.0117	-0.0002	-0.0239
90-98 (9)	2001	0.0177	-0.0030	0.0384
91-99 (9)	2002	0.0231	0.0112	0.0353
92-00 (9)	2003	-0.0085	-0.0232	0.0064
93-01 (9)	2004	0.0231	0.0135	0.0328
94-02 (9)	2005	-0.0237	-0.0235	-0.0241
95-03 (9)	2006	-0.0422	-0.0424	-0.0425
96-04 (9)	2007	-0.0282	-0.0173	-0.0396
90-99 (10)	2002	0.0169	0.0038	0.0303
91-00 (10)	2003	0.0005	-0.0142	0.0153
92-01 (10)	2004	0.0317	0.0215	0.0419
93-02 (10)	2005	-0.0155	-0.0185	-0.0125
94-03 (10)	2006	-0.0376	-0.0402	-0.0353
95-04 (10)	2007	-0.0198	-0.0112	-0.0289