

PENNSYLVANIA COMPENSATION RATING BUREAU

Retrospective Test of Trend Projections for Severity Ratios

Attached is a retrospective test of the predictive accuracy of various trend procedures. Please note that instead of using ultimate loss ratios, as in Exhibit 11a, Exhibit 11b uses ultimate severity ratios, i.e., ultimate loss ratios adjusted by dividing out the frequency component. Please note that our analysis is limited to Policy Years 1992 through 2003, the years shown on Exhibit 6, page 6.

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 severity ratio three years hence, were used. Our current review trends policy year 2003 3.25 years, policy year 2002 4.25 years, and policy year 2001 5.25 years. An average of those three values is then calculated.

Current estimates of policy year ultimate severity ratios are compared with predicted values based on trending through earlier years. The results are available for each of twenty-one loss development approaches - incurred and paid-to-2nd through paid-to-20th, as well as the average of the incurred and paid-to-20th methods, although only eleven approaches are shown.

As an illustration, the incurred loss development approach generated an indemnity severity ratio of 0.8171 for policy year 1999. Fitting the loss ratios for policy years 1993 to 1996 using a straight line and projecting that to 1999 yielded a loss ratio of 0.6334, which understates our current estimate for 1999 by 0.1837 points.

Indemnity
Actual Ultimate Severity Ratios
Including Average of Paid and Incurred

INDEMNITY	Policy	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio	Severity Ratio
	Year	(Avg Pd & Inc)	(Incur)	(Pd-2)	(Pd-3)	(Pd-4)	(Pd-5)	(Pd-6)	(Pd-8)	(Pd-12)	(Pd-16)	(Pd-20)
	1992	0.6690	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610	0.6637	0.6769
	1993	0.6846	0.6773	0.6773	0.6773	0.6773	0.6773	0.6773	0.6773	0.6746	0.6783	0.6918
	1994	0.7388	0.7252	0.7252	0.7252	0.7252	0.7252	0.7252	0.7252	0.7335	0.7376	0.7524
	1995	0.7443	0.7190	0.7190	0.7190	0.7190	0.7190	0.7190	0.7190	0.7503	0.7544	0.7695
	1996	0.6689	0.6376	0.6376	0.6376	0.6376	0.6376	0.6376	0.6376	0.6828	0.6866	0.7004
	1997	0.7250	0.6767	0.6767	0.6767	0.6767	0.6767	0.6767	0.7123	0.7542	0.7584	0.7735
	1998	0.7597	0.7126	0.7126	0.7126	0.7126	0.7126	0.7126	0.7431	0.7868	0.7912	0.8070
	1999	0.8771	0.8171	0.8171	0.8171	0.8171	0.8171	0.8234	0.8629	0.9137	0.9187	0.9370
	2000	0.9768	0.9074	0.9074	0.9074	0.9074	0.9148	0.9192	0.9632	1.0200	1.0255	1.0461
	2001	0.9982	0.9123	0.9123	0.9123	0.9414	0.9480	0.9525	0.9982	1.0569	1.0627	1.0840
	2002	1.0225	0.9354	0.9354	0.9470	0.9636	0.9705	0.9750	1.0218	1.0819	1.0879	1.1095
	2003	1.0455	0.9403	0.9758	0.9819	0.9993	1.0063	1.0111	1.0595	1.1220	1.1282	1.1508

Trend # Years = 3

**Indemnity
Linear Fit
Trended Severity Ratios**

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.8352	0.7955	0.7955	0.7955	0.7955	0.7955	0.7955	0.7955	0.8519	0.8576	0.8749
93-96 (4)	1999	0.6904	0.6334	0.6334	0.6334	0.6334	0.6334	0.6334	0.6334	0.7289	0.7330	0.7478
94-97 (4)	2000	0.6667	0.5875	0.5875	0.5875	0.5875	0.5875	0.5875	0.6445	0.7278	0.7318	0.7463
95-98 (4)	2001	0.7705	0.6954	0.6954	0.6954	0.6954	0.6954	0.6954	0.7692	0.8249	0.8296	0.8461
96-99 (4)	2002	1.0544	0.9695	0.9695	0.9695	0.9695	0.9695	0.9796	1.0570	1.1108	1.1168	1.1390
97-00 (4)	2003	1.2274	1.1369	1.1369	1.1369	1.1369	1.1488	1.1602	1.2130	1.2846	1.2914	1.3174
92-96 (5)	1999	0.7309	0.6815	0.6815	0.6815	0.6815	0.6815	0.6815	0.6815	0.7601	0.7651	0.7806
93-97 (5)	2000	0.7178	0.6428	0.6428	0.6428	0.6428	0.6428	0.6428	0.6855	0.7733	0.7777	0.7932
94-98 (5)	2001	0.7386	0.6605	0.6605	0.6605	0.6605	0.6605	0.6605	0.7220	0.7968	0.8012	0.8172
95-99 (5)	2002	0.9332	0.8482	0.8482	0.8482	0.8482	0.8482	0.8558	0.9316	0.9930	0.9985	1.0183
96-00 (5)	2003	1.1855	1.0903	1.0903	1.0903	1.0903	1.0992	1.1089	1.1847	1.2485	1.2551	1.2803
92-97 (6)	2000	0.7426	0.6754	0.6754	0.6754	0.6754	0.6754	0.6754	0.7094	0.7891	0.7941	0.8101
93-98 (6)	2001	0.7609	0.6835	0.6835	0.6835	0.6835	0.6835	0.6835	0.7352	0.8177	0.8223	0.8387
94-99 (6)	2002	0.8770	0.7900	0.7900	0.7900	0.7900	0.7900	0.7960	0.8646	0.9402	0.9454	0.9642
95-00 (6)	2003	1.0782	0.9834	0.9834	0.9834	0.9834	0.9904	0.9986	1.0759	1.1438	1.1500	1.1730
92-98 (7)	2001	0.7735	0.7012	0.7012	0.7012	0.7012	0.7012	0.7012	0.7455	0.8246	0.8297	0.8463
93-99 (7)	2002	0.8712	0.7848	0.7848	0.7848	0.7848	0.7848	0.7897	0.8509	0.9339	0.9391	0.9578
94-00 (7)	2003	1.0137	0.9175	0.9175	0.9175	0.9175	0.9233	0.9303	1.0035	1.0824	1.0883	1.1100
92-99 (8)	2002	0.8662	0.7840	0.7840	0.7840	0.7840	0.7840	0.7882	0.8428	0.9245	0.9300	0.9486
93-00 (8)	2003	0.9916	0.8958	0.8958	0.8958	0.8958	0.9008	0.9069	0.9746	1.0603	1.0661	1.0874
92-00 (9)	2003	0.9741	0.8820	0.8820	0.8820	0.8820	0.8863	0.8918	0.9540	1.0393	1.0453	1.0663

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

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	-0.0755	-0.0829	-0.0829	-0.0829	-0.0829	-0.0829	-0.0829	-0.0524	-0.0651	-0.0664	-0.0679
93-96 (4)	1999	0.1867	0.1837	0.1837	0.1837	0.1837	0.1837	0.1900	0.2295	0.1848	0.1857	0.1892
94-97 (4)	2000	0.3101	0.3199	0.3199	0.3199	0.3199	0.3273	0.3317	0.3187	0.2922	0.2937	0.2998
95-98 (4)	2001	0.2277	0.2169	0.2169	0.2169	0.2460	0.2526	0.2571	0.2290	0.2320	0.2331	0.2379
96-99 (4)	2002	-0.0319	-0.0341	-0.0341	-0.0225	-0.0059	0.0010	-0.0046	-0.0352	-0.0289	-0.0289	-0.0295
97-00 (4)	2003	-0.1819	-0.1966	-0.1611	-0.1550	-0.1376	-0.1425	-0.1491	-0.1535	-0.1626	-0.1632	-0.1666
92-96 (5)	1999	0.1462	0.1356	0.1356	0.1356	0.1356	0.1356	0.1419	0.1814	0.1536	0.1536	0.1565
93-97 (5)	2000	0.2590	0.2646	0.2646	0.2646	0.2646	0.2720	0.2764	0.2777	0.2467	0.2478	0.2529
94-98 (5)	2001	0.2596	0.2518	0.2518	0.2518	0.2809	0.2875	0.2920	0.2762	0.2601	0.2615	0.2668
95-99 (5)	2002	0.0893	0.0872	0.0872	0.0988	0.1154	0.1223	0.1192	0.0902	0.0889	0.0894	0.0912
96-00 (5)	2003	-0.1399	-0.1500	-0.1145	-0.1084	-0.0910	-0.0929	-0.0977	-0.1252	-0.1265	-0.1269	-0.1294
92-97 (6)	2000	0.2342	0.2320	0.2320	0.2320	0.2320	0.2394	0.2438	0.2538	0.2309	0.2314	0.2360
93-98 (6)	2001	0.2373	0.2288	0.2288	0.2288	0.2579	0.2645	0.2690	0.2630	0.2392	0.2404	0.2453
94-99 (6)	2002	0.1455	0.1454	0.1454	0.1570	0.1736	0.1805	0.1790	0.1572	0.1417	0.1425	0.1453
95-00 (6)	2003	-0.0327	-0.0431	-0.0076	-0.0015	0.0159	0.0159	0.0125	-0.0164	-0.0218	-0.0218	-0.0222
92-98 (7)	2001	0.2247	0.2111	0.2111	0.2111	0.2402	0.2468	0.2513	0.2527	0.2323	0.2330	0.2377
93-99 (7)	2002	0.1513	0.1506	0.1506	0.1622	0.1788	0.1857	0.1853	0.1709	0.1480	0.1488	0.1517
94-00 (7)	2003	0.0318	0.0228	0.0583	0.0644	0.0818	0.0830	0.0808	0.0560	0.0396	0.0399	0.0408
92-99 (8)	2002	0.1563	0.1514	0.1514	0.1630	0.1796	0.1865	0.1868	0.1790	0.1574	0.1579	0.1609
93-00 (8)	2003	0.0539	0.0445	0.0800	0.0861	0.1035	0.1055	0.1042	0.0849	0.0617	0.0621	0.0634
92-00 (9)	2003	0.0714	0.0583	0.0938	0.0999	0.1173	0.1200	0.1193	0.1055	0.0827	0.0829	0.0845

**Indemnity
Exponential Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Incur)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.8467	0.8030	0.8030	0.8030	0.8030	0.8030	0.8030	0.8030	0.8672	0.8733	0.8910
93-96 (4)	1999	0.6888	0.6325	0.6325	0.6325	0.6325	0.6325	0.6325	0.6325	0.7286	0.7327	0.7475
94-97 (4)	2000	0.6677	0.5942	0.5942	0.5942	0.5942	0.5942	0.5942	0.6451	0.7261	0.7301	0.7446
95-98 (4)	2001	0.7714	0.6959	0.6959	0.6959	0.6959	0.6959	0.6959	0.7713	0.8280	0.8327	0.8492
96-99 (4)	2002	1.1101	1.0129	1.0129	1.0129	1.0129	1.0129	1.0254	1.1265	1.1781	1.1845	1.2079
97-00 (4)	2003	1.3223	1.2220	1.2220	1.2220	1.2220	1.2380	1.2542	1.3091	1.3865	1.3937	1.4218
92-96 (5)	1999	0.7301	0.6790	0.6790	0.6790	0.6790	0.6790	0.6790	0.6790	0.7621	0.7672	0.7828
93-97 (5)	2000	0.7171	0.6430	0.6430	0.6430	0.6430	0.6430	0.6430	0.6839	0.7748	0.7791	0.7947
94-98 (5)	2001	0.7375	0.6610	0.6610	0.6610	0.6610	0.6610	0.6610	0.7205	0.7966	0.8011	0.8170
95-99 (5)	2002	0.9444	0.8532	0.8532	0.8532	0.8532	0.8532	0.8611	0.9477	1.0118	1.0174	1.0376
96-00 (5)	2003	1.2754	1.1635	1.1635	1.1635	1.1635	1.1749	1.1880	1.2894	1.3532	1.3604	1.3876
92-97 (6)	2000	0.7430	0.6744	0.6744	0.6744	0.6744	0.6744	0.6744	0.7081	0.7931	0.7982	0.8142
93-98 (6)	2001	0.7610	0.6827	0.6827	0.6827	0.6827	0.6827	0.6827	0.7342	0.8216	0.8262	0.8427
94-99 (6)	2002	0.8774	0.7867	0.7867	0.7867	0.7867	0.7867	0.7925	0.8654	0.9469	0.9522	0.9710
95-00 (6)	2003	1.1132	1.0065	1.0065	1.0065	1.0065	1.0143	1.0240	1.1187	1.1913	1.1978	1.2217
92-98 (7)	2001	0.7752	0.7005	0.7005	0.7005	0.7005	0.7005	0.7005	0.7455	0.8309	0.8361	0.8529
93-99 (7)	2002	0.8734	0.7820	0.7820	0.7820	0.7820	0.7820	0.7867	0.8515	0.9443	0.9496	0.9685
94-00 (7)	2003	1.0274	0.9217	0.9217	0.9217	0.9217	0.9276	0.9352	1.0190	1.1078	1.1138	1.1360
92-99 (8)	2002	0.8700	0.7824	0.7824	0.7824	0.7824	0.7824	0.7864	0.8443	0.9364	0.9421	0.9609
93-00 (8)	2003	1.0037	0.8978	0.8978	0.8978	0.8978	0.9027	0.9091	0.9853	1.0855	1.0914	1.1133
92-00 (9)	2003	0.9856	0.8838	0.8838	0.8838	0.8838	0.8879	0.8935	0.9629	1.0632	1.0696	1.0910

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

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	-0.0870	-0.0904	-0.0904	-0.0904	-0.0904	-0.0904	-0.0904	-0.0599	-0.0804	-0.0821	-0.0840
93-96 (4)	1999	0.1883	0.1846	0.1846	0.1846	0.1846	0.1846	0.1909	0.2304	0.1851	0.1860	0.1895
94-97 (4)	2000	0.3091	0.3132	0.3132	0.3132	0.3132	0.3206	0.3250	0.3181	0.2939	0.2954	0.3015
95-98 (4)	2001	0.2268	0.2164	0.2164	0.2164	0.2455	0.2521	0.2566	0.2269	0.2289	0.2300	0.2348
96-99 (4)	2002	-0.0876	-0.0775	-0.0775	-0.0659	-0.0493	-0.0424	-0.0504	-0.1047	-0.0962	-0.0966	-0.0984
97-00 (4)	2003	-0.2768	-0.2817	-0.2462	-0.2401	-0.2227	-0.2317	-0.2431	-0.2496	-0.2645	-0.2655	-0.2710
92-96 (5)	1999	0.1470	0.1381	0.1381	0.1381	0.1381	0.1381	0.1444	0.1839	0.1516	0.1515	0.1542
93-97 (5)	2000	0.2597	0.2644	0.2644	0.2644	0.2644	0.2718	0.2762	0.2793	0.2452	0.2464	0.2514
94-98 (5)	2001	0.2607	0.2513	0.2513	0.2513	0.2804	0.2870	0.2915	0.2777	0.2603	0.2616	0.2670
95-99 (5)	2002	0.0781	0.0822	0.0822	0.0938	0.1104	0.1173	0.1139	0.0741	0.0701	0.0705	0.0719
96-00 (5)	2003	-0.2299	-0.2232	-0.1877	-0.1816	-0.1642	-0.1686	-0.1769	-0.2299	-0.2312	-0.2322	-0.2368
92-97 (6)	2000	0.2338	0.2330	0.2330	0.2330	0.2330	0.2404	0.2448	0.2551	0.2269	0.2273	0.2319
93-98 (6)	2001	0.2372	0.2296	0.2296	0.2296	0.2587	0.2653	0.2698	0.2640	0.2353	0.2365	0.2413
94-99 (6)	2002	0.1451	0.1487	0.1487	0.1603	0.1769	0.1838	0.1825	0.1564	0.1350	0.1357	0.1385
95-00 (6)	2003	-0.0677	-0.0662	-0.0307	-0.0246	-0.0072	-0.0080	-0.0129	-0.0592	-0.0693	-0.0696	-0.0709
92-98 (7)	2001	0.2230	0.2118	0.2118	0.2118	0.2409	0.2475	0.2520	0.2527	0.2260	0.2266	0.2311
93-99 (7)	2002	0.1491	0.1534	0.1534	0.1650	0.1816	0.1885	0.1883	0.1703	0.1376	0.1383	0.1410
94-00 (7)	2003	0.0181	0.0186	0.0541	0.0602	0.0776	0.0787	0.0759	0.0405	0.0142	0.0144	0.0148
92-99 (8)	2002	0.1525	0.1530	0.1530	0.1646	0.1812	0.1881	0.1886	0.1775	0.1455	0.1458	0.1486
93-00 (8)	2003	0.0418	0.0425	0.0780	0.0841	0.1015	0.1036	0.1020	0.0742	0.0365	0.0368	0.0375
92-00 (9)	2003	0.0599	0.0565	0.0920	0.0981	0.1155	0.1184	0.1176	0.0966	0.0588	0.0586	0.0598

Medical
Actual Ultimate Severity Ratios
Including Average of Paid and Incurred

MEDICAL	Policy Year	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
	1992	0.4955	0.4972	0.4972	0.4972	0.4972	0.4972	0.4972	0.4972	0.4972	0.4937	0.4938
	1993	0.4984	0.4973	0.4973	0.4973	0.4973	0.4973	0.4973	0.4973	0.5019	0.4995	0.4996
	1994	0.5485	0.5504	0.5504	0.5504	0.5504	0.5504	0.5504	0.5504	0.5489	0.5463	0.5464
	1995	0.6007	0.6046	0.6046	0.6046	0.6046	0.6046	0.6046	0.6046	0.5996	0.5966	0.5969
	1996	0.6162	0.6263	0.6263	0.6263	0.6263	0.6263	0.6263	0.6263	0.6086	0.6057	0.6060
	1997	0.6782	0.6826	0.6826	0.6826	0.6826	0.6826	0.6826	0.6906	0.6768	0.6737	0.6738
	1998	0.7567	0.7818	0.7818	0.7818	0.7818	0.7818	0.7818	0.7500	0.7350	0.7314	0.7316
	1999	0.8212	0.8442	0.8442	0.8442	0.8442	0.8442	0.8326	0.8182	0.8020	0.7981	0.7983
	2000	0.9028	0.9261	0.9261	0.9261	0.9261	0.9301	0.9173	0.9015	0.8834	0.8792	0.8794
	2001	0.8964	0.9025	0.9025	0.9025	0.9357	0.9416	0.9285	0.9125	0.8943	0.8900	0.8902
	2002	0.9512	0.9508	0.9508	0.9816	1.0000	1.0064	0.9925	0.9752	0.9557	0.9512	0.9514
	2003	1.0239	1.0209	1.0316	1.0597	1.0794	1.0862	1.0711	1.0527	1.0316	1.0267	1.0269

Trend # Years = 3

**Medical
Linear Fit
Trended Severity Ratios**

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.7003	0.7063	0.7063	0.7063	0.7063	0.7063	0.7063	0.7063	0.6963	0.6940	0.6944
93-96 (4)	1999	0.7485	0.7682	0.7682	0.7682	0.7682	0.7682	0.7682	0.7682	0.7316	0.7280	0.7286
94-97 (4)	2000	0.7930	0.8042	0.8042	0.8042	0.8042	0.8042	0.8042	0.8170	0.7852	0.7817	0.7819
95-98 (4)	2001	0.9015	0.9384	0.9384	0.9384	0.9384	0.9384	0.9384	0.8931	0.8685	0.8644	0.8644
96-99 (4)	2002	1.0302	1.0725	1.0725	1.0725	1.0725	1.0725	1.0540	1.0071	0.9929	0.9879	0.9880
97-00 (4)	2003	1.1220	1.1655	1.1655	1.1655	1.1655	1.1719	1.1433	1.1055	1.0834	1.0780	1.0784
92-96 (5)	1999	0.7237	0.7379	0.7379	0.7379	0.7379	0.7379	0.7379	0.7379	0.7115	0.7089	0.7094
93-97 (5)	2000	0.8021	0.8155	0.8155	0.8155	0.8155	0.8155	0.8155	0.8251	0.7919	0.7883	0.7885
94-98 (5)	2001	0.8870	0.9195	0.9195	0.9195	0.9195	0.9195	0.9195	0.8870	0.8585	0.8544	0.8546
95-99 (5)	2002	0.9854	1.0253	1.0253	1.0253	1.0253	1.0253	1.0113	0.9734	0.9500	0.9455	0.9455
96-00 (5)	2003	1.1131	1.1528	1.1528	1.1528	1.1528	1.1576	1.1341	1.0963	1.0786	1.0733	1.0735
92-97 (6)	2000	0.7802	0.7914	0.7914	0.7914	0.7914	0.7914	0.7914	0.7990	0.7715	0.7686	0.7689
93-98 (6)	2001	0.8830	0.9131	0.9131	0.9131	0.9131	0.9131	0.9131	0.8879	0.8567	0.8526	0.8528
94-99 (6)	2002	0.9678	1.0049	1.0049	1.0049	1.0049	1.0049	0.9938	0.9624	0.9352	0.9307	0.9309
95-00 (6)	2003	1.0756	1.1152	1.1152	1.1152	1.1152	1.1190	1.0994	1.0649	1.0409	1.0359	1.0360
92-98 (7)	2001	0.8587	0.8844	0.8844	0.8844	0.8844	0.8844	0.8844	0.8640	0.8361	0.8326	0.8329
93-99 (7)	2002	0.9591	0.9942	0.9942	0.9942	0.9942	0.9942	0.9851	0.9585	0.9282	0.9237	0.9240
94-00 (7)	2003	1.0558	1.0941	1.0941	1.0941	1.0941	1.0972	1.0806	1.0497	1.0223	1.0174	1.0176
92-99 (8)	2002	0.9346	0.9660	0.9660	0.9660	0.9660	0.9660	0.9582	0.9352	0.9069	0.9030	0.9033
93-00 (8)	2003	1.0434	1.0806	1.0806	1.0806	1.0806	1.0833	1.0688	1.0411	1.0108	1.0060	1.0062
92-00 (9)	2003	1.0183	1.0525	1.0525	1.0525	1.0525	1.0548	1.0421	1.0172	0.9881	0.9837	0.9840

Medical
Linear Fit
Differences: (Actual - Trended)

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.0564	0.0755	0.0755	0.0755	0.0755	0.0755	0.0755	0.0437	0.0387	0.0374	0.0372
93-96 (4)	1999	0.0727	0.0760	0.0760	0.0760	0.0760	0.0760	0.0644	0.0500	0.0704	0.0701	0.0697
94-97 (4)	2000	0.1098	0.1219	0.1219	0.1219	0.1219	0.1259	0.1131	0.0845	0.0982	0.0975	0.0975
95-98 (4)	2001	-0.0051	-0.0359	-0.0359	-0.0359	-0.0027	0.0032	-0.0099	0.0194	0.0258	0.0256	0.0258
96-99 (4)	2002	-0.0790	-0.1217	-0.1217	-0.0909	-0.0725	-0.0661	-0.0615	-0.0319	-0.0372	-0.0367	-0.0366
97-00 (4)	2003	-0.0981	-0.1446	-0.1339	-0.1058	-0.0861	-0.0857	-0.0722	-0.0528	-0.0518	-0.0513	-0.0515
92-96 (5)	1999	0.0975	0.1063	0.1063	0.1063	0.1063	0.1063	0.0947	0.0803	0.0905	0.0892	0.0889
93-97 (5)	2000	0.1008	0.1106	0.1106	0.1106	0.1106	0.1146	0.1018	0.0764	0.0915	0.0909	0.0909
94-98 (5)	2001	0.0094	-0.0170	-0.0170	-0.0170	0.0162	0.0221	0.0090	0.0255	0.0358	0.0356	0.0356
95-99 (5)	2002	-0.0342	-0.0745	-0.0745	-0.0437	-0.0253	-0.0189	-0.0188	0.0018	0.0057	0.0058	0.0059
96-00 (5)	2003	-0.0892	-0.1319	-0.1212	-0.0931	-0.0734	-0.0714	-0.0630	-0.0436	-0.0470	-0.0466	-0.0466
92-97 (6)	2000	0.1226	0.1347	0.1347	0.1347	0.1347	0.1387	0.1259	0.1025	0.1119	0.1106	0.1105
93-98 (6)	2001	0.0134	-0.0106	-0.0106	-0.0106	0.0226	0.0285	0.0154	0.0246	0.0376	0.0374	0.0374
94-99 (6)	2002	-0.0166	-0.0541	-0.0541	-0.0233	-0.0049	0.0015	-0.0013	0.0128	0.0205	0.0205	0.0205
95-00 (6)	2003	-0.0517	-0.0943	-0.0836	-0.0555	-0.0358	-0.0328	-0.0283	-0.0122	-0.0093	-0.0092	-0.0091
92-98 (7)	2001	0.0378	0.0181	0.0181	0.0181	0.0513	0.0572	0.0441	0.0485	0.0583	0.0574	0.0573
93-99 (7)	2002	-0.0078	-0.0434	-0.0434	-0.0126	0.0058	0.0122	0.0074	0.0167	0.0275	0.0275	0.0274
94-00 (7)	2003	-0.0319	-0.0732	-0.0625	-0.0344	-0.0147	-0.0110	-0.0095	0.0030	0.0093	0.0093	0.0093
92-99 (8)	2002	0.0166	-0.0152	-0.0152	0.0156	0.0340	0.0404	0.0343	0.0400	0.0488	0.0482	0.0481
93-00 (8)	2003	-0.0195	-0.0597	-0.0490	-0.0209	-0.0012	0.0029	0.0023	0.0116	0.0208	0.0207	0.0207
92-00 (9)	2003	0.0056	-0.0316	-0.0209	0.0072	0.0269	0.0314	0.0290	0.0355	0.0435	0.0430	0.0429

**Medical
Exponential Fit
Trended Loss Ratios**

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.7231	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7300	0.7177	0.7158	0.7163
93-96 (4)	1999	0.7824	0.8081	0.8081	0.8081	0.8081	0.8081	0.8081	0.8081	0.7601	0.7563	0.7570
94-97 (4)	2000	0.8206	0.8344	0.8344	0.8344	0.8344	0.8344	0.8344	0.8501	0.8105	0.8069	0.8071
95-98 (4)	2001	0.9414	0.9860	0.9860	0.9860	0.9860	0.9860	0.9860	0.9302	0.9013	0.8972	0.8971
96-99 (4)	2002	1.1051	1.1593	1.1593	1.1593	1.1593	1.1593	1.1339	1.0686	1.0574	1.0520	1.0520
97-00 (4)	2003	1.1989	1.2559	1.2559	1.2559	1.2559	1.2646	1.2250	1.1716	1.1482	1.1424	1.1428
92-96 (5)	1999	0.7503	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7675	0.7348	0.7326	0.7331
93-97 (5)	2000	0.8440	0.8621	0.8621	0.8621	0.8621	0.8621	0.8621	0.8742	0.8295	0.8257	0.8260
94-98 (5)	2001	0.9325	0.9728	0.9728	0.9728	0.9728	0.9728	0.9728	0.9331	0.8970	0.8927	0.8929
95-99 (5)	2002	1.0448	1.0953	1.0953	1.0953	1.0953	1.0953	1.0772	1.0271	0.9998	0.9951	0.9950
96-00 (5)	2003	1.2062	1.2573	1.2573	1.2573	1.2573	1.2638	1.2310	1.1770	1.1614	1.1557	1.1557
92-97 (6)	2000	0.8166	0.8308	0.8308	0.8308	0.8308	0.8308	0.8308	0.8400	0.8047	0.8020	0.8024
93-98 (6)	2001	0.9410	0.9802	0.9802	0.9802	0.9802	0.9802	0.9802	0.9492	0.9062	0.9019	0.9022
94-99 (6)	2002	1.0317	1.0795	1.0795	1.0795	1.0795	1.0795	1.0654	1.0243	0.9895	0.9848	0.9849
95-00 (6)	2003	1.1572	1.2087	1.2087	1.2087	1.2087	1.2137	1.1873	1.1395	1.1115	1.1063	1.1063
92-98 (7)	2001	0.9105	0.9427	0.9427	0.9427	0.9427	0.9427	0.9427	0.9186	0.8814	0.8782	0.8785
93-99 (7)	2002	1.0348	1.0821	1.0821	1.0821	1.0821	1.0821	1.0704	1.0353	0.9930	0.9882	0.9884
94-00 (7)	2003	1.1417	1.1927	1.1927	1.1927	1.1927	1.1967	1.1744	1.1320	1.0967	1.0915	1.0916
92-99 (8)	2002	1.0043	1.0451	1.0451	1.0451	1.0451	1.0451	1.0355	1.0062	0.9675	0.9638	0.9641
93-00 (8)	2003	1.1409	1.1925	1.1925	1.1925	1.1925	1.1959	1.1765	1.1383	1.0952	1.0899	1.0902
92-00 (9)	2003	1.1097	1.1559	1.1559	1.1559	1.1559	1.1588	1.1422	1.1088	1.0680	1.0637	1.0640

Medical
Exponential Fit
Differences: (Actual - Trended)

Years Used (# Yrs)	3 Yr Trend To	Severity Ratio (Avg Pd & Inc)	Severity Ratio (Incur)	Severity Ratio (Pd-2)	Severity Ratio (Pd-3)	Severity Ratio (Pd-4)	Severity Ratio (Pd-5)	Severity Ratio (Pd-6)	Severity Ratio (Pd-8)	Severity Ratio (Pd-12)	Severity Ratio (Pd-16)	Severity Ratio (Pd-20)
92-95 (4)	1998	0.0336	0.0518	0.0518	0.0518	0.0518	0.0518	0.0518	0.0200	0.0173	0.0156	0.0153
93-96 (4)	1999	0.0388	0.0361	0.0361	0.0361	0.0361	0.0361	0.0245	0.0101	0.0419	0.0418	0.0413
94-97 (4)	2000	0.0822	0.0917	0.0917	0.0917	0.0917	0.0957	0.0829	0.0514	0.0729	0.0723	0.0723
95-98 (4)	2001	-0.0450	-0.0835	-0.0835	-0.0835	-0.0503	-0.0444	-0.0575	-0.0177	-0.0070	-0.0072	-0.0069
96-99 (4)	2002	-0.1539	-0.2085	-0.2085	-0.1777	-0.1593	-0.1529	-0.1414	-0.0934	-0.1017	-0.1008	-0.1006
97-00 (4)	2003	-0.1750	-0.2350	-0.2243	-0.1962	-0.1765	-0.1784	-0.1539	-0.1189	-0.1166	-0.1157	-0.1159
92-96 (5)	1999	0.0709	0.0767	0.0767	0.0767	0.0767	0.0767	0.0651	0.0507	0.0672	0.0655	0.0652
93-97 (5)	2000	0.0588	0.0640	0.0640	0.0640	0.0640	0.0680	0.0552	0.0273	0.0539	0.0535	0.0534
94-98 (5)	2001	-0.0361	-0.0703	-0.0703	-0.0703	-0.0371	-0.0312	-0.0443	-0.0206	-0.0027	-0.0027	-0.0027
95-99 (5)	2002	-0.0936	-0.1445	-0.1445	-0.1137	-0.0953	-0.0889	-0.0847	-0.0519	-0.0441	-0.0439	-0.0436
96-00 (5)	2003	-0.1823	-0.2364	-0.2257	-0.1976	-0.1779	-0.1776	-0.1599	-0.1243	-0.1298	-0.1290	-0.1288
92-97 (6)	2000	0.0862	0.0953	0.0953	0.0953	0.0953	0.0993	0.0865	0.0615	0.0787	0.0772	0.0770
93-98 (6)	2001	-0.0446	-0.0777	-0.0777	-0.0777	-0.0445	-0.0386	-0.0517	-0.0367	-0.0119	-0.0119	-0.0120
94-99 (6)	2002	-0.0805	-0.1287	-0.1287	-0.0979	-0.0795	-0.0731	-0.0729	-0.0491	-0.0338	-0.0336	-0.0335
95-00 (6)	2003	-0.1333	-0.1878	-0.1771	-0.1490	-0.1293	-0.1275	-0.1162	-0.0868	-0.0799	-0.0796	-0.0794
92-98 (7)	2001	-0.0141	-0.0402	-0.0402	-0.0402	-0.0070	-0.0011	-0.0142	-0.0061	0.0129	0.0118	0.0117
93-99 (7)	2002	-0.0836	-0.1313	-0.1313	-0.1005	-0.0821	-0.0757	-0.0779	-0.0601	-0.0373	-0.0370	-0.0370
94-00 (7)	2003	-0.1178	-0.1718	-0.1611	-0.1330	-0.1133	-0.1105	-0.1033	-0.0793	-0.0651	-0.0648	-0.0647
92-99 (8)	2002	-0.0531	-0.0943	-0.0943	-0.0635	-0.0451	-0.0387	-0.0430	-0.0310	-0.0118	-0.0126	-0.0127
93-00 (8)	2003	-0.1170	-0.1716	-0.1609	-0.1328	-0.1131	-0.1097	-0.1054	-0.0856	-0.0636	-0.0632	-0.0633
92-00 (9)	2003	-0.0858	-0.1350	-0.1243	-0.0962	-0.0765	-0.0726	-0.0711	-0.0561	-0.0364	-0.0370	-0.0371