### PENNSYLVANIA COMPENSATION RATING BUREAU

### Claim Frequencies

The attached exhibits examine historical Workers Compensation claim frequencies in Pennsylvania.

Page 1 shows counts of claims and wages as compiled by the Pennsylvania Department of Labor and Industry along with resulting claim frequencies per \$1 million of payroll. Claim counts are available through the twelve months ending June 30, 2008.

Indicated average annual changes in claim frequency are also shown (column (8)) based on an exponential regression for frequencies during the calendar periods shown in column (7). The figures in column (6) indicate that there have been four distinct periods since 1991 with regard to observed average annual changes in claim frequency. The period 1991-1994 showed an average change of -8.0% followed by three years (1995-1997) at -16.6%. Annual changes since 1997 have slowed somewhat with an estimate average change for 1998 - 2000 of -8.3%. With the exception of 2004, Labor & Industry claim counts showed increases from 2001 through 2006 due to changes in the types of claims certain carriers were reporting. Small improvements in claim frequency are shown for 2007 and the first six months of 2008. The result is that patterns of claim reporting in recent years must be reviewed with great caution.

The second portion of page 1 presents claim frequencies on a fiscal year basis.

The second page shows a graph of the frequencies appearing in column (5) of page 1.

Claim frequencies per \$1 million of expected losses are shown on page 3 based on statistics gathered by the PCRB. For informational purposes, claim frequencies are also shown at constant (1987) wage levels. The data excludes the experience of deductible business. The pattern of changes in claim frequency on page 3 are similar to, although generally lower than, the Pennsylvania Department of Labor and Industry data shown on page 1 until 2001.

Staff has selected a claim frequency trend line of the form y=1/(a+b\*x) using the most recent seven points. The selected curve produces a slightly less aggressive trend projection than that of the exponential curve.

The fourth page shows a graph of the frequencies appearing in column (5) of page 3.

The fifth and sixth pages are comparable to pages 3 and 4 but include the experience of deductible policies.

The seventh page shows a graph comparing claim frequencies presented on pages 2, 4 and 6, all indexed to a common value of 1.0 at January 1, 1988.

Page 8 presents the Unit Statistical Plan claim frequencies of page 3 by industry group and page 9 shows a graph of those industry group claim frequencies.

## <u>Pennsylvania W.C. - Injury Frequencies</u> per Department of Labor & Industry Statistics

Calendar	Fatal & Non-Fatal	% Change	Wages	% Change	Claim Frequency	% Change
Year	Claim Counts (1)	Counts (2)	(Excl. Fed. Govt.)	Wages (4)	(# per \$1million) (5)	Frequency (6)
1985	135,258		82,424,929,323		1.6410	
1986	138,168	2.2%	87,088,766,188	5.7%	1.5865	-3.3%
1987	139,706	1.1%	94,082,048,196	8.0%	1.4849	-6.4%
1988	146,461	4.8%	101,779,435,543	8.2%	1.4390	-3.1%
1989	148,445	1.4%	108,000,446,952	6.1%	1.3745	-4.5%
1990	158,030	6.5%	114,126,673,936	5.7%	1.3847	0.7%
1991	145,667	-7.8%	116,536,044,622	2.1%	1.2500	-9.7%
1992	143,268	-1.6%	123,163,218,565	5.7%	1.1632	-6.9%
1993	136,769	-4.5%	126,453,677,063	2.7%	1.0816	-7.0%
1994	130,093	-4.9%	131,499,113,452	4.0%	0.9893	-8.5%
1995	118,313	-9.1%	137,992,970,047	4.9%	0.8574	-13.3%
1996	102,132	-13.7%	144,910,231,319	5.0%	0.7048	-17.8%
1997	88,451	-13.4%	154,383,264,744	6.5%	0.5729	-18.7%
1998	85,783	-3.0%	164,800,517,598	6.7%	0.5205	-9.1%
1999	82,676	-3.6%	173,807,881,592	5.5%	0.4757	-8.6%
2000	80,133	-3.1%	181,587,857,121	@ 4.5%	0.4413	-7.2%
2001	90,405	12.8%	189,076,552,680	4.1%	0.4781	8.3%
2002	95,206	5.3%	191,748,691,971	1.4%	0.4965	3.8%
2003	99,161	4.2%	196,855,782,892	2.7%	0.5037	1.5%
2004	93,566	-5.6%	206,119,193,715	4.7%	0.4539	-9.9%
2005	102,259	9.3%	214,210,346,697	3.9%	0.4774	5.2%
2006	110,657	8.2%	225,612,061,600	5.3%	0.4905	2.7%
2007	115,845	4.7%	237,997,366,771	5.5%	0.4867	-0.8%
2007.5 *	114,166	-1.4% **	242,477,469,695	1.9%	0.4708	-3.3%

CY85 - FY end 6/08 -6.47
CY86 - FY end 6/08 CY87 - FY end 6/08 CY88 - FY end 6/08 CY88 - FY end 6/08 CY89 - FY end 6/08 CY90 - FY end 6/08 CY91 - FY end 6/08 CY91 - FY end 6/08 CY92 - FY end 6/08 CY93 - FY end 6/08 CY94 - FY end 6/08 CY95 - FY end 6/08 CY95 - FY end 6/08 CY97 - FY end 6/08 CY97 - FY end 6/08 CY97 - FY end 6/08 CY98 - FY end 6/08 CY99 - FY end 6/08 CY99 - FY end 6/08 CY90 - FY end 6/08 CY00 - FY end 6/08 CY01 - FY end 6/08 CY01 - FY end 6/08 CY02 - FY end 6/08 CY03 - FY end 6/08 CY03 - FY end 6/08 CY04 - FY end 6/08 CY05 - FY end 6/08 CY07 - FY end

Fiscal Year Ending June 30	Fatal & Non-Fatal Claim Counts (1)	% Change Counts (2)	Wages (Excl. Fed. Govt.) (3)	% Change Wages (4)	Claim Frequency (# per \$1million) (5)	% Change Frequency (6)
1996	111,412		141,080,588,470		0.7897	
1997	94,081	-15.6%	148,855,166,710	5.5%	0.6320	-20.0%
1998	87,339	-7.2%	159,326,932,528	7.0%	0.5482	-13.3%
1999	83,769	-4.1%	168,545,476,679	5.8%	0.4970	-9.3%
2000	81,338	-2.9%	178,133,454,425 @	5.7%	0.4566	-8.1%
2001	82,813	1.8%	188,197,864,473	5.6%	0.4400	-3.6%
2002	94,215	13.8%	189,850,330,342	0.9%	0.4963	12.8%
2003	98,042	4.1%	193,398,561,446	1.9%	0.5069	2.1%
2004	98,041	0.0%	199,943,996,390	3.4%	0.4903	-3.3%
2005	92,719	-5.4%	209,858,012,135	5.0%	0.4418	-9.9%
2006	108,979	17.5%	221,752,445,994	5.7%	0.4914	11.2%
2007	112,910	3.6%	232,096,746,788	4.7%	0.4865	-1.0%
2008	114,166	1.1%	242,477,469,695	4.5%	0.4708	-3.2%

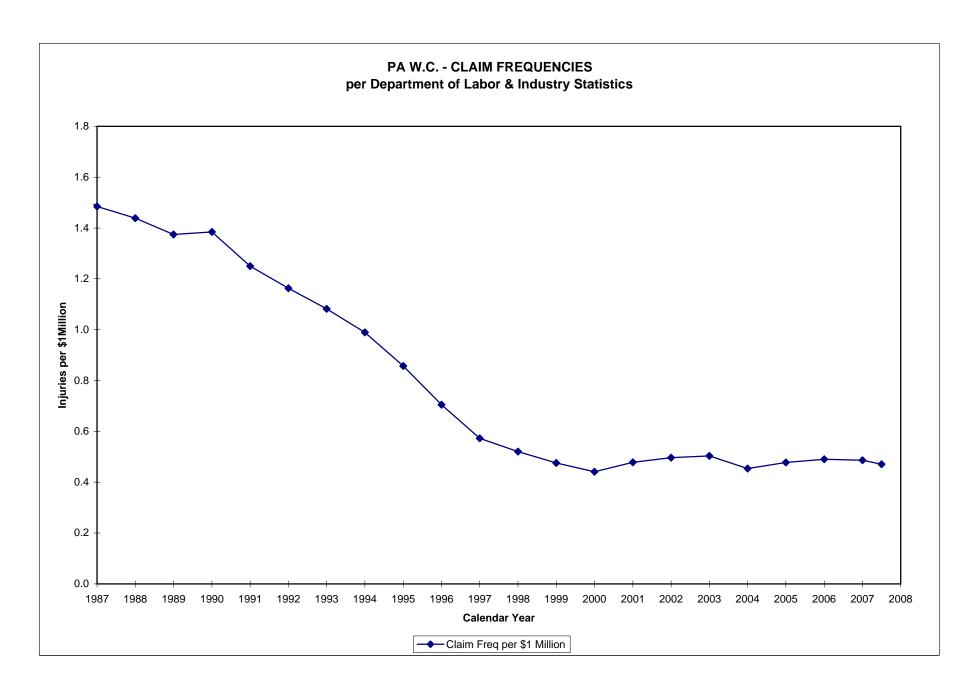
Period	Annual % Change
Ending 6/30	in Claim Frequency
(7)	(8) #
96-08 97-08 98-08 99-08 00-08 01-08 02-08 03-08 04-08 05-08	-2.67% -1.46% -0.57% 0.08% 0.45% 0.21% -0.85% -0.81% 0.15% 1.82% -2.12%

<sup>\*</sup> July 1, 2007 thru June 30, 2008 .

\*\* Six month change 1/08-12/08 to 7/08-6/09. Annualized changes are-2.8% (Counts), 3.8% (Wages) and -6.5% (Frequency)

# Exponential Trend

@ 1ST Quarter 2000 wages have been adjusted (from 45,317,695,400 to 42,864,043,865) for unusually high wage levels during the period.



# Pennsylvania W.C - Claim Frequencies PCRB Unit Statistical Plan

PCRB Unit Statistical Plan (Excluding Deductible Business)

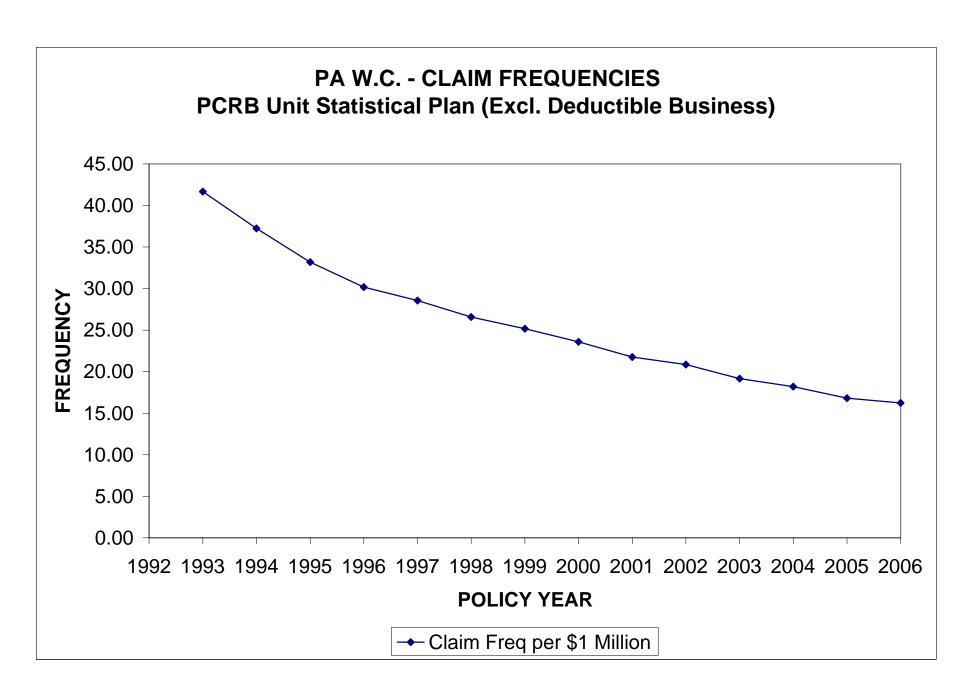
Policy	# of Claim Indemnity	% Change Counts	Expected Losses	% Change Exp Loss	Claim Frequency (#Claims per \$1 million)	% Change Claim Freq
Year	(1)	(2)	(3)	(4)	(5)	(6)
1987	78,735	, ,	, ,	, ,		, ,
1988	81,465	3.5%				
1989	82,954	1.8%				
1990	78,202	-5.7%				
1991	69,369	-11.3%				
1992	56,627	-18.4%				
1993	48,000	-15.2%	1,151,932,684		41.67	
1994	42,193	-12.1%	1,133,104,748	-1.6%	37.24	-10
1995	36,930	-12.5%	1,113,047,292	-1.8%	33.18	-10
1996	35,992	-2.5%	1,192,726,338	7.2%	30.18	-9
1997	37,658	4.6%	1,318,521,837	10.5%	28.56	-5
1998	37,208	-1.2%	1,399,746,832	6.2%	26.58	-6
1999	37,414	0.6%	1,486,702,845	6.2%	25.17	-5
2000	36,031	-3.7%	1,528,084,323	2.8%	23.58	-6
2001	32,265	-10.5%	1,482,704,732	-3.0%	21.76	-7
2002	30,068	-6.8%	1,441,471,251	-2.8%	20.86	-4
2003	27,991	-6.9%	1,461,111,468	1.4%	19.16	-8
2004	27,652	-1.2%	1,520,011,305	4.0%	18.19	-5
2005	26,981	-2.4%	1,604,711,168	5.6%	16.81	-7
2006	26,994	0.1%	1,661,870,059	3.6%	16.24	-3

Period	Annual % Change In Claim Frequency
PY87-PY06 PY88-PY06 PY89-PY06 PY90-PY06 PY91-PY06 PY92-PY06 PY93-PY06 PY95-PY06 PY96-PY06 PY97-PY06 PY98-PY06 PY99-PY06 PY00-PY06 PY01-PY06	-6.8% -6.5% -6.3% -6.2% -6.2% -6.2% -6.2% -6.1% -6.0% -6.1% -5.6% -5.5% -3.4%

	SAWW	% Change	SAWW	Adjusted Claim Frequency *	% Change
Policy		SAWW	Index	# Claims per \$1 million payrol	Adj Claim
Year					Frequency
1987	398.38		1.0000		
1988	417.36	4.8%	1.0476		
1989	434.63	4.1%	1.0910		
1990	454.60	4.6%	1.1411		
1991	474.70	4.4%	1.1916		
1992	493.63	4.0%	1.2391		
1993	508.37	3.0%	1.2761	53.17	
1994	523.85	3.0%	1.3150	48.97	-7.9%
1995	540.70	3.2%	1.3572	45.03	-8.0%
1996	560.76	3.7%	1.4076	42.48	-5.7%
1997	586.52	4.6%	1.4723	42.05	-1.0%
1998	611.60	4.3%	1.5352	40.81	-2.9%
1999	640.38	4.7%	1.6075	40.45	-0.9%
2000	659.98	3.1%	1.6567	39.06	-3.4%
2001	674.49	2.2%	1.6931	36.84	-5.7%
2002	691.43	2.5%	1.7356	36.20	-1.7%
2003	716.45	3.6%	1.7984	34.45	-4.8%
2004	744.49	3.9%	1.8688	34.00	-1.3%
2005	773.83	3.9%	1.9424	32.66	-3.9%
2006	805.31	4.1%	2.0215	32.84	0.6%

Period	Annual % Change In Adjusted Claim Frequency
PY87-PY06 PY88-PY06	
PY89-PY06	
PY90-PY06	
PY91-PY06	
PY92-PY06	
PY93-PY06	-3.4%
PY94-PY06	-3.1%
PY95-PY06	-3.0%
PY96-PY06	-2.9%
PY97-PY06	-3.0%
PY98-PY06	-3.0%
PY99-PY06	-3.1%
PY00-PY06	-2.9%
PY01-PY06	-2.5%
PY02-PY06	-2.5%
PY03-PY06	-1.8%
PY04-PY06	-1.7%
PY05-PY06	0.6%

<sup>\*</sup> Adjusted claim frequency is claim frequency per \$1 million expected losses at constant (1987) wages



Pennsylvania W.C - Claim Frequencies
PCRB Unit Statistical Plan All Business Including Deductible Business

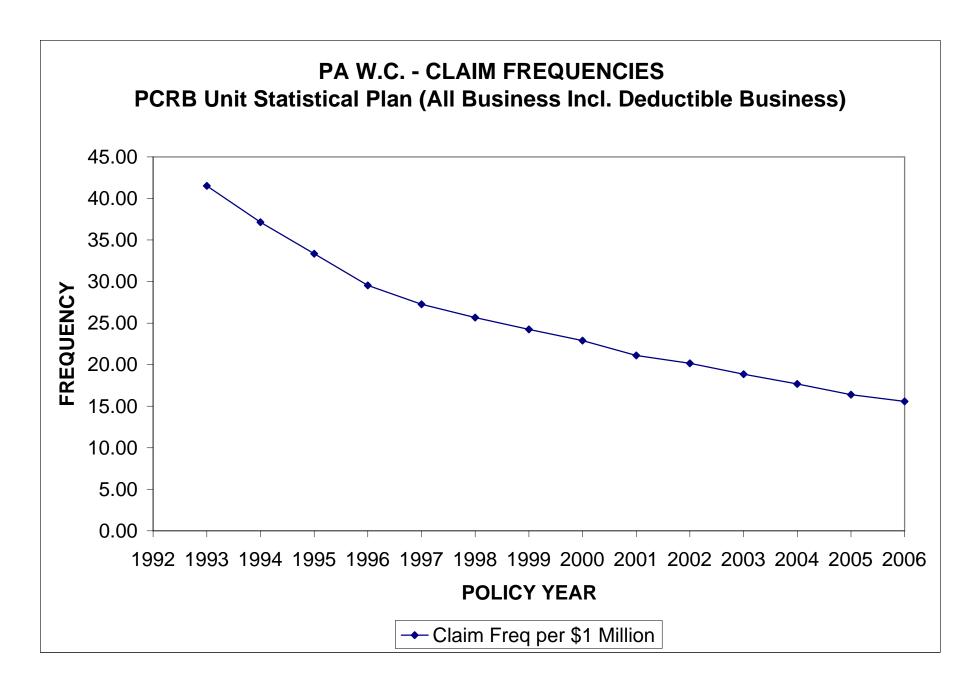
	# of Claim	% Change	Expected	% Change	Claim Frequency	% Change
Policy	Indemnity	Counts	Losses	Exp Loss	(#Claims per \$1 million)	Claim Freq
Year	(1)	(2)	(3)	(4)	(5)	(6)
1987	78,735					
1988	81,465	3.5%				
1989	82,954	1.8%				
1990	78,202	-5.7%				
1991	69,369	-11.3%				
1992	67,132	-3.2%				
1993	62,118	-7.5%	1,496,078,183		41.52	
1994	58,068	-6.5%	1,563,457,464	4.5%	37.14	-10.5%
1995	53,088	-8.6%	1,591,157,633	1.8%	33.36	-10.2%
1996	50,148	-5.5%	1,698,355,789	6.7%	29.53	-11.5%
1997	49,994	-0.3%	1,833,624,002	8.0%	27.27	-7.7%
1998	50,737	1.5%	1,976,275,380	7.8%	25.67	-5.9%
1999	51,749	2.0%	2,134,966,293	8.0%	24.24	-5.6%
2000	51,050	-1.4%	2,229,046,791	4.4%	22.90	-5.5%
2001	47,320	-7.3%	2,241,465,837	0.6%	21.11	-7.8%
2002	45,211	-4.5%	2,241,259,098	0.0%	20.17	-4.5%
2003	43,802	-3.1%	2,323,981,252	3.7%	18.85	-6.5%
2004	42,915	-2.0%	2,427,865,485	4.5%	17.68	-6.2%
2005	41,765	-2.7%	2,547,996,961	4.9%	16.39	-7.3%
2006	40,277	-3.6%	2,586,927,838	1.5%	15.57	-5.0%

Period	Annual % Change In Claim Frequency
PY87-PY06	
PY88-PY06	
PY89-PY06	
PY90-PY06	
PY91-PY06	
PY92-PY06	
PY93-PY06	-6.9%
PY94-PY06	-6.7%
PY95-PY06	-6.4%
PY96-PY06	-6.2%
PY97-PY06	-6.1%
PY98-PY06	-6.1%
PY99-PY06	-6.2%
PY00-PY06	-6.2%
PY01-PY06	-6.1%
PY02-PY06	-6.4%
PY03-PY06	-6.3%
PY04-PY06	-6.2%
PY05-PY06	-5.0%

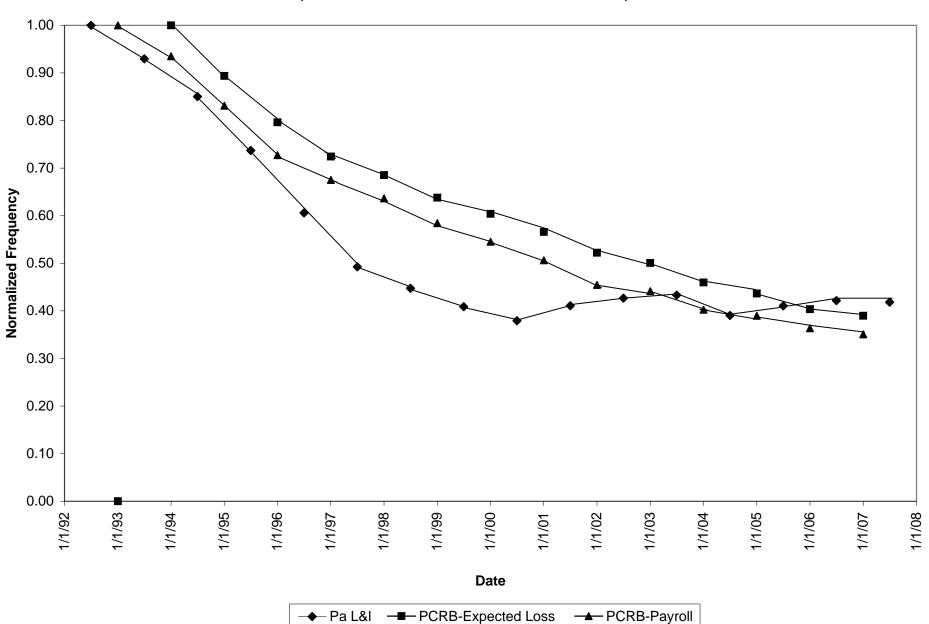
	SAWW	% Change	SAWW	Adjusted Claim Frequency *	% Change
Policy		SAWW	Index	# Claims per \$1 million payrol	Adj Claim
Year					Frequency
1987	398.38		1.0000		
1988	417.36	4.8%	1.0476		
1989	434.63	4.1%	1.0910		
1990	454.60	4.6%	1.1411		
1991	474.70	4.4%	1.1916		
1992	493.63	4.0%	1.2391		
1993	508.37	3.0%	1.2761	52.98	
1994	523.85	3.0%	1.3150	48.84	-7.8%
1995	540.70	3.2%	1.3572	45.28	-7.3%
1996	560.76	3.7%	1.4076	41.56	-8.2%
1997	586.52	4.6%	1.4723	40.14	-3.4%
1998	611.60	4.3%	1.5352	39.41	-1.8%
1999	640.38	4.7%	1.6075	38.96	-1.1%
2000	659.98	3.1%	1.6567	37.94	-2.6%
2001	674.49	2.2%	1.6931	35.74	-5.8%
2002	691.43	2.5%	1.7356	35.01	-2.0%
2003	716.45	3.6%	1.7984	33.90	-3.2%
2004	744.49	3.9%	1.8688	33.03	-2.6%
2005	773.83	3.9%	1.9424	31.84	-3.6%
2006	805.31	4.1%	2.0215	31.47	-1.2%

Period	Annual % Change In Adjusted Claim Frequency
PY87-PY06	
PY88-PY06	
PY89-PY06	
PY90-PY06	
PY91-PY06	
PY92-PY06	
PY93-PY06	-3.6%
PY94-PY06	-3.3%
PY95-PY06	-3.1%
PY96-PY06	-2.9%
PY97-PY06	-2.9%
PY98-PY06	-3.0%
PY99-PY06	-3.1%
PY00-PY06	-3.0%
PY01-PY06	-2.7%
PY02-PY06	-2.7%
PY03-PY06	-2.6%
PY04-PY06	-2.4%
PY05-PY06	-1.2%

<sup>\*</sup> Adjusted claim frequency is claim frequency per \$1 million expected losses at constant (1987) wages



PA W.C. - COMPARISON OF CLAIM FREQUENCIES (PCRB Data Excludes Deductible Business)



Pennsylvania W.C. - Claim Frequencies
PCRB Unit Statistical Plan
(Excluding Deductible Business)

1	1 1	# of Claim	% Change	Exposted	% Change	Claim Frequency	% Change	Period	Annual % Change
Policy	Industry	# of Claim Indemnity	Counts	Expected Losses	Exp Loss	(#Claims per \$1 million)	Frequency	Period	In Claim Frequency
Year	Group	(1)	(2)	(3)	(4)	(#Claims per \$1 million) (5)	(6)		in olaim ricquency
1987	1 (MFG)	26,756	(=)	506,748,388	( · /	52.80	(0)	PY87-PY06	-5.8%
1988	1	28,444	6.3%	528,682,884	4.3%	53.80	1.9%	PY88-PY06	-5.9%
1989	1	27,777	-2.3%	527,398,892	-0.2%	52.67	-2.1%	PY89-PY06	-6.0%
1990	1	25,016	-9.9%	526,115,232	-0.2%	47.55	-9.7%	PY90-PY06	-6.1%
1991	1	20,535	-17.9%	448,449,439	-14.8%	45.79	-3.7%	PY91-PY06	-6.2%
1992	1	16,091	-21.6%	363,021,615	-19.0%	44.33	-3.2%	PY92-PY06	-6.4%
1993	1	13,327	-17.2%	284,129,102	-21.7%	46.90	5.8%	PY93-PY06	-6.5%
1994	1	11,567	-13.2%	271,486,802	-4.4%	42.61	-9.1%	PY94-PY06	-6.3%
1995	1	9,904	-14.4%	258,694,230	-4.7%	38.28	-10.2%	PY95-PY06	-6.0%
1996	1	9,234	-6.8%	270,375,142	4.5%	34.15	-10.8%	PY96-PY06	-5.8%
1997	1	10,086	9.2%	308,299,877	14.0%	32.71	-4.2%	PY97-PY06	-5.8%
1998	1	9,781	-3.0%	322,000,751	4.4%	30.38	-7.1%	PY98-PY06	-5.6%
1999	1	9,231	-5.6%	323,407,751	0.4%	28.54	-6.1%	PY99-PY06	-5.5%
2000	1	8,489	-8.0%	315,099,294	-2.6%	26.94	-5.6%	PY00-PY06	-5.3%
2001	1	7,143	-15.9%	287,909,279	-8.6%	24.81	-7.9%	PY01-PY06	-4.8%
2002	1	6,191	-13.3%	271,805,811	-5.6%	22.78	-8.2%	PY02-PY06	-4.5%
2003	1	5,911	-4.5%	266,726,056	-1.9%	22.16	-2.7%	PY03-PY06	-5.1%
2004	1	6,001	1.5%	273,805,474	2.7%	21.92	-1.1%	PY04-PY06	-6.0%
2005	1	5,615	-6.4%	289,868,850	5.9%	19.37	-11.6%	PY05-PY06	0.1%
2006	1	5,821	3.7%	300,429,838	3.6%	19.38	0.1%		
1987	2 (Contracting)	11,093		316,844,901		35.01		PY87-PY06	-5.3%
1988	2	11,547	4.1%	332,676,545	5.0%	34.71	-0.9%	PY88-PY06	-5.5%
1989	2	11,619	0.6%	334,130,696	0.4%	34.77	0.2%	PY89-PY06	-5.6%
1990	2	10,403	-10.5%	339,686,123	1.7%	30.63	-11.9%	PY90-PY06	-5.7%
1991	2	9,019	-13.3%	289,829,317	-14.7%	31.12	1.6%	PY91-PY06	-5.9%
1992	2	8,118	-10.0%	276,755,002	-4.5%	29.33	-5.8%	PY92-PY06	-6.1%
1993	2	7,196	-11.4%	237,120,241	-14.3%	30.35	3.5%	PY93-PY06	-6.3%
1994	2	7,199	0.0%	246,042,511	3.8%	29.26	-3.6%	PY94-PY06	-6.3%
1995	2	6,296	-12.5%	239,679,470	-2.6%	26.27	-10.2%	PY95-PY06	-6.2%
1996	2	6,535	3.8%	260,042,042	8.5%	25.13	-4.3%	PY96-PY06	-6.2%
1997	2	6,559	0.4%	283,819,634	9.1%	23.11	-8.0%	PY97-PY06	-6.1%
1998	2	6,730	2.6%	312,907,166	10.2%	21.51	-6.9%	PY98-PY06	-6.1%
1999	2	6,817	1.3%	336,732,891	7.6%	20.24	-5.9%	PY99-PY06	-6.2%
2000	2	6,800	-0.2%	349,758,196	3.9%	19.44	-4.0%	PY00-PY06	-6.4%
2001	2	6,410	-5.7%	353,494,283	1.1%	18.13	-6.7%	PY01-PY06	-6.3%
2002	2	5,909	-7.8%	349,185,012	-1.2%	16.92	-6.7%	PY02-PY06	-6.2%
2003	2 2	5,594	-5.3%	355,578,493	1.8%	15.73	-7.0%	PY03-PY06	-6.0%
2004		5,479	-2.1%	372,038,672	4.6%	14.73	-6.4%	PY04-PY06	-6.3%
2005	2	5,617	2.5%	394,817,748	6.1%	14.23	-3.4%	PY05-PY06	-9.1%
2006	2	5,347	-4.8%	413,388,973	4.7%	12.93	-9.1%		
1987	3 (Other)	40,886		788,010,413		51.89	1	PY87-PY06	-6.3%
1988	3 (Other)	40,000	1.4%	841,536,965	6.8%	49.28	-5.0%	PY88-PY06	-6.4%
1989	3	43.558	5.0%	886,514,368	5.3%	49.13	-0.3%	PY89-PY06	-6.5%
1990	3	42,783	-1.8%	933,413,260	5.3%	45.84	-6.7%	PY90-PY06	-6.6%
1991	3	39,815	-6.9%	853,577,686	-8.6%	46.64	1.7%	PY91-PY06	-6.7%
1992	3	32,418	-18.6%	780,792,221	-8.5%	41.52	-11.0%	PY92-PY06	-6.7%
1993	3	27,477	-15.2%	630,683,341	-19.2%	43.57	4.9%	PY93-PY06	-6.8%
1994	3	23,427	-14.7%	615,575,435	-2.4%	38.06	-12.6%	PY94-PY06	-6.4%
1995	3	20,730	-11.5%	614,673,592	-0.1%	33.73	-11.4%	PY95-PY06	-6.2%
1996	3	20,223	-2.4%	662,309,154	7.7%	30.53	-9.5%	PY96-PY06	-6.1%
1997	3	21,013	3.9%	726,402,326	9.7%	28.93	-5.2%	PY97-PY06	-6.1%
1998	3	20,697	-1.5%	764,838,915	5.3%	27.06	-6.5%	PY98-PY06	-6.2%
1999	3	21,366	3.2%	826,562,203	8.1%	25.85	-4.5%	PY99-PY06	-6.2%
2000	3	20,742	-2.9%	863,226,833	4.4%	24.03	-7.0%	PY00-PY06	-6.2%
2001	3	18,712	-9.8%	841,301,170	-2.5%	22.24	-7.4%	PY01-PY06	-6.2%
2002	3	17,968	-4.0%	820,480,428	-2.5%	21.90	-1.5%	PY02-PY06	-6.6%
2003	3	16,486	-8.2%	838,806,919	2.2%	19.65	-10.3%	PY03-PY06	-5.5%
2004	3	16,172	-1.9%	874,167,159	4.2%	18.50	-5.9%	PY04-PY06	-5.0%
2005	3	15,749	-2.6%	920,024,570	5.2%	17.12	-7.5%	PY05-PY06	-2.5%
2006	3	15,826	0.5%	948,051,248	3.0%	16.69	-2.5%		

