Exhibit 7
As Filed

PENNSYLVANIA COMPENSATION RATING BUREAU

Tail Factors and Paid Bridge Factors for Loss Development

For a given calendar year, the PCRB collects financial loss development data for the current policy year and the thirty previous individual policy years. A single aggregate line of experience is reported for all older policy years combined.

A summary of both the incurred and paid 20th to ultimate tail factors is shown on Page 1.

The incurred tail factor methodology is applied separately for indemnity and medical loss experience using two separate methods. These two methods, which are described below, are averaged to generate the selected tail factors.

The first method, the historical Linear Decay method, is outlined below.

1. A starting policy year loss amount based on the average reported incurred loss for the three earliest available policy years was computed.

2. An annual loss inflation factor was selected based on observed changes in incurred losses by policy year for the older policy years having separate experience data reported.

3. A historical series of estimated incurred losses by policy year beginning with the policy year immediately prior to the earliest available policy year was computed using the starting point from #1 and the selected inflation factor from #2.

4. A calendar year loss development factor was selected for that policy year based on observed developments for the oldest years with actual separate experience available.

5. A rate of decline in calendar year loss development factors by policy year was then computed such that when the resulting series of loss development factors was applied to the historical series of estimated incurred losses in #3, the total implied dollar amount of loss development for the calendar year balanced to the observed amount of development on policy years prior to the earliest available policy year.

6. The tail factor applicable to maturities in those prior policy years based on that calendar year of experience was then computed as the cumulative product of the series of loss development factors constructed in #5 as well as the actual loss development factors from the 20th to 30th development periods to calculate a 20th to ultimate incurred tail factor.

Recognizing the volatility of observed calendar year development for the prior policy years in the aggregate, the PCRB elected to use an experience period comprising seven calendar years of loss development in computing indicated tail factors for this method.

A summary exhibit on Page 2 presents results of the Linear Decay tail development factor calculations. On Pages 3 through 16, fourteen exhibits presenting the derivation of indicated tail factors using the procedure outlined above are attached (seven for indemnity and seven for medical).

The second method, the Weibull curve fit method, is a commonly used distribution for fitting Workers Compensation data. Several Weibull models were generated and reviewed using various data points and calendar years to fit the data to project the 20th to ultimate incurred tail factor. A Weibull fit was selected for indemnity and medical from the various models generated. The model selections for indemnity and medical were considered separately to contemplate their unique characteristics relating to model fit, the stability of the data points and consistency of the development patterns before and after the tail attachment point. The detail of each of the selected Weibull models is shown on Page 17.

Pages 18 (indemnity) and 19 (medical) show the selected curves for the twentieth-to-ultimate bridge factors and the development periods used to select the curve. The average of the fitted factors from 20-21 to 50th-Ultimate was selected for both indemnity and medical. The 50th point was selected as the cutoff as the data shows that is the point where virtually all claims have been historically settled.

Page 20 shows graphically the two selected curve fits, and the resulting bridge factors based on the average of the points between the 20th and 50th reports.

PA Incurred Tail Factor Summary (20th to Ultimate)

(1) Incurred Tail Selections using Linear Decay Method (Pages 2 through 16)

Indemnity	1.0091	Medical	1.0418
Based on:		Based on:	
Average	7-Year	Average	7-Year
Data Points Used	20-30+	Data Points Used	20-30+

(2) Incurred Tail Selections using Weibull (Page 17)

Indemnity	1.0064	Medical	1.0251
Based on:		Based on:	
Average	5 year	Average	5-Year
Data Points Used	10-29	Data Points Used	10-29

(3) Incurred Tail Selections using a 50/50 Weight Between (1) and (2)

Indemnity	1.0078	Medical	1.0335

(4) Paid to Incurred Bridge Factors (Pages 18 and 19)

Indemnity	1.0107	Medical	1.0406

(5) Paid Tail Selections ((3) * (4))

Indemnity	1.0186	Medical	1.0755

SUMMARY OF TAIL FACTOR CALCULATIONS USING LINEAR DECAY METHOD

VALUATION	MATURITY	INDEMNITY Tail Factor	MEDICAL Tail Factor
23V24	20TH TO ULT.	0.9898	1.0210
22V23	20TH TO ULT.	0.9986	1.0925
21V22	20TH TO ULT.	1.0590	1.0348
20V21	20TH TO ULT.	1.0041	1.0040
19V20	20TH TO ULT.	1.0042	1.0519
18V19	20TH TO ULT.	1.0051	1.0182
17V18	20TH TO ULT.	1.0027	1.0701
AVERAGE OF LATEST 7 VALUATIONS		1.0091	1.0418

INDEMNITY   23 vs 24

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1994 PYs Incurred	11,928,339,181
Next Latest 12/31 Prior to 1994 PYs Incurred	11,932,042,123
CY Development of Prior to 1994 Pys	-3,702,941
Next Latest PY 1994 Incurred	695,601,881
# of 1994 PYs in Prior to 1994 PYs Data	17.15
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1993 Incurred = (Average of 1994, 1995, 1996) x (PY Deflation Factor ^ 2)
2 PY 1992 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1993 LDF selected based on balancing Prior to 1994 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1992 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1994 PYs:	-3,702,941
Total Dollar Development:	-3,702,941
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/24	Prior Year LDF	Dollar Development	Cumulative LDF
1953	*	68,811,591	1.000000	-1	1.0000
1954	*	72,433,254	1.000000	-2	1.0000
1955	*	76,245,530	1.000000	-3	1.0000
1956	*	80,258,453	1.000000	-4	1.0000
1957	*	84,482,582	1.000000	-5	1.0000
1958	*	88,929,033	1.000000	-7	1.0000
1959	*	93,609,509	1.000000	-11	1.0000
1960	*	98,536,325	1.000000	-15	1.0000
1961	*	103,722,447	1.000000	-21	1.0000
1962	*	109,181,524	1.000000	-29	1.0000
1963	*	114,927,920	1.000000	-41	1.0000
1964	*	120,976,757	1.000000	-57	1.0000
1965	*	127,343,955	0.999999	-80	1.0000
1966	*	134,046,269	0.999999	-113	1.0000
1967	*	141,101,335	0.999999	-158	1.0000
1968	*	148,527,722	0.999999	-222	1.0000
1969	*	156,344,970	0.999998	-312	1.0000
1970	*	164,573,653	0.999997	-437	1.0000
1971	*	173,235,424	0.999996	-614	1.0000
1972	*	182,353,078	0.999995	-861	1.0000
1973	*	191,950,608	0.999994	-1,209	1.0000
1974	*	202,053,272	0.999992	-1,697	1.0000
1975	*	212,687,654	0.999989	-2,381	1.0000
1976	*	223,881,742	0.999985	-3,342	0.9999
1977	*	235,664,991	0.999980	-4,690	0.9999
1978	*	248,068,412	0.999973	-6,583	0.9999
1979	*	261,124,644	0.999965	-9,240	0.9999
1980	*	274,868,046	0.999953	-12,968	0.9998
1981	*	289,334,785	0.999937	-18,201	0.9997
1982	*	304,562,932	0.999916	-25,546	0.9997
1983	*	320,592,560	0.999888	-35,855	0.9996
1984	*	337,465,853	0.999851	-50,325	0.9994
1985	*	355,227,213	0.999801	-70,635	0.9992
1986	*	373,923,383	0.999735	-99,143	0.9989
1987	*	393,603,561	0.999647	-139,160	0.9986
1988	*	414,319,537	0.999529	-195,335	0.9981

Policy Year	(*=Estimate)	Incurred as of 12/31/24	Prior Year LDF	Dollar Development	Cumulative LDF	
1989	*	436,125,829	0.999372	-274,198	0.9975	34TH TO ULT
1990	*	459,079,820	0.999162	-384,920	0.9967	33RD TO ULT
1991	*	483,241,916	0.998883	-540,390	0.9955	32ND TO ULT
1992	*	508,675,701	0.998511	-758,724	0.9941	31ST TO ULT
1993	*	535,448,106	0.99801420	-1,065,406	0.9921	30TH TO ULT
1994		694,875,390	0.9990		0.9911	29th TO ULT
1995		585,645,759	0.9996		0.9907	28th TO ULT
1996		499,361,752	1.0003		0.9910	27th TO ULT
1997		506,064,531	0.9999		0.9909	26th TO ULT
1998		499,836,471	1.0002		0.9911	25th TO ULT
1999		563,330,225	0.9997		0.9908	24th TO ULT
2000		596,284,737	0.9997		0.9905	23rd TO ULT
2001		623,907,623	0.9984		0.9889	22nd TO ULT
2002		671,084,449	1.0008		0.9897	21st TO ULT
2003		658,115,391	1.0001		0.9898	20th TO ULT
2004		701,842,686	0.9998			
2005		710,632,120	0.9998			
2006		739,767,547	1.0001			
2007		781,936,210	1.0000			
2008		727,955,881	1.0002			
2009		664,936,380	1.0012			
2010		689,265,004	0.9998			
2011		668,548,785	1.0023			
2012		623,916,742	0.9993			
2013		629,169,746	1.0003			
2014		629,584,745	1.0022			
2015		599,869,558	1.0014			
2016		557,094,177	1.0017			
2017		585,093,267	1.0001			
2018		605,640,330	0.9964			
2019		557,417,249	0.9974			
2020		515,928,385	1.0078			
2021		551,540,280	1.0888			
2022		573,953,839	1.4278			
2023		426,563,408	3.4592			
2024		131,668,392				

MEDICAL **23 vs 24**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1994 PYs Incurred	5,809,210,343
Next Latest 12/31 Prior to 1994 PYs Incurred	5,805,582,895
CY Development of Prior to 1994 Pys	3,627,448
Next Latest PY 1994 Incurred	411,341,147
# of 1994 PYs in Prior to 1994 PYs Data	14.12
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1993 Incurred = (Average of 1994, 1995, 1996) x (PY Deflation Factor ^ 2)
2 PY 1992 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1993 LDF selected based on balancing Prior to 1994 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1992 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1994 PYs:	3,627,448
Total Dollar Development:	3,627,448
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/24	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/24	Prior Year LDF	Dollar Development	Cumulative LDF	
1953	*	18,130,380	1.000000	1	1.0000	1989	*	247,184,230	1.001053	259,993	1.0042	34TH TO ULT
1954	*	19,495,032	1.000000	1	1.0000	1990	*	265,789,495	1.001404	372,619	1.0056	33RD TO ULT
1955	*	20,962,400	1.000000	1	1.0000	1991	*	285,795,156	1.001872	533,972	1.0075	32ND TO ULT
1956	*	22,540,215	1.000000	2	1.0000	1992	*	307,306,619	1.002496	765,074	1.0100	31ST TO ULT
1957	*	24,236,791	1.000000	3	1.0000	1993	*	330,437,225	1.00332777	1,095,971	1.0134	30TH TO ULT
1958	*	26,061,065	1.000000	4	1.0000	1994		411,150,457	0.9995		1.0129	29th TO ULT
1959	*	28,022,651	1.000000	5	1.0000	1995		370,336,576	1.0031		1.0160	28th TO ULT
1960	*	30,131,883	1.000000	8	1.0000	1996		364,670,527	1.0004		1.0164	27th TO ULT
1961	*	32,399,874	1.000000	11	1.0000	1997		387,422,758	0.9995		1.0159	26th TO ULT
1962	*	34,838,574	1.000000	16	1.0000	1998		408,297,393	1.0010		1.0169	25th TO ULT
1963	*	37,460,832	1.000001	22	1.0000	1999		433,278,584	1.0008		1.0177	24th TO ULT
1964	*	40,280,465	1.000001	32	1.0000	2000		473,032,764	0.9986		1.0163	23rd TO ULT
1965	*	43,312,328	1.000001	46	1.0000	2001		461,418,895	1.0003		1.0166	22nd TO ULT
1966	*	46,572,395	1.000001	66	1.0000	2002		559,511,548	1.0045		1.0212	21st TO ULT
1967	*	50,077,845	1.000002	94	1.0000	2003		563,449,532	0.9998		1.0210	20th TO ULT
1968	*	53,847,145	1.000003	135	1.0000	2004		620,726,756	1.0046			
1969	*	57,900,156	1.000003	193	1.0000	2005		653,662,225	0.9982			
1970	*	62,258,232	1.000004	277	1.0000	2006		679,416,832	1.0068			
1971	*	66,944,335	1.000006	397	1.0000	2007		718,323,917	1.0039			
1972	*	71,983,156	1.000008	570	1.0000	2008		658,109,019	1.0003			
1973	*	77,401,243	1.000011	817	1.0000	2009		572,829,329	1.0069			
1974	*	83,227,143	1.000014	1,171	1.0001	2010		631,638,862	0.9996			
1975	*	89,491,552	1.000019	1,679	1.0001	2011		629,721,508	1.0018			
1976	*	96,227,475	1.000025	2,407	1.0001	2012		584,764,237	0.9809			
1977	*	103,470,403	1.000033	3,451	1.0001	2013		603,837,637	1.0061			
1978	*	111,258,498	1.000044	4,947	1.0002	2014		610,298,264	0.9995			
1979	*	119,632,794	1.000059	7,093	1.0002	2015		553,649,498	1.0021			
1980	*	128,637,413	1.000079	10,169	1.0003	2016		549,470,565	1.0052			
1981	*	138,319,799	1.000105	14,579	1.0004	2017		578,937,528	0.9995			
1982	*	148,730,966	1.000141	20,901	1.0006	2018		651,196,654	0.9835			
1983	*	159,925,770	1.000187	29,964	1.0007	2019		566,359,457	1.0032			
1984	*	171,963,194	1.000250	42,957	1.0010	2020		513,685,066	0.9847			
1985	*	184,906,660	1.000333	61,582	1.0013	2021		554,818,439	1.0233			
1986	*	198,824,366	1.000444	88,279	1.0018	2022		585,783,315	1.0607			
1987	*	213,789,641	1.000592	126,546	1.0024	2023		600,294,694	2.2685			
1988	*	229,881,334	1.000790	181,393	1.0032	2024		272,382,056				

INDEMNITY **22 vs 23**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1993 PYs Incurred	11,185,856,008	1	PY 1992 Incurred = (Average of 1993, 1994, 1995) x (PY Deflation Factor ^ 2)	
Next Latest 12/31 Prior to 1993 PYs Incurred	11,187,796,491	2	PY 1991 & Prior Incurreds = Subsequent Year x PY Deflation	
CY Development of Prior to 1993 Pys	-1,940,483	3	PY 1992 LDF selected based on balancing Prior to 1993 PYs Total Dollar Dev. to Actual CY Dev.	
Next Latest PY 1993 Incurred	751,161,008	4	PY 1991 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0	
# of 1993 PYs in Prior to 1993 PYs Data	14.89			
Selected Decrement Development Factor	0.75		CY Development of Prior to 1993 PYs:	-1,940,483
Selected Average PY Deflation Factor	0.95		Total Dollar Development:	-1,940,483
			Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/23	Prior Year LDF	Dollar Development	Cumulative LDF
1952	*	78,608,537	1.000000	-1	1.0000
1953	*	82,745,828	1.000000	-1	1.0000
1954	*	87,100,872	1.000000	-1	1.0000
1955	*	91,685,128	1.000000	-2	1.0000
1956	*	96,510,662	1.000000	-3	1.0000
1957	*	101,590,170	1.000000	-4	1.0000
1958	*	106,937,021	1.000000	-6	1.0000
1959	*	112,565,285	1.000000	-8	1.0000
1960	*	118,489,774	1.000000	-11	1.0000
1961	*	124,726,078	1.000000	-15	1.0000
1962	*	131,290,608	1.000000	-21	1.0000
1963	*	138,200,640	1.000000	-30	1.0000
1964	*	145,474,358	1.000000	-42	1.0000
1965	*	153,130,904	1.000000	-59	1.0000
1966	*	161,190,425	0.999999	-83	1.0000
1967	*	169,674,131	0.999999	-116	1.0000
1968	*	178,604,349	0.999999	-163	1.0000
1969	*	188,004,578	0.999999	-229	1.0000
1970	*	197,899,555	0.999998	-322	1.0000
1971	*	208,315,322	0.999998	-452	1.0000
1972	*	219,279,286	0.999997	-634	1.0000
1973	*	230,820,301	0.999996	-890	1.0000
1974	*	242,968,738	0.999995	-1,249	1.0000
1975	*	255,756,566	0.999993	-1,752	1.0000
1976	*	269,217,438	0.999991	-2,460	1.0000
1977	*	283,386,777	0.999988	-3,452	1.0000
1978	*	298,301,870	0.999984	-4,845	0.9999
1979	*	314,001,969	0.999978	-6,800	0.9999
1980	*	330,528,388	0.999971	-9,544	0.9999
1981	*	347,924,619	0.999962	-13,395	0.9998
1982	*	366,236,441	0.999949	-18,801	0.9998
1983	*	385,512,043	0.999932	-26,387	0.9997
1984	*	405,802,151	0.999909	-37,036	0.9996
1985	*	427,160,159	0.999878	-51,982	0.9995
1986	*	449,642,272	0.999838	-72,960	0.9994
1987	*	473,307,655	0.999784	-102,405	0.9991

Policy Year	(*=Estimate)	Incurred as of 12/31/23	Prior Year LDF	Dollar Development	Cumulative LDF	
1988	*	498,218,584	0.999712	-143,737	0.9988	34TH TO ULT
1989	*	524,440,615	0.999615	-201,755	0.9985	33RD TO ULT
1990	*	552,042,753	0.999487	-283,202	0.9980	32ND TO ULT
1991	*	581,097,635	0.999316	-397,544	0.9973	31ST TO ULT
1992	*	611,681,721	0.99908846	-558,084	0.9964	30TH TO ULT
1993		751,776,012	1.0008		0.9972	29th TO ULT
1994		695,619,741	0.9997		0.9969	28th TO ULT
1995		585,895,285	0.9996		0.9965	27th TO ULT
1996		499,304,067	1.0006		0.9971	26th TO ULT
1997		506,157,871	0.9997		0.9968	25th TO ULT
1998		500,005,649	1.0005		0.9973	24th TO ULT
1999		563,499,935	1.0004		0.9977	23rd TO ULT
2000		596,756,866	1.0004		0.9981	22nd TO ULT
2001		624,884,101	0.9998		0.9979	21st TO ULT
2002		671,076,902	1.0007		$\boxed{0.9986}$	20th TO ULT
2003		660,762,857	1.0010			
2004		706,704,818	0.9997			
2005		715,040,231	1.0005			
2006		739,682,130	1.0003			
2007		781,970,565	1.0011			
2008		727,843,803	1.0005			
2009		664,106,264	0.9998			
2010		689,420,970	1.0020			
2011		667,028,581	1.0016			
2012		624,377,684	1.0008			
2013		628,985,545	1.0006			
2014		628,233,409	1.0000			
2015		599,040,983	1.0008			
2016		556,134,381	1.0006			
2017		585,037,877	0.9970			
2018		607,842,544	0.9975			
2019		558,854,216	1.0048			
2020		511,958,281	1.0589			
2021		506,570,412	1.3356			
2022		401,982,101	3.3342			
2023		123,311,994				

MEDICAL **22 vs 23**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1993 PYs Incurred	5,384,748,170
Next Latest 12/31 Prior to 1993 PYs Incurred	5,379,617,763
CY Development of Prior to 1993 Pys	5,130,407
Next Latest PY 1993 Incurred	419,846,105
# of 1993 PYs in Prior to 1993 PYs Data	12.83
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1992 Incurred = (Average of 1993, 1994, 1995) x (PY Deflation Factor ^ 2)
2 PY 1991 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1992 LDF selected based on balancing Prior to 1993 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1991 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1993 PYs:	5,130,407
Total Dollar Development:	5,130,407
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/23	Prior Year LDF	Dollar Development	Cumulative LDF
1952	*	19,048,496	1.000000	1	1.0000
1953	*	20,482,253	1.000000	1	1.0000
1954	*	22,023,928	1.000000	2	1.0000
1955	*	23,681,643	1.000000	3	1.0000
1956	*	25,464,133	1.000000	4	1.0000
1957	*	27,380,788	1.000000	5	1.0000
1958	*	29,441,707	1.000000	7	1.0000
1959	*	31,657,750	1.000000	11	1.0000
1960	*	34,040,591	1.000000	15	1.0000
1961	*	36,602,786	1.000001	22	1.0000
1962	*	39,357,835	1.000001	32	1.0000
1963	*	42,320,253	1.000001	45	1.0000
1964	*	45,505,648	1.000001	65	1.0000
1965	*	48,930,804	1.000002	93	1.0000
1966	*	52,613,768	1.000003	133	1.0000
1967	*	56,573,944	1.000003	191	1.0000
1968	*	60,832,198	1.000004	274	1.0000
1969	*	65,410,965	1.000006	392	1.0000
1970	*	70,334,371	1.000008	562	1.0000
1971	*	75,628,356	1.000011	806	1.0000
1972	*	81,320,813	1.000014	1,156	1.0001
1973	*	87,441,735	1.000019	1,657	1.0001
1974	*	94,023,371	1.000025	2,376	1.0001
1975	*	101,100,399	1.000034	3,407	1.0001
1976	*	108,710,106	1.000045	4,884	1.0002
1977	*	116,892,587	1.000060	7,002	1.0002
1978	*	125,690,954	1.000080	10,039	1.0003
1979	*	135,151,563	1.000107	14,393	1.0004
1980	*	145,324,262	1.000142	20,634	1.0006
1981	*	156,262,647	1.000189	29,581	1.0008
1982	*	168,024,352	1.000252	42,407	1.0010
1983	*	180,671,346	1.000337	60,794	1.0013
1984	*	194,270,264	1.000449	87,150	1.0018
1985	*	208,892,757	1.000598	124,928	1.0024
1986	*	224,615,868	1.000798	179,072	1.0032
1987	*	241,522,439	1.001064	256,667	1.0043

Policy Year	(*=Estimate)	Incurred as of 12/31/23	Prior Year LDF	Dollar Development	Cumulative LDF	
1988	*	259,701,547	1.001418	367,850	1.0057	34TH TO ULT
1989	*	279,248,975	1.001891	527,135	1.0076	33RD TO ULT
1990	*	300,267,715	1.002522	755,274	1.0101	32ND TO ULT
1991	*	322,868,511	1.003362	1,081,923	1.0135	31ST TO ULT
1992	*	347,170,442	1.00448298	1,549,414	1.0181	30TH TO ULT
1993		423,616,289	1.0090		1.0272	29th TO ULT
1994		411,379,218	1.0179		1.0456	28th TO ULT
1995		369,203,044	1.0070		1.0529	27th TO ULT
1996		364,561,223	1.0013		1.0543	26th TO ULT
1997		387,616,657	0.9997		1.0540	25th TO ULT
1998		408,011,714	1.0016		1.0557	24th TO ULT
1999		432,922,704	1.0035		1.0594	23rd TO ULT
2000		473,979,345	1.0110		1.0710	22nd TO ULT
2001		461,297,511	1.0020		1.0732	21st TO ULT
2002		557,311,399	1.0180		$\boxed{1.0925}$	20th TO ULT
2003		565,021,471	1.0064			
2004		621,446,050	1.0104			
2005		657,475,598	1.0055			
2006		674,816,958	1.0088			
2007		715,554,594	0.9983			
2008		657,913,205	1.0085			
2009		568,907,429	1.0095			
2010		631,861,558	1.0095			
2011		628,561,519	1.0009			
2012		596,162,358	0.9999			
2013		600,150,260	0.9923			
2014		610,587,495	0.9967			
2015		552,482,034	0.9791			
2016		546,638,273	1.0033			
2017		579,222,953	1.0021			
2018		662,137,240	1.0082			
2019		564,576,778	1.0002			
2020		521,662,745	1.0016			
2021		542,181,449	1.0353			
2022		552,268,218	2.1286			
2023		264,622,406				

INDEMNITY 21 vs 22

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1992 PYs Incurred	10,187,345,795
Next Latest 12/31 Prior to 1992 PYs Incurred	10,169,295,270
CY Development of Prior to 1992 Pys	18,050,526
Next Latest PY 1992 Incurred	715,979,126
# of 1992 PYs in Prior to 1992 PYs Data	14.23
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1991 Incurred = (Average of 1992, 1993, 1994) x (PY Deflation Factor ^ 2)
2 PY 1990 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1991 LDF selected based on balancing Prior to 1992 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1990 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1992 PYs:	18,050,526
Total Dollar Development:	18,050,526
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/22	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/22	Prior Year LDF	Dollar Development	Cumulative LDF	
1951	*	85,484,701	1.000000	7	1.0000	1987	*	541,799,505	1.002480	1,340,560	1.0100	34TH TO ULT
1952	*	89,983,895	1.000000	9	1.0000	1988	*	570,315,269	1.003307	1,879,937	1.0133	33RD TO ULT
1953	*	94,719,890	1.000000	13	1.0000	1989	*	600,331,862	1.004410	2,635,612	1.0178	32ND TO ULT
1954	*	99,705,147	1.000000	19	1.0000	1990	*	631,928,276	1.005879	3,693,698	1.0238	31ST TO ULT
1955	*	104,952,786	1.000000	26	1.0000	1991	*	665,187,659	1.00783932	5,174,057	1.0318	30TH TO ULT
1956	*	110,476,617	1.000000	37	1.0000	1992		822,569,308	1.0016		1.0334	29th TO ULT
1957	*	116,291,176	1.000000	52	1.0000	1993		719,552,782	1.0050		1.0386	28th TO ULT
1958	*	122,411,764	1.000001	72	1.0000	1994		669,028,022	1.0039		1.0427	27th TO ULT
1959	*	128,854,489	1.000001	101	1.0000	1995		559,875,608	1.0034		1.0462	26th TO ULT
1960	*	135,636,304	1.000001	142	1.0000	1996		471,983,983	1.0041		1.0505	25th TO ULT
1961	*	142,775,057	1.000001	200	1.0000	1997		487,884,263	1.0033		1.0540	24th TO ULT
1962	*	150,289,534	1.000002	281	1.0000	1998		479,218,583	1.0010		1.0550	23rd TO ULT
1963	*	158,199,509	1.000002	394	1.0000	1999		537,105,022	1.0033		1.0585	22nd TO ULT
1964	*	166,525,799	1.000003	553	1.0000	2000		570,717,561	1.0002		1.0587	21st TO ULT
1965	*	175,290,315	1.000004	776	1.0000	2001		601,317,253	1.0003		$\boxed{1.0590}$	20th TO ULT
1966	*	184,516,121	1.000006	1,089	1.0000	2002		649,838,436	0.9998			
1967	*	194,227,495	1.000008	1,528	1.0000	2003		642,806,524	1.0014			
1968	*	204,449,995	1.000010	2,144	1.0000	2004		689,488,620	1.0057			
1969	*	215,210,521	1.000014	3,009	1.0001	2005		702,941,357	1.0045			
1970	*	226,537,391	1.000019	4,224	1.0001	2006		725,759,538	1.0021			
1971	*	238,460,411	1.000025	5,928	1.0001	2007		765,665,642	1.0009			
1972	*	251,010,959	1.000033	8,320	1.0001	2008		713,842,755	1.0050			
1973	*	264,222,062	1.000044	11,677	1.0002	2009		651,855,864	1.0025			
1974	*	278,128,487	1.000059	16,389	1.0002	2010		674,646,010	1.0013			
1975	*	292,766,828	1.000079	23,001	1.0003	2011		656,776,120	1.0070			
1976	*	308,175,609	1.000105	32,281	1.0004	2012		612,985,307	1.0001			
1977	*	324,395,378	1.000140	45,305	1.0006	2013		621,237,264	1.0009			
1978	*	341,468,818	1.000186	63,584	1.0007	2014		623,742,667	1.0058			
1979	*	359,440,862	1.000248	89,235	1.0010	2015		593,591,879	1.0015			
1980	*	378,358,802	1.000331	125,231	1.0013	2016		550,548,675	1.0010			
1981	*	398,272,423	1.000441	175,744	1.0018	2017		582,156,306	1.0031			
1982	*	419,234,129	1.000589	246,621	1.0024	2018		605,068,475	1.0187			
1983	*	441,299,083	1.000785	346,067	1.0031	2019		553,097,029	1.0629			
1984	*	464,525,351	1.001046	485,582	1.0042	2020		481,614,703	1.3570			
1985	*	488,974,054	1.001395	681,281	1.0056	2021		376,004,566	3.2144			
1986	*	514,709,530	1.001860	955,740	1.0075	2022		119,390,529				

MEDICAL **21 vs 22**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1992 PYs Incurred	4,819,830,031
Next Latest 12/31 Prior to 1992 PYs Incurred	4,823,549,918
CY Development of Prior to 1992 Pys	-3,719,887
Next Latest PY 1992 Incurred	526,140,991
# of 1992 PYs in Prior to 1992 PYs Data	9.16
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1991 Incurred = (Average of 1992, 1993, 1994) x (PY Deflation Factor ^ 2)
2 PY 1990 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1991 LDF selected based on balancing Prior to 1992 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1990 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1992 PYs:	-3,719,887
Total Dollar Development:	-3,719,887
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/22	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/22	Prior Year LDF	Dollar Development	Cumulative LDF	
1951	*	21,108,438	1.000000	-1	1.0000	1987	*	287,786,186	0.999076	-266,090	0.9963	34TH TO ULT
1952	*	22,697,245	1.000000	-1	1.0000	1988	*	309,447,512	0.998768	-381,608	0.9951	33RD TO ULT
1953	*	24,405,640	1.000000	-1	1.0000	1989	*	332,739,260	0.998358	-547,333	0.9934	32ND TO ULT
1954	*	26,242,623	1.000000	-2	1.0000	1990	*	357,784,150	0.997810	-785,138	0.9913	31ST TO ULT
1955	*	28,217,874	1.000000	-3	1.0000	1991	*	384,714,140	0.99708048	-1,126,469	0.9884	30TH TO ULT
1956	*	30,341,801	1.000000	-4	1.0000	1992		527,992,426	1.0035		0.9918	29th TO ULT
1957	*	32,625,592	1.000000	-5	1.0000	1993		413,475,981	1.0301		1.0217	28th TO ULT
1958	*	35,081,282	1.000000	-8	1.0000	1994		392,954,556	1.0070		1.0288	27th TO ULT
1959	*	37,721,808	1.000000	-11	1.0000	1995		355,184,864	1.0081		1.0372	26th TO ULT
1960	*	40,561,084	1.000000	-16	1.0000	1996		346,586,169	0.9921		1.0290	25th TO ULT
1961	*	43,614,069	0.999999	-23	1.0000	1997		374,173,581	1.0010		1.0300	24th TO ULT
1962	*	46,896,848	0.999999	-33	1.0000	1998		391,925,132	1.0009		1.0309	23rd TO ULT
1963	*	50,426,719	0.999999	-47	1.0000	1999		412,808,201	1.0029		1.0339	22nd TO ULT
1964	*	54,222,278	0.999999	-67	1.0000	2000		447,121,944	1.0018		1.0358	21st TO ULT
1965	*	58,303,525	0.999998	-96	1.0000	2001		446,592,055	0.9990		1.0348	20th TO ULT
1966	*	62,691,962	0.999998	-138	1.0000	2002		529,947,195	1.0039			
1967	*	67,410,712	0.999997	-197	1.0000	2003		547,569,051	1.0016			
1968	*	72,484,637	0.999996	-283	1.0000	2004		604,395,894	1.0073			
1969	*	77,940,469	0.999995	-406	1.0000	2005		643,615,156	1.0023			
1970	*	83,806,956	0.999993	-582	1.0000	2006		656,410,350	1.0007			
1971	*	90,115,007	0.999991	-834	1.0000	2007		699,238,292	1.0045			
1972	*	96,897,857	0.999988	-1,196	1.0000	2008		638,434,899	1.0061			
1973	*	104,191,244	0.999984	-1,715	0.9999	2009		552,674,282	1.0002			
1974	*	112,033,596	0.999978	-2,459	0.9999	2010		606,846,621	1.0012			
1975	*	120,466,232	0.999971	-3,525	0.9999	2011		618,908,677	0.9972			
1976	*	129,533,583	0.999961	-5,054	0.9998	2012		586,518,686	0.9936			
1977	*	139,283,422	0.999948	-7,246	0.9998	2013		596,774,683	1.0067			
1978	*	149,767,121	0.999931	-10,389	0.9997	2014		607,607,506	0.9982			
1979	*	161,039,915	0.999908	-14,894	0.9996	2015		558,977,557	0.9972			
1980	*	173,161,199	0.999877	-21,355	0.9995	2016		538,558,701	0.9979			
1981	*	186,194,837	0.999836	-30,617	0.9993	2017		570,923,873	0.9960			
1982	*	200,209,502	0.999781	-43,898	0.9991	2018		654,441,945	1.0089			
1983	*	215,279,035	0.999708	-62,940	0.9988	2019		560,968,073	1.0014			
1984	*	231,482,833	0.999610	-90,246	0.9984	2020		517,312,920	1.0348			
1985	*	248,906,272	0.999480	-129,402	0.9979	2021		520,648,487	2.1920			
1986	*	267,641,153	0.999307	-185,555	0.9972	2022		256,917,992				

INDEMNITY 20 vs 21

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1991 PYs Incurred	9,054,842,360
Next Latest 12/31 Prior to 1991 PYs Incurred	9,051,304,630
CY Development of Prior to 1991 Pys	3,537,730
Next Latest PY 1991 Incurred	968,256,705
# of 1991 PYs in Prior to 1991 PYs Data	9.35
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1990 Incurred = (Average of 1991, 1992, 1993) x (PY Deflation Factor ^ 2)
2 PY 1989 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1990 LDF selected based on balancing Prior to 1991 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1989 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1991 PYs:	3,537,730
Total Dollar Development:	3,537,730
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/21	Prior Year LDF	Dollar Development	Cumulative LDF
1950	*	96,150,371	1.000000	1	1.0000
1951	*	101,210,916	1.000000	2	1.0000
1952	*	106,537,807	1.000000	3	1.0000
1953	*	112,145,060	1.000000	4	1.0000
1954	*	118,047,431	1.000000	5	1.0000
1955	*	124,260,454	1.000000	7	1.0000
1956	*	130,800,478	1.000000	10	1.0000
1957	*	137,684,714	1.000000	14	1.0000
1958	*	144,931,278	1.000000	20	1.0000
1959	*	152,559,239	1.000000	28	1.0000
1960	*	160,588,673	1.000000	39	1.0000
1961	*	169,040,709	1.000000	55	1.0000
1962	*	177,937,588	1.000000	77	1.0000
1963	*	187,302,724	1.000001	108	1.0000
1964	*	197,160,762	1.000001	151	1.0000
1965	*	207,537,645	1.000001	212	1.0000
1966	*	218,460,678	1.000001	298	1.0000
1967	*	229,958,609	1.000002	419	1.0000
1968	*	242,061,694	1.000002	587	1.0000
1969	*	254,801,783	1.000003	825	1.0000
1970	*	268,212,403	1.000004	1,157	1.0000
1971	*	282,328,845	1.000006	1,624	1.0000
1972	*	297,188,258	1.000008	2,280	1.0000
1973	*	312,829,745	1.000010	3,199	1.0000
1974	*	329,294,469	1.000014	4,490	1.0001
1975	*	346,625,757	1.000018	6,302	1.0001
1976	*	364,869,217	1.000024	8,845	1.0001
1977	*	384,072,860	1.000032	12,414	1.0001
1978	*	404,287,222	1.000043	17,423	1.0002
1979	*	425,565,496	1.000057	24,453	1.0002
1980	*	447,963,680	1.000077	34,320	1.0003
1981	*	471,540,716	1.000102	48,167	1.0004
1982	*	496,358,649	1.000136	67,600	1.0005
1983	*	522,482,788	1.000182	94,873	1.0007
1984	*	549,981,882	1.000242	133,147	1.0010
1985	*	578,928,297	1.000323	186,858	1.0013

Policy Year	(*=Estimate)	Incurred as of 12/31/21	Prior Year LDF	Dollar Development	Cumulative LDF	
1986	*	609,398,207	1.000430	262,229	1.0017	34TH TO ULT
1987	*	641,471,797	1.000574	367,987	1.0023	33RD TO ULT
1988	*	675,233,471	1.000765	516,375	1.0031	32ND TO ULT
1989	*	710,772,074	1.001020	724,552	1.0041	31ST TO ULT
1990	*	748,181,131	1.00136057	1,016,570	1.0055	30TH TO ULT
1991		968,620,534	1.0005		1.0060	29th TO ULT
1992		810,527,515	1.0011		1.0071	28th TO ULT
1993		707,880,642	0.9999		1.0070	27th TO ULT
1994		659,757,553	1.0005		1.0075	26th TO ULT
1995		554,452,741	1.0001		1.0076	25th TO ULT
1996		467,654,765	1.0004		1.0080	24th TO ULT
1997		483,999,903	0.9992		1.0072	23rd TO ULT
1998		473,952,317	0.9983		1.0055	22nd TO ULT
1999		530,943,909	0.9994		1.0048	21st TO ULT
2000		566,628,559	0.9993		$\boxed{1.0041}$	20th TO ULT
2001		597,308,892	1.0003			
2002		647,791,336	0.9996			
2003		640,675,294	1.0005			
2004		683,325,200	0.9993			
2005		696,901,597	1.0011			
2006		722,246,187	0.9986			
2007		762,078,733	0.9996			
2008		702,105,116	1.0014			
2009		642,453,072	1.0036			
2010		662,268,285	1.0024			
2011		637,591,012	1.0009			
2012		585,741,740	0.9973			
2013		591,057,335	1.0021			
2014		593,552,657	1.0057			
2015		564,082,013	1.0116			
2016		530,873,832	0.9999			
2017		570,263,838	1.0119			
2018		585,718,800	1.0575			
2019		516,199,734	1.3140			
2020		350,905,834	3.4510			
2021		115,363,166				

MEDICAL **20 vs 21**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1991 PYs Incurred	4,195,386,622
Next Latest 12/31 Prior to 1991 PYs Incurred	4,196,921,440
CY Development of Prior to 1991 Pys	-1,534,818
Next Latest PY 1991 Incurred	586,930,824
# of 1991 PYs in Prior to 1991 PYs Data	7.15
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1990 Incurred = (Average of 1991, 1992, 1993) x (PY Deflation Factor ^ 2)
2 PY 1989 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1990 LDF selected based on balancing Prior to 1991 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1989 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1991 PYs:	-1,534,818
Total Dollar Development:	-1,534,818
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/21	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/21	Prior Year LDF	Dollar Development	Cumulative LDF	
1950	*	23,813,960	1.000000	0	1.0000	1986	*	324,672,479	0.999662	-109,853	0.9986	34TH TO ULT
1951	*	25,606,409	1.000000	0	1.0000	1987	*	349,110,192	0.999549	-157,513	0.9982	33RD TO ULT
1952	*	27,533,773	1.000000	-1	1.0000	1988	*	375,387,304	0.999399	-225,859	0.9976	32ND TO ULT
1953	*	29,606,208	1.000000	-1	1.0000	1989	*	403,642,262	0.999198	-323,877	0.9968	31ST TO ULT
1954	*	31,834,632	1.000000	-1	1.0000	1990	*	434,023,937	0.99893101	-464,464	0.9957	30TH TO ULT
1955	*	34,230,787	1.000000	-2	1.0000	1991		586,193,142	1		0.9947	29th TO ULT
1956	*	36,807,298	1.000000	-2	1.0000	1992		520,895,036	1		0.9966	28th TO ULT
1957	*	39,577,739	1.000000	-3	1.0000	1993		398,371,196	1		1.0009	27th TO ULT
1958	*	42,556,709	1.000000	-5	1.0000	1994		387,416,163	1		1.0016	26th TO ULT
1959	*	45,759,902	1.000000	-7	1.0000	1995		349,746,066	1		1.0003	25th TO ULT
1960	*	49,204,196	1.000000	-9	1.0000	1996		346,779,470	1		1.0013	24th TO ULT
1961	*	52,907,738	1.000000	-13	1.0000	1997		372,051,141	1		1.0076	23rd TO ULT
1962	*	56,890,040	1.000000	-19	1.0000	1998		386,731,222	1		1.0094	22nd TO ULT
1963	*	61,172,086	1.000000	-28	1.0000	1999		408,798,734	1		1.0048	21st TO ULT
1964	*	65,776,437	0.999999	-40	1.0000	2000		442,032,895	1		1.0040	20th TO ULT
1965	*	70,727,352	0.999999	-57	1.0000	2001		442,252,994	1			
1966	*	76,050,916	0.999999	-82	1.0000	2002		526,330,023	1			
1967	*	81,775,178	0.999999	-117	1.0000	2003		544,904,495	1			
1968	*	87,930,299	0.999998	-168	1.0000	2004		597,998,160	1			
1969	*	94,548,709	0.999997	-240	1.0000	2005		639,258,632	1			
1970	*	101,665,278	0.999997	-345	1.0000	2006		653,802,391	1			
1971	*	109,317,504	0.999995	-494	1.0000	2007		693,791,742	1			
1972	*	117,545,703	0.999994	-708	1.0000	2008		619,763,094	1			
1973	*	126,393,229	0.999992	-1,016	1.0000	2009		543,798,434	1			
1974	*	135,906,698	0.999989	-1,456	1.0000	2010		596,374,931	1			
1975	*	146,136,234	0.999986	-2,088	0.9999	2011		608,296,506	1			
1976	*	157,135,735	0.999981	-2,993	0.9999	2012		565,446,077	1			
1977	*	168,963,156	0.999975	-4,291	0.9999	2013		566,324,009	1			
1978	*	181,680,813	0.999966	-6,152	0.9999	2014		584,414,471	1			
1979	*	195,355,713	0.999955	-8,820	0.9998	2015		535,418,255	1			
1980	*	210,059,907	0.999940	-12,646	0.9998	2016		520,559,141	1			
1981	*	225,870,867	0.999920	-18,131	0.9997	2017		564,017,812	1			
1982	*	242,871,900	0.999893	-25,995	0.9996	2018		641,248,891	1			
1983	*	261,152,581	0.999857	-37,270	0.9994	2019		555,117,919	1			
1984	*	280,809,227	0.999810	-53,436	0.9992	2020		493,387,035	2			
1985	*	301,945,405	0.999746	-76,616	0.9990	2021		235,711,188				

INDEMNITY   19 vs 20

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1990 PYs Incurred	8,188,692,883
Next Latest 12/31 Prior to 1990 PYs Incurred	8,186,858,932
CY Development of Prior to 1990 Pys	1,833,951
Next Latest PY 1990 Incurred	1,153,845,876
# of 1990 PYs in Prior to 1990 PYs Data	7.10
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1989 Incurred = (Average of 1990, 1991, 1992) x (PY Deflation Factor ^ 2)
2 PY 1988 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1989 LDF selected based on balancing Prior to 1990 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1988 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1990 PYs:	1,833,951
Total Dollar Development:	1,833,949
Difference:	2

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/20	Prior Year LDF	Dollar Development	Cumulative LDF
1949	*	115,759,869	1.000000	1	1.0000
1950	*	121,852,494	1.000000	1	1.0000
1951	*	128,265,783	1.000000	1	1.0000
1952	*	135,016,614	1.000000	2	1.0000
1953	*	142,122,751	1.000000	3	1.0000
1954	*	149,602,896	1.000000	4	1.0000
1955	*	157,476,733	1.000000	5	1.0000
1956	*	165,764,982	1.000000	7	1.0000
1957	*	174,489,454	1.000000	10	1.0000
1958	*	183,673,110	1.000000	14	1.0000
1959	*	193,340,116	1.000000	20	1.0000
1960	*	203,515,911	1.000000	28	1.0000
1961	*	214,227,275	1.000000	40	1.0000
1962	*	225,502,395	1.000000	56	1.0000
1963	*	237,370,942	1.000000	78	1.0000
1964	*	249,864,149	1.000000	110	1.0000
1965	*	263,014,894	1.000001	155	1.0000
1966	*	276,857,783	1.000001	217	1.0000
1967	*	291,429,246	1.000001	304	1.0000
1968	*	306,767,627	1.000001	427	1.0000
1969	*	322,913,291	1.000002	600	1.0000
1970	*	339,908,728	1.000002	842	1.0000
1971	*	357,798,661	1.000003	1,181	1.0000
1972	*	376,630,169	1.000004	1,658	1.0000
1973	*	396,452,810	1.000006	2,327	1.0000
1974	*	417,318,747	1.000008	3,266	1.0000
1975	*	439,282,892	1.000010	4,583	1.0000
1976	*	462,403,044	1.000014	6,432	1.0001
1977	*	486,740,046	1.000019	9,028	1.0001
1978	*	512,357,943	1.000025	12,671	1.0001
1979	*	539,324,151	1.000033	17,783	1.0001
1980	*	567,709,633	1.000044	24,959	1.0002
1981	*	597,589,087	1.000059	35,030	1.0002
1982	*	629,041,144	1.000078	49,163	1.0003
1983	*	662,148,573	1.000104	69,000	1.0004
1984	*	696,998,498	1.000139	96,838	1.0006

Policy Year	(*=Estimate)	Incurred as of 12/31/20	Prior Year LDF	Dollar Development	Cumulative LDF	
1985	*	733,682,629	1.000185	135,907	1.0007	34TH TO ULT
1986	*	772,297,504	1.000247	190,735	1.0010	33RD TO ULT
1987	*	812,944,742	1.000329	267,676	1.0013	32ND TO ULT
1988	*	855,731,307	1.000439	375,644	1.0018	31ST TO ULT
1989	*	900,769,797	1.00058556	527,143	1.0023	30TH TO ULT
1990		1,153,984,370	1.0001		1.0024	29th TO ULT
1991		998,952,964	0.9997		1.0021	28th TO ULT
1992		841,311,297	1.0007		1.0028	27th TO ULT
1993		727,642,487	1.0002		1.0030	26th TO ULT
1994		677,118,189	1.0004		1.0034	25th TO ULT
1995		571,364,425	1.0002		1.0036	24th TO ULT
1996		484,875,000	0.9988		1.0024	23rd TO ULT
1997		502,559,542	1.0005		1.0029	22nd TO ULT
1998		501,588,967	1.0006		1.0035	21st TO ULT
1999		567,949,444	1.0007		$\boxed{1.0042}$	20th TO ULT
2000		605,953,195	1.0002			
2001		615,864,862	0.9998			
2002		651,024,254	0.9998			
2003		640,947,054	0.9985			
2004		685,548,320	0.9988			
2005		698,159,011	1.0003			
2006		724,743,675	1.0011			
2007		763,127,378	1.0019			
2008		705,628,871	1.0006			
2009		643,208,438	1.0003			
2010		664,238,426	1.0009			
2011		639,644,488	1.0006			
2012		591,276,650	1.0026			
2013		591,490,618	1.0008			
2014		589,833,631	1.0012			
2015		557,562,077	0.9999			
2016		531,835,823	1.0091			
2017		564,388,149	1.0708			
2018		556,512,301	1.3172			
2019		393,672,641	3.1258			
2020		98,937,045				

MEDICAL **19 vs 20**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1990 PYs Incurred	3,674,223,609
Next Latest 12/31 Prior to 1990 PYs Incurred	3,661,430,307
CY Development of Prior to 1990 Pys	12,793,302
Next Latest PY 1990 Incurred	655,239,059
# of 1990 PYs in Prior to 1990 PYs Data	5.61
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1989 Incurred = (Average of 1990, 1991, 1992) x (PY Deflation Factor ^ 2)
2 PY 1988 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1989 LDF selected based on balancing Prior to 1990 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1988 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1990 PYs:	12,793,302
Total Dollar Development:	12,793,302
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/20	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/20	Prior Year LDF	Dollar Development	Cumulative LDF	
1949	*	28,484,126	1.000000	2	1.0000	1985	*	388,344,130	1.002370	918,149	1.0095	34TH TO ULT
1950	*	30,628,092	1.000000	3	1.0000	1986	*	417,574,334	1.003160	1,315,306	1.0127	33RD TO ULT
1951	*	32,933,432	1.000000	4	1.0000	1987	*	449,004,660	1.004213	1,883,766	1.0170	32ND TO ULT
1952	*	35,412,293	1.000000	6	1.0000	1988	*	482,800,709	1.005617	2,696,968	1.0227	31ST TO ULT
1953	*	38,077,734	1.000000	9	1.0000	1989	*	519,140,548	1.00748996	3,859,434	1.0303	30TH TO ULT
1954	*	40,943,800	1.000000	13	1.0000	1990		656,282,963	1.0016		1.0320	29th TO ULT
1955	*	44,025,592	1.000000	19	1.0000	1991		606,608,629	1.0000		1.0320	28th TO ULT
1956	*	47,339,346	1.000001	27	1.0000	1992		537,804,030	1.0078		1.0400	27th TO ULT
1957	*	50,902,523	1.000001	38	1.0000	1993		409,477,667	1.0012		1.0413	26th TO ULT
1958	*	54,733,895	1.000001	55	1.0000	1994		396,693,314	1.0004		1.0417	25th TO ULT
1959	*	58,853,651	1.000001	79	1.0000	1995		360,841,664	1.0015		1.0433	24th TO ULT
1960	*	63,283,495	1.000002	113	1.0000	1996		357,198,604	1.0002		1.0435	23rd TO ULT
1961	*	68,046,769	1.000002	162	1.0000	1997		381,831,478	1.0095		1.0534	22nd TO ULT
1962	*	73,168,569	1.000003	232	1.0000	1998		411,290,211	0.9988		1.0521	21st TO ULT
1963	*	78,675,881	1.000004	333	1.0000	1999		432,576,208	0.9998		1.0519	20th TO ULT
1964	*	84,597,721	1.000006	477	1.0000	2000		467,049,528	1.0057			
1965	*	90,965,292	1.000008	684	1.0000	2001		456,420,558	0.9984			
1966	*	97,812,142	1.000010	980	1.0000	2002		527,180,241	0.9978			
1967	*	105,174,346	1.000013	1,405	1.0001	2003		545,284,487	1.0033			
1968	*	113,090,694	1.000018	2,015	1.0001	2004		600,479,655	0.9975			
1969	*	121,602,897	1.000024	2,888	1.0001	2005		639,185,194	1.0053			
1970	*	130,755,803	1.000032	4,141	1.0001	2006		652,282,075	1.0072			
1971	*	140,597,638	1.000042	5,937	1.0002	2007		693,081,995	1.0063			
1972	*	151,180,256	1.000056	8,511	1.0002	2008		623,927,873	1.0027			
1973	*	162,559,415	1.000075	12,202	1.0003	2009		547,740,676	0.9998			
1974	*	174,795,070	1.000100	17,494	1.0004	2010		602,124,739	1.0028			
1975	*	187,951,688	1.000133	25,080	1.0005	2011		607,773,636	1.0064			
1976	*	202,098,589	1.000178	35,955	1.0007	2012		563,567,228	0.9996			
1977	*	217,310,311	1.000237	51,546	1.0009	2013		562,739,330	1.0012			
1978	*	233,667,001	1.000316	73,895	1.0013	2014		581,990,601	1.0001			
1979	*	251,254,840	1.000422	105,931	1.0017	2015		532,025,356	0.9919			
1980	*	270,166,495	1.000562	151,851	1.0023	2016		526,116,923	1.0007			
1981	*	290,501,607	1.000750	217,667	1.0030	2017		573,524,506	1.0169			
1982	*	312,367,320	1.001000	311,989	1.0040	2018		642,190,878	1.0194			
1983	*	335,878,838	1.001333	447,148	1.0053	2019		527,344,811	1.8255			
1984	*	361,160,041	1.001777	640,788	1.0071	2020		227,670,229				

INDEMNITY 18 vs 19

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1989 PYs Incurred	7,330,112,987
Next Latest 12/31 Prior to 1989 PYs Incurred	7,328,022,613
CY Development of Prior to 1989 PYs	2,090,373
Next Latest PY 1989 Incurred	1,160,484,070
# of 1989 PYs in Prior to 1989 PYs Data	6.32
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1988 Incurred = (Average of 1989, 1990, 1991) x (PY Deflation Factor ^ 2)
2 PY 1987 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1988 LDF selected based on balancing Prior to 1989 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1987 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1989 PYs:	2,090,373
Total Dollar Development:	2,090,373
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/19	Prior Year LDF	Dollar Development	Cumulative LDF
1948	*	130,392,720	1.000000	1	1.0000
1949	*	137,255,495	1.000000	1	1.0000
1950	*	144,479,468	1.000000	2	1.0000
1951	*	152,083,651	1.000000	2	1.0000
1952	*	160,088,053	1.000000	3	1.0000
1953	*	168,513,741	1.000000	4	1.0000
1954	*	177,382,885	1.000000	6	1.0000
1955	*	186,718,826	1.000000	8	1.0000
1956	*	196,546,133	1.000000	12	1.0000
1957	*	206,890,666	1.000000	16	1.0000
1958	*	217,779,648	1.000000	23	1.0000
1959	*	229,241,735	1.000000	32	1.0000
1960	*	241,307,090	1.000000	45	1.0000
1961	*	254,007,463	1.000000	64	1.0000
1962	*	267,376,277	1.000000	89	1.0000
1963	*	281,448,712	1.000000	125	1.0000
1964	*	296,261,802	1.000001	176	1.0000
1965	*	311,854,529	1.000001	247	1.0000
1966	*	328,267,925	1.000001	347	1.0000
1967	*	345,545,184	1.000001	487	1.0000
1968	*	363,731,773	1.000002	683	1.0000
1969	*	382,875,550	1.000003	959	1.0000
1970	*	403,026,895	1.000003	1,346	1.0000
1971	*	424,238,837	1.000004	1,890	1.0000
1972	*	446,567,197	1.000006	2,652	1.0000
1973	*	470,070,734	1.000008	3,722	1.0000
1974	*	494,811,298	1.000011	5,224	1.0000
1975	*	520,853,998	1.000014	7,332	1.0001
1976	*	548,267,367	1.000019	10,290	1.0001
1977	*	577,123,544	1.000025	14,443	1.0001
1978	*	607,498,467	1.000033	20,270	1.0001
1979	*	639,472,071	1.000044	28,449	1.0002
1980	*	673,128,496	1.000059	39,928	1.0002
1981	*	708,556,311	1.000079	56,038	1.0003
1982	*	745,848,749	1.000105	78,647	1.0004
1983	*	785,103,946	1.000141	110,379	1.0006

Policy Year	(*=Estimate)	Incurred as of 12/31/19	Prior Year LDF	Dollar Development	Cumulative LDF	
1984	*	826,425,206	1.000187	154,910	1.0008	34TH TO ULT
1985	*	869,921,270	1.000250	217,404	1.0010	33RD TO ULT
1986	*	915,706,600	1.000333	305,103	1.0013	32ND TO ULT
1987	*	963,901,684	1.000444	428,167	1.0018	31ST TO ULT
1988	*	1,014,633,351	1.00059253	600,847	1.0024	30TH TO ULT
1989		1,160,217,751	0.9998		1.0022	29th TO ULT
1990		1,185,020,691	0.9992		1.0014	28th TO ULT
1991		1,027,504,000	0.9995		1.0009	27th TO ULT
1992		873,784,851	1.0031		1.0040	26th TO ULT
1993		757,599,518	1.0002		1.0042	25th TO ULT
1994		700,530,084	0.9990		1.0032	24th TO ULT
1995		596,445,615	1.0003		1.0035	23rd TO ULT
1996		513,054,683	0.9995		1.0030	22nd TO ULT
1997		522,470,276	1.0011		1.0041	21st TO ULT
1998		522,902,930	1.0010		$\boxed{1.0051}$	20th TO ULT
1999		595,466,700	0.9993			
2000		632,588,483	1.0003			
2001		642,913,117	1.0000			
2002		675,522,266	0.9994			
2003		658,911,343	0.9977			
2004		695,371,586	1.0000			
2005		700,395,648	0.9989			
2006		723,087,503	1.0007			
2007		759,664,929	0.9997			
2008		708,143,423	0.9989			
2009		645,506,480	1.0017			
2010		667,707,858	1.0015			
2011		642,784,847	1.0024			
2012		590,303,169	1.0043			
2013		585,095,892	0.9978			
2014		583,671,438	1.0042			
2015		559,977,690	1.0205			
2016		529,212,396	1.0832			
2017		530,102,279	1.3449			
2018		422,417,885	3.5355			
2019		126,048,403				

MEDICAL **18 vs 19**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1989 PYs Incurred	3,159,471,440
Next Latest 12/31 Prior to 1989 PYs Incurred	3,153,223,207
CY Development of Prior to 1989 PYs	6,248,233
Next Latest PY 1989 Incurred	655,473,249
# of 1989 PYs in Prior to 1989 PYs Data	4.82
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1988 Incurred = (Average of 1989, 1990, 1991) x (PY Deflation Factor ^ 2)
2 PY 1987 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1988 LDF selected based on balancing Prior to 1989 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1987 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1989 PYs:	6,248,233
Total Dollar Development:	6,248,234
Difference:	-1

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/19	Prior Year LDF	Dollar Development	Cumulative LDF	Policy Year	(*=Estimate)	Incurred as of 12/31/19	Prior Year LDF	Dollar Development	Cumulative LDF	
1948	*	30,994,713	1.000000	1	1.0000	1984	*	422,572,738	1.001061	447,839	1.0043	34TH TO ULT
1949	*	33,327,649	1.000000	1	1.0000	1985	*	454,379,288	1.001415	641,836	1.0057	33RD TO ULT
1950	*	35,836,181	1.000000	2	1.0000	1986	*	488,579,879	1.001886	919,762	1.0076	32ND TO ULT
1951	*	38,533,528	1.000000	3	1.0000	1987	*	525,354,709	1.002515	1,317,828	1.0101	31ST TO ULT
1952	*	41,433,901	1.000000	4	1.0000	1988	*	564,897,537	1.00335302	1,887,781	1.0135	30TH TO ULT
1953	*	44,552,582	1.000000	6	1.0000	1989		654,445,740	0.9984		1.0119	29th TO ULT
1954	*	47,906,002	1.000000	9	1.0000	1990		677,560,802	1.0026		1.0145	28th TO ULT
1955	*	51,511,831	1.000000	13	1.0000	1991		627,402,187	1.0023		1.0168	27th TO ULT
1956	*	55,389,065	1.000000	19	1.0000	1992		556,747,561	1.0064		1.0233	26th TO ULT
1957	*	59,558,134	1.000000	27	1.0000	1993		429,685,191	0.9988		1.0221	25th TO ULT
1958	*	64,041,005	1.000001	38	1.0000	1994		410,946,338	1.0023		1.0245	24th TO ULT
1959	*	68,861,296	1.000001	55	1.0000	1995		376,584,348	1.0008		1.0253	23rd TO ULT
1960	*	74,044,404	1.000001	79	1.0000	1996		375,255,756	0.9927		1.0178	22nd TO ULT
1961	*	79,617,638	1.000001	113	1.0000	1997		393,565,229	0.9983		1.0161	21st TO ULT
1962	*	85,610,364	1.000002	162	1.0000	1998		429,409,261	1.0021		1.0182	20th TO ULT
1963	*	92,054,155	1.000003	232	1.0000	1999		452,765,979	1.0021			
1964	*	98,982,962	1.000003	333	1.0000	2000		487,318,937	1.0025			
1965	*	106,433,293	1.000004	477	1.0000	2001		476,079,683	1.0010			
1966	*	114,444,401	1.000006	685	1.0000	2002		546,297,278	0.9973			
1967	*	123,058,495	1.000008	981	1.0000	2003		558,041,835	0.9998			
1968	*	132,320,963	1.000011	1,407	1.0000	2004		610,827,079	1.0004			
1969	*	142,280,605	1.000014	2,017	1.0001	2005		641,828,407	1.0065			
1970	*	152,989,898	1.000019	2,892	1.0001	2006		650,203,327	1.0010			
1971	*	164,505,267	1.000025	4,146	1.0001	2007		694,940,535	1.0007			
1972	*	176,887,383	1.000034	5,944	1.0001	2008		629,871,028	1.0021			
1973	*	190,201,488	1.000045	8,522	1.0002	2009		555,214,790	0.9996			
1974	*	204,517,729	1.000060	12,218	1.0002	2010		612,162,649	1.0026			
1975	*	219,911,536	1.000080	17,516	1.0003	2011		602,374,718	1.0041			
1976	*	236,464,017	1.000106	25,112	1.0004	2012		565,763,057	1.0138			
1977	*	254,262,384	1.000142	36,002	1.0006	2013		569,618,704	0.9946			
1978	*	273,400,413	1.000189	51,614	1.0008	2014		575,317,663	0.9945			
1979	*	293,978,939	1.000252	73,994	1.0010	2015		539,012,376	1.0018			
1980	*	316,106,386	1.000336	106,075	1.0013	2016		524,482,623	1.0136			
1981	*	339,899,340	1.000448	152,062	1.0018	2017		575,245,203	1.0451			
1982	*	365,483,161	1.000597	217,977	1.0024	2018		628,770,837	2.1572			
1983	*	392,992,646	1.000796	312,450	1.0032	2019		290,459,584				

INDEMNITY **17 vs 18**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1988 PYs Incurred	6,303,711,141
Next Latest 12/31 Prior to 1988 PYs Incurred	6,304,174,763
CY Development of Prior to 1988 PYs	-463,622
Next Latest PY 1988 Incurred	994,707,604
# of 1988 PYs in Prior to 1988 PYs Data	6.34
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.95

1 PY 1987 Incurred = (Average of 1988, 1989, 1990) x (PY Deflation Factor ^ 2)
2 PY 1986 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1987 LDF selected based on balancing Prior to 1988 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1986 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1988 PYs:	-463,622
Total Dollar Development:	-463,622
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/18	Prior Year LDF	Dollar Development	Cumulative LDF
1947	*	129,126,361	1.000000	0	1.0000
1948	*	135,922,485	1.000000	0	1.0000
1949	*	143,076,300	1.000000	0	1.0000
1950	*	150,606,631	1.000000	0	1.0000
1951	*	158,533,296	1.000000	-1	1.0000
1952	*	166,877,154	1.000000	-1	1.0000
1953	*	175,660,162	1.000000	-1	1.0000
1954	*	184,905,434	1.000000	-2	1.0000
1955	*	194,637,299	1.000000	-3	1.0000
1956	*	204,881,367	1.000000	-4	1.0000
1957	*	215,664,597	1.000000	-5	1.0000
1958	*	227,015,365	1.000000	-7	1.0000
1959	*	238,963,542	1.000000	-10	1.0000
1960	*	251,540,571	1.000000	-14	1.0000
1961	*	264,779,548	1.000000	-20	1.0000
1962	*	278,715,314	1.000000	-28	1.0000
1963	*	293,384,541	1.000000	-39	1.0000
1964	*	308,825,833	1.000000	-55	1.0000
1965	*	325,079,824	1.000000	-77	1.0000
1966	*	342,189,288	1.000000	-108	1.0000
1967	*	360,199,251	1.000000	-152	1.0000
1968	*	379,157,106	0.999999	-213	1.0000
1969	*	399,112,743	0.999999	-298	1.0000
1970	*	420,118,677	0.999999	-419	1.0000
1971	*	442,230,186	0.999999	-588	1.0000
1972	*	465,505,459	0.999998	-825	1.0000
1973	*	490,005,747	0.999998	-1,158	1.0000
1974	*	515,795,523	0.999997	-1,625	1.0000
1975	*	542,942,656	0.999996	-2,281	1.0000
1976	*	571,518,585	0.999994	-3,202	1.0000
1977	*	601,598,510	0.999993	-4,494	1.0000
1978	*	633,261,590	0.999990	-6,307	1.0000
1979	*	666,591,147	0.999987	-8,852	0.9999
1980	*	701,674,892	0.999982	-12,424	0.9999
1981	*	738,605,149	0.999976	-17,438	0.9999
1982	*	777,479,104	0.999969	-24,474	0.9999

Policy Year	(*=Estimate)	Incurred as of 12/31/18	Prior Year LDF	Dollar Development	Cumulative LDF	
1983	*	818,399,057	0.999958	-34,350	0.9998	34TH TO ULT
1984	*	861,472,692	0.999944	-48,211	0.9998	33RD TO ULT
1985	*	906,813,360	0.999925	-67,666	0.9997	32ND TO ULT
1986	*	954,540,379	0.999901	-94,972	0.9996	31ST TO ULT
1987	*	1,004,779,346	0.99986735	-133,298	0.9995	30TH TO ULT
1988		994,106,481	0.9994		0.9989	29th TO ULT
1989		1,160,177,865	1.0002		0.9991	28th TO ULT
1990		1,185,702,400	1.0006		0.9997	27th TO ULT
1991		1,028,042,580	1.0004		1.0001	26th TO ULT
1992		871,251,371	1.0023		1.0024	25th TO ULT
1993		757,923,969	1.0000		1.0024	24th TO ULT
1994		701,921,392	0.9999		1.0023	23rd TO ULT
1995		596,366,407	1.0002		1.0025	22nd TO ULT
1996		513,368,363	0.9996		1.0021	21st TO ULT
1997		522,336,131	1.0006		$\boxed{1.0027}$	20th TO ULT
1998		522,907,154	1.0007			
1999		596,380,725	1.0009			
2000		632,717,334	1.0000			
2001		643,323,781	1.0009			
2002		675,956,444	1.0011			
2003		653,759,793	0.9992			
2004		683,860,179	1.0005			
2005		684,213,253	1.0020			
2006		707,864,330	1.0025			
2007		739,583,218	1.0022			
2008		691,742,383	0.9995			
2009		628,405,905	1.0029			
2010		646,714,296	1.0020			
2011		621,590,866	1.0000			
2012		570,018,890	1.0034			
2013		573,163,467	0.9976			
2014		570,064,841	1.0170			
2015		548,712,251	1.0791			
2016		488,551,343	1.3284			
2017		394,220,080	3.3940			
2018		119,495,366				

MEDICAL **17 vs 18**

Inputs and Notes for Tail Factor Estimation

Latest 12/31 Prior to 1988 PYs Incurred	2,614,306,665
Next Latest 12/31 Prior to 1988 PYs Incurred	2,598,041,698
CY Development of Prior to 1988 PYs	16,264,967
Next Latest PY 1988 Incurred	531,512,303
# of 1988 PYs in Prior to 1988 PYs Data	4.92
Selected Decrement Development Factor	0.75
Selected Average PY Deflation Factor	0.93

1 PY 1987 Incurred = (Average of 1988, 1989, 1990) x (PY Deflation Factor ^ 2)
2 PY 1986 & Prior Incurreds = Subsequent Year x PY Deflation
3 PY 1987 LDF selected based on balancing Prior to 1988 PYs Total Dollar Dev. to Actual CY Dev.
4 PY 1986 & Prior LDFs = (Subsequent Year - 1.0) x Selected Decrement + 1.0

CY Development of Prior to 1988 PYs:	16,264,967
Total Dollar Development:	16,264,967
Difference:	0

Tail Factor Model - 2026 Loss Cost Filing

Policy Year	(*=Estimate)	Incurred as of 12/31/18	Prior Year LDF	Dollar Development	Cumulative LDF
1947	*	29,493,528	1.000000	3	1.0000
1948	*	31,713,471	1.000000	4	1.0000
1949	*	34,100,506	1.000000	6	1.0000
1950	*	36,667,211	1.000000	8	1.0000
1951	*	39,427,109	1.000000	12	1.0000
1952	*	42,394,741	1.000000	17	1.0000
1953	*	45,585,743	1.000001	24	1.0000
1954	*	49,016,928	1.000001	34	1.0000
1955	*	52,706,374	1.000001	49	1.0000
1956	*	56,673,520	1.000001	70	1.0000
1957	*	60,939,269	1.000002	100	1.0000
1958	*	65,526,096	1.000002	144	1.0000
1959	*	70,458,168	1.000003	206	1.0000
1960	*	75,761,470	1.000004	295	1.0000
1961	*	81,463,947	1.000005	423	1.0000
1962	*	87,595,642	1.000007	607	1.0000
1963	*	94,188,862	1.000009	870	1.0000
1964	*	101,278,346	1.000012	1,247	1.0000
1965	*	108,901,448	1.000016	1,788	1.0001
1966	*	117,098,331	1.000022	2,564	1.0001
1967	*	125,912,184	1.000029	3,676	1.0001
1968	*	135,389,445	1.000039	5,270	1.0002
1969	*	145,580,048	1.000052	7,556	1.0002
1970	*	156,537,686	1.000069	10,832	1.0003
1971	*	168,320,092	1.000092	15,530	1.0004
1972	*	180,989,347	1.000123	22,265	1.0005
1973	*	194,612,201	1.000164	31,919	1.0007
1974	*	209,260,431	1.000219	45,760	1.0009
1975	*	225,011,216	1.000292	65,601	1.0012
1976	*	241,947,544	1.000389	94,042	1.0016
1977	*	260,158,650	1.000518	134,810	1.0021
1978	*	279,740,484	1.000691	193,242	1.0028
1979	*	300,796,219	1.000922	276,986	1.0037
1980	*	323,436,794	1.001229	396,991	1.0049
1981	*	347,781,499	1.001639	568,929	1.0066
1982	*	373,958,602	1.002185	815,225	1.0088

Policy Year	(*=Estimate)	Incurred as of 12/31/18	Prior Year LDF	Dollar Development	Cumulative LDF	
1983	*	402,106,023	1.002913	1,167,932	1.0117	34TH TO ULT
1984	*	432,372,068	1.003884	1,672,836	1.0156	33RD TO ULT
1985	*	464,916,202	1.005179	2,395,241	1.0209	32ND TO ULT
1986	*	499,909,895	1.006905	3,428,151	1.0279	31ST TO ULT
1987	*	537,537,521	1.00920652	4,903,702	1.0374	30TH TO ULT
1988		533,169,876	1.0031		1.0406	29th TO ULT
1989		655,442,233	1.0050		1.0458	28th TO ULT
1990		675,895,422	1.0017		1.0476	27th TO ULT
1991		626,111,547	1.0024		1.0501	26th TO ULT
1992		553,309,205	1.0023		1.0525	25th TO ULT
1993		430,468,373	0.9961		1.0484	24th TO ULT
1994		410,498,121	1.0088		1.0577	23rd TO ULT
1995		376,438,471	1.0046		1.0625	22nd TO ULT
1996		378,070,875	1.0031		1.0658	21st TO ULT
1997		394,997,939	1.0040		$\boxed{1.0701}$	20th TO ULT
1998		428,762,410	1.0045			
1999		452,101,414	1.0012			
2000		486,596,378	1.0081			
2001		475,812,863	1.0016			
2002		547,746,192	1.0196			
2003		552,415,916	1.0069			
2004		604,026,665	1.0101			
2005		624,663,654	1.0048			
2006		639,077,350	1.0074			
2007		679,396,727	1.0030			
2008		613,725,788	1.0034			
2009		541,854,119	0.9989			
2010		595,291,755	1.0089			
2011		583,087,922	1.0007			
2012		543,742,256	1.0003			
2013		561,898,894	0.9866			
2014		568,597,852	1.0018			
2015		538,049,539	0.9999			
2016		517,512,602	1.0466			
2017		550,490,869	2.1862			
2018		291,707,133				

The Estimation of Loss Development Tail Factors: Weibull Curve Fit

Five-Year Average of Incurred Development Factors

Development Period	Average Age of Claim (x)	Unfitted Indemnity LDF	Fitted Cumulative Indemnity LDF *	Unfitted Medical LDF	Fitted Cumulative Medical LDF *
(2)	(3)	(4)	(5)	(6)	(7)
1/2	1.5	1.3499	1.3807	1.0409	1.1912
2/3	2.5	1.0676	1.2923	1.0092	1.1701
3/4	3.5	1.0104	1.2277	0.9959	1.1517
4/5	4.5	0.9996	1.1794	0.9994	1.1355
5/6	5.5	1.0014	1.1426	0.9983	1.1212
6/7	6.5	1.0016	1.1140	1.0007	1.1085
7/8	7.5	1.0026	1.0916	0.9979	1.0973
8/9	8.5	1.0000	1.0739	1.0037	1.0873
9/10	9.5	1.0008	1.0599	0.9975	1.0785
10/11	10.5	1.0022	1.0486	0.9993	1.0706
11/12	11.5	1.0013	1.0395	0.9970	1.0635
12/13	12.5	1.0020	1.0322	1.0037	1.0572
13/14	13.5	1.0011	1.0262	1.0051	1.0515
14/15	14.5	1.0003	1.0214	1.0062	1.0464
15/16	15.5	1.0006	1.0175	1.0002	1.0419
16/17	16.5	1.0005	1.0143	1.0034	1.0378
17/18	17.5	1.0013	1.0117	1.0039	1.0341
18/19	18.5	1.0001	1.0096	1.0024	1.0308
19/20	19.5	1.0002	1.0078	1.0040	1.0278
20/21	20.5	1.0002	**1.0064**	1.0032	**1.0251**
21/22	21.5	1.0001	1.0053	1.0005	1.0227
22/23	22.5	1.0002	1.0043	1.0051	1.0205
23/24	23.5	0.9998	1.0035	1.0020	1.0186
24/25	24.5	1.0008	1.0029	1.0012	1.0168
25/26	25.5	1.0009	1.0024	0.9983	1.0152
26/27	26.5	1.0009	1.0019	1.0022	1.0137
27/28	27.5	1.0009	1.0016	1.0054	1.0124
28/29	28.5	1.0010	1.0013	1.0107	1.0112
29/30	29.5	1.0004	1.0011	1.0025	1.0102
30/31	30.5		1.0009		1.0092

Curve Fit Parameters

	Data Points Used	# of Data Points Used	Selected Parameters λ	c	*t*	Tail Factor 20th - Ult
Indemnity	10-29	20	0.198	5.000	1.000	1.0064
Medical	10-29	20	0.099	17.000	1.000	1.0251

* Fitted Cumulative LDF (5) & (7) = $1 / e^{(-\lambda (x+c)^{t})}$

INDEMNITY BRIDGE FACTORS
(Incurred Losses Divided by Paid Losses)

	Model	Y = a+b/x+c/x^2+d/x^3+e/x^4+f/x^5
EQUATION	a	0.011017174
COEFFICIENTS	b	(0.050036043)
	c	1.247579446
	d	0.013045444
	e	(0.862144932)
	f	0.281338621
	R^2	0.9995

Report Period	3 Year Average	Points Used	Fitted Value	Selected
1st	1.6408	1.6408	1.6408	
2nd	1.2544	1.2544	1.2544	
3rd	1.1243	1.1243	1.1240	
4th	1.0723	1.0723	1.0736	
5th	1.0524	1.0524	1.0497	
6th	1.0353	1.0353	1.0368	
7th	1.0277	1.0277	1.0290	
8th	1.0230	1.0230	1.0241	
9th	1.0182	1.0182	1.0208	
10th	1.0206	1.0206	1.0184	
11th	1.0211	1.0211	1.0167	
12th	1.0189	1.0189	1.0155	
13th	1.0140	1.0140	1.0145	
14th	1.0116	1.0116	1.0138	
15th	1.0119	1.0119	1.0132	
16th	1.0131	1.0131	1.0128	
17th	1.0153	1.0153	1.0124	
18th	1.0147	1.0147	1.0121	
19th	1.0124	1.0124	1.0118	
20th	1.0113	1.0113	1.0116	1.0116
21st	1.0090	1.0090	1.0115	1.0115
22nd	1.0083	1.0083	1.0113	1.0113
23rd	1.0067	1.0067	1.0112	1.0112
24th	1.0059	1.0059	1.0111	1.0111
25th	1.0064	1.0064	1.0110	1.0110
26th	1.0087	1.0087	1.0109	1.0109
27th	1.0120	1.0120	1.0109	1.0109
28th	1.0157	1.0157	1.0108	1.0108
29th	1.0155	1.0155	1.0108	1.0108
30th			1.0107	1.0107
31st			1.0107	1.0107
32nd			1.0107	1.0107
33rd			1.0106	1.0106
34th			1.0106	1.0106
35th			1.0106	1.0106
36th			1.0106	1.0106
37th			1.0106	1.0106
38th			1.0106	1.0106
39th			1.0106	1.0106
40th			1.0105	1.0105
41st			1.0105	1.0105
42nd			1.0105	1.0105
43rd			1.0105	1.0105
44th			1.0105	1.0105
45th			1.0105	1.0105
46th			1.0105	1.0105
47th			1.0105	1.0105
48th			1.0105	1.0105
49th			1.0105	1.0105
50th	1.0000	1.0000	1.0105	1.0105

Bridge Factor (Average of Selected Factors) $\boxed{1.0107}$

* Selected

MEDICAL BRIDGE FACTORS
(Incurred Losses Divided by Paid Losses)

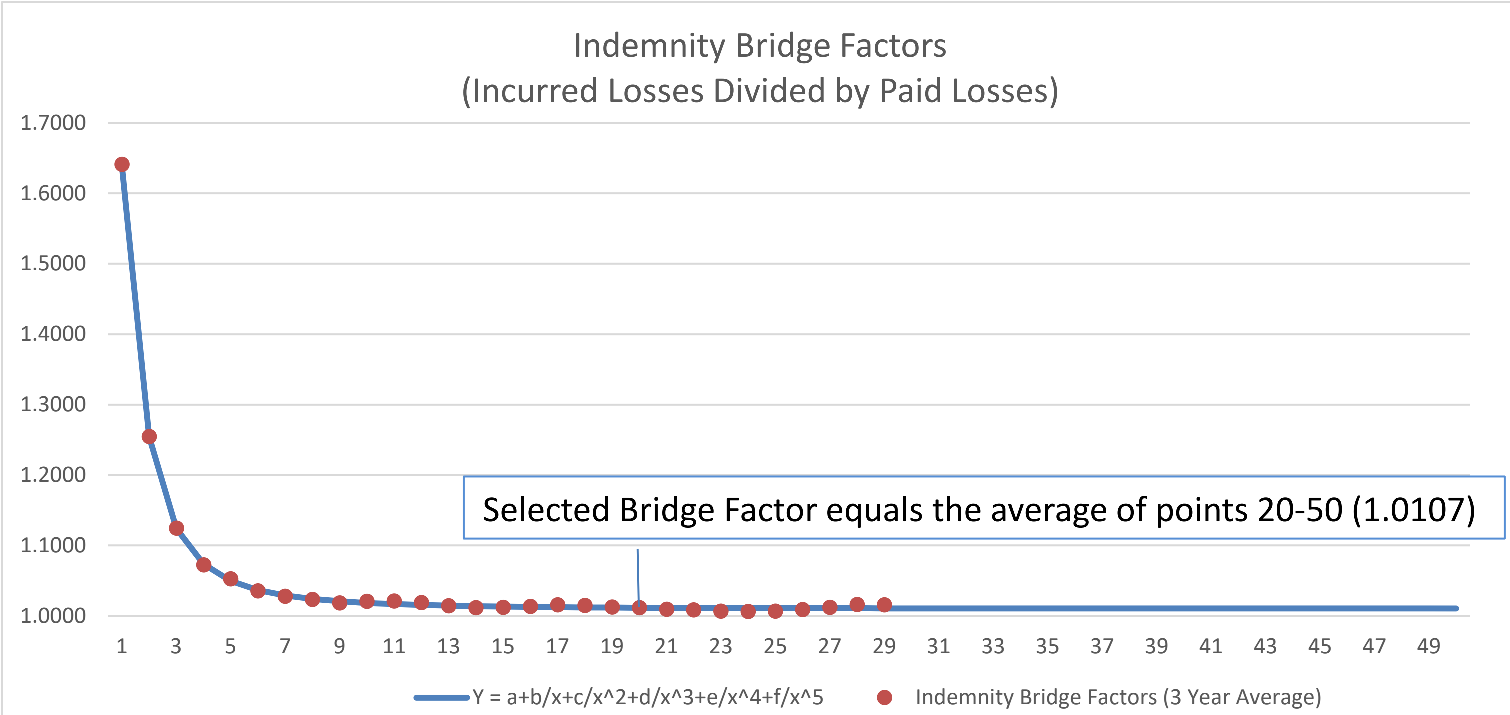
	Model	Y = a+b*log(x)/x^2+c/x^2
EQUATION	a	0.039576334
COEFFICIENTS	b	0.236455405
	c	0.355207528

R^2 0.9843

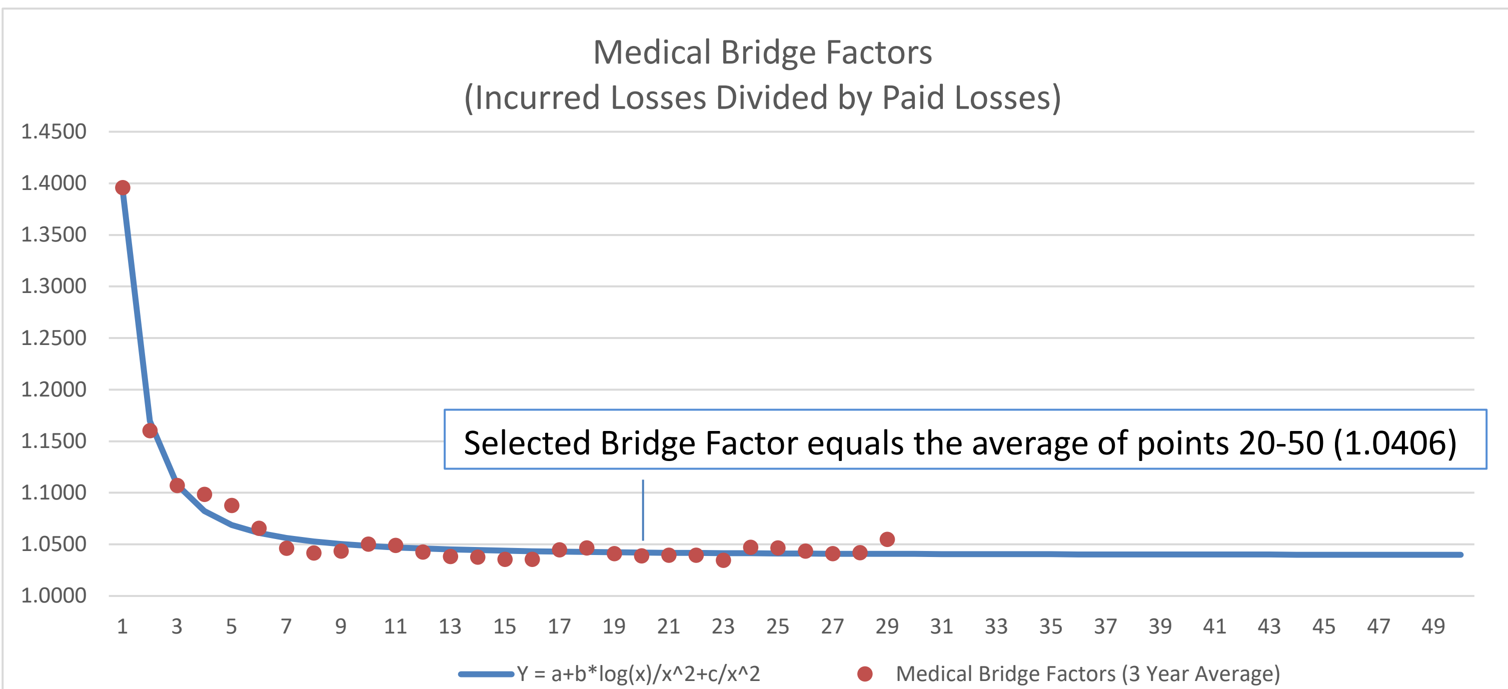
Report Period	3 Year Average	Points Used	Fitted Value	Selected
1st	1.3958	1.3958	1.3948	
2nd	1.1603	1.1603	1.1695	
3rd	1.1071	1.1071	1.1079	
4th	1.0985	1.0985	1.0822	
5th	1.0878	1.0878	1.0689	
6th	1.0656	1.0656	1.0611	
7th	1.0462	1.0462	1.0561	
8th	1.0417	1.0417	1.0527	
9th	1.0437	1.0437	1.0502	
10th	1.0503	1.0503	1.0484	
11th	1.0492	1.0492	1.0471	
12th	1.0428	1.0428	1.0460	
13th	1.0383	1.0383	1.0451	
14th	1.0377	1.0377	1.0444	
15th	1.0358	1.0358	1.0438	
16th	1.0357	1.0357	1.0434	
17th	1.0449	1.0449	1.0430	
18th	1.0466	1.0466	1.0426	
19th	1.0412	1.0412	1.0423	
20th	1.0391	1.0391	1.0421	1.0421
21st	1.0395	1.0395	1.0419	1.0419
22nd	1.0395	1.0395	1.0417	1.0417
23rd	1.0348	1.0348	1.0415	1.0415
24th	1.0473	1.0473	1.0413	1.0413
25th	1.0466	1.0466	1.0412	1.0412
26th	1.0436	1.0436	1.0411	1.0411
27th	1.0413	1.0413	1.0410	1.0410
28th	1.0420	1.0420	1.0409	1.0409
29th	1.0550	1.0550	1.0408	1.0408
30th			1.0407	1.0407
31st			1.0406	1.0406
32nd			1.0406	1.0406
33rd			1.0405	1.0405
34th			1.0404	1.0404
35th			1.0404	1.0404
36th			1.0403	1.0403
37th			1.0403	1.0403
38th			1.0403	1.0403
39th			1.0402	1.0402
40th			1.0402	1.0402
41st			1.0401	1.0401
42nd			1.0401	1.0401
43rd			1.0401	1.0401
44th			1.0401	1.0401
45th			1.0400	1.0400
46th			1.0400	1.0400
47th			1.0400	1.0400
48th			1.0400	1.0400
49th			1.0399	1.0399
50th	1.0000	1.0000	1.0399	1.0399

Bridge Factor (Average of Selected Factors) $\boxed{1.0406}$

* Selected



Indemnity Bridge Factors
(Incurred Losses Divided by Paid Losses)
1.7000
1.6000
1.5000
1.4000
1.3000
1.2000
1.1000
1.0000
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
Selected Bridge Factor equals the average of points 20-50 (1.0107)
Y = a+b/x+c/x^2+d/x^3+e/x^4+f/x^5
Indemnity Bridge Factors (3 Year Average)



Medical Bridge Factors
(Incurred Losses Divided by Paid Losses)
1.4500
1.4000
1.3500
1.3000
1.2500
1.2000
1.1500
1.1000
1.0500
1.0000
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49
Selected Bridge Factor equals the average of points 20-50 (1.0406)
Y = a+b*log(x)/x^2+c/x^2
Medical Bridge Factors (3 Year Average)