

DELAWARE COMPENSATION RATING BUREAU, INC.

Excess Loss Load Calculation

This exhibit shows the three methods used to calculate an appropriate excess loss load to cover losses above the loss limit used for ratemaking.

Page 1 shows the final average excess loss ratio as a weighted average of the three methods used.

Page 2 shows the first method based on using ELF's to calculate the Average Excess Ratio based on injury types and hazard groups

Page 3 shows the implicit excess loss method. This uses the excess losses implied by the difference between unlimited and limited losses as the basis.

Pages 4 through 6 show the direct excess loss method. Excess losses over time are used to calculate Loss Development Factors and a tail factor. Bornheutter-Ferguson is used to credibility weight this method.

Delaware December 1, 2025 Rate & Loss Cost Filing
Weighted Average Excess Loss Load as a Percent of Premium

Method	Load	Weight
Excess Loss Factor Method	0.0395	50%
Implied Development Method	0.0825	25%
Direct Development Method	0.0778	25%

Weighted Average Excess Loss Load	0.0598
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Delaware December 1, 2025 Rate & Loss Cost Filing
Average Excess Ratio*
(Post-HB373 Basis)

Hazard Group	Standard Earned Premium	Average Excess Ratio	
A	38,108,250	0.0134	
B	78,948,195	0.0402	
C	239,768,186	0.0328	
D	223,257,488	0.0569	
E	136,151,742	0.0643	
F	128,260,664	0.0924	
G	75,947,765	0.1317	
TOTAL	920,442,290	0.0596	(Percent of Loss)
(1) Limited Loss and LAE Ratio Trended (From Exhibit 12)		0.6225	
(2) Total Loss and LAE Ratio Trended (1)/(1-Average Excess Ratio)		0.6620	
(3) Implied Excess Loss Ratio (2)-(1)		0.0395	(Percent of Premium)

* \$1,979,451 is the average of the loss limits for
Policy Years 2016 through 2025 in Exhibit 1a

Delaware December 1, 2025 Rate & Loss Cost Filing
Implied Development Excess Loss Ratio as a Percent of Premium

Policy Year	(1) On-Level Standard Earned Premium	(2) Unlimited Indemnity	(3) Unlimited Medical	(4) Limited Indemnity	(5) Limited Medical	(6) Indemnity Benefit	(7) Medical Benefit	(8) Trend Factor (To 12/1/26)	(9) Trended Ultimate Excess	(10) Excess Loss Ratio
2009	71,407,089	46,392,298	44,613,363	44,598,549	39,060,657	1.2054	1.0000	0.4164	3,212,600	0.0450
2010	70,024,063	40,885,469	53,167,610	38,606,196	42,698,667	1.2086	1.0000	0.4385	5,799,224	0.0828
2011	70,613,731	39,872,088	43,255,606	38,529,279	37,690,893	1.2123	1.0000	0.4619	3,321,962	0.0470
2012	66,108,553	38,662,089	38,654,952	37,477,877	34,126,566	1.1949	1.0000	0.4864	2,890,911	0.0437
2013	62,652,941	40,071,400	42,148,245	38,619,692	36,944,101	1.1696	1.0000	0.5123	3,535,653	0.0564
2014	62,346,637	34,320,468	37,081,576	32,981,857	30,541,760	1.156	1.0000	0.5395	4,362,974	0.0700
2015	68,289,215	39,439,744	43,318,482	34,314,729	33,440,633	1.1543	1.0000	0.5682	8,973,365	0.1314
2016	73,007,357	35,599,884	41,894,725	34,136,324	34,531,007	1.1368	1.0000	0.5984	5,401,705	0.0740
2017	79,513,083	36,936,381	41,250,114	33,995,704	32,272,512	1.1223	1.0000	0.6302	7,737,125	0.0973
2018	81,852,374	33,317,159	32,225,796	32,095,903	28,006,317	1.1287	1.0000	0.6637	3,715,109	0.0454
2019	89,436,622	45,294,713	44,946,450	39,630,665	30,230,989	1.1097	1.0000	0.6989	14,678,227	0.1641
2020	95,764,231	33,299,422	36,576,132	30,026,491	26,776,024	1.0944	1.0000	0.7361	9,850,285	0.1029
2021	102,919,608	33,684,610	30,756,339	32,110,733	26,532,585	1.0808	1.0000	0.7752	4,592,957	0.0446
2022	109,433,987	38,307,945	32,809,581	36,261,425	27,976,952	1.0641	1.0000	0.8164	5,723,321	0.0523
2023	114,700,142	38,975,356	36,705,859	36,503,464	30,702,722	1.0329	1.0000	0.8598	7,356,806	0.0641

Columns (1), (4), (5), (6), and (7) come from **Exhibit 2 - Limited**

Columns (2) and (3) come from **Exhibit 2 - Unlimited**

Column (8) is the trend factor for a given year. Applies a combined indemnity and medical loss ratio trend of **-5.05%**

Column (9) = $[(2) - (4)] * (6) + [(3) - (5)] * (7) * (8)$

Column (10) = $(9)/(1)$

15 Year Weighted Average 0.0748

10 Year Weighted Average 0.0825

7 Year Weighted Average 0.0796

Delaware December 1, 2025 Rate & Loss Cost Filing
Direct Development Excess Loss Ratio as a Percent of Premium

Policy Year	(1) On-Level Standard Earned Premium	(2) Current Level Reported Losses	(3) Excess Loss Development Factors to Ult	(4) Ultimate Excess Losses (Chain Ladder Method)	(5) Ultimate Excess Losses (Expected Loss Ratio Method)	(6) Ultimate Excess Losses (Bornheutter- Ferguson Method)	(7) Trend Factor (to 12/1/26)	(8) Trended Ultimate Excess Losses	(9) Excess Loss Ratio
2009	71,407,089	1,529,782	1.1315	1,730,985	4,105,373	2,006,975	1.7967	3,605,912	0.0505
2010	70,024,063	6,656,392	1.1368	7,567,267	4,025,860	7,140,986	1.7175	12,264,737	0.1752
2011	70,613,731	1,030,265	1.1426	1,177,222	4,059,761	1,537,060	1.6418	2,523,584	0.0357
2012	66,108,553	86,408	1.1489	99,276	3,800,747	579,064	1.5695	908,825	0.0137
2013	62,652,941	955,414	1.1559	1,104,395	3,602,075	1,441,326	1.5003	2,162,434	0.0345
2014	62,346,637	4,384,587	1.1637	5,102,246	3,584,465	4,888,762	1.4342	7,011,422	0.1125
2015	68,289,215	8,864,415	1.1725	10,393,718	3,926,119	9,442,093	1.3710	12,945,008	0.1896
2016	73,007,357	3,746,756	1.1826	4,430,934	4,197,377	4,394,870	1.3106	5,759,793	0.0789
2017	79,513,083	5,140,276	1.1944	6,139,707	4,571,407	5,884,417	1.2528	7,372,097	0.0927
2018	81,852,374	0	1.2088	0	4,705,899	812,751	1.2215	992,813	0.0121
2019	89,436,622	14,676,158	1.2268	18,004,346	5,141,936	15,626,669	1.1911	18,612,214	0.2081
2020	95,764,231	5,767,744	1.2509	7,215,117	5,505,727	6,872,208	1.1613	7,980,864	0.0833
2021	102,919,608	0	1.2873	0	5,917,107	1,320,743	1.1323	1,495,525	0.0145
2022	109,433,987	346,066	1.3589	470,277	6,291,635	2,007,827	1.1041	2,216,787	0.0203
2023	114,700,142	0	2.1694	0	6,594,400	3,554,640	1.0765	3,826,619	0.0334

Column (1) comes from Exhibit 2 - Limited

Columns (2) and (3) can be found on subsequent pages of this exhibit

Column (4) = (2) * (3)

Column (5) uses an *a priori* calculated based on the chain ladder results of the oldest 14 years shown (.0575)

Column (5) = (1) * .0575

Column (6) = (2) + (1 - 1/(3)) * (5)

Column (7) is a trend factor representing the two step trend seen in Exhibit 1a.

The factor uses a trend of **4.61%** to on-level older years to 1/1/2018 and a trend of **2.56%** to bring all years to a 12/1/26 level

Column (8) = (6) * (7)

Column (9) = (8)/(1)

15 Year Weighted Average 0.0736

10 Year Weighted Average 0.0778

7 Year Weighted Average 0.0631

[illegible]

The Estimation of Loss Development Tail Factors: Weibull Curve Fit
Ten-Year Average of Development Factors

Development Period	Average Age of Claim (x)	Unfitted Excess LDF	Fitted Cumulative Excess LDF *
(2)	(3)	(4)	(5)
1/2	1.5	2.4910	32.5026
2/3	2.5	1.5604	16.8316
3/4	3.5	1.4460	10.3850
4/5	4.5	1.5144	7.1242
5/6	5.5	1.5750	5.2513
6/7	6.5	1.6730	4.0790
7/8	7.5	1.5938	3.2982
8/9	8.5	1.4954	2.7535
9/10	9.5	1.4193	2.3598
10/11	10.5	1.2865	2.0670
11/12	11.5	1.2766	1.8445
12/13	12.5	1.1419	1.6723
13/14	13.5	1.0799	1.5373
14/15	14.5	1.0848	1.4302
15/16	15.5	1.0956	1.3447
16/17	16.5	1.0134	1.2759
17/18	17.5	1.0455	1.2205
18/19	18.5	1.0184	1.1756
19/20	19.5	0.9934	1.1393
20/21	20.5	1.0636	1.1100
21/22	21.5	1.0512	1.0864
22/23	22.5	1.1296	1.0675
23/24	23.5	1.1310	1.0523
24/25	24.5	1.1204	1.0403
25/26	25.5	1.1142	1.0308
26/27	26.5	1.1039	1.0233
27/28	27.5	1.0665	1.0175
28/29	28.5	1.0293	1.0131
29/30	29.5	1.0204	1.0096
30/31	30.5		1.0071

Curve Fit Parameters

	Data Points Used	# of Data Points Used	Selected Parameters			Tail Factor 20th - Ult
Excess			λ	c	t	
	1-19	19	0.005	1.000	2.000	1.1100

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