

Advisory Rates, Assigned Risk Rates, and Rating Values Filing

Proposed Effective January 1, 2024



Dan Nelson, MCM, WCPState Relations Executive
Regulatory Division

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August 23, 2023

Honorable Doug Ommen
Insurance Commissioner
Iowa Department of Insurance and Financial Services
Iowa Insurance Division
1963 Bell Avenue
Des Moines, IA 50315

Re: Iowa Advisory Rates, Assigned Risk Rates, and Rating Values Filing Proposed Effective January 1, 2024

Dear Commissioner Ommen:

In accordance with the applicable statutes and regulations of the state of Iowa, we are filing for your consideration and approval of prospective rates and rating values for the Iowa voluntary and assigned risk markets to become effective January 1, 2024 for new and renewal policies.

This filing proposes an overall average change of -12.0% to the voluntary rate level and an overall average change of -12.0% to assigned risk rate level. The advisory prospective rates of the voluntary market are used as a basis for the rates in the assigned risk market.

Reported COVID-19-related claims have been excluded from the data on which this filing is based to better reflect the conditions likely to prevail during the proposed effective period.

This filing is made exclusively on behalf of the companies that have given valid consideration for the express purpose of fulfilling regulatory rate filing requirements and other private use of this information.

In the enclosed appendix is a list of companies which, as of the time this filing is submitted, are eligible to reference this information. The inclusion of a company on this list merely indicates that the company, or the group to which it belongs, is affiliated with NCCI in this state, or has licensed this information as a nonaffiliate, and is not intended to indicate whether the company is currently writing business or is even licensed to write business in this state.

As always, if you should have any questions or need additional information, please do not hesitate to contact Dan Benzshawel at (561) 893-3093 or me at (561) 893-3784.

Sincerely,

Dan Nelson, MCM, WCP State Relations Executive

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Workers Compensation Rate Filing – January 1, 2024

Actuarial Certification

I, Dan Benzshawel, am an Executive Director and Actuary for the National Council on Compensation Insurance, Inc. I am a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries, and I meet the Qualification Standards of the American Academy of Actuaries to provide the actuarial report contained herein.

The information contained in this report has been prepared under my direction in accordance with applicable Actuarial Standards of Practice as promulgated by the Actuarial Standards Board. The Actuarial Standards Board is vested by the U.S.-based actuarial organizations with the responsibility for promulgating Actuarial Standards of Practice for actuaries providing professional services in the United States. Each of these organizations requires its members, through its Code of Professional Conduct, to observe the Actuarial Standards of Practice when practicing in the United States.

Dan Benzshawel, FCAS, MAAA Executive Director and Actuary Actuarial and Economic Services



Workers Compensation Rate Filing – January 1, 2024

Disclosures

Purpose of the Report

The purpose of this report is to provide the proposed voluntary and assigned risk rates for workers compensation policies in Iowa, proposed to be effective January 1, 2024.

The intended users of this report are:

- The Iowa Insurance Division
- Affiliated carriers, for their reference in determining workers compensation rates

Scope

The prospective advisory rates for the voluntary market are intended to cover the indemnity and medical benefits provided under the system, the expenses associated with providing these benefits (loss-based expenses), and any other costs associated with providing workers compensation insurance (such as commissions, taxes, etc.).

Each insurance company offering workers compensation insurance in lowa may:

- a) adopt the advisory rates which include provisions for expenses based on NCCI's compilation of industry expense data, or
- b) deviate from the advisory rates.

Employers unable to secure coverage in the voluntary market can apply for such coverage in the assigned risk market. The proposed assigned risk rates are intended to cover the indemnity and medical benefits provided under the system, the expenses associated with providing these benefits (loss-based expenses), and any other costs associated with providing workers compensation insurance (such as commissions, taxes, etc.).

NCCI utilizes widely accepted general ratemaking methodologies in the calculation of voluntary and assigned risk rates, including (i) experience base determination, (ii) chain ladder development method, (iii) trending procedure, (iv) expense calculation, and (v) application of indemnity and medical benefit changes. Since the onset of the COVID-19 pandemic, NCCI has conducted in-depth reviews and analyses and has determined that the continued use of data from the pandemic-impacted time-period remains appropriate for use in its ratemaking methodologies.



Workers Compensation Rate Filing – January 1, 2024

Disclosures

Data Sources

Key Dates

Financial Data Valuation Date

December 31, 2022

Financial Call Data Cutoff Date

May 30, 2023

Unit Statistical Plan Data Cutoff Date

June 9, 2023

Filing Preparation Date July 11, 2023

The overall average advisory rate level change is based on a review of Financial Call Data, which is an aggregation of workers compensation data annually reported to NCCI. In this filing, Financial Call Data submissions received after the Financial Data Cutoff Date were not considered for inclusion in the analysis.

Advisory rate level changes at the classification code level are based on Unit Statistical Plan Data, which is the audited exposure, premium, and loss information reported to NCCI on a policy level. In this filing, Unit Statistical Data submissions received after the Unit Statistical Plan Data Cutoff Date were not considered for inclusion in the analysis.

In some areas, NCCI's analysis also relies on other data sources, which are reviewed for reasonableness and are referenced in the filing where applicable. Events that have occurred after the Filing Preparation Date that may have a material impact on workers compensation costs in this jurisdiction have not been considered in the analysis.

Data Exclusions

NCCI maintains several data reporting initiatives and programs to assist carriers to report data and to ensure that the data that is reported to NCCI is complete, accurate, and reported in a timely fashion. Occasionally, a carrier's data submission is not available for use in an NCCI filing either because the data was not reported prior to the filing, had quality issues, or NCCI determined that the data that was reported should not be included in the filing based on NCCI's actuarial judgment.

In this year's filing, data for all carriers writing at least one-tenth of one percent of the lowa workers compensation written premium volume have been included in the experience period on which this filing is based.



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Disclosures

NCCI categorizes catastrophic events as those that incur aggregate workers compensation losses in excess of \$50 million per occurrence. Pandemics have the potential to be catastrophic in terms of the costs they impose on the workers compensation system. NCCI's standard ratemaking methodology excludes catastrophe-related losses from the calculation of rates since these events are not considered to be predictive of future experience. Consistent with this methodology, NCCI is proposing to treat COVID-19 claims with accident dates between December 1, 2019 through December 31, 2022 as a catastrophe in this filing. These reported claims have been excluded from Financial Call Data and Unit Statistical Plan Data for use in ratemaking to better reflect the conditions expected to prevail in the filing's proposed effective period.

Below is a summary of COVID-19-related lost-time claim counts and indemnity and medical combined paid plus case losses, as reported in NCCI's Financial Call 31–Large Loss and Catastrophe as of year-end 2022.

Year	COVID-19 Lost-Time Claim Counts	COVID-19 Paid+Case Losses
<u> </u>	<u> </u>	<u> 20000</u>
PY 2019	100	\$2,058,179
PY 2020	260	\$2,828,357
PY 2021	35	\$816,531
AY 2020	340	\$4,839,546
AY 2021	40	\$844,004
AY 2022	17	\$20,964

Excludes large deductible and expense-only claims.

Reported COVID-19-related losses would have represented less than a 1% share of the reported paid plus case losses in lowa's experience period.

Other exclusions are made for the purposes of analysis, but do not have a material impact on the proposed changes in this filing.



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Disclosures

Risks and Uncertainty

This filing includes assumptions and projections concerning the future. As with any prospective analysis, there exists estimation uncertainty in these assumptions and projections. Areas of this analysis subject to estimation uncertainty that could have a material impact on the final results include the following:

- Projection of future loss development
- Selection of loss ratio trends
- Unanticipated changes to wage or medical inflation
- Potential impact of changes to laws and/or regulations

In addition, any future changes to workers compensation law or regulations that apply retroactively to policies or benefit claims on policies in the proposed effective period may have a significant impact on the adequacy of the rates proposed in this filing.

The course of the COVID-19 pandemic and related considerations, such as future economic conditions and the labor market, contribute additional uncertainty when estimating future costs.



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Part 1 Filing Overview

- Executive Summary
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Workers Compensation Rate Filing – January 1, 2024

Executive Summary

Based on its review of the most recently available data, NCCI has proposed the following overall average workers compensation voluntary rate and assigned risk rate changes in Iowa to become effective January 1, 2024.

Key Components	Percentage Change
Experience, Trend, and Benefit Change	- 10.0%
Production and General Expense Change	+ 0.1%
Taxes & Fees Change	+ 0.3%
Profit & Contingency Change	- 2.7%
Loss-based Expense Change	0.0%
Proposed Change in Overall Voluntary Rate Level	- 12.0%*
Assigned Risk Multiplier Change Proposed Change in Overall Assigned Risk Rate Level	<u>0.0%</u> – 12.0%

^{*} The rate change varies by classification code, each of which belongs to one of five industry groups.

Items of Note:

Experience and Development:

- The filing is based on financial premium and loss experience for Policy Years 2020 and 2021 evaluated as of December 31, 2022. The experience period evaluated as of December 31, 2022 shows continued improvement when compared to the data evaluated as of December 31, 2021. Refer to Exhibit I for the considerations underlying the Experience Period and Loss Base selections.
 - A combination of both paid and paid plus case data was selected to best reflect the conditions likely to prevail in the proposed effective period.
 - Both the latest policy years demonstrate favorable experience. The experience observed in Policy Year 2021 shows improvement from prior policy years. The use of the two most recently available full policy years appropriately balances stability and responsiveness. This methodology is consistent with prior filings in lowa.
 - Reported COVID-19-related claims have been excluded from the data on which this filing is based.
- Similar to previous Iowa filings, the reported loss amounts are projected to an ultimate basis
 using a 3-year average for paid losses and a 5-year average for paid plus case losses. The
 most recent valuation of development factors shows no clear deviation from historical
 values. Refer to Appendix A-II for considerations underlying the Development selection.



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Executive Summary

Trend:

- Generally, the selected annual loss ratio trends in this year's filing are more heavily based on the observed longer-term patterns which exhibit more of a decreasing pattern than the prior filing. Refer to Appendix A-III for considerations underlying the Trend selection.
 - The selected annual indemnity loss ratio trend factor is –4.5% and the selected medical loss ratio trend factor is –3.0%. Both represent a half-point decrease from the current approved trend factors.
 - After adjusting to a common wage level, lowa's lost-time claim frequency exhibits a long-term pattern of decline.
 - After adjusting to a common wage level, both the average indemnity and medical cost per lost-time claim figures decreased in the most recent two policy years. Long-term average cost per case figures for indemnity demonstrate a declining trend, while the long-term medical costs per case figures show a slight upward trend.

Other Items of Note:

- The primary driver of the proposed change is attributable to improved experience. The
 decrease in the experience, trend, and benefit component includes changes in loss
 experience, as well as changes in development and trend factor selections. There are no
 benefit changes proposed in this filing.
- This filing proposes a decrease in the profit and continency provision from 2.0% to 0.0%, which considers the notable shift in interest rates from previous years.
- The assigned risk rate change is identical to the voluntary rate change as this filing proposes to maintain the current approved assigned risk multiplier.
- Additional proposed methodology changes in this filing include changes to experience rating values, occupational disease provisions, and calendar year wage adjustments. Please refer to the Additional Proposed Changes section for additional information.



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Overview of Methodology

The following methodologies and assumptions used in this filing may not be applicable to or relevant for another purpose, including but not limited to NCCI filings in other jurisdictions.

Aggregate Ratemaking

NCCI's approach to determining the proposed overall average advisory rate level change utilizes widely accepted ratemaking methodologies. The approach employed in this filing includes the following steps:

- The reported historical premium totals are projected to an ultimate basis and adjusted to the current pure premium level
- The excess loss portion of individual large claims are removed from reported aggregate losses, based on an lowa-specific large loss threshold
- The reported historical limited indemnity and medical loss totals are projected to an ultimate basis and adjusted to the current benefit level
- Ratios of losses to pure premium are projected to the cost levels expected in the rate effective period
- Ultimate, trended, limited losses are adjusted to an unlimited basis via a non-catastrophe excess ratio (with excess ratios at limits beyond \$50 million set equal to zero)
- Proposed benefit level and expense changes are applied to the projected cost ratios

The indicated average advisory rate level change is calculated for the years in the filing's experience period. If the final projected cost ratios are greater (less) than 1.000, then an increase (decrease) in the average rate level is indicated.

Class Ratemaking

Once the proposed overall average advisory rate level change has been determined, NCCI separately determines rates per \$100 of payroll for each workers compensation job classification (class); the advisory rates and year-over-year changes vary by class. Three sets of pure premiums are combined as part of each class code's advisory rate calculation based on the volume of available data for that job classification. The three sets of pure premiums are:

- State-specific payroll and loss experience ("indicated")
- Currently-approved pure premium adjusted to the proposed level ("present on rate level")
- Countrywide experience adjusted to state conditions ("national")

Assigned Risk Rates

The proposed assigned risk rates are then determined for each job classification as the product of the classification's advisory voluntary rate and an assigned risk differential.



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Summary of Selections

The following is a summary of selections underlying the voluntary rates and assigned risk rates proposed to be effective January 1, 2024, along with the selections underlying the currently approved filing effective January 1, 2023.

Voluntary Market Advisory Rates	Currently Approved <u>January 1, 2023</u>	Proposed Effective <u>January 1, 2024</u>
Experience Period	Policy Years 2019 and 2020	Policy Years 2020 and 2021
Premium Development	3-yr avg	3-yr avg
Loss Experience Base	Avg Paid and P+C	Avg Paid and P+C
Loss Development - Paid	3-yr avg	3-yr avg
Loss Development - Paid+Case	5-yr avg	5-yr avg
Tail Factor – Indemnity	1.010	1.010
Tail Factor – Medical	1.020	1.020
Trend Factor – Indemnity Loss Ratio	0.960	0.955
Trend Factor – Medical Loss Ratio	0.975	0.970
Base Threshold for Limiting Losses	\$7,396,293	\$6,901,988
Excess Ratio	3.1%	3.2%
Loss-based Expense Provision	17.8%	17.8%
Production and General Expenses	24.3%	24.4%
Premium Taxes and Assessments	2.5%	2.7%
Profit and Contingencies Provision	2.0%	0.0%
Classification Swing Limits (applied by Industry Group)	+/-25%	+/-25%
Assigned Risk Rates	Currently Approved <u>January 1, 2023</u>	Proposed Effective <u>January 1, 2024</u>
Assigned Risk Differential	1.250	1.250



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Additional Proposed Changes

Experience Rating Values

The experience rating values in this filing reflect the updates approved in Item E-1409— Enhancement to NCCI's Experience Rating Plan Methodology, which revised certain underlying components of the methodology used in NCCI's Experience Rating Plan (Plan):

- The primary/excess loss split point (split point) now differs by jurisdiction to better reflect state cost differences.
- The State per claim accident limitation (SAL) and United States Longshore and Harbor Workers' Compensation (USL&HW) per claim accident limitation are now based on the 95th percentile of lost time claims and is generally lower in magnitude than the limitations under the prior methodology.
- The credibility parameters underlying the calculation of the weight (W) and ballast (B) values have been recalibrated with more recently available data to improve equity within the Experience Rating Plan.
- The G value has been adjusted to enhance consistency with other Plan parameters.
- The Discount ratios (D-ratios) no longer differ for class codes in the same hazard group.

The benefits of these updates include:

- A more accurate and predictive experience rating modification.
- More comparable Plan performance in states with claim costs that vary significantly from the countrywide average.
- Reduced sensitivity to large outlier claims without sacrificing predictive accuracy.
- The elimination of complex calculations where no value is added.

As described above, the split point is now a state-specific value reflecting lowa costs; because D-ratios are a measure of the expected proportion of losses below the split point, the average D-ratio in lowa has increased.

No statewide premium impact is anticipated from these experience rating plan updates.

Occupational Disease Provisions

NCCI recently completed a comprehensive review of Occupational Diseases (OD), excluding coal worker's pneumoconiosis. The review found that the vast majority of loss experience for OD-related conditions is reported within 10 years of policy expiration and thus captured by our Unit Statistical Plan Data. As this data is included in our ratemaking analysis each year, it was determined that there is no need for separate ratemaking handling. Based on this research,



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Additional Proposed Changes

NCCI is proposing to remove all disease loadings specific to any classification that is not related to coal mining. This includes supplementary disease rates, where applicable.

The premium generated from disease provisions is negligible, accounting for less than 0.1% of the total premium in the state. Therefore, no offset is being proposed due to the removal of OD provisions. The losses associated with OD claims will continue to be included in the ratemaking data underlying the annual rate filings.

As stated in the **Basic Manual** (Rule ID: BM-SUPD-S1257), carriers will continue to have the option to include a load for supplemental OD exposure. The supplemental disease loading proposed must be based on the carrier's judgment after an evaluation of the operation.

Calendar Year Wage Adjustments

NCCl's standard methodology is to adjust frequency and severity values included in its rate filings to a common wage level before analyzing trends that may be present in those values. This practice allows NCCl to analyze trends over and above changes that may be due solely to wage inflation. In this year's filing, the frequency and severity values have been adjusted to the Policy Year 2021 average weekly wage (AWW) level using data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW).

In addition to the traditional growth in wages/salaries that may be expected to occur each year, the observed 2019-to-2020 and 2020-to-2021 AWW changes were also impacted by COVID-19 pandemic-related shifts in employment across industry sectors. While a change in industry-sector mix occurs to a small degree each year, its impact on the 2020 and 2021 AWW changes was unusually large, due to pandemic-related job losses, followed by wage growth in relatively low-wage industries. Therefore, the 2020 and 2021 AWW values were adjusted to exclude the estimated impact of the pandemic-related, industry-sector mix change.

The impact of industry-sector mix changes on the 2022 AWW change was less atypical than what was observed in 2020 and 2021. As such, the 2022 AWW value has not been modified to exclude the impact of industry-sector mix changes.

The adjustment made to the 2020 and 2021 AWW is reflected in the frequency and severity values shown in Appendix A-III Trend Factors. The overall impact of the 2020 and 2021 AWW adjustment, and the return to an unadjusted 2022 AWW, is expected to be immaterial.



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Part 2 Proposed Values

- Proposed Voluntary Market Advisory Rates for Inclusion in the Basic Manual
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- Proposed Values for Inclusion in the Retrospective Rating Plan Manual

Please note the following in connection with this filing:

- As a result of Item B-1397, effective January 1, 2008, a single combined rate is still calculated for Class Codes 7710 and 7711 via a payroll-weighted average of the separately indicated rates for these two class codes.
- The updated experience rating plan parameters reflect the methodology enhancements from Item E-1409.
- As a result of Item E-1410, claims attributable to COVID-19 with accident dates on or after July 1, 2023 will be included in experience rating calculations. Experience modifications calculated using the values on the following pages which are effective beginning July 1, 2024* and subsequent have the potential to be affected by COVID-19 claim experience.

^{*} In certain rare circumstances, a few experience modifications effective as early as March 16, 2024 may be affected.



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Proposed Voluntary Market Advisory Rates for Inclusion in the Basic Manual

The following pages include proposed:

- Voluntary market advisory rates and minimum premiums by class code, along with associated footnotes
- Miscellaneous values, such as:
 - Catastrophe and Terrorism provisions
 - Expense Constant and Minimum Premium parameters
 - o Maximum and minimum weekly payroll applicable for select class codes
 - o Premium determination for Partners and Sole Proprietors
 - o United States Longshore and Harbor Workers' Compensation Coverage Percentage

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Effective January 1, 2024

0005 0008 0016 0034 0035 0037 0042 0050 0059D 0065D 0066D 0067D	3.42 2.35 4.10 3.57 2.02 3.17 3.38 4.63 6.50	536 419 500 553 382 500 500 650 875	2081 2089 2095 2105 2110 2111 2112	3.37 4.03 3.21 3.88 2.67	531 603 513 587 454	2802 2835 2836	3.94 3.32	PREM 593	3372	RATE 3.21	PREM 513	4206	2.93	PREM 482
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0016 0034 0035 0036 0037 0042 0050 0059D	4.10 3.57 2.02 3.17 3.38 4.63 6.50	500 553 382 500 500 650	2095 2105 2110 2111	3.21 3.88 2.67	513 587		3.32		3373	4.51	656	4207	2.57	443
0034 0035 0036 0037 0042 0050 0059D 0065D 0066D	3.57 2.02 3.17 3.38 4.63 6.50	553 382 500 500 650	2105 2110 2111	3.88 2.67	587		2.82	525 470	3383	1.42	316	4207	2.57	443
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0036 0037 0042 0050 0059D 0065D 0066D	3.17 3.38 4.63 6.50	500 500 650	2111			2881	2.72	459	3400	1.96	376	4240	1.84	362
0037 0042 0050 0059D 0065D 0066D	3.38 4.63 6.50	500 650			707	2001	2.12	459	3400	1.90	370	4243	1.04	302
0037 0042 0050 0059D 0065D 0066D	3.38 4.63 6.50	500 650		2.64	450	2883	2.82	470	3507	3.01	491	4244	2.46	431
0042 0050 0059D 0065D 0066D	4.63 6.50 –	650		3.91	590	2915	2.69	456	3515	1.92	371	4250	1.83	361
0050 0059D 0065D 0066D	6.50 –		2114	2.28	411	2916	3.08	499	3548	1.39	313	4251	3.23	515
0059D 0065D 0066D	-	0/3	2121	1.37	311	2923	1.84	362	3559	3.59	555	4263	3.59	555
0066D		_	2130	1.87	366	2960	4.27	630	3574	0.96	266	4273	2.28	411
0066D														
	_	_	2131	1.69	346	3004	1.52	327	3581	1.47	322	4279	2.31	414
0067D	_	-	2143	2.25	408	3018	2.43	427	3612	1.94	373	4283	1.74	351
á .	_	_	2157	3.42	536	3022	3.34	527	3620	2.77	465	4299	1.79	357
0079	2.47	432	2172	1.61	337	3027	1.97	377	3629	2.05	386	4304	4.40	644
0083	4.22	500	2174	3.00	490	3028	2.74	461	3632	2.69	456	4307	1.58	334
l														
0106	7.50	985	2211	6.53	878	3030	4.81	689	3634	1.40	314	4351	1.03	273
0113	3.81	579	2220	2.59	445	3040	4.55	661	3635	1.71	348	4352	1.37	311
0170	3.38	532	2286		_	3041	3.65	562	3638	1.79	357	4360	-	-
0251	3.24	516	2288	4.11	612	3042	3.89	588	3642	1.83	361	4361	0.85	254
0401	9.24	Α	2302	1.83	361	3064	3.32	525	3643	1.81	359	4410	2.80	468
07741	0.40		2205	0.00	440	2070	2.02	400	2047	0.74	404	4400	4.70	004
0771N	0.40	- 044	2305	2.30	413	3076	2.93	482	3647	2.74	461	4420	4.76	684
	151.00	311	2361	1.89	368	3081D	5.38	752 552	3648	1.12	283	4431	1.21	293
	424.00	584	2362 2380	2.33	416	3082D	3.57	553 716	3681	0.64	230	4432	1.12 2.36	283 420
0917	3.05 4.86	496 695	2388	1.83 1.42	361	3085D	5.05	710	3685	1.21	293 256	4452 4459	2.75	463
1005	4.00	093	2300	1.42	316	3110	4.91	700	3719	0.87	230	4459	2.75	403
1016	13.41	1000	2402	2.51	436	3111	3.01	491	3724	3.90	589	4470	2.28	411
1164D	2.55	441	2413	2.00	380	3113	1.99	379	3726	3.96	596	4484	2.93	482
1165D	3.03	493	2416	2.46	431	3114	2.71	458	3803	2.43	427	4493	2.18	400
1320	1.48	323	2417	1.34	307	3118	1.50	325	3807	2.36	420	4511	0.54	219
1322	6.62	888	2501	2.22	404	3119	0.80	248	3808	3.36	530	4557	2.15	397
1430	3.72	569	2503	0.96	266	3122	1.69	346	3821	4.71	678	4558	1.65	342
1438	4.32	635	2534	_	_	3126	2.17	399	3822	3.85	584	4568	2.20	402
1452	2.18	400	2570	3.08	499	3131	1.55	331	3824	3.55	551	4581	0.96	266
1463	8.36	1000	2585	3.47	542	3132	2.38	422	3826	0.75	243	4583	3.11	502
1472	3.00	490	2586	4.01	601	3145	1.92	371	3827	1.76	354	4611	1.16	288
l														
1624D	3.09	500	2587	2.18	400	3146	1.97	377	3830	1.19	291	4635	2.74	461
1642	3.23	515	2589	2.25	408	3169	2.53	438	3851	3.01	491	4653	2.29	412
1654	3.72	569	2600	4.06	607	3179	2.09	390	3865	2.77	465	4665	7.06	937
1699	2.71	458	2623	5.59	775	3180	2.18	400	3881	4.03	603	4670	_	_
1701	2.49	434	2651	1.83	361	3188	2.09	390	4000	3.66	563	4683	3.37	531
1710D	2.97	487	2660	2.13	394	3220	1.55	331	4021	4.47	652	4686	2.00	380
1747	2.64	450	2670	_	_	3224	3.32	525	4024D	4.38	642	4692	0.59	225
1748	5.04	714	2683	- 0.00	444	3227	3.42	536	4034	5.48	763	4693	1.08	279
1803D	5.83	801	2688	2.28	411	3240	2.70	467	4036	2.51	436	4703	1.24	296
1924	2.44	428	2701	13.27	1000	3241	2.79	467	4038	2.18	400	4717	1.56	332
1925	3.81	579	2702	16.75	1000	3255	2.36	420	4062	2.40	424	4720	1.96	376
2002	3.00	490	2702	7.00		3255	2.36			2.40	424	4720		376
2002	3.00 4.12	490 613	2709 2710	7.00 7.22	930 954	3257	2.35 1.97	419 377	4101 4109	2.53 0.42	438 206	4740	1.32 3.31	524
2003	4.12	639	2710	3.99	599	3300	4.51	656	4110	0.42	237	4741	3.21	513
2014	4.55 2.57	443	2714	3.55	551	3303	2.49	434	4111	1.81	359	4751 4771N	2.25	452
2010	2.01	443	2131	3.55	331	3303	2.43	+04	7111	1.01	359	7// IIN	2.20	+52
2021	3.26	519	2735	6.13	834	3307	2.35	419	4114	2.31	414	4777	3.01	491
2039	2.85	474	2759	5.59	775	3315	2.82	470	4130	2.84	472	4825	0.81	249
2041	3.54	549	2790	1.71	348	3334	2.25	408	4131	5.04	714	4828	1.99	379
2065	2.00	380	2797	3.42	536	3336	2.43	427	4133	2.44	428	4829	0.96	266
2070	4.74	681	2799	5.05	716	3365	4.10	611	4149	0.80	248	4902	2.15	397

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

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WORKERS COMPENSATION AND EMPLOYERS LIABILITY

Effective January 1, 2024

CLASS CODE	RATE	MIN PREM	CLASS	RATE	MIN PREM	CLASS	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM
4923	1.11	282	6217	4.10	611	7337M	7.44	978	8058	2.48	433	8814M	0.21	183
5020	4.54	659	6229	4.13	614	7350F	5.34	747	8072	0.58	224	8815M	0.28	191
5022	5.95	815	6233	2.24	406	7360	3.61	557	8102	1.39	313	8820	0.14	175
5037	9.39	1000	6235	4.49	654	7370	4.01	601	8103	2.44	428	8824	1.76	354
5040	5.52	767	6236	4.69	676	7380	4.47	652	8106	4.59	665	8825	_	_
5057	3.51	546	6237	1.32	305	7382	4.61	667	8107	2.62	448	8826	1.67	344
5059	12.93	1000	6251D	5.10	721	7390	3.27	520	8111	2.21	403	8829	_	_
5102	5.33	746	6252D	2.50	435	7394M	5.10	721	8116	2.09	390	8831	1.11	282
5146	3.70	567	6306	4.51	656	7395M	5.67	784	8203	8.33	1000	8832	0.28	191
5160	2.75	463	6319	2.66	453	7398M	6.96	926	8204	4.16	618	8833	0.59	225
5183	2.44	428	6325	3.54	549	7402	0.22	184	8209	3.32	525	8835	1.78	356
5188	3.11	502	6400	4.20	622	7403	2.89	478	8215	3.02	492	8842	2.12	393
5190	1.83	361	6503	2.04	384	7405N	0.92	316	8227	3.17	509	8855	0.12	173
5191	0.94	263	6504	2.48	433	7420	4.47	652	8232	4.01	601	8856	0.54	219
5192	2.83	471	6702M*	3.33	526	7421	0.72	239	8233	2.45	430	8864	1.24	296
5213	6.28	851	6703M*	4.54	659	7422	1.57	333	8235	3.92	591	8868	0.40	204
5215	4.34	637	6704M*	3.70	567	7425	1.89	368	8263	5.94	813	8869	0.93	262
5221	3.99	599	6801F	4.91	700	7431N	0.95	321	8264	4.84	692	8871	0.05	166
5222	9.19	1000	6811	4.98	708	7445N	0.50	_	8265	5.07	718	8901	0.15	177
5223	4.24	626	6824F	5.81	799	7453N	0.51	-	8279	6.50	875	9012	0.93	262
5348	3.47	542	6826F	3.69	566	7502	1.43	317	8288	6.47	872	9014	2.32	415
5402	5.00	710	6834	2.29	412	7515	0.94	263	8291	3.80	578	9015	2.39	423
5403	6.05	826	6836	2.78	466	7520	2.31	414	8292	3.33	526	9016	2.17	399
5437	4.13	614	6843F	6.97	927	7538	2.18	400	8293	5.97	817	9019	2.68	455
5443	2.95	485	6845F	3.58	554	7539	1.65	342	8304	5.32	745	9033	1.67	344
5445	3.89	588	6854	4.92	701	7540	2.31	414	8350	4.56	662	9040	2.84	472
5462	4.49	654	6872F	6.23	845	7580	2.11	392	8380	2.38	422	9044	1.15	287
5472	6.11	832	6874F	10.32	1000	7590	3.68	565	8381	1.42	316	9052	1.47	322
5473	6.54	879	6882	6.18	840	7600	3.08	499	8385	2.18	400	9058	1.41	315
5474	5.55	771	6884	4.94	703	7605	1.80	358	8392	2.00	380	9060	1.23	295
5478	3.17	509	7016M	4.35	639	7610	0.59	225	8393	1.58	334	9061	1.00	270
5479	5.25	738	7016M 7024M	4.83	691	7705	4.12	613	8500	5.22	734	9062	1.00	270
5480	5.33	746	7024M	4.81	689	7710	42.51	1000	8601	0.29	192	9063	0.72	239
5491	1.87	366	7036M	9.78	1000	7711	42.51	1000	8602	1.60	336	9077F	4.95	705
5506	5.60	776	7047M	5.93	812	7720	2.55	441	8603	0.09	170	9082	1.03	273
FF07	2.40	F20	705014	0.50	000	7055	0.74	404	0000	4.47	222	0000	4.00	200
5507	3.42	536	7050M	6.56	882	7855	2.74	461	8606	1.47	322	9083	1.09	280
5508 5535	- 5.38	- 752	7090M 7098M	5.34 10.87	747 1000	8001 8002	2.14 1.73	395 350	8709F 8719	3.15 1.69	507 346	9084 9088a	1.02	272
5537	3.62	558	7096M	13.35	1000	8002	1.73	366	8720	0.91	260	9089	a 0.99	а 269
5551	11.63	1000	7133	2.88	477	8008	0.96	266	8721	0.28	191	9093	1.21	293
5000		604	745	0.50		0040	4.00	0.40	0700	6.44	470	0464	0.00	500
5606	1.10	281	7151M	3.50	545	8010	1.66	343	8723	0.11	172	9101	3.90	589
5610	3.99	599	7152M	4.78	686	8013	0.30	193	8725	2.32	415	9102	2.60	446
5645	7.30	963	7153M	3.89	588	8015	0.66	233	8726F	1.46	321	9154	1.52	327
5703 5705	9.87 11.73	1000 1000	7219 7222	6.15 6.00	837 820	8017 8018	1.33 2.69	306 456	8734M 8737M	0.43 0.39	207 203	9156 9170	2.35 8.79	419 1000
3705	11.73	1000	1222	0.00	020	0010	2.09	400	O/ 3/ IVI	0.38	203	9110	0.19	1000
5951	0.62	228	7225	7.09	940	8021	1.97	377	8738M	0.53	218	9178	4.87	696
6003	4.40	644	7230	6.57	883	8031	1.79	357	8742	0.32	195	9179	12.59	1000
6005	3.31	524	7231	6.21	843	8032	1.61	337	8745	3.32	525	9180	4.84	692
6018	2.38	422	7232	8.67	1000	8033	1.17	289	8748	0.49	214	9182	2.38	422
6045	4.80	688	7309F	6.10	831	8037	1.63	339	8755	0.45	210	9186	8.66	1000
6204	6.47	872	7313F	2.45	430	8039	1.57	333	8799	0.65	232	9220	4.44	648
6206	2.16	398	7317F	4.64	670	8044	2.14	395	8800	1.64	340	9402	3.63	559
6213	1.76	354	7327F	12.66	1000	8045	0.60	226	8803	0.05	166	9403	7.52	987
6214	1.40	314	7333M	5.45	760	8046	2.32	415	8805M	0.23	185	9410	1.97	377
6216	4.31	634	7335M	6.06	827	8047	0.78	246	8810	0.17	179	9501	3.62	558

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

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* Refer to the Footnotes Page for additional information on this class code.

Effective January 1, 2024

LASS ODE 505 516 519	RATE 2.98	MIN PREM	CLASS CODE	RATE	MIN PREM	CLASS		MIN	CLASS		MIN	CLASS		MIN
505 516					PREIN	CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM
516		488							Ì					
510	2.18	400												
515	3.12	503												
521	3.08	499												
522	2.57	443												
534	3.12	503												
554	6.42	866												
586	0.42	206												
600	2.30	413												
620	1.09	280												
									I			I		

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WORKERS COMPENSATION AND EMPLOYERS LIABILITY

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FOOTNOTES

- a Rate for each individual risk must be obtained from NCCI Customer Service or the Rating Organization having jurisdiction.
- A Minimum Premium \$100 per ginning location for policy minimum premium computation.
- D Rate for classification no longer includes disease loading. A supplemental disease loading may be added, as described in the *Basic Manual* rule, Supplemental disease exposure.
- F Rate provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Rate includes a provision for USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published rate is for risks that voluntarily purchase standard workers compensation and employers liability coverage. A provision for the USL&HW Assessment is included for those classifications under Program II USL Act.
- N This code is part of a ratable / non-ratable group shown below. The statistical non-ratable code and corresponding rate are applied in addition to the basic classification when determining premium.

Class	Non-Ratable
Code	Element Code
4771	0771
7405	7445
7431	7453

P Classification is computed on a per capita basis.

* Class Codes with Specific Footnotes

- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection code rate and elr each x 1.215.
- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate x 1.658 and elr x 1.607.
- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate and elr each x 1.35.

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MISCELLANEOUS VALUES

Basis of premium applicable in accordance with the Basic Manual notes for Code 7370 "Taxicab Co.": Employee operated vehicle										
Catastrophe (other than Certified Acts of Terrorism) - (Voluntary)										
Expense Constant ap	plicable in	accordance v	with the Ba	sic Manua	al rule			\$160		
Maximum Minimum P Note: Maximum Minimu								\$1,000		
Maximum Weekly Pay Sports or Park: Noncor								\$4,400		
Maximum Weekly Payroll for executive officers including members of limited liability companies and partners or sole proprietors in accordance with the <i>Basic Manual</i> rules, Rule for premium determination of executive officers, Rule for premium determination of members of LLCs, and Rule for premium determination for partners or sole proprietors										
Minimum Premium M	ultiplier							110		
Minimum Weekly Pay partners or sole prop of executive officers, R determination for partner	rietors in a ule for prer	ccordance w	rith the <i>Bas</i> ination of n	s <i>ic Manua</i> nembers o	<i>I</i> rules, Rule for <mark>բ</mark> f LLCs, and Rule	oremium determinati for premium	ion	\$550		
Premium Discount Pediscounts are applicable				<i>ual</i> rule, P	remium discount.) The following pre	mium			
i			Туре А	Туре В	1					
	First	\$10,000	- -							
	Next	190,000	9.1%	5.1%						
	Next	1,550,000	11.3%	6.5%						
	Over	1,750,000	12.3%	7.5%						
Terrorism (Voluntary) United States Longsh								0.01		

(Multiply a Non-F classification rate by a factor of 1.30 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.25) and the adjustment for differences in loss-based expenses (1.041).)

applicable only in connection with the Basic Manual rule, Federal coverages.....

Experience Rating Eligibility

A risk qualifies for experience rating on an intrastate basis when it meets the premium eligibility requirements for the state in which it operates. The eligibility amount varies by rating effective date. The *Experience Rating Plan Manual* should be referenced for the latest approved eligibility amounts by state and by effective date.

30%



Workers Compensation Rate Filing – January 1, 2024

Proposed Assigned Risk Rates for Inclusion in the Residual Market Manual

The following pages include proposed:

- Assigned risk rates and minimum premiums by class code, along with associated footnotes
- Miscellaneous values, such as:
 - Catastrophe and Terrorism provisions
 - o Expense Constant and Minimum Premium parameters
 - Maximum and minimum weekly payroll applicable for select class codes
 - o Premium determination for Partners and Sole Proprietors
 - United States Longshore and Harbor Workers' Compensation Coverage Percentage

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APPLICABLE TO ASSIGNED RISK POLICIES ONLY

01.400		MAIN	01.400				SIGNED		T .		BAILL	01.400		MAIN
CLASS CODE	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM	CLASS CODE	RATE	MIN PREM
0005	4.28	631	2081	4.21	623	2802	4.93	702	3372	4.01	601	4206	3.66	563
8000	2.94	483	2089	5.04	714	2835	4.15	617	3373	5.64	780	4207	3.21	513
0016	5.13	500	2095	4.01	601	2836	3.53	548	3383	1.78	356	4239	3.21	513
0034	4.46	650	2105	4.85	694	2841	4.54	659	3385	1.19	291	4240	3.26	519
0035	2.53	438	2110	3.34	527	2881	3.40	534	3400	2.45	430	4243	2.30	413
0000	2.00	100	2110	0.01	021	2001	0.10	001	0100	2.10	100	1210	2.00	110
0036	3.96	500	2111	3.30	523	2883	3.53	548	3507	3.76	574	4244	3.08	499
0037	4.23	500	2112	4.89	698	2915	3.36	530	3515	2.40	424	4250	2.29	412
0037	5.79	650	2114	2.85	474	2916	3.85	584	3548	1.74	351	4251	4.04	604
0050	8.13	1000	2121	1.71	348	2923	2.30	413	3559	4.49	654	4263	4.49	654
0059D	-	-	2130	2.34	417	2960	5.34	747	3574	1.20	292	4273	2.85	474
0065D	_	_	2131	2.11	392	3004	1.90	369	3581	1.84	362	4279	2.89	478
0066D	_	_	2143	2.81	469	3018	3.04	494	3612	2.43	427	4283	2.18	400
0067D	_	_	2157	4.28	631	3022	4.18	620	3620	3.46	541	4299	2.24	406
0079	3.09	500	2172	2.01	381	3027	2.46	431	3629	2.56	442	4304	5.50	765
0083	5.28	500	2174	3.75	573	3028	3.43	537	3632	3.36	530	4307	1.98	378
0000	0.20	300	2174	0.70	0/0	3020	0.40	001	3002	0.00	330	4001	1.50	070
0106	9.38	1000	2211	8.16	1000	3030	6.01	821	3634	1.75	353	4351	1.29	302
0113	4.76	684	2220	3.24	516	3040	5.69	786	3635	2.14	395	4352	1.71	348
0170	4.23	625	2286	_	_	3041	4.56	662	3638	2.24	406	4360	_	_
0251	4.05	606	2288	5.14	725	3042	4.86	695	3642	2.29	412	4361	1.06	277
0401	11.55	Α	2302	2.29	412	3064	4.15	617	3643	2.26	409	4410	3.50	545
0771N	0.50	_	2305	2.88	477	3076	3.66	563	3647	3.43	537	4420	5.95	815
0908P	189.00	349	2361	2.36	420	3081D	6.73	900	3648	1.40	314	4431	1.51	326
0913P	530.00	690	2362	2.91	480	3082D	4.46	651	3681	0.80	248	4432	1.40	314
0917	3.81	579	2380	2.29	412	3085D	6.31	854	3685	1.51	326	4452	2.95	485
1005	6.08	829	2388	1.78	356	3110	6.14	835	3719	1.09	280	4459	3.44	538
1016	16.76	1000	2402	3.14	505	3111	3.76	574	3724	4.88	697	4470	2.85	474
1164D	3.19	511	2413	2.50	435	3113	2.49	434	3726	4.95	705	4484	3.66	563
1165D	3.79	577	2416	3.08	499	3114	3.39	533	3803	3.04	494	4493	2.73	460
1320	1.85	364	2417	1.68	345	3118	1.88	367	3807	2.95	485	4511	0.68	235
1322	8.28	1000	2501	2.78	466	3119	1.00	270	3808	4.20	622	4557	2.69	456
1430	4.65	672	2503	1.20	292	3122	2.11	392	3821	5.89	808	4558	2.06	387
1438	5.40	754	2534	-		3126	2.71	458	3822	4.81	689	4568	2.75	463
									3824			4581		
1452	2.73	460	2570	3.85	584	3131	1.94	373		4.44	648		1.20	292
1463	10.45	1000	2585	4.34	637	3132	2.98	488	3826	0.94	263	4583	3.89	588
1472	3.75	573	2586	5.01	711	3145	2.40	424	3827	2.20	402	4611	1.45	320
1624D	3.86	585	2587	2.73	460	3146	2.46	431	3830	1.49	324	4635	3.43	537
1642	4.04	604	2589	2.81	469	3169	3.16	508	3851	3.76	574	4653	2.86	475
1654	4.65	672	2600	5.08	719	3179	2.61	447	3865	3.46	541	4665	8.83	1000
1699	3.39	533	2623	6.99	929	3180	2.73	460	3881	5.04	714	4670	_	_
1701	3.11	502	2651	2.29	412	3188	2.61	447	4000	4.58	664	4683	4.21	623
1710D	3.71	568	2660	2.66	453	3220	1.94	373	4021	5.59	775	4686	2.50	435
1747	3.30	523	2670	2.00	-	3224	4.15	617	4024D	5.48	763	4692	0.74	241
1747		853	2683	_	_	3227		631	40240		914	4693	1.35	309
	6.30			- 0.05	474		4.28			6.85				
1803D	7.29	962	2688	2.85	474	3240		-	4036	3.14	505	4703	1.55	331
1924	3.05	496	2701	16.59	1000	3241	3.49	544	4038	2.73	460	4717	1.95	375
1925	4.76	684	2702	20.94	1000	3255	2.95	485	4062	3.00	490	4720	2.45	430
2002	3.75	573	2709	8.75	1000	3257	2.94	483	4101	3.16	508	4740	1.65	342
2003	5.15	727	2710	9.03	1000	3270	2.46	431	4109	0.53	218	4741	4.14	615
2014	5.44	758	2714	4.99	709	3300	5.64	780	4110	0.88	257	4751	4.01	601
2016	3.21	513	2731	4.44	648	3303	3.11	502	4111	2.26	409	4771N	2.81	524
2021	4.08	609	2735	7.66	1000	3307	2.94	483	4114	2.89	478	4777	3.76	574
2021						3315			4114					
	3.56	552 647	2759	6.99	929		3.53	548		3.55	551	4825	1.01	271
2041	4.43	647	2790	2.14	395	3334	2.81	469	4131	6.30	853	4828	2.49	434
2065	2.50	435	2797	4.28	631	3336	3.04	494	4133	3.05	496	4829	1.20	292
2070	5.93	812	2799	6.31	854	3365	5.13	724	4149	1.00	270	4902	2.69	456

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

Refer to the Classification codes section of the **Basic Manual** for any state specific classification phraseology.

^{*} Refer to the Footnotes Page for additional information on this class code.

WORKERS COMPENSATION AND EMPLOYERS LIABILITY

Effective January 1, 2024

APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS		MIN	CLASS		MIN	CLASS	SIGNED I	MIN	CLASS		MIN	CLASS		MIN
CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM
4923	1.39	313	6217	5.13	724	7337M	9.30	1000	8058	3.10	501	8814M	0.26	189
5020	5.68	785	6229	5.16	728	7350F	6.68	895	8072	0.73	240	8815M	0.35	199
5022	7.44	978	6233	2.80	468	7360	4.51	656	8102	1.74	351	8820	0.18	180
5037	11.74	1000	6235	5.61	777	7370	5.01	711	8103	3.05	496	8824	2.20	402
5040	6.90	919	6236	5.86	805	7380	5.59	775	8106	5.74	791	8825	-	_
5057	4.00	0.40	0007	4.05	0.40	7000	F 70	704	0407	0.00	504	0000	0.00	200
5057	4.39	643	6237	1.65	342	7382	5.76	794	8107	3.28	521	8826	2.09	390
5059	16.16	1000	6251D	6.38	862	7390	4.09	610	8111	2.76	464	8829		_
5102	6.66	893	6252D	3.13	504	7394M	6.38	862	8116	2.61	447	8831	1.39	313
5146	4.63	669	6306	5.64	780	7395M	7.09	940	8203	10.41	1000	8832	0.35	199
5160	3.44	538	6319	3.33	526	7398M	8.70	1000	8204	5.20	732	8833	0.74	241
E402	2.05	406	6225	4.42	647	7402	0.20	101	9200	4.15	617	0025	2.22	405
5183	3.05	496	6325	4.43	647	7402	0.28	191	8209	4.15		8835	2.23	405
5188	3.89	588	6400	5.25	738	7403	3.61	557	8215	3.78	576	8842	2.65	452
5190	2.29	412	6503	2.55	441	7405N	1.15	356	8227	3.96	596	8855	0.15	177
5191	1.18	290	6504	3.10	501	7420	5.59	775	8232	5.01	711	8856	0.68	235
5192	3.54	549	6702M*	4.16	618	7421	0.90	259	8233	3.06	497	8864	1.55	331
5040	7.05	1000	6703M*	F 60	705	7400	4.00	376	8235	4.90	699	8868	0.50	045
5213	7.85	1000		5.68	785	7422	1.96						0.50	215
5215	5.43	757	6704M*	4.63	669	7425	2.36	420	8263	7.43	977	8869	1.16	288
5221	4.99	709	6801F	6.14	835	7431N	1.19	361	8264	6.05	826	8871	0.06	167
5222	11.49	1000	6811	6.23	845	7445N	0.63	-	8265	6.34	857	8901	0.19	181
5223	5.30	743	6824F	7.26	959	7453N	0.64	-	8279	8.13	1000	9012	1.16	288
5348	4.34	637	6826F	4.61	667	7502	1.79	357	8288	8.09	1000	9014	2.90	479
5402	6.25	848	6834	2.86	475	7515	1.18	290	8291	4.75	683	9015	2.99	489
5403	7.56	992	6836	3.48	543	7520	2.89	478	8292	4.16	618	9016	2.71	458
5437	5.16	728	6843F	8.71	1000	7538	2.73	460	8293	7.46	981	9019	3.35	529
5443	3.69	566	6845F	4.48	653	7539	2.06	387	8304	6.65	892	9033	2.09	390
5445	4.00	005	0054	0.45	007	75.40	0.00	470	0050	F 70	707	0040	0.55	554
5445	4.86	695	6854	6.15	837	7540	2.89	478	8350	5.70	787	9040	3.55	551
5462	5.61	777	6872F	7.79	1000	7580	2.64	450	8380	2.98	488	9044	1.44	318
5472	7.64	1000	6874F	12.90	1000	7590	4.60	666	8381	1.78	356	9052	1.84	362
5473	8.18	1000	6882	7.73	1000	7600	3.85	584	8385	2.73	460	9058	1.76	354
5474	6.94	923	6884	6.18	840	7605	2.25	408	8392	2.50	435	9060	1.54	329
E 470	2.00	F00	704614	E 44	750	7040	0.74	044	0000	4.00	270	0001	4.05	200
5478	3.96	596	7016M	5.44	758	7610	0.74	241	8393	1.98	378	9061	1.25	298
5479	6.56	882	7024M	6.04	824	7705	5.15	727	8500	6.53	878	9062	1.35	309
5480	6.66	893	7038M	6.01	821	7710	53.14	1000	8601	0.36	200	9063	0.90	259
5491	2.34	417	7046M	12.23	1000	7711	53.14	1000	8602	2.00	380	9077F	6.19	841
5506	7.00	930	7047M	7.41	975	7720	3.19	511	8603	0.11	172	9082	1.29	302
5507	4.00	004	705014	0.00	1000	7055	2.42	507	0000	4.04	200	0000	4.20	240
5507	4.28	631	7050M	8.20	1000	7855	3.43	537	8606	1.84	362	9083	1.36	310
5508	- c 70	-	7090M	6.68	895	8001	2.68	455	8709F	3.94	593	9084	1.28	301
5535	6.73	900	7098M	13.59	1000	8002	2.16	398	8719	2.11	392	9088a	a	a
5537 5551	4.53 14.54	658 1000	7099M 7133	16.69 3.60	1000 556	8006 8008	2.34 1.20	417 292	8720 8721	1.14 0.35	285 199	9089 9093	1.24 1.51	296 326
5551	14.54	1000	7133	3.00	556	0000	1.20	292	0/21	0.33	199	9093	1.51	320
5606	1.38	312	7151M	4.38	642	8010	2.08	389	8723	0.14	175	9101	4.88	697
5610	4.99	709	7151M	5.98	818	8013	0.38	202	8725	2.90	479	9102	3.25	518
5645	9.13	1000	7152M	4.86	695	8015	0.83	251	8726F	1.83	361	9154	1.90	369
5703	12.34	1000	7155W	7.69	1000	8017	1.66	343	8734M	0.54	219	9154	2.94	483
5705	14.66	1000	7219	7.59	985	8017	3.36	530	8737M	0.54	219	9170	10.99	1000
3703	14.00	1000	1222	7.50	300	0010	3.30	550	07 37 IVI	0.48	Z 14	3110	10.55	1000
5951	0.78	246	7225	8.86	1000	8021	2.46	431	8738M	0.66	233	9178	6.09	830
6003	5.50	765	7230	8.21	1000	8031	2.24	406	8742	0.40	204	9179	15.74	1000
6005	4.14	615	7231	7.76	1000	8032	2.24	381	8745	4.15	617	9180	6.05	826
6018	2.98	488	7232	10.84	1000	8033	1.46	321	8748	0.61	227	9182	2.98	488
6045	6.00	820	7309F	7.63	999	8037	2.04	384	8755	0.56	222	9186	10.83	1000
00.70	3.00	320	, 55551	7.00	555	0007	2.07	304	0.00	3.00	~~~	0.50	10.00	1300
6204	8.09	1000	7313F	3.06	497	8039	1.96	376	8799	0.81	249	9220	5.55	771
6206	2.70	457	7317F	5.80	798	8044	2.68	455	8800	2.05	386	9402	4.54	659
6213	2.20	402	7327F	15.83	1000	8045	0.75	243	8803	0.06	167	9403	9.40	1000
6214	1.75	353	7333M	6.81	909	8046	2.90	479	8805M	0.00	192	9410	2.46	431
6216	5.39	753	7335M	7.58	994	8047	0.98	268	8810	0.29	183	9501	4.53	658
0210	ა.აშ	100	1 333IVI	1.00	JJ4	0047	0.80	200	0010	U.Z I	103	900 I	4.00	000

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

Refer to the Classification codes section of the **Basic Manual** for any state specific classification phraseology.

^{*} Refer to the Footnotes Page for additional information on this class code.

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Effective January 1, 2024

APPLICABLE TO ASSIGNED RISK POLICIES ONLY

CLASS		MIN	CLASS		MIN	CLASS	SIGNED	MIN	CLASS		MIN	CLASS		MIN
CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM	CODE	RATE	PREM
9505	3.73	570												
9516	2.73	460												
9519	3.90	589												
9521 9522	3.85 3.21	584 513												
9322	3.21	313												
9534	3.90	589												
9554	8.03	1000												
9586	0.53	218												
9600	2.88	477												
9620	1.36	310												

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WORKERS COMPENSATION AND EMPLOYERS LIABILITY

Effective January 1, 2024 APPLICABLE TO ASSIGNED RISK POLICIES ONLY

FOOTNOTES

- a Rate for each individual risk must be obtained from NCCI Customer Service or the Rating Organization having jurisdiction.
- A Minimum Premium \$100 per ginning location for policy minimum premium computation.
- D Rate for classification no longer includes disease loading. A supplemental disease loading may be added, as described in the **Basic Manual** rule, Supplemental disease exposure.
- F Rate provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Rate includes a provision for USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published rate is for risks that voluntarily purchase standard workers compensation and employers liability coverage. A provision for the USL&HW Assessment is included for those classifications under Program II USL Act. For the residual market, coverage under the Federal Employers' Liability Act (FELA) for employees of interstate railroads is not available for codes 6702, 6703, 6704, 7151, 7152, 7153, 8734, 8737, 8738, 8805, 8814, and 8815.
- N This code is part of a ratable / non-ratable group shown below. The statistical non-ratable code and corresponding rate are applied in addition to the basic classification when determining premium.

Class	Non-Ratable
Code	Element Code
4771	0771
7405	7445
7431	7453

P Classification is computed on a per capita basis.

* Class Codes with Specific Footnotes

- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection code rate and elr each x 1.215.
- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate x 1.658 and elr x 1.607.
- Rate and rating values only appropriate for laying or relaying of tracks or maintenance of way no work on elevated railroads. Otherwise, assign appropriate construction or erection class rate and elr each x 1.35.

Effective January 1, 2024 APPLICABLE TO ASSIGNED RISK POLICIES ONLY

MISCELLANEOUS VALUES

Basis of premium applicable in accordance with the Basic Manual notes for Code 7370 "Taxicab Co.":	
Employee operated vehicle	\$85,800 \$57,200
Catastrophe (other than Certified Acts of Terrorism) - (Assigned Risk)	0.01
Expense Constant applicable in accordance with the Basic Manual rule.	\$160
Maximum Minimum Premium Note: Maximum Minimum Premium varies for farming and agricultural class codes	\$1,000
Maximum Weekly Payroll applicable in accordance with the Basic Manual notes for Code 9178 "Athletic Sports or Park: Noncontact Sports," and Code 9179 "Athletic Sports or Park: Contact Sports"	\$4,400
Maximum Weekly Payroll for executive officers including members of limited liability companies and partners or sole proprietors in accordance with the <i>Basic Manual</i> rules, Rule for premium determination of executive officers, Rule for premium determination of members of LLCs, and Rule for premium	
determination for partners or sole proprietors	\$4,400
Minimum Premium Multiplier	110
Minimum Weekly Payroll for executive officers including members of limited liability companies and partners or sole proprietors in accordance with the <i>Basic Manual</i> rules, Rule for premium determination of executive officers, Rule for premium determination of members of LLCs, and Rule for premium	
determination for partners or sole proprietors	\$550
Terrorism - (Assigned Risk)	0.01
United States Longshore and Harbor Workers' Compensation Coverage Percentage applicable only in connection with the <i>Basic Manual</i> rule, Federal coverages	30%

(Multiply a Non-F classification rate by a factor of 1.30 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.25) and the adjustment for differences in loss-based expenses (1.041).)

Experience Rating Eligibility

A risk qualifies for experience rating on an intrastate basis when it meets the premium eligibility requirements for the state in which it operates. The eligibility amount varies by rating effective date. The *Experience Rating Plan Manual* should be referenced for the latest approved eligibility amounts by state and by effective date.



Workers Compensation Rate Filing – January 1, 2024

Proposed Values for Inclusion in the Experience Rating Plan Manual

The following pages include proposed values for inclusion in the Experience Rating Plan Manual:

- Description of Expected Loss Rates and D-ratios
- Description of the Weighting and Ballast values
- Expected Loss Rates and D-ratios by class code
- Table of Weighting Values
- Table of Ballast Values
- Experience Rating Premium Eligibility Amounts



Workers Compensation Rate Filing – January 1, 2024

Proposed Rating Values

Description of Expected Loss Rates and D-ratios

An expected loss rate for a classification is used to estimate the expected losses per \$100 of payroll during the experience rating period for risks within that classification. These expected losses are then compared with the actual losses of a risk during the experience rating period to determine the experience modification (mod).

The actual losses reflect the loss data during the experience rating period. Expected losses and actual losses must be at the same level to enable an appropriate comparison for purposes of the experience mod calculation. As such, the proposed rates are adjusted to reflect the average loss levels of the experience rating period. This is accomplished through the application of ELR factors to the proposed underlying pure premiums. These ELR factors, calculated by hazard group (HG), remove the effects of the following: loss development, expected losses in excess of the State Accident Limit, a portion of medical-only losses, benefit changes, trend, loss-based expenses, experience, and assigned risk programs.

In experience rating, losses are divided into primary and excess portions. For each claim, losses below the split point are primary losses, while losses above the split point are excess losses. The D-ratio represents the estimated ratio of expected primary losses to expected total losses for a classification. The D-ratio is used to determine the expected excess losses to be used in the experience mod calculation.

D-ratios are calculated by hazard group and are based on the latest three years of Unit Statistical Data trended to the midpoint of the proposed experience rating period. A comparison of the resulting D-ratios across hazard groups is done to ensure that they monotonically decrease from hazard group A to hazard group G. If they do not, an adjustment is made by averaging the D-ratios over adjacent hazard groups. The final D-ratio for each classification is the hazard group D-ratio.

An adjustment to the ELR factors is necessary so that the resulting ELRs produce an expected intrastate experience rating off-balance that equals the targeted intrastate experience rating off-balance used in the calculation of the overall rate level change for the state. Preliminary ELR factors are calculated by class code utilizing the appropriate hazard group factors and underlying pure premiums. Intrastate experience rating modifications for the most recent year of rating effective dates available at the time of the production of the filing are calculated based on the preliminary ELRs and D-ratios, and the losses underlying the mod calculations are adjusted for trend and to the appropriate benefit level of the data that will be used for experience ratings in the proposed effective period. The trend is applied separately by frequency and severity using selected values that are appropriate for the time period covered. It should be noted that the loss ratio trends used in other parts of the filing may not match the ELR trends due to possible differences between the experience rating trend periods and the ratemaking trend periods. An average of these intrastate experience modifications is calculated, and an iterative process follows where the ELR factors are adjusted up or down, class ELRs are recalculated, and experience rating modifications are restated until the target average intrastate experience mod is achieved.



Workers Compensation Rate Filing – January 1, 2024

Proposed Rating Values

The final ELR for each classification is calculated as follows:

ELR = {(HG indemnity ELR factor) x (indemnity pure premium) + (HG medical ELR factor) x (medical pure premium)} x Manual/Standard Ratio

Description of the Weighting and Ballast Values

The weighting value (W) and ballast value (B) influence the degree to which an employer's actual losses impact the experience rating modification for employers of various sizes - generally described as excess loss credibility - and are governed by the formulas in Item E-1409.

One element of these formulas is the G-value, which represents the state average claim severity in thousands of dollars and reflects the state accident limitation and the reduction of medical only losses. The state accident limit is used to curtail the impact of large claims on the experience modification and is based on a state-level 95th percentile of lost-time claims so that the limitation is expected to impact the largest 5% of lost-time claims.

The values for W and B are such that larger employers receive higher excess loss credibility in their experience modification calculation than smaller employers.

The ballast value is a stabilizing value designed to control the effect of actual loss experience on the experience rating modification. It is added to both the numerator and denominator in the experience modification calculation and increases as expected losses increase.

The weighting value for various levels of expected losses is provided in the Table of Weighting Values.

The ballast value for various levels of expected losses is provided in the Table of Ballast Values.

Effective January 1, 2024

TABLE OF EXPECTED LOSS RATES AND DISCOUNT RATIOS APPLICABLE TO ALL POLICIES

CLASS CODE	ELR	D RATIO	CLASS CODE	ELR	D RATIO	CLASS CODE	ELR	D RATIO	CLASS CODE	ELR	D RATIO	CLASS CODE	ELR	D RATIO
0005	1.95	0.49	2081	2.06	0.52	2802	2.14	0.47	3372	1.74	0.47	4206	1.67	0.49
8000	1.34	0.49	2089	2.29	0.49	2835	2.03	0.52	3373	2.57	0.49	4207	1.14	0.40
0016	1.97	0.42	2095	1.74	0.47	2836	1.73	0.52	3383	0.81	0.49	4239	1.14	0.40
0034	1.94	0.47	2105	2.38	0.52	2841	2.07	0.49	3385	0.54	0.49	4240	1.60	0.52
0035	1.09	0.47	2110	1.52	0.49	2881	1.67	0.52	3400	1.11	0.49	4243	1.00	0.47
0036	1.81	0.49	2111	1.50	0.49	2883	1.61	0.49	3507	1.64	0.47	4244	1.19	0.42
0037	1.63	0.42	2112	2.23	0.49	2915	1.30	0.42	3515	1.04	0.47	4250	0.99	0.47
0042	2.51	0.47	2114	1.40	0.52	2916	1.48	0.42	3548	0.79	0.49	4251	1.84	0.49
0050	3.13	0.42	2121	0.84	0.52	2923	1.13	0.52	3559	1.95	0.47	4263	1.95	0.47
0059	-	-	2130	1.02	0.47	2960	2.32	0.47	3574	0.55	0.49	4273	1.24	0.47
0065	_	_	2131	0.97	0.49	3004	0.67	0.40	3581	0.84	0.49	4279	1.12	0.42
0066	_	_	2143	1.38	0.52	3018	1.07	0.40	3612	1.05	0.47	4283	0.99	0.49
0067	_	_	2157	1.95	0.49	3022	1.90	0.49	3620	1.34	0.42	4299	0.97	0.47
0079	1.34	0.47	2172	0.78	0.42	3027	0.95	0.42	3629	1.11	0.47	4304	2.39	0.47
0083	2.29	0.47	2174	1.71	0.49	3028	1.32	0.42	3632	1.46	0.47	4307	0.97	0.52
0106	3.31	0.40	2211	3.15	0.42	3030	2.32	0.42	3634	0.76	0.47	4351	0.59	0.49
0113	2.17	0.49	2220	1.41	0.47	3040	2.47	0.47	3635	0.93	0.47	4352	0.78	0.49
0170	1.93	0.49	2286	1.41	0.47	3041	1.98	0.47	3638	1.02	0.49	4360	0.28	0.42
0251	1.76	0.47	2288	2.34	0.49	3042	2.12	0.47	3642	1.04	0.49	4361	0.48	0.49
0401	4.07	0.40	2302	0.99	0.47	3064	1.80	0.47	3643	0.87	0.42	4410	1.60	0.49
0771	_	_	2305	1.11	0.42	3076	1.67	0.49	3647	1.49	0.47	4420	2.10	0.40
0908	82.11	0.47	2361	1.03	0.47	3081	2.92	0.47	3648	0.69	0.52	4431	0.74	0.52
0913	229.92	0.47	2362	1.33	0.49	3082	1.72	0.42	3681	0.36	0.49	4432	0.69	0.52
0917	1.87	0.52	2380	1.04	0.49	3085	2.74	0.47	3685	0.69	0.49	4452	1.28	0.47
1005	1.97	0.38	2388	0.87	0.52	3110	2.66	0.47	3719	0.35	0.38	4459	1.33	0.42
1016	5.42	0.38	2402	1.21	0.42	3111	1.72	0.49	3724	1.57	0.38	4470	1.24	0.47
1164	1.03	0.38	2413	1.09	0.47	3113	1.08	0.47	3726	1.60	0.38	4484	1.67	0.49
1165	1.22	0.38	2416	1.40	0.49	3114	1.47	0.47	3803	1.38	0.49	4493	1.19	0.47
1320	0.65	0.40	2417	0.76	0.49	3118	0.92	0.52	3807	1.35	0.49	4511	0.29	0.47
1322	2.68	0.38	2501	1.26	0.49	3119	0.51	0.56	3808	1.82	0.47	4557	1.04	0.42
1430	1.79	0.42	2503	0.55	0.49	3122	1.04	0.52	3821	2.27	0.42	4558	0.89	0.47
1438	2.08	0.42	2534	1.26	0.49	3126	1.18	0.47	3822	2.19	0.49	4568	1.06	0.42
1452	1.06	0.42	2570	1.76	0.49	3131	0.84	0.47	3824	2.02	0.49	4581	0.42	0.40
1463	3.38	0.38	2585	1.88	0.47	3132	1.36	0.49	3826	0.41	0.47	4583	1.37	0.40
1472	1.45	0.42	2586	2.28	0.49	3145	1.04	0.47	3827	1.00	0.49	4611	0.66	0.49
1624	1.36	0.40	2587	1.25	0.49	3146	1.07	0.47	3830	0.65	0.47	4635	1.21	0.40
1642	1.56	0.42	2589	1.22	0.47	3169	1.44	0.49	3851	1.72	0.49	4653	1.31	0.49
1654	1.80	0.42	2600	2.32	0.49	3179	1.19	0.49	3865	1.70	0.52	4665	3.40	0.42
1699	1.30	0.42	2623	2.70	0.42	3180	1.24	0.49	3881	2.18	0.47	4670	1.83	0.47
1701	1.10	0.40	2651	1.04	0.49	3188	1.13	0.47	4000	1.61	0.40	4683	1.83	0.47
1710	1.43	0.42	2660	1.31	0.52	3220	0.84	0.47	4021	2.42	0.47	4686	0.97	0.42
1747	1.28	0.42	2670	1.30	0.49	3224	2.04	0.52	4024	2.42	0.42	4692	0.33	0.42
1747	2.43	0.42	2683	1.26	0.49	3227	1.95	0.32	4024	2.11	0.42	4693	0.55	0.49
1803	2.43	0.42	2688	1.20	0.49	3240	1.95	0.49	4034	1.21	0.42	4703	0.67	0.49
1924	1.39	0.42	2701	5.87	0.49	3240	1.59	0.49	4038	1.34	0.42	4717	0.96	0.47
1925	2.07	0.47	2702	6.76	0.38	3255	1.45	0.52	4062	1.30	0.47	4720	1.06	0.47
2002	2.07 1.71	0.47	2702	3.09	0.38	3255	1.45	0.52	4101	1.30	0.47	4740	0.53	0.47
2002	2.24	0.49	2709	3.48	0.40	3257	1.34	0.49	4101	0.24	0.47	4740	1.80	0.38
2003	2.24	0.47	2710	3.46 2.27	0.42	3300	2.76	0.49	41109	0.24	0.49	4741	1.55	0.47
2014	1.47	0.42	2731	2.02	0.49	3303	1.42	0.52	4111	1.03	0.49	4771	0.99	0.42
2021	1.77	0.47	2735	3.49	0.49	3307	1.27	0.47	4114	1.26	0.47	4777	1.33	0.40
2039	1.63	0.47	2759	3.49	0.49	3315		0.47	4114	1.62	0.47	4825	0.39	0.40
							1.61							
2041	2.02	0.49	2790	1.05	0.52	3334	1.22	0.47	4131	2.87	0.49	4828	0.88	0.40
2065	1.09	0.47	2797	2.09	0.52	3336	1.32	0.47	4133	1.50	0.52	4829	0.42	0.40
2070	2.58	0.47	2799	2.74	0.47	3365	1.81	0.40	4149	0.49	0.52	4902	1.22	0.49

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

EXPERIENCE RATING PLAN MANUAL

Effective January 1, 2024

TABLE OF EXPECTED LOSS RATES AND DISCOUNT RATIOS APPLICABLE TO ALL POLICIES

CLASS		D	CLASS		D	CLASS	LE IO AL	D	CLASS		D	CLASS		D
CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO
4923	0.60	0.47	6217	1.66	0.38	7337	2.92	0.38	8058	1.41	0.49	8814	0.12	0.49
5020	2.00	0.40	6229	1.99	0.42	7350F	1.86	0.36	8072	0.36	0.49	8815	0.12	0.49
5022	2.40	0.40	6233	0.90	0.38	7360	1.74	0.42	8102	0.79	0.49	8820	0.10	0.42
5037	3.79	0.38	6235	1.81	0.38	7370	2.29	0.49	8103	1.32	0.47	8824	1.14	0.56
5040	2.23	0.38	6236	2.27	0.42	7380	2.16	0.42	8106	2.21	0.42	8825	1.02	0.52
0010	2.20	0.00	0200	2.21	0.12	7000	2.10	0.12	0100	2.2.	0.12	0020	1.02	0.02
5057	1.42	0.38	6237	0.58	0.40	7382	2.50	0.47	8107	1.15	0.40	8826	1.02	0.52
5059	5.22	0.38	6251	2.25	0.40	7390	1.87	0.49	8111	1.20	0.47	8829	1.14	0.56
5102	2.35	0.40	6252	1.01	0.38	7394	2.06	0.38	8116	1.14	0.47	8831	0.71	0.56
5146	1.79	0.42	6306	1.99	0.40	7395	2.28	0.38	8203	4.52	0.47	8832	0.16	0.49
5160	1.11	0.38	6319	1.07	0.38	7398	2.71	0.38	8204	2.26	0.47	8833	0.33	0.49
5183	1.08	0.40	6325	1.43	0.38	7402	0.12	0.49	8209	1.89	0.49	8835	1.01	0.49
5188	1.37	0.40	6400	2.02	0.42	7403	1.65	0.49	8215	1.46	0.42	8842	1.37	0.56
5190	0.81	0.40	6503	1.16	0.49	7405	0.53	0.49	8227	1.40	0.40	8855	0.07	0.49
5191	0.45	0.42	6504	1.41	0.49	7420	1.81	0.38	8232	1.93	0.42	8856	0.31	0.49
5192	1.53	0.47	6702	1.61	0.42	7421	0.35	0.42	8233	1.19	0.42	8864	0.76	0.52
5213	2.53	0.38	6703	2.12	0.42	7422	0.69	0.40	8235	2.13	0.47	8868	0.25	0.52
5215	2.09	0.42	6704	1.79	0.42	7425	0.84	0.40	8263	3.22	0.47	8869	0.57	0.52
5221	1.76	0.40	6801F	1.82	0.38	7431	0.42	0.40	8264	2.34	0.42	8871	0.03	0.49
5222	3.71	0.38	6811	2.40	0.42	7445	-	-	8265	2.23	0.40	8901	0.07	0.42
5223	2.05	0.42	6824F	2.16	0.38	7453	_	_	8279	2.86	0.40	9012	0.45	0.42
0220	2.00	0.42	002-1	2.10	0.00	7400			0213	2.00	0.40	3012	0.40	0.42
5348	1.67	0.42	6826F	1.37	0.38	7502	0.69	0.42	8288	3.51	0.47	9014	1.32	0.49
5402	2.85	0.49	6834	1.31	0.49	7515	0.38	0.38	8291	2.06	0.47	9015	1.30	0.47
5403	2.67	0.40	6836	1.51	0.47	7520	1.25	0.47	8292	1.90	0.49	9016	1.23	0.49
5437	1.82	0.40	6843F	2.28	0.34	7538	0.88	0.38	8293	3.40	0.49	9019	1.29	0.42
5443	1.60	0.47	6845F	1.17	0.34	7539	0.73	0.40	8304	2.35	0.40	9033	0.91	0.47
0440	1.00	0.47	00401	1.17	0.04	7000	0.70	0.40	0004	2.00	0.40	3000	0.51	0.47
5445	1.57	0.38	6854	2.17	0.40	7540	0.93	0.38	8350	2.01	0.40	9040	1.74	0.52
5462	2.17	0.42	6872F	2.04	0.34	7580	1.02	0.42	8380	1.29	0.47	9044	0.70	0.52
5472	2.47	0.38	6874F	3.37	0.34	7590	1.77	0.42	8381	0.77	0.47	9052	0.90	0.52
5473	2.64	0.38	6882	2.72	0.40	7600	1.48	0.42	8385	1.19	0.47	9058	0.91	0.56
5474	2.24	0.38	6884	2.12	0.40	7605	0.79	0.42	8392	1.23	0.52	9060	0.75	0.52
3474	2.24	0.50	0004	2.10	0.40	7003	0.79	0.40	0032	1.25	0.52	3000	0.75	0.52
5478	1.40	0.40	7016	1.76	0.38	7610	0.28	0.42	8393	0.77	0.42	9061	0.61	0.52
5479	2.53	0.42	7024	1.95	0.38	7705	2.24	0.47	8500	2.52	0.42	9062	0.66	0.52
5480	2.35	0.42	7038	1.94	0.38	7710	18.75	0.40	8601	0.13	0.40	9063	0.44	0.52
5491	0.82	0.40	7046	3.95	0.38	7711	18.75	0.40	8602	0.77	0.42	9077F	2.04	0.46
5506	2.47	0.40	7047	2.32	0.38	7720	1.23	0.42	8603	0.05	0.42	9082	0.66	0.56
3300	2.41	0.40	7047	2.52	0.50	1120	1.25	0.42	0000	0.03	0.43	3002	0.00	0.50
5507	1.51	0.40	7050	2.56	0.38	7855	1.32	0.42	8606	0.65	0.40	9083	0.70	0.56
5508	1.51	0.40	7090	2.15	0.38	8001	1.22	0.49	8709F	1.03	0.34	9084	0.62	0.52
5535	2.17	0.38	7098	4.39	0.38	8002	0.99	0.49	8719	0.75	0.40	9088	a	a.02
5537	1.75	0.42	7099	5.22	0.38	8006	1.14	0.43	8720	0.73	0.40	9089	0.60	0.52
5551	4.69	0.42	7133	1.27	0.40	8008	0.59	0.52	8721	0.40	0.42	9093	0.74	0.52
0001	۲.00	3.00	7.130	1.21	5.40	5555	0.00	5.52	0.21	0.10	J.72	5555	0.17	5.52
5606	0.45	0.38	7151	1.55	0.40	8010	0.95	0.49	8723	0.06	0.47	9101	2.39	0.52
5610	1.93	0.42	7152	2.04	0.40	8013	0.16	0.47	8725	1.12	0.42	9102	1.41	0.47
5645	2.95	0.38	7153	1.71	0.40	8015	0.36	0.47	8726F	0.54	0.38	9154	0.87	0.49
5703	4.76	0.42	7219	2.72	0.40	8017	0.81	0.52	8734	0.21	0.42	9156	1.44	0.52
5705	5.66	0.42	7222	2.65	0.40	8018	1.53	0.49	8737	0.19	0.42	9170	3.88	0.40
1	5.00	J. 12	l ·	2.00	5.10	55.5	1.00	5.10	0.0,	0.10	J. 12	*	0.00	5.10
5951	0.35	0.49	7225	3.42	0.42	8021	1.13	0.49	8738	0.26	0.42	9178	3.13	0.56
6003	1.94	0.40	7230	3.57	0.47	8031	1.02	0.49	8742	0.16	0.42	9179	8.11	0.56
6005	1.60	0.42	7231	3.38	0.47	8032	0.92	0.49	8745	1.80	0.47	9180	2.63	0.47
6018	1.15	0.42	7232	3.83	0.40	8033	0.71	0.52	8748	0.22	0.40	9182	1.36	0.49
6045	2.32	0.42	7309F	2.00	0.34	8037	1.05	0.56	8755	0.22	0.42	9186	3.81	0.40
		- :=							I					· · ·
6204	2.85	0.40	7313F	0.80	0.34	8039	0.96	0.52	8799	0.37	0.49	9220	2.41	0.47
6206	0.87	0.38	7317F	1.52	0.34	8044	1.22	0.49	8800	0.93	0.49	9402	1.60	0.40
6213	0.71	0.38	7327F	4.14	0.34	8045	0.34	0.49	8803	0.02	0.42	9403	3.32	0.40
6214	0.62	0.40	7333	2.20	0.38	8046	1.32	0.49	8805	0.13	0.49	9410	1.13	0.49
6216	1.74	0.38	7335	2.45	0.38	8047	0.44	0.49	8810	0.10	0.49	9501	1.74	0.42
<u> </u>		3.00	. 555		3.00	JJ .,	· · · · ·	3	55.0	00	30	5551		J

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

Effective January 1, 2024

TABLE OF EXPECTED LOSS RATES AND DISCOUNT RATIOS APPLICABLE TO ALL POLICIES

CLASS		D	CLASS		D	CLASS		D	CLASS		D	CLASS		D
CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO	CODE	ELR	RATIO
9505	1.62	0.47				+			 					
9505	1.02	0.47												
9519	1.19	0.42												
9521	1.49	0.42												
9522	1.58	0.52												
9322	1.50	0.32												
9534	1.26	0.38												
9554	2.83	0.40												
9586	0.26	0.52												
9600	1.31	0.49												
9620	0.53	0.42												
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REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS TO ALL CLASS CODES

EXPERIENCE RATING PLAN MANUAL

Effective January 1, 2024 TABLE OF WEIGHTING VALUES APPLICABLE TO ALL POLICIES

Expecte Losse		Weighting Values	Expect Losse		Weighti Value		
•	0.074	0.44	4 000 504	4.044.070	0.40		
0	2,271	0.14	1,280,564	1,344,976	0.49		
2,272	6,399	0.15	1,344,977	1,412,853	0.50		
6,400	10,625	0.16	1,412,854	1,484,483	0.51		
10,626	14,954	0.17	1,484,484	1,560,185	0.52		
14,955	16,465	0.18	1,560,186	1,640,320	0.53		
16,466	18,622	0.17	1,640,321	1,725,287	0.54		
18,623	21,568	0.16	1,725,288	1,815,537	0.55		
21,569	26,002	0.15	1,815,538	1,911,583	0.56		
26,003	34,439	0.14	1,911,584	2,013,999	0.57		
34,440	79,141	0.13	2,014,000	2,123,441	0.58		
79,142	106,348	0.14	2,123,442	2,240,660	0.59		
106,349	130,109	0.15	2,240,661	2,366,516	0.60		
130,110	152,964	0.16	2,366,517	2,502,000	0.61		
152,965	175,637	0.17	2,502,001	2,648,261	0.62		
175,638	198,457	0.17	2,648,262	2,806,639	0.63		
170,000	100,407	0.10	2,070,202	2,000,000	0.03		
198,458	221,614	0.19	2,806,640	2,978,705	0.64		
221,615	245,234	0.20	2,978,706	3,166,316	0.65		
245,235	269,410	0.21	3,166,317	3,371,677	0.66		
269,411	294,220	0.22	3,371,678	3,597,433	0.67		
294,221	319,730	0.23	3,597,434	3,846,783	0.68		
319,731	344,886	0.24	3,846,784	4,123,628	0.69		
344,887	369,608	0.25	4,123,629	4,432,785	0.70		
369,609	395,109	0.26	4,432,786	4,780,261	0.71		
395,110	421,430	0.27	4,780,262	5,173,649	0.71		
421,431	448,618	0.28	5,173,650	5,622,697	0.72		
448,619	476,721	0.29	5,622,698	6,140,116	0.74		
476,722	505,788	0.30	6,140,117	6,742,809	0.75		
505,789	535,875	0.31	6,742,810	7,453,753	0.76		
535,876	567,038	0.32	7,453,754	8,304,989	0.77		
567,039	599,338	0.33	8,304,990	9,342,591	0.78		
599,339	632,841	0.34	9,342,592	10,635,289	0.79		
632,842	667,619	0.35	10,635,290	12,290,346	0.80		
667,620	703,747	0.36	12,290,347	14,484,954	0.81		
703,748	741,305	0.37	14,484,955	17,534,344	0.82		
741,306	780,383	0.38	17,534,345	22,058,695	0.83		
780,384	821,077	0.39	22,058,696	29,469,518	0.84		
821,078	863,491	0.40	29,469,519	43,823,025	0.85		
863,492	907,735	0.41	43,823,026	83,472,265	0.86		
907,736 953,933	953,932 1,002,217	0.42 0.43	83,472,266 711,150,038 /		0.87		
			, ,				
1,002,218	1,052,734	0.44					
1,052,735	1,105,644	0.45	ĺ				
1,105,645	1,161,121	0.46	ĺ				
1,161,122	1,219,357	0.47					
1,219,358	1,280,563	0.48					
State Per Claim /					1		

(a) G (b) State Per Claim Accident Limitation (c) State Multiple Claim Accident Limitation (d) USL&HW Per Claim Accident Limitation (e) USL&HW Multiple Claim Accident Limitation (f) Employers Liability Accident Limitation (g) Primary/Excess Loss Split Point (h) USL&HW Act Expected Loss Factor Non-F Classes	10.50 \$181,500 \$363,000 \$286,500 \$573,000 \$55,000 \$29,500
(n) USL&HW Act Expected Loss Factor Non-F Classes	1.25

Effective January 1, 2024 TABLE OF BALLAST VALUES APPLICABLE TO ALL POLICIES

Expecte		Ballast	Expected		Ballast	Expected		Ballast	
Losses	3	Values	Losses		Values	Losse	s	Values	
0	378,871	48,300	, ,	3,652,228	232,050	6,839,297	6,933,039	415,800	
378,872	470,919	53,550	, ,	3,745,955	237,300	6,933,040	7,026,783	421,050	
470,920	563,512	58,800	3,745,956 3	3,839,683	242,550	7,026,784	7,120,526	426,300	
563,513	656,426	64,050	3,839,684 3	3,933,412	247,800	7,120,527	7,214,270	431,550	
656,427	749,545	69,300	3,933,413 4	,027,142	253,050	7,214,271	7,308,014	436,800	
749,546	842,801	74,550	4,027,143 4	,120,873	258,300	7,308,015	7,401,758	442,050	
842,802	936,155	79,800		,214,604	263,550	7,401,759	7,495,502	447,300	
936,156	1,029,580	85,050		,308,337	268,800	7,495,503	7,589,247	452,550	
1,029,581	1,123,058	90,300		,402,070	274,050	7,589,248	7,682,991	457,800	
1,123,059	1,216,578	95,550		,495,804	279,300	7,682,992	7,776,736	463,050	
1,216,579	1,310,131	100,800		,589,539	284,550	7,776,737	7,870,481	468,300	
1,310,132	1,403,709	106,050	, ,	,683,274	289,800	7,870,482	7,964,226	473,550	
1,403,710	1,497,309	111,300		,777,010	295,050	7,964,227	8,057,971	478,800	
1,497,310	1,590,927	116,550	4,777,011 4	,870,746	300,300	8,057,972	8,151,716	484,050	
1,590,928	1,684,559	121,800	4,870,747 4	,964,483	305,550	8,151,717	8,245,461	489,300	
1,684,560	1,778,204	127,050	4,964,484 5	5,058,220	310,800	8,245,462	8,339,207	494,550	
1,778,205	1,871,859	132,300	, ,	5,151,958	316,050	8,339,208	8,432,952	499,800	
1,871,860	1,965,523	137,550	, ,	5,245,696	321,300	8,432,953	8,526,698	505,050	
1,965,524	2,059,195	142,800	, ,	5,339,435	326,550	8,526,699	8,620,443	510,300	
2,059,196	2,152,873	148,050		5,433,174	331,800	8,620,444	8,714,189	515,550	
_,,	_,,,,	,	5,555,555	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		-,,	2.0,222	
2,152,874	2,246,558	153,300	5,433,175 5	5,526,914	337,050	8,714,190	8,807,935	520,800	
2,246,559	2,340,247	158,550	5,526,915 5	5,620,653	342,300	8,807,936	8,901,681	526,050	
2,340,248	2,433,942	163,800	5,620,654 5	5,714,393	347,550	8,901,682	8,995,427	531,300	
2,433,943	2,527,640	169,050	5,714,394 5	,808,134	352,800	8,995,428	9,089,173	536,550	
2,527,641	2,621,343	174,300	5,808,135 5	5,901,875	358,050	9,089,174	9,182,919	541,800	
2,621,344	2,715,048	179,550	5,901,876 5	5,995,616	363,300	9,182,920	9,275,700	547,050	
2,715,049	2,808,756	184,800		5,089,357	368,550	0,.02,020	0,2.0,.00	011,000	
2,808,757	2,902,468	190,050		5,183,098	373,800				
2,902,469	2,996,181	195,300	, ,	5,276,840	379,050				
2,996,182	3,089,897	200,550	, ,	5,370,582	384,300				
2,000,102	0,000,007	200,000	0,270,041	,010,002	004,000				
3,089,898	3,183,615	205,800	, ,	3,464,325	389,550				
3,183,616	3,277,334	211,050	6,464,326 6	5,558,067	394,800				
3,277,335	3,371,056	216,300	6,558,068 6	6,651,810	400,050				
3,371,057	3,464,778	221,550	6,651,811 6	3,745,553	405,300				
3,464,779	3,558,503	226,800	6,745,554 6	3,839,296	410,550				

For Expected Losses greater than \$9,275,700, the Ballast Value can be calculated using the following formula (rounded to the nearest 1):

Ballast = (0.056)(Expected Losses) + 2876.4(Expected Losses)(10.50) / (Expected Losses + (600)(10.50))

G = 10.50

REFER TO UPDATE PAGE FOR ALL SUBSEQUENT REVISIONS.

NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

IOWA—UPDATE TO EXPERIENCE RATING PREMIUM ELIGIBILITY AMOUNTS

EXPERIENCE RATING PLAN MANUAL—2003 EDITION RULE 2—EXPERIENCE RATING ELEMENTS AND FORMULA A. PREMIUM ELIGIBILITY

2. State Subject Premium Eligibility Amounts

A risk qualifies for experience rating when its subject premium, developed in its experience period, meets or exceeds the minimum eligibility amount shown in the State Table of Subject Premium Eligibility Amounts in Rule 2-A-2-c. Refer to Rule 2-E-1 to determine a risk's experience period.

- a. A risk qualifies for experience rating if its data within the most recent 24 months of the experience period develops a subject premium of at least the amount shown in Column A.
- b. A risk may not qualify according to Rule 2-A-2-a. If it has more than the amount of experience referenced in Rule 2-A-2-a, then to qualify for experience rating the risk must develop an average annual subject premium of at least the amount shown in Column B. Refer to Rule 2-A-3 to determine average annual subject premium.
- c. A risk's rating effective date determines the applicable Column A and Column B subject premium eligibility amounts required to qualify for experience rating. Refer to Rule 2-B for rating effective date determination.

State Table of Subject Premium Eligibility Amounts

State	Rating Effective Date	Column A (\$)	Column B (\$)
IA	7/1/24 and after	10,000	<u>5,000</u>
	7/1/23 - 6/30/24	9,500	4,750
	7/1/22 - 6/30/23	9,000	4,500

NOTE: This exhibit revises the lowa experience rating subject premium eligibility amounts shown in the State Table of Subject Premium Eligibility Amounts in NCCl's *Experience Rating Plan Manual* national Rule 2-A-2-c. The content shown in this table is not a complete replacement of the existing State Table of Subject Premium Eligibility Amounts. The premium eligibility amounts are applicable to all policies.



Iowa

Workers Compensation Rate Filing – January 1, 2024

Proposed Values for Inclusion in the Retrospective Rating Plan Manual

The following pages include proposed values for inclusion in the Retrospective Rating Plan Manual, such as:

- Average Cost per Case
- Excess Loss Factors
- Expected Loss Ratios
- Retrospective Development Factors
- Tables of Expense Ratios
- Tax Multipliers

Average Cost per Case by Hazard Group

Α	В	С	D	E	F	G
7,775	10,088	15,470	18,570	27,392	42,069	49,542

Average Cost per Case including ALAE by Hazard Group

Α	В	С	D	E	F	G
8.490	11,002	16.851	20,212	29.751	45.643	53.734

Tax Multipliers
a. State (non-F Classes)

1.028

b. Federal Classes, or non-F classes where rate is increased by the

USL&HW Act Percentage 1.053

Countrywide Expected Loss Ratio 3.

Countrywide Expected Loss and Allocated Expense Ratio

Table of Expense Ratios
Type A: 2023-01
Type B: 2023-01

5. **Excess Loss Factors** (Applicable to New and Renewal Policies)

Per Accident			н	lazard Group	s		
<u>Limitation</u>	Α	В	С	D .	E	F	G
\$10,000	0.434	0.466	0.494	0.512	0.535	0.553	0.562
\$15,000	0.400	0.435	0.465	0.485	0.513	0.533	0.544
\$20,000	0.374	0.410	0.442	0.463	0.493	0.516	0.529
\$25,000	0.352	0.388	0.422	0.444	0.477	0.501	0.515
\$30,000	0.334	0.370	0.404	0.427	0.461	0.487	0.503
\$35,000	0.317	0.353	0.388	0.411	0.448	0.474	0.492
\$40,000	0.303	0.338	0.374	0.397	0.435	0.463	0.481
\$50,000	0.278	0.313	0.349	0.373	0.413	0.441	0.462
\$75,000	0.234	0.266	0.303	0.326	0.369	0.399	0.422
\$100,000	0.203	0.234	0.270	0.292	0.336	0.367	0.391
\$125,000	0.180	0.210	0.245	0.266	0.310	0.341	0.366
\$150,000	0.162	0.190	0.225	0.245	0.290	0.320	0.345
\$175,000	0.148	0.175	0.208	0.228	0.273	0.303	0.328
\$200,000	0.136	0.162	0.194	0.213	0.258	0.288	0.312
\$225,000	0.126	0.151	0.182	0.201	0.245	0.275	0.299
\$250,000	0.117	0.141	0.172	0.190	0.234	0.263	0.287
\$275,000	0.110	0.133	0.163	0.180	0.224	0.252	0.276
\$300,000	0.103	0.126	0.155	0.172	0.215	0.243	0.267
\$325,000	0.098	0.119	0.148	0.164	0.207	0.234	0.258
\$350.000	0.092	0.113	0.142	0.157	0.200	0.227	0.250
\$375,000	0.088	0.108	0.136	0.151	0.193	0.219	0.242
\$400.000	0.084	0.103	0.131	0.145	0.187	0.213	0.235
\$425,000	0.080	0.099	0.126	0.140	0.181	0.207	0.229
\$450,000	0.076	0.095	0.121	0.135	0.176	0.201	0.223
\$475,000	0.073	0.091	0.117	0.131	0.171	0.196	0.217
\$500,000	0.070	0.088	0.113	0.127	0.166	0.191	0.212
\$600,000	0.061	0.077	0.101	0.113	0.151	0.174	0.193
\$700,000	0.054	0.069	0.091	0.102	0.138	0.160	0.178
\$800,000	0.048	0.062	0.083	0.093	0.128	0.149	0.166
\$900,000	0.044	0.057	0.077	0.086	0.120	0.140	0.156
\$1,000,000	0.040	0.052	0.071	0.080	0.113	0.131	0.147
\$2,000,000	0.022	0.030	0.044	0.049	0.074	0.087	0.097
\$3,000,000	0.015	0.022	0.032	0.036	0.056	0.067	0.075
\$4.000.000	0.012	0.017	0.026	0.029	0.046	0.055	0.062
\$5,000,000	0.009	0.014	0.021	0.024	0.039	0.047	0.052
\$6,000,000	0.008	0.012	0.018	0.020	0.033	0.040	0.046
\$7,000,000	0.007	0.010	0.016	0.018	0.029	0.035	0.040
\$8,000,000	0.006	0.009	0.014	0.015	0.026	0.031	0.036
\$9,000,000	0.005	0.007	0.012	0.014	0.023	0.028	0.032
\$10,000,000	0.004	0.007	0.010	0.012	0.020	0.025	0.029

6.

Effective January 1, 2024

Excess Loss and Allocated Expense Factors (Applicable to New and Renewal Policies)

Per Accident			H	lazard Group	s		
<u>Limitation</u>	Α	В	С	D	E	F	G
\$10,000	0.478	0.513	0.542	0.561	0.585	0.604	0.612
\$15,000	0.443	0.480	0.512	0.533	0.562	0.583	0.594
\$20,000	0.416	0.453	0.487	0.510	0.541	0.565	0.579
\$25,000	0.392	0.431	0.466	0.490	0.524	0.549	0.565
\$30,000	0.372	0.411	0.448	0.472	0.508	0.535	0.552
\$35,000	0.355	0.393	0.431	0.455	0.493	0.521	0.540
\$40,000	0.340	0.378	0.416	0.441	0.480	0.509	0.528
\$50,000	0.313	0.351	0.389	0.415	0.456	0.487	0.508
\$75,000	0.265	0.301	0.340	0.365	0.409	0.442	0.466
\$100,000	0.232	0.265	0.304	0.328	0.374	0.408	0.433
\$125,000	0.207	0.239	0.277	0.300	0.347	0.380	0.407
\$150,000	0.188	0.218	0.255	0.277	0.325	0.358	0.384
\$175,000	0.172	0.201	0.237	0.259	0.306	0.338	0.365
\$200,000	0.159	0.187	0.222	0.243	0.290	0.322	0.349
\$225,000	0.148	0.174	0.209	0.229	0.276	0.308	0.334
\$250,000	0.138	0.164	0.198	0.217	0.264	0.295	0.321
\$275,000	0.130	0.155	0.188	0.207	0.253	0.284	0.310
\$300,000	0.122	0.147	0.179	0.197	0.243	0.273	0.299
\$325,000	0.116	0.139	0.171	0.189	0.234	0.264	0.289
\$350,000	0.110	0.133	0.164	0.181	0.226	0.256	0.280
\$375,000	0.105	0.127	0.157	0.174	0.219	0.248	0.272
\$400,000	0.100	0.122	0.151	0.168	0.212	0.241	0.265
\$425,000	0.096	0.117	0.146	0.162	0.206	0.234	0.258
\$450,000	0.092	0.112	0.141	0.156	0.200	0.228	0.251
\$475,000	0.088	0.108	0.136	0.151	0.195	0.222	0.245
\$500,000	0.085	0.104	0.132	0.147	0.189	0.216	0.239
\$600,000	0.074	0.092	0.118	0.131	0.172	0.197	0.219
\$700,000	0.065	0.082	0.107	0.119	0.158	0.182	0.203
\$800,000	0.059	0.074	0.098	0.109	0.147	0.170	0.189
\$900,000	0.053	0.068	0.090	0.101	0.137	0.159	0.178
\$1,000,000	0.049	0.063	0.084	0.094	0.129	0.150	0.168
\$2,000,000	0.027	0.036	0.051	0.057	0.084	0.100	0.112
\$3,000,000	0.019	0.026	0.038	0.042	0.064	0.077	0.086
\$4,000,000	0.014	0.020	0.030	0.033	0.052	0.063	0.070
\$5,000,000	0.011	0.016	0.025	0.028	0.044	0.053	0.060
\$6,000,000	0.009	0.014	0.021	0.023	0.038	0.046	0.052
\$7,000,000	0.008	0.012	0.018	0.020	0.033	0.040	0.046
\$8,000,000	0.007	0.010	0.016	0.018	0.029	0.036	0.041
\$9,000,000	0.006	0.009	0.014	0.016	0.026	0.032	0.037
\$10,000,000	0.005	0.008	0.012	0.014	0.023	0.029	0.033

Retrospective Development Factors

w	ith Loss Limi	t		Without Loss	<u>Limit</u>	
1st	2nd	3rd	1st	2nd	3rd	4th & Subsequent
<u>Adj.</u>	<u>Adj.</u>	<u>Adj.</u>	<u>Adj.</u>	<u>Adj.</u>	<u>Adj.</u>	<u>Adjustment</u>
0.04	0.02	0.01	0.13	0.08	0.05	0.00



Table of Expense Ratios - Excluding Taxes and Including Profit and Contingencies

Type A: 2023-01

WC Premium Rai	nge Expense	WC Premium Range	Expense	WC Pre	nium Range	Expense
From To		From To	Ratio	From	То	Ratio
0 - 10,0	55 0.381	21,928 - 22,469	0.333	393,334	- 424,799	0.285
10,056 - 10,1	67 0.380	22,470 - 23,037	0.332	424,800	- 461,739	0.284
10,168 - 10,2		23,038 - 23,636	0.331	461,740	- 505,714	0.283
10,283 - 10,3		23,637 - 24,266	0.330	505,715	- 558,947	0.282
10,400 - 10,5	20 0.378	24,267 - 24,931	0.329	558,948	- 624,705	0.281
10,521 - 10,6	43 0.377	24,932 - 25,633	0.328	624,706	- 707,999	0.280
10,644 - 10,7		25,634 - 26,376	0.327	708,000	- 816,923	0.279
10,770 - 10,8		26,377 - 27,164	0.326	816,924	- 965,454	0.278
10,899 - 11,0		27,165 - 27,999	0.325	965,455	- 1,179,999	0.277
11,031 - 11,1		28,000 - 28,888	0.324	1,180,000	- 1,517,142	0.276
11,166 - 11,3		28,889 - 29,836	0.323	1,517,143	- 1,824,799	0.275
11,305 - 11,4		29,837 - 30,847	0.322	1,824,800	- 1,983,478	0.274
11,447 - 11,5 11.593 - 11.7		30,848 - 31,929	0.321	1,983,479	- 2,172,380	0.273
11,593 - 11,7 11,742 - 11,8		31,930 - 33,090 33,091 - 34,339	0.321 0.320	2,172,381 2,401,053	2,401,0522,683,529	0.272 0.271
11,896 - 12,0		34,340 - 35,686	0.319	2,683,530	- 3,041,333	0.270
12,053 - 12,2		35,687 - 37,142	0.318	3,041,334	- 3,509,230	0.269
12,215 - 12,3 12,381 - 12,5		37,143 - 38,723 38,724 - 40,444	0.317 0.316	3,509,231 4,147,273	4,147,2725,068,888	0.268 0.267
12,552 - 12,7		40,445 - 42,325	0.315	5,068,889	- 6,517,142	0.266
12,728 - 12,9		42,326 - 44,390	0.314	6,517,143	- 9,123,999	0.265
12,726 - 12,9		44,391 - 46,666	0.314	9,124,000	- 9,123,999 - 15,206,666	0.265
13,094 - 13,2		46,667 - 49,189	0.313	15,206,667	- 45,619,999	0.264
13,285 - 13,4		49,190 - 51,999	0.311	45,620,000	- And Above	0.263
13,482 - 13,6		52,000 - 55,151	0.310	10,020,000	7.1.14.7.150.70	0.200
13,685 - 13,8		55,152 - 58,709	0.309			
13,894 - 14,1		58,710 - 62,758	0.308			
14,109 - 14,3		62,759 - 67,407	0.307			
14,331 - 14,5		67,408 - 72,799	0.306			
14,560 - 14,7	96 0.353	72,800 - 79,130	0.305			
14,797 - 15,0	41 0.352	79,131 - 86,666	0.304			
15,042 - 15,2	94 0.351	86,667 - 95,789	0.303			
15,295 - 15,5	55 0.350	95,790 - 107,058	0.302			
15,556 - 15,8	26 0.350	107,059 - 121,333	0.301			
15,827 - 16,1	06 0.349	121,334 - 139,999	0.300			
16,107 - 16,3	96 0.348	140,000 - 165,454	0.299			
16,397 - 16,6	97 0.347	165,455 - 200,377	0.298			
16,698 - 17,0		200,378 - 208,235	0.297			
17,010 - 17,3		208,236 - 216,734	0.296			
17,334 - 17,6	69 0.344	216,735 - 225,957	0.295			
17,670 - 18,0	19 0.343	225,958 - 235,999	0.294			
18,020 - 18,3		236,000 - 246,976	0.293			
18,384 - 18,7		246,977 - 259,024	0.293			
18,763 - 19,1		259,025 - 272,307	0.292			
19,158 - 19,5		272,308 - 287,027	0.291			
19,570 - 19,9		287,028 - 303,428	0.290			
20,000 - 20,4		303,429 - 321,818	0.289	First	- 10,000	0.0%
20,450 - 20,9		321,819 - 342,580	0.288	Next	- 190,000	9.1%
20,920 - 21,4		342,581 - 366,206 366,207 303,333	0.287	Next	- 1,550,000 1,750,000	11.3%
21,412 - 21,9	27 0.334	366,207 - 393,333	0.286	Over	- 1,750,000	12.3%
				From a set of t	- Datia	0.505
				Expected Loss Tax Multiplier:		0.585 1.035
				ı ax ıvıulupiler.		1.035



Table of Expense Ratios - Excluding Taxes and Including Profit and Contingencies

Type B: 2023-01

	niur	n Range	Expense
From		То	Ratio
0	-	10,099	0.381
10,100	-	10,303	0.380
10,304	-	10,515	0.379
10,516	-	10,736	0.379
10,737	-	10,967	0.378
10,968	-	11,208	0.377
11,209	-	11,460	0.376
11,461	-	11,724	0.375
11,725	-	11,999	0.374
12,000	-	12,289	0.373
12,290	-	12,592	0.372
12,593	-	12,911	0.371
12,912	-	13,246	0.370
13,247	-	13,599	0.369
13,600	-	13,972	0.368
13,973	-	14,366	0.367
14,367	-	14,782	0.366
14,783	-	15,223	0.365
15,224	-	15,692	0.364
15,693	-	16,190	0.363
16,191	-	16,721	0.362
16,722	-	17,288	0.361
17,289	-	17,894	0.360
17,895	-	18,545	0.359
18,546	-	19,245	0.358

WC Pren	niu	m Range	Expense
From		То	Ratio
19,246	-	19,999	0.357
20,000	-	20,816	0.356
20,817	-	21,702	0.355
21,703	-	22,666	0.354
22,667	-	23,720	0.353
23,721	-	24,878	0.352
24,879	-	26,153	0.351
26,154	-	27,567	0.350
27,568	-	29,142	0.350
29,143	-	30,909	0.349
30,910	-	32,903	0.348
32,904	-	35,172	0.347
35,173	-	37,777	0.346
37,778	-	40,799	0.345
40,800	-	44,347	0.344
44,348	-	48,571	0.343
48,572	-	53,684	0.342
53,685	-	59,999	0.341
60,000	-	67,999	0.340
68,000	-	78,461	0.339
78,462	-	92,727	0.338
92,728	-	113,333	0.337
113,334	-	145,714	0.336
145,715	-	200,606	0.335
200,607	-	213,548	0.334

	ıiu	m Range	Expense
From		То	Ratio
213,549	-	228,275	0.333
228,276	-	245,185	0.332
245,186	-	264,799	0.331
264,800	-	287,826	0.330
287,827	-	315,238	0.329
315,239	-	348,421	0.328
348,422	-	389,411	0.327
389,412	-	441,333	0.326
441,334	-	509,230	0.325
509,231	-	601,818	0.324
601,819	-	735,555	0.323
735,556	-	945,714	0.322
945,715	-	1,323,999	0.321
1,324,000	-	1,809,565	0.321
1,809,566	-	1,981,904	0.320
1,981,905	-	2,190,526	0.319
2,190,527	-	2,448,235	0.318
2,448,236	-	2,774,666	0.317
2,774,667	-	3,201,538	0.316
3,201,539	-	3,783,636	0.315
3,783,637	-	4,624,444	0.314
4,624,445	-	5,945,714	0.313
5,945,715	-	8,323,999	0.312
8,324,000	-	13,873,333	0.311
13,873,334	-	41,619,999	0.310
41,620,000	-	And Above	0.309
First	_	10,000	0.0%
Next	-	190,000	5.1%
Next	-	1,550,000	6.5%
Over	-	1,750,000	7.5%
Expected Loss	Ra	tio:	0.585
Tax Multiplier:			1.035



Table of Expense Ratios - Excluding Allocated Loss Adjustment Expense and Taxes and Including Profit and Contingencies

Type A: 2023-01

/C Pre From	miur	n Range To	Expense Ratio	WC Premi	um Range To	Expense Ratio	WC Pre	miu	m Range To	Expense Ratio
0	-	10,055	0.318	21,928 -	22,469	0.269	393,334	-	424,799	0.221
10,056	-	10,167	0.317	22,470 -	23,037	0.268	424,800	-	461,739	0.220
10,168	-	10,282	0.316	23,038 -	23,636	0.267	461,740	-	505,714	0.219
10,283	-	10,399	0.315	23,637 -	24,266	0.266	505,715	-	558,947	0.218
10,400	-	10,520	0.314	24,267 -	- 24,931	0.265	558,948	-	624,705	0.217
10,521	-	10,643	0.313	24,932 -	25,633	0.265	624,706	-	707,999	0.216
10,644	-	10,769	0.312	25,634 -	26,376	0.264	708,000	-	816,923	0.215
10,770	-	10,898	0.311	26,377 -	27,164	0.263	816,924	-	965,454	0.214
10,899	-	11,030	0.310	27,165 -	27,999	0.262	965,455	-	1,179,999	0.213
11,031	-	11,165	0.309	28,000 -	- 28,888	0.261	1,180,000	-	1,517,142	0.212
11,166	-	11,304	0.308	28,889 -	29,836	0.260	1,517,143	-	1,824,799	0.211
11,305	-	11,446	0.307	29,837 -	30,847	0.259	1,824,800	-	1,983,478	0.210
11,447	-	11,592	0.306	30,848 -	31,929	0.258	1,983,479	-	2,172,380	0.209
11,593	-	11,741	0.305	31,930 -	33,090	0.257	2,172,381	-	2,401,052	0.208
11,742	-	11,895	0.304	33,091 -	34,339	0.256	2,401,053	-	2,683,529	0.208
11,896	_	12,052	0.303	34,340 -	35,686	0.255	2,683,530	-	3,041,333	0.207
12,053	_	12,214	0.302	35,687 -		0.254	3,041,334	-	3,509,230	0.206
12,215	-	12,380	0.301	37,143 -	38,723	0.253	3,509,231	-	4,147,272	0.205
12,381	-	12,551	0.300	38,724 -	40,444	0.252	4,147,273	-	5,068,888	0.204
12,552	-	12,727	0.299	40,445 -	42,325	0.251	5,068,889	-	6,517,142	0.203
12,728	_	12,907	0.298	42,326 -	44,390	0.250	6,517,143	_	9,123,999	0.202
12,908	_	13,093	0.297	44,391 -		0.249	9,124,000	-	15,206,666	0.201
13,094	_	13,284	0.296	46,667		0.248	15,206,667	· _	45,619,999	0.200
13,285	_	13,481	0.295	49,190 -		0.247	45,620,000		And Above	0.199
13,482	-	13,684	0.294	52,000 -		0.246	, ,			
13,685	_	13,893	0.294	55,152 -	- 58,709	0.245				
13,894	_	14,108	0.293	58,710 -		0.244				
14,109	_	14,330	0.292	62,759 -	,	0.243				
14,331	_	14,559	0.291	67,408 -		0.242				
14,560	-	14,796	0.290	72,800 -		0.241				
14,797	_	15,041	0.289	79,131 -	86,666	0.240				
15,042	_	15,294	0.288	86,667		0.239				
15,295	_	15,555	0.287	95,790 -	,	0.238				
15,556	_	15,826	0.286	107,059 -		0.237				
15,827	-	16,106	0.285	121,334 -		0.237				
16,107	_	16,396	0.284	140,000 -	165,454	0.236				
16,397	_	16,697	0.283	165,455 -	,	0.235				
16,698	_	17,009	0.282	200,378 -		0.234				
17,010	_	17,333	0.281	208,236 -		0.233				
17,334	_	17,669	0.280	216,735 -		0.232				
17,670	_	18,019	0.279	225,958 -		0.231				
18,020	_	18,383	0.278	236,000 -		0.230				
18,384	_	18,762	0.277	246,977 -		0.229				
18,763	_	19,157	0.276	259,025 -		0.228				
19,158	_	19,569	0.275	272,308 -		0.227				
19,570	_	19,999	0.274	287,028 -		0.226				
20,000	-	20,449	0.274	303,429		0.225	First	_	10,000	0.0%
20,450	_	20,919	0.272	*	- 342,580	0.224	Next	_	190,000	9.1%
20,920	_	21,411	0.271	*	366,206	0.223	Next	_	1,550,000	11.3%
21,412	-	21,927	0.270	366,207 -		0.222	Over	-	1,750,000	12.3%
							Expected Los	ss and	d ALAE Ratio:	0.649
							Tax Multiplie			1.035



Table of Expense Ratios - Excluding Allocated Loss Adjustment Expense and Taxes and Including Profit and Contingencies

Type B: 2023-01

		niur	n Range	Expense
ı	From		То	Ratio
	0	-	10,099	0.318
	10,100	-	10,303	0.317
	10,304	-	10,515	0.316
	10,516	-	10,736	0.315
	10,737	-	10,967	0.314
	10,968	-	11,208	0.313
	11,209	-	11,460	0.312
	11,461	-	11,724	0.311
	11,725	-	11,999	0.310
	12,000	-	12,289	0.309
	12,290	-	12,592	0.308
	12,593	-	12,911	0.307
	12,912	-	13,246	0.306
	13,247	-	13,599	0.305
	13,600	-	13,972	0.304
	13,973	-	14,366	0.303
	14,367	-	14,782	0.302
	14,783	-	15,223	0.301
	15,224	-	15,692	0.300
	15,693	-	16,190	0.299
	16,191	-	16,721	0.298
	16,722	-	17,288	0.297
	17,289	-	17,894	0.296
	17,895	-	18,545	0.295
	18,546	-	19,245	0.294
1				

	niu	m Range	Expense
From		То	Ratio
19,246	-	19,999	0.294
20,000	-	20,816	0.293
20,817	-	21,702	0.292
21,703	-	22,666	0.291
22,667	-	23,720	0.290
23,721	-	24,878	0.289
24,879	-	26,153	0.288
26,154	-	27,567	0.287
27,568	-	29,142	0.286
29,143	-	30,909	0.285
30,910	-	32,903	0.284
32,904	-	35,172	0.283
35,173	-	37,777	0.282
37,778	-	40,799	0.281
40,800	-	44,347	0.280
44,348	-	48,571	0.279
48,572	-	53,684	0.278
53,685	-	59,999	0.277
60,000	-	67,999	0.276
68,000	-	78,461	0.275
78,462	-	92,727	0.274
92,728	-	113,333	0.273
113,334	-	145,714	0.272
145,715	-	200,606	0.271
200,607	-	213,548	0.270

	niu	m Range	Expense	
From		То	Ratio	
213,549	-	228,275	0.269	
228,276	-	245,185	0.268	
245,186	-	264,799	0.267	
264,800	-	287,826	0.266	
287,827	-	315,238	0.265	
315,239	-	348,421	0.265	
348,422	-	389,411	0.264	
389,412	-	441,333	0.263	
441,334	-	509,230	0.262	
509,231	-	601,818	0.261	
601,819	-	735,555	0.260	
735,556	-	945,714	0.259	
945,715	-	1,323,999	0.258	
1,324,000	-	1,809,565	0.257	
1,809,566	-	1,981,904	0.256	
1,981,905	-	2,190,526	0.255	
2,190,527	-	2,448,235	0.254	
2,448,236	-	2,774,666	0.253	
2,774,667	-	3,201,538	0.252	
3,201,539	-	3,783,636	0.251	
3,783,637	-	4,624,444	0.250	
4,624,445	-	5,945,714	0.249	
5,945,715	-	8,323,999	0.248	
8,324,000	-	13,873,333	0.247	
13,873,334	-	41,619,999	0.246	
41,620,000	-	And Above	0.245	
First		10,000	0.0%	
Next		190,000	5.1%	
Next		1,550,000	6.5%	
Over		1,750,000	7.5%	
Expected Loss and ALAE Ratio: 0.649				
Tax Multiplier:			1.035	



Iowa

Workers Compensation Rate Filing – January 1, 2024

Part 3 Supporting Exhibits

- Exhibit I: Determination of the Indicated Advisory Rate Level Change
- Exhibit II: Workers Compensation Expense Program
- Appendix A: Factors Underlying the Proposed Rate Level Change
- Appendix B: Calculations Underlying the Advisory Rate Change by Classification
- Appendix C: Memoranda for Laws and Assessments
- Appendix D: Determination of Assigned Risk Rates



lowa

Workers Compensation Rate Filing – January 1, 2024

Exhibit I – Determination of Indicated Advisory Rate Level Change

NCCI analyzed the emerging experience of lowa workers compensation policies in recent years. The primary focus of our analysis was on premiums and losses from the proposed experience period, as shown in the exhibits on the next few pages.

Determination of the Loss Base

In analyzing losses for the purpose of Aggregate Ratemaking, NCCI reviews both "paid" and "paid plus case" loss data, which are (i) the benefit amounts already paid by insurers on reported claims and (ii) the benefit amounts already paid by insurers on reported claims plus the amounts set aside to cover future payments on those claims.

During this year's analysis, which included an assessment of possible pandemic claim-related impacts, a combination of both paid and paid plus case data was selected to best reflect the conditions likely to prevail in the proposed effective period. This methodology makes the most use of the available financial data information and is consistent with prior filings made in lowa.

Determination of the Experience Period

This year's analysis included a review of various experience periods and an assessment of possible pandemic claim-related impacts. The most recent five policy year and calendar-accident year projected loss ratios are shown below. Policy year data is given greater consideration by NCCI because policy year data reflects the best match between exposure and losses.

Policy	Loss	Calendar-	Loss
<u>Year</u>	<u>Ratio</u>	Accident Year	<u>Ratio</u>
2017	0.930	2018	0.900
2018	0.938	2019	1.013
2019	0.945	2020	0.867
2020	0.929	2021	0.938
2021	0.871	2022	0.829

Note the following regarding the projected loss ratios:

- Based on NCCl's Financial Call data reported through 12/31/2022, on-leveled, developed to an ultimate report, and trended to the prospective period. Projected losses do not include the change in expenses and standard earned premium at Designated Statistical Reporting (DSR) level is adjusted to a pure premium level.
- The Calendar-Accident Year analysis was not conducted separately; the displayed loss ratios are trended using the policy year loss ratio selections underlying this filing.
- Calendar-Accident Year 2019–2022 loss ratios include a premium audit adjustment due to changes in audit activity primarily attributable to the COVID-19 pandemic-related recession.

The policy year loss ratios in this period are consistent and favorable. While certain temporary effects stemming from the pandemic, like social distancing and decreased medical treatments for minor injuries, could be playing a role in the favorable loss ratio trends observed in Policy Years



Iowa

Workers Compensation Rate Filing – January 1, 2024

Exhibit I – Determination of Indicated Advisory Rate Level Change

2019 and 2020, these influences have had a minor and limited impact in lowa and appear to be isolated to Calendar-Accident Year 2020. Iowa was one of seven states that did not issue a stay-at-home order during the pandemic. Additionally, employment in manufacturing and agriculture benefited from a surge in consumer demand for lowa-produced corn, soy, wheat, and agricultural equipment, and by early 2021, lowa's unemployment rate was one of the lowest in the nation (Source: Moody's Analytics).

The loss trends observed in the most recent Policy Year, 2021, and the Calendar-Accident Year, 2022, which are further removed from the peak of the pandemic and are likely indicative of future experience, demonstrate ongoing loss experience improvement in Iowa. Some pandemic effects have increased safety and resulted in lasting changes in the workplace landscape. For example, the shift to remote work and reduced business travel are likely contributing to the improved loss ratio experience. There has also been a long-term pattern of improved workplace safety as well as an increase in the use of automation, both of which continue to put downward pressure on lost-time claim frequency.

Medical-only claim count volumes continue to be reviewed in Iowa. In Policy Year 2020, there was a substantial drop of around 25% in medical-only claim counts from Policy Year 2018. While medical-only claim counts experienced a recovery in Policy Year 2021, they didn't reach the levels observed in Policy Year 2018 and prior years. Despite the decline in claim counts, the medical-only paid+case loss volume for Policy Year 2021 remains similar to the levels observed before the pandemic. The degree to which the reduction in medical-only claim count volume will persist in the future remains uncertain.

An analysis was conducted to evaluate the influence of shifting volumes of large losses on the loss experience of the most recent policy years. The loss ratios for Calendar-Accident Years 2020 and 2022 demonstrate favorable experience, attributed in part to a decrease in the volume of large loss claims. However, Policy Years 2020 and 2021 exhibit a similar level of initial large claim activity by first report compared to prior policy years. While the calendar-accident years in lowa display fluctuations from year to year, the policy year activity remains more consistently robust.

Call 31 Claims with Paid+Case Losses over 500K

Policy <u>Year</u>	Claim <u>Counts</u>	Limited <u>Paid+Case</u>	Accident <u>Year</u>	Claim <u>Counts</u>	Limited <u>Paid+Case</u>
2017	44	58.8M	2018	30	30.7M
2018	34	40.9M	2019	34	46.6M
2019	42	63.4M	2020	32	38.5M
2020	39	58.1M	2021	36	51.0M
2021	47	46.9M	2022	31	25.4M

Based on NCCI's Financial Call data reported through 12/31/2022, Call 31 claims valued at first report



Iowa

Workers Compensation Rate Filing – January 1, 2024

Exhibit I – Determination of Indicated Advisory Rate Level Change

In this filing, the data for the two most recently available full policy years, 2020 and 2021, was selected as the most appropriate experience period on which to base this year's filing. This selection provides a balance between stability and responsiveness and best reflects the conditions likely to prevail in the proposed effective period. This method is consistent with prior filings in lowa.

<u>Determination of the Indicated Change</u>

NCCI uses the following general methodology to determine the indicated change based on experience, trend, and benefits for each of the policy years in the experience period:

- Standard earned premium at Designated Statistical Reporting (DSR) level is developed to ultimate, on-leveled to the current approved advisory rate level, and adjusted to a pure premium level.
- Reported indemnity and medical losses are limited by a large loss threshold, developed to ultimate using limited development factors, and on-leveled to a common benefit level to yield adjusted limited losses.
- 3. Limited indemnity and medical cost ratios excluding trend and benefits changes are calculated as adjusted losses (step 2) divided by premium available for benefit costs (step 1).
- 4. Trend factors are applied to the indemnity and medical cost ratios to reflect expected differences between the historical experience years and the effective period of the proposed filing.
- 5. Limited losses are adjusted to an unlimited basis via a non-catastrophe excess ratio (with excess ratios at limits beyond \$50 million set equal to zero).
- A factor is applied to reflect the impact of proposed indemnity and medical benefit changes.
- 7. The projected unlimited indemnity and medical cost ratios including benefit changes are added to yield the indicated change based on experience, trend, and benefits.

The indicated change based on experience, trend, and benefits for this filing is calculated as the average of the indicated changes for each of the individual policy years in the experience period. Lastly, the impact of the change in loss-based expenses, change in production and general expenses, change in premium taxes and assessments, and change in the profit and contingency provision is applied to determine the indicated overall average advisory rate level change.

The detailed calculations can be found on the following pages.



EXHIBIT I

Determination of Indicated Rate Level Change

Section A - Policy Year 2021 Experience

Premium:

(1)	Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$654,387,186
(2)	Premium On-level Factor (Appendix A-I)	0.528
(3)	Pure Premium Available for Benefit Costs = (1) x (2)	\$345,516,434

Indemnity Benefit Cost:

(4)	Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$135,202,397
(5)	Indemnity Loss On-level Factor (Appendix A-I)	1.000
(6)	Adjusted Limited Indemnity Losses = (4) x (5)	\$135,202,397
(7)	Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.391
(8)	Factor to Reflect Indemnity Trend (Appendix A-III)	0.871
(9)	Projected Limited Indemnity Cost Ratio = (7) x (8)	0.341
(10)	Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.033
(11)	Projected Indemnity Cost Ratio = (9) x (10)	0.352
(12)	Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.000
(13)	Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.352

Medical Benefit Cost:

(14)	Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$189,923,805
(15)	Medical Loss On-level Factor (Appendix A-I)	1.000
(16)	Adjusted Limited Medical Losses = (14) x (15)	\$189,923,805
(17)	Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.550
(18)	Factor to Reflect Medical Trend (Appendix A-III)	0.913
(19)	Projected Limited Medical Cost Ratio = (17) x (18)	0.502
(20)	Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.033
(21)	Projected Medical Cost Ratio = (19) x (20)	0.519
(22)	Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.000
(23)	Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.519

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.871
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EXHIBIT I

Determination of Indicated Rate Level Change

Section B - Policy Year 2020 Experience

Premium:

(1)	Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$620,665,071
(2)	Premium On-level Factor (Appendix A-I)	0.519
(3)	Pure Premium Available for Benefit Costs = (1) x (2)	\$322,125,172

Indemnity Benefit Cost:

(4)	Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$133,713,985
(5)	Indemnity Loss On-level Factor (Appendix A-I)	1.000
(6)	Adjusted Limited Indemnity Losses = (4) x (5)	\$133,713,985
(7)	Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.415
(8)	Factor to Reflect Indemnity Trend (Appendix A-III)	0.832
(9)	Projected Limited Indemnity Cost Ratio = (7) x (8)	0.345
(10)	Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.033
(11)	Projected Indemnity Cost Ratio = (9) x (10)	0.356
(12)	Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.000
(13)	Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.356

Medical Benefit Cost:

(14)	Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$202,006,465
(15)	Medical Loss On-level Factor (Appendix A-I)	1.000
(16)	Adjusted Limited Medical Losses = (14) x (15)	\$202,006,465
(17)	Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.627
(18)	Factor to Reflect Medical Trend (Appendix A-III)	0.885
(19)	Projected Limited Medical Cost Ratio = (17) x (18)	0.555
(20)	Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.033
(21)	Projected Medical Cost Ratio = (19) x (20)	0.573
(22)	Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.000
(23)	Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.573

Total Benefit Cost:

(24) India	ated Change Based o	n Experience.	Trend and Benefits =	(13) + (23)	0.929
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EXHIBIT I

Determination of Indicated Rate Level Change

Section C - Indicated Change Based on Experience, Trend, and Benefits	
(1) Policy Year 2021 Indicated Change Based on Experience, Trend, and Benefits	0.871
(2) Policy Year 2020 Indicated Change Based on Experience, Trend, and Benefits	0.929
(3) Indicated Change Based on Experience, Trend, and Benefits* = (1) x 50.0% + (2) x 50.0%	0.900
* The weight applied to each loss ratio in the experience period does not vary by year.	
Section D - Application of the Change in Production and General Expenses	
(1) Indicated Rate Level Change	0.900
(2) Effect of the Change in Production and General Expenses (Exhibit II)	1.001
(3) Indicated Change Modified to Reflect the Change in Production and General Expenses = (1) x (2)	0.901
Section E - Application of the Change in Taxes	
(1) Indicated Rate Level Change	0.901
(2) Effect of the Change in Taxes (Exhibit II)	1.003
(2) Effect of the Change in Taxes (Exhibit II)(3) Indicated Change Modified to Reflect the Change in Taxes = (1) x (2)	1.003 0.904
(3) Indicated Change Modified to Reflect the Change in Taxes = (1) x (2)	
(3) Indicated Change Modified to Reflect the Change in Taxes = (1) x (2) Section F - Application of the Change in the Profit and Contingency Provision	0.904



EXHIBIT I

Determination of Indicated Rate Level Change

Section G - Application of the Change in Loss-based Expenses

(1) Indicated Rate Level Change	0.880
(2) Effect of the Change in Loss-based Expenses (Exhibit II)	1.000
(3) Indicated Change Modified to Reflect the Change in Loss-based Expenses = (1) x (2)	0.880

Section H - Distribution of Overall Rate Level Change to Industry Groups

Industry Group Differentials (Appendix A-IV):

Manufacturing	1.004
Contracting	0.974
Office & Clerical	0.983
Goods & Services	1.013
Miscellaneous	1.010

Applying these industry group differentials to the final overall rate level change produces the changes in rate level proposed for each group as shown:

	(1)	(2)	$(3) = (1) \times (2)$	
	Final Overall	Industry	Final Rate	
	Rate	Group	Level Change	
Industry Group	Level Change	Differential	by Industry Group	
Manufacturing	0.880	1.004	0.884	(-11.6%)
Contracting	0.880	0.974	0.857	(-14.3%)
Office & Clerical	0.880	0.983	0.865	(-13.5%)
Goods & Services	0.880	1.013	0.891	(-10.9%)
Miscellaneous	0.880	1.010	0.889	(-11.1%)
Overall	0.880	1.000	0.880	(-12.0%)



Iowa

Workers Compensation Rate Filing – January 1, 2024

Exhibit II – Workers Compensation Expense Program

The proposed rates include several expense-related provisions as described below. The expense provisions described below are assumed to be the same for both the voluntary and assigned risk market.

Production and General Expenses: Production costs include commissions, costs of preparing the policy, verifying the correct application of rates and rating plans, billing and collecting premium and the costs of maintaining company branch offices. General expenses are commonly classified into four categories: general administration, audit, boards and bureaus, and inspection expenses.

The Production and General Expense provisions are reviewed on an annual basis using countrywide NAIC data. Countrywide data is reviewed because insurance carriers cannot easily attribute portions of their Production and General expenses to any specific state. The analysis of the Production and General expenses involves creating expense to premium ratios. Since the premium comes from a non-NCCI data source, adjustments are made to the premium to convert the premium to a Designated Statistical Reporting (DSR) level. In addition, the fixed expenses are removed from the numerator and denominator of the ratio to arrive at a purely variable expense ratio. These expense ratios are reviewed over time and a selection is made to balance stability and responsiveness. A selection for both Production and General expenses is made after a review of the expense to premium ratios and the underlying data.

Note: In this year's filing, the rounding methodology used in the analysis and selection of the production and general expense provisions was altered to match that of the other standard NCCI methodologies outlined in the filing.

Premium Taxes and Assessments: The proposed rates have a provision for taxes, licenses, and fees (other than Federal Income Tax) including a Premium Tax provision, a miscellaneous tax provision, and a provision for the Second Injury Fund. Where published by the state, the published value is selected. When no value is published by the state, historical values are reviewed, and a selection is made.

Profit and Contingency Provision: Insurers should have an opportunity to earn a fair rate of return on the capital supporting all of their workers compensation business. Therefore, voluntary rate filings should contemplate the inclusion of a fair and reasonable profit and contingency (P&C) provision.

The proposed P&C provision in this year's filing was selected based on the results of NCCl's Internal Rate of Return (IRR) model, which estimates the time series of expected future cash flows including premium, losses, expenses, investment income and taxes, for a representative insurer underwriting workers compensation coverage. In determining the P&C provision, NCCl reviews both a static and a dynamic P&C estimate as indicated by IRR model. The static estimate takes into account current interest rates, while the dynamic estimate incorporates projections of future interest rate levels. The P&C selection is based on a review of both of these estimates, while also considering stability in this filing component. This filing proposes a decrease to the P&C provision from 2.0% to 0.0%, which



Iowa

Workers Compensation Rate Filing – January 1, 2024

Exhibit II – Workers Compensation Expense Program

considers the notable and rapid shift in interest rates from the prior year.

Loss-based Expense Provision: The only component of the loss-based expense provision included in the proposed rates is the provision for loss adjustment expenses (LAE).

LAE is included in the rates by using a ratio of loss adjustment expense dollars to loss dollars (called the LAE provision). These expenses are directly associated with the handling of workers compensation claims. The LAE provision is comprised of two components: Adjusting and Other Expenses (AOE) and Defense and Cost Containment Expenses (DCCE).

Given the nature of AOE, it cannot be allocated to a specific claim, and hence cannot be accurately attributed to specific states. Therefore, the state-specific AOE ratio reflects the latest selected countrywide provision. The countrywide provision was calculated using data obtained from the NCCI Call for Loss Adjustment Expense. The accident year developed AOE ratios are calculated on a countrywide basis using private carrier-only data after removing the reported COVID-19-related losses.

The reported DCCE and losses from COVID-19-related claims have been excluded from the underlying data in this year's analysis to better reflect the conditions likely to prevail in the proposed effective period. NCCI used the following general methodology to determine the proposed DCCE provision based on lowa-specific paid DCCE and losses reported on the NCCI Call for Policy Year Data:

- Ratios of reported paid DCCE-to-paid losses by policy year are developed to a 19th report using DCCE ratio development factors.
- A 19th-to-ultimate tail factor is applied to reflect expected development beyond a 19th report.
- The proposed DCCE provision is selected based on the ultimate projected DCCE ratios by policy year.

Expense Constant: Insurer expenses as a proportion of premium vary by size of risk. As risk size increases, marginal expenses tend to diminish. An expense constant helps address fixed expense differences by size of risk. The expense constant together with the expense provision included in the manual rate provide the necessary funding for insurer expenses.



EXHIBIT II

Section A - Comparison of Proposed and Current Expense Provisions

Overhead expense provisions are itemized below. These figures are expressed as percentages of standard premium (excluding expense constant) and are indicative of the expenses of the first \$10,000 of policy premium. Taken together these allowances represent that portion of the standard premium dollar necessary to operate the benefit system. The complementary portion corresponds to the portion of the premium dollar available to finance benefits, loss adjustment expenses and loss-based assessments, if applicable. It is referred to as the "target cost ratio".

		Expense Provisions Underlying	Expense Provisions Underlying
		<u>Current Rates</u>	Proposed Rates
(1)	Expense Constant	\$160	\$160
(2)	Production Expense	18.2%	18.3%
(3)	General Expense	6.1%	6.1%
(4)	Taxes, Licenses and Fees (other than Federal Income Tax)		
	Premium Tax	1.0%	1.0%
	Miscellaneous	0.3%	0.3%
	Second Injury Fund	1.2%	1.4%
	Total	2.5%	2.7%
(5)	Profit and Contingency Provision	2.0%	0.0%
(6)	Total Overhead Provisions		
	(2)+(3)+(4)+(5)	28.8%	27.1%
(7)	Target Cost Ratio		
	[100% - (6)]	71.2%	72.9%
(8)	Loss Adjustment Expense	17.8%	17.8%
(9)	Loss-based Assessment	0.0%	0.0%
(10)	Permissible Loss Ratio (7) / [1+(8)+(9)]	60.4%	61.9%



EXHIBIT II

Section B - Calculation of Change in Expense Provisions

		Α	В	С	D
		_	Col. A with		Col. C with
		Current	Proposed Prod	Col. B with	Proposed Profit
		<u>Expenses</u>	<u>& Gen Exp</u>	Proposed Taxes	and Contingency
(1)	Production Expense	18.2%	18.3%	18.3%	18.3%
(2)	General Expense	6.1%	6.1%	6.1%	6.1%
(3)	Taxes	2.5%	2.5%	2.7%	2.7%
(4)	Profit and Contingency Provision	<u>2.0%</u>	<u>2.0%</u>	<u>2.0%</u>	0.0%
(5)	Total Provisions (1)+(2)+(3)+(4)	28.8%	28.9%	29.1%	27.1%
(6)	TCR (100%-(5))	71.2%	71.1%	70.9%	72.9%
(7)	Loss Based Expenses	17.8%	17.8%	17.8%	17.8%
(8)	Change in Production and General Exp (6A) / (6B)	ense		1.001	+0.1%
(9)	Change in Taxes and Assessments (6B) / (6C)			1.003	+0.3%
(10)	Change in Profit and Contingency Prov (6C) / (6D)	ision		0.973	-2.7%
(11)	Change in Loss Based Expenses [1.0 + (7B)] / [1.0 + (7A)]			1.000	0.0%



EXHIBIT II

Section C - Countrywide Expense Program

NCCI annually reviews expense provisions underlying workers compensation rates. This review procedure is based on countrywide expense data. Since a significant portion of workers compensation insurance is interstate business, it is not practical to allocate expenses (especially general, other acquisition, and adjusting and other loss adjustment expenses) to particular states.

The NCCI expense program is designed to ensure equity among employers through a percentage provision in manual rates, a schedule of premium discounts for risks with standard premium in excess of \$10,000, and the application of an expense constant.

The majority of expenses incurred in workers compensation vary directly by layer of premium and are accordingly termed variable expenses. An equitable apportionment of variable expense is achieved through the application of premium discounts. As the premium for a policy increases, some expenses incurred in handling the insurance coverage become proportionately less in terms of premium. A fair expense program must, therefore, provide that the larger premium policies be charged a lower percentage of premium for these expenses than the smaller policies.

Other expenses such as issuing, recording and auditing are common to all policies regardless of size. These common expenses are called fixed expenses and are addressed by incorporating an expense constant in the program.



EXHIBIT II

Section D - Derivation of General Expense Provisions

The data below (amounts in thousands) illustrates that the combination of a 6.1% general expense provision in the manual rates, a \$160 expense constant, and the premium discount schedule generates general expense premium dollars that are consistent with historical actual general expenses as reported in the Insurance Expense Exhibit. All figures below obtained from the Insurance Expense Exhibit (IEE) include data for stock and mutual companies.

		<u>2020</u>	<u>2021</u>	<u>2022</u>
(1)	Direct Earned Premium (NAIC Insurance Expense Exhibit Data)	44,697,279	44,738,409	49,079,544
	(1a) Effect of Premium Discounts	0.930	0.930	0.930
	(1b) Effect of Schedule Rating	0.957	0.960	0.961
	(1c) Effect of Carrier Deviations	1.076	1.079	1.077
	(1d) Effect of Deductibles	0.742	0.739	0.739
	(1e) Expense Constant Offset	0.990	0.989	0.989
(2)	Gross Adjusted Premium (STD Premium @ NCCI Level Excl. Expense Constant) {(1) / [(1a) x (1b) x (1c) x (1d)]} x (1e)	62,273,778	62,152,237	68,238,635
(3)	Direct General Expenses Incurred (NAIC Insurance Expense Exhibit Data) (3a) Proportion of Expense Constant Attributable	3,321,770	3,346,906	3,599,629
	to General Expenses	0.406	0.406	0.406
(4)	General Expenses Incurred (Excluding Expense Constant Revenue) (3) - (2) x [1-(1e)]/(1e) x (3a)	3,066,385	3,066,247	3,291,486
(5)	Ratio of General Expense to Premium (Excluding Expense Constant Revenue) (4)/(2)	4.9%	4.9%	4.8%
(6)	General Expense Gradations (General Expenses in Average Premium Discount)	1.2%	1.2%	1.2%
(7)	General Expense Provision (5)+(6)	6.1%	6.1%	6.0%
(8)	Selected General Expense Provision			6.1%



EXHIBIT II

Section E - Derivation of Production Expense Provisions

The data below (amounts in thousands) illustrates that the combination of a 18.3% production expense provision in the manual rates, a \$160 expense constant, and the premium discount schedule generates production expense premium dollars that are consistent with historical actual production expenses as reported for combined stock and mutual companies' voluntary business. All figures below obtained from the Insurance Expense Exhibit (IEE) include data for stock and mutual companies.

		<u>2020</u>	<u>2021</u>	<u>2022</u>
(1)	Direct Written Premium (NAIC Insurance Expense Exhibit Data) (1a) Effect of Premium Discounts	44,395,749 0.931	45,045,328 0.930	49,871,770 0.930
	(1b) Effect of Schedule Rating	0.959	0.961	0.961
	(1c) Effect of Carrier Deviations	1.080	1.078	1.075
	(1d) Effect of Deductibles (1e) Expense Constant Offset	0.740 0.989	0.739 0.989	0.739 0.989
(2)	Pool Written Premium	900,966	857,108	921,787
(2)	(Summary of NCCI Managed Pools - Combined Stock and Mutual Company Data)	900,900	637,106	921,767
(3)	Adjusted Direct Written Premium (STD Premium Excl. Pool Written Premium) [(1)-(2)] / (1a) x (1e)	46,204,447	46,991,559	52,055,412
(4)	Gross Direct Written Premium (STD Premium @ NCCI Level Incl. Pool Written Premium) {(1) / [(1a) x (1b) x (1c) x (1d)]} x (1e)	61,533,825	62,571,492	69,469,126
(5)	Direct Commission & Brokerage Incurred (NAIC Insurance Expense Exhibit Data)	3,982,263	4,279,676	4,675,886
(6)	Pool Producer Fees (Summary of NCCI Managed Pools - Combined Stock and Mutual Company Data)	29,463	28,272	31,610
(7)	Direct Other Acquisition Expenses Incurred	2,128,770	2,101,949	2,401,715
	(NAIC Insurance Expense Exhibit Data) (7a) Proportion of Expense Constant Attributable to Production Expenses	0.531	0.531	0.531
(8)	Other Acquisition Expenses Incurred (Excluding Expense Constant Revenue) (7) - (4) x [1-(1e)]/(1e) x (7a)	1,765,353	1,732,404	1,991,433
(9)	Ratio of Other Acq. Expenses to Premium (Excluding Expense Constant Revenue) (8)/(4)	2.9%	2.8%	2.9%
(10)	Direct Commission & Brokerage Provision [(5)-(6)]/(3)	8.6%	9.0%	8.9%
(11)	Production Expense Gradations (Production Expenses in Average Premium Discount)	6.6%	6.6%	6.6%
(12)	Production Expense Provision (9)+(10)+(11)	18.1%	18.4%	18.4%
(13)	Selected Production Expense Provision			18.3%



EXHIBIT II

Workers Compensation Loss-based Expense Provision

Section F (a) - Determination of Loss Adjustment Expense Provision

In this filing, NCCI proposes a 17.8% loss adjustment expense allowance as a percentage of losses. The DCCE provision is based on lowa-specific data reported to NCCI on the Policy Year Call for Experience. The AOE provision is based on countrywide data reported to NCCI on the Call for Loss Adjustment Expense.

	Developed		Developed		
Policy Year	DCCE Ratio	Accident Year	AOE Ratio		
2017	8.2%	2018	9.1%		
2018	8.9%	2019	9.6%		
2019	8.1%	2020	10.2%		
2020	8.0%	2021	9.6%		
2021	9.0%	2022	9.3%		
Countrywide selected:			9.4%		
lowa selected:	8.4%	+	9.4%	=	17.8%

Section F (b) - Defense and Cost Containment Expense (DCCE) Ratio

(1)	(2)	(3)	$(4) = (2) \times (3)$
	Reported Ratio of	Age-to-Ultimate	
Policy	Paid DCCE to	Development	Ultimate
<u>Year</u>	Paid Losses	<u>Factor</u>	DCCE Ratio
2017	8.4%	0.979	8.2%
2018	9.0%	0.987	8.9%
2019	8.0%	1.016	8.1%
2020	7.2%	1.107	8.0%
2021	7.1%	1.271	<u>9.0%</u>

lowa selected:

8.4%

Section F (c) - Proposed Change in the Iowa Loss Adjustment Expense (LAE) Provision

	(5) <u>Current</u>	(6) <u>Proposed</u>
Iowa LAE Provision	17.8%	17.8%
Proposed Change in LAE Provision = [1.000 + (6)] / [1.000 + (5)] - 1		1.000 (0.0%)



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

Overview

According to actuarial principles, insurance rates should provide for the cost of capital through an underwriting profit and contingency (P&C) provision, after accounting for investment and other income. NCCI considered Actuarial Standard of Practice #30 Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking in choosing to employ an Internal Rate of Return (IRR) model to estimate a P&C provision. The cost of capital and investment income assumptions used in the model are estimated using market-based financial methods for investors of securities with a similar risk profile to workers compensation insurance companies. Note that the assumptions used in this IRR model, including the cost of capital and investment income assumptions, may or may not be applicable to any individual insurance company in this state.

The IRR model is based on the principle that the internal rate of return from an investment opportunity equals the investor's cost of capital if the sum of all cash flows from that investment, discounted at the cost of capital, equals zero. In the case of workers compensation insurance, cash flows to the capital providers are comprised of insurance cash flows, investment income, and commitment and release of capital in support of the insurance transaction.

- The insurance cash flows are estimated based on premiums earned less payments for losses and expenses, as included in this rate filing, after recognizing the impact of federal income taxes.
- · Investment income on reserves and surplus depends on an after-tax return on investment (RoI), which is estimated using a combination of current financial market data and forecasts.
- The cost of capital used is a weighted average cost of capital (WACC), expressed as a percentage of capital, which takes into account both debt and equity components of a representative insurer's capital structure.

IRR Model Inputs and Results

The model estimates the P&C provision necessary in order for the proposed rates to cover the cost of capital. The P&C provision is estimated using two different assumptions regarding the return on investment and cost of capital:

- The "Static" estimate of the P&C provision assumes that the return on investment and the WACC do not change over time. Static estimates of the return on investment and the WACC are derived using data through the first quarter of 2023.
- The "Dynamic" estimate assumes that the return on investment and WACC vary over time. Dynamic estimates
 are derived using data through the first quarter of 2023, with forecasts from May of that year. The starting point for
 the Dynamic estimates is January 1, 2024.

The following table summarizes the inputs and results of the model under these two scenarios.

TABLE 1: IRR MODEL INPUTS AND RESULTS

Inputs:			
(1)	Expenses and Taxes as a Percentage of Net Premium at NCCI Level		21.70%
(2)	Reserve-to-Surplus Ratio		1.89
(3)	Cash Flow Patterns		See Table 2
(4)	Return on Investments	<u>Static</u> 4.51%	<u>Dynamic*</u> 4.61% - 3.91%
(5)	Weighted Average Cost of Capital	9.82%	10.06% - 9.51%
Results		Static	<u>Dynamic</u>
(6)	Indicated Profit and Contingency Provision	-1.86%	-1.04%
(7)	Loss and Loss Adjustment Expense Provision [100% - (6) - (1)]	80.16%	79.34%

Table Notes:

It is assumed that no policyholders dividends are paid and that there are no rate departures (deviations or schedule rating).

- (1) Expense provisions and taxes derived from the filing.
- (2) Calculated from Best's 2022 Aggregates & Averages, for Commercial Casualty Composite, as the weighted average of Loss, LAE, and Unearned Premium Reserves to Policyholder Surplus, for years 2017 2021.
- * See Table 3 for details by time period.



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Section G - Derivation of the Indicated Profit and Contingency Provision

EXHIBIT

TABLE 2: CASH FLOW PATTERNS (CUMULATIVE)

TABLE 3: DYNAMIC ESTIMATE INPUTS

	(1)	(2)	(3)	(4)	(5)			(1)	(2)
	Policy-Year				Paid				Weighted
	Collected	Earned	Written	Expenses	Losses			Return on	Average Cost
Time	Premium	Premium	Premium	and Taxes	and LAE		Time	Investments	of Capital
0.00	-	-	-	-	-		0.00	-	-
0.25	12.24%	3.50%	28.00%	12.18%	0.92%		0.25	4.61%	10.06%
0.50	28.89%	13.61%	52.90%	28.13%	3.57%		0.50	4.59%	10.05%
0.75	52.15%	30.15%	79.40%	50.04%	7.91%		0.75	4.49%	9.93%
1.00	75.64%	52.58%	100.00%	71.88%	13.80%		1.00	4.47%	9.85%
1.25	89.22%	74.08%		83.96%	23.35%		1.25	4.41%	9.79%
1.50	97.06%	88.96%		90.93%	32.90%		1.50	4.39%	9.74%
1.75	100.00%	97.43%		100.00%	42.45%		1.75	4.34%	9.70%
2.00		100.00%			52.00%		2.00	4.32%	9.67%
2.25					56.80%		2.25	4.27%	9.67%
2.50					61.60%		2.50	4.27%	9.72%
2.75					66.40%		2.75	4.03%	9.72%
3.00					71.20%		3.00	4.03%	9.70%
3.25					73.75%		3.25	4.03%	9.71%
3.50					76.30%		3.50	4.03%	9.72%
3.75					78.85%		3.75	4.03%	9.72%
4.00					81.40%		4.00	4.03%	9.73%
4.25					82.78%		4.25	4.03%	9.73%
4.50					84.15%		4.50	4.03%	9.71%
4.75 5.00					85.53% 86.90%		4.75 5.00	4.03% 4.02%	9.71% 9.70%
6.00					89.40%		6.00	4.02%	9.70%
7.00					90.80%		7.00	3.99%	9.62%
8.00					91.80%		8.00	3.95%	9.59%
9.00					92.30%		9.00	3.92%	9.58%
10.00					92.80%		10.00	3.93%	9.57%
11.00					93.20%		11.00	3.94%	9.55%
12.00					93.60%		12.00	3.94%	9.54%
13.00					94.00%		13.00	3.95%	9.54%
14.00					94.40%		14.00	3.95%	9.53%
15.00					94.70%		15.00	3.95%	9.52%
16.00					94.90%		16.00	3.91%	9.52%
17.00					95.30%		17.00	3.92%	9.53%
18.00					95.70%		18.00	3.93%	9.54%
19.00					95.90%		19.00	3.94%	9.55%
20.00					96.10%		20.00	3.93%	9.54%
21.00					96.20%		21.00	3.93%	9.53%
22.00					96.40%		22.00	3.92%	9.53%
23.00					96.90%		23.00	3.92%	9.52%
24.00					97.10%		24.00	3.92%	9.52%
25.00					97.40%		25.00	3.92%	9.51%
26.00					97.80%		26.00	3.91%	9.51%
27.00					97.90%		27.00	3.91%	9.51%
28.00					98.00%		28.00	3.91%	9.51%
29.00					98.10%		29.00	3.91%	9.51%
30.00					98.30%		30.00	3.91%	9.51%
31.00 32.00					98.30%		31.00	3.91% 3.91%	9.51% 9.51%
					98.76%		32.00		
33.00 34.00					99.20% 99.61%		33.00 34.00	3.91% 3.91%	9.51% 9.51%
35.00					100.00%			3.91% 3.91%	
JJ.00					100.00%	<u> </u>	35.00	3.91%	9.51%

Table 2 Notes:

- (1) Derived from estimates of premium distribution and payment terms by size of policy.
- (2) Based on written premium pattern assuming uniform writings within quarters and standard quarterly earning pattern.
- (3) Based on this jurisdiction's premium writings by quarter.
- (4) Expenses assumed paid as premium is collected; timing of taxes based on NCCI's Tax and Assessment Directory.
- (5) Derived from loss development data underlying this rate filing. Payouts for the first 31 years are based upon the ratio of paid losses to incurred losses from the most recent 31 policy years for which data is available. For the following years, loss payouts are assumed to trail off geometrically, with an adjustment so that the payout will be complete at 35 years.

Table 2 shows cumulative cash flows. For ease of reading no additional numbers are shown after a column reaches 100% cumulative cash flow.

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Section G - Derivation of the Indicated Profit and Contingency Provision

Calculation Details

The tables in the following pages show the detailed calculations of the IRR model.

List of Tables

Static Estimate

- Table 4: Derivation of Insurance Cash Flows
- Table 5: Derivation of Cash Flows to the Capital Providers

Dynamic Estimate

- Table 6: Derivation of Insurance Cash Flows
- Table 7: Derivation of Cash Flows to the Capital Providers

Appendices

- Appendix A: Calculation of Weighted Average Cost of Capital and Return on Investments
 - Table A.1: Calculation of Weighted Average Cost of Capital
 - Table A.2: Calculation of Return on Investments
- Appendix B: Federal Income Tax Incurred from Insurance Operations
 - Table B.1: Federal Income Tax Calculation (Static Estimate)
 - Table B.2: Federal Income Tax Calculation (Dynamic Estimate)
- Appendix C: Reserve-to-Surplus Ratio

Note: Although values are displayed to 4 decimal places in the following tables, the calculations themselves are carried to the full precision of the computer.



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

Calculation Details - Static Estimate

TABLE 4: DERIVATION OF INSURANCE CASH FLOW (STATIC ESTIMATE)

Collected Expense Factor Factor		(1)	(2)	(3)	(4)	(5)
Time Fractor Factor Factor Factor Cash flow Factor 0.00 0.25 0.1224 0.0264 0.0074 0.0049 0.083 0.50 0.2889 0.0610 0.0286 0.0098 0.1890 0.75 0.5215 0.1086 0.0634 0.0147 0.347 1.00 0.7564 0.1560 0.1106 0.0197 0.4701 1.25 0.8922 0.1822 0.1872 0.0159 0.5068 1.50 0.9706 0.1973 0.2637 0.0122 0.4973 1.75 1.0000 0.2170 0.3403 0.0085 0.4441 2.00 1.0000 0.2170 0.4168 0.0048 0.3612 2.25 1.0000 0.2170 0.4553 0.0041 0.3233 2.75 1.0000 0.2170 0.4583 0.0033 0.2853 2.75 1.0000 0.2170 0.5202 0.0014 0.1904 3.50 1.0000 0.2170						
Time						Cash flow
0.25	Time	Factor		Factor	Factor	Factor
0.50 0.2889 0.0610 0.0286 0.0034 0.0147 0.3347 1.00 0.7564 0.1560 0.1106 0.0197 0.4701 1.25 0.8922 0.1822 0.1872 0.0159 0.5065 1.50 0.9706 0.1973 0.2637 0.0122 0.4973 1.75 1.0000 0.2170 0.3403 0.0085 0.4342 2.00 1.0000 0.2170 0.4468 0.0048 0.3614 2.25 1.0000 0.2170 0.4553 0.0041 0.3236 2.50 1.0000 0.2170 0.4938 0.0033 0.2858 2.75 1.0000 0.2170 0.5323 0.0026 0.2481 3.00 1.0000 0.2170 0.5912 0.0014 0.1902 3.55 1.0000 0.2170 0.6312 0.0014 0.1902 3.75 1.0000 0.2170 0.6321 0.0004 0.1502 4.00 1.0000 0.2170 <	0.00	-	-	-	-	-
0.50 0.2889 0.0610 0.0286 0.0034 0.0147 0.3347 1.00 0.7564 0.1560 0.1106 0.0197 0.4701 1.25 0.8922 0.1822 0.1872 0.0159 0.5065 1.50 0.9706 0.1973 0.2637 0.0122 0.4973 1.75 1.0000 0.2170 0.3403 0.0085 0.4342 2.00 1.0000 0.2170 0.4468 0.0048 0.3614 2.25 1.0000 0.2170 0.4553 0.0041 0.3236 2.50 1.0000 0.2170 0.4938 0.0033 0.2858 2.75 1.0000 0.2170 0.5323 0.0026 0.2481 3.00 1.0000 0.2170 0.5912 0.0014 0.1902 3.55 1.0000 0.2170 0.6312 0.0014 0.1902 3.75 1.0000 0.2170 0.6321 0.0004 0.1502 4.00 1.0000 0.2170 <	0.25	0.1224	0.0264	0.0074	0.0049	0.0837
1.00	0.50	0.2889		0.0286	0.0098	0.1894
1.00	0.75	0.5215	0.1086	0.0634	0.0147	0.3347
1.25						0.4701
1.50		0.8922	0.1822	0.1872	0.0159	0.5069
2.00			0.1973	0.2637	0.0122	0.4973
2.00						0.4342
2.25 1.0000 0.2170 0.4553 0.0041 0.3236 2.50 1.0000 0.2170 0.4938 0.0033 0.2856 2.75 1.0000 0.2170 0.5323 0.0026 0.2481 3.00 1.0000 0.2170 0.5707 0.0019 0.2104 3.50 1.0000 0.2170 0.6116 0.0009 0.1709 3.75 1.0000 0.2170 0.6321 0.0004 0.1506 4.00 1.0000 0.2170 0.6325 (0.0000) 0.1306 4.55 1.0000 0.2170 0.6635 (0.0003) 0.1996 4.75 1.0000 0.2170 0.6635 (0.0003) 0.1996 4.75 1.0000 0.2170 0.6856 (0.0009) 0.0985 5.00 1.0000 0.2170 0.7166 (0.0017) 0.0886 6.00 1.0000 0.2170 0.7279 (0.0020) 0.0571 8.00 1.0000 0.2170 0.7359 <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.3614</td>						0.3614
2.50				0.4553		0.3236
2.75						0.2859
3.00						
3.25						
3.50						
3.75						0.1705
4.00 1.0000 0.2170 0.6525 (0.0000) 0.1308 4.25 1.0000 0.2170 0.6635 (0.0003) 0.1198 4.50 1.0000 0.2170 0.6745 (0.0006) 0.1090 4.75 1.0000 0.2170 0.6966 (0.0012) 0.0876 6.00 1.0000 0.2170 0.7166 (0.0017) 0.0686 7.00 1.0000 0.2170 0.7279 (0.0020) 0.057 8.00 1.0000 0.2170 0.7359 (0.0023) 0.0499 9.00 1.0000 0.2170 0.7399 (0.0026) 0.0457 10.00 1.0000 0.2170 0.7399 (0.0028) 0.0411 11.00 1.0000 0.2170 0.7439 (0.0028) 0.0411 11.00 1.0000 0.2170 0.7535 (0.0031) 0.0358 13.00 1.0000 0.2170 0.7535 (0.0031) 0.0351 13.00 1.0000 0.2170						
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32.00					, ,	(0.0011)
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					, ,	(0.0083)
(/						(0.0116)
35.00 1.0000 0.2170 0.8016 (0.0039) (0.0147					, ,	(0.0147)

Column Notes:

- (1) is Collected Premium by time period, expressed as a factor, = Table 2 col (1)
- (2) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (3) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Static) x Table 2 col (5)
- (4) per the Tax Cuts and Jobs Act of 2017, federal income taxes are computed as the tax rate (21%) times the adjusted underwriting income calculated per IRS rules. See Appendix B for details.
- (5) is the Total Insurance Cash Flow by time period, expressed as a factor, = (1) [(2) + (3) + (4)]



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

Calculation Details - Static Estimate (continued)

TABLE 5: DERIVATION OF CASH FLOWS TO THE CAPITAL PROVIDERS (STATIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Unearned Premium,	Factor for	Total Invested	Income from	(5) Capital	(6) Capital	Discounted
	Unpaid Loss	Surplus	Funds	Invested Funds	Provider	Provider	Capital
	and Unpaid LAE	Allocated to	Factor	Factor	Equity	Cash Flow	Provider Cash
Time		Reserves	Factor	Factor	Factor	Factor	Flow Factor
0.00	Reserve Factor	Reserves			Factor	Factor	Flow Factor
0.00	0.2657	0.1406	0.2487	0.0014	(0.1636)	(0.1636)	(0.1617)
		0.1406			, ,	,	,
0.50	0.4734		0.4837	0.0054	(0.2889)	(0.1253)	(0.1210)
0.75	0.6707	0.3549	0.7531	0.0123	(0.4061)	(0.1172)	(0.1106)
1.00	0.7851	0.4154	0.9569	0.0218	(0.4649)	(0.0588)	(0.0542)
1.25	0.6659	0.3523	0.9104	0.0322	(0.3713)	0.0936	0.0842
1.50	0.5598	0.2962	0.8265	0.0418	(0.2874)	0.0839	0.0737
1.75	0.4664	0.2468	0.7132	0.0503	(0.2287)	0.0588	0.0505
2.00	0.3848	0.2036	0.5883	0.0576	(0.1694)	0.0593	0.0497
2.25	0.3463	0.1832	0.5295	0.0638	(0.1421)	0.0273	0.0224
2.50	0.3078	0.1629	0.4707	0.0693	(0.1155)	0.0266	0.0213
2.75	0.2693	0.1425	0.4118	0.0742	(0.0895)	0.0260	0.0203
3.00	0.2309	0.1221	0.3530	0.0785	(0.0641)	0.0253	0.0194
3.25	0.2104	0.1113	0.3218	0.0822	(0.0491)	0.0150	0.0112
3.50	0.1900	0.1005	0.2905	0.0856	(0.0344)	0.0147	0.0107
3.75	0.1695	0.0897	0.2592	0.0887	(0.0201)	0.0143	0.0102
4.00	0.1491	0.0789	0.2280	0.0914	(0.0061)	0.0140	0.0097
4.25	0.1381	0.0731	0.2111	0.0938	0.0025	0.0085	0.0058
4.50	0.1271	0.0672	0.1943	0.0961	0.0108	0.0084	0.0055
4.75	0.1160	0.0614	0.1774	0.0981	0.0190	0.0082	0.0053
5.00	0.1050	0.0556	0.1606	0.1000	0.0270	0.0080	0.0051
6.00	0.0850	0.0450	0.1299	0.1065	0.0446	0.0177	0.0106
7.00	0.0737	0.0390	0.1128	0.1120	0.0564	0.0117	0.0064
8.00	0.0657	0.0348	0.1005	0.1168	0.0658	0.0094	0.0047
9.00	0.0617	0.0327	0.0944	0.1212	0.0725	0.0068	0.0031
10.00	0.0577	0.0305	0.0883	0.1254	0.0790	0.0065	0.0027
11.00	0.0545	0.0288	0.0833	0.1292	0.0848	0.0057	0.0021
12.00	0.0513	0.0271	0.0784	0.1329	0.0903	0.0055	0.0019
13.00	0.0481	0.0254	0.0735	0.1363	0.0956	0.0053	0.0016
14.00	0.0449	0.0238	0.0686	0.1395	0.1006	0.0051	0.0014
15.00	0.0425	0.0225	0.0650	0.1425	0.1051	0.0044	0.0011
16.00	0.0409	0.0216	0.0625	0.1454	0.1089	0.0038	0.0009
17.00	0.0377	0.0199	0.0576	0.1481	0.1134	0.0045	0.0010
18.00	0.0345	0.0182	0.0527	0.1506	0.1176	0.0042	0.0008
19.00	0.0329	0.0174	0.0503	0.1529	0.1208	0.0032	0.0006
20.00	0.0313	0.0165	0.0478	0.1552	0.1238	0.0031	0.0005
21.00	0.0305	0.0161	0.0466	0.1573	0.1264	0.0026	0.0004
22.00	0.0289	0.0153	0.0441	0.1593	0.1293	0.0029	0.0004
23.00	0.0248	0.0131	0.0380	0.1612	0.1333	0.0040	0.0005
24.00	0.0232	0.0123	0.0355	0.1628	0.1358	0.0025	0.0003
25.00	0.0208	0.0110	0.0319	0.1644	0.1386	0.0028	0.0003
26.00	0.0176	0.0093	0.0270	0.1657	0.1416	0.0020	0.0003
27.00	0.0168	0.0089	0.0257	0.1669	0.1432	0.0016	0.0001
28.00	0.0160	0.0085	0.0245	0.1680	0.1448	0.0016	0.0001
29.00	0.0152	0.0081	0.0233	0.1691	0.1463	0.0015	0.0001
30.00	0.0136	0.0072	0.0208	0.1701	0.1482	0.0018	0.0001
31.00	0.0136	0.0072	0.0208	0.1710	0.1491	0.0009	0.0001
32.00	0.0099	0.0072	0.0208	0.1718	0.1519	0.0009	0.0001
33.00	0.0099	0.0034	0.0099	0.1714	0.1543	0.0028	0.0001
34.00	0.0003	0.0034	0.0048	0.1727	0.1564	0.0024	0.0001
35.00	0.0031	0.0017	0.0040	0.1727	0.1564	0.0021	0.0001
33.00	-	•	-	0.1729	0.1562	0.0018	0.0001

Column Notes

- (1) is Unearned Premium Reserve (equal to Written Premium minus Earned Premium, per the cashflow pattern) plus Unpaid Loss and LAE Reserve (equal to Incurred minus Paid Losses and LAE) by time period, expressed as a factor,
 - = [Table 2 col (3) Table 2 col (2)] + Table 1 row (7, Static) x [Table 2 col (2) Table 2 col (5)]
- (2) is the Surplus derived from Reserves per the Reserve-to-Surplus Ratio by time period, expressed as a factor, = (1) / Table 1 row (2)
- (3) is Reserves plus Surplus minus Agent Balances by time period, expressed as a factor, = (1) + (2) Agent Balances. Agent Balances exist when Written Premium exceeds Collected Premium, = [Table 2 col (3) Table 2 col (1)].
- (4) is derived by applying the Return on Investments [Table 1 row (4, Static)] to the average Invested Funds (4) from the previous and current time periods, plus previous Income from Invested Funds, by time period expressed as a factor.
- (5) is Insurance Cash Flow plus Income from Invested Funds minus Total Invested Funds by time period, expressed as a factor, = Table 4 col (5) + (4) (3)
- (6) is the difference between Capital Provider Equity (5) at the current and previous time periods, expressed as a factor
- (7) is the Capital Provider Cash Flow (6) discounted by the Weighted Average Cost of Capital [Table 1 row (5, Static)], expressed as a factor



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

Calculation Details - Dynamic Estimate

TABLE 6: DERIVATION OF INSURANCE CASH FLOW (DYNAMIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)
	Collected	Expense	Paid Losses	Federal	Insurance
	Premium	and Taxes	and LAE	Income Tax	Cash flow
Time	Factor	Factor	Factor	Factor	Factor
0.00	-	-	-	-	-
0.25	0.1224	0.0264	0.0073	0.0051	0.0836
0.50	0.2889	0.0610	0.0283	0.0102	0.1893
0.75	0.5215	0.1086	0.0628	0.0153	0.3348
1.00	0.7564	0.1560	0.1095	0.0205	0.4705
1.25	0.8922	0.1822	0.1852	0.0170	0.5078
1.50	0.9706	0.1973	0.2610	0.0135	0.4988
1.75	1.0000	0.2170	0.3368	0.0100	0.4363
2.00	1.0000	0.2170	0.4125	0.0064	0.3640
2.25	1.0000	0.2170	0.4506	0.0057	0.3267
2.50	1.0000	0.2170	0.4887	0.0050	0.2893
2.75	1.0000	0.2170	0.5268	0.0043	0.2520
3.00	1.0000	0.2170	0.5649	0.0035	0.2146
3.25	1.0000	0.2170	0.5851	0.0031	0.1948
3.50	1.0000	0.2170	0.6053	0.0026	0.1751
3.75	1.0000	0.2170	0.6256	0.0021	0.1553
4.00	1.0000	0.2170	0.6458	0.0017	0.1356
4.25	1.0000	0.2170	0.6567	0.0014	0.1249
4.50	1.0000	0.2170	0.6676	0.0011	0.1143
4.75	1.0000	0.2170	0.6785	0.0008	0.1037
5.00	1.0000	0.2170	0.6894	0.0006	0.0930
6.00	1.0000	0.2170	0.7093	0.0001	0.0737
7.00	1.0000	0.2170	0.7204	(0.0002)	0.0629
8.00	1.0000	0.2170	0.7283	(0.0006)	0.0553
9.00	1.0000	0.2170	0.7323	(0.0009)	0.0516
10.00	1.0000	0.2170	0.7362	(0.0011)	0.0478
11.00	1.0000	0.2170	0.7394	(0.0012)	0.0448
12.00	1.0000	0.2170	0.7426	(0.0014)	0.0418
13.00	1.0000	0.2170	0.7458	(0.0016)	0.0388
14.00	1.0000	0.2170	0.7489	(0.0017)	0.0358
15.00	1.0000	0.2170	0.7513	(0.0019)	0.0336
16.00	1.0000	0.2170	0.7529	(0.0020)	0.0321
17.00	1.0000	0.2170	0.7561	(0.0021)	0.0290
18.00	1.0000	0.2170 0.2170	0.7592	(0.0021)	0.0258
19.00 20.00	1.0000 1.0000	0.2170	0.7608 0.7624	(0.0021) (0.0021)	0.0243 0.0227
21.00	1.0000	0.2170	0.7632	(0.0021)	0.0227
22.00	1.0000	0.2170	0.7648	(0.0021)	0.0219
23.00	1.0000	0.2170	0.7688	(0.0021)	0.0203
24.00	1.0000	0.2170	0.7703	(0.0021)	0.0148
25.00	1.0000	0.2170	0.7727	(0.0021)	0.0124
26.00	1.0000	0.2170	0.7759	(0.0021)	0.0092
27.00	1.0000	0.2170	0.7767	(0.0021)	0.0084
28.00	1.0000	0.2170	0.7775	(0.0021)	0.0076
29.00	1.0000	0.2170	0.7783	(0.0021)	0.0069
30.00	1.0000	0.2170	0.7799	(0.0021)	0.0053
31.00	1.0000	0.2170	0.7799	(0.0021)	0.0053
32.00	1.0000	0.2170	0.7835	(0.0021)	0.0016
33.00	1.0000	0.2170	0.7870	(0.0022)	(0.0018)
34.00	1.0000	0.2170	0.7902	(0.0022)	(0.0051)
35.00	1.0000	0.2170	0.7934	(0.0022)	(0.0082)
<u>, </u>				,	,

Column Notes:

- (1) is Collected Premium by time period, expressed as a factor, = Table 2 col (1)
- (2) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (3) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Dynamic) x Table 2 col (5)
- (4) per the Tax Cuts and Jobs Act of 2017, federal income taxes are computed as the tax rate (21%) times the adjusted underwriting income calculated per IRS rules. See Appendix B for details.
- (5) is the Total Insurance Cash Flow by time period, expressed as a factor, = (1) [(2) + (3) + (4)]



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

Calculation Details - Dynamic Estimate (continued)

TABLE 7: DERIVATION OF CASH FLOWS TO THE CAPITAL PROVIDERS (DYNAMIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Unearned Premium,	Factor for	Total	Income from	Capital	Capital	Cumulative	Discounted
	Unpaid Loss	Surplus	Invested	Invested	Provider	Provider	Discount	Capital
	and Unpaid LAE	Allocated to	Funds	Funds	Equity	Cash Flow	Factor	Provider Cash
Time	Reserve Factor	Reserves	Factor	Factor	Factor	Factor		Flow Factor
0.00		-		-	-	-	1	-
0.25	0.2655	0.1405	0.2483	0.0014	(0.1634)	(0.1634)	0.9881	(0.1614)
0.50	0.4725	0.2500	0.4824	0.0055	(0.2876)	(0.1243)	0.9647	(0.1199)
0.75	0.6689	0.3539	0.7503	0.0123	(0.4032)	(0.1156)	0.9422	(0.1089)
1.00	0.7819	0.4137	0.9520	0.0217	(0.4598)	(0.0566)	0.9203	(0.0521)
1.25	0.6617	0.3501	0.9040	0.0317	(0.3644)	0.0954	0.8991	0.0857
1.50	0.5551	0.2937	0.8195	0.0411	(0.2796)	0.0848	0.8784	0.0745
1.75	0.4619	0.2444	0.7063	0.0492	(0.2208)	0.0588	0.8583	0.0505
2.00	0.3808	0.2015	0.5823	0.0560	(0.1622)	0.0586	0.8387	0.0491
2.25	0.3427	0.1813	0.5241	0.0619	(0.1356)	0.0267	0.8196	0.0219
2.50	0.3046	0.1612	0.4658	0.0671	(0.1095)	0.0261	0.8008	0.0209
2.75	0.2666	0.1410	0.4076	0.0714	(0.0842)	0.0252	0.7825	0.0197
3.00	0.2285	0.1209	0.3494	0.0752	(0.0596)	0.0246	0.7645	0.0188
3.25	0.2083	0.1102	0.3184	0.0785	(0.0451)	0.0145	0.7470	0.0108
3.50	0.1880	0.0995	0.2875	0.0815	(0.0309)	0.0142	0.7299	0.0103
3.75	0.1678	0.0888	0.2566	0.0842	(0.0171)	0.0139	0.7132	0.0099
4.00	0.1476	0.0781	0.2256	0.0866	(0.0035)	0.0136	0.6968	0.0095 0.0056
4.25 4.50	0.1367 0.1257	0.0723 0.0665	0.2090 0.1923	0.0887 0.0907	0.0047 0.0127	0.0082 0.0080	0.6808 0.6652	0.0053
4.30	0.1237	0.0608	0.1923	0.0907	0.0127	0.0080	0.6500	0.0051
5.00	0.1039	0.0550	0.1589	0.0923	0.0283	0.0079	0.6351	0.0031
6.00	0.0841	0.0445	0.1286	0.1000	0.0451	0.0168	0.5995	0.0100
7.00	0.0730	0.0386	0.1116	0.1048	0.0560	0.0110	0.5469	0.0060
8.00	0.0651	0.0344	0.0995	0.1089	0.0647	0.0087	0.4990	0.0043
9.00	0.0611	0.0323	0.0934	0.1127	0.0709	0.0062	0.4554	0.0028
10.00	0.0571	0.0302	0.0873	0.1163	0.0767	0.0059	0.4157	0.0024
11.00	0.0539	0.0285	0.0825	0.1196	0.0819	0.0052	0.3794	0.0020
12.00	0.0508	0.0269	0.0776	0.1228	0.0870	0.0050	0.3464	0.0017
13.00	0.0476	0.0252	0.0728	0.1257	0.0918	0.0048	0.3162	0.0015
14.00	0.0444	0.0235	0.0679	0.1285	0.0964	0.0046	0.2887	0.0013
15.00	0.0420	0.0222	0.0643	0.1311	0.1004	0.0040	0.2636	0.0011
16.00	0.0405	0.0214	0.0619	0.1336	0.1038	0.0034	0.2407	0.0008
17.00	0.0373	0.0197	0.0570	0.1359	0.1079	0.0041	0.2197	0.0009
18.00	0.0341	0.0180	0.0522	0.1381	0.1117	0.0038	0.2006	0.0008
19.00	0.0325	0.0172	0.0497	0.1401	0.1146	0.0028	0.1831	0.0005
20.00	0.0309	0.0164	0.0473	0.1420	0.1173	0.0028	0.1672	0.0005
21.00	0.0301	0.0160	0.0461	0.1438	0.1196	0.0023	0.1526	0.0003
22.00	0.0286	0.0151	0.0437	0.1456	0.1222	0.0026	0.1393	0.0004
23.00	0.0246	0.0130	0.0376	0.1472	0.1259	0.0037	0.1272	0.0005
24.00 25.00	0.0230	0.0122	0.0352	0.1486	0.1282	0.0023	0.1162	0.0003 0.0003
26.00	0.0206 0.0175	0.0109 0.0092	0.0315 0.0267	0.1499	0.1307	0.0026	0.1061	0.0003
26.00	0.0175 0.0167	0.0092	0.0267	0.1510 0.1521	0.1336 0.1350	0.0028 0.0014	0.0969 0.0885	0.0003
28.00	0.0159	0.0084	0.0255	0.1521	0.1364	0.0014	0.0808	0.0001
29.00	0.0159	0.0084	0.0243	0.1530	0.1304	0.0014	0.0608	0.0001
30.00	0.0131	0.0080	0.0230	0.1548	0.1377	0.0013	0.0674	0.0001
31.00	0.0135	0.0071	0.0206	0.1556	0.1403	0.0008	0.0615	0.0001
32.00	0.0098	0.0052	0.0150	0.1563	0.1429	0.0026	0.0562	0.0001
33.00	0.0064	0.0034	0.0098	0.1568	0.1452	0.0023	0.0513	0.0001
34.00	0.0031	0.0016	0.0048	0.1571	0.1472	0.0020	0.0468	0.0001
35.00	-	-	-	0.1572	0.1490	0.0017	0.0428	0.0001
			<u> </u>	5Z		0.00.1	5.5.20	0.0001

Column Notes

- (1) is Unearned Premium Reserve (equal to Written Premium minus Earned Premium, per the cashflow pattern) plus Unpaid Loss and LAE Reserve (equal to Incurred minus Paid Losses and LAE) by time period, expressed as a factor,
 - = [Table 2 col (3) Table 2 col (2)] + Table 1 row (7, Dynamic) x [Table 2 col (2) Table 2 col (5)]
- (2) is the Surplus derived from Reserves per the Reserve-to-Surplus Ratio by time period, expressed as a factor, = (1) / Table 1 row (2)
- (3) is Reserves plus Surplus minus Agent Balances by time period, expressed as a factor, = (1) + (2) Agent Balances. Agent Balances exist when Written Premium exceeds Collected Premium, = [Table 2 col (3) Table 2 col (1)].
- (4) is derived by applying the Return on Investments [Table 3 col (1)] to the average Invested Funds (4) from the previous and current time periods, plus previous Income from Invested Funds, by time period expressed as a factor.
- (5) is Insurance Cash Flow plus Income from Invested Funds minus Total Invested Funds by time period, expressed as a factor, = Table 6 col (5) + (4) (3)
- (6) is the difference between Capital Provider Equity (5) at the current and previous time periods, expressed as a factor
- (7) is derived from the respective Weighted Average Cost of Capital [Table 3 col (2)] for each time period, expressed as a factor
- (8) is the Capital Provider Cash Flow (6) discounted by the Cumulative Discount Factor (7), expressed as a factor



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

APPENDIX A: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL AND RETURN ON INVESTMENTS

The calculation of the Weighted Average Cost of Capital (WACC) is shown in Table A.1, and the calculation of the Return on Investments (RoI) is shown in Table A.2. The calculation for the Static estimate is shown in each. Calculations of the WACC and RoI under the Dynamic estimate for time periods 1, 2, and 5 are also provided for illustrative purposes. Note that the IRR model under the Dynamic estimate includes estimates of the WACC and RoI on a quarterly basis for the first five years and annually thereafter.

TABLE A.1: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL

		IRR	Model Time	(yrs)
	Static	1.00	2.00	5.00
(1) 5 year US T-note Yield	3.80%	3.81%	3.59%	3.61%
(2) US Equity Market Risk Premium	7.92%			
(3) Beta for Property/Casualty (P/C) Insurers	0.89			
(4) Equity Cost of Capital for P/C Insurers	10.85%	10.85%	10.64%	10.66%
(5) Share of Equity Capital for P/C Insurers	85%			
(6) Debt Cost of Capital for P/C Insurers	4.00%	4.15%	4.15%	4.26%
(7) Weighted Average Cost of Capital (WACC)	9.82%	9.85%	9.67%	9.70%

Column Notes:

- (1) Forward estimates of US Treasury yields are from Moody's forecasts and apply only to the Dynamic estimate of the WACC. Time periods provided are illustrative; the full model includes estimates on a quarterly basis for the first five years and annually thereafter.
- (3) & (5) P/C beta and share of equity capital are estimated from historical data for a collection of insurers with publicly traded equity and debt.
 - $(4) = (1) + (2) \times (3)$
 - (6) P/C debt cost of capital is the sum of the 10-year US T-note yield plus the historical corporate spread, net of income tax.
 - $(7) = (4) \times (5) + (6) \times [1 (5)]$



IOWA **EXHIBIT II**

Section G - Derivation of the Indicated Profit and Contingency Provision

APPENDIX A: CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL AND RETURN ON INVESTMENTS (CONTINUED)

TABLE A.2 CALCULATION OF RETURN ON INVESTMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	Investment		Roll-over	Income					
Security Description	Portfolio	Yield Curve, Maturity and Spread	Period	Tax Rate		Post-tax	Return		
Bonds, of which	72.9%	<u> </u>	•				IRR Model Time (yrs		
Government Direct Obligations	7.0%				Static	1.00	2.00	5.00	
< 1yr	2.5%	6 mo US T-bill	0.50 yrs	21.00%	3.94%	3.22%	2.48%	2.06%	
1 – 5 yrs	2.8%	2.5 yr US T-note	2.50 yrs	21.00%	3.33%	3.28%	3.28%	2.58%	
5 – 10 yrs	1.1%	7.5 yr US T-note	7.50 yrs	21.00%	2.94%	3.16%	3.16%	3.16%	
10 – 20 yrs	0.2%	15 yr US T-note	15.00 yrs	21.00%	2.98%	3.26%	3.26%	3.26%	
> 20 yrs	0.3%	20 yr US T-note	20.00 yrs	21.00%	3.08%	3.42%	3.42%	3.42%	
Collateralized Securities	7.6%								
< 1yr	1.2%	6 mo US T-bill + 50 basis points	0.50 yrs	21.00%	4.33%	3.62%	2.87%	2.46%	
1 – 5 yrs	3.1%	2.5 yr US T-note + 50 basis points	2.50 yrs	21.00%	3.72%	3.67%	3.67%	2.98%	
5 – 10 yrs	2.1%	7.5 yr US T-note + 50 basis points	7.50 yrs	21.00%	3.34%	3.55%	3.55%	3.55%	
10 – 20 yrs	0.9%	15 yr US T-note + 50 basis points	15.00 yrs	21.00%	3.38%	3.65%	3.65%	3.65%	
> 20 yrs	0.2%	20 yr US T-note + 50 basis points	20.00 yrs	21.00%	3.48%	3.81%	3.81%	3.81%	
Tax-exempt Bonds	18.2%								
< 1yr	1.4%	6 mo US T-bill + Tax-exempt spread	0.50 yrs	5.25%	4.83%	3.97%	3.08%	2.58%	
1 – 5 yrs	5.6%	2.5 yr US T-note + Tax-exempt spread	2.50 yrs	5.25%	4.15%	4.09%	4.09%	3.26%	
5 – 10 yrs	4.5%	7.5 yr US T-note + Tax-exempt spread	7.50 yrs	5.25%	3.70%	3.96%	3.96%	3.96%	
10 – 20 yrs	5.3%	15 yr US T-note + Tax-exempt spread	15.00 yrs	5.25%	3.86%	4.19%	4.19%	4.19%	
> 20 yrs	1.5%	20 yr US T-note + Tax-exempt spread	20.00 yrs	5.25%	4.07%	4.47%	4.47%	4.47%	
Industrial and Hybrid Securities (unaffiliated)	39.8%								
< 1yr	4.6%	6 mo US T-bill + Corp spread	0.50 yrs	21.00%	4.43%	3.71%	2.97%	2.55%	
1 – 5 yrs	17.6%	2.5 yr US T-note + Corp spread	2.50 yrs	21.00%	4.05%	4.01%	4.01%	3.30%	
5 – 10 yrs	13.6%	7.5 yr US T-note + Corp spread	7.50 yrs	21.00%	4.00%	4.21%	4.21%	4.21%	
10 – 20 yrs	2.4%	15 yr US T-note + Corp spread	15.00 yrs	21.00%	4.16%	4.43%	4.43%	4.43%	
> 20 yrs	1.7%	20 yr US T-note + Corp spread	20.00 yrs	21.00%	4.28%	4.59%	4.59%	4.59%	
Industrial and Hybrid Securities (affiliated)	0.3%								
< 1yr	0.1%	6 mo US T-bill + Corp spread	0.50 yrs	5.25%	5.31%	4.45%	3.56%	3.06%	
1 – 5 yrs	0.2%	2.5 yr US T-note + Corp spread	2.50 yrs	5.25%	4.86%	4.80%	4.80%	3.96%	
5 – 10 yrs	0.0%	7.5 yr US T-note + Corp spread	7.50 yrs	5.25%	4.79%	5.05%	5.05%	5.05%	
10 – 20 yrs	0.0%	15 yr US T-note + Corp spread	15.00 yrs	5.25%	4.99%	5.31%	5.31%	5.31%	
> 20 yrs	0.0%	20 yr US T-note + Corp spread	20.00 yrs	5.25%	5.13%	5.51%	5.51%	5.51%	
Stocks, of which	11.9%								
Preferred Stock	0.5%	5 year US T-note + 396 basis points	0.25 yrs	13.13%	6.74%	6.75%	6.56%	6.58%	
Common Stock	11.4%	5 year US T-note + 792 basis points	0.25 yrs	18.40%	9.57%	9.57%	9.40%	9.41%	
Mortgage Loans	2.6%								
Real Estate	0.5%								
Cash & Short-Term Investment	5.0%	3 month US T-bill	0.25 yrs	21.00%	3.84%	2.99%	2.22%	1.94%	
All Other Assets*	7.1%								
		Post-Tax Return on I	nvested Funds,	ore-Expense:	4.69%	4.64%	4.49%	4.20%	
			Investme	nt Expense**:	-0.17%	-0.17%	-0.17%	-0.17%	
		Post-T	ax Return on Inv	ested Funds:	4.51%	4.47%	4.32%	4.02%	

Table Notes:

(1) Government Direct Obligations include US Government Issuer Obligations and Non-US Government Issuer Obligations.

Collateralized Securities include Mortgage Backed, Loan Backed, or Structured Securities.

Tax-exempt Bonds include Issuer Obligations of US States, Territories, and Possessions, US Political Subdivisions of States, Territories, and Possessions, and US Special Revenue and Special Assessment Obligations.

Industrial and Hybrid Securities (unaffiliated) include Industrial and Miscellaneous and Hybrid Securities.

Industrial and Hybrid Securities (affiliated) include Parents, Subsidiaries, and Affiliates.

- (2) Bond and total portfolio distributions are 3-year averages for 2019-2021, calculated from annual editions of Best's Aggregates & Averages (Property-Casualty), Assets for Commercial Casualty Composite, page number varies by edition, Column 3, Net Admitted Assets.
- For each year 2019-2021, the maturity distribution pertains to all bonds owned as of December 31 at book/adjusted carrying value for Commercial Casualty Composite, Schedule D, Part 1A, Section 2.
- (3) Spread to US treasury yields are either constant or varying by maturity (tax-exempt or corporate) as applicable.

The tax-exempt spread is a term structure of average historical spreads in forward rates at different maturities between US municipal bonds and US Treasuries Data on historical yields to US municipal bonds are from Bloomberg.

The corporate spread is a term structure of average historical spreads in forward rates at different maturities between US corporate bonds and US Treasuries.

Historical data on yields to US corporate bonds are from the US Department of Treasury.

(4) Applies only to the Dynamic estimate of the return on invested funds.

The roll-over period is the time interval at which the estimated yield is updated for the given security in the investment portfolio.

For bonds, the roll-over period is the bond's term to maturity. Forward yields for common and preferred stocks are updated quarterly.

(5) It is assumed that investment returns, except dividends and tax exempt municipal bond income, are taxed at 21%.

It is assumed that 50% of dividends received are tax exempt. In accordance with the "pro-ration" provision, it is assumed that 25% of otherwise exempt municipal bond income and dividends are taxed at 21%. For common stock, the portion of income attributable to capital appreciation is assumed to equal 66.9% while the income portion is 33.1%. The percentages are obtained from Kroll, LLC

- SBBI Summary Statistics of Annual Returns: large cap stocks, arithmetic mean. (6) Static estimates of US Treasury yields are constant maturity yields from the first quarter of 2023.
- (7)-(9) Applies only to the dynamic estimate of the return on invested funds. Forward estimates of US Treasury yields at various maturities are from Moody's.
 - * Yields to mortgage loans, real estate, and all other assets are not directly estimated, but are assumed to equal the weighted average portfolio yield net of these categories.
 - ** Investment expense calculated from Annual Statement data for the Commercial Casualty Composite by dividing Total Investment Expense by Cash and Invested Assets. Total investment expense for 2021 is from the Annual Statement, Exhibit of Net Investment Income

Average cash and invested assets for 2020 and 2021 are from Best's Aggregates and Averages (Property-Casualty), Assets for Commercial Casualty Composite.







Section G - Derivation of the Indicated Profit and Contingency Provision

APPENDIX B: FEDERAL INCOME TAX INCURRED FROM INSURANCE OPERATIONS

Federal taxes on underwriting income, based on the Tax Cuts and Jobs Act of 2017, are calculated in the following tables on an annual basis. Columns (1) through (4) are the same under both the Static and Dynamic Estimates; the paid losses and LAE factors (col (5)) vary by Estimate. Note that investment taxes are accounted for in Appendix A. Annual tax is prorated when quarterly amounts are required.

TABLE B.1: FEDERAL INCOME TAX CALCULATION (STATIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Written	Unearned	Expense	Discount	Paid	AY1 Paid	AY2 Paid	Discounted	Discounted	Federal
	Premium	Premium	and Taxes	Factor	Losses	Losses	Losses	AY1 Unpaid	AY2 Unpaid	Income
	Factor	Factor	Factor		and LAE	and LAE	and LAE	Losses & LAE	Losses & LAE	Tax
Time					Factor	Factor	Factor	Factor	Factor	Factor
0.00	-	-	-	-	-	-	-	-	-	-
1.00	1.0000	0.4743	0.1560	0.8973	0.1106	0.1106	-	0.2604	-	0.0197
2.00	1.0000	-	0.2170	0.8836	0.4168	0.2573	0.1595	0.1268	0.2165	0.0048
3.00	1.0000	-	0.2170	0.8782	0.5707	0.2994	0.2713	0.0890	0.1144	0.0019
4.00	1.0000	-	0.2170	0.8738	0.6525	0.3397	0.3128	0.0534	0.0773	(0.0000)
5.00	1.0000	-	0.2170	0.8766	0.6966	0.3526	0.3440	0.0422	0.0496	(0.0012)
6.00	1.0000	-	0.2170	0.8711	0.7166	0.3612	0.3555	0.0345	0.0397	(0.0017)
7.00	1.0000	-	0.2170	0.8766	0.7279	0.3653	0.3625	0.0311	0.0333	(0.0020)
8.00	1.0000	-	0.2170	0.8905	0.7359	0.3692	0.3666	0.0281	0.0300	(0.0023)
9.00	1.0000	-	0.2170	0.9036	0.7399	0.3703	0.3696	0.0276	0.0278	(0.0026)
10.00	1.0000	-	0.2170	0.9121	0.7439	0.3728	0.3711	0.0256	0.0268	(0.0028)
11.00	1.0000	-	0.2170	0.9239	0.7471	0.3739	0.3732	0.0248	0.0252	(0.0030)
12.00	1.0000	-	0.2170	0.9360	0.7503	0.3758	0.3745	0.0234	0.0243	(0.0031)
13.00	1.0000	-	0.2170	0.9482	0.7535	0.3772	0.3763	0.0223	0.0230	(0.0033)
14.00	1.0000	-	0.2170	0.9606	0.7567	0.3789	0.3778	0.0210	0.0218	(0.0035)
15.00	1.0000	-	0.2170	0.9732	0.7591	0.3799	0.3792	0.0204	0.0207	(0.0036)
16.00	1.0000	-	0.2170	0.9859	0.7607	0.3806	0.3801	0.0199	0.0201	(0.0037)
17.00	1.0000	-	0.2170	0.9868	0.7639	0.3826	0.3813	0.0179	0.0192	(0.0038)
18.00	1.0000	-	0.2170	0.9868	0.7671	0.3840	0.3831	0.0166	0.0175	(0.0038)
19.00	1.0000	-	0.2170	0.9868	0.7687	0.3845	0.3842	0.0160	0.0164	(0.0038)
20.00	1.0000	-	0.2170	0.9868	0.7703	0.3855	0.3849	0.0151	0.0157	(0.0038)
21.00	1.0000	-	0.2170	0.9868	0.7711	0.3856	0.3855	0.0150	0.0151	(0.0038)
22.00	1.0000	-	0.2170	0.9868	0.7727	0.3868	0.3860	0.0139	0.0146	(0.0038)
23.00	1.0000	-	0.2170	0.9868	0.7768	0.3892	0.3876	0.0115	0.0131	(0.0038)
24.00	1.0000	-	0.2170	0.9868	0.7784	0.3892	0.3892	0.0115	0.0115	(0.0038)
25.00	1.0000	-	0.2170	0.9868	0.7808	0.3910	0.3898	0.0097	0.0109	(0.0038)
26.00	1.0000	-	0.2170	0.9868	0.7840	0.3925	0.3915	0.0082	0.0092	(0.0039)
27.00	1.0000	-	0.2170	0.9868	0.7848	0.3923	0.3924	0.0084	0.0083	(0.0039)
28.00	1.0000	-	0.2170	0.9868	0.7856	0.3930	0.3926	0.0077	0.0081	(0.0039)
29.00	1.0000	-	0.2170	0.9868	0.7864	0.3933	0.3931	0.0074	0.0076	(0.0039)
30.00	1.0000	-	0.2170	0.9868	0.7880	0.3943	0.3936	0.0064	0.0071	(0.0039)
31.00	1.0000	-	0.2170	0.9868	0.7880	0.3938	0.3942	0.0069	0.0065	(0.0039)
32.00	1.0000	-	0.2170	0.9868	0.7917	0.3968	0.3948	0.0039	0.0059	(0.0039)
33.00	1.0000	-	0.2170	0.9868	0.7951	0.3979	0.3972	0.0028	0.0035	(0.0039)
34.00	1.0000	-	0.2170	0.9868	0.7985	0.3999	0.3986	0.0009	0.0022	(0.0039)
35.00	1.0000	-	0.2170	0.9868	0.8016	0.4008	0.4008	-	-	(0.0039)

Column Notes:

- (1) is Written Premium by time period, expressed as a factor, = Table 2 col (3)
- (2) is Written Premium minus Earned Premium by time period, expressed as a factor, = Table 2 col (3) Table 2 col (2)
- (3) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (4) is from Internal Revenue Bulletin, 2023-03, Rev. Proc. 2023-10, dated January 17, 2023
- (5) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Static) x Table 2 col (5)
- (6) and (7) split the payments between the accident year coincident with the policy year ("AY1"), and the following accident year ("AY2"). Assuming that the payout pattern is linear between integer times, and that the average accident date for AY2 is two-thirds of a year later than the average accident date for AY1, columns (6) and (7) are determined by solving these two equations simultaneously:
 - Col(6) + Col(7) = Col(5)
 - Col(7) = (2/3) * Col(6, previous row) + (1/3) * Col(6)
 - with Col (6, Time 1) = Col (5, Time 1) and Col (6, Time 35) = Col (7, Time 35)
- (8) is the discounted difference between AY1 Losses and LAE that will ultimately be paid, and the amount already paid, = [col (6, Time 35) (6)] x (4)
- (9) is the discounted difference between AY2 Losses and LAE that will ultimately be paid, and the amount already paid, = [col (7, Time 35) (7)] x col (4, previous row)
- (10) Per IRS rules, federal income tax equals the tax rate (21%) times the adjusted underwriting income = $21\% * \{ (1) 0.8 * (2) [(3) + (5) + (8) + (9)] \}$



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

APPENDIX B: FEDERAL INCOME TAX INCURRED FROM INSURANCE OPERATIONS (CONTINUED) TABLE B.2: FEDERAL INCOME TAX CALCULATION (DYNAMIC ESTIMATE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Written	Unearned	Expense	Discount	Paid	AY1 Paid	AY2 Paid	Discounted	Discounted	Federal
	Premium	Premium	and Taxes	Factor	Losses	Losses	Losses	AY1 Unpaid	AY2 Unpaid	Income
	Factor	Factor	Factor		and LAE	and LAE	and LAE	Losses & LAE	Losses & LAE	Tax
Time					Factor	Factor	Factor	Factor	Factor	Factor
0.00	-	-	-	-	-	-	-	-	-	-
1.00	1.0000	0.4743	0.1560	0.8973	0.1095	0.1095	-	0.2577	-	0.0205
2.00	1.0000	-	0.2170	0.8836	0.4125	0.2547	0.1579	0.1255	0.2143	0.0064
3.00	1.0000	-	0.2170	0.8782	0.5649	0.2963	0.2686	0.0881	0.1132	0.0035
4.00	1.0000	-	0.2170	0.8738	0.6458	0.3362	0.3096	0.0529	0.0765	0.0017
5.00	1.0000	-	0.2170	0.8766	0.6894	0.3490	0.3404	0.0418	0.0491	0.0006
6.00	1.0000	-	0.2170	0.8711	0.7093	0.3575	0.3518	0.0342	0.0393	0.0001
7.00	1.0000	-	0.2170	0.8766	0.7204	0.3615	0.3588	0.0308	0.0330	(0.0002)
8.00	1.0000	-	0.2170	0.8905	0.7283	0.3655	0.3628	0.0278	0.0297	(0.0006)
9.00	1.0000	-	0.2170	0.9036	0.7323	0.3665	0.3658	0.0273	0.0275	(0.0009)
10.00	1.0000	-	0.2170	0.9121	0.7362	0.3689	0.3673	0.0253	0.0265	(0.0011)
11.00	1.0000	-	0.2170	0.9239	0.7394	0.3701	0.3693	0.0246	0.0250	(0.0012)
12.00	1.0000	-	0.2170	0.9360	0.7426	0.3719	0.3707	0.0232	0.0240	(0.0014)
13.00	1.0000	-	0.2170	0.9482	0.7458	0.3734	0.3724	0.0221	0.0227	(0.0016)
14.00	1.0000	-	0.2170	0.9606	0.7489	0.3750	0.3739	0.0208	0.0216	(0.0017)
15.00	1.0000	-	0.2170	0.9732	0.7513	0.3760	0.3753	0.0201	0.0205	(0.0019)
16.00	1.0000	-	0.2170	0.9859	0.7529	0.3767	0.3762	0.0197	0.0199	(0.0020)
17.00	1.0000	-	0.2170	0.9868	0.7561	0.3787	0.3774	0.0177	0.0190	(0.0021)
18.00	1.0000	-	0.2170	0.9868	0.7592	0.3801	0.3792	0.0164	0.0173	(0.0021)
19.00	1.0000	-	0.2170	0.9868	0.7608	0.3806	0.3802	0.0159	0.0162	(0.0021)
20.00	1.0000	-	0.2170	0.9868	0.7624	0.3815	0.3809	0.0150	0.0156	(0.0021)
21.00	1.0000	-	0.2170	0.9868	0.7632	0.3816	0.3816	0.0148	0.0149	(0.0021)
22.00	1.0000	-	0.2170	0.9868	0.7648	0.3828	0.3820	0.0137	0.0145	(0.0021)
23.00	1.0000	-	0.2170	0.9868	0.7688	0.3852	0.3836	0.0113	0.0129	(0.0021)
24.00	1.0000	-	0.2170	0.9868	0.7703	0.3852	0.3852	0.0114	0.0113	(0.0021)
25.00	1.0000	-	0.2170	0.9868	0.7727	0.3870	0.3858	0.0096	0.0108	(0.0021)
26.00	1.0000	-	0.2170	0.9868	0.7759	0.3884	0.3875	0.0081	0.0091	(0.0021)
27.00	1.0000	-	0.2170	0.9868	0.7767	0.3883	0.3884	0.0083	0.0082	(0.0021)
28.00	1.0000	-	0.2170	0.9868	0.7775	0.3890	0.3885	0.0076	0.0080	(0.0021)
29.00	1.0000	-	0.2170	0.9868	0.7783	0.3892	0.3891	0.0074	0.0075	(0.0021)
30.00	1.0000	-	0.2170	0.9868	0.7799	0.3903	0.3896	0.0063	0.0070	(0.0021)
31.00	1.0000	-	0.2170	0.9868	0.7799	0.3898	0.3901	0.0068	0.0065	(0.0021)
32.00	1.0000	-	0.2170	0.9868	0.7835	0.3928	0.3908	0.0039	0.0058	(0.0021)
33.00	1.0000	-	0.2170	0.9868	0.7870	0.3938	0.3931	0.0028	0.0035	(0.0022)
34.00	1.0000	-	0.2170	0.9868	0.7902	0.3958	0.3945	0.0009	0.0022	(0.0022)
35.00	1.0000	-	0.2170	0.9868	0.7934	0.3967	0.3967	-	-	(0.0022)

Column Notes:

- (1) is Written Premium by time period, expressed as a factor, = Table 2 col (3)
- (2) is Written Premium minus Earned Premium by time period, expressed as a factor, = Table 2 col (3) Table 2 col (2)
- (3) is Expenses and Taxes by time period, expressed as a factor, = Table 1 row (1) x Table 2 col (4)
- (4) is from Internal Revenue Bulletin, 2023-03, Rev. Proc. 2023-10, dated January 17, 2023
- (5) is Paid Losses and LAE by time period, expressed as a factor, = Table 1 row (7, Dynamic) x Table 2 col (5)
- (6) and (7) split the payments between the accident year coincident with the policy year ("AY1"), and the following accident year ("AY2"). Assuming that the payout pattern is linear between integer times, and that the average accident date for AY2 is two-thirds of a year later than the average accident date for AY1, columns (6) and (7) are determined by solving these two equations simultaneously:
 - Col(6) + Col(7) = Col(5)
 - Col(7) = (2/3) * Col(6, previous row) + (1/3) * Col(6)
 - with Col (6, Time 1) = Col (5, Time 1) and Col (6, Time 35) = Col (7, Time 35)
- (8) is the discounted difference between AY1 Losses and LAE that will ultimately be paid, and the amount already paid, = [col (6, Time 35) (6)] x (4)
- (9) is the discounted difference between AY2 Losses and LAE that will ultimately be paid, and the amount already paid, = [col (7, Time 35) (7)] x col (4, previous row)
- (10) Per IRS rules, federal income tax equals the tax rate (21%) times the adjusted underwriting income = $21\% * \{ (1) 0.8 * (2) [(3) + (5) + (8) + (9)] \}$
- Page 72 of 138



EXHIBIT II

Section G - Derivation of the Indicated Profit and Contingency Provision

APPENDIX C: RESERVE-TO-SURPLUS RATIO in 000's

	(1)	(2)	(3)	(4)	(5)	(6)
					Ratio excl.	Ratio incl.
					Unearned	Unearned
		Unpaid Loss			Premium	Premium
Year	Unpaid	Adjustment	Unearned	Policyholder	{(1)+(2)}	{(1)+(2)
End	Losses	Expense	Premium	Surplus	/(4)	+(3)}/(4)
2021	228,459,570	48,775,145	98,954,979	199,495,575	1.39	1.89
2020	213,654,262	47,148,359	91,285,583	184,607,060	1.41	1.91
2019	201,634,477	45,253,873	88,025,958	177,424,154	1.39	1.89
2018	198,071,343	43,050,172	84,424,740	169,657,802	1.42	1.92
2017	194,692,095	42,696,647	77,537,150	171,664,964	1.38	1.83
2017 - 2021	1,036,511,747	226,924,196	440,228,410	902,849,555	1.40	1.89

Selected Ratio including Unearned Premium: 1.89

Source: Columns (1) - (4) for the latest year are taken from Liabilities, Surplus and Other Funds in Best's 2022 Aggregates & Averages, for Commercial Casualty Composite.



EXHIBIT II

Section H - Table of Premium Discounts

Division of Standard Premium		Type A <u>Discounts</u>	Type B <u>Discounts</u>
First	\$10,000		
Next	\$190,000	9.1%	5.1%
Next	\$1,550,000	11.3%	6.5%
Over	\$1,750,000	12.3%	7.5%

Application of the appropriate discount schedule to the standard premium produces a dollar discount that is subtracted from the standard premium.



EXHIBIT II

Section I - Average Expense Provisions

Reproduced below are the gradated expense provisions by policy size.

Gradation of Standard Premium

		Expense Gradations				
Division of	of					
Premium	ı	Production*	General	Discounts		
First	\$10,000	18.3%	6.1%			
Next	\$190,000	10.8%	5.1%	9.1%		
Next	\$1,550,000	9.3%	4.5%	11.3%		
Over	\$1,750,000	9.3%	3.6%	12.3%		
Proposed	d Average:	11.7%	4.9%			
	d Average Expense Gradation: for 1st \$10,000 - Avg Expense)	6.6%	1.2%			

Average Premium Discount: [Avg Exp Grad] / [1-Taxes-P&C] = [6.6%+1.2%] / [1-2.7% - 0.0%] = 8.0%

Composition of Standard Premium:

Benefit & Loss Adj. Cost	Production (18.3%)	General (6.1%)	Profit (0.0%)	Taxes (2.7%)	Premium Standard Premium
72.9%	11.7%	4.9%	0.0%	2.5%	After Discounts (92.0%) Excluding Expense Constant (100.0%)
	6.6%	1.2%	0.0%	0.2%	} Discount (8.0%)
	0.6%	0.5%	0.0%	0.0%	} Premium from \$160 expense constant. (1.1% = 1/0.989 - 1)^

Notes

^{*} The production expense gradations shown are based on Type A gradations.

[^] The 0.989 offset is for the \$160 expense constant.

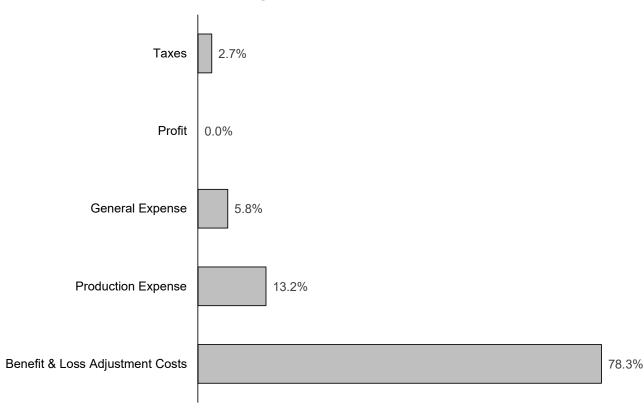


EXHIBIT II

Section J - Iowa Expense Provisions as a Percentage of Net Premium at NCCI Level

The exhibit below illustrates the allocation of the final premium dollar after the application of premium discounts and expense constants based on lowa expense provisions.

Components of Premium



Notes

Total

Benefit & Loss Adjustment Costs	78.3%	=	(72.9%) / 93.1%
Production Expense	13.2%	=	(11.7% + 0.6%) / 93.1%
General Expense	5.8%	=	(4.9% + 0.5%) / 93.1%
Profit	0.0%	=	(0.0% + 0.0%) / 93.1%
Taxes	2.7%	=	(2.5% + 0.0%) / 93.1%

100.0%



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Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Appendix A-I Determination of Policy Year On-level Factors

NCCI uses premium and loss on-level factors to adjust historical policy year experience to current rate and benefit levels, respectively.

Premium on-level factors are adjustment factors that reflect the cumulative impact of all premium level changes that have occurred during and after the individual year being on-leveled. To calculate a weighted average, NCCI utilizes a monthly premium distribution for Iowa based on an analysis of policies reported in the Unit Statistical Plan Data. Additional adjustments applied as part of the premium on-level factor calculation include:

- Adjustment for Expense Constant Removal: This factor removes premium collected via the charged expense constant.
- Adjustment for Expense Removal: This factor is applied to remove expenses from the reported assigned risk and voluntary DSR level premium totals—serving to make the separate market premiums more comparable.
- Experience Rating Off-Balance Adjustment Factor: This factor reflects the relative difference between the average experience rating modification for the historical year being on-leveled and the average experience rating modification expected during the proposed filing effective period. Additional details on this adjustment factor are provided in the sub-section below.

Loss on-level factors are adjustment factors that reflect the cumulative impact of all benefit level changes that have occurred during and after the individual year of data being on-leveled.

Note: For NCCI ratemaking purposes, proposed benefit level changes that (i) do not impact the experience period of the filing and (ii) have not yet been approved are included in Exhibit I, rather than in the loss on-level calculation.

Experience Rating Off-Balance Adjustment Factor

The term "off-balance" refers to the average experience rating modification factor (E-mod) across all employers for a given time period. Historical off-balance values are calculated as a weighted average—using expected losses as weights—of the following:

- E-mods for intrastate rated employers
- E-mods for interstate rated employers
- A unity factor for all non-rated employers

NCCI reviews changes in each state's average off-balance annually. The historical data review combined with the experience rating parameters included in the latest approved filing provide all



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Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

necessary information to adjust historical premiums to reflect any changes in the off-balance values over time. Specifically, the premiums in the financial data experience period are adjusted to the off-balance expected in the proposed filing period. This adjustment can be seen in the premium on-level adjustment factors provided in Appendix A-I.

The key components used to estimate the off-balance for the proposed filing include:

- A targeted off-balance of 0.960 for all intrastate rated employers. A targeted intrastate E-mod slightly below unity is desirable because employers who qualify for experience rating typically have better loss experience, on average, than non-rated employers. The choice of an intrastate target is premium-neutral on a statewide basis while promoting rate adequacy for non-rated employers.
- The average E-mod for interstate rated employers is estimated based on the E-mod experience rating data for all interstate rated employers compiled within the most recent twelve months. Unlike intrastate rated employers, interstate employers have exposure in multiple states, where each state's data and underlying experience rating parameters are used to determine the employer's interstate E-mod. Because E-mods for interstate employers are influenced by experience rating values for multiple states, NCCl's standard approach is to assume that the interstate off-balance during the proposed filing period is best approximated by the interstate off-balance observed over the most recent twelve months of E-mod data available at the time of the analysis.



APPENDIX A-I

Determination of Policy Year On-level Factors

Section A - Factor Adjusting 2021 Policy Year Assigned Risk Premium to Present Assigned Risk Level

		(1)	(2)	(3)	(4)	(5)	(6) Adj. For	(7)	(8) Premium
		Rate	O		Declarat	Adj. Factor	Expense	Adj. For	Adjustment
		Level	Cumulative		Product	Present Index/	Constant	Expense	Factor
	Date	Change	Index	Weight	(2)x(3)	Sum Column (4)	Removal @	Removal	(5)x(6)x(7)
_									
NR	01/01/21	Base	1.000	1.000	1.000	0.835	0.977	0.604	0.493
NR	01/01/22	0.909	0.909						
NR	01/01/23	0.919	0.835						
					1.000				

Section B - Factor Adjusting 2021 Policy Year Voluntary Premium to Present Voluntary Level

		(1)	(2)	(3)	(4)	(5)	(6) Adj. For	(7)	(8) Premium
		Rate				Adj. Factor	Expense	Adj. For	Adjustment
		Level	Cumulative		Product	Present Index/	Constant	Expense	Factor
_	Date	Change	Index	Weight	(2)x(3)	Sum Column (4)	Removal @	Removal	(5)x(6)x(7)
NR	01/01/21	Base	1.000	1.000	1.000	0.868	0.986	0.604	0.517
NR	01/01/21	0.945	0.945	1.000	1.000	0.000	0.900	0.004	0.517
NR	01/01/22	0.943	0.868						
INIX	01/01/23	0.919	0.000		1.000				

Section C - Factor Adjusting 2021 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1)	Assigned Risk Market Share PY 2021	0.042
(2)	Voluntary Market Share PY 2021	0.958
(3)	Assigned Risk Standard Premium Adjustment Factor (See Sec. A)	0.493
(4)	Voluntary Standard Premium Adjustment Factor (See Sec. B)	0.517
(5)	Premium Adjustment Factor = [(1)x(3)]/1.348+(2)x(4) #	0.511
(6)	Experience Rating Off-balance Adjustment Factor*	1.034
(7)	Final Premium Adjustment Factor = (5)x(6)	0.528

NR New and renewal business.

- @ Eliminates premium derived from expense constants.
- # Current premium index (assigned risk-to-voluntary) = 1.348
- * = 1.034 = 0.954 / 0.923 = (Targeted Off-balance) / (Off-balance for Policy Year 2021)



APPENDIX A-I

Determination of Policy Year On-level Factors

Section D - Factor Adjusting 2021 Policy Year Indemnity Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/19	Base	1.000	1.000	1.000	1.000

Section E - Factor Adjusting 2021 Policy Year Medical Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/19	Base	1.000	1.000	1.000	1.000



APPENDIX A-I

Determination of Policy Year On-level Factors

Section F - Factor Adjusting 2020 Policy Year Assigned Risk Premium to Present Assigned Risk Level

		(1)	(2)	(3)	(4)	(5)	(6) Adj. For	(7)	(8) Premium
		Rate				Adj. Factor	Expense	Adj. For	Adjustment
		Level	Cumulative		Product	Present Index/	Constant	Expense	Factor
_	Date	Change	Index	Weight	(2)x(3)	Sum Column (4)	Removal @	Removal	(5)x(6)x(7)
NR	01/01/20	Base	1.000	1.000	1.000	0.838	0.977	0.604	0.495
NR	01/01/21	1.003	1.003						
NR	01/01/22	0.909	0.912						
NR	01/01/23	0.919	0.838						
					1.000				

Section G - Factor Adjusting 2020 Policy Year Voluntary Premium to Present Voluntary Level

		(1)	(2)	(3)	(4)	(5)	(6) Adj. For	(7)	(8) Premium
_	Date	Rate Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Expense Constant Removal @	Adj. For Expense Removal	Adjustment Factor (5)x(6)x(7)
NR NR NR NR	01/01/20 01/01/21 01/01/22 01/01/23	Base 1.003 0.945 0.919	1.000 1.003 0.948 0.871	1.000	1.000	0.871	0.986	0.604	0.519
					1.000				

Section H - Factor Adjusting 2020 Policy Year Assigned Risk Premium and Voluntary Premium to Present Statewide Level

(1)	Assigned Risk Market Share PY 2020	0.040
(2)	Voluntary Market Share PY 2020	0.960
(3)	Assigned Risk Standard Premium Adjustment Factor (See Sec. F)	0.495
(4)	Voluntary Standard Premium Adjustment Factor (See Sec. G)	0.519
(5)	Premium Adjustment Factor = $[(1)x(3)]/1.348+(2)x(4) #$	0.513
(6)	Experience Rating Off-balance Adjustment Factor*	1.011
(7)	Final Premium Adjustment Factor = (5)x(6)	0.519

NR New and renewal business.

- @ Eliminates premium derived from expense constants.
- # Current premium index (assigned risk-to-voluntary) = 1.348
- * = 1.011 = 0.954 / 0.944 = (Targeted Off-balance) / (Off-balance for Policy Year 2020)



APPENDIX A-I

Determination of Policy Year On-level Factors

Section I - Factor Adjusting 2020 Policy Year Indemnity Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/19	Base	1.000	1.000	1.000	1.000

Section J - Factor Adjusting 2020 Policy Year Medical Losses to Present Benefit Level

	(1)	(2)	(3)	(4)	(5)
Date	Benefit Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)
01/01/19	Base	1.000	1.000	1.000	1.000



Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Appendix A-II Determination of Premium and Losses Developed to an Ultimate Report

Development factors are used to project premium and limited losses to an ultimate report. In general, the ultimate development factors are based on a chain-ladder approach that utilizes average link ratios for several maturities and the application of a tail factor, as shown on the following pages.

Limited Large Loss Methodology

In order to limit volatility on the rate indications due to the impact of extraordinary large losses, a limited large loss methodology is used in lowa. A base threshold for the large loss limitation is determined by the volume of premium in the state as well as the number of years used in the experience period. It is calculated as one percent of the total volume of premium from the state's experience period underlying the currently approved filing. The base threshold is detrended by policy year to reflect the inflationary impact on claim costs due to wage inflation. The wage index used as a basis for these calculations is the lowa average weekly wages from the Quarterly Census of Employment and Wages (QCEW). Detrended thresholds are used in the experience period, trend period, and loss development period. Indemnity and medical losses are limited at the detrended large loss threshold corresponding to their Policy Year.

After developing limited indemnity and medical losses to an ultimate report, a statewide, non-catastrophe excess ratio at the base threshold is used to adjust the limited losses to an unlimited basis. The excess ratios are non-catastrophe because excess ratios at limits beyond \$50 million are set equal to zero. The excess ratio is derived from Iowa's Retrospective Rating Plan Parameters.

Premium Development

Premium at an ultimate report is estimated by incorporating a review of historical patterns of premium development over time—primarily due to payroll audits. For premium development, link ratios are used from 1st report through 5th report. It is assumed that no further development occurs after the 5th report.

In this filing, a three-year average of historical premium development factors was selected to strike a balance between responsiveness to recently observed changes and maintaining stability in the selected development factors from one filing to the next.

Loss Development

Loss development factors are needed since total paid losses and case reserve estimates on a given claim change over time until the claim is finally closed. For indemnity and medical loss

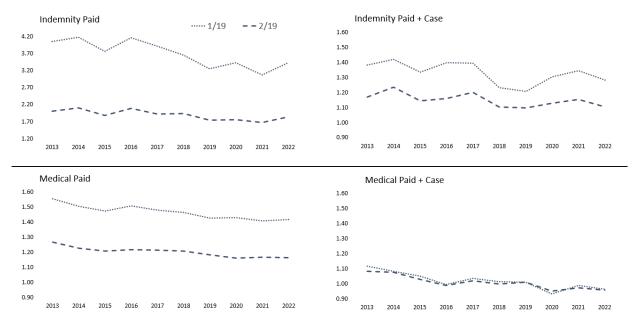


Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

development, link ratios calculated from limited losses are used from 1st report through the 19th report. For indemnity and medical loss development past the 19th report, a 19th-to-ultimate "tail" factor is used to reflect all future expected loss emergence. The loss development factors are calculated based on how paid losses and case reserve estimates change over time for claims in older years.

The graphs below display the age-to-19th cumulative loss development factors over the last ten valuations.



The specific development link ratio selections underlying this filing are shown below:

- A three-year average of historical paid loss development factors through a 19th report
- A five-year average of historical paid plus case loss development factors through a 19th report

The graphs provided above illustrate that the most recent valuation of development factors remain generally consistent with those observed in historical periods. This consistency applies to both indemnity and medical paid development, as well as indemnity and medical paid plus case development. While there has been some fluctuation in indemnity development, this year's filing demonstrates marginal increases in indemnity paid development, balanced by decreases in indemnity paid+case development. Medical paid+case development has converged around unity in recent valuations, while medical paid development has exhibited a slightly declining trend. The selected development averages remain unchanged in comparison to last year's filing.



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Workers Compensation Rate Filing - January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Notably, utilizing a two-year average for paid loss development factors results in no change in the overall indication.

The development factor selections were made to strike a balance between stability and responsiveness to the data. A shorter-term average was selected for paid losses to capture more recent changes in paid development patterns over time, while a longer-term average was selected for paid plus case losses to limit the amount of volatility from year to year.

19th-to-Ultimate Tail Factor

Tail factors are calculated separately for indemnity and medical unlimited losses by comparing the changes in the volume of policy year losses that occur on policy years reported after a nineteenth report to the volume of policy year losses at the nineteenth report. To adjust for these differences in the volume of losses between policy years, a growth adjustment factor is applied. The tail factors are brought from an unlimited basis to a limited basis through the application of a tail adjustment factor, which is based on countrywide data and the state specific large loss threshold.

The calculation of indemnity and medical paid plus case 19th-to-ultimate tail factors utilizes all available experience for the years prior to the tail attachment point and are calculated for the most recent ten available policy years. Loss development tail factors from a nineteenth report to ultimate were judgmentally selected in this filing based on a review of the ten most recently available factors.

Paid plus case data is used in the calculation of 19th-to-ultimate loss development factors since it is most reflective of the expected ultimate losses. Since this filing utilizes both paid and paid plus case data, the selected paid plus case loss development tail factors are converted to a paid basis using paid-to-paid plus case ratios. Both the indemnity and medical conversion ratios were selected based on a review of historical conversion ratios.



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section A - Premium and Loss Summary Valued as of 12/31/2022

Policy Year 2021

(1) (2) (3)	Standard Earned Premium Factor to Develop Premium to Ultimate Standard Earned Premium Developed to Ultimate = (1)x(2)	\$651,131,528 1.005 \$654,387,186
(4) (5) (6)	Limited Indemnity Paid Losses Limited Indemnity Paid Development Factor to Ultimate Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$39,524,649 3.385 \$133,790,937
(7) (8) (9)	Limited Indemnity Paid+Case Losses Limited Indemnity Paid+Case Development Factor to Ultimate Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	\$106,397,085 1.284 \$136,613,857
(10)	Policy Year 2021 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	\$135,202,397
(12)	Limited Medical Paid Losses Limited Medical Paid Development Factor to Ultimate Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	\$130,199,232 1.479 \$192,564,664
(15)	Limited Medical Paid+Case Losses Limited Medical Paid+Case Development Factor to Ultimate Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	\$188,035,085 0.996 \$187,282,945



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section A - Premium and Loss Summary Valued as of 12/31/2022

Policy Year 2020

(1) (2) (3)	Standard Earned Premium Factor to Develop Premium to Ultimate Standard Earned Premium Developed to Ultimate = (1)x(2)	\$620,665,071 1.000 \$620,665,071
(4) (5) (6)	Limited Indemnity Paid Losses Limited Indemnity Paid Development Factor to Ultimate Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$73,174,635 1.793 \$131,202,121
(7) (8) (9)	Limited Indemnity Paid+Case Losses Limited Indemnity Paid+Case Development Factor to Ultimate Limited Indemnity Paid+Case Losses Developed to Ultimate = (7)x(8)	\$120,982,104 1.126 \$136,225,849
(10)	Policy Year 2020 Limited Indemnity Losses Developed to Ultimate = [(6)+(9)]/2	\$133,713,985
(12)	Limited Medical Paid Losses Limited Medical Paid Development Factor to Ultimate Limited Medical Paid Losses Developed to Ultimate = (11)x(12)	\$169,416,927 1.214 \$205,672,149
(15)	Limited Medical Paid+Case Losses Limited Medical Paid+Case Development Factor to Ultimate Limited Medical Paid+Case Losses Developed to Ultimate = (14)x(15)	\$199,940,303 0.992 \$198,340,781
(17)	Policy Year 2020 Limited Medical Losses Developed to Ultimate = [(13)+(16)]/2	\$202,006,465



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section B - Premium Development Factors

Policy <u>Year</u>	<u>1st/2nd</u>	Policy <u>Year</u>	<u>2nd/3rd</u>	Policy <u>Year</u>	<u>3rd/4th</u>	Policy <u>Year</u>	4th/5th
2018	1.006	2017	0.999	2016	1.000	2015	1.000
2019 2020	1.001 1.007	2018 2019	1.000 1.000	2017 2018	1.000 1.000	2016 2017	1.000 1.000
Average	1.005	Average	1.000	Average	1.000	Average	1.000

Summary of Premium Development Factors

<u>1st/5th</u>	2nd/5th	3rd/5th	4th/5th
1.005	1.000	1.000	1.000



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section C - Limited Indemnity Paid Loss Development Factors

Policy <u>Year</u>	<u>1st/2nd</u>	Policy <u>Year</u>	<u>2nd/3rd</u>	Policy <u>Year</u>	3rd/4th	Policy <u>Year</u>	<u>4th/5th</u>
			· 				
2018	1.958	2017	1.350	2016	1.127	2015	1.051
2019	1.838	2018	1.281	2017	1.151	2016	1.053
2020	1.868	2019	1.368	2018	1.165	2017	1.060
Average	1.888	Average	1.333	Average	1.148	Average	1.055
Policy		Policy		Policy		Policy	
<u>Year</u>	5th/6th	<u>Year</u>	6th/7th	<u>Year</u>	7th/8th	<u>Year</u>	8th/9th
2014	1.027	2013	1.013	2012	1.010	2011	1.003
2015	1.024	2014	1.010	2013	1.011	2012	1.002
2016	1.026	2015	1.019	2014	1.013	2013	1.004
Average	1.026	Average	1.014	Average	1.011	Average	1.003
Policy		Policy		Policy		Policy	
<u>Year</u>	9th/10th	<u>Year</u>	10th/11th	<u>Year</u>	11th/12th	<u>Year</u>	12th/13th
2010	1.007	2009	1.002	2008	1.008	2007	1.002
2011	1.003	2010	1.006	2009	1.006	2008	1.004
2012	1.005	2011	1.003	2010	1.002	2009	1.001
Average	1.005	Average	1.004	Average	1.005	Average	1.002
Policy		Policy		Policy		Policy	
<u>Year</u>	13th/14th	<u>Year</u>	14th/15th	<u>Year</u>	15th/16th	<u>Year</u>	16th/17th
2006	1.005	2005	1.002	2004	1.005	2003	1.004
2007	1.002	2006	1.005	2005	1.002	2004	1.002
2008	1.003	2007	1.002	2006	1.004	2005	1.002
Average	1.003	Average	1.003	Average	1.004	Average	1.003
Policy		Policy					
<u>Year</u>	17th/18th	<u>Year</u>	18th/19th				
2002	1.002	2001	1.004				
2003	1.001	2002	1.002				
2004	1.001	2003	1.001				
Average	1.001	Average	1.002				



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Determination of Premium and Losses Developed to an Ultimate Report

Section D - Limited Medical Paid Loss Development Factors

Policy <u>Year</u>	<u>1st/2nd</u>	Policy <u>Year</u>	<u>2nd/3rd</u>	Policy <u>Year</u>	<u>3rd/4th</u>	Policy <u>Year</u>	<u>4th/5th</u>
<u> </u>	<u></u>	<u> </u>	<u>=</u>	<u> </u>	<u>0.00.10.1</u>	<u> </u>	<u></u>
2018	1.231	2017	1.053	2016	1.025	2015	1.014
2019	1.208	2018	1.058	2017	1.023	2016	1.014
2020	1.216	2019	1.072	2018	1.015	2017	1.013
Average	1.218	Average	1.061	Average	1.021	Average	1.014
Policy		Policy		Policy		Policy	
<u>Year</u>	5th/6th	<u>Year</u>	6th/7th	<u>Year</u>	7th/8th	<u>Year</u>	8th/9th
2014	1.011	2013	1.007	2012	1.005	2011	1.004
2015	1.007	2014	1.007	2013	1.006	2012	1.004
2016	1.009	2015	1.007	2014	1.004	2013	1.004
Average	1.009	Average	1.007	Average	1.005	Average	1.004
Policy		Policy		Policy		Policy	
<u>Year</u>	9th/10th	<u>Year</u>	10th/11th	<u>Year</u>	11th/12th	<u>Year</u>	12th/13th
2010	1.006	2009	1.005	2008	1.004	2007	1.002
2011	1.002	2010	1.008	2009	1.005	2008	1.007
2012	1.006	2011	1.003	2010	1.004	2009	1.003
Average	1.005	Average	1.005	Average	1.004	Average	1.004
Policy		Policy		Policy		Policy	
<u>Year</u>	13th/14th	<u>Year</u>	14th/15th	<u>Year</u>	15th/16th	<u>Year</u>	16th/17th
2006	1.004	2005	1.004	2004	1.003	2003	1.002
2007	1.002	2006	1.003	2005	1.004	2004	1.001
2008	1.002	2007	1.001	2006	1.004	2005	1.005
Average	1.003	Average	1.003	Average	1.004	Average	1.003
Policy		Policy					
<u>Year</u>	17th/18th	<u>Year</u>	18th/19th				
2002	1.002	2001	1.001				
2003	1.003	2002	1.003				
2004	1.002	2003	1.003				
Average	1.002	Average	1.002				



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Determination of Premium and Losses Developed to an Ultimate Report

Section E - Limited Indemnity Paid + Case Loss Development Factors

Policy		Policy		Policy		Policy	
<u>Year</u>	1st/2nd	<u>Year</u>	2nd/3rd	<u>Year</u>	3rd/4th	<u>Year</u>	4th/5th
						· 	·
2016	1.118	2015	1.062	2014	1.013	2013	1.017
2017	1.100	2016	1.068	2015	1.000	2014	1.013
2018	1.156	2017	1.051	2016	1.033	2015	1.013
2019	1.166	2018	1.073	2017	1.032	2016	1.017
2020	1.162	2019	1.079	2018	1.025	2017	0.998
2020	1.102	2013	1.073	2010	1.023	2017	0.550
Average	1.140	Average	1.067	Average	1.021	Average	1.012
Policy		Policy		Policy		Policy	
•	5th/6th		6th/7th	•	7th/9th	•	9th/Oth
<u>Year</u>	<u>5th/6th</u>	<u>Year</u>	6th/7th	<u>Year</u>	7th/8th	<u>Year</u>	8th/9th
2012	1.000	2011	0.993	2010	1.002	2009	1.010
2013	0.996	2012	1.019	2011	1.002	2010	1.001
2014	1.000	2013	1.002	2012	1.002	2011	1.000
2015	1.005	2014	1.003	2013	1.011	2012	0.997
2016	1.000	2015	0.999	2014	1.006	2013	0.994
Average	1.000	Average	1.003	Average	1.005	Average	1.000
Dallan		Dallan		Dallan		Dallari	
Policy	011 /4 011	Policy	400-7440	Policy	4411-74011-	Policy	400-/400
<u>Year</u>	9th/10th	<u>Year</u>	<u>10th/11th</u>	<u>Year</u>	11th/12th	<u>Year</u>	12th/13th
2008	1.005	2007	1.001	2006	1.000	2005	1.001
2009	0.997	2008	0.998	2007	0.998	2006	0.997
2010	1.001	2009	1.003	2008	1.005	2007	1.000
2011	1.000	2010	1.004	2009	1.001	2008	1.003
2012	1.002	2011	1.000	2010	0.999	2009	1.000
Average	1.001	Average	1.001	Average	1.001	Average	1.000
Policy		Policy		Policy		Policy	
•	13th/14th		1.4+b/1.E+b		15th/16th		16th/17th
<u>Year</u>	13071401	<u>Year</u>	14th/15th	<u>Year</u>	13071601	<u>Year</u>	16071701
2004	0.997	2003	1.002	2002	1.001	2001	0.998
2005	1.001	2004	1.003	2003	0.999	2002	1.001
2006	1.014	2005	1.001	2004	0.997	2003	1.001
2007	1.001	2006	0.999	2005	1.001	2004	1.000
2008	0.998	2007	1.000	2006	1.000	2005	1.000
2008	0.990	2007	1.000	2000	1.000	2003	1.000
Average	1.002	Average	1.001	Average	1.000	Average	1.000
Policy		Policy					
•	17th/18th	•	18th/19th				
<u>Year</u>	<u> 17 try 18tri</u>	<u>Year</u>	<u> 1800/1901</u>				
2000	0.999	1999	1.000				
2001	1.001	2000	1.001				
2002	1.000	2001	1.001				
2002	1.000	2002	1.001				
2004	1.001	2003	1.000				
Average	1.000	Average	1.001				



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Determination of Premium and Losses Developed to an Ultimate Report

Section F - Limited Medical Paid + Case Loss Development Factors

Policy		Policy		Policy		Policy	
<u>Year</u>	1st/2nd	<u>Year</u>	2nd/3rd	<u>Year</u>	3rd/4th	<u>Year</u>	4th/5th
2016	1.013	2015	0.982	2014	1.010	2013	1.004
2017	1.000	2016	0.985	2015	0.997	2014	1.004
2018	0.981	2017	0.968	2016	0.984	2015	1.003
2019	1.018	2018	0.994	2017	0.981	2016	0.997
2020	1.007	2019	0.981	2018	0.986	2017	0.997
Average	1.004	Average	0.982	Average	0.992	Average	1.001
ŭ		ŭ		ŭ		· ·	
Policy		Policy		Policy		Policy	
<u>Year</u>	5th/6th	<u>Year</u>	6th/7th	<u>Year</u>	7th/8th	<u>Year</u>	8th/9th
2012	0.996	2011	1.008	2010	1.008	2009	1.003
2013	1.002	2012	1.012	2011	1.005	2010	1.003
2014	1.005	2013	0.999	2012	1.004	2011	1.002
2015	1.000	2014	1.007	2013	1.001	2012	1.004
2016	0.999	2015	0.995	2013	0.995	2013	0.994
2010	0.999	2013	0.995	2014	0.995	2013	0.994
Average	1.000	Average	1.004	Average	1.003	Average	1.001
Policy		Policy		Policy		Policy	
	O+F /4 O+F		4 041- /4 441-	•	4 4 4 1- /4 04 1-		4 041- /4 041-
<u>Year</u>	9th/10th	<u>Year</u>	10th/11th	<u>Year</u>	11th/12th	<u>Year</u>	12th/13th
0000	4.004	2007	0.000	2000	0.000	2225	0.000
2008	1.001	2007	0.999	2006	0.999	2005	0.998
2009	0.998	2008	0.997	2007	1.003	2006	1.001
2010	0.997	2009	0.996	2008	0.994	2007	1.000
2011	0.997	2010	0.997	2009	0.990	2008	1.005
2012	1.012	2011	0.999	2010	0.995	2009	0.999
-	-	-					
Average	1.001	Average	0.998	Average	0.996	Average	1.001
rtvolago	1.001	rtvolago	0.000	rtvolago	0.000	rtvolago	1.001
Policy		Policy		Policy		Policy	
<u>Year</u>	13th/14th	Year	14th/15th	Year	15th/16th	<u>Year</u>	16th/17th
' <u></u>	' <u></u>			<u>——</u>		<u> </u>	
2004	1.003	2003	0.998	2002	0.997	2001	1.000
2005	1.001	2004	1.001	2003	1.001	2002	1.003
2006	1.001				1.004		
		2005	0.999	2004		2003	0.993
2007	1.000	2006	0.998	2005	0.997	2004	0.999
2008	0.998	2007	1.005	2006	1.001	2005	1.002
Average	1.001	Average	1.000	Average	1.000	Average	0.999
Б. іі		5 "					
Policy		Policy					
<u>Year</u>	17th/18th	<u>Year</u>	18th/19th				
2000	1.000	1999	0.995				
2001	1.002	2000	0.998				
2002	1.002	2001	1.001				
2002	1.001	2002	1.005				
2004	1.000	2003	1.000				
	4.001	•	4.000				
Average	1.001	Average	1.000				



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section G - Determination of Policy Year Loss Development Factors (19th-to-Ultimate Report)

Indemnity Paid+Case Data for Matching Companies

(1)	(2)	(3)	(4)	(5)	(6)	(7)
					Factor to	Indicated
Policy	Losses for	Policy Year	Losses for All P	rior Policy Years	Adjust Losses	19th-to-Ult Development
Year	19th Report	20th Report	Previous	Current	for Prior Policy Years	for Policy Year
1993	87,319,062	87,107,611	1,406,598,225	1,406,819,743	1.030	1.000
1994	82,099,375	82,128,016	1,483,588,317	1,484,308,890	1.112	1.008
1995	85,221,368	85,310,286	1,568,473,892	1,569,599,936	1.100	1.013
1996	95,346,516	95,386,308	1,654,509,644	1,655,835,393	0.995	1.014
1997	92,843,300	92,888,304	1,748,307,509	1,749,276,465	1.035	1.011
1998	102,372,363	102,538,741	1,842,164,769	1,842,881,714	0.934	1.009
1999	105,122,707	105,137,626	1,911,291,201	1,911,609,430	0.892	1.004
2000	110,603,320	110,534,374	2,016,747,056	2,017,835,597	0.836	1.011
2001	114,357,204	114,476,792	2,128,086,225	2,128,825,128	0.806	1.009
2002	114,006,843	114,186,961	2,243,301,920	2,243,806,551	0.828	1.007
			Selected Indemnity	/ 19th-to-Ultimate I	Loss Development Factor	1.010

Medical Paid+Case Data for Matching Companies

(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Factor to	Indicated
Policy	Losses for	Policy Year	Losses for All P	rior Policy Years	Adjust Losses	19th-to-Ult Development
Year	19th Report	20th Report	Previous	Current	for Prior Policy Years	for Policy Year
						_
1993	81,422,582	81,357,885	988,792,640	987,065,646	0.834	0.974
1994	87,981,179	88,426,279	1,060,976,600	1,063,783,871	0.810	1.044
1995	84,860,040	84,924,354	1,155,011,907	1,157,821,436	0.899	1.038
1996	107,031,423	107,131,340	1,242,481,684	1,249,363,852	0.752	1.086
1997	91,737,394	91,544,484	1,353,980,947	1,347,106,215	0.938	0.918
1998	92,403,946	92,596,429	1,438,650,699	1,441,337,176	0.962	1.032
1999	100,831,692	100,541,259	1,499,121,113	1,496,394,765	0.888	0.967
2000	109,409,124	109,018,981	1,596,936,024	1,595,300,991	0.830	0.978
2001	104,010,073	103,948,788	1,703,795,061	1,709,063,179	0.885	1.057
2002	119,154,292	119,144,434	1,813,011,967	1,822,808,632	0.784	1.105
			Selected Medica	l 19th-to-Ultimate l	oss Development Factor	1.020

^{(7) = 1 + [(3) - (2) + ((5) - (4)) / (6)] / (2)}

^{(14) = 1 + [(10) - (9) + ((12) - (11)) / (13)] / (9)}

Columns (4) and (11) are valued as of the date at which the given policy year is at a 19th report.

Columns (5) and (12) are valued as of the date at which the given policy year is at a 20th report.



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Determination of Premium and Losses Developed to an Ultimate Report

Section H - Derivation of Policy Year Limited 19th-to-Ultimate Loss Development Factors

Policy <u>Year</u>	Indemnity Paid-to- Paid + Case Ratio 19th Report	Medical Paid-to- Paid + Case Ratio 19th Report
1999	0.983	0.982
2000	0.984	0.975
2001	0.989	0.985
2002	0.989	0.968
2003	0.987	0.975
Selected	0.985	0.970

	<u>Indemnity</u>	<u>Medical</u>
(1) Paid+Case 19th-to-Ultimate Loss Development Factor (Section G)	1.010	1.020
(2) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited Basis	0.621	0.621
(3) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(1) - 1] x (2) + 1	1.006	1.012
(4) Limited Paid-to-Paid+Case Ratio	0.985	0.970
(5) Limited Paid 19th-to-Ultimate Loss Development Factor = (3) / (4)	1.021	1.043

Section I - Summary of Limited Paid Loss Development Factors

	(1)	(2)		(3)	(4)
	Indemnity Paid	Loss Development		Medical Paid L	oss Development
Report	to Next Report	to Ultimate	Report	to Next Report	to Ultimate
1st	1.888	3.385	1st	1.218	1.479
2nd	1.333	1.793	2nd	1.061	1.214
3rd	1.148	1.345	3rd	1.021	1.144
4th	1.055	1.172	4th	1.014	1.120
5th	1.026	1.111	5th	1.009	1.105
6th	1.014	1.083	6th	1.007	1.095
7th	1.011	1.068	7th	1.005	1.087
8th	1.003	1.056	8th	1.004	1.082
9th	1.005	1.053	9th	1.005	1.078
10th	1.004	1.048	10th	1.005	1.073
11th	1.005	1.044	11th	1.004	1.068
12th	1.002	1.039	12th	1.004	1.064
13th	1.003	1.037	13th	1.003	1.060
14th	1.003	1.034	14th	1.003	1.057
15th	1.004	1.031	15th	1.004	1.054
16th	1.003	1.027	16th	1.003	1.050
17th	1.001	1.024	17th	1.002	1.047
18th	1.002	1.023	18th	1.002	1.045
19th		1.021	19th		1.043

^{(2) =} Cumulative upward product of column (1).

^{(4) =} Cumulative upward product of column (3).



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Determination of Premium and Losses Developed to an Ultimate Report

Section J - Summary of Limited Paid+Case Loss Development Factors

	(1)	(2)		(3)	(4)
		ase Loss Development			se Loss Development
Report	to Next Report	to Ultimate	Report	to Next Report	to Ultimate
1st	1.140	1.284	1st	1.004	0.996
2nd	1.067	1.126	2nd	0.982	0.992
3rd	1.021	1.055	3rd	0.992	1.010
4th	1.012	1.033	4th	1.001	1.018
5th	1.000	1.021	5th	1.000	1.017
6th	1.003	1.021	6th	1.004	1.017
7th	1.005	1.018	7th	1.003	1.013
8th	1.000	1.013	8th	1.001	1.010
9th	1.001	1.013	9th	1.001	1.009
10th	1.001	1.012	10th	0.998	1.008
11th	1.001	1.011	11th	0.996	1.010
12th	1.000	1.010	12th	1.001	1.014
13th	1.002	1.010	13th	1.001	1.013
14th	1.001	1.008	14th	1.000	1.012
15th	1.000	1.007	15th	1.000	1.012
16th	1.000	1.007	16th	0.999	1.012
17th	1.000	1.007	17th	1.001	1.013
18th	1.001	1.007	18th	1.000	1.012
19th		1.006	19th		1.012

^{(2) =} Cumulative upward product of column (1).(4) = Cumulative upward product of column (3).



APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section K - Factor to Adjust Limited Losses to an Unlimited Basis

(1) Threshold at the Midpoint of the Rate Effective Period*	6,901,988
(2) Statewide Excess Ratio for (1)	0.032
(3) Market Share for Carriers Missing from Large Loss and Catastrophe Call	0.000
(4) Factor to Adjust Limited Losses to an Unlimited Basis = 1.0 / {1.0 - [(2) x (1.0 - (3))]}	1.033

Section L - Policy Year Large Loss Limits

	Policy Year
Experience	Detrended
Year	Limit
2021	5,878,031
2020	5,502,979
2019	5,214,662
2018	5,009,879
2017	4,861,749
2016	4,722,333
2015	4,619,102
2014	4,487,228
2013	4,329,535
2012	4,221,754
2011	4,114,382
2010	3,993,526
2009	3,874,445
2008	3,826,031
2007	3,760,174
2006	3,628,853
2005	3,493,157
2004	3,378,459
2003	3,246,121
2002	3,118,058
2001	3,024,938
2000	2,937,142
1999	2,841,296

^{*} November 29, 2024 is the midpoint of the effective period for which the revised rates are being proposed.



lowa

Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Appendix A-III Trend Factors

The proposed voluntary and assigned risk rates are intended for use with policies with effective dates in the proposed effective period. However, the data underlying this filing is based on the years in the experience period. Thus, it is necessary to use trend factors that forecast how much future lowa workers compensation experience will differ from historical experience.

Trend factors measure anticipated changes in the amount of indemnity and medical benefits as compared with anticipated changes in the amount of workers' wages. For example, if benefit costs are expected to grow faster than wages, then a trend factor greater than zero is indicated. Conversely, if wages are expected to grow faster than benefit costs, then a trend factor less than zero is indicated.

Overview of Methodology

NCCI separately analyzes a measure of the number of workplace injuries (claim frequency) and the average indemnity and medical costs of each of these injuries (claim severity). Premium, lost-time claim counts, and losses used in these frequency and severity calculations are developed to ultimate and adjusted for changes in the level of workers' wages over time using the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages for lowa. Note that medical-only claim counts are excluded from the claim frequency and severity calculations, but the losses associated with medical-only claims are included in severity figures.

While claim frequency and severity are reviewed separately, NCCI selects annual indemnity and medical loss ratio trend factors in lowa. Loss ratios are relied upon as they are less impacted by shifts in the industry mix since these impacts to frequency and severity tend to offset one another. Additionally, loss ratios do not require an adjustment to a common wage level, since the wage adjustment to frequency and severities nullify.

In order to estimate the average annual percentage changes in the loss ratios, exponential curves are fit to the historical data points. Consideration in the trend factor selections include a review of loss ratio patterns observed over an extended period of time, along with other pertinent considerations including, but not limited to, changes in system benefits and administration, economic environment, credibility of state data, and prior trend approach and selection.

The trend lengths displayed on the following exhibits are calculated by comparing the average accident date, or midpoint, for the effective period of the proposed rates to each average accident date of the policy years in the experience period. The average accident dates are based on an lowa distribution of policy writings by month and assume a uniform probability of loss over the coverage period.



Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Considerations Underlying Trend Selections in this Filing

The trend factors selected in this filing are meant to recognize the impact the changes in benefits and inflation will have on loss ratios between the midpoints of the experience period years on which the filing is based and the midpoint of the proposed rate effective period. Trends using the most recent 15 policy years are typically reviewed to allow one to evaluate changes over an extended period of time, including both economic and non-economic factors, and to mitigate short-term anomalous year-to-year changes.

The indicated exponential indemnity and medical loss ratio trend fits for which the trend selections in this filing are based are displayed on the following pages.

Similar to last year's filing, the trend selections explicitly incorporate considerations for the aspects of House File 518 (effective July 2017) that have emerged in experience but are not fully reflected in the loss on-level factors.

A significant decrease in the Policy Year 2016 indemnity loss ratio and a corresponding increase in Policy Year 2017 coincides with the enactment of House File 518. Note Policy Year 2016 experience is impacted by House File 518 provisions since the last policy underlying this policy year had an effective date of December 31, 2016, and did not expire until December 31, 2017. Among other things, this bill included some unquantified impacts such as a 90-day notice and statute of limitations defenses, use of *AMA Guides* for permanent impairment, determination of reduction in earning capacity for unscheduled permanent partial disability awards, and changes to an employer's liability for successive disabilities. As a result, the 2016 and 2017 year-over-year indemnity loss ratio changes were given less reliance in our analysis of loss ratio trends. To assess the impact on the long-term exponential fits, a hypothetical scenario was considered during this year's trend analysis. As shown below, scenario A represents the unadjusted indemnity loss ratios. In scenario B, the 2016 and 2017 year-over-year changes are judgmentally replaced by -7.7% and -1.6%—lowa's actual lost-time claim frequency changes for those years.

Scenario A: Unadjusted indemnity loss ratios

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Loss ratio	0.715	0.705	0.709	0.706	0.622	0.610	0.643	0.588	0.555	0.453	0.476	0.464	0.453	0.415	0.391
% Change		-1.4%	0.6%	-0.4%	-11.9%	-1.9%	5.4%	-8.6%	-5.6%	-18.4%	5.1%	-2.5%	-2.4%	-8.4%	-5.8%



Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

Scenario B: Adjusted indemnity loss ratios after replacing the 2015-to-2016 and 2016-to-2017 loss ratio changes with the actual changes in lost-time claim frequency.

	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016~</u>	<u>2017~</u>	<u>2018*</u>	<u>2019*</u>	<u>2020*</u>	<u>2021*</u>
Loss ratio	0.715	0.705	0.709	0.706	0.622	0.610	0.643	0.588	0.555	0.512	0.504	0.491	0.479	0.439	0.414
% Change		-1.4%	0.6%	-0.4%	-11.9%	-1.9%	5.4%	-8.6%	-5.6%	-7.7%	-1.6%	-2.6%	-2.4%	-8.4%	-5.7%

[~] The 2016 and 2017 loss ratios were reduced by the actual decline in lost-time claim frequency

Displayed on the following pages, the alternative indemnity loss ratio exponential fits are based on scenario B.

In general, long-term patterns of improving loss ratios have been observed over the last 15 years. The improved loss ratio experience observed in recent years is expected to continue going forward as the COVID-19 pandemic may have permanently altered aspects of the workplace and economy. For example, remote work and reduced business travel affecting some sectors, changes in job duties and workplaces, and changes in the mix of business are likely to persist into the future. The increasingly favorable policy year and calendar-accident year experience, coupled with the strength and stability of lowa's labor market, suggests improvements in experience are predictive of future experience and expected to persist into the filing effective period.

The effect of the pandemic in lowa from both an economic and workers compensation perspective, was limited. The employment levels decreased in early 2020 but lowa's employment has since recovered. The unemployment rate was 2.7% in year-end 2019, rising to 10.9% during 2020, and returning to 2.9% at year-end 2021 (source: Bureau of Labor Statistics). The unemployment rate for the effective period of this filing is forecasted to be similar the pre-pandemic period, approximately 3.2% (source: Moody's Analytics). When employment levels are similar, it suggests a comparable industry composition in the historical data. Furthermore, a stronger level of employment suggests fewer return-to-work challenges.

The Great Reshuffle, characterized by significant worker mobility across jobs, sectors and occupations, led to an increase in the proportion of short-tenured workers in some industries, which NCCI studies have shown to be associated with both higher injury frequency and claim costs. However, hiring and separation rates have since fallen nearly to pre-pandemic levels. This will likely lead to the share of short-tenured workers declining in 2023 toward historical averages.

^{*} Adjusted



Workers Compensation Rate Filing – January 1, 2024

Appendix A – Factors Underlying the Proposed Rate Level Change

The annual increase in wages has seen a consistent growth of over 5% in lowa over the past few years, with an estimated peak in 2022 surpassing 9%. Projections indicate that wage growth in lowa is anticipated to become more moderate, hovering around or below 4% for the year 2024 and beyond. As wages rise, premiums automatically increase along with the associated workers compensation indemnity benefits. Recent shifts in wages have significantly outpaced the rate of medical inflation within the workers compensation system, leading to a downward impact on the medical loss ratios of the most recent policy years. Although the margin is projected to be narrower, the trend of wage inflation outpacing medical inflation is expected to persist, exerting a somewhat reduced downward influence on forthcoming medical loss ratios. Medical inflation, as measured by the Chain-Weighted Personal Healthcare index, is projected to grow moderately over the next ten years, approximately 3.0% per year.

The medical loss ratio for Policy Year 2021 saw a decline of 12.3%. This decrease can be partly attributed to the wage growth in 2021 and 2022 relative to the changes in medical inflation, along with the reduced number of medical-only claim counts (outlined in Exhibit I). Therefore, a portion of the favorable medical loss ratio change observed in Policy Year 2021 from Policy Year 2020 may not accurately forecast future changes to experience. To address this concern, when analyzing trend factors for this filing, the exponential fits were reviewed both including and excluding Policy Year 2021 to gain an understanding of the impact of the most recent policy year on the trend fits. Displayed on the following pages, the alternative exponential fits for medical loss ratios exclude Policy Year 2021.

In light of the considerations above, the selected annual loss ratio trends are based heavily on mid— to longer—term adjusted exponential trend fits. These selected fits exhibit reduced volatility and effectively balance both responsiveness and stability. An annual trend factor of –4.5% was selected for the indemnity loss ratio, and an annual trend factor of –3.0% was selected for the medical loss ratio. These selections are in line with the indicated annual trends implied by both the adjusted and unadjusted fits.

Also shown on the following pages are the underlying frequency and severity components. Note that frequency and severity trends were reviewed but not selected. These figures reflect today's rate level as well as a common wage level, derived from an average of paid and paid plus case losses. Lost-time claim frequency has exhibited a long-term pattern of decline, which is not as steep in more recent policy years. After adjusting to a common wage level, both the average indemnity and medical cost per lost-time claim figures decreased in the most recent two policy years. Long-term average cost per case figures for indemnity demonstrate a declining trend, while the long-term medical costs per case figures show a slight upward trend. Together, claim frequency and severity trends suggest improving workers compensation experience



APPENDIX A-III

Policy Year Trend Factors

Section A - Calculation of Annual Loss Ratio Trend Factors

(1) Selected Annual Loss Ratio Trends: Indemnity Medical
-4.5% -3.0%

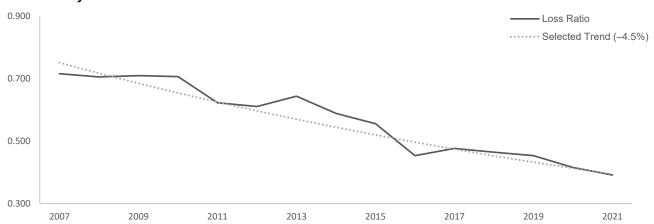
(2) Length of Trend Period from Midpoint of Policy Year to Midpoint of Effective Period:

 PY 2021
 PY 2020

 Trend Length:
 3.001
 4.001

(3) Trend Factors Applied to Experience Year Loss Ratios = [1 + (1)] ^ (2)

Section B - Indemnity Loss Ratio Trend Data



Policy	Indemnity	Annual Percent			
Year	Loss Ratio [^]	Change			
2007	0.715				
2008	0.705	-1.4%			Alternate
2009	0.709	0.6%	# of Years	Exponential	Exponential
2010	0.706	-0.4%	in Fit	Fits	Fits*
2011	0.622	-11.9%	15	-4.5%	-3.9%
2012	0.610	-1.9%	14	-4.7%	-4.1%
2013	0.643	5.4%	13	-4.9%	-4.3%
2014	0.588	-8.6%	12	-5.0%	-4.3%
2015	0.555	-5.6%	11	-4.9%	-4.2%
2016	0.453	-18.4%	10	-5.2%	-4.5%
2017	0.476	5.1%	9	-5.5%	-4.8%
2018	0.464	-2.5%	8	-5.0%	-4.5%
2019	0.453	-2.4%	7	-4.5%	-4.3%
2020	0.415	-8.4%	6	-3.3%	-4.2%
2021	0.391	-5.8%	5	-4.9%	-4.9%

[^]Based on an average of paid and paid+case losses

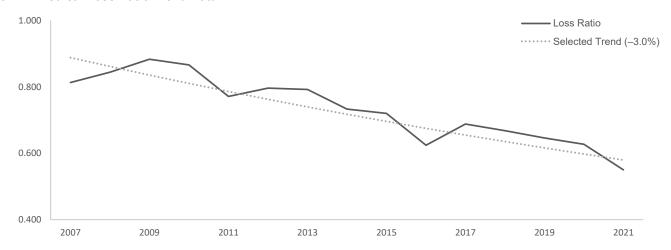
^{*}Exponential Fits from Scenario B (as described in preceeding pages)



APPENDIX A-III

Policy Year Trend Factors

Section C - Medical Loss Ratio Trend Data



Policy	Medical	Annual Percent			
Year	Loss Ratio^	Change			
2007	0.813				
2008	0.844	3.8%			Alternate
2009	0.883	4.6%	# of Years	Exponential	Exponential
2010	0.866	-1.9%	in Fit	Fits	Fits*
2011	0.771	-11.0%	15	-2.8%	
2012	0.796	3.2%	14	-3.1%	-2.6%
2013	0.792	-0.5%	13	-3.3%	-2.9%
2014	0.733	-7.4%	12	-3.3%	-3.1%
2015	0.720	-1.8%	11	-3.1%	-2.9%
2016	0.624	-13.3%	10	-3.4%	-2.7%
2017	0.688	10.3%	9	-3.4%	-3.0%
2018	0.668	-2.9%	8	-3.1%	-2.8%
2019	0.646	-3.3%	7	-3.0%	-2.2%
2020	0.627	-2.9%	6	-2.7%	-1.7%
2021	0.550	-12.3%	5	-5.0%	-0.5%

[^]Based on an average of paid and paid+case losses

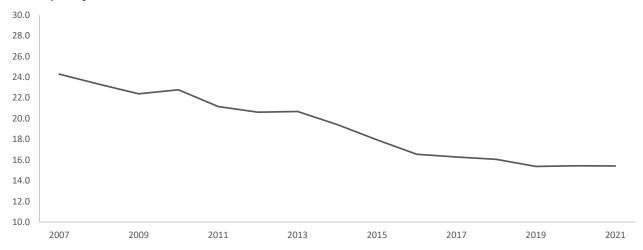
^{*}Exponential Fits excluding Policy Year 2021



APPENDIX A-III

Policy Year Trend Factors

Section D - Frequency Trend Data



Policy Year	Claim Frequency^	Annual Percent Change		
2007	24.293	-		
2008	23.317	-4.0%		
2009	22.390	-4.0%	# of Years	Exponential
2010	22.773	1.7%	in Fit	Fits
2011	21.160	-7.1%	15	-3.6%
2012	20.609	-2.6%	14	-3.6%
2013	20.684	0.4%	13	-3.7%
2014	19.411	-6.2%	12	-3.8%
2015	17.938	-7.6%	11	-3.7%
2016	16.549	-7.7%	10	-3.7%
2017	16.282	-1.6%	9	-3.6%
2018	16.055	-1.4%	8	-3.0%
2019	15.368	-4.3%	7	-2.3%
2020	15.432	0.4%	6	-1.6%
2021	15.418	-0.1%	5	-1.5%

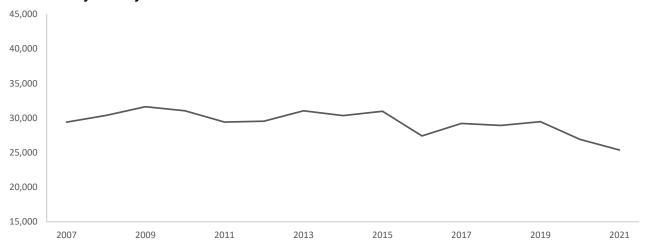
[^]Per million of on-leveled, wage-adjusted premium



APPENDIX A-III

Policy Year Trend Factors

Section E - Indemnity Severity Trend Data



Policy Year	Indemnity Severity^	Annual Percent Change		
2007	29,395	-		
2008	30,369	3.3%		
2009	31,637	4.2%	# of Years	Exponential
2010	31,041	-1.9%	in Fit	Fits
2011	29,409	-5.3%	15	-0.9%
2012	29,544	0.5%	14	-1.1%
2013	31,040	5.1%	13	-1.3%
2014	30,344	-2.2%	12	-1.3%
2015	30,967	2.1%	11	-1.3%
2016	27,416	-11.5%	10	-1.6%
2017	29,214	6.6%	9	-2.0%
2018	28,929	-1.0%	8	-2.1%
2019	29,471	1.9%	7	-2.2%
2020	26,914	-8.7%	6	-1.7%
2021	25,381	-5.7%	5	-3.5%

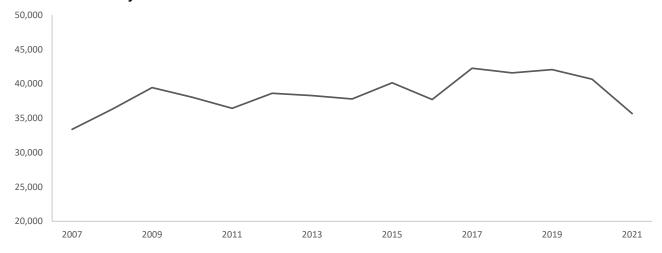
[^]Adjusted to a common wage level, based on an average of paid and paid+case losses



APPENDIX A-III

Policy Year Trend Factors

Section F - Medical Severity Trend Data



Policy Year	Medical Severity^	Annual Percent Change		
2007	33,372	-		
2008	36,284	8.7%		
2009	39,435	8.7%	# of Years	Exponential
2010	38,048	-3.5%	in Fit	Fits
2011	36,425	-4.3%	15	0.8%
2012	38,609	6.0%	14	0.5%
2013	38,274	-0.9%	13	0.4%
2014	37,792	-1.3%	12	0.5%
2015	40,142	6.2%	11	0.6%
2016	37,704	-6.1%	10	0.3%
2017	42,253	12.1%	9	0.2%
2018	41,583	-1.6%	8	0.0%
2019	42,060	1.1%	7	-0.7%
2020	40,660	-3.3%	6	-1.1%
2021	35,653	-12.3%	5	-3.6%

[^]Adjusted to a common wage level, based on an average of paid and paid+case losses



APPENDIX A-IV

Derivation of Industry Group Differentials

Industry group differentials are used to more equitably distribute the overall rate level change based on the individual experience of each industry group. The payroll, losses and claim counts used in the calculations below are from NCCI's Workers Compensation Statistical Plan (WCSP) data.

I. Expected Losses

The current expected losses (columns (1) and (2)) are the payroll extended by the pure premiums underlying the latest approved rates. The proposed expected losses (3) are the current expected losses adjusted to the proposed level. These adjustments include the proposed experience, trend, benefit and, if applicable, loss-based expense changes as well as any miscellaneous premium adjustments.

	(1)	(2)	(3)	(4)	(5)
	Latest Year	Five Year	Five Year		
	Current Expected	Current Expected	Proposed Expected	Current	Proposed
	Losses Prior to	Losses Prior to	Losses Prior to	Ratio of	Ratio of
	Adjustment for	Adjustment for	Adjustment for	Manual to	Manual to
	Change in	Change in	Change in	Standard	Standard
Industry Group	Off-Balance	Off-Balance	Off-Balance	Premium	Premium
Manufacturing	133,143,714	611,086,428	549,977,785	1.186	1.188
Contracting	110,742,492	518,191,270	466,372,143	1.142	1.133
Office & Clerical	58,483,559	270,533,813	243,480,432	1.123	1.125
Goods & Services	188,315,357	881,999,157	793,799,242	1.088	1.090
Miscellaneous	97,060,711	449,310,269	404,379,242	1.124	1.121
Statewide	587,745,834	2,731,120,938	2,458,008,844	·	

	(6)	(7)	(8)	(9)	(10)
	Latest Year	Five Year	Five Year		
	Current Expected	Current Expected	Proposed Expected		Adjustment to
	Losses Adjusted	Losses Adjusted	Losses Adjusted		Proposed for
	for Change in	for Change in	for Change in	Current/	Current
	Off-Balance	Off-Balance	Off-Balance	Proposed	Relativity
Industry Group	(1)x(4)/(5)	(2)x(4)/(5)	(3)x(4)/(5)	(7)/(8)	(9)IG/(9)SW
Manufacturing	132,919,567	610,057,663	549,051,897	1.111	1.000
Contracting	111,622,176	522,307,529	470,076,776	1.111	1.000
Office & Clerical	58,379,588	270,052,864	243,047,578	1.111	1.000
Goods & Services	187,969,825	880,380,810	792,342,729	1.111	1.000
Miscellaneous	97,320,463	450,512,705	405,461,435	1.111	1.000
Statewide	588,211,619	2,733,311,571	2,459,980,415	1.111	



APPENDIX A-IV

II. Industry Group Differentials

To calculate the converted indicated balanced losses (11) the reported losses are limited to \$500,000 for a single claim occurrence and \$1,500,000 for each multiple claim occurrence. After the application of limited development, trend and benefit factors, the limited losses are brought to an unlimited level through the application of the expected excess provision. The expected excess loss provisions are non-catastrophe and the excess ratios at a loss limit of \$50 million are set equal to zero. The proposed experience change, applicable loss-based expenses and any miscellaneous premium adjustments are applied to calculate the indicated losses. These indicated losses are then balanced to the expected losses using the factors shown in Appendix B-I, Section A-3.

Industry Group	(11) Converted Indicated Balanced Losses	(12) Indicated/ Expected Ratio (11)/[(8)x(10)]	(13) Indicated Differential (12)IG/(12)SW	(14) Lost-Time Claim Counts
Manufacturing	552,126,978	1.006	1.006	11,009
Contracting	454,245,419	0.966	0.966	5,889
Office & Clerical	237,048,627	0.975	0.975	4,333
Goods & Services	803,928,042	1.015	1.015	19,082
Miscellaneous	412,435,276	1.017	1.017	6,322
Statewide	2,459,784,342	1.000		

	(15)	(16)	(17)	(18)
			Credibility Weighted	
	Full Credibility	Credibility	Indicated/Expected	Final
	Standard	Minimum of	Ratio	Industry Group
	for Lost-Time	1.000 and	[(16)IGx(12)IG] +	Differential
Industry Group	Claim Counts	((14)/(15))^0.5	[1-(16)IG]x(12)SW*	(17)IG/(17)SW
Manufacturing	12,000	0.96	1.006	1.004
Contracting	12,000	0.70	0.976	0.974
Office & Clerical	12,000	0.60	0.985	0.983
Goods & Services	12,000	1.00	1.015	1.013
Miscellaneous	12,000	0.73	1.012	1.010
Statewide			1.002	1.000

^{*}Statewide ratio (column 17) = $\Sigma_{IG}[(6)x(17)] \div \Sigma_{IG}(6)$



lowa

APPENDIX A-IV

III. Description of Industry Group Differentials

Column (2) reflects the indemnity and medical combined expected losses calculated as five years of payroll (in hundreds) extended separately by indemnity and medical pure premiums underlying the latest approved rates. Column (3) adjusts the current expected losses to the proposed level by applying the components of the proposed rate level change. These components are applied separately for indemnity and medical, where possible. These adjustments are reflected in Appendix B-I. Section B.

Column (4) shows the current manual premium to standard premium ratios that were calculated using the latest five years of WCSP data used in the currently approved lowa filing. Column (5) shows the proposed manual premium to standard premium ratios calculated using the latest five years of manual premium and experience modification factors reported in the WCSP data used in the proposed lowa filing. "Proposed" ratio refers to the fact that these ratios are based on the latest available WCSP data in the proposed filing, and they are used to adjust the proposed industry group differentials to reflect the latest available impact of experience rating by industry group. The differences between columns (4) and (5) relate to the different periods of data being used, which are rolling 5-year periods.

Columns (6), (7), and (8) are based on columns (1), (2), and (3), respectively, and include an adjustment for the change in the average experience rating off-balance by Industry Group (IG). The adjustment for the change in the average experience rating off-balance by IG is reflected by multiplying columns (1), (2), and (3) by the ratio of column (4) to column (5). The ratio of column (4) to column (5) adjusts the current and proposed expected losses (and therefore the IG differentials) to reflect the latest available impact of experience rating by industry group.

The expected losses in column (6) are used as the IG weights when determining the statewide average Credibility Weighted Indicated-to-Expected Ratio in column (17).

The expected losses in columns (7) and (8) are used to determine the relative IG changes from the prior filing to the proposed filing in column (9). Since the indicated IG relativities in column (9) reflect a statewide average that differs from 1.000, the calculation in column (10) ensures that the indicated changes by IG balance to the overall proposed statewide rate level change.

Column (13) normalizes the indicated to expected ratios determined in column (12) to determine differentials before credibility weighting. The credibilities are calculated for each industry group using actual lost-time cases (column (14)) and the full credibility standard. The full credibility standard (column (15)) is determined based on an analysis of five successive years of five industry group differential fluctuations across 36 states. In column (16), the credibility is 1.00 when lost-time claims exceed 12,000. The final differentials reflected in column (18) are the normalized credibility weighted industry group differentials calculated in column (17).



Workers Compensation Rate Filing – January 1, 2024

Appendix B – Calculations Underlying the Advisory Rate Change by Classification

NCCI separately determines rates for each workers compensation classification. The proposed change from the current rate will vary depending on the classification. The following are the general steps utilized to determine the industrial classification rates:

- Calculate industry group differentials, which are used to more equitably distribute the proposed overall average advisory rate level change based on the individual experience of each industry group
- 2. For each classification, determine the indicated pure premiums based on the most recently-available five policy periods of lowa payroll and loss experience
- 3. Indicated pure premiums are credibility-weighted with present on rate level pure premiums and national pure premiums to generate derived by formula pure premiums
- 4. Final adjustments include the application of a test correction factor, the ratio of manual-tostandard premium, swing limits, and where applicable, an expense allowance and any additional loads



APPENDIX B-I

Distribution of Rate Level Change to Occupational Classification

After determining the required changes in the overall rate level for the state and by industry group, the next step in the ratemaking procedure is to distribute these changes among the various occupational classifications. In order to do this, the pure premiums by classification must be adjusted, by policy period, industry group, or on an overall basis, to incorporate the changes proposed in the filing. There are three sets of pure premiums for each classification: indicated, present on rate level, and national pure premiums.

Section A – Calculation of Indicated Pure Premiums

The indicated pure premiums are calculated from the payroll and loss data reported, by class code and policy period, in the Workers Compensation Statistical Plan (WCSP) for the latest available five policy periods. Various adjustments are made to these pure premiums to put them at the level proposed in this filing (Sections A-1 to A-3).

Section A-1 – Calculation of Primary Conversion Factors

1. Limited Loss Development Factors*

The following factors are applied to develop the losses from first through fifth report to an ultimate basis.

	Inde	mnity	Medical		
Policy Period	Likely-to-Develop	Not-Likely-to- Develop	Likely-to-Develop	Not-Likely-to-Develop	
3/16-2/17	1.037	1.017	1.030	1.004	
3/17-2/18	1.056	1.035	1.035	1.005	
3/18-2/19	1.111	1.065	1.037	1.005	
3/19-2/20	1.269	1.169	1.034	1.006	
3/20-2/21	1.717	1.329	1.065	1.018	

^{*}The likely/not-likely development factors reflect a 60% likely / 40% not-likely distribution of the total tail development.

2. Factors to Adjust to the Proposed Trend Level

The proposed trend factors are applied to adjust the losses to the proposed level.

Policy Period	Indemnity	Medical
3/16-2/17	0.698	0.788
3/17-2/18	0.731	0.813
3/18-2/19	0.765	0.838
3/19-2/20	0.801	0.864
3/20-2/21	0.839	0.891

3. Factors to Adjust to the Proposed Benefit Level

The following factors are applied to adjust the losses to the proposed benefit level.

		Permanent Total	Permanent Partial	Temporary Total	
Policy Period	Fatal	(P.T.)	(P.P.)	(T.T.)	Medical
3/16-2/17	1.009	1.025	0.920	1.025	1.000
3/17-2/18	1.007	1.013	1.003	1.013	1.000
3/18-2/19	1.002	1.002	1.002	1.002	1.000
3/19-2/20	1.000	1.000	1.000	1.000	1.000
3/20-2/21	1.000	1.000	1.000	1.000	1.000



APPENDIX B-I

4. Primary Conversion Factors: Indicated Pure Premiums

The factors above, contained within Section A-1, are combined multiplicatively, resulting in the following factors for the Likely-to-Develop (L) and Not-Likely-to-Develop (NL) groupings.

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
3/16-2/17	0.730	0.716	0.742	0.666	0.653	0.742	0.728	0.812	0.791
3/17-2/18	0.777	0.762	0.782	0.774	0.759	0.782	0.766	0.841	0.817
3/18-2/19	0.852	0.816	0.852	0.852	0.816	0.852	0.816	0.869	0.842
3/19-2/20	1.016	0.936	1.016	1.016	0.936	1.016	0.936	0.893	0.869
3/20-2/21	1.441	1.115	1.441	1.441	1.115	1.441	1.115	0.949	0.907

^{*} Permanent total losses are always assigned to the Likely-to-Develop grouping.

Section A-2 – Expected Excess Provision and Redistribution

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of excess loss factors by hazard group. The expected excess loss provisions are non-catastrophe and the excess ratios at a loss limit of \$50 million are set equal to zero. These factors are shown below.

Hazard Group	А	В	С	D	E	F	G
(1) Excess Ratios	0.107	0.136	0.176	0.198	0.262	0.302	0.336
(2) Excess Factors 1/(1-(1))	1.120	1.157	1.214	1.247	1.355	1.433	1.506

As the excess loss factors are on a combined (indemnity and medical) basis, a portion (40%) of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses. Since a portion of the expected excess losses are redistributed in an additive manner, the expected excess factors shown above cannot be combined multiplicatively with either the primary or secondary loss conversion factors.



APPENDIX B-I

Section A-3 - Calculation of Secondary Conversion Factors

1. Factors to Adjust for Proposed Industry Group Differentials

The following factors are applied to adjust the indicated industry group differentials for the effects of credibility weighting the industry group differentials and weighting the differentials by the latest year expected losses.

	Manufacturing	Contracting	Office and Clerical	Goods and Services	Miscellaneous
(1) Indicated Differentials*	1.006	0.966	0.975	1.015	1.017
(2) Final Differentials**	1.004	0.974	0.983	1.013	1.010
(3) Adjustment (2)/(1)	0.998	1.008	1.008	0.998	0.993

^{*}See Appendix A-IV, column (13).

2. Factors to Balance Indicated to Expected Losses

The expected losses are calculated as the pure premium underlying the current rates, adjusted to the proposed level and adjusted for the Experience Rating Plan off-balance. The indicated losses are balanced to the expected losses by applying the following factors.

	(1)				
	Adjustment of	(2)	(3)	(4)	(5)
	Indicated Losses	Current Ratio of	Proposed Ratio of		Balancing
	to Pure Premium	Manual to	Manual to	Off-balance	Indicated to
	at Proposed	Standard	Standard	Adjustment	Expected Losses
Policy Period	Level	Premium	Premium	(2)/(3)	(1)x(4)
3/16-2/17	0.912	1.129	1.127	1.002	0.914
3/17-2/18	0.863	1.129	1.125	1.004	0.866
3/18-2/19	0.832	1.130	1.133	0.997	0.830
3/19-2/20	0.887	1.130	1.133	0.997	0.884
3/20-2/21	0.894	1.130	1.127	1.003	0.897

3. Adjustment for Experience Change

A factor of 0.916 is applied to adjust for the experience change in the proposed rate level.

4. Factor to Reflect the Proposed Loss-Based Expense Provisions

A factor of 1.178 is applied to include the proposed loss-based expense provisions.

5. Secondary Conversion Factors: Indicated Pure Premiums

The factors above, contained within section A-3, are combined multiplicatively, resulting in the following factors:

Policy Period	Manufacturing	Contracting	Office and Clerical	Goods and Services	Miscellaneous
3/16-2/17	0.984	0.994	0.994	0.984	0.979
3/17-2/18	0.933	0.942	0.942	0.933	0.928
3/18-2/19	0.894	0.903	0.903	0.894	0.889
3/19-2/20	0.952	0.962	0.962	0.952	0.947
3/20-2/21	0.966	0.976	0.976	0.966	0.961

^{**}See Appendix A-IV, column (18).



APPENDIX B-I

Section B - Calculation of Present on Rate Level Pure Premiums

The present on rate level pure premiums are the pure premiums underlying the current rates, adjusted to the proposed level. The data sources for the above-captioned pure premiums are the partial pure premiums underlying the current rates.

1. Adjustment for Experience Change

A factor of 0.916 is applied to adjust for the experience change in the proposed rate level.

2. Factors to Adjust to the Proposed Trend Level

The pure premiums underlying the current rates contain the current trend. The change in trend factors, 0.982 and 0.982, for indemnity and medical, respectively, are applied to adjust to the proposed trend level.

3. Factors to Adjust to the Proposed Benefit Level

The following factors are applied to adjust the pure premiums underlying the current rates to the proposed benefit level.

	Indemnity	Medical
Benefit Adjustment	1.000	1.000

4. Factors to Include the Proposed Loss-Based Expense Provisions

The pure premiums underlying the current rates include the current loss-based expense provisions and must be adjusted to the proposed level.

	(a) Cı	urrent	(b) Proposed	
	Indemnity	Medical	Indemnity	Medical
(1) Loss Adjustment Expense	1.178	1.178	1.178	1.178
(2) Loss-based Assessment	1.000	1.000	1.000	1.000
(3) = (1) + (2) - 1.000	1.178	1.178	1.178	1.178
(4) Overall Change (3b)/(3a)			1.000	1.000

5. Adjustment to Obtain Expected Losses

The pure premiums underlying the current rates reflect the current Experience Rating Plan off-balance. The change in off-balance must be applied.

	(1)	(2)	(3)
	Current Ratio of	Proposed Ratio of	Off-balance
	Manual to Standard	Manual to Standard	Adjustment
Industry Group	Premium	Premium	(1)/(2)
Manufacturing	1.186	1.188	0.998
Contracting	1.142	1.133	1.008
Office & Clerical	1.123	1.125	0.998
Goods & Services	1.088	1.090	0.998
Miscellaneous	1.124	1.121	1.003



APPENDIX B-I

6. Factors to Adjust for Proposed Industry Group Differentials

The pure premiums underlying the current rates are adjusted by the proposed industry group differentials.

Industry Group	(1) Final Differential*	(2) Adjustment to Proposed for Current Relativities**	(3) Adjusted Differential (1)x(2)
Manufacturing	1.004	1.000	1.004
Contracting	0.974	1.000	0.974
Office & Clerical	0.983	1.000	0.983
Goods & Services	1.013	1.000	1.013
Miscellaneous	1.010	1.000	1.010

^{*}See Appendix A-IV, column (18).
**See Appendix A-IV, column (10).

7. Combined Conversion Factors

The factors above, contained within Section B, are combined multiplicatively, resulting in the following factors.

Industry Group	Indemnity	Medical
Manufacturing	0.902	0.902
Contracting	0.884	0.884
Office & Clerical	0.883	0.883
Goods & Services	0.910	0.910
Miscellaneous	0.912	0.912



APPENDIX B-I

Section C - Calculation of National Pure Premiums

Finally, there are the national pure premiums, which reflect the countrywide experience for each classification adjusted to state conditions. These pure premiums reflect the countrywide experience for each classification as indicated by the latest available individual classification experience for all states for which the National Council on Compensation Insurance compiles workers compensation data.

Countrywide data is adjusted to lowa conditions in four steps. First, statewide indicated pure premiums are determined for lowa. Second, using lowa payrolls as weights, corresponding statewide-average pure premiums are computed for each remaining state. Third, the ratios of lowa statewide pure premiums to those for other states are used as adjustment factors to convert losses for other states to a basis that is consistent with the lowa indicated pure premiums. The quotient of the countrywide total of such adjusted losses divided by the total countrywide payroll for the classification is the initial pure premium indicated by national relativity. Finally, national pure premiums are balanced to the level of the state indicated pure premiums to ensure unbiased derived by formula pure premiums. Indemnity and medical pure premiums are computed separately.

Section D - Calculation of Derived by Formula Pure Premiums

The indicated, present on rate level and national pure premiums are credibility weighted, and the resulting derived by formula pure premiums are used to determine the final class rates.

As for the preceding pure premiums, separate computations are performed for each partial pure premium: indemnity and medical. Each partial formula pure premium is derived by the weighting of the indicated, present on rate level and national partial pure premiums. The weight assigned to the policy year indicated pure premium varies in one-percent intervals from zero percent to one hundred percent, depending upon the volume of expected losses (i.e. the product of the underlying pure premiums and the payroll in hundreds). To achieve full state credibility, a classification must have expected losses of at least: \$34,104,169 for indemnity and \$26,092,886 for medical.

The partial credibilities formula is:

z = [(expected losses) / (full credibility standard)]^{0.5}

For the national pure premiums, credibility is determined from the number of lost-time claims. Full credibility standards are: 2,300 lost-time claims for indemnity and 2,000 lost-time claims for medical.

Partial credibilities are assigned using a credibility formula similar to that used for indicated pure premiums but based on the number of national cases. In no case is the national credibility permitted to exceed 50% of the complement of the state credibility.

National Credibility equals the smaller of:

[(national cases)/(full credibility standard)]^{0.5} and [(1 – state credibility)/2]

The residual credibility (100% minus the sum of the state and national credibilities) is assigned to the present on rate level pure premium.

For example, if the state credibility is 40%, the national pure premium is assigned a maximum credibility of 30% ((100-40) / 2). The remainder is assigned to the present on rate level pure premium.

The total pure premium shown on the attached Appendix B-III is obtained by adding the indemnity and medical partial pure premiums obtained above and rounding the sum to two decimal places.



APPENDIX B-II

Adjustments to Obtain Rates

The following items are combined with the derived by formula pure premium to obtain the proposed rate:

1. Test Correction Factor

The payrolls are now extended by the rates presently in effect and by the indicated rates to determine if the required change in manual premium level as calculated in Exhibit I has been achieved. Since at first this calculation may not yield the required results, an iterative process is initiated which continuously tests the proposed rates including tentative test correction factors until the required change in manual premium level is obtained. The test correction factor is applied to the derived by formula pure premiums.

The factors referred to above are set out as follows:

	Test Correction
	Factor
Manufacturing	0.9940
Contracting	1.0024
Office & Clerical	0.9863
Goods & Services	0.9941
Miscellaneous	0.9984

2. Ratios of Manual to Standard Premiums

The ratios of manual to standard premiums by industry group have also been excluded from the classification experience, and it is necessary to apply these factors to the derived by formula pure premiums.

	Ratio of Manual
	to Standard
	Premiums
Manufacturing	1.188
Contracting	1.133
Office & Clerical	1.125
Goods & Services	1.090
Miscellaneous	1.121

3. Expense Allowance

The expense allowance is introduced into the rate by dividing the product of the proposed pure premium and the appropriate factors above by the proposed target cost ratio of 0.729 (see Exhibit II-A for derivation of this factor). This operation produces the proposed rate prior to the addition of a disease loading, if any.



APPENDIX B-II

4. Swing Limits

As a further step, a test is made to make certain that the proposed rates fall within the following departures from the present rates:

Manufacturing	from 13% above to 37% below
Contracting	from 11% above to 39% below
Office & Clerical	from 12% above to 38% below
Goods & Services	from 14% above to 36% below
Miscellaneous	from 14% above to 36% below

These limits have been calculated in accordance with the following formula:

Max. Deviation = Effect of the final change in rate level by industry group plus or minus 25% rounded to the nearest 1%.

The product of the swing limits and the present rate sets bounds for the proposed rate. If the calculated rate falls outside of the bounds, the closest bound is chosen as the proposed rate. When a code is limited, the underlying pure premiums are adjusted to reflect the limited rate. The classifications which have been so limited are shown below. Note that classifications that are subject to special handling may fall outside of the swing limits. A code listed below with an asterisk indicates the code's swing limit was adjusted by one cent before being applied; this is only performed when the upper and lower bounds calculated by the swing limit are equal.

An illustrative example showing the calculation of a proposed manual class rate is attached as Appendix B-III. This example demonstrates the manner in which the partial pure premiums are combined to produce a total pure premium, and shows the steps in the calculation at which the rounding takes place. The rates for other classifications are calculated in the same manner.

List of Classifications Limited by the Upper Swing

List of Classifications Limited by the Lower Swing

2586 4653 7710



APPENDIX B-III

Derivation of Proposed Rate - Code 8810

As previously explained in Appendix B-I, the indicated pure premiums are developed by adjusting the limited losses by a set of conversion factors. The converted losses are then summarized into indemnity and medical and then divided by payroll (in hundreds). The derivation of the indicated pure premium for the above-captioned classification follows:

LIMITED LOSSES (Workers Compensation Statistical Plan)

				Permanent	Permanent	Temporary	Temporary		
	Fatal	Fatal	Permanent	Partial	Partial	Total	Total	Medical	Medical
Policy Period	Likely	Not-Likely	Total	Likely	Not-Likely	Likely	Not-Likely	Likely	Not-Likely
03/01/16 - 02/28/17	0	0	0	1,104,408	2,004,426	165,341	781,061	1,127,761	5,347,988
03/01/17 - 02/28/18	0	0	0	738,515	2,266,060	403,556	772,225	864,449	7,034,719
03/01/18 - 02/28/19	0	0	0	1,088,293	3,338,250	755,071	912,801	2,490,278	7,864,645
03/01/19 - 02/29/20	0	497,330	0	848,426	1,508,144	544,039	1,249,025	1,540,847	5,998,700
03/01/20 - 02/28/21	0	0	0	607,944	1,053,478	229,820	1,103,506	1,588,436	5,264,764

PRIMARY CONVERSION FACTORS (Appendix B-I, Section A-1)

				Permanent	Permanent	Temporary	Temporary		
	Fatal	Fatal	Permanent	Partial	Partial	Total	Total	Medical	Medical
Policy Period	Likely	Not-Likely	Total	Likely	Not-Likely	Likely	Not-Likely	Likely	Not-Likely
03/01/16 - 02/28/17	0.730	0.716	0.742	0.666	0.653	0.742	0.728	0.812	0.791
03/01/17 - 02/28/18	0.777	0.762	0.782	0.774	0.759	0.782	0.766	0.841	0.817
03/01/18 - 02/28/19	0.852	0.816	0.852	0.852	0.816	0.852	0.816	0.869	0.842
03/01/19 - 02/29/20	1.016	0.936	1.016	1.016	0.936	1.016	0.936	0.893	0.869
03/01/20 - 02/28/21	1.441	1.115	1.441	1.441	1.115	1.441	1.115	0.949	0.907

EXPECTED EXCESS PROVISION AND REDISTRIBUTION (Appendix B-I, Section A-2)

After the application of the primary conversion factors, the limited losses are brought to an expected unlimited level through the application of a hazard group-specific excess loss factor. The factor is shown below:

	HAZARD GROUP: C
Excess Factor	1.214

As the excess loss factor is on a combined (indemnity and medical) basis, the following portion of the indemnity expected excess losses are redistributed to medical in order to more accurately allocate expected excess losses:

Redistribution %	40%



APPENDIX B-III

Derivation of Proposed Rate - Code 8810

EXPECTED UNLIMITED LOSSES (Limited Losses x Primary Conversion Factors, then adjusted for the Excess Provision and Redistribution)

				Permanent	Permanent	Temporary	Temporary		
	Fatal	Fatal	Permanent	Partial	Partial	Total	Total	Medical	Medical
Policy Period	Likely	Not-Likely	Total	Likely	Not-Likely	Likely	Not-Likely	Likely	Not-Likely
03/01/16 - 02/28/17	0	0	0	829,799	1,476,631	138,405	641,483	1,184,661	5,294,217
03/01/17 - 02/28/18	0	0	0	644,866	1,940,360	356,025	667,331	958,083	7,172,442
03/01/18 - 02/28/19	0	0	0	1,046,055	3,073,109	725,765	840,302	2,760,459	8,332,813
03/01/19 - 02/29/20	0	525,157	0	972,471	1,592,530	623,581	1,318,912	1,790,746	6,586,558
03/01/20 - 02/28/21	0	0	0	988,317	1,325,163	373,613	1,388,093	1,932,541	6,000,553

SECONDARY CONVERSION FACTORS (Appendix B-I, Section A-3)

	INDUSTRY GROUP:
Policy Period	Office and Clerical
03/01/16 - 02/28/17	0.994
03/01/17 - 02/28/18	0.942
03/01/18 - 02/28/19	0.903
03/01/19 - 02/29/20	0.962
03/01/20 - 02/28/21	0.976

PAYROLL, FINAL CONVERTED LOSSES (Expected Unlimited Losses x Secondary Conversion Factors)

		Indemnity	Indemnity	Medical	Medical	Total	Total	
Policy Period	Payroll	Likely	Not-Likely	Likely	Not-Likely	Indemnity	Medical	Total
03/01/16 - 02/28/17	10,090,695,980	962,395	2,105,405	1,177,553	5,262,452	3,067,800	6,440,005	9,507,805
03/01/17 - 02/28/18	10,209,254,711	942,839	2,456,445	902,514	6,756,440	3,399,284	7,658,954	11,058,238
03/01/18 - 02/28/19	10,709,508,725	1,599,953	3,533,810	2,492,694	7,524,530	5,133,763	10,017,224	15,150,987
03/01/19 - 02/29/20	12,209,036,125	1,535,402	3,306,008	1,722,698	6,336,269	4,841,410	8,058,967	12,900,377
03/01/20 - 02/28/21	11,589,466,056	1,329,244	2,648,138	1,886,160	5,856,540	3,977,382	7,742,700	11,720,082
Total	54,807,961,597	6,369,833	14,049,806	8,181,619	31,736,231	20,419,639	39,917,850	60,337,489
		INDICATED PURE PREMIUM			0.037	0.073	0.11	

The pure premiums shown were calculated using unrounded losses, while the converted losses have been rounded for display purposes.

The present on rate level pure premiums are developed by adjusting the pure premiums underlying the current rate by the conversion factors calculated in Appendix B-I. The derivation of the present on rate level pure premiums for the above-captioned classification follows:

	Indemnity	Medical	Total
Pure Premiums Underlying Current Rate	0.038	0.082	0.12
Conversion Factors (App. B-I, Section B)	0.883	0.883	XXX
PURE PREMIUMS PRESENT ON RATE LEVEL			
(Underlying Pure Premiums) x (Conversion Factor)	0.034	0.072	0.11



APPENDIX B-III

Derivation of Proposed Rate - Code 8810

Industry Group - Office and Clerical, Hazard Group - C

The rate for the above-captioned classification is derived as follows:

		Indemnity	<u>Medical</u>	<u>Total</u>
1.	Indicated Pure Premium	0.037	0.073	0.11
2.	Pure Premium Indicated by National Relativity	0.029	0.054	0.08
3.	Pure Premium Present on Rate Level	0.034	0.072	0.11
4.	State Credibilities	74%	100%	xxx
5.	National Credibilities	13%	0%	xxx
6.	Residual Credibilities = 100% - (4) - (5)	13%	0%	xxx
7.	Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	0.036	0.073	0.11
8.	Test Correction Factor	0.9863	0.9863	xxx
9.	Underlying Pure Premiums = (7) x (8) *	0.038	0.072	0.11
10.	Ratio of Manual to Standard Premium			1.125
11.	Target Cost Ratio			0.729
12.	Rate = (9) x (10) / (11)			0.17
13.	Rate Within Swing Limits			0.17
	Current Rate x Swing Limits a) Lower bound = 0.19 x 0.620 = 0.12 b) Upper bound = 0.19 x 1.120 = 0.21			
14.	Pure Premiums Underlying Proposed Rate* = ((14TOT) / (9TOT)) x (9); (14TOT) = (13) x (11) / (10)	0.038	0.072	0.11
15.	Miscellaneous Loadings			0.00
16.	Final Loaded Rate			0.17

^{*} Indemnity pure premium is adjusted for the rounded total pure premium: Indemnity Pure Premium = Total Pure Premium - Medical Pure Premium



APPENDIX B-IV

WCSP data is used to determine the F-Classification (F-Class) rates. The latest year of WCSP payroll is extended by both the current and proposed rates. Based on \$1,712,074 of payroll, the overall rate level change in Iowa is -23.4%.

I. Overview of Methodology

- Ten years of F-Class losses* across all states for which the National Council on Compensation Insurance compiles
 workers compensation ratemaking data are converted and adjusted to a countrywide level and used with ten years of FClass countrywide payroll to determine the F-class countrywide pure premiums at both an overall and individual
 classification level.
- F-class code countrywide relativities are then calculated by comparing the F-class countrywide pure premiums by class to the overall countrywide F-class pure premium. The relativity values are reflected in the table in Section II.
- A single state primary base pure premium is calculated by applying a countrywide to state relativity factor to bring the Fclass overall countrywide pure premium to the lowa proposed level.
- A final base rate is calculated by bringing the primary base pure premium to the proposed lowa trend and benefit levels, and applying any applicable expenses and/or offsets.
- Final F-Class rates are calculated by applying the countrywide relativity by class code to the final base rate and applying swing limits.

*Losses are limited to \$500,000 for a single claim occurrence and \$1,500,000 for each multiple claim occurrence. Texas data is included for policies effective 1/1/2013 and subsequent.



APPENDIX B-IV

II. The F-class code countrywide relativities:

Class Code	Countrywide Relativity**
6006	1.686
6801*	1.000
6824	1.184
6825	0.351
6826	0.666
6828*	1.000
6829*	1.000
6843	1.358
6845	0.729
6872	1.268
6873*	1.000
6874	1.592
7309	1.227
7313	0.498
7317	0.946
7327	2.518
7350	1.023
8709	0.385
8726	0.264
9077*	1.000

^{*}Relativities for class codes with a limited amount of data are set to 1.000.

III. Swing Limits

The proposed rates are limited to the swing limits based on 25% above and 25% below the current rates.

Classifications Limited by the Upper Swing	Classifications Limited by the Lower Swing			
NONE	6826	6843	6874	7309
	7327	7350	8709	8726

^{**}The relativities have been locked into the values from the prior filing



APPENDIX B-IV

Derivation of State Base Rate

	Indemnity	<u>Medical</u>	<u>Total</u>
Overall Countrywide Pure Premium			2.76
2. State Act Pure Premium Relativity Factor			1.447
3. Countrywide State Act Weight			24%
4. Primary Base Pure Premium =[(1) x (2) x (3)] + [(1) x (1 - (3))]			3.06
5. Countrywide Weights	51%	49%	100%
6. Trend Factors	0.958	0.972	xx
7. Weighted Benefits	1.000	1.000	xx
8. Weighted Loss-Based Expenses	1.245	1.178	xx
9. Secondary Base Pure Premium = (4tot) x (5) x (6) x (7) x (8)	1.861	1.717	3.58
10. Additional Offsets			1.000
11. Expense Allowance			0.729
12. Final Base Rate = (9) x (10) / (11)			4.91



APPENDIX B-IV

Derivation of Proposed Rate - Code 6872

Industry Group - F-Class, Hazard Group - G

The rate for the above-captioned classification is derived as follows:

1. Iowa's Final Base Rate	4.91
2. Countrywide Class Code 6872 Relativity (Section II)	1.268
3. Rate = (1) x (2)	6.23
4. Rate Within Swing Limits	6.23
Current Rate x Swing Limits a) Lower bound = 7.95 x 0.75 = 5.97 a) Upper bound = 7.95 x 1.25 = 9.93	
5. Miscellaneous Loadings	0.00
6 Final Loaded Rate	6 23



APPENDIX B-IV

U.S. Longshore and Harbor Workers' Compensation Act Assessment

The F-class and Program II, Option II maritime class voluntary rates and assigned risk rates include the following provision for the federal assessment:

1.) Assessment Rate on Indemnity Losses *

8.8%

2.) Assessment Rate on Total Losses #

4.8%

- * Calculated using data provided by the U.S. Department of Labor
- # Calculated using U.S. Department of Labor data and on-leveled and developed USL&HW losses statistical plan data



Appendix B-V

Calculation of Coal Mine Traumatic

Coal mine experience is reflected in the following class codes:

- Surface Coal Mine Class Code 1005
- Underground Coal Mine Class Code 1016

The traumatic rate for Surface Coal Mine Class Code 1005 is calculated based on WCSP data as explained in Appendices B-I through B-III. Class Code 1005 is in the Miscellaneous industry group.

The traumatic rate for Underground Coal Mine Class Code 1016 is calculated using WCSP data. Pure premiums are calculated and adjusted for trend, benefits, and any applicable offsets or expense provisions. Swing limits for Class Code 1016 are applied around the currently approved rate.



Workers Compensation Rate Filing – January 1, 2024

Appendix C – Memoranda for Laws and Assessments

The purpose of this appendix is to provide details on changes affecting workers compensation benefit costs that are not yet reflected in the on-level factors shown in Appendix A-I. Such changes may result from annual updates in medical reimbursement levels or other changes that directly affect worker compensation benefit levels. In addition, changes to the administration of the workers compensation system, including benefit levels, may result from specific regulatory, legislative, or judicial action. The overall effect of benefit changes displayed within this appendix is calculated as of the benefit effective date, which may differ from the overall impact on the filling as shown in the Executive Summary.

In this year's filing, there have been no newly enacted benefit changes in Iowa.



Workers Compensation Rate Filing – January 1, 2024

Appendix D – Determination of Assigned Risk Rates

Overall Proposed Change to Assigned Risk Rate Level

NCCI applies an assigned risk multiplier to convert the advisory voluntary rates to assigned risk rates. In Iowa, the only component of the assigned risk multiplier is the assigned risk rate differential. This filing proposes no change to the current assigned risk multiplier.

Assigned Risk Rate Differential

The assigned risk rate differential reflects the fact that the collective experience for employers in the assigned risk market is typically worse than that of employers in the voluntary market. Loss ratios are calculated for both the (i) assigned risk market and (ii) statewide market by individual year as follows:

(total onleveled losses)

(total onleveled, developed standard premium at the voluntary level)

For each individual policy year, the assigned risk loss ratio is divided by the statewide loss ratio to produce loss ratio relativities. These loss ratio relativities are reviewed for fifteen individual years so that changes in the actual differentials can be observed over a long period of time. When selecting the assigned risk rate differential, the impact of additional premium that is already expected to be generated due to other assigned risk programs (removal of premium discounts, Assigned Risk Adjustment Program) is also reflected in the calculation. In addition, estimated uncollectible premium and the expected difference between the voluntary and assigned risk expenses were considered for during the selection of the assign risk rate differential.

Based on this year's analysis, NCCI is proposing no change to the currently approved assigned risk rate differential. NCCI believes there are several reasons that it is appropriate to maintain the current differential:

- The assigned risk differential can vary quite substantially from one year to the next. For example, the individual assigned risk differentials for the latest fifteen years range from 0.798 to 1.966. A longer-term average provides stability when dealing with such a wide range of indications from year to year.
- The differential should be sufficiently high so that an insured would not find an offer of residual market coverage to be more attractive than an offer for voluntary coverage.
- There is value in having stability in the rates; this stability can be achieved by allowing the assigned risk rate level to move in concert with the voluntary rates, while maintaining



Iowa

Workers Compensation Rate Filing – January 1, 2024

Appendix D – Determination of Assigned Risk Rates

a differential that will be adequate over the long term rather than modifying it each year based on specific arithmetic calculation.

- It is important to the health of the workers compensation system to have an adequate rate level in the residual market, allowing that market to be as self-funding as possible.
- The assigned risk rate differential was lowered from 1.300 to 1.250 in the January 1, 2022 filing. NCCI believes that maintaining the differential is appropriate to encourage the process of residual market depopulation.

The data underlying this calculation is shown in Appendix D – Derivation of Assigned Risk Differential.



APPENDIX D

Determination of Assigned Risk Rates

Section A - Derivation of Assigned Risk Differential Experience Valued as of 12/31/2022

Policy	(1) Standard Pu	(2)	(3) Unlimited Undeveloped	(4)	
Year	Assigned Risk	Statewide	Assigned Risk	Statewide	_
I Gai	Assigned Risk	Statewide	Assigned Nisk	Statewide	
2007	8.646,873	233,646,695	21,206,212	350,241,576	
2008	8,008,205	233,984,235	21,024,399	355,579,375	
2009	7,084,201	229,963,593	17,022,421	377,976,608	
2010	6,186,615	242,903,139	20,692,263	368,721,526	
2011	6,965,760	257,759,560	14,579,747	339,352,120	
2012	9,033,483	259,097,992	24,048,162	351,884,101	
2013	11,913,010	266,658,002	19,718,727	369,282,230	
2014	11,776,094	272,012,380	21,341,013	356,753,131	
2015	11,599,994	279,910,185	19,709,803	356,332,843	
2016	9,742,497	288,632,368	10,329,095	313,203,650	
2017	8,527,222	299,507,715	12,121,469	351,230,623	
2018	8,437,049	304,327,075	8,715,340	351,652,785	
2019	8,856,246	312,592,250	9,609,517	347,348,844	
2020	9,193,377	318,278,440	13,933,728	326,899,312	
2020	9,193,377	334,108,054	9,604,855	302,257,217	
2021	9,000,070	334, 100,034	9,004,000	302,237,217	
	(5) = (3) / (1)	(6) = (4) / (2)	(7) = (5) / (6)	(8) = (7) / Impact of	
				AR Programs [^]	
			Assigned Risk	•	
Policy	Pure Prem	ium Ratio	to Statewide	Indicated Assigned	
Year	Assigned Risk	Statewide	Relativity	Risk Differential	
2007	2.452	1.499	1.636	1.459	
2008	2.625	1.520	1.727	1.541	
2009	2.403	1.644	1.462	1.304	
2010	3.345	1.518	2.204	1.966	
2011	2.093	1.317	1.589	1.417	
2012	2.662	1.358	1.960	1.748	
2013	1.655	1.385	1.195	1.066	
2014	1.812	1.312	1.381	1.232	
2015	1.699	1.273	1.335	1.191	
2016	1.060	1.085	0.977	0.872	
2017	1.422	1.173	1.212	1.081	
2018	1.033	1.156	0.894	0.798	
2019	1.085	1.111	0.977	0.872	
2020	1.516	1.027	1.476	1.317	
2021	0.971	0.905	1.073	0.957	
<i>,</i>					
			Current Assigned Risk Differential	1.250	
		Prop	osed Assigned Risk Differential	1.250	
		Proposed Ch	ange in Assigned Risk Differential	1.000	0.0%

Assigned Risk Programs in Addition to the Differential			
(a) Removal of Premium Discounts	1.040		
(b) ARAP	1.078		
Total impact of programs	1.121		
= (a) x (b)			

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Iowa

Workers Compensation Rate Filing – January 1, 2024

Part 4 Additional Information

- Definitions
- NCCI Affiliate List
- Key Contacts



Workers Compensation Rate Filing – January 1, 2024

Definitions

Accident Year (AY): A loss accounting definition in which experience is summarized by the calendar year in which an accident occurred.

Calendar Year (CY):

- 1. The 12-month period beginning January 1 and ending December 31.
- 2. Method of accounting for all financial transactions occurring during a specific year.

Case Reserves: Reserves that an insurance company establishes for specific (known) claims.

DSR Level Premium: The standard earned premium that would result if business were written at NCCI state-approved rates instead of at the company rates. It is the common benchmark level at which carriers report premium on the Financial Calls.

Frequency: The number of lost-time claims per million dollars of on-leveled, wage-adjusted premium.

Incurred Claim Count: The total of all claims reported, whether open or closed, as of a given valuation date. An indemnity claim is associated with a payment or case reserve for an indemnity loss (i.e., lost work time-related benefits) and excludes claims closed without an indemnity payment.

Lost-time Claims: Claims where an injured employee has received wage replacement benefits due to a compensable workplace injury.

Limited Losses: Losses that result after the application of NCCI's large loss procedure—in which individual large claims are limited to jurisdiction and year-specific large loss thresholds.

On-Level Factor: Applied to historical premiums and losses to adjust the historical experience to reflect approved rate level changes as well as statutory benefit level changes implemented since that time.

Paid+Case Losses: The sum of paid losses and case reserves. Also known as "case incurred losses."

Paid Losses: Losses that an insurance company has paid as a result of claim activity.

Policy Year:

- The one-year period beginning with the effective date or anniversary of a policy.
- A premium and loss accounting definition in which experience is summarized for all
 policies with effective dates in a given calendar year period.

Severity: The average cost per case (claim) calculated as ultimate losses divided by ultimate lost-time claim counts.



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Definitions

Ultimate Development Factor: For an aggregation of data, an estimate of the development that will occur between the data's current valuation date and the time when all claims are closed.

Unlimited Losses: Losses that have not been limited to jurisdiction and year-specific large loss thresholds as part of NCCI's large loss procedure.

Valuation Date: The date that premiums and losses are evaluated for reporting purposes. Premiums and losses may change over time from initial estimates to final values. Therefore, interim snapshots have associated valuation dates.

Wage Level Adjustment Factor: The ratio of the average workers' wages during the most recent time period to the average workers' wages during a historical time period.



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NCCI Affiliate List

A M C O INSURANCE COMPANY
ACADIA INSURANCE COMPANY
ACCIDENT FUND GENERAL INS CO
ACCIDENT FUND INS CO OF AMERICA
ACCIDENT FUND NATIONAL INS CO
ACE AMERICAN INSURANCE COMPANY

ACE FIRE UNDERWRITERS INSURANCE COMPANY ACE PROPERTY & CASUALTY INSURANCE COMPANY

ACIG INS CO

ACUITY A MUTUAL INS COMPANY ADDISON INSURANCE COMPANY AIG ASSURANCE COMPANY

AIG PROPERTY CASUALTY COMPANY

AIU INSURANCE CO (NATIONAL UNION FIRE OF PITTS PA)

AK NATIONAL INS CO ALLIED EASTERN IND CO ALLIED INSURANCE COMPANY OF AMERICA ALLIED PROPERTY AND CASUALTY INS CO

ALLIED PROPERTY AND CASUALTY INS CO ALLMERICA FINANCIAL ALLIANCE INS CO ALLMERICA FINANCIAL BENEFIT INS CO

AMERICAN ALTERNATIVE INSURANCE CORPORATION

AMERICAN AUTOMOBILE INSURANCE CO

AMERICAN BUSINESS AND MERCANTILE INS MUTUAL INC AMERICAN CASUALTY COMPANY OF READING PA

AMERICAN COMPENSATION INS CO AMERICAN ECONOMY INS CO AMERICAN FAMILY HOME INS CO

AMERICAN FAMILY INS CO

AMERICAN FAMILY MUTUAL INSURANCE COMPANY, S.I.

AMERICAN FIRE AND CASUALTY CO

AMERICAN GUARANTEE AND LIABILITY INS CO

AMERICAN HOME ASSUR CO-NATIONAL UNION FIRE OF PIT

AMERICAN INTERSTATE INS CO AMERICAN INTERSTATE INS CO OF TX AMERICAN LIBERTY INSURANCE CO AMERICAN MODERN HOME INS CO

AMERICAN NATIONAL PROPERTY AND CASUALTY CO

AMERICAN SELECT INS CO

AMERICAN STATES INS CO A SAFECO COMPANY

AMERICAN ZURICH INS CO AMERISURE INS CO AMERISURE MUTUAL INS CO AMERISURE PARTNERS INS CO

AMFED ADVANTAGE INSURANCE COMPANY

AMFED CASUALTY INS CO

AMFED NATIONAL INSURANCE COMPANY

AMGUARD INS CO

AMTRUST INSURANCE CO

ARCH INDEMNITY INSURANCE COMPANY

ARCH INSURANCE COMPANY ARCH PROPERTY CASUALTY INS CO ARGONAUT GREAT CENTRAL INS CO

ARGONAUT INS CO

ARGONAUT MIDWEST INS CO ASCOT INSURANCE COMPANY ASSOCIATION CASUALTY INS CO ATLANTIC SPECIALTY INS CO (INTACT) ATLANTIC STATES INS CO AUSTIN MUTUAL INSURANCE COMPANY

AUTO OWNERS INS CO

BADGER MUTUAL INS CO BANKERS STANDARD INS CO

BEARING MIDWEST CASUALTY COMPANY BENCHMARK INSURANCE COMPANY BERKLEY CASUALTY COMPANY BERKLEY INSURANCE COMPANY

BERKLEY NATIONAL INSURANCE COMPANY

BERKLEY REGIONAL INS CO

BERKSHIRE HATHAWAY DIRECT INSURANCE COMPANY

BERKSHIRE HATHAWAY HOMESTATE INS CO
BITCO GENERAL INSURANCE CORPORATION
BITCO NATIONAL INSURANCE COMPANY
BLACKBOARD INSURANCE COMPANY
BRICKSTREET MUTUAL INS CO
BROTHERHOOD MUTUAL INS CO
CALIFORNIA INSURANCE COMPANY
CAROLINA CASUALTY INS CO
CELINA MUTUAL INS CO
CHARTER OAK FIRE INS CO

CHEROKEE INS CO
CHIRON INSURANCE COMPANY
CHUBB INDEMNITY INS CO
CHUBB NATIONAL INS CO
CHURCH MUTUAL INS CO, S.I.

CIMARRON INSURANCE COMPANY INC CINCINNATI CASUALTY COMPANY CINCINNATI INDEMNITY COMPANY CINCINNATI INS CO

CITIZENS INS CO OF AMERICA

CLEAR SPRING PROPERTY AND CASUALTY COMPANY

CLERMONT INS CO

COLONIAL AMERICAN CASUALTY & SURETY CO

COLONIAL SURETY COMPANY
COLUMBIA MUTUAL INSURANCE CO
COLUMBIA NATIONAL INS CO
COMMERCE AND INDUSTRY INS CO
CONSOLIDATED INS CO
CONTINENTAL CASUALTY CO
CONTINENTAL INDEMNITY CO

CONTINENTAL WESTERN INSURANCE COMPANY

COREPOINTE INSURANCE COMPANY

CRESTBROOK INS CO

CONTINENTAL INS CO

CRUM AND FORSTER INDEMNITY CO DAKOTA TRUCK UNDERWRITERS

DEPOSITORS INS CO

DISCOVER PROPERTY & CASUALTY INS CO

DONEGAL MUTUAL INS CO

EASTERN ADVANTAGE ASSURANCE COMPANY EASTERN ALLIANCE INSURANCE COMPANY

EASTGUARD INS CO ELECTRIC INS CO

EMC PROPERTY & CASUALTY COMPANY

EMCASCO INS CO

EMPLOYERS ASSURANCE COMPANY EMPLOYERS COMPENSATION INS CO EMPLOYERS INS CO OF WAUSAU

EMPLOYERS INSURANCE COMPANY OF NEVADA

EMPLOYERS MUTUAL CASUALTY CO



Workers Compensation Rate Filing – January 1, 2024

NCCI Affiliate List

EMPLOYERS PREFERRED INS CO ENDURANCE AMERICAN INS CO

ENDURANCE ASSURANCE CORPORATION EVEREST DENALI INSURANCE COMPANY

EVEREST NATIONAL INS CO

EVEREST PREMIER INSURANCE COMPANY EVEREST REINSURANCE CO DIRECT EXECUTIVE RISK INDEMNITY INC

EXPLORER INS CO

FALLS LAKE NATIONAL INSURANCE CO FARM BUREAU PROPERTY & CASUALTY INS CO

FARMERS AUTOMOBILE INS ASSN FARMERS INSURANCE EXCHANGE FARMINGTON CASUALTY COMPANY FEDERAL INSURANCE COMPANY FEDERATED MUTUAL INS CO

FEDERATED RESERVE INSURANCE CO FEDERATED RURAL ELECTRIC INS EXCHANGE

FEDERATED SERVICE INS CO

FIDELITY & DEPOSIT COMPANY OF MARYLAND FIDELITY & GUARANTY INS UNDERWRITERS FIDELITY & GUARANTY INSURANCE CO

FIRE INS EXCHANGE

FIREMANS FUND INSURANCE CO FIREMENS INS CO OF WASHINGTON DC

FIRST DAKOTA INDEMNITY CO FIRST LIBERTY INS CORP FIRST NATIONAL INS CO OF AMERICA FIRSTCOMP INSURANCE CO FLORISTS MUTUAL INSURANCE CO FRANK WINSTON CRUM INSURANCE CO FREEDOM SPECIALTY INSURANCE COMPANY GENERAL CASUALTY COMPANY OF WISCONSIN

GENERAL CASUALTY INSURANCE COMPANY

GENERAL INS CO OF AMERICA

GENESIS INS CO

GRANITE STATE INSURANCE COMPANY GRAPHIC ARTS MUTUAL INS CO **GRAY INSURANCE COMPANY** GREAT AMERICAN ALLIANCE INS CO GREAT AMERICAN ASSURANCE COMPANY GREAT AMERICAN INS CO OF NY GREAT AMERICAN INSURANCE COMPANY GREAT AMERICAN SPIRIT INS CO GREAT DIVIDE INSURANCE COMPANY

GREAT MIDWEST INS CO GREAT NORTHERN INS CO GREAT WEST CASUALTY COMPANY

GREATER NY MUTUAL INS CO

GREENWICH INS CO

GRINNELL MUTUAL REINSURANCE CO

GRINNELL SELECT INS CO GUIDEONE ELITE INS CO GUIDEONE INSURANCE COMPANY

GUIDEONE SPECIALTY INSURANCE COMPANY

HANOVER AMERICAN INS CO

HANOVER INS CO.

HARLEYSVILLE INSURANCE COMPANY

HARLEYSVILLE LAKE STATES INSURANCE COMPANY HARLEYSVILLE PREFERRED INSURANCE CO

HARLEYSVILLE WORCESTER INSURANCE CO HARTFORD ACCIDENT AND INDEMNITY CO.

HARTFORD CASUALTY INS CO HARTFORD FIRE INSURANCE CO HARTFORD INS CO OF IL HARTFORD INS CO OF MIDWEST HARTFORD INS CO OF THE SOUTHEAST HARTFORD UNDERWRITERS INS CO

HASTINGS MUTUAL INS CO HAWKEYE-SECURITY INS CO HDI GLOBAL INSURANCE COMPANY HORIZON MIDWEST CASUALTY COMPANY

IA AMERICAN INS CO

IA LONG TERM CARE RISK MGMT ASSN

IA MUTUAL INS CO IL EMCASCO INS CO

ILLINOIS CASUALTY COMPANY ILLINOIS INSURANCE COMPANY

ILLINOIS NATIONAL INSURANCE COMPANY

IMPERIUM INSURANCE COMPANY

IMT INS CO

INCLINE CASUALTY COMPANY

INDEMNITY INS CO OF NAMERICA (INA INS) (CT GEN)

INDIANA INSURANCE COMPANY INS CO OF NORTH AMERICA INS CO OF THE STATE PA INS CO OF THE WEST

INTEGRITY INSURANCE COMPANY INTEGRITY PROPERTY & CASUALTY INS CO

INTEGRITY SELECT INSURANCE COMPANY

INTREPID CASUALTY COMPANY INTREPID INSURANCE COMPANY

KEY RISK INS CO

LACKAWANNA AMERICAN INS CO LACKAWANNA CASUALTY CO LACKAWANNA NATIONAL INS CO

LAFAYETTE INS CO LIBERTY INS CORP

LIBERTY INSURANCE UNDERWRITERS INC

LIBERTY MUTUAL FIRE INS CO LIBERTY MUTUAL INS CO

LM INS CORP MA BAY INS CO MAG MUTUAL INS CO

MANUFACTURERS ALLIANCE INS CO MARKEL AMERICAN INSURANCE CO

MARKEL INSURANCE CO MEMIC INDEMNITY CO

MERIDIAN SECURITY INSURANCE COMPANY

MID CENTURY INS CO MIDDLESEX INS CO

MIDVALE INDEMNITY COMPANY

MIDWEST BUILDERS CASUALTY MUTUAL COMPANY

MIDWEST EMPLOYERS CASUALTY CO

MIDWEST FAMILY ADVANTAGE INSURANCE CO

MIDWEST FAMILY MUTUAL INS CO

MIDWEST INS CO

MIDWESTERN INDEMNITY CO MILBANK INSURANCE COMPANY MILFORD CASUALTY INSURANCE CO



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NCCI Affiliate List

MITSUI SUMITOMO INS CO OF AMERICA

MITSUI SUMITOMO INS USA INC

MOTORISTS COMMERCIAL MUTUAL INSURANCE COMPANY

NATIONAL AMERICAN INS CO NATIONAL CASUALTY CO

NATIONAL FIRE INS CO OF HARTFORD NATIONAL INTERSTATE INS CO

NATIONAL LIABILITY & FIRE INSURANCE CO

NATIONAL SPECIALTY INS CO NATIONAL SURETY CORP

NATIONAL UNION FIRE INS CO OF PITTSBURGH PA

NATIONWIDE AGRIBUSINESS INS CO NATIONWIDE ASSURANCE CO NATIONWIDE GENERAL INSURANCE CO NATIONWIDE INS CO OF AMERICA NATIONWIDE MUTUAL INS CO

NATIONWIDE PROPERTY AND CASUALTY INS CO

NETHERLANDS INSURANCE COMPANY
NEW HAMPSHIRE INSURANCE COMPANY

NEW YORK MARINE AND GENERAL INSURANCE CO

NEXT INSURANCE US COMPANY NHRMA MUTUAL INSURANCE COMPANY

NORGUARD INS CO NORTH POINTE INS CO NORTH RIVER INS CO

NORTHSTONE INSURANCE COMPANY NOVA CASUALTY COMPANY OAK RIVER INSURANCE COMPANY OBI AMERICA INSURANCE COMPANY OBI NATIONAL INSURANCE COMPANY

OH CASUALTY INS CO OH FARMERS INS CO OHIO SECURITY INS CO

OLD GUARD INSURANCE COMPANY

OLD REPUBLIC GENERAL INSURANCE CORPORATION

OLD REPUBLIC INS CO
OMAHA NATIONAL INS CO
OWNERS INSURANCE COMPANY
PA MANUFACTURERS ASSN INS CO
PA MANUFACTURERS INDEMNITY CO
PACIFIC EMPLOYERS INS CO
PACIFIC INDEMNITY CO

PACIFIC INS CO LTD
PARK NATIONAL INS COMPANY
PARTNERS MUTUAL INS CO
PATRONS MUTUAL INS CO OF CT

PEERLESS INDEMNITY INS CO PEERLESS INSURANCE COMPANY

PEKIN INS CO
PEKIN SELECT INS CO
PENN MILLERS INS CO

PENNSYLVANIA INSURANCE COMPANY

PETROLEUM CASUALTY CO PHARMACISTS MUTUAL INS CO

PHOENIX INS CO
PIE CASUALTY INS CO
PIE INSURANCE COMPANY

PINNACLE NATIONAL INSURANCE COMPANY PINNACLEPOINT INSURANCE COMPANY PIONEER SPECIALTY INSURANCE COMPANY PLAZA INSURANCE CO

PRAETORIAN INSURANCE COMPANY PREFERRED EMPLOYERS INS CO

PREFERRED PROFESSIONAL INSURANCE COMPANY PRESCIENT NATIONAL INSURANCE COMPANY

PREVISOR INSURANCE COMPANY

PROPERTY AND CASUALTY INS CO OF HARTFORD

PROSELECT INSURANCE COMPANY

PROTECTIVE INS CO

QBE INSURANCE CORPORATION REDWOOD FIRE & CASUALTY INS CO REGENT INSURANCE COMPANY

REPUBLIC INDEMNITY COMPANY OF AMERICA

RIVERPORT INSURANCE COMPANY RLI INSURANCE COMPANY ROCKWOOD CASUALTY INS CO RURAL TRUST INSURANCE COMPANY SAFECO INS CO OF AMERICA

SAFETY FIRST INS CO

SAFETY NATIONAL CASUALTY CORP

SAGAMORE INSURANCE CO

SAMSUNG FIRE AND MARINE INS CO LTD USB

SCOTTSDALE INDEMNITY CO SECURA INSURANCE COMPANY SECURA SUPREME INS CO

SECURITY NATIONAL INS CO (AMTRUST GROUP)

SELECTIVE INS CO OF SC

SELECTIVE INS CO OF THE SOUTHEAST SELECTIVE INSURANCE COMPANY OF AMERICA

SELECTIVE WAY INS CO SENTINEL INS CO SENTRY CASUALTY CO SENTRY INS CO

SENTRY SELECT INSURANCE COMPANY

SEQUOIA INSURANCE CO

SERVICE AMERICAN INDEMNITY COMPANY

SERVICE LLOYDS INSURANCE CO, A STOCK COMPANY

SFM MUTUAL INS CO

SFM SAFE INSURANCE COMPANY SFM SELECT INSURANCE COMPANY

SILVER OAK CASUALTY INC

SIRIUSPOINT AMERICA INSURANCE COMPANY SOCIETY INSURANCE A MUTUAL COMPANY

SOMPO AMERICA FIRE & MARINE INSURANCE COMPANY

SOMPO AMERICA INSURANCE COMPANY

SOUTHERN INS CO

ST PAUL FIRE AND MARINE INS CO ST PAUL GUARDIAN INS CO ST PAUL MERCURY INS CO ST PAUL PROTECTIVE INS CO STANDARD FIRE INSURANCE COMPANY

STAR INS CO

STARNET INSURANCE COMPANY
STARR INDEMNITY AND LIABILITY CO
STARR SPECIALTY INSURANCE COMPANY
STARSTONE NATIONAL INSURANCE COMPANY
STATE AUTO PROPERTY AND CASUALTY INS CO

STATE AUTOMOBILE MUTUAL INS CO STATE FARM FIRE AND CASUALTY CO STATE NATIONAL INSURANCE COMPANY



Workers Compensation Rate Filing – January 1, 2024

NCCI Affiliate List

STONETRUST COMMERCIAL INS CO

STONINGTON INS CO

SUMMITPOINT INSURANCE COMPANY

SUNZ INSURANCE COMPANY

SUTTON NATIONAL INSURANCE COMPANY

SWISS RE CORPORATE SOLUTIONS AMERICA INS CORP

SWISS RE CORPORATE SOLUTIONS ELITE INS CORP

SWISS RE CORPORATE SOLUTIONS PREMIER INS CORP

THE INSURANCE COMPANY

TECHNOLOGY INSURANCE CO

THE TRAVELERS CASUALTY COMPANY

TNUS INSURANCE CO

TOKIO MARINE AMERICA INSURANCE CO

TRANS PACIFIC INS CO

TRANSGUARD INS CO OF AMERICA INC

TRANSPORTATION INS CO

TRAVELERS CASUALTY AND SURETY CO

TRAVELERS CASUALTY INS CO OF AMERICA

TRAVELERS INDEMNITY CO

TRAVELERS INDEMNITY CO OF AMERICA

TRAVELERS INDEMNITY CO OF CT

TRAVELERS INSURANCE CO

TRAVELERS PROPERTY CASUALTY CO OF AMERICA

TRI STATE INSURANCE COMPANY OF MINNESOTA

TRIANGLE INSURANCE COMPANY INC

TRIUMPHE CASUALTY COMPANY TRUCK INSURANCE EXCHANGE

TRUMBULL INS CO

TWIN CITY FIRE INS CO

UNION INS CO OF PROVIDENCE

UNION INSURANCE COMPANY

UNITED FIRE AND CASUALTY CO

UNITED STATES FIDELITY AND GUARANTY CO

UNITED WI INS CO

US FIRE INS CO

UTICA MUTUAL INS CO

VALLEY FORGE INS CO

VANLINER INS CO

VANTAPRO SPECIALTY INS CO

VICTORIA FIRE & CASUALTY COMPANY

VIGILANT INS CO

WADENA INSURANCE COMPANY

WAUSAU BUSINESS INSURANCE COMPANY

WAUSAU UNDERWRITERS INSURANCE COMPANY

WCF NATIONAL INSURANCE COMPANY

WCF SELECT INSURANCE COMPANY

WELLFLEET INSURANCE COMPANY

WELLFLEET NEW YORK INSURANCE COMPANY

WESCO INSURANCE COMPANY (AMTRUST GROUP)

WEST AMERICAN INS CO

WEST BEND MUTUAL INS CO

WESTCHESTER FIRE INSURANCE COMPANY

WESTERN AGRICULTURAL INS CO

WESTERN NATIONAL ASSURANCE CO

WESTERN NATIONAL MUTUAL INS CO WESTFIELD CHAMPION INSURANCE COMPANY

WESTFIELD INS CO

WESTFIELD NATIONAL INS CO

WESTFIELD PREMIER INSURANCE COMPANY

WESTFIELD SUPERIOR INSURANCE COMPANY

WESTFIELD TOUCHSTONE INSURANCE COMPANY
WESTPORT INSURANCE CORPORATION
WILLIAMSBURG NATIONAL INS CO
WORK FIRST CASUALTY CO
XL INS CO OF NY INC
XL INSURANCE AMERICA INC
XL SPECIALTY INS CO

ZENITH INS CO ZNAT INS CO

ZURICH AMERICAN INS CO

ZURICH AMERICAN INS CO OF IL



Iowa

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