



Rhode Island

Advisory Loss Costs and
Rating Values Filing

Proposed Effective August 1, 2021



Justin Moulton, CPCU, WCP
State Relations Executive
Regulatory Division

(P) 860-969-7903 (F) 561-893-5762
Email: Justin_Moulton@ncci.com

November 19, 2020

The Honorable Elizabeth Kelleher Dwyer
Deputy Director & Superintendent of Insurance
State of Rhode Island and Providence Plantations
Department of Business Regulation
Insurance Division
1511 Pontiac Ave
Cranston, RI 02920

Attention: Beth Vollucci, SPIR, Chief of Consumer and Filing Services

Re: Rhode Island Advisory Loss Costs and Rating Values Filing Proposed to Be Effective August 1, 2021

Dear Superintendent Dwyer:

In accordance with the applicable statutes and regulations of the state of Rhode Island, we are filing for your consideration and approval advisory loss costs changes for Rhode Island.

The advisory loss costs, which are proposed to be effective August 1, 2021, reflect a decrease of 7.0% from the current advisory loss costs which became effective August 1, 2020.

Please note the following in connection with this filing:

1. Although considered, since the combined impact and direction of all direct and indirect COVID-19-related forces is unknown, no explicit adjustment has been made in this year's analysis at an overall or individual classification code level.
2. As a result of Item B-1437, effective August 1, 2020:
 - a. Class Codes 2286 and 2220 are combined to reflect the final year of a two-year transition program, and Class Code 2286 is discontinued.
 - b. Class Codes 2670 and 2688 are combined to reflect the final year of a two-year transition program, and Class Code 2670 is discontinued.
3. As a result of Item B-1439, effective August 1, 2021:
 - a. Class Codes 2683 and 2501 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Code 2683 will be discontinued.
 - b. Class Codes 3240 and 3257 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Code 3240 will be discontinued.
4. As a result of Item R-1418, the retrospective rating plan parameters are updated.

This filing is made exclusively on behalf of the companies that have given valid consideration for the express purpose of fulfilling regulatory rate or pure premium 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 jurisdiction, or has licensed this information as a non-affiliate, and is not intended to indicate whether the company is currently writing business or is even licensed to write business in this jurisdiction.

As always, if you should have any questions or need additional information, please do not hesitate to contact me at (860) 969-7903 or Brett Foster at (561) 893-3121.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin Moulton", with a long horizontal flourish extending to the right.

Justin Moulton
State Relations Executive, CPCU, WCP



© Copyright 2020 National Council on Compensation Insurance, Inc. All Rights Reserved.

These materials are comprised of NCCI actuarial judgment and proprietary and confidential information which are valuable assets of NCCI and are protected by copyright and other intellectual property laws. Any persons in the legal possession of these materials are required to maintain them in the strictest confidence and shall implement sufficient safeguards to protect the confidentiality of such materials in the same respect as it protects its own intellectual property. NCCI will seek appropriate legal remedies for any unauthorized use, sale, reproduction, distribution, preparation of derivative works, or transfer of this material, or any part thereof in any media. Authorized uses of these materials are governed by one or more agreements between NCCI and an end user. Unless expressly authorized by NCCI, you may not copy, create derivative works (by way of example, create or supplement your own works, or other materials), display, perform, or use the materials, in whole or in part, in any media and in any manner including posting to a web site.

NCCI MAKES NO REPRESENTATIONS OR WARRANTIES RELATING TO THESE MATERIALS, INCLUDING ANY EXPRESS, STATUTORY OR IMPLIED WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, AUTHORIZED END USERS ASSUME RESPONSIBILITY FOR THE USE OF, AND FOR ANY AND ALL RESULTS DERIVED OR OBTAINED THROUGH THE USE OF SUCH MATERIALS.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Actuarial Certification

I, Brett Foster, am a 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.

A handwritten signature in black ink, appearing to read "Brett Foster".

Brett Foster, FCAS, MAAA
Director and Actuary
Actuarial and Economic Services



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Disclosures

Purpose of the Report

The purpose of this report is to provide the proposed advisory loss costs for workers compensation policies in Rhode Island, proposed to be effective August 1, 2021. The intended users of this report are:

- The Rhode Island Department of Business Regulation, Insurance Division
- Affiliated carriers, for their reference in determining workers compensation rates

Scope

The prospective loss costs are intended to cover the indemnity and medical benefits provided under the system, as well as some of the expenses associated with providing these benefits (loss adjustment expenses). They do not, however, contemplate any other costs associated with providing workers compensation insurance (such as commissions, taxes, etc.).

Although considered, since the combined impact and direction of all direct and indirect COVID-19 related forces is unknown, no explicit adjustment has been made in this year's analysis at an overall or individual classification code level.

Each insurance company offering workers compensation insurance in Rhode Island that uses NCCI loss costs may file a loss cost multiplier to be applied to the approved advisory prospective loss costs in order to compute the final workers compensation rates they intend to charge. This multiplier is intended to cover the other costs associated with providing workers compensation insurance that are not already part of the advisory prospective loss costs.

Data Sources and Dates

The overall average loss cost 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 September 4, 2020 were not considered for inclusion in the analysis.

The overall average loss cost level change in this filing is based on premium and loss experience evaluated as of December 31, 2019. Therefore, this data does not reflect any potential direct or indirect effects of the COVID-19 pandemic.

Loss cost level changes at the classification code level are based on five years of Unit Statistical Plan Data, which is the audited exposure, premium, and loss information reported to NCCI on a policy level. The Unit Statistical Plan Data used in this filing includes policies with expiration



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Disclosures

dates through December 2018. Therefore, the individual classification code experience does not reflect potential direct or indirect effects of the COVID-19 pandemic. In this filing, Unit Statistical Data submissions received after September 22, 2020 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.

This filing was prepared as of October 14, 2020. Therefore, events that occurred after this date that may have a material impact on workers compensation costs in this jurisdiction have not been considered in the analysis.

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.

Data for all carriers writing at least one-tenth of one percent of the Rhode Island workers compensation written premium volume have been included in the experience period on which this filing is based.

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

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
- Potential impact of changes to laws and/or regulations



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Disclosures

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 loss costs proposed in this filing.

The premium and loss experience on which this filing is based does not reflect potential direct or indirect effects of the COVID-19 pandemic. At this time, the course of the pandemic remains unclear and represents a significant source of uncertainty with respect to estimating workers compensation system costs for the proposed loss cost effective period.

The direct effect of compensable claims resulting from COVID-19 infections may put upward pressure on workers compensation costs, as could certain indirect effects. For example, there is potential for the weakened labor market to lengthen return-to-work times or adverse loss development to occur if the pandemic serves to increase the time to medical treatment for injured workers. However, it is possible that other various effects may put downward pressure on workers compensation costs—such as increased telecommuting, decreased exposure to motor vehicle accidents, and an increased use of telehealth for injured workers. Additional COVID-19-related considerations, such as future economic conditions and their corresponding impact on the labor market, contribute additional uncertainty when estimating future costs.

After considering direct and indirect pandemic-related factors, it is reasonable to believe they will give rise to component changes that may, to some extent, have offsetting impacts on workers compensation system costs. Although considered, since the combined impact and direction of all direct and indirect COVID-19-related forces is unknown, no explicit adjustment for the pandemic has been made in this year's analysis at an overall or individual classification code level.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Table of Contents

Part 1 Filing Overview

- Executive Summary
- Overview of Methodology
- Summary of Selections
- Selections Underlying the Proposed Changes
- Additional Proposed Changes

Part 2 Proposed Values

- Proposed Voluntary Market Advisory Loss Costs and Rating Values
- Proposed Values for Inclusion in the Experience Rating Plan Manual
- Proposed Values for Inclusion in the Retrospective Rating Plan Manual

Part 3 Supporting Exhibits

- Exhibit I: Determination of Indicated Loss Cost Level Change
- Exhibit II: Workers Compensation Loss Adjustment Expenses
- Appendix A: Factors Underlying the Proposed Loss Cost Level Change
- Appendix B: Calculations Underlying the Loss Cost Change by Classification
- Appendix C: Memoranda for Laws and Assessments
- Appendix D: Derivation of Experience Rating Values

Part 4 Additional Information

- Definitions
- NCCI Affiliate List
- Key Contacts



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Part 1 Filing Overview

- Executive Summary
- Overview of Methodology
- Summary of Selections
- Selections Underlying the Proposed Changes
- Additional Proposed Changes



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Executive Summary

Based on its review of the most recently available data, NCCI has proposed an overall average workers compensation voluntary market loss cost level change of -7.0% to become effective August 1, 2021.

<u>Key Components</u>	<u>Percentage Change</u>
Impact of change in Experience and Development	- 7.1%
Impact of change in Trend	- 0.7%
Impact of change in Benefits	+ 0.2%
<u>Impact of change in Loss-based Expenses</u>	<u>+ 0.7%</u>
Proposed Change in Overall Voluntary Loss Cost Level	- 7.0%

Key Observations:

- The overall loss cost level change in this filing is based on premium and loss experience for policy years 2016, 2017, and 2018, evaluated as of December 31, 2019. This data does not reflect any effects of the COVID-19 pandemic.
- Lost-time claim frequency continues to decline in Rhode Island with a decrease of more than 7% in Policy Year 2018.
- Rhode Island's indemnity and medical cost per case figures have both remained fairly stable over time, however the indemnity average cost per case has increased in recent years.
- The loss cost change varies by classification code, each of which belongs to one of five industry groups. The average change by industry group ranges from - 10.7% for Manufacturing to - 5.7% for Miscellaneous.

Additional Notable Change(s) Proposed in the Filing:

- Proposed Change to the Countrywide Adjusting and Other Expense (AOE) Provision Calculation



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Overview of Methodology

Aggregate Ratemaking

NCCI's approach to determining the proposed overall average loss cost 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 a Rhode Island-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 loss cost effective period
- Ultimate, trended, limited losses are adjusted to an unlimited basis with an excess ratio
- Proposed benefit level and expense changes are applied to the projected cost ratios

The indicated average loss cost 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 loss cost level is indicated.

Class Ratemaking

Once the proposed overall average voluntary loss cost level change has been determined, NCCI separately determines loss costs per \$100 of payroll for each workers compensation job classification (class); the loss costs and year-over-year changes vary by class. Three sets of pure premiums are combined as part of each class code's loss cost 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")

Note: The methodology 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.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Summary of Selections

The following is a summary of selections underlying the voluntary loss proposed to be effective August 1, 2021, along with the selections underlying the currently-approved loss costs.

Voluntary Loss Costs	Currently Approved August 1, 2020	Proposed Effective August 1, 2021
Experience Period	Policy Years 2015–2017	Policy Years 2016–2018
Premium Development	3-year average	3-year average
Basis of Loss Experience	Paid Losses	Paid Losses
Loss Development Factors	5-year Xhilo average	5-year Xhilo average
Tail Factors	Selected	Selected
Indemnity Annual Loss Ratio Trend Factor	0.970	0.970
Medical Annual Loss Ratio Trend Factor	0.960	0.955
Loss Adjustment Expense Provision	22.4%	23.3%
Base Threshold for Limiting Losses	\$3,403,956	\$3,262,665
Large Loss Excess Ratio	1.7%	1.6%
Classification Swing Limits (applied by Industry Group)	+/-15%	+/-15%



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes

Experience and Development

NCCI analyzed the emerging experience of Rhode Island workers compensation policies in recent years. The primary focus of our analysis was on premiums and losses from policy years 2016, 2017, and 2018 evaluated as of December 31, 2019. The most recently available full policy year is 2018 since the last policy had an effective date of December 31, 2018 and did not expire until December 31, 2019. During this year's analysis, after reviewing various possible experience periods, the use of the three most recently available full policy years of data was selected as most appropriate in terms of providing balance between stability and responsiveness.

The specific loss experience used by NCCI in this filing is based on paid losses, which are the benefit amounts already paid by insurers on reported claims. This is consistent with NCCI filings made in the past several years in Rhode Island. Loss development factors are needed since paid losses on a given claim change over time until the claim is finally closed. The loss development factors are based on how paid losses changed over time for claims from older years. The specific development link ratio selections underlying this filing are shown below:

- A three-year average of historical premium development factors
- A five-year excluding highest and lowest average of historical paid loss development factors through a 19th report
- Loss development tail factors from a 19th report to ultimate were selected

The ultimate impact that the COVID-19 pandemic will have on loss development factors is unknown. Although considered, since the combined impact and direction of all direct and indirect COVID-19-related forces is unknown, no explicit adjustment for the pandemic has been made in this year's analysis.

Trend

This filing relies primarily on the experience from policy years 2016, 2017, and 2018. However, the proposed loss costs are intended for use with policies with effective dates starting on August 1, 2021. It is necessary to use trend factors that forecast how much the future Rhode Island workers compensation experience will differ from the past. These 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. While historical changes in claim frequency and average cost per case were also reviewed, NCCI applies loss ratio trend factors in the determination of the proposed overall average loss cost level change.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes

The COVID-19 pandemic is an extraordinary, unprecedented event. At this time, the overall impact the COVID-19 pandemic may have on trends is indeterminate. It is reasonable to believe COVID-19 will give rise to component changes that may, to some extent, have offsetting impacts on system costs. For example,

- There could be an increase in the number of compensable workers compensation claims arising in occupations with greater potential exposure to the pandemic
- There could be a decrease in workers compensation claims due to the increased number of employees who are teleworking

Short- and long-term COVID-19-related impacts may also differ. For example,

- In the short term, during the COVID-19 pandemic, there may be a reduction in the number of physical therapy sessions attended by injured employees and/or a deferral in the number of workers compensation-related surgeries that are not deemed to be immediately critical
- Over the longer term, an increase in these types of services may be expected as the current burden on medical-related personnel and facilities is lessened
- In economic downturns, workers may forego filing claims for certain injuries to maintain active employment as the economy navigates these uncertain times—leading to temporary downward pressure on claim frequency

Although considered, since the combined impact and direction of all direct and indirect COVID-19-related forces is unknown, no explicit adjustment for the pandemic has been made in this year's trend analysis.

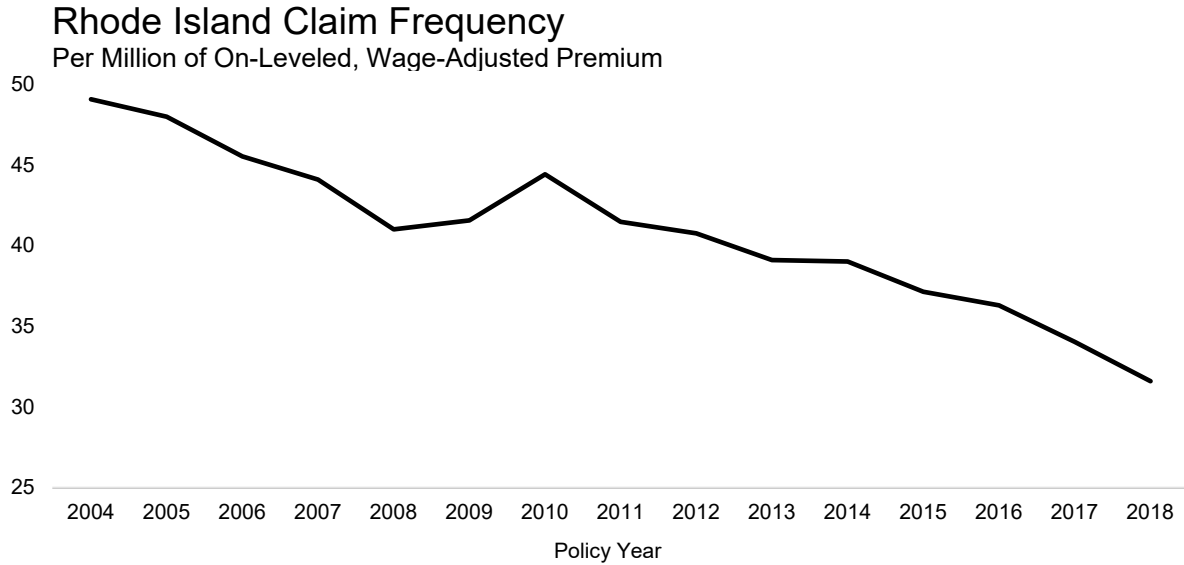


RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes

The following few charts show a measure of the number of workplace injuries (claim frequency) and the average cost of each of these injuries (claim severity).



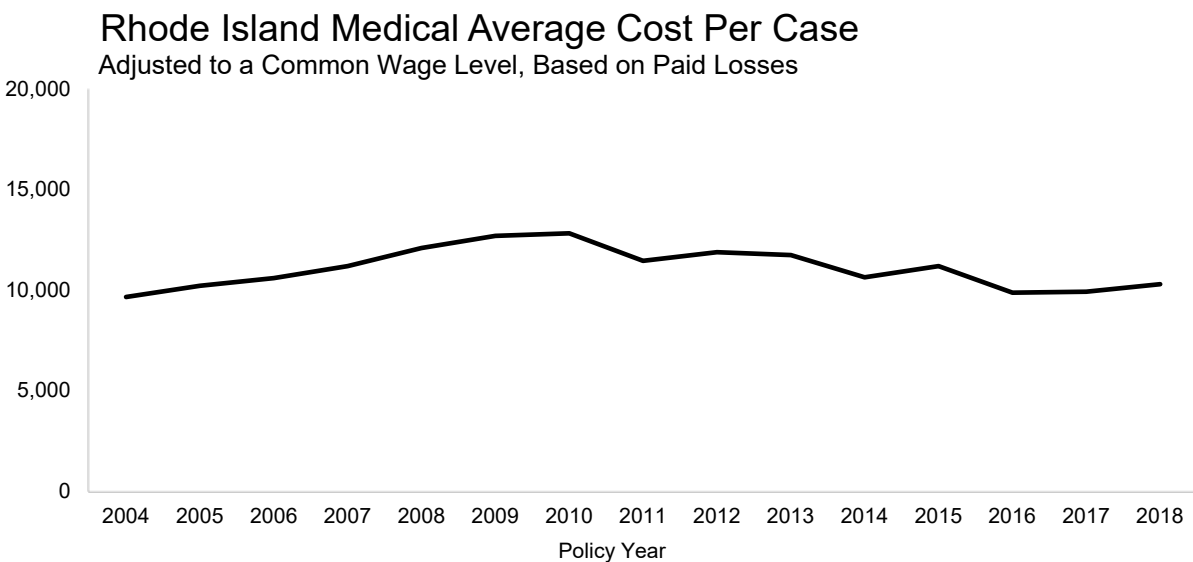
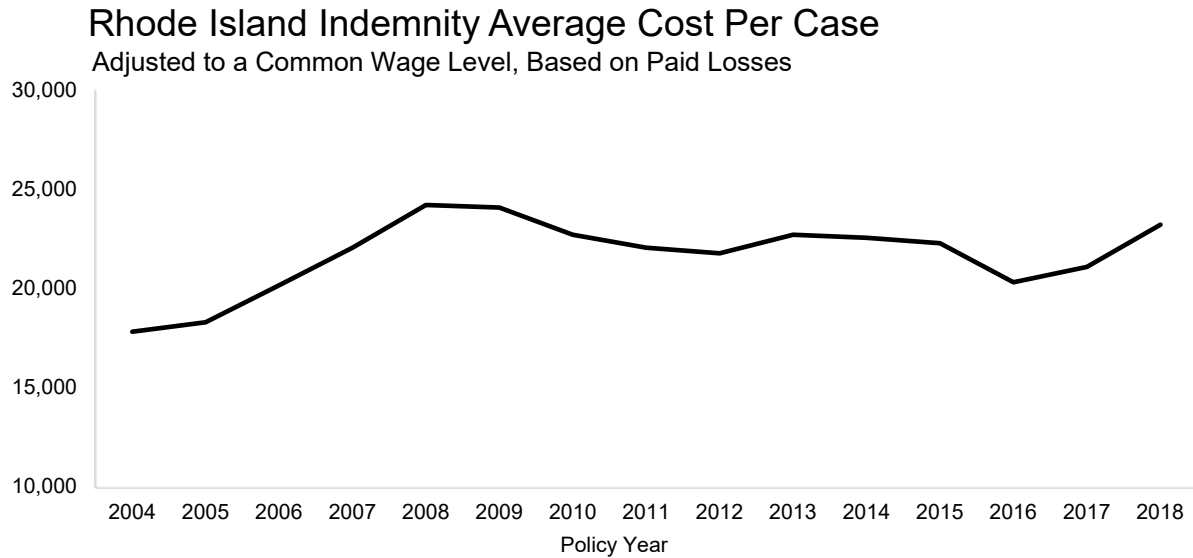
Rhode Island's lost-time claim frequency has declined since 2010, as shown immediately above. The data in this chart reflects premiums at today's loss cost and wage levels.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes



As these two charts illustrate, Rhode Island's indemnity and medical cost per case figures have both remained fairly stable over time, however the indemnity average cost per case has increased in recent years.



RHODE ISLAND

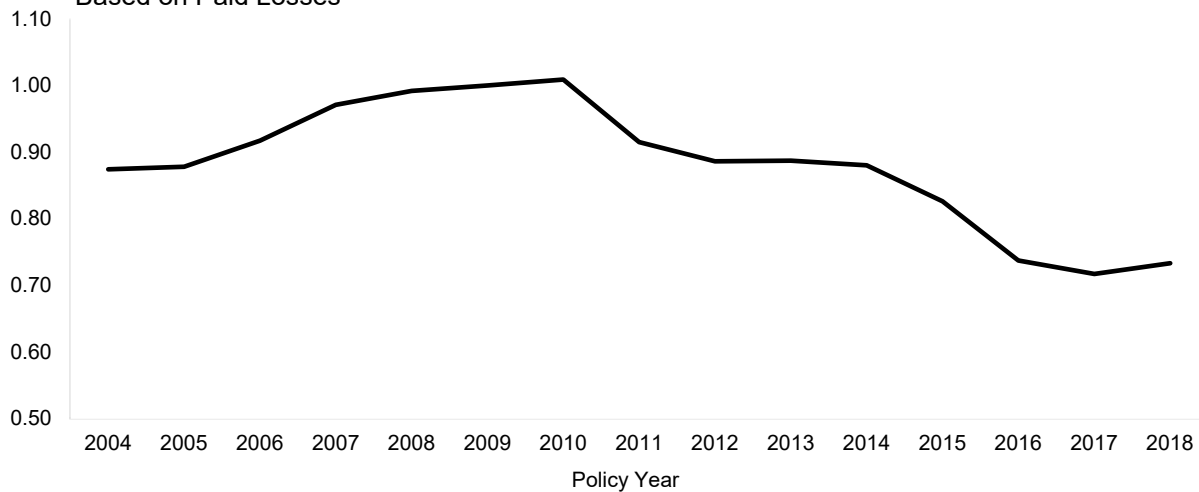
Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes

Loss ratios result after combining observed changes in Rhode Island's average claim frequency with corresponding changes in Rhode Island's average cost per case.

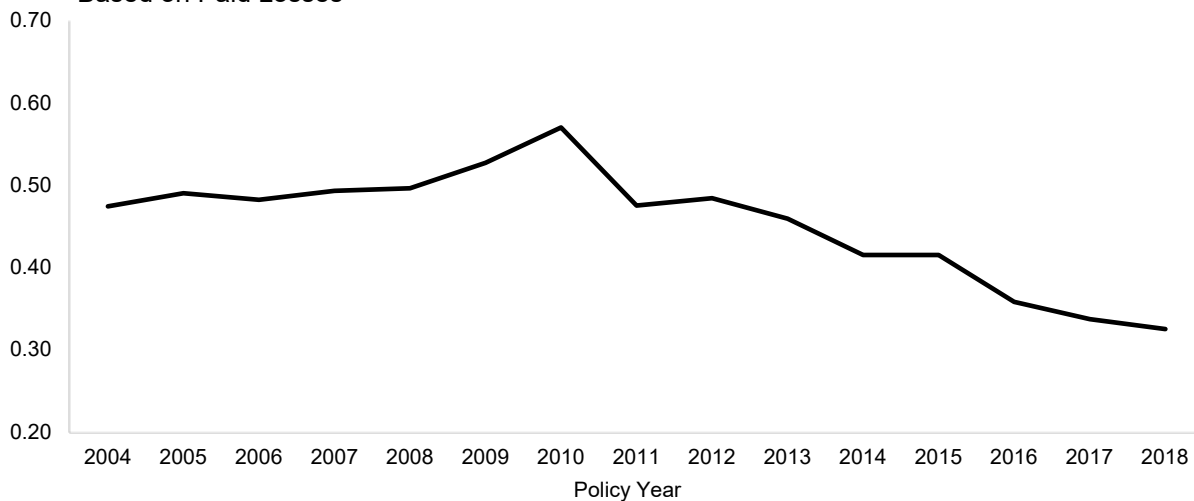
Rhode Island Indemnity Loss Ratio History

Based on Paid Losses



Rhode Island Medical Loss Ratio History

Based on Paid Losses



Based on our analysis this year, we are proposing to maintain the annual indemnity loss ratio trend of -3.0% and decrease the annual medical loss ratio trend from -4.0% to -4.5% .



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Selections Underlying the Proposed Changes

Benefit Changes

NCCI has included the impact of the most recent Medical Fee Schedule updates effective January 1, 2021. These changes are estimated to impact medical costs by +0.8%. Please see Appendix C-I for additional detail.

Loss-Based Expenses

The proposed loss costs include a provision for loss adjustment expenses (LAE). These are expenses associated with the handling of workers compensation claims. LAE is included in the loss costs by using a ratio of private carrier loss adjustment expense dollars to loss dollars (called the LAE provision). In this filing, NCCI is proposing to increase the current LAE provision from 22.4% to 23.3% of losses. Please see Exhibit II for additional detail.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Additional Proposed Changes

Proposed Change to the Countrywide Adjusting and Other Expense (AOE) Provision Calculation

Each year, NCCI performs a countrywide analysis to determine an actuarially appropriate AOE provision for inclusion in state loss cost/rate filings. The analysis is based on data from NCCI's Call for Loss Adjustment Expense (Financial Call #19).

As a result of Third-Party Administrator (TPA) agreements, some carriers report losses on Call #19 without associated AOE. Beginning with this filing, for policies associated with TPA agreements where the AOE is not reported to NCCI, the associated losses will be excluded from the AOE analysis so that they do not impact the countrywide ultimate AOE ratios. All other aspects of the current AOE methodology remain unchanged.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Part 2 Proposed Values

- Proposed Voluntary Market Advisory Loss Costs and Rating Values
- Proposed Values for Inclusion in the Experience Rating Plan Manual
- Proposed Values for Inclusion in the Retrospective Rating Plan Manual



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Proposed Voluntary Market Advisory Loss Costs and Rating Values

The following pages include proposed voluntary market advisory loss costs and rating values:

- Voluntary market advisory loss costs, expected loss rates, and d-ratios by class code, along with associated footnotes
 - The “X” footnote denoting a state special classification phraseology will no longer be shown on the following pages. Refer to the special classifications section of the Basic Manual for any state specific classification phraseology.
- Advisory miscellaneous values, such as:
 - Advisory loss elimination ratios
 - Maximum and minimum weekly payroll applicable for select class codes
 - Catastrophe and Terrorism voluntary advisory loss costs
 - United States Longshore and Harbor Workers’ Compensation Coverage Percentage

ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

Advisory loss costs exclude all expense provisions except loss adjustment expense.

Effective August 1, 2021

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
0005	3.04	2.59	0.39	2016	2.32	2.00	0.39	2709	7.45	5.82	0.33
0008	2.16	1.77	0.35	2021	2.48	2.04	0.35	2710	6.19	4.62	0.29
0016	4.88	3.85	0.33	2039	2.25	1.94	0.39	2714	3.64	3.18	0.40
0034	3.58	3.04	0.39	2041	2.26	1.95	0.40	2731	3.37	2.65	0.33
0035	2.35	2.03	0.40	2065	1.66	1.41	0.39	2735	4.96	4.35	0.40
0036	3.80	3.22	0.39	2070	4.39	3.71	0.39	2759	6.13	5.34	0.40
0037	3.87	3.19	0.35	2081	2.59	2.23	0.39	2790	1.21	1.06	0.40
0042	4.14	3.40	0.35	2089	2.68	2.28	0.39	2797	2.94	2.52	0.39
0050	3.42	2.92	0.39	2095	3.62	3.07	0.39	2799	3.42	2.80	0.35
0059D	0.17	0.06	0.33	2105	3.12	2.71	0.40	2802	3.65	2.99	0.35
0065D	0.04	0.02	0.33	2110	1.68	1.46	0.40	2835	2.02	1.82	0.46
0066D	0.04	0.02	0.33	2111	2.07	1.80	0.40	2836	2.40	2.15	0.46
0067D	0.04	0.02	0.33	2112	2.84	2.47	0.40	2841	3.38	2.97	0.40
0079	2.69	2.14	0.33	2114	2.01	1.76	0.40	2881	2.10	1.88	0.46
0083	4.24	3.61	0.39	2121	1.08	0.92	0.39	2883	2.68	2.29	0.39
0106	9.88	7.38	0.29	2130	1.55	1.32	0.39	2913	-	2.29	0.39
0113	3.46	2.96	0.39	2131	1.71	1.44	0.39	2915	2.89	2.35	0.35
0170	2.51	2.16	0.39	2143	2.29	1.99	0.40	2916	2.54	1.90	0.29
0251	3.24	2.76	0.39	2157	4.09	3.44	0.39	2923	1.64	1.43	0.40
0400	-	2.04	0.35	2172	1.49	1.20	0.35	2942	-	0.97	0.47
0401	9.69	7.25	0.29	2174	2.37	2.07	0.40	2960	5.79	4.96	0.39
0771N	0.41	-	-	2211	4.64	3.64	0.33	3004	1.29	1.01	0.33
0908P	126.00	107.86	0.39	2220	1.53	1.30	0.39	3018	2.28	1.78	0.33
0913P	409.00	345.97	0.39	2260	-	3.64	0.33	3022	3.02	2.61	0.40
0917	3.67	3.18	0.40	2286	-	1.30	0.39	3027	2.64	2.06	0.33
0918	0.89	0.76	0.39	2288	3.05	2.66	0.40	3028	2.22	1.88	0.39
1005	6.18	4.25	0.29	2300	-	1.40	0.39	3030	5.62	4.43	0.33
1164D	3.21	2.21	0.29	2302	1.49	1.27	0.39	3040	4.30	3.38	0.33
1165D	2.65	1.94	0.29	2305	1.91	1.57	0.35	3041	3.23	2.75	0.39
1320	1.42	1.05	0.29	2361	1.43	1.23	0.39	3042	3.65	3.00	0.35
1322	5.42	4.01	0.29	2362	1.82	1.56	0.39	3064	3.65	3.11	0.39
1430	3.73	2.94	0.33	2380	1.72	1.47	0.39	3076	3.18	2.70	0.39
1438	3.64	2.69	0.29	2386	-	1.40	0.39	3081D	5.36	4.19	0.33
1452	2.19	1.70	0.33	2388	1.47	1.29	0.40	3082D	3.39	2.63	0.33
1463	9.07	6.80	0.29	2402	2.26	1.78	0.33	3085D	3.52	2.72	0.33
1472	2.49	1.87	0.29	2413	2.34	2.00	0.39	3110	3.22	2.73	0.39
1624D	2.39	1.77	0.29	2416	1.32	1.13	0.39	3111	1.68	1.43	0.39
1642	2.10	1.64	0.33	2417	1.73	1.45	0.39	3113	1.23	1.04	0.39
1654	4.89	3.81	0.33	2501	1.64	1.40	0.39	3114	2.55	2.16	0.39
1655	-	1.64	0.33	2503	1.60	1.38	0.40	3118	1.54	1.34	0.40
1699	2.47	1.94	0.33	2534	-	1.40	0.39	3119	0.63	0.57	0.46
1701	2.42	1.90	0.33	2570	2.99	2.58	0.40	3122	1.64	1.43	0.40
1710D	3.11	2.39	0.33	2585	3.12	2.69	0.40	3126	1.31	1.11	0.39
1741	-	1.90	0.33	2586	2.26	1.93	0.39	3131	1.40	1.19	0.39
1747	2.11	1.64	0.33	2587	2.41	2.07	0.39	3132	2.33	2.00	0.39
1748	3.72	2.93	0.33	2589	1.51	1.29	0.39	3145	1.67	1.43	0.39
1803D	6.44	4.61	0.29	2600	3.71	3.20	0.39	3146	2.08	1.78	0.39
1852	-	1.25	0.28	2623	5.39	4.43	0.35	3169	2.40	2.02	0.39
1853	-	1.90	0.33	2651	1.62	1.41	0.40	3175	-	2.02	0.39
1860	-	1.72	0.39	2660	1.95	1.70	0.40	3179	1.71	1.47	0.39
1924	1.99	1.71	0.39	2670	-	1.49	0.40	3180	1.83	1.59	0.40
1925	3.01	2.47	0.35	2683	1.64	1.40	0.39	3188	1.78	1.55	0.40
2002	4.64	4.07	0.40	2688	1.72	1.49	0.40	3220	1.61	1.36	0.39
2003	3.31	2.82	0.39	2701	11.48	8.89	0.33	3223	-	1.59	0.40
2014	4.06	3.18	0.33	2702	18.09	12.67	0.28	3224	2.45	2.11	0.39

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

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

ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

Advisory loss costs exclude all expense provisions except loss adjustment expense.

Effective August 1, 2021

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
3227	2.13	1.85	0.40	4021	3.50	2.75	0.33	4611	0.83	0.72	0.40
3240	2.54	2.17	0.39	4024D	3.29	2.56	0.33	4635	2.22	1.55	0.28
3241	2.29	1.95	0.39	4034	4.28	3.34	0.33	4653	2.14	1.88	0.40
3255	1.94	1.75	0.47	4036	1.72	1.35	0.33	4665	5.45	4.26	0.33
3257	2.54	2.17	0.39	4038	1.96	1.75	0.46	4670	-	3.34	0.39
3270	2.08	1.77	0.39	4053	-	1.79	0.39	4683	3.92	3.34	0.39
3300	3.16	2.73	0.40	4061	-	1.79	0.39	4686	2.09	1.64	0.33
3303	1.79	1.56	0.40	4062	2.11	1.79	0.39	4692	0.69	0.59	0.39
3307	2.67	2.28	0.39	4101	2.08	1.70	0.35	4693	0.78	0.66	0.39
3315	2.86	2.46	0.39	4109	0.40	0.35	0.40	4703	1.59	1.34	0.39
3334	2.14	1.80	0.39	4110	0.90	0.77	0.39	4717	1.59	1.42	0.46
3336	4.08	3.18	0.33	4111	1.30	1.13	0.40	4720	2.33	1.99	0.39
3365	3.04	2.37	0.33	4113	-	1.13	0.40	4740	1.06	0.83	0.33
3372	2.32	1.90	0.35	4114	2.13	1.80	0.39	4741	2.30	1.95	0.39
3373	3.21	2.73	0.39	4130	2.60	2.22	0.39	4751	1.61	1.27	0.33
3383	1.44	1.25	0.40	4131	4.06	3.54	0.40	4771N	2.31	1.62	0.28
3385	0.69	0.60	0.40	4133	1.58	1.38	0.40	4777	2.80	1.98	0.28
3400	2.36	1.94	0.35	4149	0.84	0.76	0.46	4825	0.53	0.41	0.33
3507	2.34	1.99	0.39	4206	2.55	2.15	0.39	4828	1.14	0.93	0.35
3515	1.58	1.35	0.39	4207	1.68	1.31	0.33	4829	1.07	0.80	0.29
3516	-	1.35	0.39	4239	2.16	1.67	0.33	4902	2.20	1.92	0.40
3548	1.36	1.16	0.39	4240	2.32	2.02	0.40	4923	1.31	1.11	0.39
3559	2.03	1.73	0.39	4243	2.05	1.74	0.39	5020	3.55	2.77	0.33
3561	-	0.72	0.40	4244	2.90	2.47	0.39	5022	4.30	3.18	0.29
3574	0.83	0.72	0.40	4250	1.47	1.25	0.39	5037	10.93	7.61	0.28
3581	0.92	0.80	0.40	4251	2.10	1.79	0.39	5040	6.59	4.58	0.29
3612	1.77	1.45	0.35	4263	2.11	1.80	0.39	5057	3.61	2.50	0.29
3620	2.30	1.79	0.33	4273	2.08	1.77	0.39	5059	11.39	7.98	0.28
3629	1.07	0.93	0.40	4279	2.02	1.72	0.39	5069	-	7.98	0.28
3632	1.86	1.52	0.35	4282	-	1.72	0.39	5102	3.81	2.82	0.29
3634	1.35	1.16	0.40	4283	1.28	1.09	0.39	5146	4.26	3.31	0.33
3635	1.68	1.43	0.39	4299	1.41	1.22	0.40	5160	1.65	1.21	0.29
3638	1.38	1.20	0.40	4301	-	1.72	0.39	5183	2.38	1.86	0.33
3642	0.91	0.78	0.39	4304	3.41	2.80	0.35	5188	2.23	1.73	0.33
3643	1.48	1.25	0.39	4307	1.39	1.25	0.46	5190	1.72	1.34	0.33
3647	2.14	1.75	0.35	4351	0.82	0.70	0.39	5191	0.82	0.70	0.39
3648	1.27	1.10	0.40	4352	1.19	1.04	0.40	5192	2.87	2.43	0.39
3681	0.63	0.55	0.40	4360	-	0.44	0.35	5213	3.81	2.82	0.29
3685	0.86	0.75	0.40	4361	0.63	0.55	0.40	5215	4.22	3.46	0.35
3719	0.80	0.56	0.29	4410	2.38	2.03	0.39	5221	3.69	2.87	0.33
3724	2.55	1.88	0.29	4420	3.29	2.42	0.29	5222	5.81	4.30	0.29
3726	2.29	1.60	0.28	4431	1.19	1.08	0.47	5223	3.94	3.08	0.33
3803	2.02	1.71	0.39	4432	1.07	0.97	0.47	5348	4.37	3.40	0.33
3807	2.11	1.82	0.40	4439	-	1.18	0.39	5402	4.05	3.50	0.40
3808	2.93	2.38	0.35	4452	2.21	1.89	0.39	5403	4.03	2.99	0.29
3821	4.61	3.77	0.35	4459	2.10	1.78	0.39	5437	4.95	3.86	0.33
3822	2.83	2.34	0.35	4470	1.95	1.64	0.39	5443	2.61	2.21	0.39
3824	3.00	2.46	0.35	4484	2.18	1.85	0.39	5445	4.78	3.55	0.29
3826	0.77	0.65	0.39	4493	2.28	1.93	0.39	5462	5.40	4.22	0.33
3827	1.79	1.47	0.35	4511	0.67	0.55	0.35	5472	8.08	5.64	0.28
3830	1.00	0.81	0.35	4557	2.10	1.81	0.40	5473	5.51	3.85	0.28
3851	1.97	1.71	0.40	4558	1.39	1.18	0.39	5474	4.93	3.67	0.29
3865	1.80	1.64	0.47	4568	1.74	1.36	0.33	5478	3.01	2.34	0.33
3881	3.06	2.60	0.39	4581	0.77	0.58	0.29	5479	4.19	3.44	0.35
4000	3.51	2.59	0.29	4583	4.43	3.28	0.29	5480	4.67	3.44	0.29

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

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

ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

Advisory loss costs exclude all expense provisions except loss adjustment expense.

Effective August 1, 2021

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
5491	1.29	0.96	0.29	7046M	4.75	3.31	0.28	7705	4.20	3.42	0.35
5506	5.20	3.65	0.28	7047M	5.15	3.39	0.29	7710	3.11	2.32	0.29
5507	3.35	2.50	0.29	7050M	6.20	4.30	0.28	7711	3.11	2.32	0.29
5508	-	2.50	0.29	7090M	3.77	2.73	0.28	7720	2.03	1.59	0.33
5535	4.84	3.80	0.33	7098M	5.28	3.68	0.28	7855	2.50	1.95	0.33
5537	2.97	2.32	0.33	7099M	8.68	5.80	0.28	8001	1.76	1.54	0.40
5551	10.58	7.47	0.28	7133	2.41	1.80	0.29	8002	1.78	1.53	0.39
5606	0.57	0.42	0.29	7151M	2.93	2.18	0.29	8006	1.83	1.56	0.39
5610	4.05	3.40	0.39	7152M	5.35	3.83	0.29	8008	0.93	0.81	0.40
5645	5.49	4.06	0.29	7153M	3.25	2.43	0.29	8010	1.27	1.10	0.40
5703	11.55	9.03	0.33	7219	5.85	4.35	0.29	8013	0.54	0.46	0.39
5705	8.87	7.00	0.33	7222	5.98	4.62	0.33	8015	0.67	0.57	0.39
5951	0.23	0.20	0.40	7225	5.11	3.99	0.33	8017	1.44	1.26	0.40
6003	5.67	4.42	0.33	7228	-	4.35	0.29	8018	2.18	1.89	0.40
6005	2.97	2.34	0.33	7229	-	4.35	0.29	8021	2.07	1.76	0.39
6045	3.69	2.84	0.33	7230	6.19	5.02	0.35	8031	2.33	1.99	0.39
6204	6.10	4.53	0.29	7231	7.99	6.47	0.35	8032	1.80	1.57	0.40
6206	2.04	1.42	0.29	7232	8.16	5.96	0.29	8033	1.38	1.17	0.39
6213	1.06	0.79	0.29	7309F	8.04	4.14	0.27	8037	1.56	1.37	0.40
6214	1.35	0.94	0.28	7313F	3.55	1.83	0.27	8039	1.32	1.15	0.40
6216	3.83	2.66	0.29	7317F	5.90	3.02	0.27	8044	3.34	2.74	0.35
6217	2.94	2.18	0.29	7327F	14.86	7.80	0.27	8045	0.64	0.55	0.40
6229	2.98	2.22	0.29	7333M	2.72	1.87	0.29	8046	2.43	2.08	0.39
6233	1.79	1.32	0.29	7335M	3.02	2.08	0.29	8047	0.76	0.66	0.40
6235	3.73	2.59	0.29	7337M	4.96	3.28	0.29	8058	2.83	2.43	0.39
6236	4.95	3.84	0.33	7350F	10.25	5.43	0.28	8072	0.57	0.50	0.40
6237	1.08	0.83	0.33	7360	3.09	2.41	0.33	8102	1.74	1.52	0.40
6251D	4.53	3.31	0.29	7370	4.34	3.67	0.39	8103	2.46	2.04	0.35
6252D	6.36	4.38	0.29	7380	4.66	3.80	0.35	8105	-	1.89	0.40
6260	-	3.31	0.29	7382	2.76	2.35	0.39	8106	3.58	2.80	0.33
6306	2.98	2.21	0.29	7390	6.86	5.82	0.39	8107	2.58	2.01	0.33
6319	2.59	1.91	0.29	7394M	3.29	2.27	0.29	8111	1.61	1.37	0.39
6325	2.34	1.74	0.29	7395M	3.66	2.52	0.29	8116	2.33	1.98	0.39
6400	3.80	3.09	0.35	7398M	6.02	3.97	0.29	8203	6.38	5.42	0.39
6503	1.78	1.54	0.39	7402	0.12	0.10	0.39	8204	4.64	3.69	0.33
6504	2.45	2.13	0.40	7403	4.12	3.22	0.33	8209	3.39	2.90	0.39
6702M*	3.04	2.37	0.33	7405N	1.04	0.80	0.33	8215	3.07	2.41	0.33
6703M*	5.55	4.15	0.33	7420	9.09	6.20	0.29	8227	2.67	1.87	0.28
6704M*	3.38	2.64	0.33	7421	1.01	0.75	0.29	8232	4.39	3.44	0.33
6801F	3.58	1.99	0.31	7422	1.26	0.87	0.29	8233	3.08	2.36	0.33
6811	3.83	3.00	0.33	7425	2.11	1.45	0.29	8235	4.09	3.48	0.39
6824F	6.17	3.34	0.27	7431N	0.88	0.60	0.29	8263	4.75	3.92	0.35
6826F	3.04	1.71	0.31	7445N	0.56	-	-	8264	4.39	3.45	0.33
6834	2.95	2.42	0.35	7453N	0.47	-	-	8265	5.13	3.81	0.29
6836	2.62	2.06	0.33	7502	1.36	1.06	0.33	8279	5.76	4.40	0.29
6843F	8.29	4.28	0.27	7515	0.82	0.57	0.28	8288	5.83	4.63	0.33
6845F	4.48	2.31	0.27	7520	3.08	2.61	0.39	8291	2.83	2.31	0.35
6854	4.41	3.09	0.28	7538	2.75	1.93	0.28	8292	3.09	2.62	0.39
6872F	6.54	3.38	0.27	7539	1.09	0.81	0.29	8293	8.38	6.59	0.33
6874F	9.82	5.04	0.27	7540	2.21	1.56	0.28	8304	4.76	3.73	0.33
6882	4.73	3.37	0.28	7580	2.17	1.70	0.33	8350	5.87	4.34	0.29
6884	2.09	1.47	0.28	7590	2.55	2.08	0.35	8381	1.75	1.44	0.35
7016M	2.82	1.94	0.29	7600	3.69	2.88	0.33	8385	2.04	1.59	0.33
7024M	3.13	2.15	0.29	7605	1.66	1.29	0.33	8387	2.84	2.32	0.35
7038M	3.39	2.46	0.28	7610	0.54	0.44	0.35	8391	2.30	1.88	0.35

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

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

ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

Advisory loss costs exclude all expense provisions except loss adjustment expense.

Effective August 1, 2021

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
8392	1.77	1.52	0.39	9058	1.29	1.16	0.46				
8393	1.50	1.26	0.39	9060	1.16	1.02	0.40				
8500	5.59	4.36	0.33	9061	0.98	0.88	0.46				
8601	0.21	0.17	0.35	9063	0.68	0.60	0.40				
8602	0.72	0.58	0.35	9077F	2.17	1.25	0.39				
8603	0.06	0.05	0.39	9082	1.06	0.96	0.46				
8606	2.10	1.55	0.29	9083	1.07	0.97	0.47				
8709F	3.64	1.88	0.27	9084	1.12	0.96	0.39				
8719	2.10	1.47	0.28	9088a	a	a	a				
8720	0.88	0.70	0.33	9089	0.93	0.83	0.40				
8721	0.26	0.21	0.33	9093	1.04	0.92	0.40				
8723	0.10	0.08	0.39	9101	3.05	2.65	0.40				
8725	2.22	1.73	0.33	9102	2.47	2.11	0.39				
8726F	1.67	0.93	0.31	9154	1.26	1.08	0.39				
8734M	0.31	0.25	0.33	9156	2.07	1.71	0.35				
8737M	0.28	0.22	0.33	9170	8.01	5.66	0.28				
8738M	0.51	0.38	0.33	9178	2.97	2.75	0.47				
8742	0.23	0.18	0.33	9179	5.75	4.95	0.39				
8745	2.68	2.19	0.35	9180	4.28	3.41	0.33				
8748	0.53	0.43	0.35	9182	1.56	1.35	0.40				
8754	0.71	0.61	0.39	9186	9.57	7.27	0.29				
8755	0.21	0.16	0.33	9220	3.71	3.03	0.35				
8799	0.45	0.39	0.39	9402	4.27	3.33	0.33				
8800	1.10	0.99	0.46	9403	5.75	4.25	0.29				
8803	0.04	0.03	0.33	9410	2.05	1.74	0.39				
8805M	0.14	0.12	0.39	9501	2.22	1.82	0.35				
8810	0.10	0.08	0.39	9505	3.09	2.52	0.35				
8814M	0.12	0.10	0.39	9516	2.84	2.21	0.33				
8815M	0.22	0.17	0.39	9519	3.27	2.54	0.33				
8820	0.11	0.09	0.35	9521	2.84	2.22	0.33				
8824	2.67	2.33	0.40	9522	1.61	1.36	0.39				
8825	-	1.81	0.39	9534	2.51	1.85	0.29				
8826	2.11	1.81	0.39	9554	6.06	4.52	0.29				
8831	0.90	0.78	0.40	9586	0.46	0.41	0.46				
8832	0.23	0.20	0.39	9600	2.21	1.91	0.40				
8833	0.93	0.78	0.39	9620	1.12	0.92	0.35				
8835	2.08	1.76	0.39								
8841	1.69	1.38	0.35								
8842	2.38	2.03	0.39								
8855	0.11	0.09	0.39								
8856	0.27	0.23	0.39								
8864	1.25	1.07	0.39								
8868	0.24	0.21	0.40								
8869	0.69	0.61	0.40								
8871	0.06	0.05	0.39								
8901	0.15	0.13	0.35								
9012	0.83	0.68	0.35								
9014	2.46	2.09	0.39								
9015	2.68	2.28	0.39								
9016	2.96	2.54	0.39								
9019	2.40	1.90	0.33								
9033	2.74	2.32	0.39								
9040	3.20	2.79	0.40								
9047	2.03	1.72	0.39								
9052	1.71	1.48	0.40								

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

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

Effective August 1, 2021

FOOTNOTES

- a Advisory loss cost for each individual risk must be obtained from NCCI Customer Service or the Rating Organization having jurisdiction.
- D Advisory loss cost for classification already includes the specific disease loading shown in the table below. See **Basic Manual** Rule 3-A-7.

Disease			Disease			Disease		
Code No.	Loading	Symbol	Code No.	Loading	Symbol	Code No.	Loading	Symbol
0059D	0.17	S	1165D	0.01	S	3082D	0.04	S
0065D	0.04	S	1624D	0.01	S	3085D	0.05	S
0066D	0.04	S	1710D	0.02	S	4024D	0.02	S
0067D	0.04	S	1803D	0.22	S	6251D	0.02	S
1164D	0.02	S	3081D	0.05	S	6252D	0.03	S

S=Silica

- F Advisory loss cost provides for coverage under the United States Longshore and Harbor Workers Compensation Act and its extensions. Loss cost contains a provision for the USL&HW Assessment.
- M Risks are subject to Admiralty Law or Federal Employers Liability Act (FELA). However, the published loss cost 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 advisory loss cost are applied in addition to the basic classification when determining premium.

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

- P Classification is computed on a per capita basis.

*** Class Codes with Specific Footnotes**

- 6702 Loss cost 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 loss cost and elr each x 1.215.
- 6703 Loss cost 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 loss cost x 2.219 and elr x 2.126.
- 6704 Loss cost 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 loss cost and elr each x 1.35.

Effective August 1, 2021

ADVISORY MISCELLANEOUS VALUES

Advisory Loss Elimination Ratios - The following percentages represent the portion of total loss eliminated per claim and are applicable by hazard group:

Advisory Loss Elimination Ratios							
Deductible Amount	HAZARD GROUP						
	A	B	C	D	E	F	G
\$250	2.8%	2.0%	1.8%	1.4%	1.2%	0.9%	0.8%
\$500	4.8%	3.6%	3.2%	2.6%	2.1%	1.6%	1.4%
\$1,000	7.8%	6.0%	5.4%	4.4%	3.7%	2.8%	2.4%
\$2,500	13.6%	11.0%	10.0%	8.3%	7.1%	5.7%	4.7%
\$5,000	20.4%	16.9%	15.6%	13.2%	11.4%	9.4%	7.9%

Note: These percentages do not include a safety factor and do not reflect the premium reductions to be applied to policy premium.

Basis of premium applicable in accordance with *Basic Manual* footnote instructions for Code 7370 --"Taxicab Co.":

Employee operated vehicle.....	\$81,300
Leased or rented vehicle.....	\$54,200

Catastrophe (other than Certified Acts of Terrorism) - (Advisory Loss Cost)..... 0.01

Maximum Weekly Payroll applicable in accordance with *Basic Manual* Rule 2-E-1 -- "Executive Officers" and *Basic Manual* footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," and Code 9179 -- "Athletic Sports or Park: Contact Sports"..... \$4,200

Minimum Weekly Payroll applicable in accordance with *Basic Manual* Rule 2-E-1 -- "Executive Officers" .. \$1,050

Terrorism - (Advisory Loss Cost) 0.005

United States Longshore and Harbor Workers' Compensation Coverage Percentage applicable only in connection with *Basic Manual* Rule 3-A-4..... 84%

(Multiply a Non-F classification loss cost by a factor of 1.84 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.75) and the adjustment for differences in loss-based expenses (1.050).)

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.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Proposed Values for Inclusion in the Experience Rating Plan Manual

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

- Table of Weighting Values
- Table of Ballast Values
- Experience Rating Premium Eligibility Amounts

Effective August 1, 2021
TABLE OF WEIGHTING VALUES
APPLICABLE TO ALL POLICIES
Experience Rating Program - ERA

Expected Losses			Weighting Values	Expected Losses			Weighting Values
0	--	2,219	0.04	1,251,744	--	1,320,789	0.44
2,220	--	8,973	0.05	1,320,790	--	1,393,832	0.45
8,974	--	15,871	0.06	1,393,833	--	1,471,231	0.46
15,872	--	22,918	0.07	1,471,232	--	1,553,388	0.47
22,919	--	30,120	0.08	1,553,389	--	1,640,757	0.48
30,121	--	50,378	0.09	1,640,758	--	1,733,851	0.49
50,379	--	74,990	0.10	1,733,852	--	1,833,251	0.50
74,991	--	96,882	0.11	1,833,252	--	1,939,623	0.51
96,883	--	118,197	0.12	1,939,624	--	2,053,727	0.52
118,198	--	139,516	0.13	2,053,728	--	2,176,439	0.53
139,517	--	161,097	0.14	2,176,440	--	2,308,771	0.54
161,098	--	183,087	0.15	2,308,772	--	2,451,902	0.55
183,088	--	205,585	0.16	2,451,903	--	2,607,211	0.56
205,586	--	228,665	0.17	2,607,212	--	2,776,321	0.57
228,666	--	252,390	0.18	2,776,322	--	2,961,159	0.58
252,391	--	276,817	0.19	2,961,160	--	3,164,026	0.59
276,818	--	301,997	0.20	3,164,027	--	3,387,697	0.60
301,998	--	327,983	0.21	3,387,698	--	3,635,544	0.61
327,984	--	354,827	0.22	3,635,545	--	3,911,713	0.62
354,828	--	382,582	0.23	3,911,714	--	4,221,354	0.63
382,583	--	411,304	0.24	4,221,355	--	4,570,945	0.64
411,305	--	441,052	0.25	4,570,946	--	4,968,751	0.65
441,053	--	471,886	0.26	4,968,752	--	5,425,489	0.66
471,887	--	503,872	0.27	5,425,490	--	5,955,300	0.67
503,873	--	537,082	0.28	5,955,301	--	6,577,248	0.68
537,083	--	571,588	0.29	6,577,249	--	7,317,658	0.69
571,589	--	607,474	0.30	7,317,659	--	8,213,940	0.70
607,475	--	644,825	0.31	8,213,941	--	9,321,107	0.71
644,826	--	683,736	0.32	9,321,108	--	10,723,513	0.72
683,737	--	724,308	0.33	10,723,514	--	12,557,423	0.73
724,309	--	766,654	0.34	12,557,424	--	15,058,203	0.74
766,655	--	810,892	0.35	15,058,204	--	18,670,434	0.75
810,893	--	857,155	0.36	18,670,435	--	24,346,787	0.76
857,156	--	905,587	0.37	24,346,788	--	34,564,210	0.77
905,588	--	956,345	0.38	34,564,211	--	58,404,845	0.78
956,346	--	1,009,602	0.39	58,404,846	--	177,607,962	0.79
1,009,603	--	1,065,549	0.40	177,607,963	AND OVER	0.80	
1,065,550	--	1,124,395	0.41				
1,124,396	--	1,186,374	0.42				
1,186,375	--	1,251,743	0.43				

(a) G	10.60
(b) State Per Claim Accident Limitation	\$265,500
(c) State Multiple Claim Accident Limitation	\$531,000
(d) USL&HW Per Claim Accident Limitation	\$665,000
(e) USL&HW Multiple Claim Accident Limitation	\$1,330,000
(f) Employers Liability Accident Limitation	\$55,000
(g) Primary/Excess Loss Split Point	\$18,000
(h) USL&HW Act -- Expected Loss Factor -- Non-F Classes	1.75
<i>(Multiply a Non-F classification ELR by the USL&HW Act - Expected Loss Factor of 1.75.)</i>	

Effective August 1, 2021

TABLE OF BALLAST VALUES
APPLICABLE TO ALL POLICIES
Experience Rating Plan - ERA

Expected Losses	Ballast Values	Expected Losses	Ballast Values	Expected Losses	Ballast Values
0 -- 57,015	26,500	1,829,571 -- 1,882,540	212,000	3,684,033 -- 3,737,025	397,500
57,016 -- 98,129	31,800	1,882,541 -- 1,935,512	217,300	3,737,026 -- 3,790,017	402,800
98,130 -- 145,369	37,100	1,935,513 -- 1,988,485	222,600	3,790,018 -- 3,843,010	408,100
145,370 -- 195,204	42,400	1,988,486 -- 2,041,459	227,900	3,843,011 -- 3,896,003	413,400
195,205 -- 246,251	47,700	2,041,460 -- 2,094,435	233,200	3,896,004 -- 3,948,996	418,700
246,252 -- 297,939	53,000	2,094,436 -- 2,147,412	238,500	3,948,997 -- 4,001,990	424,000
297,940 -- 350,001	58,300	2,147,413 -- 2,200,390	243,800	4,001,991 -- 4,054,984	429,300
350,002 -- 402,299	63,600	2,200,391 -- 2,253,369	249,100	4,054,985 -- 4,107,977	434,600
402,300 -- 454,754	68,900	2,253,370 -- 2,306,349	254,400	4,107,978 -- 4,160,971	439,900
454,755 -- 507,319	74,200	2,306,350 -- 2,359,330	259,700	4,160,972 -- 4,213,965	445,200
507,320 -- 559,965	79,500	2,359,331 -- 2,412,312	265,000	4,213,966 -- 4,266,960	450,500
559,966 -- 612,670	84,800	2,412,313 -- 2,465,295	270,300	4,266,961 -- 4,319,954	455,800
612,671 -- 665,422	90,100	2,465,296 -- 2,518,278	275,600	4,319,955 -- 4,372,948	461,100
665,423 -- 718,209	95,400	2,518,279 -- 2,571,262	280,900	4,372,949 -- 4,425,943	466,400
718,210 -- 771,025	100,700	2,571,263 -- 2,624,247	286,200	4,425,944 -- 4,478,938	471,700
771,026 -- 823,865	106,000	2,624,248 -- 2,677,232	291,500	4,478,939 -- 4,531,933	477,000
823,866 -- 876,723	111,300	2,677,233 -- 2,730,218	296,800	4,531,934 -- 4,584,928	482,300
876,724 -- 929,598	116,600	2,730,219 -- 2,783,204	302,100	4,584,929 -- 4,637,923	487,600
929,599 -- 982,486	121,900	2,783,205 -- 2,836,191	307,400	4,637,924 -- 4,690,918	492,900
982,487 -- 1,035,385	127,200	2,836,192 -- 2,889,178	312,700	4,690,919 -- 4,743,913	498,200
1,035,386 -- 1,088,294	132,500	2,889,179 -- 2,942,166	318,000	4,743,914 -- 4,796,909	503,500
1,088,295 -- 1,141,211	137,800	2,942,167 -- 2,995,154	323,300	4,796,910 -- 4,849,904	508,800
1,141,212 -- 1,194,136	143,100	2,995,155 -- 3,048,143	328,600	4,849,905 -- 4,902,900	514,100
1,194,137 -- 1,247,067	148,400	3,048,144 -- 3,101,132	333,900	4,902,901 -- 4,955,896	519,400
1,247,068 -- 1,300,003	153,700	3,101,133 -- 3,154,121	339,200	4,955,897 -- 5,008,891	524,700
1,300,004 -- 1,352,945	159,000	3,154,122 -- 3,207,111	344,500	5,008,892 -- 5,061,500	530,000
1,352,946 -- 1,405,891	164,300	3,207,112 -- 3,260,101	349,800		
1,405,892 -- 1,458,841	169,600	3,260,102 -- 3,313,092	355,100		
1,458,842 -- 1,511,794	174,900	3,313,093 -- 3,366,082	360,400		
1,511,795 -- 1,564,750	180,200	3,366,083 -- 3,419,073	365,700		
1,564,751 -- 1,617,709	185,500	3,419,074 -- 3,472,065	371,000		
1,617,710 -- 1,670,671	190,800	3,472,066 -- 3,525,056	376,300		
1,670,672 -- 1,723,635	196,100	3,525,057 -- 3,578,048	381,600		
1,723,636 -- 1,776,602	201,400	3,578,049 -- 3,631,040	386,900		
1,776,603 -- 1,829,570	206,700	3,631,041 -- 3,684,032	392,200		

For Expected Losses greater than \$5,061,500, the Ballast Value can be calculated using the following formula (rounded to the nearest 1):

$$\text{Ballast} = (0.10)(\text{Expected Losses}) + 2500(\text{Expected Losses})(10.60) / (\text{Expected Losses} + (700)(10.60))$$

G = 10.60

NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

RHODE ISLAND—UPDATE TO EXPERIENCE RATING PREMIUM ELIGIBILITY

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 (\$)
RI	<u>2/1/22 and after</u>	<u>11,500</u>	<u>5,750</u>
	<u>2/1/21 - 1/31/22</u>	11,000	5,500
	<u>2/1/20 - 1/31/21</u>	11,000	5,500

NOTE: This exhibit revises the Rhode Island experience rating subject premium eligibility amounts shown in the State Table of Subject Premium Eligibility Amounts in NCCI's *Experience Rating Plan Manual* national Rule 2-A-2. 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.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Proposed Values for Inclusion in the Retrospective Rating Plan Manual

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

- Average Cost per Case by Hazard Group
- Average Cost per Case including ALAE by Hazard Group
- Excess Loss Pure Premium Factors
- Excess Loss and Allocated Expense Pure Premium Factors
- Retrospective Pure Premium Development Factors

Effective August 1, 2021

1. Average Cost per Case by Hazard Group

A	B	C	D	E	F	G
8,168	11,498	12,781	16,060	20,504	27,575	30,846

Average Cost per Case including ALAE by Hazard Group

A	B	C	D	E	F	G
9,435	13,273	14,743	18,508	23,606	31,721	35,404

2.

Excess Loss Pure Premium Factors
(Applicable to New and Renewal Policies)

Per Accident Limitation	Hazard Groups						
	A	B	C	D	E	F	G
\$10,000	0.572	0.609	0.623	0.649	0.670	0.693	0.710
\$15,000	0.514	0.556	0.572	0.601	0.627	0.654	0.675
\$20,000	0.469	0.513	0.531	0.563	0.591	0.621	0.645
\$25,000	0.432	0.477	0.496	0.530	0.560	0.593	0.618
\$30,000	0.402	0.447	0.467	0.501	0.534	0.567	0.595
\$35,000	0.377	0.422	0.442	0.477	0.510	0.545	0.574
\$40,000	0.355	0.400	0.420	0.455	0.489	0.525	0.555
\$50,000	0.319	0.363	0.383	0.419	0.454	0.491	0.523
\$75,000	0.257	0.299	0.319	0.354	0.389	0.426	0.461
\$100,000	0.217	0.256	0.275	0.309	0.344	0.381	0.416
\$125,000	0.187	0.224	0.243	0.276	0.310	0.346	0.382
\$150,000	0.165	0.200	0.218	0.250	0.283	0.319	0.355
\$175,000	0.147	0.180	0.198	0.229	0.261	0.296	0.332
\$200,000	0.133	0.164	0.182	0.211	0.243	0.276	0.312
\$225,000	0.121	0.151	0.168	0.196	0.227	0.260	0.295
\$250,000	0.111	0.139	0.156	0.183	0.213	0.245	0.280
\$275,000	0.102	0.130	0.146	0.172	0.201	0.232	0.267
\$300,000	0.095	0.121	0.137	0.162	0.190	0.221	0.255
\$325,000	0.089	0.114	0.129	0.153	0.181	0.210	0.245
\$350,000	0.083	0.107	0.121	0.145	0.172	0.201	0.235
\$375,000	0.078	0.101	0.115	0.138	0.165	0.193	0.226
\$400,000	0.074	0.096	0.109	0.132	0.157	0.185	0.218
\$425,000	0.069	0.091	0.104	0.126	0.151	0.178	0.210
\$450,000	0.066	0.086	0.099	0.120	0.145	0.171	0.203
\$475,000	0.063	0.082	0.095	0.115	0.140	0.165	0.197
\$500,000	0.060	0.079	0.091	0.111	0.134	0.159	0.190
\$600,000	0.050	0.067	0.078	0.096	0.117	0.140	0.170
\$700,000	0.043	0.058	0.068	0.084	0.104	0.125	0.153
\$800,000	0.037	0.051	0.060	0.075	0.093	0.113	0.139
\$900,000	0.033	0.045	0.054	0.067	0.084	0.103	0.128
\$1,000,000	0.029	0.040	0.048	0.061	0.077	0.094	0.118
\$2,000,000	0.013	0.019	0.023	0.030	0.040	0.050	0.065
\$3,000,000	0.007	0.011	0.014	0.019	0.025	0.032	0.044
\$4,000,000	0.005	0.007	0.009	0.013	0.018	0.023	0.032
\$5,000,000	0.003	0.005	0.007	0.009	0.013	0.017	0.024
\$6,000,000	0.002	0.004	0.005	0.007	0.010	0.013	0.019
\$7,000,000	0.002	0.003	0.004	0.005	0.008	0.011	0.015
\$8,000,000	0.002	0.002	0.003	0.004	0.006	0.009	0.012
\$9,000,000	0.001	0.002	0.002	0.003	0.005	0.007	0.010
\$10,000,000	0.001	0.002	0.002	0.003	0.004	0.006	0.008

Effective August 1, 2021

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

Per Accident Limitation	Hazard Groups						
	A	B	C	D	E	F	G
\$10,000	0.676	0.716	0.732	0.759	0.782	0.806	0.824
\$15,000	0.613	0.659	0.676	0.709	0.736	0.765	0.787
\$20,000	0.563	0.612	0.631	0.666	0.697	0.730	0.755
\$25,000	0.523	0.573	0.593	0.630	0.664	0.699	0.726
\$30,000	0.489	0.540	0.561	0.599	0.634	0.671	0.701
\$35,000	0.461	0.511	0.533	0.572	0.608	0.647	0.678
\$40,000	0.436	0.487	0.509	0.548	0.585	0.625	0.657
\$50,000	0.395	0.445	0.468	0.508	0.546	0.587	0.621
\$75,000	0.324	0.372	0.394	0.434	0.473	0.515	0.552
\$100,000	0.277	0.323	0.345	0.383	0.422	0.463	0.502
\$125,000	0.243	0.286	0.308	0.345	0.383	0.424	0.463
\$150,000	0.217	0.258	0.279	0.315	0.352	0.392	0.432
\$175,000	0.196	0.235	0.255	0.290	0.327	0.366	0.406
\$200,000	0.179	0.216	0.236	0.270	0.306	0.344	0.384
\$225,000	0.164	0.200	0.219	0.252	0.287	0.325	0.364
\$250,000	0.152	0.186	0.205	0.237	0.271	0.308	0.347
\$275,000	0.141	0.175	0.193	0.224	0.257	0.293	0.332
\$300,000	0.132	0.164	0.182	0.212	0.245	0.280	0.318
\$325,000	0.124	0.155	0.172	0.201	0.233	0.268	0.306
\$350,000	0.117	0.146	0.163	0.192	0.223	0.257	0.294
\$375,000	0.110	0.139	0.155	0.183	0.214	0.247	0.284
\$400,000	0.105	0.132	0.148	0.175	0.205	0.238	0.274
\$425,000	0.099	0.126	0.142	0.168	0.198	0.229	0.265
\$450,000	0.094	0.120	0.136	0.161	0.190	0.221	0.257
\$475,000	0.090	0.115	0.130	0.155	0.184	0.214	0.249
\$500,000	0.086	0.111	0.125	0.150	0.177	0.207	0.242
\$600,000	0.073	0.095	0.108	0.130	0.156	0.184	0.217
\$700,000	0.063	0.083	0.095	0.115	0.140	0.166	0.197
\$800,000	0.055	0.073	0.085	0.103	0.126	0.150	0.181
\$900,000	0.049	0.065	0.076	0.094	0.115	0.138	0.167
\$1,000,000	0.044	0.059	0.069	0.085	0.105	0.127	0.155
\$2,000,000	0.020	0.028	0.034	0.043	0.056	0.069	0.088
\$3,000,000	0.011	0.017	0.021	0.027	0.036	0.046	0.059
\$4,000,000	0.008	0.011	0.014	0.019	0.025	0.033	0.043
\$5,000,000	0.005	0.008	0.010	0.014	0.019	0.025	0.033
\$6,000,000	0.004	0.006	0.008	0.010	0.014	0.019	0.026
\$7,000,000	0.003	0.005	0.006	0.008	0.011	0.015	0.021
\$8,000,000	0.002	0.004	0.005	0.007	0.009	0.013	0.017
\$9,000,000	0.002	0.003	0.004	0.005	0.007	0.010	0.014
\$10,000,000	0.002	0.003	0.003	0.004	0.006	0.009	0.012

3.

Retrospective Pure Premium Development Factors

With Loss Limit			Without Loss Limit			4th & Subsequent Adjustment
1st Adj.	2nd Adj.	3rd Adj.	1st Adj.	2nd Adj.	3rd Adj.	
0.08	0.04	0.02	0.22	0.12	0.06	0.00



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Part 3 Supporting Exhibits

- Exhibit I: Determination of Indicated Loss Cost Level Change
- Exhibit II: Workers Compensation Loss Adjustment Expenses
- Appendix A: Factors Underlying the Proposed Loss Cost Level Change
- Appendix B: Calculations Underlying the Loss Cost Change by Classification
- Appendix C: Memoranda for Laws and Assessments
- Appendix D: Derivation of Experience Rating Values



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Exhibit I – Determination of Indicated Loss Cost Level Change

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:

1. Standard earned premium at Designated Statistical Reporting (DSR) level is developed to ultimate and on-leveled to the current approved loss cost level
2. 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 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. An excess provision is applied to adjust the limited cost ratios to an unlimited basis
6. 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 is applied. The detailed calculations can be found on the following pages.



RHODE ISLAND

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section A - Policy Year 2018 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$159,130,013
(2) Premium On-level Factor (Appendix A-I)	0.635
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$101,047,558

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$74,795,187
(5) Indemnity Loss On-level Factor (Appendix A-I)	0.990
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$74,047,235
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.733
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.895
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.656
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.666
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.000
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.666

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$32,602,269
(15) Medical Loss On-level Factor (Appendix A-I)	1.007
(16) Adjusted Limited Medical Losses = (14) x (15)	\$32,830,485
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.325
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.846
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.275
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(21) Projected Medical Cost Ratio = (19) x (20)	0.279
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.281

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.947
---	-------



RHODE ISLAND

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section B - Policy Year 2017 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$160,112,016
(2) Premium On-level Factor (Appendix A-I)	0.604
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$96,707,658

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$69,196,023
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.002
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$69,334,415
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.717
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.869
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.623
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.633
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.000
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.633

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$32,177,906
(15) Medical Loss On-level Factor (Appendix A-I)	1.014
(16) Adjusted Limited Medical Losses = (14) x (15)	\$32,628,397
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.337
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.808
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.272
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(21) Projected Medical Cost Ratio = (19) x (20)	0.276
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.278

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.911
---	-------



RHODE ISLAND

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section C - Policy Year 2016 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$163,719,663
(2) Premium On-level Factor (Appendix A-I)	0.560
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$91,683,011

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$66,955,366
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.009
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$67,557,964
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.737
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.842
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.621
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.631
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.000
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.631

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$32,070,104
(15) Medical Loss On-level Factor (Appendix A-I)	1.023
(16) Adjusted Limited Medical Losses = (14) x (15)	\$32,807,716
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.358
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.772
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.276
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.016
(21) Projected Medical Cost Ratio = (19) x (20)	0.280
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.282

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.913
---	-------



RHODE ISLAND

EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section D - Indicated Change Based on Experience, Trend, and Benefits

(1) Policy Year 2018 Indicated Change Based on Experience, Trend, and Benefits	0.947
(2) Policy Year 2017 Indicated Change Based on Experience, Trend, and Benefits	0.911
(3) Policy Year 2016 Indicated Change Based on Experience, Trend, and Benefits	0.913
(4) Indicated Change Based on Experience, Trend, and Benefits = $[(1)+(2)+(3)] / 3$	0.924

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

(1) Indicated Loss Cost Level Change	0.924
(2) Effect of the Change in Loss-based Expenses (Exhibit II)	1.007
(3) Indicated Change Modified to Reflect the Change in Loss-based Expenses = (1) x (2)	0.930

Section F - Distribution of Overall Loss Cost Level Change to Industry Groups

Industry Group Differentials (Appendix A-IV):

Manufacturing	0.960
Contracting	0.991
Office & Clerical	1.000
Goods & Services	1.012
Miscellaneous	1.014

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

Industry Group	(1) Final Overall Loss Cost Level Change	(2) Industry Group Differential	(3) = (1) x (2) Final Loss Cost Level Change by Industry Group	
Manufacturing	0.930	0.960	0.893	(-10.7%)
Contracting	0.930	0.991	0.922	(-7.8%)
Office & Clerical	0.930	1.000	0.930	(-7.0%)
Goods & Services	0.930	1.012	0.941	(-5.9%)
Miscellaneous	0.930	1.014	0.943	(-5.7%)
Overall	0.930	1.000	0.930	(-7.0%)



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Exhibit II – Workers Compensation Loss Adjustment Expenses

The proposed loss costs include a provision for loss adjustment expenses (LAE).

LAE is included in the loss costs 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 displayed in Section B are calculated on a countrywide basis using private carrier-only data.

NCCI used the following general methodology to determine the proposed DCCE provision based on Rhode Island-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.

The proposed LAE provision is based on private carrier data.

The calculation of the loss adjustment expense provision is shown on the following pages.



RHODE ISLAND

EXHIBIT II

Workers Compensation Loss Adjustment Expense Provision

Section A - Proposed Change in Rhode Island Loss Adjustment Expense Provision

NCCI proposes a 23.3% loss adjustment expense allowance as a percentage of incurred losses. This represents a 0.7% increase from the currently approved loss adjustment expense provision.

Rhode Island Provisions	(1) Currently Approved	(2) Proposed
AOE	8.0%	8.9%
DCCE	14.4%	14.4%
Total LAE	22.4%	23.3%

$$\begin{aligned} \text{Proposed Change in Rhode Island LAE Provision} & \quad 1.007 \\ = [1.0 + (2)] / [1.0 + (1)] - 1 & \quad \mathbf{+ 0.7\%} \end{aligned}$$

Section B - Selection of AOE Provision

The adjusting and other expense data by accident year shown below is based on countrywide data for private carriers. NCCI's countrywide selection for the AOE provision is 8.9%.

<u>Accident Year</u>	<u>Ultimate AOE Ratio</u>
2015	7.8%
2016	8.3%
2017	8.9%
2018	8.8%
2019	8.9%
Countrywide Selected	8.9%
Rhode Island Selected	8.9%



RHODE ISLAND

EXHIBIT II

Workers Compensation Loss Adjustment Expense Provision

Section C - Selection of DCCE Provision

<u>Policy Year</u>	(1) Reported Ratio of Paid DCCE to <u>Paid Losses</u>	(2) Age to Ultimate Development <u>Factor</u>	(3) Ultimate DCCE <u>Ratio</u>
2014	15.9%	0.979	15.6%
2015	12.2%	0.978	11.9%
2016	15.6%	0.964	15.0%
2017	16.4%	0.969	15.9%
2018	13.5%	1.021	13.8%
Rhode Island Selected			14.4%

(2) Section D

(3) = (1) x (2)

Section D - Summary of Paid DCCE to Paid Loss Ratio Development Factors

<u>Report</u>	(1) (2) <u>DCCE Ratio Development</u>	
	<u>To Next Report</u>	<u>To Ultimate</u>
1st	1.054	1.021
2nd	1.005	0.969
3rd	0.986	0.964
4th	0.999	0.978
5th	0.997	0.979
6th	1.001	0.982
7th	0.991	0.981
8th	0.993	0.990
9th	0.999	0.997
10th	1.002	0.998
11th	0.999	0.996
12th	1.001	0.997
13th	0.999	0.996
14th	0.998	0.997
15th	1.000	0.999
16th	0.998	0.999
17th	1.001	1.001
18th	1.000	1.000
19th		1.000*

(1) Section E

(2) = Cumulative upward product of column (1)

*Selection



RHODE ISLAND

EXHIBIT II

Workers Compensation Loss Adjustment Expense Provision

Section E - Paid DCCE to Paid Loss Ratio Development Factors

<u>Valuation</u>	<u>1st/2nd</u>	<u>2nd/3rd</u>	<u>3rd/4th</u>	<u>4th/5th</u>	<u>5th/6th</u>	<u>6th/7th</u>
12/31/2015	1.033	1.012	1.002	0.989	0.997	1.004
12/31/2016	1.077	0.995	0.982	1.004	0.987	0.995
12/31/2017	1.072	1.007	0.973	1.014	1.010	1.011
12/31/2018	1.050	0.959	1.007	1.004	0.990	0.999
12/31/2019	1.040	1.012	0.865	0.977	1.005	1.000
Average*	1.054	1.005	0.986	0.999	0.997	1.001

* Excludes the years with the lowest and highest factors.

<u>Valuation</u>	<u>7th/8th</u>	<u>8th/9th</u>	<u>9th/10th</u>	<u>10th/11th</u>	<u>11th/12th</u>	<u>12th/13th</u>
12/31/2015	0.992	0.976	1.000	1.003	0.996	1.000
12/31/2016	1.000	0.997	1.000	0.996	1.003	1.001
12/31/2017	0.982	1.006	1.004	1.003	1.000	1.001
12/31/2018	0.981	0.990	0.997	1.002	0.998	0.998
12/31/2019	1.000	0.991	0.996	1.001	0.999	1.001
Average*	0.991	0.993	0.999	1.002	0.999	1.001

* Excludes the years with the lowest and highest factors.

<u>Valuation</u>	<u>13th/14th</u>	<u>14th/15th</u>	<u>15th/16th</u>	<u>16th/17th</u>	<u>17th/18th</u>	<u>18th/19th</u>
12/31/2015	0.999	1.000	0.998	1.000	1.001	1.000
12/31/2016	1.003	0.999	1.000	0.994	1.001	1.001
12/31/2017	1.001	0.996	0.998	1.000	0.998	1.000
12/31/2018	0.995	1.000	1.003	0.980	1.000	0.993
12/31/2019	0.998	0.996	1.001	1.000	1.002	1.000
Average*	0.999	0.998	1.000	0.998	1.001	1.000

* Excludes the years with the lowest and highest factors.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix A – Factors Underlying the Proposed Loss Cost 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 loss cost 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 Rhode Island based on an analysis of policies reported in the Unit Statistical Data, which was updated for this filing. Additional adjustments applied as part of the premium on-level factor calculation include:

- Adjustment for Expense Removal: This factor is applied to remove expenses from the reported voluntary DSR level premium totals.
- 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 targeted in the filing.

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.



RHODE ISLAND

APPENDIX A-I

Determination of Policy Year On-level Factors

Section A - Factor Adjusting 2018 Policy Year Premium to Present Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Date	Loss Cost Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Removal	Off-balance Adjustment Factor*	Premium Adjustment Factor (5)x(6)x(7)
NR 08/01/17	Base	1.000	0.628	0.628	0.772	0.817	1.006	0.635
NR 08/01/18	0.947	0.947	0.372	0.352				
NR 08/01/19	0.919	0.870						
NR 08/01/20	0.870	0.757						
				0.980				

Section B - Factor Adjusting 2018 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)
10/01/17	Base	1.000	0.099	0.099	0.990
05/10/18	1.021	1.021	0.235	0.240	
10/01/18	1.000	1.021	0.483	0.493	
05/10/19	0.985	1.006	0.183	0.184	
01/01/20	1.000	1.006			
				1.016	

Section C - Factor Adjusting 2018 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)
10/01/17	Base	1.000	0.099	0.099	1.007
05/10/18	1.000	1.000	0.235	0.235	
10/01/18	1.008	1.008	0.483	0.487	
05/10/19	1.000	1.008	0.183	0.184	
01/01/20	1.004	1.012			
				1.005	

NR New and renewal business.

* $1.006 = 0.956 / 0.950 = (\text{Targeted Off-balance}) / (\text{Off-balance for Policy Year 2018})$



RHODE ISLAND

APPENDIX A-I

Determination of Policy Year On-level Factors

Section D - Factor Adjusting 2017 Policy Year Premium to Present Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Date	Loss Cost Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Removal	Off-balance Adjustment Factor*	Premium Adjustment Factor (5)x(6)x(7)
NR 08/01/16	Base	1.000	0.628	0.628	0.736	0.817	1.005	0.604
NR 08/01/17	0.955	0.955	0.372	0.355				
NR 08/01/18	0.947	0.904						
NR 08/01/19	0.919	0.831						
NR 08/01/20	0.870	0.723						
				0.983				

Section E - Factor Adjusting 2017 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)
10/01/16	Base	1.000	0.274	0.274	1.002
09/01/17	1.000	1.000	0.060	0.060	
10/01/17	1.002	1.002	0.482	0.483	
05/10/18	1.021	1.023	0.157	0.161	
10/01/18	1.000	1.023	0.027	0.028	
05/10/19	0.985	1.008			
01/01/20	1.000	1.008			
				1.006	

Section F - Factor Adjusting 2017 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)
10/01/16	Base	1.000	0.274	0.274	1.014
09/01/17	1.010	1.010	0.060	0.061	
10/01/17	1.000	1.010	0.482	0.487	
05/10/18	1.000	1.010	0.157	0.159	
10/01/18	1.008	1.018	0.027	0.027	
05/10/19	1.000	1.018			
01/01/20	1.004	1.022			
				1.008	

NR New and renewal business.

* 1.005 = 0.956 / 0.951 = (Targeted Off-balance) / (Off-balance for Policy Year 2017)



RHODE ISLAND

APPENDIX A-I

Determination of Policy Year On-level Factors

Section G - Factor Adjusting 2016 Policy Year Premium to Present Level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Date	Loss Cost Level Change	Cumulative Index	Weight	Product (2)x(3)	Adj. Factor Present Index/ Sum Column (4)	Adj. For Expense Removal	Off-balance Adjustment Factor*	Premium Adjustment Factor (5)x(6)x(7)
NR 08/01/14	Base	1.000	0.628	0.628	0.687	0.817	0.998	0.560
NR 08/01/16	0.925	0.925	0.372	0.344				
NR 08/01/17	0.955	0.883						
NR 08/01/18	0.947	0.836						
NR 08/01/19	0.919	0.768						
NR 08/01/20	0.870	0.668						
				0.972				

Section H - Factor Adjusting 2016 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)
05/01/14	Base	1.000	0.190	0.190	1.009
07/15/16	1.000	1.000	0.144	0.144	
10/01/16	1.003	1.003	0.616	0.618	
09/01/17	1.000	1.003	0.023	0.023	
10/01/17	1.002	1.005	0.027	0.027	
05/10/18	1.021	1.026			
10/01/18	1.000	1.026			
05/10/19	0.985	1.011			
01/01/20	1.000	1.011			
				1.002	

Section I - Factor Adjusting 2016 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)
05/01/14	Base	1.000	0.190	0.190	1.023
07/15/16	1.005	1.005	0.144	0.145	
10/01/16	1.000	1.005	0.616	0.619	
09/01/17	1.010	1.015	0.023	0.023	
10/01/17	1.000	1.015	0.027	0.027	
05/10/18	1.000	1.015			
10/01/18	1.008	1.023			
05/10/19	1.000	1.023			
01/01/20	1.004	1.027			
				1.004	

NR New and renewal business.

* 0.998 = 0.956 / 0.958 = (Targeted Off-balance) / (Off-balance for Policy Year 2016)



RHODE ISLAND

APPENDIX A-I

Determination of Policy Year On-level Factors

Section J - Premium Adjustment to Average Expected Mod

Rating Year	(1) Average Intrastate Mod	(2) Average Interstate Mod	(3) Average Mod Combined Rated Risk	(4) Weighted Average Off-Balance	(5) Average Mod Expected	(6)= (5)/(4) Policy Year Adjustment Factor
2002	1.010	1.019	1.013	1.012	0.956	0.945
2003	1.018	1.005	1.013	1.012	0.956	0.945
2004	0.991	1.008	0.997	0.997	0.956	0.959
2005	0.976	1.017	0.991	0.992	0.956	0.964
2006	0.974	0.991	0.980	0.982	0.956	0.974
2007	0.985	0.991	0.987	0.989	0.956	0.967
2008	0.985	0.997	0.989	0.991	0.956	0.965
2009	0.995	0.977	0.988	0.990	0.956	0.966
2010	0.992	0.987	0.990	0.991	0.956	0.965
2011	0.998	0.990	0.995	0.996	0.956	0.960
2012	0.996	0.987	0.992	0.993	0.956	0.963
2013	0.988	0.983	0.986	0.988	0.956	0.968
2014	0.960	0.982	0.969	0.973	0.956	0.983
2015	0.951	0.957	0.953	0.959	0.956	0.997
2016	0.949	0.955	0.951	0.958	0.956	0.998
2017	0.939	0.951	0.944	0.951	0.956	1.005
2018	0.946	0.937	0.942	0.950	0.956	1.006
2019	0.938	0.944	0.941	0.949	0.956	1.007



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix A – Factors Underlying the Proposed Loss Cost 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 in Appendix A-II Sections A through G.

Limited Large Loss Methodology

In order to limit volatility on the loss cost indications due to the impact of extraordinary large losses, a limited large loss methodology is used in Rhode Island. 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. The base threshold proposed in this filing is \$3,262,665, based on the volume of premium in policy years 2015, 2016, and 2017 underlying the currently approved filing that utilizes data valued as of 12/31/2018. 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 Rhode Island 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, as shown in Appendix A-II Section I.

Limited indemnity and medical losses used to calculate the ultimate losses are shown in Appendix A-II Section A. After developing limited indemnity and medical losses to an ultimate report, a statewide excess ratio at the base threshold is used to adjust the limited losses to an unlimited basis. The proposed excess ratio in this filing is 1.6%, as shown in Appendix A-II Section H.

Development Factors

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.

For indemnity and medical loss 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 “tail” factor is used to reflect all future expected emergence. The calculation of indemnity and medical paid + case 19th-to-ultimate tail factors utilize all available experience for the years prior to the tail attachment point. Tail factors are calculated for the most recent ten available policy years, each relying on losses in older policy years as well as a factor to adjust for the differences in the volume of losses



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix A – Factors Underlying the Proposed Loss Cost Level Change

between the policy years. Tail factors are calculated separately for indemnity and medical 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, along with the application of a growth adjustment factor. Due to the 1992 reform, the development from the indemnity tail factors for policy years 1992 and prior are reduced by half.

Since unlimited losses are used for the tail factor, they are adjusted to a limited basis as shown in Appendix A-II Section F.



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section A - Premium and Loss Summary Valued as of 12/31/2019

Policy Year 2018

(1) Standard Earned Premium	\$158,338,321
(2) Factor to Develop Premium to Ultimate	1.005
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$159,130,013
(4) Limited Indemnity Paid Losses	\$27,650,716
(5) Limited Indemnity Paid Development Factor to Ultimate	2.705
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$74,795,187
(7) Limited Medical Paid Losses	\$20,543,333
(8) Limited Medical Paid Development Factor to Ultimate	1.587
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$32,602,269

Policy Year 2017

(1) Standard Earned Premium	\$160,112,016
(2) Factor to Develop Premium to Ultimate	1.000
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$160,112,016
(4) Limited Indemnity Paid Losses	\$43,410,303
(5) Limited Indemnity Paid Development Factor to Ultimate	1.594
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$69,196,023
(7) Limited Medical Paid Losses	\$25,316,999
(8) Limited Medical Paid Development Factor to Ultimate	1.271
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$32,177,906

Policy Year 2016

(1) Standard Earned Premium	\$163,719,663
(2) Factor to Develop Premium to Ultimate	1.000
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$163,719,663
(4) Limited Indemnity Paid Losses	\$52,679,281
(5) Limited Indemnity Paid Development Factor to Ultimate	1.271
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$66,955,366
(7) Limited Medical Paid Losses	\$27,575,326
(8) Limited Medical Paid Development Factor to Ultimate	1.163
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$32,070,104



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section B - Premium Development Factors

<u>Policy Year</u>	<u>1st/2nd</u>	<u>Policy Year</u>	<u>2nd/3rd</u>	<u>Policy Year</u>	<u>3rd/4th</u>	<u>Policy Year</u>	<u>4th/5th</u>
2015	1.005	2014	1.000	2013	1.000	2012	1.000
2016	1.003	2015	1.000	2014	0.999	2013	1.000
2017	1.007	2016	1.000	2015	1.000	2014	1.000
Average	1.005	Average	1.000	Average	1.000	Average	1.000

Summary of Premium Development Factors

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



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section C - Limited Indemnity Paid Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2013	1.731	2012	1.280	2011	1.118	2010	1.053
2014	1.740	2013	1.251	2012	1.098	2011	1.048
2015	1.700	2014	1.269	2013	1.114	2012	1.042
2016	1.628	2015	1.242	2014	1.118	2013	1.049
2017	1.659	2016	1.239	2015	1.097	2014	1.048
Average*	1.697	Average*	1.254	Average*	1.110	Average*	1.048
* Excludes the years with the lowest and highest factors.							
Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2009	1.024	2008	1.014	2007	1.020	2006	1.020
2010	1.030	2009	1.009	2008	1.008	2007	1.007
2011	1.025	2010	1.012	2009	1.015	2008	1.003
2012	1.029	2011	1.020	2010	1.015	2009	1.013
2013	1.040	2012	1.017	2011	1.011	2010	1.004
Average*	1.028	Average*	1.014	Average*	1.014	Selected	1.008
* Excludes the years with the lowest and highest factors.							
Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2005	1.002	2004	1.002	2003	1.004	2002	1.001
2006	1.003	2005	1.004	2004	1.002	2003	1.000
2007	1.000	2006	1.003	2005	1.001	2004	1.001
2008	1.006	2007	1.001	2006	1.002	2005	1.003
2009	1.013	2008	1.002	2007	1.002	2006	1.002
Average*	1.004	Average*	1.002	Average*	1.002	Average*	1.001
* Excludes the years with the lowest and highest factors.							
Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
2001	1.003	2000	1.000	1999	1.003	1998	1.000
2002	1.001	2001	1.004	2000	1.000	1999	1.005
2003	1.000	2002	1.006	2001	1.004	2000	1.000
2004	1.003	2003	1.000	2002	1.001	2001	1.009
2005	1.010	2004	1.004	2003	1.000	2002	1.001
Average*	1.002	Average*	1.003	Average*	1.001	Average*	1.002
* Excludes the years with the lowest and highest factors.							
Policy Year	17th/18th	Policy Year	18th/19th				
1997	1.000	1996	1.006				
1998	1.000	1997	1.001				
1999	1.001	1998	1.000				
2000	1.000	1999	1.003				
2001	1.002	2000	1.000				
Average*	1.000	Average*	1.001				
* Excludes the years with the lowest and highest factors.							



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section D - Limited Medical Paid Loss Development Factors

Policy Year	1st/2nd	Policy Year	2nd/3rd	Policy Year	3rd/4th	Policy Year	4th/5th
2013	1.235	2012	1.080	2011	1.041	2010	1.028
2014	1.287	2013	1.092	2012	1.041	2011	1.016
2015	1.252	2014	1.098	2013	1.052	2012	1.034
2016	1.226	2015	1.091	2014	1.043	2013	1.030
2017	1.260	2016	1.095	2015	1.074	2014	1.019
Average*	1.249	Average*	1.093	Average*	1.045	Average*	1.026
* Excludes the years with the lowest and highest factors.							
Policy Year	5th/6th	Policy Year	6th/7th	Policy Year	7th/8th	Policy Year	8th/9th
2009	1.012	2008	1.009	2007	1.002	2006	1.008
2010	1.020	2009	1.006	2008	1.006	2007	1.003
2011	1.016	2010	1.012	2009	1.014	2008	1.004
2012	1.016	2011	1.011	2010	1.012	2009	1.005
2013	1.017	2012	1.014	2011	1.004	2010	1.011
Average*	1.016	Average*	1.011	Average*	1.007	Average*	1.006
* Excludes the years with the lowest and highest factors.							
Policy Year	9th/10th	Policy Year	10th/11th	Policy Year	11th/12th	Policy Year	12th/13th
2005	1.005	2004	1.003	2003	1.007	2002	1.002
2006	1.005	2005	1.002	2004	1.003	2003	1.001
2007	1.001	2006	1.006	2005	1.002	2004	1.002
2008	1.004	2007	1.001	2006	1.003	2005	1.003
2009	1.009	2008	1.002	2007	1.001	2006	1.003
Average*	1.005	Average*	1.002	Average*	1.003	Average*	1.002
* Excludes the years with the lowest and highest factors.							
Policy Year	13th/14th	Policy Year	14th/15th	Policy Year	15th/16th	Policy Year	16th/17th
2001	1.003	2000	1.001	1999	1.003	1998	1.000
2002	1.002	2001	1.005	2000	1.000	1999	1.002
2003	1.002	2002	1.003	2001	1.003	2000	1.003
2004	1.002	2003	1.001	2002	1.002	2001	1.011
2005	1.002	2004	1.002	2003	1.001	2002	1.003
Average*	1.002	Average*	1.002	Average*	1.002	Average*	1.003
* Excludes the years with the lowest and highest factors.							
Policy Year	17th/18th	Policy Year	18th/19th				
1997	1.001	1996	1.002				
1998	1.000	1997	1.001				
1999	1.002	1998	1.000				
2000	1.001	1999	1.005				
2001	1.003	2000	1.001				
Average*	1.001	Average*	1.001				
* Excludes the years with the lowest and highest factors.							



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

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

Indemnity Paid+Case Data for Matching Companies

(1) Policy Year	(2) <u>Losses for Policy Year</u> 19th Report	(3) <u>Losses for Policy Year</u> 20th Report	(4) <u>Losses for All Prior Policy Years</u> Previous	(5) <u>Losses for All Prior Policy Years</u> Current	(6) Factor to Adjust Losses for Prior Policy Years	(7) Indicated 19th-to-Ult Development for Policy Year	(8) Adjusted 19th-to-Ult Development for Policy Year
1990	112,503,976	112,790,727	1,298,012,630	1,298,407,655	0.899	1.006	1.003
1991	85,575,382	85,672,605	1,409,971,364	1,411,320,668	1.239	1.014	1.007
1992	48,966,747	49,116,401	1,496,937,388	1,498,561,923	2.215	1.018	1.009
1993	32,082,136	32,043,098	1,547,678,324	1,546,925,912	3.353	0.992	0.992
1994	35,573,601	35,269,771	1,578,600,354	1,579,786,961	2.916	1.003	1.003
1995	33,411,148	33,410,705	1,614,875,524	1,616,415,545	2.984	1.015	1.015
1996	32,626,595	32,676,866	1,649,815,097	1,651,133,241	2.862	1.016	1.016
1997	37,652,693	37,670,124	1,683,393,920	1,683,526,291	2.232	1.002	1.002
1998	42,406,781	42,410,412	1,721,196,415	1,721,953,208	1.735	1.010	1.010
1999	52,556,592	52,719,950	1,730,440,924	1,730,858,611	1.200	1.010	1.010
Selected Indemnity 19th-to-Ultimate Loss Development Factor							1.005

Medical Paid+Case Data for Matching Companies

(9) Policy Year	(10) <u>Losses for Policy Year</u> 19th Report	(11) <u>Losses for Policy Year</u> 20th Report	(12) <u>Losses for All Prior Policy Years</u> Previous	(13) <u>Losses for All Prior Policy Years</u> Current	(14) Factor to Adjust Losses for Prior Policy Years	(15) Indicated 19th-to-Ult Development for Policy Year	
1990	33,727,324	33,705,992	358,959,623	359,252,356	0.754	1.011	
1991	30,866,077	31,077,089	392,573,156	395,172,097	0.884	1.102	
1992	20,595,271	20,585,164	426,208,322	426,744,400	1.391	1.018	
1993	17,249,496	17,306,436	447,329,564	445,502,865	1.691	0.941	
1994	16,124,192	15,872,178	462,664,689	462,078,050	1.809	0.964	
1995	16,651,572	16,805,511	477,878,172	477,524,550	1.741	0.997	
1996	15,376,023	15,327,703	494,295,888	493,962,401	1.834	0.985	
1997	18,940,099	18,769,960	509,011,886	508,947,030	1.409	0.989	
1998	19,623,245	19,624,596	527,716,990	527,527,028	1.281	0.993	
1999	31,523,511	32,031,547	536,850,762	536,858,199	0.739	1.016	
Selected Medical 19th-to-Ultimate Loss Development Factor							1.000

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

(15) = 1 + [(11)-(10) + ((13)-(12)) / (14)] / (10)

Columns (4) and (12) are valued as of the date at which the given policy year is at a 19th report.

Columns (5) and (13) are valued as of the date at which the given policy year is at a 20th report.



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

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

Policy Year	Indemnity Paid-to-Paid + Case Ratio 19th Report	Medical Paid-to-Paid + Case Ratio 19th Report
1996	0.986	0.990
1997	0.990	0.963
1998	1.000	1.000
1999	0.981	0.982
2000	0.996	0.991
Selected	0.995	0.980

	Indemnity	Medical
(1) Paid+Case 19th-to-Ultimate Loss Development Factor (Section E)	1.005	1.000
(2) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited Basis	0.529	0.529
(3) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(1)-1]x(2)+1	1.003	1.000
(4) Limited Paid-to-Paid+Case Ratio (Section F)	0.995	0.980
(5) Limited Paid 19th-to-Ultimate Loss Development Factor = (3) / (4)	1.008	1.020

Section G - Summary of Limited Paid Loss Development Factors

Report	(1) Indemnity Paid Loss Development		Section F	(3) Medical Paid Loss Development		Section F
	to Next Report	to Ultimate		to Next Report	to Ultimate	
1st	1.697	2.705		1.249	1.587	
2nd	1.254	1.594		1.093	1.271	
3rd	1.110	1.271		1.045	1.163	
4th	1.048	1.145		1.026	1.113	
5th	1.028	1.093		1.016	1.085	
6th	1.014	1.063		1.011	1.068	
7th	1.014	1.048		1.007	1.056	
8th	1.008	1.034		1.006	1.049	
9th	1.004	1.026		1.005	1.043	
10th	1.002	1.022		1.002	1.038	
11th	1.002	1.020		1.003	1.036	
12th	1.001	1.018		1.002	1.033	
13th	1.002	1.017		1.002	1.031	
14th	1.003	1.015		1.002	1.029	
15th	1.001	1.012		1.002	1.027	
16th	1.002	1.011		1.003	1.025	
17th	1.000	1.009		1.001	1.022	
18th	1.001	1.009		1.001	1.021	
19th		1.008	Section F		1.020	Section F

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



RHODE ISLAND

APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

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

(1) Threshold at the Midpoint of the Loss Cost Effective Period*	3,262,665
(2) Statewide Excess Ratio for (1)	0.016
(3) Market Share for Carriers Missing from Large Loss and Catastrophe Call	0.000
(4) Factor to Adjust Limited Losses to an Unlimited Basis = $1.0 / \{1.0 - [(2) \times (1.0 - (3))]\}$	1.016

Section I - Policy Year Large Loss Limits

<u>Experience Year</u>	<u>Policy Year Detrended Limit</u>
2018	3,131,448
2017	3,070,307
2016	3,005,375
2015	2,942,201
2014	2,878,990
2013	2,788,171
2012	2,703,308
2011	2,636,219
2010	2,574,690
2009	2,508,712
2008	2,468,662
2007	2,420,883
2006	2,351,857
2005	2,267,323
2004	2,186,942
2003	2,119,856
2002	2,034,952
2001	1,957,318
2000	1,896,626
1999	1,827,170
1998	1,762,047
1997	1,686,967
1996	1,601,501

* July 27, 2022 is the midpoint of the effective period for which the revised loss costs are being proposed.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix A – Factors Underlying the Proposed Loss Cost Level Change

Appendix A-III Trend Factors

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 Rhode Island. 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.

While claim frequency and average costs per case are reviewed separately, NCCI selects annual indemnity and medical loss ratio trend factors based on an analysis of historical indemnity and medical loss ratios, 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 lost-time claim frequency, average costs per case, and loss ratios for policy years 2004 through 2018 are shown in Appendix A-III, along with the impact of the trend selection for each policy year in the experience period. The trend lengths displayed in Section B(3) are calculated by comparing the average accident date for the effective period of the proposed loss costs to each of the policy years in the experience period. The average accident dates are based on a Rhode Island distribution of policy writings by month and assume a uniform probability of loss over the coverage period.



RHODE ISLAND

APPENDIX A-III

Policy Year Trend Factors

Section A - Summary of Policy Year Data

(1)	(2)	(3)	(4)	(5)	(6)
Policy Year	Lost-Time Claim	Indemnity		Medical	
	Frequency*	Avg Cost Per Case**	Loss Ratio^	Avg Cost Per Case**	Loss Ratio^
2004	49.089	17,811	0.874	9,649	0.474
2005	48.003	18,281	0.878	10,203	0.490
2006	45.542	20,142	0.917	10,584	0.482
2007	44.095	22,037	0.971	11,188	0.493
2008	41.007	24,197	0.992	12,084	0.496
2009	41.561	24,064	1.000	12,693	0.527
2010	44.423	22,694	1.009	12,824	0.570
2011	41.480	22,040	0.915	11,444	0.475
2012	40.761	21,758	0.886	11,881	0.484
2013	39.099	22,691	0.887	11,738	0.459
2014	39.008	22,538	0.880	10,624	0.415
2015	37.136	22,267	0.826	11,181	0.415
2016	36.293	20,299	0.737	9,861	0.358
2017	34.027	21,072	0.717	9,914	0.337
2018	31.589	23,198	0.733	10,285	0.325

* Figures have been adjusted to the common wage level.

^ Based on paid losses.

Section B - Summary of Annual Trend Factors

	<u>Indemnity</u>	<u>Medical</u>
(1) Current Approved Annual Loss Ratio Trend Factor	0.970	0.960
(2) Selected Annual Loss Ratio Trend Factor	0.970	0.955
(3) Length of Trend Period from Midpoint of Policy Year to Midpoint of Effective Period:		
		<u>Years</u>
	Policy Year 2016	5.628
	Policy Year 2017	4.628
	Policy Year 2018	3.628
(4) Trend Factor Applied to Experience Year = (2) ^ (3)	<u>Indemnity</u>	<u>Medical</u>
	Policy Year 2016	0.772
	Policy Year 2017	0.808
	Policy Year 2018	0.846



RHODE ISLAND

APPENDIX A-IV

Derivation of Industry Group Differentials

Industry group differentials are used to more equitably distribute the overall loss cost 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 loss costs. 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.

Industry Group	(1) Latest Year Current Expected Losses Prior to Adjustment for Change in Off-Balance	(2) Five Year Current Expected Losses Prior to Adjustment for Change in Off-Balance	(3) Five Year Proposed Expected Losses Prior to Adjustment for Change in Off-Balance	(4) Current Ratio of Manual to Standard Premium	(5) Proposed Ratio of Manual to Standard Premium
Manufacturing	22,545,765	106,410,102	99,003,209	1.090	1.094
Contracting	26,757,840	115,220,048	107,245,157	1.093	1.097
Office & Clerical	19,268,614	89,819,758	83,549,393	1.091	1.102
Goods & Services	66,702,727	309,051,351	287,460,576	1.006	1.013
Miscellaneous	28,256,300	128,385,969	119,472,555	1.076	1.084
Statewide	163,531,246	748,887,228	696,730,890		

Industry Group	(6) Latest Year Current Expected Losses Adjusted for Change in Off-Balance (1)x(4)/(5)	(7) Five Year Current Expected Losses Adjusted for Change in Off-Balance (2)x(4)/(5)	(8) Five Year Proposed Expected Losses Adjusted for Change in Off-Balance (3)x(4)/(5)	(9) Current/ Proposed (7)/(8)	(10) Adjustment to Proposed for Current Relativity (9)IG/(9)SW
Manufacturing	22,463,331	106,021,034	98,641,223	1.075	1.000
Contracting	26,660,273	114,799,920	106,854,108	1.074	0.999
Office & Clerical	19,076,278	88,923,191	82,715,415	1.075	1.000
Goods & Services	66,241,800	306,915,754	285,474,176	1.075	1.000
Miscellaneous	28,047,766	127,438,471	118,590,839	1.075	1.000
Statewide	162,489,448	744,098,370	692,275,761	1.075	



RHODE ISLAND

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 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	91,407,083	0.927	0.928	3,143
Contracting	105,128,662	0.985	0.986	2,336
Office & Clerical	83,224,961	1.006	1.007	2,579
Goods & Services	289,591,905	1.014	1.015	12,165
Miscellaneous	122,271,644	1.031	1.032	3,354
Statewide	691,624,255	0.999		

Industry Group	(15) Full Credibility Standard for Lost-Time Claim Counts	(16) Credibility Minimum of 1.000 and ((14)/(15))^0.5	(17) Credibility Weighted Indicated/Expected Ratio [(16)IGx(12)IG] + [1-(16)IG]x(12)SW*	(18) Final Industry Group Differential (17)IG/(17)SW
Manufacturing	12,000	0.51	0.962	0.960
Contracting	12,000	0.44	0.993	0.991
Office & Clerical	12,000	0.46	1.002	1.000
Goods & Services	12,000	1.00	1.014	1.012
Miscellaneous	12,000	0.53	1.016	1.014
Statewide			1.002	1.000

*Statewide ratio (column 17) = $\sum_{IG} [(6) \times (17)] \div \sum_{IG} (6)$



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix B – Calculations Underlying the Loss Cost Change by Classification

NCCI separately determines voluntary loss costs for each workers compensation classification. The proposed change from the current loss cost will vary depending on the classification. The following are the general steps utilized to determine the individual classification loss costs:

1. Calculate industry group differentials, which are used to more equitably distribute the proposed overall average loss cost 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 Rhode Island 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-to-standard premium, and swing limits.



RHODE ISLAND

APPENDIX B-I

Distribution of Loss Cost Level Change to Occupational Classification

After determining the required changes in the overall loss cost 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.

Policy Period	Indemnity		Medical	
	Likely-to-Develop	Not-Likely-to-Develop	Likely-to-Develop	Not-Likely-to-Develop
1/13-12/13	1.065	1.021	1.038	0.996
1/14-12/14	1.095	1.039	1.047	0.999
1/15-12/15	1.139	1.080	1.073	1.004
1/16-12/16	1.311	1.185	1.106	1.010
1/17-12/17	2.054	1.594	1.177	1.035

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
1/13-12/13	0.769	0.672
1/14-12/14	0.793	0.704
1/15-12/15	0.817	0.737
1/16-12/16	0.842	0.772
1/17-12/17	0.868	0.808

3. Factors to Adjust to the Proposed Benefit Level

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

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/13-12/13	0.998	1.009	1.011	1.011	1.041
1/14-12/14	0.998	1.009	1.011	1.011	1.036
1/15-12/15	0.998	1.009	1.011	1.011	1.035
1/16-12/16	0.996	1.007	1.010	1.009	1.031
1/17-12/17	0.992	1.001	1.003	1.001	1.022



RHODE ISLAND

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)
1/13-12/13	0.817	0.784	0.826	0.828	0.794	0.828	0.794	0.726	0.697
1/14-12/14	0.867	0.822	0.876	0.878	0.833	0.878	0.833	0.764	0.729
1/15-12/15	0.929	0.881	0.939	0.941	0.892	0.941	0.892	0.818	0.766
1/16-12/16	1.099	0.994	1.112	1.115	1.008	1.114	1.007	0.880	0.804
1/17-12/17	1.769	1.373	1.785	1.788	1.388	1.785	1.385	0.972	0.855

* 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. These factors are shown below.

Hazard Group	A	B	C	D	E	F	G
(1) Excess Ratios	0.067	0.090	0.105	0.129	0.158	0.188	0.226
(2) Excess Factors 1/(1-(1))	1.072	1.099	1.117	1.148	1.188	1.232	1.292

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.



RHODE ISLAND

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*	0.928	0.986	1.007	1.015	1.032
(2) Final Differentials**	0.960	0.991	1.000	1.012	1.014
(3) Adjustment (2)/(1)	1.034	1.005	0.993	0.997	0.983

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

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

2. Factors to Balance Indicated to Expected Losses

The expected losses are calculated as the pure premium underlying the current loss costs, 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.

Policy Period	(1) Adjustment of Indicated Losses to Pure Premium at Proposed Level	(2) Current Ratio of Manual to Standard Premium	(3) Proposed Ratio of Manual to Standard Premium	(4) Off-balance Adjustment (2)/(3)	(5) Balancing Indicated to Expected Losses (1)x(4)
1/13-12/13	0.906	1.053	1.045	1.008	0.913
1/14-12/14	0.842	1.053	1.057	0.996	0.839
1/15-12/15	0.925	1.053	1.064	0.990	0.916
1/16-12/16	0.947	1.054	1.068	0.987	0.935
1/17-12/17	0.902	1.054	1.071	0.984	0.888

3. Adjustment for Experience Change

A factor of 0.929 is applied to adjust for the experience change in the proposed loss cost level.

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

A factor of 1.233 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
1/13-12/13	1.081	1.051	1.038	1.043	1.028
1/14-12/14	0.994	0.966	0.954	0.958	0.945
1/15-12/15	1.085	1.054	1.042	1.046	1.031
1/16-12/16	1.107	1.076	1.064	1.068	1.053
1/17-12/17	1.052	1.022	1.010	1.014	1.000



RHODE ISLAND

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 loss costs, adjusted to the proposed level. The data sources for the above-captioned pure premiums are the partial pure premiums underlying the current loss costs.

1. Adjustment for Experience Change

A factor of 0.929 is applied to adjust for the experience change in the proposed loss cost level.

2. Factors to Adjust to the Proposed Trend Level

The pure premiums underlying the current loss costs contain the current trend. The change in trend factors, 1.000 and 0.976, 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 loss costs to the proposed benefit level.

Effective Date	Indemnity	Medical
January 1, 2021	1.000	1.008

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

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

	(a) Current		(b) Proposed	
	Indemnity	Medical	Indemnity	Medical
(1) Loss Adjustment Expense	1.224	1.224	1.233	1.233
(2) Loss-based Assessment	1.000	1.000	1.000	1.000
(3) = (1) + (2) – 1.000	1.224	1.224	1.233	1.233
(4) Overall Change (3b)/(3a)			1.007	1.007

5. Adjustment to Obtain Expected Losses

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

Industry Group	(1) Current Ratio of Manual to Standard Premium	(2) Proposed Ratio of Manual to Standard Premium	(3) Off-balance Adjustment (1)/(2)
Manufacturing	1.090	1.094	0.996
Contracting	1.093	1.097	0.996
Office & Clerical	1.091	1.102	0.990
Goods & Services	1.006	1.013	0.993
Miscellaneous	1.076	1.084	0.993



RHODE ISLAND

APPENDIX B-I

6. Factors to Adjust for Proposed Industry Group Differentials

The pure premiums underlying the current loss costs 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	0.960	1.000	0.960
Contracting	0.991	0.999	0.990
Office & Clerical	1.000	1.000	1.000
Goods & Services	1.012	1.000	1.012
Miscellaneous	1.014	1.000	1.014

*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	0.895	0.880
Contracting	0.923	0.907
Office & Clerical	0.927	0.911
Goods & Services	0.941	0.925
Miscellaneous	0.942	0.926



RHODE ISLAND

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 Rhode Island conditions in four steps. First, statewide indicated pure premiums are determined for Rhode Island. Second, using Rhode Island payrolls as weights, corresponding statewide-average pure premiums are computed for each remaining state. Third, the ratios of Rhode Island 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 Rhode Island 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 loss costs.

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: \$33,649,773 for indemnity and \$7,806,221 for medical.

The partial credibilities formula is:

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

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:

$$[(\text{national cases}) / (\text{full credibility standard})]^{0.5} \text{ and } [(1 - \text{state credibility}) / 2]$$

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.



RHODE ISLAND

APPENDIX B-II

Adjustments to Obtain Loss Costs

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

1. Test Correction Factor

The payrolls are now extended by the loss costs presently in effect and by the indicated loss costs 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 loss costs 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	1.0064
Contracting	1.0198
Office & Clerical	1.0090
Goods & Services	0.9979
Miscellaneous	0.9964

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	1.094
Contracting	1.097
Office & Clerical	1.102
Goods & Services	1.013
Miscellaneous	1.084

3. Disease Loadings

The proposed manual loss costs shown in this filing include specific disease loadings for those classifications where they apply. The proposed specific disease loadings are shown on the footnotes page.



RHODE ISLAND

APPENDIX B-II

4. Swing Limits

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

Manufacturing	from 4% above to 26% below
Contracting	from 7% above to 23% below
Office & Clerical	from 8% above to 22% below
Goods & Services	from 9% above to 21% below
Miscellaneous	from 9% above to 21% below

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

Max. Deviation = Effect of the final change in loss cost level by industry group plus or minus 15% rounded to the nearest 1%.

The product of the swing limits and the present loss cost sets bounds for the proposed loss cost. If the calculated loss cost falls outside of the bounds, the closest bound is chosen as the proposed loss cost. When a code is limited, the underlying pure premiums are adjusted to reflect the limited loss cost. 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 loss cost 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 loss costs for other classifications are calculated in the same manner.

List of Classifications Limited by the Upper Swing

3169	3865	4110	4653	6217	6229	8602
8720	8856	9179				

List of Classifications Limited by the Lower Swing

0917	4720	5040	8279
------	------	------	------



RHODE ISLAND

APPENDIX B-II

Determination of Rating Values on Miscellaneous Values Page

A. Current and Proposed Miscellaneous Values are calculated based on formulas, dependent on the State Average Weekly Wage (SAWW).

	Current	Proposed	Change
1) State Average Weekly Wage (SAWW)	\$1,019.75 ¹	\$1,042.85 ²	2.3%
2) Basis of premium applicable in accordance with the Basic Manual footnote instructions for Code 7370 -- "Taxicab Co.":			
Employee operated vehicle ³	\$79,500	\$81,300	2.3%
Leased or rented vehicle ⁴	\$53,000	\$54,200	2.3%
3) Maximum Weekly Payroll applicable in accordance with Basic Manual Rule 2-E-1 -- "Executive Officers" ⁵ and Basic Manual footnote instructions for Code 9178 -- "Athletic Sports or Park: Non-Contact Sports," and Code 9179 -- "Athletic Sports or Park: Contact Sports" ⁶	\$4,100	\$4,200	2.4%
4) Minimum Weekly Payroll applicable in accordance with Basic Manual Rule 2-E-1 -- "Executive Officers" ⁷	\$1,000	\$1,050	5.0%

¹ State Average Weekly Wage. Effective October 1, 2019.
² State Average Weekly Wage. Effective October 1, 2020.
³ Underlying formula is: SAWW x 52 x 1.5 (Rounded to the nearest \$100), Item B-1422.
⁴ Underlying formula is: SAWW x 52 (Rounded to the nearest \$100), Item B-1422.
⁵ Underlying formula is: SAWW x 4 (Rounded to the nearest \$100), Item B-1420.
⁶ Underlying formula is: SAWW x 4 (Rounded to the nearest \$100), Item B-1422.
⁷ Underlying formula is: SAWW (Rounded to the nearest \$50), Item B-1420.

B. Loss Elimination Ratios (LERs) are defined in "Fundamentals of Individual Risk Rating" by Gillam and Snader, 1992. The latest methodology for determining Excess Loss Pure Premium Factors (ELPPFs) is described in "NCCI's 2014 Excess Loss Factors" by Corro and Tseng, 2019. The updated LER values reflect the experience, trend, and development consistent with the Excess Loss Pure Premium Factors (ELPPFs) filed in Item R-1418.



RHODE ISLAND

APPENDIX B-III

Derivation of Proposed Loss Cost - 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)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	680,882	1,141,354	316,637	1,225,047	355,685	1,382,130
01/01/14 - 12/31/14	0	0	0	455,395	1,027,545	423,313	852,992	237,451	1,161,652
01/01/15 - 12/31/15	0	0	29,535	299,930	973,123	471,546	898,859	708,127	1,172,328
01/01/16 - 12/31/16	0	500,000	0	238,098	574,393	405,033	1,098,993	270,277	1,090,585
01/01/17 - 12/31/17	0	0	0	62,528	347,701	393,445	927,549	217,864	1,068,974

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

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0.817	0.784	0.826	0.828	0.794	0.828	0.794	0.726	0.697
01/01/14 - 12/31/14	0.867	0.822	0.876	0.878	0.833	0.878	0.833	0.764	0.729
01/01/15 - 12/31/15	0.929	0.881	0.939	0.941	0.892	0.941	0.892	0.818	0.766
01/01/16 - 12/31/16	1.099	0.994	1.112	1.115	1.008	1.114	1.007	0.880	0.804
01/01/17 - 12/31/17	1.769	1.373	1.785	1.788	1.388	1.785	1.385	0.972	0.855

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	1.117

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%
------------------	-----



RHODE ISLAND

APPENDIX B-III

Derivation of Proposed Loss Cost - Code 8810

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

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	603,455	970,026	280,630	1,041,155	327,282	1,164,536
01/01/14 - 12/31/14	0	0	0	427,982	916,196	397,831	760,558	238,901	1,019,705
01/01/15 - 12/31/15	0	0	29,685	302,101	929,127	474,959	858,220	682,573	1,081,715
01/01/16 - 12/31/16	0	531,984	0	284,167	619,744	482,968	1,184,587	299,379	1,082,125
01/01/17 - 12/31/17	0	0	0	119,670	516,580	751,735	1,375,083	274,812	1,104,132

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

Policy Period	INDUSTRY GROUP: Office and Clerical
01/01/13 - 12/31/13	1.038
01/01/14 - 12/31/14	0.954
01/01/15 - 12/31/15	1.042
01/01/16 - 12/31/16	1.064
01/01/17 - 12/31/17	1.010

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

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/13 - 12/31/13	4,423,707,734	917,680	2,087,606	339,719	1,208,788	3,005,286	1,548,507	4,553,793
01/01/14 - 12/31/14	4,740,127,517	787,826	1,599,623	227,912	972,799	2,387,449	1,200,711	3,588,160
01/01/15 - 12/31/15	4,629,616,273	840,628	1,862,416	711,241	1,127,147	2,703,044	1,838,388	4,541,432
01/01/16 - 12/31/16	5,009,681,682	816,232	2,485,839	318,539	1,151,381	3,302,071	1,469,920	4,771,991
01/01/17 - 12/31/17	5,051,926,249	880,119	1,910,580	277,560	1,115,173	2,790,699	1,392,733	4,183,432
Total	23,855,059,455	4,242,485	9,946,064	1,874,971	5,575,288	14,188,549	7,450,259	21,638,808
INDICATED PURE PREMIUM						0.059	0.031	0.09

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 loss cost 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 Loss Cost	0.064	0.036	0.10
Conversion Factors (App. B-I, Section B)	0.927	0.911	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	0.059	0.033	0.09



RHODE ISLAND

APPENDIX B-III

Derivation of Proposed Loss Cost - Code 8810
 Industry Group - Office and Clerical, Hazard Group - C

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

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.059	0.031	0.09
2. Pure Premium Indicated by National Relativity	0.057	0.032	0.09
3. Pure Premium Present on Rate Level	0.059	0.033	0.09
4. State Credibilities	65%	100%	xxx
5. National Credibilities	17%	0%	xxx
6. Residual Credibilities = 100% - (4) - (5)	18%	0%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	0.059	0.031	0.09
8. Test Correction Factor	1.0090	1.0090	xxx
9. Underlying Pure Premiums = (7) x (8) *	0.059	0.031	0.09
10. Ratio of Manual to Standard Premium			1.102
11. Loss Cost = (9) x (10)			0.10
12. Loss Cost Within Swing Limits			0.10
Current Loss Cost x Swing Limits			
a) Lower bound = 0.11 x 0.780 = 0.09			
b) Upper bound = 0.11 x 1.080 = 0.11			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	0.059	0.031	0.09
14. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			0.10

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



RHODE ISLAND

APPENDIX B-IV

I. Determination and Distribution of Premium Level Change to “F” Classifications

The Workers Compensation Statistical Plan (WCSP) data is used to determine the overall “F” classifications (F-class) premium level change as well as the individual change by the various classifications. There are three sets of pure premiums for each classification: indicated, present on rate level, and national pure premiums. All sets of pure premiums are adjusted to the common proposed level that is explained further in this exhibit. These three sets of pure premiums are credibility weighted and the results, the derived by formula pure premiums, are adjusted for additional proposed components (Section II) to determine the indicated loss costs. The payrolls are extended by the loss costs presently in effect and by the indicated loss costs. The loss costs are limited to the swing limits based on 15% above and 15% below the current loss costs. This results in the indicated loss cost level change of -10.7%.

Section A – Calculation of F-Class Indicated Pure Premiums

The payroll and loss data reported are from the WCSP data by class code for the latest available five policy periods.

Section A-1 – Calculation of Primary Conversion Factors

1. Factors to Adjust to the Proposed Benefit Levels

The state and federal losses are adjusted to the proposed state and federal benefit levels, respectively.

STATE ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/13 - 12/13	0.998	1.009	1.011	1.011	1.041
1/14 - 12/14	0.998	1.009	1.011	1.011	1.036
1/15 - 12/15	0.998	1.009	1.011	1.011	1.035
1/16 - 12/16	0.996	1.007	1.010	1.009	1.031
1/17 - 12/17	0.992	1.001	1.003	1.001	1.022

FEDERAL ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/13 - 12/13	1.000	1.000	1.000	1.000	1.000
1/14 - 12/14	1.000	1.000	1.000	1.000	1.000
1/15 - 12/15	1.000	1.000	1.000	1.000	1.000
1/16 - 12/16	1.000	1.000	1.000	1.000	1.000
1/17 - 12/17	1.000	1.000	1.000	1.000	1.000

2. Factors to Adjust to the Proposed Trend Level

The following factors are applied to trend the losses in each policy year to the proposed rating year. The selected annual trends utilized were 0.970 and 0.955 for indemnity and medical, respectively.

Policy Period	Indemnity	Medical
1/13 - 12/13	0.769	0.672
1/14 - 12/14	0.793	0.704
1/15 - 12/15	0.817	0.737
1/16 - 12/16	0.842	0.772
1/17 - 12/17	0.868	0.808



RHODE ISLAND

APPENDIX B-IV

Section A-1 Calculation of Primary Conversion Factors (continued)

3. Limited Loss Development Factors

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

Policy Period	Indemnity		Medical	
	Likely-to-Develop	Not-Likely-to-Develop	Likely-to-Develop	Not-Likely-to-Develop
1/13 - 12/13	1.085	1.041	1.184	1.029
1/14 - 12/14	1.110	1.055	1.228	1.028
1/15 - 12/15	1.278	1.110	1.305	1.029
1/16 - 12/16	1.477	1.255	1.374	1.065
1/17 - 12/17	2.319	1.811	1.594	1.141

4. Primary Conversion Factors = (1) x (2) x (3)

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.

STATE ACT

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
1/13 - 12/13	0.833	0.799	0.842	0.844	0.809	0.844	0.809	0.828	0.720
1/14 - 12/14	0.878	0.835	0.888	0.890	0.846	0.890	0.846	0.896	0.750
1/15 - 12/15	1.042	0.905	1.054	1.056	0.917	1.056	0.917	0.995	0.785
1/16 - 12/16	1.239	1.052	1.252	1.256	1.067	1.255	1.066	1.094	0.848
1/17 - 12/17	1.997	1.559	2.015	2.019	1.577	2.015	1.574	1.316	0.942

FEDERAL ACT

Policy Period	Fatal (L)	Fatal (NL)	P.T.*	P.P. (L)	P.P. (NL)	T.T. (L)	T.T. (NL)	Medical (L)	Medical (NL)
1/13 - 12/13	0.834	0.801	0.834	0.834	0.801	0.834	0.801	0.796	0.691
1/14 - 12/14	0.880	0.837	0.880	0.880	0.837	0.880	0.837	0.865	0.724
1/15 - 12/15	1.044	0.907	1.044	1.044	0.907	1.044	0.907	0.962	0.758
1/16 - 12/16	1.244	1.057	1.244	1.244	1.057	1.244	1.057	1.061	0.822
1/17 - 12/17	2.013	1.572	2.013	2.013	1.572	2.013	1.572	1.288	0.922

* Permanent Total losses are always assigned to the Likely-to-Develop grouping.



RHODE ISLAND

APPENDIX B-IV

Section A-2 – Expected Excess Provision and Redistribution

To reduce distortions in individual class loss cost indications, individual claim amounts are subject to a maximum limit of \$500,000. Multiple claim accidents are limited to three times the individual claim loss limitation. 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. These factors are shown below.

Hazard Group	A	B	C	D	E	F	G
(1) Excess Ratios	0.067	0.090	0.105	0.129	0.158	0.188	0.226
(2) Excess Factors 1/(1-(1))	1.072	1.099	1.117	1.148	1.188	1.232	1.292

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.

Section A-3 – Calculation of Secondary Conversion Factors

The following factors are applied to include the proposed loss-based expenses. The state losses are adjusted to reflect the proposed loss-based expenses. The federal losses are adjusted to reflect the proposed USL&HW Special Fund Assessment and loss adjustment expense. The combined** factors are based on a combined indemnity and medical loss-weighted average of the above loss-based expenses by policy period.

Policy Period	State Act	Federal Act
1/13 - 12/13	1.233	1.233
1/14 - 12/14	1.233	1.293
1/15 - 12/15	1.233	1.257
1/16 - 12/16	1.233	1.290
1/17 - 12/17	1.233	1.326

** See Section B.3 for the indemnity and medical breakdown of the proposed loss-based expenses.



RHODE ISLAND

APPENDIX B-IV

Section B – Present on Rate Level

1. Benefits

The underlying pure premiums are adjusted by the weighted impact of the proposed state and federal benefit levels. The distribution of state and federal losses was used to determine the weighted effects.

State Weight (St%)	0.233
Federal Weight (Fed%)	0.767

	Indemnity	Medical	Total
(a) State Laws	1.000	1.008	1.002
(b) Federal Laws	1.000	1.000	1.000
(c) Weighted Laws = [(a)xSt%] + [(b)xFed%]	1.000	1.002	1.000

2. Trend

Since the trend in the current underlying pure premiums is adequate for the current rating year, additional trend is applied to bring the underlyings to the proposed rating year.

Indemnity	Medical
0.970	0.955



RHODE ISLAND

APPENDIX B-IV

Section B – Present on Rate Level (continued)

3. Loss-Based Expenses

The current underlying pure premiums are adjusted to reflect the change in the weighted effect of the loss-based expense provisions.

Proposed:

STATE ACT			
	Indemnity	Medical	Total
(a) Loss Adjustment Expense	1.233	1.233	1.233
(b) Loss-Based Assessment	1.000	1.000	1.000
(c) Total = (a) + (b) - 1	1.233	1.233	1.233

FEDERAL ACT			
	Indemnity	Medical	Total
(d) Loss Adjustment Expense	1.233	1.233	1.233
(e) Loss-Based Assessment	1.115	1.000	1.062
(f) Total = (d) + (e) - 1	1.348	1.233	1.295

	Indemnity	Medical	Total
(g) Weighted Proposed Expenses = [(c) x St%] + [(f) x Fed%]	1.321	1.233	1.281

Current:

STATE ACT			
	Indemnity	Medical	Total
(h) Loss Adjustment Expense	1.224	1.224	1.224
(i) Loss-Based Assessment	1.000	1.000	1.000
(j) Total = (h) + (i) - 1	1.224	1.224	1.224

FEDERAL ACT			
	Indemnity	Medical	Total
(k) Loss Adjustment Expense	1.224	1.224	1.224
(l) Loss-Based Assessment	1.120	1.000	1.068
(m) Total = (k) + (l) - 1	1.344	1.224	1.292

	Indemnity	Medical	Total
(n) Weighted Current Expenses = [(j) x St%] + [(m) x Fed%]	1.316	1.224	1.276

Change:

	Indemnity	Medical	Total
Weighted Expense Change in Loss-Based Expenses = [(g) / (n)]	1.004	1.007	1.004

4. Conversion Factors = (1) x (2) x (3)

The factors have been applied multiplicatively resulting in the following factors.

Indemnity	Medical
0.974	0.964



RHODE ISLAND

APPENDIX B-IV

Section C – National Pure Premiums

The latest three years of state and federal losses for states in which NCCI compiles workers compensation data are separately adjusted to the same level as the indicated and present on rate level pure premiums.

Class Code 9077

For Code 9077, the indicated, national and present on rate level pure premiums were calculated as described previously in Sections A, B and C but using the non-appropriated benefit changes and the federal loss-based expenses.

Section D – Derived by Formula Pure Premiums

The derived by formula pure premiums are calculated by a process similar to that of the industrial codes, which is described in Appendix B-I, Section D. To achieve full state credibility, a classification must have expected losses of at least: \$109,580,300 for indemnity and \$43,604,000 for medical.

II. Calculation of Proposed Loss Costs

The following items are combined with the derived by formula pure premiums to obtain the proposed loss cost:

A. Test Correction Factor **1.0000**

B. Ratio of Manual Premium to Earned Premium **1.072**
(selected based on Rhode Island off-balance analysis)

C. Swing Limits

The classifications which were adjusted by swing limits are as follows:

List of Classifications Limited by the Upper Swing:
None

List of Classifications Limited by the Lower Swing:
6824 6872 7309



RHODE ISLAND

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 8709

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:

STATE ACT - LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	28,262	0	0	0	19,847	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	985
01/01/17 - 12/31/17	0	0	0	0	0	0	0	0	0

FEDERAL ACT - LIMITED LOSSES (Workers Compensation Statistical Plan)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	0
01/01/17 - 12/31/17	0	0	0	0	0	0	0	0	0

STATE ACT - PRIMARY CONVERSION FACTORS (Appendix B-IV, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0.833	0.799	0.842	0.844	0.809	0.844	0.809	0.828	0.720
01/01/14 - 12/31/14	0.878	0.835	0.888	0.890	0.846	0.890	0.846	0.896	0.750
01/01/15 - 12/31/15	1.042	0.905	1.054	1.056	0.917	1.056	0.917	0.995	0.785
01/01/16 - 12/31/16	1.239	1.052	1.252	1.256	1.067	1.255	1.066	1.094	0.848
01/01/17 - 12/31/17	1.997	1.559	2.015	2.019	1.577	2.015	1.574	1.316	0.942

FEDERAL ACT - PRIMARY CONVERSION FACTORS (Appendix B-IV, Section A-1)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0.834	0.801	0.834	0.834	0.801	0.834	0.801	0.796	0.691
01/01/14 - 12/31/14	0.880	0.837	0.880	0.880	0.837	0.880	0.837	0.865	0.724
01/01/15 - 12/31/15	1.044	0.907	1.044	1.044	0.907	1.044	0.907	0.962	0.758
01/01/16 - 12/31/16	1.244	1.057	1.244	1.244	1.057	1.244	1.057	1.061	0.822
01/01/17 - 12/31/17	2.013	1.572	2.013	2.013	1.572	2.013	1.572	1.288	0.922



RHODE ISLAND

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 8709

EXPECTED EXCESS PROVISION AND REDISTRIBUTION (Appendix B-IV, 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: G
Excess Factor	1.292

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%
------------------	-----

STATE ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	28,032	0	0	0	24,017	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	1,079
01/01/17 - 12/31/17	0	0	0	0	0	0	0	0	0

FEDERAL ACT - EXPECTED UNLIM LOSSES (Lim Losses x Primary Conv Factors, then adjusted for the Excess Provision and Redistribution)

Policy Period	Fatal Likely	Fatal Not-Likely	Permanent Total	Permanent Partial Likely	Permanent Partial Not-Likely	Temporary Total Likely	Temporary Total Not-Likely	Medical Likely	Medical Not-Likely
01/01/13 - 12/31/13	0	0	0	0	0	0	0	0	0
01/01/14 - 12/31/14	0	0	0	0	0	0	0	0	0
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	0
01/01/16 - 12/31/16	0	0	0	0	0	0	0	0	0
01/01/17 - 12/31/17	0	0	0	0	0	0	0	0	0

STATE ACT - SECONDARY CONVERSION FACTORS (Appendix B-IV, Section A-3)

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/13 - 12/31/13	1.233
01/01/14 - 12/31/14	1.233
01/01/15 - 12/31/15	1.233
01/01/16 - 12/31/16	1.233
01/01/17 - 12/31/17	1.233

FEDERAL ACT - SECONDARY CONVERSION FACTORS (Appendix B-IV, Section A-3)

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/13 - 12/31/13	1.233
01/01/14 - 12/31/14	1.293
01/01/15 - 12/31/15	1.257
01/01/16 - 12/31/16	1.290
01/01/17 - 12/31/17	1.326



RHODE ISLAND

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 8709

TOTAL - PAYROLL, FINAL CONVERTED LOSSES

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/13 - 12/31/13	1,020,903	34,563	0	29,613	0	34,563	29,613	64,176
01/01/14 - 12/31/14	1,066,446	0	0	0	0	0	0	0
01/01/15 - 12/31/15	1,014,948	0	0	0	0	0	0	0
01/01/16 - 12/31/16	964,740	0	0	0	1,330	0	1,330	1,330
01/01/17 - 12/31/17	1,122,498	0	0	0	0	0	0	0
Total	5,189,535	34,563	0	29,613	1,330	34,563	30,943	65,506
INDICATED PURE PREMIUM						0.666	0.596	1.26

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 loss cost by the conversion factors. The derivation of the present on rate level pure premiums for the above-captioned classification follows:

	Indemnity	Medical	Total
Pure Premiums Underlying Current Loss Cost	1.999	1.781	3.78
Conversion Factors (Section B)	0.974	0.964	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	1.947	1.717	3.66



RHODE ISLAND

APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 8709

Industry Group - F-Class, Hazard Group - G

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

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Indicated Pure Premium	0.666	0.596	1.26
2. Pure Premium Indicated by National Relativity	0.239	0.562	0.80
3. Pure Premium Present on Rate Level	1.947	1.717	3.66
4. State Credibilities	3%	5%	xxx
5. National Credibilities	6%	6%	xxx
6. Residual Credibilities = 100% - (4) - (5)	91%	89%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	1.806	1.592	3.40
8. Test Correction Factor	1.0000	1.0000	xxx
9. Underlying Pure Premiums = (7) x (8) *	1.808	1.592	3.40
10. Ratio of Manual to Standard Premium			1.072
11. Loss Cost = (9) x (10)			3.64
12. Loss Cost Within Swing Limits			3.64
Current Loss Cost x Swing Limits			
a) Lower bound = 4.06 x 0.850 = 3.46			
b) Upper bound = 4.06 x 1.150 = 4.66			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	1.808	1.592	3.40
14. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			3.64

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



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix C – Memoranda for Laws and Assessments

Appendix C provides 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 in Appendix C is calculated as of the benefit effective date, which may differ from the overall impact on the filing as shown in the Executive Summary.

The following changes affecting Rhode Island benefit levels are detailed in this section of the filing:

- Change in the Rhode Island Medical Fee Schedule Effective January 1, 2021
- Longshore and Harbor Workers' Compensation Act Annual Assessment



RHODE ISLAND

Appendix C-I

Analysis of the Rhode Island Medical Fee Schedule Changes, Effective January 1, 2021

NCCI estimates that the changes to the medical fee schedule in Rhode Island, effective January 1, 2021, will result in an impact of +0.2% on overall workers compensation system costs.

Summary of Changes

The current Medical Fee Schedule (MFS) for professional services, anesthesia, ambulance, Healthcare Common Procedure Coding System (HCPCS), and dental services in Rhode Island became effective January 1, 2020. The changes to the MFS include revisions to the professional services, anesthesia, ambulance, HCPCS, and dental fee schedules.

Actuarial Analysis

NCCI's methodology to evaluate the impact of medical fee schedule changes includes three major steps:

1. Calculate the percentage change in maximum reimbursements
 - Compare the prior and revised maximum reimbursements by procedure code and determine the percentage change by procedure code.
 - Calculate the weighted-average percentage change in maximum reimbursements for the fee schedule using observed payments by procedure code as weights.
2. Determine the share of costs that are subject to the fee schedule
 - The share is based on a combination of fields, such as procedure code, provider type, and place of service, as reported on the NCCI Medical Data Call, to categorize payments that are subject to the fee schedule.
 - NCCI assumes no change for the share of costs not subject to the fee schedule.
3. Estimate the price level change as a result of the revised fee schedule
 - NCCI research by David Colón and Paul Hendrick, "The Impact of Fee Schedule Updates on Physician Payments" (2018), suggests that approximately 80% of the change in maximum reimbursements for physician fee schedules is realized on payments impacted by the change.
 - For A price realization factor of 80% is also assumed for the ambulance, dental, and HCPCS fee schedules.



RHODE ISLAND

Appendix C-I

Analysis of the Rhode Island Medical Fee Schedule Changes, Effective January 1, 2021

In this analysis, NCCI relies primarily on two data sources:

- Detailed medical data underlying the calculations in this analysis are based on NCCI's
- Medical Data Call for Rhode Island for Service Year 2018.
- The share of benefit costs attributed to medical benefits is based on NCCI's Financial Call data for Rhode Island from Policy Years 2015, 2016, and 2017 projected to the effective date of the benefit changes.

Summary of Impacts

The impacts from the fee schedule changes in Rhode Island, effective January 1, 2021, are summarized below.

Type of Service	(A) Impact on Type of Service	(B) Share of Medical Costs	(C) = (A) x (B) Impact on Medical Costs
Professional	+1.4%	56.9%	+0.8%
Other ¹	+0.6%	5.2%	Negligible ² increase
Combined Impact on Medical Costs (D) = Total of (C)			+0.8%
Medical Costs as a Share of Overall Costs (E)			31%
Combined Impact on Overall Costs (F) = (D) x (E)			+0.2%

Refer to the appendix for the weighted-average changes in MARs by professional services practice category, the share of costs subject to the fee schedule by type of service, and the weighted-average change in MAR by type of service.

¹ Other includes ambulance, HCPCS, and dental services.

² Negligible is defined in this document to be an impact smaller in magnitude than +/-0.1%.



RHODE ISLAND

Appendix C-I

Analysis of the Rhode Island Medical Fee Schedule Changes, Effective January 1, 2021

Appendix

Weighted-Average Percentage Change in MARs Prior to Price Realization by Physician Practice Category.

Professional Service Practice Category	Share of Professional Costs	Percentage Change in MARs
Anesthesia	4.0%	0.0%
Surgery	25.0%	+1.8%
Radiology	9.9%	+2.3%
Pathology & Laboratory	0.3%	+1.4%
Evaluation & Management	25.5%	+2.2%
Medicine	2.8%	+0.1%
State Specific Codes	25.4%	+2.3%
Payments with no specific MAR	7.1%	-
Total Professional Costs	100.0%	+1.8%

Share of Costs Subject to the Fee Schedule and Weighted-Average Percentage Change in MARs by Type of Service.

Type of Service	Share of Costs Subject to the Fee Schedule	Percentage Change in MARs	Impact after 80% Price Realization
Professional	92.9%	+1.8%	+1.4%
Other	68.2%	+0.7%	+0.6%



RHODE ISLAND

APPENDIX C-II

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

The F-class and Program II, Option II maritime class voluntary loss costs include the following provision for the federal assessment:

1.) Estimated Total Expense Needed for 2020 *	94,000,000
2.) Compensation Payments Reported (on indemnity only) in 2019 *	820,509,290
3.) Assessment Rate on Indemnity Losses (1) / (2)	11.5%

Breakdown of Losses Under the Longshore and Harbor Workers Act

4.) Indemnity Losses (Combination of 1st through 3rd reports) #	39,408,883
5.) Medical Losses (Combination of 1st through 3rd reports) #	33,568,865
6.) Total Losses (4) + (5)	72,977,748
7.) Assessment Rate on Total Losses { (3) x (4) } / (6)	6.2%

* Source: U.S. Department of Labor

Source: On-leveled and developed USL&HW losses - statistical plan data



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix D – Derivation of Experience Rating Values

1. Expected Loss Rate (ELR) factors

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 pure premiums underlying the proposed loss costs are adjusted to reflect the average loss levels of the proposed 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, remove the effects of items such as: loss development, expected losses above the State Accident Limit, a portion of medical-only losses, benefit changes, trend, loss-based expenses, experience, and offsets for assigned risk programs.

An adjustment is made to the ELR factors so that the resulting ELRs produce an expected experience rating off-balance that equals the targeted experience rating off-balance used in the calculation of the overall loss cost level change for the state (Appendix A–I).

The final ELR for each classification is calculated as follows:

$$\text{ELR} = \{(\text{Hazard Group indemnity ELR factor}) \times (\text{indemnity pure premium}) + (\text{Hazard Group medical ELR factor}) \times (\text{medical pure premium})\} \times \text{Manual/Standard Ratio}$$

2. Discount Ratio (D-Ratio) factors

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 primary losses to be used in the experience mod calculation.

D-ratio factors are calculated separately for indemnity and medical losses by hazard group and are based on the latest three years of Unit Statistical data. A comparison of the resulting D-ratio



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Appendix D – Derivation of Experience Rating Values

factors across hazard groups is done to ensure that the factors 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 calculated as follows:

$$\text{D-ratio} = \frac{\{(HG \text{ indemnity D-ratio factor}) \times (\text{indemnity pure premium}) + (HG \text{ medical D-ratio factor}) \times (\text{medical pure premium})\}}{\text{total pure premium}}$$

3. Additional experience rating values

Table of Weighting Values

The Weighting Value (W) determines how much actual excess and expected excess losses will enter the experience modification formula. The weighting value increases as expected losses increase with larger insureds receiving a larger weighting value. The weighting value for various levels of expected losses is provided in the Table of Weighting Values. The table is updated based on the state reference point, which is updated with Unit Statistical data each experience filing.

The state reference point is calculated as the state average cost per case for the experience rating period multiplied by 250. The state reference point serves to determine how much credibility to give to the losses of an individual risk and as an index of claim cost differences by state. The state per claim accident limitation shown on the Table of Weighting Values is 10% of the state reference point.

Table of Ballast Values

The Ballast Value (B) is a stabilizing value designed to limit the effect of any actual loss experience on the experience rating modification. It is added to both the numerator and denominator of the mod calculation and increases as expected losses increase. The ballast value for various levels of expected loss ranges is provided in the Table of Ballast Values. The table is updated based on the state reference point, which is updated with Unit Statistical data.

The G value used in the ballast formula is the state reference point / 250,000, rounded to the nearest 0.05.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Part 4 Additional Information

- Definitions
- NCCI Affiliate List
- Key Contacts



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

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 loss costs or 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 loss cost/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.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

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.



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

NCCI Affiliate List

ACADIA INSURANCE COMPANY
ACCIDENT FUND GENERAL INS CO
ACCIDENT FUND INS CO OF AMERICA
ACCIDENT FUND NATIONAL INS CO
ACCREDITED SURETY AND CASUALTY CO INC
ACE AMERICAN INSURANCE COMPANY
ACE FIRE UNDERWRITERS INSURANCE COMPANY
ACE PROPERTY & CASUALTY INSURANCE COMPANY
ACIG INS CO
AIG ASSURANCE COMPANY
AIG PROPERTY CASUALTY COMPANY
AIU INSURANCE CO (NATIONAL UNION FIRE OF PITTS PA)
ALLIED EASTERN IND CO
ALLIED INSURANCE COMPANY OF AMERICA
ALLMERICA FINANCIAL ALLIANCE INS CO
ALLMERICA FINANCIAL BENEFIT INS CO
AMERICAN ALTERNATIVE INSURANCE CORPORATION
AMERICAN AUTOMOBILE INSURANCE CO
AMERICAN CASUALTY COMPANY OF READING P A
AMERICAN COMPENSATION INS CO
AMERICAN FAMILY HOME INS CO
AMERICAN FIRE AND CASUALTY CO
AMERICAN GUARANTEE AND LIABILITY INS CO
AMERICAN HOME ASSUR CO-NATIONAL UNION FIRE OF PIT
AMERICAN INS CO
AMERICAN INTERSTATE INS CO
AMERICAN MODERN HOME INS CO
AMERICAN ZURICH INS CO
AMERISURE INS CO
AMERISURE MUTUAL INS CO
AMERISURE PARTNERS INS CO
AMGUARD INS CO
ARBELLA INDEMNITY INS CO
ARBELLA PROTECTION INS 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
ARROW MUTUAL LIABILITY INS CO
ASSOCIATED EMPLOYERS INS CO
ASSOCIATED INDEMNITY CORP
ASSOCIATED INDUSTRIES OF MASS MUTUAL INS CO
ATLANTIC SPECIALTY INS CO (INTACT)
BANKERS STANDARD INS CO
BEACON MUTUAL INS CO
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
BLACKBOARD INSURANCE COMPANY
BROTHERHOOD MUTUAL INS CO
CALIFORNIA INSURANCE COMPANY
CAROLINA CASUALTY INS CO
CERITY INSURANCE COMPANY
CHARTER OAK FIRE INS CO
CHEROKEE INS CO
CHUBB INDEMNITY INS CO
CHUBB NATIONAL INS CO
CHURCH MUTUAL INS CO, S.I.
CINCINNATI CASUALTY COMPANY
CINCINNATI INDEMNITY COMPANY
CINCINNATI INS CO
CITIZENS INS CO OF AMERICA
CLEAR SPRING PROPERTY AND CASUALTY COMPANY
COLONIAL AMERICAN CASUALTY & SURETY CO
COMMERCE AND INDUSTRY INS CO
CONTINENTAL CASUALTY CO
CONTINENTAL INDEMNITY CO
CONTINENTAL INS CO
CRESTBROOK INS CO
CRUM AND FORSTER INDEMNITY CO
DISCOVER PROPERTY & CASUALTY INS CO
DORCHESTER MUTUAL INSURANCE COMPANY
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 MUTUAL CASUALTY CO
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
EXCELSIOR INSURANCE COMPANY
EXECUTIVE RISK INDEMNITY INC
FALLS LAKE NATIONAL INSURANCE CO
FARMINGTON CASUALTY COMPANY
FEDERAL INSURANCE COMPANY
FEDERATED MUTUAL INS CO
FEDERATED RESERVE INSURANCE CO
FEDERATED SERVICE INS CO
FIDELITY & DEPOSIT COMPANY OF MARYLAND
FIDELITY & GUARANTY INS UNDERWRITERS
FIDELITY & GUARANTY INSURANCE CO
FIREMANS FUND INSURANCE CO
FIREMENS INS CO OF WASHINGTON DC
FIRST LIBERTY INS CORP
FIRSTCOMP INSURANCE CO
FITCHBURG MUTUAL INS CO
FLORISTS MUTUAL INSURANCE CO
FRANK WINSTON CRUM INSURANCE CO
GENERAL CASUALTY COMPANY OF WISCONSIN
GENERAL INS CO OF AMERICA
GENESIS INS CO
GRANITE STATE INSURANCE COMPANY
GRAPHIC ARTS MUTUAL INS CO
GRAY INSURANCE COMPANY



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

NCCI Affiliate List

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
GUIDEONE ELITE INS CO
GUIDEONE MUTUAL INS CO
GUIDEONE SPECIALTY MUTUAL INS CO
HANOVER AMERICAN INS CO
HANOVER INS CO
HARLEYSVILLE 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
HDI GLOBAL INSURANCE COMPANY
ILLINOIS NATIONAL INSURANCE COMPANY
IMPERIUM INSURANCE COMPANY
INDEMNITY INS CO OF N AMERICA (INA INS) (CT GEN)
INS CO OF GREATER NY
INS CO OF NORTH AMERICA
INS CO OF THE STATE PA
INS CO OF THE WEST
INTREPID INSURANCE COMPANY
KEY RISK INS CO
LACKAWANNA AMERICAN INS CO
LACKAWANNA CASUALTY CO
LACKAWANNA NATIONAL 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
MAIN STREET AMERICA ASSURANCE CO
MANUFACTURERS ALLIANCE INS CO
MARKEL INSURANCE CO
ME EMPLOYERS MUTUAL INS CO
MEMIC CASUALTY COMPANY
MEMIC INDEMNITY CO
MERCHANTS MUTUAL INS CO
MERCHANTS PREFERRED INSURANCE COMPANY
MERIDIAN SECURITY INSURANCE COMPANY
MID CENTURY INS CO
MIDDLESEX INS CO
MIDVALE INDEMNITY COMPANY
MIDWEST EMPLOYERS CASUALTY CO
MILBANK INSURANCE COMPANY
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 FIRE INS CO
NATIONWIDE MUTUAL INS CO
NATIONWIDE PROPERTY AND CASUALTY INS CO
NETHERLANDS INSURANCE COMPANY
NEW HAMPSHIRE EMPLOYERS INSURANCE COMPANY
NEW HAMPSHIRE INSURANCE COMPANY
NEW YORK MARINE AND GENERAL INSURANCE CO
NGM INSURANCE COMPANY
NORFOLK AND DEDHAM MUTUAL FIRE INS CO
NORGUARD INS CO
NORTH AMERICAN ELITE INSURANCE CO
NORTH AMERICAN SPECIALTY INS CO
NORTH POINTE INS CO
NORTH RIVER INS CO
NOVA CASUALTY COMPANY
OAK RIVER INSURANCE COMPANY
OBI AMERICA INSURANCE COMPANY
OBI NATIONAL INSURANCE COMPANY
OH CASUALTY INS CO
OHIO SECURITY INS CO
OLD REPUBLIC GENERAL INSURANCE CORPORATION
OLD REPUBLIC INS CO
PA MANUFACTURERS ASSN INS CO
PA MANUFACTURERS INDEMNITY CO
PA NATIONAL MUTUAL CAS INS CO
PACIFIC EMPLOYERS INS CO
PACIFIC INDEMNITY CO
PATRONS MUTUAL INS CO OF CT
PEERLESS INDEMNITY INS CO
PEERLESS INSURANCE COMPANY
PENN MILLERS INS CO
PENNSYLVANIA INSURANCE COMPANY
PETROLEUM CASUALTY CO
PHARMACISTS MUTUAL INS CO
PHENIX MUTUAL FIRE INS CO
PHOENIX INS CO
PLAZA INSURANCE CO
PRAETORIAN INSURANCE COMPANY
PREFERRED PROFESSIONAL INSURANCE COMPANY
PRIVILEGE UNDERWRITERS RECIPROCAL EXCHANGE
PROPERTY AND CASUALTY INS CO OF HARTFORD
PROTECTIVE INS CO
QBE INSURANCE CORPORATION
REDWOOD FIRE & CASUALTY INS CO
REGENT INSURANCE COMPANY



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

NCCI Affiliate List

REPUBLIC FRANKLIN INS CO
REPUBLIC INDEMNITY CO OF CA
REPUBLIC INDEMNITY COMPANY OF AMERICA
RIVERPORT INSURANCE COMPANY
RLI 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
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 INSURANCE A MUTUAL CO
SENTRY SELECT INSURANCE COMPANY
SERVICE AMERICAN INDEMNITY COMPANY
SFM MUTUAL INS CO
SIRIUS AMERICA INSURANCE COMPANY
SOMPO AMERICA FIRE & MARINE INSURANCE COMPANY
SOMPO AMERICA INSURANCE COMPANY
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 NATIONAL INSURANCE COMPANY
STONINGTON INS CO
STRATHMORE INS CO
SUNZ INSURANCE COMPANY
T H E 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
TRIUMPHE CASUALTY COMPANY
TRUCK INSURANCE EXCHANGE
TRUMBULL INS CO
TWIN CITY FIRE INS CO
UNION INS CO OF PROVIDENCE
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
WASHINGTON INTERNATIONAL INSURANCE COMPANY
WCF NATIONAL 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
WESTPORT INSURANCE CORPORATION
WORK FIRST CASUALTY CO
XL INS CO OF NY INC
XL INSURANCE AMERICA INC
XL SPECIALTY INS CO
ZENITH INS CO
ZURICH AMERICAN INS CO
ZURICH AMERICAN INS CO OF IL



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2021

Key Contacts

Justin Moulton, CPCU, WCP
State Relations Executive
Regulatory Division
National Council on Compensation Insurance, Inc. (NCCI)
901 Peninsula Corporate Circle
Boca Raton, Florida 33487-1362
Phone (860) 969-7903 Fax (561) 893-5762

Brett Foster, FCAS, MAAA
Director and Actuary
Actuarial and Economic Services Division
National Council on Compensation Insurance, Inc. (NCCI)
901 Peninsula Corporate Circle
Boca Raton, Florida 33487-1362
Phone (561) 893-3121 Fax (561) 893-5828

All NCCI employees can be contacted via e-mail using the following format:

First Name_Last Name@NCCI.com