



Rhode Island

Advisory Loss Costs and
Rating Values Filing

Proposed Effective August 1, 2019



**National Council on
Compensation Insurance**

Justin Moulton, CPCU
State Relations Executive
Regulatory Division

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November 20, 2018

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: Paula Pallozzi, SPIR, Associate Director

Re: **Rhode Island Advisory Loss Costs and Rating Values Filing Proposed to Be Effective August 1, 2019**

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, 2019, reflect a decrease of 7.7% from the current advisory loss costs which became effective August 1, 2018.

Please note the following in connection with this filing:

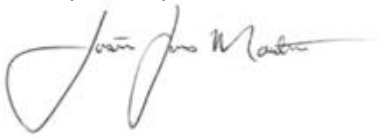
1. As a result of Item B-1435, effective August 1, 2018:
 - a. Class Codes 2386, 2501, and 2534 are combined to reflect the final year of a two-year transition program, and Class Codes 2386 and 2534 are discontinued.
2. As a result of Item B-1436, effective August 1, 2018:
 - a. Class Codes 8825 and 8826 are combined to reflect the first year of a two-year transition program. In the second year of the transition, Class Code 8825 will be discontinued.
3. As a result of Item R-1414, effective January 1, 2019, new parameters are shown on the Retrospective Rating Plan Manual pages.
4. As a result of Item R-1415, the retrospective rating plan parameters were 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 Nadege Bernard-Ahrendts at (561) 893-3082.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin Moulton". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Justin Moulton, CPCU
State Relations Executive



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Actuarial Certification

I, Nadege Bernard-Ahrendts, am a Director and Senior 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 that reads "Nadege Bernard-Ahrendts".

Nadege Bernard-Ahrendts, FCAS, MAAA
Director & Senior Actuary
Actuarial and Economic Services



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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, 2019. 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.).

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 17, 2018 were not considered for inclusion in the analysis.

Loss cost level changes at the classification code level are based on Unit Statistical Data, which is the audited exposure, premium and loss information reported to NCCI on a policy level. In this filing, Unit Statistical Data submissions received after September 27, 2018 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 18, 2018. 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.



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Disclosures

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.

All carriers writing at least one-tenth of one percent of the Rhode Island workers compensation written premium volume and whose data is not included in the experience period are listed below:

- Policy Year 2014 – Public Service Insurance Company (0.3% of state premium)
- Policy Year 2015 – Public Service Insurance Company (0.3% of state premium)
- Policy Year 2016 – Public Service Insurance Company (0.1% of state premium)

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

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.



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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 -7.7% to become effective August 1, 2019.

<u>Key Components</u>	<u>Percentage Change</u>
Impact of change in Experience and Development	- 6.1%
Impact of change in Trend	- 4.6%
Impact of change in Benefits	+ 1.8%
<u>Impact of change in Loss-based Expenses</u>	<u>+ 1.2%</u>
Proposed Change in Overall Voluntary Loss Cost Level	- 7.7%

Key observations:

- The filing is based on premium and loss experience for policy years 2014, 2015, and 2016, all three policy years show improving expected experience and loss development
- Rhode Island's lost-time claim frequency has generally declined since 2002
- Adjusted indemnity and medical average cost per case figures are showing improvements in the more recent years

Proposed Changes in Voluntary Loss Cost Level by Industry Group:

<u>Industry Group</u>	<u>Average Change</u>	<u>Maximum Increase</u>	<u>Maximum Decrease</u>
Manufacturing	- 9.3%	+ 6.0%	- 24.0%
Contracting	- 7.9%	+ 7.0%	- 23.0%
Office and Clerical	- 9.3%	+ 6.0%	- 24.0%
Goods and Services	- 7.1%	+ 8.0%	- 22.0%
Miscellaneous	- 6.7%	+ 8.0%	- 22.0%

Additional Notable Change(s) Proposed in the Filing:

- Revised credibility parameters for loss cost ratemaking by classification code
- Update to retrospective rating values



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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.



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Summary of Selections

The following is a summary of selections underlying the voluntary loss costs proposed to be effective August 1, 2019, along with the selections underlying the currently-approved loss costs.

Voluntary Loss Costs	Currently Approved August 1, 2018	Proposed Effective August 1, 2019
Experience Period	Policy Years 2013–2015	Policy Years 2014–2016
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	0.990	0.980
Medical Annual Loss Ratio Trend Factor	0.980	0.970
Loss Adjustment Expense Provision	19.1%	20.5%
Base Threshold for Limiting Losses	\$3,546,318	\$3,514,479
Large Loss Excess Ratio	2.4%	2.2%
Classification Swing Limits (applied by Industry Group)	+/-15%	+/-15%



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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 2014, 2015, and 2016 evaluated as of December 31, 2017. The most recently available full policy year is 2016 since the last policy had an effective date of December 31, 2016 and did not expire until December 31, 2017. 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

Trend

This filing relies primarily on the experience from policy years 2014, 2015, and 2016. However, the proposed loss costs are intended for use with policies with effective dates starting on August 1, 2019. 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.

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).

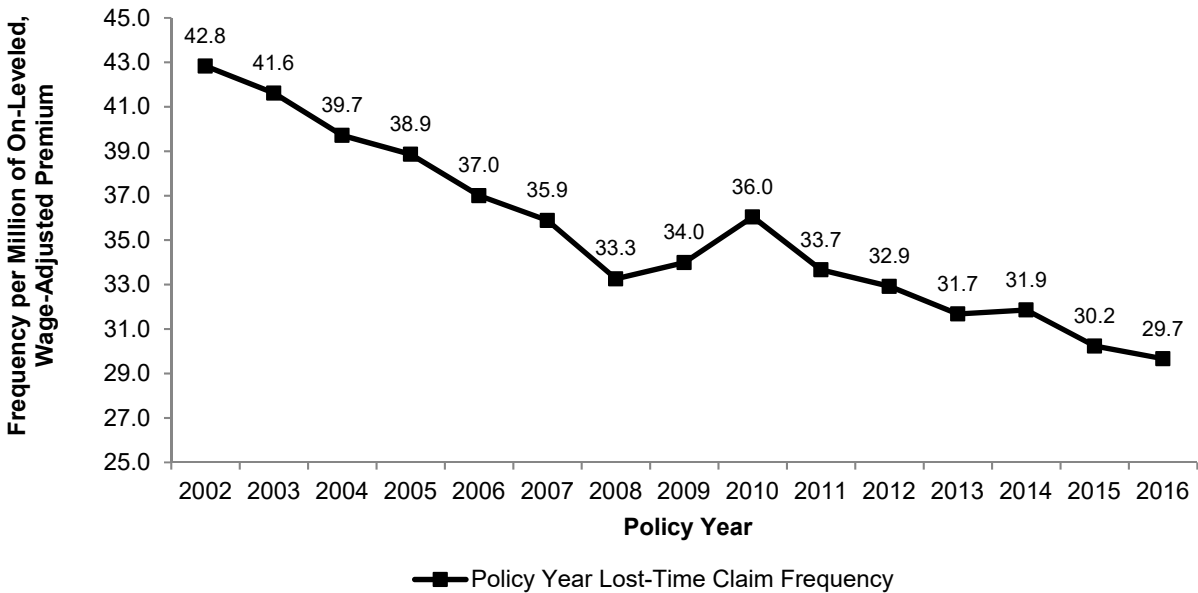


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Selections Underlying the Proposed Changes

Rhode Island Claim Frequency



Rhode Island's lost-time claim frequency has generally declined since 2002, as shown immediately above. The data in this chart reflects premiums at today's loss cost and wage levels.

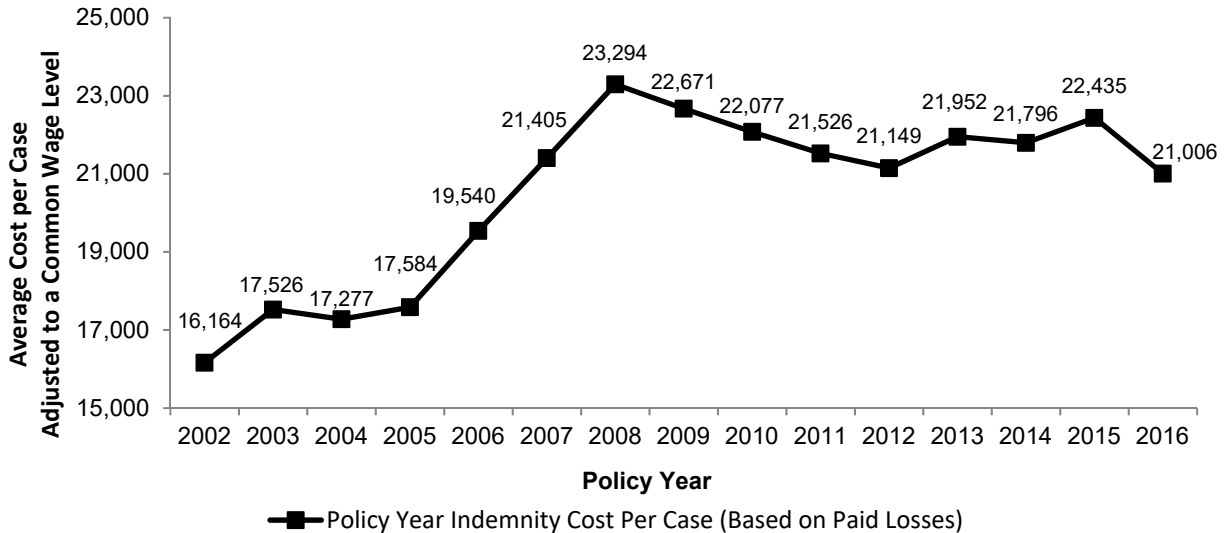


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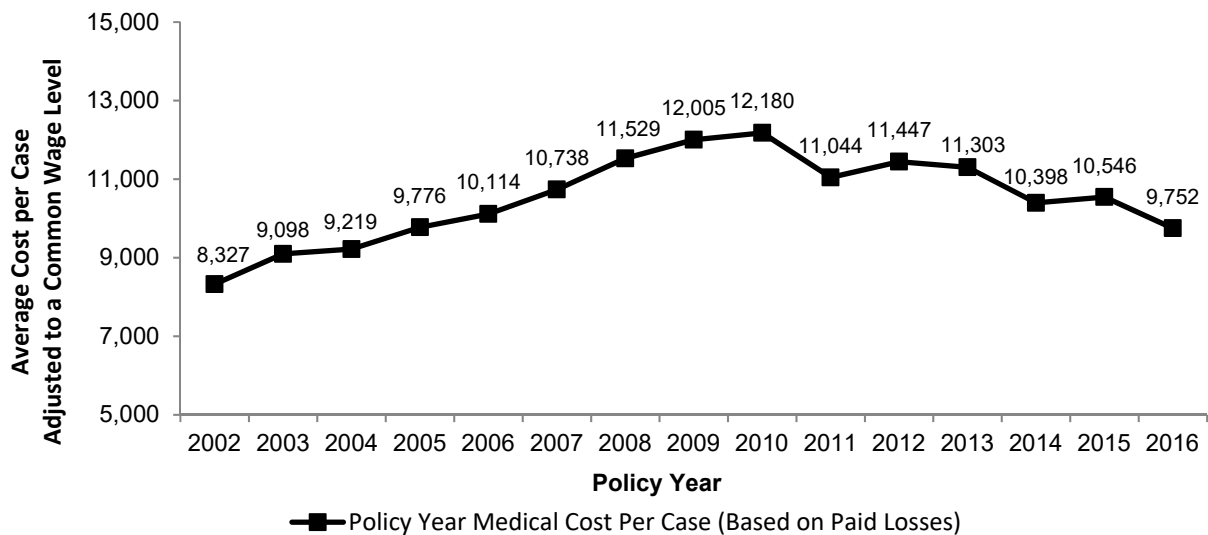
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Selections Underlying the Proposed Changes

Rhode Island Indemnity Cost Per Case Adjusted to a Common Wage Level



Rhode Island Medical Cost Per Case Adjusted to a Common Wage Level



As these two charts illustrate, Rhode Island's average indemnity cost per case have exhibited some volatility since 2008, while medical cost per case has generally declined since 2010.



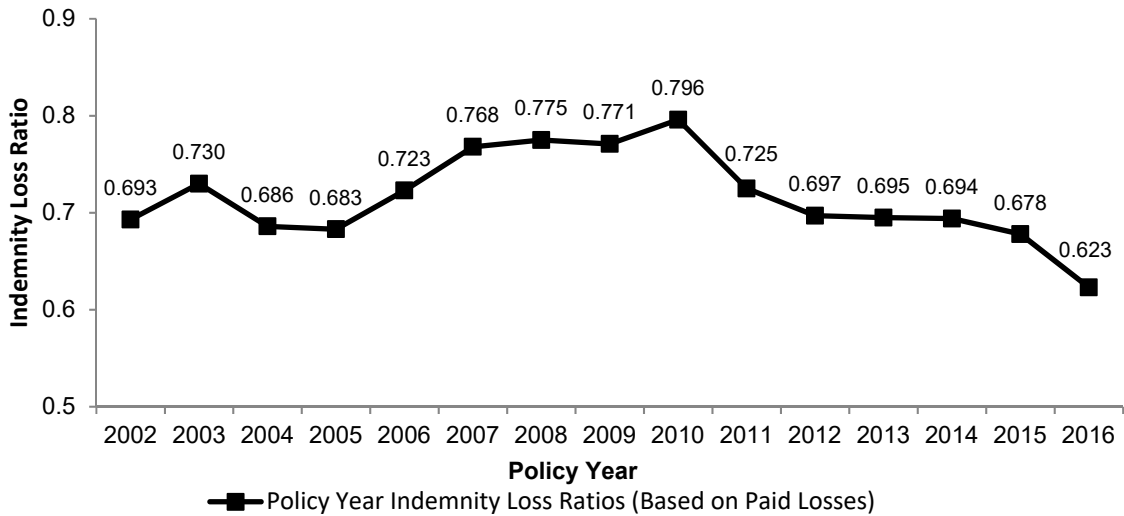
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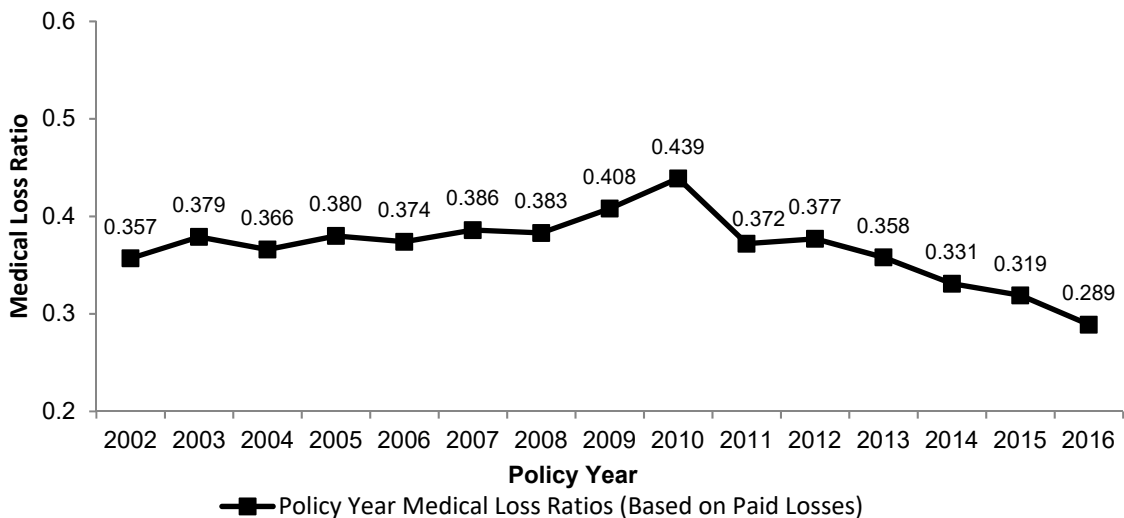
Selections Underlying the Proposed Changes

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



Rhode Island Medical Loss Ratio History



Based on our analysis this year, we are proposing a decrease in the annual indemnity loss ratio trend of -1.0% to -2.0% and annual medical loss ratio trend from -2.0% to -3.0% .



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Selections Underlying the Proposed Changes

Benefit Changes

The federal Tax Cuts and Jobs Act will change individual income tax rates beginning in tax year 2018, thereby impacting net pay and the benefits paid to injured workers in Rhode Island. NCCI estimates this to change indemnity costs by +2.1% and overall system costs by +1.4%. Please see Appendix C-I for additional detail.

Workers injured in Rhode Island receive wage replacement (indemnity) benefits as a percentage of their pre-injury spendable weekly wage. These benefits are subject to a weekly minimum and maximum. Each Fall, the minimum and maximum weekly benefits are updated based on Rhode Island's most recent state average weekly wage. The latest increase in Rhode Island's state average weekly wage is estimated to change indemnity costs by +0.1% and overall system costs by +0.1%. Please see Appendix C-II for additional detail.

NCCI has included the impact of the most recent Medical Fee Schedule updates effective October 1, 2018. These changes are estimated to increase medical costs by +0.8% and overall workers compensation system costs by +0.2%. Please see Appendix C-III 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 19.1% to 20.5% of losses. Please see Exhibit II for additional detail.



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Additional Proposed Changes

Classification Ratemaking – Revised Credibility Parameters

This filing proposes an update to the parameters of the credibility formulas used in the calculation of derived by formula pure premiums (see Appendix B-I), which are used in the calculation of loss costs. The proposed changes to the credibility formulas are expected to significantly increase the stability of classification loss costs—particularly for those classifications with low volume of observed experience—while also seeking to improve the level of predictive accuracy.

To achieve enhanced year-to-year stability, NCCI is proposing to revise the credibility parameters according to the following tables:

Indicated (State) Pure Premium Credibility Formula

	<u>Previous Filing</u>	<u>Proposed Filing</u>
Basis for credibility	Expected losses	Expected losses
Exponent	0.40	0.50
Full credibility standard:		
- Indemnity	850 x average indemnity severity for lost-time claims	1,700 x average indemnity severity for lost-time claims
- Medical	400 x average medical severity for lost-time claims	800 x average medical severity for lost-time claims

National Pure Premium Credibility Formula

	<u>Previous Filing</u>	<u>Proposed Filing</u>
Basis for credibility	Actual lost-time claims	Actual lost-time claims
Exponent	0.40	0.50
Full credibility standard:		
- Indemnity	1,150 lost-time claims	2,300 lost-time claims
- Medical	1,000 lost-time claims	2,000 lost-time claims
Limitation of National Pure Premium Credibility	0.5 x (1 – state credibility)	0.5 x (1 – state credibility)

Additionally, state special classifications that exist in a minimal number of states will no longer include a national component in the ratemaking process.

Present On Rate Level Pure Premium Credibility Formula

There is no change to the credibility formula for the present on rate level pure premium, which will continue to receive the residual credibility (100% minus the sum of the state and national credibilities).



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Additional Proposed Changes

Background

As explained in Appendix B-I of this filing, the classification loss costs are derived using a three-way credibility weighting of the indicated, present on rate level, and national pure premiums. The formulas used to produce the credibility weights for each classification were derived in the early 1990s using a method based on limited fluctuation credibility theory. At its core, limited fluctuation credibility theory seeks to limit the extent to which random fluctuations in classification experience can influence final loss costs.

When the Likely/Not-Likely class ratemaking methodology was first implemented, NCCI incorporated several major revisions to its classification ratemaking methodology designed to improve the predictive accuracy and year-to-year stability of classification loss costs. Among these revisions were updates to the parameters of the credibility formulas which had previously remained unchanged since the early 1990s. When developing the revised credibility parameters, consideration was given to the following:

- An update to the limited fluctuation approach to credibility with the most recently available data indicated that reductions to classification credibilities may be appropriate.
- While newly-implemented updates to NCCI's classification ratemaking methodology (e.g., incorporating likely and not-likely loss development groupings and including an expected excess provision after limiting large claims to \$500,000) were expected to result in significantly enhanced accuracy and stability, they suggested increases to classification credibilities may be appropriate.

At that time, to balance these concerns, NCCI revised the credibility parameters without introducing significant changes to the actual classification credibility percentages used. It was NCCI's intent to further recalibrate the credibility parameters when a sufficient volume of pure premium data based on the revised classification methodology became available to achieve increased year-to-year stability of loss costs.

NCCI has recently concluded a multi-year analysis of its class ratemaking methodologies, which focused on the stability of small classes. When conducting this research, NCCI re-estimated historical classification derived by formula pure premiums using alternatives to the current methodology. This research resulted in NCCI investigating updates to the parameters of the credibility formulas used in the calculation of derived by formula pure premiums.



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Additional Proposed Changes

Methodology

During the multi-year analysis of its class ratemaking methodologies, NCCI refreshed the limited fluctuation approach to credibility using the latest pure premium data from all jurisdictions for which the full history of likely/not-likely filings was available.

The first task was to estimate the exponent of the credibility formula indicated by the most recent pure premium data. To accomplish this task, sample coefficients of variation were derived and a linear model was fit. The exponent of the credibility formula indicated by the most recent pure premium data is the (negative of the) fitted slope of the linear model.

The second task was to estimate the full credibility standard. Limited fluctuation credibility theory suggests that as the size of a class increases, the random fluctuation of the class pure premium decreases. However, some minimal level of random fluctuation is likely to persist for even the largest classes. Based on the linear model, the full credibility standard was determined after recognizing this minimum level of random fluctuation along with the targeted level of pure premium fluctuation in the losses with which credibility is to be calibrated, and the probability that this level of fluctuation will be achieved.

In addition to relying on limited fluctuation credibility theory to calibrate the parameters of the credibility formulas, several performance testing metrics were utilized—which focused on the stability or accuracy of the alternative classification pure premiums. These metrics were used to distinguish between the various alternatives and to guide the selection of updated parameters to the credibility formulas.

Ultimately, selections were made for both the exponent of the credibility formula and the full credibility standard. These selections required judgment and considered both the linear model and the performance test results. The final credibility parameters being proposed accomplished the goal of stabilizing the small classes and were shown to achieve excellent performance results based on the tests performed.

Impact

These class ratemaking methodology changes will impact individual class loss costs, but will not impact the state's overall average loss cost level indication—since the individual classification code changes must balance to the overall average statewide change. These changes are expected to result in increased class equity and stability. Any specific class code impacts will be subject to NCCI's current class ratemaking procedures (swing limits, credibility-weighted average of indicated, national, and present-on-rate level, etc.).



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Additional Proposed Changes

Updates to Retrospective Rating

Changes to Retrospective Rating Plan Manual Pages

Due to the replacement of Table M within Item R-1414 effective January 1, 2019, State Hazard Group Differentials and the Table of Expected Loss Ranges are no longer needed to calculate retrospective rating premium. These values have been removed from the Retrospective Rating Plan Manual pages.

If a carrier has elected to calculate net aggregate loss factors using the new Table of Aggregate Loss Factors, the expected number of claims for the policy must be determined. To aid in deriving the expected number of claims, the average cost per case values that underlie the ELPPFs and ELAEPFs are now included on the Retrospective Rating Plan Manual pages. An update will be made to last year's pages to include these values for the calculation of retrospective premium for policies issued after January 1, 2019 but prior to August 1, 2019

Update to Retrospective Pure Premium Development Factor Methodology

This filing proposes an enhancement to NCCI's methodology of calculating Retrospective Pure Premium Development Factors which are shown on the Retrospective Rating Plan Manual pages. In retrospective rating plans, retrospective development premium is an optional element that stabilizes premium adjustments by anticipating that losses typically develop upwards over time.

To calculate Retrospective Pure Premium Development Factors at each adjustment, total loss development factors are needed by report. Under NCCI's current methodology, total loss development factors are estimated by weighting together injury type-specific development factors by their losses from the corresponding policy period. Losses by injury type, particularly permanent total (PT) losses, may be volatile from one policy period to the next. To reduce the potential for large fluctuations year to year, NCCI proposes to use information from five policy periods to weight the injury type-specific development factors. This enhancement increases the stability of the total loss development factors and consequently the Retrospective Pure Premium Development Factors.



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Part 2 Proposed Values

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

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

- Advisory loss costs, expected loss rates, and d-ratios by class code, along with associated footnotes

- Advisory miscellaneous values, such as:
 - Advisory loss elimination ratios
 - Maximum weekly payroll applicable for select class codes
 - Premium determination for Executive Officers and Athletic Sports or Park
 - Terrorism advisory loss cost
 - United States Longshore and Harbor Workers' Compensation Coverage Percentage

ADVISORY LOSS COSTS - NOT RATES

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

Effective August 1, 2019

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
0005	3.29	2.61	0.37	2016	3.29	2.64	0.38	2709	11.00	7.95	0.32
0008	2.77	2.11	0.35	2021	2.65	2.02	0.35	2710	8.05	5.59	0.28
0016	6.15	4.49	0.32	2039	2.71	2.19	0.38	2714	5.03	4.08	0.38
0034	4.51	3.56	0.37	2041	2.83	2.29	0.38	2731	3.86	2.81	0.32
0035	2.61	2.13	0.38	2065	2.42	1.91	0.37	2735	7.26	5.95	0.38
0036	4.85	3.82	0.37	2070	5.54	4.37	0.37	2759	7.43	6.02	0.38
0037	4.75	3.62	0.35	2081	3.03	2.40	0.37	2790	1.41	1.15	0.38
0042	4.73	3.61	0.35	2089	3.43	2.71	0.37	2797	3.88	3.08	0.37
0050	4.12	3.26	0.37	2095	5.51	4.35	0.37	2799	3.87	2.95	0.35
0059D	0.22	0.07	0.32	2105	3.45	2.81	0.38	2802	4.34	3.31	0.35
0065D	0.05	0.02	0.32	2110	2.25	1.82	0.38	2835	2.66	2.24	0.50
0066D	0.05	0.02	0.32	2111	3.47	2.82	0.38	2836	2.61	2.21	0.50
0067D	0.05	0.02	0.32	2112	3.76	3.06	0.38	2841	4.67	3.81	0.38
0079	3.30	2.42	0.32	2114	2.72	2.22	0.38	2881	2.65	2.23	0.50
0083	5.00	3.95	0.37	2121	1.44	1.15	0.37	2883	3.17	2.51	0.37
0106	13.79	9.61	0.28	2130	2.16	1.70	0.37	2913	-	2.51	0.37
0113	4.16	3.29	0.37	2131	2.56	2.01	0.37	2915	3.45	2.62	0.35
0170	3.30	2.62	0.37	2143	2.38	1.93	0.38	2916	3.74	2.59	0.28
0251	4.15	3.29	0.37	2157	5.58	4.38	0.37	2923	2.30	1.86	0.38
0400	-	2.14	0.35	2172	2.01	1.51	0.35	2942	-	1.33	0.50
0401	11.70	8.12	0.28	2174	2.83	2.30	0.38	2960	6.55	5.24	0.37
0771N	0.53	-	-	2211	6.08	4.41	0.32	3004	1.82	1.32	0.32
0908P	139.00	110.46	0.37	2220	1.68	1.33	0.37	3018	3.11	2.26	0.32
0913P	483.00	379.74	0.37	2260	-	4.41	0.32	3022	3.45	2.78	0.38
0917	6.21	5.05	0.38	2286	1.73	1.40	0.38	3027	3.32	2.41	0.32
0918X	1.41	1.11	0.37	2288	3.35	2.74	0.38	3028	3.11	2.46	0.37
1005	6.47	4.11	0.27	2300	-	1.57	0.37	3030	7.13	5.18	0.32
1164D	5.02	3.19	0.27	2302	1.99	1.58	0.37	3040	6.60	4.80	0.32
1165D	3.10	2.12	0.28	2305	2.44	1.86	0.35	3041	4.16	3.30	0.37
1320	1.81	1.25	0.28	2361	2.02	1.61	0.37	3042	4.26	3.24	0.35
1322	6.66	4.58	0.28	2362	2.02	1.61	0.37	3064	4.63	3.67	0.37
1430	5.40	3.93	0.32	2380	2.14	1.69	0.37	3069	-	3.09	0.37
1438	4.63	3.21	0.28	2386	-	1.57	0.37	3076	3.92	3.09	0.37
1452	2.67	1.92	0.32	2388	2.15	1.76	0.38	3081D	6.30	4.54	0.32
1463	11.00	7.61	0.28	2402	3.27	2.39	0.32	3082D	4.35	3.13	0.32
1472	3.14	2.18	0.28	2413	2.92	2.32	0.37	3085D	4.27	3.06	0.32
1624D	2.85	1.95	0.28	2416	1.74	1.37	0.37	3110	3.91	3.08	0.37
1642	2.78	2.00	0.32	2417	2.44	1.91	0.37	3111	2.38	1.88	0.37
1654	6.53	4.71	0.32	2501	1.97	1.57	0.37	3113	1.76	1.39	0.37
1655	-	2.00	0.32	2503	1.79	1.44	0.38	3114	2.57	2.03	0.37
1699	3.58	2.59	0.32	2534	-	1.57	0.37	3118	2.17	1.75	0.38
1701	3.02	2.19	0.32	2570	3.73	3.02	0.38	3119	0.68	0.58	0.50
1710D	3.78	2.70	0.32	2585	4.26	3.45	0.38	3122	2.04	1.66	0.38
1741	-	2.19	0.32	2586	2.64	2.08	0.37	3126	1.71	1.36	0.37
1747	2.57	1.85	0.32	2587	2.93	2.35	0.38	3131	1.84	1.46	0.37
1748	4.69	3.42	0.32	2589	1.99	1.57	0.37	3132	2.92	2.32	0.37
1803D	7.29	4.88	0.28	2600	4.49	3.62	0.38	3145	1.93	1.53	0.37
1852	-	1.54	0.27	2623	7.39	5.64	0.35	3146	2.53	2.01	0.37
1853	-	2.19	0.32	2651	1.66	1.35	0.38	3169	2.47	1.96	0.37
1860	-	2.05	0.37	2660	2.19	1.78	0.38	3175	-	1.96	0.37
1924	2.76	2.22	0.38	2670	1.90	1.61	0.50	3179	2.16	1.75	0.38
1925	3.75	2.87	0.35	2683	1.75	1.44	0.38	3180	3.12	2.53	0.38
2002	4.82	3.95	0.38	2688	2.56	2.07	0.38	3188	2.39	1.94	0.38
2003	4.58	3.62	0.37	2701	13.35	9.61	0.32	3220	1.97	1.56	0.37
2014	5.22	3.77	0.32	2702	30.13	19.47	0.27	3223	-	2.53	0.38

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ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

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

Effective August 1, 2019

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
3224	2.95	2.37	0.38	4000	4.34	2.98	0.28	4583	4.88	3.37	0.28
3227	2.84	2.30	0.38	4021	4.77	3.47	0.32	4611	0.92	0.75	0.38
3240	2.83	2.30	0.38	4024D	3.18	2.29	0.32	4635	2.68	1.72	0.27
3241	3.21	2.54	0.37	4034	5.91	4.27	0.32	4653	2.06	1.68	0.38
3255	2.37	2.00	0.50	4036	2.24	1.62	0.32	4665	6.80	4.93	0.32
3257	3.16	2.50	0.37	4038	2.64	2.21	0.50	4670	6.93	5.05	0.32
3270	2.41	1.91	0.37	4053	-	1.95	0.37	4683	3.93	3.07	0.37
3300	4.08	3.26	0.37	4061	-	1.95	0.37	4686	2.78	2.01	0.32
3303	2.68	2.18	0.38	4062	2.47	1.95	0.37	4692	0.93	0.74	0.38
3307	4.43	3.50	0.37	4101	2.69	2.05	0.35	4693	1.03	0.81	0.37
3315	3.75	3.03	0.38	4109	0.65	0.53	0.38	4703	2.17	1.70	0.37
3334	2.85	2.23	0.37	4110	0.87	0.69	0.37	4717	1.89	1.59	0.50
3336	5.66	4.10	0.32	4111	1.46	1.19	0.38	4720	4.43	3.52	0.37
3365	4.70	3.36	0.32	4113	-	1.19	0.38	4740	1.48	1.07	0.32
3372	2.90	2.21	0.35	4114	2.40	1.88	0.37	4741	3.29	2.59	0.37
3373	4.43	3.49	0.37	4130	3.52	2.78	0.37	4751	1.74	1.27	0.32
3383X	1.68	1.36	0.38	4131	4.62	3.77	0.38	4771N	2.99	1.94	0.27
3385	0.80	0.65	0.38	4133	1.99	1.62	0.38	4777	3.96	2.56	0.27
3400	3.07	2.34	0.35	4149	0.94	0.79	0.50	4825	0.74	0.53	0.32
3507	3.71	2.92	0.37	4206	3.16	2.48	0.37	4828	1.50	1.14	0.35
3515	2.12	1.69	0.37	4207	2.04	1.47	0.32	4829	1.22	0.84	0.28
3516	-	1.69	0.37	4239	2.35	1.70	0.32	4902	3.22	2.61	0.38
3548	2.24	1.78	0.37	4240	2.92	2.37	0.38	4923	1.52	1.19	0.37
3559	2.30	1.83	0.37	4243	2.25	1.77	0.37	5020	4.95	3.57	0.32
3561	-	0.84	0.38	4244	3.90	3.09	0.37	5022	5.05	3.47	0.28
3574	1.04	0.84	0.38	4250	1.80	1.43	0.37	5037	13.82	8.83	0.27
3581	1.07	0.87	0.38	4251	2.63	2.07	0.37	5040	12.09	7.72	0.27
3612	2.71	2.06	0.35	4263	2.51	1.98	0.37	5057	4.80	3.07	0.27
3620	2.95	2.13	0.32	4273	2.60	2.06	0.37	5059	14.19	9.16	0.27
3629	1.50	1.22	0.38	4279	2.59	2.05	0.37	5069	-	9.16	0.27
3632	2.16	1.64	0.35	4282	-	2.05	0.37	5102	4.76	3.29	0.28
3634	1.94	1.57	0.38	4283	1.79	1.42	0.37	5146	6.48	4.68	0.32
3635	2.15	1.70	0.37	4299	1.90	1.54	0.38	5160	2.13	1.46	0.28
3638	1.44	1.17	0.38	4301	-	2.05	0.37	5183	3.08	2.23	0.32
3642	1.30	1.03	0.37	4304	3.92	2.99	0.35	5188	2.32	1.67	0.32
3643	1.91	1.50	0.37	4307	1.81	1.53	0.50	5190	2.34	1.70	0.32
3647	2.51	1.91	0.35	4351	0.94	0.75	0.37	5191	0.99	0.78	0.37
3648	1.48	1.20	0.38	4352	1.38	1.12	0.38	5192	3.29	2.59	0.37
3681	1.04	0.85	0.38	4360	1.14	0.91	0.38	5213	5.54	3.83	0.28
3685	1.19	0.97	0.38	4361	0.94	0.76	0.38	5215	5.78	4.41	0.35
3719	1.10	0.70	0.27	4410	3.18	2.51	0.37	5221	5.52	3.99	0.32
3724	3.16	2.17	0.28	4420	4.50	3.09	0.28	5222	6.55	4.50	0.28
3726	2.84	1.82	0.27	4431	1.53	1.29	0.50	5223	5.27	3.82	0.32
3803	2.18	1.72	0.37	4432	1.57	1.33	0.50	5348	5.19	3.75	0.32
3807	2.43	1.97	0.38	4439	-	1.22	0.37	5402	3.78	3.06	0.38
3808	3.57	2.70	0.35	4452	2.63	2.08	0.37	5403	5.98	4.12	0.28
3821	5.46	4.16	0.35	4459	3.02	2.38	0.37	5437	5.98	4.32	0.32
3822	3.49	2.69	0.35	4470	2.94	2.32	0.37	5443	3.03	2.39	0.37
3824	4.00	3.06	0.35	4484	3.10	2.46	0.37	5445	5.59	3.86	0.28
3826	0.98	0.77	0.37	4493	3.36	2.66	0.37	5462	6.56	4.76	0.32
3827	2.24	1.71	0.35	4511	0.92	0.70	0.35	5472	12.88	8.29	0.27
3830	1.17	0.89	0.35	4557	2.79	2.25	0.38	5473	7.62	4.90	0.27
3851	2.97	2.40	0.38	4558	1.54	1.22	0.37	5474	6.08	4.19	0.28
3865	1.74	1.47	0.50	4568	2.47	1.79	0.32	5478	3.71	2.67	0.32
3881	3.88	3.07	0.37	4581	0.93	0.65	0.28	5479	5.64	4.31	0.35

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ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

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

Effective August 1, 2019

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
5480	6.38	4.38	0.28	7038M	4.36	2.89	0.26	7610	0.56	0.43	0.35
5491	1.56	1.08	0.28	7046M	6.08	3.90	0.27	7705	4.56	3.47	0.35
5506	7.02	4.53	0.27	7047M	4.10	2.52	0.27	7710	4.13	2.86	0.28
5507	3.28	2.27	0.28	7050M	6.86	4.41	0.26	7711	4.13	2.86	0.28
5508D	9.33	6.66	0.32	7090M	4.84	3.21	0.26	7720	2.53	1.84	0.32
5535	5.31	3.84	0.32	7098M	6.75	4.32	0.27	7855	3.15	2.28	0.32
5537	4.12	2.99	0.32	7099M	9.57	5.94	0.27	8001	1.97	1.60	0.38
5551	13.56	8.81	0.27	7133	2.77	1.92	0.28	8002	2.15	1.71	0.37
5606	0.82	0.57	0.28	7151M	3.37	2.34	0.28	8006	2.16	1.71	0.37
5610	4.60	3.60	0.37	7152M	5.30	3.56	0.28	8008	1.12	0.91	0.38
5645	6.54	4.52	0.28	7153M	3.74	2.59	0.28	8010	1.65	1.34	0.38
5703	15.72	11.37	0.32	7219	6.55	4.52	0.28	8013	0.69	0.54	0.37
5705	11.82	8.61	0.32	7222	6.63	4.75	0.32	8015	0.95	0.75	0.37
5951	0.26	0.21	0.38	7225	6.18	4.46	0.32	8017	1.57	1.28	0.38
6003	9.09	6.58	0.32	7228	-	4.52	0.28	8018	2.38	1.93	0.38
6005	3.96	2.88	0.32	7229	-	4.52	0.28	8021	2.31	1.83	0.37
6045	4.38	3.12	0.32	7230	7.20	5.47	0.35	8031	2.97	2.35	0.37
6204	7.44	5.15	0.28	7231	11.03	8.36	0.35	8032	2.14	1.74	0.38
6206	2.32	1.49	0.27	7232	9.08	6.21	0.28	8033	1.86	1.47	0.37
6213	1.54	1.06	0.28	7309F	10.72	5.28	0.25	8037	2.40	1.95	0.38
6214	1.76	1.13	0.27	7313F	3.96	1.96	0.25	8039	1.68	1.37	0.38
6216	4.96	3.17	0.27	7317F	7.43	3.64	0.25	8044X	4.21	3.21	0.35
6217	3.08	2.12	0.28	7327F	16.04	8.03	0.25	8045	0.71	0.57	0.38
6229	3.28	2.27	0.28	7333M	3.47	2.19	0.27	8046	3.89	3.10	0.37
6233	2.05	1.41	0.28	7335M	3.86	2.44	0.27	8047	0.93	0.75	0.38
6235	4.94	3.16	0.27	7337M	5.47	3.36	0.27	8058	3.18	2.54	0.37
6236	6.43	4.63	0.32	7350F	11.59	5.97	0.27	8072	0.82	0.67	0.38
6237	1.39	1.00	0.32	7360	3.69	2.68	0.32	8102	2.30	1.87	0.38
6251D	7.53	5.11	0.28	7370	5.78	4.55	0.37	8103	2.78	2.14	0.35
6252D	6.58	4.19	0.27	7380	5.47	4.16	0.35	8105	-	1.93	0.38
6260	-	5.11	0.28	7382	3.64	2.88	0.37	8106	3.90	2.83	0.32
6306	3.45	2.38	0.28	7390	7.85	6.20	0.37	8107	3.16	2.28	0.32
6319	3.70	2.53	0.28	7394M	4.04	2.56	0.27	8111	2.48	1.95	0.37
6325	2.98	2.05	0.28	7395M	4.49	2.85	0.27	8116	2.51	1.98	0.37
6400	6.24	4.74	0.35	7398M	6.37	3.92	0.27	8203	8.97	7.11	0.37
6503	2.14	1.73	0.38	7402	0.15	0.12	0.37	8204	4.44	3.24	0.32
6504	3.02	2.45	0.38	7403	5.19	3.77	0.32	8209	3.69	2.92	0.37
6702M*	3.83	2.77	0.32	7405N	1.30	0.93	0.32	8215	4.16	3.02	0.32
6703M*	6.03	4.23	0.32	7420	11.61	7.31	0.28	8227	3.92	2.52	0.27
6704M*	4.25	3.08	0.32	7421	1.62	1.11	0.28	8232	4.70	3.41	0.32
6801F	3.90	2.08	0.30	7422	1.57	1.00	0.27	8233	3.96	2.82	0.32
6811	4.59	3.31	0.32	7425	2.68	1.69	0.28	8235	4.98	3.94	0.37
6824F	8.55	4.45	0.27	7431N	1.09	0.69	0.27	8263	5.44	4.20	0.35
6826F	3.55	1.90	0.29	7445N	0.70	-	-	8264	7.42	5.44	0.32
6834	4.06	3.10	0.35	7453N	0.59	-	-	8265	6.26	4.33	0.28
6836	3.48	2.53	0.32	7502	1.82	1.32	0.32	8279	8.18	5.85	0.27
6843F	6.86	3.40	0.25	7515	1.04	0.67	0.27	8288	7.08	5.20	0.32
6845F	5.24	2.59	0.25	7520	4.06	3.20	0.37	8291	3.71	2.82	0.35
6854	5.55	3.57	0.27	7538	4.04	2.60	0.27	8292	5.21	4.14	0.37
6872F	8.53	4.21	0.25	7539	1.27	0.87	0.28	8293	9.16	6.65	0.32
6874F	11.11	5.46	0.25	7540	3.05	1.97	0.27	8304	5.19	3.77	0.32
6882	6.30	4.10	0.27	7580	2.32	1.68	0.32	8350X	6.25	4.31	0.28
6884	2.68	1.72	0.27	7590	3.23	2.46	0.35	8381X	2.08	1.59	0.35
7016M	2.60	1.65	0.27	7600	4.38	3.16	0.32	8385	3.09	2.25	0.32
7024M	2.89	1.83	0.27	7605	1.79	1.30	0.32	8387X	3.31	2.51	0.35

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ADVISORY LOSS COSTS - NOT RATES

RHODE ISLAND

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Effective August 1, 2019

CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO	CLASS CODE	LOSS COST	ELR	D RATIO
8391X	2.70	2.05	0.35	9052	2.35	1.91	0.38				
8392	2.29	1.83	0.37	9058	1.73	1.46	0.50				
8393X	1.92	1.51	0.37	9060	1.56	1.27	0.38				
8500	6.13	4.43	0.32	9061	1.27	1.07	0.50				
8601	0.28	0.21	0.35	9063	0.87	0.71	0.38				
8602	0.66	0.50	0.35	9077F	2.29	1.27	0.36				
8603	0.09	0.07	0.37	9082	1.35	1.14	0.50				
8606	2.77	1.91	0.28	9083	1.24	1.05	0.50				
8709F	4.29	2.12	0.25	9084	1.44	1.15	0.37				
8719	2.79	1.80	0.27	9088a	a	a	a				
8720	0.97	0.70	0.32	9089	1.19	0.99	0.38				
8721	0.27	0.19	0.32	9093	1.49	1.22	0.38				
8723	0.13	0.10	0.37	9101	3.39	2.75	0.38				
8725	2.17	1.58	0.32	9102	3.21	2.54	0.37				
8726F	1.77	0.95	0.29	9154	1.46	1.16	0.37				
8734M	0.36	0.26	0.32	9156	2.11	1.61	0.35				
8737M	0.33	0.24	0.32	9170	9.78	6.36	0.27				
8738M	0.52	0.37	0.32	9178	3.75	3.23	0.50				
8742	0.27	0.20	0.32	9179	5.15	4.20	0.38				
8745	3.93	2.99	0.35	9180	4.73	3.49	0.32				
8748	0.60	0.46	0.35	9182	2.03	1.62	0.37				
8754X	0.93	0.74	0.37	9186	13.14	9.27	0.27				
8755	0.23	0.16	0.32	9220	4.45	3.39	0.35				
8799	0.43	0.34	0.37	9402	5.18	3.74	0.32				
8800	1.36	1.15	0.50	9403	7.90	5.45	0.28				
8803	0.06	0.05	0.32	9410	3.06	2.40	0.37				
8805M	0.18	0.14	0.37	9501	2.75	2.09	0.35				
8810	0.13	0.10	0.37	9505	4.03	3.06	0.35				
8814M	0.16	0.13	0.37	9516	4.88	3.51	0.32				
8815M	0.25	0.19	0.37	9519	4.22	3.04	0.32				
8820	0.12	0.09	0.35	9521	3.93	2.86	0.32				
8824	3.45	2.79	0.38	9522	1.84	1.46	0.37				
8825	2.21	1.75	0.37	9534	2.75	1.88	0.28				
8826	2.21	1.75	0.37	9554	6.73	4.67	0.28				
8831	1.14	0.91	0.37	9586	0.59	0.49	0.50				
8832	0.26	0.21	0.37	9600	2.69	2.17	0.38				
8833	1.25	0.99	0.37	9620	1.25	0.95	0.35				
8835	2.62	2.06	0.37								
8841X	1.81	1.38	0.35								
8842	2.73	2.17	0.37								
8855	0.14	0.11	0.37								
8856	0.25	0.20	0.37								
8864	1.49	1.18	0.37								
8868	0.26	0.21	0.38								
8869	0.85	0.70	0.38								
8871	0.08	0.06	0.38								
8901	0.15	0.11	0.35								
9012	1.10	0.84	0.35								
9014	3.12	2.46	0.37								
9015	3.50	2.76	0.37								
9016	3.75	2.98	0.37								
9019	2.49	1.82	0.32								
9033X	3.59	2.83	0.37								
9040	4.10	3.33	0.38								
9047X	2.74	2.17	0.37								

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

Effective August 1, 2019

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	0.22	S	1624D	0.01	S	4024D	0.02	S
0065D	0.05	S	1710D	0.02	S	5508D	0.03	S
0066D	0.05	S	1803D	0.25	S	6251D	0.03	S
0067D	0.05	S	3081D	0.06	S	6252D	0.03	S
1164D	0.03	S	3082D	0.06	S			
1165D	0.02	S	3085D	0.06	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.
- X Refer to special classification phraseology in these pages which is applicable in this state.

*** 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 1.914 and elr x 1.856.
- 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, 2019

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	2.4%	1.7%	1.5%	1.3%	1.0%	0.8%	0.7%
\$500	4.3%	3.1%	2.8%	2.3%	1.8%	1.4%	1.3%
\$1,000	7.1%	5.3%	4.8%	4.0%	3.2%	2.6%	2.3%
\$2,500	12.6%	9.9%	9.0%	7.5%	6.2%	5.1%	4.6%
\$5,000	19.0%	15.4%	14.1%	12.0%	10.1%	8.5%	7.5%

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.....	\$78,200
Leased or rented vehicle.....	\$52,100

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"..... \$4,000

Minimum Weekly Payroll applicable in accordance with *Basic Manual* Rule 2-E-1 -- "Executive Officers" .. \$1,000

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..... 58%

(Multiply a Non-F classification loss cost by a factor of 1.58 to adjust for differences in benefits and loss-based expenses. This factor is the product of the adjustment for differences in benefits (1.50) and the adjustment for differences in loss-based expenses (1.054).)

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, 2019

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, 2019
TABLE OF WEIGHTING VALUES
APPLICABLE TO ALL POLICIES
Experience Rating Program - ERA

Expected Losses			Weighting Values	Expected Losses			Weighting Values
0	--	2,167	0.04	1,222,221	--	1,289,638	0.44
2,168	--	8,761	0.05	1,289,639	--	1,360,959	0.45
8,762	--	15,497	0.06	1,360,960	--	1,436,532	0.46
15,498	--	22,378	0.07	1,436,533	--	1,516,752	0.47
22,379	--	29,409	0.08	1,516,753	--	1,602,060	0.48
29,410	--	49,190	0.09	1,602,061	--	1,692,958	0.49
49,191	--	73,221	0.10	1,692,959	--	1,790,014	0.50
73,222	--	94,597	0.11	1,790,015	--	1,893,878	0.51
94,598	--	115,410	0.12	1,893,879	--	2,005,290	0.52
115,411	--	136,226	0.13	2,005,291	--	2,125,108	0.53
136,227	--	157,297	0.14	2,125,109	--	2,254,319	0.54
157,298	--	178,769	0.15	2,254,320	--	2,394,074	0.55
178,770	--	200,736	0.16	2,394,075	--	2,545,720	0.56
200,737	--	223,272	0.17	2,545,721	--	2,710,842	0.57
223,273	--	246,438	0.18	2,710,843	--	2,891,320	0.58
246,439	--	270,288	0.19	2,891,321	--	3,089,403	0.59
270,289	--	294,875	0.20	3,089,404	--	3,307,798	0.60
294,876	--	320,248	0.21	3,307,799	--	3,549,800	0.61
320,249	--	346,459	0.22	3,549,801	--	3,819,456	0.62
346,460	--	373,559	0.23	3,819,457	--	4,121,794	0.63
373,560	--	401,604	0.24	4,121,795	--	4,463,140	0.64
401,605	--	430,649	0.25	4,463,141	--	4,851,564	0.65
430,650	--	460,756	0.26	4,851,565	--	5,297,529	0.66
460,757	--	491,989	0.27	5,297,530	--	5,814,844	0.67
491,990	--	524,414	0.28	5,814,845	--	6,422,124	0.68
524,415	--	558,108	0.29	6,422,125	--	7,145,072	0.69
558,109	--	593,147	0.30	7,145,073	--	8,020,215	0.70
593,148	--	629,617	0.31	8,020,216	--	9,101,269	0.71
629,618	--	667,610	0.32	9,101,270	--	10,470,600	0.72
667,611	--	707,226	0.33	10,470,601	--	12,261,257	0.73
707,227	--	748,572	0.34	12,261,258	--	14,703,057	0.74
748,573	--	791,767	0.35	14,703,058	--	18,230,093	0.75
791,768	--	836,939	0.36	18,230,094	--	23,772,570	0.76
836,940	--	884,229	0.37	23,772,571	--	33,749,017	0.77
884,230	--	933,790	0.38	33,749,018	--	57,027,372	0.78
933,791	--	985,791	0.39	57,027,373	--	173,419,095	0.79
985,792	--	1,040,418	0.40	173,419,096	AND OVER	0.80	
1,040,419	--	1,097,876	0.41				
1,097,877	--	1,158,393	0.42				
1,158,394	--	1,222,220	0.43				

(a) G	10.35
(b) State Per Claim Accident Limitation	\$258,500
(c) State Multiple Claim Accident Limitation	\$517,000
(d) USL&HW Per Claim Accident Limitation	\$845,500
(e) USL&HW Multiple Claim Accident Limitation	\$1,691,000
(f) Employers Liability Accident Limitation	\$55,000
(g) Primary/Excess Loss Split Point	\$17,000
(h) USL&HW Act -- Expected Loss Factor -- Non-F Classes	1.52
<i>(Multiply a Non-F classification ELR by the USL&HW Act - Expected Loss Factor of 1.52.)</i>	

Effective August 1, 2019

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 -- 55,670	25,875	1,786,421 -- 1,838,140	207,000	3,597,146 -- 3,648,887	388,125
55,671 -- 95,814	31,050	1,838,141 -- 1,889,863	212,175	3,648,888 -- 3,700,630	393,300
95,815 -- 141,940	36,225	1,889,864 -- 1,941,586	217,350	3,700,631 -- 3,752,373	398,475
141,941 -- 190,600	41,400	1,941,587 -- 1,993,312	222,525	3,752,374 -- 3,804,116	403,650
190,601 -- 240,443	46,575	1,993,313 -- 2,045,038	227,700	3,804,117 -- 3,855,860	408,825
240,444 -- 290,912	51,750	2,045,039 -- 2,096,765	232,875	3,855,861 -- 3,907,603	414,000
290,913 -- 341,746	56,925	2,096,766 -- 2,148,494	238,050	3,907,604 -- 3,959,347	419,175
341,747 -- 392,810	62,100	2,148,495 -- 2,200,224	243,225	3,959,348 -- 4,011,091	424,350
392,811 -- 444,029	67,275	2,200,225 -- 2,251,954	248,400	4,011,092 -- 4,062,835	429,525
444,030 -- 495,354	72,450	2,251,955 -- 2,303,686	253,575	4,062,836 -- 4,114,579	434,700
495,355 -- 546,758	77,625	2,303,687 -- 2,355,418	258,750	4,114,580 -- 4,166,324	439,875
546,759 -- 598,221	82,800	2,355,419 -- 2,407,151	263,925	4,166,325 -- 4,218,068	445,050
598,222 -- 649,728	87,975	2,407,152 -- 2,458,885	269,100	4,218,069 -- 4,269,813	450,225
649,729 -- 701,270	93,150	2,458,886 -- 2,510,619	274,275	4,269,814 -- 4,321,558	455,400
701,271 -- 752,841	98,325	2,510,620 -- 2,562,354	279,450	4,321,559 -- 4,373,302	460,575
752,842 -- 804,434	103,500	2,562,355 -- 2,614,090	284,625	4,373,303 -- 4,425,047	465,750
804,435 -- 856,046	108,675	2,614,091 -- 2,665,826	289,800	4,425,048 -- 4,476,793	470,925
856,047 -- 907,673	113,850	2,665,827 -- 2,717,562	294,975	4,476,794 -- 4,528,538	476,100
907,674 -- 959,314	119,025	2,717,563 -- 2,769,300	300,150	4,528,539 -- 4,580,283	481,275
959,315 -- 1,010,966	124,200	2,769,301 -- 2,821,037	305,325	4,580,284 -- 4,632,029	486,450
1,010,967 -- 1,062,627	129,375	2,821,038 -- 2,872,775	310,500	4,632,030 -- 4,683,774	491,625
1,062,628 -- 1,114,296	134,550	2,872,776 -- 2,924,514	315,675	4,683,775 -- 4,735,520	496,800
1,114,297 -- 1,165,972	139,725	2,924,515 -- 2,976,253	320,850	4,735,521 -- 4,787,265	501,975
1,165,973 -- 1,217,655	144,900	2,976,254 -- 3,027,992	326,025	4,787,266 -- 4,839,011	507,150
1,217,656 -- 1,269,343	150,075	3,027,993 -- 3,079,732	331,200	4,839,012 -- 4,890,757	512,325
1,269,344 -- 1,321,036	155,250	3,079,733 -- 3,131,472	336,375	4,890,758 -- 4,942,125	517,500
1,321,037 -- 1,372,733	160,425	3,131,473 -- 3,183,212	341,550		
1,372,734 -- 1,424,434	165,600	3,183,213 -- 3,234,953	346,725		
1,424,435 -- 1,476,138	170,775	3,234,954 -- 3,286,694	351,900		
1,476,139 -- 1,527,846	175,950	3,286,695 -- 3,338,435	357,075		
1,527,847 -- 1,579,556	181,125	3,338,436 -- 3,390,176	362,250		
1,579,557 -- 1,631,269	186,300	3,390,177 -- 3,441,918	367,425		
1,631,270 -- 1,682,984	191,475	3,441,919 -- 3,493,660	372,600		
1,682,985 -- 1,734,701	196,650	3,493,661 -- 3,545,402	377,775		
1,734,702 -- 1,786,420	201,825	3,545,403 -- 3,597,145	382,950		

For Expected Losses greater than \$4,942,125, the Ballast Value can be calculated using the following formula (rounded to the nearest 1):

$$\text{Ballast} = (0.10)(\text{Expected Losses}) + 2500(\text{Expected Losses})(10.35) / (\text{Expected Losses} + (700)(10.35))$$

G = 10.35

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>2/1/20 and after</u>	<u>11,000</u>	<u>5,500</u>
	<u>2/1/19 - 1/31/20</u>	10,500	5,250
	<u>2/1/18 - 1/31/19</u>	10,500	5,250

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, 2019

Proposed Values for Inclusion in the Retrospective Rating Plan Manual

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

- Hazard group average cost per case
- Hazard group average cost per case including ALAE
- Excess loss pure premium factors
- Excess loss and allocated expense pure premium factors
- Retrospective pure premium development factors

**RETROSPECTIVE RATING PLAN MANUAL
STATE SPECIAL RATING VALUES**

RHODE ISLAND

Effective August 1, 2019

1. Average Cost per Case

A	B	C	D	E	F	G
9,399	13,458	15,035	18,210	24,153	30,943	33,527

Average Cost per Case including ALAE

A	B	C	D	E	F	G
10,596	15,160	16,923	20,487	27,146	34,763	37,580

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	0.604	0.643	0.657	0.681	0.703	0.723	0.736
\$15,000	0.546	0.590	0.607	0.635	0.661	0.685	0.703
\$20,000	0.500	0.547	0.566	0.596	0.625	0.652	0.674
\$25,000	0.463	0.511	0.531	0.563	0.595	0.624	0.648
\$30,000	0.432	0.481	0.501	0.534	0.568	0.599	0.625
\$35,000	0.405	0.455	0.475	0.509	0.544	0.576	0.604
\$40,000	0.382	0.432	0.452	0.487	0.522	0.556	0.585
\$50,000	0.344	0.393	0.414	0.449	0.486	0.520	0.553
\$75,000	0.279	0.325	0.347	0.381	0.418	0.453	0.490
\$100,000	0.237	0.280	0.301	0.334	0.371	0.405	0.444
\$125,000	0.207	0.248	0.268	0.299	0.335	0.369	0.409
\$150,000	0.184	0.223	0.242	0.272	0.308	0.340	0.380
\$175,000	0.166	0.203	0.222	0.250	0.285	0.317	0.357
\$200,000	0.151	0.187	0.205	0.232	0.266	0.297	0.337
\$225,000	0.139	0.173	0.191	0.217	0.250	0.280	0.320
\$250,000	0.129	0.161	0.179	0.204	0.236	0.265	0.305
\$275,000	0.120	0.151	0.168	0.193	0.224	0.252	0.292
\$300,000	0.112	0.142	0.159	0.183	0.214	0.241	0.281
\$325,000	0.106	0.135	0.151	0.174	0.204	0.230	0.270
\$350,000	0.100	0.128	0.144	0.166	0.196	0.221	0.261
\$375,000	0.094	0.122	0.137	0.159	0.188	0.213	0.252
\$400,000	0.089	0.116	0.131	0.152	0.181	0.205	0.244
\$425,000	0.085	0.111	0.126	0.146	0.174	0.198	0.236
\$450,000	0.081	0.106	0.121	0.140	0.168	0.191	0.230
\$475,000	0.077	0.102	0.116	0.135	0.163	0.185	0.223
\$500,000	0.074	0.098	0.112	0.131	0.157	0.180	0.217
\$600,000	0.063	0.085	0.098	0.115	0.140	0.160	0.197
\$700,000	0.055	0.075	0.087	0.103	0.126	0.145	0.181
\$800,000	0.048	0.067	0.078	0.093	0.115	0.133	0.167
\$900,000	0.043	0.060	0.071	0.085	0.106	0.123	0.156
\$1,000,000	0.039	0.055	0.065	0.078	0.098	0.114	0.146
\$2,000,000	0.018	0.028	0.034	0.042	0.056	0.067	0.091
\$3,000,000	0.011	0.018	0.022	0.028	0.038	0.046	0.065
\$4,000,000	0.007	0.012	0.016	0.020	0.028	0.035	0.050
\$5,000,000	0.005	0.009	0.012	0.015	0.022	0.027	0.040
\$6,000,000	0.004	0.007	0.009	0.012	0.017	0.022	0.033
\$7,000,000	0.003	0.006	0.007	0.010	0.014	0.018	0.028
\$8,000,000	0.003	0.005	0.006	0.008	0.012	0.015	0.023
\$9,000,000	0.002	0.004	0.005	0.007	0.010	0.013	0.020
\$10,000,000	0.002	0.003	0.004	0.006	0.008	0.011	0.017

Effective August 1, 2019

**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	0.693	0.734	0.750	0.775	0.798	0.819	0.833
\$15,000	0.631	0.678	0.696	0.726	0.754	0.779	0.798
\$20,000	0.582	0.632	0.652	0.685	0.716	0.745	0.767
\$25,000	0.541	0.594	0.615	0.650	0.683	0.715	0.740
\$30,000	0.507	0.561	0.582	0.619	0.654	0.688	0.715
\$35,000	0.478	0.532	0.554	0.591	0.629	0.664	0.693
\$40,000	0.453	0.507	0.530	0.567	0.606	0.642	0.673
\$50,000	0.411	0.465	0.488	0.526	0.566	0.603	0.637
\$75,000	0.339	0.390	0.413	0.450	0.491	0.530	0.568
\$100,000	0.291	0.340	0.362	0.398	0.439	0.477	0.518
\$125,000	0.257	0.303	0.325	0.360	0.400	0.437	0.479
\$150,000	0.231	0.274	0.296	0.329	0.369	0.405	0.447
\$175,000	0.210	0.252	0.273	0.305	0.343	0.378	0.421
\$200,000	0.193	0.233	0.254	0.284	0.322	0.356	0.399
\$225,000	0.178	0.217	0.237	0.267	0.304	0.337	0.380
\$250,000	0.166	0.204	0.223	0.252	0.288	0.320	0.364
\$275,000	0.156	0.192	0.211	0.239	0.274	0.306	0.349
\$300,000	0.146	0.182	0.200	0.227	0.262	0.293	0.336
\$325,000	0.138	0.172	0.191	0.217	0.251	0.281	0.324
\$350,000	0.131	0.164	0.182	0.208	0.241	0.270	0.313
\$375,000	0.124	0.157	0.174	0.199	0.232	0.261	0.303
\$400,000	0.118	0.150	0.167	0.191	0.224	0.252	0.294
\$425,000	0.113	0.144	0.161	0.184	0.216	0.243	0.285
\$450,000	0.108	0.138	0.155	0.178	0.209	0.236	0.278
\$475,000	0.104	0.133	0.149	0.172	0.203	0.229	0.270
\$500,000	0.099	0.128	0.144	0.166	0.197	0.222	0.263
\$600,000	0.085	0.112	0.127	0.147	0.176	0.200	0.240
\$700,000	0.075	0.099	0.113	0.132	0.159	0.182	0.221
\$800,000	0.066	0.089	0.102	0.120	0.146	0.167	0.205
\$900,000	0.060	0.081	0.093	0.110	0.135	0.155	0.192
\$1,000,000	0.054	0.074	0.086	0.101	0.125	0.144	0.180
\$2,000,000	0.026	0.038	0.046	0.056	0.072	0.086	0.114
\$3,000,000	0.016	0.025	0.030	0.037	0.050	0.060	0.082
\$4,000,000	0.011	0.017	0.022	0.027	0.037	0.045	0.064
\$5,000,000	0.008	0.013	0.016	0.021	0.029	0.036	0.051
\$6,000,000	0.006	0.010	0.013	0.016	0.023	0.029	0.042
\$7,000,000	0.005	0.008	0.010	0.013	0.019	0.024	0.036
\$8,000,000	0.004	0.007	0.008	0.011	0.016	0.020	0.030
\$9,000,000	0.003	0.005	0.007	0.009	0.013	0.017	0.026
\$10,000,000	0.003	0.005	0.006	0.008	0.011	0.015	0.023

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.	
0.07	0.04	0.02	0.22	0.11	0.06	0.00



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

Part 3 Supporting Exhibits

- Exhibit I – Determination of the Indicated Loss Cost Level Change
- Exhibit II – Workers Compensation Loss Adjustment Expense
- 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



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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.



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EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section A - Policy Year 2016 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$163,782,924
(2) Premium On-level Factor (Appendix A-I)	0.721
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$118,087,488

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$73,290,930
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.004
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$73,584,094
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.623
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.929
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.579
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.592
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.022
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.605

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$33,789,351
(15) Medical Loss On-level Factor (Appendix A-I)	1.011
(16) Adjusted Limited Medical Losses = (14) x (15)	\$34,161,034
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.289
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.895
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.259
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(21) Projected Medical Cost Ratio = (19) x (20)	0.265
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.267

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.872
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EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section B - Policy Year 2015 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$164,115,232
(2) Premium On-level Factor (Appendix A-I)	0.700
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$114,880,662

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$77,287,348
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.008
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$77,905,647
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.678
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.911
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.618
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.632
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.022
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.646

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$36,084,451
(15) Medical Loss On-level Factor (Appendix A-I)	1.015
(16) Adjusted Limited Medical Losses = (14) x (15)	\$36,625,718
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.319
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.868
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.277
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(21) Projected Medical Cost Ratio = (19) x (20)	0.283
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.285

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.931
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EXHIBIT I

Determination of Indicated Loss Cost Level Change

Section C - Policy Year 2014 Experience

Premium:

(1) Standard Earned Premium Developed to Ultimate (Appendix A-II)	\$153,030,584
(2) Premium On-level Factor (Appendix A-I)	0.702
(3) Pure Premium Available for Benefit Costs = (1) x (2)	\$107,427,470

Indemnity Benefit Cost:

(4) Limited Indemnity Losses Developed to Ultimate (Appendix A-II)	\$73,842,374
(5) Indemnity Loss On-level Factor (Appendix A-I)	1.010
(6) Adjusted Limited Indemnity Losses = (4) x (5)	\$74,580,798
(7) Adjusted Limited Indemnity Cost Ratio excluding Trend and Benefits = (6) / (3)	0.694
(8) Factor to Reflect Indemnity Trend (Appendix A-III)	0.892
(9) Projected Limited Indemnity Cost Ratio = (7) x (8)	0.619
(10) Factor to Adjust Indemnity Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(11) Projected Indemnity Cost Ratio = (9) x (10)	0.633
(12) Factor to Reflect Proposed Changes in Indemnity Benefits (Appendix C)	1.022
(13) Projected Indemnity Cost Ratio including Benefit Changes = (11) x (12)	0.647

Medical Benefit Cost:

(14) Limited Medical Losses Developed to Ultimate (Appendix A-II)	\$34,960,069
(15) Medical Loss On-level Factor (Appendix A-I)	1.017
(16) Adjusted Limited Medical Losses = (14) x (15)	\$35,554,390
(17) Adjusted Limited Medical Cost Ratio excluding Trend and Benefits = (16) / (3)	0.331
(18) Factor to Reflect Medical Trend (Appendix A-III)	0.842
(19) Projected Limited Medical Cost Ratio = (17) x (18)	0.279
(20) Factor to Adjust Medical Cost Ratio to an Unlimited Basis (Appendix A-II)	1.022
(21) Projected Medical Cost Ratio = (19) x (20)	0.285
(22) Factor to Reflect Proposed Changes in Medical Benefits (Appendix C)	1.008
(23) Projected Medical Cost Ratio including Benefit Changes = (21) x (22)	0.287

Total Benefit Cost:

(24) Indicated Change Based on Experience, Trend and Benefits = (13) + (23)	0.934
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EXHIBIT I

Determination of Indicated Loss Cost Level Change

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

(1) Policy Year 2016 Indicated Change Based on Experience, Trend, and Benefits	0.872
(2) Policy Year 2015 Indicated Change Based on Experience, Trend, and Benefits	0.931
(3) Policy Year 2014 Indicated Change Based on Experience, Trend, and Benefits	0.934
(4) Indicated Change Based on Experience, Trend, and Benefits = $[(1)+(2)+(3)] / 3$	0.912

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

(1) Indicated Loss Cost Level Change	0.912
(2) Effect of the Change in Loss-based Expenses (Exhibit II)	1.012
(3) Indicated Change Modified to Reflect the Change in Loss-based Expenses = (1) x (2)	0.923

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

Industry Group Differentials (Appendix A-IV):

Manufacturing	0.983
Contracting	0.998
Office & Clerical	0.983
Goods & Services	1.007
Miscellaneous	1.011

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	0.923	0.983	0.907	(-9.3%)
Contracting	0.923	0.998	0.921	(-7.9%)
Office & Clerical	0.923	0.983	0.907	(-9.3%)
Goods & Services	0.923	1.007	0.929	(-7.1%)
Miscellaneous	0.923	1.011	0.933	(-6.7%)
Overall	0.923	1.000	0.923	(-7.7%)



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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: Defense and Cost Containment Expenses (DCCE) and Adjusting and Other Expenses (AOE).

NCCI uses the following general methodology to determine the proposed LAE provision based on data for private carriers.

1. Using data obtained from the NCCI Call for Loss Adjustment Expense, accident year developed LAE ratios are calculated on a countrywide basis, including separate DCCE and AOE ratio components.
2. A state-to-countrywide DCCE relativity is selected based on NAIC Annual Statement data.
3. The state-specific DCCE ratio is calculated by multiplying the countrywide-selected DCCE ratio by the state-to-countrywide DCCE relativity.
4. 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 proposed LAE provision is based on private carrier data.



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EXHIBIT II

Workers Compensation Loss-based Expense Provision

Section A - Determination of Loss Adjustment Expense Provision

NCCI has computed the loss adjustment expense allowance on an accident year basis using data obtained from the NCCI Call for Loss Adjustment Expense. For this filing, NCCI proposes a 20.5% loss adjustment expense allowance as a percentage of incurred losses.

<u>Accident Year</u>	<u>Accident Year Developed LAE Ratio</u>	<u>Accident Year Developed DCCE Ratio</u>	<u>Accident Year Developed AOE Ratio</u>
2013	20.3%	13.1%	7.2%
2014	20.3%	13.4%	6.9%
2015	20.0%	13.1%	6.9%
2016	20.5%	13.2%	7.3%
2017	21.0%	13.2%	7.8%
Countrywide selected:	20.8%	13.2%	7.6%
Rhode Island selected: (12.9% = 13.2% x 0.977)	20.5%	12.9%	7.6%

Section B - Determination of Rhode Island DCCE Relativity

(1a) Rhode Island paid losses (in '000s)	122,426
(1b) Rhode Island paid DCCE (in '000s)	15,430
(1c) Ratio (1b)/(1a)	12.6%
(2a) Countrywide paid losses (in '000s)	69,515,494
(2b) Countrywide paid DCCE (in '000s)	8,987,869
(2c) Ratio (2b)/(2a)	12.9%
(3) Rhode Island DCCE relativity (1c)/(2c)	0.977

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

(1) Current Rhode Island LAE Provision	19.1%
(2) Proposed Rhode Island LAE Provision	20.5%
(3) Proposed Change in LAE Provision	1.012
= [1.0 + (2)] / [1.0 + (1)] - 1	1.2%

Notes

NAIC Annual Statement data is used in the above calculations. The countrywide figures exclude state funds.



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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.



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APPENDIX A-I

Determination of Policy Year On-level Factors

Section A - 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	0.634	0.634	0.859	0.840	0.999	0.721
NR 08/01/16	0.925	0.925	0.366	0.339				
NR 08/01/17	0.955	0.883						
NR 08/01/18	0.947	0.836						
				0.973				

Section B - Factor Adjusting 2016 Policy Year Indemnity Losses to Present Benefit Level

Date	(1) Benefit Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)
09/01/15	Base	1.000	0.189	0.189	1.004
07/15/16	1.000	1.000	0.145	0.145	
10/01/16	1.005	1.005	0.616	0.619	
09/01/17	1.000	1.005	0.023	0.023	
10/01/17	1.002	1.007	0.027	0.027	
				1.003	

Section C - Factor Adjusting 2016 Policy Year Medical Losses to Present Benefit Level

Date	(1) Benefit Level Change	(2) Cumulative Index	(3) Weight	(4) Product (2)x(3)	(5) Adj. Factor Present Index/ Sum Column (4)
09/01/15	Base	1.000	0.189	0.189	1.011
07/15/16	1.005	1.005	0.145	0.146	
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	
				1.004	

NR New and renewal business.

* $0.999 = 0.957 / 0.958 = (\text{Targeted Off-balance}) / (\text{Off-balance for Policy Year 2016})$



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APPENDIX A-I

Determination of Policy Year On-level Factors

Section D - Factor Adjusting 2015 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	1.000	1.000	0.836	0.840	0.997	0.700
NR 08/01/16	0.925	0.925						
NR 08/01/17	0.955	0.883						
NR 08/01/18	0.947	0.836						
				1.000				

Section E - Factor Adjusting 2015 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)
09/01/14	Base	1.000	0.274	0.274	1.008
09/01/15	1.002	1.002	0.633	0.634	
07/15/16	1.000	1.002	0.066	0.066	
10/01/16	1.005	1.007	0.027	0.027	
09/01/17	1.000	1.007			
10/01/17	1.002	1.009			
				1.001	

Section F - Factor Adjusting 2015 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)
09/01/14	Base	1.000	0.274	0.274	1.015
09/01/15	1.000	1.000	0.633	0.633	
07/15/16	1.005	1.005	0.066	0.066	
10/01/16	1.000	1.005	0.027	0.027	
09/01/17	1.010	1.015			
10/01/17	1.000	1.015			
				1.000	

NR New and renewal business.

* $0.997 = 0.957 / 0.960 = (\text{Targeted Off-balance}) / (\text{Off-balance for Policy Year 2015})$



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APPENDIX A-I

Determination of Policy Year On-level Factors

Section G - Factor Adjusting 2014 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 08/01/13	Base	1.000	0.634	0.634	0.849	0.840	0.984	0.702
NR 08/01/14	1.025	1.025	0.366	0.375				
NR 08/01/16	0.925	0.948						
NR 08/01/17	0.955	0.905						
NR 08/01/18	0.947	0.857						
				1.009				

Section H - Factor Adjusting 2014 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)
09/01/13	Base	1.000	0.088	0.088	1.010
05/01/14	1.000	1.000	0.186	0.186	
09/01/14	1.002	1.002	0.676	0.677	
09/01/15	1.002	1.004	0.050	0.050	
07/15/16	1.000	1.004			
10/01/16	1.005	1.009			
09/01/17	1.000	1.009			
10/01/17	1.002	1.011			
				1.001	

Section I - Factor Adjusting 2014 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)
09/01/13	Base	1.000	0.088	0.088	1.017
05/01/14	1.008	1.008	0.186	0.187	
09/01/14	1.000	1.008	0.676	0.681	
09/01/15	1.000	1.008	0.050	0.050	
07/15/16	1.005	1.013			
10/01/16	1.000	1.013			
09/01/17	1.010	1.023			
10/01/17	1.000	1.023			
				1.006	

NR New and renewal business.

* $0.984 = 0.957 / 0.973 = (\text{Targeted Off-balance}) / (\text{Off-balance for Policy Year 2014})$



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
2000	1.006	0.969	0.994	0.994	0.957	0.963
2001	1.010	0.998	1.006	1.006	0.957	0.951
2002	1.010	1.019	1.013	1.012	0.957	0.946
2003	1.018	1.005	1.013	1.012	0.957	0.946
2004	0.991	1.008	0.997	0.997	0.957	0.960
2005	0.976	1.017	0.991	0.992	0.957	0.965
2006	0.974	0.991	0.980	0.982	0.957	0.975
2007	0.985	0.991	0.987	0.989	0.957	0.968
2008	0.985	0.997	0.989	0.991	0.957	0.966
2009	0.995	0.977	0.988	0.990	0.957	0.967
2010	0.992	0.987	0.990	0.991	0.957	0.966
2011	0.998	0.990	0.995	0.996	0.957	0.961
2012	0.996	0.987	0.992	0.993	0.957	0.964
2013	0.988	0.983	0.986	0.988	0.957	0.969
2014	0.960	0.982	0.969	0.973	0.957	0.984
2015	0.951	0.958	0.954	0.960	0.957	0.997
2016	0.949	0.957	0.952	0.958	0.957	0.999
2017	0.940	0.955	0.946	0.953	0.957	1.004



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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 \$ 3,514,479, based on the volume of premium in policy years 2013, 2014, and 2015 underlying the currently approved filing that utilizes data valued as of 12/31/2016. 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 2.2%, 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



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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 indemnity tail factors for Policy Years 1992 and prior is 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.



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APPENDIX A-II

Determination of Premium and Losses Developed to an Ultimate Report

Section A - Premium and Loss Summary Valued as of 12/31/2017

Policy Year 2016

(1) Standard Earned Premium	\$162,968,084
(2) Factor to Develop Premium to Ultimate	1.005
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$163,782,924
(4) Limited Indemnity Paid Losses	\$26,110,057
(5) Limited Indemnity Paid Development Factor to Ultimate	2.807
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$73,290,930
(7) Limited Medical Paid Losses	\$20,528,160
(8) Limited Medical Paid Development Factor to Ultimate	1.646
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$33,789,351

Policy Year 2015

(1) Standard Earned Premium	\$164,115,232
(2) Factor to Develop Premium to Ultimate	1.000
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$164,115,232
(4) Limited Indemnity Paid Losses	\$46,840,817
(5) Limited Indemnity Paid Development Factor to Ultimate	1.650
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$77,287,348
(7) Limited Medical Paid Losses	\$27,693,362
(8) Limited Medical Paid Development Factor to Ultimate	1.303
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$36,084,451

Policy Year 2014

(1) Standard Earned Premium	\$153,030,584
(2) Factor to Develop Premium to Ultimate	1.000
(3) Standard Earned Premium Developed to Ultimate = (1)x(2)	\$153,030,584
(4) Limited Indemnity Paid Losses	\$56,801,826
(5) Limited Indemnity Paid Development Factor to Ultimate	1.300
(6) Limited Indemnity Paid Losses Developed to Ultimate = (4)x(5)	\$73,842,374
(7) Limited Medical Paid Losses	\$29,255,288
(8) Limited Medical Paid Development Factor to Ultimate	1.195
(9) Limited Medical Paid Losses Developed to Ultimate = (7)x(8)	\$34,960,069



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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>
2013	1.007	2012	1.000	2011	1.000	2010	1.000
2014	1.003	2013	1.000	2012	1.000	2011	1.000
2015	1.005	2014	1.000	2013	1.000	2012	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



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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
2011	1.674	2010	1.277	2009	1.158	2008	1.078
2012	1.662	2011	1.260	2010	1.106	2009	1.049
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	1.699	2014	1.269	2013	1.116	2012	1.042
Average*	1.701	Average*	1.269	Average*	1.113	Average*	1.050
* 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
2007	1.039	2006	1.034	2005	1.023	2004	1.008
2008	1.030	2007	1.039	2006	1.022	2005	1.008
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
Average*	1.028	Average*	1.020	Average*	1.019	Average*	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
2003	1.004	2002	1.001	2001	1.002	2000	1.008
2004	1.011	2003	1.003	2002	1.004	2001	1.003
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
Average*	1.003	Average*	1.003	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
1999	1.007	1998	1.002	1997	1.006	1996	1.006
2000	1.000	1999	1.010	1998	1.000	1997	1.001
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	1.001	2001	1.004	2000	1.000
Average*	1.001	Average*	1.002	Average*	1.002	Average*	1.002
* Excludes the years with the lowest and highest factors.							
Policy Year	17th/18th	Policy Year	18th/19th				
1995	1.001	1994	1.013				
1996	1.003	1995	1.001				
1997	1.000	1996	1.006				
1998	1.000	1997	1.001				
1999	1.001	1998	1.000				
Average*	1.001	Average*	1.003				
* Excludes the years with the lowest and highest factors.							



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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
2011	1.259	2010	1.103	2009	1.066	2008	1.020
2012	1.277	2011	1.073	2010	1.064	2009	1.031
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
Average*	1.263	Average*	1.090	Average*	1.052	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
2007	1.023	2006	1.018	2005	1.011	2004	1.007
2008	1.019	2007	1.048	2006	1.027	2005	1.010
2009	1.013	2008	1.009	2007	1.002	2006	1.008
2010	1.021	2009	1.006	2008	1.006	2007	1.003
2011	1.016	2010	1.014	2009	1.014	2008	1.004
Average*	1.019	Average*	1.014	Average*	1.010	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
2003	1.003	2002	1.002	2001	1.003	2000	1.008
2004	1.006	2003	1.005	2002	1.004	2001	1.004
2005	1.005	2004	1.003	2003	1.007	2002	1.002
2006	1.005	2005	1.005	2004	1.003	2003	1.001
2007	1.001	2006	1.006	2005	1.002	2004	1.002
Average*	1.004	Average*	1.004	Average*	1.003	Average*	1.003
* 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
1999	1.005	1998	1.008	1997	1.002	1996	1.003
2000	1.000	1999	1.007	1998	1.000	1997	1.001
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
Average*	1.002	Average*	1.005	Average*	1.002	Average*	1.002
* Excludes the years with the lowest and highest factors.							
Policy Year	17th/18th	Policy Year	18th/19th				
1995	1.006	1994	1.008				
1996	1.001	1995	1.003				
1997	1.001	1996	1.002				
1998	1.000	1997	1.001				
1999	1.002	1998	1.000				
Average*	1.001	Average*	1.002				
* Excludes the years with the lowest and highest factors.							



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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) Losses for Policy Year 19th Report	(3) Losses for Policy Year 20th Report	(4) Losses for All Prior Policy Years Previous	(5) Losses for All Prior Policy Years 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
1988	154,789,371	154,601,219	1,030,466,056	1,029,990,339	0.559	0.993	0.997
1989	176,705,579	177,303,328	1,184,591,558	1,185,617,205	0.528	1.014	1.007
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	1,546,962,946	3.353	0.992	0.992
1994	35,573,601	35,269,771	1,578,637,388	1,579,823,995	2.916	1.003	1.003
1995	33,411,148	33,410,705	1,614,912,558	1,616,452,579	2.984	1.015	1.015
1996	32,626,595	32,676,866	1,649,852,131	1,651,135,498	2.862	1.015	1.015
1997	37,264,294	37,281,725	1,680,554,118	1,680,721,265	2.232	1.002	1.002
Selected Indemnity 19th-to-Ultimate Loss Development Factor							1.005

Medical Paid+Case Data for Matching Companies

(9) Policy Year	(10) Losses for Policy Year 19th Report	(11) Losses for Policy Year 20th Report	(12) Losses for All Prior Policy Years Previous	(13) Losses for All Prior Policy Years Current	(14) Factor to Adjust Losses for Prior Policy Years	(15) Indicated 19th-to-Ult Development for Policy Year	
1988	40,060,454	40,473,027	287,528,109	288,304,226	0.550	1.046	
1989	46,187,274	45,985,799	328,777,253	331,652,954	0.516	1.116	
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	445,526,340	1.691	0.941	
1994	16,124,192	15,872,178	462,688,164	462,101,525	1.809	0.964	
1995	16,651,572	16,805,511	477,901,647	477,548,025	1.741	0.997	
1996	15,376,023	15,327,703	494,319,363	493,985,876	1.834	0.985	
1997	18,699,248	18,529,109	507,972,696	507,907,840	1.409	0.988	
Selected Medical 19th-to-Ultimate Loss Development Factor							1.005

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

Column (8) reduces the development portion of Column (7) by a factor of 0.5 for Policy Years 1992 and prior to reflect the 1992 reform.

(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.



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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
1994	0.985	0.981
1995	0.996	0.951
1996	0.986	0.990
1997	0.989	0.961
1998	1.000	1.000
Average	0.991	0.977

	Indemnity	Medical
(1) Paid+Case 19th-to-Ultimate Loss Development Factor (Section E)	1.005	1.005
(2) Factor to Adjust 19th-to-Ultimate Development Factor to a Limited Basis	0.458	0.458
(3) Limited Paid+Case 19th-to-Ultimate Loss Development Factor = [(1)-1]x(2)+1	1.002	1.002
(4) Limited Paid-to-Paid+Case Ratio (Section F)	0.991	0.977
(5) Limited Paid 19th-to-Ultimate Loss Development Factor = (3) / (4)	1.011	1.026

Section G - Summary of Limited Paid Loss Development Factors

Report	(1) Indemnity Paid Loss Development		Report	(3) Medical Paid Loss Development	
	to Next Report	to Ultimate		to Next Report	to Ultimate
1st	1.701	2.807	1st	1.263	1.646
2nd	1.269	1.650	2nd	1.090	1.303
3rd	1.113	1.300	3rd	1.052	1.195
4th	1.050	1.168	4th	1.026	1.136
5th	1.028	1.112	5th	1.019	1.107
6th	1.020	1.082	6th	1.014	1.086
7th	1.019	1.061	7th	1.010	1.071
8th	1.008	1.041	8th	1.006	1.060
9th	1.003	1.033	9th	1.004	1.054
10th	1.003	1.030	10th	1.004	1.050
11th	1.003	1.027	11th	1.003	1.046
12th	1.002	1.024	12th	1.003	1.043
13th	1.001	1.022	13th	1.002	1.040
14th	1.002	1.021	14th	1.005	1.038
15th	1.002	1.019	15th	1.002	1.033
16th	1.002	1.017	16th	1.002	1.031
17th	1.001	1.015	17th	1.001	1.029
18th	1.003	1.014	18th	1.002	1.028
19th	1.011	1.011	19th	1.026	1.026

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



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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*	3,514,479
(2) Statewide Excess Ratio for (1)	0.022
(3) Market Share for Carriers Missing from Large Loss and Catastrophe Call	0.000
(4) Factor to Adjust Limited Losses to an Unlimited Basis = $1.0 / \{1.0 - [(2) \times (1.0 - (3))]\}$	1.022

Section I - Policy Year Large Loss Limits

<u>Experience Year</u>	<u>Policy Year Detrended Limit</u>
2016	3,124,076
2015	3,065,131
2014	2,999,252
2013	2,904,604
2012	2,816,230
2011	2,746,341
2010	2,682,248
2009	2,613,499
2008	2,571,835
2007	2,521,997
2006	2,450,096
2005	2,361,991
2004	2,278,288
2003	2,208,392
2002	2,119,910
2001	2,039,068
2000	1,975,841
1999	1,903,465
1998	1,835,643
1997	1,757,388
1996	1,668,359
1995	1,601,803
1994	1,549,808

* July 29, 2020 is the midpoint of the effective period for which the revised loss costs are being proposed.



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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 2002 through 2016 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.



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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^
2002	42.833	16,164	0.693	8,327	0.357
2003	41.617	17,526	0.730	9,098	0.379
2004	39.714	17,277	0.686	9,219	0.366
2005	38.862	17,584	0.683	9,776	0.380
2006	37.004	19,540	0.723	10,114	0.374
2007	35.887	21,405	0.768	10,738	0.386
2008	33.260	23,294	0.775	11,529	0.383
2009	33.990	22,671	0.771	12,005	0.408
2010	36.047	22,077	0.796	12,180	0.439
2011	33.666	21,526	0.725	11,044	0.372
2012	32.923	21,149	0.697	11,447	0.377
2013	31.679	21,952	0.695	11,303	0.358
2014	31.860	21,796	0.694	10,398	0.331
2015	30.236	22,435	0.678	10,546	0.319
2016	29.665	21,006	0.623	9,752	0.289

* 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	0.990	0.980
(2) Selected Annual Loss Ratio Trend Factor	0.980	0.970
(3) Length of Trend Period from Midpoint of Policy Year to Midpoint of Effective Period:		
		<u>Years</u>
	Policy Year 2014	5.633
	Policy Year 2015	4.633
	Policy Year 2016	3.633
(4) Trend Factor Applied to Experience Year = (2) ^ (3)	<u>Indemnity</u>	<u>Medical</u>
	Policy Year 2014	0.842
	Policy Year 2015	0.868
	Policy Year 2016	0.895



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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	28,035,526	127,533,195	117,338,128	1.079	1.085
Contracting	29,656,459	134,405,693	123,760,074	1.077	1.085
Office & Clerical	22,582,815	104,950,452	96,508,305	1.074	1.080
Goods & Services	78,420,314	358,575,172	329,744,741	0.994	0.999
Miscellaneous	31,693,731	148,058,317	136,268,477	1.048	1.058
Statewide	190,388,845	873,522,829	803,619,725		

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	27,880,490	126,827,942	116,689,254	1.087	1.000
Contracting	29,437,794	133,414,684	122,847,557	1.086	0.999
Office & Clerical	22,457,355	104,367,394	95,972,148	1.087	1.000
Goods & Services	78,027,820	356,780,501	328,094,367	1.087	1.000
Miscellaneous	31,394,168	146,658,900	134,980,495	1.087	1.000
Statewide	189,197,627	868,049,421	798,583,821	1.087	



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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	113,170,684	0.970	0.971	3,351
Contracting	122,521,072	0.998	0.999	2,362
Office & Clerical	92,780,793	0.967	0.968	2,605
Goods & Services	330,782,143	1.008	1.009	12,282
Miscellaneous	138,114,699	1.023	1.024	3,352
Statewide	797,369,391	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	0.53	0.984	0.983
Contracting	12,000	0.44	0.999	0.998
Office & Clerical	12,000	0.47	0.984	0.983
Goods & Services	12,000	1.00	1.008	1.007
Miscellaneous	12,000	0.53	1.012	1.011
Statewide			1.001	1.000

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



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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.



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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
1/11-12/11	1.035	1.006	1.054	1.006
1/12-12/12	1.061	1.027	1.071	1.011
1/13-12/13	1.109	1.063	1.072	1.014
1/14-12/14	1.290	1.167	1.131	1.021
1/15-12/15	2.055	1.558	1.275	1.036

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
1/11-12/11	0.840	0.769
1/12-12/12	0.857	0.793
1/13-12/13	0.875	0.817
1/14-12/14	0.892	0.842
1/15-12/15	0.911	0.868

3. Factors to Adjust to the October 1, 2018 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
1/11-12/11	1.029	1.039	1.054	1.043	1.031
1/12-12/12	1.026	1.036	1.034	1.040	1.031
1/13-12/13	1.024	1.034	1.033	1.038	1.030
1/14-12/14	1.021	1.032	1.032	1.035	1.025
1/15-12/15	1.018	1.029	1.030	1.032	1.023



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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)
1/11-12/11	0.895	0.870	0.903	0.916	0.891	0.907	0.881	0.836	0.798
1/12-12/12	0.933	0.903	0.942	0.940	0.910	0.946	0.915	0.876	0.827
1/13-12/13	0.994	0.952	1.003	1.002	0.961	1.007	0.965	0.902	0.853
1/14-12/14	1.175	1.063	1.188	1.188	1.074	1.191	1.077	0.976	0.881
1/15-12/15	1.906	1.445	1.926	1.928	1.462	1.932	1.465	1.132	0.920

* 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	0.082	0.110	0.127	0.149	0.181	0.207	0.252
(2) Excess Factors 1/(1-(1))	1.089	1.124	1.145	1.175	1.221	1.261	1.337

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.



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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*	0.971	0.999	0.968	1.009	1.024
(2) Final Differentials**	0.983	0.998	0.983	1.007	1.011
(3) Adjustment (2)/(1)	1.012	0.999	1.015	0.998	0.987

*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)
1/11-12/11	0.960	1.038	1.024	1.014	0.973
1/12-12/12	0.973	1.038	1.038	1.000	0.973
1/13-12/13	0.968	1.038	1.045	0.993	0.961
1/14-12/14	0.913	1.038	1.056	0.983	0.897
1/15-12/15	0.981	1.038	1.063	0.976	0.957

3. Adjustment for Experience Change

A factor of 0.939 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 1.205 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
1/11-12/11	1.114	1.100	1.117	1.099	1.087
1/12-12/12	1.114	1.100	1.117	1.099	1.087
1/13-12/13	1.100	1.086	1.104	1.085	1.073
1/14-12/14	1.027	1.014	1.030	1.013	1.002
1/15-12/15	1.096	1.082	1.099	1.081	1.069



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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 0.939 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, 0.961 and 0.938, for indemnity and medical, respectively, are applied to adjust to the proposed trend level.

3. Factors to Adjust to the October 1, 2018 Benefit Level

The pure premiums underlying the current loss costs are at the current October 1, 2017 level. The following factors are applied to adjust to the proposed benefit level.

Effective Date	Indemnity	Medical
May 10, 2018	1.021	1.000
October 1, 2018	1.001	1.000
October 1, 2018	1.000	1.008
Combined Benefit Adjustment	1.022	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	1.191	1.191	1.205	1.205
(2) Loss-based Assessment	1.000	1.000	1.000	1.000
(3) = (1) + (2) – 1.000	1.191	1.191	1.205	1.205
(4) Overall Change (3b)/(3a)			1.012	1.012

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	1.079	1.085	0.994
Contracting	1.077	1.085	0.993
Office & Clerical	1.074	1.080	0.994
Goods & Services	0.994	0.999	0.995
Miscellaneous	1.048	1.058	0.991



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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	0.983	1.000	0.983
Contracting	0.998	0.999	0.997
Office & Clerical	0.983	1.000	0.983
Goods & Services	1.007	1.000	1.007
Miscellaneous	1.011	1.000	1.011

*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	0.912	0.877
Contracting	0.924	0.889
Office & Clerical	0.912	0.877
Goods & Services	0.935	0.900
Miscellaneous	0.935	0.900



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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: \$36,926,876 for indemnity and \$9,456,610 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.



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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	1.0065
Contracting	1.0186
Office & Clerical	0.9859
Goods & Services	1.0049
Miscellaneous	1.0004

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	1.085
Contracting	1.085
Office & Clerical	1.080
Goods & Services	0.999
Miscellaneous	1.058

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.



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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 6% above to 24% below
Contracting	from 7% above to 23% below
Office & Clerical	from 6% above to 24% below
Goods & Services	from 8% above to 22% below
Miscellaneous	from 8% above to 22% 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.

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

List of Classifications Limited by the Lower Swing

2143 2503 2651 2799 3114 3826 4110 4452
 4583 4653 5507 5610 8106 8204 8602 8856
 9019 9620

0917 3507 4720 5040 8292 8803



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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)	\$976.73 ¹	\$1,002.20 ²	2.6%
2) Basis of premium applicable in accordance with the Basic Manual footnote instructions for Code 7370 -- "Taxicab Co.":			
Employee operated vehicle ³	\$76,200	\$78,200	2.6%
Leased or rented vehicle ⁴	\$50,800	\$52,100	2.6%
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	\$3,900	\$4,000	2.6%
4) Minimum Weekly Payroll applicable in accordance with Basic Manual Rule 2-E-1 -- "Executive Officers" ⁷	\$1,000	\$1,000	0.0%

¹ State Average Weekly Wage. Effective October 1, 2017.
² State Average Weekly Wage. Effective October 1, 2018.
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) continue to be determined using the standard methodology described in the literature (e.g. Gillam,W.R.; and Snader, R.H., "Fundamentals of Individual Risk Rating," 1992, and Rollins, J.; and Washburn,M.J., "A Quantification of Snader's Deductible Safety Factor," 1994). The updated values reflect the experience, trend and development consistent with the Excess Loss Pure Premium Factors (ELPPFs) filed in Item R-1415. A newly enhanced methodology for determining ELPPFs was introduced with "Item R-1408 - 2014 Update to the Retrospective Rating Plan Parameters - Excess Loss Pure Premium Factors and Excess Loss and Allocated Expense Pure Premium Factors."



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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
01/01/11 - 12/31/11	0	0	0	412,074	1,584,292	558,106	716,132	379,740	1,510,070
01/01/12 - 12/31/12	0	0	0	707,491	836,826	130,996	837,413	425,232	1,107,903
01/01/13 - 12/31/13	0	0	0	616,360	865,525	272,130	1,133,188	325,174	1,398,219
01/01/14 - 12/31/14	0	0	0	430,156	767,170	660,467	769,088	327,066	1,105,552
01/01/15 - 12/31/15	0	0	29,534	107,802	539,593	544,336	645,067	984,410	1,260,038

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
01/01/11 - 12/31/11	0.895	0.870	0.903	0.916	0.891	0.907	0.881	0.836	0.798
01/01/12 - 12/31/12	0.933	0.903	0.942	0.940	0.910	0.946	0.915	0.876	0.827
01/01/13 - 12/31/13	0.994	0.952	1.003	1.002	0.961	1.007	0.965	0.902	0.853
01/01/14 - 12/31/14	1.175	1.063	1.188	1.188	1.074	1.191	1.077	0.976	0.881
01/01/15 - 12/31/15	1.906	1.445	1.926	1.928	1.462	1.932	1.465	1.132	0.920

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	1.145

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%
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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
01/01/11 - 12/31/11	0	0	0	410,407	1,534,816	550,386	685,981	415,066	1,499,193
01/01/12 - 12/31/12	0	0	0	723,090	827,981	134,739	833,114	472,603	1,138,426
01/01/13 - 12/31/13	0	0	0	671,500	904,371	297,954	1,188,975	387,860	1,478,220
01/01/14 - 12/31/14	0	0	0	555,630	895,859	855,276	900,607	441,164	1,211,827
01/01/15 - 12/31/15	0	0	61,847	225,984	857,743	1,143,451	1,027,510	1,353,063	1,428,771

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

Policy Period	INDUSTRY GROUP: Office and Clerical
01/01/11 - 12/31/11	1.117
01/01/12 - 12/31/12	1.117
01/01/13 - 12/31/13	1.104
01/01/14 - 12/31/14	1.030
01/01/15 - 12/31/15	1.099

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
01/01/11 - 12/31/11	4,963,269,119	1,073,206	2,480,630	463,629	1,674,599	3,553,836	2,138,228	5,692,064
01/01/12 - 12/31/12	4,893,688,199	958,195	1,855,443	527,898	1,271,622	2,813,638	1,799,520	4,613,158
01/01/13 - 12/31/13	4,423,918,676	1,070,277	2,311,054	428,197	1,631,955	3,381,331	2,060,152	5,441,483
01/01/14 - 12/31/14	4,756,593,789	1,453,233	1,850,360	454,399	1,248,182	3,303,593	1,702,581	5,006,174
01/01/15 - 12/31/15	4,623,829,050	1,572,979	2,071,893	1,487,016	1,570,219	3,644,872	3,057,235	6,702,107
Total	23,661,298,833	6,127,890	10,569,380	3,361,139	7,396,577	16,697,270	10,757,716	27,454,986
INDICATED PURE PREMIUM						0.071	0.045	0.12

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	0.080	0.050	0.13
Conversion Factors (App. B-I, Section B)	0.912	0.877	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	0.073	0.044	0.12



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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	0.071	0.045	0.12
2. Pure Premium Indicated by National Relativity	0.073	0.044	0.12
3. Pure Premium Present on Rate Level	0.073	0.044	0.12
4. State Credibilities	69%	100%	xxx
5. National Credibilities	15%	0%	xxx
6. Residual Credibilities = 100% - (4) - (5)	16%	0%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	0.072	0.045	0.12
8. Test Correction Factor	0.9859	0.9859	xxx
9. Underlying Pure Premiums = (7) x (8) *	0.076	0.044	0.12
10. Ratio of Manual to Standard Premium			1.080
11. Loss Cost = (9) x (10)			0.13
12. Loss Cost Within Swing Limits			0.13
Current Loss Cost x Swing Limits			
a) Lower bound = 0.14 x 0.760 = 0.11			
b) Upper bound = 0.14 x 1.060 = 0.14			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	0.076	0.044	0.12
14. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			0.13

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



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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 -8.3%.

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 losses are adjusted to the October 1, 2018 state law level. The federal losses are adjusted to the October 1, 2017 federal law level.

STATE ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/11 - 12/11	1.029	1.039	1.054	1.043	1.031
1/12 - 12/12	1.026	1.036	1.034	1.040	1.031
1/13 - 12/13	1.024	1.034	1.033	1.038	1.030
1/14 - 12/14	1.021	1.032	1.032	1.035	1.025
1/15 - 12/15	1.018	1.029	1.030	1.032	1.023

FEDERAL ACT

Policy Period	Fatal	Permanent Total (P.T.)	Permanent Partial (P.P.)	Temporary Total (T.T.)	Medical
1/11 - 12/11	1.028	1.023	1.010	1.023	1.000
1/12 - 12/12	1.022	1.019	1.008	1.019	1.000
1/13 - 12/13	1.018	1.015	1.006	1.015	1.000
1/14 - 12/14	1.015	1.012	1.005	1.012	1.000
1/15 - 12/15	1.011	1.008	1.003	1.008	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 0.980 and 0.970 for indemnity and medical, respectively.

Policy Period	Indemnity	Medical
1/11 - 12/11	0.840	0.769
1/12 - 12/12	0.857	0.793
1/13 - 12/13	0.875	0.817
1/14 - 12/14	0.892	0.842
1/15 - 12/15	0.911	0.868



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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
1/11 - 12/11	1.093	1.030	1.196	1.036
1/12 - 12/12	1.124	1.052	1.220	1.041
1/13 - 12/13	1.245	1.116	1.253	1.067
1/14 - 12/14	1.412	1.212	1.337	1.089
1/15 - 12/15	2.198	1.728	1.571	1.145

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)
1/11 - 12/11	0.945	0.890	0.954	0.968	0.912	0.958	0.902	0.948	0.821
1/12 - 12/12	0.988	0.925	0.998	0.996	0.932	1.002	0.938	0.997	0.851
1/13 - 12/13	1.116	1.000	1.126	1.125	1.009	1.131	1.014	1.054	0.898
1/14 - 12/14	1.286	1.104	1.300	1.300	1.116	1.304	1.119	1.154	0.940
1/15 - 12/15	2.038	1.603	2.060	2.062	1.621	2.066	1.625	1.395	1.017

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)
1/11 - 12/11	0.944	0.889	0.939	0.927	0.874	0.939	0.885	0.920	0.797
1/12 - 12/12	0.984	0.921	0.982	0.971	0.909	0.982	0.919	0.967	0.826
1/13 - 12/13	1.109	0.994	1.106	1.096	0.982	1.106	0.991	1.024	0.872
1/14 - 12/14	1.278	1.097	1.275	1.266	1.087	1.275	1.094	1.126	0.917
1/15 - 12/15	2.024	1.592	2.018	2.008	1.579	2.018	1.587	1.364	0.994

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



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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	0.082	0.110	0.127	0.149	0.181	0.207	0.252
(2) Excess Factors 1/(1-(1))	1.089	1.124	1.145	1.175	1.221	1.261	1.337

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
1/11 - 12/11	1.205	1.205
1/12 - 12/12	1.205	1.268
1/13 - 12/13	1.205	1.205
1/14 - 12/14	1.205	1.262
1/15 - 12/15	1.205	1.232

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



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APPENDIX B-IV

Section B – Present on Rate Level

1. Benefits

The current underlying pure premiums are at the current October 1, 2017 state and October 1, 2016 federal law levels. These pure premiums are adjusted to reflect the weighted effect of state and federal laws which bring losses to the proposed October 1, 2018 state and October 1, 2017 federal law levels. The distribution of state and federal losses in regard to total losses was used to determine the weighted effects.

State Weight (St%)	0.279
Federal Weight (Fed%)	0.721

	Indemnity	Medical	Total
(a) State Laws	1.022	1.008	1.018
(b) Federal Laws	1.003	1.000	1.002
(c) Weighted Laws = [(a)xSt%] + [(b)xFed%]	1.008	1.002	1.006

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
0.980	0.970



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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	1.205	1.205	1.205
(b) Loss-Based Assessment	1.000	1.000	1.000
(c) Total = (a) + (b) - 1	1.205	1.205	1.205

FEDERAL ACT			
	Indemnity	Medical	Total
(d) Loss Adjustment Expense	1.205	1.205	1.205
(e) Loss-Based Assessment	1.113	1.000	1.065
(f) Total = (d) + (e) - 1	1.318	1.205	1.270

	Indemnity	Medical	Total
(g) Weighted Proposed Expenses = [(c) x St%] + [(f) x Fed%]	1.286	1.205	1.252

Current:

STATE ACT			
	Indemnity	Medical	Total
(h) Loss Adjustment Expense	1.191	1.191	1.191
(i) Loss-Based Assessment	1.000	1.000	1.000
(j) Total = (h) + (i) - 1	1.191	1.191	1.191

FEDERAL ACT			
	Indemnity	Medical	Total
(k) Loss Adjustment Expense	1.191	1.191	1.191
(l) Loss-Based Assessment	1.119	1.000	1.071
(m) Total = (k) + (l) - 1	1.310	1.191	1.262

	Indemnity	Medical	Total
(n) Weighted Current Expenses = [(j) x St%] + [(m) x Fed%]	1.277	1.191	1.242

Change:

	Indemnity	Medical	Total
Weighted Expense Change in Loss-Based Expenses = [(g) / (n)]	1.007	1.012	1.008

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

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

Indemnity	Medical
0.995	0.984



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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: \$125,439,600 for indemnity and \$52,530,400 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 **1.078**
(selected based on Rhode Island off-balance analysis)

C. Swing Limits
No classifications were adjusted on account of swing limits.



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APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 6824

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
01/01/11 - 12/31/11	0	0	0	0	0	0	31,539	0	29,589
01/01/12 - 12/31/12	0	0	0	0	0	0	19,217	0	16,568
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	776	0	2,042
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	1,738

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
01/01/11 - 12/31/11	0	0	0	0	0	0	0	0	476
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	0
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

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
01/01/11 - 12/31/11	0.945	0.890	0.954	0.968	0.912	0.958	0.902	0.948	0.821
01/01/12 - 12/31/12	0.988	0.925	0.998	0.996	0.932	1.002	0.938	0.997	0.851
01/01/13 - 12/31/13	1.116	1.000	1.126	1.125	1.009	1.131	1.014	1.054	0.898
01/01/14 - 12/31/14	1.286	1.104	1.300	1.300	1.116	1.304	1.119	1.154	0.940
01/01/15 - 12/31/15	2.038	1.603	2.060	2.062	1.621	2.066	1.625	1.395	1.017

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
01/01/11 - 12/31/11	0.944	0.889	0.939	0.927	0.874	0.939	0.885	0.920	0.797
01/01/12 - 12/31/12	0.984	0.921	0.982	0.971	0.909	0.982	0.919	0.967	0.826
01/01/13 - 12/31/13	1.109	0.994	1.106	1.096	0.982	1.106	0.991	1.024	0.872
01/01/14 - 12/31/14	1.278	1.097	1.275	1.266	1.087	1.275	1.094	1.126	0.917
01/01/15 - 12/31/15	2.024	1.592	2.018	2.008	1.579	2.018	1.587	1.364	0.994



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APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 6824

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: F
Excess Factor	1.261

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
01/01/11 - 12/31/11	0	0	0	0	0	0	32,904	0	33,604
01/01/12 - 12/31/12	0	0	0	0	0	0	20,849	0	19,661
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	1,004	0	2,511
01/01/15 - 12/31/15	0	0	0	0	0	0	0	0	2,230

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
01/01/11 - 12/31/11	0	0	0	0	0	0	0	0	478
01/01/12 - 12/31/12	0	0	0	0	0	0	0	0	0
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

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

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/11 - 12/31/11	1.205
01/01/12 - 12/31/12	1.205
01/01/13 - 12/31/13	1.205
01/01/14 - 12/31/14	1.205
01/01/15 - 12/31/15	1.205

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

	INDUSTRY GROUP: F-Class
Policy Period	
01/01/11 - 12/31/11	1.205
01/01/12 - 12/31/12	1.268
01/01/13 - 12/31/13	1.205
01/01/14 - 12/31/14	1.262
01/01/15 - 12/31/15	1.232



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APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 6824

TOTAL - PAYROLL, FINAL CONVERTED LOSSES

Policy Period	Payroll	Indemnity Likely	Indemnity Not-Likely	Medical Likely	Medical Not-Likely	Total Indemnity	Total Medical	Total
01/01/11 - 12/31/11	2,017,703	0	39,649	0	41,069	39,649	41,069	80,718
01/01/12 - 12/31/12	844,943	0	25,123	0	23,692	25,123	23,692	48,815
01/01/13 - 12/31/13	959,586	0	0	0	0	0	0	0
01/01/14 - 12/31/14	1,538,544	0	1,210	0	3,026	1,210	3,026	4,236
01/01/15 - 12/31/15	918,132	0	0	0	2,687	0	2,687	2,687
Total	6,278,908	0	65,982	0	70,474	65,982	70,474	136,456
INDICATED PURE PREMIUM						1.051	1.122	2.17

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	4.620	4.270	8.89
Conversion Factors (Section B)	0.995	0.984	xxx
PURE PREMIUMS PRESENT ON RATE LEVEL (Underlying Pure Premiums) x (Conversion Factor)	4.597	4.202	8.80



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APPENDIX B-IV

Derivation of Proposed Loss Cost - Code 6824

Industry Group - F-Class, Hazard Group - F

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	1.051	1.122	2.17
2. Pure Premium Indicated by National Relativity	2.237	3.802	6.04
3. Pure Premium Present on Rate Level	4.597	4.202	8.80
4. State Credibilities	5%	7%	xxx
5. National Credibilities	17%	18%	xxx
6. Residual Credibilities = 100% - (4) - (5)	78%	75%	xxx
7. Derived by Formula Pure Premiums = (1) x (4) + (2) x (5) + (3) x (6)	4.019	3.914	7.93
8. Test Correction Factor	1.0000	1.0000	xxx
9. Underlying Pure Premiums = (7) x (8) *	4.016	3.914	7.93
10. Ratio of Manual to Standard Premium			1.078
11. Loss Cost = (9) x (10)			8.55
12. Loss Cost Within Swing Limits			8.55
Current Loss Cost x Swing Limits			
a) Lower bound = 9.54 x 0.850 = 8.11			
b) Upper bound = 9.54 x 1.150 = 10.97			
13. Pure Premiums Underlying Proposed Loss Cost* = ((13TOT) / (9TOT)) x (9) , (13TOT) = (12) / (10)	4.016	3.914	7.93
14. Disease, Catastrophe and/or Miscellaneous Loadings			0.00
15. Final Loaded Loss Cost			8.55

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



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Advisory Loss Costs and Rating Values Filing – August 1, 2019

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 the state average weekly wage, medical reimbursement levels, or other recurring 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 following changes affecting Rhode Island benefit levels are detailed in this section of the filing:

- Change in Spendable Wages, Effective May 10, 2018
- Change in the Rhode Island Maximum & Minimum Weekly Benefits, Effective October 1, 2018
- Change in the Rhode Island Medical Fee Schedule Effective October 1, 2018
- Longshore and Harbor Workers' Compensation Act
 - Change in the Minimum and Maximum Weekly Benefits, Effective October 1, 2017
 - Annual Assessment



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APPENDIX C-I

Impact of Change in Spendable Wages, Effective May 10, 2018

The Tax Cuts and Jobs Act of 2017 (TCJA) lowers most individual income tax rates beginning in tax year 2018, thereby resulting in higher net pay or “spendable wages” on average¹. In turn, this impacts the amount of indemnity benefits to be paid to injured workers in Rhode Island under the Workers Compensation Act, since the rate of compensation for fatal, total disability, and partial disability benefits is 75% of pre-injury spendable wages. Hence, lower taxes and higher spendable wages will lead to higher workers compensation (WC) benefits, on average, for some injured workers in Rhode Island. The change to spendable wages for injured workers in Rhode Island became effective on May 10, 2018 concurrent with the publishing of the Rhode Island Department of Labor and Training’s Amended Spendable Base Wage Tables as outlined in Information Letter 2018-02. **The overall impact of the TCJA on WC benefits in Rhode Island resulting from the expected increase in spendable wages is +1.4%.**

The approach used in calculating the effect of the TCJA on WC benefits resulting from the expected increase in spendable wages is as follows:

1. Begin with the 2017 Federal Withholding Tax Tables for Single and for Married Filing Jointly taxpayers.
2. Estimate the appropriate number of exemptions for taxpayers with children and without children (using countrywide distributions of the number of dependents in fatal cases).
3. Calculate spendable wages by gross earnings bracket, accounting for federal income tax, FICA² taxes, and state income taxes for each of the four situations, (i) Single, No Children, (ii) Single, With Children, (iii) Married, No Children, and (iv) Married, With Children.
4. Calculate the average weekly benefits (AWB) for the four situations using a countrywide distribution of workers and their wages³, indexed to the Rhode average Island injured worker weekly wage⁴, for each injury type (Fatal, Permanent Total, Permanent Partial, and Temporary Total).
5. Calculate the AWB for each injury type weighted across the four situations⁵.

¹ Note that the elimination of exemptions and slight annual inflationary indexing of the maximum amount of wages in 2018 subject to the 6.2% Social Security tax (from \$127,200 to \$128,400) resulting from the TCJA could have a countering (i.e., downward) impact on spendable wages for some injured workers. These changes are negligible when considered in isolation but are included in determining the overall change due to the tax rate revisions.

² Federal Insurance Contributions Act (FICA) taxes are payroll taxes which go towards the funding of the Social Security program and Medicare.

³ Based on NCCI Detailed Claim Information data.

⁴ Forecasted using the Bureau of Labor Statistics Quarterly Census of Employment and Wages, for all private sector employment, and adjusted to reflect injured workers wages.

⁵ Based on countrywide distributions of average dependents by type (e.g., spouse, spouse with one child, parent, etc.) for fatal and for disability cases.



RHODE ISLAND

APPENDIX C-I

Impact of Change in Spendable Wages, Effective May 10, 2018

- 6. Repeat steps 1 through 5 for calculations reflecting the TCJA, beginning with the 2018 Federal Withholding Tax Tables for Single and for Married Filing Jointly taxpayers.
 - a. Note that the standard deduction was doubled for all taxpayers, and the personal and dependent exemptions were eliminated from 2018 through 2025.
 - b. As a result, the four situations are now, (i) Single, (ii) Single, Head of Household, (iii) Married, Single Earner, and (iv) Married, Dual Earner.
- 7. Calculate the average additional weekly dependent benefit for each injury type, per Rhode Island statutes, using a countrywide distribution of dependents.
 - a. \$40 is used for fatal cases and
 - b. \$15 is used for permanent total and temporary total injury types.
- 8. Calculate the total weekly benefit by injury type⁶ as the sum of the AWB plus the additional weekly dependent benefit calculated in step 7 for both 2017 and 2018.
- 9. Determine the impact of the spendable wage change for each injury type by dividing the 2018 total weekly benefit by the 2017 total weekly benefit for each of the respective injury types.
- 10. Determine the indemnity cost distribution by injury type⁷.
- 11. Using the indemnity cost distribution (Step 10) and the changes in the total weekly benefit by injury type (Step 9), calculate the effect of the TCJA on total indemnity benefit costs.
- 12. Multiply the impact on total indemnity benefit costs (Step 11) by the percentage of losses attributed to indemnity benefits⁸ to determine the impact of the TCJA on overall benefit costs.

The results of the above calculations are as follows:

Type of Injury	Percentage of Losses	Effect (%)
Fatal	1.4%	+0.6%
Permanent Total	0.5%	+2.0%
Permanent Partial	41.8%	+2.2%
Temporary Total	24.4%	+2.0%
Total Indemnity	68.1%	+2.1%
Medical	31.9%	0.0%
Total	100.0%	+1.4%

⁶ The total weekly benefit for the healing period portion of permanent partial benefits includes the additional weekly dependent benefit used for permanent total and temporary total injury types.

⁷ NCCI Unit Statistical Plan data for the 36-month policy period ending 12/31/2014 on the 10/01/2017 law level and developed to an ultimate basis by type of injury.

⁸ NCCI Financial Call data for Rhode Island for Policy Years 2013 through 2015 projected to 5/10/2018.



RHODE ISLAND

APPENDIX C-II

Change in the Minimum and Maximum Weekly Benefits, Effective October 1, 2018

In Rhode Island, maximum and, for certain benefit types, minimum workers compensation indemnity benefit provisions are dependent upon the state average weekly wage (SAWW). The impacts summarized in the table below result from anticipated changes in workers compensation costs due to the change in the SAWW from \$976.73 ("current") to \$1,002.20 ("revised"), and apply to injuries occurring on or after October 1, 2018.

The approach used in calculating the effects of a change in the SAWW is as follows:

1. Obtain the latest available SAWW from the RI Department of Labor.
2. Calculate the minimum and maximum benefits by benefit payment type that are dependent upon and expressed as a percentage of the current and revised SAWW.
3. Using a countrywide distribution of workers and their wages¹, indexed to the Rhode Island average weekly wage², determine expected current and revised average weekly benefits by benefit payment type (and dependency type, as appropriate)³.
4. Use the above-calculated average weekly benefits to determine the indemnity benefit costs for each injury type (Fatal, Permanent Total, Permanent Partial, and Temporary Total)⁴ prior to and subsequent to the change in the SAWW. Calculate the ratio of the revised indemnity benefit costs to current indemnity benefit costs for each injury type to determine the impact by injury type from the change in the SAWW.
5. Determine the indemnity cost distribution by injury type⁵.
6. Using the indemnity cost distribution (Step 5) and the effects by injury type (Step 4), calculate the effect of the change in SAWW on total indemnity benefit costs.
7. Multiply the impact on total indemnity benefit costs (Step 6) by the percentage of losses attributed to indemnity benefits⁶ to determine the impact of the change in the SAWW on overall benefit costs.

<u>Type of Injury</u>	<u>Percentage of Losses</u>	<u>Effect (%)</u>
Fatal	1.4%	+ 0.1
Permanent Total	0.6%	+ 0.1
Permanent Partial	42.2%	+ 0.1
Temporary Total	24.7%	+ 0.1
Total Indemnity	68.9%	+ 0.1
Medical	31.1%	0.0
Total	100.0%	+ 0.1

¹ Based on NCCI Detailed Claim Information data.

² Forecasted using the Bureau of Labor Statistics Quarterly Census of Employment and Wages, for all private sector employment, and adjusted to reflect injured workers.

³ For states where the rate of compensation is based on spendable wages, state and federal tax withholding tables are used in conjunction with pertinent assumptions (e.g., number of dependents).

⁴ Various distributions based on internal and external data are employed in determining the impact by type of injury. For example, for Fatal injuries, a countrywide distribution of average ages and dependents by type (e.g., spouse, spouse with one child, parent, etc.) is used in calculating mortality-adjusted annuity values under both the current and revised weekly maximum benefits, with the likelihood of remarriage incorporated as applicable.

⁵ NCCI Unit Statistical Plan data for the 36-month policy period ending 12/31/2014 on the 05/10/2018 law level and developed to an ultimate basis by type of injury.

⁶ NCCI Financial Call data for Rhode Island for Policy Years 2014, 2015, and 2016 projected to 10/01/2018.



ANALYSIS OF RHODE ISLAND MEDICAL FEE SCHEDULE CHANGES EFFECTIVE OCTOBER 1, 2018

APPENDIX C-III

NCCI estimates that the changes to the fee schedule in Rhode Island, effective October 1, 2018, will result in an impact of +0.2% on overall workers compensation system costs in Rhode Island.

SUMMARY OF CHANGES

The Medical Fee Schedule (MFS) in Rhode Island is published by the Rhode Island Department of Labor and Training (DLT). The prior MFS for physician, ambulance, ambulatory surgical center (ASC), Healthcare Common Procedure Coding System (HCPCS), and dental services in Rhode Island became effective September 1, 2017.

The changes to the Rhode Island Workers Compensation MFS include changes to the physician, ambulance, ASC, 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. Estimate the price level change as a result of the revised fee schedule
 - NCCI research by Frank Schmid and Nathan Lord (2013), "The Impact of Physician Fee Schedule Changes in Workers Compensation: Evidence from 31 States", suggests that a portion of a change in maximum reimbursements is realized on payments impacted by the change.
 - In response to a fee schedule decrease, NCCI research indicates that physician payments decline by approximately 50% of the fee schedule change.
 - In response to a fee schedule increase, NCCI research indicates that physician payments increase by approximately 80% of the fee schedule change. The magnitude of the response for physician fee schedules depends on the relative difference between actual payments and fee schedule maximums (i.e. the price departure). Consequently, the formula used to determine the percent realized for physician fee schedule changes is $80\% \times (1.10 + 1.20 \times (\text{price departure}))$. For non-physician fee schedule changes, a price realization factor of 80% is assumed.
3. 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.



**ANALYSIS OF RHODE ISLAND MEDICAL FEE SCHEDULE CHANGES
EFFECTIVE OCTOBER 1, 2018**

APPENDIX C-III

- The share is calculated as the greater of the percent of observed payments with a maximum allowable reimbursement (MAR) or 75%. NCCI assumes no change for the share of costs not subject to the fee schedule.

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 2016.
- The share of benefit costs attributed to medical benefits is based on NCCI’s Financial Call data for Rhode Island from the latest three policy years projected to the effective date of the benefit changes.

Physician Fee Schedule

In Rhode Island, payments for physician services represent 55.5% of total medical costs. The overall change in maximums for physician services is a weighted average of the percentage change in MAR by procedure code (Revised MAR/Prior MAR). The weights are based on Service Year 2016 observed payments by procedure code for Rhode Island, as reported on NCCI’s Medical Data Call. The overall weighted-average percentage change in maximums for physician services is +1.8%. The impact by category is shown in the following table.

Physician Practice Category	Share of Physician Costs	Percentage Change in MAR
Anesthesia	4.4%	0.0%
Surgery	26.6%	+1.5%
Radiology	9.3%	+2.2%
Pathology & Laboratory	0.3%	+1.9%
Evaluation & Management	25.4%	+2.2%
Medicine	2.9%	+1.8%
State Specific Codes	24.1%	+2.3%
Physician Payments with no specific MAR	7.0%	-
Total Physician Costs	100.0%	+1.8%

Since the overall average maximum reimbursement for physician services increased, the percentage expected to be realized from the fee schedule change is estimated according to the formula $80\% \times (1.10 + 1.20 \times (\text{price departure}))$. The observed price departure for physician payments in Rhode Island is -5%, which implies that the ratio of actual payments to fee schedule maximums is 0.95. The price realization factor is estimated to be 83% ($= 80\% \times (1.10 + 1.20 \times (-0.05))$). The impact on physician payments after applying the price realization factor is +1.5% ($= +1.8\% \times 0.83$).

The above impact of +1.5% is then multiplied by the percentage of medical costs attributed to physician payments in Rhode Island (55.5%) to arrive at an impact of +0.8% on medical costs. This is then multiplied by the percentage of benefit costs attributed to medical benefits in Rhode Island (31.1%) to arrive at an impact of +0.2% on overall workers compensation costs.



**ANALYSIS OF RHODE ISLAND MEDICAL FEE SCHEDULE CHANGES
EFFECTIVE OCTOBER 1, 2018**

APPENDIX C-III

HCPCS Fee Schedule

In Rhode Island, payments for HCPCS services represent 7.2% of total medical costs. The impact on HCPCS services, which is calculated in an analogous manner to the physician fee schedule change, is +0.4%. A price realization factor of 80% was applied. The impact on HCPCS payments after applying the price realization factor is +0.3% (= +0.4% x 0.80).

The above impact of +0.3% is then multiplied by the percentage of medical costs attributed to HCPCS payments in Rhode Island (7.2%) to arrive at a negligible¹ increase in medical and overall workers compensation costs in Rhode Island.

Ambulance Fee Schedule

In Rhode Island, payments for ambulance services represent 0.7% of total medical costs. The impact on ambulance services, which is calculated in an analogous manner to the physician fee schedule change, is +1.2%. A price realization factor of 80% was applied. The impact on ambulance payments after applying the price realization factor is +1.0% (= +1.2% x 0.80).

The above impact of +1.0% is then multiplied by the percentage of medical costs attributed to ambulance payments in Rhode Island (0.7%) to arrive at a negligible increase in medical and overall workers compensation costs in Rhode Island.

Dental Fee Schedule

In Rhode Island, payments for dental services represent 0.5% of total medical costs. The impact on dental services, which is calculated in an analogous manner to the physician fee schedule change, is +6.4%. A price realization factor of 80% was applied. The impact on dental payments after applying the price realization factor is +5.1% (= +6.4% x 0.80).

The above impact of +5.1% is then multiplied by the percentage of medical costs attributed to dental payments in Rhode Island (0.5%) to arrive at a negligible increase in medical and overall workers compensation costs in Rhode Island.

ASC Fee Schedule

In Rhode Island, payments for ASC services represent 2.9% of medical costs and medical costs represent 31.1% of total benefit costs. Therefore, ASC services represent 0.9% (=2.9% x 31.1%) of total benefit costs. Due to sparseness of ASC data reported by procedure code, no reliable estimate of the impact due to the changes to the ASC fee schedule can be calculated. Any impacts due to the ASC fee schedule changes will flow through experience and be reflected in future advisory loss cost filings in Rhode Island.

¹ Negligible is defined in this document to be an impact on system costs of less than 0.1%.



**ANALYSIS OF RHODE ISLAND MEDICAL FEE SCHEDULE CHANGES
EFFECTIVE OCTOBER 1, 2018**

APPENDIX C-III

SUMMARY OF IMPACTS

The impacts from the fee schedule changes in Rhode Island effective October 1, 2018, are summarized in the following table:

Type of Service	(A) Impact on Type of Service	(B) Share of Medical Costs	(C) = (A) x (B) Impact on Medical Costs
Physician	+1.5%	55.5%	+0.8%
HCPCS	+0.3%	7.2%	Negligible Increase
Ambulance	+1.0%	0.7%	Negligible Increase
Dental	+5.1%	0.5%	Negligible Increase
Combined Impact on Medical Costs (D) = Total of (C)			+0.8%
Medical Costs as a Share of Overall Costs (E)			31.1%
Combined Impact on Overall Costs (F) = (D) x (E)			+0.2%



RHODE ISLAND

APPENDIX C-IV

Longshore and Harbor Workers' Compensation Act

Change in the Minimum and Maximum Weekly Benefits, Effective October 1, 2017

In the Longshore And Harbor Workers' Compensation Act , maximum and, for certain benefit types, minimum workers compensation indemnity benefit provisions are dependent upon the national average weekly wage (NAWW). The impacts summarized in the table below result from anticipated changes in workers compensation costs due to the change in the NAWW from \$718.24 ("current") to \$735.89 ("revised"), and apply to injuries occurring on or after October 1, 2017.

The approach used in calculating the effects of a change in the NAWW is as follows:

1. Obtain the latest available NAWW from the United States Department of Labor, Division of Longshore and Harbor Workers' Compensation (DLHWC).
2. Calculate the minimum and maximum benefits by benefit payment type that are dependent upon and expressed as a percentage of the current and revised NAWW.
3. Using a countrywide distribution of workers and their wages¹, indexed to the Longshore And Harbor Workers' Compensation Act average weekly wage², determine expected current and revised average weekly benefits by benefit payment type (and dependency type, as appropriate)³.
4. Use the above-calculated average weekly benefits to determine the indemnity benefit costs for each injury type (Fatal, Permanent Total, Permanent Partial, and Temporary Total)⁴ prior to and subsequent to the change in the NAWW. Calculate the ratio of the revised indemnity benefit costs to current indemnity benefit costs for each injury type to determine the impact by injury type from the change in the NAWW.
5. Determine the indemnity cost distribution by injury type⁵.
6. Using the indemnity cost distribution (Step 5) and the effects by injury type (Step 4), calculate the effect of the change in NAWW on total indemnity benefit costs.
7. Multiply the impact on total indemnity benefit costs (Step 6) by the percentage of losses attributed to indemnity benefits to determine the impact of the change in the NAWW on overall benefit costs.

Type of Injury	Percentage of Losses	Effect (%)
Fatal	2.2%	+ 0.5
Permanent Total	5.9%	+ 0.4
Permanent Partial	41.9%	+ 0.2
Temporary Total	7.6%	+ 0.4
Total Indemnity	57.6%	+ 0.3
Medical	42.4%	0.0
Total	100.0%	+ 0.2

¹ Based on NCCI Detailed Claim Information data.

² Bureau of Labor Statistics Quarterly Census of Employment and Wages, for all private sector employment, and adjusted to reflect injured workers.

³ For states where the rate of compensation is based on spendable wages, state and federal tax withholding tables are used in conjunction with pertinent assumptions (e.g., number of dependents).

⁴ Various distributions based on internal and external data are employed in determining the impact by type of injury. For example, for Fatal injuries, a countrywide distribution of average ages and dependents by type (e.g., spouse, spouse with one child, parent, etc.) is used in calculating mortality-adjusted annuity values under both the current and revised weekly maximum benefits, with the likelihood of remarriage incorporated as applicable.

⁵ NCCI Unit Statistical Plan data for the 36-month policy period ending 12/31/2014 on the 10/01/2016 law level and developed to an ultimate basis by type of injury.



RHODE ISLAND

APPENDIX C-V

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 2018 *	107,000,000
2.) Compensation Payments Reported (on indemnity only) in 2017 *	948,926,168
3.) Assessment Rate on Indemnity Losses (1) / (2)	11.3%

Breakdown of Losses Under the Longshore and Harbor Workers Act

4.) Indemnity Losses (Combination of 1st through 3rd reports) #	44,388,071
5.) Medical Losses (Combination of 1st through 3rd reports) #	32,733,507
6.) Total Losses (4) + (5)	77,121,578
7.) Assessment Rate on Total Losses { (3) x (4) } / (6)	6.5%

* 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, 2019

Part 4 Additional Information

- Definitions
- NCCI Affiliate List
- Key Contacts



RHODE ISLAND

Advisory Loss Costs and Rating Values Filing – August 1, 2019

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.



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Definitions

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

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

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

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



Rhode Island

Advisory Loss Costs and Rating Values Filing – August 1, 2019

NCCI Affiliate List

ACADIA INSURANCE COMPANY
ACCIDENT FUND GENERAL INS CO
ACCIDENT FUND INS CO OF AMERICA
ACCIDENT FUND NATIONAL INS CO
ACE AMERICAN INSURANCE COMPANY
ACE FIRE UNDERWRITERS INSURANCE COMPANY
ACE PROPERTY & CASUALTY INSURANCE COMPANY
ACIG INS CO
ADVANTAGE WC INSURANCE 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 MINING 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 INSURANCE COMPANY
ARGONAUT GREAT CENTRAL INS CO
ARGONAUT INS CO
ARGONAUT MIDWEST INS CO
ARROW MUTUAL LIABILITY INS CO
ASSOCIATED INDEMNITY CORP
ATLANTA INTERNATIONAL INS CO
ATLANTIC SPECIALTY INS CO (ONEBEACON)
BANKERS STANDARD INS CO
BEACON MUTUAL INS CO
BENCHMARK INSURANCE 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
CHARTER OAK FIRE INS CO
CHEROKEE INS CO
CHUBB INDEMNITY INS CO
CHUBB NATIONAL INS CO
CHURCH MUTUAL INS CO
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
COMMERCIAL CASUALTY 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
FOREMOST INS CO GRAND RAPIDS MICHIGAN
FOREMOST PROPERTY & CAS INS
FOREMOST SIGNATURE INS 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

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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 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
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 INDEMNITY CO
MERCHANTS MUTUAL INS CO
MERCHANTS PREFERRED INSURANCE COMPANY
MERIDIAN SECURITY INSURANCE COMPANY
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 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
NETHERLANDS 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
PUBLIC SERVICE INSURANCE COMPANY
QBE INSURANCE CORPORATION
REDWOOD FIRE & CASUALTY INS CO
REGENT INSURANCE COMPANY
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



Rhode Island

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NCCI Affiliate List

SAVERS PROPERTY & CASUALTY INS CO
SECURITY NATIONAL INS CO (AMTRUST GROUP)
SELECTIVE INS CO OF SC
SELECTIVE INS CO OF THE SOUTHEAST
SELECTIVE INSURANCE COMPANY OF AMERICA
SELECTIVE WAY INS CO
SENECA INSURANCE CO
SENTINEL INS CO
SENTRY CASUALTY CO
SENTRY INSURANCE A MUTUAL CO
SENTRY SELECT INSURANCE COMPANY
SERVICE AMERICAN INDEMNITY 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
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, 2019

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