MILLIMAN REPORT

NCCI Proposed Workers Compensation Advisory Loss Costs, Effective 8/1/22

State of Rhode Island and Providence Plantations

Department of Business Regulation

Cranston, RI

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John Herzfeld, FCAS, MAAA
Mary Ann McMahon, FCAS, MAAA

201 Edgewater Drive
Suite 289
Wakefield, MA 01880 USA

Tel +1 781 213 6200

milliman.com

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I. Scope and Intended Purpose

A. Background

On 11/19/21, the National Council on Compensation Insurance, Inc. ("NCCI") filed to revise its Rhode Island workers compensation advisory loss costs to be effective 8/1/22. NCCI proposes an overall change in loss costs of -6.4% for the industrial classes and -14.0% for the Federal ("F") classifications. For the U.S. Longshore and Harbor Workers ("USL&HW") compensation percentage that adjusts for differences in benefits and loss-based expenses, NCCI proposes not to change the current percentage of 84%.

B. Scope

Milliman, Inc. ("Milliman") has been retained by the State of Rhode Island and Providence Plantations Department of Business Regulation ("the Department") to provide an independent actuarial review of NCCI's Rhode Island loss cost filing, with a proposed effective date of 8/1/22, including the underlying assumptions, actuarial methodology, and reasonableness of the assumptions and selections.

C. Intended Purpose

The intended purpose of this report is to assist the Department in evaluating NCCI's proposed loss cost changes.

D. Limitations on Distribution

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II. Summary of Findings

Table 1 summarizes the proposed changes of NCCI and Milliman.

Table 1: Summary of Proposed Changes by Party

Effective 8/1/22

	NCCI	Milliman
Industrial Classes	-6.4%	-6.4%
"F" Classifications	-14.0%	-14.0%
USL&HW %	0.0%	0.0%

The following is a summary of the major findings of Milliman's independent actuarial review of the filing.

- **Industrial Classes:** We find NCCI's methodology to be within a range of reasonableness and its assumptions to be reasonably supported.
- **"F" Classifications:** We find NCCI's methodology to be within a range of reasonableness and its assumptions to be reasonably supported.
- **USL&HW:** We find NCCI's methodology to be within a range of reasonableness and its assumptions to be reasonably supported.

We recommend that NCCI continue to monitor COVID-19 loss experience, including long COVID, and examine the relationship between COVID-19 and experience rating.

III. Summary of NCCI Filing

A. Industrial Classes

Table 2 summarizes NCCI's proposed changes by component.

Table 2: Proposed Changes - Industrial Classifications

Effective 8/1/22

Component	Indication
Impact of Change in Experience and Development	-5.0%
Impact of Change in Trend	-3.0%
Impact of Change in Benefits	+1.9%
Impact of Change in Loss Adjustment Expenses	-0.3%
Proposed Change in Overall Voluntary Loss Cost Level	-6.4%

NCCI proposes an overall change of -6.4% in loss costs for the industrial classes. This is derived from a change in experience and development of -5.0%, change in trend of -3.0%, change in benefits of +1.9%, and a change in the Loss Adjustment Expenses ("LAE") provision of -0.3%.

B. "F" Classifications / USL&HW

Table 3 summarizes NCCI's proposed changes to its "F" classifications and the USL&HW percentage to be Effective 8/1/22.

Table 3: Proposed Changes - Other

Effective 8/1/22

Component	Indication
"F" Classifications	-14.0%
USL&HW %	0.0%

For the "F" classifications, NCCI proposes a loss cost change of -14.0%. For USL&HW, NCCI proposes no change to the current 84% adjustment factor for differences in benefits and loss-based expenses.

This filing proposes to revise the approach used to determine the loss costs for the "F" classification codes that are subject to the benefits provided under the USL&HW Act. The proposed methodology combines the data at a countrywide level, rather than relying on smaller volume of state-specific data, with state-specific benefit relativities and expands the analysis to 10 policy years of data. NCCI states that the new methodology will result in greater year-to-year stability in loss costs, provide a simplified ratemaking approach, and recognize that these types of benefits are the same across all jurisdictions. The "F" classifications represents less than 0.1% of Rhode Island's total payroll.

We asked for a comparison of the indicated F-Class loss costs calculated using the prior methodology to the proposed F-Class loss costs. NCCI stated that this was not available but estimates the indication would be about 3% lower and notes that most F-Class loss costs were limited to the maximum selected -15% swing.

C. Industry Group Loss Cost Level Changes

Table 4 summarizes the distribution of the overall loss cost level change to each industry group as filed by NCCI. The overall change across all classes is designed to balance to the overall aggregate indication.

Table 4: Proposed Changes by Industry Groups

Effective 8/1/22

Industry Group	Average Change
Manufacturing	-9.6%
Contracting	-6.6%
Office and Clerical	-6.2%
Goods and Services	-5.9%
Miscellaneous	-5.2%
Overall	-6.4%

D. Experience Rating Plan Split Point

In experience rating, the split point separates losses into primary and excess components. For the twenty years prior to 2013, the split point had been $5,000. In 2013, NCCI's analysis indicated that the split point should be increased to $15,000, and NCCI stated that the experience rating plan becomes less responsive if the split point is not indexed for claims cost inflation. Rather than implementing a single large change in 2013, NCCI began transitioning to the indicated split point by implementing smaller incremental changes to the experience rating plan. Additional changes in the split point would be based on countrywide severity changes.

Table 5 summarizes the historical split point by year and shows NCCI's proposed split point for 2022.

Table 5: Experience Rating Plan Split Point History

Year	Split Point
1993-2012	$5,000
2013	$10,000
2014-2015	$13,500
2016	$16,000
2017-2018	$16,500
2019	$17,000
2020	$17,500
2021	$18,000
2022	$18,500

In the current filing, NCCI proposes to increase the split point to $18,500, which is an increase of $500 compared to the prior filing. We believe NCCI's implementation of smaller incremental changes to the split point is reasonable, and the proposed split point of $18,500 is also reasonable.

IV. Milliman Analysis and Comments on NCCI Filing

A. Loss Cost Level Indication

With respect to the treatment of individual large losses, NCCI uses the same ratemaking methodology as was used in recent filings of limiting individual large losses to a certain loss threshold (about $2.9 million in this year's filing). The actual excess "paid plus case" loss amounts greater than this amount are removed and replaced with an expected excess loss amount. This methodology is intended to stabilize the loss cost indications. According to NCCI, in the experience period used in this year's filing, there were no claims that exceeded the threshold on a paid basis but there was one claim in policy year 2019 that exceeded it on a "paid plus case" basis.

Using this ratemaking methodology, NCCI calculates an indication of the estimated loss cost needed for the prospective year based on the loss experience of policy years 2017, 2018, and 2019 evaluated as of 12/31/20. We note that policy year 2019 is the latest available policy year for use in the filing, which is based on 12/31/20 data. Policies written during 2019 have effective dates between 1/1/19 and 12/31/19 and are in effect for twelve months. Therefore, these policies have expiration dates between 1/1/20 and 12/31/20, respectively. Policy year 2020 is not fully earned as of 12/31/20 and it is appropriate to exclude that year from the filing.

The proposed indication is based on the following loss development methodology: 100% weight to developed paid losses using loss development factors ("LDFs") based on the average of the latest five years excluding the highest and lowest years ("XHL").

We asked NCCI to calculate alternative loss cost level indications based on the same methodology as described above for the treatment of large losses, but using alternative scenarios. These alternative indications are listed below and compared in Table 6. Please note that these alternative indications reflect the overall impact of the proposed change, including the LAE provision.

- 100% weight to paid losses with LDFs based on the latest five years ("Paid 5")
- 100% weight to paid losses with LDFs based on the latest three years ("Paid 3")
- 100% weight to "paid plus case" losses with LDFs based on the latest five years excluding the highest and lowest years ("Paid+Case 5 XHL")
- 100% weight to "paid plus case" losses with LDFs based on the latest five years ("Paid+Case 5")
- 100% weight to "paid plus case" losses with LDFs based on the latest three years ("Paid+Case 3")
- 50% weight to Paid 5 and 50% weight to Paid+Case 5
- 50% weight to Paid 3 and 50% weight to Paid+Case 3
- 50% weight to Paid 5 XHL and 50% weight to Paid+Case 5 XHL

Table 6 summarizes NCCI's original and alternative indications for the current filing. The table also shows the differential between the original and alternative indications. NCCI's selected methodology (i.e., original indication) is the lowest of all of these tested methods, which also occurred in last year's filing. Prior to last year's filing, the selected methodology usually produced an indication that fell in the middle of the tested alternative indications. However, NCCI's selected methodology is consistent with the approved methodology in recent filings. Based on our review of this data and information, we believe that NCCI's selected methodology is reasonable at this time.

Table 6: Alternative Scenarios - Policy Year Basis

Effective 8/1/22

Scenario	Indication	Average Change
Original	-6.4%	
Paid 5 Years	-5.6%	+0.8%
Paid 3 Years	-5.1%	+1.3%
Paid+Case 5 Years XHL	-5.7%	+0.7%
Paid+Case 5 Years	-5.2%	+1.2%
Paid+Case 3 Years	-6.2%	+0.2%
50% Paid and 50% Paid+Case 5 Years	-5.4%	+1.0%
50% Paid and 50% Paid+Case 3 Years	-5.7%	+0.7%
50% Paid and 50% Paid+Case 5 Years XHL	-6.1%	+0.3%

We also asked NCCI to provide an alternative indication based on loss experience and premium for accident years 2018, 2019, and 2020, using the same loss development methodology used in the original filing. Table 7 summarizes this alternative indication. Please note that this alternative indication reflects the overall impact of the proposed change, including the LAE provision.

Table 7: Alternative Scenarios - Accident Year Basis

Effective 8/1/22

Accident Year	Indication
2018	+1.5%
2019	-7.6%
2020	-25.8%
Total	-10.7%

NCCI notes "it is likely that the AY 2020 experience is influenced by the indirect impact of the COVID-19 pandemic and is not necessarily expected to be indicative of the proposed period."

In general, we believe that NCCI's selection based upon paid LDFs in the calculation of the loss cost indication is reasonable. Paid LDFs have been relied on for many years in Rhode Island and can be stable and reliable for workers compensation coverage, which typically makes periodic payments on claims.

Based on the data and information that we received from NCCI, we believe that NCCI's loss development methodology is reasonably supported.

B. Treatment of COVID-19

1. NCCI Filing

According to NCCI, "The COVID-19 pandemic has shown that pandemics have the potential to be a catastrophic peril on workers compensation system costs. In this filing, COVID-19 is being treated as a catastrophe and all reported data from COVID-19 pandemic claims have been excluded from ratemaking to better reflect the conditions likely to prevail in the filing's proposed effective period beginning on 8/1/22."

NCCI further states, "Both the definition of catastrophe and the treatment of catastrophe losses in property and catastrophe ratemaking are addressed in the Actuarial Standards of Practice (ASOP). As defined in ASOP 39 (Treatment of Catastrophe Losses in Property/Casualty Insurance Ratemaking), a catastrophe is a 'relatively infrequent event or phenomenon that produces unusually large aggregate losses.' ASOP 39 also states that 'consideration should be given to the impact of catastrophes and that procedures should be developed to include an allowance for catastrophe exposure in the rate.'"

NCCI recently revised the Catastrophe (other than Certified Acts of Terrorism) Provision to consider exposure to all events or perils that could result in aggregate workers compensation losses in excess of $50 million, which may include pandemics.

NCCI removed all COVID-19 losses from the historical experience used in the filing. The filing includes a catastrophe factor that indirectly reflects the potential impact of COVID-19 losses.

NCCI provided the following summary of COVID-19 losses in the state of Rhode Island as of 12/31/20:

Table 8: COVID-19 Loss Experience as of 12/31/20

Effective 8/1/22

	Indemnity		Medical		Total		Lost-Time	Med Only
Policy Year	Paid	Paid+Case	Paid	Paid+Case	Paid	Paid+Case	Claims	Claims
2019	836,024	1,706,864	31,200	238,007	867,224	1,944,871	87	3
2020	194,881	726,642	741	336,869	195,622	1,063,511	120	0

This year's filing is based on policy years 2017, 2018, and 2019 only and does not include policy year 2020. The filing is also based on paid losses only. Therefore, COVID-19 losses represent a very small percentage of the overall loss data eligible for use in this filing (about 2% of policy year 2019 paid loss experience and about 0.5% across all three policy years).

In addition, NCCI excludes payments to furloughed employees as a result of COVID-19 from the premium calculations in this filing.

2. Comments from Third Parties

The Department of the Attorney General ("AG") and Beacon Mutual Insurance Company ("Beacon Mutual") provided comments on NCCI's filing concerning the impact of COVID-19 losses on the ratemaking process.

Beacon Mutual noted that "COVID-19 losses are not reflected in experience rating used to evaluate policyholders' loss experience, both for underwriting and premium rating purposes. Therefore, regardless of exposure or whether a policyholder acted to mitigate its exposure to COVID-19 losses, such policyholder's experience rating will not be impacted. In essence, a policyholder that mitigated its workers' compensation claims and losses through appropriate pandemic safety measures for employees would have the same experience and rate as a policyholder which disregarded or failed to enforce safety measures."

In addition, Beacon Mutual "is concerned about the potential impact of NCCI's exclusion of COVID-19 losses from experience rating and loss cost filings, as well as its treatment of pandemic losses as Catastrophe losses. It is widely recognized, including by NCCI, that the long-term impact of COVID-19 and potential future pandemics remains unknown. Experts are just beginning to study the effects of post-acute COVID-19, also known as 'Long COVID.' It is also uncertain whether COVID-19 will result in delayed losses, including from mental stress and employer liability claims, as well as permanent claims. In addition, other considerations, such as potential legal and legislative changes, may impact the compensability of pandemic-related losses. Also, limitations and/or exclusions for occupational disease-related losses are being proposed by reinsurers in response to the COVID-19 pandemic."

The Attorney General "recognizes that certain factors, such as risk to occupations comprised of frontline workers and increase of teleworking capabilities, will determine whether the COVID impact ultimately results in a positive, negative, or flat change in the loss cost levels, and for how long that impact may last. Nonetheless, in a time when so many employers continue to suffer financial hardship, it is critical to keep workers compensation costs as low as possible this year and going forward once the COVID impact is able to be quantified. COVID-19 experience should be considered in NCCI's ratemaking going forward and not excluded in order to establish the most accurate baseline for these rates."

3. Milliman Comments and Recommendations

NCCI excludes payments to furloughed employees from the premium calculations in this filing. We believe this approach to be reasonable as furloughed employees can not file a workers compensation claim during their furlough. Further, this prevents an overstatement of premium in the filing, which would result in a lower rate level indication.

We believe NCCI's proposed approach of treating COVID-19 loss data in the filing is reasonable at this time. As additional information about COVID-19 losses emerge, alternative approaches may be reasonable for future filings. We recommend that NCCI continue to monitor COVID-19 loss experience, including long COVID.

We recognize the possibility of double counting the impact of COVID-19 on specific classifications (e.g., Nursing Homes and Hospitals) and experience rating. Thus, we recommend that NCCI examine the relationship between COVID-19 losses and experience rating.

C. Treatment of Large Losses

We believe that NCCI's ratemaking methodology with respect to the treatment of large losses is reasonable and appropriate for use in a small state like Rhode Island. It is a continuation of NCCI's program utilized in prior Rhode Island filings and is similar to NCCI's program in other states. This methodology should help increase long-term stability in the loss cost level in Rhode Island. If one or more large losses occur in a policy year, it will not cause the loss cost level to increase as significantly in the years that follow. The large loss threshold is $2,894,382 in this year's filing, which is slightly lower than the threshold of $3,262,665 in the prior filing. The large loss threshold changes over time based on loss trend and development. We believe the proposed large loss threshold of $2,894,382 is reasonable at this time.

D. Tail Factors

A “tail factor” is the final LDF that is applied to losses to develop them to an ultimate basis and is selected for each of medical and indemnity losses. NCCI selects its tail factors based on historical loss information.

Based on a review of loss experience from policy years 1991 to 2000, NCCI’s selected the following tail factors:

- Indemnity “paid plus case” of 1.005
- Indemnity paid of 1.007
- Medical “paid plus case” of 1.000
- Medical paid of 1.020

The selected indemnity paid tail factor is slightly lower than the prior filing (1.008) and all other selected tail factors are unchanged from the prior filing.

We asked NCCI to provide an alternative indication using the prior selected tail factors along with the other assumptions of the original filing. According to NCCI, the alternative indication in this scenario is -6.4%, which is the same as the original proposed indication.

We also asked NCCI to provide alternative indications based on the latest eight-year average (i.e., policy years 1993 to 2000) and latest five-year average (i.e., policy years 1996 to 2000) of “paid plus case” indicated factors. According to NCCI, the alternative indications are -6.5% and -6.4%, respectively.

Please note all of these alternative indications reflect the overall impact of the proposed change, including the LAE provision.

Based on the data and information that we received from NCCI, we believe that both the medical and indemnity tail factors are reasonably supported.

E. Trend Factors

NCCI uses trend factors to measure expected changes in benefit costs along with expected changes in wages. Trend is determined separately for indemnity and medical benefits. The indemnity portion of the 2019 adjusted limited total losses is 71% and the medical portion is 29%.

In the current filing, NCCI proposes decreasing the indemnity trend factor from -3.0% to -3.5% and decreasing the medical trend factor from -4.5% to -5.5%. NCCI’s selections are based on an analysis of Rhode Island historical loss ratios as well as economic data.

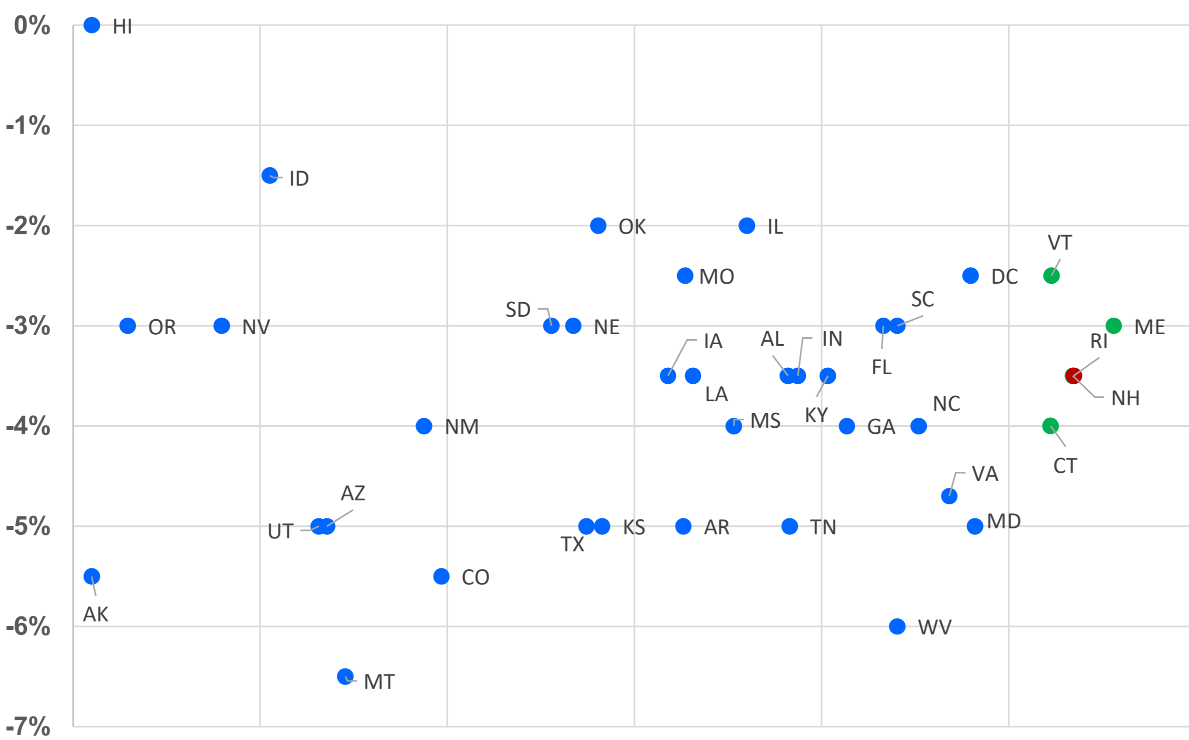
For comparison purposes, we asked NCCI to calculate alternative overall indications for each of the following alternative scenarios: (a) -3.0% for the indemnity trend factor and -4.5% for the medical trend factor (i.e., no change to the currently approved trend selections); (b) -4.0% for the indemnity trend factor and -6.0% for the medical trend factor; and (c) -3.0% for the indemnity trend factor and -5.0% for the medical trend factor. The overall indications are -3.5% for scenario (a), -8.7% for scenario (b), and -4.2% for scenario (c). Please note that these alternative indications reflect the overall impact of the proposed change, including the LAE provision.

NCCI also provided the currently approved indemnity and medical trend factors in other NCCI states, the annual percentage changes in the indemnity and medical loss ratios in Rhode Island, and the exponential trend analyses that were reviewed for Rhode Island along with the goodness-of-fit statistics, or R-squared values.

Indemnity Trend Factor

Chart 1 illustrates the currently approved indemnity trend factors in states where NCCI performs a workers compensation analysis. Regarding NCCI's selected indemnity trend factor of -3.5%, we note that there are many states that have both higher and lower approved indemnity trends than RI. The selected indemnity trend factors for the surrounding New England states are -4.0% for CT, -3.0% for ME, -3.5% for NH, and -2.5% for VT. In addition, the countrywide unweighted average is -3.8%.

Chart 1: Comparison of Rhode Island Proposed Indemnity Trend Factor with Approved Trend Factors for All Other NCCI States



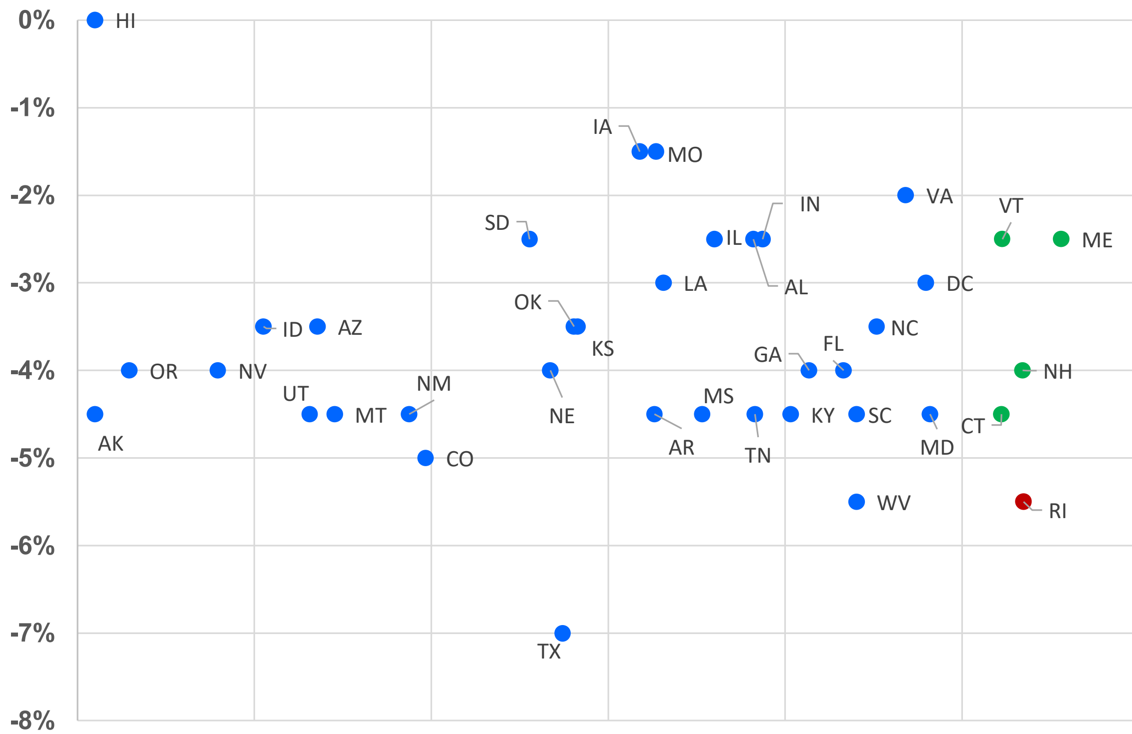
We also reviewed the 5, 6, 7, 8, 9, 10, 11, and 12-year goodness-of-fit statistics of the indemnity trend. The 11-year data fit had the highest goodness-of-fit statistic, and this corresponds to an indemnity trend factor of -4.6%. Including additional years in the data fit implies a lower indemnity trend factor but it also reduces the goodness-of-fit statistic.

At this time, in light of the data and information provided by NCCI, we believe the selected indemnity trend of -3.5% is reasonably supported.

Medical Trend Factor

Chart 2 illustrates the currently approved medical trend factors in states where NCCI performs a workers compensation analysis. Regarding NCCI's selected medical trend factor of -5.5%, we note that only one state (TX) has a lower approved medical trend (-7.0%) and only one other state (WV) has the same medical trend factor (-5.5%). All other states (35) have greater medical trend factors than the selection for RI. However, we note that most states (25 of the 37 states reviewed by NCCI) have an approved medical trend of -3.5% or less negative. The selected medical trend factors for the surrounding New England states are -4.5% for CT, -2.5% for ME, -4.0% for NH, and -2.5% for VT. In addition, the countrywide unweighted average is -3.7%.

Chart 2: Comparison of Rhode Island Proposed Medical Trend Factor with Approved Trend Factors for All Other NCCI States



We also reviewed the 5, 6, 7, 8, 9, 10, 11, and 12-year goodness-of-fit statistics of the medical trend. In general, the data indicates a lower medical trend factor than -5.5%. The 8-year data fit had the highest goodness-of-fit statistic, and this corresponds to a medical trend factor of -9.1%. Including additional years in the data fit generally implies higher medical trend factors but it also reduces the goodness-of-fit statistic. We note that a medical trend factor of -9.1% would be an outlier compared to other states.

At this time, in light of the data and information provided by NCCI, we believe NCCI's selected medical trend of -5.5% is reasonably supported. We believe that changes to trend factors should be a gradual process, so we believe the proposed change from -4.5% to -5.5% is reasonable at this time.

F. Loss Adjustment Expense Provision

NCCI is proposing a decrease in the LAE provision from 23.3% to 22.9%, for an estimated impact of -0.3%. LAE is comprised of two components, Defense and Cost Containment Expenses ("DCCE") and Adjusting and Other Expenses ("AOE").

Two years ago, NCCI proposed a new method for determining the DCCE portion of the LAE. Previously, the DCCE portion of the LAE provision had been calculated based on a selected countrywide DCCE provision calculated from the NCCI Call for Loss Adjustment Expenses ("Financial Call #19"). This countrywide DCCE provision was then adjusted by applying a state-specific relativity derived using NAIC Annual Statement payment data.

NCCI is now calculating the DCCE provision more directly by utilizing Rhode Island-specific paid DCCE and losses, reported on the NCCI Call for Policy Year Data ("Financial Call #3"). Under this new methodology, the ratios of reported paid DCCE to paid losses by policy year are developed to a 19th report using DCCE ratio development factors. A 19th-to-ultimate tail factor is applied to reflect expected development beyond the 19th report. The proposed DCCE provision is selected based on the ultimate projected DCCE ratios by policy year.

As loss costs have decreased in Rhode Island in each of the five most recently approved filings, it is not unreasonable for the LAE provision (or one of its two components) to increase. Expenses may not be decreasing at the same rate as the level of losses and therefore the expense ratio (as measured by the ratio of expenses to losses) may exhibit an increase due to the smaller level of losses. In this year's filing, NCCI is proposing to increase the AOE provision from 8.9% to 9.4% and decrease the DCCE provision from 14.4% to 13.5%.

We believe that NCCI's proposed change in the LAE provision of -0.3%, coupled with the proposed change of -6.1% in losses, is reasonable at this time.

G. USL&HW Compensation Coverage Percentage

NCCI is proposing no change in the USL&HW benefits provision of 1.75 that was based on a recently completed a study of the USL&HW factors using Unit Statistical Data. NCCI is also proposing no change to the factor to adjust for differences in loss-based expenses of 1.050. Therefore, there is no proposed change to the USL&HW Coverage Percentage of 84%.

We believe the USL&HW Coverage Percentage of 84% is reasonable at this time.

H. Summary

With respect to the following major areas of review, we believe that NCCI's methodology and assumptions in this year's filing is reasonable at this time:

- weighting of standard actuarial loss development methodologies
- selection of LDFs
- treatment of COVID-19
- treatment of large losses

- selection of the indemnity and medical trend factors
- selected LAE provision
- selected USL&HW Compensation Coverage Percentage

Please note that for convenience we use the term “reasonable” in this report as equivalent to our understanding of not excessive, inadequate, or unfairly discriminatory as stated in Rhode Island law and regulations.

We recommend that NCCI continue to monitor COVID-19 loss experience, including long COVID, and examine the relationship between COVID-19 and experience rating.

V. Disclosures and Limitations

A. Acknowledgement of Qualifications

John Herzfeld is a Principal of Milliman, a Fellow of the Casualty Actuarial Society, and a Member of the American Academy of Actuaries. Mary Ann McMahon is a Consulting Actuary of Milliman, a Fellow of the Casualty Actuarial Society, and a Member of the American Academy of Actuaries. John and Mary Ann each meet the qualification standards of the American Academy of Actuaries to provide the findings in this report.

B. Data and Information

In performing this analysis, we relied on data and other information provided by NCCI. We have not audited or verified this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. In that event, the results of our analysis may not be suitable for the intended purpose.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

C. Uncertainty

Actuarial estimates are subject to uncertainty from various sources, including changes in claim reporting patterns, claim settlement patterns, judicial decisions, legislation, and economic conditions.

In estimating the amount of loss cost change required, it is necessary to project future loss and LAE payments. Actual future losses and LAE will not develop exactly as projected and may, in fact, vary significantly from NCCI's projections. Further, the projections make no provision for future emergence of new classes or types of losses not sufficiently represented in NCCI's historical database or that are not yet quantifiable.

Indemnity benefits and the availability/timeliness of medical treatment may be impacted by the COVID-19 pandemic. The length of the recovery period, the ultimate cost of treatment, and the timing of payments for workplace and other injuries may be affected. In addition, the pandemic may influence the filing and settlement of claims in unexpected ways.

D. Variability of Results

NCCI's estimates are based on long term averages. Actual loss experience in any given year may differ from what is suggested by these averages.

VI. Glossary of Insurance Terms

Actuarial Central Estimate. An actuarial central estimate represents an expected value over the range of reasonably possible outcomes. As such, it is conceptually similar to an estimate of the mean. Since the range of reasonably possible outcomes may not include all conceivable outcomes, an actuarial central estimate is not technically a true statistical mean. For example, the range of reasonably possible outcomes may exclude conceivable extreme events whose contribution to the true statistical mean is not reliably estimable.

Adjusting and Other Expenses ("AOE"). AOE is the portion of loss adjustment expenses that covers all claims adjusting expenses, whether internal or external to an insurance company.

Case Reserves. Case reserves are the claims administrator's estimates of future payments on individual reported claims for a particular period at a specific point in time.

Defense and Cost Containment Expenses ("DCCE"). DCCE is the portion of loss adjustment expenses that covers all defense and litigation-related expenses, whether internal or external to an insurance company.

Incurred But Not Reported ("IBNR") Reserves. IBNR reserves are the difference between ultimate losses and case incurred losses to date. As such, they are a provision for unreported claims, changes in incurred values on open claims, and future payments on reopened claims.

Incurred ("Paid Plus Case") Losses. Incurred losses are the sum of all paid losses and case reserves for a particular period at a specific point in time. Incurred losses are also referred to as case incurred losses or reported losses.

Loss Adjustment Expenses ("LAE"). LAE is classified as allocated loss adjustment expenses ("ALAE") and unallocated loss adjustment expenses ("ULAE"). Generally, ALAE includes claims settlement costs directly assigned to specific claims, such as legal fees, and ULAE includes other claims administration expenses.

Loss Cost. A loss cost is the ratio of ultimate losses to payroll (in $100 increments). In this report, LAE are excluded from the loss costs.

Loss Development Factor. A loss development factor ("LDF") is a ratio used to quantify the change in immature loss data over time. An "age-to-age" or "incremental" LDF is the ratio of a specific data item (e.g., paid losses, incurred losses, reported claims, etc.) at successive evaluations. An "age-to-ultimate" or "cumulative" LDF quantifies the change in the data item from its current value to its ultimate value when all claims are closed.

Paid Losses. Paid losses for a particular period are losses that have been paid on all known claims.

Premium On-Leveling. Premium on-leveling is the process of estimating what historical premium levels would be, had the insurance been written today.

Tail Factor. A tail factor is a final development factor that is applied to losses (or claims) to develop to an ultimate basis. Tail factors provide for development beyond the maturities represented in the historical development triangles.

Trend Factors. Trend factors adjust historical values for inflationary effects and any other underlying trends that are expected to produce changes over time. For WC, a loss trend factor accounts for the expected combined growth in indemnity benefits and medical costs, and a payroll trend factor accounts for the expected growth in wages.

Ultimate Losses. Ultimate losses are the final settlement values for all claims. Until all claims are closed with no possibility of reopening, ultimate losses can only be estimated. At any prior time, an estimate of ultimate losses is equal to the sum of paid losses, case reserves, and estimated IBNR reserves.