NYCIRB
New York Compensation
Insurance Rating Board
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Meeting of the Actuarial Committee
Actuarial Research
Tuesday, April 30 and Wednesday May 1, 2019
Meeting Minutes

Mr. Jeremy Attie presided

Members	**Represented by**
American Home Assurance Company	Marc Fournier / Amanda Bello
Continental Indemnity Company	Rose Barrett
Federal Insurance Company	Ju-Young Suh
Hartford Accident and Indemnity Company	Nicholas Papacoda
Liberty Mutual Fire Insurance Company	Sandra Kipust
New York State Insurance Fund	Timothy Koester / Peter Hennes
Public Member	Mark Priven
Pennsylvania Manufacturers' Assoc. Ins. Co.	Scott Curlee
QBE Insurance Corporation	John Celidonio
Technology Insurance Company	Bryan Ware
Travelers Indemnity Company	Brian Clancy

Non-Voting Attendees

Arch Insurance Company	Scott Burke
Continental Casualty Company	Julia Stenberg
Greater New York Mutual Insurance Company	Jeffrey Feder
North American Specialty Insurance Corporation	Dionne Chisolm
Zurich North American Insurance Company	Mauro Garcia

Others Present

Provident Actuarial Consulting	Robert McCarthy*
National Council on Compensation Insurance	Yuchen Su
New York Compensation Insurance Rating Board	Jeremy Attie / Ziv Kimmel
	Brett King / Neal Leibowitz
	CJ Mohin / Suzanne Finnegan
	Robert Fogelson† / Ivy Zhu
	Christopher DiPaola / Yan Lin
	Peter Zhou / Hannah Ferziger
	Taylor Boudwin-Jones

* Attended on Tuesday, April 30, 2019 only
† Attended on Wednesday, May 1, 2019 only

Prior to the consideration of the agenda, the antitrust compliance policy statement and ethics statement were distributed to and signed by Committee members and non-voting attendees. Mr. Jeremy Attie welcomed all of the attendees.

Loss Development Research

Mr. Kimmel informed the Committee that preliminary research by the Rating Board suggested that further refining loss development categories from the current categories – "Likely" to develop and "Not Likely" to develop – may increase accuracy in class ratemaking, experience rating, and excess loss analysis. Mr. Brett King, the Rating Board's Director of Actuarial Research, presented the latest update on the research of loss development categories, which was attached as Exhibit A to the agenda.

Several Committee members agreed that the current methodology is not refined sufficiently, and further refinement should be explored. However, concerns were raised with respect to the complexity and stability of the presented analysis. A Committee member questioned whether the same groupings would be generated over time as new data emerges. It was also suggested that the proposed groupings shown were in some cases too refined, raising concerns over the complexity of the model. Mr. King noted his view that current programming power can facilitate implementation of complex models.

It was suggested that size of loss may matter more for certain injury types but not others. Further, Committee members suggested using a percentile other than the median to separate losses by size. To simplify the approach, Committee members suggested that the Rating Board create two sets of groupings: one for early report levels (such as first to ultimate, second to ultimate, etc.) and another for later report levels, (such as fifth to ultimate, etc.), instead of a separate set of groupings for each report level. Further, another Committee member recommended that the variance of loss development factors be utilized as part of the grouping process.

A Committee member pointed out that, based on the data shown, it appears that many temporary claims were still open at third report and beyond, and recommended that the Rating Board further examine this data anomaly.

Another Committee member suggested that in addition to a data driven model, a narrative should be developed explaining the intuitive reasons for each grouping. It was suggested that the Rating Board consider utilizing a Generalized Linear Model ("GLM") to advance this project, however, other Committee members expressed their view that introducing a GLM should be a low priority at this point.

Finally, the Committee agreed that in order to limit complexity, the Rating Board should focus on creating a small number of groups rather than more groups. It was also agreed that more testing of any proposed groupings would be required to examine both the predictive accuracy of the proposal at the class level, as well as the stability of the model over time.

Experience Rating Research

Mr. Kimmel reminded the Committee that in October of 2017, the Committee requested that the Rating Board conduct a holistic review of the experience rating plan. Mr. King presented the Committee with an update on experience rating plan research. The presentation was included as Exhibit B to the agenda. Mr. King discussed the possibility of adjusting certain parameters within the current plan as a short-term adjustment until an alternative plan is developed. However, he indicated that if items such as the loss limit and credibility parameters are changed within the current plan then (a) such adjustments may violate some of the underlying credibility assumptions of the current plan framework, and (b) it is possible that the weighting of the Weights and Ballasts with other states will no longer be under the same credibility umbrella and may have undesirable consequences on the resulting mods of interstate risks. Mr. King proceeded to describe several alternative plans and resulting quintile tests which were attached as Exhibit C to the agenda.

Committee members raised several issues. First, a question was raised with respect to small claims, their predictive value, their random nature and any incentive to underreport them as a result of the plan's structure. Mr. Kimmel reminded the Committee that the current New York plan differs from NCCI's in that the New York plan includes the full value of medical only claims. It is not yet known whether removing a portion of these claims would solve any underreporting issues.

Second, questions arose with respect to the appropriateness of claims free credits, and maximum modification factors for small vs. large risks. It was suggested that other stakeholders, such as regulators, be consulted to obtain their perspective on this matter.

Third, the stability of modification factors was discussed, considering that a single claim can result in a very large swing in a risk's modification factor and its resulting premiums.

Fourth, a Committee member requested information relating to the statutory and regulatory requirements pertaining to the Rating Board's merit rating plan. Mr. Kimmel responded that the Rating Board provided the Committee with a statutory and regulatory analysis of experience rating requirements in the fall of 2018, and that he would once again provide a copy of that analysis to the Committee.

With respect to the specific plans presented, Committee members expressed concerns over some of the very large factors generated under the California experience rating plan. A Committee member suggested that, intuitively, the claim count model may be appropriate given that the actual value of a claim is subject to a certain level of randomness. A concern associated with the claim count model was that a very small claim can potentially result in a premium increase higher than the cost of the claim.

For the long-term plan, the Committee agreed on a number of items. First, there was agreement that there should be no more than a single experience rating plan and a single merit rating plan. Second, there was agreement that several factors need to be considered and discussed with various system stakeholders: simplicity, socialization (the appropriateness of very large mods), stability of year-to-year mod changes, and the impact of the transition from current plan. The Rating Board should then incorporate that input as it further explores the four approaches described in the presentation.

With respect to a short-term adjustment of the current plan, the Committee agreed that the Rating Board should have discussions with NCCI to explore the interstate implication of the optimized New York model. If the optimized plan works well on interstate risks, it should be brought to the Committee in October for review and approval.

A motion was made to adjourn the meeting and the motion was approved.