National
Council on
Compensation
Insurance, Inc

Laura Backus Hall
State Relations Executive
Regulatory Service Division

January 30, 2008

Paula Pallozzi
Chief Property & Casualty Insurance Rate Analyst
State of Rhode Island & Providence Plantations
Department of Business Regulation (DBR), Insurance Division
233 Richmond Street - Suite 233
Providence, RI 02903-4233

Re: Experience Rating and Schedule Rating Analysis

Dear Paula:

In accordance with the Department's decision NCCI 06-I-0168 I am submitting our review of Experience Rating thresholds in Rhode Island.

NCCI periodically reviews the performance of the experience rating plan. NCCI's various studies have included results based on different characteristics of experience rated risks. The enclosed review contains key findings and observations from NCCI's most recent analyses. While NCCI's continues to review the experience rating plan, we offer recommendations pertaining to the current experience rating and schedule rating thresholds in Rhode Island.

Please feel free to contact me if you want to discuss the enclosed analysis. NCCI appreciates the opportunity to provide information. We understand your need to have the best available information on which to base your judgments.

Sincerely,

Laura Backus Hall
State Relations Executive

LBH:ah

Cc: Karen Ayres, NCCI

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Review of Experience Rating Thresholds
Rhode Island

Current Experience Rating Eligibility Threshold

Rhode Island's current experience rating threshold requires $10,000 of subject premium in 24 months, or average annual subject premium of $5,000. These values are similar to other New England states, as shown in the following chart:

	Subject Premium	
State	24 Months	Average Annual
Connecticut	$11,000	$5,500
Maine	$9,000	$4,500
New Hampshire	$11,000	$5,500
Rhode Island	$10,000	$5,000
Vermont	$8,000	$4,000

The RI experience rating threshold was raised to this level on September 1, 2002. The historical experience rating thresholds prior to that date are summarized below.

	Subject Premium	
Effective Date	24 Months	Average Annual
July 11, 1990	$4,000	$2,000
September 1, 2000	$6,500	$3,250
September 1, 2001	$7,500	$3,750
September 1, 2002	$10,000	$5,000

Schedule Rating Eligibility – The current schedule rating threshold in RI is $5,000. In many states, including RI, schedule rating eligibility is consistent with the average annual premium required for experience rating. This is primarily a result of historical precedent, when the Schedule Rating Plan was included as part of the Experience Rating Plan Manual. The plans are not directly related, however, and the Schedule Rating Plan has since been removed from the Experience Rating Plan Manual. It is now contained within the Basic Manual.

Unlike experience rating, which is mandatory for all eligible risks, the application of schedule rating is not mandatory. It may be applied on a case by case basis, at the discretion of the carrier, to reflect risk characteristics that are not reflected in the risk's experience. Because it is not mandatory, and because its application is discretionary, the NCCI-filed loss costs do not contemplate schedule rating. Therefore, the selection of a different threshold for schedule rating would not affect the adequacy of the rating organization-filed loss costs. NCCI views the setting of the schedule rating threshold as a public policy issue.

NCCI's Analysis of Experience Rating Plan Performance

NCCI periodically reviews the performance of the Experience Rating Plan. NCCI's various studies have included results based on different characteristics of experience rated risks. Following are some key findings and observations from NCCI's most recent analyses. The results cited reflect experience for all NCCI states combined.

Differences in Experience by Size of Risk

Experience shows that small risks, in the aggregate, generally have worse loss experience than medium and large risks. The attached exhibits demonstrate several differences in the results for large versus small insureds.

Exhibit I shows the volatility over a five year period in individual risk experience by size of risk. Exhibit I-A looks at the volatility in the experience mods, while Exhibit I-B shows the volatility in the pure loss ratios. From these exhibits, the following observations may be made.

- Exhibit I-A shows that the annual experience mods for small risks appear to vary over time to about the same extent as large risks (column 2).
- Using similar measurements, Exhibit I-B shows that actual loss experience for small risks varies significantly more over time than for large risks. The five-year average loss ratios vary more significantly across risks (column 2). Likewise, over the five year period, the annual loss ratios for an individual risk vary more widely for small risks than for large risks (columns 3 and 5.)
- Taken together, the prior two bullets suggest that lower credibility in the Experience Rating Plan creates a level of stability in the mods for small risks comparable to the stability of large risk mods.

Exhibit II shows that, based on a least squares regression, the loss ratios for larger insureds are better than those for smaller insureds. The Experience Rating Plan cannot fully compensate for this, and compensates very little for small risks where the credibility is very low.

Exhibit III further examines difference by size by looking at the experience of risks with no lost time claims compared to those with one or more lost time claims. For each size of loss range, the exhibit shows the average experience mod and the subsequent actual/expected loss ratio for claim free risks versus those with claims. (Note that the experience mods and the loss ratios have been normalized so that the average over all size ranges equals 1.00. As such, the results shown in the two columns can be viewed as relativities to the overall average.) The following observations can be made.

- Approximately 20% of small risks (those with expected losses less than $5000) experience a lost-time claim within the experience period used for calculating the experience mod.

- Smaller risks have higher experience mods than larger risks; this can be seen in the column labeled Weighted Average Experience Modification Factor. This is true for both claim free risks as well as those that have experienced claims.
- The average loss ratios are higher for smaller risks than for larger risks. Again, this holds for claim free risks as well as those with claims. This is evident in the last column labeled Subsequent Actual Loss/Manual Basis Expected Loss.
- For each category of risks, the subsequent loss ratios are relatively higher than the experience mods would have suggested. The difference between these two values increases as the risk size decreases.
- The above results suggest that the experience mods for small risks are not sufficiently large to account for their relatively worse loss experience.
- If a loss free credit of x% were applicable to small risks, a corresponding debit of approximately 4x% would be needed to achieve balance in the Experience Rating Plan. In other words, a 10% loss free credit would require an offsetting debit of 40%.

Current Performance of the Experience Rating Plan

NCCI regularly evaluates the performance of the Experience Rating Plan by using a 'quintile test'. In this test, countrywide risks are sorted by the value of the mod and divided into five equally sized groups called quintiles. Each of the quintiles is large enough to be very credible. Exhibit IV displays the results of NCCI's latest review of the quintile test.

In the quintile test, two different measures are evaluated.

- The ratio of actual losses to expected losses is calculated for each quintile. If the Experience Rating Plan is performing well, the risks receiving the lowest mods will have the best experience and the risks with the highest mods will have the worst experience. The left hand set of bars on Exhibit IV shows that this is the case; the left-most bar in that set shows that risks with mods less than .84 had a loss ratio of roughly 70% while the right hand bar shows that risks with mods greater than 1.19 had a loss ratio of nearly 150%.

- The ratio of actual losses to modified expected losses (which reflects the application of the mod) is also calculated for each quintile. If the Experience Rating Plan is performing well, the modified loss ratios will be similar across the quintiles. The right hand set of bars on Exhibit IV shows that the modified loss ratios are close to 100% for each quintile.

Aspects for Future Review of Experience Rating Plan

NCCI is undergoing an extensive review of various aspects of the Experience Rating Plan. The overall project has been divided into four phases, each of which involves

significant staff analysis, as well as peer review by NCCI's Actuarial Committee. The phase of this project that includes a review of the Experience Rating thresholds is currently targeted for completion by the end of 2008.

Recommendations

The information presented above indicates that the NCCI Experience Rating Plan is currently performing well. Differences in actual experience across risks are being appropriately reflected in the experience mods. Lower credibilities associated with smaller risks are helping to mitigate the volatility in the actual loss experience of those risks. Modifications to the Experience Rating thresholds could be expected to affect these results, and may require additional adjustments to the Plan to ensure that it remained actuarially sound. As a result, NCCI recommends that the current thresholds be retained while the broader review of the Experience Rating Plan is ongoing. In the meantime, any changes that the DBR wishes to consider regarding Schedule Rating eligibility could be implemented without affecting the actuarial adequacy of the NCCI-filed loss costs or the Experience Rating Plan.

Volatility Over Time of Individual Risk Experience Modification Factor By Size of Risk

Policy Years 1998 through 2002

(Includes only risks with mods for all 5 policy years.)

Avg Expected Losses	Risk Count	(1) Avg of 5-Yr Avg Mods	(2) Stnd Dev Across Risks of 5-Yr Avg Mods	(3) Avg Stnd Dev Within Risk of Mod Over 5 Yrs	(4) Std Dev of the Col (3) Stnd Devs	(5) Avg Spread Between Min and Max Mod Within Risk
2,000,000 — 5,000,000	1,075	0.859	0.277	0.135	0.134	0.295
1,000,000 — 1,999,999	1,670	0.904	0.263	0.137	0.136	0.304
500,000 — 999,999	3,396	0.920	0.237	0.134	0.126	0.300
250,000 — 499,999	6,663	0.946	0.226	0.130	0.130	0.294
150,000 — 249,999	8,930	0.959	0.216	0.127	0.117	0.290
100,000 — 149,999	10,875	0.967	0.199	0.130	0.123	0.293
75,000 — 99,999	10,454	0.962	0.196	0.126	0.119	0.287
50,000 — 74,999	19,656	0.966	0.199	0.130	0.129	0.294
25,000 — 49,999	50,827	0.965	0.191	0.132	0.134	0.298
15,000 — 24,999	55,412	0.965	0.186	0.132	0.143	0.294
10,000 — 14,999	55,694	0.967	0.173	0.126	0.142	0.277
7,500 — 9,999	41,905	0.967	0.156	0.113	0.132	0.248
5,000 — 7,499	44,144	0.969	0.141	0.102	0.122	0.221
2,500 — 4,999	23,687	0.961	0.120	0.086	0.105	0.186
Total	334,388	0.964	0.175	0.121	0.132	0.269

Notes:

1. Averages and Standard Deviations across risks are risk weighted.
2. The standard deviation formula is applied without adjustment for the correlation of the sample.

Volatility Over Time of Individual Risk Experience Period Pure Loss Ratio By Size of Risk

Policy Years 1998 through 2002

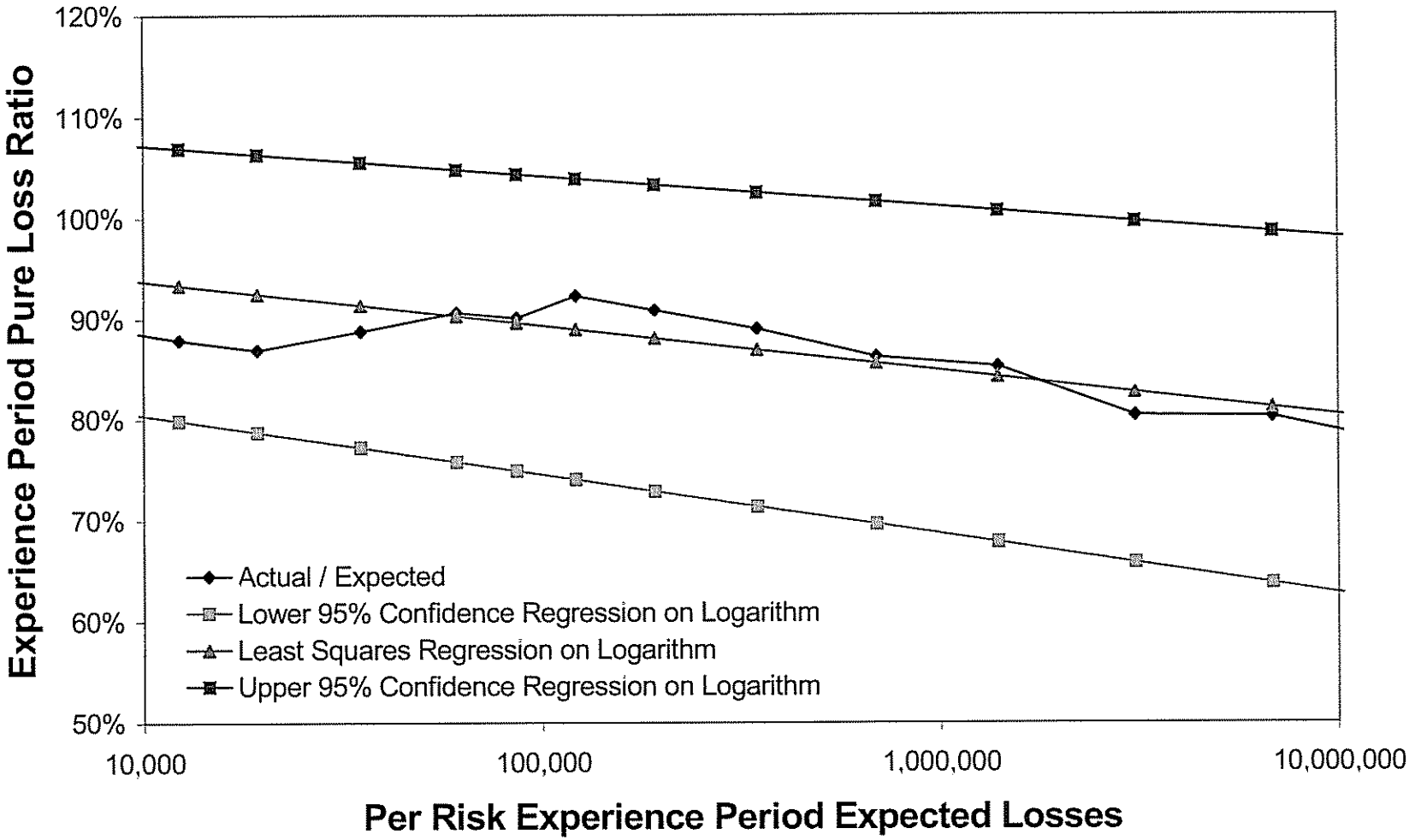
(Includes only risks with mods for all 5 policy years.)

Avg Expected Losses	Risk Count	(1) Avg of 5-Yr Avg LR	(2) Stnd Dev Across Risks of 5-Yr Avg LR	(3) Avg Stnd Dev Within Risk of LR Over 5 Yrs	(4) Std Dev of the Col (3) Stnd Devs	(5) Avg Spread Between Min and Max LR Within Risk
2,000,000 — 5,000,000	1,075	0.804	0.392	0.199	0.206	0.431
1,000,000 — 1,999,999	1,670	0.853	0.405	0.224	0.213	0.502
500,000 — 999,999	3,396	0.862	0.446	0.276	0.268	0.614
250,000 — 499,999	6,663	0.890	0.524	0.348	0.363	0.782
150,000 — 249,999	8,930	0.909	0.603	0.430	0.423	0.962
100,000 — 149,999	10,875	0.923	0.695	0.528	1.018	1.153
75,000 — 99,999	10,454	0.901	0.727	0.558	0.614	1.234
50,000 — 74,999	19,656	0.906	0.868	0.643	0.791	1.385
25,000 — 49,999	50,827	0.888	0.994	0.750	1.036	1.590
15,000 — 24,999	55,412	0.869	1.223	0.852	1.426	1.763
10,000 — 14,999	55,694	0.879	1.479	0.946	1.797	1.924
7,500 — 9,999	41,905	0.889	1.772	0.995	2.192	2.021
5,000 — 7,499	44,144	0.952	2.062	1.104	2.660	2.211
2,500 — 4,999	23,687	0.980	2.405	1.188	3.347	2.347
Total	334,388	0.901	1.396	0.863	1.872	1.775

Notes:

1. Averages and Standard Deviations across risks are risk weighted.
2. The standard deviation formula is applied without adjustment for the correlation of the sample.
3. Loss Ratios are defined as the sum of the primary and excess actual losses used for the experience modification factor calculation divided by the corresponding expected losses.

Experience Period Actual / Expected Losses By Size of Risk



Note: These loss ratios corresponds to an estimate of manual loss ratios. The data comes from experience used for the experience modification factor calculation averaged over policy years 1998-2002 for risks having mods in all 5 policy years)

Comparison of Experience Rated Lost Time Claim Free Risks By Size of Risk

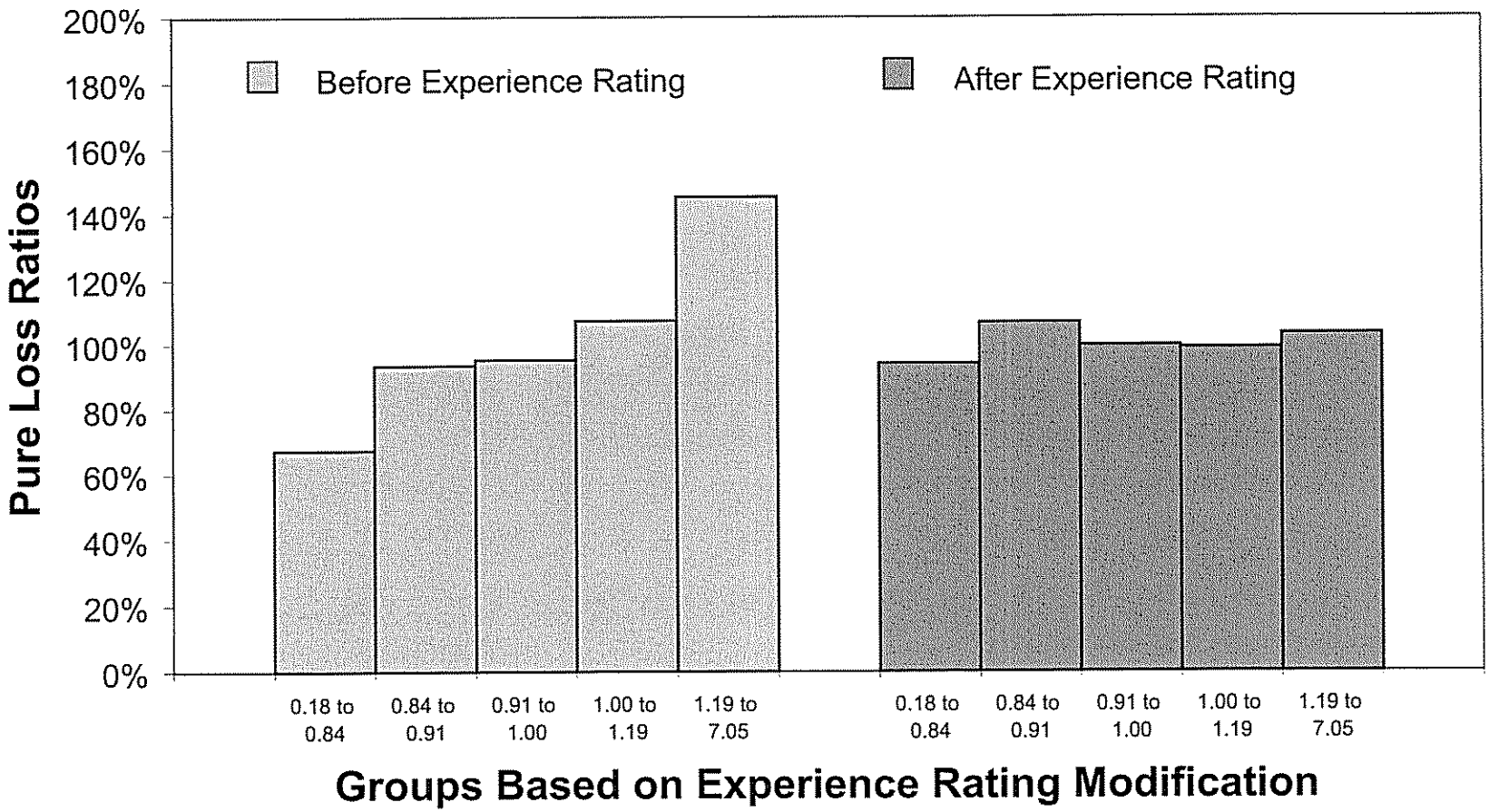
(Estimates Derived From Countrywide Policy Year 2001 Experience Rated Risks)

Experience Period Expected Losses	% of All Manual Premium	% of All Risks	Lost Time Claims in Experience Period	% of Manual Premium within Range	Weighted Average Experience Modification Factor	Subsequent Actual Loss / Manual Basis Expected Loss(1)
up to - 3,999	0.4%	6.6%	0	83%	0.92	1.37
			1+	17%	1.18	2.24
4,000 - 7,999	2.0%	23.8%	0	74%	0.88	1.09
			1+	26%	1.21	1.76
8,000 - 15,999	3.8%	26.9%	0	60%	0.84	1.03
			1+	40%	1.15	1.58
16,000 - 31,999	4.8%	18.1%	0	40%	0.80	0.91
			1+	60%	1.07	1.44
32,000 - 63,999	5.8%	11.2%	0	21%	0.76	0.86
			1+	79%	1.02	1.35
64,000 - or more	83.1%	13.5%	0	2%	0.71	0.73
			1+	98%	0.91	0.95

Note: (1) Assumes total countrywide manual basis expected loss equals actual loss at ultimate.

Exhibit IV

2003 Performance of ER Plan: The Quintile Test



Note: Pure loss ratios are based on actual losses compared to the expected losses underlying the loss costs.