Actuarial Committee

Meeting Agenda

Date	Time	Location	Staff Contact
February 15, 2022	9:00 AM	Webinar Teleconference	David M. Bellusci

1901 Harrison Street, 17th Floor • Oakland, CA 94612 • 415.777.0777 • Fax 415.778.7007 • www.wcirb.com • wcirb@wcirb.com

Released: February 8, 2022

To Members of the Classification and Rating Committee, WCIRB Members and All Interested Parties:

This meeting is Open to the Public.

Please use this link to register for the meeting webinar. After registering, you will receive a confirmation email containing information about the meeting.

I. Approval of Minutes

Meetings held on December 7, 2021 and December 9, 2021

II. Working Group Meeting Summaries

None

III. New Business

A. AC22-02-01: 9/1/2022 Regulatory Filing – Experience Rating Plan Values

B. AC22-02-02: Review of Payroll Limitation Methodology

IV. Matters Arising at Time of Meeting

V. Next Meeting Date: March 21, 2022

VI. Adjournment

Item AC22-02-01
9/1/2022 Regulatory Filing – Experience Rating Plan Values

An analysis of the indicated experience rating off-balance factor and the factors used to generate proposed expected loss rates for policies incepting between September 1, 2022 to August 31, 2023 policies will be presented at the meeting. The methodology to produce the indicated experience rating off-balance factor and expected loss rates, as reflected in the last several regulatory filings, is summarized below.

Off-Balance Factor

The calculation of the indicated off-balance factor is initially based on the average modification and average credibility assigned to the experience of all experience rated employers for recent policy years. This information is based on the WCIRB's experience modification records and reflects the actual modifications issued for each of those policy years. In the last several regulatory filings, the most recent three policy years were used, which would correspond to policy years 2019 to 2021 for the September 1, 2022 off-balance factor. However, due to the change in filing effective dates from January 1 to September 1 in 2021, policies incepting between January 1, 2021 and August 31, 2021 were treated separately from policies incepting after September 1, 2021. This results in four policy periods used in the computation of the indicated September 1, 2022 off-balance factor (January 1, 2019 to December 31, 2019, January 1, 2020 to December 31, 2020, January 1, 2021 to August 31, 2021, and September 1, 2021 to August 31, 2022).[1] Based on this information, the ratio of actual to expected losses for experience rated employers in each of these periods is estimated.

The ratios for each of these policy periods are then adjusted by (a) the off-balance factor that was used to adjust each period's expected loss rates, (b) the adjustment that was made to the expected loss rates to produce the target off-balance factor for that period (if applicable), (c) the adjustment that was made to each historical period's expected loss rates to reflect the impact of California Insurance Code Section 11751.9 corrections based on closed claim values that are significantly below the values of the claims that were used in an experience modification computation and (d) the hindsight correction factor to the expected losses for each of these policy periods, which is intended to adjust for any difference in projected expected loss rates and the level of losses that actually underlies a year's experience modifications.[2]

The ratios, after adjustment as described above, represent the estimated ratios of actual to expected losses for experience rated employers in which the total actual losses for all employers equal the total expected losses for the experience period. The projected ratio of actual to expected losses for experience rated employers is selected as the average of the latest four periods' ratios adjusted as described above. The projected average credibility for experience rated employers is selected as the average credibility for the most recent completed policy period of experience. In the September 1, 2022 Regulatory Filing, this represents policies incepting between January 1, 2021 and August 31, 2021 which included the January 1, 2021 off-balance factor.

The computation of the indicated off-balance factor is based on the projected ratio of actual to expected losses and the projected average credibility computed as described above as well as the ratio of experience rated premium to total premium. This ratio is based on a comparison of the premiums at the advisory pure premium rate level for experience rated employers with those for all employers including employers who are not experience rated based on the most recent three policy years of experience

[1] Data from the September 1, 2021 to August 31, 2022 policy period is preliminary.

[2] The hindsight correction factor for each period is computed as the ratio of the statewide weighted average of the promulgated expected loss rates (adjusted to remove that period's off-balance factor and its related adjustment, if any, and the adjustment to reflect the impact of California Insurance Code Section 11751.9 rerates) to the hindsight weighted average statewide ratio of losses (excluding first $250 and limited to $175,000) to payroll for the policy years and report levels reflected in that period's experience modifications.

(policy years 2017 through 2019 for the September 1, 2022 Regulatory Filing). The computation of the indicated off-balance factor is derived from the relationship of the off-balance factor as the reciprocal of the average modification over all risks.[3] (For informational purposes, the off-balance factor reflected in the September 1, 2021 advisory pure premium rates and expected loss rates is 1.015.)

Expected Loss Rates

The expected loss rates represent the average losses per $100 of payroll by classification estimated to be reflected in experience rating calculations for policies incepting between September 1, 2022 and August 31, 2023. They are computed by comparing the average limited loss to payroll ratio included for each classification as computed in the WCIRB's proposed September 1, 2022 classification relativities with the average level of losses per $100 of payroll anticipated to be used in September 1, 2022 to August 31, 2023 experience modification calculations.

The WCIRB's methodology to determine classification expected loss rates uses adjustment factors based on the experience of classifications grouped in accordance with the North American Industry Classification System (NAICS). The average adjustment factors on a statewide, all classifications combined basis are first computed to ensure that the factors computed by NAICS sector groupings balance to the statewide, all classifications combined expected loss rate level. These factors begin with the calculation of the average indicated ratio of limited losses to $100 of payroll based on the total statewide payroll generated on the most recent two "policy years" used in the WCIRB's classification relativities analysis (2018 and 2019)[4] and the indicated limited loss to payroll ratios for each classification, segregated between the indemnity and medical components.

Next, the estimated average ratio of losses to $100 of payroll for the time period and maturity level to be reflected in September 1, 2022 to August 31, 2023 experience modifications is computed. For the September 1, 2022 Regulatory Filing, this generally reflects policies incepting between September 1, 2018 and August 31, 2019 at third unit statistical report level, policies incepting between September 1, 2019 and August 31, 2020 at second unit statistical report level, and policies incepting between September 1, 2020 and August 31, 2021 at first unit statistical report level. These ratios are determined as follows:

- The average expected ratios of indemnity and medical losses per $100 of payroll for September 1, 2018 to August 31, 2019 policies are determined by developing the first unit statistical report level ratios from these policies to third unit statistical report level. The development factors used to develop this experience are based on the most recently available accident year experience converted to a basis that reflects September 1, 2018 to August 31, 2019 policies.[5]

- The average expected ratios of indemnity and medical losses per $100 of payroll for September 1, 2019 to August 31, 2020 policies are determined in a similar way, by developing available data at first unit statistical report level (18 months from policy inception) to second unit statistical report level (30 months from policy inception). For the average expected ratios for September 1, 2019 to August 31, 2020, data from policies incepting between April 1, 2019 and March 31, 2020 are used and trended forward five months to reflect the period of experience

[3] That is OBF = 1 / (Avg. Mod All Risks), where Avg. Mod All Risks = (Avg. Mod Rated Risks x Premium Share of Rated Risks) + (1.0 x Premium Share of Non-rated Risks), and where the formula for the average modification for rated risks is as follows: Avg. Mod Rated Risks = [(Avg. Ratio of Actual to Expected) x (1 / OBF) x (Avg. Credibility)] + [1.0 x (1 - Avg. Credibility)].

[4] In the classification relativities proposed to be effective September 1, 2022, "policy year" refers to policies incepting between December 1 of the prior year and November 30 of the year. For example, "policy year" 2019 refers to policies incepting between December 1, 2018 and November 30, 2019.

[5] For development from 18 to 21 months, a weighted average based on 25% weight applied to accident year 2019 development and 75% weight applied to accident year 2020 development is used. For development from 21 to 33 months, accident year 2019 development is used. For development from 33 to 42 months, accident year 2018 development is used.

underlying September 1, 2019 to August 31, 2020 policies.[6] The development factors used to develop this experience are based on the most recently available accident year experience converted to a basis for September 1, 2019 to August 31, 2020 policies.[7]

- The average expected ratios of indemnity and medical losses per $100 of payroll for September 1, 2020 to August 31, 2021 policies are estimated from the prior year's ratios, adjusted for the change in the average accident year loss ratios estimated in the WCIRB's most recent evaluation of insurer experience[8]—with the premiums adjusted to a common basis but with the impact of projected wage inflation removed—and converted to a September 1 to August 31 policy period basis using a standard actuarial parallelogram approach.

The average of the expected loss to payroll ratios for each of the three years of the experience rating period computed as described above are adjusted by three additional factors: (1) the selected experience rating off-balance correction factor to be reflected in September 1, 2022 to August 31, 2023 expected loss rates, (2) the factor to reflect the individual loss limitation of $175,000 and the elimination of the first $250 of each claim in the experience rating calculation[9] and (3) the factor to reflect the estimated average impact of experience modification revisions resulting from Insurance Code Section 11751.9 rerates. The product of these factors represents the average adjustments across all NAICS Sector groupings to produce the average indicated September 1, 2022 to August 31, 2023 expected loss rates when applied to the statewide indicated limited loss to payroll ratios from the September 1, 2022 classification relativity analysis.

The computation of the adjustment factors for each of the NAICS Sector groupings is analogous to that described above on a statewide, all classifications combined basis, with the following exceptions:

1. The estimated first report level ratios of indemnity and medical losses per $100 of payroll for September 1, 2018 to August 31, 2019 policies and September 1, 2019 to August 31, 2020 policies for each NAICS Sector grouping are developed to third and second report levels, respectively, based on the latest available year incurred development factor derived from unit statistical data for that NAICS Sector grouping.

2. The estimated first report level ratios of indemnity and medical losses per $100 of payroll for September 1, 2020 to August 31, 2021 policies for each NAICS Sector grouping are computed by adjusting the first report level ratios of indemnity and medical loss to payroll for September 1, 2019 to August 31, 2020 policies for that NAICS Sector grouping by the annual change in the first report level ratios of indemnity and medical loss to payroll for that NAICS Sector grouping from the latest available unit statistical data,[10] with individual claims limited to $500,000.

3. An additional factor is applied to adjust the indemnity and medical expected loss rate factors computed at the NAICS Sector grouping level to balance to the statewide, all classifications combined expected loss rate factors.

4. The indicated September 1, 2022 change in a classification's expected loss rate relativity to the statewide average expected loss rate from the prior year's expected loss rate relativity is limited

[6] The trend factors used are based on changes in accident year indemnity and medical loss ratios reflected in Item AC21-12-01 of the December 7, 2021 WCIRB Actuarial Committee Agenda, converted to a September 1 to August 31 policy period using a standard actuarial parallelogram approach.

[7] For development from 18 to 21 months, accident year 2020 development is used. For development from 21 to 30 months, accident year 2019 development is used.

[8] See Item AC21-12-01 of the December 7, 2021 WCIRB Actuarial Committee Agenda.

[9] This factor is based on utilizing the latest available unit statistical data and de-trending the $175,000 and $250 loss limits from the average level underlying the data used to compute September 1, 2022 to August 31, 2023 experience modifications to the average level of the latest available unit statistical data.

[10] September 1, 2017 to August 31, 2018 policies compared to September 1, 2018 to August 31, 2019 policies.

to 15%. The cost of redistributing the impact of the capped classifications' net expected losses above the 15% limitation is distributed among the remaining uncapped classifications.

The factors by NAICS Sector grouping, computed as described above, are applied to the indicated limited loss to payroll ratios for indemnity and medical that are computed in the September 1, 2022 classification relativity analysis. Each indemnity and medical loss to payroll ratio is adjusted by the appropriate factor based on the NAICS Sector grouping to which that classification is assigned. The adjusted indemnity and medical ratios for each classification are then added together to generate the expected loss rate for that classification proposed to be effective September 1, 2022 with each classification's expected loss rate change in relativity limited to a 15% change from the classification's relativity underlying the September 1, 2021 expected loss rates.

Item AC22-02-02
Review of Payroll Limitation Methodology

As part of the WCIRB's continuing efforts to analyze payroll as the basis of workers' compensation premium, the WCIRB completed a study in 2018 which found that at very high wage levels there is no evidence of increasing workers' compensation losses with increasing wage levels. As part of the January 1, 2019 Regulatory Filing, the WCIRB recommended and the Insurance Commissioner approved a proposal to extend the *California Workers' Compensation Uniform Statistical Reporting Plan—1995* annual payroll limitation to five classifications to be effective January 1, 2020. In the September 1, 2021 Regulatory Filing, the WCIRB recommended and the Insurance Commissioner approved a proposal to extend payroll limitations to six additional classifications to be effective September 1, 2022.

To adjust the advisory pure premium rate for the newly payroll limited classification to reflect the estimated payroll reduction due to the limitation, staff relied on American Community Survey (ACS) data mapped via industry and occupation to classifications. Staff reviewed the adjustment factors derived in this manner for the five payroll-limited classifications effective January 1, 2020 based on a sample of actual payroll audits conducted on 2020 policies in 2021.

Specifically, staff surveyed up to 40 policies with effective dates in April 2020 for each of the following Classifications for which payroll limitations were adopted on January 1, 2020:

- 7607(1), *Video Post-Production – computer or electronic – all employees – including Clerical Office Employees and Outside Salespersons*
- 7607(2), *Audio Post-Production – computer or electronic – all employees – including Clerical Office Employees and Outside Salespersons*
- 8743, *Mortgage Brokers – no direct lending – all employees – including Clerical Office Employees and Outside Salespersons*
- 8803, *Auditing, Accounting or Management Consulting Services – all employees – including Clerical Office Employees*
- 8820, *Law Firms – all employees – including Outside Salespersons and Clerical Office Employees*
- 8859(1), *Computer Programming or Software Development – all employees – including Clerical Office Employees and Outside Salespersons*
- 8859(2), *Internet or Web-Based Application Development or Operation – including Clerical Office Employees and Outside Salespersons*

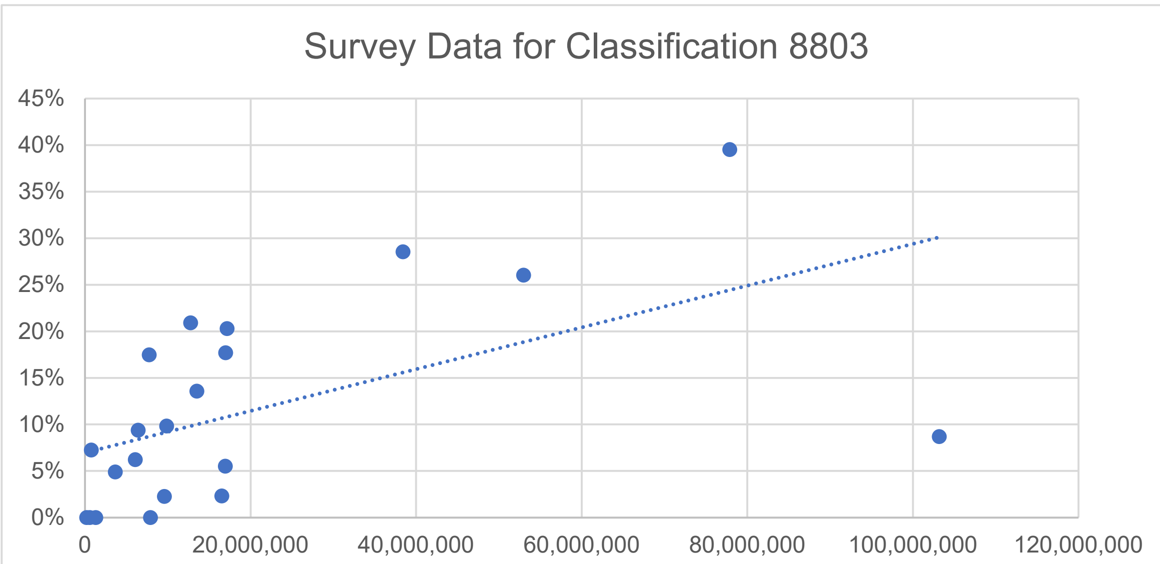
As there were relatively few policies available in Classifications 7607(1), 7607(2) and 8743 during the sample period, the analysis will focus on Classifications 8803, 8820, 8859(1) and 8859(2).

Exhibit 1 summarizes the results of the survey and the observed share of payroll in excess of the payroll limitation threshold, or excess ratios, for the sampled policy year (PY) 2020 policies. As expected, the observed excess ratios by individual employer varied significantly and tended to increase as the size of the employer payroll increased. For Classifications 8803 and 8820, the sample average excess ratio was lower than the estimate derived based on ACS data, while the sample average excess ratio was higher for Classification 8859. The sampled excess ratios are volatile but do not differ from the projections in a systematic manner.

Staff recommends continuing to use the existing methodology to estimate the payroll adjustments and to shift to actual audited unit statistical data reported on a payroll-limited basis as soon as it becomes available.

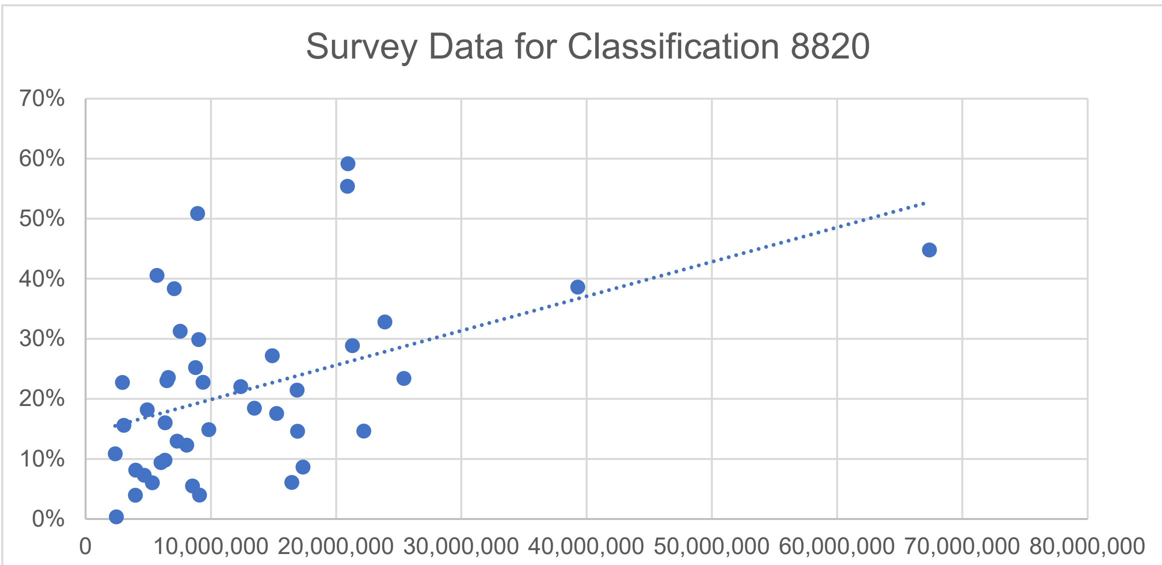
Classification 8803

Distribution by Payroll Before Limitations	Share of PY 2019 Policies (trended)	Share of Survey Policies	Survey Excess Ratio
Less than $5M	28.6%	30.4%	3.6%
$5M - $10M	6.5%	26.1%	7.4%
$10M - $50M	12.0%	30.4%	17.6%
Greater than $50M	52.9%	13.0%	22.9%
Average			11.4%
Reweighted by size			15.7%
Excess Ratio estimated for filing			19.0%



Classification 8820

Distribution by Payroll Before Limitations	Share of PY 2019 Policies (trended)	Share of Survey Policies	Survey Excess Ratio
Less than $5M	39.5%	19.0%	11.1%
$5M - $10M	10.5%	42.9%	21.1%
$10M - $50M	50.0%	38.1%	31.0%
Average			23.0%
Reweighted by size			22.1%
Excess Ratio estimated for filing			33.0%



Classification 8859

Distribution by Payroll Before Limitations	Share of PY 2019 Policies (trended)	Share of Survey Policies	Survey Excess Ratio
Less than $20M	20.0%	22.6%	20.9%
$20M - $50M	6.3%	45.2%	31.4%
Greater than $50M	73.7%	32.3%	53.8%
Average			36.3%
Reweighted by size			45.8%
Excess Ratio estimated for filing			27.0%