

To: The Honorable Michael Humphreys, Insurance Commissioner  
From: Brent Otto, FCAS, MAAA, Vice President of Actuarial Services and Chief Actuary  
Date: December 14, 2024  
Subject: PCRB Filing C-384 – Workers Compensation Loss Cost Filing  
Proposed Effective Date: April 1, 2025

This actuarial memorandum provides a discussion of the analysis performed by the PCRB that supports the proposed changes to loss costs and other rating values in Pennsylvania contained in this filing. The loss costs proposed are intended to apply to policies written from April 1, 2025 through March 31, 2026.

**Indicated and Proposed Overall Change -8.67%**

The premium and loss experience underlying this filing has been updated with a new year of data compared to Filing C-383 (the April 1, 2024 Loss Cost filing) and includes the use of over 99% of the statewide data.

Several legislative references are made throughout this memorandum: Act 44 of 1993 (Act 44), Act 57 of 1996 (Act 57), House Bill 1846 of 2014 (HB1846) and House Bill 1840 of 2017 (HB1840)<sup>1</sup>. Also referenced is the Pennsylvania Supreme Court decision in Protz v. WCAB (Derry Area School District) (Protz).

In this year's filing, the underlying indemnity losses continue to be adjusted to reflect Pennsylvania law after Act 57, Protz and HB1840 (a post-HB1840 basis), while the medical losses are reflected on a post-HB1846 basis.

The filing incorporates considerations related to the COVID-19 pandemic. In regard to the treatment of COVID-19 claims, the claims were excluded from the April 1, 2025 indication. Also, the economic impacts that resulted in unusual changes due to the pandemic during Calendar Years 2019, 2020, and 2021 were addressed in the analysis. The resulting economic impacts related to the shutdowns are having a more significant impact relative to the costs of claims. The primary factors influencing the decision to exclude COVID-19 claims were:

- 1.) COVID-19 claims are not considered a reliable predictor of future losses, as this event is deemed extraordinary and unlikely to re-occur on an annual or regular basis.
- 2.) Final adjudication of these claims still contains some uncertainty.
- 3.) This provides consistent handling between claims and the economic impacts of the event as both effects are excluded or adjusted.

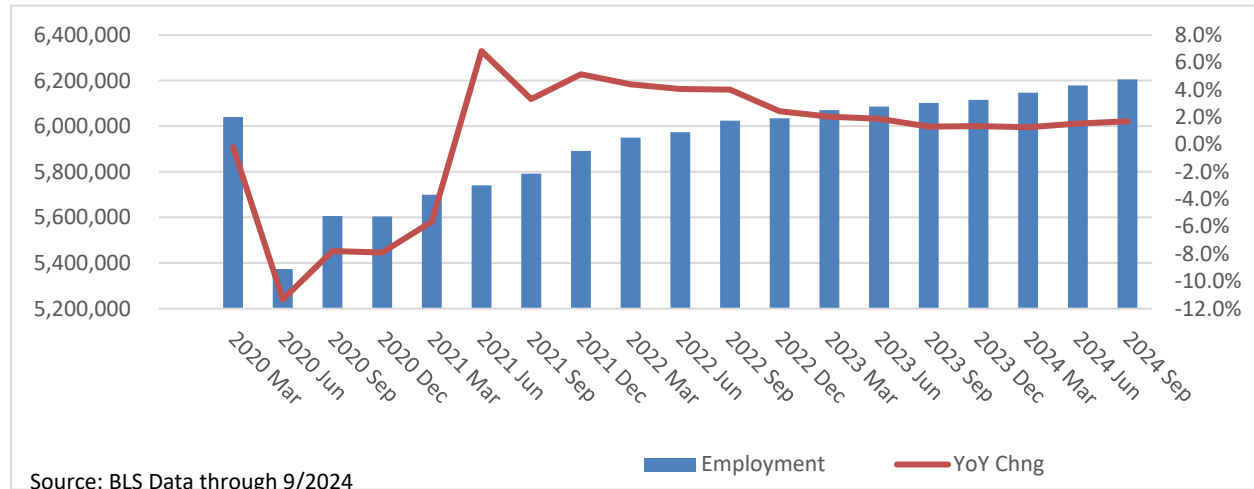
The indication includes Policy Years 2020 through 2022, which excluded 1,340 claims totaling \$12 million coded to COVID-19 from the Financial Call #15 (Catastrophe No. 12) as of December

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<sup>1</sup> For consistency with prior filings, the term HB1846 is generally used in this memorandum, rather than Act 184 of 2014. Likewise, HB1840 is referenced, rather than Act 111 of 2018.

31, 2023. Given the relatively small number and amount of these claims, the decision to include or exclude these claims has an insignificant impact on this year's indication.

The graph below shows lower employment levels due to the pandemic in Policy Years 2020 and 2021 because of the economic shutdowns. Therefore, special considerations were necessary due to the significance of this event. Employment levels returned to pre-pandemic levels in 2022.



Due to the economic impacts of the pandemic, the frequency trend calculations included a wage adjustment to “on-level” expected losses in older years for the recent shift in wages compared to historical periods. The increase in annual wage was estimated at 2.2%. Bringing stability to the frequency trend means no further methodological adjustments were necessary in this year's filing related to the pandemic.

The historical frequency selection of a 7-point fit, including all the most recent years, was used again in this filing. In an effort to reflect the reversion to historical norms, both severity trends were moved to a 4-point fit. This created a fair balance between the recent higher year-over-year trend points and the historic severity levels. Further, regarding severity, the 2020 and 2021 years continued to be depressed due to the pandemic as higher costs are not yet reflected in the reported data. Higher indemnity costs and medical fee schedules tied to the Statewide Average Weekly Wage (SAWW) will impact future periods differently, compared to the patterns seen in the historical filing data. The higher expected severity seems to be appearing more directly in 2022. Since these costs are not fully reflected in the experience period, this filing continued to use both historical trends and SAWW trends to more accurately capture this shifting cost.

Last year, one non-pandemic related selection change was made for the indemnity incurred loss development factors. A 3-year average rather than a 2-year average was selected due to disruption in the latest diagonal from reserving changes attributable to one large carrier that implemented a new claim system. Due to additional disruption observed this year in the medical triangles and the value of addressing the volatility and consistency, each of the four development methods (indemnity and medical for paid and incurred losses) were moved to that 3-year average. The impact of this selection change is negligible with a small decrease on medical incurred LDFs offsetting an increase in the paid LDFs.

The PCRB feels these adjustments are reasonable and necessary to limit the unusual nature of the pandemic, other known disruptions and random volatility from impacting the projection of future loss cost levels.

The remaining presentation in this memorandum is organized by the following topics:

- Summary of Key Elements
- Recognition of Effects of Changes in Law
- Adherence to Actuarial Principles and Standards of Practice
- Methods
  - Premium and Loss Development
  - Trends (Exposure, Frequency, Severity)
- Indicated Change in Loss Costs
- Employer Assessment Factor and Loss Cost Loadings
- Experience Rating Plan Parameters
- Classification Loss Cost Relativities
- Excess Loss (Pure Premium) Factors, Loss Elimination Ratios and State and Hazard Group Relativities
- Closing Comments and Qualifications
- Index of Exhibits

## SUMMARY OF KEY ELEMENTS

Aside from the COVID-19 consideration noted above, the PCRB applied procedures and analyses consistent with those supporting the prior year's annual filings. The following table summarizes the major components of the proposed change.

Components of the Indicated Change in Loss Costs		
	Component	Impact on Indication
1	Indemnity Loss	-4.23%
2	Medical Loss	-3.78%
3	Indemnity Trend	+0.13%
4	Medical Trend	-1.03%
	Overall Indicated Rate Change	-8.67%
Note that the total results from converting the percentages to factors (e.g., -8.67% is 0.9133, in factor form) and calculating the product of the four factors.		

Each of the components identified in this chart are briefly discussed below with more thorough discussion found in subsequent sections of this memorandum.

### Changes in Indemnity and Medical Loss Experience

The PCRB's analysis of the experience data for indemnity benefits produces estimates of loss costs that would be lower than the costs underlying the schedule of loss costs in last year's annual filing. The available historical indemnity data was adjusted to be consistent with provisions of Act 57 and applied benefit on-level factors to adjust historical indemnity data to a post-Act 44 basis.

Further, factors were applied to adjust indemnity experience to a post-HB1840 basis before proceeding with the loss development and trend analyses. The indemnity loss experience in the current filing, after adjustment to ultimate value, but before adjustment for trend, implies a change in indicated loss costs of -4.23%.

The medical loss experience was adjusted to a post-HB1846 basis, before proceeding with the loss development and trend analyses. The evaluation of medical loss experience in this filing, after adjustment to ultimate value, but before adjustment for trend, shows a change in indicated loss costs of -3.78%. The change in medical loss experience is consistent with the indemnity loss experience this year.

Changes in Trend

Like last year’s loss cost filing, the trend provisions are based upon separate analyses of claim frequency and claim severity experience for the Pennsylvania workers compensation system. The PCRB has applied an exponential trend model fitted using seven policy years (2016 to 2022) as the basis for estimating claim frequency trend.

For both indemnity and medical severity, ultimate loss ratios at current loss cost levels are adjusted to remove frequency. The remaining severity ratios have been reviewed using commonly accepted trend methods. Additionally, claim severity was analyzed, in a manner noted above, to include a second method that looks at the change in SAWW. This is considered reasonable since the recent changes in costs are not yet fully reflected in the historical data and the future costs are correlated with changes in SAWW for both indemnity and medical.

The following table provides a summary of the trend results and a comparison of results to last year’s selections, which shows that the trend selections this year are slightly lower.

<b>PCRB</b>		
<b>Trend Comparison Current v. Prior</b>		
	<b>Current Analysis</b>	<b>Prior Analysis</b>
<b>Indemnity</b>		
<b>Frequency Trend</b>	-6.2%	-6.1%
<b>Severity Trend</b>	+3.2%	+3.1%
<b>Combined (Loss Ratio) Trend</b>	-3.2%	-3.2%
<b>Medical</b>		
<b>Frequency Trend</b>	-6.2%	-6.1%
<b>Severity Trend</b>	+2.8%	+3.2%
<b>Combined (Loss Ratio) Trend</b>	-3.5%	-3.1%

## **RECOGNITION OF THE EFFECTS OF CHANGES IN LAW**

As in previous filings, the PCRB made adjustments to reflect the impacts of major legislative changes including Act 44, Act 57, HB1846, Protz and HB1840.

Indemnity losses were adjusted to a post-HB1840 basis, consistent with last year's filing. Table I, prepared from reported financial data in support of this filing, adjusted to a post-HB1840 and HB1846 basis, is shown in Exhibit 4. Details of the adjustments are provided in Exhibit 4.

## **ADHERENCE TO ACTUARIAL PRINCIPLES AND STANDARDS OF PRACTICE**

This filing has been developed using actuarial methods that are consistent with all applicable actuarial principles and standards of practice. Loss costs, as developed, filed and distributed by the PCRB, represent estimates of future costs. These estimates rely on projections of loss experience (claim costs) to the prospective time period during which they will be in effect. That is, they are estimates of the costs of claims that are made under workers compensation insurance policies to be in effect from April 1, 2025 to March 31, 2026. The ultimate, true value of these claims will not be known until they have all closed, several decades from now. As a result, estimates of the future costs must be used. Adherence to actuarial principles and standards of practice ensures the reasonableness of the estimates, along with their compliance with regulatory requirements.

Four principles are provided in the Casualty Actuarial Society's Statement of Principles Regarding Property and Casualty Insurance Ratemaking. The fourth principle states:

"A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer."

Actuarial Standards of Practice (ASOPs) apply to this filing. These documents set forth the standards, including appropriate considerations, that guide an actuary to develop and present the methods and calculations in this filing. These include ASOPs regarding data quality (ASOP 23), credibility (ASOP 25), trend (ASOP 13), risk classification (ASOP 12), communications (ASOP 41), and unpaid claim estimates (ASOP 43) which states:

"The actuary should assess the reasonableness of the unpaid claim estimate, using appropriate indicators or tests that, in the actuary's professional judgment, provide a validation that the unpaid claim estimate is reasonable. The reasonableness of an unpaid claim estimate should be determined based on facts known to, and circumstances known to or reasonably foreseeable by, the actuary at the time of estimation."

Unpaid claim estimates are discussed in this filing in the Loss Development section. While ASOP 43 specifies that it does not apply to "estimates developed solely for ratemaking purposes," the PCRB has nevertheless adhered to the spirit of this standard. The PCRB notes that the estimates for unpaid claims included in the referenced filing are inherently uncertain. Uncertainty stems from a dependence on facts and circumstances that are unknown currently and other limitations, including the use of aggregate data and legislative uncertainties may apply.

This filing relies on data provided by our member companies; however, in accordance with ASOP 23 Data Quality, the data has been reviewed for reasonableness and consistency. Some examples of review include but are not limited to: identifying and investigating questionable data from the 25 largest carrier groups in the state as well as in total for all carriers; comparing the current premium and loss data to the data used in the prior analysis; comparing loss development patterns and several reserving diagnostic triangles.

### Aggregate Data

The filing contains data and information for the combined experience of carriers in the PCRB's database. The policy year data valued as of December 31, 2023 used to calculate the overall loss cost indication in this filing was based on most companies in the database. The total Pennsylvania workers compensation market share of those companies was approximately 99%. This compared to market shares of 99%, and 98% in the April 1, 2024 and 2023 loss cost filings, respectively. Not all companies' financial call data is used in the filing due to data quality issues or because certain companies/groups did not submit financial calls to the PCRB.

Data by carrier or insured is not disclosed in the filing to protect the proprietary and trade secret information of these entities. However, it is acknowledged that the experience of the individual member companies or insureds may be different (or may be perceived to be different) from the aggregate experience of the PCRB's total membership.

### Legislative Changes

The impact of legislative adjustments over time is another area that can impact unpaid claim estimates. The uncertainty inherent in the estimation of legislative reform implies that a range of reserves can be actuarially sound. The true value of the impact of these reforms may not be known until all claims have been settled.

## **METHODS**

The ratemaking approach in this filing has three overarching steps:

- Gather premium and claim data from prior periods and project it to its ultimate value. This is commonly known as premium and loss development.
- Project the resulting estimated ultimate loss ratios using both frequency and severity trend to the midpoint of the future policy period.
- Make any other adjustments necessary to reflect known trends or changes impacting premium or claims.

## **PREMIUM AND LOSS DEVELOPMENT**

This filing uses premium and loss experience from recent policy years to estimate the costs of the upcoming policy period, which starts April 1, 2025. Using experience from prior years is perhaps the most common approach to developing estimates of future costs in property and casualty insurance ratemaking and relies on the basic assumption that past experience is a key source of information and insight regarding future costs.

Premiums used within the analysis are developed due to audits and other adjustments that occur over different reporting periods. This filing continues to use the 4-year average selection.

For loss development, this filing utilizes both the case incurred loss development and the paid loss development methods in the analysis of loss experience of prior policy periods. The PCRB has selected the average of these two methods in its estimate of future costs to balance and capture the strengths of each method. Results of these loss development methods are set forth in detail in Exhibits 5, 7 and 10. The data used to calculate the three most recent sets of development factors (link ratios) is shown in Exhibit 4.

Data in Exhibit 4 is organized so that policy year losses for a given stage of development, used to calculate development factors, are from a common population of companies. To make the best use of available data, the population of companies used for one stage of development is allowed to differ from the population for other stages of development. Exhibit 4 provides the data for three stages of development: policy years valued as of 12/31/20 developing to values as of 12/31/21; policy years valued as of 12/31/21 developing to values as of 12/31/22; policy years valued as of 12/31/22 developing to values as of 12/31/23. These are the three stages of development used to select loss development factors in this filing. The development factors calculated in this fashion are shown in columns labeled, "Ratio to Prior Year."

Exhibits 5 and 6 show the development factors calculated in Exhibit 4, along with several sets of factors from prior years for comparison. Historically, the selected factors for indemnity and medical, both paid and incurred, are the average of the factors for the latest two stages of development (from Exhibit 4). The exception included last year to this was with the indemnity incurred selected average development points, which used a 3-year average rather than 2-year average. As mentioned above, this triangle was distorted due to reserving changes attributable to one larger carrier that implemented a new claim system in addition to some other carrier volatility. Due to continued and wider disruption observed, the methodological change was further applied to all four development methods for consistency. Carrier feedback supported this observation as being abnormal. This selection change had a small overall impact (-0.2%) on the indication compared to using the normal 2-year average, however resulted in more stable factors for both paid and incurred development.

Exhibit 7 shows the calculations for our 20<sup>th</sup> to ultimate tail factor selections, and the curve fits for indemnity and medical. The ultimate tail factor methodology uses two separate methods, the historical Linear Decay method, and the Weibull curve fitting method. The decay incurred tail method was maintained at a 7-point average for both indemnity and medical incurred loss factors for greater stability. Stability is desired for any tail factor method, especially one that uses actual data points that can be volatile. To strike a balance, the final incurred tail factor selections were the result of averaging the two methods. The resulting tail factors are summarized in Exhibit 7, Page 1 with the detailed calculations following on Pages 2-17.

The tail factors for paid loss development are based on the incurred loss tail factors and a paid "bridge factor" using ratios of incurred losses to paid losses. The 20<sup>th</sup> to ultimate paid bridge factors are calculated in Exhibit 7, Pages 18-20. The approach continued in this filing uses a curve fit. The curve fits are performed on a broader set of data based on triangles of incurred to paid loss ratios using a 3-year average of factors. The curve fits project these ratios to the 50<sup>th</sup> report level, when virtually all of the claims have been settled. Exhibit 7, Page 20 shows graphically the two selected curve fits, and the resulting bridge factors based on the average of the points

between the 20<sup>th</sup> and 50<sup>th</sup> reports. The bridge factors are then multiplied by the incurred tail factors to calculate the paid tail factors for both indemnity and medical.

Paid and incurred loss development factors are used through the 19<sup>th</sup> report with the tail factors added at the 20<sup>th</sup> report to develop losses to an ultimate level. The individual development factors for each report are accumulated into report-to-ultimate factors, shown in Exhibit 5 as “Cum LDF”. The product of the report-to-ultimate factors and the most recent valuation of paid loss or case incurred loss, as appropriate, produces estimates of ultimate loss for all policy years displayed. This process produces estimates of ultimate loss for both indemnity and medical on both an incurred and paid basis. The resulting projected ultimate losses can be seen on Exhibit 5, Page 7 for indemnity and Page 14 for medical. The resulting projected ultimate loss ratios appear on Exhibit 5, Page 8 for indemnity and Page 15 for medical.

In summary, the paid loss development method and the incurred loss development method provide important insight into the projected costs of the upcoming policy period. The practice of using the average of the two methods, as is done in this and in prior filings, strikes a balance between the two and utilizes the strengths of both methods: the paid loss development method relies on actual payments and payment patterns, while the incurred loss development method uses actual payments plus the amounts that insurers have identified as the additional amounts to be paid on a case-by-case basis. These two methods produce consistent and relatively tight projections in most years, which is a desirable outcome between methods.

## **TRENDS**

This filing incorporates adjustments for four types of trend, or the inflationary (deflationary) forces that affect costs and the methods of measuring and projecting costs: exposure trend, frequency trend, indemnity severity trend, and medical severity trend.

### Exposure Trend

Like past filings, standard earned premium is calculated at current loss cost levels. This removes the impact of loss cost level changes. The remaining trends in exposure are matched to trends in costs through loss ratios. By dividing losses for a policy year, either on a paid or case incurred basis, by premium at current levels, the loss-based costs of providing workers compensation coverage are directly paired with the premium for the coverage. When loss ratios rise, then costs are rising relative to premium, and when they decline, the costs are declining relative to premium, exclusive of filed loss cost changes. Thus, the loss ratio methods used in this filing implicitly reflect premium trends due to exposure changes. The loss ratios are shown in Exhibit 5, Page 8 for indemnity and Page 15 for medical.

### Frequency Trend

Exhibit 8 provides an analysis of frequency trends. Expected losses starting in Policy year 2020 increased significantly compared to historical years due to the pandemic. Wage levels for the years 2020 to 2022 were 2.2-points higher compared to historical levels observed from 2012 to 2019. Policy years prior to 2021 were “on-leveling” based on the excess wage of 2.2%. This effectively adjusts the older years to be on the same basis as the newer years and removes the bias in the trend patterns. Indemnity claim counts are used as a consistent measure for frequency, since these claims include those with indemnity and medical benefits. Medical only claims are not



used here to reduce the volatility they bring; however the cost of medical only claims is incorporated later in the medical loss ratios. Separate analyses are shown; the first excludes large deductible business, while the second includes it. This exhibit also includes graphs of frequency using both approaches, along with non-deductible business broken down by industry group. This year, five industry groups are shown rather than three. The two additional groups that were split out are Office and Clerical, and Goods and Services.

The analysis develops claim counts used in the frequency analysis to an ultimate level. Exhibit 8, Page 2 shows the Reported Claim Count development triangle and development factors. To ensure stable and consistent factors, a 5-year average was selected. There was limited development beyond the 4<sup>th</sup> report, so the factors result in unity beyond that point.

The PCRB selected the 7-year exponential trend, as shown on Exhibit 8, Page 1 (see "PY16-PY22"). The resulting frequency trend, -6.2%, compares to the -6.1% selection last year. The 2019 and 2022 points show larger decreases; however the other changes are generally between -4% and -7%. These lower points appear to be volatility, in part, related to the pandemic disruptions and will continue to be monitored.

Claim frequency ("Claims per \$1 million") in Exhibit 8 is shown in Exhibit 5, Page 8. These are actual frequency measures, not fitted. The figures are normalized to show them relative to Policy Year 2012. The frequency component of indemnity and medical trend is removed by dividing the indemnity loss ratio and the medical loss ratio by normalized frequency. The resulting indemnity severity and medical severity ratios show the resulting severity over time. In other words, by holding exposure trend and frequency trend constant, the remaining severity trends may be observed and analyzed.

#### Indemnity Severity Trend

Exponential trend models are applied to the severity ratios of the four most recent available policy years, and to a SAWW index using the six most recent available policy years to estimate indemnity claim severity trend. The selected indemnity severity trend of +3.2% is the average of the historical indemnity severity trend of +1.7% and the indicated SAWW trend of +4.7%. This is slightly higher than the selected indemnity severity trend in last year at +3.1%. Exhibit 1, Page 2 and 3, provides details of the severity ratios, SAWW trends and the variety of analyses applied. As mentioned earlier, the incorporation of the SAWW trends is necessary given that the historical data alone is not fully representative of future costs and indemnity benefits based directly on SAWW.

#### Medical Severity Trend

Exponential trend models are applied to the most recent four available policy years, and to a SAWW index using the six most recent available policy years to estimate medical claim severity trend. The use of SAWW is reasonable since the change in the medical fee schedule is based on the change in SAWW. The fee schedule is expected to increase more significantly, compared to recent years, due to the rise in SAWW related to the economic disruptions. The shift in these costs will not be fully observed in the historical data for several years. Also, note that the pandemic-related wage adjustment for frequency has allowed the use of more recent Policy Years in the severity trend models. The selected medical severity trend is +2.8%, an average of the historical medical severity trend of +1.0% per year and the indicated SAWW trend of +4.7%. The

selected trend is lower than the selected medical severity trend in last year's filing, which was +3.2%. Exhibit 1, Pages 2 and 3, provides details of the medical severity ratios and the variety of analyses applied.

### **INDICATED CHANGE IN LOSS COSTS**

Exhibit 1 presents the derivation of indicated changes in collectible loss costs effective April 1, 2025. The indicated change in collectible loss costs is derived based on estimates of prior policy year loss ratios on a post-reform basis as described previously. The estimated policy year loss ratios are trended forward to the midpoint of the prospective policy period (April 1, 2026), resulting in a loss ratio of 0.9133, which represents a change in collectible loss costs of -8.67%.

Recognizing expected changes in experience modification factors during the period for which the proposed loss costs apply, the average proposed change in manual loss costs stands at -9.88%. By industry group, the proposed average changes in manual loss costs effective April 1, 2025 are:

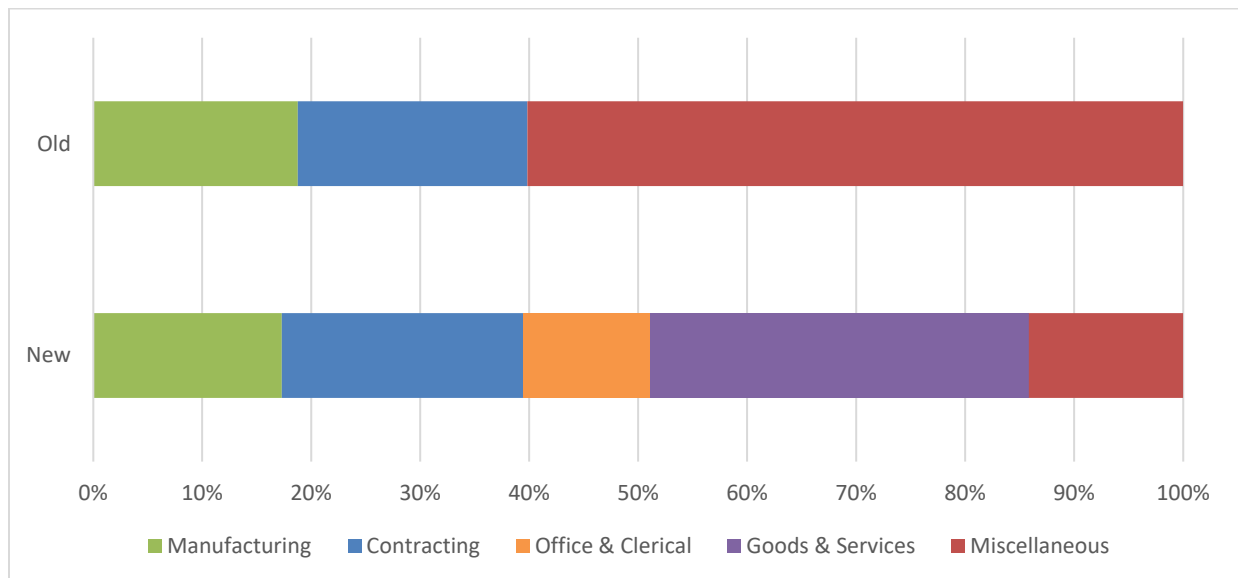
Manufacturing	-10.12%
Contracting	-9.93%
Office & Clerical	-8.91%
Goods & Services	-10.10%
Miscellaneous	-9.92%

These indicated changes to manual loss costs were derived by industry group on Page 1 of Exhibit 1, using information regarding the historical operation of the Experience Rating Plan (see Exhibits 18 and 19 of the enclosures to this filing). Anticipated collectible premium ratios are compared to provisions in current loss costs, with the ratios used to adjust the proposed change in collectible loss costs to appropriate manual levels on the bottom of Page 1 of Exhibit 1.

As noted earlier, portions of our filing previously utilizing three industry groups now are based on five industry groups. Extensive research was conducted including a review of the industry groups used in other jurisdictions. Based on individual class assessment of core operations and exposures, and how similar classifications were grouped in other jurisdictions, classifications were assessed and assigned to five industry groups. The assignments were aligned as much as possible with industry standards for benchmarking consistency unless it was felt a classification was clearly different or unique to Pennsylvania and warranted a different assigned group. For example, quarrying and mining were both moved to Miscellaneous, which were previously included in Manufacturing and Contracting respectively. Below is a table showing the distribution of classes before and after the change as well as the average impact for each specific movement from one industry group to another.

Current 3 Industry Groups & Counts		New 5 Industry Groups & Counts		Average Change
1 - Manufacturing & Quarrying	244	1 - Manufacturing	226	0.0%
		2 - Contracting	0	0.0%
		3 - Office & Clerical	0	0.0%
		4 - Goods & Services	4	-7.5%
		5 - Miscellaneous	14	-5.1%
2 - Construction & Mining	104	1 - Manufacturing	2	-15.1%
		2 - Contracting	85	0.0%
		3 - Office & Clerical	0	0.0%
		4 - Goods & Services	2	-11.9%
		5 - Miscellaneous	15	-18.7%
3 - Other Industries	278	1 - Manufacturing	2	-0.8%
		2 - Contracting	7	20.9%
		3 - Office & Clerical	47	-3.8%
		4 - Goods & Services	164	-0.8%
		5 - Miscellaneous	58	0.0%

The next graphic shows how the premium is now distributed between the current (old) groups and proposed new 5 groups.



Here are the individual classes that shifted industry groups.

Class Code	Old IG	New IG	Class Code	Old IG	New IG	Class Code	Old IG	New IG	Class Code	Old IG	New IG	Class Code	Old IG	New IG	Class Code	Old IG	New IG
0141	1	4	2005	3	2	2961	3	3	0907	3	4	0976	3	4	2915	3	4
0142	1	4	2012	3	2	2962	3	3	0908	3	4	0977	3	4	2916	3	4
2141	1	4	2802	3	2	2963	3	3	0909	3	4	0978	3	4	2917	3	4
2142	1	4	0819	3	3	2965	3	3	0910	3	4	0979	3	4	2918	3	4
0721	1	5	0822	3	3	2984	3	3	0911	3	4	0980	3	4	2919	3	4
0751	1	5	0887	3	3	2987	3	3	0912	3	4	0981	3	4	2920	3	4
0752	1	5	0890	3	3	2988	3	3	0913	3	4	0983	3	4	2921	3	4
0753	1	5	0891	3	3	0006	3	4	0914	3	4	0986	3	4	2922	3	4
0755	1	5	0892	3	3	0008	3	4	0915	3	4	0997	3	4	2923	3	4
0757	1	5	0893	3	3	0011	3	4	0916	3	4	0999	3	4	2924	3	4
0759	1	5	0903	3	3	0013	3	4	0917	3	4	2011	3	4	2925	3	4
2721	1	5	0905	3	3	0016	3	4	0918	3	4	2013	3	4	2926	3	4
2751	1	5	0936	3	3	0034	3	4	0919	3	4	2801	3	4	2927	3	4
2752	1	5	0948	3	3	0036	3	4	0920	3	4	2806	3	4	2928	3	4
2753	1	5	0951	3	3	0083	3	4	0921	3	4	2809	3	4	2932	3	4
2755	1	5	0953	3	3	0170	3	4	0922	3	4	2813	3	4	2933	3	4
2757	1	5	0955	3	3	0801	3	4	0923	3	4	2814	3	4	2934	3	4
2759	1	5	0956	3	3	0806	3	4	0924	3	4	2815	3	4	2935	3	4
0059	2	1	0957	3	3	0809	3	4	0925	3	4	2816	3	4	2940	3	4
2059	2	1	0958	3	3	0813	3	4	0926	3	4	2818	3	4	2941	3	4
0709	2	4	0961	3	3	0814	3	4	0927	3	4	2820	3	4	2944	3	4
2709	2	4	0962	3	3	0815	3	4	0928	3	4	2821	3	4	2945	3	4
0025	2	5	0963	3	3	0816	3	4	0932	3	4	2825	3	4	2952	3	4
0028	2	5	0965	3	3	0818	3	4	0933	3	4	2855	3	4	2959	3	4
0050	2	5	0984	3	3	0820	3	4	0934	3	4	2857	3	4	2960	3	4
0051	2	5	0987	3	3	0821	3	4	0935	3	4	2858	3	4	2964	3	4
0055	2	5	0988	3	3	0825	3	4	0940	3	4	2859	3	4	2966	3	4
0164	2	5	2819	3	3	0855	3	4	0941	3	4	2860	3	4	2968	3	4
0716	2	5	2887	3	3	0857	3	4	0942	3	4	2862	3	4	2971	3	4
0718	2	5	2890	3	3	0858	3	4	0943	3	4	2865	3	4	2973	3	4
2025	2	5	2891	3	3	0859	3	4	0944	3	4	2880	3	4	2974	3	4
2028	2	5	2892	3	3	0860	3	4	0945	3	4	2882	3	4	2975	3	4
2050	2	5	2893	3	3	0862	3	4	0952	3	4	2884	3	4	2976	3	4
2051	2	5	2903	3	3	0865	3	4	0959	3	4	2885	3	4	2977	3	4
2055	2	5	2905	3	3	0880	3	4	0960	3	4	2886	3	4	2978	3	4
2716	2	5	2936	3	3	0882	3	4	0964	3	4	2896	3	4	2979	3	4
2718	2	5	2948	3	3	0884	3	4	0966	3	4	2897	3	4	2980	3	4
4777	3	1	2951	3	3	0885	3	4	0968	3	4	2898	3	4	2981	3	4
6777	3	1	2953	3	3	0886	3	4	0971	3	4	2899	3	4	2983	3	4
0005	3	2	2955	3	3	0896	3	4	0972	3	4	2907	3	4	2986	3	4
0007	3	2	2956	3	3	0897	3	4	0973	3	4	2910	3	4	2997	3	4
0012	3	2	2957	3	3	0898	3	4	0974	3	4	2911	3	4	2999	3	4
0802	3	2	2958	3	3	0899	3	4	0975	3	4	2914	3	4			

\* Miscellaneous industry group 5 is analogous to the old Other industry group 3. For that reason, classes moving from old 3 (Other) to new 3 (Office & Clerical) are shown as opposed to showing catch-all groups for old 3 (Other) to new 5 (Miscellaneous).

## **EMPLOYER ASSESSMENT FACTOR AND LOSS COST LOADINGS**

The PCRB has reviewed experience pertinent to the Employer Assessment Factor to be applied to Pennsylvania workers compensation business in accordance with Act 57 of 1997. Exhibit 13 presents a summary of the Employer Assessment Factor determination. The proposed employer assessment provision is 2.22%, a decrease from the currently approved provision of 2.42%. The decrease in the provision was primarily due to decreases in the Administration Fund and the Supersedeas Fund assessments.

The provision for assessments supporting the Office of the Small Business Advocate, which continues to be part of proposed loss costs, stayed constant at the current level of 0.03%.

PCRB loss costs continue to include adjustments for the effects of the Merit Rating Plan and the Certified Safety Committee Program. The Merit Rating Plan increment factor is proposed to be 0.0026, which is lower than the current factor of 0.0039. The drop this year is due to the April 1, 2024 change that lowered the Experience Rating Plan eligibility resulting in employers moving from being merit rated to experience rated. The Certified Safety Committee Program increment factor is proposed at 0.0104, a slight decrease from the current factor of 0.0106. These proposed values are shown in Exhibit 13 and are separately derived in Exhibits 15 and 16.

This filing also proposes to update classification loss costs to reflect indicated loadings for the Pennsylvania Construction Classification Premium Adjustment Program (PCCPAP). The PCCPAP program is intended to be revenue neutral and reallocates premium obligations between low and high wage employers without either increasing or reducing the overall amount of premium collected in the affected classifications.

Participation was analyzed in this program and the level of credits generally obtained by participating employers in each classification using the most recent available experience. Results of that analysis and proposed PCCPAP loads on loss costs by classification are included in Exhibit 14.

Available experience, as summarized on Exhibit 14, produces a revised average indicated PCCPAP offset of 1.68% of loss costs, a decrease from the current average of 1.91%.

Exhibit 14 reveals that there continues to be material differences between construction classifications in terms of the portion of employers receiving PCCPAP credits and/or the level of credits provided to such employers. Proposed offsets range from 0.00% in Code 2652, Temporary Staffing Carpentry–Residential, to 3.80% in Code 649, Ceiling Installation–Suspended Acoustical Grid Type.

## **EXPERIENCE RATING PLAN PARAMETERS**

The Experience Rating Plan provides a prospective means of recognizing differences in loss potential between employers. This recognition is accomplished by means of a comparison of each qualifying employer's loss and exposure experience over a specified period (experience period) to the average experience of all employers engaged in similar businesses.

As part of each loss cost filing, the PCRB reviews the results of its Experience Rating Plan and proposes certain updates or revisions to the plan as are deemed necessary or appropriate to maintain the effective operation of the plan. No significant changes were made to the plan this year other than updating the loss limits in Table B.

Exhibit 18 presents a detailed analysis of results of the Experience Rating Plan within each industry group over the most recent available five years. These analyses are set forth in tabular form by premium size group and experience modification range by year.

Exhibit 19 presents summaries of collectible premium ratios and details of the derivation of expected loss cost factors supporting the Experience Rating Plan parameters proposed in this filing.

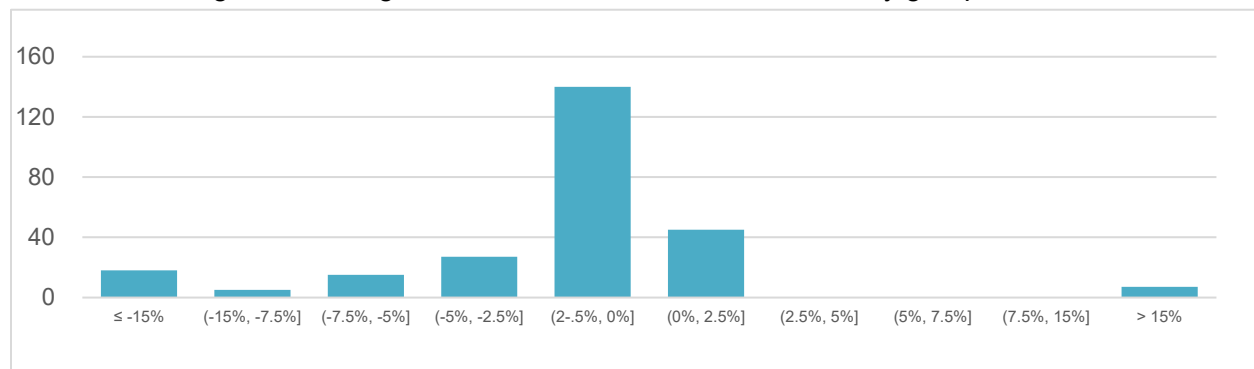
Experience Rating Plan parameters proposed in this filing are shown in Exhibits 27 and 28.

### **CLASSIFICATION LOSS COST RELATIVITIES**

Workers compensation insurance rates are based on a classification system that provides varying rating values for different types of businesses, based on the risk of loss inherent in those businesses subject to each distinct classification. As a result, any overall loss cost indication must ultimately be apportioned to each individual classification with due recognition given to the comparative experience of employers subject to each classification.

As noted earlier, the industry groups were increased from three to five groups to be consistent with all other jurisdiction and are as follows: 1) Manufacturing, 2) Contracting, 3) Office & Clerical, 4) Goods & Services, and 5) Miscellaneous. Generally, this resulted in splitting out many classes from our current Miscellaneous group into the two new groups Office & Clerical and Goods & Services. While generally, this was for information and display purposes, the rating values for classes that shifted groups will result in different changes compared to what they would have received had the groups not been added. For example, since class 953 – Office and Clerical is our largest payroll class, this “anchored” the other classes within the Miscellaneous group from adjusting as their data would have indicated. By being part of their own more homogeneous group, they will adjust more easily to their indicated levels. Below is a summary of impacts for the classes that shifted industry groups and the “additional” change that resulted from this movement. As explained below, “swing limits” and secondary capping is applied to prevent any larger changes and provide stability until each class reaches its new indicated level.

Below is a histogram showing how the classes that switched industry groups have been affected.



While most classes moved very little, the classes that moved into or out of the contracting industry group had larger effects, moving up or down around 20% respectively. This is due to the higher-than-average loss experience within that industry group. In any case, classes have moved to more homogeneous industry groups and will receive more appropriate rate levels.

Exhibit 17 provides an overview of the classification loss cost formulae used in preparation of this filing. These procedures are consistent with previously submitted and approved methods.

The PCRB applies “swing limits,” which limit fluctuations in classification loss costs to no more than 25 percentage points above and below the average loss cost change within each industry group. In addition, a testing procedure is applied to identify significant changes in classification loss cost changes relative to overall average indications year-after-year and intervenes where such indicated changes exceed selected amounts. These swing limits apply to “pure” loss costs, which include an adjustment for the operation of the Experience Rating Plan. The values so determined are subsequently adjusted to include appropriate provisions for the following items:

- Offsets for PCCPAP from Exhibit 14
- Offsets for net Merit Rating Plan credits derived in Exhibit 15
- Offsets for Certified Safety Committee credits derived in Exhibit 16
- Assessment for the Office of the Small Business Advocate shown in Exhibit 13

The Other Supporting Classification Exhibits and the accompanying Class Book present details of the experience and loss cost indications derived for each classification in this filing. Within the Other Supporting Classification Exhibits, certain parameters of the classification loss cost review process are presented, and the bases for establishing credibility tables applicable to both payroll and expected losses are provided. Summary unit statistical data is also included in Exhibits 20a, 20b and 20c.

Item 8 within the Other Supporting Classification Exhibits identifies several classifications for which some form of selection or other intervention in the standard procedures was deemed appropriate. The bases for loss cost selection include special pricing procedures (for example, the explosives, aircraft, and temporary staffing classes), allocation of loss costs between ratable and non-ratable components, recognition of statutory provisions for occupational disease benefits, combinations of separately defined codes for purposes of determining loss costs.

Item 10 of the Other Supporting Classification Exhibits presents “Supplemental Class Book Pages” detailing the derivation of loss costs for classifications treated in combination or subject to reassignments of data from/to another classification or classifications. The Class Book presents details of the experience and loss cost indications derived for each individual classification in this filing, performed without special consideration using the proposed procedures.

The loss costs developed in accordance with the procedures set forth in Exhibit 17 and presented in portions of the Other Supporting Classification Exhibits and the Class Book exclude the four offset items listed above.

The loss costs prior to application of these considerations may be thought of as “pure” loss costs and are the values to which the loss cost change limitations or “swing limits” have been applied.

Consideration has been given to past filings’ changes by classification relative to average or overall indications in making final rating value selections. This “secondary capping” procedure is

meant to mitigate substantial fluctuations above and below average levels between successive filings for a limited number of classifications. This procedure also includes an additional step to prevent an increase beyond an increase resulting from secondary capping, or a decrease beyond a decrease resulting from the secondary capping.

Exhibit 28 presents a complete table of proposed loss costs and expected loss factors pertinent to the Experience Rating Plan. Exhibit 29 presents both summary results and classification detail of the PCRB's tests of proposed loss costs against intended levels for direct employment classifications. A new column was added to the exhibit showcasing the effect of changing industry groups. Exhibit 30 calculates temporary staffing loss costs based on the methodology introduced in 2021. Exhibit 31 depicts in graphic form the distribution of percentage changes in classification loss costs for direct employment classes and temporary staffing classes on both an indicated and proposed basis.

### **EXCESS LOSS (PURE PREMIUM) FACTORS, LOSS ELIMINATION RATIOS**

The loss cost filings typically include rating values for various rating plans affected by the size of loss for individual claims or occurrences. Limitations applicable to the amount(s) of loss can be used in computing a retrospective premium. Other portions of this analysis facilitate the application of standard tables to Pennsylvania business. Also, this filing did not change the assigned hazard groups by class.

Exhibit 22 shows empirical size-of-loss distributions for Pennsylvania workers compensation business. Actual excess loss indications for loss levels below \$500,000 were combined with excess loss indications derived by fitting either Single Parameter Pareto distributions or Lognormal distributions to empirical data by type of loss (death, permanent total, permanent partial and temporary total).

Exhibit 23 shows the derivation of excess loss (pure premium) factors from the loss distributions produced in Exhibit 22. Average claim size by hazard group and type of injury were used, together with incurred loss weights by type of injury within each hazard group, to derive excess loss factors at selected size-of-loss limits by hazard group for Hazard Groups A through G.

Offering small deductible coverages at certain specified amounts is mandatory in Pennsylvania. PCRB filings provide loss elimination ratios computed consistent with the mandatory deductible levels of \$1,000, \$5,000, and \$10,000. Exhibit 25 shows the results of the updated analysis with updated loss elimination ratios proposed.

### **CLOSING COMMENTS AND QUALIFICATIONS**

This filing fully and fairly reflects the most recent available experience indications in Pennsylvania, together with all initial and continuing effects of Act 44, Act 57, HB1846, Protz and HB1840. The PCRB respectfully requests a timely review of this filing, allowing implementation on a new and renewal basis **effective April 1, 2025**. A timely review will allow adequate advance notice of final loss costs and related rating values to all participants in the Pennsylvania marketplace. Toward that objective, the PCRB will be pleased to answer any questions or provide any available supplementary information which you or your staff may require.



The Honorable Michael Humphreys  
Commonwealth of Pennsylvania  
December 14, 2024  
PCRB Filing C-384  
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This filing has been developed by and under the direction of Brent Otto, FCAS, MAAA. He meets the Qualification Standards of the American Academy of Actuaries to provide the actuarial opinion contained within this filing.

Please direct all questions to:

Brent Otto, FCAS, MAAA  
Vice President and Chief Actuary  
[botto@pcrb.com](mailto:botto@pcrb.com)  
215-320-4451

Jesse Marass, ACAS  
Director of Actuarial Services  
[jmarass@pcrb.com](mailto:jmarass@pcrb.com)  
215-320-4477

## **INDEX OF EXHIBITS**

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