WSI

North Dakota Workforce
Safety & Insurance

Experience Rating Plan

Workforce Safety & Insurance's (WSI's) experience rating formula is an actuarially based method of determining if a specific risk's loss experience is better than expected or worse than expected. Similar to formulas used in nearly all other states, WSI's formula compares the losses that actually occurred to the losses that were expected. The period used for comparison is referred to as the experience rating period – it consists of three policy periods excluding the most recently completed period. A unity mod (1.00) indicates an average risk. A mod greater than 1.00 indicates a risk with greater than expected loss experience. A mod less than 1.00 indicates a risk with better than expected loss experience. Experience rate mods can be translated into surcharges or discounts. Mods of 1.00 or greater reflect a premium surcharge; mods less than 1.00 reflect discounts to premium (e.g. .97 = 3% discount or -3%).

Understanding the Formula

Most insurance and risk management professionals have little interest in working through the many formulas associated with the actuarial side of the industry. However, a quick discussion of the mod formula will help lay the foundation for understanding what drives the mod up or down. The mod formula is outlined below:

The EMod Formula

$$\frac{\text{Actual Primary Losses} + \text{Credibility Factor} \times \text{Actual Excess Losses} + (1 - \text{Credibility Factor}) \times \text{Expected Excess Losses} + \text{Ballast Value}}{\text{Total Expected Losses} + \text{Ballast Value}}$$

Effective July 1, 2016, primary losses are the first $15,000 of any loss. Excess losses are all loss amounts over $15,000 - capped at $275,000 per claim. Expected losses are computed using an industry average loss rate and the amount of payroll by payroll class code. The total amount of primary losses is a measure of frequency. Excess losses are a measure of loss severity. Because frequency represents greater risk than severity, the primary losses are not weighted and impact the mod much more significantly than excess losses.

The formula attempts to accommodate for the size of the risk (thus the credibility of its loss experience) by utilizing a credibility value in the formula. The credibility factor is multiplied by the actual excess losses of the risk. The complement of the credibility value (1 - credibility factor) is multiplied by expected excess losses. The credibility value increases as the expected losses for a risk increase.

Therefore, the larger the risk, the more weight is placed on the actual excess loss experience. It is interesting to note that no credibility value is applied to the primary losses. Therefore, primary losses have a more significant impact on the mod than excess losses.

NOTE: The ballast value is used in the numerator and denominator to move all mod calculations closer to unity (1.0).

The cost of each loss: The impact that each loss has on the mod is another important analysis. This can be determined by simply removing the loss from the mod calculation and recomputing the mod. It is important to note that the loss will be in the experience rating period for three years. Therefore, the one-year mod impact can be multiplied by the unmodified premium and then multiplied by three. This gives an estimate of the total cost of the loss in terms of the increased premium dollars paid.

Call customer service at 800-777-5033 or 701-328-3800 with questions.