

Experience Rating Key Massachusetts

The experience modification factor is the result of a calculation using the following elements:

- A= Actual Incurred Losses (total indemnity and medical loss payments and loss reserves for the 3 year "experience period")
- B= Actual Primary Losses (losses, including reserves, which are under \$5000 each along with the first \$5000 of any claim in excess of \$5000)
- C= Expected Losses (equals payrolls by class during the experience period multiplied by actuarially determined expected loss rates)
- D= Expected Primary Losses (equals expected losses multiplied by an actuarially determined "D Ratio")
- E= (A-B) Actual Excess Losses (Actual Incurred Losses minus Actual Primary Losses)
- F= (C-D) Expected Excess Losses (Expected Losses minus Expected Primary Losses)
- G= Weighting Factor (actuarially determined factor used to determine the percentage of excess losses used in the calculation)
- H= Ballast Value

Expected Loss Rate, D Ratio, Weighting Factor, and Ballast Value are all taken from tables prepared by the MA WCRIB.

Experience rating compares the actual losses in a given time period for a given account with what could have been expected for that account based on class loss statistics. **It's important to note that only claims with dollars attached to them - either payments or reserves - are included in the mod calculation. Incidents which do not result in loss reserves being set up or payments being made do not impact the mod calculation in any way.**

Experience Rating Formula

$$\text{Experience mod} = \frac{\text{Actual Primary Losses} + \text{Ballast Value} + \text{Actual Excess Losses} \times \text{Weighting Factor} + ((1 - \text{Weighting Factor}) \times \text{Expected Excess Losses}}{\text{Expected Primary Losses} + \text{Ballast Value} + \text{Expected Excess Losses} \times \text{Weighting Factor} + ((1 - \text{Weighting Factor}) \times \text{Expected Excess Losses}}$$

Bolded Values

"Primary losses" enter the calculation at full value. Smaller claims tend to be more frequent, more predictable and therefore more preventable, less subject to large fluctuations. Therefore they are given more weight in the calculation.

"Excess losses" enter the calculation at something less than full value. An excess loss is that portion of each loss in excess of \$5000. Larger claims tend to be less frequent, less predictable and therefore less preventable, more subject to large fluctuations. Therefore they are given less weight in the calculation.

Non-Bolded Values

The other elements of the formula above are called stabilizing values. These elements are designed to limit the effect of any single loss on the experience rating modification as well as to limit the potential for severe swings in the experience mod factors from one year to another.

Mod Calculation - Example

- A= Actual Incurred Losses \$51,417
- B= Actual Primary Losses \$34,710
- C= Expected Losses \$53,104
- D= Expected Primary Losses \$11,096
- E= (A-B) Actual Excess Losses \$16,707
- F= (C-D) Expected Excess Losses \$42,008
- G= Weighting Factor 0.08
- H= Ballast Value 21,000

$$\text{Experience mod} = \frac{\text{Actual Primary Losses} + \text{Ballast Value} + \text{Actual Excess Losses} \times \text{Weighting Factor} + ((1 - \text{Weighting Factor}) \times \text{Expected Excess Losses}}{\text{Expected Primary Losses} + \text{Ballast Value} + \text{Expected Excess Losses} \times \text{Weighting Factor} + ((1 - \text{Weighting Factor}) \times \text{Expected Excess Losses}}$$

$$\text{Experience mod} = \frac{\mathbf{34710} + 21000 + \mathbf{(16707 \times 0.08)} + ((1 - 0.08) \times 42008)}{\mathbf{11096} + 21000 + \mathbf{(42008 \times 0.08)} + ((1 - 0.08) \times 42008)}$$

$$\text{Experience mod} = \frac{\mathbf{34710} + 21000 + \mathbf{1337} + 38647}{\mathbf{11096} + 21000 + \mathbf{3361} + 38647} = \frac{95694}{74104} = 1.29$$