

PENNSYLVANIA COMPENSATION RATING BUREAU
F-CLASS FILING

Tax Multiplier

Enclosed is a calculation of the tax multiplier for use in retrospective rating associated with F-Class coverages.

**CALCULATION OF TAX MULTIPLIER FOR USE IN RETROSPECTIVE RATING PLANS
(U.S.L. & H.W. Act Coverages)**

Expense Provisions for U.S.L. & H.W. Classes

Losses	62.67
Loss Adjustment Expense	9.59
Loss & Loss Adjustment	72.26
Premium Discount	7.64
Acquisition	6.40
General Expenses	4.21
Profit and Contingencies	1.10
Taxes	2.31
Security Fund	-
Uncollectible Premium	1.31
Federal Assessment	3.83
	26.80

If

- T = Tax multiplier
- E = Expense provision in rates (General, Acquisition, and Profit), less premium discount
- L = Loss provision in rates
- C = Loss conversion factor
- B = Assessments made on premiums
- A = Assessments made on losses (adjusted so as not to collect profit and general expense dollars on the extra premium generated by the assessments)

Using average discount (Schedules X & Y combined) this yields:

$$E = 0.0407 = \begin{matrix} \text{ACQ} \\ 0.0640 \end{matrix} + \begin{matrix} \text{GEN} \\ 0.0421 \end{matrix} + \begin{matrix} \text{PROFIT} \\ 0.0110 \end{matrix} - \begin{matrix} \text{PREM DISC} \\ 0.0764 \end{matrix}$$

$$A = 0.0587 = 0.0611 \times \frac{1 - 0.0407 - 0.0362}{1 - 0.0027 - 0.0362}$$

Then

$$T = \frac{E + L(1 + C + A)}{E + L(1 + C)} \times \frac{1}{1 - B}$$

$$T = \frac{0.0407 + 0.6267(1 + 0.1531 + 0.0587)}{0.0407 + 0.6267(1 + 0.1531)} \times \frac{1}{1 - 0.0362} = 1.0876$$