

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	62.13
Loss Adjustment Expense	<u>9.76</u>
Loss & Loss Adjustment	71.89
Premium Discount	7.64
Acquisition	6.15
General Expenses	3.69
Profit and Contingencies	1.91
Taxes	2.32
Security Fund	-
Uncollectible Premium	1.15
Federal Assessment	<u>3.71</u>
	26.57

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:

$$E = 0.0411 = \begin{matrix} \text{ACQ} \\ 0.0615 \end{matrix} + \begin{matrix} \text{GEN} \\ 0.0369 \end{matrix} + \begin{matrix} \text{PROFIT} \\ 0.0191 \end{matrix} - \begin{matrix} \text{PREM DISC} \\ 0.0764 \end{matrix}$$

$$A = 0.0572 = 0.0597 \times \frac{1 - 0.0411 - 0.0347}{1 - 0.0003 - 0.0347}$$

Then

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

$$T = \frac{0.0411 + 0.6213(1 + 0.1571 + 0.0572)}{0.0411 + 0.6213(1 + 0.1571)} \times \frac{1}{1 - 0.0347} = 1.0843$$