

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	58.77
Loss Adjustment Expense	<u>8.75</u>
Loss & Loss Adjustment	67.52
Premium Discount	7.98
Acquisition	9.26
General Expenses	5.09
Profit and Contingencies	0.31
Taxes	2.33
Security Fund	-
Uncollectible Premium	0.40
Federal Assessment	<u>7.11</u>
	32.48

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:

$$E = 0.0668 = 0.0926 \text{ (ACQ)} + 0.0509 \text{ (GEN)} + 0.0031 \text{ (PROFIT)} - 0.0798 \text{ (PREM DISC)}$$

$$A = 0.1161 = 0.1209 \times \frac{1 - 0.0668 - 0.0273}{1 - 0.0291 - 0.0273}$$

Then

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

$$T = \frac{0.0668 + 0.5877(1 + 0.1489 + 0.1161)}{0.0668 + 0.5877(1 + 0.1489)} \times \frac{1}{1 - 0.0273} = 1.1226$$