

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	61.14
Loss Adjustment Expense	<u>8.53</u>
Loss & Loss Adjustment	69.67
Premium Discount	8.1
Acquisition	6.63
General Expenses	2.91
Profit and Contingencies	(5.37)
Taxes	2.38
Security Fund	0.43
Uncollectible Premium	1.25
Federal Assessment	<u>14.00</u>
	30.33

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:

$$E = (0.0393) = \frac{ACQ}{0.0663} + \frac{GEN}{0.0291} + \frac{PROFIT}{(0.0537)} - \frac{PREM DISC}{0.0810}$$

$$A = 0.2387 = 0.2289 \times \frac{1 - 0.0393 - 0.0406}{1 - 0.0018 - 0.0406}$$

Then

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

$$T = \frac{-0.0393 + 0.6114(1 + 0.1395 + 0.2387)}{-0.0393 + 0.6114(1 + 0.1395)} \times \frac{1}{1 - 0.0406} = 1.2736$$