

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	64.64
Loss Adjustment Expense	10.35
Loss & Loss Adjustment	74.99
Premium Discount	7.81
Total Acquisition	7.31
General Expenses	4.27
Profit and Contingencies	(2.22)
Taxes	2.30
Security Fund	-
Uncollectible Premium	1.61
Federal Assessment	4.07
	25.15

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:

$$E = 0.0155 = \frac{ACQ}{0.0731} + \frac{GEN}{0.0427} + \frac{PROFIT}{(0.0222)} - \frac{PREM DISC}{0.0781}$$

$$A = 0.0627 = 0.0630 \times \frac{1 - (0.0155 - 0.0391)}{1 - (0.0107 - 0.0391)}$$

Then

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

$$T = \frac{0.0155 + 0.6464(1 + 0.1602 + 0.0627)}{0.0155 + 0.6464(1 + 0.1602)} \times \frac{1}{1 - 0.0391} = 1.0958$$