

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	60.13
Loss Adjustment Expense	8.79
Loss & Loss Adjustment	68.92
Premium Discount	7.95
Acquisition	7.23
General Expenses	2.91
Profit and Contingencies	0.07
Taxes	2.36
Security Fund	-
Uncollectible Premium	0.50
Federal Assessment	10.06
	31.08

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:

$$E = 0.0226 = 0.0723 \text{ (ACQ)} + 0.0291 \text{ (GEN)} + 0.0007 \text{ (PROFIT)} - 0.0795 \text{ (PREM DISC)}$$

$$A = 0.1650 = 0.1674 \times \frac{1 - 0.0226 - 0.0286}{1 - 0.0090 - 0.0286}$$

Then

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

$$T = \frac{0.0226 + 0.6013(1 + 0.1462 + 0.1650)}{0.0226 + 0.6013(1 + 0.1462)} \times \frac{1}{1 - 0.0286} = 1.1729$$