

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	56.20
Loss Adjustment Expense	9.39
Loss & Loss Adjustment	65.59
Premium Discount	9.79
Acquisition	8.40
General Expenses	3.91
Profit and Contingencies	(4.85)
Taxes	2.40
Security Fund	0.86
Federal Assessment	13.90
	34.41

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:

$$E = (0.0233) = \frac{ACQ}{0.0840} + \frac{GEN}{0.0391} + \frac{PROFIT}{(0.0485)} - \frac{PREM DISC}{0.0979}$$

$$A = 0.2565 = 0.2474 \times \frac{1 - 0.0233 - 0.0326}{1 - 0.0119 - 0.0326}$$

Then

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

$$T = \frac{-0.0233 + 0.5620(1 + 0.1671 + 0.2565)}{-0.0233 + 0.5620(1 + 0.1671)} \times \frac{1}{1 - 0.0326} = 1.2692$$