

DELAWARE COMPENSATION RATING BUREAU, INC.

Tax Multiplier

**CALCULATION OF TAX MULTIPLIER FOR USE IN RETROSPECTIVE RATING PLANS
(O/T U.S.L. & H.W. Act Coverages)**

Expense Provisions for O/T U.S.L. & H.W. Classes

Losses	64.30
Loss Adjustment Expense	<u>7.97</u>
Loss & Loss Adjustment	72.27
Premium Discount	8.33
Acquisition	9.58
General Expenses	3.17
Profit and Contingencies	(2.55)
Taxes	2.36
Uncollectible Premium	2.00
Workers' Compensation Fund	2.00
Administrative Assessment	<u>2.84</u>
	27.73

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 (Schedule Y) this yields:

$$E = 0.0187 = \frac{ACQ}{0.0958} + \frac{GEN}{0.0317} + \frac{PROFIT}{(0.0255)} - \frac{PREM DISC}{0.0833}$$

$$A = 0.0447 = 0.0442 \times \frac{1 - 0.0187 - 0.0636}{1 - 0.0284 - 0.0636}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0045$$

$$T = \frac{0.0187 + 0.6430(1 + 0.1239 + 0.0447)}{0.0187 + 0.6430(1 + 0.1239)} \times \frac{1}{1 - 0.0636 - 0.0045} = 1.1147$$