

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	64.65
Loss Adjustment Expense	<u>7.64</u>
Loss & Loss Adjustment	72.29
Premium Discount	10.81
Acquisition	9.92
General Expenses	3.00
Profit and Contingencies	(3.84)
Taxes	2.32
Uncollectible Premium	1.00
Workers' Compensation Fund	2.00
Administrative Assessment	<u>2.50</u>
	27.71

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:

$$E = (0.0173) = \text{ACQ } 0.0992 + \text{GEN } 0.0300 + \text{PROFIT } (0.0384) - \text{PREM DISC } 0.1081$$

$$A = 0.0403 = 0.0387 \times \frac{1 - 0.0173 - 0.0532}{1 - 0.0202 - 0.0532}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0175$$

$$T = \frac{-0.0173 + 0.6465(1 + 0.1182 + 0.0403)}{-0.0173 + 0.6465(1 + 0.1182)} \times \frac{1}{1 - 0.0532 - 0.0175} = 1.1158$$