

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	64.54
Loss Adjustment Expense	<u>8.37</u>
Loss & Loss Adjustment	72.91
Premium Discount	10.58
Acquisition	9.42
General Expenses	3.12
Profit and Contingencies	(5.96)
Taxes	2.32
Uncollectible Premium	1.00
Workers' Compensation Fund	4.00
Administrative Assessment	<u>2.61</u>
	27.09

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:

$$E = (0.0400) = \text{ACQ } 0.0942 + \text{GEN } 0.0312 + \text{PROFIT } (0.0596) - \text{PREM DISC } 0.1058$$

$$A = 0.0429 = 0.0404 \times \frac{1 - 0.0400 - 0.0732}{1 - 0.0168 - 0.0732}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0156$$

$$T = \frac{-0.0400 + 0.6454(1 + 0.1296 + 0.0429)}{-0.0400 + 0.6454(1 + 0.1296)} \times \frac{1}{1 - 0.0732 - 0.0156} = 1.1416$$