

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	60.51
Loss Adjustment Expense	10.50
Loss & Loss Adjustment	<u>71.01</u>
Premium Discount	8.53
Acquisition	7.18
General Expenses	3.38
Profit and Contingencies	(0.39)
Taxes	2.37
Uncollectible Premium	2.00
Workers' Compensation Fund	3.50
Administrative Assessment	2.42
	<u>28.99</u>

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:

$$E = 0.0164 = \frac{ACQ}{0.0718} + \frac{GEN}{0.0338} + \frac{PROFIT}{(0.0039)} - \frac{PREM DISC}{0.0853}$$

$$A = 0.0394 = 0.0400 \times \frac{1 - 0.0164 - 0.0787}{1 - 0.0032 - 0.0787}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0037$$

$$T = \frac{0.0164 + 0.6051(1 + 0.1735 + 0.0394)}{0.0164 + 0.6051(1 + 0.1735)} \times \frac{1}{1 - 0.0787 - 0.0037} = 1.1256$$