

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	66.35
Loss Adjustment Expense	7.43
Loss & Loss Adjustment	<u>73.78</u>
Premium Discount	8.89
Acquisition	9.96
General Expenses	3.06
Profit and Contingencies	(3.76)
Taxes	2.33
Uncollectible Premium	1.25
Workers' Compensation Fund	2.00
Administrative Assessment	<u>2.51</u>
	26.24

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:

$$E = 0.0037 = \frac{ACQ}{0.0996} + \frac{GEN}{0.0306} + \frac{PROFIT}{(0.0376)} - \frac{PREM DISC}{0.0889}$$

$$A = 0.0389 = 0.0379 \times \frac{1 - 0.0037 - 0.0558}{1 - 0.0282 - 0.0558}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0101$$

$$T = \frac{0.0037 + 0.6635(1 + 0.1117 + 0.0389)}{0.0037 + 0.6635(1 + 0.1117)} \times \frac{1}{1 - 0.0558 - 0.0101} = 1.1078$$