

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	59.56
Loss Adjustment Expense	15.72
Loss & Loss Adjustment	<u>75.28</u>
Premium Discount	8.40
Acquisition	6.28
General Expenses	2.63
Profit and Contingencies	(1.95)
Taxes	2.30
Uncollectible Premium	2.67
Workers' Compensation Fund	1.00
Administrative Assessment	3.39
	<u>24.72</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:

$$E = (0.0144) = \frac{ACQ}{0.0628} + \frac{GEN}{0.0263} + \frac{PROFIT}{(0.0195)} - \frac{PREM DISC}{0.0840}$$

$$A = 0.0576 = 0.0570 \times \frac{1 - (-0.0144) - 0.0597}{1 - (-0.0047) - 0.0597}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0077$$

$$T = \frac{-0.0144 + 0.5956(1 + 0.2640 + 0.0576)}{-0.0144 + 0.5956(1 + 0.2640)} \times \frac{1}{1 - 0.0597 - 0.0077} = 1.1221$$