

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	57.08
Loss Adjustment Expense	<u>11.63</u>
Loss & Loss Adjustment	68.71
Premium Discount	9.15
Acquisition	8.82
General Expenses	3.44
Profit and Contingencies	0.79
Taxes	2.35
Uncollectible Premium	1.00
Workers' Compensation Fund	3.50
Administrative Assessment	<u>2.24</u>
	31.29

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:

$$E = 0.0390 = \begin{matrix} \text{ACQ} \\ 0.0882 \end{matrix} + \begin{matrix} \text{GEN} \\ 0.0344 \end{matrix} + \begin{matrix} \text{PROFIT} \\ 0.0079 \end{matrix} - \begin{matrix} \text{PREM DISC} \\ 0.0915 \end{matrix}$$

$$A = 0.0383 = 0.0393 \times \frac{1 - 0.0390 - 0.0685}{1 - 0.0153 - 0.0685}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0381$$

$$T = \frac{0.0390 + 0.5708(1 + 0.2037 + 0.0383)}{0.0390 + 0.5708(1 + 0.2037)} \times \frac{1}{1 - 0.0685 - 0.0381} = 1.1530$$