

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	63.32
Loss Adjustment Expense	7.19
Loss & Loss Adjustment	70.51
Premium Discount	11.05
Acquisition	10.30
General Expenses	3.35
Profit and Contingencies	(3.94)
Taxes	2.32
Uncollectible Premium	1.00
Workers' Compensation Fund	3.00
Administrative Assessment	2.41
	29.49

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:

$$E = (0.0134) = \frac{ACQ}{0.1030} + \frac{GEN}{0.0335} + \frac{PROFIT}{(0.0394)} - \frac{PREM DISC}{0.1105}$$

$$A = 0.0396 = 0.0381 \times \frac{1 - 0.0134 - 0.0632}{1 - 0.0227 - 0.0632}$$

Then

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

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

$$T = \frac{-0.0134 + 0.6332(1 + 0.1135 + 0.0396)}{-0.0134 + 0.6332(1 + 0.1135)} \times \frac{1}{1 - 0.0632 - 0.0077} = 1.1153$$