

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	64.28
Loss Adjustment Expense	<u>8.87</u>
Loss & Loss Adjustment	73.15
Premium Discount	8.33
Acquisition	9.41
General Expenses	2.97
Profit and Contingencies	(3.84)
Taxes	2.39
Uncollectible Premium	3.00
Workers' Compensation Fund	2.00
Administrative Assessment	<u>2.59</u>
	26.85

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:

$$E = 0.0021 = \frac{ACQ}{0.0941} + \frac{GEN}{0.0297} + \frac{PROFIT}{(0.0384)} - \frac{PREM DISC}{0.0833}$$

$$A = 0.0414 = 0.0403 \times \frac{1 - 0.0021 - 0.0739}{1 - 0.0267 - 0.0739}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0057$$

$$T = \frac{0.0021 + 0.6428(1 + 0.1380 + 0.0414)}{0.0021 + 0.6428(1 + 0.1380)} \times \frac{1}{1 - 0.0739 - 0.0057} = 1.1259$$