

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	58.99
Loss Adjustment Expense	15.90
Loss & Loss Adjustment	<u>74.89</u>
Premium Discount	8.15
Acquisition	5.53
General Expenses	2.51
Profit and Contingencies	(2.57)
Taxes	2.30
Uncollectible Premium	3.21
Workers' Compensation Fund	1.50
Administrative Assessment	4.48
	<u>25.11</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:

$$E = (0.0268) = \frac{ACQ}{0.0553} + \frac{GEN}{0.0251} + \frac{PROFIT}{(0.0257)} - \frac{PREM DISC}{0.0815}$$

$$A = 0.0773 = 0.0760 \times \frac{1 - 0.0268 - 0.0701}{1 - 0.0103 - 0.0701}$$

Then

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

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0065$$

$$T = \frac{-0.0268 + 0.5899(1 + 0.2696 + 0.0773)}{-0.0268 + 0.5899(1 + 0.2696)} \times \frac{1}{1 - 0.0701 - 0.0065} = 1.1513$$