

Atlantic Commercial Vehicles - Industry

Calculation of the Number of Claims for full Credibility Standards

Data Value as of 31 December, 2003.

Coverage	Acc. Year	Severity Mean	Severity Variance	Severity Variance / Mean ²	Probability of Counts within Confidence Interval	Normal Distribution Value	K	Indicated Std. for Full Credibility	Selected Std. for Full Credibility	Selected 1,082 Multiplier
Bodily Injury	1999	37,541	6,320,309,825	4.48						
	2000	32,194	4,029,447,697	3.89						
	2001	37,297	10,798,038,836	7.76						
	Selected Avg. 99-01			5.38	95%	1.960	0.1044	2,248	2,164	2.00
Property Damage	1999	2,959	66,287,292	7.57						
	2000	3,274	118,585,263	11.06						
	2001	3,691	462,422,876	33.94						
	Selected Avg. 99-01 excl. >\$500K			7.55	95%	1.960	0.1044	3,013	3,246	3.00
Third Party Liability	1999	11,617	1,879,283,159	13.92						
	2000	11,006	1,333,278,080	11.01						
	2001	13,573	3,653,179,592	19.83						
	Selected Avg. 99-01			14.92	95%	1.960	0.1044	5,612	5,410	5.00
Collision	1999	3,310	24,968,572	2.28						
	2000	3,281	21,580,760	2.00						
	2001	3,518	23,831,585	1.93						
	Selected Avg. 99-01			2.07	95%	1.960	0.1044	1,082	1,082	1.00
Comprehensive	1999	777	5,110,093	8.46						
	2000	882	5,838,934	7.51						
	2001	1,103	26,892,656	22.11						
	Selected Avg. 99-00			7.99	95%	1.960	0.1044	3,167	3,246	3.00

Notes :

Full Credibility Standard for Collision is set at 1,082,

Credibility Standards for other coverages are calculated based on Collision.

For Normal Distribution, the value of 1.96 corresponds to 97.5% probability (two tails)

K calculated based on the formula : Full Cred. Std. = (Normal Dist. Value/K)² X (1+Var./Mean²)

K is solved for using Collision severity's Var./Mean² , and is used by other coverages