

Atlantic Private Passenger 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	33,181	4,540,950,571	4.12						
	2000	31,616	3,108,410,601	3.11						
	2001	29,584	2,758,383,048	3.15						
	Selected Avg. 99-01			3.46	95%	1.960	0.1046	1,567	2,164	2.00
Property Damage	1999	2,359	25,524,303	4.59						
	2000	2,428	12,655,980	2.15						
	2001	2,592	15,304,329	2.28						
	Selected Avg. 99-01 excl. >\$300K			2.37	95%	1.960	0.1046	1,185	1,082	1.00
Third Party Liability	1999	12,537	1,707,181,159	10.86						
	2000	12,659	1,287,212,131	8.03						
	2001	12,496	1,189,078,332	7.61						
	Selected Avg. 99-01			8.84	95%	1.960	0.1046	3,455	3,246	3.00
Collision	1999	2,525	13,263,243	2.08						
	2000	2,741	15,820,921	2.11						
	2001	2,786	15,952,748	2.06						
	Selected Avg. 99-01			2.08	95%	1.960	0.1046	1,082	1,082	1.00
Comprehensive	1999	713	2,970,217	5.85						
	2000	818	3,769,293	5.63						
	2001	830	3,688,215	5.35						
	Selected Avg. 99-01			5.61	95%	1.960	0.1046	2,321	2,164	2.00

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