

1      **Transcript Reference: Nov 17, 2014, Pages 122, Lines 23-25**

2  
3      Undertake to provide the same exercise for two periods, 1998 H1 – 2004 H1 and 2004 H2 to  
4      2012 H2 for bodily injury.

5  
6      **Response:**

7  
8      Attached are the loss trend regression statistics for the noted time periods.

9  
10     In the case of severity, consistent with Undertaking #18, we exclude the same data points (1998-  
11     1, 2001-2, 2002-1 and 2011-2) for our regression analysis. In the case of frequency, consistent  
12     with Undertaking #18, we exclude the same data points (2001-1 and 2003-1) for our regression  
13     analysis.

14  
15     For the period for 2004-1 and prior, there is significant volatility in the severity amounts, and we  
16     calculate a severity trend rate of -1.1%. For the period for 2004-1 and prior, there is significant  
17     volatility in the frequency rates, and we calculate a frequency trend rate of +3.2%.

18  
19     Based on the above noted frequency and severity trend rates, we calculate a loss cost trend rate  
20     of +2.1% for the period 2004-1 and prior.

21  
22     For the period from 2004-2 and onward, we calculate the severity trend rate over the period  
23     2005-2 to 2012-2 to be +2.6%, a notable 1.7 percentage points less than over the period 2004-2  
24     to 2012-2. Similarly, we find the severity trend rate to decline to +2.2% over the period 2006-2  
25     to 2012-2, and to +1.2% over the period 2007-2 to 2012-2. Hence, there is evidence the severity  
26     trend rate is declining since 2004-2. We attribute some of this variance in the calculated severity  
27     trend rate over different time periods to the “noise” in the severity data due to the different mix  
28     of claim sizes from period to period.

29  
30     For the period from 2004-2 and onward, we calculate the frequency trend rate of -2.8%. We  
31     observe the frequency trend rate to be -3.0% over the period 2005-2 to 2012-2; -3.1% over the  
32     period 2006-2 to 2012-2, and -5.1% over the period 2007-2 to 2012-2. Hence, depending upon  
33     the data period selected, the frequency trend rate ranges from -2.8%, to -5.1%, and is the average  
34     of the noted four trend rates is approximately -3.5%.

35  
36     We calculate a loss cost trend rate over the period 2004-2 to 2012-2 of +1.2%. Based on our  
37     combined calculated frequency and severity trend rates noted above, we calculate loss cost trend  
38     rates ranging from +1.4%, -0.5%, -1.0% and -4.0% for this period 2004-2 and we would select a  
39     loss cost trend rate of -1.1%.

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Freq. per 1000	Fitted Freq. per 1000
	X									
x 1998.1	1	0	0	7,520	50	1,186	1.145	1,358	6.65	6.68
x 1998.2	2	1	0	8,312	53	2,203	1.145	2,523	6.38	6.79
x 1999.1	3	0	0	7,876	51	2,349	1.106	2,598	6.48	6.90
x 1999.2	4	1	0	7,925	51	2,601	1.106	2,877	6.44	7.01
x 2000.1	5	0	0	7,874	53	2,182	1.093	2,385	6.73	7.12
x 2000.2	6	1	0	8,370	82	3,474	1.093	3,798	9.80	7.23
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	11.76	
x 2001.2	8	1	0	9,548	68	5,551	1.082	6,006	7.12	7.47
x 2002.1	9	0	0	9,092	81	6,073	1.068	6,486	8.91	7.58
x 2002.2	10	1	0	9,190	75	2,712	1.068	2,897	8.16	7.70
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	11.33	
x 2003.2	12	1	0	9,680	70	3,510	1.076	3,778	7.23	7.95
x 2004.1	13	0	0	9,363	68	3,361	1.080	3,630	7.26	8.08
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	6.61	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	6.09	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	6.63	
2006.1	17	0	1	9,683	59	2,574	1.072	2,760	6.09	
2006.2	18	1	1	10,236	58	2,503	1.072	2,790	5.67	
2007.1	19	0	1	10,087	58	2,519	1.072	2,700	5.74	
2007.2	20	1	1	10,199	69	4,271	1.072	4,577	6.76	
2008.1	21	0	1	9,737	66	3,081	1.075	3,312	6.75	
2008.2	22	1	1	10,382	60	2,920	1.075	3,138	5.75	
2009.1	23	0	1	10,223	61	2,393	1.073	2,567	5.98	
2009.2	24	1	1	10,931	71	3,359	1.073	3,603	6.54	
2010.1	25	0	1	10,775	52	2,510	1.056	2,650	4.86	
2010.2	26	1	1	11,140	59	3,204	1.056	3,382	5.28	
2011.1	27	0	1	11,010	60	2,698	1.052	2,839	5.47	
2011.2	28	1	1	11,524	65	5,203	1.052	5,476	5.66	
2012.1	29	0	1	11,448	53	2,997	1.052	3,154	4.62	
2012.2	30	1	1	12,361	69	3,944	1.052	4,150	5.58	

Avg Annual Trend

3.21%

Regression Coefficients	Constant	6.5802
	Time	1,0159
Regression Statistics	Deg. of Freedom	9.0000
	F-Statistic	2.2719
	R2	0.2016
	SSReg	0.0410
	SSResid	0.1623
	Adjusted R2	0.1128
p-Values	Constant	0.0000
	Time	0.1660
T-Statistics	Constant	23.4312
	Time	1.5073

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Freq. per 1000	Fitted Freq. per 1000
	X									
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	6.65	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	6.38	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	6.48	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	6.44	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	6.73	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	9.80	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	11.76	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	7.12	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	8.91	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	8.16	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	11.33	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	7.23	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	7.26	
X	2004.2	14	1	9,830	65	2,391	1.080	2,582	6.61	6.55
X	2005.1	15	0	9,682	59	1,917	1.066	2,045	6.09	6.46
X	2005.2	16	1	9,960	66	2,854	1.066	3,043	6.63	6.37
X	2006.1	17	0	9,683	59	2,574	1.072	2,760	6.09	6.28
X	2006.2	18	1	10,236	58	2,603	1.072	2,790	5.67	6.19
X	2007.1	19	0	10,087	58	2,519	1.072	2,700	5.74	6.11
X	2007.2	20	1	10,199	69	4,271	1.072	4,577	6.76	6.02
X	2008.1	21	0	9,737	66	3,081	1.075	3,312	6.75	5.94
X	2008.2	22	1	10,382	60	2,920	1.075	3,138	5.75	5.85
X	2009.1	23	0	10,223	61	2,393	1.073	2,567	5.98	5.77
X	2009.2	24	1	10,931	71	3,359	1.073	3,603	6.54	5.69
X	2010.1	25	0	10,775	52	2,510	1.056	2,650	4.86	5.61
X	2010.2	26	1	11,140	59	3,204	1.056	3,382	5.28	5.53
X	2011.1	27	0	11,010	60	2,698	1.052	2,839	5.47	5.46
X	2011.2	28	1	11,524	65	5,203	1.052	5,476	5.66	5.38
X	2012.1	29	0	11,448	53	2,997	1.052	3,154	4.62	5.30
X	2012.2	30	1	12,361	69	3,944	1.052	4,150	5.58	5.23

Avg Annual Trend      -2.78%

Regression Coefficients	Constant	7.9800
	Time	0.9860
Regression Statistics	Deg. of Freedom	15.0000
	F-Statistic	10.3653
	R2	0.4086
	SSReg	0.0809
	SSResid	0.1171
	Adjusted R2	0.3692
p-Values	Constant	0.0000
	Time	0.0057
T-Statistics	Constant	21.0669
	Time	(3.2195)

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Freq. per 1000	Fitted Freq. per 1000
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	6.65	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	6.38	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	6.48	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	6.44	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	6.73	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	9.80	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	11.76	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	7.12	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	8.91	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	8.16	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	11.33	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	7.23	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	7.26	
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	6.61	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	6.09	
x 2005.2	16	1	1	9,950	66	2,854	1.066	3,043	6.63	6.45
x 2006.1	17	0	1	9,683	59	2,574	1.072	2,760	6.09	6.35
x 2006.2	18	1	1	10,236	58	2,603	1.072	2,790	5.67	6.26
x 2007.1	19	0	1	10,087	58	2,519	1.072	2,700	5.74	6.16
x 2007.2	20	1	1	10,199	69	4,271	1.072	4,577	6.76	6.07
x 2008.1	21	0	1	9,737	66	3,081	1.075	3,312	6.75	5.97
x 2008.2	22	1	1	10,382	60	2,920	1.075	3,138	5.75	5.88
x 2009.1	23	0	1	10,223	61	2,393	1.073	2,567	5.98	5.79
x 2009.2	24	1	1	10,931	71	3,359	1.073	3,603	6.54	5.70
x 2010.1	25	0	1	10,775	52	2,510	1.056	2,650	4.86	5.61
x 2010.2	26	1	1	11,140	59	3,204	1.056	3,382	5.28	5.53
x 2011.1	27	0	1	11,010	60	2,698	1.052	2,839	5.47	5.44
x 2011.2	28	1	1	11,524	65	5,203	1.052	5,476	5.66	5.36
x 2012.1	29	0	1	11,448	53	2,997	1.052	3,154	4.62	5.28
x 2012.2	30	1	1	12,361	69	3,944	1.052	4,150	5.58	5.20

Avg Annual Trend

-3.04%

Regression Coefficients	Constant	8.2635
	Time	0.9847
Regression Statistics	Deg. of Freedom	13.0000
	F-Statistic	7.7036
	R2	0.3721
	SSReg	0.0669
	SSResid	0.1129
	Adjusted R2	0.3238
p-Values	Constant	0.0000
	Time	0.0157
T-Statistics	Constant	16.2034
	Time	(2.7756)

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Freq. per 1000	Fitted Freq. per 1000
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	6.65	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	6.38	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	6.48	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	6.44	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	6.73	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	9.80	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	11.76	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	7.12	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	8.91	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	8.16	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	11.33	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	7.23	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	7.26	
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	6.61	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	6.09	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	6.63	
2006.1	17	0	1	9,683	59	2,574	1.072	2,760	6.09	
2006.2	18	1	1	10,236	58	2,603	1.072	2,790	5.67	6.28
x 2007.1	19	0	1	10,087	58	2,519	1.072	2,700	5.74	6.18
x 2007.2	20	1	1	10,199	69	4,271	1.072	4,577	6.76	6.08
x 2008.1	21	0	1	9,737	66	3,081	1.075	3,312	6.75	5.99
x 2008.2	22	1	1	10,382	60	2,920	1.075	3,138	5.75	5.89
x 2009.1	23	0	1	10,223	61	2,393	1.073	2,567	5.98	5.80
x 2009.2	24	1	1	10,931	71	3,359	1.073	3,603	6.54	5.71
x 2010.1	25	0	1	10,775	52	2,510	1.056	2,650	4.86	5.62
x 2010.2	26	1	1	11,140	59	3,204	1.056	3,382	5.28	5.53
x 2011.1	27	0	1	11,010	60	2,698	1.052	2,839	5.47	5.44
x 2011.2	28	1	1	11,524	65	5,203	1.052	5,476	5.66	5.36
x 2012.1	29	0	1	11,448	53	2,997	1.052	3,154	4.62	5.27
x 2012.2	30	1	1	12,361	69	3,944	1.052	4,150	5.58	5.19

Avg Annual Trend

-3.13%

Regression Coefficients	Constant	8.3622
	Time	0.9842
Regression Statistics	Deg. of Freedom	11.0000
	F-Statistic	4.5869
	R2	0.2943
	SSReg	0.0460
	SSResid	0.1104
	Adjusted R2	0.2301
p-Values	Constant	0.0000
	Time	0.0554
T-Statistics	Constant	11.7748
	Time	(2.1417)

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Freq. per 1000	Fitted Freq. per 1000
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	6.65	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	6.38	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	6.48	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	6.44	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	6.73	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	9.80	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	11.76	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	7.12	
2002.1	9	0	0	9,092	81	6,073	1.058	6,486	8.91	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	8.16	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	11.33	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	7.23	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	7.26	
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	6.61	
2005.1	15	0	1	9,582	59	1,917	1.066	2,045	6.09	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	6.63	
2006.1	17	0	1	9,583	59	2,574	1.072	2,760	6.09	
2006.2	18	1	1	10,236	58	2,603	1.072	2,790	5.67	
2007.1	19	0	1	10,087	58	2,519	1.072	2,700	5.74	
x	2007.2	20	1	10,199	69	4,271	1.072	4,577	6.76	6.52
x	2008.1	21	0	9,737	66	3,081	1.075	3,312	6.75	6.35
x	2008.2	22	1	10,382	60	2,920	1.075	3,138	5.75	6.18
x	2009.1	23	0	10,223	61	2,393	1.073	2,567	5.98	6.02
x	2009.2	24	1	10,931	71	3,359	1.073	3,603	6.54	5.86
x	2010.1	25	0	10,775	52	2,510	1.056	2,650	4.86	5.71
x	2010.2	26	1	11,140	59	3,204	1.056	3,382	5.28	5.56
x	2011.1	27	0	11,010	60	2,998	1.052	2,839	5.47	5.42
x	2011.2	28	1	11,524	65	5,203	1.052	5,476	5.66	5.27
x	2012.1	29	0	11,448	53	2,997	1.052	3,154	4.62	5.14
x	2012.2	30	1	12,361	69	3,944	1.052	4,150	5.58	5.00

Avg Annual Trend

-5.15%

Regression Coefficients	Constant	11.0646
	Time	0.9739
Regression Statistics	Deg. of Freedom	9.0000
	F-Statistic	8.7435
	R2	0.4928
	SSReg	0.0770
	SSResid	0.0793
	Adjusted R2	0.4364
p-Values	Constant	0.0000
	Time	0.0160
T-Statistics	Constant	10.6589
	Time	(2.9569)

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Severity	Fitted Severity
x 1998.1	1	0	0	7,520	50	1,186	1,145	1,358	27,153	
x 1998.2	2	1	0	8,312	53	2,203	1,145	2,523	47,595	47,499
x 1999.1	3	0	0	7,876	51	2,349	1,106	2,598	50,933	47,241
x 1999.2	4	1	0	7,925	51	2,601	1,106	2,877	56,405	46,984
x 2000.1	5	0	0	7,874	53	2,182	1,093	2,385	44,995	46,729
x 2000.2	6	1	0	8,370	82	3,474	1,093	3,798	46,312	46,475
x 2001.1	7	0	0	8,417	99	3,330	1,082	3,603	36,395	46,223
2001.2	8	1	0	9,548	68	5,551	1,082	6,006	88,329	
2002.1	9	0	0	9,092	81	6,073	1,068	6,486	80,068	
x 2002.2	10	1	0	9,190	75	2,712	1,068	2,897	38,623	45,474
x 2003.1	11	0	0	9,098	103	3,632	1,076	3,909	37,956	45,227
x 2003.2	12	1	0	9,680	70	3,510	1,076	3,778	53,975	44,981
x 2004.1	13	0	0	9,363	68	3,361	1,080	3,630	53,377	44,736
2004.2	14	1	1	9,830	65	2,391	1,080	2,582	39,727	
2005.1	15	0	1	9,682	59	1,917	1,066	2,045	34,654	
2005.2	16	1	1	9,960	66	2,854	1,066	3,043	46,107	
2006.1	17	0	1	9,683	59	2,574	1,072	2,760	46,771	
2006.2	18	1	1	10,236	58	2,603	1,072	2,790	48,097	
2007.1	19	0	1	10,087	58	2,519	1,072	2,700	46,598	
2007.2	20	1	1	10,199	69	4,271	1,072	4,577	66,411	
2008.1	21	0	1	9,737	66	3,081	1,075	3,312	50,354	
2008.2	22	1	1	10,382	60	2,920	1,075	3,138	52,552	
2009.1	23	0	1	10,223	61	2,393	1,073	2,587	42,014	
2009.2	24	1	1	10,931	71	3,359	1,073	3,603	50,422	
2010.1	25	0	1	10,775	52	2,510	1,056	2,650	50,657	
2010.2	26	1	1	11,140	59	3,204	1,056	3,382	57,459	
2011.1	27	0	1	11,010	60	2,698	1,052	2,839	47,127	
2011.2	28	1	1	11,524	65	5,203	1,052	5,476	83,886	
2012.1	29	0	1	11,448	53	2,997	1,052	3,154	59,581	
2012.2	30	1	1	12,361	69	3,944	1,052	4,150	60,201	

Avg Annual Trend      -1.08%

Regression Coefficients	Constant Time	48,019 0.995
Regression Statistics	Deg. of Freedom F-Statistic R2	8,000 0.152 0.019
	SSReg	0.004
	SSResid	0.219
	Adjusted R2	(0.104)
p-Values	Constant Time	0.000 0.707
T-Statistics	Constant Time	93.909 (0.389)

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Severity	Fitted Severity
	x									
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	27,153	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	47,595	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	50,933	
1999.2	4	1	0	7,825	51	2,601	1.106	2,877	56,405	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	44,995	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	46,312	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	36,395	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	88,329	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	80,068	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	38,623	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	37,956	
2003.2	12	1	0	9,580	70	3,510	1.076	3,778	53,975	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	53,377	
x	2004.2	14	1	9,830	65	2,391	1.080	2,582	39,727	41,987
x	2005.1	15	0	9,682	59	1,917	1.086	2,045	34,654	42,881
x	2005.2	16	1	9,960	66	2,854	1.086	3,043	46,107	43,794
x	2006.1	17	0	9,683	59	2,574	1.072	2,760	48,771	44,726
x	2006.2	18	1	10,236	58	2,603	1.072	2,790	48,097	45,678
x	2007.1	19	0	10,087	58	2,519	1.072	2,700	46,598	46,651
x	2007.2	20	1	10,199	69	4,271	1.072	4,577	66,411	47,544
x	2008.1	21	0	9,737	66	3,081	1.075	3,312	50,354	48,658
x	2008.2	22	1	10,382	60	2,920	1.075	3,138	52,552	49,694
x	2009.1	23	0	10,223	61	2,393	1.073	2,587	42,014	50,752
x	2009.2	24	1	10,931	71	3,359	1.073	3,603	50,422	51,832
x	2010.1	25	0	10,775	52	2,510	1.056	2,650	50,657	52,935
x	2010.2	26	1	11,140	59	3,204	1.056	3,382	57,459	54,062
x	2011.1	27	0	11,010	60	2,698	1.052	2,839	47,127	55,213
x	2011.2	28	1	11,524	65	5,203	1.052	5,476	83,886	
x	2012.1	29	0	11,448	53	2,997	1.052	3,154	59,581	57,589
x	2012.2	30	1	12,361	69	3,944	1.052	4,150	60,201	58,815

Avg Annual Trend      4.30%

Regression Coefficients	Constant Time	31,264 1.021
Regression Statistics	Deg. of Freedom F-Statistic R2 SSReg SSResid Adjusted R2	14.000 9.601 0.407 0.164 0.239 0.364
p-Values	Constant Time	0.000 0.008
T-Statistics	Constant Time	68.726 3.099

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time X	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Severity	Fitted Severity
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	27,153	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	47,595	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	50,933	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	56,405	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	44,995	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	46,312	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	36,395	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	88,329	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	80,068	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	38,623	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	37,956	
2003.2	12	1	0	9,880	70	3,510	1.076	3,778	53,975	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	53,377	
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	39,727	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	34,654	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	46,107	47,177
2006.1	17	0	1	9,883	59	2,574	1.072	2,760	46,771	47,783
2006.2	18	1	1	10,236	58	2,603	1.072	2,790	48,097	48,396
2007.1	19	0	1	10,087	58	2,519	1.072	2,700	46,598	49,016
2007.2	20	1	1	10,199	69	4,271	1.072	4,577	68,411	49,645
2008.1	21	0	1	9,737	66	3,081	1.075	3,312	50,354	50,282
2008.2	22	1	1	10,382	60	2,920	1.075	3,138	52,552	50,927
2009.1	23	0	1	10,223	61	2,393	1.073	2,567	42,014	51,580
2009.2	24	1	1	10,931	71	3,359	1.073	3,603	50,422	52,242
2010.1	25	0	1	10,775	52	2,510	1.056	2,650	50,657	52,912
2010.2	26	1	1	11,140	59	3,204	1.056	3,382	57,459	53,591
2011.1	27	0	1	11,010	60	2,698	1.052	2,839	47,127	54,278
2011.2	28	1	1	11,524	65	5,203	1.052	5,476	83,886	
2012.1	29	0	1	11,448	53	2,997	1.052	3,154	59,581	55,680
2012.2	30	1	1	12,361	69	3,944	1.052	4,150	60,201	56,394

Avg Annual Trend      2.58%

Regression Coefficients	Constant Time	38,473 1.013
Regression Statistics	Deg. of Freedom F-Statistic R2 SSReg SSResid Adjusted R2	12.000 2.936 0.197 0.041 0.168 0.130
p-Values	Constant Time	0.000 0.112
T-Statistics	Constant Time	61.604 1.714

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Severity	Fitted Severity
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	27,153	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	47,595	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	50,933	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	56,405	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	44,995	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	46,312	
2001.1	7	0	0	8,417	99	3,330	1.082	3,603	36,395	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	88,329	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	80,068	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	38,623	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	37,956	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	53,975	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	53,377	
2004.2	14	1	1	9,830	65	2,381	1.080	2,582	39,727	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	34,654	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	46,107	
2006.1	17	0	1	9,683	59	2,574	1.072	2,760	46,771	
2006.2	18	1	1	10,236	58	2,603	1.072	2,790	48,097	49,110
2007.1	19	0	1	10,087	58	2,519	1.072	2,700	46,598	49,644
2007.2	20	1	1	10,199	69	4,271	1.072	4,577	66,411	50,184
2008.1	21	0	1	9,737	66	3,081	1.075	3,312	50,354	50,729
2008.2	22	1	1	10,382	60	2,920	1.075	3,138	52,552	51,281
2009.1	23	0	1	10,223	61	2,393	1.073	2,567	42,014	51,838
2009.2	24	1	1	10,931	71	3,359	1.073	3,603	50,422	52,402
2010.1	25	0	1	10,775	52	2,510	1.056	2,650	50,657	52,971
2010.2	26	1	1	11,140	59	3,204	1.056	3,382	57,459	53,547
2011.1	27	0	1	11,010	60	2,698	1.052	2,839	47,127	54,129
2011.2	28	1	1	11,524	65	5,203	1.052	5,476	83,886	
2012.1	29	0	1	11,448	53	2,997	1.052	3,154	59,581	55,312
2012.2	30	1	1	12,361	69	3,944	1.052	4,150	60,201	55,914

Avg Annual Trend      2.19%

Regression Coefficients	Constant	40,425
	Time	1.011

Regression Statistics	Deg. of Freedom	10,000
	F-Statistic	1.157
	R2	0.104
	SSReg	0.019
	SSResid	0.166
	Adjusted R2	0.014

p-Values	Constant	0.000
	Time	0.307

T-Statistics	Constant	44.052
	Time	1.076

Province of Newfoundland and Labrador  
Board of Commissioners of Public Utilities  
Commercial Automobile

**Third Party Liability - Bodily Injury**

Accident Period	Time	Seasonal	Bill	Earned Exposures	Ultimate Counts	Ultimate Losses	ULAE Adjustment	Adjusted Ultimate Losses	Ultimate Severity	Fitted Severity
1998.1	1	0	0	7,520	50	1,186	1.145	1,358	27,153	
1998.2	2	1	0	8,312	53	2,203	1.145	2,523	47,595	
1999.1	3	0	0	7,876	51	2,349	1.106	2,598	50,933	
1999.2	4	1	0	7,925	51	2,601	1.106	2,877	56,405	
2000.1	5	0	0	7,874	53	2,182	1.093	2,385	44,995	
2000.2	6	1	0	8,370	82	3,474	1.093	3,798	46,312	
2001.1	7	0	0	8,417	99	3,330	1.062	3,603	36,385	
2001.2	8	1	0	9,548	68	5,551	1.082	6,006	88,329	
2002.1	9	0	0	9,092	81	6,073	1.068	6,486	80,068	
2002.2	10	1	0	9,190	75	2,712	1.068	2,897	38,623	
2003.1	11	0	0	9,088	103	3,632	1.076	3,909	37,956	
2003.2	12	1	0	9,680	70	3,510	1.076	3,778	53,975	
2004.1	13	0	0	9,363	68	3,361	1.080	3,630	53,377	
2004.2	14	1	1	9,830	65	2,391	1.080	2,582	39,727	
2005.1	15	0	1	9,682	59	1,917	1.066	2,045	34,654	
2005.2	16	1	1	9,960	66	2,854	1.066	3,043	46,107	
2006.1	17	0	1	9,683	59	2,574	1.072	2,760	46,771	
2006.2	18	1	1	10,236	58	2,603	1.072	2,790	48,097	
2007.1	19	0	1	10,087	58	2,519	1.072	2,700	46,598	
x	2007.2	20	1	10,189	69	4,271	1.072	4,577	66,411	51,811
x	2008.1	21	0	9,737	66	3,081	1.075	3,312	50,354	52,113
x	2008.2	22	1	10,382	60	2,920	1.075	3,138	52,552	52,417
x	2009.1	23	0	10,223	61	2,393	1.073	2,587	42,014	52,722
x	2009.2	24	1	10,931	71	3,359	1.073	3,603	50,422	53,030
x	2010.1	25	0	10,775	52	2,510	1.056	2,650	50,657	53,339
x	2010.2	26	1	11,140	59	3,204	1.056	3,382	57,459	53,650
x	2011.1	27	0	11,010	60	2,698	1.052	2,839	47,127	53,962
x	2011.2	28	1	11,524	65	5,203	1.052	5,476	83,886	
x	2012.1	29	0	11,448	53	2,997	1.052	3,154	59,581	54,593
x	2012.2	30	1	12,361	69	3,944	1.052	4,150	60,201	54,912

Avg Annual Trend      1.17%

Regression Coefficients	Constant	46,125
	Time	1.006
Regression Statistics	Deg. of Freedom	8,000
	F-Statistic	0.170
	R2	0.021
	SSReg	0,003
	SSResid	0.159
	Adjusted R2	(0.102)
p-Values	Constant	0.000
	Time	0.691
T-Statistics	Constant	30.632
	Time	0.413