

EARTHQUAKE EXPOSURE DATA

1) DERIVATION OF THE DEFAULT PML

Please fill the following tables showing the derivation of the default PML.

Note: Total sum insured in thousand x (250 shake or fire factor) = 250 shake or fire PML for each CRESTA zone
 Total sum insured in thousand x (500 shake or fire factor) = 500 shake or fire PML for each CRESTA zone
 Total = sum of shake or fire PML for each CRESTA zone

British Columbia - Personal Property Shake						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 shake factor %	500 shake factor %	250 shake PML	500 shake PML
Zone 1 Richmond, Fraser Delta	V3M, V4G, V4K, V6V-Y, V7A-E,		5.88	10.76		
Zone 2 Rest of Greater Vancouver	Rest of V3, V4, V5, V6, V7		2.25	4.31		
Zone 3 Victoria	V8N-Z, V9A-E		1.02	2.19		
Zone 4 Rest of Vancouver Earthquake Zone	V8A, V8L, V9L-Y, V2P-Z, V0M-S, V0X, V1M, V4W, V4X, V4R, V3G		1.05	2.30		
Zone 11 British Columbia excluding zones 1-4	remainder of V codes		0.03	0.07		
Total BC personal property shake PML						

British Columbia - Personal Property Fire						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 fire factor %	500 fire factor %	250 fire PML	500 fire PML
Zone 1 Richmond, Fraser Delta	V3M, V4G, V4K, V6V-Y, V7A-E,		2.02	2.90		
Zone 2 Rest of Greater Vancouver	Rest of V3, V4, V5 V6, V7		2.36	3.09		
Zone 3 Victoria	V8N-Z, V9A-E		0.98	0.94		
Zone 4 Rest of Vancouver Earthquake Zone	V8A, V8L, V9L-Y, V2P-Z, V0M-S, V0X, V1M V4W, V4X, V4R, V3G		0.39	0.46		
Zone 11 British Columbia excluding zones 1-4	remainder of V codes		0.03	0.03		
Total BC personal property fire PML						

Quebec-Personal Property Shake						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 shake factor %	500 shake factor %	250 shake PML	500 shake PML
Zone 5 Montreal	H		3.11	6.38		
Zone 6 Greater Montreal	J3V-Z, J4, J5R, J6W-Z, J7A-R, J0N		1.69	4.12		
Zone 7 Surroundings of Montreal	J2S-X, J3A-L, J5Y-Z, J6A-T, J7V-Z, J0J-L, J0P-S		1.85	4.18		
Zone 8 Rest of Montreal Earthquake Zone	G8Y-Z, G9A-C, J1E-X, J2B-N, J3P-R, J5V, J8C-H, J0C-H, J0T-V, K6A-K, K0B-C		1.30	2.44		
Zone 9 Quebec City and Epicentral Region	G1, G2, G5V, G6V-W, G0A, G0L, G0R, G0T		1.14	3.01		
Zone 10 Rest of Quebec Earthquake Zone	G5L-R, G5Y, G6G-T, G7, G8B-H, G8T-Z, G9, G0K, G0M-P, G0S, G0V, G0X-Z		0.37	0.78		
Zone 16 Quebec	excluding zones 5-10		0.77	1.40		
Total Quebec personal property shake						

Quebec - Personal Property Fire						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 fire factor %	500 fire factor %	250 fire PML	500 fire PML
Zone 5 Montreal	H		1.25	5.95		
Zone 6 Greater Montreal	J3V-Z, J4, J5R, J6W-Z, J7A-R, J0N		0.40	1.27		
Zone 7 Surroundings of Montreal	J2S-X, J3A-L, J5Y-Z, J6A-T, J7V-Z, J0J-L, J0P-S		0.28	0.87		
Zone 8 Rest of Montreal Earthquake Zone	G8Y-Z, G9A-C, J1E-X, J2B-N, J3P-R, J5V, J8C-H, J0C-H, J0T-V, K6A-K, K0B-C		0.22	0.58		
Zone 9 Quebec City and Epicentral Region	G1, G2, G5V, G6V-W, G0A, G0L, G0R, G0T		0.50	2.62		
Zone 10 Rest of Quebec Earthquake Zone	G5L-R, G5Y, G6G-T, G7, G8B-H, G8T-Z, G9, G0K, G0M-P, G0S, G0V, G0X-Z		0.17	0.38		
Zone 16 Quebec	excluding zones 5-10		0.07	0.38		
Total Quebec personal property fire PML						

British Columbia - Commercial Property Shake						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 shake factor %	500 shake factor %	250 shake PML	500 shake PML
Zone 1 Richmond, Fraser Delta	V3M, V4G, V4K, V6V-Y, V7A-E,		10.92	15.43		
Zone 2 Rest of Greater Vancouver	Rest of V3, V4, V5 V6, V7		4.68	6.67		
Zone 3 Victoria	V8N-Z, V9A-E		2.67	4.58		
Zone 4 Rest of Vancouver Earthquake Zone	V8A, V8L, V9L-Y, V2P-Z, V0M-S, V0X, V1M, V4W, V4X, V4R, V3G		2.29	4.15		
Zone 11 British Columbia excluding zones 1-4	remainder of V codes		0.10	0.13		
Total BC commercial property shake PML						
British Columbia - Commercial Property Fire						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 fire factor %	500 fire factor %	250 fire PML	500 fire PML
Zone 1 Richmond, Fraser Delta	V3M, V4G, V4K, V6V-Y, V7A-E,		0.94	1.26		
Zone 2 Rest of Greater Vancouver	Rest of V3, V4, V5, V6, V7		1.52	1.80		
Zone 3 Victoria	V8N-Z, V9A-E		0.56	0.69		
Zone 4 Rest of Vancouver Earthquake Zone	V8A, V8L, V9L-Y, V2P-Z, V0M-S, V0X, V1M, V4W, V4X, V4R, V3G		0.22	0.30		
Zone 11 British Columbia excluding zones 1-4	remainder of V codes		0.03	0.03		
Total BC commercial property fire PML						

Quebec-Commercial Property Shake						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 shake factor %	500 shake factor %	250 shake PML	500 shake PML
Zone 5 Montreal	H		5.43	10.74		
Zone 6 Greater Montreal	J3V-Z, J4, J5R, J6W-Z, J7A-R, J0N		3.62	8.35		
Zone 7 Surroundings of Montreal	J2S-X, J3A-L, J5Y-Z, J6A-T, J7V-Z, J0J-L, J0P-S		3.51	7.41		
Zone 8 Rest of Montreal Earthquake Zone	G8Y-Z, G9A-C, J1E-X, J2B-N, J3P-R, J5V, J8C-H, J0C-H, J0T-V, K6A-K, K0B-C		2.77	4.66		
Zone 9 Quebec City and Epicentral Region	G1, G2, G5V, G6V-W, G0A, G0L, G0R, G0T		2.35	4.61		
Zone 10 Rest of Quebec Earthquake Zone	G5L-R, G5Y, G6G-T, G7, G8B-H, G8T-Z, G9, G0K, G0M-P, G0S, G0V, G0X-Z		0.80	1.52		
Zone 16 Quebec	excluding zones 5-10		1.12	1.84		
Total Quebec commercial property shake PML						

Quebec-Commercial Property Fire						
CRESTA ZONE	POSTAL CODES	Total Sum Insured (\$000)	250 fire factor %	500 fire factor %	250 fire PML	500 fire PML
Zone 5 Montreal	H		0.45	1.49		
Zone 6 Greater Montreal	J3V-Z, J4, J5R, J6W-Z, J7A-R, J0N		0.17	0.35		
Zone 7 Surroundings of Montreal	J2S-X, J3A-L, J5Y-Z, J6A-T, J7V-Z, J0J-L, J0P-S		0.08	0.25		
Zone 8 Rest of Montreal Earthquake Zone	G8Y-Z, G9A-C, J1E-X, J2B-N, J3P-R, J5V, J8C-H, J0C-H, J0T-V, K6A-K, K0B-C		0.08	0.23		
Zone 9 Quebec City and Epicentral Region	G1, G2, G5V, G6V-W, G0A, G0L, G0R, G0T		0.22	0.57		
Zone 10 Rest of Quebec Earthquake Zone	G5L-R, G5Y, G6G-T, G7, G8B-H, G8T-Z, G9, G0K, G0M-P, G0S, G0V, G0X-Z		0.08	0.13		
Zone 16 Quebec	excluding zones 5-10		0.05	0.12		
Total Quebec commercial property fire PML						

2) **MODELED PML**

- If a model was used to derive the operative PML, please provide the name of supplier and a description of the model used for shake and fire following (e.g. developed in-house or by third-party, deterministic or probabilistic, etc.)
- The Earthquake Exposure Sound Practices guideline on pages 4 and 5 and the appendix II on page 2 provides a list of parameters and factors to be considered in loss estimation. Please provide a brief description of the assumptions you used in your loss estimation:

Damageability Confidence Level: (if applicable)	
Deductibles:	
Post-Event Inflation:	
Co-Insurance:	
Loss Adjustment Expenses:	
Debris Removal:	
Automobile Physical Damage:	
Under-Insurance:	

3) **COMPARISON OF THE PMLs**

If the selected PML was derived from a computer model, compare the default PML with the operative PML.

Quebec PML Comparison - Personal Property			
	Shake PML	Fire PML	Total PML
Quebec personal property default PML 250			
Quebec personal property operative (model) PML 250			
Difference			
Quebec personal property default PML 500			
Quebec personal property operative (model) PML 500			
Difference			
Quebec PML Comparison - Commercial Property			
	Shake PML	Fire PML	Total PML
Quebec commercial property default PML 250			
Quebec commercial property operative (model) PML 250			
Difference			
Quebec commercial property default PML 500			
Quebec commercial property operative (model) PML 500			
Difference			

BC PML Comparison - Personal Property			
	Shake PML	Fire PML	Total PML
BC personal property default PML 250			
BC personal property operative (model) PML 250			
Difference			
BC personal property default PML 500			
BC personal property operative (model) PML 500			
Difference			
BC PML Comparison - Commercial Property			
	Shake PML	Fire PML	Total PML
BC commercial property default PML 250			
BC commercial property operative (model) PML 250			
Difference			
BC commercial property default PML 500			
BC commercial property operative (model) PML 500			
Difference			

4) **ELEMENTS OF THE RESERVING FORMULA**

Please provide the following elements of the reserving formula:

NOTE: All amounts should be in thousands.

PML ₂₅₀				1
PML ₅₀₀				2
Reserving PML				3
Reinsurance Collectable				4
Retention				5
10% of Capital & Surplus				6
Approved Capital Market Financing				
	Required	Voluntary	Carried in Annual Return	
EPR				7
ERC				8
ERR		9		9

1. PML₂₅₀ equals the **higher** value between QC and BC total losses on personal and commercial property caused by shake and fire for a loss return period of 250 years.
2. PML₅₀₀ equals the **higher** value between QC and BC total losses on personal and commercial property caused by shake and fire for a loss return period of 500 years.
3. Reserving PML = PML₂₅₀ + N/25 (PML₅₀₀ – PML₂₅₀), Where N= current fiscal year minus 1997.
4. Reinsurance Collectible is the amount that the company will receive from reinsurers if a loss of PML₂₅₀ + N/25 (PML₅₀₀ – PML₂₅₀) occurs. **It should therefore always be smaller or equal to the Reserving PML.**
5. Retention is the maximum amount of capital a company is ready to lose in the case of an earthquake, limited to 10% of the Capital & Surplus.
6. Surplus & Capital is the amount reported on the latest P&C-1 Annual Return for Canadian-incorporated companies (exhibit 20.20, line 49) or *worldwide capital and surplus* (in Canadian Dollars) reported on the latest P&C-2 Annual Return for Canadian branches of foreign insurance companies (exhibit 10.60, line 22, column 5).
7. EPR equals the amount related to earthquake reported on the latest P&C-1 (exhibit 20.40, line 91) or P&C-2 (exhibit 20.45, line 91). The annual increase in this reserve is limited to 75% of net earned earthquake premiums.
8. ERC equals the amount related to earthquake reported on the latest P&C-1 (exhibit 20.40, line 90) or P&C-2 (exhibit 20.45, line 90).
9. ERR=EPR+ERC