



## City of Thorold

### Seismic Data

Probability of exceedance per annum	0.000404	0.001	0.0021	0.01
Probability of exceedance in 50 years	2 %	5 %	10 %	40 %
Sa (0.05)	0.329	0.163	0.082	0.012
Sa (0.1)	0.386	0.200	0.106	0.019
Sa (0.2)	0.316	0.165	0.090	0.021
Sa (0.3)	0.232	0.122	0.068	0.019
Sa (0.5)	0.154	0.083	0.049	0.015
Sa (1.0)	0.071	0.041	0.025	0.007
Sa (2.0)	0.032	0.019	0.011	0.003
Sa (5.0)	0.007	0.004	0.002	0.001
Sa (10.0)	0.003	0.002	0.001	0.000
PGA (g)	0.204	0.106	0.056	0.011
PGV (m/s)	0.120	0.063	0.036	0.009

**Notes:** Spectral ( $S_a(T)$ , where T is the period in seconds) and peak ground acceleration (PGA) values are given in units of g ( $9.81 \text{ m/s}^2$ ). Peak ground velocity is given in m/s. Values are for "firm ground" (NBCC2015 Site Class C, average shear wave velocity 450 m/s). NBCC2015 and CSAS6-14 values are highlighted in yellow. Three additional periods are provided - their use is discussed in the NBCC2015 Commentary. Only 2 significant figures are to be used. **These values have been interpolated from a 10-km-spaced grid of points. Depending on the gradient of the nearby points, values at this location calculated directly from the hazard program may vary. More than 95 percent of interpolated values are within 2 percent of the directly calculated values.**