Wellington sits astride the boundary between two of Earth's great tectonic plates – the Pacific and Australian plates. The two plates move into and against each other at a rate of about four cm per year, and it is this movement that feeds the region's earthquake engine. The sideways motion of the plates is taken up by lateral slip (large earthquakes) on, for example, the Wellington Fault and the Wairarapa Fault, and the contractional motion is accounted for mainly as slip on the subduction interface between the two plates.

