

17122 - Detailed seismic assessment of reinforced concrete buildings

In early 2017 new legislation associated with the identification of potentially earthquake-prone buildings will be enacted. This legislation will require Territorial Authorities to identify potentially earthquake prone buildings in their jurisdictions using building profile categories. Once these potentially earthquake prone buildings have been identified, structural engineers will be required to undertake detailed seismic assessments using guidance documents prepared by NZSEE. This project seeks to provide research to support this described procedure, specifically addressing reinforced concrete (RC) buildings. The proposal is divided into 4 objectives that address aspects of the building profile categories, gaps in existing knowledge pertaining to RC buildings (specifically addressing the use of plain round reinforcement and nonductile columns and walls) and benchmarking of New Zealand professional practice against international procedures and performance of buildings in past earthquakes.