

## Smart infrastructure: An innovative approach for vacuum sewer monitoring

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*Showcasing the wide-scale implementation of a novel vacuum sewer monitoring system utilising cutting-edge sensor technology to provide smart infrastructure for the resilient city of Christchurch.*

After the 2010 Canterbury Earthquake, Christchurch City Council (CCC) installed three vacuum sewer systems which collectively consist of 1,483 geographically dispersed vacuum chambers. CCC recognised a need to monitor the performance of the vacuum system in order to improve their operational response. The lack of power at sites made this an ideal opportunity to consider emerging Internet of Things (IoT) technology as a solution. In this case study, we describe the drivers behind the solution and the process of installing smart infrastructure whilst managing the associated risks.

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