Surveying a Broken City- A Story of Innovation and Collaboration

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SUMMARY

It’s not often the need arises to immediately survey the infrastructure of a whole city. Following the Christchurch earthquakes we threw away the rule book in search of a model that could procure, manage and deliver a city’s worth of precise geospatial data within a few years.

The events in 2010 and 2011 caused about 3 billion dollars of damage to the City’s infrastructure. Hundreds of kilometers of roads, bridges and underground pipes were broken and in need of repair to underpin the larger 40 billion dollar recovery of the City.

The ‘Stronger Christchurch Infrastructure Rebuild Team’ (SCIRT) was formed with the ambitious goal of rebuilding 150 years of horizontal infrastructure development in only 5. The project was complex, uncertain, and was going to take different way of thinking. Within months, an alliance model was formed to pull parties together and create a single goal – Create Resilient Infrastructure.

The land surveying contribution to this project was enormous and critical to the success of this huge project. The collective efforts of 150 surveyors and about 200,000 hours have resulted not only in a city’s infrastructure nearly rebuilt, but a legacy of remarkable innovation. We’ve created a model that successfully brought together 16 survey consultancies and supplied 200 civil designers with a city’s worth of geospatial data on a single federated digital platform.

This paper presents the story of that innovation and highlights the lessons that can be applied to survey procurement, management and delivery in the event of future large scale recovery projects.