



CHRISTCHURCH REBUILD “THE LONG JOURNEY”

HOW MANY YEARS IS YOUR RECOVERY PLAN

PAST BUILDING STANDARDS WERE A
SUCCESS IN SAVING LIVES

BUT ARE SLOWING THE REBUILD

Typical streetscape 3 years post earthquake

- 3000 Commercial buildings provided safe refuge and escape
- There were 2 commercial building failures with a loss of life



HOMES WERE SAFE DURING QUAKE

- 180,000 Single Family residences with no loss of life
- 10,000 Residences require demolition
- 100,000 Residences require significant repairs
- 17000 New homes will need to be constructed



Over 1200 commercial buildings to be demolished



All the waste finds it's way to landfill sites

- The resulting building waste along with 400,000 tons of silt from liquefaction created a need for an entirely new site
- The site also required a forensic area due to the possibility that human remains may remain in the building waste.



Commercial construction is starting to move

- Government is stimulating the construction effort with core building projects in precincts near the CBD.
- Financing has been an impediment. During the first 2 years there were several aftershocks over 6 on the Richter Scale. Each time financing was suspended for 3 months.
- The developers are not sure what to build in the CBD because the public may not feel comfortable in the area or in the buildings.



Constant Road Network Disruptions

- 1000 Km's or 52% of the road network is damaged.
- 500 Km's of water supply system is damaged.
- Storm Sewer and Waste collection systems have leaks and disturb grades. There are areas with thousands of homes with land settlement of 1.5 meters.



Over 3 Billion Dollars allocated for Sewer and Water

- This amount will not be enough to complete the work.
- The storm water system cannot keep up with the inflow because outflows are now below sea level due to liquifaction settlement.
- The repairs will likely take more than 10 years.



Stress is a significant factor in the recovery

- 80% of the people have said that their lives have been significantly effected by the earthquake.
- Approximately 10,000 people or 3% of the population have left the city permanently.
- Everyone of the after shocks causes an adrenaline reaction in most people because they never know if it is another major quake coming. There have been 11,000 aftershocks since September 2010



What do you think

- How many years is the recovery plan in your jurisdiction?
- Should we expect more resilient buildings?
- Are we planning for massive infrastructure damage?
- Does your jurisdiction's plan anticipate 80% of your community being under stress for a decade?