Reflections on Recovery

The Canterbury earthquakes within the context of other catastrophic disasters

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After Great Disasters
An In-depth Analysis of How Six Countries Managed Community Recovery
Laurie A. Johnson and Robert B. Olshansky

United States
- 2001 World Trade Center disaster
- 2005 Hurricane Katrina
- 2012 Hurricane Sandy

China
- 2008 Sichuan earthquake

India
- 2001 Gujarat earthquake

Japan
- 1995 Kobe earthquake
- 2011 Tohoku earthquake and tsunami

Indonesia
- 2004 Sumatra earthquake and tsunami

New Zealand
- 2010-2011 Canterbury earthquakes

http://www.lincolninst.edu
Catastrophic disaster results in extraordinary levels of casualties or damage or disruption. Communities are complex, adaptive, open, and largely self-organizing systems. Recovery happens as communities repair themselves as functioning systems and adapt to changing circumstances.
Time compression—a compression of urban development activities in time (e.g. 50 years -> 5 years)—is what distinguishes recovery from normal urban development.

Source: Olshansky, Hopkins, & Johnson, Natural Hazards Review, August 2012
Disasters extend over time, and the policies, plans and projects enacted post-disaster can facilitate or impede recovery.
When disaster strikes, there is already a plan for reconstruction indelibly stamped in the mind of every affected resident—the plan of the pre-disaster city...
... This is the ‘first’ recovery plan, and all previous plans or new plans made following the disaster will undoubtedly compete, for many residents, with the first plan, oftentimes intensely.

(Haas, Kates, and Bowden, *Reconstruction Following Disaster*, 1977)
Findings

Recovery Management = f (Money, Information, Collaboration, Time)
Continuity of multi-level government commitment of funding for recovery
Strong scientific, engineering, and evidence-based practices and standards informed or influenced recovery policy
Continued coverage of the rebuild has also been a valuable information source.
New or strengthened collaborations
Strong community capacity to self-organize helped to alleviate communication and collaboration challenges
The aftershock sequence and flooding essentially “reset the clock” and exacerbated differential recovery.

7 Recommendations
Recommendations:

- Reconstruct quickly, but do not be hasty.
- Enhance existing systems and structures to promote information flow and collaboration.
- Increase local capacity and empower local governments to implement recovery actions.
Traditional Governance

- More directive leadership model
- Manager is organizer/controller.
- Goals are clear, and success is attainment of the goals.
- Linear/rational approach to planning
- Public participation – Complies with legal requirements, educate the public, and obtain public support for proposals.

Collaborative/Network Governance

- More generative leadership model, creating conditions to bring teams together and help build collective capacity to learn about problems and find solutions together
- Manager is a mediator and process manager
- Goals are sometimes in conflict or likely to change as part of deliberation. Success is realization of collective action and capacity to adapt to change.
- Non-linear approach to planning where goals may be revisited as part of analysis, policy development or implementation
- Public participation – Engage in joint learning and deliberation; build public capacity for problem-solving and adaptation

(Innes and Booher, Planning with Complexity, 2018)
Current disaster recovery frameworks facilitate collaboration but do not adequately address governance.
Recommendations:

- Plan and act simultaneously.
- Budget for the costs of communication and planning; revise budgets, plans and approaches over time.
- Emphasize data management, communication, transparency, and accountability.
“The 10% rule”

(Roger Sutton)
“Implementation and evaluation are the opposite sides of the same coin”

(Pressman and Wildavsky 1984)
Recommendation:

- Avoid permanent relocation of residents and communities except in rare instances, and only with full participation of residents.
**Median Weekly Rent**

**Three bedroom house**

- **Auckland**: $600
- **Wellington**: $500
- **Christchurch**: $400
- **National**: $300

**Source:** MBIE

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<thead>
<tr>
<th>Inform</th>
<th>Consult</th>
<th>Involve</th>
<th>Collaborate</th>
<th>Empower</th>
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</thead>
<tbody>
<tr>
<td><strong>Public Participation goal</strong></td>
<td>To provide the public with balanced and objective information.</td>
<td>To obtain public feedback on analysis, alternatives, and/or decisions.</td>
<td>To work directly with the public throughout the process.</td>
<td>To partner with the public in each aspect of the decision</td>
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<td><strong>Promise to the public</strong></td>
<td>We will keep you informed, listen to and acknowledge concerns and aspirations and provide feedback on how public input influenced decisions.</td>
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<td>We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.</td>
<td>We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.</td>
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**Example techniques**
- Restoration/Rebuild/Replace: Accelerate decision-making
  - Fact sheets
  - Web sites
  - Open houses
  - Public comment
  - Focus groups
  - Surveys
  - Public meetings
  - Workshops
  - Deliberative planning

- Redevelop/Regenerate: Empower stakeholders to “tip in”
  - Citizen advisory committees
  - Consensus-building
  - Participatory decision-making
  - Citizen juries
  - Ballots
  - Delegated decision

Source: IAP2 Spectrum of Public Participation, 2007
Local community planners working with residents in India, Japan, and the U.S. on neighborhood relocation and regeneration plans.
Commemoration
While some residents still face complex challenges five years on, much progress has been made. The people of Canterbury have demonstrated courage, determination and innovation. We can see an inspiring city emerging.

Ka oì Rūaumoko, ara ake Waitaha. Despite the heaving earth, Canterbury will rise again.
Thank you!

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