



POLICY BRIEF

Housing and disaster recovery

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Recent disasters in Aotearoa New Zealand have affected residential dwellings to varying degrees. Impacted communities have been displaced, housed in temporary accommodations, and experienced a range of flow-on effects on wellbeing.

This is the second in a series of briefs designed for policy analysts. These briefs bring together research on the most effective actions after a disaster. This brief focusses on housing issues that may arise immediately post-disaster. It encapsulates research from a wide variety of sources, researchers, and organisations, detailing key findings on housing in the first three months post-disaster and providing case studies to illustrate these findings. It also identifies where more research is needed.

Out of scope of this policy brief are: creating housing resilience to protect against future disasters, managed retreat and buy-out schemes, improving building resilience, and housing the response and recovery workforce. A separate brief in this series will address insurance.



2017 April flooding of Edgecumbe, Bay of Plenty. Credit: Brad Scott, GNS Science | EQC Toka Tū Ake

Recommended Actions

Evacuation planning

In the event of a large Wellington-based earthquake, serious planning is needed for either support-in-place or mass evacuation of Wellingtonians. In the event of a large tsunami hitting the coast or a volcanic eruption in Auckland, similar evacuation planning is also needed.

Building assessments

New Zealand's Rapid Building Assessment procedures have been primarily developed for earthquakes rather than floods. With the experience gained in the Auckland Anniversary Weekend floods and Cyclone Gabrielle this area needs urgent attention.

Access to information

a. Temporary housing resource. There are currently no databases on the location and availability of resources for temporary housing. This information can and should be collected and maintained, to ease data collection demand post-disaster. This should include:

- local authority scoping projects to determine areas suitable for temporary housing and the infrastructure requirements for building on these areas.
- identification of potential suppliers for short-term sheltering solutions (tents, caravan, etc) with contact details and estimated supply.
- a Register of Rental Properties and Landlords in order to establish a database of rental supply and monitoring of rental housing quality.

b. Insurance. After the Canterbury Earthquake Sequence, researchers and stakeholders needed to ask for (and in many cases could not obtain) duplicate data directly from data providers, because Statistics NZ were unable to share them on ethical and commercial sensitivity grounds. Statistics NZ also found it impossible to obtain insurance claim data. The lack of insurance claim data is an ongoing issue for researchers.

c. Valuation. New Zealand's dwelling valuation rolls are held by local councils who sell this information to Core Logic, which means access to this data is limited. Valuation data is necessary for modelling risk and might better be housed in the StatsNZ public collection.

Household displacement modelling

A new household impacts model for estimating post-disaster habitability and population displacement is available via GNS Science. The core components of the agent-based model are ready to be used in the event of any disaster event anywhere within Aotearoa New Zealand. The inputs required post-event are information on water and power outages, road access disruptions, and damage to community facilities.

Renter specific actions

Landlords or property companies should be encouraged to install rainwater collection tanks on the sides of their buildings. We suggest changing current tenancy laws, so renters have permission to secure heavy furniture to the wall without being penalised. Post-disaster, rent stabilisation measures could be considered in order to protect tenants.

How do disasters affect housing?

People's wellbeing is directly impacted by damage to their homes. Housing is at the centre of disaster recovery and is closely linked to other aspects including utility networks, insurance, and psycho-social impacts. Those already under stress are likely to experience worse outcomes in the aftermath of a disaster.

In Aotearoa New Zealand, housing is not seen as a lifeline utility, and is not included within the New Zealand definition of 'critical infrastructure'.

After a natural hazard event such as a flood, earthquake, or landslide, a household's decision on whether to evacuate or shelter in place is based on a range of factors. These include:

- physical/legal elements: structural integrity, type of building (house, apartment, eldercare facility), and lifeline utility function (water, sewage, communications, power availability).
- household needs: financial resources, dwelling ownership (rented, owned), family status (dependent children, sole-caregiver responsibilities, pets), access to a vehicle and petrol, and health issues.
- neighbourhood liveability: distance to food and water supplies, access to healthcare, public transport, employment, schools, shops, and social networks.
- mobility issues: petrol availability, transport route damage, and geographical isolation.
- feelings of safety and social connection are also an important element of housing choice post-disaster.

The tipping point for a household's decision-making is highly varied. However, there are three common outcomes. Households may:

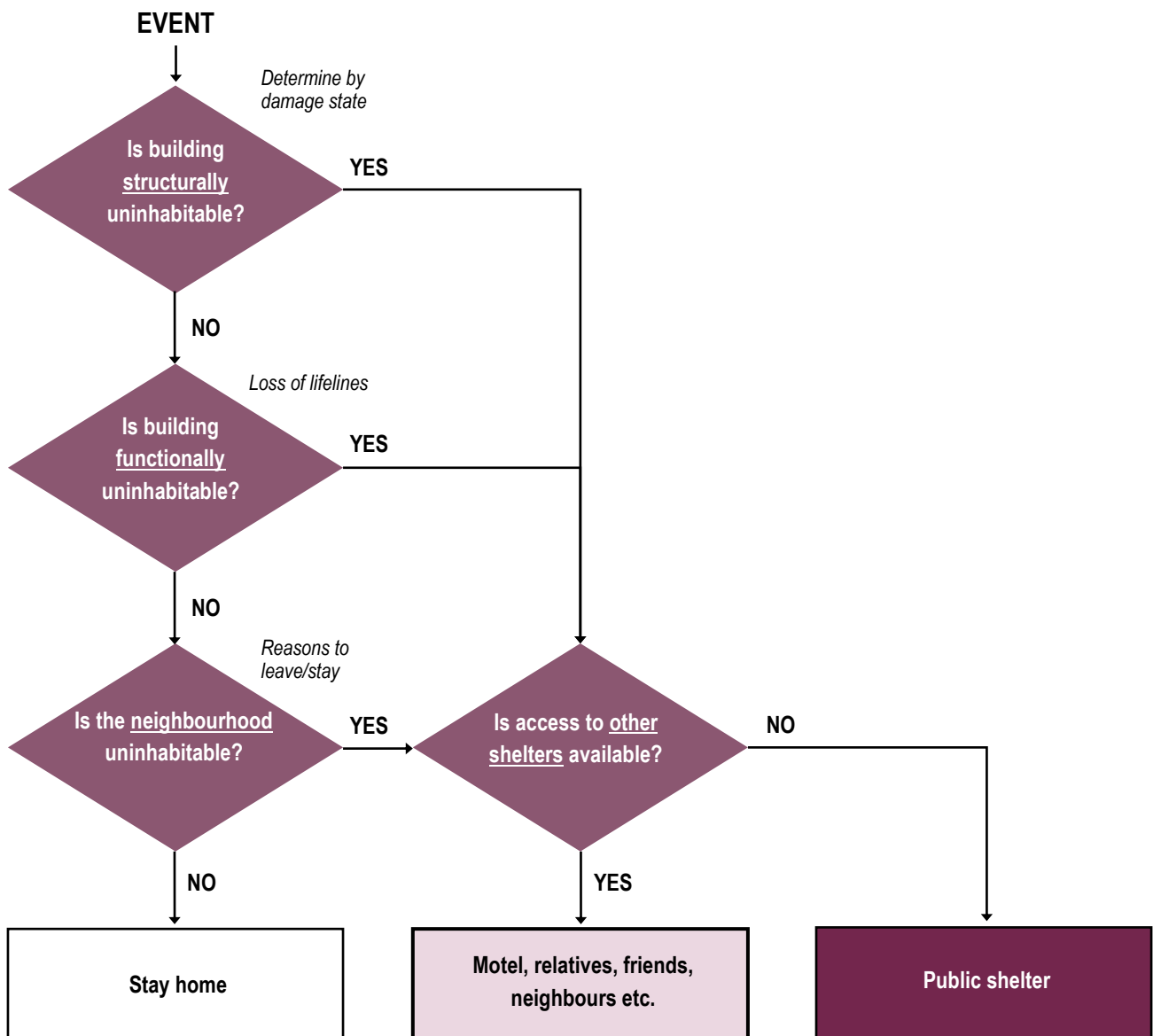
- shelter in place: this choice usually occurs when factors encouraging evacuation do not outweigh the benefits of remaining in their homes, or if the risks associated with evacuation are too high.
- self-evacuate using their own resources: this action often depends on financial resources and the availability of transport routes.
- evacuate with assistance: these evacuations may occur voluntarily or be subject to a mandatory evacuation order.

All those that evacuate will require alternative accommodation, either in a public shelter or accommodation of their choosing, such as relatives, friends, or local marae. Marae provide natural evacuation sites and community support centres, offering shelter, food, comfort and stress relief. Other options may include hotels and motels, campervans, existing undamaged residential housing stock, tourist accommodation, portable cabins, or other temporary housing.



Rockfall damage at Redcliffs following the 2011 Christchurch earthquake. Credit: Graham Hancox, GNS Science | EQC Toka Tū Ake

Figure 1: Sheltering needs decision tree¹



When disaster becomes catastrophe

Researchers emphasise that recent disasters in Aotearoa New Zealand have not truly tested the resilience of our housing. For example, an earthquake of similar magnitude to the February 2011 Christchurch earthquake centred on Wellington will have much more damaging effects on housing. This is due to the increased likelihood of earthquake-triggered landslides, the number of apartment dwellers, and fires caused by the greater amount of reticulated gas. The next big earthquake affecting Wellington could also be a subduction event (these types of earthquakes affect a much wider area).

The most recent modelling for evacuation numbers, welfare needs and sheltering requirements in Wellington after a major earthquake was done in 2012². This modelling estimated that 140,000 people would potentially be without homes for more than 3 months.

Researchers warn that serious planning is needed for mass evacuation of Wellingtonians after a large subduction quake. Similar concern was expressed about the impact of a volcanic eruption in Auckland or a major tsunami event.

CASE STUDY: Subsidised homes for most

2010 Chilean earthquake and tsunami: The M8.8 quake claimed 526 lives and displaced more than 1.5 million people, with approximately 370,000 housing units lost and many, many more damaged. The Chilean government rebuilt or repaired 222,000 units (60%) for low- and middle-income families with the remainder financed through insurance and private funds. Essentially, anyone with housing damage who did not own a second home was eligible for a subsidy.

Local mayors were given six months to create a registry of damaged dwellings, which served as the basis for all housing subsidies. Of the 222,000 housing units targeted for government assistance, 49% involved repairs of damaged homes, and 51% required rebuilding. The aim was to reconstruct on owner sites to keep families in place.

The national government consciously chose not to create a special agency for reconstruction. The Ministry of Housing and Urban Development [MINVU] was given responsibility for the reconstruction of cities and housing. There were strict construction norms for all new housing, funding for technical and quality oversight was built into the subsidies and aimed at local level, all families were given a choice of a variety of building types and contractors.

Flexibility in both program development and implementation was critical to the reconstruction effort. However, as social and economic planning was largely left out of the rebuilding programme, some locations could not resolve the loss of economic opportunity and neighbourhood cohesion caused by the earthquake.

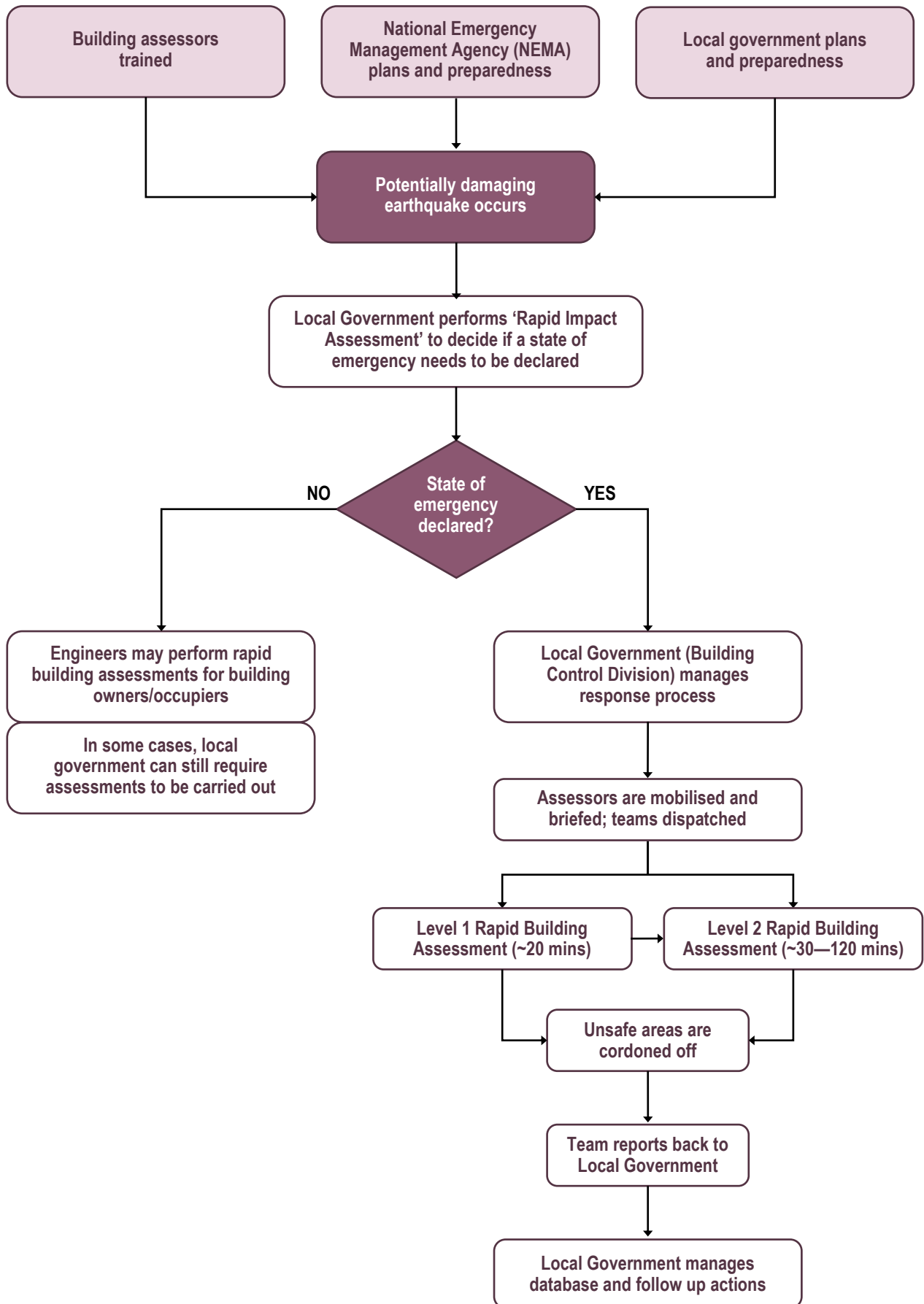


A building in Concepción destroyed in the 2010 Chile earthquake. Credit: Claudio Núñez [CC BY-SA 2.0](https://creativecommons.org/licenses/by-sa/2.0/)

Structural safety

The post-earthquake building evaluation system has been tested on a number of occasions and its importance widely recognised. Rapid impact assessments are undertaken within the first 8 to 48 hours of an emergency. They are usually completed by teams of MBIE-trained and registered building assessors led by the local Territorial Authority. An assessor will look at the outside, and possibly the inside of the building to check damage, including the risk of being damaged by neighbouring buildings or natural hazards nearby. These assessments give councils the information to prioritise where to send rapid building assessment teams.

Figure 2: Overview of the New Zealand Rapid Building Assessment procedure³



Once the rapid impact assessment is finished the team will record details of the damage and assign appropriate placards to buildings to identify use:

- White (can be used)
- Yellow (restricted access by supervised personnel, or for a short period of time)
- Red (entry prohibited because of either land risk or damage to building).

The formalisation and training of national resources capable of leading an assessment operation is needed with some urgency to make the overall system operate as intended. Training around rapid impact assessment is also needed for engineers and building officials, especially in smaller territorial authorities.

Technology has a greater role to play, this includes:

- greater uptake of apps for recording field data that enable more rapid production of GIS plots of damaged buildings
- protocols to allow existing building engineering instrumentation information to be accessed, aggregated and synthesized in an emergency
- linking geotechnical and structural rapid assessments.

CASE STUDY: Rapid temporary repair service

Several years after the Christchurch earthquake, the Canterbury Earthquake Recovery Authority established a rapid temporary repair service to make the homes of vulnerable residents secure, sanitary and weathertight. This successful initiative evolved over time into a collaboration with community groups, who drew on local networks and on the expertise of tradespeople employed by project management offices working free of charge to repair homes of vulnerable residents. Researchers felt this could be a useful option if used earlier in the process.

Habitability

A key factor behind the decision of whether or not to evacuate is the habitability of a residence, with both the physical state and the ability of the building to support habitation being important. Structural stability aside, habitability depends primarily on the supply of essential services to the building, whether through normal reticulated supplies or emergency alternatives. Another key concern is the distance of the residence from water and food supplies, e.g. whether residents have the physical ability to carry 20 litres of water per person per day over this distance.⁴

People with disabilities (both visible and invisible) have higher needs for habitability than the general population. Emergency shelter and temporary accommodation is often not inclusive of people with disabilities.⁵

Renters

After a disaster, renters are more likely to be displaced, whereas homeowners can often choose to stay despite the damage. Renters may not have access to information about their home after a disaster, which can make decision making harder. They are less likely to have access to a garden, meaning access to on-site disposal of human waste may not be possible. In addition, rental properties are more commonly dependent on electric and portable gas heaters. Renters are also more likely to have difficulty finding alternative housing.

The legal requirements for rent payment after a disaster may create extra burdens for renters. If a building has not been assessed for damage, rent is still required, unless the damage can be easily proven with photographs. If renters choose to leave their home due to aftershocks, lack of utilities, or other habitability needs, they may still be charged rent if the building is assessed as able to be used (white stickered).

In the longer term, rents often increase in the post-disaster period and more affluent households often occupy the vacant rental properties that are available.

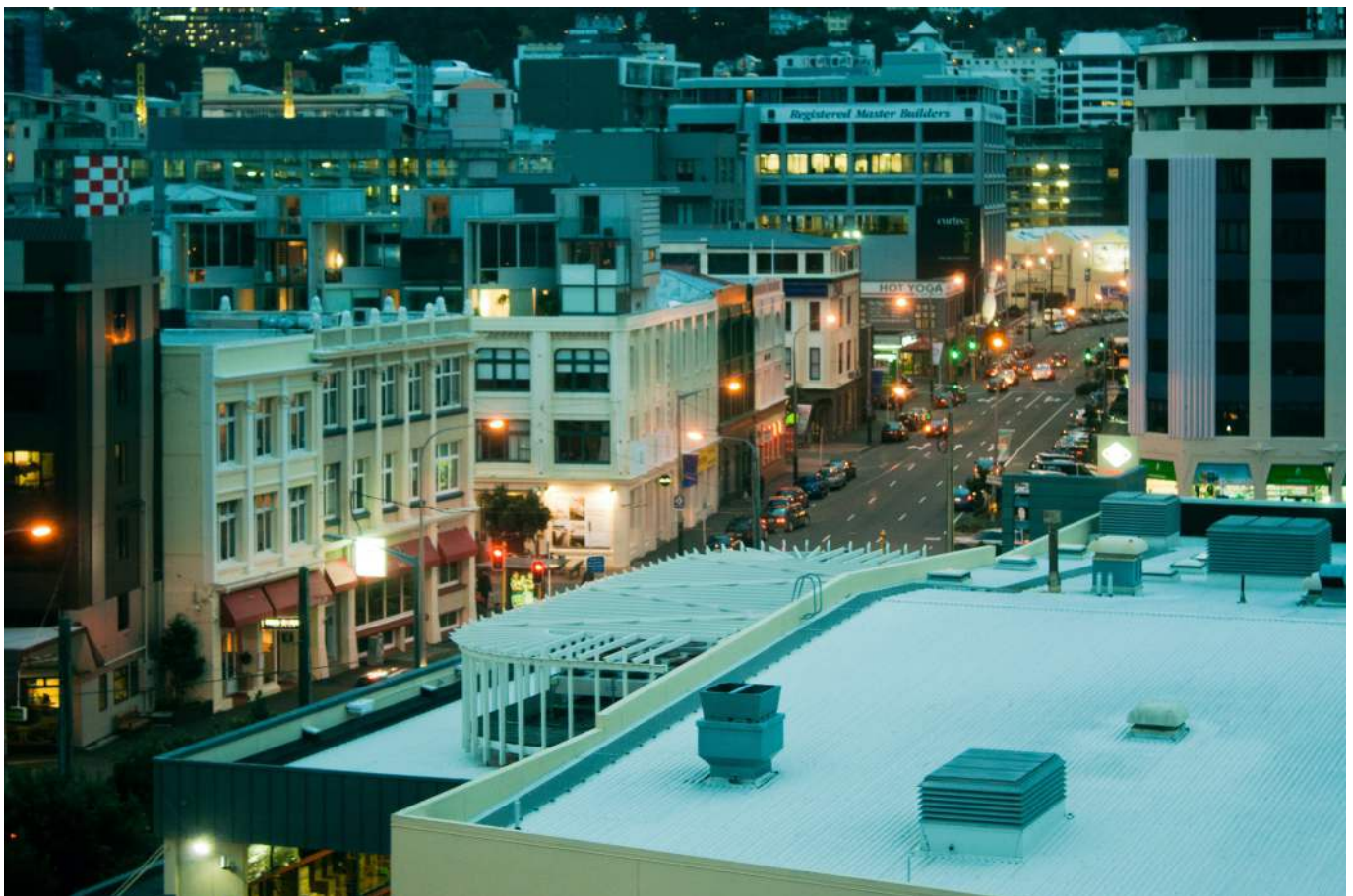
Apartment dwellers

Apartments in particular are critically dependent on reticulated services (water supply, wastewater removal, and power) because they have few alternatives. In apartments, the electricity supply supports fire suppression systems, air conditioning, water supply, lighting, heating, elevators, and wastewater disposal. Without working elevators it may be impractical for apartment dwellers to carry the necessary 20 litres of water per day per person up the stairs.

Apartment dwellers are also unlikely to have:

- land nearby for on-site disposal of human waste
- the ability to collect rainwater
- stored food and water due to space constraints.

Apartments are more likely to be rental residences and on a unit title. In a study of those living in Wellington in an apartment during the 2016 Kaikōura earthquake, renters reported that communicating with the Body Corporate or landlord was difficult. They had trouble getting information about the damage status of the building, making decisions about returning challenging.⁶



Apartment buildings in Wellington city. Credit: Stas Kulesh, Unsplash

Older people

Research tells us that older people are more vulnerable to the impacts of disasters and tend to be displaced for longer.⁷ This is particularly the case for those in residential care facilities.

In September 2021, there were nearly 41,000 aged residential care beds in Aotearoa New Zealand. Nearly two thirds of these were at one of the higher care levels (hospital, dementia, or psychogeriatric), requiring highly specialised care by healthcare professionals.⁸ The rest of our ageing population tend to live in couple-only and one-person households. An older person moving away from their usual residence or remaining at a damaged residence is likely to require more support than previously needed.⁹

Many residential care facilities will experience similar issues to apartment buildings after a disaster causing disruption to lifeline utilities. In 2014, only 59.7 percent of retirement villages with rest homes or aged care facilities also had an on-site generator.¹⁰ Anecdotal evidence suggests that there are only around 40 100KVA generators (suitable for retirement homes) in the country and these are more likely to be prioritised for other needs.

Ownership of units within an elder care facility is commonly held under a license to occupy, rather than the occupant outright owning the dwelling.¹¹ This can cause complexities in repair and recovery decisions.

Rural

In rural areas the tyranny of distance is exacerbated in a disaster. Timelines for habitability are extended and the collapse of communication capability is often systemic. This can lead to communities cut off from all utilities for days if not weeks and sometimes months. Although rural communities are often better prepared, with supplies of food, water, and generators common, these supplies may be unsustainable over the months it may take for utilities and infrastructure to be repaired.

Estimating post-disaster habitability

A new household impacts model for estimating post-disaster habitability and population displacement has been developed by GNS Science. This model incorporates a variety of the factors involved in residents' decision-making on whether to remain or relocate from their homes. The new model combines data inputs from various sources (including a national building inventory of residential dwellings) and is agent-based, which means that each household is considered individually. The model covers all of Aotearoa New Zealand and contains key household demographics including family composition, number of adults and children, tenure, and household income.

The core components of the agent-based model are ready to be used in the event of any disaster event anywhere within Aotearoa New Zealand. The inputs required post disaster event are information on water and power outages, road access disruptions, and damage to community facilities. The model accounts for changing conditions over time, such as restoration of services, lifting of mandatory evacuation zones, or building repair. It can also model the locations and accommodation types that displaced households relocate to. The new model has recently been applied to a Taranaki Mouna volcanic scenario and an Alpine Fault earthquake scenario.

Temporary, emergency, and transitional housing options

Temporary housing is usually defined as cots in safe dry spaces such as marae or school halls. It is time bound. Following a disaster, those affected are often unaware of the official locations for emergency hubs. Instead, many show up to their local marae – in both the Kaikōura earthquake and Cyclone Gabrielle the official temporary accommodation hubs often had beds empty, while marae were full. Following the Christchurch earthquake, displaced people were hesitant to accept short-term solutions (campervans) and to some extent the medium-term one (e.g. temporary housing at Linwood Park).¹² Most showed a great adaptive capacity, choosing either to share accommodation with other families or to stay in their damaged house, adapting to the reduced availability of utility services.

Emergency housing is a commercial relationship between the owner of the property and the person living there. In emergency housing, the government has no responsibility for the quality of the housing. A disaster can lead to the existing (otherwise homeless) occupants of emergency housing being displaced to house those displaced by the disaster.

Transitional housing involves providers contracted by the government and is organised through a transparent online booking service. For example, in Queenstown during COVID, the Ministry of Social Development requisitioned empty houses for transitional occupancy and sorted out the payment to the property owners after the fact.

Existing social housing providers are often not included in conversations about temporary or transitional housing in a disaster, although they have up-to-date records on what is available.

CASE STUDY: Emergency and temporary options are not just short-term

As of 31 December 2023, there were 116 people in subsidised emergency housing under the Temporary Accommodation Service, with 28 on the waitlist. Those without other options, many of them elderly, had moved into makeshift housing on their properties: uninsulated sheds furnished with donated goods and chemical toilets, campervans of varying comfort levels, garages with timber framing and plasterboard thrown up to create rudimentary living spaces.¹³

International research¹⁴ has found:

- people who trust the government tend to evacuate, but trust in government is not a significant variable in choice of shelter
- the most affluent households tend to favour hotels or rental houses
- people with lower levels of education, and those over 75 have a higher tendency to contact the government for help regarding shelter
- young people (20–34 years old), people with larger social networks, and people with more than one previous disaster experience tend to prefer staying with relatives or friends
- those in temporary housing with more frequent opportunities for social participation experienced greater health benefits.¹⁵

Temporary settlements, conceived for use over the medium-term use (6 months to 2 years) can last for decades with negative social consequences for the displaced population and negative economic, social, and environmental consequences for the hosting communities.

CASE STUDY: A two-phase approach

L'Aquila earthquake, Italy 2009: An estimated 15,000 buildings were damaged or destroyed in the medieval town. This led to the temporary evacuation of 70,000 to 80,000 people and left about 30,000 people homeless. Temporary housing and reconstruction issues were administered by the central government, with control ceded to the regional government 10 months after the quake. The government decided not to provide temporary homes, instead establishing tent communities and housing others in hotels along the Adriatic Coast completely subsidised by the government. Eight months after the quake:

- 185 seismically isolated, sustainable and environmentally friendly buildings with 4,600 apartments for 12,000 displaced people were delivered. These new buildings were separated into 19 different areas within L'Aquila in order to avoid creating a 'new town' and to maintain the identity of the city. These buildings cost €2,428 per m².
- 3,113 temporary houses in 57 rural areas were finished, housing around 6,000 displaced people. These houses were built to be highly earthquake resistant and safe, and aimed to let people remain in the areas where they 'belonged'. They were available in different sizes depending on the needs of the family and the geography. These houses cost €1210 per m².
- Where portacoms were used, the cost (including air conditioning and basic furniture, but not including thermal insulation, electricity, sewage, and road facilities) was €1070 per m².

Extensive damage in L'Aquila caused by the 2009 earthquake. Credit: UCL Mathematical and Physical Sciences [CC BY 2.0](#)



The international trend following the L'Aquila earthquake for the management of temporary housing follows this two-phase approach. This begins with short-term emergency response including tents, welfare centres, alternative accommodation with whānau or in motel/hotel/available apartments or choosing to remain in place with reduced utility services. The approach then moves directly to repair or reconstruction alongside construction of high-quality housing with the standard of permanent houses. This avoids costly low-quality short/medium-term temporary solutions.

Reducing the psychosocial impacts of displacement

The types of housing required after a disaster are important, however residential mobility encompasses more than just housing; it is about people’s capacity to move or not, which can depend on their mental and emotional state.

Decisions and uncertainties about housing can be major stressors after disasters. Both relocating and remaining in place after a disaster have been associated with a range of poor psychological outcomes. Either can impinge on individual wellbeing, social relationships, and experiences of security. This in turn influences whether people and communities recover well and re-engage in everyday activities and routines.

Harm to the natural environment and natural resources can cause distress and grief, in multiple ways, for many people. This includes psychological, physical, and spiritual health impacts that result from the threat of climate change. Māori can be particularly affected because of their genealogical relationship to the whenua and their role as guardians and protectors of te taiao. In te ao Māori, a ‘natural hazard’ can be a tīpuna or atua.¹⁶

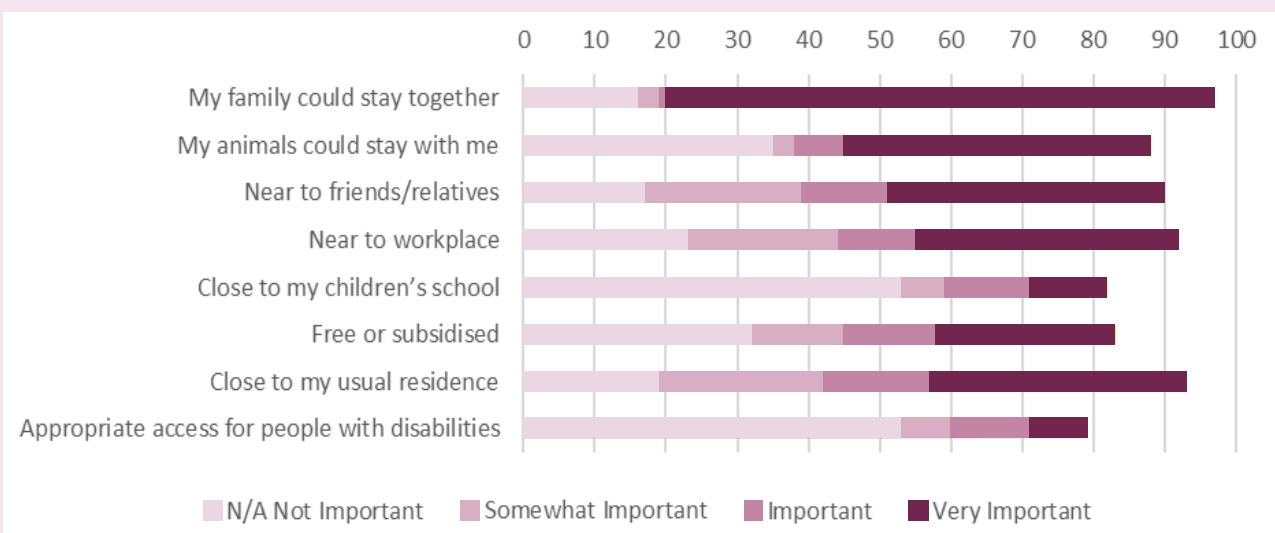
“Everyone who loses their home in a disaster has needs greater than shelter. They need to replace their possessions—clothes, medicine, car, bicycle, documents, and so on. They need to know if they have a job, if their children will have a school, if an injured family member can get medical care, or if health care will be available for chronic and routine needs.”

— Mary Comerio¹⁷

CASE STUDY: Evacuation of an entire town

Edgecumbe Flooding, Bay of Plenty, 2017: On the morning of 6 April 2017, the Rangitaiki River breached a stop bank, resulting in widespread flooding within Edgecumbe. Residents typically received only a few minutes warning before water began flowing into streets and properties. A mandatory evacuation was called for the entire town, forcing residents out of their homes for a minimum of 10 days, depending on the level of property damage. Many residents were forced into temporary accommodation for weeks to months until their homes were repaired. In some cases, residents did not return to their original addresses or relocated out of Edgecumbe permanently.

Figure 3: Factors influencing choice of alternative accommodation after Edgecumbe flooding



People with more social relationships generally have better mental health in recovery. Benefits of staying locally include opportunities for community connection and discussion of shared experiences, although this can be undermined if friends, neighbours, and whānau choose to leave. Those who relocate may feel guilt over this and be less socially connected in their new homes but may benefit from stepping away from the post-disaster disruption. Their mental health may be protected if they have new neighbours who have also relocated from the same area.

Public gathering spaces are important to the social and economic function of local communities. When restoring or reopening buildings and infrastructure, priority should be given to what is central to community cohesion, such as marae, roads, bridges, schools, community halls and local businesses.

After the Christchurch earthquake, the Canterbury Earthquake Recovery Authority established a multi-hub agency in a suburban mall, where residents could drop in and seek advice from a number of agencies, including the Housing Recovery team.

Background

Homes are not just buildings, but important emotional resources with a strong degree of personal significance for their occupants, including belonging, comfort, safety, and wellbeing. For Māori, home tends to be more about connection to people and communities rather than a physical location or a physical dwelling.¹⁸

Socially disadvantaged or marginalised groups are disproportionately susceptible to displacement from natural hazard-related disasters. Low-income households are more affected because they are more likely to rent or reside in substandard or unsafe housing. Marginalised groups such as disabled people, Māori, Pasifika, and those in receipt of state welfare disproportionately experience housing instability.¹⁹ The housing people had before a disaster tends to shape what they can access afterwards. Income gaps often widen after disasters.

Māori have significant experience and knowledge of disaster management in relation to natural phenomena. Iwi responsibilities as kaitiaki (cultural guardians) for their respective rohe extend particularly to marae, which are focal points for communities to access accommodation, food, social support, and medical care in the event of a disaster. In addition to the cultural imperative to provide hospitality and care for the community, some marae are designated 'welfare hubs' by the National Emergency Management Agency (NEMA).

Mahi aroha – 'unpaid activity performed out of sympathy and caring for others in accordance with the principles of tikanga to maintain mana and rangatiratanga' – is part of Māori cultural identity and sense of self-worth. Post-disaster, those best placed to engage in mahi aroha are those whose housing is affordable and secure, whereas the most vulnerable are whānau impacted by housing insecurity.

“...one can no longer measure the magnitude of the disaster in terms of units affected or victims displaced. Instead, it is important to look at the loss in relation to existing housing resources and conditions in the housing market. If the number of units lost or rendered un-inhabitable is very large, but represents only a small percentage of a particular housing type in a soft market, alternative housing may not pose significant problems. Whereas, even if the numbers lost are small, if they represent a majority of housing types in a limited price range, then shelter will be a critical issue.”

— Mary Comerio²⁰

Housing statistics

Aotearoa New Zealand had approximately 1.8 million dwellings at the 2018 census. Of these, just under 1.7 million were privately occupied, housing around 4.3 million people. There is increasing diversification of housing stock, with more multi-unit dwellings being built, including units built as part of retirement complexes. Around 40 percent of all new dwellings consented since mid-2019 were multi-unit.

At the 2018 census, homeownership had fallen to 64.5 percent of households, with around 32 percent of Aotearoa New Zealand households in rental accommodation. By 2018, just over 1.4 million people lived in houses they did not own, including 120,000 children under five years of age. Although private renting predominated for all age groups, almost one-third of renters aged 65 and over lived in social housing. At the 2018 census, a total of 31% of Māori were living in owner-occupied homes.²²

Between 1986 and 2018, the proportion of housing stock owned by private investors went up 191%. At the same time, expenditure on maintenance and repairs for housing stock went down while house prices increased. The combination of these factors is resulting in older dwellings in a state of disrepair that could reduce habitability following a disaster.

In 2018, around 1 in 9 New Zealanders lived in a crowded house, with the highest rates of crowding among Pacific peoples. Household crowding was highest in Auckland and Gisborne regions.

Just under one percent of the population was estimated to be severely housing deprived (homeless) in 2018. Rates of severe housing deprivation were highest among young Pacific peoples and young Māori, while overall, severe housing deprivation prevalence rates for Pacific peoples and Māori were close to four and six times the European rate.



Existing regulation and policy

<p>Sendai Framework for Disaster Risk Reduction 2015–2030</p>	<p>Disaster management must be multi-disciplinary, inclusive, and accessible through collaboration across public and private sectors including the media. Government must actively empower local authorities to work and coordinate with indigenous peoples in disaster risk management.</p>
<p>2002 Civil Defence and Emergency Management Act</p>	<p>Government is mandated to work with rūnanga and other Māori groups and services in a disaster.</p> <p>Territorial authorities must develop and maintain arrangements to ensure they are ready to respond to an emergency and lead recovery work to achieve the building emergency management objective of the National Civil Defence Emergency Management Plan:</p> <ul style="list-style-type: none"> • Protect life and promote safety within and in the vicinity of each building • Minimise damage to and loss of property • Restore building functions as soon as possible to minimise social and economic consequences of the emergency • Minimise losses or disruption of lifeline utility services that are in or near any building. <p>Households are at the bottom of the response priorities given to regional controllers (section 10.1 page 2).</p>
<p>Building Act 2004</p>	<p>Part 2, Subpart 6B of the Building Act 2004 provides an end-to-end process for managing buildings following an emergency event. The provisions provide:</p> <ul style="list-style-type: none"> • powers to civil defence emergency management group controllers, recovery managers and territorial authorities to manage buildings after an emergency event • certainty to building owners and occupiers about how the safety of their buildings will be managed after an emergency • for MBIE and NEMA to receive notifications of designations and facilitate the notifications to the National Controller, Minister for Emergency Management, and Minister for Building & Construction.
<p>Human Rights Commission</p>	<p>Everyone has the right to a decent home. A decent home is safe, warm, dry, affordable, accessible and culturally adequate. It is supported by necessary infrastructure such as water, and accessible to key services and facilities such as education, health providers, and community. Decent housing improves health, education, and work. It provides a sense of safety and belonging. Without a decent home, it is difficult to contribute to society. Because housing is so vital to our mana and wellbeing, it is a human right.</p>

Process

During or following a natural hazard event, a state of local emergency can be declared by a Mayor, while a national state of emergency is declared by the Minister for Emergency Management.

The [Resources for managing buildings in an emergency guide](#) describes the roles and responsibilities of central and local government, and of other agencies, for managing buildings affected by an emergency, from the initial response right through to recovery. It explains how territorial authorities should plan for, and carry out, rapid building assessments. It also provides guidance on the use of emergency powers to keep people safe in and around buildings, remove or reduce risks, and enable the long-term use or occupation of affected buildings.

The Temporary Accommodation Service (TAS), part of the Ministry for Business, Innovation and Employment, generally becomes activated in disaster-affected regions after 14 days. Those living in a damaged house can register once TAS is activated for their region. Households staying in TAS accommodation are required to pay a part payment towards the cost. Rent is set based on the lowest quartile of market rent for the affected region, minus 10 per cent.²³

Anecdotal evidence suggests some residents displaced by Cyclone Gabrielle who had already signed a tenancy agreement then became ineligible for TAS help. This affected those whose insurance covered a private rental for a brief period but then needed somewhere to live once it expired.

In July 2023, Hastings District Council provided a 'community connector' service to help residents navigate information and services. But for many, it was too little, too late.²⁴

There is enormous potential for papakāinga (village or settlements, often adjacent to marae) to be part of housing solutions for Māori, both in response to the housing crisis which disproportionately affects Māori, and also as part of recovery planning and rebuilding following a disaster.

Areas for more work

Further research is needed in the following areas:

- Marae as temporary accommodation
- Social component of relocation
- What are the needs of different communities that will not fit into a one-size-fits-all box, e.g. mana whenua, refugees and migrants, disabled people, big-bodied people?
- What are the accommodation needs in the event of a mass displacement after a catastrophic disaster? How do these differ between disasters, i.e. volcanic eruption in Auckland, Hikurangi subduction zone earthquake and tsunami?
- Post flood building assessment needs
- What are the most effective processes for transitional and temporary housing post disaster?

Conclusion

Since the Canterbury Earthquakes there has been a wide range of research studying the impact of disasters on communities. This series of briefings is designed to compile this research into concise, policy-focused findings with a practical application for community recovery immediately post-disaster.

When the housing system is under stress, handling accommodation needs post-disaster is much more difficult. Researchers were all in agreement that existing housing stress and inequity were exacerbated by disasters. If Aotearoa New Zealand's housing system was under less stress, emergency and temporary housing provision would become easier.

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