Earthquake Insurance in New Zealand

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OVERVIEW

1. New Zealand’s vulnerability to earthquakes
2. The current system in brief
3. Canterbury Earthquakes
4. Statutory Insurance
5. Private Insurance
6. Some Conclusions

1. VULNERABILITY TO EARTHQUAKES

- Like Japan, New Zealand is seismically vulnerable, although has a lower level of fatalities compared to other nations.

- There are nearly 1,000 known faults. Around 20,000 earthquakes are recorded annually, with 150-250 actually perceptible. One magnitude 6 earthquake is expected every year, and one magnitude 7 earthquake is expected every ten years.

- A recent study estimated that the likelihood of ground shaking has increased by 50% (on average) since 2010 (*National Seismic Hazard Model*, 2022).

- Land often becomes **unbuildable** after earthquakes due to:
  - NZ's location on the boundary between the Indo-Australian and Pacific plates.
  - Building settlement patterns (low-rise dwellings over high-risk soils; less engineered ground improvement; suburban sprawl across floodplains and riverbeds).

2. THE CURRENT SYSTEM IN BRIEF

- Dual system: a combination of private insurance and statutory insurance.

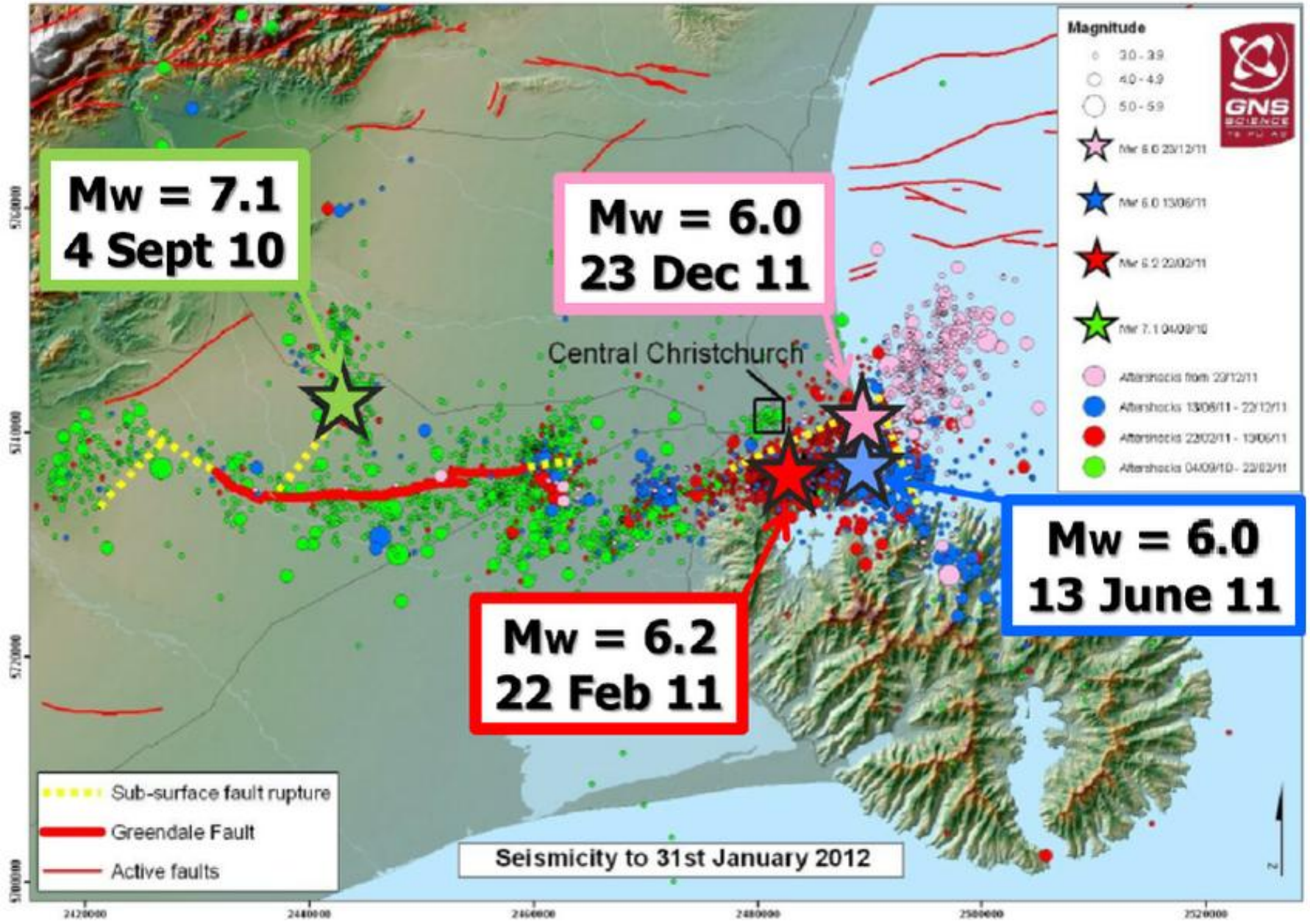
- In general, statutory insurance provides a limited **first-loss layer of cover** (for residential land and building damage) and private insurance provides either indemnity value or replacement (for residential building damage only). The statutory insurance is **automatically attached** to private insurance.

- The adequacy and effectiveness of this system has been severely tested in the past 15 years, especially by the Canterbury earthquakes (2010-2011 and February 2016), Kaikoura earthquake (2016, Mw 7.8) and also by the more recent Auckland flooding (January 2023) and Ex-cyclone Gabrielle (February 2023).

- In this presentation I will focus on legal issues arising from residential property damage as a result of the Canterbury earthquakes.

3. CANTERBURY EARTHQUAKES

- **4 September 2010** – Mw 7.1 (40km west of Christchurch)
- **22 February 2011** – Mw 6.3 (closer to the CBD, and with greater liquefaction)
- 13 June 2011 – significant aftershocks (Mw 5.2 and 6.0)
- 23 December 2011 – significant aftershocks (Mw 5.8 and 5.9)
- [14 February 2016 – Mw 5.7 (offshore)]


Mw = 7.1
4 Sept 10
Mw = 6.0
23 Dec 11
Central Christchurch
Mw = 6.2
22 Feb 11
Mw = 6.0
13 June 11
Magnitude
3.0 - 3.9
4.0 - 4.9
5.0 - 5.9
Mw 6.0 23/12/11
Mw 6.0 13/06/11
Mw 6.2 22/02/11
Mw 7.1 04/09/10
Aftershocks from 23/12/11
Aftershocks 13/06/11 - 22/12/11
Aftershocks 22/02/11 - 13/06/11
Aftershocks 04/09/10 - 22/02/11
GNS SCIENCE
Sub-surface fault rupture
Greendale Fault
Active faults
Seismicity to 31st January 2012
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Impact

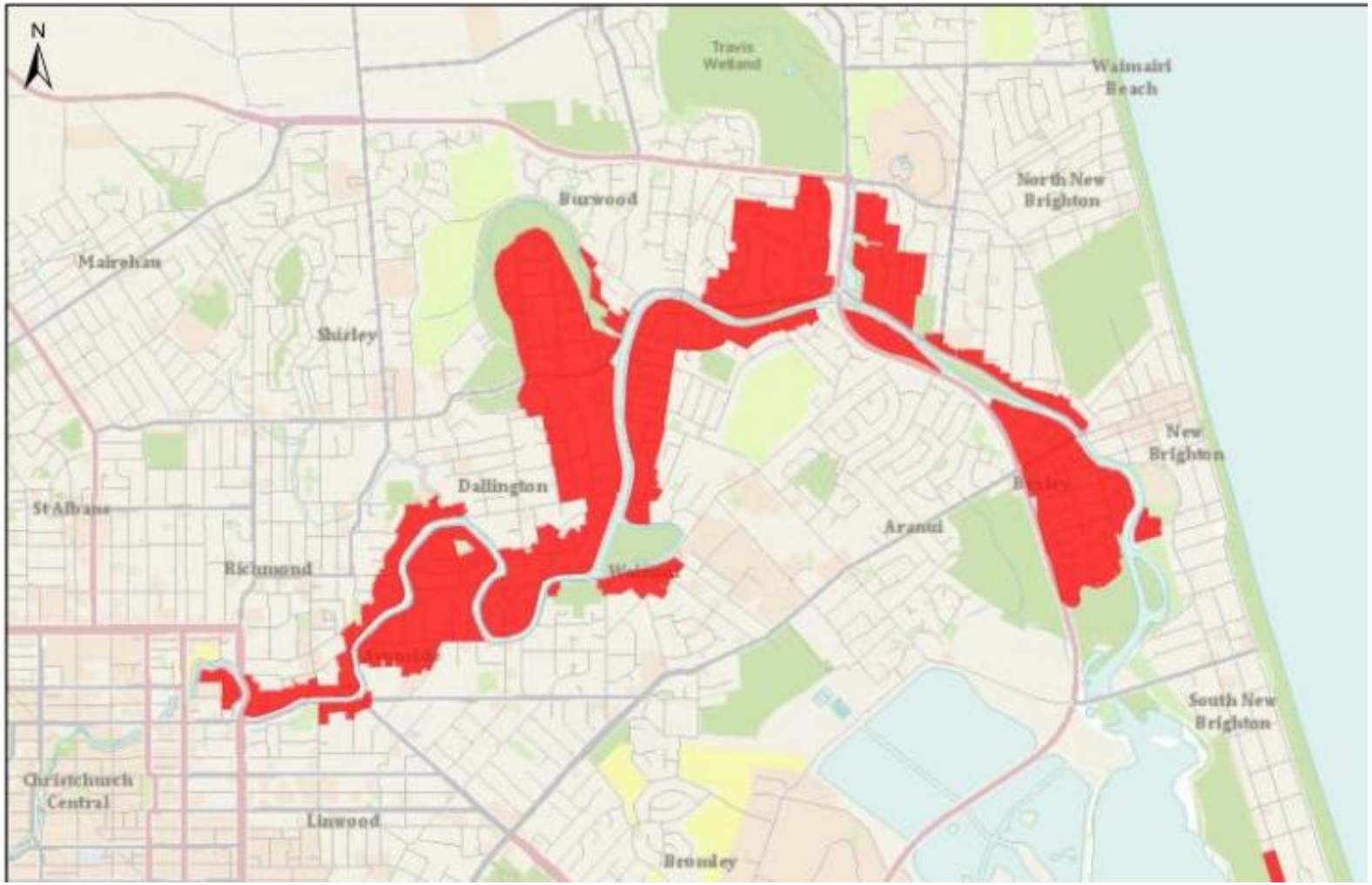
- Caused 185 deaths and thousands of serious injuries.

- Total damage was over NZD$49 billion (¥4 trillion), adjusted for inflation (RBNZ estimate). This makes it New Zealand's costliest natural disaster ever.

- Some 170,000 properties damaged and 8,000 properties were deemed infeasible to rebuild on ("red-zoned") and acquired by CERA ("Canterbury Earthquake Recovery Authority"). This was due to either liquefaction/settlement or landslide/boulder roll.

- The effects on the mental health and well-being of the affected population were also profound.

Red-zone map (CERA / NSG, 2016)



Liquefaction (February 2011 earthquake)

Rockfall / landslide (February 2011 earthquake)

Photo 25. Rock fall on to house at 116A Main Road, Redcliffs *(GNS Photo-GTH_5823)*.

Insurance claims

- 460,000 claims made with the Earthquake Commission (the former statutory insurer – now the Natural Hazards Commission) and 760,000 sub-claims. EQC was only prepared for 150,000 maximum. This exhausted the available fund (approx. $6 billion), and the Crown guarantee had to be called on.

- 168,000 claims made with private insurers.

- Unfortunately, lengthy delays were experienced in the handling and assessment of insurance claims. A substantial volume of litigation also ensued. Some claims are still on foot now.

- Two insurers also became insolvent (AMI Insurance and Western Pacific Insurance Ltd). The Government took over part of AMI's business relating to Christchurch earthquake damage).

Complicating factors

1. Multiple events meant multiple claims (and increased damage).

2. Typically, policies were on uncapped *"full replacement"* basis. This required case by case assessment, and resulted in disputes over quantum. There were insufficient numbers of loss adjusters and engineers.

3. The dual insurance model proved lacking, particularly because it gave rise to disagreements as to the liability of EQC (then up to NZD$100,000), and inadequate/slow handling of claims by both EQC and private insurers.

4. Regulation impacted insurers' ability to commence repairs/rebuilding – esp. new strengthening standards, repair guidelines, acquisition of damaged properties and the cordoning-off of the CBD (also causing business interruption)

A. STATUTORY INSURANCE

- Natural Hazards Insurance Act (previously: Earthquake Commission Act), commenced 1 July 2024

- Purposes (section 3):

1. *To reduce the impact of natural hazards on people, property and the community by providing for "first loss insurance".*
2. To contribute to the management of the financial risk of the Crown.
3. To enable the Commission to facilitate the Crown arranging reinsurance in respect of Crown risks beyond those covered in the Act.

- Purposes of natural hazard cover (section 4): *"to contribute to the replacement or reinstatement of dwellings that suffer natural hazard damage."*

Funding

- The NHIA establishes a fund to provide for payment of claim settlement costs, sourced by a levy and earnings from investments (section 108)

- The insured pays for the levy as part of the private insurance premium, calculated at the rate of 16c [¥14] for every $100 / ¥8,600 of the “building cover cap” for the building. The maximum is $480 / ¥41,000.

- Supported by Crown “guarantee” (section 112, NHIA) if the fund is insufficient to pay amounts due/payable within any 12 month period.

Operation and extent of cover

- Provides “building cover” for a **residential** building and “land cover” for **residential** land, against “natural hazard damage” (section 28(2)).

- (I will explain what “natural hazard damage” means on the next slide)

- Cover commences when insurance cover under a private fire insurance contract commences (section 29). This is not optional.

- The Commission may provide direct cover on application to someone who has an insurable interest in the property (section 48).

Natural hazard damage

- “Natural hazard” means: earthquake, hydrothermal activity, landslide, tsunami, volcanic activity, flood, storm, natural hazard fire (section 23).

- And “natural hazard damage” means physical loss or damage to a building or land if is a direct result of a natural hazard, or occurs as a result of mitigation measures, or is “imminent” damage (section 24).

- NB: “natural hazard damage” does **not include** loss or damage to a residential **building** as a direct result of a storm, flood or natural hazard fire (section 24(5)) .

Building cover

- Building (s 9) = the whole building + appurtenant structures (e.g. garage/shed) + service infrastructure.

- Entitlement is to the lesser of (section 31):

1. The “replacement cost of the damaged parts of the building”; and
2. The “building cap cover” = the lesser of the specified replacement sum insured under the fire insurance contract, and the number of dwellings in the building multiplied by NZD $300,000.

So the maximum entitlement for a single dwelling will be NZD **$300,000 (= ¥26,000,000)**

Note: this does not include building contents or personal property

Land cover

- “Land” (s 17) = where the building is situated + other land within 8 metres + access ways within 60 metres of the building + retaining walls + bridges/culverts

- The entitlement is (s 39):

  The lesser of:

  (i) The “actual loss suffered” (usually quantified using reinstatement cost or diminution of value); and

  (ii) The “land cover cap” (s 43) = the assessed market value, which is the prior market value of the land PLUS any damaged retaining walls (maximum $50,000 / ¥) and any damaged bridges or culverts (maximum $25,000 / ¥)

  minus

  The “land cover excess”, being the lesser of:

  (i) $500 / ¥43,000 (if one dwelling); and

  (ii) $5,000 / ¥431,000 (maximum).

Cover for your home

You are covered for:

- your home or holiday home
- separate buildings or structures that you use as part of your day-to-day living, such as sheds, garages or pergolas
- some essential services associated with your home up to 60 metres from your home, such as water, drainage, sewerage, gas, electricity and telecommunications.

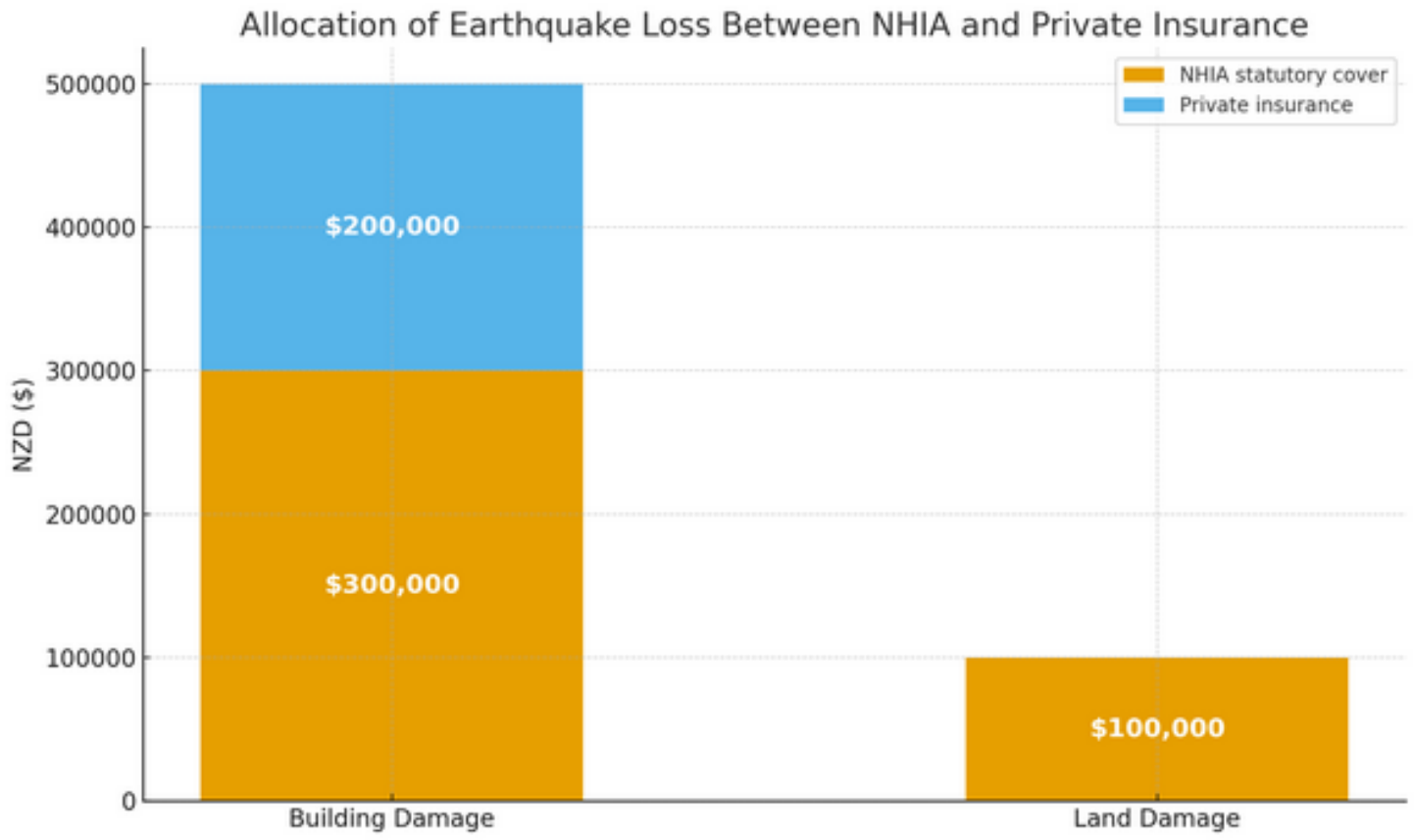
Cover for your land

You are covered for the land:

- under your home
- under some related buildings and structures, for example your garage or pergola
- within 8 metres of your home and some related buildings and structures
- under or supporting your main access way up to 60 metres from your home, for example under your driveway.

You are also covered for some retaining walls, bridges and culverts, to a limit.

Example: suppose $500,000 building damage and $100,000 land damage based on actual loss (NB: single dwelling, before excess deduction)



Why is residential land insured?

- NZ's geology means that, due to liquefaction / lateral spreading / subsidence, dwellings cannot be rebuilt without land remediation.
- To ensure people can remain in housing
- Funding land damage through insurance was viewed as more efficient than providing post-event grants.
- Private insurers were unwilling or unable to offer cover.

Comparing earthquake insurance programmes (Nguyen & Noy, 2020)

How would the Japan and California systems have responded to dwelling damage in the 2010-2011 Canterbury earthquakes?

System	Residential insurance penetration (assumed)	Payment per dwelling (mean)	Percentage of damage covered (assumed to be $44,566 per dwelling)	Total spend
NZ (compulsory statutory first layer cover)	95%	$27,052	60.7%	$6.2b
Japan (optional statutory reinsurance scheme + cooperative mutual insurers)	44%	$7,709	17.2%	$1.6b
California (optional public-private insurance pool)	10.23%	$3,397	7.6%	$0.7b

(All in USD)

Advantages

- Provides a degree of universal insurance protection, including for land, for a low flat-rate levy.
- Avoids the problem of property owners under-estimating their risk.
- Losses are shared nationwide, rather than regionally.
- Helps to buffer exposure to private insurers.

Disadvantages

- Insensitive to risk:
  - Means riskier properties are cheaper to insure whereas safer ones are more expensive; and
  - Does not incentivise strengthening homes or moving away from hazard-prone areas

- The building cap is arbitrary and low compared to current construction costs

- Costly (the scheme is running at a shortfall - estimated at NZD$400m - $500m per annum [¥35.2b - 44b] (*Treasury ECO-24-SUB-0099*))

B. PRIVATE INSURANCE

- Primarily governed by contract law, with limited statutory overlay.

- At the time of the Canterbury earthquakes, residential property insurance was generally offered inexpensively on a “full replacement” basis (uncapped). High insurance coverage for losses (74% for 2010 earthquake and 69% for 2011 earthquake – *RBNZ bulletin* vol 79 No. 3)). Compare to Tōhoku earthquake (19%).

- This significantly increased insurer liability, and caused uncertainty about insured entitlements.

- After the Canterbury earthquakes, insurers moved to a “sum insured” model (creating risk of under-insurance) and premiums increased (roughly, they have doubled since 2015).

EXAMPLE LEGAL PROBLEMS

1. Policy interpretation

2. Policy application

3. Claims handling

For the most part, these issues had to be determined on a case-by-case basis (rather than through ‘test’ cases).

1. Policy interpretation

- Most insurance disputes involve issues of policy interpretation

- Terms may be vague or ambiguous or complete

- The established approach to interpretation involves identifying the intention of the parties by consideration of:
  - the natural and ordinary meaning of the language;
  - the context (the policy as a whole, the purpose of the contract, facts known or assumed by both parties)
  - commercial common sense;
  - the subsequent conduct of the parties

- The approach is **objective** – the question is based on the perspective of a hypothetical reasonable person.

(a) Standard of replacement: “as new” (or “when new”)

- Suppose the insured owns an Edwardian-style villa (early 1900s), with distinctive features including windows and floors made of native timber, which is destroyed.

“As new”: *Turvey Trustee Ltd v Southern Response* [2012] NZHC 3344

- The policy required the insurer to replace the house to an **“as new”** condition, using materials and construction methods in common use at the time of replacement.
- Can the insured insist on an exact replication, using the same materials as originally used or their nearest equivalent?

- Held: the new building only need be the equivalent of the old (“by size, functionality, relative quality”), not a replica.

(b) Whether red-zoning is “physical loss or damage”: *O’Loughlin v Tower* [2013] 3 NZLR 275

- Insured’s house, particularly the foundations, was damaged in three successive earthquakes. The insurer elected to pay the cost of repairs.
- Eventually, the house was “red-zoned” and sold to CERA.
- The insured argued that the creation of the “red-zone” triggered the primary insuring clause or natural disaster benefit clause, meaning the insurer had to replace the house.

- Held: the creation of the “red-zone” did not cause any physical loss or damage to the house. The policy did not cover economic loss.

2. Policy application

- Inclusion of professional fees and contingency allowance in a notional (not actual) rebuild? *Southern Response v Avonside Holdings* [2015] NZSC 110.

- Successive losses – was each earthquake in the sequence a separate event, meaning the insurer had to indemnify loss in respect of each event? *Ridgecrest v IAG New Zealand* [2015] 1 NZLR 40.

- Aggregation clauses – where the policy allows "aggregation" of loss, or a "series of losses", caused by a single event or "series of events" which have the same cause. *Moore v IAG New Zealand* [2020] NZCA 319.

Successive losses: *Ridgecrest v IAG*

- A commercial building is damaged by 4 x successive earthquakes in 2010-2011.
- Some repairs are done in respect of the 2010 damage, but by the last earthquake, the building is damaged beyond repair
- The policy provides a sum insured (NZD $1.984m / ¥164m) for each “happening” after which the cap was reset. This was less than the actual replacement cost.

- The insured claimed $1.984m for the final earthquake, plus the earlier losses up to $1.984m each.

- Held: each “happening” gave rise to a separate entitlement up to $1.984m but the total of all claims **could not exceed the actual replacement cost of the building.**

3. Claims handling

Median length of the settlement process (from lodgement of claim to completion of repairs):

- *Small claims* (less than $15,000 / ¥1.3m) - 138 to 191 days
- *Medium claims* (between $15,000 and $100,000 / ¥8.7m) - 712 to 890 days
- *Large claims* (more than $100,000 / ¥8.7m) - 1226 to 1392 days

Insurer conduct – Canterbury earthquakes

- *Rout v Southern Response* [2013] NZHC 3262
  - Insured's house was damaged and red-zoned, although it was not uninhabitable.
  - Insurer delayed in processing the claim (3 years).
  - Insured sought general damages of $50,000 / ¥4.3m
  - Refused because (1) the delay was partly due to unsuccessful settlement negotiations and (2) the insured's claim was inflated/unsupported.

- *Young v Tower* [2016] NZHC 2956
  - Parties in dispute as to whether the house could be repaired or replaced
  - Insurer's withheld a report that did not support its position (it said the building had to be rebuilt), and also delayed in settling the claim (5 years).
  - Insured sought general damages.
  - Awarded only $5,000 / ¥431,000.

“Class Action” (*Southern Response v Ross*)

- In 2020, proceedings were filed on behalf of 3,000 policyholders who had settled insurance claims with Southern Response
- They alleged that Southern Response had given them incomplete information about the cost of remedying damage to their homes
- As a result, they had agreed to settle their claims on a less favourable basis than they otherwise would have.
- They claimed the difference between what they had settled for and the higher cost.
- A settlement was reached but the process took around 5 years to complete.

REFORM 1: Statutory Insurance

- Reform was initially proposed in July 2015 by Treasury but this was delayed due to further earthquakes in 2016 (Canterbury & Kaikoura)

- In November 2018, a public inquiry into the Earthquake Commission commenced.

- It was chaired by a former High Court judge, Dame Silvia Cartwright.

- The inquiry was asked to investigate and report on the lessons that can be learned from the Commission's operational practices and approaches to claims outcomes in relation to the Canterbury earthquakes and subsequent events, and to make recommendations to improve the Commission's readiness to respond to future events.

- Around the same time, the Government also decided to review insurance contract law generally (because of long-standing deficiencies).

Key findings

- EQC was overwhelmed and unprepared for the scale and complexity of the Canterbury earthquakes, leading to major operational failures, delays, and claimant distress.
- Inadequate IT, data, and case-management systems severely hindered assessment, decision-making, and communication with homeowners and insurers.
- Poor damage assessment quality and poor repair programme (“botched repairs”) were major failures.
- Claimant experience was often negative.
- Dispute resolution systems were inadequate.

Natural Hazards Insurance Act

- Operational practices are codified, reducing ambiguity and improving efficiency. One major change is that the NHC may delegate its claims management/assessment/settlement functions to private insurers (section 130).

- Clarifies eligibility for multi-unit buildings and introduces flat-rate excesses for claims.

- Code of *Insured Persons' Rights* - establishes service standards and a new dispute resolution pathway for natural hazard claims.

REFORM 2: Canterbury Earthquakes Insurance Tribunal

- Established in June 2019
- Purpose: The Tribunal is *"to provide fair, speedy, flexible, and cost-effective services for resolving disputes about insurance claims for physical loss or damage to residential buildings, property, and land arising from the Canterbury earthquakes."*
- Takes a more proactive approach to investigating claims/evidence and encourages early settlement
- As of June 2024:
  - 164 applications had been lodged with the Tribunal, involving seven different insurers.
  - 22 applications were still open.
  - Most claims were resolved (by settlement) within 15 months.

REFORM 3: Contracts of Insurance Legislation

- First major reform in New Zealand in approx. 40 years (well behind Australia and the United Kingdom). This was initiated in March 2018 by the Minister of Commerce and Consumer Affairs.

- Enacted 15 November 2024. Commencement dates not yet set but the legislation will commence by 15 November 2027 at the latest

- Purpose is *"to promote the confident and informed participation of insurers, policyholders, and other participants in the New Zealand insurance market, and ensure that the provisions included in contracts of insurance, and the practices of insurers in relation to those contracts, operate fairly."*

- Addresses certain long-standing problems in insurance contract law in general (e.g. insured's duty of disclosure and remedies for breach).

- However, does not specifically address issues arising from natural disasters.

SOME CONCLUSIONS

- Legislative response to insurance law problems arising from the Canterbury earthquakes has been less than optimal.
- The basic dual system continues. There have definitely been some improvements, especially with the statutory cover regime, but nothing radical.
- After the next major earthquake, a number of disputes over policy interpretation, application and claims handling are likely to arise.

- In my view, there is a need for carefully considered reform – especially relating to minimum insurer obligations (scope/standard of cover and handling of claims).