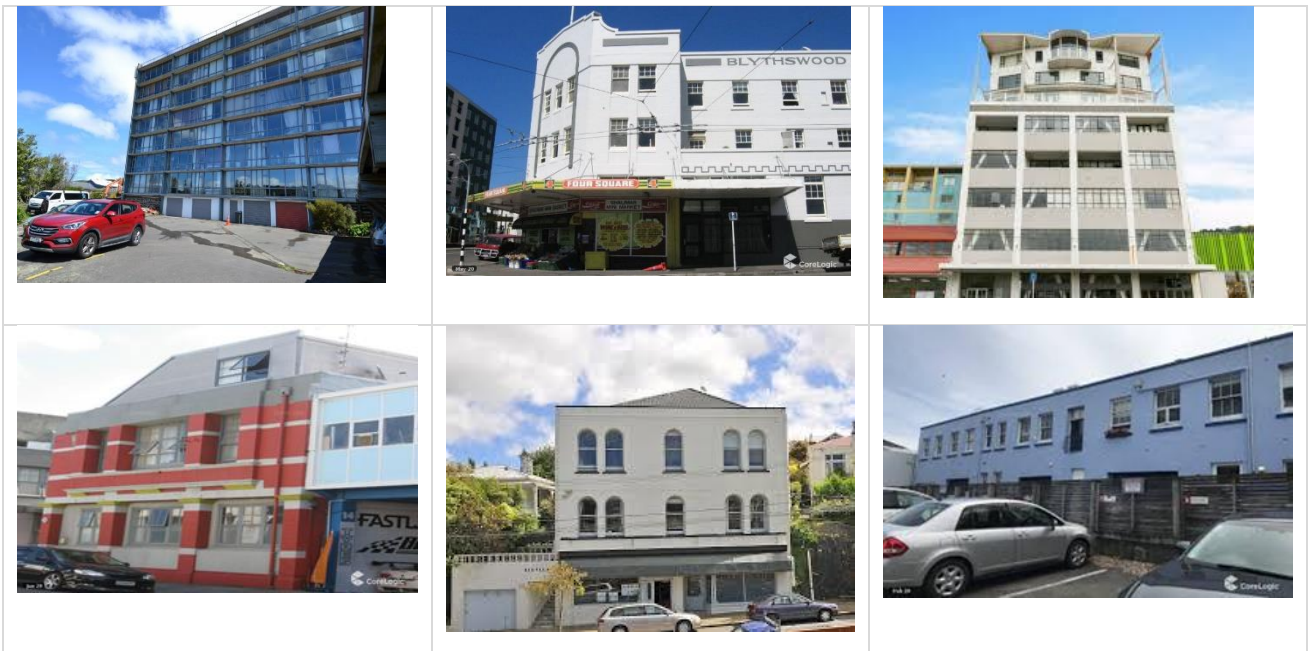


Earthquake prone building legislation based on flawed policy analysis: apartment owners bear the financial consequences

Report on ICW 2020 survey of owners of apartments in ‘earthquake prone’ buildings in Wellington: Part 1: Analysis

“Having finally paid my mortgage I felt secure in the knowledge that I have a roof over my head no one can take away. How wrong I was.”

Owner of an apartment in an ‘earthquake prone’ building in Wellington



August 2020

Abbreviations

Act	Building Act 2004
CBA	Cost Benefit Analysis Refers to Indicative CBA Model for Earthquake prone building review, Final Report – September 2012. Martin Jenkins for MBIE. (See Essential Reading for link)
DBH	Department of Building and Housing
EPB	‘Earthquake prone’ building - a building that has been assessed as being ‘earthquake-prone’ and appears on MBIE’s Earthquake-prone Buildings Register
EPB legislation	Subpart 6A of the Building Act 2004
FAS	Residential Earthquake Prone Building Financial Assistance Scheme, MBIE, Dec 2019
ICW	Inner City Wellington
MBIE	Ministry of Business, Innovation and Employment
MBIE 2018 report	Potential funding support for earthquake strengthening: options for the design of loan schemes to support owners in multi-unit, multi-story residential properties, Martin Jenkins, Nov 2018
MORB	Multi-owner residential building
MORB EPB	Multi-owner residential building that is an ‘Earthquake-prone’ building
NBS	New Building Standard (ie, the Building Code), the strength of the building is usually expressed as a % of NBS
WCC	Wellington City Council

Version Control

10 Aug 2020		Release of report
15 Aug 2020	V0.1	Glossary corrections: NBS – New Building Standard (previously National Building Standard) with revised explanation; CBA –in full, correction of date 2012 (previously 2020); and some minor corrections
28 Aug 2020	V0.2	Typos, grammar, minor clarity corrections

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Limitations

We are not statistical experts, but to the best of our ability and knowledge, the analysis of the survey data and the numbers is accurate and fairly represented.

We include our analysis of the MBIE CBA, a document which was not presented for the home owner audience to understand, with that caveat.

Limited data cleansing was carried out on the data provided in the survey. We have taken the data and comments provided in good faith.

The data and commentary from the survey are provided in a separate document.

Introduction

At the end of July 2020, there were 561 Wellington buildings on MBIE's Earthquake-prone Buildings Register. Around 40 of those are multi-owner residential buildings (MORBs). Based on information for 17 buildings in our survey, MORBs have an average of 16.7 apartments each, and each apartment has an average of 1.6 owners. So we estimate the 40 MORB EPBs in Wellington contain around 668 apartments, and those 668 homes have in total around 1,068 owners.

The EPB legislation makes these 1,068 private individuals personally responsible for ensuring that the buildings their homes are in are strengthened to 34% of the new building standard, (NBS), no matter what the cost and risk of doing so. They and their families are all victims of the earthquake prone provisions of the Building Act 2004 (the Act) that we contend are unreasonable, unfair, harmful and morally indefensible.

This report follows Inner City Wellington's (ICW) written submission to the Governance and Administration Parliamentary Select Committee in 2019 and an oral submission to the Committee in June 2020, on two petitions presented to Parliament. The submissions asked that the Government address our concerns by commissioning an independent review of the EPB legislation, exempting MORBs from the EPB provisions in the Act, and taking other measures to assist and compensate apartment owners caught up in the EPB regime. The Select Committee did not report back before Parliament rose on 6 August 2020. ICW will be asking candidates in the Wellington Central electorate to progress the recommendations made in the submission in the next term.

ICW has recently undertaken a survey in two parts - Part 1: individual owners, and Part 2: representatives of all owners in individual buildings. 116 respondents from 24 MORB EPBs responded from a personal perspective or as a building representative, providing a wealth of up-to-date data and personal commentary which, along with additional analysis we have done, clearly shows that the Government's current position is untenable and that as it affects apartment owners, the EPB legislation is seriously flawed.

This report presents a compelling case for the exemption of multi-owner residential buildings from the EPB regime because, whilst theoretically possible, compliance is in practice impossible for apartment owners to achieve without exposing themselves to financial, legal, housing, wellbeing and health risks so enormous that they are likely to suffer short term and lifetime consequences out of all proportion to any benefits their sacrifices might achieve. We urge readers of this report to read owners' comments in the separate document, to fully understand the impact them.

ICW greatly appreciates the input from owners and building representatives in response to our survey.

For further detail on this report, contact:

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Executive Summary

This retrospective legislation is going to de-house, and impose poverty on owners of very modest apartments. In what society is this OK? The bar has been set too high, and the cost all imposed on private citizens. How about enforced retro-fitting of airbags to all cars (at say \$10k each car)? Would that idea fly?

Apartment owner

Responses from over a hundred owners of apartments in ICW's recent survey confirm our contention that as it affects apartment owners, the EPB legislation is unreasonable, unfair, harmful and morally indefensible, because:

1. It is impossible for apartment owners to comply without incurring financial losses and exposing themselves to financial, legal, housing, wellbeing and health risks so enormous that they will suffer short term and lifetime consequences out of all proportion to any benefits their sacrifice might achieve.
2. The legislation forces private home owners to become de facto property developers, amateur project managers, and co-operative finance managers, for complex, high-cost, high-risk construction projects.
3. Unsubstantiated claims about the risks presented by their buildings, advice to strengthen to the highest possible %NBS rather than 34% NBS to avoid being 'earthquake prone' again in the future when the threshold is raised to 67%, and non-compliance penalties of \$200,000 per apartment and compulsory demolition are intended to frighten apartment owners into making decisions that are not in their best interests and amount to coercion.
4. Compliance by apartment owners results in no discernible public safety benefits.
5. Compliance results in no discernible benefits to apartment owners or occupants.
6. Apartment owners are the victims of flawed legislation resulting from flawed policy development. Issues with the policy development include:
 - The regulatory impacts on private home owners were not considered.
 - Apartment owners are discriminated against, compared to owners of public and commercial buildings, because most cannot reclaim GST, claim tax relief on costs, obtain cash flow benefits from depreciation, or recoup costs from tenants, customers or ratepayers.
 - Apartment owners are discriminated against, compared to other home owners, because other types of dwellings are exempted from the legislation.
 - Apartment owners are discriminated against, compared to gun owners, because their private property rights are effectively taken away on the grounds of reducing public safety risk.
 - The legislation and implementation system does not meet any of the Government's expectations for good regulatory practice.
 - The assumptions underlying the policy, legislation and implementation system are not substantiated.
 - The actual cost of achieving the policy objectives is out of all proportion to the value of any benefits.

- Successive governments since 2003/04 have made decisions that affect private home owners based on unreliable data, officials omitting to advise Parliament of the expansion of building types that would be covered, and ignoring the cost-benefit analysis (CBA) results, and officials providing misleading information to Parliament, for example, wrongly implying that other jurisdictions (such as Italy) have mandatory retro-strengthening of all older buildings.

7. Assumptions are not born out by evidence:

MBIE policy assumption	Reality	
Buildings less than 34% NBS are likely to collapse in a moderate earthquake	Risk overstated No evidence	No building with an s124 or EPB notice has collapsed in any earthquake including moderate and stronger earthquakes
Assumption in MBIE's CBA modelling		
There are between 15,000 and 25,000 buildings in New Zealand less than 34% NBS	The CBA Model overstated the scale of the problem (as the problem is defined by the policy assumption)	MBIE's latest estimates (Progress towards identifying potentially earthquake prone buildings), suggest that by 2028, less than 10,000 EPBs will have been identified
The public safety benefit of the EPB policy would be 24 buildings not collapsing, saving 173 lives in earthquakes over 75 years	The CBA Model overstated the benefits (even if the policy assumption was correct)	No matter how many buildings of less than 34% NBS there are, if they are not likely to collapse in a moderate earthquake, the predicted public safety benefit will not be realised
Cost of strengthening work used in the CBA modelling \$300 per sqm	The CBA Model understated the costs	Cost of strengthening work is currently 10 times the CBA estimate Full cost of compliance is around 14 times the CBA estimate for the work

Note: the conclusion of the 2012 CBA was that the costs of the proposed policy substantially exceeded benefits. The Government ignored that result as it made building owners responsible for the unlimited costs and risks of implementation for public safety, without any policy work on the impact of that on the different owner groups.

8. Apartment owners are the victims of the Government's and WCC's assumptions (under its' own EPB policy) about multi-owner residential building and their owners.

Assumptions	Reality	
Apartments are mainly owned by investor owners	There is no evidence for this	Our survey shows that around 14% of owners are investor owners, and of those the vast majority only own one apartment (ie 'mum and dad investors')
Apartment occupants will benefit from reduction in	There is no	Authors of the CBA did not consider any life safety benefit to occupants sufficiently

Assumptions	Reality	
life safety risk	evidence for this Never claimed by anyone in policy papers	large to measure, no matter how many buildings were strengthened to what % NBS
Apartment owners will benefit from capital gains	There is no evidence for this	For most owners all costs will be net losses
Apartment owners will benefit from improved availability and affordability of earthquake risk insurance	There is no evidence for this	Insurance companies do not recognise % NBS as an indicator of earthquake risk

What we want the Government to do

1. Accept there is problem

2. Commission a review

- Commission an independent review of the EPB policy, legislation and implementation system (at least as it affects owners of multi-owner residential buildings).

3. Impose a moratorium

- Pending the outcome of the review, put a moratorium on identifying new potential MORB EPBs; the requirement for MORB owners to obtain Detailed Seismic Assessments (DSAs); and the requirement for MORB EPB owners to progress compliance plans.

4. Provide a compensation scheme

- Provide a scheme to compensate owners who have incurred, are now incurring, or are legally committed to incurring financial losses and impacts due to this legislation.
- A government suspensory loan scheme, heritage building funding, Council rate rebates, and grants for some investigation expenses, will not solve anything because the fundamental problem is not affordability. The fundamental problems are that the assumptions are flawed.

5. Provide practical owner-centric transition measures

- Provide apartment owners currently in the EPB regime with options for exiting the regime. Options might include continue with strengthening, opt out of strengthening, sell to the Government or the Council, or sell on the open market.
- Provide these apartment owners with independent advice and assistance to assess the pros and cons of the options available to them, and to implement with their chosen option.

Key issues

1. The impossibility of complying without significant losses, puts owners' health and wellbeing at risk

- Owners report mental and/or physical health issues caused by trying to comply and thinking about the future.
- This is not surprising given huge amount of time and money spent trying to find a way to comply, escalating cost estimates, massive risks of almost any decision, pressure to make unwise financial decisions, fear of draconian non-compliance penalties and a bleak future, added to a strong sense that this should not be happening in New Zealand.
- The owners managing the project on behalf of all owners are under even more stress, with associated impacts on personal wellbeing.

2. The financial implications of strengthening make compliance unrealistic and high risk

Simplified scenario of financial implications faced by owners using data from the survey

Average rating valuation (QV RV Sept 2018) of apartments in the survey	\$435,000 ¹	
Market value when building gets an EPB notice – land value average 31%	\$134,850	47 owners

Average cost of preliminary investigations of strengthening options and legal advice, including GST	\$20,000	71 owners
Average cost of strengthening work and related items, including GST	\$302,000	76 owners
Average cost of unavoidable additional items, including GST	\$31,000	33 owners
Average cost of alternative accommodation for 12 months, including GST	\$31,200	52 x \$600
Average total cost of compliance, including GST, excluding interest	\$384,200	

Interest on loan @ 5% for 18 months	\$15,387	Westpac calculator
Total cost of compliance including interest	\$399,587	Say \$400k

Assume value of apartment after strengthening work completed returns to RV	\$435,000	
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¹ This figure is the midpoint between an average of the average approximate RV for the apartments in their buildings provided by 11 building representatives - \$384,796; and the average of RVs provided by 53 owners in the individual owner survey, \$489,000.

Lenders will not be prepared to lend on this scenario, but if an owner could somehow raise the finance

Owner has loan when strengthening work is completed	\$400,000
Owner sells to repay loan at RV	\$435,000
Proceeds of sale (before sale fees)	\$35,000

End result - The owner has lost their home and \$400,000.

- In the survey, 50% of owners expect that, if strengthening did go ahead, they would sell their apartments when the work was completed. At that rate, if all 40 MORB EPBs in Wellington were strengthening, 334 apartments would be sold and their 534 owners would lose their homes.
- The Minister of Building and Construction (Jenny Salesa) says owners could achieve an increase in valuation by strengthening, but she provides no evidence of how that would happen. ICW disagrees. Owners are only restoring the value lost from being designated an EPB; that is not a 'valuation increase' in the sense that most home owners would understand.

3. The complexities of multi-ownership structures make compliance unrealistic and high risk

- As the legislation applies to individual owners of apartments, as if they were owners of whole buildings, there is an implied expectation that owners can and will, willingly enter into collective agreements that commit them individually to potentially limitless cost and risk. The legal issues related to the different multi-ownership structures (unit title, cross lease, company share) make this difficult if not impossible.
- There is also an implied expectation that some owners will take responsibility, without legal protection for themselves or other owners, for managing the whole compliance process including huge amounts of owners' money as voluntary amateur project managers.
- Unlike public and commercial owners, most apartment owners cannot be registered for GST, claim costs as expenses, depreciate capital items, or pass on costs to tenants, customers or ratepayers

4. Compliance costs are far greater than the costs used in MBIE's Cost Benefit Analysis

- In our survey, the average total cost of strengthening work (building contract) for an average sized apartment of 100sqm is \$3,020 per sqm, just over 10 times the average cost per sqm used in MBIE's 2012 CBA model of \$300 excluding GST.
- But the average total compliance cost per sqm, including legal fees, displacement costs, and interest is \$4,000 per sqm, just over 13 times the updated MBIE per sqm cost.

5. 'Earthquake prone' buildings are not as risky as the assessment system presumes

- If each of the 17,424 buildings in New Zealand, dating from the 19th century to the 1990s, expected by MBIE to be designated 'earthquake prone', were indeed to have their ultimate capacity exceeded in a moderate earthquake and so be likely to collapse (as

defined in the table below), we might expect buildings to be collapsing regularly as moderate and strong earthquakes are common events.

<p>MBIE definition of an 'earthquake-prone' building</p>	<p><i>A building, or part of a building, is earthquake prone if it will have its ultimate capacity exceeded in a moderate earthquake, and if it were to collapse, would do so in a way that is likely to cause injury or death to persons in or near the building or on any other property, or damage to any other property</i></p>																																							
<p>Building Act definition of a 'moderate earthquake'</p>	<p style="text-align: center;"><i>Earthquake-prone buildings: general</i></p> <p>Heading: inserted, on 1 July 2017, by regulation 6 of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Amendment Regulations 2017 (LI 2017/136).</p> <p>7 Moderate earthquake and ultimate capacity defined</p> <p>For the purposes of section 133AB of the Act (meaning of earthquake-prone building),—</p> <p>moderate earthquake means, in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as, the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site if it were designed on 1 July 2017</p> <p>ultimate capacity means the probable capacity to withstand earthquake actions and maintain gravity load support assessed by reference to the building as a whole and its individual elements or parts.</p> <p>Regulation 7: replaced, on 1 July 2017, by regulation 7 of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Amendment Regulations 2017 (LI 2017/136).</p> <p>Regulation 7: replaced, on 1 July 2017, by regulation 45 of the Building (Earthquake-prone Buildings) Amendment Act 2016 (2016 No 22).</p>																																							
<p>GNS description of a 'moderate intensity' earthquake</p>	<p>the New Zealand Modified Mercalli Intensity scale.</p> <table border="1" data-bbox="368 954 1428 1509"> <thead> <tr> <th>MMI</th> <th>INTENSITY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>unnoticeable</td> <td>Barely sensed only by a very few people.</td> </tr> <tr> <td>2</td> <td>unnoticeable</td> <td>Felt only by a few people at rest in houses or on upper floors.</td> </tr> <tr> <td>3</td> <td>weak</td> <td>Felt indoors as a light vibration. Hanging objects may swing slightly.</td> </tr> <tr> <td>4</td> <td>light</td> <td>Generally noticed indoors, but not outside, as a moderate vibration or jolt. Light sleepers may be awakened. Walls may creak, and glassware, crockery, doors or windows rattle.</td> </tr> <tr> <td>5</td> <td>moderate</td> <td>Generally felt outside and by almost everyone indoors. Most sleepers are awakened and a few people alarmed. Small objects are shifted or overturned, and pictures knock against the wall. Some glassware and crockery may break, and loosely secured doors may swing open and shut.</td> </tr> <tr> <td>6</td> <td>strong</td> <td>Felt by all. People and animals are alarmed, and many run outside. Walking steadily is difficult. Furniture and appliances may move on smooth surfaces, and objects fall from walls and shelves. Glassware and crockery break. Slight non-structural damage to buildings may occur.</td> </tr> <tr> <td>7</td> <td>severe</td> <td>General alarm. People experience difficulty standing. Furniture and appliances are shifted. Substantial damage to fragile or unsecured objects. A few weak buildings are damaged.</td> </tr> <tr> <td>8</td> <td>extreme</td> <td>Alarm may approach panic. A few buildings are damaged and some weak buildings are destroyed.</td> </tr> <tr> <td>9</td> <td>extreme</td> <td>Some buildings are damaged and many weak buildings are destroyed.</td> </tr> <tr> <td>10</td> <td>extreme</td> <td>Many buildings are damaged and most weak buildings are destroyed.</td> </tr> <tr> <td>11</td> <td>extreme</td> <td>Most buildings are damaged and many buildings are destroyed.</td> </tr> <tr> <td>12</td> <td>extreme</td> <td>All buildings are damaged and most buildings are destroyed.</td> </tr> </tbody> </table>	MMI	INTENSITY	DESCRIPTION	1	unnoticeable	Barely sensed only by a very few people.	2	unnoticeable	Felt only by a few people at rest in houses or on upper floors.	3	weak	Felt indoors as a light vibration. Hanging objects may swing slightly.	4	light	Generally noticed indoors, but not outside, as a moderate vibration or jolt. Light sleepers may be awakened. Walls may creak, and glassware, crockery, doors or windows rattle.	5	moderate	Generally felt outside and by almost everyone indoors. Most sleepers are awakened and a few people alarmed. Small objects are shifted or overturned, and pictures knock against the wall. Some glassware and crockery may break, and loosely secured doors may swing open and shut.	6	strong	Felt by all. People and animals are alarmed, and many run outside. Walking steadily is difficult. Furniture and appliances may move on smooth surfaces, and objects fall from walls and shelves. Glassware and crockery break. Slight non-structural damage to buildings may occur.	7	severe	General alarm. People experience difficulty standing. Furniture and appliances are shifted. Substantial damage to fragile or unsecured objects. A few weak buildings are damaged.	8	extreme	Alarm may approach panic. A few buildings are damaged and some weak buildings are destroyed.	9	extreme	Some buildings are damaged and many weak buildings are destroyed.	10	extreme	Many buildings are damaged and most weak buildings are destroyed.	11	extreme	Most buildings are damaged and many buildings are destroyed.	12	extreme	All buildings are damaged and most buildings are destroyed.
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- But
 - Between 1 January and 23 June 2020, Geonet recorded a total of 3 'strong' and 7 'moderate' earthquakes across New Zealand. On 23 June, there were 3,173 EPBs in NZ on MBIE's Register yet none of those had their ultimate capacity exceeded and collapsed.
 - One of those quakes, on 25 May 2020, shook Wellington. Geonet recorded a 'strong intensity', magnitude 5.8 earthquake. ('Strong' is an intensity rating one higher than 'moderate'). On that day, there were 565 EPBs in Wellington on MBIE's EPB Register, none of which had its ultimate capacity exceed and collapsed.
 - No 'earthquake prone' buildings in Wellington were structurally damaged or collapsed in that Kaikoura quake in 2016. However, new buildings with 100% NBS were seriously damaged.

- It is obvious that the policy assumption that 17,424 buildings or more are likely to collapse in the event of a moderate earthquake is not true. Apartment owners can work this out for themselves yet they are expected to spend on average \$400,000 as if it were true that their building could collapse when the next event comes along.

6. Public safety benefits do not justify the costs and harm to private individuals

- Even if 'earthquake prone' buildings were likely to collapse in a moderate earthquake, the public safety benefits do not justify the costs and harm to private individuals.
- The public safety policy objective behind the EPB legislation is to reduce the number of lives lost in earthquakes due to collapsing buildings.
- According to MBIE's cost benefit modelling, strengthening 17,424 buildings across the country to 34% NBS (or demolishing them), would potentially reduce the number of lives that would be lost due to buildings collapsing in earthquakes over 75 years by 173.25, because 24 buildings that would otherwise have collapsed would not have done so. If that is correct, then every building strengthened potentially reduces the number of lives lost by 0.0099.

Estimated actual cost of compliance	MBIE estimated public safety benefit, assuming 17,424 are at risk of collapse
\$6,680,000 per building (average 16.7 apartments per building) \$400,000 per apartment	MBIE CBA assumes 173.25 lives saved over 75 years by strengthening all the buildings Strengthening one building contributes 0.0099 lives

- Based on these figures, if all 40 MORB EPBs in Wellington complied, owner would have spent \$267,200,000, (and more than 534 owner could have lost their homes), to save 0.4 lives over 75 years.
- Our calculations do not take account of the higher risk in Wellington, compared to medium and low seismic risk zones, so the benefit may be somewhat higher, but the point is obvious, the cost benefit ratio would not pass a rationale person's test. Yet apartment owners must comply under threat of draconian non-compliance penalties.
- Note that to save 173.25 lives over 75 years, all 17,424 buildings have to be strengthened or demolished. Yet information from MBIE suggests that only around 10,000 EPBs will be identified, which would reduce the value of the contribution made by strengthening any one building, making the cost benefit ratio even more ridiculous.

7. No discernable benefits accrue to building owners or occupants

- The policy objective is public safety benefits, not private safety benefits
- Any reduction in risk to occupants is immeasurably small
- Strengthening has no impact on the availability or affordability of earthquake risk insurance for MORBs because insurance companies do not recognise the NBS rating scale as an indicator of earthquake risk or resilience in earthquakes

- Strengthening does not deliver capital gains. (If it did, banks would be willing to lend, speculators would want to buy unstrengthened apartments, and owners would not be worried.)
- Reduced damage in the event of an earthquake, which is dependent on the size and nature of the earthquake, may not warrant the costs incurred, especially as strengthening does not result in a reduced insurance premium.

8. Exempting MORBs from the EPB legislation would have no discernable impact on public safety

- Public safety benefits delivered over 75 years by strengthening any building are 0.0099 lives saved.
- Earthquake prone MORBs, subsequently identified as priority buildings, have reduced time frames to strengthen or demolish to achieve public safety outcomes. There should be Crown funding for the public safety benefit, as for the gun buyback scheme.

Commentary on owners' responses to the survey

Who are the owners of apartments in multi-owner residential EPBs?

The typical owners are aged between 41 – 64 years and are employed. 33% of apartments are owned by two people. 42% are owner-occupied. 36% used to be owner occupied but owners are now renting out their homes with a key driver being the need to move but not being able to sell, or needing to rent to raise money for strengthening.

Investor owners, who bought to rent, account for 14% of owners and the majority have only the one apartment (in an EPB) in their portfolio.

In the survey, a typical apartment in a multi-owner residential EPB:

- Is 100m²
- Has two bedrooms
- Has one garage or car park space
- Has a capital value of \$485,000, of which the land value is 30% - \$145,500²
- Is or was owner occupied

The bulk of apartments (73%) are in unit title ownership, (governance of their buildings under the Unit Titles Act 2010), with the remainder being in cross-lease (17%) or company share (9%) ownership structures.

Context:

When the legislation was drafted, the regulations developed, and the implementation system designed, neither officials nor politicians considered apartment owners as a specific stakeholder group.

All multi-ownership structures are more complex than a single-title ownership structure, which is more common for large commercial and public buildings that form the bulk of earthquake-prone buildings. This has an impact on decision-making. The committee acting on behalf of multiple owners for the purposes of EPB compliance is not a legal entity in its own right.

Territorial authorities can prosecute the owner of an EPB who does not comply with a maximum fine of \$200,000. In a multi-owner

We are unable to rent it out or sell so at present we are paying three mortgages on a reduced income. HELP! We are going broke slowly. My wife and I will have to sell apartment and family home to clear debt at the end of the build. This is not a good place to be at retirement age. It is hard to write this and face the truth we will retire very poor.

Now that we have received the advice from the consultant, which compares a range of potential options - selling the property, strengthening, options to sell off part of the property to defray costs, etc., owners will need to seek their own advice before we can make a decision. At the moment we have some owners in favour of sale, some of proceeding with strengthening and some who wish that the whole thing would go away. We were due to meet at the end of April to discuss our next steps, however COVID-19 will delay that meeting

Building representative

² Based on information recently obtained from WCC it does not appear that QV, which undertakes the valuations for WCC, explicitly takes the EPB status into account in the valuations. QV does survey commercial earthquake-prone properties. A number of owners successfully challenged the 2018 valuations with reductions to land value. This means most apartment owners in EPB are paying higher rates due to this inconsistent valuation process.

building, such as unit title apartment buildings, that means every single owner is subject to a fine of up to \$200,000.

The Hansard records³ for the Building (Earthquake-prone Buildings) Bill shows there was minimal understanding that residential home owners were to be impacted by this legislation. The Minister for Building and Construction, Maurice Williamson, started his first reading speech by saying '**I stress this does not include residential buildings. It does not even include apartments if they are less than two storeys. They have to be multiple-storey apartment blocks to be included**'. The Minister never mentioned apartments as residential homes or referred to the affected home owners.

In his speech, he refers to building owners doing what they think is economically viable or where their customer base wants it. Neither of these statements is relevant to residential home owners. Only three MPs referred to home owners among the building owners covered by the legislation, but there were numerous references to businesses, investors, landlords, and commercial property owners throughout the Hansard records.

Owners' perception of safety of their apartments under an arbitrary threshold

Many owners point to the fact that when they bought their apartments, their building had been given code compliance certificates when they were built or when last they had work done on them that required a building consent.

I asked Wellington City Council about earthquake proneness because it was a major concern of mine, but they misled me by saying the apartment complex was too new to be assessed

Apartment owner

34% of owners said that if strengthening was not mandatory, they would not want to strengthen their buildings because they are comfortable with the risk. Some owners would be willing to strengthen, depending on the costs, but only 2% would want to strengthen regardless of the cost, and 13% could not afford to strengthen even if they wished to.

[The building] has withstood every earthquake that's been thrown at it since it was built almost 100 years ago. If it collapses in an earthquake, the whole city will collapse and no amount of strengthening will change that

Apartment owner

Many owners consider that the rating of their building does not reflect the actual strength of the building.

Context:

Two fundamental changes were made to the earthquake prone provisions through the Building Bill 2003 without any political or public scrutiny. First, the scope of buildings expanded from just unreinforced masonry and unreinforced concrete buildings under the Building Act 1991, to all building types. No data was provided to Cabinet on the number of buildings that would be included or the types of owners who be affected. Parliament was not advised of this change in the explanatory note to the Bill and consequently there was no discussion on it by Parliament or in the media.

Second, the Bill enabled territorial authorities to establish their own earthquake prone buildings policy and to take a proactive approach (ie, to identify potentially earthquake prone buildings through desktop analysis and require owners to strengthen if confirmed as earthquake prone), or

³ Emphasis added in Hansard extracts.

a passive approach (ie, where strengthening would only be triggered through the building consent process).

Whereas upgrades to fire security system or electrical wiring is only required if a building consent is being applied for by the owner (ie, a passive approach), the proactive requirement to strengthen or demolish a building determined to be an EPB is based on assessment against an arbitrary threshold. Acceptance or remediation of fire risks is left to the owner to decide. Owners in an EPB do not have a choice.

The Bill also established the definition of a 'moderate earthquake' as the trigger for being determined earthquake-prone, but clearly earthquake prone buildings are not having their ultimate capacity exceeded and collapsing. On 25 May 2020, an earthquake shook Wellington that was recorded 'strong earthquake' of 5.8 magnitude. Buildings that were seriously damaged and subsequently demolished in Wellington after the Kaikoura 2016 earthquake were not earthquake prone. Scientists, engineers and politicians point to the particular nature of the Kaikoura earthquake, but every earthquake will have its' particular nature, which raises questions about the reliability of the threshold and assessment methodology.

Owners forced to become de facto property developers and amateur construction project managers

We know from our surveys this year and in 2019, and from anecdotal evidence, that for all but the few owners who found they could comply, using relatively simple technical solutions at relatively modest cost, compliance is anything but easy. Most owners find the process intimidating, frustrating, exhausting and distressing. For most it is a matter of spending years locked in what seems like a never-ending nightmare, trying to do the impossible.

A few owners are bearing additional stress to help the many: 13% are leading the project, 35% are on the committee or group, and another 11% have been involved in a committee or group. Despite the best efforts of owners involved in the projects, progress is universally slow; 21 owners have been working on the projects for between 5 and 9 years, and 10 owners say between 10 – 15 years. In the main, the owners are satisfied with the work by their project teams. These volunteers have to cope without any support from Government or WCC, and no legal liability protections.

In our survey, 5 buildings had had 2 DSAs done, and 3 had had 3 or more DSAs done, which add to the timeframe and costs. This can be due to seeking assurance on the engineers' work and assessment, withdrawal of services by the initial engineer and having to start again, or changing requirements for assessments.

Owners of 12 buildings in the survey are intending to strengthen to between 67%NBS and 100%NBS. Of those strengthening to between 34-67%NBS, at least one building is only strengthening to just over 34%NBS as going higher is not economically viable. The 2012 CBA for

We made the decision, based on high level estimates and property advice that strengthening beyond 34% was not economically viable - if it was actually feasible. We also made the decision around five years ago to defer some exterior maintenance on the building until the time of the strengthening project. We have now completed detailed design and have a pre-tender estimate of costs of the strengthening and the deferred maintenance. The cost of strengthening is significantly higher than anticipated. We are now looking at the full range of options open to us, including selling the property

Apartment owner

MBIE says the CBA does not support higher levels of strengthening from a cost benefit perspective.

Nevertheless, based on the building survey, owners of the bulk of buildings are making progress with nine still investigating or making a decision on what to do next given the estimated costs; and six have decided to strengthen and engaged an engineer or are in contract negotiations with a provisional date to start. Five buildings are on hold due to a variety of reasons: not all owners being able to secure funds after having decided to strengthen; strengthening is not financially or practically feasible and owners are selling whole building; owners deciding to do nothing for time being; or owners are stuck and cannot decide what to do.

Context:

Neither Wellington City Council (under its own EPB Policy), nor MBIE officials, nor Parliament in the 2013-2016 legislation changes, considered how apartment owners would comply with the legislation. This is a basic requirement of the Government's expectations of good regulatory practice and successive governments have failed to deliver.

Owners are left to work out for themselves how to manage large scale, complex, high cost and high-risk building projects, achieve consensus decisions and secure guaranteed funding from owners. If the buildings were public or commercial buildings, experienced professionals would be in the lead and doing the work.

Most owners involved with or leading the projects are employed or running their own businesses so they are all doing this work in their own time and unpaid. Some body corporates use professional project managers, but these still have to be selected and managed and are not always successful.

The rules keep changing and we - a bunch of amateurs at this - keep trying to keep up. (For example, a preliminary design (1st engineer) is delivered some years back, but the designer exits from the project and / or the design becomes inadequate because the criteria demanded by the authorities change.) An AGM decision was made for strengthening to 34%. Some owners are now agitating for 67%, but this has not yet been addressed by an AGM (or SGM I suppose) as is required for such a change. We DID have a design, but NOW we are back to the investigation stage all over again. We have engaged (2nd engineer) to complete a (second) DSA and then expect to get two strengthening design options. In a sense the relatively simple statements above cannot effectively address the complicated process that quake strengthening is proving to be.

Apartment owner

The Hansard record of David Parker's (Labour – Dunedin) speech in the In Committee stage reinforces ICW's view that the focus was on commercial property owners experienced in complex, high-risk projects. He said

'In terms of the implementation of this, it is actually the Building Act and the interface between engineers, this code, and the building processes that we need to get right. Because if we do not allow that process—and I

have seen examples of this in Dunedin and, indeed, I have been involved in some personally—if we do not get the practical engineers who are able to unpick and say “Well, **actually, there are different ways that we could do this but we won’t really be sure until we pull off all of the internal linings and the building is unoccupied and we’ve got all the ceilings and the wall devices off.**” you will not get to the most cost-effective solution.’

Apartment owners are not in a position to pull off the internal linings, ceilings and wall devices and vacate the building to undertake the investigation. They have to rely on their engineers and experience has shown that this can take multiple attempts at additional costs, and with variable results.

There is a constant concern about, and numerous references to, the likelihood that the legislation will change again with the risk that the building will again become ‘earthquake prone’. This results in pressure to strengthen to as high a percentage NBS as possible, but that has consequential impacts on costs and viability.

The risk of future changes is underlined by Wellington City Council officials recently recommending to elected members that the Central Library receive the highest level of remediation, including base-isolation for several reasons including the need for additional strengthening to meet building regulation changes.⁴

The intention of the definition of the moderate earthquake and linking it to the building code in force at the time of the assessment was to provide owners with certainty. However, the Cabinet paper recommendation noted, in brackets – ‘unless the regulations changed’. Meaning owners funding substantial costs now, or having already done so, could be required to do so again.

Life changing decisions are made under duress

Owners are in different financial and life situations. This creates pressures on all owners when making decisions and increases the challenges for those owners leading the project to get agreement.

There is a high degree of nervousness around the risks of costs escalation and the project generally, whether there will be affordable insurance even if the building is strengthened, being able to maintain payments on loans if circumstances change. Owners are concerned they will over-capitalise their homes and will not get their money back. Others want to sell as a collective while some want to sell individually. Only 16% wanted the strengthening to go ahead as soon as possible.

Owners in 10 buildings have considered selling the whole building, and owners in 2 buildings are progressing with a sale. Selling the whole building is not

We are strengthening so that those who need to will be able to sell.

The cost is out of proportion to the benefit but we have 12 years before we must strengthen or demolish. Given the housing shortage in Wellington, and my wish to recoup some of the purchase price before I have to sell it for land value only, I want to rent my out my apartment for as long as possible.

I want to run the clock out but was advised I was about the only one, so signed agreement to sell. Then just last week find out there are several others who felt the same and have not signed.

Various apartment owners

The process could get challenging if there is any disagreement among owners. Depending on numbers we could risk going ahead with a sale anyway. The onus would be on an owner objecting and starting high court proceedings.

Building representative

⁴ Scoop 15 July 2020 <http://wellington.scoop.co.nz/?p=129585>)

a simple option and creates substantial financial, housing and wellbeing impacts for owners. Half (50%) of owners say they would sell their apartments once the strengthening is completed. This is not always by choice but to cover the debts incurred from strengthening or to meet bank loan conditions.

The Government's Residential Earthquake Prone Buildings Financial Assistance Scheme (FAS)⁵ could provide an option for some owners and nine owners in the survey had submitted an expression of interest. Several positive comments were submitted in support of the Scheme. However, 42 owners did not think they would qualify as they are not (or are no longer) owner-occupiers. Another 12 owners said the size of the loan would not be enough to cover the gap between the cost and what the owner could afford. Seven owners are not prepared to take on debt even on preferential terms. Other owners commented they were not owner-occupiers, had bought after the 1 July 2017 deadline, had already had to obtain a loan as the FAS was not available when they were seeking funds.

I have found dealing with the relevant Minister frustrating. I cannot get answers to my questions; when I am responded to, I am told things I already know. I do not believe the government appreciates that they are dealing with the very lives of citizens; their homes, their health, their wellbeing, their freedom, their life.

Apartment owner

Many of the owners in our survey have been active, trying to explain the realities, tell their stories and seek advice from the Minister for Building and Construction (18%), their Member of Parliament (31%), or their ward councillor (17%). Some owners are not satisfied with the responses they received.

Many owners have not protested about their situation, because they feel overwhelmed by their situation.

All pointless
Apartment owner

Frankly, it's so overwhelmingly bad it's hard to face up to it with family, let alone externals
Apartment owner

Some owners have tried to sell their apartments but received no offers (15) or the offer would not have enabled them to buy a similar property in Wellington (2). Other owners (9) had approached banks to borrow money for strengthening but lenders would not accept the apartment as security. Owners are effectively trapped as they cannot fund the strengthening costs and cannot sell the apartment.

We explored selling the unit with agents, however, the feedback is that the sale price we are likely to get would be so significantly below costs, it would decimate our family's finances so it's not an option.

Apartment owner

The identification of priority buildings and the associated reduced timeframes (from 15 years to 7.5 years) creates pressure for owners, particularly if the extended timeframe was being relied on to raise funds.

Context:

Every owner of an apartment in a MORB is a part-owner of the building and therefore in some way liable for the whole building's compliance with the EPB legislation, although exactly which parts,

⁵ The FAS was announced in the June 2019 Budget and was expected to be open by the end of 2019. It is not yet open for applications.

and how much of a MORB and the land it stands on, an individual apartment owner owns, depends on the ownership structure of the building. This can create issues when deciding how to make decisions and allocate the costs of strengthening. The Unit Titles Act does not help.

As apartments cannot be individually strengthened, all the owners of a building must work together, to research options, agree on a strategy, agree on and finance the plan and implement that plan, dealing with risks along the way. There is no legal framework within which this can be done.

There are no independent, low-cost or free, authoritative and informed advisory services available to owners or committees/groups working on the project to seek advice on how to progress the project and to identify and assess their options and mitigate the risks. All professional advice comes at a cost, and anecdotal feedback indicates that it is not always informed or authoritative. Neither MBIE nor Wellington City Council (WCC) has provided an independent, comprehensive advisory service for apartment owners. Although WCC has latterly set up an advisory service, following pressure from ICW and in discussion with our Wellington Central MP, but as the regulator, WCC cannot be independent nor focused on the best outcome for owners.

The Minister of Building and Construction has stated in media releases around eligibility for the Financial Advisory Service that owners who are not eligible have the option of selling. Survey responses show that generally, selling is not a viable option as real estate agents are not taking them on or the financial consequences would be severe hardship. The impossibility of certainty about the costs of strengthening options also impact on the ability to sell.

Adverse impacts on financial, mental, physical, social and housing wellbeing experienced by owners

Financial wellbeing

Out of 66 owners who responded to the question on options for funding the strengthening only two could fund the work without borrowing or using savings, and one could borrow from family or friends. Of the others, 19 owners have no means of funding the work, and 45 owners would need to use up savings or retirement funds or get a loan. Owners’ comments show how concerned they are about their futures when their financial security is at risk.

I am scared my modest retirement savings will evaporate. I am scared of the ‘black hole’. The government’s loan scheme means taking on debt when I worked hard to be debt free. I have paid \$38k to date into a quake fund with nothing to show for it. How long can this go on? I do not believe the government knows what it asks of private citizens of ordinary means

Apartment owner

No owners were comfortable with the level of risk involved and 50% are worried about the financial risks involved in proceeding with strengthening.

Owners were asked about the impact on their lives from being an owner of an apartment in an earthquake prone building. Only six owners considered that the requirements either had no or is unlikely to have any serious consequence (2), or did not expect to lose anything financially (4). The others consider there has or will be adverse financial impacts.

I expect significant losses to be the end result of strengthening, or selling to avoid compliance	59	59%
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My savings have been or will be eaten up and I won't be able to rebuild them for my retirement	53	53%
I imagine bankruptcy and/or social housing will be where this will lead for me	8	8%
I was planning to retire but I will have to keep working indefinitely now	21	21%
I have a young family, a mortgage and I am uncertain about income in these times. This is no way I can afford to comply or take on the risks of strengthening the building that I am happy to live in as it is	7	7%

There are three indicators of whether a capital gain is likely to result from strengthening, the willingness of banks to lend to cover the cost of the work, the market for apartments in EPBs, and owners' own calculations.

In our survey, we asked owners who had applied for a new mortgage or an extension to an existing mortgage to fund the strengthening work, what responses they had had from banks.

Strengthening must be above 70% NBS which isn't a feasible requirement given the cost to achieve this. It would also mean work is invasive and apartment would have to be vacated and therefore loss of income

Apartment owner

Of the 22 respondents who had approached banks 11 had been turned down, four had found a bank willing to lend on condition that the apartment was sold to repay the loan immediately after work was completed, and seven had found a bank willing to lend without special conditions.

Of course, each of these owners will have different personal credit profiles, but responses suggest that banks generally do not see strengthening as a way of making a capital gain.

Physical, mental, social and housing wellbeing

There are adverse consequences for owners' wellbeing from the compliance burdens placed on them.

Nearly all of the respondents report negative impacts on their mental and/or physical wellbeing. Thirty owners involved in working on the project on behalf of their neighbours are experiencing stress and exhaustion from working on these projects.

Please consider the impacts of this legislation on ordinary tax and ratepayers. We're not rich and this is a hugely stressful situation that has caused significant mental health issues.

Apartment owner

The situation now and thinking about what might happen in the future is having a negative effect on my mental and/or physical wellbeing	58	58%
I am exhausted with working on the committee/working group to try to find a way out of this nightmare for us all. It is a huge responsibility on top of everything else in my life. It is more than volunteers should have to do	30	30%
I was planning a life with a home of my own where I wanted to be, and the ability to sell and buy another home when I wanted to, but now I have to plan for a life with no home of my own, and debts	31	31%
I have had to move for work or another personal reason, but my capital is still tied up in a property that is going to cost me a fortune before I can sell it at some unknown	24	24%

date in the future		
I need to move to get work, to live near my children, or go into a retirement home, but I am stuck and have no idea when the situation will be resolved	4	4%
I live on a fixed income which was fine before all this came along. I cannot afford to do anything. So I will be facing \$200,000 fines and compulsory demolition of my home	10	10%

The majority of owners (53%) expect they would have to vacate their apartments if strengthening work gets underway, for periods ranging from up to six months to more than 18 months, with the bulk being between 6 and 12 months (20%), or between 12 and 18 months (24%). 28% of those who might have to vacate 28% do not know where they would stay and cannot afford market rents.

Rents very high. Few properties available. I provide accommodation for three others.

Apartment owner

Impacts of COVID-19

The survey took place over the latter part of Level 3 and Level 2 lockdowns.

Ability or willingness to fund strengthening costs

Owners were asked how they thought COVID-19 would affect their situation. Respondents (87) could select any number of statements.

Cannot commit the funds due to employment uncertainty or reduced earnings, or reduced interest on savings	17	19.5%
Not willing to take on debt in this environment	25	29%
Priority to use own funds for things that will provide greater security for me and my family	20	23%
Not willing to sign anything that may mean I have to find more money later if the cost blows out.	31	37%
Would be foolish to risk losing the roof over my head by committing to strengthening costs that could mean I have to sell to repay debt, and may not be able to sell if the property market is adversely affected	28	34%
It will be difficult enough to find money for rates, body corporate fees, and massive increases in insurance premiums.	38	46%

Lockdown has increased the project timeline by at least 6 weeks which means additional costs that I'm unsure I can fund

Apartment owner

Fortunately I have a secure government job so I don't see a direct impact

Apartment owner

Risks of progressing with strengthening

Owners were asked how they thought COVID-19 would affect the risks of progressing with strengthening. Respondents (94) could select any number of statements.

Government-funded building projects are likely to take priority	43	49%
Economic stimulus measures may drive up building costs	51	54%
Construction companies may go out of business	59	63%
Cost of building materials may rise	67	71%
Some building materials and skills may be in short supply	51	54%
Owners can't have confidence in their ability to service loans as their financial circumstances may change without notice eg employers closing, redundancy, cut in hours	59	63%
Now is not a good time to be making big financial commitments – default would affect all the other owners	55	58.5%

Selection of owners' comments

<i>We have started. We have to roll with the punches. This is a financial nightmare</i>	<i>I am working, but others will be affected and we all need to find the funding for the project to go ahead.</i>	<i>I'm concerned that not all of the 10 owners will be able to fund the works so what happens then? Do we force them to sell?</i>
<i>I fear there is a real risk of over-engineering resulting in unnecessary costs. If each party adds a margin for more safety (seismologist, geologist, bureaucrats / legislation, soil engineers, structural investigators, structural engineers, council inspectors, etc), the end results can be ludicrously overly cautious.</i>		
<i>Most of these risk factors also apply to delaying strengthening projects. Failure to strengthen also means that buildings will not meet market expectations and will lose value. Post Covid-19 recovery measures could be used as an opportunity to promote public/private sector cooperative strengthening initiatives to benefit urban resilience, maintain housing stocks and support climate change goals (the carbon footprint of a renovated building being lower than that of a new build).</i>		<i>If we strengthen what's to say legislation changes and we are no longer at that rated NBS. So say we strengthen to 72% and another engineer comes along and says oh its actually 54%</i>

Owners are expected to bear all the costs and risk for a policy driven by public safety outcomes

Owners were asked what they believed the intent of the EPB legislation to be. Twenty-two percent of owners said to deliver safety benefits for the public, while 59% of owners said to deliver safety benefits for the public and building occupants, with 10% saying safety benefits for building occupants.

Context

ICW acknowledges that a strengthened apartment

Failure to maintain seismic standards as technical knowledge evolves will impact on urban resilience and result in a growing stock of devalued, degrading and deteriorating buildings with compromised market value. Maintenance is in the collective interests of central and local government as well as of building owners but achieving it requires an equitable sharing of costs and risks and ready access to relevant expertise. Current legislation and regulatory structures do not provide for this.

Apartment owner

building could provide some benefits to the owners. The question is whether those benefits would outweigh the financial and wellbeing costs incurred in achieving them. Our assessment of MBIE's cost-benefit analysis is that the costs far exceed any potential benefits. This is covered in the section on the cost-benefit analysis.

The Hansard record⁶ clearly shows the primary focus and driver of the policy was on public safety, and commercial and/or heritage buildings. In his closing paragraph of his introductory speech, the Minister for Building and Construction said **'It will strike a balance between protecting the public from harm in an earthquake and managing the cost of strengthening or removing buildings**, and it will ensure that information about earthquake-prone buildings is made available to the public'. Only Jacqui Dean (National – Waitaki), referred to the safety of home owners affected by the policy **'brought up to a necessary level of safety so that both public safety and also people in their homes, if they live in multi-storey buildings, can feel safe in the event of a bad earthquake'**.

In the second reading, Todd Muller (National – Bay of Plenty) referred to individual families from an economic impact perspective, saying **'that age-old question of how you balance safety to people with the sheer cost of compliance to do that, and what the impact would be to individual families and businesses and communities around the country'**. Paul Foster-Bell (National) focused on the benefits to public safety, despite representation about the pressures being imposed on inner-city apartment owners: **'That will impose some pressures, particularly on inner-city apartment owners, who have made representations to me. But I am certain that measures such as the prioritisation of buildings that lie on essential routes to the airport, for instance, or to hospitals—prioritising those buildings for strengthening is important. It may well save lives.'**

In the Committee stage, the focus was again on public safety and costs. There was discussion on tax breaks to redress **'significant tax disadvantages faced by commercial, industrial, retail and heritage property owners**. Ron Mark (NZ First) in addressing IRDs stance on the maintenance or capital question said **'They [ie, owners] will not have added one shred—not one cent—to the value of their building. They will simply have repaired it to the standard required by this Parliament—repaired it, not improved it, not expanded its capacity or its capability**. They will simply have repaired it to the standard that we are now saying, in this legislation here tonight, they must do'.

When introducing the Bill for its third reading, Nick Smith (Minister for Building and Construction) said **'If we are too soft we may risk the lives of hundreds of our fellow citizens whenever the next major quake occurs. If we go too hard, the impacts of costs on communities—particularly rural and provincial New Zealand, as well as our heritage buildings—would be too great**. This bill avoids a one-size-fits-all approach, prioritising those geographic areas, buildings, and parts of buildings that pose the greatest risk. This ensures that our response is proportionate to those risks, that costs are minimised, and that we retain as much of New Zealand's built heritage as possible. ... These changes **are intended to help tenants and the public** better differentiate between earthquake-prone buildings and to encourage and motivate building owners to strengthen those buildings in a timely way'.

There is no mention of the benefits to and impacts on home owners who happen to live in an apartment that falls within the scope of the criteria.

⁶ Bold emphasis added.

Who should pay for the benefits and share the risk?

The majority of owners in the survey said that it was fair and reasonable that both owners and the Government/Council should share the costs and the risk. Only 3% said owners should pay all the costs and bear all the risks, and 18% said Government/Council should pay all the costs and bear all the risks.

The majority of the remainder (37%) said it should be 50/50 sharing of costs and risks, with virtually an even split between 16% saying the Government/Council should pay 25% of the costs, and 15% saying the Government/Council should pay 75% of the costs. Twelve percent considered the Government/Council should pay 33% of the costs, which is similar to the rebate for donations to charitable organisations.

The following selection of apartment owners’ comments reflects a variety of views expressed on the options.

<p><i>There is no fair and reasonable way to describe the financial ruin that has been placed on individual owners of apartments in our building. I am near retirement and will never recover from the costs imposed on my wife and I. We are not in a position to keep paying a double mortgage on what was to be a small retirement income. I will need to keep working into my 70s to repay the money we have had to borrow against the apartment and our family home. We plan to sell the apartment when the build is finished with at best estimate a \$200,000 loss. We should be enjoying life but have to watch every penny. I don't know how we will pay the next car bill. This is not fair. We bought an apartment that was up to code at time of purchase. We did due diligence and checked before purchasing. There are any number of hidden costs that we will never recoup. Paying for evaluation, engineers reports etc</i></p>	<p><i>It is for the public good. It is not like we purchased a gun that is now considered dangerous. We purchased a home that according to the council met regulations. Now they have decided it does not! If we had a gun that was now considered dangerous the government would buy it back at market value. Why can't the government do that for our homes?</i></p>	
<p><i>EQ strengthening should be supported by government because it is mandated by government. At the very least there should be guidance about how to manage the project and approved suppliers, and the cost of the project should be tax deductible, with other support for people who are not earning</i></p>	<p><i>The earthquake risks are theoretical and the financial risks to owners are real. The government should at least contribute to meeting the costs of its theories</i></p>	<p><i>The govt set the policies. What they didn't consider was the huge financial impact that apartment owners under their legislation had to endure. Contractors, architects, engineers etc would increase costs to cover their own. The govt own the legislation they need to cover the costs 100%</i></p>

The costs far exceed what was estimated by officials

From the survey we find that the average total cost of strengthening work (building contract) for an average sized apartment of 100sqm is \$3,020 per sqm including GST. That is just over 10 times the average cost per sqm of \$300 (excluding GST) used in the MBIE CBA model.

However, the average total compliance cost per sqm, including professional fees, displacement costs, and interest is \$4,000, just over 13 times the MBIE per sqm cost. The range of estimates for total compliance cost is from \$100,000 to \$899,000 per apartment.

Total cost of compliance estimated by owners		
100,000 to 199,000	18	24%
200,000 to 299,000	32	42%
300,000 to 399,000	6	8%
400,000 to 499,000	5	6.5%
500,000 to 599,000	5	6.5%
600,000 to 699,000	3	4%
700,000 to 799,000	3	4%
800,000 to 899,000	4	5%

Responses to the survey indicate that not all owners have included all potential costs of compliance, as opposed to just the strengthening work itself, so their costs are likely to be higher than they report.

What benefits might accrue to apartment owners?

Strengthening does not deliver capital gain

Strengthening should restore the building to its valuation prior to the EPB status being applied – all else being equal, but the costs paid by the owner could exceed the restored valuation. This is not capital gain as owners are paying to restore the value lost through being determined to be earthquake prone. However, how much value is restored may be constrained by the %NBS that has been achieved. Some owners are paying substantial costs to get just over 34%NBS.

Strengthening has no impact on the availability or affordability of insurance

The Insurance Council of NZ has stated that the %NBS is not a factor that influences the premiums available to owners of strengthened buildings. Instead, the sector uses the age, height, location and soil type to assess the risk and the premium. Prior to COVID-19, the Government was undertaking work on the insurance market to investigate and respond to availability and affordability issues. Given the Government has set a threshold of 34%NBS, it must ensure that owners who strengthen can obtain affordable insurance irrespective of the %NBS that was achieved.

It would be helpful if some investigation of insurance premiums could be undertaken. Because of the quasi commercial nature of the Body Corporate Insurance the premiums are ~8-9x that charged for a similarly valued residential property. The brokers state that insurers would prefer not to insure yet lenders require it. A catch 22 situation where Insurers and Brokers are fleecing owners.
Apartment owner

Reduced damage in strengthened buildings

Theoretically there should be reduced damage in strengthened buildings in the event of future earthquakes and less likelihood of owners and residents having to leave after an earthquake. But this is totally dependent on the size and nature of every earthquake.

The question remains as to whether the costs borne by owners outweigh the risk of damage and having to vacate. As owners who have strengthened have found, there is no benefit in reduced insurance premiums and buildings that have not suffered damage in earthquakes continue to get high premium increases due to the insurance sector stance.

Reduction in risk for owners and occupants is immeasurably small

For some owners there will be comfort from having an apartment in a strengthened building, but other owners are comfortable with the earthquake life safety risk of living in the homes they have chosen, (compared to other life safety risks, eg vehicle accidents), and not at all comfortable with the other risks of strengthening, particularly financial insecurity.

Our analysis (as shown in the box below) of the MBIE CBA shows that for all residential areas (the term used in the CBA) , just under 4 lives would be saved over 75 years based on the building being strengthened to 34%NBS.

Indicative CBA Model for Earthquake prone building review: summary of methodology and results

Final report – September 2012 Produced by Martin Jenkins for MBIE

The base case was status quo – strengthen to 33% (sic) NBS over a compliance timeframe of, on average across the country, 28 years. As this was the policy option decided upon, we have extracted the assumptions and calculations for that option.

Estimated number and size of buildings/units 33% NBS or less

Between 15,000 and 25,000

Base case used the midpoint, 17,424 buildings, with an estimated total area of 11,994,162 sqm

Estimated 2% of the area was residential

Estimated cost of strengthening buildings to 33% NBS \$300 per sqm

Total Real Cost	COST NPV \$m
\$3,486m	\$958m

Estimated benefits over 75 years of strengthening buildings to 33% NBS

“75 years is seen as a conservative estimate of the remaining useful life of the current earthquake prone building stock. It is possible that building lives will be shorter, but using 75 years makes it more likely that all potential benefits are captured.”

“The base case probability results produced annual deaths for New Zealand in a no strengthening case of approximately 1 per annum. This appeared low in comparison to historical deaths over the last 19 years which were on average 3 per annum. Since 1929 the average has been 6 per annum (including Canterbury) and an approximate ‘population adjusted’ estimate of the annual figures is 8.5 per annum.” However, a figures of 8.07 was used in the modelling.

	Estimated Deaths: daytime work-day		Estimated Building Collapses	
	No strengthening	33% NBS	No strengthening	33% NBS
Total impact (deaths) Sensitivity analysis results – maximum probability, MM8 to	8.07	5.76	1.37	1.05

The CBA did not specifically identify the estimated deaths over 75 years of the two scenarios which would be 605.25 for no strengthening and 432 for strengthening 17,424 buildings to 33% NBS, a benefit of 173.25 lives saved.

The estimated building collapses over 75 years for no strengthening would be 102.75 and for strengthening to 33% NBS, 78.75, a benefit of 24 buildings saved.

If 2% of the area in scope was residential, the contribution to benefits of strengthening residential buildings would be the saving of 3.5 lives and 0.5 buildings over 75 years.

Cost Benefit Results

Benefit Cost Ratio 0.02651. Note the benefit:cost ratio decreases given the higher actual costs.

	COST NPV \$m	BENEFIT NPV \$m
Cost/benefit to achieve 33% NBS in average of 28 years	\$958m	\$25m (monetary value put on benefits)

Conclusions

The paper concludes:

“...even with extreme sensitivity scenarios, costs substantially exceed benefits. This is mainly because large earthquake that cause significant damage are very rare, and smaller more common earthquakes don't cause very much damage.”

“There are significant data limitationsBut calculations are possible – and sensitivity analysis provides comfort around the conclusions. On a probability basis, cost are well in excess of benefits. Even under extreme sensitivities, the relationship does not change. On an actual event basis, there is only a small time window where higher strengthening options show net benefits. This window will shrink and may disappear if higher assumptions were used for building stock numbers.”

Essential reading list

Government expectations of good regulatory practice

<https://treasury.govt.nz/sites/default/files/2015-09/good-reg-practice.pdf>

Indicative CBA Model for Earthquake prone building review, Final Report – September 2020. MartinJenkins for MBIE

<https://www.mbie.govt.nz/dmsdocument/74-cost-benefit-analysis-earthquake-prone-building-review-pdf>

Inner City Wellington. Submissions to Governance and Administration Committee in support of two petitions:

- [Initial submission](#), 1 Nov 2019, includes the two petitions
- [Supplementary submission \(Personal submissions\)](#) 15 Dec 2019
- [Oral submission to Select Committee](#) 24 June 2020

Select Committee did not report back on petition prior to Parliament rising on 6 Aug 2020