

Building Seismic Performance

Proposals to improve the New Zealand earthquakeprone building system

Full report on the consultation process

July 2013

Contents

1.	Glossary of terms	4
2.	Purpose	6
3.	Context	7
4.	Executive Summary	8
4.1	1. The MBIE proposals	.8
4.2	2. The Canterbury Earthquakes Royal Commission	10
4.3	3. Other issues	11
5.	Regional public information seminars1	2
5.1	1. Overview	12
5.2	2. Summary of comments	13
6.	Submissions received	0
7.	High-level analysis 2	1
7.1	1. Overview	21
7.2	2. General themes	22
	7.2.1. Costs	23
	7.2.2. One-size fits all approach	23
	7.2.3. Sector capacity	26
	7.2.4. Heritage building stock	27
7.3	3. Out of scope issues	27
	7.3.1. Financial assistance and insurance costs and availability	27
	7.3.2. Health and safety concerns	29
-	7.3.3. Issues regarding the definition of earthquake-prone buildings	29
8.	Detailed analysis of submissions	1
8.1	1. Compulsory seismic capacity assessment of buildings	31
8.2	2. Public register	39
8.3	3. A mandatory national requirement	25
8.4	4. Enforcing the mandatory national requirement	57
8.5	b. Exemptions and time extensions	78
8.6	5. Roles, advice, information and education	53
8.1	7. Other issues: Strengthening and other Building Act upgrade requirements	38
8.8	3. Other issues: Heritage buildings	10
8.9	9. Other issues: inclusion of all residential buildings	12
8.1	10. Other questions	17
9.	Appendix one – list of submitters	ð

1. Glossary of terms

Building Code	Specifies the required performance of buildings.								
Building Warrant of Fitness (BWOF)	An annual statement that a building owner supplies to their local authority. It confirms that the systems specified in the compliance schedule for their building have been maintained, inspected, and are performing adequately. A copy of the building warrant of fitness must be publicly displayed on the building.								
Canterbury Earthquakes Royal Commission (Royal Commission)	An independent Commission established in response to the Canterbury earthquakes, to examine issues around the built environment in the Christchurch central business district.								
Compliance schedule	Issued by local authorities, the compliance schedule states the specified systems, their expected performance standards, and the inspection, maintenance and reporting procedures needed to keep these systems in good working order. Specified systems contribute to the proper functioning of a building; examples include sprinkler systems, fire alarms, lifts and escalators.								
Depreciation	A taxation and accounting method that allows for the wear and tear on a fixed asset. This must be deducted from income for tax purposes. There are some assets that do not depreciate, such as land or trading stock								
Detailed engineering evaluation (DEE)	A detailed examination of a building and its structural drawings to assess the likely seismic performance of the structure.								
District Plan	Plans developed by local authorities under the Resource Management Act that set out the policies and rules a local authority will use to manage the use and development of land in its area.								
Earthquake-prone buildings	Defined in section 122 of the Building Act as a building that exceeds its ultimate seismic capacity and is likely to collapse in a moderate earthquake, causing death, injury or damage to property. A building is normally considered earthquake-prone when it is assessed as not satisfying more than 33% of the current standards for new buildings.								
Heritage building	A building entered on the register of historic places, historic areas, wahi tapu and wahi tapu areas maintained by the New Zealand Historic Places Trust, and/or listed in a local authority's district plan for its heritage value, is often referred to as a heritage building.								
Importance level	The structural loadings standard AS/NZS1170 classifies buildings by giving them an importance level from 1 to 5. The higher the number, the greater the risk the building's failure would present to the safety of people, as well as any social, economic and environmental consequences. The importance level determines the structural design strength the building must have.								
Initial Evaluation Procedure (IEP)	A standard, non-intrusive engineering tool that provides an initial assessment of a building's likely seismic risk and performance. Used to identify whether a building requires further detailed assessment to determine if it is earthquake-prone.								
Land Information Memoranda (LIM)	A comprehensive report that contains all of the relevant information a local authority has about the history of a property, including any issues that may affect the property. Can be applied for by anyone for any purpose.								
Ministry of Business, Innovation and	The Ministry responsible for the consultation process and this document.								

Employment (MBIE)							
Moderate earthquake	Defined in regulations as an earthquake that would generate shaking that is one-third as strong as the earthquake shaking that would be used to design a new building at that site.						
Project Information Memoranda (PIM)	Provides information about the property and the requirements of other legislation that might be relevant to proposed building work, such as planning restrictions and ground conditions. Can only be applied for by someone who is planning a specific project on that site (such as the owner).						
Percentage of new building standard (% NBS)	Building Codes prescribe the standard a new building should be constructed to, including its seismic strength. The seismic risk of buildings can be measured by comparing the assessed performance of each building against the performance required of a new building. This is often expressed as a percentage of the new building standard, or the % NBS						
Ultimate limit state / ultimate capacity	The structural design level of a building that ensures that it has suitable levels of strength, stiffness and ductility to survive a major earthquake without collapsing as a result of structural failure. Ductility involves planning for cracking of concrete and yielding of reinforcement in concrete and structural steel elements.						
Unreinforced masonry building (URM)	A term used to describe a building constructed of bricks (secured by mortar), stone masonry, and/or concrete that has not been reinforced. This type of construction is not permissible under most modern building codes, which typically require reinforcement.						

2. Purpose

The purpose of this document is to summarise the consultation process undertaken by the Ministry of Business, Innovation and Employment (MBIE) during its review of earthquake-prone building policy. The document includes a summary of:

- the regional public information seminars
- submissions in response to:
 - the proposals put forward by the MBIE to review New Zealand's earthquake-prone building policy system under the Building Act 2004, and
 - recommendations covering earthquake-prone building policy made by the Canterbury Earthquakes Royal Commission.

3. Context

MBIE undertook a review of New Zealand's earthquake-prone building system under the Building Act 2004 in 2012. The purpose of the review was to enable a timely Government response to the recommendations of the Canterbury Earthquakes Royal Commission (Royal Commission) covering earthquake-prone building policy.

The Royal Commission's recommendations are broadly in line with the MBIE proposals, although the Royal Commission's recommendations go further in some areas.

In December 2012, a number of proposals were put forward to the public for consultation. Feedback on the Royal Commission's recommendations was also welcomed. The proposed options and Royal Commission recommendations were set out in the discussion document, titled *Building Seismic Performance: Proposals to improve the New Zealand earthquake-prone building system: Consultation document.* The full terms of reference and the consultation document are available online at: www.dbh.govt.nz/epb-policy-review

The consultation process was widely publicised over the internet and in the media. MBIE also organised seminars nationwide to discuss the proposals with interested parties. A summary of the public seminars is discussed in more detail in section five of this report. An internet-based online submission option was provided. The submission period closed on Friday 8 March 2013.

4. Executive Summary

This section provides an executive summary of submission responses. More detailed analysis is contained in sections seven and eight.

4.1. The MBIE proposals

In general, submitters supported the majority of the proposals. Of those that raised concerns, the majority related to the proposed timeframes. General themes from submitters included concerns about costs, sector capacity in implementing the proposals, built heritage stock and that the proposals were a "one size fits all approach".

Submitters also raised a number of issues not discussed in the consultation document. This included a lack of financial assistance, insurance costs, health and safety in employment concerns and issues out of scope of the current definition of earthquake-prone buildings.

	Proposals	Detailed analysis
Compulsory seismic capacity assessment	 Proposal 1: Requiring each local authority to assess the seismic capacity of all non-residential and multistorey, multi-unit residential buildings in its district Generally supported by submitters Of those that expressed concerns, many related to the mechanics of how the assessments would be done and costs Views were mixed on whether five years was sufficient to carry out the assessments 	pg 31
of buildings	 Proposal 2: Prioritising assessment for certain buildings Generally supported by submitters There was mixed support for the Royal Commission recommendation that unreinforced masonry buildings be prioritised for assessment 	pg 36
Public register	 Proposal 3: Seismic capacity information on individual buildings be entered into a publicly accessible central register, maintained by MBIE Generally supported by submitters General support for entering information other than seismic capacity onto the register Of those that expressed concerns, many relate to the quality of information and the potential impact on building values 	pg 37
A mandatory national	Proposal 4: Maintaining the current earthquake- prone building threshold	pg 55

Broadly, responses to proposals for consultation were as follows.

requirement		
	 Generally supported by submitters Of those that disagreed, some submitters contended the standard should be higher, others contended it did not incorporate an adequate level of risk, while others noted the market is driving higher levels of strengthening Some industry body submitters raised concerns about the current definition of earthquake-prone buildings 	
	Proposal 5: All buildings to be strengthened to be no longer earthquake-prone or be demolished, within 15 years of the legislation taking effect (up to five years for local authorities to complete seismic capacity ratings, followed by 10 years for owners to strengthen or demolish buildings)	pg 67
Enforcing the	 Not supported by submitters Many of the concerns related to cost or affordability, sector capacity, and a "one size fits all" approach that does not adequately consider people at risk, location risk, economic issues and heritage issues 	
mandatory	Proposal 6: Strengthening to be carried out faster for certain buildings	
requirement	 Generally supported by submitters Some submitters noted local authorities should be able to prioritise their own buildings 	pg 74
	Proposal 7: Owners of buildings assessed as earthquake-prone to submit a plan for strengthening or demolition within 12 months.	
	 Not supported by submitters Many of the concerns related to sector capacity and capability, issues for buildings with multiple owners, owners with building portfolios, owners with multiple tenants and potential changes in assessment tools 	pg 67
	Proposal 8: Certain buildings could be exempted or be given longer time to strengthen	
Exemptions and time extensions	 Generally supported by submitters Of those that expressed concerns, many relate to ensuring the exemptions are clearly defined and risk based 	pg 77
Roles, advice, information	Proposal 9: Central government to have a much greater role in guiding and supporting local authorities and building owners, as well as in public education and information	pg 83
and education	 Generally supported by submitters Of those that raised concerns, many related to the public perception of earthquake-prone 	

buildings and the need for detail or effective	
public education and information campaigns	

4.2. The Canterbury Earthquakes Royal Commission

In general, responses to the Royal Commission recommendations that extend beyond the proposals developed by MBIE, were either not supported or mixed. The one exception was the recommendation to enable local authorities to waive access and facilities upgrade requirements for people with disabilities to facilitate earthquake strengthening, which was generally accepted (Royal Commission recommendation 98).

Responses to Royal Commission recommendations that extend beyond the proposals developed by MBIE were as follows.

	Royal Commission recommendation	Detailed analysis
Local authority powers	 Recommendations 87 & 88: Giving local authorities the option of requiring strengthening to be done faster and/or to higher levels than those set by central government, after consulting with communities Not supported by submitters Many of the concerns related to a preference for a consistent national standard 	pg 61
Unreinforced masonry	 Recommendation 86: Higher strengthening levels (to 50% of new building requirements) for certain parts of unreinforced masonry buildings Views by submitters were mixed Some submitters commented certain parts of URMs present a high risk to the public and justify a higher standard of strengthening Other submitters commented these features be prioritised for strengthening as opposed to be strengthened to a higher level 	pg 64
buildings (URMs)	 Recommendations 82 & 83: Faster timeframes for assessment (within two years) and strengthening (within seven years) Views by submitters that URMs be prioritised for assessment were mixed. Views by submitters that URMs be prioritised for strengthening were not supportive. In both cases, submitters expressed preference for prioritisation to be based on risk rather than construction material only 	pg 76
Disability upgrade requirements	 Recommendation 98: Enabling local authorities to waive access and facilities upgrade requirements for people with disabilities to facilitate earthquake strengthening Generally supported by submitters 	pg 88

	 Strong dissent from disability interest groups Submitters commented current requirements add costs 	
Residential buildings	 Recommendation 99: Individual local authorities to be able to require strengthening of hazardous elements on residential buildings Views by submitters were mixed. Of concerns raised, some view the risks as not significant enough to justify regulation, while other see 	pg 113
	guidance or education as more appropriate	

4.3. Other issues

Views were also sought on how important **heritage buildings** can be preserved, while also being made safer. Submitters in general expressed concerns about the potential impact of the proposals on New Zealand's built heritage stock. Many concerns related to the high costs of strengthening heritage buildings and the need for better information or guidance for owners of heritage buildings.

5. Regional public information seminars

5.1. Overview

To discuss the proposals with interested parties, MBIE arranged for a series of regional public information seminars to take place nationwide during February 2013. A total of nine public seminars were held, two of which were organised by the Property Council New Zealand for property owners in Wellington and Tauranga.¹ This chapter summarises themes in the questions and comments raised by attendees at regional public information seminars held during February 2013.

Approximately 1,100 people attended the nine public meetings. The breakdown of representation and approximate attendee numbers is shown in Table 1.

Table 1: Approxima	ite represe	ntatio	on and at	tendance	e figu	res at	t pub	lic se	eminars		
Location	Date	/	See See	elle and and	and a start of the	States	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	A DE LES CO	r and a	ere saint	secones rended est
Wellington	5 Feb 13	х	x	x		x	x		x	300	
Wellington (Property	12 Feb 13	x								200	
Council)			x						x		
Auckland	12 Feb 13	x	x		x			x	x	150	
Tauranga (Property	13 Feb 13	x								60	
Council)			x						x		
Palmerston North	14 Feb 13	x	x	x	x	x			x	75	
Christchurch	19 Feb 13	x	x	x	x	x			x	50	
Dunedin	21 Feb 13	x	x	x	x	x			x	70	
Hamilton	25 Feb 13	x	x			x		x	x	100	
Napier	26 Feb 13	x	x			x		x	x	90	
Total										1095	

The nature of the responses varied considerably by location. People attending meetings in Auckland, Wellington and Christchurch tended to be more supportive of the proposals, and even advocated going further in some respects. In other centres, opposition to the proposals was more pronounced.

The most common recurring themes at the meetings were:

- support for a consistent national approach to earthquake strengthening
- support for retaining the current earthquake-prone building threshold (33 per cent of new building requirement)
- concern that the proposed timeframes are too short, in particular the 10 year limit for strengthening or demolishing earthquake-prone buildings

¹ A workshop for local authorities was also organised in February and but has not been included in Table 1 as it was not open to the public.

- concern about the impact of the proposals on small provincial towns in particular, where the cost of strengthening cannot be passed on through increased rentals
- opposition to a "one size fits all" standard, with support for longer strengthening timeframes in smaller towns and low seismic risk areas
- concerns about the affordability of strengthening, with support for tax incentives or other assistance to building owners, and
- opposition to the Canterbury Earthquakes Royal Commission proposal to remove the existing Building Code requirement for building owners who are strengthening to also upgrade their buildings' fire escapes and access for people with disabilities.

5.2. Summary of comments

The following is a summary of comments at the public meetings on each of the nine proposals, as well as comments on other relevant issues and significant themes that emerged from the meetings. They are not considered a formal part of the consultation process.

5.2.1. The MBIE proposals

Proposal 1: Local authorities would be required to make a seismic capacity assessment of all non-residential and multi-unit, multi-storey residential buildings in their districts within five years of the legislation taking effect, using a standard methodology developed by central government, and to provide the resulting seismic capacity rating to building owners. An owner could have their building's seismic capacity rating changed by commissioning their own engineering assessment.

There was little objection to this proposal and some support expressed at meetings for the general principle that councils should assess all buildings within five years.

The first three proposals make a lot of sense. People want good information on the earthquake-proneness of buildings in their community, and that should be publicly available. (Jono Naylor, Mayor of Palmerston North).

A range of concerns were raised about how the assessment requirement would be implemented. Some questioned the lack of clarity in the proposal on how much work the assessments would require. A few, including local authority representatives, expressed concerns about the possible costs, especially if the assessments required engineering input.

Some attendees were worried about the prospect of councils having to re-assess buildings to meet new assessment criteria. Several people expressed concerns about inconsistency in assessment standards.

You could get five engineers to do IEPs [Initial Evaluation Procedure report] on the same building, or even full engineering reports, and you would get five different results. (Attendee, Palmerston North).

Some also wondered about the capacity of councils to carry out the assessments within the required timeframe.

I'm concerned that councils won't be able to afford that level of work and may not have the expertise. (Attendee, Dunedin).

Proposal 2: Assessments would be prioritised faster for certain buildings (e.g., buildings on transport routes identified as critical in an emergency).

This proposal attracted little comment.

Proposal 3: Building information would be entered into a publicly accessible register, to be maintained by MBIE.

There was a general consensus in favour of making building information publicly available. Some attendees raised concerns about the potential costs associated with the register, and about the impact of public disclosure of building information on building values.

This council has been proactive in sharing this information, that doesn't always find favour – but think about the proposal for a national register? We do have to be careful about the level of information disclosed. (Wellington City Council).

It [public notification] is a great concept but it has to be used in the right way, not as a marketing tool to the detriment of property owners. (Engineer, Napier)

Proposal 4: The current earthquake-prone building threshold (one-third of the requirement for new buildings, often referred to as 33% NBS) would not be changed. However, it is proposed to establish a mandatory national requirement for all buildings to be strengthened to above the current threshold, or demolished, within a defined time period.

Generally, there was acceptance at meetings of the need for a nationally consistent approach to earthquake strengthening. However, there was also strong opposition to "one size fits all" strengthening requirements.

In particular, it was felt that small towns should not be subject to the same requirements as cities, where it was claimed that stronger rental markets made strengthening more economic.

Several speakers who otherwise opposed key aspects of the proposals supported retaining the threshold at the existing level of 33% of the new building standard (NBS).

I believe the 15 years proposed is too short, though the recommended NBS is more than reasonable. It could be a lot worse. (Engineer, Dunedin).

33% is a good idea, go with that. The timeframe is the big issue for us. (Oamaru Whitestone Civic Trust, Dunedin).

Others felt that a mandatory strengthening requirement, even to the current threshold, would be difficult for small towns.

You are not addressing the consequences for small towns – it's all about cities. We struggle to find people to use our buildings. It would kill at least two of our towns, we know that from talking to people. (Attendee, Palmerston North).

There are a lot of country towns where almost every building is earthquakeprone. There doesn't really seem to be a solution for those people. (Property developer, Wellington).

Very few speakers advocated raising the statutory threshold above 33% NBS, although a number noted that the market was driving higher strengthening standards and this was putting pressure on many building owners.

Many commented that insurers were refusing to cover older buildings regardless of their strength, or else they were requiring prohibitive premiums.

Very few companies will insure pre-1935 buildings. The problem is that the Building Code is there to protect lives, not buildings. If they do cover older buildings, the premiums are high and typically in excess of 10% of the value of the building. (Insurance broker, Napier).

Market forces are overtaking this Government consideration. Insurance companies aren't interested in whether it's 33% or 67%. (Attendee, Wellington).

Government agency leasing behaviour was criticised at many of the meetings for allegedly putting pressure on rental values.

Who is instructing the government agencies that we will not lease a building that is under 67%? If you follow that through, the economy will collapse. (Building owner, Palmerston North).

The pressure on rental values is coming from government departments. (Attendee, Hamilton).

In Auckland and Christchurch, it was asserted that Health and Safety in Employment Act 1992 requirements were also putting pressure on building owners.

The market has been driven by trading banks...they are now saying that 67% is the standard for entering tenancies. They say this has been driven by their obligations under the Health and Safety in Employment Act. (Attendee, Auckland)

It is frustrating that under the Health and Safety in Employment Act, buildings below 67% can potentially be an issue. (Property developer, Christchurch).

Speakers at some meetings, in particular Christchurch, argued in favour of the Royal Commission's recommendation for higher thresholds and faster timeframes for dealing with hazardous features of buildings.

We would like to see shorter timeframes for assessing and strengthening hazardous elements of buildings. We feel they were a major contributor to the deaths of many people. (Bob Parker, Mayor of Christchurch).

The Royal Commission report Volume Four had quite an emphasis on parapets and ornamentals...we're not seeing this in the consultation document? (Attendee, Christchurch).

It's encouraging that the Government is keeping it at 33. They should focus on parapets and verandahs – if the focus was just on the front of buildings, everyone would be better off. (Building owner, Tauranga).

A few people were concerned that owners who strengthened their building to above the current threshold might get caught out by future changes to the Building Code, causing their buildings to drop back below the threshold.

Proposal 5: All buildings would be strengthened to be no longer earthquakeprone, or be demolished, within 15 years of the legislation taking effect (up to five years for local authorities to complete seismic capacity ratings, followed by 10 years for owners to strengthen or demolish buildings).

The proposed ten-year strengthening timeframe attracted critical comment at most of the meetings, especially in the smaller centres or where the perceived risk from earthquakes was lower than elsewhere. Many speakers said that strengthening timeframes should be linked to risk levels in different parts of the country:

The worse case is that we spend massive money in locations that are not earthquake-prone...what about having a range of timeframes linked to geographic risk around the country? (Attendee, Auckland).

We see a lot of strengthening going on at high-quality sites that are economically viable. But when you look at small town New Zealand, there may be just bus stops and cafes but they are a beautiful part of our countryside, but building owners there have no justification for spending a dollar because they get no return. Do we need to have one standard and timing to suit all? (Engineer, Wellington).

I generally agree with the policy, but greater timings would be more reasonable. It needs to be within the economic cycle. If you strengthen at the point of redevelopment, the impact is small, if you are forced to do it earlier and kick out tenants, the impact is much heavier. Different time limits for different seismic regions makes sense. (Engineer, Dunedin).

At some meetings, concerns were raised about the availability of qualified engineers to do the structural design work required.

Has anyone put their mind to the logistics of this – the number of engineers available, the labour force...it can't all be done with the wave of a hand. (Attendee, Hamilton).

A few speakers raised the prospect of building owners walking away from buildings at the end of the strengthening time limit, leaving councils with a liability.

In some smaller towns, the risk and the cost will outweigh the value of doing work. Demolition might be the only option and some people might struggle even to do that. (Property developer, Palmerston North).

Proposal 6: Strengthening would be carried out faster for certain buildings (e.g. buildings on transport routes identified as critical in an emergency).

This proposal attracted little comment.

Proposal 7: Owners of buildings assessed as earthquake-prone would have to submit a plan for strengthening or demolition within 12 months.

Some people asserted that 12 months was too short to make properly-considered decisions about the future of buildings assessed as earthquake-prone:

Why is the timeframe to submit proposals only 12 months? That seems very short – is that to provide full design drawings? (Attendee, Napier)

Proposal 8: Certain buildings could be exempted or be given longer time to strengthen, e.g., low-use rural churches or farm buildings with little passing traffic.

This proposal attracted little comment in itself, although many people argued for a greater range of strengthening timeframes, rather than national requirements with a small range of specified exemptions (as noted above in the proposal five comments).

Proposal 9: Central government would have a much greater role in guiding and supporting local authorities and building owners, as well as in public education and information.

Some speakers proposed the Government should help make better information on modern, cost-effective earthquake strengthening techniques more widely available.

Every meeting I've gone to, I've heard a new idea of a better fix for earthquake strengthening. A toolkit of well-endorsed information would be extremely helpful. (Attendee, Wellington).

Is the Ministry researching how unreinforced masonry buildings and other earthquake-prone buildings can be bought up to the appropriate level in a more cost-effective or smarter way? There's very little research focusing on how traditional masonry buildings can be bought up to Code. (Attendee, Christchurch).

Other issues: Views are sought on whether the current Building Act fire and disability upgrade requirements are, in practice, a barrier to building owners deciding to carry out earthquake strengthening work.

Only a small number of people said the fire and disability upgrade requirements were a disincentive to strengthening, and no specific examples were provided at the meetings. However, representatives of disability action groups attended every public meeting and argued against the Royal Commission recommendation to delink the upgrade requirements from strengthening work.

Inaccessible buildings are bad business...are we going to take a backward step and turn tourists away from our city just because they can't access our buildings? (Disability representative, Wellington).

The UN Convention on the Rights of People with Disabilities says the state must comply with access requirements. New Zealand has signed and ratified this. I'm interested in how much we are going to compromise if cost is going to override our rights? (Disability representative, Auckland).

Investment in building accessibility is an investment, it shouldn't be viewed as a cost. We are a growing market. Nearly a billion dollars will be pumped into the global economy by people with disabilities. We are participants in society. (Disability representative, Dunedin).

Other issues: Views are sought on how important heritage buildings can be preserved while also being made safer.

While some meeting participants spoke of the importance of heritage preservation, there were few specific ideas proposed on how this might be achieved while also making buildings safer.

Dunedin, Oamaru, Ponsonby Road – what would they be like without their heritage buildings? (Attendee, Auckland).

I don't want the lynching of heritage buildings. Heritage and character buildings are a big reason why people come here, it would be devastating for Christchurch and Christchurch is devastated. (Attendee, Christchurch).

In Napier, a council representative described how building owners had been largely cooperative with the city's policy for strengthening heritage buildings.

Building owners in this city have shown nothing but respect for the council's position. I have had no negative comment on earthquake-prone assessment or how we can rort the building and leave the council with a liability. (Council representative, Napier)

Where the council has been active and engaged in community discussion, you don't get that negativity – that's a marked distinction with other communities where there hasn't been that discussion. (Engineer, Napier).

Other issues: Views are sought on the Royal Commission's recommendation to allow local authorities the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements on residential buildings to be dealt with within a specified timeframe.

This recommendation attracted little comment.

5.2.2. Other issues raised

Financial incentives or assistance was among the most frequently raised items at meetings. Numerous attendees asked whether the Government was considering such measures.

A minority of attendees at most meetings, particularly Palmerston North and Dunedin, argued there was little or no public benefit from investing in earthquake strengthening, especially when compared to the potential benefit from investing in other risk mitigation measures.

What we have got is a reaction to a tragedy. If you put the two buildings [CTV and PGC] to one side, the number of people killed was relatively small compared with road fatalities. Are we over-reacting? (Attendee, Wellington).

We are in danger of collapsing the economy of this country. This won't add any extra value to this country. (Attendee, Palmerston North).

The proposals are bureaucratic nonsense. Knocking down buildings now in case they are knocked down in years to come. By all means build future buildings to new standards, but let heritage buildings take their chance. We are just guessing – throwing billions at just a guess. (Attendee, Dunedin).

If the Government is concerned about consistency, wouldn't scrapping all cars without a five-star rating be a good idea? (Attendee, Hamilton).

What's the cost-benefit ratio of improving the roads in New Zealand – wouldn't society get better value from that? (Attendee, Tauranga).

6. Submissions received

MBIE received 535 submissions (with 40% using the online submissions process). Approximately one-third were from groups, including local authorities, industry bodies, membership associations, and disability and heritage advocates. A great deal of detail was included by submitters, including suggestions, examples and ideas on alternative systems and processes, as well as what the proposed changes meant to them. These have been considered by MBIE staff working on the review.

The online submissions process was designed by MBIE officials to both encapsulate the views of a wide range of interested parties on the proposals and also allow analysis to be undertaken by MBIE officials as effectively and efficiently as possible. Therefore, some questions in the online submissions process were designed to only allow the submitter to provide a descriptive answer if they disagreed with the question. This is reflected in the analysis where a number of submitters do not provide a reason for their answer. Submitters who did not use the online process were not subject to any restrictions.

This summary reflects the main themes and key points raised in submissions. In this summary, some examples of submitter's comments have been included in italics, identified by the submitter's name. These may have been condensed to reflect key points, and have been selected as reflecting a sample of the views presented.

Table 2: Submitters by category								
Stakeholders	Indiv	Individual Group		Total				
Academic/training institute	0	-	5	3%	5			
Architects/designers	11	3%	3	2%	14			
Builders/building consultants /building								
industry	8	2%	2	1%	10			
Building owners	84	23%	11	6%	95			
Community organisation	0	-	12	7%	12			
Crown entity/SOE/Government	0	-	2	1%	2			
Disability	0	-	16	9%	16			
Engineers and fire engineers	27	7%	11	6%	38			
Heritage	0	-	12	7%	12			
Local government	0	-	46	26%	46			
Individuals	223	62%	0	-	223			
Industry bodies	0	-	3	2%	3			
Insurers	0	-	1	1%	1			
Membership associations	0	-	19	11%	19			
Other industry	0	-	19	11%	19			
Real estate/developers	2	1%	11	6%	13			
Suppliers/manufacturers	0	-	1	1%	1			
Not specified	6	2%	0	-	6			
Sub-total	361			74	535			
Total Submissions 535								

Appendix 1 lists all submitters. An indication of the types of submitters who made submissions is shown in Table 2.

7. High-level analysis

This section provides an overview and description of the general submission themes. A description of out of scope responses is also provided.

7.1. Overview

Most submitters agreed improvements need to be made to New Zealand's earthquake-prone system, agreeing to the majority of the proposals in the consultation document.

We consider that the document presents a reasonable position for making New Zealand's building stock more resilient. (Wellington City Council)

The proposed Council submission supports the principles and specific [Ministry of Business, Innovation and Employment] MBIE proposals. (Christchurch City Council)

...we strongly agree with the Crown's proposal to retain the one third of the requirement for new buildings as the threshold for earthquake prone buildings. (Southern Councils)

The NZHPT supports the objectives of the review in terms of achieving acceptable risk, better and more accessible information, providing reasonable timeframes, providing limited exemptions and preserving important heritage buildings. (New Zealand Historic Places Trust)

Overall, Property Council is broadly supportive of much of MBIE's proposals. (Property Council New Zealand)

There are a number of issues with the current system. (Structural Engineering Society New Zealand)

In most cases support is tempered by the proposed timeframes. Many submitters commented the proposed timeframes are a "one-size fits all approach", failing to incorporate variability of seismic risk, which would have a broad social and economic impact on communities.

While we agree with the retention of the current standard, the proposed timeframes and accountabilities appear too hard-hitting for our communities to absorb in any cost effective way. (Southern Councils)

...the proposed timeframes and accountabilities will have significant economic, social, and cultural impacts in our communities. (Dunedin City Council)

Waikato-Tainui does not support proposals that take a "one size fits all" approach and recommend that you take a much broader basis for assessing risk from earthquake prone buildings e.g. identify and categorise areas according to the likelihood of their experiencing an earthquake event i.e. high risk, medium risk, low risk. (Waikato-Tainui)

Federated Farmers agrees that the earthquake-prone building system needs to ensure that high-risk buildings are identified and addressed in a timely and costeffective way. However, any changes to the system must take account of risk to the public and to appropriately weigh the costs of strengthened regulations against the benefits. (Federated Farmers)

A minority of submitters were strongly opposed to the proposals, seeing it as a kneejerk reaction to the Canterbury series of earthquakes.

...smoking alone kills 20 times as many people each and every year as were killed in Christchurch. The total number of Kiwis killed by earthquake is one tenth of those killed by smoking and the same for obesity. If the Government is genuinely serious about saving lives it is currently barking up the wrong tree! (Individual submitter)

If the government is really concerned about saving lives, all owners of motor vehicles could be compelled to have them fitted with a standard height bumper bar, made of recycled tyres. All vehicles would be fitted with a speed-limit governor of no more than 100 kph. That would save far more lives each year than the extravagant lengths being proposed for earthquake strengthening. (Individual submitter)

Life is about risk. Although we have suffered a great loss in Christchurch which we don't want to repeat, it is an economic unreality to proceed down the track the Government is proposing. It will decimate not only small towns but also our bigger cities. (Individual submitter)

A small minority of submitters were strongly opposed to the proposals, criticising the terms of reference of the policy review.

It is important to consider building regulation alongside other areas of government intervention to ensure a reasonably consistent approach is taken across the board, ensuring an efficient allocation of resources...the case for intervention (of the type proposed) is not clear...the Consultation Document dismisses both more market-based approaches to risk management and also the current system whereby local authorities have the power (under the Building Act) to develop their own policies for dealing with earth-quake prone buildings. (Business New Zealand)

Our overall conclusion is that the Ministry's proposals are not based on a coherent analytical framework and are fundamentally flawed. They will result in substantial economic and social damage with very limited safety benefits. (Tailrisk Economics)

7.2. General themes

A number of general themes emerged across the submissions, particularly in reaction to the proposed timeframes. These included concerns regarding:

- the costs to strengthen earthquake-prone buildings
- a "one size fits all approach"
- sector capacity, and
- the built heritage stock.

7.2.1. Costs

The vast majority of submitters raised concerns over the cost of strengthening earthquake-prone buildings, either as individuals, or as a community.

Businesses and building owners, including KIPT, are facing very significant costs and economic losses from the need to upgrade buildings to meet seismic standards required by both the market and the need to comply with the proposed policy changes in the discussion document. This reflects the new reality in New Zealand following the Canterbury earthquakes, consistent with the market's understanding and acceptance of earthquake risks. (Kiwi Property Income Trust)

...[the proposed changes] will break many small property owners or at the very least [cause] a big loss on their investment especially in Auckland where the earthquake risk is small. (Individual submitter)

Many submitters commented the proposed timeframes would place an unreasonable burden on building owners to meet the costs to strengthen or demolish their building.

REINZ submits that the strengthening costs should be met by investors who are willing and prepared to meet them over a reasonable period of time. We do not think that 10 years from the date of the seismic capacity assessment is a sufficient time to enable all owners of earthquake-prone buildings in the country to strengthen or demolish. The time required for compliance will vary depending on the level of risks associated as well as the timeframes and costs of administration that are workable for each territorial authority concerned. (Real Estate Institute of New Zealand)

When assessing the strengthening schedule, the resulting economic burden on the city/locality as a whole should be a factor when fixing a deadline for completion. (Willis Bond)

Some submitters were concerned about the cost implications of the proposals on local authorities (particularly rural communities) and subsequently ratepayers.

The Consultation document proposes that the assessments could be carried out by Council staff. It is important to note that securing and maintaining the required specialised technical proficiencies, as a human resource, will be challenging in the current New Zealand skills market place...For these reasons, WDC does not believe it is practicable or affordable for the assessment regime to be completed within 5 years as proposed. We suggest that it would be more prudent to take a risk-based approach to the application of any assessment regime as well as full building upgrades. (Waitomo District Council)

The cost of this exercise would not be sustainable to small territories, if the above proposal is passed into legislation we will be required to either hire a full time engineer or be forced to hire outside contractors. This is not affordable with a relatively low rate payer base. (Ruapehu District Council)

7.2.2. One-size fits all approach

A majority of submitters raised concerns about a "one-size fits all approach", particularly in reaction to the proposed timeframes.

Provincial centres with low occupancy buildings, low rating bases and depressed economies are not the same as Auckland or Wellington. One size does not fit all. (Wanganui District Council)

...DCC stresses the importance of working together to address this issue and that a "one size fits all approach" is unlikely to be a workable solution in our community. (Dunedin City Council)

There was general support for increased central government involvement or guidance on earthquake-prone building policy as submitters considered this would bring greater consistency throughout the country in the way that earthquake-prone buildings are treated.

A nationally uniform approach to resolving earthquake prone buildings would remove inconsistent application of policies and more readily inform owners – especially owners who may own buildings in several districts. It would facilitate the understanding of the issue across the country. (Waimakariri District Council)

The Government should also require local Councils to adopt the same and uniform earthquake prone building policies that are in line with the legislation. At present there are Councils that have adopted higher standards than are required under the legislation. Westfield notes that the High Court action taken by the Insurance Council v Christchurch City Council (CIV 2012-409-2444) regarding the Christchurch City Council Earthquake Prone Building policy that required upgrade works over and above the current Building Act requirement of 34% to 67%, the Court has set this policy aside. This further reinforces the argument for one rule across the country. (Westfield New Zealand Limited)

However, submitters felt equally strongly that central government involvement should not compromise local authority decision making autonomy, or more commonly, that local conditions and factors should be recognised within a national framework.

Local authorities should retain discretion to balance the costs versus the level of risk mitigation achieved within their areas. (Dunedin City Council)

PNCC submit that while national direction is required, the proposals must also factor in a greater appreciation of regional variation and the relative risk. (Palmerston North City Council)

Submitters felt that any national framework for any strengthening programme should take the following local factors and conditions into account for an area:

- seismicity
- economic profile
- local heritage, and
- social and community impacts.

We need a policy for NZ but there is room for regional variances relating to lower density towns and reflecting the economic viability of these communities. (Feilding Promotion)

Local authorities must be given discretion for these buildings to cater for occasional one-off events which are viewed as critical for maintaining the social functioning of the district. Rural halls, sports facilities and churches need to

cater for Anzac day services, A&P shows, weddings, birthdays, school functions, fire brigade functions and for funerals, all of which can attract hundreds of people for relatively short periods of time. (Hurunui District Council)

Nearly a fifth of all submitters proposed the development of a new system as an alternative to either the proposals or the current policy. These submitters suggested that a more sophisticated risk framework be developed to decide how best to address local earthquake-prone building issues.

Local authorities recommend a broader basis for assessing risk from earthquake prone buildings...(Local Government New Zealand)

Many submitters discussed the factors that should be included in this risk framework, which would be used to assess a community's building stock. These factors included:

- local factors and conditions (as described above)
- seismicity of the area
- type of building being assessed, noting the key vulnerabilities of different types of buildings
- occupancy rates
- building use, and
- building location (e.g., whether it is on a major arterial route)

The process should reflect the level of risk, which is a result of several factors, including: building structure, isolation from other buildings, and occupancy levels. (The Architectural Centre)

Grey District Council does not agree with this one size fits all approach. GDC considers that strengthening timeframes should be based on risk. Risk based on the seismic hazard in the geographic area, the proximity of the building to people and the risk of the building's potential to cause harm, such as unreinforced masonry buildings, presence of parapets and other dangerous elements. (Grey District Council)

Council feels we should be focusing on the high risk buildings which include the commercial and public buildings with high occupancy rates. The Government needs to make a clear and concise statement about the types of buildings that any updated earthquake-prone building legislation will apply to. (Waikato District Council)

Submitters proposed that buildings be prioritised for strengthening based on the results of this risk assessment.

To promote the use of resources, the programme for assessment and improvement should be planned using a risk management framework so that high-risk buildings are improved first. (Opus International Consultants)

Many favoured taking a staged approach, prioritising the earlier strengthening of high risk parts of the building (such as securing fall hazards) and strengthening the rest of the building later. The risk assessment would also identify the building's high risk elements and set the timeframes for its interim and full strengthening.

The NZHPT supports mandatory national requirements that are informed by a national risk management framework that provides an affordable and staged approach to strengthening targets over a period of time. (New Zealand Historic Places Trust)

HPA advocates for a risk-based approach with the possibility of staged timeframes that enable a priority focus on strengthening facades, hazardous elements such as parapets, gables, roof ornaments, verandas and so on. In other words a set staged approach for short, medium and long term outcomes. (Historic Places Aotearoa)

...further options on retaining decision making at local level, prioritisation of building elements (such as parapets) that present greatest risk to life, and longer timeframes for full building upgrades is required if the outcomes and work of the CERC is to be delivered in a sustainable and enduring manner. (Wairoa District Council)

7.2.3. Sector capacity

A substantial number of submitters commented on the lack of sector capacity to carry out the work intended in the proposals.

The assessment of buildings is specialised work, with significant implications for building owners, local communities and the national economy if the assessments are too conservative or of inconsistent quality. In our experience, New Zealand has a relatively small group of structural engineers capable of assessing buildings reliably and there are few others worldwide with the appropriate skills, let alone familiarity with historic New Zealand construction techniques necessary for the seismic assessment of existing buildings. (Beca)

...a key issue our industry is facing is the on/off nature of our industry activity. We are looking forward now with the rebuild of Christchurch to an extended period of increased and long awaited activity. Add to this the work associated to strengthen potentially 25,000 EPB's in the proposed timeframe, then considerable demands will be placed on the industry which will then revert back to zero when the requirements have been met...from a boom/bust cycle point of view there is a big difference between a boomlinked 15 years implementation framework or a say 30 years keep-it-even and sustainable implementation framework. So while we fully agree with government that they need to act now, a more holistic strategic approach correlated to the risk may benefit not only the wellbeing of our people but also the New Zealand economy. (Heavy Engineering Research Association)

There just are not enough structural engineers with the skills in the country to do this work in the time frame suggested. It will lead to more demolitions than may be necessary. (Individual submitter)

Resource is scarce, particularly in smaller cities/towns, and buying more resource will lead to higher rates. Also, structural engineer capacity is stretched now, so if local authorities have a higher demand for this expertise then timing and costs will blow out. (Individual submitter)

7.2.4. Heritage building stock

A majority of submitters expressed concerns about the potential impact of the proposals on New Zealand's built heritage stock.

HPA broadly supports objectives of the changes but has serious reservations about the impact they may have on the retention of New Zealand's built heritage if implemented as presently proposed. (Historic Places Aotearoa)

...the speed of any action has to be balanced with a building's heritage status and the likelihood of a catastrophic quake – faster action would likely limit the number of solutions available to strengthen/save a building where funding is difficult to raise. Heritage will be lost unnecessarily. (Individual submitter)

...a much longer time frame should be given...if the proposed changes are enacted, it would be a tragedy for the country in terms of the loss of our heritage and amenity. (Individual submitter)

7.3. Out of scope issues

The majority of submitters took the opportunity to comment on issues not discussed in the consultation document. This included:

- financial assistance and insurance
- health and safety in employment concerns, and
- issues out of scope of proposal four regarding the definition of earthquakeprone buildings.

7.3.1. Financial assistance and insurance costs and availability

A majority of submitters commented on the lack of financial assistance or incentives to strengthen their building.

The National Heritage Preservation Fund, administered by the New Zealand Historic Places Trust, is currently only available to work on private-owned Category I historic places. In addition, Lottery Environment and Heritage funds non-profit organisations who wish to strengthen heritage buildings they own. (Whanganui Regional Heritage Trust Board)

OWCT is fortunate, as a Charitable Trust it does have access to grants and donations. However increasingly funders are telling us that they will not fund structural strengthening work. (Oamaru Whitestone Civic Trust)

The majority of heritage buildings are privately owned, but these places are often of value to society as a whole. This means that private owners often provide and pay for a social benefit. (New Zealand Heritage Trust Board)

Submitters commented about the difficulty of obtaining insurance for older buildings, buildings just above the earthquake-prone threshold, and those that are earthquake-prone.

Obtaining insurance cover at a reasonable cost is an increasing issue for building owners in Wellington. A recent survey by the Council indicated that around half of the earthquake prone building owners had difficulty getting cover

and the majority of those faced premium increases of greater than 50%. (Wellington City Council)

Insurance rates have already tripled, there is a concern that insurance companies will demand higher and higher rates for heritage buildings which will make it impossible to run a viable business out of a heritage building. (Onehunga Business Association)

Submitters also commented the lack of insurance impacts the ability of owners to obtain loans to strengthen their building. Submitters stated banks would not lend unless the building was insured, insurers would not insure unstrengthened buildings, but owners could not get the loan they need to strengthen their building when they had no insurance.

It is or will be a huge problem with insuring or their renewals and consequently mortgage finance from banks or the continuation of the finances. Already insurers are not insuring buildings that are pre 1935 whether earthquake prone or not. If you can't get insurance then you can't get finance or refinance, then what? (Individual submitter)

Businesses and building owners face a vicious cycle with strengthening, insurance and bank finance. In order to comply with bank debt covenants and some leases, and obtain finance, the building must be insured. In order to obtain insurance, the building must be strengthened to a standard where the building (as opposed to the public) might survive a moderate earthquake. This leaves many businesses and building owners in a potentially ruinous situation where they face the completely uneconomic prospect of strengthening to 67% NBS. (Property Council New Zealand)

Some submitters suggested a variety of financial assistance measures to help address the problems many building owners have funding strengthening works.

The Government also needs to work with the insurance industry to develop more satisfactory approaches to insurance charges for buildings which have been strengthened. It may well be that the best approach is to follow the policy, widely adopted in California, of not having earthquake insurance at all. The money spent on premiums could then be put into strengthening to 100% of code. (Historic Places Canterbury, and Interests in Conserving the Identity of Christchurch)

We would encourage that more be done to give local authorities the ability to put effective support measures in place. Specific examples include necessary legislative changes to allow bank loans to be guaranteed for owners needing to upgrade buildings, and for the cost of a seismic retrofit (just that component) to be deemed "repairs and maintenance" rather than "capital expenditure" for tax purposes. (Auckland City Council)

...give Councils wider powers to vary the way rates are assessed to give incentives for upgrading work by rates relief for approved programmes (Wanganui District Council)

Access to direct grants of money should be prioritised accorded to degree of risk to public safety and the heritage or strategic importance of the building. (Historic Places Canterbury, and Interests in Conserving the Identity of Christchurch)

7.3.2. Health and safety concerns

A number of business submitters raised concerns about a "disconnect" between the obligations under the Building Act 2004 and the Health and Safety in Employment Act 1992.

At present, there is considerable uncertainty about the steps required to be taken by duty-holders to comply with their duties owed under the HSE Act in relation to EPBs. We consider that the requirement for a building owner to take "all practicable steps" under the HSE Act requires the owner to follow the recommendations contained in the NZSEE Guidelines. The NZSEE Guidelines strongly recommend aiming for a standard of 67% to 100% of Code, which is inconsistent with the Ministry's proposal in the consultation document, to maintain the existing threshold at 33% of Code. (Bell Gully)

The difference between the strict test in the Building Act and the principlesbased test in the HSE Act provides uncertainty for businesses. A number of our members have vacated buildings which, while complying with the Building Act test, have been deemed internally to be below the standard required under the HSE Act. This has resulted in some banks having to find new premises, while continuing to pay for the old premises because they are technically compliant and so have no legal ability to cancel the lease. (New Zealand Bankers Association)

ANZ considers the best way forward would be for Government to issue guidance that if a property owner has met the threshold of 33% of Code it, as a general rule, would be interpreted as complying with the Building Act, HSE Act, regulations, codes and bylaws. This would effectively provide New Zealand property owners with a single, aligned standard that would allow for a more pragmatic approach going forward. (ANZ)

7.3.3. Issues regarding the definition of earthquake-prone buildings

A number of engineering bodies and individual engineer submitters raised concerns about the assessment methods engineers use to determine whether a building is likely to fail in a moderate earthquake. Specifically they took issue with the current definition of earthquake-prone buildings. Some submitters proposed extending the definition of earthquake-prone buildings to include buildings whose overall strength means that they would not currently be considered earthquake-prone, but have critical structural weaknesses (vulnerabilities) that could lead to their collapse major earthquake.

A proposed new definition for an earthquake-prone building is one that either: Is likely to have its ultimate capacity exceeded in a moderate earthquake, either wholly or in part, in a way that may lead to death or injury to persons within or outside the property; or has significant critical vulnerabilities that could result in catastrophic collapse in a major earthquake...

...The second part targets buildings such as the CTV building and includes those with non-ductile columns. MBIE has initiated a process of identifying such buildings in the main centres...new definitions will be required for significant critical vulnerabilities – we understand MBIE has commissioned the NZ Society of Earthquake Engineering to revise the "2006 Guidelines for the Initial Evaluation Procedure" and this revision will include a list of defined critical vulnerabilities. This list will be needed sooner rather than later. (Institution of Professional Engineers New Zealand)

8. Detailed analysis of submissions

This section contains detailed analysis of submissions. It includes a general summary of responses to each proposal as well as responses to Royal Commission recommendations that differ from the MBIE review. A detailed breakdown of responses to individual questions is also provided.

8.1. Compulsory seismic capacity assessment of buildings

Proposal 1: Local authorities would be required to make a seismic capacity assessment of all non-residential and multi-unit, multi-storey residential buildings in their districts within five years of the legislation taking effect, using a standard methodology developed by central government, and to provide the resulting seismic capacity rating to building owners. An owner could have their building's seismic capacity rating changed by commissioning their own engineering assessment.

This proposal was generally supported by submitters. Of those that expressed concerns, many related to the mechanics of how the assessments would be done and potential costs (e.g., questions of whether owners should be required to do this and provide results to local authorities, or concerns about potential assessment tools, and concerns about sector capacity/capability). Views were mixed on whether five years was sufficient to carry out all of the required assessments.

The assessments are an essential prerequisite to earthquake preparedness. (Wellington Civic Trust)

Q1: Should local authorities be required to assess the seismic capacity of all buildings covered by the earthquake-prone building system in their areas and to issue seismic capacity ratings to owners?



Q1 Pie chart

Q1 Yes responses

Two hundred and seventy-one (271) submitters (51%) agreed local authorities should be required to assess the seismic capacity of all buildings covered by the earthquakeprone building system in their areas and to issue seismic capacity ratings to owners. Of these, 218 submitters (80%) did not provide a reason.

Seven submitters (3%) commented that local authorities were best placed to carry out the assessments.

Yes. Practically it is only local authorities that have the overall knowledge, records and plans of their building stock that would enable this work to be undertaken within the timeframes proposed. (Christchurch City Council)

Some submitters qualified their support for this proposal. Eleven submitters (4%) commented they were concerned about potential costs.

Beca supports the assessment of the New Zealand building stock but considers this needs to be completed in a cost-effective, practical manner, while ensuring, with confidence, the buildings representing the highest risk are identified. (Beca)

Eleven submitters (4%) were concerned about assessment tools.

Yes, we support the proposal to assess buildings. As discussed above we have concerns about the consistency and quality of these assessments. (Chorus Limited)

Seven submitters (3%) were concerned about transitional provisions.

But any process should avoid duplicating work that has already been completed or is well underway e.g. Wellington City is well down this track. Building owners should not be expected to face additional uncertainty/cost if they have already participated in a fit-for-purpose process. (Wellington Inner City Residents and Business Association)

Q1 No responses

One hundred and seventy-eight (178) submitters (33%) did not agree local authorities should be required to assess the seismic capacity of all buildings covered by the earthquake-prone building system in their areas and to issue seismic capacity ratings to owners.

Of these, 36 submitters (20%) commented that building owners should be required to undertake the assessment instead.

We do not think local authorities and their communities should be obliged to pay for seismic assessments for buildings. As the TTAC Ltd & GNS report identified: "In smaller earthquakes economic risk is well aligned with building owners and users." This risk should be reinforced by requiring building owners to undertake and pay for seismic capacity assessments. (Local Government New Zealand)

Twenty-eight (28) submitters (16%) were concerned about potential costs.

The cost of this exercise would not be sustainable to small territories, if the above proposal is passed into legislation we will be required to either hire a full time engineer or be forced to hire outside contractors. This is not affordable with a relatively low rate payer base. (Ruapehu District Council)

Twenty-four (24) submitters (13%) were concerned about local authorities' capacity, capability or role.

The expertise to do this properly is not generally available within Councils. (Individual submitter)

Eighteen submitters (10%) commented the proposals were not justified by the risk.

Excessive cost for minimal (probably "no") return. (Individual submitter)

Thirteen submitters (7%) commented the proposal should not apply in low risk areas.

Not in Auckland or north of Auckland having regard to the risk. (Building owner)

Q2: Do you think five years is a reasonable and practical time to require local authorities to carry out assessments in their districts?



Q2 Yes responses

One hundred and ninety-six (196) submitters (37%) agreed that five years is a reasonable and practical time to require local authorities to carry out assessments in their districts. Of these, 159 submitters (81%) did not provide a reason.

Some submitters qualified their support for this proposal. Fourteen submitters (7%) commented the proposed timeframe was reasonable provided there was sufficient workforce capacity.

Yes five years is a reasonable time to carry out assessments provided resource capacity exists. (Tasman District Council)

Twelve submitters (6%) commented the proposed timeframe was reasonable depending on the detail of the assessment.

Yes. The nature of the standard methodology that is to be developed by central government for the seismic capacity assessment will be important in order to meet these timeframes. The present IEP (Initial Evaluation Procedure) system is too complex and needs modification if this is the type of methodology that will be adopted. (Christchurch City Council)

Nine submitters (5%) commented that the proposed timeframe was reasonable as long as the assessment was a preliminary assessment.

Yes this is a reasonable timeline, we have found that building owners want to know where they stand in relation to this issue and the assessment gives them an indication. Council agrees with this timeline on the assumption that Council staff can undertake the assessment and that a professional engineer is not required to undertake this initial assessment. (Opotiki District Council)

Q2 No responses

Two hundred and forty-seven (247) submitters (45%) did not agree that five years is a reasonable and practical time to require local authorities to carry out assessments in their districts.

Submitters provided a number of reasons for why they disagreed with the question. Sixty-nine submitters (28%) commented they had concerns about council and sector capacity and capability.

The five year time frame for seismic capacity assessments is unlikely to be achievable due largely to a lack of qualified engineers. (Local Government New Zealand)

Sixty-eight (68) submitters (28%) commented that more time was needed.

The timetable is too tight for business and landlords to be able to adjust to the additional costs that will be associated with this policy. We ask that <the> policy requires an assessment of New Zealand's built stock and its compliance status over the next 5-10 years by the local Councils. (Onehunga Business Association)

On the other hand, 20 submitters (8%) commented the assessments should be done faster.

Three years would be a reasonable amount of time. (Building owner)

Thirty-one (31) submitters (13%) commented rather than a set timeframe, the timeframes should be staggered (e.g. based on age and/or use and/or risk profile).

The assessments should be carried out to a programme that is identified in the "Risk Management Framework". Under the "Risk Management Framework" programme it is possible that the most critical buildings in high seismic regions will be assessed well within a 5-year period, whereas other, less critical buildings, may require a longer timeframe because of resource constraints. The "Risk Management Framework" will also identify appropriate resources, the development of best practice processes, and training requirements to achieve an inventory of building seismic capacity that the public can have confidence in. (New Zealand Society for Earthquake Engineering)

Nineteen submitters (8%) had concerns about potential costs.

The proposal that Councils should undertake seismic assessments of all buildings within five years is economically challenging. The proposed accountabilities are concerning as they create a liability for Councils. We believe this will ultimately create a cost to our community over the five year period also. These are costs which will need to be recovered through rates or user pays. (Southern Councils)

Proposal 2: Assessments would be prioritised faster for certain buildings (e.g., buildings on transport routes identified as critical in an emergency).

The Royal Commission recommends that local authorities complete assessments within two years of the effective date of the law change for all unreinforced masonry buildings in their districts, and within five years of the effective date of the law change for all other earthquake-prone buildings. (Recommendation 82, Vol. 4, Final Report)

Proposal two was generally supported by submitters.

However, views were mixed in response to the Royal Commendation recommendation that unreinforced masonry buildings (URMs) be prioritised for assessment. Forty-two per cent (42%) agreed, with some submitters commenting that URMs present a high risk, while others commenting that URMs be prioritised based upon the experience of Christchurch.

Thirty-eight per cent (38%) did not support the recommendation. Some submitters commented that building assessments should be prioritised by risk or consequence, regardless of construction.

Q3: Should unreinforced masonry buildings be assessed faster than other buildings?



Q3 Yes responses

Two hundred and twenty-three (223) submitters (42%) agreed URMs should be assessed faster than other buildings. Of these, 149 submitters (67%) did not provide a reason.
Forty-one (41) submitters (18%) commented URMs should be prioritised because they are higher risk.

Yes. Clearly URMs (Unreinforced Masonry Buildings) collectively pose a greater risk than other categories of buildings. Generally they will be earthquake-prone and consequently the assessment of URMs should be relatively simple and uncontested. Faster assessment of these buildings will also better identify hazardous elements that the Royal Commission recommended should be immediately addressed. (Christchurch City Council)

Eight submitters (4%) commented URMs should be prioritised based on the experience of Christchurch.

Support that critical buildings (i.e. unreinforced masonry – brick façade) are assessed within 2 years. Given the evidence from the Christchurch earthquakes these types of buildings were one of the highest causes of death and identifying and reducing this hazard would have wide community benefits from a life safety perspective. (Westfield New Zealand Limited)

Some submitters qualified their support. Fourteen submitters (6%) commented that URMs should be prioritised if they have particularly vulnerable features.

The Royal Commission recommends unreinforced masonry buildings be a priority and intuitively this seems sensible. However, it tended to be the certain features of these buildings that caused the most risk (external ornaments, parapets etc) and loss of life in Canterbury. Given this prioritising these aspects should be considered. (Registered Master Builders Federation)

Q3 No responses

Two hundred and three (203) submitters (38%) did not agree that URMs should be assessed faster than other buildings. Of these, 152 submitters (75%) did not provide a reason.

Forty-seven (47) submitters (23%) commented that building assessments should be prioritised by risk or consequence, regardless of construction.

Timaru District Council considers that building assessments should be risk based (and assessed by the building owner using an appropriate and standardized methodology) as opposed to prioritising by building type or construction method. (Timaru District Council)

Q4: What costs and other implications do you see with these proposals to assess the seismic capacity of buildings?

Three hundred and fifty-eight (358) submitters responded to this question. Of these, 112 submitters (31%) commented they had concerns about the potential costs of the assessments.

There is a large cost for local government generally and its rate payers in undertaking this work. (Christchurch City Council)

Fifty-seven (57) submitters (16%) identified multiple cost impacts of the proposals.

There are a number of costs and implications involved with these proposals, these include: Availability of sufficient structural engineers to undertake assessments of buildings – both for local authorities and owners; Financial cost to local authorities to set up and undertake both the desktop review and IEP assessments e.g. Training, employment of staff, etc. Some possible ways of reducing these costs could include: Using existing seismic assessments undertaken by owners; Making owners/developers responsible for undertaking detailed assessments as part of their consent process; Have Central Government provide either a grant scheme or funding to undertake detailed assessments particularly for URM Buildings. (Victoria University of Wellington)

Thirty (30) submitters (8%) had concerns about workforce capacity/capability.

Lack of manpower and staff. (Individual submitter)

Twenty-two (22) submitters (6%) had concerns about impacts on building values or other general economic concerns.

It would cripple many provincial towns and cities if buildings with low ratings were required to be vacated as in many of these areas it would be totally uneconomic to strengthen them to a level greater than 33% and even that would be out of the question for many as the rents are so low yet the costs so high destroying the character of many of these places and many of the business that can't afford a higher rental, further threatening the viability of many of these already marginal communities. (Building owner)

Twenty submitters (6%) had concerns about the potential loss of heritage buildings.

The risk that we could lose many of our heritage buildings because owners do not see strengthening as cost effective. (Individual submitter)

Twenty submitters (6%) commented that the costs of the proposals were not justified by the risks.

This is a huge drain on taxpayer money for no measurable benefit. (Individual submitter)

On the other hand, 17 submitters (5%) commented that the proposals were likely to have a low or manageable cost impact.

The assessment costs should be manageable, the remediation less manageable. (Individual submitter)

8.2. Public register

Proposal 3: Assessments would be prioritised faster for certain buildings (e.g., buildings on transport routes identified as critical in an emergency).

Most submitters supported the proposal to enter information about buildings into a publicly accessible register maintained by MBIE. There was also general support for entering information in addition to the building's seismic capacity into the register. Submitters expressed mixed views about whether or not any additional information should be publicly disclosed.

There is a good case for Government creating a system of technical information sharing and creating a reservoir of best practice. Allowing all parties to access this freely would have positive benefits for relatively little cost. (New Zealand Chambers of Commerce)

The NZHPT supports improved access to information about earthquake-prone buildings and the development of a national public register. Currently, public information about earthquake-prone buildings varies widely around New Zealand with some territorial authorities having developed very accessible information registers while others provide no information to the public. (New Zealand Historic Places Trust)

Q5: Do you agree that local authorities should be required to enter information on the seismic capacity of buildings into a publicly accessible, central register to be managed by MBIE?



Q5 Yes responses

Two hundred and seventy-seven (277) submitters (52%) agreed local authorities should be required to enter information on the seismic capacity of buildings into a publicly accessible central register to be managed by MBIE.

Nearly two-thirds of these submitters (179) did not provide a reason.

Twenty-nine (29) submitters (11%) commented the information gathered for the register would be useful to a wide range of users (such as investors, tenants, lenders, and insurers) and able to be used for multiple purposes (e.g. local government planning, and national monitoring and evaluation).

Having [this information] publicly accessible would provide transparency and useful information to the public and tenants. It would also enable MBIE to monitor the state of buildings across the country, assisting with policy making and safety. (Property Council New Zealand)

In addition, 9% of submitters believed that it would be more efficient and effective to have a national earthquake-prone building register because this would result in information that is more consistent.

Council supports the creation and maintenance of a central earthquake-prone building register as it is likely to be the more efficient and effective means of ensuring consistent and up-to-date information is available to the public. (Hastings District Council).

Many submitters qualified their support for this proposal. Thirty-three (33) submitters (12%) expressed concerns about the likely quality of the data the register would hold, or the need to keep this information up to date.

IPENZ supports disclosure in principle, but has concerns about the public disclosure of poor quality assessment information. Poor quality data may impact on property values and insurance, and these impacts may be immediate. (Institution of Professional Engineers New Zealand)

Seventeen submitters (6%) questioned whether local authorities have the expertise to carry out the assessments or manage the register. Some submitters highlighted the need to build in a review mechanism that would allow building owners to challenge a local authority assessment, add information from their consultant engineers, or to agree a building's status by consensus.

The building owner must have a reasonable time to provide a more detailed assessment which might challenge the earthquake-prone status. We recommend a year for this to ensure that information entered into a publicly accessible, central register are final assessments as agreed by owners and local authorities. (The Architectural Centre)

Fifteen submitters (5%) suggested local authorities should hold the register or that the information is placed on documents that local authorities already produce or hold, such as Land Information Memoranda (LIM) or a Building Warrant of Fitness (BWOF).

OWCT agrees that local authorities should be required to enter the information on the seismic capacity of buildings into a publicly accessible register but that it is accessed through Council LIM reports. A central register is an unnecessary additional layer of bureaucracy. (Oamaru Whitestone Civic Trust)

If the information is going to be publicly accessible on a register, the Government should also give direction about having the information put on LIMs and [Project Information Memoranda] PIMs, where prospective buyers would be looking for the information. (Hurunui District Council)

...any buildings in public use are required annually to complete a Warrant of Fitness to confirm that they are properly serviced and maintained for the purposes of human safety. Perhaps in the future their earthquake-prone status could be included and all relevant data entered into a publicly accessible register. The compliance status of a building could then be easily accessed by the public. (All Churches Bureau)

Ten submitters raised concerns about cost.

Actually a qualified yes, with financial assistance from MBIE/central government, then a central register is fair and sensible. Without financial assistance this is yet another cost to local district ratepayers that may not be for the benefit of the district. (Individual submitter)

Nine submitters raised concerns about the impact of a register on a building's value or on the behaviour of the property market.

Such information potentially affects property values. (Auckland Civic Trust)

Other costs that could be incurred in the situation where a tenant becomes nervous about being located in an [earthquake] prone building and chooses to break their lease, the building having been labelled as [earthquake] prone now becomes much harder to rent and of course to insure. (Building owner)

Q5 No responses

One hundred and forty-eight (148) submitters (28%) did not agree local authorities should be required to enter information on the seismic capacity of buildings into a publicly accessible central register to be managed by MBIE.

Submitters provided a variety of reasons for why they disagreed. Forty-seven (47) submitters (32%) preferred local authorities to hold the register or incorporate the information it would contain into existing, publicly accessible council documents.

This is plainly local authority business and does not require a central register. The role of central government agencies should be limited to developing and specifying assessment standards and protocols. (Individual submitter)

This is an issue for Territorial Authorities and any relevant information regarding the seismic loading of any building subject to upgrading (or demolition) should form part of a LIM report. (Individual submitter)

In addition, 12 submitters felt the area's seismic risk should inform whether or not a particular local authority needed to input into an earthquake-prone buildings register.

It should only be a requirement in high earthquake risk areas. A blanket approach to the whole country is not necessary. (Individual submitter)

Twenty submitters (14%) questioned whether this register would encourage the strengthening of earthquake-prone buildings, ensure public safety, or provide any benefit for the public overall.

The ICA understands the proposed central register is a response to a perceived need for greater levels of transparency and easily accessible information on the earthquake strengthen of buildings. That said we have low confidence that a database (or multiple if they are mirrored in some way at the local government level) will be maintained to a sufficient standards that would allow it to play this role in any meaningful way. (Wellington Inner City Residents and Business Association)

Who in rural areas will look at it? This information should be available only for certain buildings. (Individual submitter)

Twenty-five (25) submitters (17%) gave potential costs as a reason they did not support the development of a national earthquake-prone buildings register.

The costs of establishing and maintaining a register may be difficult to support in comparison to say quarterly reporting to a set template from Councils. (Waimakariri District Council)

Twenty-five (25) submitters (17%) also suggested the risk of an earthquake occurring did not justify the cost to establish and maintain a register.

There is no register for tsunami risk buildings, leaky buildings or buildings with other risks so I see no reason why should there be a register particularly for this low level risk factor, and it could cause a multitude of unintended consequences. (Building owner)

Twenty-four (24) submitters (16%) discussed the impact a publicly accessible national register would have on a building's value, including on the wider economy.

If such a central registry is created it will be the subject of much controversy as people argue that their buildings have been maligned and their businesses irreparably damaged. (Individual submitter)

This will have huge negative impacts on property values and raise undue concerns with the public. (Building owner)

Twenty-three (23) submitters (16%) suggested the public might have trouble understanding how buildings were assessed and what the resulting ratings would mean. Some submitters who supported the question also had concerns about this.

Data on the seismic capacity of a building is not the same as information on the risk of harm...The stickering/placarding system in Christchurch is an example of the risk of such a system, where information provided was easily misinterpreted and gave people unrealistic expectations of building safety. (Dunedin City Council)

Twenty-two (22) submitters (15%) commented that any register needed to contain accurate data that should be kept up to date.

Too much potential for badly managed data which could create unnecessary fear in the public. (Individual submitter)

This would place further responsibility on Council which could result in litigation if the information is not current or accurate. (Central Hawkes Bay District Council) Eleven submitters (7%) also raised concerns about both local and central government committing resources to produce the same information. Others commented it would be difficult to gather complex, locally-based information together efficiently.

Whangarei District Council does not support this proposal. Building information is already available on the property file and is readily accessed as part of: LIMS, PIMs and public enquiry. The duplication of this information needed by Council to produce these items would result in double handling and greater risk of information mismanagement. (Whangarei District Council)

The information is best retained locally with MBIE overview of the process. Otherwise the list gets dominated by larger city buildings and becomes cumbersome. (Engineer)

Q5 Out of scope responses

A small minority of submitters commented a register should be for buildings that are not earthquake-prone, to act as an incentive for building owners who need to strengthen their building.

There should be a national register, but for buildings which are assessed to *exceed* 33% NBS. Then it becomes an incentive for building owners to have their building listed on the register, rather than a stigma. Otherwise there would be issues with keeping the register up to date as strengthening work was completed. (Individual submitter)

A small minority of submitters raised editorial issues with this question.

Q6: Should information other than a building's seismic capacity rating be entered into the register – for example, agreed strengthening actions or information from an agreed building ratings system?



Q6 Pie chart

Q6 Yes responses

Two hundred and thirty-four (234) submitters (44%) agreed information other than the building's seismic capacity rating should be entered into the register. Of these, 100 submitters (43%) did not provide a reason.

The public have a right to know what buildings are to be strengthened and action and timelines. (Individual submitter)

Acquisition of this information is being paid for through taxes and rates, and the information is of public interest, so the information must be freely available to the public. (Individual submitter)

Twenty-six (26) submitters (11%) commented the information contained in the register would be useful to the general public, particularly the financial services industry.

The more information in the public domain the better. That information will help building purchasers make better decisions. (Individual submitter)

...a national register of completed strengthening works would be extremely useful for the public, valuers and the insurance trade as a reference point. (Gisborne District Council)

They also discussed how the information on the building gathered before an event would assist evaluators when buildings are damaged in a disaster.

Having this available in the event of an emergency will enable informed decisions to be made on retention or demolition of any building. This can then be done irrespective of the experience in heritage management of the personnel involved. (Wellington City Council)

Forty-five (45) submitters (19%) felt the register should set out the strengthening plan proposed for each building.

It may be possible to enter at least agreed timeframes over which action is to be taken, so that these dates are likely to be adhered to and are available for prospective tenants or purchasers to complete longer term planning. (Structural Engineering Society New Zealand)

Thirty-seven (37) submitters (16%) suggested the register contain a wide variety of information gathered during the building's assessment.

Specific information relating to the buildings performance e.g. it is the parapets that are the biggest risk with this building. (Individual submitter)

If a register were created in the event of more earthquakes it would be useful to know which strengthened to, what materials were used, what glues/bolts/bracings etc. (Building owner)

Twenty-six (26) submitters (11%) thought this should be supplemented with a description of any strengthening work that had been carried out on the building.

If an initial assessment is added to the register then any actions should be as well so that the information is current. (Individual submitter)

Ten submitters thought that the register should record formal confirmation of this work.

A summary of the remedial action taken and a certification of the resulting improved earthquake resistance. (Individual submitter)

Once a building has been strengthened to the minimum standard or has been demolished it should be removed from the register to prevent any confusion. (Individual submitter)

Some submitters also proposed setting out who had done any strengthening work, and when, including the contact details of the building owner or relevant building professional.

A register...should include the results of the assessments, any further assessments and any actions to improving the risk or removing the risk. It should include the details of the engineers that have carried out the assessments, strengthening designs and the timeframes agreed with the Council. (Individual submitter)

Submitters also suggested that the register contain other information about the building. Nineteen submitters (8%) proposed including information about the seismicity and other hazards the building has resistance to.

I consider the register should include basic hazard data specific to the site – so the other risks are kept in perspective. (Engineer)

A small minority of submitters suggested that the register include information about the building's accessibility, how "green" it is, fire egress and other emergency planning, and its heritage status.

Information recorded should include the following headings:

(a) Fire safety

(b) Disabled access and facilities i.e. "Accessibility"

(c) Earthquake risk status condition (as per this report)

(d) Presence of hazardous substances, e.g. Asbestos

(e) Statutorily recognised Building Conditions, viz "Dangerous and/or Insanitary" Building status. (Fraser Thomas Limited)

Although they favoured the register containing more information than the building's seismic capacity rating, four submitters did not want the register to set out the building's strengthening plan.

In addition to those who opposed including wider information, 17 submitters (7%) who thought that the register should contain more information than the building's seismic capacity rating contended that this information should be incorporated into existing, publicly accessible, council documents to avoid duplication of the same information.

You do need to be mindful that this information should form part of the LIM report together with the Project Information Memorandum (PIM). (Individual submitter)

Q6 No responses

One hundred and seventy-seven (177) submitters (33%) did not agree that information other than the building's seismic capacity rating should be entered into the register. Of these, 90 submitters did not provide a reason.

Twelve submitters (5%) believed including more information would not be of benefit, encourage strengthening, or ensure public safety.

We do not see any public benefit from doing this. (Feilding Promotion)

Potential costs were a major reason that submitters did not favour including other information in any register. To avoid the costs of duplicating information, 20 submitters (9%) suggested information about an earthquake-prone building should be incorporated into existing, publicly accessible, council documents.

Details of a building's strengthening plan and undertaken work will already be entered on the respective council's property file and should be sufficient to maintain this information. For a small fee interested parties can pay for a LIM or obtain the Council property file which will give them this information. The present system works well. (St James Apartments Body Corporate)

Fifteen submitters (6%) expressed concerns about the costs of gathering and storing information.

Building users (i.e. non-technical people) would require any technical information in the database (e.g. identified structural weaknesses or features) to be easily understood to be useful. This would be resource intensive and costly. (Wellington Inner City Residents and Business Association)

Submitters also raised possible issues with the information requirements for the assessment process. Seventeen submitters (7%) raised concerns about the accuracy of information held by the register.

...there would be the problem of the consequences of inaccurate or wrong information. (Individual submitter)

Nearly 5% of submitters felt that the information in the register should be clearly defined, limited, and understandable.

Any details kept need to be meaningful and measureable otherwise they are of no value. (Individual submitter)

A small minority of submitters highlighted inconsistencies and other issues with current engineering assessment methods.

We do not believe that it would be possible to establish a database that would report consistently on all building strengthening proposals. Similarly, just because one "expert" provided one proposal, another expert may provide a different assessment/proposal. We do not see how differing proposals could be adequately contained in the one standardised database. (Body Corporate Chairs Group)

Thirteen submitters (6%) opposed the inclusion of other information on privacy grounds, while others pointed out that this information is likely to be commercially sensitive.

It is the University's view that detailed information on buildings should only be released at the discretion of the building owner, due to commercial sensitivity concerns. (Massey University)

Q7: Rather than a central register, should local authorities be responsible for both collecting and publishing this information?



Q7 Pie Chart

Q7 Yes responses

One hundred and thirty-four (134) submitters (25%) agreed rather than a central register, local authorities should be responsible for both collecting and publishing this information.

The majority of these submitters considered giving local authorities this responsibility is more efficient than developing a national register. Forty-eight (48) submitters commented local authorities are better placed to understand the buildings in their area.

Local councils know their city and community – and the information is usually needed locally and not from a central source. Keep it simple. (Individual submitter)

A central register could be cumbersome and potentially confusing when buildings in different towns have near identical addresses. The information is best handled locally with some central oversight to ensure all are doing their job. (Individual submitter)

Fifty-four (54) submitters (40%) suggested local authorities have already collected and published this information into existing council documents such as the Land Information Memoranda.

Local authorities already hold all relevant information about buildings in their catchment area...Local authorities are already the statutory custodians of the records for buildings (New Zealand Law Society)

Eighteen submitters (13%) commented it would be easier for people to access the information from their local council.

Local people know local situations and are usually more accessible to those who wish to consult with them. (Individual submitter)

Professionals in the industry expect the information about buildings to be held locally. (Individual submitter)

Thirteen submitters (10%) also commented collating the information nationally would be too complex and costly.

Local authority control will be simpler and cheaper. A central register will lead to duplication and additional cost. (Individual submitter)

Some submitters proposed that information on earthquake-prone buildings should be held by local authorities but its collection, storage and public availability should be governed by a national framework.

The register should be local in nature. There seems little point in having the information available nationally. However all councils should collect and record data to an agreed national standard. (Individual submitter)

Ten submitters (7%) suggested both national and local government should develop a register, with shared information. Alternatively, 11 submitters (8%) proposed the information be collected and stored nationally with input from local authorities.

Given a council's access to local information, it is logical for them to be responsible for collecting the information and passing it on to MBIE. While we support the concept of councils making information available to the public, for consistency the register needs to be managed by MBIE. (Wellington City Council)

Q7 No responses

Two hundred and sixty-one (261) submitters (49%) did not agree local authorities should be responsible for both collecting and publishing this information. Of these, 190 submitters (73%) did not provide a reason.

Fifty-two (52) submitters (20%) commented that a central register or national management of locally-held registers is more efficient and effective than each local authority developing its own earthquake-prone buildings register.

IAG does not favour each authority developing a separate register, as this creates the risk of introducing inconsistencies in the information collected and will make obtaining a consolidation of [a] national view less efficient. (IAG)

Other submitters suggested that it was not a local authority's role to collate or publish information on earthquake-prone buildings.

Local Authorities are already required to collect information pertaining to buildings in their district. If the responsibility for notifying the public of earthquake prone buildings was placed on the building owner, why should Local Authorities need to publish such information? (Tasman District Council)

A minority of submitters raised concerns about who would be accountable (or legally liable) for this public information.

This would place further responsibility on Council which would result in litigation if the information is not current or accurate. Purchasers or lessees of property should be encouraged to carry out their own due diligence. (Hurunui District Council).

Q8: Should there be any other information disclosure requirements – for example, should building owners be legally required to display information on the building itself about the building's seismic capacity?



Q8: Pie Chart

Q8 Yes responses

One hundred and ninety-five (195) submitters (36%) agreed there should be additional information disclosure requirements. Sixty-seven (67) of these (34%) proposed publicly disclosing additional information about earthquake-prone buildings to ensure the public is made aware of a building's status so that they can make an informed decision about whether or not to enter it.

Absolutely I think this would enable the people to make a conscious choice about entering that building at their own risk, so that if something happens they can not put the responsibility on the owner. (Individual submitter)

Many of us are happy to go into historic buildings at our own risk...Enter and enjoy at your own risk. (Individual submitter)

Twenty-three (23) submitters (12%) commented the building's occupants or users would also become aware that it was earthquake-prone.

If there is any doubts of the building's integrity, it should have public disclosure posted clearly and all tenants made aware of impending works required. (Individual submitter)

Submitters also suggested that publicly disclosing additional information would clarify the risk the building poses in an earthquake, inform financial and property market decision-making, and incentivise owners to upgrade.

I feel that anyone walking into (or deciding to rent or buy) any earthquake prone building in the country is entitled to know the risks they are taking. I live in an earthquake prone building in Wellington Central. It has been valuable information for me to know the status of this building. I will not live here again next year and know others plan to do the same. (Individual submitter)

Information on seismic capacity should be available on-line and displayed on the building itself because...it allows market forces to operate and creates an incentive for building owners to upgrade their buildings. This is especially important where the financial incentive is low, such as in Wanganui. (Wanganui Earthquake-prone Buildings Community Taskforce)

Some submitters described the type of information they thought should be publicly disclosed.

It is considered that this display of information on a building is just as, if not more important that having this information available on a register. Many people, especially those from outside the district and overseas may not know about the seismic issues or how to access a register but if they choose to enter a building they will see the earthquake-prone status provided it is required to be placed in a prominent position, written in plain English and using appropriately recognisable symbols. (New Plymouth District Council)

Thirty-seven (37) submitters (19%) favoured the disclosure of a simple statement of a building's status, a rating, a grade, or where in a performance band the building falls.

It is recommended that the building owner be required to display a public notice on the building identifying the earthquake resistant capacity of the building in a standardized form. The information displayed should be in "plain English", which includes the seismic rating of the building as well as vulnerable features. (New Zealand Society for Earthquake Engineering)

Very simple colour-coded information that allows people to make an immediate, informed decision on entering or using the building. (Individual submitter)

Thirty (31) submitters (16%) suggested the seismic capacity of the building, typically expressed as the percentage of the new building standard should be disclosed.

The building's ability to resist quakes needs to be presented in both the context of the local seismic risk, and in a way that the average person can comprehend. Something like: "This building has been assessed at 25% of New Building Standard. In this locality a building rated at 25% would be expected to experience a quake strong enough to destroy it about once every [insert correct number] of years." (Individual submitter) However, a minority of these submitters (4%) explicitly excluded disclosure of the percentage of new building standard, mainly due to concerns that people would not understand what this actually meant and overreact to the risk the building posed in a moderate earthquake.

Seismic status is not as straight-forward as a percentage figure and the veracity of the final seismic rating figure can be challenged by other engineers – there is therefore little use in publishing one defining figure. However, bands of seismic capability indication can be indicated...(New Zealand Institute of Architects)

Other information submitters proposed disclosing include:

- the building's assessment and required strengthening (7%)
- proposed strengthening plans (4%), and
- strengthening work that has already been completed (4%).

Submitters also commented on where the information should be displayed. Onehundred and nineteen (119) submitters (61%) commented the information should be displayed on an official notice placed on the building.

Council supports a national identification system on building such as the 5 star rating system used for power consumption to let building users know it's likely performance in a moderate earthquake. (Matamata Piako District Council)

There should be a standard assessment (the DEE report) requirement resulting in a building structural certificate being displayed prominently at the entrance of every commercial or public building. This is the only thing that allows employees and the public to be adequately informed. The register is not enough. (Individual submitter)

Forty-one (41) submitters (21%) thought that this information should be added to the annual Building Warrant of Fitness that must be publicly displayed on most public buildings.

Twenty submitters (10%) suggested that the notice show a simple statement of a building's status, a rating, a grade, or where in a performance band the building falls: most of these submitters favoured using a star rating system. Other submitters gave examples of similar notices that could be used as templates.

A simple rating, but using an intelligible scale that is self explanatory. It should be realistic to convey the risk (or lack of). (Individual submitter)

Colour coding or star rating should be considered with relevance to methods already used in other countries. (Queenstown Lakes District Council)

We envisage a system similar to the BWOF system whereby building owners are legislatively required to display, in a public part of the building, information related to the seismic capacity of the building along with information on the certification of the building systems. (Wairoa District Council)

A nationally agreed system should be implemented so that all users of buildings have some knowledge of the risks they are exposing themselves to, no matter how low those may be. When eating at a restaurant you know the hygiene rating of the establishment e.g. A, B, C etc. There is more risk eating at a lower rated eatery. The same should apply with respect to living, working or visiting a building. (Individual submitter)

Q8 No responses

Two hundred and twelve (212) submitters (40%) did not agree there should be any other information disclosure requirements. Of these, 170 submitters (80%) did not provide a reason.

Fourteen submitters (7%) commented the risk associated with these buildings was overstated compared to other risks.

As an earthquake-prone building is not by definition dangerous except in rare events, the use of warning labels/placards is out of keeping with relative risk in our environment. Things that pose a daily hazard; chemical, hazardous places, dangerous buildings, are what we justifiably warn people of by displaying prominent warning signs. (Individual submitter)

Twelve submitters (6%) expressed concerns about how well the public would understand any risk associated with an earthquake-prone building, the assessment process used, and any notice of a rating placed on the building.

It's far too complex an issue and a simplistic public would quite erroneously be guided by a simplistic rating. (Individual submitter)

A small minority of submitters commented market factors were already encouraging owners to make this sort of information public, so there was no need to require its disclosure.

RMBF believes that the reaction of the market to driving change should not be under estimated. Already we have seen a significant increase in public awareness of earthquake impacts with NBS percentages now common place in the marketing of commercial buildings. (Registered Master Builders Federation)

Q9: What costs and other implications do you see resulting from the proposal to put seismic capacity information in a register?

Three hundred and thirty-five (335) submitters (63%) responded to this question. Of these, 82 submitters (25%) felt that a publicly accessible national register would impact on the value of an earthquake-prone building, leading to flow on effects on the behaviour of the property market, the profitability of businesses, and the wider local and national economy.

A public register should result in the market making the necessary price adjustments to factor in the true cost of seismic risk and legislative liability for upgrading. There is also the potential that the market may over price seismic risk issues in buildings leading to excessive drops on value that could be attributed to seismic "stigma." (Individual submitter)

Obviously will influence the sale price of the building on the register if not strengthened. Again this could lead to instances of owners walking away from

buildings resulting in demolition by neglect at the general rate payers' costs. (Individual submitter)

Some submitters discussed the cost impacts of the proposal. Thirty-nine (39) submitters (12%) commented the cost impacts resulting from the development and release of a public, national earthquake-prone buildings register would be low. Nineteen submitters (6%) thought that the benefits would offset any cost impacts.

No doubt it would be costly to keep the register but it isn't always about cost. (Individual submitter)

Of course it will cost money, but it must be done as a national risk management strategy, to reduce the risk of more earthquake related deaths in future. (Individual submitter)

Similar numbers of submitters expressed the opposite view. Thirty-six (36) submitters (11%) contended a register would have significant costs and wider impacts. Thirty-two (32) submitters (10%) felt the costs and impacts of the proposal were not justified by the risk.

Considerable costs and little benefit as the layman will not understand or will misinterpret the information. (Individual submitter)

An unnecessary cost on businesses, providing information that does not correctly represent the real danger to persons. The roads are a lot more dangerous!! (Building owner)

Submitters also described the costs they thought would arise from a register. Sixtyone (61) submitters (18%) specifically mentioned the costs associated with setting up and maintaining a register. Submitters also mentioned the costs of assessing buildings and the costs of strengthening.

Allocated funding would be required for the recreation of a centralised Risk Register, including annual funding for the allocation of Ministry support staff to deal with enquiries and provide guidance to local authorities on the administration of seismic policy. (University of Waikato)

Thirty-nine (38) submitters (11%) expressed concerns about potential set-up and maintenance costs for a register of earthquake-prone buildings.

Who bears the cost of forming and running the register? (Individual submitter)

The expense of setting up a new register, creating the IT mechanism to link many different systems may not be significantly better than a reporting system. The value of a "live" register (such as the National Dog Database) as opposed to a regularly updated one is hard to justify where the asset registered is fixed in location and change does not rapidly occur. (Waimakariri District Council)

Other submitters commented on a number of other costs they felt would arise from the proposal. They expressed concerns about compliance costs and costs associated with challenging any official assessment, either through the courts or using a review process (which would also need to be set-up).

It is likely central and local government will seek to pass on administration cost. Most leases state that the lessee is liable for statutory requirement costs than structural, so these are likely to be passed on to lessees. (Individual submitter)

Liability issues (from assessors) must be addressed, or the publication of outcomes is likely to lead to the assessments being over-conservative. (Structural Engineering Society New Zealand)

If a local authority made an assessment that was inconsistent with that made by the building owner or insurer it is likely that the assessment would be challenged. This may result in legal action either from the building owner or their insurer depending upon the assessment outcome and which position it favoured. (University of Canterbury)

Forty-five (45) submitters (13%) expressed concerns the register would contain inaccurate, out-of-date information that could stigmatise a building. Others raised concerns about issues with current assessment methods.

WELL submits that it is important to keep the register up to date as the building owner moves through the process of completing and agreeing the assessment, developing and agreeing the work plan and then getting the remediation work completed. If the register is out of date this could have negative financial consequences for the building owner (if, for example, the public is not prepared to rent space or enter the building. (Wellington Electricity Lines Limited)

Forty-seven (47) submitters (14%) suggested the proposal would negatively affect building owners. Other submitters thought that the proposal would impose costs and otherwise impact on the occupants and users of earthquake-prone buildings, local authorities and tax- and ratepayers.

Enormous cost to building owners in terms of perception of resale value. (Individual submitter)

While the financial cost may be manageable the cost to owners in having vacant buildings and to communities in loss of rates on vacant buildings could be significant. (Old Town Properties)

Some submitters felt that these impacts would arise partly because of the way that the public understands the risk posed by earthquake-prone buildings. Fifteen submitters (5%) expressed concerns about the way that the information in the register could be (mis)used.

Data on the seismic capacity of a building is not the same as information on the risk from harm. There is a danger that if not carefully managed, data may be used irresponsibly and create unnecessary fear in the public. (Dunedin City Council)

Twenty-seven (27) submitters (8%) commented there was a general lack of understanding about risk and the technical assessments that underpin a building's earthquake-prone status. Some of these submitters highlighted the need for education on these topics.

It is of critical importance that the more the base information is made public, the better and more comprehensive the guidance documentation will need to be to prevent uninformed decision making around the issue. (Auckland Council)

8.3. A mandatory national requirement

Proposal 4: The current earthquake-prone building threshold (one-third of the requirement for new buildings, often referred to as 33% NBS) would not be changed. However, it is proposed to establish a mandatory national requirement for all buildings to be strengthened to above the current threshold, or demolished, within a defined time period.

The Royal Commission's view is the same as the conclusion in these proposals that, in general, the current earthquake-prone building definition should be retained. To quote its report: "Overall, we do not consider that the experience of the Canterbury earthquakes should lead to the abandonment of the current one-third rule, which we have concluded should remain as the appropriate standard." (Section 7.4.1, Vol.4, Final Report)

There was general support for the proposal to establish a mandatory national requirement for all buildings to be strengthened to above the current threshold, or demolished, with a defined time period. Fifty per cent (50%) of submitters agreed to retain the current earthquake-prone definition, while 28% disagreed.

Yes we consider that this provides the right balance. There is evidence from the Canterbury quakes to show that many buildings above 33% performed relatively well. On this basis, 33% should be considered reasonable. (Wellington City Council)

The retention of the 33% new building standard is welcomed. (Southern Councils)

Of those who disagreed, some submitters contended the national standard should be higher, while others commented it should be more dynamic, incorporating different elements of risk.

Furthermore, some industry body submitters raised concerns about the current earthquake-prone building definition.

Q10: Does the current earthquake-prone building threshold (33 per cent of the requirement for new buildings) strike a reasonable balance between protecting people from harm and the costs of upgrading or removing the estimated 15,000-25,000 buildings likely to be below this line?



Q10 Yes responses

Two hundred and seventy (270) submitters (50%) agreed the current earthquakeprone building threshold strikes a reasonable balance between protecting people from harm and the costs of upgrading or removing the estimated 15,000-25,000 earthquake-prone buildings. The majority of these submitters (174) did not provide any reason.

Thirteen submitters (5%) commented the market is pushing higher than the current earthquake-prone building threshold of 33% of the requirement for new buildings.

...the effect of market forces (such as tenant demand, value erosion and insurance costs) on obtaining a higher standard should not be underestimated. (Registered Master Builders Federation)

Market and other forces may well be driving or encouraging upgrades to the two-third minimum, and if this continues, may render the 33% threshold impotent in the near to medium term. (Hastings District Council)

It is also important to note that over the coming ten years and beyond, a sizable proportion of buildings noted as earthquake prone may undergo a "change of use," in which case they will be required to meet a standard of 2/3 of code or higher. To "future-proof" themselves against further regulatory changes or changes of use, the majority of owners are currently seeking to increase the performance of their buildings to over 2/3 of code. (Dunedin District Council)

Q10 No responses

One hundred and fifty (150) submitters (28%) did not agree the current earthquakeprone building threshold strikes a reasonable balance between protecting people from harm and the costs of upgrading or removing the estimated 15,000-25,000 buildings.

Of these, 43 submitters (29%) commented the current earthquake-prone standard is too low. This included:

- eight submitters who preferred 50% of the requirement for new buildings (5.3%)
- 21 submitters who preferred 67% of the requirement for new buildings (13.9%), and
- six submitters who preferred 100% of the requirement for new buildings (4%).

Forty submitters (27%) commented the current earthquake-prone building threshold should be more dynamic, incorporating different elements of risk (such population density, seismicity of the region etc).

Risk of collapse of the building and dangerous elements of the building need to be considered in the legislation and/or the associated methods of assessment, if they are not adequately addressed already. For example, if a building (even worse, a large building with a high occupancy) has a known potential for catastrophic collapse at loads associated with 50% NBS, this should be considered an unacceptable risk. Similarly if there are building elements known to present a high risk to safety in an earthquake (even if above 33% NBS), these should be addressed. (New Zealand Institute of Architects)

NZGS is concerned that the 33% NBS threshold is obscure and poorly understood. A risk rating would be preferable. The risk assessment needs to include more factors than just the above ground part of the building (such as building importance, occupancy, seismicity, geological hazards, foundation performance, pounding). (New Zealand Geotechnical Society)

Twenty-eight submitters (19%) cited costs as a reason for disagreeing with the current earthquake-prone building threshold.

...areas such as Onehunga have a huge small and medium enterprise base and these businesses are struggling. To push compliance costs onto these entities will cost jobs and peoples livelihood and negatively impact social outcomes...Landlords will pass on any costs to tenants...We need to be realistic where these costs will fall and that is not on the landlord. All costs will be passed onto the tenant. (Onehunga Business Association)

Seventeen submitters (11%) were against a "one size fits all" national standard.

We believe any proposal to address earth quake prone buildings should be based on risk and the "one size fits all approach" should not be implemented on a national basis as is being proposed in this consultation document. (Hauraki District Council)

Seven submitters (5%) commented the current earthquake-prone building threshold is detrimental to rural communities.

In a small community the costs of this exercise far outweigh the benefits, when considering the age of the majority of commercial buildings found in small towns and the low population density the economic and social cost of upgrading/demolishing a large section of a town is not a cost-effective means of reducing the already negligible chance of severe injury or death resulting from an earthquake prone structure. (Ruapehu District Council)

A minority of submitters opposed a threshold linked to a variable standard.

The BCCG's very strong view is that linking the current earthquake-prone threshold to a variable standard is totally inappropriate...Building owners want certainty because of the potentially massive costs that may be imposed in undertaking any major earthquake strengthening. Linking an earthquake-prone building standard to a variable standard would not provide this certainty...We are conscious that any change in the underlying building standards will automatically raise the requirements indicated by a 33% NBS, to the extent that a building that was seen to be, say, 45% NBS at one point in time may be below 33% NBS if there are changes to the building code. (Body Corporate Chairs Group)

Q10 Out of scope responses

Some submitters commented the current definition of earthquake-prone buildings is inadequate.

Our preference is to have an alternative definition that is not solely related to a percentage of the NBS. A proposed new definition for an earthquake-prone building is one that either: is likely to have its ultimate capacity exceeded in a moderate earthquake, either wholly or in part, in a way that may lead to death or injury to persons within or outside the property; or has significant critical vulnerabilities that could result in catastrophic collapse in a major earthquake. (Institution of Professional Engineers New Zealand)

The NZSEE maintains its recommendations, written in the NZSEE2006 guidelines, to try to target 67% NBS, and to at least reduce critical vulnerabilities and modify, as much as reasonably possible, brittle mechanisms so they develop sufficient ductility. (New Zealand Society for Earthquake Engineering)

Q11: Should the requirement for earthquake-prone buildings to be strengthened or demolished take precedence over all other legal, regulatory and planning requirements, such as those designed to protect buildings of heritage or local character?



Q11 Pie chart

Q11 Yes responses

One hundred and forty-eight (148) submitters (28%) agreed that the requirement for earthquake-prone buildings to be strengthened or demolished should take precedence over all other legal, regulatory and planning requirements. Of these, 14 were local council submissions (30% of all local council submissions).

One-hundred and five (105) submitters did not provide a reason.

Twenty submitters (14%) commented safety should take precedence over the retention of heritage buildings.

Our District plan review feedback has indicated that the safety of the public should be prioritised over the retention of heritage buildings but that there still appears to be a need to maintain a "heritage" feel and streetscape. (Manawatu District Council).

A minority of submitters agreed that the requirement for earthquake-prone buildings to be strengthened or demolished should take precedence over all other legal, regulatory and planning requirements because this would keep costs down.

Q11 No responses

Two hundred and fifty-eight (259) submitters (48%) did not agree the requirement for earthquake-prone buildings to be strengthened or demolished should take precedence over all other legal, regulatory and planning requirements. Of these, 22 were local council submissions (48% of all local council submissions).

One hundred and forty (140) submitters (54%) commented that heritage buildings should get special treatment.

Heritage properties are unique and offer significant cultural value that may outweigh the cost of upgrading or demolishing such buildings. (Individual submitter)

Many submitters highlighted the benefit of legal, regulatory or planning requirements. Eighty-two (82) submitters (32%) commented they provide a balance to assess both risk and costs in strengthening.

While the Council supports strengthening and has a long history of seeking to protect heritage buildings, it does want to be able to give city resilience objectives equal, if not more, weight in some circumstances. This should be the case if not strengthening a building also puts other city resilience outcomes at risk (i.e. a high priority heritage building might be strengthened regardless). It is appropriate that a resource consent process (with allowance within District Plans

to enable these trade-offs to be considered) decides on this balance. (Wellington City Council)

Forty-eight (48) submitters (19%) commented legal, regulatory and planning requirements are necessary to protect heritage buildings from being demolished.

What is needed are legislative checks and balances to ensure that building owners are not allowed to undertake wholesale alteration or destruction of heritage buildings. Equally checks and balances to existing rules are needed to facilitate strengthening of key buildings as a viable alternative to demolition. For example, Kapiti District has recently proposed changes to our heritage rules that provide greater flexibility to undertake strengthening works. (Kapiti District Council)

Twelve (12) submitters (5%) commented the community should have input for decisions concerning their heritage buildings.

The over-riding of heritage protection rules should not occur without some corresponding policies to provide for a "community agreed" level of protection for buildings with important heritage or local character values. (Wanganui District Council)

Q11 Out of scope responses

Thirteen (13) submitters (3%) commented financial incentives are needed for strengthening of heritage buildings.

Reforms must account for economic efficiency and affordability. Otherwise many owners will have to abandon their buildings rather than strengthen them. Empowering building owners to undertake earthquake strengthening, by way of appropriate tax policies or other measures may help alleviate affordability issues. (Property Council New Zealand)

A small minority of submitters raised editorial issues with this question.

The Royal Commission recommends that, after consulting with their communities, local authorities be able to require strengthening within shorter timeframes to achieve the minimum standard required by legislation for some or all of the buildings in its district. (Recommendation 86, Vol. 4, Final Report)

It also recommends that, after consulting with their communities, local authorities be able to require higher strengthening standards for:

- some or all buildings in its district, or for
- high importance or high-occupancy buildings, or
- where public funding is to be contributed to building strengthening, or
- where the public safety hazard justifies a higher standard.

(Recommendations 87 and 88, Vol.4, Final Report)

The majority of submitters did not support this Royal Commission recommendation. Only 21 per cent agreed, some commenting there are circumstances where a higher standard for strengthening within shorter timeframes is justified. This included circumstances where buildings of high risk, or buildings of high importance, such as ones that have a critical post-disaster function.

Fifty-five per cent (55%) of submitters disagreed, some of which preferring a national strengthening standard that would be applied equally across the country.

Q12: Should local authorities have the power to require higher levels of strengthening that the earthquake-prone building threshold, or strengthening within shorter timeframes than the legally defined period?



Q12: Pie Chart

One hundred and fourteen (114) submitters (21%) agreed local authorities should have the power to require higher levels of strengthening than the earthquake-prone building threshold, or strengthening within shorter timeframes than the legally defined period. Of these, 26 were local authority submissions (57% of all local authority submissions).

Some submitters provided circumstances where local authorities should be able to require higher levels of strengthening or strengthening within shorter timeframes. Thirty-one (31) submitters (27%) believed such a circumstance could be where the level of risk from harm is high.

...there are certain geographic areas which have an increased risk from natural hazards. In these cases, allowing Councils to require...strengthening within shorter timeframes than the legally defined period means that they can respond more quickly to an imminent risk. (Christchurch City Council)

Only where the TA believes public safety is comprised i.e., dangerous buildings, unstable ground conditions, buildings subjected to aftershocks or previous moderate earthquake activity. (Individual submitter).

...in the case of specific buildings vital to a community, this may make sense. There should be a risk-based prioritisation based on hazard, vulnerability and consequences, and this may mean in some cases that shorter timeframes and higher levels of strengthening are required. Prioritisation also makes sense in terms of the spread of the industry resource. Local Authorities could incorporate factors such as higher importance level into their risk assessment, however we note that the average LA does not necessarily have the expertise to make such decisions. (New Zealand Institute of Architects)

Nineteen submitters (17%) commented that a circumstance could be for buildings of particular importance to the community.

Local authorities should be able to require that buildings with high rates of public use or vital in emergencies be strengthened to a higher standard (e.g. Universities, schools, hospitals, museums, etcetera). (St James Apartments Body Corporate)

Fifteen submitters (13%) commented that a circumstance could be for buildings with a critical post-disaster function.

...Given the key importance of IL4 buildings (buildings that would have a critical post-disaster function such as fire stations, emergency departments in hospitals, or certain key airport buildings), and that such importance would be likely to increase should a seismic event occur, it would be entirely appropriate for a national policy approach to be adopted that would lead to these IL4 buildings having, not only a higher required minimum standard than the current 33% of the requirement for new buildings, but also a tighter compliance timeframe. In our view the required minimum compliance timeframe for post disaster function buildings (IL4) should be ten years. (Auckland Airport)

A minority of local council submitters supported the power to impose a higher level of strengthening as this reflected current practice.

The GDC has long recommended a 67% standard albeit 67% of NZS1900 when that standard was referenced in the Local Government Act and more latterly the '91 Building Act. This strengthening served this city very well in the event of December 2007 which had ground accelerations of approximately...Therefore a local authority should have the power to require a higher level of strengthening if the policy has been through the special consultative procedure as required by the Local Government Act. (Gisborne District Council)

Q12 No responses

Two hundred and ninety-two (292) submitters (55%) did not agree that local authorities should have the power to require higher levels of strengthening than the earthquake-prone building threshold, or strengthening within shorter timeframes than the legally defined period. Of these, 10 were local authority submissions (22% of all local authority submissions).

The vast majority (244) of these submitters (84%) did not provide a reason.

Thirty-three (33) submitters (11%) commented earthquake strengthening standards should be applied equally across the country.

Affording local authorities with such powers defeats the point of having national guidance and policies on appropriate standards. It goes against MBIE's aims of ensuring consistency in approach across the country in striking an appropriate balance between increasing safety and associated costs. (Kiwi Income Property Trust)

Opportunities for local authorities to take different regulatory approaches in different locations have created unacceptable anomalies in many areas of the building and property industries over time. A nationally consistent approach must be achieved. (Massey University)

Q12 Out of scope responses

Twelve (12) submitters (3%) commented that financial incentives are needed if there is a requirement for higher standards.

There must also be government funding to recognise the overwhelming public good component of the higher requirements in these situations (i.e. these higher standards are required for public good purposes not simply to safeguard the lives of building occupants and/or owners. (Wellington Inner City Residents and Business Association) **The Royal Commission recommends** that, for unreinforced masonry buildings, "the out-of-plane resistance of chimneys, parapet, ornaments and external walls to lateral forces shall be strengthened to be equal to or greater than 50 per cent Ultimate Limit State" (that is, 50 per cent of the standard required for a new building). (Recommendation 86, Vol. 4, Final Report)

Response to this Royal Commission recommendation was mixed. Thirty-eight per cent (38%) of submitters agreed that certain features of unreinforced masonry buildings should be required to be strengthened to a higher level. Predominantly these submitters were of the opinion that certain features of unreinforced masonry buildings present a high risk to the general public, therefore justifying the higher standard of strengthening.

Thirty-nine per cent (39%) of submitters disagreed. Some of these submitters contended certain features of unreinforced masonry buildings should be prioritised for strengthening as opposed to be strengthened to a higher level.

Q13: Should certain features of unreinforced masonry buildings, such as chimneys and parapets, be required to be strengthened to a higher level?



Q13 Yes responses

Two hundred and five (205) submitters (38%) agreed certain features of unreinforced masonry buildings should be required to be strengthened to a higher level. Some submitters explicitly supported a particular feature being strengthened to a higher level. This included:

• 76 submitters (37%) for parapets

- 75 submitters (36%) for chimneys
- 36 submitters (17%) for any features likely to fall off that would cause injury or death to pedestrians
- 22 submitters (11%) for verandas
- 17 submitters (9%) for hazards adjacent to footpaths and roads
- 14 submitters (7%) for facades, and
- 13 submitters (6%) for ornamental features.

We support the strengthening of high risk features to a higher level than 33%. Experience of the Gisborne and Christchurch earthquakes has shown these high risk elements can fail even in moderate quakes and despite the 33% life safety requirement for the building. High risk features on buildings are items that represent falling hazards like chimneys, veneers, gables, parapets, cornices, canopies and ornamentation, water tanks, tower like appendages, fire escapes, lift wells, facades, plaster and other heavy renders. (Wellington City Council)

Thirty-nine (39) submitters (19%) commented that the level to which certain features of unreinforced masonry buildings should be strengthened should be determined by risk.

Part of that assessment should be to take into account whether there is an actual risk from these components of the building. Parapets and items which could topple onto public footpaths or adjoining buildings should get addressed with urgency and to a higher level. However remote standalone buildings or in situations/locations where people are not at great risk of being injured as a result of the failure of those items should not be made to mandatorily upgrade those features to higher than 33%. (Queenstown Lakes District Council)

Some submitters commented on the level to which certain features of unreinforced masonry buildings should be strengthened to. This included:

- 19 submitters (9%) supporting 50% of the new building standard
- 15 submitters (7%) supporting 67% of the new building standard, and
- nine submitters (4%) supporting 100% of the new building standard.

A small minority of submitters commented that a balance needs to be struck between safety and maintaining the heritage feel of buildings.

It makes sense to seek higher levels of earthquake resistance to external parts of buildings, which may be more vulnerable to falling down/collapse. However I don't think it should be so cut and dry. The reality is likely to increase pressure to remove decorative features that add to the character and appearance of buildings. Some balance may need to be struck. For example, the removal of chimneys at Government House was seen to have an adverse heritage effect and new chimneys of suitable materials have now been put in place. (Individual submitter)

Q13 No responses

Two hundred and seven (207) submitters (39%) did not agree that certain features of unreinforced masonry buildings should be required to be strengthened to a higher level. The majority of these submitters (136) did not provide a reason.

Forty-five (45) submitters (22%) commented that certain features of unreinforced masonry buildings should be prioritised for strengthening, rather than strengthened to a higher level.

...[we support the] prioritisation of building elements which present [the] greatest risk to life (such as parapets). (Southern Councils)

Following the earthquakes, UC targeted weaker structures and carried out seismic strengthening works ahead of the total remediation program. The purpose of this was to allow structures that were initially assessed as earthquake prone to be reoccupied, which in turn allowed UC to continue to operate. In the context of this proposal it would be helpful that where such an investment was made that this was recognised with respect to the timeframe to then complete the upgrade to the remaining building. (University of Canterbury)

A minority of submitters commented that where strengthening is not possible, the replacement of building elements with lightweight or otherwise safer materials should be promoted.

Communities are seeking technical/engineering advice on the options for replacement of some dangerous elements with acceptable alternatives, such as features made from safer materials, including the use of new technologies. (Feilding Promotion)

8.4. Enforcing the mandatory national requirement

Proposal 5: All buildings would be strengthened to be no longer earthquakeprone, or be demolished, within 15 years of the legislation taking effect (up to five years for local authorities to complete seismic capacity ratings, followed by 10 years for owners to strengthen or demolish buildings).

The majority of submitters did not support this proposal. Many of the concerns of submitters related to costs or affordability, sector capacity, and a "one size fits all" approach, which does not adequately consider people at risk, location risk, economic issues and heritage issues.

PNCC has serious doubts over the 10 year timeframe. PNCC considers the earthquake-prone issue as an intergenerational one; trying to fix 150 years of buildings in 10 years places a great cost on the current generation. (Palmerston North City Council)

Waikato Tainui does not support proposal 5. There needs to be recognition of the costs, cultural impact and inability to obtain financial support for buildings on multiple owned Maori land. (Waikato Tainui)

Proposal 7: Owners of buildings assessed as earthquake-prone would have to submit a plan for strengthening or demolition within 12 months.

The vast majority of submitters did not support the proposal for owners of buildings assessed as earthquake-prone having to submit a plan for strengthening or demolition within 12 months. Many of the concerns of submitters related to sector capacity and capability, issues for buildings with multiple owners, owners with building portfolios, owners with multiple tenants, and changes in assessment tools.

12 months is not long enough for building owners to identify suitably qualified experts, commission the work (subject to availability – a key issue), work through the detailed analysis and range of complex issues needed before properly informed decisions are made, and gain agreement of the local authority to the plans. (Wellington Inner City and Business Association)

Q14: Is it reasonable and practical for owners of earthquake-prone buildings to meet the following timeframes:

- 12 months to submit plans for either strengthening or demolishing the building?
- 10 years from the date of the seismic capacity rating to strengthen or demolish?



Q14 Pie chart

Q14 Yes responses

Ninety (90) submitters (17%) agreed it is reasonable and practicable for owners of earthquake-prone buildings to meet the timeframes. The majority (73) of these submitters (81%) did not provide a reason. A minority of submitters raised concerns about sector capacity to carry out assessments.

Q14 No responses

Three hundred and fifty-four (354) submitters (66%) disagreed that it is reasonable and practicable for owners of earthquake-prone buildings to meet the timeframes.

Ninety-four (94) submitters (27%) disagreed with the proposal to strengthen or demolish within 10 years of the seismic capacity rating. A number of these submitters suggested preferred timeframes to strengthen or demolish a building. This included:

- 45 submitters suggesting 15-20 years to strengthen or demolish a building (13%), and
- 18 submitters suggesting more than 20 years to strengthen or demolish a building (5%).

One hundred and sixty-four (164) submitters (46%) disagreed with the proposal to submit plans for either strengthening or demolition within 12 months. A number of these submitters suggested preferred timeframes to submit plans. This included:

- 39 submitters suggesting two-three years to submit plans (11%)
- 22 submitters suggesting five years to submit plans (6%), and
- seven submitters suggesting more than five years to submit a plan (2%).

Thirty-four (34) submitters (10%) agreed with the proposal to strengthen or demolish within 10 years of the seismic capacity rating but disagreed with the proposal to submit plans for either strengthening or demolition within 12 months.

One hundred and twenty-one (121) submitters (34%) raised concerns about the capacity of the sector to carry out the proposals.

We consider the proposed 12 month period for property owners to submit plans for strengthening or demolition will be unachievable/unaffordable particularly given the competition for advisors such as engineers. (Clutha District Council)

Twelve months is unlikely to work in practical terms if it is envisaged that the plan will be developed with professional input from structural engineers or geotechnical experts...We have commented earlier on the difficulty being experienced in Canterbury that building owners are having engaging structural engineers. (Hurunui District Council)

Twenty-four (24) submitters (7%) raised concerns about sector expertise.

There is also differing views on assessment across the Engineers. It is conceivable that peer reviews will be required and therefore 12 months will not achievable. (KiwiRail)

Seventy-four (74) submitters (21%) suggested the timeframes be relative to the risk the building poses to the safety of occupants or public. A number of these submitters noted local authorities were better positioned than central government to prioritise earthquake-prone buildings based on risk.

Rather than impose the shortest practical timeframe for all work to be complete, we believe better outcomes will be achieved if a targeted approach is taken based on addressing the higher-risk buildings first. Risk categorisation should be based on factors such as building age and importance in addition to % NBS. (Massey University)

...we would contend that locally we are best placed to prioritise [earthquakeprone buildings] in terms of risk to ensure priority buildings are forced to have their risks attended to earlier within these nominated timeframes. (Wanganui District Council)

Sixty-seven (67) submitters (19%) raised concerns of cost or adverse effects on the economy.

This has the effect of immediately destroying value in a very large number of buildings, and will in many cases prove an impossible financial burden to the owners of these buildings. The result is likely to be the loss of both the buildings, and the investor's ability to improve, replace or on-sell the properties. These costs will flow on to the community in the form of reduced available commercial buildings, higher rents, and a reduced ability for community enterprises and small start up businesses to find appropriate and affordable accommodation. (Individual submitter)

A number of industry body submitters commented on the adverse effects the short timeframes could have on the building and construction industry.

A further issue relating to the economy, as raised by the Productivity Taskforce, is the on/off nature of the building and construction industry, and the effect this has on the already low labour productivity in this industry. There is a big difference between a "boom" 15-year implementation framework and a longer time frame of say 30 years, and this suggests a more measured and planned approach would be appropriate. (Institution of Professional Engineers New Zealand)

Twenty-four (24) of submitters (7%) commented the proposals were a "one size fits all" approach that could have adverse effects on rural communities.

Council believes the timeframes may be too tight and this proposal would apply a "One size fits all" approach. We consider the timeframes should be based on seismic risk in different parts of country. The value of upgrade work can exceed the actual (rather than perceived) risk with the commercial return in small rural towns unlikely to justify the necessary expenditure. (Matamata Piako District Council)

In rural New Zealand where the economic returns are unlikely to warrant building strengthening, there may potentially be whole streets demolished. (Central Otago District Council)

If there is a need to strengthen 15,000 to 25,000 buildings within 10 years, and if many of these buildings are in provincial centres where economic growth is low, it may result in many businesses being forced to close. (Institution of Professional Engineers New Zealand)

Twenty-four (24) submitters (7%) commented that the proposed timeframes may force some building owners to demolish or abandon their building.

The proposal for a plan within 12 months of buildings being assessed may drive decisions to abandon or demolish when options for strengthening are still being developed. (Local Government New Zealand)

Eighteen submitters (5%) commented that the proposed timeframes may be difficult for building owners with tenants.

In many cases, these buildings will be have existing tenants with leases granting 1 or more rights of renewal giving exclusive occupation rights for many years. Tenants' legal rights to quiet enjoyment could prevent both planning and actual seismic strengthening or demolition for many years. (Phillimore Properties)

Thirteen submitters (4%) commented that the proposed timeframes may deny access to new assessment technologies.

The 12 month timeline to submit remedial plans may be too short. Given that technology and engineering techniques will likely improve in the next 15 years we need to ensure that innovative solutions are able to be worked into the designs. (Westfield New Zealand Limited)

Twelve submitters (3%) commented that short timeframes would be difficult for buildings with multiple owners, such a body corporate.

The proposed timescales appear ambitious and meeting them is likely to be costly. Various difficulties can arise, hindering progress. For example...where

one person causes problems for bodies corporate operating under a unit titles structure, and workers are not provided access for undertaking strengthening. It will therefore be vital to implement appropriate policies, in order to help ensure affordability and compliance – and help guard against unintended consequences, including businesses closing and slowing economic growth. (Kiwi Income Property Trust)

Q14 Out of scope responses

Thirty (30) submitters commented that financial incentives or assistance are needed to assist building owners (particularly owners of certain types of buildings) meet timeframes to strengthen their buildings.

...our support for nationally consistent timeframes is conditional on Government funding being available to assist with upgrading important heritage buildings. (Wanganui District Council)

Q15: What additional powers would local authorities require to enforce the proposed requirements?

A total of two hundred and eighty-eight (288) submitters responded to this question. Of these, 90 submitters (31%) commented local authorities need no additional powers.

In relation to plans, 37 submitters (13%) commented that local authorities need enforcement powers when building owners do not comply with their plan to strengthen or demolish. Twenty-three (23) submitters (8%) commented that local authorities need enforcement powers when building owners do not submit a plan at all. Fourteen submitters (5%) commented local authorities need a power to approve plans submitted by building owners.

New powers would be required in respect approving an owner's plans for strengthening or demolition. New powers would be required where an owner does not submit a plan for strengthening or demolition within 12 months of the building being assessed as earthquake-prone. New powers would be required to address the owner failing to comply with the agreed plan to strengthen or demolition. (Waikato District Council)

Twenty-eight (28) submitters (10%) commented local authorities should have the power to close premises.

Give the council power to keep people out of buildings if there is exceptional risk if identified by a structural engineer. (South Taranaki District Council)

Twenty-one (21) submitters (7%) commented that local authorities should have the power to provide tools to assist owners to strengthen their buildings.

...it is equally important to provide tools to assist building owners. Examples may include low interest loans against the property, changes to depreciation, providing clarity for buildings already strengthened, and revisiting the requirements around Building Act change of use. (Local Government NZ)

...give Councils wider powers to vary the way rates are assessed to give incentives for upgrading work by rates relief for approved programmes. (Wanganui District Council)

Eleven submitters (3%) commented that local authorities should have the power to carry out strengthening work or demolition on behalf of the building owner.

While it seems relatively clear to us in present legislation, as we intend to manage non-complying buildings whose timeframes have expired by means of isolation (hoardings, barricades etc.), it would be useful to have it made clear at a national level that local authorities have the right to carry out such action for the safety of the public, with the cost to be charged back to the owner of the property (or more specifically for the charge to be placed on the property itself). (Auckland City Council)

Twenty-one (21) submitters (7%) commented that local authorities should have the power to recover costs.

It will be essential that Councils will need the power to recover the actual costs of implementing the proposals from the building owners or central government or a combination of, including assessment, compliance, monitoring and enforcement costs. (Timaru District Council)

Thirteen submitters (5%) raised concerns about local authorities bearing the responsibility and subsequent burden and cost for strengthening or demolition of buildings.

The legal process for recovering costs for demolition of dangerous or earthquake-prone buildings outside their strengthening timeframe from uncooperative building owner needs to be simplified. Demolitions having to be actioned to date against uncooperative owners by the Southland District Council have proven to be protracted and costly. There can also be problems recovering demolition and legal costs from uncooperative building owners where the owner has limited means and the property have minimal land value. High demolition costs loaded by councils against properties of limited land value does not encourage their sale and results in undeveloped sections on the main streets of rural townships. (Southland District Council)

Fourteen submitters (5%) commented that local authorities should have the power to impose penalties or fines.

Q15 Other responses

Twelve submitters (4%) commented that local authorities may require assistance from Government with enforcing the proposed requirements.

The Government we submit needs to take the lead and set some guidelines in order to establish some national consistency. (Hamilton City Council)

Clearer legislation about who has the power in Council to order a demolition of a building if this was warranted and who picks up the cost of demolition, site clearance and the landfill fees, particularly in the case of sporting and community groups who have no funding to undertake the work. (Hurunui District Council)
It should be noted that a small territorial authority there may not be sufficient funds to demolish buildings where owners default and then wait to recover costs, or bring further legal action to recover costs (or their may be no prospect of cost recovery if owners are bankrupt etc). In such situations we propose that Councils can ask central government to take over enforcement in such cases. (Christchurch City Council)

A small minority of submitters commented that there should be an appeal process available to building owners.

Any powers must take into account evidence of progress by owners...Any appeals process must be efficient and low-cost to avoid further financial distress for building owners. (Body Corporate of the Bond Store)

Wellington City Council raised concerns about the possible adverse implications of the proposed changes on any strengthening work already undertaken.

If the Building Act is changed and requires a shorter time frame for strengthening to take place, then the Act needs to be very clear that the legislation is retrospective and that these new timeframes apply to the existing notices already issued under sec 124 of the Act. Our advice is that existing notices are irrevocable and a significant legal risk could result if the Council attempted to amend the notice, or to cancel and reissue new notices without legislative support. The legislation must be clear that the Council does not have to reassess these buildings and issue new notices to have the new regulations apply to them or bear legal liability from changes in the legislative framework. (Wellington City Council) **Proposal 6:** Strengthening would be carried out faster for certain buildings (e.g. buildings on transport routes identified as critical in an emergency).

The majority of submitters supported the proposal to strengthen certain buildings faster. There was general support for the buildings located on transport routes identified as critical in an emergency, buildings with important public, social and economic functions, and buildings with post-earthquake recovery functions.

Timaru District Council agrees that local authorities should retain the flexibility (based on local level decision making) for faster action on buildings of strategic importance. (Timaru District Council)

Q16: Should local authorities be able to require faster action on buildngs of strategic importance, such as those:

- located on transport routes identified as critical in an emergency
- with important public, social and economic functions, such as schools and police stations
- with post-earthquake recovery functions, such as civil defence centres and hospitals.



Q16 Pie chart

Q16 Yes responses

Two hundred and ninety-one (291) submitters (54%) agreed that local authorities should be able to require faster action on buildings of strategic importance. Of these, 85 submitters (29%) did not provide a reason.

Of those that provided detailed answers:

• 72 submitters (25%) supported faster action on buildings located on transport routes identified as critical in an emergency

- 104 submitters (36%) supported faster action on buildings with important public, social and economic functions, such as schools and police stations, and
- 105 submitters (36%) supported faster action on buildings with postearthquake recovery functions, such as civil defence centres and hospitals.

Twelve submitters (4%) commented that densely occupied buildings should be included as a building of strategic importance.

Twenty-two (22) submitters (8%) commented that local authorities should be able to provide input when prioritising buildings. This included either through district plans, legislation or regulation.

We believe that this is a reasonable requirement with provision that the community also agrees or supports this is a public safety and city resilience issue. This would be built into a Local Earthquake Prone Building and Resilience Policy following consultation. However guidance from MBIE is required to ensure it is applied consistently by councils. (Kapiti District Council & Wellington City Council)

Some submitters suggested preferred timeframes in which buildings of strategic importance be strengthened by. This included:

- 33 submitters (11%) suggesting they be prioritised on a risk-based framework
- four submitters (1%) suggesting they be strengthened within two years
- 17 submitters (6%) suggesting they be strengthened within five years, and
- 12 submitters (4%) suggesting they be strengthened within ten years.

Q16 No responses

One hundred and sixteen (116) submitters (22%) did not agree that local authorities should be able to require faster action on buildings of strategic importance. The majority of these submitters did not provide a reason (58%).

A small minority of submitters commented that existing regulations already prioritise strategic buildings.

It is important to note that buildings with important public, social and economic functions, or post-earthquake recovery functions are already dealt with by AS/NZS 1170.0:2002. (Dunedin City Council)

A small number of submitters also felt that buildings of strategic importance should be prioritised but strengthened within the same timeframes.

The Royal Commission recommends timeframes be set nationally and that unreinforced masonry (URM) buildings be treated separately and strengthened more quickly than other earthquake-prone buildings (Recommendation 82, Vol. 4, Final Report)

It recommends that all URM buildings be strengthened within seven years of the law change, and that other earthquake-prone buildings be strengthened within 15 years. (Recommendation 83, Vol. 4, Final Report)

This Royal Commission recommendation was not supported by the majority of submitters. Only 27 per cent of submitters agreed that unreinforced masonry buildings should be strengthening more quickly than other earthquake-prone buildings. Some submitters commented that the timeframes which unreinforced masonry buildings should be strengthened to, be relative to the risk they pose.

Forty-seven per cent (47%) of submitters disagreed. Some of these submitters preferred to prioritise buildings based on a broader risk based framework (e.g., use and occupancy density), as opposed to limiting such an assessment to only construction materials.

Q17: Should all unreinforced masonry buildings require strengthening more quickly than other earthquake-prone buildings?



Q17: Pie Chart

Q17 Yes responses

One hundred and forty-five (145) submitters (27%) agreed that unreinforced masonry buildings should require strengthening more quickly than other earthquake-prone buildings. Thirty-six (36) submitters (25%) suggested unreinforced masonry buildings be strengthened relative to risk (25%). Some submitters suggested preferred timeframes for strengthening unreinforced masonry buildings:

- 13 submitters suggested within two years (9%)
- 27 submitters suggested within five years (19%)
- 15 submitters suggested within 10 years (8%), and
- 11 submitters suggested within 15 years (11%).

Q17 No responses

Two hundred and fifty-two (252) submitters (47%) did not agree that unreinforced masonry buildings should be assessed faster than other buildings. The majority (197) did not provide a reason (78%).

Of those that did provide a detailed response, thirty-one (31) submitters (12%) preferred a risk-based approach for determining timeframes of all buildings, not just unreinforced masonry buildings.

It is not the construction that is important, but the potential risk posed that should drive timing. A hospital should be strengthened ahead of a multi-unit and multi-storey residential building, ahead of a small shop. (IAG)

OWCT disagrees with the proposal that unreinforced masonry buildings should require strengthening more quickly than other earthquake prone buildings. As indicated previously we consider that the key determinate for strengthening should be risk (including use and occupancy) and assessment against the 33% NBS. Given the loss of life and injury in the Canterbury Television and Pyne Gould Corporation buildings on the 22 February 2011, the establishment of rules focused on building type may result in a situation whereby newer buildings with lower NBS ratings are deferred in favour of addressing unreinforced masonry buildings with potentially higher new building standard ratings. (Oamaru Whitestone Civic Trust)

Twenty submitters (8%) questioned the risk that unreinforced masonry buildings pose in comparison to densely occupied buildings.

...low occupancy un-reinforced masonry building on the outskirts of a town will not pose the risk of a heavy concrete building with poor structural form in a main shopping centre. (Spencer Holmes)

The Christchurch experience is that buildings of high occupancy may carry a greater risk to public safety. Unreinforced masonry buildings do not generally have high occupancy. (Wanganui District Council)

8.5. Exemptions and time extensions

Proposal 8: Certain buildings could be exempted or be given longer time to strengthen, e.g., low-use rural churches or farm buildings with little passing traffic.

There was strong support for the proposal for certain buildings to be exempt or given longer time to strengthen.

The Council supports this proposal which would allow for buildings with low public safety risk to be exempted from the strengthening provisions. We consider that any exemption should have a time limit at that time it can be renewed so that if circumstances or building use changes then the exemption can be removed. To ensure that this process is applied consistently, there may be a requirement for an MBIE audit or review, where exemptions are granted. (Wellington City Council)

Q18: Should the owners of certain specified types of earthquake-prone buildings be able to apply to local authorities for exemptions or time extensions to the requirement to strengthen or demolish?



Q18 Pie chart

Q18 Yes responses

Three hundred and sixty-two (362) submitters (67%) agreed that owners of certain specified types of earthquake-prone buildings should be able to apply to local authorities for exemptions or time extensions to the requirement to strengthen or demolish. The majority of submitters (306) did not provide a reason (85%).

Of those that did provide a detailed answer, 22 submitters (6%) commented that low occupancy or low usage buildings should be exempt. Seventeen submitters (5%) commented that criteria for exemptions or time extensions should be based on an assessment of risk. Fifteen submitters (4%) commented that exemptions or time extensions should be flexible and discretion based.

Exemptions should be able to be sought based on a risk based assessment, generally along the lines proposed in the consultation document...A significant "regulatory impact" study is required to identify how much of the buildings stock viz numbers, value of buildings, might fall within the exemption category, what "scaling" of the normal "extension timeframe" for strengthening might be applied...and what sort of numbers, value of buildings, might receive a total exemption (as opposed to merely extending the timeframe). (Fraser Thomas Limited)

Q18 No responses

Sixty-three (63) submitters (12%) did not agree that owners of certain specified types of earthquake-prone buildings should be able to apply to local authorities for exemptions or time extensions to the requirement to strengthen or demolish. The vast majority (59) of these submitters (94%) did not provide a reason.

The Royal Commission recommends that the legislation should exempt seldom-used buildings located where their failure in an earthquake would be more unlikely to cause loss of life or serious injury to passers-by. (Recommendation 90, Vol. 4, Final Report)

Q19: What are your views on the following possible criteria:

- the building is used only by the owner, or by persons directly employed by the owner, on an occasional and infrequent basis
- the building is used only occasionally (less than eight hours per week), and by less than 50 people at any one time

AND in each circumstance above

- all users are notified that the building is likely to collapse in a moderate earthquake
- the building is not a dwelling
- the building is not a school or hospital and does not have a post-disaster recovery function
- there is no risk of the building partially or fully collapsing onto a public walkway, transport route or a neighbouring building or public amenity
- effective mitigation measures have been put in place to protect building users from the risk of collapse in a moderate earthquake.

The majority of submitters supported this Royal Commission recommendation. Fortyseven per cent (47%) agreed that seldom-used buildings should be exempt. Some submitters commented that the exemption should be clearly defined, while a small minority requested low risk timber-frame buildings also be exempt.

Twenty-six per cent (26%) disagreed. Some submitters required further clarification of the exemption criteria, or wanted the scope to be widened, particularly around low occupancy buildings. A minority of submitters commented that heritage buildings should be exempt, while others commented it was inappropriate for central government to determine the exemption criteria, preferring local authorities to have that role.



Q19 Yes responses

Two hundred and fifty (250) submitters (47%) agreed with the suggested criteria. The majority of these submitters (194) did not provide a reason (78%).

The majority of descriptive answers were qualified responses. Sixteen submitters (6%) stressed that the exemptions would need to be clearly defined.

Yes but there needs to be a better definition as to what buildings need to be assessed and upgraded...We recommend that there should be a schedule of buildings that are automatically exempt based on their ...This would be similar to schedule 1 of the Building Act for buildings that do not require building consents. (Waipa District Council)

Twelve submitters (5%) supported the suggested criteria but commented on widening some aspects.

The council supports the proposed criteria under which exemptions might be granted. Council suggests that <the> word "hospital" in third criteria be widened. Most smaller urban and rural communities do not have hospitals, but do have healthcare and health services facilities... (Kapiti Coast District Council)

Yes we support these criteria but would submit that it needs to go further to mitigate the economic impact on small towns which have lower density, smaller size businesses and attract lower rentals than the cities. (Feilding Promotion)

A small minority of submitters suggested low risk timber-frame buildings (such as marae) be exempt.

The NZHPT supports the possibility of providing exemptions and time extensions for low risk rural buildings. These exemptions and time extensions should be outlined in the national risk management framework and should acknowledge the resilience of timber-framed buildings...Specific exemptions are requested for all marae. (New Zealand Historic Places Trust)

An unintended consequence under this proposal may be that all marae will choose not to hold the designation of a post-disaster recovery station as they will not be able to afford the costs of earthquake strengthening and, consequently, have a wider impact on the wider community...The Te Puni Kokiri survey 2009 stated that almost 32% of marae were designated as a Civil Defence Centre, and 27% reported that they had provided accommodation or resources during a civil defence emergency. (Waikato Tainui)

A small minority of submitters suggested "special infrastructure buildings" such as bridges and highway structures be exempt.

Agreed, need to review list and for our purposes clearly identify what is a "building" and what buildings are "exempted". KiwiRail will expect that tunnels, bridges, culverts will be exempted rather than having to agree on a new assessment criteria for assets that are clearly not "buildings." (KiwiRail)

...specific criteria would need to be developed for the exemption of highway structures. (New Zealand Transport Agency)

Q19 No responses

One hundred and thirty-nine (139) submitters (26%) did not agree with the suggested criteria. Of these, twenty-four (24) submitters (7%) commented that the criteria need further clarification.

PNCC questions whether 50 people would be too many, as generally 20 persons are considered a more manageable group to evacuate from any design building readily. Some of the criteria would require further development – for example is 8 hours per week averaged or not. PNCC also questions whether staged strengthening work could also enable an extension of time. (Palmerston North City Council)

The second bullet point is descriptive and certain but "occasional" and "infrequent" are both open to interpretation and argument. If this was to stay there would need to be an independent body that could arbitrate between the local authority and the building owner. Also "persons directly employed by the owner" should have a limiting number. Gisborne has limited this discretion to rural churches that are an important part of the historic fabric of the district. The above clauses should not be seen as a method for building owners to retain poorly maintained and semi derelict buildings that are available to groups to use on a low rent basis but may pose a significant risk to those groups. The exemption should be limited to single story buildings. (Gisborne District Council)

Eighteen submitters (13%) commented the criteria for low occupancy buildings should be widened further.

Federated Farmers believes that all farm buildings should be exempted from the requirements. There is very little or no danger to the general public from these buildings and they are almost always located well away from public roads, buildings, or amenities. The risk from these buildings would be very low, as evidenced by the experience with the Canterbury earthquakes. (Federated Farmers)

Fourteen submitters (10%) commented that exemptions should also be made for heritage buildings.

Additional criteria should include qualifying heritage status buildings. The threshold for qualifying heritage buildings will, in the view of the magnitude of

the issue, need to be more robust and consistently applied across New Zealand. (Auckland Civic Trust)

Provided there are adequate support mechanisms also in place, the allowance of some degree of time extension for the upgrading of heritage buildings requiring complex solutions should also be considered. (Auckland City Council)

Ten submitters were against a "one size fits all" approach, where exemptions are determined by central government without local input.

It is noted that under Council's existing earthquake prone buildings policy there is allowance for risk assessment and contextualizing other important factors before any decisions are made. The need for this proposal only arises from a "one size fits all" administration that does not allow for discretion up front as per the existing policy framework. The proposal that would include such low risk type buildings with such a mechanism will prove to be logistically challenging based on Council's experience with other similar legislation. The outcome creates an industry based on uncertainly and the need to provide extra resource and time to assess on a building by building basis. (Whangarei District Council)

Manawatu District Council raised concerns about liability for exempted buildings that collapsed.

The proposal regarding exempting low risk buildings by ensuring quote "effective mitigation measures have been put in place to protect building users from the risk of collapse in a moderate earthquake" unquote is an area of concern for us. This will be a subjective decision and is a considerable responsibility to put on Council officers when the consequence is so high...Clear guidelines for "effective mitigation measures" would be required for a consistent approach. What happens if the owner does not fulfill these obligations? Who is legally liable if the building collapses and kills people? (Manawatu District Council)

8.6. Roles, advice, information and education

Proposal 9: Central government would have a much greater role in guiding and supporting local authorities and building owners, as well as in public education and information.

The Royal Commission recommends that MBIE should review the best ways of making information about building risk in earthquakes publicly available, and carry out education activities to develop public understanding about such buildings. (Recommendation 102, Vol. 4, Final Report)

It also recommends that territorial authorities and subject matter experts share information and research on the assessment of, and seismic retrofit techniques for, different types of buildings. (Recommendation 106, Vol. 4, Final Report)

There was strong support for central government having a much greater role in guiding and supporting local authorities and building owners.

Property Council supports MBIE's proposals for guiding and supporting local authorities and submits that similar activities should be provided for engineers, building owners, as well as the public. It is imperative that all guidance is precise, clear and robust. MBIE must also ensure effective communications, information sharing and training for stakeholders. (Property Council New Zealand)

Westfield strongly believes that Central Government should be the governing body responsible for managing the Earthquake Prone Buildings issue. New Zealand must present a consistent message to the world (insurers and investors) that we are a safe and economical place to do business. Part of this is the ability to implement and administer a robust system that obtains the right balance between life safety and economic reality. (Westfield New Zealand Limited)

A considerable minority of submitters wanted to see more detail on the proposed public education and information campaigns.

To date, and clearly evident after the Canterbury earthquakes the guidance and education is not getting through to those that need it the most. A review of who needs the information and how information is disseminated to reach the appropriate user group(s) is needed. Think outside the square and be innovative. (Selwyn District Council) **Q20:** Are the advice, information and education activities proposed for central and local government agencies sufficient to help ensure effective implementation of the new earthquake-prone building system?



Q20 Pie chart

Q20 Yes responses

One hundred and eighty-two (182) submitters (33%) agreed the advice, information and education activities proposed for central and local government agencies is sufficient to help ensure effective implementation of the new earthquake-prone building system.

Of these, 22 submitters (12%) commented there should be a greater role for central government

Kiwi Income Property Trust supports MBIE's proposals for guiding and supporting Local Authorities and submits that similar activities should be provided for engineers, building owners, as well as the public. It is imperative that all guidance is precise, clear and robust. MBIE must also ensure effective communications, information sharing and training for stakeholders. (Kiwi Income Property Trust)

Central government needs to have a much stronger role in the administration of earthquake prone buildings policy than has been provided in the past, as a passive approach has been shown to be inadequate through the uneven attention paid to vulnerable buildings by local authorities across the country. The releasing of little-read guidance notes on Ministry websites will be insufficient to guarantee the success of any new regime. Strong leadership from Central Government (MBIE) is required to ensure that the new system is implemented and adopted in a consistent manner by all to achieve the desired outcomes. (Massey University) Eight submitters (4%) qualified their support for this proposal. These submitters were largely concerned with the public perception of earthquake-prone buildings.

NZSEE supports Government, through MBIE, to develop guidelines for local authorities, building owners, and the general public to assist them understand the issues around earthquake-prone building systems. However, the Society has a concern that the public perception around earthquake resistant building performance is not well founded, particularly with the heightened interest following the events in Christchurch. Consequently there is a challenging task to develop soundly based. (New Zealand Society for Earthquake Engineering)

At a high level the proposed advice, formation and education activities are appropriate. However there appears to be a lack of recognition that the proposed system to be implemented comes with such a high cost that it is likely most of New Zealand cannot afford it. (Oamaru Whitestone Civic Trust)

A small minority of submitters commented that there is a need for a highly effective public education campaign.

Notes that the public in New Zealand has a poor understanding of seismic risk, even after the recent Canterbury earthquakes, and we consider a significant public education programme is required to lift understanding. (Individual submitter)

Agrees that the activities proposed are adequate to ensure effective implementation of the new earthquake-prone building system. Once the proposals are enacted however a highly effective education communication plan will need to be rolled out throughout the country so that affected stakeholders have all the information necessary to make informed decisions. (Tasman District Council)

Q20 No responses

One hundred and thirty-eight (138) submitters (26%) did not agree that the advice, information and education activities proposed for central and local government agencies is sufficient to help ensure effective implementation of the new earthquake-prone building system. Of these, 24 submitters (13%) commented that there was not enough detailed information to comment.

The whole business of Building Seismic Performance is not understood by the majority of the Building Owners, Councils, nor the Public. The Present formula to assess buildings is complicated and a matter of opinion. Local Authorities do not have the experience or knowledge to carry out structural surveys, and label buildings as earthquake prone. A Structural Engineer is required to assess a building and use a formula that is not easily understood. (Building owner)

TEC believes that the general public's awareness of the risks presented by buildings of different percentage of NBS is poor. This creates pressure on building operators to strengthen over-and-above what is arguably prudent or necessary. TEC believes that significant education is needed for the general public on the risk posed by earthquake-prone buildings in addition to the proposed information and education activities proposed for central and local government agencies. Of particular concern is the focus on 33%, 67% and 100% of the NBS instead of a focus on whether the building is considered at an

acceptable level of safety for occupancy versus likely to be undamaged in terms of its ongoing usable life. (Tertiary Education Commission)

Twenty submitters (11%) commented that there was not enough detailed information from central government to comment.

At this stage there is insufficient detail for Council to respond definitively to the question. The consultation document solely states that MBIE would provide information to local authorities, building owners and users on legal requirements and how to comply with them; the risks of buildings collapsing during earthquakes; what seismic capacity rating information means. (Kapiti District Council)

The education of the actual risk created by these earthquake prone buildings has not at all been clearly conveyed. The statistics with the proposal document, from the deaths per 100,000, through to the cost/benefit table go in no way towards justifying such an overly fast, unconsidered response. A knee-jerk reaction is the only possible explanation, and such an important proposal with such long term consequences deserves better. If this is the low level of information shared at the start of the process, it creates many concerns that the education for both councils and the public may well be inadequate. (Individual submitter)

Fourteen submitters (8%) commented that more cooperation between stakeholders in the building industry is required.

What is being proposed is useful but structural engineering is a very technical area and building owners (including bodies corporate, which are made up of varying levels of skills and expertise) require good quality advice and guidance to bring – often complex – projects to successful conclusion. A toolkit of well-endorsed information on how to earthquake strengthen would be very useful for building owners. (Body Corporate of the Bond Store)

I don't know what advice and education is available, but our experience in a multistorey dwelling of 34 flats was that we were given no advice, bounced around between expensive professionals trying to find a way forward and then paid for an expensive and largely useless solution. Had we known the right questions to ask and engaged a project manager early on, this could largely have been avoided. (Building owner)

Six submitters (4%) suggested that a training programme for engineers, architects and other participants in the building industry would be appropriate education activities.

There is presently only limited guidance available to engineers and architects for the design of building strengthening, a task that is generally more challenging than new building design. In addition, there are presently limited skilled resources able to undertake assessment and improvement work, so a training programme is required to structural engineers to meet the anticipated demand for these services. (Opus International Consultants)

Q20 Out of scope answers

Seventeen submitters raised editorial issues with the question. Ten submitters commented on financial incentives or assistance.

Provision of information, advice and education to building owners is beneficial, however to provide an effective earthquake-prone building system in New Zealand the Government should consider providing funding assistance. Small rural communities are under threat and neither individuals nor communities are in a position to pay for assessments and/or the required strengthening work. (Central Otago District Council)

8.7. Other issues: Strengthening and other Building Act upgrade requirements

Other issues: Views are sought on whether the current Building Act fire and disability upgrade requirements are, in practice, a barrier to building owners deciding to carry out earthquake strengthening work.

The Royal Commission recommends amending the Building Act to enable local authorities to issue building consents for strengthening works, without triggering the Building Act rule to upgrade the building to comply "as nearly as reasonably practicable" with current Building Code requirements for access and facilities for people with disabilities. (Recommendation 98, Vol. 4, Final Report)

There was general support for the Royal Commission recommendation to waive disability upgrade requirements for earthquake strengthening work.

A significant number of submitters commented that the cost of complying with the disabled and fire requirements was a barrier to strengthening their buildings.

There would be savings to building owners in both their own consultancy, build costs and consent fees if these provisions of the Building Act were de linked. (Rotorua District Council)

Financial costs of the physical work would obviously and immediately be much lower, for both the building owner, and the local authority trying to assess the building. Further implications would be minimal, as legislation already exists to ensure compliance with fire and access requirements. (Individual submitter)

Submitters representing disabled groups strongly disagreed with any lessening of the current requirements to upgrade disabled access requirements.

What would be the costs and other implications of de-linking earthquake strengthening from current Building Code fire and disabled access requirement? Discrimination against disabled people <under> the Human Rights Act 1993 makes it unlawful to discriminate against disabled people in a number of areas including by Government and in the access by the public to places, vehicles and facilities. If this proposal were to go ahead it could amount to the Government limiting "the right to freedom from discrimination" of disabled people "in relation to an act or omission even if it is authorised or required by an enactment." (Human Rights Commission)

The considerable cost to New Zealand society would be the ongoing exclusion of disabled people from the public arena. It would mean that disabled people would be more likely to be socially isolated, less likely to be able to find employment, and therefore dependent on welfare benefits. It would also be viewed internationally as a breach of New Zealand's commitments under the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and reported as such to the UN Disability Committee. (Auckland Disability Law) **Q21:** Are current requirements to upgrade buildings to "as nearly as reasonably practicable" to Building Code fire and disabled access requirements a disincentive or barrier to owners planning to earthquake-strengthen existing buildings?



Q21 Yes responses

Two hundred and fifty-three (253) submitters (47%) agreed that the current requirements to upgrade buildings "as nearly as reasonably practicable" to Building Code fire and disabled access requirements are a disincentive or barrier to owners planning to earthquake-strengthen existing buildings.

Of these, 110 submitters (43%) commented that the cost of current requirements is a disincentive.

When costs are compounded by the requirement to add perhaps five accessible toilets and a lift in a multi tenanted building at an approximate cost of an additional \$140,000 plus loss of retail space the disincentive to comply multiplies. Add a type 3 or 4 alarm and the disincentive escalates accordingly. (Gisborne District Council)

I am the owner of an earthquake prone building. The works to bring to close to 100% of code cost around \$7,000. However the fire and disability upgrades with cost \$50,000 plus. If work is completed I not get a rental increase or any financial benefit. (Building owner)

Forty (40) submitters (16%) commented that the complexity of current requirements is a disincentive.

Older buildings especially are extremely difficult and expensive to bring up to present day fire and disability requirements. (Personal experience of renovating small old commercial villa). These upgrades should be confined to compulsory earthquake requirements only. (Building owner)

Of course I see repeated examples of costs and "hassle" for building owners who want to improve the earthquake resistance of their building, but who then get "tangled in a wrangle" over fire and/or accessibility issues. Reduce the hurdles I say. (Engineer)

Seventeen submitters (7%) commented that local authority processes are a disincentive.

We had a voluntary upgrade from 40% NBS to 67+% NBS and the council made the building owner upgrade the fire safety precaution. The owner was almost put off strengthening. We have had to strengthen a building in Wairoa and they have had to upgrade disabled toilets, counter and ramps. Many old buildings do not have compliant disabled access and it can increase strengthening costs but tens of thousands of dollars. (Engineer)

Our local council has been very keen to make full upgrades required for any "change of use" for a building, even when the reality of the change is very subtle. This has lead to the loss of new businesses and activities from the town. So one could only see the potential for this sort of over-zealous behaviour as a disincentive to constructive strengthening. Although I am not in principle opposed to the upgrades, having seen the effects of varying interpretations to current requirements, it is all too easy to envisage further problems. (Individual submitter)

Fifteen submitters (6%) commented that current requirements are particularly a disincentive for heritage buildings.

Experience has shown that these requirements can cause seismic upgrade projects to be scrapped or scaled back. This is particularly the case in heritage buildings, where access requirements such as ramps conflict with heritage objectives, making it all but impossible to get through both RMA and Building Consent requirements. At the very least, they can add considerable cost and time to the design and consenting process with no long-term benefit to the actual work that is executed. (Structural Engineering Society New Zealand)

All of these things add considerable costs and delays. None of these costs are recoverable. For example wider doors entail structural changes, if it is a heritage building and the front has to be changed this will require a resource consent. My neighbour was forced to rebuild the front of his building to make the entrance wider and put in a disabled toilet which involved demolishing internal walls moving plumbing and reconfiguring the interior of the building. He is a one man business, the public do not have access to the toilet and he would not let them use it anyway, and only a few people a day go into the business anyway. What is the point of subjecting him to all this expense and hassle? (Individual submitter)

Seven submitters (3%) commented that guidance should be published to reduce or remove this disincentive.

We submit that Central Government needs to provide very clear guidance for Local Authorities to work with to ensure a sensible approach is able to be taken without compromising the ability to upgrade a building. (Hamilton City Council)

We are aware of many building owners who defer undertaking any permitted improvement work because it will trigger fire and disabled access requirements which are difficult and expensive to achieve with older buildings. This Council endeavours to "manage" this requirement as best possible, using tools such as staged work to achieve the desired outcome. Greater guidance and management of the risks in widely interpreting this provision is needed from officials. (Wanganui District Council)

Q21 No responses

One hundred and one (101) submitters (19%) did not agree current requirements to upgrade buildings "as nearly as reasonably practicable" to Building Code fire and disabled access requirements are a disincentive or barrier to owners planning to earthquake-strengthen existing buildings.

Of these, 15 submitters (15%) commented that the proposed changes could be discriminatory towards disabled people.

The paper does not provide evidence but infers that there "may be significant hardship for many building owners" when coping with the cost of earthquake strengthening, so therefore they cannot also cope with any additional cost in upgrading the building's accessibility. Accessibility should be seen as an opportunity and not a cost. (Royal New Zealand Foundation of the Blind)

We do not support that requirements identified in question 21, are in practice a barrier or disincentive to building owners deciding to carry out earthquake strengthening work. In the event there are supportive views, then Government has as much if not more responsibility than organisations such as ours, to educate owners and others, of the benefits that will accrue both socially and economically, by being inclusive. To make decisions which discriminate on the basis of disability will be a breach of human rights and be in breach of the UNCRPD, an international convention which this country has proudly ratified. (Blind Citizens New Zealand)

A small minority of submitters commented that there is no evidence to suggest upgrades are a disincentive for building owners.

Building Act 112(I)(a) (Fire Safety and Access Current Upgrade) is already tempered internally by the dispensation provisions inherent within BA112(2) which (it seems) is in practice rarely applied. There is no reason why this sort of provision might not be extended to seismic strengthening in its application. (Engineer)

A small minority of submitters commented that there needs to be prioritisation framework.

Given limited resources these requirements will delay the implementation of strengthening. MBIE needs to consider what has priority noting that many Chorus buildings will never have a need for disabled access. (Chorus Limited and Telecom)

Q21 Out of scope responses

Five submitters raised editorial issues with this question.

Q22: Should local authorities be able to grant building consents for earthquake strengthening without triggering the requirement to upgrade the building towards Building Code fire escape and disabled access and facilities requirements?



Q22 Yes responses

Three hundred and nine (309) submitters (58%) agreed that local authorities should be able to grant building consents for earthquake strengthening without triggering the requirement to upgrade the building towards Building Code fire escape and disabled access and facilities requirements.

Of these, 51 submitters (17%) commented that strengthening is time consuming and costly.

The risk of not doing so is a disincentive on property owners to strengthen buildings. The combined financial cost of regulatory obligations makes, what may be a marginal strengthening decision any way, potentially an impossible one. (Registered Master Builders Federation)

Yes, and changes to Section 112 are required to enable earthquake strengthening to take place without triggering fire and disabled access improvements. Section 112(2) (c) effectively requires fire and disabled access improvements to outweigh earthquake strengthening improvements. This is a very difficult comparison to make, and we suggest that (c) be amended to exclude earthquake strengthening as an improvement. The cost burden for many property owners for all three improvements will be considerable, and we believe the three improvements should not be linked. (Institution of Professional Engineers New Zealand)

Thirty-five (35) submitters (11%) commented that strengthening should take priority over other requirements.

Earthquake strengthening is a priority and all endeavours should be made to ensure this is financially possible for all building owners. (Building owner)

The priority should be strengthening, disabled access provides another financial disincentive to the process when building owners are facing significant costs this adds to the challenge of the process. Where disabled access is easy to achieve or where existing accesses will be significantly altered by the strengthening then the building owner should be encouraged to upgrade but it shouldn't be mandatory. (Engineer)

Twenty-eight (28) submitters (9%) commented that strengthening should be delinked from disabled access and fire requirements.

Yes. Many building owners may take the opportunity to address the fire escape and or disability access requirements when undertaking strengthening work as part of a more general upgrade of the building however this should remain at their discretion. (Foodstuffs New Zealand Limited)

These buildings were up to code when they were built/refurbished. Had this strengthening upgrade not been enforced on them by the new legislation then they would not have been required to upgrade their facilities. Usually the upgrade works are triggered when the building owner requests changes to the building, but the proposed changes to the building (strengthening) in this situation are being requested of the owner and thus should be addressed differently. Forcing strengthening work and commensurate fire/disability upgrades onto building owners may force many of them to decide that demolishing the building is the cheaper option. (Building owner)

Fifteen submitters (5%) commented that building owners should choose either fire or disabled access.

It is important to separate fire and disabled access requirements, as they have different implications to building upgrades. (University of Auckland)

A modified approach is preferred where there is a requirement to meet reasonably practical Building Code fire accessibility requirements when undertaking earthquake strengthening, but not disabled access. It would be preferable for local authorities to have some flexibility as to how and when these improvements are required. (Wanganui District Council)

Q22 No responses

One hundred and one (101) submitters (19%) did not agree that local authorities should be able to grant building consents for earthquake strengthening without triggering the requirement to upgrade the building towards Building Code fire escape and disabled access and facilities requirements.

Of these, 26 submitters (26%) commented that disabled persons would be subject to discrimination.

DPA does not believe local authorities should be able to grant building code consents for earthquake strengthening without trigging the requirement to upgrade the building code fire escape and disabled access and facilities requirements. We base this on the fact that disabled are consumers, tenants and business owners in the same way that non disabled are. The UN Convention on the Rights of Persons with disabilities outlines the States legal obligation to comply with its Articles even when cost is a factor, it is not an excuse. (Disabled Persons Assembly New Zealand)

This is problematic. Removing fire safety and disabled access requirements puts vulnerable members of the community at risk. Maintaining these requirements, on the other hand, may impact upon employment opportunities. Where buildings house places of employment unintentional discrimination may occur as employers argue they cannot afford to employ a person in a wheelchair because they cannot afford to meet earthquake strengthening requirements and provide facilities such as a ramp and a larger bathroom to accommodate a person in a wheelchair. (Dunedin Community Law Centre)

Fourteen submitters (14%) commented that the building should meet all code requirements

It makes sense to undertake these other upgrades at the same time, to minimise disruption to occupancy, and to make these important fire safety and accessibility improvements as soon as possible. (Accessible Properties New Zealand Limited)

If the building has to be strengthened then it should be upgraded (as above) at the same time and I would have thought even though it will be more costly to the building owner, they should be assured they have taken all practicable steps to ensure safety in their buildings. If selling the building in the future it will be seen as a bonus to any prospective purchaser. (Individual submitter)

Thirteen submitters (13%) commented that upgrading fire/access is just as important as earthquake strengthening.

Fire escapes are more likely to prevent loss of life than earthquake strengthening, it would be negligent to ignore the greater risk in an assessment, in all likelihood it would make it easier for property owners to strengthen their buildings however the property owner will still need to bring their buildings up to standard eventually. (Individual submitter)

Disabled access affects many people today and fire escape requirements of the building code are far more important that earthquake strengthening, so if remedial work is to be done, these should be included at the same time. (Building owner)

Ten submitters (10%) commented that the safety of building users is important.

CCANZ believes that local authorities should NOT be able to grant building consents for earthquake strengthening without triggering the requirement to upgrade the building towards Building Code fire escape and disabled access and facilities requirements. One reason why these requirements should not be waived is that a fire event is highly likely post-earthquake. (Cement Concrete Association of New Zealand)

This is a dangerous Idea. This could result in serious injury or death should a natural disaster or emergency occur in said buildings. As a wheelchair user, getting down stairs in a fire (for example) is not an option and would need other means to get out. Furthermore this is discrimination plain and simple. Saving money while singling out a minority within the population is not fair and should not be about money. This is about equal opportunity and safety to all people in New Zealand. There is also a growing number of people who would need

disabled access routes available to them. This includes our growing older generations. (Individual submitter)

Q23: Should any change apply to both fire escape and disabled access and facilities requirements, or to disabled access and facilities requirements only, i.e. retain the current fire escape upgrade requirements?

Three hundred and forty-four (344) submitters responded to this question. Of these, forty-three (43) submitters (13%) commented that fire requirements should be retained.

Council considers fire as one of the greatest building risk within existing building stock. These should be brought up to standard as reasonably practicably. Disability access likewise has a high but more social priority. (Whangarei District Council)

The current requirements ensure safety in the event of a fire, the likelihood of a fire far exceeds the likelihood of an earthquake, (the recently released costbenefit of this proposal shows our districts risk of death from earthquakes as near non-existent) to allow fire safety requirements to become lax so as to hasten a process that may increase safety in the extraordinarily unlikely event of a life threatening earthquake is both negligent and dangerous. (Ruapehu District Council)

These are separate issues. In general I support the triggering of fire requirements, as the risk of harm from fire exceeds that of harm from an earthquake. The same can not be said for the potential inaccessibility for the disabled. The current provisions in the Building Act which allow a TA some leniency and discretion in requiring the installation of disability access is appropriate. (Individual submitter)

Fire is a far greater risk to life and safety than earthquake. Compliance with Building Code fire egress should be made to comply as part of strengthening, as currently required under the Consent process. Disabled access and facilities is a different issue. Provision, or not, of disabled facilities is not notably a life threatening risk. (Building owner)

Forty-one (41) submitters (12%) commented the status quo should be retained, and that upgrades should be addressed at the same time.

In order to strengthen a building as well as undertake fire and disabled access improvements can double the cost of strengthening alone. However we believe that there should be no relaxation of these requirements. It is more likely that a building will experience a fire than a major earthquake event, accordingly present day fire requirements are considered to be equally as important as strengthening a building. We see disabled access and fire egress having similar requirements and believe that a comprehensive upgrade of buildings is essential in the present day environment. (Christchurch City Council)

No for the reasons already explained we believe there is adequate provision for buildings to be upgraded on a reasonable basis currently. It can be argued that these reasonable levels of upgrade have a larger positive effect on the users of the buildings on a daily basis, when compared to the rarer events of a one-off earthquake event. There is caution needed when considering why we should be more lenient for an existing building as opposed to a new building. You would have to argue then whether it is appropriate for a new building owner to be given automatic dispensation from some code clause requirements just on the basis of cost to build in a particular fashion. The reality is that already there is a provision available within the Building Act in the form of consideration of a waiver of specific code clauses with appropriate reason. (Queenstown-Lakes District Council)

The changes should affect both fire and accessibility equally. It is essential that accessibility is not made worse by earthquake strengthening works but that every opportunity to improve these provisions should be encouraged. (Individual submitter)

Thirty-three (33) submitters (10%) commented that building owners should be allowed to strengthen without triggering fire and access requirements.

ICA members report that upgrading to current requirements can almost be as expensive as the strengthening element of the work. Need to focus on the critical objective – earthquake strengthening. (Wellington Inner City Residents and Business Association)

Although there is already discretion in the use of "as nearly as is reasonably practicable" in S112, experience shows that this is unevenly applied. Further guidance should be provided on what is intended by "as nearly as is reasonably practicable". A significant issue is the diversion of funds away from the actual work that is required. So even though a building undergoing seismic upgrade (with no other change) may be shown to not require any other upgrade for fire escape and disabled access, there may be considerable study required to demonstrate this. (Structural Engineering Society New Zealand)

Fourteen submitters (4%) commented that the proposed changes would be discriminatory towards disabled persons.

Our understanding is that requirements of the Building Act 2004 (and those of the former Building Act 1991) deliberately link these two sets of requirements together. On this basis one requirement i.e. fire escape and disabled access cannot be dealt with in isolation of the other i.e. access and facilities for people with disabilities. We again point out that people with disabilities have the same human rights as anyone else in this country. They have the right to safely enter and use public buildings, to be employed in those buildings, and they have the same rights to be protected from fire. (Blind Citizens New Zealand)

Fourteen submitters (4%) commented that strengthening should be the number one priority.

No. The emphasis must be on reducing risk from earthquakes. The other requirements should not be included at the same time as strengthening is proposed by the building owner because they will dissuade the owners from carrying out strengthening work. (Central Hawkes Bay District Council)

Upgrades should be limited to earthquake work only . Any extra compulsory work is an added expense that landlords will find hard or impossible to bear. (Building owner)

Thirteen submitters (4%) commented that there should be more flexibility.

We suggest that the provision for "as near as is reasonably practicable" is retained, but allow greater flexibility on the application of the standards for accessibility in the case of heritage buildings. Creating fully compliant disabled access and facilities is frequently difficult and expensive for heritage buildings: more flexibility over interpreting the rules is requested. (New Zealand Institute of Architects)

While a risk based approach needs to be undertaken, we support greater flexibility in granting building consents without triggering fire and disabled access requirements. This is not to say that Council would retreat from the application of these requirements, rather we support decisions on inclusion of either fire or disability requirements as part of the building consent process should be determined on a case by case basis. (Southern Councils)

Q24: What would be the costs and other implications of delinking earthquake strengthening from current Building Code fire and disabled access requirements?

Two hundred and seventy-one (271) submitters responded to this question. Many comments related to cost. Sixty-four (64) submitters (24%) commented that the cost of strengthening would be lower.

There would be considerable cost savings to the building owner and insurers when undertaking earthquake repair of a building. Such savings may influence willingness of insurers to cover older buildings. Where the strengthening involves retro-fitting of the building for an extended life, appropriate consideration of disabled access and facilities would seem appropriate. (New Zealand Society for Earthquake Engineering)

On the other hand, 24 submitters (9%) commented that delinking earthquake strengthening from current Building Code fire and disabled access requirements would result in higher costs.

Very considerable starting with the costs and delays to engage Fire Engineers and Accessibility experts and then on top of that often having to do physical works of no relevance whatsoever to improving earthquake resistance. (Engineer)

While it may save cost in the short term the long term goal should be to achieve fire safety and disabled access. It is often more cost efficient to undertake multiple building modifications at the same time rather than as separate exercises. In addition if a change of use is carried out in the future then the upgrade costs will need to be incurred then. (Individual submitter)

Twenty-three (23) submitters (8%) commented that the impact of delinking earthquake strengthening from current Building Code fire and disabled access requirements would been minimal.

The costs of linking earthquake strengthening to current Building Code fire and disabled access requirements will be very large. However, the de-linking will have minimal impact as these buildings, had they not been forced to undergo

strengthening, would legally have been able to continue operating as they were for many years. (St James Apartments Body Corporate)

No obvious cost. NZ Sugar submit that delinking strengthening from building code fire and disabled access would maintain the current status quo on these matters, therefore, there would be no additional cost incurred. Cost would be incurred through maintaining a link to the codes and strengthening requirements due to delays in implementation of strengthening programmes due to longer time to process consents and additional resources required by council and building owner. Increased incentive to advocate for demolition of buildings, in particular older heritage buildings. (New Zealand Sugar Company Limited)

Thirty-three (33) submitters (12%) commented that they were uncertain about the impact of delinking earthquake strengthening from the current Building Code fire and disabled access requirements.

Uncertain, building owners need regulatory certainty to plan for, and manage, the large financial investments involved with earthquake strengthening. Serious consideration should be given to de-linking the minimum strengthening threshold from the NBS. (Wellington Inner City Residents and Business Association)

Sixteen submitters (6%) commented that delinking earthquake strengthening from current Building Code fire and disabled access requirements would result in negative outcomes for disabled people.

If the proposed changes to the Building Act are accepted, the RNZFB believes this would be a step backwards for access, equality and safety for all current and future building users. The social costs of de-linking the earthquake strengthening from access requirements would be high as you are excluding people from visiting and using the building. The economic costs of exclusion will range from loss of rental opportunities and loss of tourist dollars, to loss of employment opportunities and loss of staff productivity whether that's due to permanent or temporary impairment. (Royal New Zealand Foundation of the Blind)

I believe the proposal undermines the hard work shown over many years by people with disabilities ad supporting organisations in New Zealand. It undercuts the Positive Aging Strategies adopted in many of our NZ communities. It is contrary to the Government's Disability Strategy and Positive Aging Strategy which were also the result of many years of hard work and consultation, and is also contrary to the United Convention on Rights of Persons with Disabilities to which NZ is a party. (Individual submitter)

Fifteen submitters (6%) commented that delinking earthquake strengthening from current Building Code fire and disabled access requirements would see more strengthening work done.

The implication would be that owners would be able to focus and use the costs to the best advantage to comply with legislation. It will mean that an owner is less likely faced with demolition and as such the community will maintain its level of buildings, its heritage and its amenities. (Thames-Coromandel District Council) Delinking fire/disabled access would provide the ability to look at the issues separately to prioritise with limited resources. It is likely that it will not detrimentally impact on the long term provision of fire/disabled access as this will continue in response to market pressure and in the normal course of building use upgrades. Most building owners do provide disabled access in response to market or social pressure. Many Churches, e.g. the Anglican Diocese of Wellington, already have a policy of upgrading to take account of the needs of all people. (Building owner)

Fourteen submitters (5%) commented that delinking earthquake strengthening from current Building Code fire and disabled access requirements would mean that these Code requirements would be ignored.

De-linking earthquake strengthening from current Building Code fire and disabled access requirements may open the system to abuse. Building owners could seek to carry out work under the umbrella of "earthquake strengthening" and circumvent mandatory upgrading requirements that would otherwise apply. (New Zealand Law Society)

Delinking fire escape and accessibility provisions from earthquake strengthening would send out completely the wrong message to designers and owners. For instance, there will be ample opportunity to improve the accessibility of buildings at no cost which would be lost if de-linking occurred. Delinking fire escape requirements could be potentially fatal and have insurance implications. (Individual submitter)

8.8. Other issues: Heritage buildings

Other issues: Views are sought on how important heritage buildings can be preserved while also being made safer.

Q25: When considering listing heritage buildings on district plans, what factors should local authorities consider when balancing heritage values with safety concerns?

Three hundred and twenty-two (322) submitters responded to this question. Of these, 134 submitters (42%) commented on the importance of heritage values relative to other considerations when listing on district plans.

Heritage buildings are extremely important and vital that they keep their character without new regulations destroying this. It is not practical to expect them to meet new regulations. They were built to last and they have done so – a major catastrophic earthquake will bring destruction to new buildings as well – let the old ones rest in peace till this happens. (Building owner)

Heritage is a matter of national significance and is in the public good. Heritage listings should be based on heritage values, and those heritage values remain whether a building has structural weaknesses or not. Assessment of any safety concerns is therefore a separate exercise. Rather, the interface of legislation and procedures protecting heritage and those protecting safety should be examined. (New Zealand Institute of Architects)

The benefits of heritage retention need to be kept firmly in mind when balancing heritage values with safety concerns. Community identity; sense of place; attractive city; historical education; a reference point in the context of new development; sustainable development; tourism and economic value are all important considerations. Safety concerns should not outweigh these factors. (Christchurch City Council)

We don't want to see earthquake strengthening requirements being used as a way of getting around heritage requirements. It is very important that heritage buildings be preserved. (Hurunui District Council)

Seventy-nine (79) submitters (25%) commented that public safety should be taken into account when listing heritage buildings on district plans. Furthermore, 44 submitters (14%) were strongly in favour of public safety being a determining factor to be taken into account when listing on district plan.

Safety should ALWAYS come first. The additional cost of strengthening in a way sympathetic to heritage needs over and above basic strengthening requirements should also be factored in. It is unreasonable in some cases to expect owners to spend significantly higher on strengthening on a low level heritage building. (Individual submitter)

Our District Plan review feedback has indicated that the safety of the public should be prioritised over the retention of heritage buildings but that there still appears to be a need to maintain a "heritage" feel and streetscape. (Manawatu District Council) Section 5 of the Resource Management Act requires local authorities to strike a balance between a number of competing needs including health and safety. Subject to the need for buildings to be safe, improving seismic performance should not be at the expense of heritage or environmental values. (University of Canterbury)

The buildings need to continue to be used so safety should come first, historic issues are secondary. (Individual submission)

Forty-nine (49) submitters (15%) commented on issues around managing risk (and consideration of actual risk). Thirty-five (35) submitters (11%) commented on the related issue of usage.

Once we lose our heritage buildings they are gone forever and cannot be replaced. We need to consider the number of people who have been killed in earthquakes over the years, and compare that to, say, road deaths. Is it fair to allow the wholesale destruction of our heritage for approximately 100 times fewer fatalities (around 400 versus 40,000)? (Building owner)

We also have to recognise that no building can ever be earthquake-proof, and that like everything in life there are risks to be considered and weighed. Living or working in a heritage building should be one of the risks we factor in to our lives. People/businesses with a lower risk threshold can choose not to use these buildings. (Wellington Inner City Residents and Business Association)

How important is the building to the city? What is the likelihood of the public being injured by the building? Are the owners and occupiers of the building the only ones likely to be affected in an earthquake? (Hawkes Bay Club)

Thirty-eight (38) submitters (12%) commented that cost implications of listing should be taken into account when listing on district plans.

...If the building does require seismic upgrading then what are the costs involved with preserving the building and are the public entities involved prepared to fund the marginal costs of those works (i.e. the costs over and above those involved in demolition and replacement) in full or in part. If the public entities are expecting the owner of the building to fund that work unaided then the structure should not be listed. (Property Council New Zealand)

Thirty-four (34) submitters (11%) commented on taking into account the economic contribution and amenity value of heritage buildings.

Consideration needs to be given to the age of the building, how that building has contributed to the community, what the cultural background to that building is, what is the social and architectural aspects and what is the economic contribution it makes to the community. In an independent economic impact study completed on the Art Deco activities that occur in Napier because of the Art Deco styled buildings found in the city, revealed a \$26 million gross revenue impact on the area. This report was completed in 2006 and focused on the Art Deco Trusts activities. The financial impact is very likely to have grown significantly over the past 7 years. (Art Deco Trust)

A critical issue is the need to balance the need for economic sustainability (which obviously contributes to a dynamic and growing city) with the desire to preserve our heritage. There is unlikely to be one hard and fast formula but flexibility must be preserved in the system to ensure that buildings can continue provide for the needs of the people that are likely to demand its services i.e. work in it, live in it etc. If the costs associated with strengthening upgrades to heritage buildings create economically unsustainable buildings then we will ultimately lose part of our heritage as they will eventually be abandoned. (Wellington Inner City Residents and Business Association)

Eighteen (18) submitters (6%) commented on the importance of preserving only the most important heritage buildings (including having a better/tighter definition for heritage).

There is a need for a clear definition of what constitutes heritage and, as such, what therefore needs to be protected and what can be developed. This definition must be sensible, not everything should be classed as heritage and can be preserved. (Kiwi Income Property Trust)

Local authorities need to be directed by statute to narrow their focus onto the most important and outstanding heritage buildings which are generally state or local government owned. (Property Council New Zealand)

Sixteen (16) submitters (5%) commented on the importance of taking economic considerations of the owner into account.

It must also be acknowledged that strengthening may not always be economically viable for a commercial property owner. In this case building owners must reserve the right to demolish. Alternatively, central or local Government might devise ways to assist building owners with the cost of strengthening work e.g. tax relief, public grants. (Foodstuffs New Zealand Limited)

Fourteen (14) submitters (4%) commented on the importance of taking local concerns, including of the owner, into account.

At present not all heritage buildings are adequately covered under District Plans, therefore decisions on their inclusion needs to take account of both the Historic places trust and local decision making in a consistent and transparent way. One key issue is ensuring the community has the opportunity to discuss and agree the perceived value of the heritage buildings. (Waitaki District Council)

A number of local authority submitters commented on how they currently balance heritage values against other values, and ways the system could be improved.

The section 32 process under the RMA enables a council to balance all matters before recommending to councillors that regulation is required (as well as or instead of non-regulatory methods). At this point, in developing or reviewing district plan provisions around heritage, it would be appropriate to take into account a council's other functions under the Building Act and the wider regulatory environment within which district plan provisions would apply. Public safety and overall city outcomes, in this case for resilience, would be matters taken into account in this process. Elevating consideration of natural hazards into Part 2 of the RMA would also empower councils to justify a range of approaches based on balancing heritage with other considerations under the Act. (Wellington City Council) Heritage Listing of buildings in the District Plan is a Resource Management Act process, and an assessment is required under s32 of that Act "Consideration of alternatives, benefits, and costs" and the goal of achieving Sustainable Management as defined by Part 2. Heritage listing is a decision made balancing the benefits of heritage protection with other factors. (Palmerston North City Council)

Q26: What assistance or guidance will be required for owners, local authorities and communities to make informed decisions on strengthening heritage buildings in their districts?

Two hundred and seventy-five (275) submitters responded to this question. Of these, eighty-two (82) submitters (30%) commented on the need for better general information or guidance. Fifteen submitters (6%) thought that owners do not need further assistance and the system needs no change.

Owners will require clear and thorough guidance and advice on earthquake strengthening. This will need to be consistent and readily available. (Hastings District Council)

There is a considerable amount of expertise in methods for strengthening heritage buildings. Government could assist communities and building owners by providing education on strengthening methods. (Central Otago District Council)

Improved national policy and guidance for building safety provisions under the RMA would give greater certainty for building owners and reduce the potential for misunderstanding and misinformation. (New Zealand Historic Places Trust)

Eighty-one (81) submitters (30%) commented on the need for greater professional assistance or more specialist training of architects, engineers, and heritage professionals.

Help is required with the provision and remuneration of heritage experts for determining heritage status, and for engineers and other consultants to assess the viability of strengthening heritage buildings. (Building Owner)

Engineers working in this field need to have demonstrable expertise. This may entail the development of more assessment and strengthening tools, and/or further training. However, there is a finite population of such buildings, so a matching of existing skillsets to the need is required...(Structural Engineering Society New Zealand)

Fifty-three (53) submitters (19%) commented on the need for information on options (including demolition and costings, and acceptable solutions for targeting certain elements of buildings.

Provide generic guidance on how to undertake seismic upgrades – e.g. acceptable cost effective ways to strengthen chimneys or parapets. (Individual submitter)

The DCC believes there is a need for greater information around economic methods for strengthening heritage buildings and acceptable solutions for

targeting "problem" elements of heritage buildings, such as parapets. (Dunedin City Council)

Twenty-four (24) submitters (9%) commented on the need for guidance on determining heritage value including what is the most significant.

Better guidance in the RMA around defining what is "heritage" compared with a building's character. (Wellington City Council)

Better guidance on what makes a building "historic." Presently too many people who claim an interest can dictate the building's fate without having to finance any costs towards the consequences of their opinions. (Individual submitter)

Twenty (20) submitters (7%) commented on the need for the greater understanding of seismic risk, including the use of risk assessments or risk management frameworks.

A greater understanding of the nature of seismic risk – not simply the % NBS rating of buildings. This requires better communication between engineers and non-engineers. (Structural Engineering Society New Zealand)

Twenty (20) submitters (7%) commented on the need for better regulatory processes, including clear procedures around consenting, standard templates and best practice guides.

Clear legislative procedures supported by regulations and practical guide notes / brochure information and standard templates for local authorities to use. (Hurunui District Council)

District plans, in particular, should include objectives, policies and methods, including rules and definitions to promote and improve heritage building safety. (New Zealand Historic Places Trust)

Q26 Out of scope issues

Submitters raised the need for better advice. Nineteen submitters (20%) commented on the need for better advice or assistance (including integrated advice) from local authorities. Sixteen submitters (6%) wanted better advice from the New Zealand Historic Places Trust.

Q27: What barriers deter heritage building owners from strengthening their buildings?

Three hundred and thirty-five (335) submitters responded to this question. Of these, 272 submitters (81%) identified cost as the greatest barrier to strengthening heritage buildings.

The DCC has undertaken a lot of work in this area, through its Heritage Buildings Economic Re-use Steering Group. In Dunedin the greatest barriers appear to be financial barriers – the cost of upgrade and insufficient additional return following upgrade. (Dunedin City Council) Perceived cost is the major factor in deterring building owners from strengthening heritage buildings. (Historic Places Canterbury, and Interests in Conserving the Identity of Christchurch)

Eighty-five (85) submitters (25%) identified returns on investment or economic viability as a barrier.

The major barrier is financial viability to ensure the building owner gets a return on investment within their period of building ownership. Factors affecting financial viability include prevailing and projected commercial property market conditions, costs of insurance, and the costs of strengthening. (Institution of Professional Engineers New Zealand)

The main barriers are economic. There is not only the cost of undertaking the strengthening and refurbishing of the building but the loss of income from the building whilst this work is being undertaken. Once the work is completed in many cases the revenue received from the building will not give an economic return on the capital invested. If the owner is able to demolish the building and erect a modern building their return will usually be much greater. (Building owner)

Forty-two (42) submitters (13%) identified the loss of heritage values as a barrier to strengthening, including the need to find solutions that do not compromise heritage values and issues of aesthetics.

The Insurance Council says that it's possible that some building strengthening solutions could be seen to degrade the heritage fabric of the building. (Insurance Council of New Zealand)

Difficulty in strengthening unreinforced masonry buildings without either significantly detracting from their heritage look or major internal works. (Building owner)

Forty (40) submitters (11%) identified compliance issues (such as resource consents) as a possible a barrier to strengthening.

The costs of refurbishing a heritage building are increased by the onerous reporting and compliance obligations. The provision of historic information should be funded by the local authority, as it is not required for the matter at hand. (University of Auckland)

The cost associated with specific heritage and/or archaeological assessments and current Historic Places Trust requirements represent a compliance cost and in cases a barrier to property owners strengthening heritage buildings. (Clutha District Council)

Twenty-six (26) submitters (8%) identified the lack of good advice (including access to specialist help) as a deterrent to strengthening. Seven (7) submitters (2%) identified the requirement for specialist advice as a barrier to strengthening.

Lack of information on how to do it, difficult to get appropriate engineering advice. There are very few heritage building specialists in New Zealand. In an example I was involved with, one engineer proposed a solution costing \$96,000, when a second opinion resulted in a \$6000 solution. (Individual submitter)

In addition, the building materials and process associated with many of these properties means that specialist advisors and contractors are often required to carry out this work. (Clutha District Council)

Twenty-three (23) submitters (7%) commented on the degree of uncertainty or lack of knowledge in relation to strengthening options and or regulatory requirements.

A lack of understanding on what they will need to do, combined with a perception that the process is too difficult to manage. (Building owner)

Uncertainty of outcomes e.g.: Will demolition be allowed? Will a new building be allowed and with what restrictions? What are the costs of strengthening? (Wanganui Earthquake-prone Buildings Community Taskforce)

Twenty-three (23) submitters (7%) commented on timing issues: either the proposed timeframes or the length of time to strengthen a heritage building.

We submit that the cost of strengthening is the major barrier. We suggest in our experience that many building owners, and particularly in the case of owners of older buildings, struggle to fully understand the balance between cost of strengthening and commercial longer term viability. We submit in the case of heritage buildings Central Government recognise the difficulties faced by building owners and make provision for longer timeframes for upgrading heritage buildings. (Hamilton City Council)

It may be appropriate to consider longer timeframe for some heritage buildings and even exemptions as covered earlier in the submission, and these are appropriate to consider on a case-by case basis. There continues to be advancements in technology and products capable of being used to strengthen heritage buildings, and this may mean it is very appropriate to take a staged approach to allowing upgrade on an extended timeframe to allow for affordability and practicality. (Queenstown Lakes District Council)

Twenty (20) submitters (6%) identified accessibility and fire compliance requirements act as a deterrent to strengthening heritage buildings.

A further concern is the Building Act requirements around access. When a building owner seeks to undertake earthquake strengthening work, they are faced with having to also meet the requirements of the Building Act to upgrade the building "as nearly as reasonably practicable" to current Building Code requirements for fire and access. For a heritage building owner, the interpretation of these requirements is critical. (Hastings District Council)

The issues which are identified in earlier questions relating to requirement to upgrade for all building code clauses is perceived by owners to be a barrier. However it is our experience that the provisions of "as nearly as is reasonable practical", and the ability to apply for a "waiver" of certain code clauses, do provide for a reasonable balanced approach to be taken currently. (Queenstown Lakes District Council)

Nineteen (19) submitters (6%) identified the lack of support from the public or government (including financial support), as a barrier to strengthening heritage buildings.

A lack of support in funding improvements from affected parties i.e. local authorities, Historic Places Trust, central government. (Ashburton District Council)

Other countries do not blindly destroy their built heritage – but instead they encourage it to remain for the benefit of all. Their heritage architecture remains because there are financial incentives for it to remain. The costs of strengthening heritage buildings currently fall completely in the hands of the owner of the building, despite the visual, social and cultural benefits being subscribed to by the much wider population. If the public of our cities wish to retain that heritage, then it must be the role of the public to help pay for that privilege, through government assisted funds or other mechanisms. Currently there are few routes for this process to take place, other than the very small amount of grants available to building strengthening – and this is available in only a very few cities. Clearly some new mechanisms must take place. (New Zealand Institute of Architects)

There is often a great reluctance by both central and local government to contribute towards normal maintenance and repairs as well as [earthquake] strengthening proposals for listed heritage properties. (Individual submitter)

Thirteen (13) submitters (4%) identified the lack of feasible options or acceptable engineering solutions as being a barrier to strengthening.

A further issue which is not restricted to owners of heritage buildings is the lack of structural engineers available to assist with carrying out the assessment of buildings. While there is much discussion around council processes and the time this takes, it is more likely that what will hold up any strengthening work is actually determining how earthquake prone a building is and what work needs to be done to bring it up to standard. This is one of the key concerns raised by building owners in the Hawke's Bay at public meetings late last year, as well as by structural engineers themselves. (Hastings District Council)

Due to the demand on engineering services, the situation can arise where the limits of an engineer's knowledge or experience may be stretched, or there is insufficient time to fully develop solutions for what can be complex engineering problems. In these cases, the proposed strengthening works may impinge on heritage fabric to an unacceptable degree, or the solution may not be cost effective. These technical demands highlight the need for the development of training material and its dissemination to practicing engineers. (New Zealand Society for Earthquake Engineering)

Twelve (12) submitters (4%) commented on the role of the New Zealand Historic Places Trust and pressure from heritage advocates.

The council won't make a decision on the tiny compromises needed to implement the "cheaper option" and discussions with the Historic Places Trust are going nowhere. (Building owner)

The heritage protectors are the greatest barrier to maintaining/strengthening heritage buildings. Heritage protectors' inability to be flexible about what and how structures are altered just make projects to difficult to entertain. (Individual submitter)

Q28: Do heritage rules (for example, those in district plans) deter owners from strengthening heritage buildings?



Q28: Pie Chart

Q28 Yes responses

Two hundred and twenty-five (225) submitters (42%) answered that heritage rules do deter owners from strengthening heritage buildings. Of these, 38 submitters (17%) did not provide a reason while 19 submitters (8%) did not know why heritage rules deter owners from strengthening heritage buildings.

Seventy-six (76) submitters (34%) commented that heritage rules add to the cost of strengthening heritage buildings.

The reasons can sometimes be resolved through adequate consultation with all stakeholders. Often the problem is essentially a design issue that can be resolved through appropriate expertise, however this is a limited and expensive resource. The over-riding factor as to how strengthening is to be done is a cost issue. Often the most direct way to do so may destroy what was first set out to preserve. In the present circumstances however, severe lack of funds is the major deterrent. (All Churches Bureau)

Forty-three (43) submitters (19%) commented that heritage rules lack flexibility and are unduly restrictive.

Often heritage rules require building owners to use specific materials or techniques that will increase the cost of any strengthening or repair strategy. This is a barrier and disincentive for building owners of heritage buildings and it should be addressed...It may be that reducing heritage requirements to allow heritage buildings to be upgraded in accordance with modern techniques (even if this will diminish the authenticity or aesthetic appeal somewhat) is a necessary reality to prevent demolition. While central government should and must take steps to promote heritage buildings, this should not be by way of reducing performance criteria under the Act. (New Zealand Law Society)
If it is possible to provide local authorities with the scope to take a flexible approach to consent assessment, then it would in all likelihood be possible to save many more heritage buildings from demolition. (University of Canterbury)

Property Council members have been left in situations where heritage rules prevent them from replacing façade's with replicas to make them safe and also from demolishing the building. These rules are ruinous both for building owners and for any future use of the building. (Property Council New Zealand)

Twenty-three submitters (10%) commented that heritage rules are of no benefit to the owner.

Sixteen submitters (7%) commented on the need to get resource consent while 12 submitters (5%) suggested rules can restrict an owner from strengthening.

Q28 No responses

Ninety-three (93) submitters (17%) answered that heritage rules do not deter owners from strengthening heritage buildings. Of these, 73 submitters (79%) gave no reason.

Sixteen submitters (17%) commented that heritage rules and district plans in general can be changed to enable strengthening.

Carefully constructed policies and rules within district plans can in fact enhance the process of balancing effects on heritage values with the need for buildings to be strengthened, alongside other tools to financially incentivise strengthening and provide building owners with clear and accurate information and expedient service delivery. The advocacy role of Councils is crucial to balancing its regulatory functions. Having an emphasis on assisting building owners through the process, rather than seeing it as a deterrent is crucial to the success of a resilience policy. Depending on current and future rules within district plans across the country, the resource consent process is a way of ensuring life safety issues can be balanced appropriately with heritage values and economic considerations. This process is important from an urban form and town/city vitality perspective as much as from a heritage perspective. A focus for Government could be on dovetailing Building Act changes, RMA changes and heritage protection provisions. (Feilding Promotion)

Q29: What are the costs and benefits of setting consistent rules across the country for strengthening heritage buildings?

Two hundred and sixty (260) submitters responded to this question. Of these, 79 submitters (30%) commented that consistent rules could bring certainty, improve public safety and assist in helping councils with potentially controversial decisions.

The potential benefits of consistent rules are that there is uniformity across the country. A framework such as this could take some uncertainty and variability out of the process and may reduce decision making time for councils, whilst avoiding the need to introduce specific nationwide rules. (Feilding Promotion)

There needs to be national consistency in the assessment of buildings. Setting a standard for heritage rules could be beneficial in that it would not only be beneficial to Councils in determining the requirements for upgrading buildings, but also for building owners as there would be a consistent approach being taken. However, such a proposal needs to proceed with caution. Really what is at issue here is the rules as they relate to earthquake strengthening, and the work that is required to bring a building up to the NBS standard...It would be a mistake to introduce a national standard or similar that relates to heritage in general. Such a standard does not take into account local context or the value of heritage to communities. (Hastings District Council)

Submitters also noted other significant benefits of setting consistent national rules for strengthening heritage buildings. These included fewer arguments about interpretation, setting clear parameters for owners/local authorities/professionals, and a more consistent understanding of what is heritage.

Seventy-six (76) submitters (29%) commented that consistent rules would fail to recognise local or regional variation in seismic risk.

Consistent generic rules across the country would provide greater certainty for building owners as to potential requirements. However, consistent rules would work against remote heritage buildings in a low seismic area. The different risks associated with remote areas, provincial centres and metropolitan centres must be addressed. Resources can also vary from region to region, hence working for or against a particular approach to protecting heritage buildings. Again the "Risk Management Framework" would have the potential to identify those differences and provide appropriate direction. (New Zealand Society for Earthquake Engineering)

Fifty-six (56) submitters (22%) commented that consistent rules could undermine local values and reduce the ability of communities to find local solutions.

Different communities place different importance on heritage values. Therefore consistent rules across the country are not appropriate. Some communities may be prepared to live with a higher level of risk for a longer period of time, subject to a maximum time-frame. Some councils support the retention of heritage buildings by providing financial support for strengthening. (Institution of Professional Engineers New Zealand)

Consistent rules do not recognise the differences between communities, for example small rural towns are less likely to get the economic benefits from strengthening buildings, and are also less likely to cope with large scale demolition, either economically, environmentally or socially as buildings are unlikely to be rebuilt. By comparison economic returns in larger centre will ensure that revitalisation occurs following demolition. Also in some towns, because of a historic lack of economic activity, there may be a higher percentage of heritage buildings and therefore increased likelihood of demolition under the current proposals. Flexibility is essential to enable communities to adopt innovative methods to protect heritage buildings from demolition. (Central Otago District Council)

The Art Deco Trust would support a national standard for earthquake strengthening but consistent rules across the country may not be in the best interests of heritage buildings, and in different regions, the cost of strengthening is the same but the economic return is different. (Art Deco Trust) Twenty-six submitters (10%) noted the danger of inflexible rules. Twenty-one submitters (8%) suggested that consistent rules might end in greater loss of heritage buildings.

Other submitters commented that the rules would increase the financial burden on councils and communities and increase bureaucracy.

8.9. Other issues: Inclusion of all residential buildings

Other issues: Views are sought on the Royal Commission's recommendation to allow local authorities the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements on residential buildings to be dealt with within a specified timeframe.

The Royal Commission recommends that local authorities ought to be able to decide, in consultation with their communities, whether they want to have policies to deal with specific hazardous features of residential buildings within a specified timeframe. (Recommendation 99, Vol. 4, Final Report)

There was mixed support for this Royal Commission recommendation. Of those that agreed, the majority commented that residential dwellings can pose a risk to users and the safety of users is important.

If something heavy, projecting and on a well patronised building is known about then local authorities should have power to enforce removal regardless of any earthquake considerations. (Engineer)

Presently domestic buildings that are 2 stories high and have 2 or 1 household units are exempt from the proposed legal requirements nationally. This exemption is not in accordance with the life and safety considerations. These domestic dwellings should not be exempted, if they are in city or suburban environments. If the national requirement would not include these types of dwellings the local authorities should have the power to include them in their seismic assessment process and enforce upgrades if required. (Building owner)

Of those that disagreed, submitters suggested that home owners should have the discretion to strengthen or not, but the risk from earthquakes does not justify regulatory intervention. Submitters instead suggested non-regulatory responses such as education and guidance would be a better way of dealing with these risks.

We do not believe this the proposal should include residential buildings. Any such requirement will place a further financial burden on property owners who are having rate increases as a result of all the other work their Council is being required to undertake as a result of these proposals including strengthening public buildings...We recommend MBIE provide public education on the dangers of chimneys and what people should do with them. (Matamata Piako District Council)

[We] prefer to deal voluntarily with low-risk hazards such as chimneys when time and resources allow, rather than be constrained by a "one-size-fits-all" approach imposed by the local authority. For example our suburban house had two stucco over brick chimneys, one of which had several large cracks. Upon demolishing this chimney we found substantial amounts of reinforcing steel through the walls, which meant that there was only a very small risk of this structure fracturing and falling in an earthquake. We have decided not to demolish the other chimney. (Building owner)

The cost versus the economic benefit is far too high. Many homeowners are under pressure now and could not afford to upgrade there houses. Especially when you look at how many people in CHCH actually died in residential houses versus commercial buildings. (Individual submitter)

Q30: Should local authorities have the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements on residential buildings to be dealt with within a specified timeframe?



Q30 Yes responses

One hundred and ninety-seven (197) submitters (37%) agreed local that authorities should have the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements on residential buildings to be addressed within a specified timeframe. Of these, 24 submitters (12%) commented that the safety of building users is important

While not a major issue for Gisborne (most unreinforced brick chimneys have been replaced after previous events) it can be a major impediment to the recovery after a significant seismic event if many dwellings have suffered damage from over toppling chimneys or have fallen off their piles. (Gisborne District Council)

Twenty-two (22) submitters (11%) commented that residential buildings can pose a risk of injury or death.

Yes, it is in the community's interest for hazards to be reduced, including chimneys and parapets. By permitting and encouraging work on chimney strengthening to be undertaken immediately, on a nationwide basis, the country will have discounted (by a considerable amount) the likely cost of any future earthquake. (New Zealand Institute of Architects)

RMBF agrees allowing local authorities the power to adopt and enforce policies to require specific hazardous elements on residential buildings to be dealt with within a specified timeframe The Royal Commission has recommended

allowing local authorities the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements (e.g. chimneys) on residential buildings to be dealt with within a specified timeframe. (Registered Master Builders Federation)

Twelve submitters (6%) suggested that specific hazards such as chimneys should be removed.

...but limited to the likes of brick chimneys and other similar hazard elements and A). Owners be give 15 years to remedy for most cases, OR. B). 10 years to remedy if a hazard to passing public is present, like a "rumpety" brick garage wall immediately beside a public footpath of moderate or greater usage. (Individual submitter)

Chimneys, parapets etc caused major damage and death. Luckily no residential building contributed to any deaths but this was luck only. Get rid of these unsupported edifices. (Individual submitter)

Some submitters qualified their response. Eleven submitters (6%) commented that local authorities should only have the power in high risk areas or where there is a high risk of injury or death.

We support discretionary power to [territorial authorities] to enforce the removal of specific hazardous elements (e.g. chimneys) but only those that may fall onto public areas or adjacent properties, although note this would ideally be done under a nationally aligned policy. (Beca)

Just elements that could cause loss of life – but it should be determined nationally not locally, and according to the region's earthquake risk. (Individual submitter)

Eleven submitters (6%) commented that local authorities should only have the power provided there are sufficient timeframes to carry out the strengthening work.

Yes, but not in the proposed timeframe. I consider this to be ridiculously short. (Individual submitter)

Q30 No responses

One hundred and seventy-three (172) submitters (32%) did not agree that local authorities should have the power, following consultation with their communities, to adopt and enforce policies to require specific hazardous elements on residential buildings to be dealt with within a specified timeframe.

Of these, 35 submitters (20%) commented the risk of injury or death is too low to include residential buildings.

Residential buildings do not pose a significant hazard, the likelihood of injury is low and then to very small numbers of occupants. Methods of construction have been in general in accordance with light timber frame construction. (Thames Coromandel District Council)

The density of people in most residential situations makes the risk small and beyond the need for local authority intervention. The owners of residential

properties, which are less than 2 storey and contain fewer than 3 household units, should make these decisions themselves. (Individual submitter)

Twenty-six (26) submitters (15%) commented residential building owners should decide whether to identify hazardous elements of their houses.

No, residential buildings should not be included. Councils could provide education to assist residential building owners in understanding risks and making buildings safe for example by strengthening or removing chimneys. Such decisions should be made by the residential property owners. (Central Otago District Council)

People should be allowed to make their own decisions and accept or reject the risk. For example I am not about to earthquake strengthen the chimneys in my 105 year old villa in Auckland. In the very remote possibility that there is an earthquake and they fall down, I will take my chances that I am not underneath. (Individual submitter)

Sixteen submitters (9%) commented that public education would be a more effective way of dealing with dangerous elements of residential buildings.

The University does not support this proposal as the level of risk posed by the specific hazardous elements on residential buildings is minimal. Instead local authorities should be looking to educate residential homeowners on what the risks are and how they can reduce the level of risk to their home. (Massey University)

Council strongly encourages the Ministry to prepare final proposals that support and adopt nationally consistent legislation. Council does not support an active role being taken by local authorities in residential buildings other than already provided for in the current legislative provisions. Seismic upgrading work relating to residential chimneys and other items are more appropriately left to home owners to address. The Ministry would be best placing its attention and resources to highly visible public education campaigns to draw attention to the need for owners to address at risk profiles on residential buildings. (Hastings District Council)

Fourteen submitters (8%) raised concerns about cost.

Residential building should be left out of earthquake-prone building policies. Specific dangerous circumstances can be dealt with under the dangerous building legislation of the Building Act although the process and cost of the process needs to be streamlined. Too costly and protracted at the moment. (Southland District Council)

I think we are going too far to apply rules to single or double unit dwellings. The older buildings are often owned by people of less means (it's what they can afford) and they would not have the ability to fund upgrades. In rental situations, upgrade would result increased rents which again may be unaffordable. (Individual submitter)

Ten submitters (6%) commented there is not enough resourcing for local authorities.

Resourcing this process would be difficult for many local authorities. Our experience is that this would be very unpopular. The quote "A (English) man's

house is his castle" springs to mind from recent heritage buildings meetings experience. These meetings identified that homeowners do not like to be told by Council what to do with their dwellings. Provision of information would be the preferred approach. Dwellings do not pose the same level of risk to "other" people in the way that commercial buildings do. (Manawatu District Council)

While recommended by the Royal Commission, local authorities do not have the resources to implement and enforce this process. Council considers that the limited safety benefits that may result, do not justify the cost of regulating and implementing such a provision or the potential negative impact it could have on housing values. (Kapiti District Council)

8.10. Other questions

Many of the submitters who responded to the following questions took the opportunity to summarise their submission, or to make statements setting out their conclusions after considering the proposals as a whole.

Q31: What would the proposed changes mean for you?

Four hundred and nineteen (419) submitters responded to this question. Most submitters described the negative impacts that the proposed changes would likely to have on them, particularly in response to the proposed timeframes.

Q31 Positive impacts

Thirty-five (35) submitters (8%) recognised that the Canterbury series of earthquakes has highlighted issues with New Zealand's earthquake-prone buildings policy.

Christchurch was a wake-up call to which government must respond. (Individual submitter)

Forty-three (43) submitters (10%) commented that the proposals would have minimal impact. Submitters who identified positive impacts described how the proposed changes would encourage strengthening, result in safer buildings and communities, and introduce clearer expectations and national consistency.

On the whole it is considered that the proposed changes driven from a central government level will promote clearer guidelines and processes which will benefit the earthquake-prone assessment and strengthening of buildings. (New Plymouth District Council)

They mean improved safety for my community. I think there is a real opportunity here to encourage property owners to strengthen buildings for earthquakes. (Individual submitter)

Q32 Negative impacts

One hundred and eighteen (118) submitters (28%) felt the impact of the proposed changes would be significant.

The inevitable destruction of the town that I live in. In low economic areas like mine the results could only be demolition, and without money to replace buildings essential services would have to leave the district. The cost associated with that sort of outcome are obvious at a financial and convenience level, but even more distressing to consider the artificial loss of a town. (Individual submitter)

No direct impact as I am not a building owner, but if the old streetscape was demolished the area would lose its character, the new buildings would have higher rents so the small tenants would be put out of business. I would ask myself why I am living here at all. (Individual submitter)

Forty-three (43) submitters (10%) commented that the proposals overstate the risk or are an overreaction to it.

The reaction to the effects of the Christchurch and Canterbury earthquakes will almost certainly be seen as disproportionate in the future. We would hope that in the meantime this reaction does not result in widespread abandonment of heritage buildings and their eventual destruction. (Akaroa Civic Trust)

The proposed changes, as they stand, represent a heavy level of compliance on our Council and community. Analysis undertaken as part of our submissions suggests the proposed accountabilities, timeframes and emerging scale of the issue, would be inflexible, unworkable and unjustified in terms of risks and returns for our community. (Clutha District Council)

Some submitters noted that they would be directly affected by the proposed changes. These types of submitters tended to either be local authorities, building owners, and private companies who would undertake assessment and strengthening work.

The proposed changes, as they stand, represent a heavy level of compliance on our Council and community. (Timaru District Council)

I own an apartment in Auckland that has been identified as earthquake-prone. The costs of building upgrade will likely be very significant. (Building owner)

I am a structural engineer. I foresee a huge bottleneck in the construction business due to insufficient structural engineers to carry out the proposed evaluations and strengthening designs. (Engineer)

Twenty-one (21) submitters (5%) noted the effect the proposals would have on the disabled.

The suggested changes on reducing the disabled access means I won't be able to live a normal inclusive life. (Individual submitter)

Forty (40) submitters (10%) commented that the proposals were not relevant for areas of low seismicity, such as Auckland, and that these places should not be subject to the same requirements as places with high seismicity (such as Wellington).

Council does not agree with the proposal that all non-residential and multi-unit, multi-storey residential buildings have a seismic capacity assessment within 5 years of the changes taking effect, unless it is in a high risk area. The Hauraki District is not in a high risk area. (Hauraki District Council)

The proposals appear to be based on the earthquake prone building work carried out in large cities, for example Wellington, with many tall buildings and intense development posing risks. In rural New Zealand towns such as Waipukurau (which is in Central Hawke's Bay) most buildings are single storied, with a few two storied buildings. The risks and the solutions are likely to be quite different to those in large cities. (Central Hawkes Bay District Council)

Eighty-three (83) submitters (20%) suggested the proposals would have a disproportionate impact on smaller provincial centres with many older commercial buildings, such as Whanganui. Some of these submitters also noted that areas with a high number of heritage buildings, such as the Auckland suburbs of Devonport and

Ponsonby and centres like Oamaru and Dunedin, would be significantly affected by the proposed changes.

Rural and provincial New Zealand carries a disproportionate burden of the economic and social impact of the proposals. (Local Government New Zealand)

I am very afraid that our heritage areas such as Devonport, Mt Eden, Ponsonby and Sandringham will vanish under the proposed criteria. For Auckland to suffer because of a 1 in 2500 year event in Christchurch seems unreasonable. (Individual submitter)

The Government proposals, if even partly implemented, would have a catastrophic effect on our Council, businesses, both rural and urban, all our residents and owners property rights. All, but a very few buildings in our business area would have to be upgraded or demolished. This would be a huge cost and most businesses would either resist action required or would simply walk away from their buildings. New buildings will not be built. The end result would be a business area without banks, shops, restaurants, rural service outlets, insurance companies, accountants etc. (Waimate District Council)

Many submitters described how the proposed changes would impact rural communities. Ninety-one (91) submitters (22%) contended that the proposals would affect the value of any buildings identified as earthquake-prone, forcing tenants to relocate during strengthening work, interrupting businesses, and reducing the wealth of business owners. Some of these submitters described how these effects would flow into the local and then national economies.

There are the direct financial impacts of the engineering assessments, working drawings and the actual cost of strengthening buildings...From a Council point of view these financial costs have wider community social, economic and cultural implications. Buildings, particularly commercial and community, form the community infrastructure in which the economic and social exchanges take place. If buildings are unoccupied or destroyed, there will be a loss of economic viability and social viability. Many city and town centres are already under threat from malls and large format retail. (Palmerston North City Council)

Sixty-one submitters (15%) suggested that these factors, along with the potential costs of strengthening, would lead to the demolition of earthquake-prone buildings. This would further impact small, older communities whose businesses could not afford the higher rents associated with new buildings.

There would be no capital gain from the upgrade investment as rental income will not change. Only option is to lose current investment and demolish building and hope to recover demolition costs from sale of vacant land. (Building owner)

In the absence of a more comprehensive package that also addresses issues of financing of strengthening and insurance for earthquake prone buildings, there is increased potential that building owners will consider that demolition may be the only viable option. (Kapiti District Council)

Ninety-one submitters (22%) also expressed concerns about the potential loss of heritage.

Potentially we could lose a considerable portion of our remaining Heritage/character stock. (Auckland Council)

I live in a heritage area and believe these changes would allow too many people to demolish and build bland modern buildings. Heritage areas will disappear from New Zealand unless we are very careful. (Individual submitter)

Two hundred and sixteen (216) submitters (51.9%) felt that the proposals would have significant business costs and a major impact on the wider economy.

The proposed changes would mean we will demolish one building and possibly strengthen another. There is significant cost involved not to mention redevelopment cost. (Building owner)

Potentially negative economic effect on a city I love (Wellington), which is already struggling with job losses etc. (Individual submitter)

If implemented, we consider the mandatory timeframes would materially impact on the ability of our communities and sectors (including primary industries and business) to support the pace of economic recovery and growth. (Southern councils)

Submitters also commented that strengthening constrains investment elsewhere and creates other compliance costs.

The issue is not whether they are affordable, but whether they are a good use of the community's resources given the risk and benefits involved...If there was no limit on resources, then the proposed measures could be justified. However, this is not the case, and the funding for building assessments and strengthening will have to come from other possible areas of personal and community spending. (Clutha District Council)

Some submitters even suggested that the proposals may lead to unavoidable or deliberate non-compliance, particularly when owners cannot afford to strengthen and cannot demolish.

I would be unable to afford to strengthen my 1912 brick heritage building, that has recently been given an IEP of 9%. I would also be unable to afford to demolish it at a cost of \$50,000...I am a law abiding citizen but in short I would be forced to break the law as I would be unable to afford to comply. (Building owner)

Several property owners have indicated that should they be forced to strengthen or demolish, they would abandon their buildings instead as both of these options are too expensive. (Ruapehu District Council)

Some submitters suggested that there would be difficulties resourcing the proposals. Although 6% of submitters noted that the proposals could result in business opportunities, 9% of submitters (34) felt that their businesses would come under pressure and existing skills shortages (in the engineering profession in particular) would be exacerbated.

As a structural engineer, I see a flood of work, but do not see how this is to be managed. (Engineer)

Another obvious problem that the country will face is finding enough engineers to undertake the inspections and to develop plans for the work required, within a relatively short timeframe. The resource of expertise is just not there, as the shortage of these skills in Canterbury at present demonstrates. (Akaroa Civic Trust)

Twenty-seven (27) submitters (7%) commented on the likely increase in work for local authorities.

Councils would have a major part to play in administering the requirements, undertaking seismic capacity assessments, notifying owners and negotiating strengthening plans, serving notices to undertake engineering evaluations, entering information on seismic capacity of buildings and administering a building rating system, enforcing requirements on building owners and reporting on monitoring and evaluation activities to MBIE. (Christchurch City Council)

The Consultation document proposes that the assessments could be carried out by Council staff. It is important to note that securing and maintaining the required specialised technical proficiencies, as a human resource, will be challenging in the current New Zealand skills marketplace. (Waitomo District Council)

Forty-three submitters (10%) highlighted the potential for these and other issues to arise during the implementation of the proposed changes.

Both Council and some building owners will be significantly challenged to meet the proposed timeframes. (Kapiti District Council)

The demand on resources to assess and improve the seismic performance of the existing building stock might be too high in the suggested timeframe. Without proper coordination at municipality, regional and national level, it is realistic to anticipate that there may be a bottle-neck on resources (engineers, contractors, building consent authorities), near the end of the suggested term/deadline. It is herein proposed to develop a Risk Management Framework which could assist to prioritise the allocation of limited resources during the assessment phase, but more importantly during the implementation phase. (New Zealand Society for Earthquake Engineering)

Some submitters discussed issues with the current assessment methods. Others noted that the changes do not allow for changes in the technical standards that underpin these assessments, nor the wider policy environment: building owners may be forced to strengthen their buildings again, when changes are introduced.

Consideration should be given to how the proposed changes will apply to buildings already undertaking or completed earthquake strengthening. In these situations building owners may be additionally financially effected by the new requirements even though they have proactively already sought to strengthen their buildings. (New Plymouth District Council)

Some submitters, notably local authorities, pointed out that the costs associated with the proposal may lead to rates rises or other activities that are at odds with other government frameworks.

The proposed changes would mean more resources will be required to meet the new policy requirements. That will become an additional cost to ratepayers at a time when councils are required to place limits on rate increases under the Local Government Act 2002. (Manawatu District Council)

Q32: Are you aware of any problems with current policy and practice around earthquake-prone buildings, other than those identified in this document?

Three hundred and sixty-five (365) submitters responded to this question. Of these, 89 submitters (24%) commented they were not aware of any issues with the current policy that the consultation document had not covered.

Forty (40) submitters (11%) commented on the costs of strengthening, particularly the effect on businesses and the wider community. Twenty-one (21) submitters (6%) commented that these costs tend to fall on building owners and local authorities.

An important aspect of the proposals is that the cost will fall almost exclusively on building owners while the number of projected benefits (while very small in comparison) could apply to a significant number of people. (Business New Zealand)

Ninety-nine (99) submitters (27%) identified problems obtaining funding to carry out strengthening and the lack of funding sources as a problem with the current policy.

The National Heritage Preservation Incentive Fund, administered by the New Zealand Historic Places Trust, is currently only available to support work on privately-owned Category I historic places. In addition, Lottery Environment and Heritage funds non-profit organisations who wish to strengthen heritage buildings they own. (Whanganui Heritage Regional Trust Board)

I have a large mortgage on the earthquake prone property, a large mortgage on my personal house and am the only earner for my family. It is unlikely that any bank would lend me funding to do the strengthening work, and if I found some funding, the end result would be an asset worth what it was pre CHCH earthquake but with a mortgage \$500k bigger. Even if I could get the funding, the other body corporate members may not be able to – this would create massive stress and legal issues. (Building owner)

OWCT is obtaining detailed seismic assessments for thirteen buildings. The cost of this work is \$45,000. Despite a number of funding applications, only one funder has agreed to assist...OWCT is fortunate as a Charitable Trust it does have access to grants and donations however increasingly funders are telling us that they will not fund structural strengthening work. (Oamaru Whitestone Civic Trust)

Forty-eight (48) submitters (13%) expressed concerns about the rising costs of insurance; others indicated that insurance is difficult to obtain for heritage buildings and is not obtainable if the building is earthquake-prone. Submitters described how not being able to obtain insurance affects their ability to obtain lending to strengthen their buildings.

Owners of un-reinforced buildings and pre-1935 [buildings] are facing earthquake re-insurance cover rates of 3% of the insurable amount and this doesn't include fire service levies and perils insurance. This in turn produces a total premium sometimes more than 50% of the buildings gross income! This has a double edged sword as the fixed costs have increased, thus destroying any equity the owner may have had within the asset to draw on, to be able them to strengthen his/her building. (Individual submitter)

There is limited choice in the market, premiums (where cover is being offered) are becoming unaffordable (and affecting the ability of building owners to raise the funds needed for strengthening work), there is confusion about the requirements of the Unit Titles Act (the Inner-City Association has made a separate submission on this), and there are significant implications for mortgagees if they are not able to get insurance or the Body Corporate decides it cannot afford insurance. (Wellington Inner City Residents and Business Association)

Submitters also discussed how the increased awareness of risk from earthquakes has exacerbated some of these problems. Thirty-five (35) submitters (10%) noted an increase in market demand for stronger buildings.

Because the Christchurch earthquake remains at the forefront of peoples' minds some people, perhaps understandably, are over reacting to the situation and the risks imposed. This is having significant consequences on business confidence. For example a Wellington Employers' Chamber of Commerce survey revealed that in Wellington (where earthquake sensitivity is high), 23.6% of businesses report anxiety around earthquakes is having an impact on their customers' confidence. Furthermore 16.5% of businesses are thinking of moving premises due to earthquake strengthening or as a result of apprehension around earthquakes. (New Zealand Chambers of Commerce)

However, fifty-six (56) submitters (15%) commented that the public has a poor understanding about the risk of earthquakes and how to manage this risk. This meant that they are less willing to enter or work in an earthquake-prone building, even though the risk that an earthquake strong enough to compromise the building will occur at any given time is generally low.

Beca has been advising clients including both building owners and tenants and other interested parties on the seismic risk assessment and remediation of buildings across New Zealand. As part of this process we have had many conversations about seismic risk and its relativity compared with other risks society faces, for example, from road accidents. We observe there is public confusion about risk, and generally a poor understanding. (Beca)

Other submitters raised concerns about the implementation of the current policy by local authorities. Forty-eight (48) submitters (13%) felt that local authority implementation has been poor and inconsistent.

All TA's have different and inconsistent views of what and how things should be carried out. (Individual submitter)

As every council has to compile its own policies and rules there is inconsistencies and duplication of effort and therefore cost across the country. (Individual submitter)

Others expressed concerns about the technical assessment process used to determine whether a building is earthquake-prone. Eighty-six (86) submitters (24%) commented on the:

• inconsistencies between engineers reports

- assessments made by council staff, and
- proposed strengthening solutions.

Some engineers have a better understanding of the issues and others have undertaken design work where they lacked the necessary experience. We have seen engineering solutions provided for exactly the same building where the extent of bracing is different by 100%. (Individual submitter)

In response to information arising from the Royal Commission, Council initiated a peer review of the findings of some IEP assessments and have learned that the level of error may be up to 20% of the IEP assessment result. (Hastings District Council)

Other submitters raised concerns about the methods engineers use. Some submitters suggested stressing the identification of a building's key structural vulnerabilities as well as the overall strength of the building.

It is important that the register contains both a score that demonstrates a building's primary (global) seismic score and information on any secondary vulnerabilities that present a risk to life safety. (Fletcher Building Limited)

Ensure a priority is placed on addressing critical structure weaknesses to remove or reduce building vulnerabilities. (Feilding Promotion)

Submitters highlighted that this is particularly relevant for timber buildings and URMs (of which the parapets and other fall hazards are a greater danger to the public than the possible collapse of the building).

If single-storey wooden buildings are not exempt from the process, (which I think strongly that they should be) there needs to be a much more realistic form of assessment. The currently-used IEP and Detailed Assessment methods are not designed for such buildings and suggest they are much more unsafe than they actually are. (Individual submitter)

Complex URM buildings (such as traditional churches) are very complex and difficult for engineers to assess with accuracy. We consider the focus on a firm 33% NBS target may not be so appropriate for these structures as often contentious or overly conservative and expensive outcomes result. Instead a focus on securing and removal of critical weakness may be more appropriate (Catholic Diocese of Auckland)

Forty-four (44) submitters (12%) commented that the relationship the current policy has with other policies set by legislation is inconsistent, unclear or incompatible.

There is currently a "disconnect" between the obligations owed under the Building Act and the [Health and Safety in Employment] HSE Act...At present, there is considerable uncertainty about the steps required to be taken by duty-holders to comply with their duties owed under the HSE Act in relation to EPBs. (Bell Gully)

Earthquake strengthening and weathertightness repairs have become major issues for body corporates. However, there is a serious flaw in the Unit Titles Act 2010 which hampers body corporates trying to deal with these issues – body corporates have no power to levy owners for repair work in advance of the work

being carried out, except in proportion to each owner's utility interest. (Tasman Garden Body Corporate)

Q33: Do you agree with the following objectives for changes to the existing earthquake-prone buildings system:

- reduce the risk to an acceptable level of people dying and being injured in or by buildings that are likely to collapse in moderate to large earthquakes
- ensure that building owners and users have access to good information on the strength of buildings they own and use, to help them make good decisions about building resilience and their use of the building.



Q33 Pie chart

Q33 Yes responses

Three hundred and six (306) submitters (57%) agreed with the objectives for changes to the existing earthquake-prone system.

Some submitters proposed changes to the text of the suggested objectives. Twentyeight (28) submitters (9%) suggested adding additional criteria to the stated objectives, while fifteen (5%) reworded their text.

I also believe a third objective is required that recognises the need to protect heritage and achieve sustainability. (Individual submitter)

...need to clarify "collapse" and differentiate between collapse of elements and total collapse. (Individual submitter)

Forty-four (44) submitters (14%) expressed concerns about how to define and set risk, and what the term 'acceptable risk' meant.

I think it is "acceptable level" that is the key. (Individual submitter)

Other submitters suggested New Zealand's earthquake-prone buildings policy needed to recognise the local context and the impact the cost of strengthening has on communities.

The comparative risks from different hazards and conditions differ throughout the country, meaning that while in some towns and cities the greatest risk to public safety and the economy is earthquakes, in others, the more immediate and likely risk might relate to sea level rise, the loss of important employers, or even the quality of housing. (Dunedin City Council)

For these reasons, 19 submitters proposed government look at alternatives to the proposals and/or the current policy.

Q33 No responses

Ninety-six (96) submitters (18%) did not agree with the objectives for changes to the existing earthquake-prone system. Of these, nearly half (45%) expressed concerns about the way in which the policy will define and set risk.

Interpretation of an acceptable level is of concern. (Individual submitter)

While these objectives are reasonable in themselves, the issue is what is meant by "acceptable". (Clutha District Council)

This terminology is used in road death toll statistics, however we do not believe that this is a comparable issue. People have control over how they drive and choices about which car they drive (regarding safety features or roadworthiness) and decisions they make whilst driving to limit the risk. People have less control when working in or visiting a town or city and using/moving around buildings. (Manawatu District Council)

Thirty-seven (37) submitters (39%) commented that the risk from earthquake-prone buildings is overstated while 17 submitters (18%) did not feel any change to the current policy is required.

The risk is overstated and to alleviate that risk brings with it too much cost. While all safety goals are laudable they should not be retrospective unless they take into account the personal, social, historic, and economic toll. (Individual submitter)

The likelihood of another major earthquake happening linked with the cost to the country (lives lost) does not compare to the cost to upgrade all buildings in New Zealand. (Individual submitter)

No change is needed. Risk is being reduced with buildings being upgraded over time under current law. (Individual submitter)

Twenty-five submitters (26%) commented that the earthquake-prone buildings policy should recognise the local context.

The proposals to have national applied rules are not supported, as the need regarding risk/benefit/cost is different for provincial and rural communities to that of large cities or where large numbers of people congregate. (Waimate District Council)

Thirty-two (32) submitters (33%) disagreed with the stated objectives because of concerns about potential costs.

We live with risk daily as we go about our lives and there is far too a high cost to the country to set safety at this level. (Individual submitter)

In addition to the above objectives, the magnitude of proposed seismic upgrade requirements, whilst enormous, is an inter-generational matter, and any comprehensive solution must necessarily consider the costs and benefits of acting or not acting. (Auckland Civic Trust)

Twenty-eight submitters (29%) suggested alternatives to either the proposals or the current system.

9. Appendix one – list of submitters

List of submitters					
Accessible Options New Zealand	Athol Hamilton	Brian Carter			
Accessible Properties New Zealand Ltd	Athol Parks	Brian Lovelock			
Akaroa Civic Trust	Auckland Airport Ltd	Brian Main			
Alan Daysh	Auckland CBD Residents Advisory Group	Bruce Forbes			
Alan Farquharson	Auckland Civic Trust	Bruce Plunkett			
Alex Woods	Auckland Council	Bruce Welsh			
All Churches Bureau	Auckland Disability Law	Building Officials Institute of New Zealand (BOINZ)			
Allison Maria Tindale	Barbara Weavers	Business New Zealand			
Andrew Bogle	Barrier Free New Zealand Trust	Catholic Diocese of Auckland			
Andrew Ridden-Harper	Barry Connor	Caversham Presbyterian Church Property Committee			
Andrew Turpin	Be Accessible	Cement & Concrete Association of New Zealand (CCANZ)			
Ann Allen	Beca Group Ltd	Central Hawkes Bay District Council			
Ann Brower	Bell Gully	Central Otago DC			
Ann Galloway	Benjamin Richardson	Chantelle Bailey			
Ann Hogan	Benjamin Sutherland	Character Coalition Auckland			
Ann Young	Berl Economics Ltd	Chorus Ltd			
Anna Miles	Bernard Bourke	Chris Gray			
Anne Bennett	Bernard Dodson	Chris James			
Anne Dunlop	Bernice Beachman	Chris Payne			
Anne-Marie Sullivan	Bernice Frost	Chris von Batenburg			
Anthony Dean	Bevan White	Christchurch City Council			
Anthony Hughes	Bill Darnell	Christine Warrander			
Anthony John Timperley	Blind Citizens New Zealand	Claire Bruell			
Anthony Muir	Bob Tidd	Claire Rawkins			
ANZ Bank Ltd	Body Corporate Chairs Group	Clare Brown			
Aoraki Development Business & Tourism	Body Corporate of the Bond Store	Claudia Page			
Architects 44 Ltd	Brent Goodwin	Cliff Mason			
Art Deco Trust Inc	Brent Nahkies	Clutha District Council			
Ashburton District Council	Brian Allan Jones	Colin Booth			
Association of Consulting Engineers (ACENZ)	Brian Blackman	Colin Crombie			

List of submitters					
Colin Hill	Deaf Aotearoa	Elaine Reilly			
Construction Industry Council (CIC)	Dean Thomson	Electricity Networks Association			
Contact Energy Ltd	Debbie Leaver	Elizabeth Dickie			
Coralie Rose	Debbie Stanton	Elizabeth Hayes			
Craig A. Rickit	Denise Patterson	Emma Lynch			
Craig Dunlop	Dennis Anthony Smith	Eric Cox			
Craig Horrocks	Dennis Bush-King	Erich Bucher			
Craig Manktelow	Dennis Dorney	Federated Farmers			
Crippled Children Society (CCS) Disability Action	Derek Bradley	Federation of Rail Organisations of New Zealand			
D. H. Tucker	Derek Snow	Feilding Promotion Inc			
D. L. Kitchingman	Devonport Heritage	Fletcher Building Ltd			
D. M. McHattie	Diana & Maurice Lubbock	Foodstuffs (New Zealand) Ltd			
D. Mcphail	Dieter Helm	Fraser Thomas Ltd			
Damon J. McPhail	Disabled Persons Assembly (DPA) Dunedin	Gail Drake			
Dan Lowe	Disabled Persons Assembly New Zealand (DPA NZ)	Gaire Thompson			
Dan Wetherill	Dispute Resolution Services Ltd	Gary Littler			
Daniel Green	Domestic Violence and Disability (DVD) Working Group	Gary Smith			
Darrel Robinson	Don Holden	Gavin Turner			
Darren Stafford	Don Irvine	Genesis Energy Ltd			
Dave Wiseman	Don Stewart	Geoff Banks			
David Allan	Douglas Wilson	Geoff Radley			
David Blake	Dr. David C Hopkins	Geoff Thomas			
David Chapple	Dr. Lynne Lochhead	Geoff Tune			
David Edwards	Dr. Peter Johnstone	Geraldine Murphy & John Harris			
David Griffin	Dr. Regan Potangaroa	Gisbourne District Council			
David Littleton	Dunedin City Council	Glenn Houpapa			
David Morrison	Dunedin Community Law Centre	Glenyce Hall			
David Tucker	Dwayne Roper	Goodman Property Trust			
David White	Edgar Agda	Grace Mai			
Dawood Latif	Edward Middleton	Graeme North			

List of submitters				
Graeme Smith	Ian Smith	John Pfahlert		
Graham Stoddart	Ian Stewart	John R. Smith		
Grant Gillon	Institute of Directors in New Zealand	John Shirtcliff		
Greg Young	Institution of Professional Engineers New Zealand (IPENZ)	John Stevens		
Grey District Council	Insurance Australia Group Ltd (IAG)	Jon Hickford		
Guy Lethbridge	Insurance Council of New Zealand (ICNZ)	Jonathan Torrance		
H. Dare	J. Wrightson	Joseph Baranyai		
Hamilton City Council	Jackie Gillies	Joshua Anderson		
Harry Adam	James Dustin	Joy Mace		
Hastings District Council	James Mann	Julie Comfort		
Hauraki District Council	Jan Hill	Kaipara District Council		
Hawke's Bay Club	Jane Campbell	Kapiti Coast District Council		
Hayden Trass	Janet MacKinnon	Karin Henshaw		
Heather Sanders	Janne Ensor	Kathy Phillips		
Heike Lutz	Jeanette Budgett	Ken Spurway		
Helen Stead	Jeff Dickie	Kerry Gracie		
Hine Moke	Jeff Johnston	Kevin Banton		
Historic Places Aotearoa	Jeff Roberts	Kevin Clark		
Historic Places Canterbury & Interests in Conserving the Identity of Christchurch	Jen Watt	Kevin O'Connor		
Holmes Farsight Ltd	Jenny Marshall	Kiwi Income Property Trust		
Hong Lai	Jeremy Boys	Kiwirail		
Hugh Adrian Falkner	Jeremy Stubbs	L. Stowell		
Hugo Jackson	Jerry Hamlyn	Lacey Graham		
Human Rights Commission	Jess Freeland	Laura Black		
Hurunui District Council	John Burton	Linda Montgomery		
Hutt Valley Disability Advisory Group	John C.Wilson	Lindsay Faris		
lan Bone	John Dale	Linzi Irving		
lan Butler	John F. Cuttance	Lisa Patterson		
lan Campbell	John Green	Liz Angelo		
lan Dawn	John Halstead	Liz Church		
lan Hills	John Kardas	Lloyd Bathurst		
lan Lochhead	John Laurent	Local Government New Zealand (LGNZ)		
lan McLean	John O'Connell	Lucas Bonne		
lan Petrie	John Osborn	Lynne Scott		

List of submitters					
M Brennan	Millennium & Copthorne Hotels New Zealand Ltd	NZ Bankers Association			
M.C. & J.M. Pinnell	Mitchell Coll	NZ Chambers of Commerce (NZCCI)			
Mainstreet Wanganui Inc	Murray Ballinger	NZ Retail Association (NZRA)			
Malcolm Stuart	Murray Lazelle	Octa Group Ltd			
Manuwatu District Council	N. Arts	Old Town Properties			
Margaret King	Napier City Council	Onehunga Business Association			
Margaret Stewart	Nelson Heritage Advisory Group Inc Soc	Opotiki District Council			
Margy-Jean Malcolm	Neville Colbert	Opus International Consultants Ltd			
Marianne Bishop	Neville Lyne	P B & S F Properties Ltd & Scaramouche Properties Ltd			
Mark Lynch	New Plymouth District Council	P. R. Perry			
Mark Racle	New Zealand Disabled Support Network (NZDSN)	Palmerston North City Council			
Mark Ryburn	New Zealand Geotechnical Society (NZGS)	Pam Hanna			
Mark Sandiford	New Zealand Heavy Engineering Research Associaton (HERA)	Pat Benson			
Martin Spencer	New Zealand Historic Places Trust	Pat Moore			
Martin Sullivan	New Zealand Institute of Architects (NZIA)	Patrick Rossiter			
Martin Weber	New Zealand Law Society (NZLS)	Patsy Wakefield			
Marty Van Der Kley	New Zealand Playcentre Federation	Paul Douglas			
Mary Schnackenberg	New Zealand Society for Earthquake Engineering (NZSEE)	Paul Dunmore			
Massey University	New Zealand Sugar Company Ltd	Paul Hickson			
Masterton District Council	New Zealand Transport Authority (NZTA)	Paul Probett			
Matamata Piako District Council	Ngati Pikiao Environmental Incorporated Society	Paul Robinson			
Matthew Ensor	Nick Baker	Peter Carrrington			
Maurice Richards	Nick Wolfe	Peter Dowell			
Max Dawson	Nicola Young	Peter Lim			
McDowall Structures	Nigel Colenso	Peter Martelletti			
Michael Costello	Nigel Hewitson	Peter McAlley			
Michael Simpson	Nina Arron	Peter McCarten			
Michael Trewern	Norman Macfarlane	Peter McMillan			
Mike Swann	Norman West	Peter Mulligan			

List of submitters					
Peter Murphy	Robin Miller	South Canterbury Chamber of Commerce			
Peter Reddin	Robyn Green	South Taranaki District Council			
Peter Watts	Rod Macdiarmid	South Waikato District Council			
Phil Elms	Rod Wilson	Southern Councils			
Philip Deacon	Roger Mulvay	Southland District Council			
Philip Smith	Roger Shackell	Spencer Homes Ltd			
Phillimore Properties Ltd.	Roger Thackery	St James Apartments Body Corporate Committee			
Precinct Properties New Zealand Ltd	Ron Hutchings	Stephen Ansley			
Progressives Ltd	Rosemary Minchin	Stephen Costelloe			
Property Council New Zealand (PCNZ)	Rosemary Williams	Stephen Mitchell			
Queenstown Lakes District Council	Rosheen Parker	Sterling Nominees Ltd			
Rachel Green	Ross Gray	Steve Hull			
Ralph Lawrence	Rotorua District Council	Steve Mcmillan			
Rangitikei District Council	Royal Institute of Chartered Surveyors (RICS)	Steve Roberts			
Rangitikei Heritage	Royal New Zealand Foundation of the Blind (RNZFB)	Steve Williams			
Real Estate Institute of New Zealand (REINZ)	Ruapehu District Council	Structural Engineering Society New Zealand (SESOC)			
Registered Master Builders Federation (RMBF)	Russell Christensen	Stuart MacWilliam			
Rex Nicholls	Russell Flinn	Stuart Mount			
Richard Alach & Alice van den Hout	Russell Sullivan	Sue Cooke			
Richard Burrell	Saeid Shaigan	Suresh Dayal			
Richard Cullingworth	Sally Petersen	Susan Baty			
Richard Foot	Salmond Reed Architects	Susan Pattullo			
Richard Hoadley	Samson Corporation Ltd	Tailrisk Economics Ltd			
Richard Vine	Sarah Holman	Tanya Tankard			
Rick Vine	Sarah Webb	Tararua District Council			
Rik Bennett	Sher Foley	Tasman Garden Body Corporate			
Robert Banks	Shirley Vollweiler	Te Runanga-a-Iwi-Ngati Kahu			
Robert Brassey	Shortland Flats Ltd	Ted Daniels			
Robert Jaunay	Simon Hampson	Telecom Ltd			
Robert Oldnall	Simon Howard	Tertiary Education Commission			
Robert Snow	Simone van der Plas	The Architectural Centre			
Robert Weinkove	Smith & Caughey Ltd	The Oamaru Whitestone Civic Trust			

List of submitters					
The Wellington Company Ltd	University of Canterbury	Wanganui Earthquake Prone Buildings (EQPB) Community Taskforce			
Tim Brown	University of Waikato	Watercare			
Tim Fraser	Upper Hutt City Council	Wayne Ellery			
Tim Hayward	Vibrant Invercargill Ltd	Wayne Fredricson			
Tim Pike	Victoria University of Wellington	Wellington City Council			
Tim Wood	Vivienne Galletly	Wellington City Council Accessibili Advisory Group			
Timaru District Council	W. G. Moulder	Wellington Civic Trust			
Tom Lanigan	Waikato District Council	Wellington Electricity Lines Ltd			
Tonkin & Taylor Ltd	Waikato Tainui	Wellington Employers Chamber of Commerce			
Tony Goodwin	Waimakariri District Council	Wellington Inner City Residents and Business Association			
Tony Stuart	Waimate District Council	Wendy Neilson			
Tony Thomas	Waipa District Council	Westfield New Zealand Ltd			
Trevor James	Wairoa District Council	Whanganui Regional Heritage Trust Board			
Trish Card	Waitaki District Council	Whangarei District Council			
Trish Saunders	Waitomo District Council	Willis Bond			
Ulysses Trust	Wanganui District Council	Wyn Hoadley			
University of Auckland					



Questions and Answers

What is an earthquake-prone building?

The Building Act 2004 defines an earthquake-prone building as one that would be likely to collapse in a 'moderate earthquake' causing injury or death or damage to other property.

The term 'moderate earthquake' is defined in regulations under the Act as one that would generate shaking, at the site of the building, that is of the same duration, but one-third as strong as what a new building at the same site would be designed for.

In practice an earthquake-prone building is defined as one that is less than 34% of the new building standard, or NBS.

The definition of an earthquake-prone building takes into account a range of factors, including different levels of seismic risk around New Zealand. This means a building at 33% in Wellington, where there is relatively high seismic risk, is stronger (in absolute terms) than a building at 33% in Auckland where the seismic risk is lower.

What is wrong with the current system to deal with earthquake-prone buildings?

The Canterbury Earthquakes Royal Commission and a review by the Ministry of Business, Innovation & Employment (MBIE) both identified many earthquake-prone buildings in New Zealand are not being managed in a consistent, timely and cost effective way.

A clear view has emerged that the current system is not achieving an acceptable level of risk in terms of protecting people from serious harm in moderate earthquakes.

Issues identified with the current system include:

- **Too much variability in local practice**. Territorial Authorities (councils) have very different approaches to implementing the current policies. Some TAs are not actively identifying earthquake-prone buildings or requiring building owners to deal with them. Others have taken action, but have either given building owners a very long time to resolve problems or are requiring higher strengthening than that set by law.
- Poor quality information on the number and specific location of earthquake-prone buildings across the country. Information on building strength is also not widely available or easy to find and use.
- Lack of central guidance. Central Government has provided limited information and guidance to councils to support good practice and decision-making and there is limited central monitoring and oversight of the sector.

What are councils currently required to do in relation to earthquake prone buildings?

Councils are required to develop policies on how they will identify and deal with earthquake-prone buildings in their areas, in consultation with their communities. These policies must be reviewed every five years and a copy provided to MBIE.

Councils are not currently required to make building assessments or collect data on earthquake-prone buildings in their districts, although they can choose to do so.

How will the Government's decisions improve the system for managing earthquake-prone buildings?

The Government will have a greater role in providing leadership and direction in relation to earthquake-prone buildings. The new nationally consistent policy will make better use of the resources and capability of central and local government. This will ensure that earthquake-prone buildings are dealt with in a consistent and timely way across the country.

The associated costs and risks of dealing with earthquake-prone buildings will be better managed and there will be better information to support effective decision making.

Stand-alone homes will not be affected under the new system, but all non-residential and multi-unit, multi-storey residential buildings will have to comply.

How do the decisions line up with the recommendations in Volume 4 of the Canterbury Earthquakes Royal Commission's report?

The Government's decisions are broadly in line with the recommendations of the Canterbury Earthquakes Royal Commission on earthquake-prone buildings.

However, some of the Royal Commission's recommendations will not be part of the Government's legislative change programme. These recommendations were either not supported by submitters or there was no clear majority view during the wider public consultation undertaken by the Government on these issues. Instead these recommendations will be addressed by guidance, information and education. For example, the Government is encouraging homeowners to consider dealing with potentially hazardous elements on houses, such as unreinforced masonry chimneys, but has decided not to give councils powers to require these matters to be dealt with in a specified timeframe (as recommended by the Royal Commission).

What will owners now need to do to ensure their buildings are no longer earthquake-prone?

The Government is encouraging building owners to strengthen to as high a percentage of the requirements for new buildings as practical, taking into account affordability. However the Government is only requiring strengthening so that the buildings are no longer earthquake-prone (i.e. the status quo of 34% of the new building standard (NBS) will not change).

Owners will have 15 years from the time the building is assessed to strengthen it. Councils will be required to complete these assessments within five years of the legislation taking effect.

If an owner has already had an assessment that is recognised under the new system and they have been given more than 15 years to strengthen their building, they will now only have 15 years to strengthen. Owners who have been given less than 15 years under the current system will need to strengthen within the timeframe they have already been given.

How will the Government support building owners to strengthen their buildings?

The Government recognises some owners of earthquake-prone buildings will find it difficult to fund the costs of strengthening. That's why the timeframe for assessing and strengthening earthquake-prone buildings has been increased from a maximum of 15 years, as originally proposed in the consultation document, to 20 years.

The issue of financial incentives was raised during consultation and the Government has agreed to look at the issue in the coming months.

Why is a building register important?

A publicly accessible national register will include all earthquake-prone buildings, their locations and the outcome of seismic capacity assessments. This will give people better and more accessible information about the risks associated with buildings in their area, so they can make informed decisions.

How will certain buildings be prioritised for assessment and strengthening?

The Government plans to develop regulations under the Building Act to define certain buildings that will be prioritised over others for assessment and strengthening.

Territorial authorities will have to:

- prioritise for assessment: (i) buildings likely to have a significant impact on public safety (including buildings with high risk elements such as falling hazards), and (ii) strategically-important buildings e.g. those on transport routes identified as critical in an emergency.
- set a framework, in consultation with their community, on requiring the buildings referred to above, that are assessed as earthquake-prone, to be strengthened (or demolished) more quickly than other earthquake-prone buildings.

How will the Government support territorial authorities?

We know the changes will have an effect on territorial authorities. That's why we'll be working actively with them on the implementation of the new system for managing earthquake-prone buildings.

Who did the Government consult with?

The consultation document *Building Seismic Performance*, outlining proposals to improve the system for managing earthquake-prone buildings, was released on 7 December 2012, with a closing date for submissions of 8 March 2013.

535 submissions were received on the proposals. Of these, 174 submissions were received from groups including: building owners, engineers, local government, architects, insurers and disability and heritage advocates. 361 individuals made submissions.

Public meetings were held in Auckland, Wellington, Christchurch, Dunedin, Hamilton, Palmerston North, and Napier in February 2013 to support the consultation process. A range of targeted stakeholder meetings were also held, including with territorial authorities, the Property Council, and engineers.

More than 1,000 people attended the public and stakeholder meetings on this issue.

What was the response to the proposals?

Most of the proposals were generally supported by submitters. This included the proposal that the status quo of existing buildings having to be earthquake strengthened to 34% of the New Building Standard remain the same.

There was also strong support for central government having a much greater role in guiding and supporting local authorities and building owners.

However, the proposed timeframe for strengthening (or demolishing) earthquakeprone buildings was not supported. The Government has listened to this feedback and to address the concerns raised has increased the time for strengthening (or demolishing) from within 15 years, as originally proposed, to within 20 years.

There was also concern about how earthquake-prone heritage buildings should be dealt with. Again, the Government has listened to this feedback and developed an approach to address this issue.

What happens if earthquake-prone building owners refuse to strengthen their buildings?

We expect the vast majority of building owners will address the danger their earthquake-prone buildings present.

However, there are penalties for those who don't. In these cases the existing offence provisions will continue to apply. An owner who fails to comply can incur a maximum fine of \$200,000.

While the responsibility for dealing with earthquake-prone buildings rests with owners of the affected buildings, territorial authorities may undertake work themselves (where the owner fails to do so), and recover the costs from owners. Work undertaken can include demolition.

How long will it take for the Government's decisions to take effect? Will councils and other groups be able to work with the Government on implementation?

It's hoped legislation will be introduced to Parliament later this year. It will then go through the select committee submissions process. This process will be another opportunity for people to provide input. If the Bill is passed into law, it is likely there will be a transition period before the law takes effect while detailed implementation issues are worked through. MBIE will be working with councils and engineers on implementing these changes.



Building Seismic Performance

Proposals to improve the New Zealand earthquakeprone building system

Summary of submissions

July 2013

Contents

1.	Purp	ose	4
2.	Cont	ext	5
3.	Subr	nissions received	6
4.	Sum	mary of responses	7
4.1		The MBIE proposals	7
4.2	2.	The Canterbury Earthquakes Royal Commission	9
4.3	3.	Other issues	10
5.	High	-level analysis	11
5.1		Overview	11
5.2	2.	General themes	12
5	5.2.1.	Costs	13
5	5.2.2.	One-size fits all approach	13
5	5.2.3.	Sector capacity	16
5	5.2.4.	Heritage building stock	17
5.3	3.	Out of scope issues	17
5	5.3.1.	Financial assistance and insurance costs and availability	17
5	5.3.2.	Health and safety concerns	19
5	5.3.3.	Issues regarding the definition of earthquake-prone buildings	19

1. Purpose

The purpose of this document is to provide a high-level summary of the public's response to:

- the proposals put forward by the Ministry of Business, Innovation and Employment (MBIE) to review New Zealand's earthquake-prone building policy system under the Building Act 2004, and
- recommendations covering earthquake-prone building policy made by the Canterbury Earthquakes Royal Commission.

Further information on the consultation process, including a summary of the regional public seminars, detailed analysis of submissions, and an appendix of listed submitters can be found in the *Building Seismic Performance: Proposals to improve the New Zealand earthquake-prone building system, Full report on the consultation process May 2013.*

2. Context

MBIE undertook a review of New Zealand's earthquake-prone building system under the Building Act 2004 in 2012. The purpose of the review was to enable a timely Government response to the recommendations of the Canterbury Earthquakes Royal Commission (Royal Commission) covering earthquake-prone building policy.

The Royal Commission's recommendations are broadly in line with the MBIE proposals, although the Royal Commission's recommendations go further in some areas.

In December 2012, a number of proposals were put forward to the public for consultation. Feedback on the Royal Commission's recommendations was also welcomed. The proposed options and Royal Commission recommendations were set out in the discussion document, titled *Building Seismic Performance: Proposals to improve the New Zealand earthquake-prone building system: Consultation document.* The full terms of reference and the consultation document are available online at: www.dbh.govt.nz/epb-policy-review

The consultation process was widely publicised over the internet and in the media. MBIE also organised seminars nationwide to discuss the proposals with interested parties. A summary of the public seminars is discussed in more detail in section five of this report. An internet-based online submission option was provided. The submission period closed on Friday 8 March 2013.

3. Submissions received

MBIE received 535 submissions (with 40% using the online submissions process). Approximately one-third were from groups, including local authorities, industry bodies, membership associations, and disability and heritage advocates.

This summary reflects the main themes and key points raised in submissions. In this summary, some examples of submitter's comments have been included in italics, identified by the submitter's name. These may have been condensed to reflect key points, and have been selected as reflecting a sample of the views presented.

An appendix that lists all submitters is available in the full report on the consultation process. An indication of the types of submitters who made submissions is shown in Table 1.

Table 1: Submitters by category					
Stakeholders	Individual		Group		Total
Academic/training institute	0	-	5	3%	5
Architects/designers	11	3%	3	2%	14
Builders/building consultants /building					
industry	8	2%	2	1%	10
Building owners	84	23%	11	6%	95
Community organisation	0	-	12	7%	12
Crown entity/SOE/Government	0	-	2	1%	2
Disability	0	-	16	9%	16
Engineers and fire engineers	27	7%	11	6%	38
Heritage	0	-	12	7%	12
Local government	0	-	46	26%	46
Individuals	223	62%	0	-	223
Industry bodies	0	-	3	2%	3
Insurers	0	-	1	1%	1
Membership associations	0	-	19	11%	19
Other industry	0	-	19	11%	19
Real estate/developers	2	1%	11	6%	13
Suppliers/manufacturers	0	-	1	1%	1
Not specified	6	2%	0	-	6
Sub-total	361		174		535
Total Submissions					535
4. Summary of responses

This section provides a high-level summary of submission responses to the proposals and Royal Commission recommendations. More detailed analysis is contained in the full report on the consultation process.

4.1. The MBIE proposals

In general, submitters supported the majority of the proposals. Of those that raised concerns, the majority related to the proposed timeframes (proposals five and seven). General themes from submitters included concerns about costs, sector capacity in implementing the proposals, built heritage stock and that the proposals were a "one size fits all approach".

Submitters also raised a number of issues not discussed in the consultation document. This included a lack of financial assistance, insurance costs, health and safety in employment concerns and issues out of scope of the current definition of earthquake-prone buildings.

Proposals		
Compulsory seismic capacity assessment of buildings	Proposal 1: Requiring each local authority to assess the seismic capacity of all non-residential and multi-storey, multi-unit residential buildings in its district	
	 Generally supported by submitters Of those that expressed concerns, many related to the mechanics of how the assessments would be done and costs Views were mixed on whether five years was sufficient to carry out the assessments 	
	Proposal 2: Prioritising assessment for certain buildings	
	 Generally supported by submitters There was mixed support for the Royal Commission recommendation that unreinforced masonry buildings be prioritised for assessment 	
Public register	Proposal 3: Seismic capacity information on individual buildings be entered into a publicly accessible central register, maintained by MBIE	
	 Generally supported by submitters General support for entering information other than seismic capacity onto the register Of those that expressed concerns, many relate to the quality of information and the potential impact on building values 	
A mandatory national requirement	Proposal 4: Maintaining the current earthquake-prone building threshold	
	Generally supported by submitters	

Broadly, responses to proposals for consultation were as follows.

	• Of those that disagreed some submitters contended the
	• Of those that disagreed, some submitters contended the
	standard should be higher, others contended it did hot
	incorporate an adequate level of fisk, while others noted the
	market is driving higher levels of strengthening
	 Some industry body submitters raised concerns about the
	current definition of earthquake-prone buildings
	Proposal 5: All buildings to be strengthened to be no longer
	earthquake-prone or be demolished, within 15 years of the
	legislation taking effect (up to five years for local authorities to
	complete seismic capacity ratings, followed by 10 years for owners
	to strengthen or demolish buildings)
	 Not supported by submitters
	 Many of the concerns related to cost or affordability, sector
	capacity, and a "one size fits all" approach that does not
	adequately consider people at risk location risk economic
	issues and heritage issues
Enforcing the	Proposal 6: Strengthening to be carried out faster for certain
mandatory	buildings
national	
requirement	Generally supported by submitters
	Some submitters noted local authorities should be able to
	prioritise their own buildings
	Proposal 7: Owners of buildings assessed as earthquake-prope to
	submit a plan for strengthening or demolition within 12 months
	 Not supported by submitters
	 Many of the concerns related to sector canacity and
	capability issues for buildings with multiple owners owners
	with building portfolios, owners with multiple tenants and
	notential changes in assessment tools
	Proposal 8: Cortain buildings could be exempted or be given longer
	time to strengthen
Exemptions	
and time	Generally supported by submitters
extensions	 Of these that expressed concerns, many relate to ensuring.
	 Of those that expressed concerns, many relate to ensuring the exemptions are clearly defined and risk based
	Proposal 9: Central government to have a much greater role in
	guiding and supporting local authorities and building owners as well
Roles	as in public education and information
advice	
information	Generally supported by submitters
and	 Off these that raised concerns, many related to the public.
education	• Or mose may raised concerns, many related to the public
cucation	detail or effective public education and information
	campaigns

4.2. The Canterbury Earthquakes Royal Commission

In general, responses to the Royal Commission recommendations that extend beyond the proposals developed by MBIE, were either not supported or mixed. The one exception was the recommendation to enable local authorities to waive access and facilities upgrade requirements for people with disabilities to facilitate earthquake strengthening, which was generally accepted (Royal Commission recommendation 98).

Responses to Royal Commission recommendations that extend beyond the proposals developed by MBIE were as follows.

Royal Commission recommendation		
Local authority powers	 Recommendations 87 & 88: Giving local authorities the option of requiring strengthening to be done faster and/or to higher levels than those set by central government, after consulting with communities Not supported by submitters Many of the concerns related to a preference for a consistent national standard 	
Unreinforced masonry buildings (URMs)	 Recommendation 86: Higher strengthening levels (to 50% of new building requirements) for certain parts of unreinforced masonry buildings Views by submitters were mixed Some submitters commented certain parts of URMs present a high risk to the public and justify a higher standard of strengthening Other submitters commented these features be prioritised for strengthening as opposed to be strengthened to a higher level Recommendations 82 & 83: Faster timeframes for assessment (within two years) and strengthening (within seven years) Views by submitters that URMs be prioritised for strengthening were mixed. Views by submitters that URMs be prioritised for strengthening were not supportive. In both cases, submitters expressed preference for prioritisation to be based on risk rather than construction material only 	
Disability upgrade requirements	 Recommendation 98: Enabling local authorities to waive access and facilities upgrade requirements for people with disabilities to facilitate earthquake strengthening Generally supported by submitters Strong dissent from disability interest groups Submitters commented current requirements add costs 	
Residential buildings	 Recommendation 99: Individual local authorities to be able to require strengthening of hazardous elements on residential buildings Views by submitters were mixed. Of concerns raised, some view the risks as not significant enough to justify regulation, while other see guidance or education as more appropriate 	

4.3. Other issues

Views were also sought on how important **heritage buildings** can be preserved, while also being made safer. Submitters in general expressed concerns about the potential impact of the proposals on New Zealand's built heritage stock. Many concerns related to the high costs of strengthening heritage buildings and the need for better information or guidance for owners of heritage buildings.

5. High-level analysis

This section provides an overview and description of the general submission themes. A description of out of scope responses is also provided.

5.1. Overview

Most submitters agreed improvements need to be made to New Zealand's earthquake-prone system, agreeing to the majority of the proposals in the consultation document.

We consider that the document presents a reasonable position for making New Zealand's building stock more resilient. (Wellington City Council)

The proposed Council submission supports the principles and specific [Ministry of Business, Innovation and Employment] MBIE proposals. (Christchurch City Council)

...we strongly agree with the Crown's proposal to retain the one third of the requirement for new buildings as the threshold for earthquake prone buildings. (Southern Councils)

The NZHPT supports the objectives of the review in terms of achieving acceptable risk, better and more accessible information, providing reasonable timeframes, providing limited exemptions and preserving important heritage buildings. (New Zealand Historic Places Trust)

Overall, Property Council is broadly supportive of much of MBIE's proposals. (Property Council New Zealand)

There are a number of issues with the current system. (Structural Engineering Society New Zealand)

In most cases support is tempered by the proposed timeframes. Many submitters commented the proposed timeframes are a "one-size fits all approach", failing to incorporate variability of seismic risk, which would have a broad social and economic impact on communities.

While we agree with the retention of the current standard, the proposed timeframes and accountabilities appear too hard-hitting for our communities to absorb in any cost effective way. (Southern Councils)

...the proposed timeframes and accountabilities will have significant economic, social, and cultural impacts in our communities. (Dunedin City Council)

Waikato-Tainui does not support proposals that take a "one size fits all" approach and recommend that you take a much broader basis for assessing risk from earthquake prone buildings e.g. identify and categorise areas according to the likelihood of their experiencing an earthquake event i.e. high risk, medium risk, low risk. (Waikato-Tainui)

Federated Farmers agrees that the earthquake-prone building system needs to ensure that high-risk buildings are identified and addressed in a timely and costeffective way. However, any changes to the system must take account of risk to the public and to appropriately weigh the costs of strengthened regulations against the benefits. (Federated Farmers)

A minority of submitters were strongly opposed to the proposals, seeing it as a kneejerk reaction to the Canterbury series of earthquakes.

...smoking alone kills 20 times as many people each and every year as were killed in Christchurch. The total number of Kiwis killed by earthquake is one tenth of those killed by smoking and the same for obesity. If the Government is genuinely serious about saving lives it is currently barking up the wrong tree! (Individual submitter)

If the government is really concerned about saving lives, all owners of motor vehicles could be compelled to have them fitted with a standard height bumper bar, made of recycled tyres. All vehicles would be fitted with a speed-limit governor of no more than 100 kph. That would save far more lives each year than the extravagant lengths being proposed for earthquake strengthening. (Individual submitter)

Life is about risk. Although we have suffered a great loss in Christchurch which we don't want to repeat, it is an economic unreality to proceed down the track the Government is proposing. It will decimate not only small towns but also our bigger cities. (Individual submitter)

A small minority of submitters were strongly opposed to the proposals, criticising the terms of reference of the policy review.

It is important to consider building regulation alongside other areas of government intervention to ensure a reasonably consistent approach is taken across the board, ensuring an efficient allocation of resources...the case for intervention (of the type proposed) is not clear...the Consultation Document dismisses both more market-based approaches to risk management and also the current system whereby local authorities have the power (under the Building Act) to develop their own policies for dealing with earth-quake prone buildings. (Business New Zealand)

Our overall conclusion is that the Ministry's proposals are not based on a coherent analytical framework and are fundamentally flawed. They will result in substantial economic and social damage with very limited safety benefits. (Tailrisk Economics)

5.2. General themes

A number of general themes emerged across the submissions, particularly in reaction to the proposed timeframes. These included concerns regarding:

- the costs to strengthen earthquake-prone buildings
- a "one size fits all approach"
- sector capacity, and
- the built heritage stock.

5.2.1. Costs

The vast majority of submitters raised concerns over the cost of strengthening earthquake-prone buildings, either as individuals, or as a community.

Businesses and building owners, including KIPT, are facing very significant costs and economic losses from the need to upgrade buildings to meet seismic standards required by both the market and the need to comply with the proposed policy changes in the discussion document. This reflects the new reality in New Zealand following the Canterbury earthquakes, consistent with the market's understanding and acceptance of earthquake risks. (Kiwi Property Income Trust)

...[the proposed changes] will break many small property owners or at the very least [cause] a big loss on their investment especially in Auckland where the earthquake risk is small. (Individual submitter)

Many submitters commented the proposed timeframes would place an unreasonable burden on building owners to meet the costs to strengthen or demolish their building.

REINZ submits that the strengthening costs should be met by investors who are willing and prepared to meet them over a reasonable period of time. We do not think that 10 years from the date of the seismic capacity assessment is a sufficient time to enable all owners of earthquake-prone buildings in the country to strengthen or demolish. The time required for compliance will vary depending on the level of risks associated as well as the timeframes and costs of administration that are workable for each territorial authority concerned. (Real Estate Institute of New Zealand)

When assessing the strengthening schedule, the resulting economic burden on the city/locality as a whole should be a factor when fixing a deadline for completion. (Willis Bond)

Some submitters were concerned about the cost implications of the proposals on local authorities (particularly rural communities) and subsequently ratepayers.

The Consultation document proposes that the assessments could be carried out by Council staff. It is important to note that securing and maintaining the required specialised technical proficiencies, as a human resource, will be challenging in the current New Zealand skills market place...For these reasons, WDC does not believe it is practicable or affordable for the assessment regime to be completed within 5 years as proposed. We suggest that it would be more prudent to take a risk-based approach to the application of any assessment regime as well as full building upgrades. (Waitomo District Council)

The cost of this exercise would not be sustainable to small territories, if the above proposal is passed into legislation we will be required to either hire a full time engineer or be forced to hire outside contractors. This is not affordable with a relatively low rate payer base. (Ruapehu District Council)

5.2.2. One-size fits all approach

A majority of submitters raised concerns about a "one-size fits all approach", particularly in reaction to the proposed timeframes.

Provincial centres with low occupancy buildings, low rating bases and depressed economies are not the same as Auckland or Wellington. One size does not fit all. (Wanganui District Council)

...DCC stresses the importance of working together to address this issue and that a "one size fits all approach" is unlikely to be a workable solution in our community. (Dunedin City Council)

There was general support for increased central government involvement or guidance on earthquake-prone building policy as submitters considered this would bring greater consistency throughout the country in the way that earthquake-prone buildings are treated.

A nationally uniform approach to resolving earthquake prone buildings would remove inconsistent application of policies and more readily inform owners – especially owners who may own buildings in several districts. It would facilitate the understanding of the issue across the country. (Waimakariri District Council)

The Government should also require local Councils to adopt the same and uniform earthquake prone building policies that are in line with the legislation. At present there are Councils that have adopted higher standards than are required under the legislation. Westfield notes that the High Court action taken by the Insurance Council v Christchurch City Council (CIV 2012-409-2444) regarding the Christchurch City Council Earthquake Prone Building policy that required upgrade works over and above the current Building Act requirement of 34% to 67%, the Court has set this policy aside. This further reinforces the argument for one rule across the country. (Westfield New Zealand Limited)

However, submitters felt equally strongly that central government involvement should not compromise local authority decision making autonomy, or more commonly, that local conditions and factors should be recognised within a national framework.

Local authorities should retain discretion to balance the costs versus the level of risk mitigation achieved within their areas. (Dunedin City Council)

PNCC submit that while national direction is required, the proposals must also factor in a greater appreciation of regional variation and the relative risk. (Palmerston North City Council)

Submitters felt that any national framework for any strengthening programme should take the following local factors and conditions into account for an area:

- seismicity
- economic profile
- local heritage, and
- social and community impacts.

We need a policy for NZ but there is room for regional variances relating to lower density towns and reflecting the economic viability of these communities. (Feilding Promotion)

Local authorities must be given discretion for these buildings to cater for occasional one-off events which are viewed as critical for maintaining the social functioning of the district. Rural halls, sports facilities and churches need to cater for Anzac day services, A&P shows, weddings, birthdays, school functions, fire brigade functions and for funerals, all of which can attract hundreds of people for relatively short periods of time. (Hurunui District Council)

Nearly a fifth of all submitters proposed the development of a new system as an alternative to either the proposals or the current policy. These submitters suggested that a more sophisticated risk framework be developed to decide how best to address local earthquake-prone building issues.

Local authorities recommend a broader basis for assessing risk from earthquake prone buildings...(Local Government New Zealand)

Many submitters discussed the factors that should be included in this risk framework, which would be used to assess a community's building stock. These factors included:

- local factors and conditions (as described above)
- seismicity of the area
- type of building being assessed, noting the key vulnerabilities of different types of buildings
- occupancy rates
- building use, and
- building location (e.g., whether it is on a major arterial route)

The process should reflect the level of risk, which is a result of several factors, including: building structure, isolation from other buildings, and occupancy levels. (The Architectural Centre)

Grey District Council does not agree with this one size fits all approach. GDC considers that strengthening timeframes should be based on risk. Risk based on the seismic hazard in the geographic area, the proximity of the building to people and the risk of the building's potential to cause harm, such as unreinforced masonry buildings, presence of parapets and other dangerous elements. (Grey District Council)

Council feels we should be focusing on the high risk buildings which include the commercial and public buildings with high occupancy rates. The Government needs to make a clear and concise statement about the types of buildings that any updated earthquake-prone building legislation will apply to. (Waikato District Council)

Submitters proposed that buildings be prioritised for strengthening based on the results of this risk assessment.

To promote the use of resources, the programme for assessment and improvement should be planned using a risk management framework so that high-risk buildings are improved first. (Opus International Consultants)

Many favoured taking a staged approach, prioritising the earlier strengthening of high risk parts of the building (such as securing fall hazards) and strengthening the rest of the building later. The risk assessment would also identify the building's high risk elements and set the timeframes for its interim and full strengthening.

The NZHPT supports mandatory national requirements that are informed by a national risk management framework that provides an affordable and staged approach to strengthening targets over a period of time. (New Zealand Historic Places Trust)

HPA advocates for a risk-based approach with the possibility of staged timeframes that enable a priority focus on strengthening facades, hazardous elements such as parapets, gables, roof ornaments, verandas and so on. In other words a set staged approach for short, medium and long term outcomes. (Historic Places Aotearoa)

...further options on retaining decision making at local level, prioritisation of building elements (such as parapets) that present greatest risk to life, and longer timeframes for full building upgrades is required if the outcomes and work of the CERC is to be delivered in a sustainable and enduring manner. (Wairoa District Council)

5.2.3. Sector capacity

A substantial number of submitters commented on the lack of sector capacity to carry out the work intended in the proposals.

The assessment of buildings is specialised work, with significant implications for building owners, local communities and the national economy if the assessments are too conservative or of inconsistent quality. In our experience, New Zealand has a relatively small group of structural engineers capable of assessing buildings reliably and there are few others worldwide with the appropriate skills, let alone familiarity with historic New Zealand construction techniques necessary for the seismic assessment of existing buildings. (Beca)

...a key issue our industry is facing is the on/off nature of our industry activity. We are looking forward now with the rebuild of Christchurch to an extended period of increased and long awaited activity. Add to this the work associated to strengthen potentially 25,000 EPB's in the proposed timeframe, then considerable demands will be placed on the industry which will then revert back to zero when the requirements have been met...from a boom/bust cycle point of view there is a big difference between a boomlinked 15 years implementation framework or a say 30 years keep-it-even and sustainable implementation framework. So while we fully agree with government that they need to act now, a more holistic strategic approach correlated to the risk may benefit not only the wellbeing of our people but also the New Zealand economy. (Heavy Engineering Research Association)

There just are not enough structural engineers with the skills in the country to do this work in the time frame suggested. It will lead to more demolitions than may be necessary. (Individual submitter)

Resource is scarce, particularly in smaller cities/towns, and buying more resource will lead to higher rates. Also, structural engineer capacity is stretched now, so if local authorities have a higher demand for this expertise then timing and costs will blow out. (Individual submitter)

5.2.4. Heritage building stock

A majority of submitters expressed concerns about the potential impact of the proposals on New Zealand's built heritage stock.

HPA broadly supports objectives of the changes but has serious reservations about the impact they may have on the retention of New Zealand's built heritage if implemented as presently proposed. (Historic Places Aotearoa)

...the speed of any action has to be balanced with a building's heritage status and the likelihood of a catastrophic quake – faster action would likely limit the number of solutions available to strengthen/save a building where funding is difficult to raise. Heritage will be lost unnecessarily. (Individual submitter)

...a much longer time frame should be given...if the proposed changes are enacted, it would be a tragedy for the country in terms of the loss of our heritage and amenity. (Individual submitter)

5.3. Out of scope issues

The majority of submitters took the opportunity to comment on issues not discussed in the consultation document. This included:

- financial assistance and insurance
- health and safety in employment concerns, and
- issues out of scope of proposal four regarding the definition of earthquakeprone buildings.

5.3.1. Financial assistance and insurance costs and availability

A majority of submitters commented on the lack of financial assistance or incentives to strengthen their building.

The National Heritage Preservation Fund, administered by the New Zealand Historic Places Trust, is currently only available to work on private-owned Category I historic places. In addition, Lottery Environment and Heritage funds non-profit organisations who wish to strengthen heritage buildings they own. (Whanganui Regional Heritage Trust Board)

OWCT is fortunate, as a Charitable Trust it does have access to grants and donations. However increasingly funders are telling us that they will not fund structural strengthening work. (Oamaru Whitestone Civic Trust)

The majority of heritage buildings are privately owned, but these places are often of value to society as a whole. This means that private owners often provide and pay for a social benefit. (New Zealand Heritage Trust Board)

Submitters commented about the difficulty of obtaining insurance for older buildings, buildings just above the earthquake-prone threshold, and those that are earthquake-prone.

Obtaining insurance cover at a reasonable cost is an increasing issue for building owners in Wellington. A recent survey by the Council indicated that around half of the earthquake prone building owners had difficulty getting cover

and the majority of those faced premium increases of greater than 50%. (Wellington City Council)

Insurance rates have already tripled, there is a concern that insurance companies will demand higher and higher rates for heritage buildings which will make it impossible to run a viable business out of a heritage building. (Onehunga Business Association)

Submitters also commented the lack of insurance impacts the ability of owners to obtain loans to strengthen their building. Submitters stated banks would not lend unless the building was insured, insurers would not insure unstrengthened buildings, but owners could not get the loan they need to strengthen their building when they had no insurance.

It is or will be a huge problem with insuring or their renewals and consequently mortgage finance from banks or the continuation of the finances. Already insurers are not insuring buildings that are pre 1935 whether earthquake prone or not. If you can't get insurance then you can't get finance or refinance, then what? (Individual submitter)

Businesses and building owners face a vicious cycle with strengthening, insurance and bank finance. In order to comply with bank debt covenants and some leases, and obtain finance, the building must be insured. In order to obtain insurance, the building must be strengthened to a standard where the building (as opposed to the public) might survive a moderate earthquake. This leaves many businesses and building owners in a potentially ruinous situation where they face the completely uneconomic prospect of strengthening to 67% NBS. (Property Council New Zealand)

Some submitters suggested a variety of financial assistance measures to help address the problems many building owners have funding strengthening works.

The Government also needs to work with the insurance industry to develop more satisfactory approaches to insurance charges for buildings which have been strengthened. It may well be that the best approach is to follow the policy, widely adopted in California, of not having earthquake insurance at all. The money spent on premiums could then be put into strengthening to 100% of code. (Historic Places Canterbury, and Interests in Conserving the Identity of Christchurch)

We would encourage that more be done to give local authorities the ability to put effective support measures in place. Specific examples include necessary legislative changes to allow bank loans to be guaranteed for owners needing to upgrade buildings, and for the cost of a seismic retrofit (just that component) to be deemed "repairs and maintenance" rather than "capital expenditure" for tax purposes. (Auckland City Council)

...give Councils wider powers to vary the way rates are assessed to give incentives for upgrading work by rates relief for approved programmes (Wanganui District Council)

Access to direct grants of money should be prioritised accorded to degree of risk to public safety and the heritage or strategic importance of the building. (Historic Places Canterbury, and Interests in Conserving the Identity of Christchurch)

5.3.2. Health and safety concerns

A number of business submitters raised concerns about a "disconnect" between the obligations under the Building Act 2004 and the Health and Safety in Employment Act 1992.

At present, there is considerable uncertainty about the steps required to be taken by duty-holders to comply with their duties owed under the HSE Act in relation to EPBs. We consider that the requirement for a building owner to take "all practicable steps" under the HSE Act requires the owner to follow the recommendations contained in the NZSEE Guidelines. The NZSEE Guidelines strongly recommend aiming for a standard of 67% to 100% of Code, which is inconsistent with the Ministry's proposal in the consultation document, to maintain the existing threshold at 33% of Code. (Bell Gully)

The difference between the strict test in the Building Act and the principlesbased test in the HSE Act provides uncertainty for businesses. A number of our members have vacated buildings which, while complying with the Building Act test, have been deemed internally to be below the standard required under the HSE Act. This has resulted in some banks having to find new premises, while continuing to pay for the old premises because they are technically compliant and so have no legal ability to cancel the lease. (New Zealand Bankers Association)

ANZ considers the best way forward would be for Government to issue guidance that if a property owner has met the threshold of 33% of Code it, as a general rule, would be interpreted as complying with the Building Act, HSE Act, regulations, codes and bylaws. This would effectively provide New Zealand property owners with a single, aligned standard that would allow for a more pragmatic approach going forward. (ANZ)

5.3.3. Issues regarding the definition of earthquake-prone buildings

A number of engineering bodies and individual engineer submitters raised concerns about the assessment methods engineers use to determine whether a building is likely to fail in a moderate earthquake. Specifically they took issue with the current definition of earthquake-prone buildings. Some submitters proposed extending the definition of earthquake-prone buildings to include buildings whose overall strength means that they would not currently be considered earthquake-prone, but have critical structural weaknesses (vulnerabilities) that could lead to their collapse major earthquake.

A proposed new definition for an earthquake-prone building is one that either: Is likely to have its ultimate capacity exceeded in a moderate earthquake, either wholly or in part, in a way that may lead to death or injury to persons within or outside the property; or has significant critical vulnerabilities that could result in catastrophic collapse in a major earthquake...

...The second part targets buildings such as the CTV building and includes those with non-ductile columns. MBIE has initiated a process of identifying such buildings in the main centres...new definitions will be required for significant critical vulnerabilities – we understand MBIE has commissioned the NZ Society of Earthquake Engineering to revise the "2006 Guidelines for the Initial Evaluation Procedure" and this revision will include a list of defined critical vulnerabilities. This list will be needed sooner rather than later. (Institution of Professional Engineers New Zealand)