



**LOCAL GOVERNMENT NEW ZEALAND SUBMISSION**

In the matter of Building Seismic Performance

To the Ministry of Business, Innovation and  
Employment

*Local Government  
New Zealand*  
te pūtakehi matakōkiri



## Submission by Local Government New Zealand

IN THE MATTER OF:

Building Seismic Performance: Proposals to improve  
the New Zealand earthquake-prone building system.

To the Ministry of Business, Innovation and  
Employment.

# Introduction

1. Local Government New Zealand (LGNZ) welcomes the opportunity to submit on the Building Seismic Performance: Proposals to improve the New Zealand earthquake-prone building system.
2. LGNZ is a member based organisation representing all 78 local authorities in New Zealand. LGNZ's governance body is the National Council. The members of the National Council are:
  - Lawrence Yule, President, Mayor, Hastings District Council
  - John Forbes, Vice-President, Mayor, Opotiki District Council
  - John Bain, Zone 1, Deputy Chair, Northland Regional Council
  - Richard Northey, Zone 1, Councillor, Auckland Council
  - Meng Foon, Zone 2, Mayor, Gisborne District Council
  - Jono Naylor, Zone 3, Mayor, Palmerston North City Council
  - Adrienne Staples, Zone 4, Mayor, South Wairarapa District Council
  - Maureen Pugh, Zone 5, Mayor, Westland District Council
  - Tracy Hicks, Zone 6, Mayor, Gore District Council
  - Len Brown, Metro Sector, Mayor, Auckland Council
  - Dave Cull, Metro Sector, Mayor, Dunedin City Council
  - Stuart Crosby, Metro Sector, Mayor, Tauranga City Council
  - Brendan Duffy, Provincial Sector, Mayor, Horowhenua District Council
  - Stephen Woodhead, Regional Sector, Chair, Otago Regional Council
  - Fran Wilde, Regional Sector, Chair, Greater Wellington Regional Council.
3. This submission has been prepared under the direction of the National Council. Councils may choose to make individual submissions. The LGNZ submission does not derogate from these individual submissions.
4. The final submission was endorsed under delegated authority by Lawrence Yule, President, LGNZ.
5. LGNZ would be pleased to meet with the Ministry of Business, Innovation and Employment for further discussion on any points raised in this submission.

# Recommendation

LGNZ makes the following recommendation:

- Local authorities recommend a broader basis for assessing risk from earthquake prone buildings.

## Comments

1. Proposals in the “Building Seismic Performance” consultation document target earthquake prone buildings to protect people from serious harm. No one would disagree that keeping people safe is important but individual’s factor many things into a decision that involves the potential for harm. To use the analogy in the consultation document, the decision people make to own and use a car is not just about how safe the car is, but includes other factors such as convenience, cost of the car compared with their income, how many will use the car, distances travelled, the need for travel, driver experience, road conditions, and the cost of alternatives where available. The emphasis of the present proposals on life safety, in the absence of broader economic and social factors, seems somewhat narrow.
2. The strength of the local economy drives business opportunity and tenancy demand. These will be key factors in determining the fate of buildings and outcomes for community services and amenities if these proposals are translated into regulation.
3. From a national perspective, the consequences to the economy of a like-sized earthquake is variable depending on the community affected; the population that is exposed, the impact on the local economy, and the role of that community in the New Zealand economy. Wellington as the centre of Government, and Christchurch as the gateway for South Island tourism, are examples of where national exposure is high.
4. Treasury has recently released their vision and guidance to achieve higher living standards for New Zealanders. The “Higher Living Standards”<sup>1</sup> work is framed around economic growth, sustainability for the future, social infrastructure, increasing equity and managing risks. In the guidance managing risk means:
  - articulating the appetite or tolerance to risk;
  - identifying and measuring risks to objectives;
  - deciding whether, how and when to ‘treat’ those risks in order to improve the availability of desired human, social, natural, physical and financial capital;
  - measuring the impacts of that treatment; and
  - using that knowledge to continue to improve decision-making.

The Australia/New Zealand Standard for Risk Management (AS/NZS 4360:2004) defines risk as:

“...the possibility of something happening that impacts on your objectives. It is the chance to either make a gain or a loss. It is measured in terms of likelihood and consequence.”

We appreciate that the purpose of this consultation is to guide Government’s response to the Canterbury earthquakes Royal Commission recommendations and amendments to regulation should they be required.

Local authorities do not believe that the proposals outlined in the consultation document adequately account for variability in risk, particularly the consequences of an earthquake, at the local or national level. Nor do the proposals take into account the broader economic or social impacts the proposals might have on smaller communities. Local authorities do not support proposals that apply to New Zealand as a whole.

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<sup>1</sup> <http://www.treasury.govt.nz/abouttreasury/higherlivingstandards>

5. Rural and provincial New Zealand carries a disproportionate burden of the economic and social impact of the proposals. Business districts are dominated by older buildings and even where there are the resources to upgrade these buildings (engineers, builders and funds) it may not be economic to do so within the 15 year timeframe proposed (five years for assessments and 10 years for the upgrade work). Users of the buildings may be more concerned to have the convenience of the business in the town than the risk of personal harm in an earthquake.
6. Greymouth for example, for buildings assessed so far, over 75% of the business district is earthquake prone. This has led to businesses, particularly national organisations such as banks, relocating to the few more modern buildings within the business district. Not all businesses have managed to secure one of these recently built premises however, and anecdotal evidence is that at least one national company will set up business in a container in a car park for lack of premises that would allow them to meet their obligations under the Health and Safety in Employment Act.
7. The New Zealand Productivity Commission discuss regulation in their review of “Local Government Regulatory Performance” (Issues Paper, July 2012):

“When designed well and enforced efficiently and effectively, regulation can play an important role in correcting market failures and improving the efficiency with which resources are used. In doing so, regulation can help achieve broader economic, social and environmental goals that underpin wellbeing and that are unlikely to be achieved by market forces alone. Regulation is typically used to control or modify the behaviour of individuals or businesses and is justified in the interests of the wider public benefit. However, if regulation is used when it is not needed, or is poorly designed and executed, it can fail to achieve policy objectives and have negative consequences that harm the wellbeing of New Zealanders.”

Local authorities are concerned that the proposals outlined in the consultation document will lead to regulation that could impede the broader economic and social goals of their communities.

8. The aim should be to maximise the overall fitness and resilience of communities to handle disruption from earthquakes viewed from both a local and national scale. This requires a comprehensive understanding of the factors which influence an individual’s and community appetite for risk. These include the influence of legislation, such as Health and Safety in Employment Act, the availability of insurance, the property market, the state of the local economy as well as the seismic hazard and state of buildings.
9. To take insurance as an example, we do not believe the approach outlined in the proposals will make it easier for building owners to source insurance. Insurance companies price their risk independent of standards imposed by Government. From a reinsurance perspective New Zealand and Australia combined contributed just 2% to the global reinsurance fund in 2011 at a cost of 20%. This has increased insurance premiums which, coupled with on-going hazard events in the Asia Pacific region, will not change in the immediate future.
10. In the supporting report “A Risk Framework for Earthquake Prone Building Policy” it states that the relationship between shaking and risk is complex and not well characterised for New Zealand. The TTAC Ltd & GNS (Taig) report also outlines how risk is distributed amongst different people in a complex fashion.
  - a. In smaller earthquakes economic risk is well aligned with building owners and users. But the wider social and economic impacts of major earthquakes are unlikely to be attributable to specific owners/users. Governments typically play a major part in addressing these issues (and bear significant share of associated costs);
  - b. Life risk is greater for neighbours and passers-by than for occupants of some older buildings; and



c. Heritage conservation may be completely disconnected from building ownership and use.

11. Acknowledging the complexity of the issue, local authorities are actively involved in finding solutions. In October 2011, LGNZ submitted to the Canterbury Earthquakes Royal Commission. We said that considered in a risk management framework the option of national regulation is challenging. As a general principle however, risk is best managed at the level closest to those directly affected.<sup>2</sup> By way of a solution, we drew attention to the Ingham/Griffiths technical report on unreinforced masonry buildings and the recommendation for a strategic approach and incentives to implement upgrades of buildings across New Zealand.
12. LGNZ and Wellington City Council have discussed the potential to support building upgrades through a mechanism similar to the Sustainable Melbourne building upgrade agreements<sup>3</sup> with local authorities and Ministers. The provision of this as an option for adoption by local authorities is widely supported but requires a change to legislation. This would allow local authorities to assist without carrying any liability for the debt or decisions on strengthening work, and without the cost increasing a council's overall debt burden.
13. On a Council basis, many are actively working with building owners to help them understand their responsibilities and facilitate the process of building assessment. Opotiki, for example, co-ordinates the provision of an engineer to undertake the seismic assessment of buildings on a user pay basis.  
  
Others, including Wellington and Wanganui, work with researchers to identify solutions for strengthening buildings. Discussions on the costs and benefits of maintaining the character of business districts is an integral part of these discussions. For some, the character and heritage values of the buildings are a draw for visitors and support the local economy, for example, Oamaru and Napier.
14. We support a strategic approach to this issue that captures all aspects of the risk posed by earthquake prone buildings. We believe a mandatory requirement for building owners to have their buildings assessed would better inform any proposals to amend the current regulation and would fully occupy engineers for some time.
15. We do not believe that a sweeping change to the compliance timeframe is realistic given the constraints of the economy and lack of skilled engineers to provide advice on requirements for strengthening. This is supported by the work of the Department of P Regulation should reflect risk in proposing different compliance timeframes for completing strengthening work on buildings. Together with a national standard for seismic strengthening we believe this would be a cost effective approach to implementation of earthquake prone building policy to prevent injury and death or damage to other properties.

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<sup>2</sup> Department of Prime Minister and Cabinet, New Zealand's National Security System, May 2011.

<sup>3</sup> The Sustainable Melbourne building upgrade agreement is a loan to building owners to undertake energy efficiency improvements to buildings. The council collects the loan payments via a targeted rate. For the building owner it makes funding for work to retrofit buildings more accessible as the bank has more assurance that they will recover their money. For the bank it improves business and reduces their potential for loss in the event of default as local authority debt is settled preferentially. A number of banks are interested in a similar arrangement for strengthening earthquake prone buildings. Market rates apply.

# Feedback on proposals in consultation document

**Proposal 1: Local authorities would be required to make a seismic capacity assessment of all non-residential standard methodology developed by central government, and to provide the resulting seismic capacity rating to building owners. An owner could have their buildings seismic capacity rating changed by commissioning their own engineering assessment.**

16. Section 2 (How big is the problem?) of the consultation document estimates that there are between 15,000 and 25,000 earthquake prone buildings in New Zealand. The estimate has been extrapolated from local authority data where available. We agree better information is needed to define the problem.
17. 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. As the beneficiaries of the business associated with the building they carry the risk of losses in an earthquake so it makes sense from a business perspective to assess the risk. To draw on the analogy of car accidents used in the consultation document public transport i.e. bus and taxi drivers pay for their vehicle warrant of fitness to operate. If ratepayers are to pay then it is important to recognise that they would be subsidising private commercial activity.
18. Local authorities are also building owners and will need to undertake seismic capacity assessments and strengthening work. Public buildings with high usage should have priority. There will also undoubtedly be charitable organisations such as the Red Cross and Salvation Army that will look to local authorities for financial assistance.
19. The five year time frame for seismic capacity assessments is unlikely to be achievable due largely to a lack of qualified engineers. We understand that MBIE is working with engineers to develop criteria and guidance on how to undertake an initial seismic assessment. The option of undertaking assessments without engineer input is unlikely to provide sufficient certainty for many building owners and will simply lead to demand for engineers to do a more detailed evaluation. There is some concern that the demand for structural engineers will increase the cost of assessments and lead to an influx of less competent engineers. Consistency in the application and results of assessments is already an issue for some nationally represented companies and will need to be managed to maintain building owner and public confidence in the process.
20. In response to the question of whether unreinforced masonry buildings should be assessed faster than other buildings we draw your attention to the summary on page 44 of the TTAC Ltd & GNS report.

"While URM buildings are the most likely to collapse in earthquakes, they are not necessarily the highest risk. Some concrete buildings can be more dangerous to life because, though they are less likely to collapse, they are more likely to be lethal to their occupants when they do so. This is because of the greater weight of floors and other internal structures which can fall onto people, and which make rescue more difficult."

**Proposal 2: Assessments would be prioritised faster for certain buildings (for example, buildings on transport routes identified in an emergency).**

21. Adopting a risk based approach supports the prioritisation of certain buildings. Prioritising buildings of importance level 3 or above and buildings on transport routes identified as important in an emergency is supported.

**Proposal 3: Building information would be entered into a publicly accessible register maintained by the Ministry of Business Innovation and Employment.**

22. We are aware there are national benefits in having access to seismic capacity data, the development and review of regulations being the obvious example. There are costs in developing and maintaining databases. Some local authorities (where earthquake risk is high) may provide data for a register but the cost of the collection and transfer of data should not be imposed on local authorities. The key is a robust methodology of assessment and a consistent approach to data storage that is accessible when required.
23. Data on the seismic capacity of a building is not the same as information on the risk of harm. This is reinforced in the consultation document on a number of occasions, for example, the discussion on the risk of dying in an earthquake compared with in a car (around one in a million compared with a one in 10,000 risk of dying in a car) and the discussion on the causes of deaths in the Canterbury earthquakes (35 died from buildings collapsing onto footpaths and roads).
24. The seismic capacity rating of a building is just one piece of data that will inform building owners and building users' choice about whether the risk of harm in using that building outweighs the benefits. We have already discussed other factors that influence a building owner or users choice, (the desire to use a service, presence and cost of alternatives etc).
25. Information should be accessible and readily available closest to where it will effect change. Educating people about what the seismic capacity rating means and what your options are as a building owner, a tenant and a member of the public are also important pieces of information that will effect change.
26. Undoubtedly, the availability the seismic capacity rating for a building will inform decision-making for tenants and building owners where the economy is sufficient to drive the demand for better quality buildings but in many communities this will not be the case.

**Proposal 4: The current national 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 and above the current threshold, or demolished, within a defined time period.**

**Proposal 5: All buildings would be strengthened to be no longer earthquake-prone, or be demolished, within 15 years of the legislation taking effect.**

**Proposal 6: Strengthening would be carried out faster for certain buildings on transport routes indentified as critical in an emergency.**

**Proposal 8: Certain buildings could be exempted or given longer to strengthen, for example, low use rural churches or farm buildings with little passing traffic.**

27. The TTAC Ltd & GNS report discusses the benefits of strengthening to 33% NBS vs 67% or some other level.

In terms of safety benefits, the experience of the Christchurch 22/2/11 event suggests that the shaking threshold above which there would be significant



benefits of moving from 33% to 67% NBS is quite high (there were no fatalities involving buildings that had been strengthened to 33% NBS or better).

In terms of economic benefits, the Christchurch 22/2/11 experience suggests that this threshold would be lower (the proportion of buildings which suffered severe damage short of total collapse was significantly lower for buildings strengthened to 67% or better compared with those strengthened to 33% NBS).

28. Many local authorities encourage strengthening to higher levels than the current 33% NBS. Where there is demand for building space (Wellington and Auckland) or recent earthquake experience (Christchurch and Gisborne) the building owners are willing to upgrade to a higher standard.<sup>4</sup>
29. A blanket requirement for 33% NBS will establish expectations that this level of strengthening is sufficient, where as future reviews of the seismic hazard and changes to building standards could mean that building owners again find themselves below the requirement of 33% NBS and earthquake prone.
30. Local authorities support additional flexibility to increase the strengthening standard and reduce compliance timeframes for particular features on buildings and classes of buildings, including heritage buildings and those that could impact on lifelines, provided this has community support.
31. The proposal to provide for exemptions for low use buildings is also supported. This allows decision-making on risk where the understanding of the many factors influencing the risk is greatest.
32. As discussed previously however, if the aim is to maximise the overall fitness and resilience of communities to handle disruption from earthquakes this requires a comprehensive understanding of the factors which influence an individual's or community appetite for risk. This cannot be regulated for nationally and undoubtedly provides the rationale for the existing regulations where a 33% NBS minimum is set centrally with local discretion for policy to set a higher standard (granted that this is not enforceable). Similarly, a blanket timeframe for compliance ultimately leading to demolition of earthquake prone buildings after 15 years does not reflect the diversity of communities in New Zealand.
33. Regardless, it is clear that any standards must be enforceable and the discussion on an appropriate standard cannot be separated from discussion on the timeframes for compliance. The question of the status of existing assessments and notices under section 124 of the Act must also be addressed.
34. While it is important to set a strengthening target, 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.

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

35. This proposal raises many questions and may be unrealistic given concerns about engineering capacity to advise and provide plans. What would the next steps be if a plan was not received? How detailed will the plan need to be – full details or just a proposal? What is the process if the plan is

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<sup>4</sup> The recent High Court case, the Insurance council of NZ Incorporated and Christchurch City Council, supports the LGNZ legal opinion (2004) that strengthening above 33% under the existing legislation leaves building owners funding the work, Gisborne being the notable exception.

declined? It is unclear why a plan to strengthen a building must be delivered within six years of legislation being passed.

36. 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. Anecdotal advice from many building owners, including owners of heritage buildings, is that even where funding exists it can be difficult to justify strengthening relative to the return value from rents. The exceptions are a few larger metropolitan areas. Within these cities there is also variable opportunity. The city centre might generate sufficient rental income to support building upgrades but the suburban areas do not, for example, central Wellington and Newtown.
37. The worst case scenario is that building owners will maximise the economic value of a building over the 15 years and then abandon the building. Enforcement is a key issue.

## Conclusion

38. Local authorities do not believe that the proposals outlined in the consultation document take adequate account of the variables in an individual's or community's decision-making on risk. The proposals apply a narrow definition of risk which inevitably leads to a narrow range of solutions.
39. Proposals for changing regulation should reflect national security concerns while taking into account the broader economic or social impacts the proposals might have on New Zealand communities.
40. The more complex the risk, the greater the need for active partnerships between multiple stakeholders and levels of governance. Local authorities support a strategic approach and incentives to implement upgrades of buildings across New Zealand.
41. Local Government New Zealand would be pleased to meet with the Ministry of Business, Innovation and Employment for further discussion on the points raised in this submission.