



Submission of Civic Trust Auckland

Building Seismic Performance

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If there is to be a hearing regarding the public consultation on these matters, we wish to speak in support of our submission.

Civic Trust Auckland (CTA) is a non-profit public interest group, incorporated in 1968, with activities and interests throughout the greater Auckland region.

The aims of the Trust include:

- Protection of natural landforms
- Preservation of heritage, in all its aspects
- Encouragement of good planning, for the City and Region.

The Trust has associations with other groups within Auckland, with an interest in the protection of Auckland's natural and built heritage, as well as beyond Auckland, e.g. the Wellington and Christchurch Civic Trusts).

In our view, the proposed Building Seismic Performance Policy is impractical and is an over-reaction to the risk of damage to property and loss of life and injury from potential earthquakes in New Zealand. We question the rationale behind the proposals. Furthermore, the cost of seismic upgrades proposed for non-complying buildings would impose severe regulatory and financial burdens on thousands of companies and individuals throughout the country.

The policy suggests that spending millions of dollars, mostly from the private purse, to seismically upgrade buildings, will save lives in the event of a sizeable earthquake. Although we are by no means overlooking the disastrous consequences of earthquakes and the tragic loss of 185 lives in Christchurch in February 2011, we believe that the scale of the seismic upgrades potentially required would have severe cost implications that would outweigh the benefits.

Every life *is* precious. However, in comparison to the measures proposed to decrease the threat to life from earthquakes, we note the following. When cars first came into use the Locomotive (Red Flag) Act of 1865 in the UK - with a similar act in the US - required cars to travel at no more than 6km/h in the country and 3km/h in towns and that someone carrying a red flag was required to walk in front of the car. In 2013 we drive our cars up to (and sometimes, over) a speed limit of 100 km/h. We kill approximately 300 people on our roads each year and injure many more, with 307 deaths in 2012 (the second lowest number of road fatalities since 1952), and we do not ban drivers from drinking alcohol, which is a major cause of such deaths. Most of us are prepared to take the risk of getting into a car every day. Pedestrian crossings poles do not have baskets fastened to them containing safety helmets and padded clothing for us in which to dress ourselves while we cross the dangerous road.

The Tangiwai disaster in December 1953 killed 285 people. Subsequently, an early warning system for lahars from Ruapehu was installed. The disaster did not result in the redirection of the Auckland to Wellington railway track to a route well away from the mountain, nor a requirement to strengthen every railway bridge in the country, nor did it prevent thousands of people from continuing recreational activities on and around the volcano.

When the devastating tsunami struck in 2004, 200,000 people died and more than 2 million lost their homes. This did not result in all the people who live on New Zealand beachfronts selling their homes to go and live five kilometres inland. It did not result in any regulations to compel them to do so.

The Christchurch population did not leave the city in droves subsequent to the earthquakes. Aside from a small number, most Cantabrians have been prepared to remain in an earthquake risk area and some of them continue to live and work inside what could be deemed earthquake prone buildings. Many of us throughout New Zealand currently live and work within buildings that, if the Building Seismic Performance Policy is enacted, could be either upgraded or demolished within 15 years. As individuals, we seem to be prepared to take the risk of being inside or near a building which may injure or kill us during an earthquake.

Trees can also injure or kill people during earthquakes - as well as during storms. However, there are no proposals to cut down all mature trees to avoid the risk of them falling on people. Neither are there proposals to relocate all large rocks throughout the country that could potentially fall or roll onto a building, a passer-by or a vehicle, or to seismically assess with a view to strengthening caves, cliffs and other features of the natural environment that could cause injury or death during an earthquake. If such regulations were to be proposed, they are likely to be rejected.

In our view it is unreasonable for individuals to expect their government to protect them from natural disasters, beyond taking practicable steps for safety, such as issuing a warning when there is a potential tsunami or organising a national earthquake drill to educate people about what to do should one occur. We suggest that most individuals would not hold an expectation of the New Zealand government to protect its people from tsunamis, tornadoes, eruptions, bush fires, floods, earthquakes and so on, but only to provide support when such disasters strike.

We do expect the government to protect us as much as possible from being trapped inside a building in the event of a relatively commonly occurring incident such as a fire, and for this reason we are concerned that building owners could be enabled to forgo disability access rights.

We submit that even if all buildings in New Zealand were upgraded to the standards proposed, this would not necessarily save lives in an earthquake or some other disaster.

We submit that buildings yet to be built should be constructed to the standards proposed and that existing buildings should be assessed within a five-year period, at the taxpayers' expense. Subsequent to assessment, buildings should then be issued with a report - to be made publicly available - which outlines the building's predicted performance in an earthquake, as well as a certificate with a grade indicating the level of performance expected, to be displayed within the building. Seismic strengthening should only be required when a building is being upgraded for some other purpose.

The proposed policy emerged from the New Zealand Government's need to demonstrate to its bereft population that it was doing something in response to the Canterbury earthquakes and to address our understandable desire to feel safe. We appreciate that a Royal Commission was established and a report produced.

We suggest, however, that the policy will do little to eliminate the risks posed by an earthquake. Educating citizens about emergency drills and supplies, as per Civil Defence recommendations, would contribute much more to saving lives than strengthening buildings.

We are of the view that the resources required to effect the proposed policy would be better spent on ensuring safety in other areas where injuries and deaths occur daily, such as in the workplace, on the road and within our domestic relationships.

We cannot prevent injury and loss of life in a major earthquake.

Proposal 1: Local authorities would be required to make a seismic capacity assessment of all nonresidential and multiunit, multi-story residential buildings in their districts within five years, 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.

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

2. 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? Yes / No? If not, why not?

Yes.

3. Do you think five years is a reasonable and practical time to require local authorities to carry out assessments in their districts? Yes / No? If not, what time do you suggest, and why?

No.

The shortage of qualified engineers would seem to be a problem.

Before owners make decisions about whether to demolish or strengthen their buildings, it is necessarily reasonable to have all relevant information available. Unless the majority of New Zealand's remaining built heritage is to suffer the same ultimate fate as Christchurch, it is imperative that incentive mechanisms be devised and implemented to equitably share the cost of upgrading between building owner and the public, on whose behalf the building's heritage amenity is being retained. A prerequisite for any such incentive mechanism is the identification of qualifying heritage. In many cases this is not done. In summary, the time required for the engineering assessment should also allow for the concurrent heritage assessment.

4. Should unreinforced masonry buildings be assessed faster than other buildings? No / Yes - if yes, within what period?

No.

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

Lack of certainty about future plans for the property.

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

6. 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? Yes / No - if not, why not?

Yes.

Such information potentially affects property values and therefore other relevant information e.g. eligibility for incentives should be determined prior to entering information on the central register.

7. 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? Yes / No. If yes, what additional details? If not, why not?

No. The purpose is for the rating is primarily seismic capacity.

8. Rather than a central register, should local authorities be responsible for both collecting and publishing this information? No / Yes. If yes, why?

Yes, however central government should ensure that the framework for this information be consistent across the nation.

9. 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? No / Yes - if yes, what information, and why?

No, but it might alleviate any official sense of culpability in the event of an earthquake where death occurred.

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

One implication is that some of the assessments, if unchallenged by building owners, may contain inaccurate information, given that the initial assessment is likely to have been a desktop exercise.

Proposal 4: The current earthquake prone building threshold (one third of the requirement for new buildings, often referred to as 33 per cent 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.

11. 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? Yes / No - if not, what level do you suggest, and why?

Yes, generally but no in relation to heritage buildings. In the case of heritage buildings, strengthening to 67% of code would be more appropriate since this would protect not only life but the fabric of a qualifying heritage building. It is important to consider costs in a comprehensive manner and since the cost to individual building owners is ultimately a cost to the nation, it is important that any economic value that may be derived from assets on account of their heritage value be taken into consideration.

12. 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? Yes / No - if not, why not?

Yes, ultimately but not without introducing flexibility around compliance where there is demonstrable heritage value.

CTA opposes the removal of RMA heritage rules for earthquake-prone heritage buildings.

13. Should local authorities 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? No / Yes, if yes, what powers?

No to the shorter timeframes as these are short enough already. Yes, 67% for heritage buildings (on the basis that 67% would be required to ensure the building survives substantially). Any incentive mechanism that might be devised to share the cost of upgrade between the building owner and public should provide for a covenant to be placed on the property to protect the public investment in privately owned heritage amenity.

14. Should certain features of unreinforced masonry buildings, such as chimneys and parapets, be required to be strengthened to a higher level? No / Yes - if yes, which features, to what level, and why?

Though an obvious target for a quick fix, such features as parapets afford buildings and streetscapes much of their heritage value, which, in turn, underpins part of their economic value. Caution should therefore be exercised in any decision to remove such features. Furthermore, in the context of increasingly intensified urban environments, where heritage roofscapes are more visible, methods of strengthening such features should seek to avoid simplistic and unsightly solutions such as supporting rods bracing the back of parapet.

Proposal 5: All buildings would 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).

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

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

15. 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?**

12 months is sufficient for demolition plans. It is not sufficient for strengthening that might be undertaken as part of an integrated re-development of an existing heritage

building (planning and consenting for quality work that is likely to take longer than a year).

• **10 years from the date of the seismic capacity rating to strengthen or demolish?**

This should be enough provided the incentives are put in place for upgrading.

Yes / No - if not, what alternatives do you suggest and why?

Ten years to strengthen or demolish is reasonable provided central and / or local government make some tangible progress in the provision of incentives. (Auckland Council, for example, has not a single dollar in its long-term (10-year) plan towards the strengthening of any heritage assets held in private hands.)

Proposal 5 provides two options: strengthening or demolition. If human safety is the primary concern, there should be a third option of temporary closure which prevents access until safety issues have been addressed.

16. What additional powers would local authorities require to enforce the proposed requirements?

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17. Should local authorities be able to require faster action on buildings of strategic importance, such as those:

• **located on transport routes identified as critical in an emergency**

. But this does not stop central and / or local government agencies from taking action as fast as they deem necessary.

It is unclear what is critical and who determines that. We agree with this proposal only on the basis that critical routes are defined as those forming the motorway network rather than the former tram routes.

• **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. Yes / No If yes, which buildings, and how much sooner should action be required? If not, why not?**

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18. Should all unreinforced masonry buildings require strengthening more quickly than other earthquake prone buildings? No / Yes - if yes, within what timeframe?

No. Further investigation should be undertaken into the potential of redesigned verandahs (attached to heritage buildings) as a means of providing zones of safety from falling masonry. This would likely necessitate the reinstatement of curbside posts whilst at the same time allowing the removal of metals tie-rods which contributed to the collapse of heritage facades in the Christchurch earthquakes. Such an approach might achieve government's primary health and safety objectives on a significantly more affordable basis than currently proposed.

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.

19. 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? Yes / No

No. The ability to apply to local authorities for exemptions should be extended to a broader range of types of earthquake prone buildings.

20. If yes, 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 or 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?

Yes / No - if not, what alternative criteria do you suggest?

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.

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.

21. 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? Yes / No - if no, please elaborate.

No. Maybe they would be if seismic capacity was the only relevant factor. However, as submitted, the real cost of the upgrading proposed for New Zealand's needs to take account of any economic value derived from its heritage amenity (or the loss of value arising from its destruction). The assessment of heritage values is surprisingly incomplete but could and should be completed on a basis which is nationally consistent.

22. 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? No / Yes - if yes, please provide examples.

Yes, they would be if earthquake upgrading triggered the need for and expense of fire and disability upgrades that would not have occurred but for the earthquake upgrades.

23. 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? Yes / No Please explain answers.

Yes. Whilst not diminishing the importance of fire safety and provision for disabled access, the scale of seismic upgrading facing New Zealand is so large that to address the fire and disabled issues at the same time, whilst probably more efficient, is likely to limit the affordability of the government's seismic upgrade objectives.

24. 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? Yes / No Please explain answers.

No. This issue can be dealt with later when the country can afford it.

25. What would be the costs and other implications of de-linking earthquake strengthening from current Building Code fire and disabled access requirements?

While linking fire and disabled access from earthquake requirements could provide design and cost efficiency, the magnitude of the earthquake issue upgrading is such that they probably should be de-linked for reasons of affordability.

26. When considering listing heritage buildings on district plans, what factors should local authorities consider when balancing heritage values with safety concerns?

Local Authorities should consider any inherent heritage significance of the area or place, its contribution to the broader context, and whether the effects of district plan listing are *'reasonable'*. The *'reasonableness'* of any district plan listing will in turn require Councils to consider, and implement, a combination of rules and incentives that equitably apportion the costs (arising as a consequence of heritage listing) between heritage building owners and the public (on whose behalf any heritage amenity is being protected). This will only be effective if the incentives are meaningful.

27. What assistance or guidance will be required for owners, local authorities and communities to make informed decisions on strengthening heritage buildings in their districts?

The owners could benefit from Council assistance in terms of planning, flexibility and the provision of financial incentives (that equitably share the costs of upgrading between

those who benefit from it, i.e. building owner *and* the public). Communities need information on the relative heritage value of heritage buildings and the effective cost (provided through financial incentives of some sort) that would be need to be shouldered by the community as a whole. Local authorities need assessment of the extent of additional development potential that could occur on the site without unduly detracting from the heritage significance of the site. It would be good for local authorities to know that assistance might available from central government (by way of tax rebates, grants and loans).

The provision of effective financial incentives would usefully be facilitated by some provision being made via the appropriate structure within the development contributions currently being discussed as per the *Development Contributions Review Discussion Paper* - Policy Group, Department of Internal Affairs.

28. What barriers deter heritage building owners from strengthening their buildings?

The cost and any effect on the future potential (and thus economic value of the property).

The apparent inequitable sharing of the costs above.

29. Do heritage rules (for example, those in district plans) deter owners from strengthening heritage buildings? No / Yes - if yes, how?

The rules in themselves don't but the lack of a mechanism to share the costs does.

30. What are the costs and benefits of setting consistent rules across the country for strengthening heritage buildings?

Like the register of seismic capacity, consistency of rules across the country should make implementation more streamlined and simplified. As noted earlier, this would usefully and should necessarily be done in conjunction with assessment of heritage value.

31. 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? Yes / No Please explain answer.

No. If the intention of this proposal is the removal of chimneys from all character buildings, the considerable effect that such removal would have on the heritage amenity of early residential suburbs (e.g. villas and bungalows) should be weighed against the reality that there was a very low incident of death by falling chimneys.

OTHER QUESTIONS

32. What would the proposed changes mean for you?

There would be a significant effect around the country from the potential loss of heritage buildings and much of that over which Civic Trust Auckland has a custodial mandate could be destroyed, more particularly, in the Auckland region, the protection of which is mandated by the constitution of CTA.

33. Are you aware of any problems with current policy and practice around earthquake prone buildings, other than those identified in this document?

As stated throughout this submission, the proposed policy does not take adequate account of the collective benefit derived from privately owned heritage assets, the public's appetite for costs involved in retaining such heritage assets, and any more general data around the economic value of heritage preservation for the nation

34. 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. Yes / No - if no, what objectives would you propose?**

No. 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.