

# Survey on Seismic Strengthening of Central City and Heritage Buildings 2015

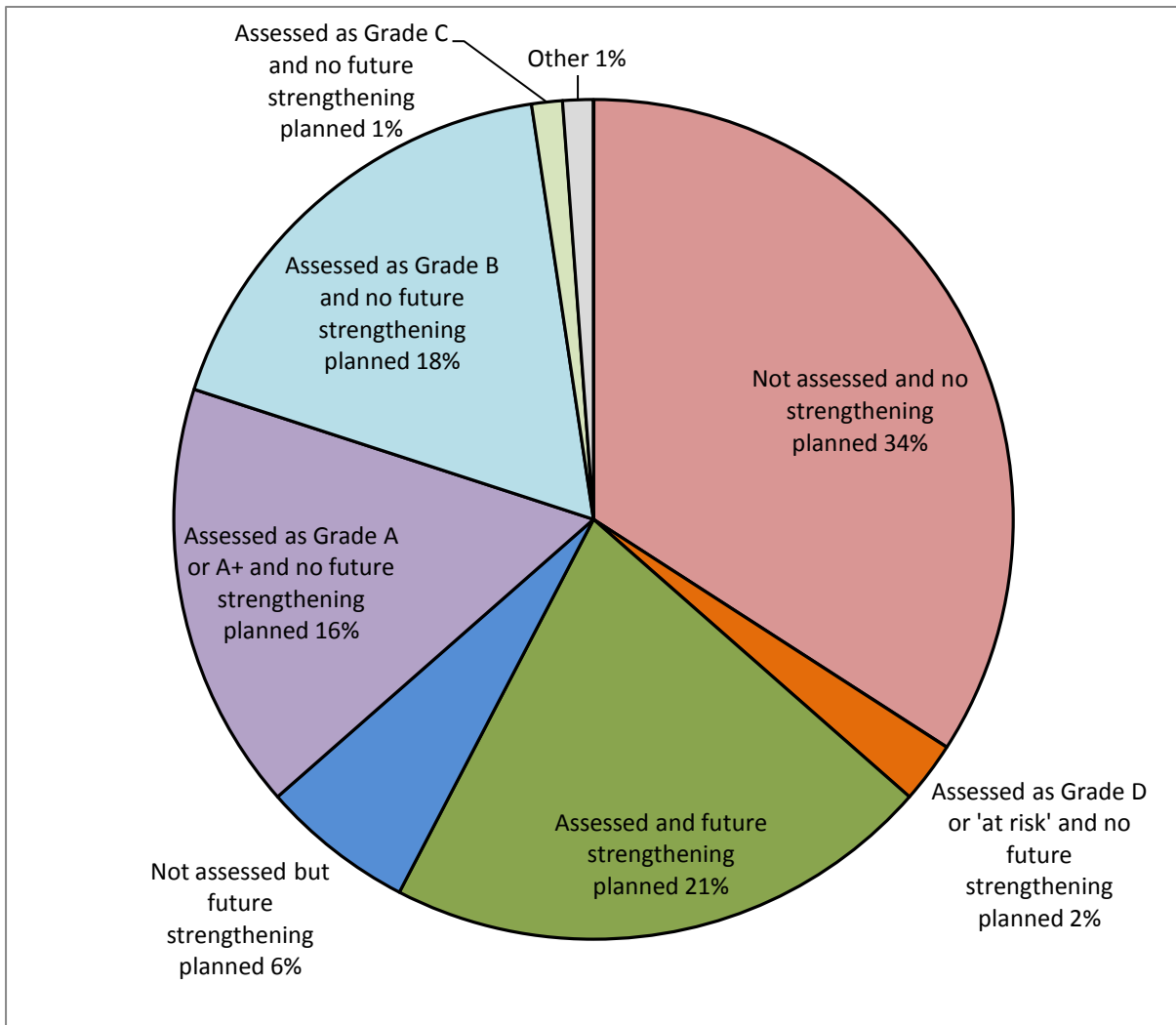


The objectives of the survey were to gauge building owner awareness of seismic strengthening requirements, investigate the economic implications of strengthening work, and inform the development of the Whakamahere Whakatu Nelson Plan (which incorporates a review of the Nelson Resource Management Plan).

The survey targeted properties that were either in the inner city centre or were heritage buildings that fell within the Council's Earthquake Prone Building Policy. There were 279 properties selected. 59 were heritage buildings, of which 25 were in the central city.

There were 87 responses to the survey (including 19 relating to heritage buildings), a response rate of 31%.

## Assessment status and intentions for seismic strengthening



(Refer *Seismic Assessments and Grades* section at end for Grade descriptions).

## Assessment status and intentions for seismic strengthening

- About a third of buildings in the survey have not had a seismic assessment and are not considering seismic strengthening. The ages of these buildings vary:
  - 10 percent were built before 1940
  - 21 percent were built between 1940 and 1980
  - 14 percent were in the 1980s or 1990s
  - 31 percent were built since 2000
  - 24 percent were of a mixed age, meaning different parts of the building have been built or renovated at different times
  
- Two percent are not considering seismic strengthening, despite having been assessed as Grade D (below 33% of the New Building Standard) or as 'at risk'
  
- Of the 33 buildings not being strengthened and that either have no assessment or have been assessed as below 33% of the New Building Standard, 20 have owners who don't think strengthening is required:

<b>Reasons why building owners are not strengthening their building</b>	<b>Number of responses, out of 33</b> Respondents could select multiple reasons
Don't think (further) strengthening is required	20 (61%)
Cannot afford to undertake the work	5 (15%)
Cannot afford detailed design drawings	3 (9%)
Need more information before deciding	3 (9%)
The return would not be worth the investment	2 (6%)
Cannot afford the seismic assessments	2 (6%)
Don't have access to finance	0
Will lose tenants while work is done	0
The works will result in a loss of rentable space	0
Geotechnical conditions make the job too expensive	0

- About a quarter (27%) of buildings are being or will be strengthened. Twelve percent have work already underway, eight percent will be strengthened within the next five years and seven percent have no timeframe.
  - Of the buildings with strengthening work planned, most have a budget of less than \$50,000 for Phase 1 – investigation and obtaining reports
  - For Phase 2 – completing the strengthening works, 16 owners were able to give an indication of the budget:
    - five will cost less than \$50,000
    - six estimate up to \$250,000
    - three estimate between \$250,000 and \$500,000
    - two estimate it would cost between \$1-2 million

## Heritage buildings

There were 19 responses about heritage buildings.

- 89% are aware that they need to apply for a resource consent and possibly a building consent to significantly alter or demolish their building
- 82% are aware of the rate remissions available for heritage maintenance and 53% were aware of the Heritage Project Fund. Only two owners of heritage buildings are aware that there are zero fees for non-notified resource consents to conserve or restore a heritage building
- Of the five respondents who had accessed rates remissions, four rated them as helpful
- Only one respondent had accessed the Heritage Project Fund and also rated it as helpful

The 19 owners of heritage buildings were also asked whether they felt the following comments applied to them or their building:

Comments relating to heritage buildings	Number out of 19 who agreed
Council heritage rules mean that I need a resource consent but I can make changes internally and externally that are sensitive to the heritage values of my building	9 (47%)
I would prefer that my building was not considered a heritage building	8 (42%)
I'd like a plaque on my building confirming its heritage status	5 (26%)
My building's heritage values help me in the use of my building	4 (21%)
I am not bothered about whether my building is a heritage building or not	3 (16%)
Council heritage rules allow only internal space changes	3 (16%)
Council heritage rules mean I can't change anything	0
Council heritage rules don't stop any changes to my building	0

## Suggestions for potential Council assistance

People were asked to rate how helpful the following suggestions were, on a scale of 1 (not helpful at all) to 5 (very helpful):

- Building consent fee rebate for strengthening work (88% rated it 4 or 5)
- Remission of rates for strengthened buildings (up to 5 years) (86%)
- Percentage contribution towards the cost of physical strengthening works (83%)
- Monetary grants for strengthening works (79%)
- Assistance in obtaining and funding structural engineering reports (78%)
- Assistance in obtaining and funding geotechnical engineering reports (74%)
- Building consent fee reimbursement for work required to strengthen heritage buildings (67%)
- Remission of rates where building is not fit for purpose (unoccupied) during strengthening works (66%)
- Access to a Council-funded project manager to act as a conduit to relevant Council departments as needed (57%)

## Comments

People were asked to provide any other comments including how Council could assist building owners.

Several people noted that requirements under the Building Act could be onerous, e.g. needing to improve means of fire egress at the same time. It was also requested that council lobby Government to allow tax deductions for earthquake strengthening or relax timeframes for completing works.

There were contrasting opinions relating to Council's financial assistance. Some felt that it was Council's responsibility to assist owners, as the work was being imposed by Council and would put pressure on rents resulting in vacant buildings. Others felt that those buildings were private investments and that owners have either had plenty of time to maintain and strengthen their buildings or have made a poor investment choice. Several felt that financial assistance should be available to those that have already strengthened their buildings.

There were several responses supporting preservation of heritage buildings and consideration of quality architecture for new builds.

One respondent noted that seismic risk needs to be looked at more closely in terms of cost/benefit, as earthquakes occur so infrequently. Other suggestions included producing a certificate to be displayed after a building had been strengthened (and include mention of council's contribution if any), improved consistency in Council's Building Consents' approach and establishing a historical society for downtown Nelson.

## Seismic Assessments and Grades

%NBS	0%	20%	33%	67%	80%	100%		
Seismic Grade	E		D	C		B	A	A+
Relative Risk	High			Moderate	Low			
Designation as per BA 2004	Earthquake Prone Building (%NBS <=33)			Earthquake Risk Building (33 < %NBS < 67)		Low Potential Earthquake Risk (%NBS >= 67)		