

## 1. REVIEW OF EARTHQUAKE-PRONE, DANGEROUS AND INSANITARY BUILDINGS POLICY

<b>General Manager responsible:</b>	General Manager Regulation and Democracy Services, DDI 941-8462
<b>Officer responsible:</b>	Environmental Policy and Approvals Manager
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### PURPOSE OF REPORT

1. This report meets the requirements of the Building Act 2004, which requires a review of the Christchurch City Council Earthquake-prone, Dangerous and Insanitary Buildings Policy 2006 within 5 years of its adoption.
2. This report recommends amendments to the Policy that will be consulted on using the special consultative procedure set out in the Local Government Act 2002, as required by the Building Act 2004.
3. The recommended amendments in this report are in accord with the Council's previous resolution to take an active approach to seeking to reduce earthquake risk over time, in a way which is acceptable in both social and economic terms.
4. The report further recommends the future consideration of both additional staffing to support the introduction of the policy and to work proactively with affected building owners, and additional funding to assist the owners of heritage buildings with the additional costs associated with strengthening these particular types of building.

### EXECUTIVE SUMMARY

5. The Building Act 2004 (the Building Act) required Territorial Authorities (TAs) to adopt a policy on dangerous, earthquake-prone, and insanitary buildings by 31 May 2006. The policy needed to include:
  - (a) The approach that the TA will take in performing its functions under the Building Act
  - (b) The TA's priorities in performing those functions
  - (c) How the policy will apply to heritage buildings.
6. The policy must be reviewed every five years.
7. The definition of an earthquake-prone building is included in the Policy. It does not include buildings used wholly or mainly for residential purposes except where these are multi-storey and include three or more household units. The formal definition is:

#### ***Earthquake-prone buildings***

*Under Section 122 of the Building Act, the meaning of earthquake-prone building is:*

- "(1) A building is earthquake-prone for the purposes of this Act if, having regard to its condition and to the ground on which it is built, and because of its construction, the building –*
- (a) will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and*
  - (b) would be likely to collapse causing –*
    - (i) injury or death to persons in the building or to persons on any other property; or*
    - (ii) damage to any other property.*
- (2) Subsection (1) does not apply to a building that is used wholly or mainly for residential purposes unless the building:*
- (a) comprises 2 or more storeys; and*
  - (b) contains 3 or more household units."*

8. The present Policy was adopted by the Council on 25 May 2006. At the time of its adoption the Council asked for further information on the numbers and types of earthquake-prone buildings and timeframes and priorities for earthquake strengthening. The Council wanted a full review completed by 30 June 2010. Given that a full review would require a special consultative procedure, and bearing in mind the election later this year, this report is now before the Council. The changes to the 2006 policy attached are underlined. The following are attached to the report:
- **Attachment 1 Summary of Information**
  - **Attachment 2 Proposed Earthquake-Prone, Dangerous, and Insanitary Buildings Policy 2010 (Tracked version)**
  - **Attachment 3 Proposed Earthquake-Prone, Dangerous, and Insanitary Buildings Policy 2010(Clean Copy).**
9. The current Policy aims to minimise some of the risk for, and arising from, buildings in an earthquake by stating the steps that the Council would take to address its responsibilities under the Building Act 2004. This included undertaking work to ascertain the number of earthquake prone buildings.
10. There have been four studies carried out for the Council since 2006. From these it has been determined that there are approximately 7,600 earthquake prone buildings in Christchurch. These are commercial buildings constructed before 1976. 490 of these are heritage buildings listed in the Christchurch City Plan and Banks Peninsula District Plan. The highest risk amongst these buildings are the 958 unreinforced masonry buildings which are likely to fail in a moderate earthquake. 295 listed heritage buildings are constructed of unreinforced masonry.
11. The major change that this report recommended to the Policy is that the timeframes for earthquake strengthening of earthquake prone buildings will commence on 1 July 2012, and will be in line with Department of Building and Housing guidelines and categorisations in accordance with AS/NZS 1170:2002:
- Buildings with special post-disaster functions as defined in AS/NZ 1170.0:2002, importance level 4, **15 years**.
  - Buildings that contain people in crowds or contents of high value to the community as defined in AS/NZ 1170.2:2002, importance level 3, **20 years**.
  - Buildings with an importance level of less than 3 as defined in AS/NZS 1170.0:2002, **30 years**.
12. A further amendment proposed is that a process be established for granting an extension of timeframes for up to three years for building owners who have made significant progress in preparing for strengthening works to commence.
13. The existing policy is amended to remove listed heritage buildings as a separate category. Heritage buildings will be categorised and assessed in the same way as other buildings, and subject to the same timeframes for strengthening. Given the difficulties and costs associated with strengthening heritage buildings, the adoption of this policy may place these buildings at greater risk. The introduction of additional support for the owners of heritage buildings should be considered by the Council through the 2012/22 LTCCP to make this policy change successful.
14. Some other minor modifications to the existing policy, to take effect immediately, are also proposed:
- To clarify the definition of significant alterations by noting that the value is assessed against the rateable value of the building only, not the land on which the building is located.
  - To require owners to take action if a building is damaged in an earthquake.
  - Updates the economic impact figure in the Policy.
  - Deletes out of date comments and includes discussion of the latest studies by the Council.

15. The draft amended policy will be released for public consultation in accordance with the special consultative procedure provided for in the Local Government Act 2002. The policy attached to this report has been drafted with regard to the principles in section 4, the matters required to be included in the policy under section 131 (approach, priorities and heritage buildings), and the procedure for adopting the policy is being carried out in accordance with the special consultative procedures set out in the Local Government Act 2002.

#### **FINANCIAL IMPLICATIONS**

16. The costs of the special consultative procedure have been provided for in operational budgets.
17. There will be an economic impact on building owners for the costs of strengthening buildings. The timeframes provided in the Policy, provide for them to plan and schedule the building works.
18. The cost of earthquake strengthening buildings is significant. The actual cost to strengthen a building will be largely dependant on the construction type and the intended use. The timeframes provided in the Policy will enable building owners to plan the strengthening works.
19. To support the effective implementation of the revised Policy three key initiatives are recommended for consideration in the 2012/22 LTCCP:
  - Funding for implementation of the revised Policy - 1 FTE to survey buildings and work with owners to get strengthening work done within the timeframes proposed.
  - Funding for a new seismic strengthening grant scheme to assist and encourage the upgrading of priority heritage buildings in line with the timeframes developed (\$2 million per year).
  - An additional FTE to administer the seismic strengthening fund and provide advice to owners of heritage buildings.
20. In view of the potential financial implications of the amended policy it has been recommended that the timeframes for upgrading do not commence until 1 July 2012, at which time the Council will have considered and determined what level of resources it will provide to support implementation of the this Policy.

#### **Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?**

21. The adoption by the Council of the amended policy does not of itself commit the Council to any financial expenditure on its own buildings or any other buildings (including heritage buildings) to meet the policy. However, the Council's Asset Managers will need to incorporate the cost of strengthening into their asset management plans for individual buildings, over the next 15-30 years.
22. The annual Heritage Incentive Grants funding presently provided for in the 2009/19 LTCCP (\$842,000 per annum) is largely focused on conservation works and also funds some seismic strengthening. This grant scheme would be inadequate to assist building owners in meeting upgrading requirements for priority heritage buildings should the revised Policy be introduced with timeframes for seismic upgrades of heritage buildings.

#### **LEGAL CONSIDERATIONS**

23. The adoption of the Earthquake-prone, Dangerous and Insanitary Buildings Policy was a requirement of the Building Act 2004 which also requires Council to review the Policy within five years and to carry out further reviews at intervals of not more than five years.
24. The requirements of the Building Act 2004, clause 131(2), are that the Policy must state:
  - (a) The approach that the Territorial Authority will take in performing its functions.
  - (b) The Territorial Authority's priorities in performing these functions.
  - (c) How the Policy will apply to heritage buildings.

25. The guidance material from The Department of Building and Housing (DBH) notes that an active policy approach involving a planned programme of initial evaluations, more detailed assessments and timetables and guidelines for upgrading, will provide territorial authorities *“with the best possible risk reduction programme”* in their communities. A passive approach *“has the significant disadvantage that it relies on a somewhat haphazard order of remediation based essentially on an owner’s intention for a building ... (which) could leave some significant high-risk buildings untouched for a long period of time”*.

**Have you considered the legal implications of the issue under consideration?**

26. Yes - as above. The amendment of this policy can only be achieved by using the special consultative procedure.

**ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS**

27. Aligns with page 89 LTCCP, administration of laws around building and development leading to safe buildings and reduction in environmental hazards plus page 187 LTCCP, developing our urban environment, sustainable use of buildings and our heritage is protected.

**Do the recommendations of this report support a level of service or project in the 2006-16 LTCCP?**

28. As above. The Heritage Conservation Policy provides for the Council to work with developers, landowners and other stakeholders to conserve heritage areas and buildings.

**ALIGNMENT WITH STRATEGIES**

29. In accord with the Heritage Conservation Policy and heritage provisions of the Christchurch City Plan and Banks Peninsula District Plan. The policy also aligns with the Christchurch Urban Development Strategy and Central City Revitalisation Strategy.

**Do the recommendations align with the Council’s strategies?**

30. Yes. As above.
31. The introduction of this revised Policy with timeframes for strengthening heritage buildings will place greater pressure on the heritage buildings and present an increased risk of demolition unless the revised Policy is supported by assistance for heritage building owners. Heritage retention is a key aspect of Council strategies and therefore this report recommends that the Council consider introducing additional support for the owners of heritage buildings through the 2012/22 LTCCP to make this policy change successful..

**CONSULTATION FULFILMENT**

32. The policy is required to be consulted on with the community, in accordance with the special consultative procedure of the Local Government Act 2002.
33. Council Officers have advised the Property Council of New Zealand, Historic Places Trust, Insurance Council of New Zealand that a review of this Policy is underway. All of these parties are aware of the special consultative procedure that Council will undertake and will make submissions as appropriate.

**STAFF RECOMMENDATION**

That the Council:

- (a) Resolve to adopt the Draft amended Earthquake-prone, Dangerous, and Insanitary Buildings Policy 2006 (the Draft Amended Policy) and the summary of information attached to this report.
- (b) Resolve that the Draft Amended Policy and Summary of Information be made available for public inspection at all Council Service Centres, Council libraries and on the Council’s website.
- (c) Determine that public notice of the proposal be given in a newspaper having a wide circulation in the Council's district.

- (d) Resolve that the period within which written submissions on the Draft Amended Policy may be made to the Council between 30 March and 7 May 2010.
- (e) Appoint a hearings panel to consider submissions on the Draft Amended Policy and to report to Council with its recommendations on the Draft Amended Policy, to be considered at the meeting of the Council on 24 June 2010.
- (f) Resolve that to effectively implement the revised Policy the Council consider establishing as part of the 2012-22 LTCCP:
  - (i) A seismic strengthening grant fund and eligibility criteria to assist in the upgrading of priority heritage buildings in line with the timeframes set out in the revised Policy.
  - (ii) Two FTE positions, one to support implementation of and compliance with the policy, and the second to administer the seismic strengthening fund (if established) and provide advice to heritage building owners.

#### **COMMITTEE RECOMMENDATION**

That the Council:

- (a) Resolve to adopt the Draft amended Earthquake-prone, Dangerous, and Insanitary Buildings Policy 2006 (the Draft Amended Policy) and the summary of information attached to this report for a special consultative procedure.
- (b) Resolve that the Draft Amended Policy and Summary of Information be made available for public inspection at all Council Service Centres, Council libraries and on the Council's website.
- (c) Determine that public notice of the proposal be given in a newspaper having a wide circulation in the Council's district and that the summary of information be distributed to key stakeholders and the individual property owners of potentially earthquake prone buildings in the city.
- (d) Resolve that the period within which written submissions on the Draft Amended Policy may be made to the Council between 30 March and 7 May 2010.
- (e) Appoint a hearings panel to consider submissions on the Draft Amended Policy and to report to Council with its recommendations on the Draft Amended Policy, to be considered at the meeting of the Council on 24 June 2010.
- (f) Resolve that to effectively implement the revised Policy the Council consider establishing as part of the 2012-22 LTCCP:
  - (i) A seismic strengthening grant fund and eligibility criteria to assist in the upgrading of priority heritage buildings in line with the timeframes set out in the revised Policy.
  - (ii) Additional funding to implement the revised policy and seismic strengthening grants, one to support implementation of and compliance with the policy, and the second to administer the seismic strengthening fund (if established) and provide advice to heritage building owners.
- (g) Note that Committee has asked staff to:
  - Clarify how significant renovations under the proposed policy will impact multi-unit components in a building.
  - Clarify that Summary of Information should note that timeframes "have been introduced".
  - Provide an overlay between the categories in Appendix A in the draft policy with the importance levels.
  - Record how views were sought in accordance with section 78 of the Local Government Act 2002.
  - Clarify that changes to the policy would be effective on adoption.
  - Add consideration of an Option 3, which is the amended policy without timeframes, as part of the Statement of Proposal.

Councillor Shearing moved by way of amendment:

*That the preferred option be the amended policy without timeframes.*

The amendment was seconded by Councillor Buck, and when put to the meeting was declared **lost**.

The original motion was then put to the meeting and was declared **carried** on Division No. 1 by 5 votes to 2, the voting being as follows:

**For (5):** Councillors Johanson, Reid, Wall, Wells and Williams.

**Against (2):** Councillors Buck and Shearing.

## **BACKGROUND (THE ISSUES)**

### **Legislative Framework - Building Act requirements**

34. The Building Act 2004 (the Building Act) required territorial authorities (TAs) to adopt a policy on dangerous, earthquake-prone, and insanitary buildings by 31 May 2006. The Policy is now due for review.
35. Section 4 of the Building Act sets out the principles to be applied by the Council when performing its functions, duties and powers under the Act.
36. Section 4(2)(d) and (l) provide:
  - “(2) *In achieving the purpose of this Act, a person to whom this section applies must take into account the following principles that are relevant to the performance of functions or duties imposed, or the exercise of powers conferred, on that person by this Act:*
  - (d) *the importance of recognising any special traditional and cultural aspects of the intended use of a building;*
  - (l) *the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value.”*
37. The policy requirements are set out in section 131 of the Act and must include:
  - (a) The approach that the territorial authority will take in performing its functions under the Act, and
  - (b) The territorial authority’s priorities in performing those functions; and
  - (c) How the policy will apply to heritage buildings
38. The Government’s policy objective in regard to earthquake-prone buildings (EPBs) seeks to reduce the earthquake risk to the **public** over time and targets the most vulnerable buildings.
39. The primary focus of this review is on the earthquake prone building provisions. This is given the importance of this issue to Christchurch and that the dangerous and insanitary provisions of the Policy have proven effective and generally follow the provisions of the Building Act.

### **Setting timeframes for strengthening**

40. The Building Act does not require councils to establish timeframes for strengthening. The Department of Building and Housing’s policy guidance document discusses possible approaches to seismic upgrading:
  - At one end of the spectrum is an “active” approach in which TAs would first identify buildings likely to be at high risk, then undertake further more detailed evaluations, and set timetables for action and guidelines for required upgrading standards.
  - At the other end of the spectrum is a more “reactive” approach in which assessment and upgrading would only be required where there was an application under the Building Act for building alteration, change of use, extension of life or subdivision.

41. The Department stresses that these are “suggestions only”, and that TAs are free to adopt “entirely different styles that reflect the level of earthquake risk and priorities specific to local communities”. The legal opinion obtained by Local Government New Zealand at the time that the Council developed its current Policy recommended, however, that an entirely passive approach is unlikely to be appropriate because of the implied obligations in the Building Act that TAs will take positive action in relation to earthquake-prone, dangerous and insanitary buildings.
42. When the Council’s current Policy was adopted in 2006, the Council decided that it would take an active approach to strengthening, modelled on that in the Department’s guidance notes, but felt that it did not have sufficient information on the number of buildings affected or the likely impact of strengthening requirements to decide on a final category list for prioritising earthquake-prone buildings or to set realistic timeframes for action. These were to be established at the first review of the Policy, following a desktop review of the building stock to determine the likely number of earthquake-prone buildings and the degree of strengthening, if any, that has been carried out to date.
43. This desktop review has been carried out and has established the total number of buildings which fall in the earthquake-prone category. These numbers have been tested by inspecting typical blocks of buildings in the central area. As a result, the likely impact of finalising priorities and timeframes on building owners, on the building stock as a whole, and indeed on the Council, can now be reasonably assessed.

#### **STUDIES OF EARTHQUAKE RISK AND EARTHQUAKE PRONE BUILDINGS IN CHRISTCHURCH CITY**

44. An overview of the earthquake risk for the city, including estimates of damage to buildings and human casualties, was prepared in 2005 by Geological and Nuclear Sciences. Dr Jim Cousins of Geological and Nuclear Sciences Limited. This study indicated that Christchurch lies in an intermediate seismicity zone some distance from a zone of high activity. However, known earthquake sources, in particular the Ashley, Springbank and Pegasus fault zones, are present within the region and are large enough and close enough to cause significant damage throughout the city.
45. Following the adoption of the Policy in 2006, there have been four studies carried out for CCC. These studies include:
  - A Report on “Heritage Earthquake-prone Building Strength Code Study”, prepared by Holmes Consulting Group Ltd in 2009.
  - A report on Christchurch City Council Earthquake-prone Building Review Preliminary Scoping Report”, prepared by Holmes Consulting Group Ltd in 2009.
  - A desktop review of Council files and computer records to determine numbers of Earthquake-prone Buildings and earthquake strengthening measures undertaken, prepared by Sunshine Consulting Group 2008.
  - Report on assessment of Five Central City Blocks and comparison to desktop review, prepared by Sunshine Consulting Group 2008/09

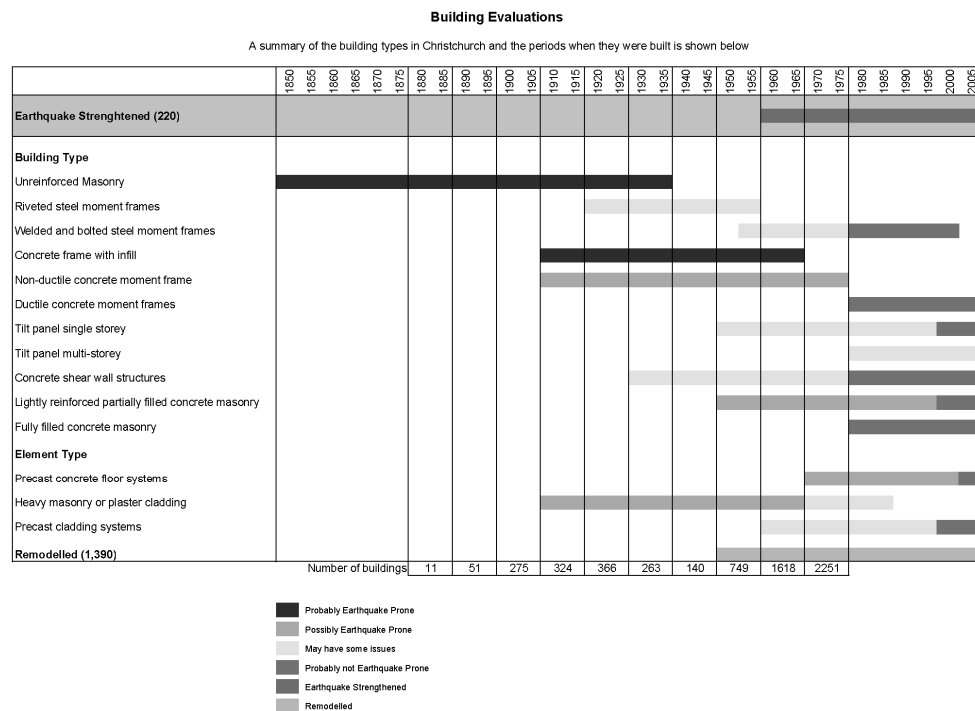
#### **Numbers of EQP Buildings**

46. Based on the reports above, there are approximately **7,658 earthquake-prone** buildings overall in Christchurch. These are buildings built before 1976 which are likely to be shown to be earthquake-prone when a more detailed structural analysis is carried out. They are of varying construction types and their degree of earthquake strength varies as well.
47. There are around 490 listed or scheduled **heritage buildings** which are likely to be earthquake-prone in terms of the Building Act. The majority (approx 295) are unreinforced masonry, there are 29 reinforced concrete and around 163 timber frame and other types.
48. We have **958 un-reinforced masonry buildings** recorded in the City. These buildings were built from the 1860s through to the mid 1940s. These buildings pose the greatest risk as they are expected to be earthquake-prone and likely to collapse in a moderate earthquake. Some have been strengthened but a number not to the acceptable 33 per cent of the current code. There are around 295 listed or scheduled heritage buildings included in this category.

## Construction Types of EQP Buildings

49. The likely construction types of all EQP buildings depends on their year of construction. Figure 1 overleaf outlines the numbers and types of buildings constructed in different time periods.

Figure 1:



**Unreinforced masonry** - 1860 to 1940s. The highest risk construction method. Floors and roof generally light timber framed. Cost of strengthening typical building \$350-450/m<sup>2</sup> to 33% FCL (full code level).

**Riveted steel frame** - 1900 to 1950s. Steel frames generally encased in concrete. Cost of strengthening typical building \$150-300/m<sup>2</sup> to 33% FCL (full code level).

**Welded and bolted Steel Moment Frame** - 1950s to present. Not generally EQP. Cost of strengthening typical building \$150-300/m<sup>2</sup> to 33% FCL (full code level).

**Concrete or steel frame with infill** - 1900 to 1960s. A higher risk construction method. Columns and beams infilled with brick and masonry which reduces ductility of structure. Cost of strengthening typical building \$250-400/m<sup>2</sup> to 33% FCL (full code level).

**Non-ductile Concrete moment Resisting Frames** - 1900 to 1975. Some poor seismic performance due to lack ductility and shear capacity. Cost of strengthening typical building \$250-400/m<sup>2</sup> to 33% FCL (full code level).

**Ductile Concrete Moment Resisting Frames** - 1975 to present. Designed to resist seismic attack. Cost of strengthening typical building \$800-1,200/m<sup>2</sup> to 67% (FCL). Will meet 33% already.

**Single Level Tilt panel** - 1950s to present. Lightweight metal roves with steel portal frames. Problem early on at connection points with floor. Cost of strengthening typical building \$50-100/m<sup>2</sup> to 33% FCL (full code level).

**Multi Storey Tilt panel** - 1970s to present. Designed generally to meet seismic standards. A few issues with connection points in some buildings. Cost of strengthening typical building \$50-100/m<sup>2</sup> to 33% FCL (full code level).

**Concrete Sheerwall Structures** - 1925 to present. Will generally not collapse in earthquake and **meets 33%** generally. Cost of strengthening typical building \$800-1,200/m<sup>2</sup> to **67%** FCL (full code level).



**Lightly reinforced partially filled concrete Masonry** - 1940 to present. May experience moderate damage in earthquake. Cost of strengthening typical building \$250-400/m<sup>2</sup> to 33% FCL (full code level).

**Fully Filled Reinforced Concrete Masonry** - 1970 to present. Will generally not collapse in earthquake and **meets 33%** generally. Cost of strengthening typical building \$800-1,200/m<sup>2</sup> to **67%** FCL (full code level).

50. The numbers of EQP buildings earthquake strengthened is 220. This only represents 3 per cent of the EQP buildings in the City and prior to 2004, the level of strengthening was to a lower level and would not necessarily achieve the 33 per cent of current code now required. Since the introduction of the Earthquake-prone, Dangerous and Insanitary Buildings Policy in 2006, there have been 26 buildings earthquake strengthened to 33+% of current code.

#### Heritage Buildings - Earthquake-Prone

51. The Building Act requires Territorial Authorities to state in their Earthquake-Prone Building policies how they intend to manage heritage buildings that are earthquake-prone. This does not mean that TAs *must* have different provisions for heritage buildings within their EQPB Policy and for risk mitigation and safety reasons. This report recommends the policy treats heritage buildings like other earthquake-prone buildings with regard to timeframes for strengthening works.
52. However, this report also recommends that the Council look to including provision in the 2012 LTCCP for a seismic fund and staff resource, to work with owners of heritage buildings to get priority building strengthened. The special considerations and constraints relating to heritage buildings mean that a different overall approach, including grants and other assistance is desirable. These considerations include:
- The desirability of retaining rather than demolishing these buildings
  - The need to find strengthening methods that do not unacceptably compromise their heritage fabric
  - The high costs of strengthening.

#### Number of Heritage Buildings Affected

53. Table 1 shows the approximate number of listed buildings in Christchurch and Banks Peninsula affected by the Policy, the estimated cost of strengthening them either to 33 per cent or to 67 per cent of Full Code Levels (FCL), and an estimate of the additional cost, as a percentage of the strengthening cost, of meeting fire and disabled access code requirements, which may also be necessary.

Table 1: **Listed Buildings**

Method of construction	Heritage Significance			TOTAL	Strengthening Cost (to 33%) (million)	Strengthening Cost (to 67%) (million)
	1 City Plan GP 1 and BPDP HPT Cat 1	2 City Plan GP 2	3 City Plan GP 3 and 4, BPDP HPT Cat 2 and Notable			
Unreinforced masonry	55	70	170	295	\$137	\$344
Reinforced concrete	1	7	21	29	\$23	\$57
Timber framed and other	18	19	126	163	\$9	\$22
<b>TOTAL</b>	<b>74</b>	<b>96</b>	<b>317</b>	<b>487</b>	<b>\$169</b>	<b>\$421</b>
Additional cost of fire and disabled access requirements					20%-100%	60%-160%

54. There are approximately 490 listed buildings that are likely to be earthquake-prone as defined by the Act. Some have been strengthened to some extent, but very few would meet the 33 per cent FCL threshold that would make them no longer "earthquake-prone" in terms of the Act.
55. The cost of strengthening these buildings to 33% of FCL - the maximum that can be required under the Building Act unless there is a change of use - is estimated at \$169 million, plus or minus 25 per cent. The unreinforced masonry buildings alone would require \$137 million, with the generally larger Group 1 buildings accounting for a disproportionate amount of that cost. As noted above, however, strengthening in itself triggers the requirement to upgrade the building to comply with the provisions of the code that relate to means of escape from fire and also

disabled access regulations (if the building is one to which members of the public are admitted), adding a further 20-100 per cent to the overall cost of the project.

56. Strengthening to 33 per cent is sufficient to make buildings no longer earthquake prone in terms of the Building Act, but 67 per cent of FCL is generally considered necessary to protect their heritage fabric, and is the minimum required if there is a change to the use of the building. The Holmes report estimates that if around 1/3 of listed buildings were strengthened to 67 per cent for one reason or another, this would bring the total cost of strengthening to \$253 million (excluding other upgrading costs).
57. In addition to listed heritage buildings there are also a sizable number of older buildings constructed of unreinforced masonry that contribute significantly to the character of the City. Many of these buildings will be earthquake prone and require seismic strengthening within the proposed timeframes. It is difficult to quantify the impact of seismic strengthening options on non-listed "character" buildings, given that what counts as a "character" building is a subjective judgement and there is no formal process at present for identifying them or regulatory protection for them.

### **Affordability**

58. While strengthening is desirable to protect both life and the heritage fabric of the buildings, the Building Act allows councils considerable leeway in determining how they will approach seismic strengthening within their districts. This recognises that "local economic, social and other factors have an impact on the implementation of these provisions of the Act". The affordability of the substantial cost of the necessary upgrades needs to be a key factor in determining a practical approach.
59. The strengthening costs set out in the previous section are beyond the means of most building owners, and beyond the means of the Council or any other grants body to support in the short or even medium-term. Some buildings in commercial use may be able to get bank loans, but most owners of listed buildings will be reliant on grant funding to undertake seismic and other upgrades. Eligibility for Historic Places Trust and Lottery Grants Board funding is limited, and therefore in many cases the only significant source of funding would be the Council's Heritage Incentive Grant (HIG) Fund, which currently amounts to \$842,000 per annum. The Fund is already fully allocated each year and it would in any case be inadequate even to support the upgrading of all Group 1 and 2 unreinforced masonry buildings over a period of 15-30 years.

### **Impact of Introducing Timeframes for Strengthening**

60. The introduction of a tight timeframe for strengthening historic buildings, particularly where unsupported by any regulatory protection and/or by any financial assistance to upgrade them, will put them at a significantly increased risk of demolition. Many building owners, faced with considerable uncertainty about the actual cost and therefore the economic feasibility of the upgrade, are likely to choose to demolish their buildings. Experience elsewhere suggests that another, sizeable, group of building owners is likely to largely ignore the timeframes until the deadline approaches then seek Council support.

### **DANGEROUS AND INSANITARY BUILDINGS**

61. Amendments to the Policy are not being recommended with regard to dangerous or insanitary buildings, other than to note that where these buildings are heritage buildings the heritage values will be taken into account in determining possible courses of action. Presently the relevant sections (section 121(1) Dangerous Buildings and section 123(1) Insanitary Buildings) of the Building Act 2004 are utilised. These provisions have been found to be effective in resolving the issues found and with regard to dangerous buildings, work closely with the Fire Service as envisaged in the 2006 Policy.

### **OPTIONS**

62. Two policy options have been identified. A table summarising each option is attached to this report.

63. Each option includes:

- (a) The approach that the Christchurch City Council will take in performing its functions under the Building Act
- (b) The priorities of the Christchurch City Council in performing those functions
- (c) How the policy will apply to heritage buildings.

#### **THE OBJECTIVES**

64. To reduce danger from dangerous, insanitary and earthquake-prone buildings in a way that is acceptable in social and economic terms to Christchurch City ratepayers.

#### **THE OPTIONS**

##### **Option 1**

65. The priorities/timeframe proposed for the strengthening of identified earthquake-prone buildings are in accordance with the guidance provided by the Department of Building and Housing (DBH) and would commence on 1 July 2012. Buildings will be categorised in accordance with AS/NZS 1170.2002 and there will be different timeframes for different categories of building. For example, it is proposed that buildings in the lowest risk/least important category will have 30 years to take action to strengthen or demolish the building, while buildings in the highest risk/most important category will have 15 years. There is provision for an extension of up to three years where owners have made substantial progress to apply to the Regulatory and Planning Committee or Council for an extension.

66. In the meantime, and in addition to the above:

- When an application for a consent for a significant alteration to a building is received, the building owner would be required to provide a report on the strength of the building and if the building strength was less than 33 per cent of current Code the building would be required to be strengthened to at least 33 per cent of Code as part of the building consent.
- When an application for a consent involving a change of use is received the requirements of the Building Act for the building to be strengthened to as near as is reasonably practicable the strength of a new building would be followed.

67. To effectively implement Option 1, which proposes a more active approach to strengthening of earthquake prone buildings, it is recommended that the Council consider establishing as part of the 2012-22 LTCCP:

- (i) A seismic strengthening grant fund and eligibility criteria to assist in the upgrading of priority heritage buildings in line with the timeframes set out in the revised Policy.
- (ii) Two FTE positions, one to support implementation of and compliance with the policy, and the second to administer the seismic strengthening fund (if established) and provide advice to heritage building owners.

##### **Option 2**

68. Retain the Policy in its present form. In effect this is a "passive approach" as there are no timeframes included, where only owners wishing to upgrade their buildings or undertake building works which trigger upgrades under Section 115 of the Building Act 2004 would strengthen their buildings.

- When an application for a consent for a significant alteration to a building is received, the building owner would be required to provide a report on the strength of the building and if the building strength was less than 33 per cent of current Code the building would be required to be strengthened to at least 33 per cent of Code as part of the building consent.
- When an application for a consent involving a change of use is received the requirements of the Building Act for the building to be strengthened to as near as is reasonably practicable the strength of a new building would be followed.

## PREFERRED OPTION

### Option 1

69. Set 15, 20 and 30 year timeframes based on the priority of the building, in accordance with DBH guidelines and provide for an extension of up to three years where owners have made substantial progress and apply to the Regulatory and Planning Committee or Council for an extension.

## ASSESSMENT OF OPTIONS

### The Preferred Option

70. Option 1 – Set timeframes and priorities for strengthening in accordance with DBH guidelines

	<b>Benefits (current and future)</b>	<b>Costs (current and future)</b>
<b>Social</b>	Reduced risk to human life and property. Enables programmed improvements with building use continuance.	Limited effects on building continued use in the short to medium term.
<b>Cultural</b>	Preservation of City heritage buildings and structures. Improvement in amenity of buildings and retention of overall city identity.	Retention of heritage buildings and structures able to be programmed as finances become available but could limit uses and changes.
<b>Environmental</b>	Avoidance of significant damage to urban infrastructure.	Reduction in city revitalisation and modernisation.
<b>Economic</b>	Enables building owners to programme improvements to fulfil policy over time.	Maintenance and strengthening costs for earthquake-prone, dangerous or insanitary buildings.
<p><b>Extent to which community outcomes are achieved:</b>            Primary alignment with Community Outcome <b>A Safe City</b>, particularly, <i>Risks from hazards are managed and mitigated</i> and <i>People feel safe at all times in Christchurch City</i>.</p> <p>Also contributes to An <b>Attractive and Well-designed City</b>, particularly, <i>Christchurch is attractive and well-maintained</i> and <i>Our Heritage is protected for future generations</i>.</p> <p><b>Impact on Council's capacity and responsibilities:</b>            The Council already has policy on earthquake strengthening (see below) and has a responsibility for enforcement of earthquake-prone, dangerous and insanitary buildings under the Building Act 2004. Potential increase in costs due to management of earthquake-prone buildings and possibility of providing financial support for strengthening of heritage buildings. However timetabling of requirements enables spread of the costs over a lengthy period and more focus on this issue by building owners.</p> <p><b>Effects on Maori:</b>            None specific to this policy.</p> <p><b>Consistency with existing Council policies:</b>            This option is in line with the Greater Christchurch Urban Development Strategy, the Central City Revitalisation Strategy and the Central City South Master Plan. Consistent with current approach for dangerous and insanitary buildings.</p> <p><b>Views and preferences of persons affected or likely to have an interest:</b>            Takes into account matters raised during stakeholder consultation. Provisions for giving special consideration to Heritage buildings would possibly meet the preferences of those interested in such matters.</p>		

## Other Options

### 71. Option 2 – Retain present “passive policy with no timeframes”

	<b>Benefits (current and future)</b>	<b>Costs (current and future)</b>
<b>Social</b>	Increased risk to human life and property. Enables programmed improvements with building use continuance.	Limited effects on building continued use. Passive approach does not allow quantification of costs.
<b>Cultural</b>	Preservation of City heritage buildings and structures. Improvement in amenity of buildings and retention of overall city identity.	Retention of heritage buildings and structures. Owners unlikely to do works as no timeframes for completion.
<b>Environmental</b>	Increases risk of significant damage to urban infrastructure.	Potentially greater loss in the event of an earthquake.
<b>Economic</b>	Enables building owners to undertake improvements to suit their own needs.	Maintenance and strengthening costs for earthquake-prone, dangerous or insanitary buildings.
<p><b>Extent to which community outcomes are achieved:</b>            Primary alignment with Community Outcome <b>A Safe City</b>, particularly, <i>Risks from hazards are managed and mitigated and People feel safe at all times in Christchurch City</i>.</p> <p>Also contributes to An <b>Attractive and Well-designed City</b>, particularly, <i>Christchurch is attractive and well-maintained and Our Heritage is protected for future generations</i>.</p> <p><b>Impact on Council’s capacity and responsibilities:</b>            The Council already has policy on earthquake strengthening (see below) and has a responsibility for enforcement of earthquake-prone, dangerous and insanitary buildings under the Building Act 2004. Potential increase in costs due to management of earthquake-prone buildings and possibility of providing financial support for strengthening of heritage buildings. However timetabling of requirements enables spread of costs over a lengthy period.</p> <p><b>Effects on Maori:</b>            None specific to this policy.</p> <p><b>Consistency with existing Council policies:</b>            This option does not result in acceleration of development and revitalisation of the affected buildings. This option is therefore not in accord with the Greater Christchurch Urban Development Strategy, the Central City Revitalisation Strategy or the Central City South Master Plan. Consistent with current approach for dangerous and insanitary buildings.</p> <p><b>Views and preferences of persons affected or likely to have an interest:</b>            Takes into account matters raised during stakeholder consultation. Provisions for giving special consideration to Heritage buildings would possibly meet the preferences of those interested in such matters.</p>		