

# TDC Earthquake Prone Buildings Workshop

# TDC Earthquake Prone Buildings Workshop

# Purpose:

To update the Elected Members on the:

- EPB Register General practice Earthquake Prone Building System -Building (EPB) Amendment Act 2016
- LTP 2021-2024 TDC owned buildings Earthquake Strengthening Building Project
- TDC has a page on it's website for the general public to seek further advice or help with their buildings

https://www.timaru.govt.nz/services/building/managing-earthquake-risk

## Risk



#### Tell Us

### Council

### **Services**

## Community

### **News & Events**

Public Input, Feedback & Fix-Its Members, Jobs, Meetings Animals, Building, Rates, Rubbish Our District, Recreation, Webcam Media Releases, Notices & What's On

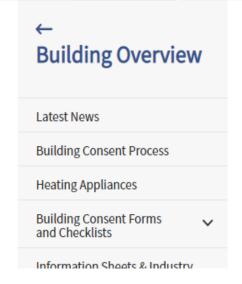
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# Managing the earthquake risk in our built environment





From July 1<sup>st</sup> 2017, the Ministry of Business Innovation and Employment (MBIE) now have a national strategy in place to focus on mitigating the risk of earthquake prone buildings in New Zealand. This will involve working through what this means regarding the shared responsibility that the council, building owners and engineers have to work towards the goal of a safer built environment for us all.



#### RELATED INFORMATION

Priority Buildings – Routes and thoroughfares Geraldine

(PDF 525.9 KB updated 24-Feb-2021)

Priority Buildings - Routes and

# What is an EPB

- Unreinforced masonry building or parts of those buildings
- Pre 1976 buildings
- MBIE methodology used to identify EPB buildings
- EPB's can be at greater risk than other buildings
- EPB's have an NBS rating of >34%
- Notices are displayed on buildings

# High, medium and low risk areas

- Timaru is noted as being in a medium seismic risk area and the territorial authority must identify potentially earthquake prone buildings by 1 July 2022 for priority buildings, 1 July 2027 for others. Seismic work must be carried out on priority buildings for medium risk areas within 12.5 years with all other buildings within 25 years of being issued with an EPB notice.
- The Ministry for Innovation, Business and Employment is conducting a review of the earthquake prone building NBS rating system with information due to be published in 2026. This information could change the status of some buildings within the portfolio.

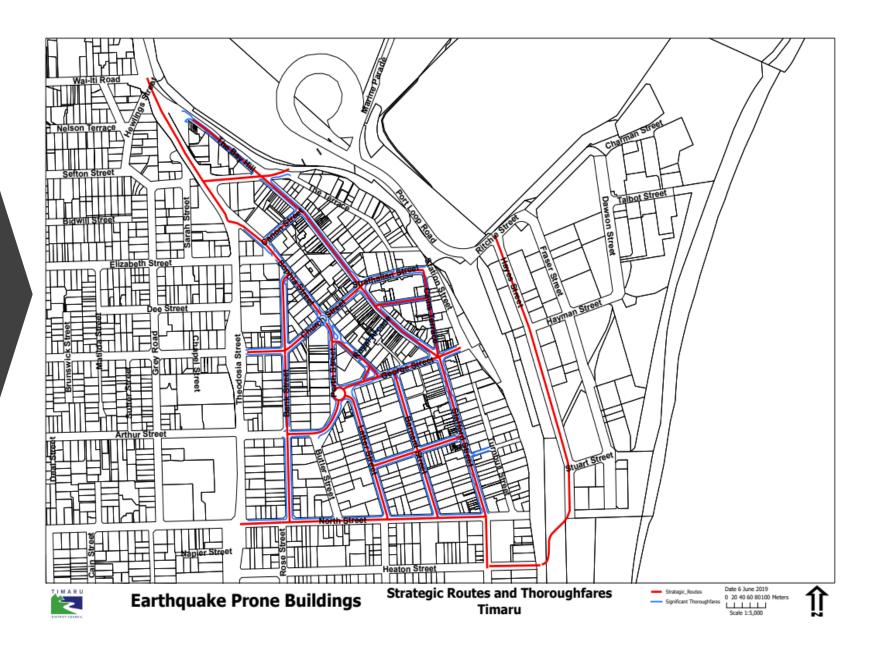
Ministry for Business, Innovation and Employment – Guidelines for EPB Notices

Seismic risk area	TAs must identify potentially earthquake prone buildings by:		Owners of earthquake prone buildings must carry out seismic work within (time from issue of EPB notice):		
	Priority	Other	Priority	Other	
High	1 Jan 2020	1 July 2022	7.5 years	15 years	
Medium Timaru	1 July 2022	1 July 2027	12.5 years	25 years	
Low	N/A	1 July 2032	N/A	35 years	

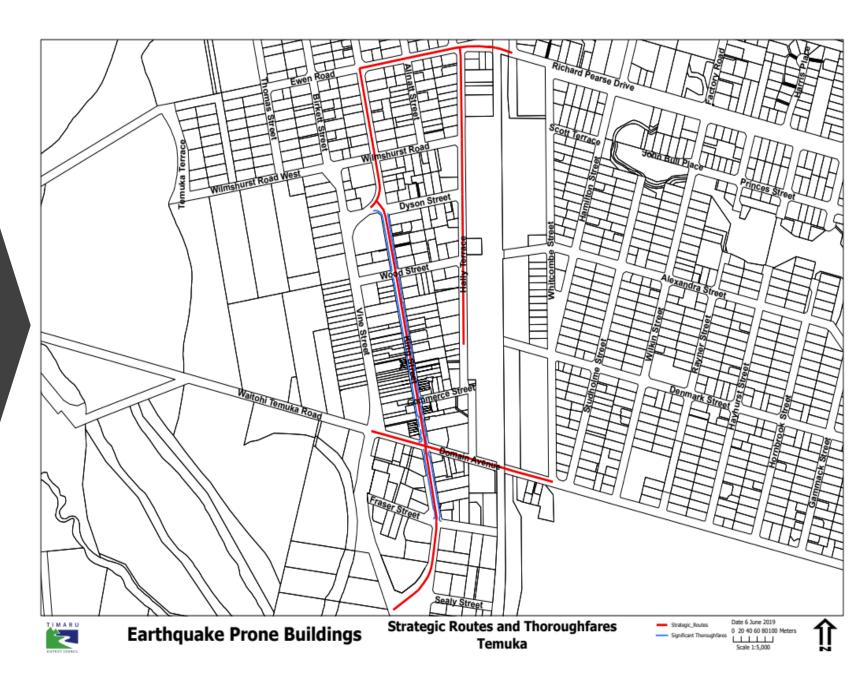
# Overview of the EPB process

- Researching council records and information
- Advising building owners
- Receiving and checking assessments
- Determining buildings NBS rating
- Updating national register
- Notices attached to buildings
- Identifying buildings as priority buildings, on a strategic route or significant thoroughfare

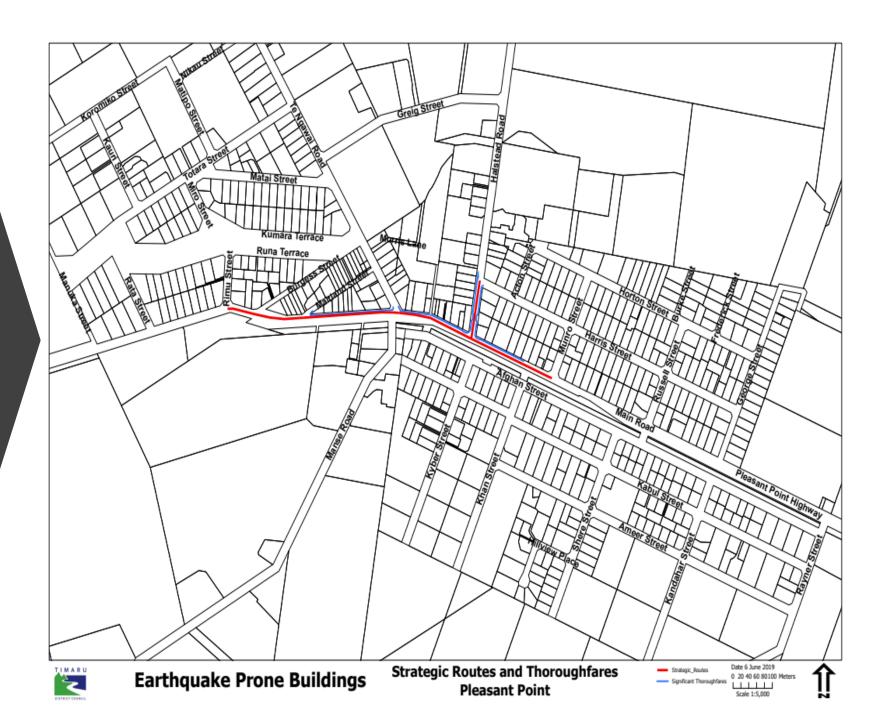
# Priority Routes Timaru



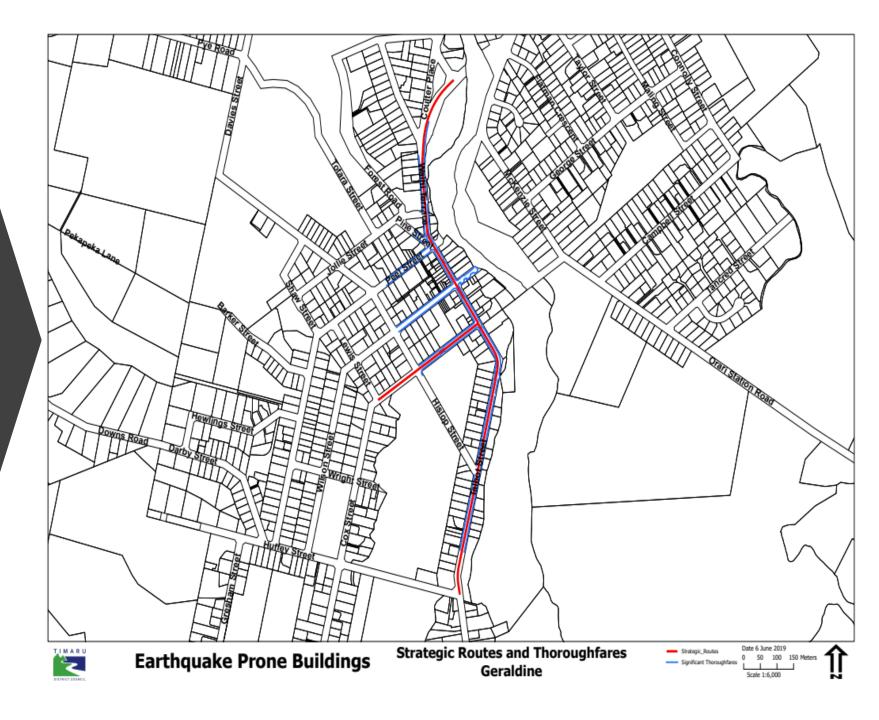
# Priority Routes Temuka



Priority
Routes –
Pleasant
Point



Priority
Routes –
Geraldine





# TDC Earthquake Prone Building Project

## TDC Earthquake Prone Building Project

The Property Department is leading a review of the TDC list of vertical building assets in the community facilities and property groups and assessing whether they are likely to be "earthquake prone".

## Definition of "earthquake prone" is:

"A building, or part of a building, is earthquake prone if it will have its ultimate capacity exceeded in a moderate earthquake, and if it were to collapse, would do so in a way that is likely to cause injury or death to persons in or near the building or on any other property, or damage to any other property".

This is not an exact science, as each building is unique in the way it was constructed and when. Assessments are carried out by registered structural engineers and governed by the Building (Earthquake-prone Buildings) Amendment Act 2016.

# Identifying priority list:

- TDC EPB Notice or identified as earthquake prone
- High usage
- Emergency Response

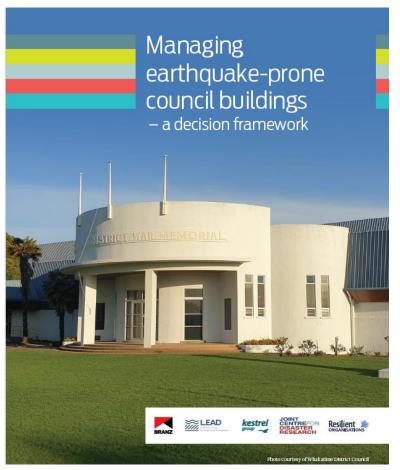
## RISK ASSESSMENT MATRIX AND RISK SCORES

	CONSEQUENCES					
LIKELIHOOD	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)	
Almost Certain (5)	s Moderate	10 Moderate	15 High	20 High	25 High	
Likely (4)	4 Low	8 Moderate	12 Moderate	16 High	20 High	
Possible (3)	3 Low	6 Moderate	9 Moderate	12 Moderate	s High	
Unlikely (2)	2 Low	4 Low	6 Moderate	8 Moderate	10 Moderate	
Rare (1)	1 Low	2 Low	3 Low	4 Low	s Moderate	

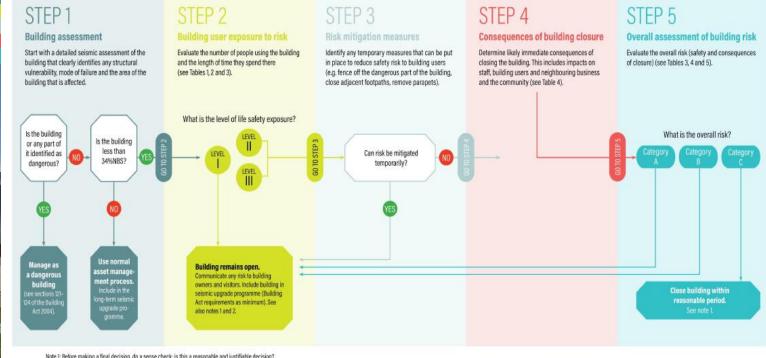
Low/Moderate/High (circle category applicable)

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Hazard Risk Score: Likelihood ( ) X Consequence ( ) = Hazard Risk Score ( )
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# Assessing the risks associated with use of EQP buildings



#### Decision making for council-owned earthquake-prone buildings



Note 1: Before making a final decision, do a sense check: is this a reasonable and justifiable decision?

Note 2: Consider the demographics of the people using the building - are they elderly, physically impaired or vulnerable in any way? Does this change the risk? Consider other hazards that might create additional risk, like the presence of hazardous substances or asbestos in the building or natural and geological hazards nearby such as unstable ground.











# Project Update:

#### Past

# Mixture of ISA's, DSA's and no assessments

- (ISA Initial Seismic Assessment DSA – Detailed Seismic Assessment)
- Building Department has issued EPB (Earthquake Prone Building) Notices
- Clock ticking depending on nonassessment but identified as EP or under 34 NBS% rating
- Govt has extended timelines for priority buildings by another 4 years

## Present – F/Y 2025 2026

- Budget \$1m carried forward for Reports and Construction
- Identified priority buildings EPB notice, high usage and emergency response
- Received quotes and action DSA's across a number of buildings

#### Future – LTP 2027 2037

- Strategic Review of Property
   Assets to determine Opex, Capex
   and Replacement plan
- Identify from each DSA recommendations to bring buildings either up to 34%NBS and/or on to 67%NBS%
- Link each recommendation list to an AMP and building asset plan to target opex/Capex on priority spend to match timeline of EPB notice

## **Property Department**

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Priority Route EPB notice issued when DSA's completed then repairs to be completed within 12.5 years + 4 years	NBS Rating and IL Status (IL – Importance Level)		
138 Stafford Street – Chinese Royal Gardens	15% NBS IL2 (under 200 persons in building) – Notice issued.		
136 Stafford Street – Criterion Hotel	15% NBS IL2 (under 200 persons in building) – Notice issued.		
122-124 Stafford Street — Theatre Royal	33% NBS IL3 (over 200 persons in building) – Notice issued.		
30 Barnard Street – Carpet Court	15%NBS IL2 (under 200 persons in building) — Notice issued.		
78 Talbot Street – Geraldine Cinema	20%NBS IL3 (over 200 persons in building — Notice issued.		
Priority Buildings  Status of building and funds available to fix in LTP 2027  2037  EPB notice when DSA's completed then repairs to be completed within 12.5 years + 4 years	NBS Rating and IL Status (IL – Importance Level)		
2 King George Place – Municipal Building	# Note that investigations work has been temporarily halted for a draft DSA.		
Temuka Alpine Energy Building	Draft 15%NBS IL4 and IL3 - Emergency Response Building – Work to be completed in 2025		
26 King Street – Parks Yard and Nursery Area	Draft 15%NBS IL4		
Pleasant Point Hall	15%NBS IL3 (over 200 persons in building) — Notice issued.		
Geraldine Pavilion - Gardens	Draft 20%NBS IL2 (up to 200 persons in building) - Work now completed and needs to be reassessed to be brought off list.		
South Block – Adjacent to Municipal Building	20%NBS IL2 (up to 200 persons in building) — Notice issued.		
Caroline Bay Tea Rooms	20%NBS IL3 — Notice issued.		
Not Priority Repairs DSA notice issued then repair in 25 years	NBS Rating and IL Status (IL – Importance Level)		
14 Butler Street - Warehouse	No works underway – Notice Issued.		
8 Craigie Ave – South Canterbury Gymnastics	No works underway – No notice issued.		
16 Cox Street - Geraldine Medical Centre	No works underway – Notice issued.		

## **Community and Recreation Department**

Buildings	NBS Rating and IL Status (IL – Importance Level)		
Temuka Service and Library Centre	15%NBS IL2 (under 200 people) – Notice issued.		
Aorangi Stadium	15%NBS IL3 for over 200 people – Notice issued.		
South Canterbury Museum	Draft 15%NBS IL2 & IL3		
Timaru Library	15% ISA for one component of main area – No notice issued.		
CBay Pool	Unknown		
Geraldine Pool	Unknown		
Temuka Pool	Unknown		
Pleasant Point Pool	Unknown		

## To Code

Geraldine Service and Library Centre

Aigantighe House Art Gallery and Gallery