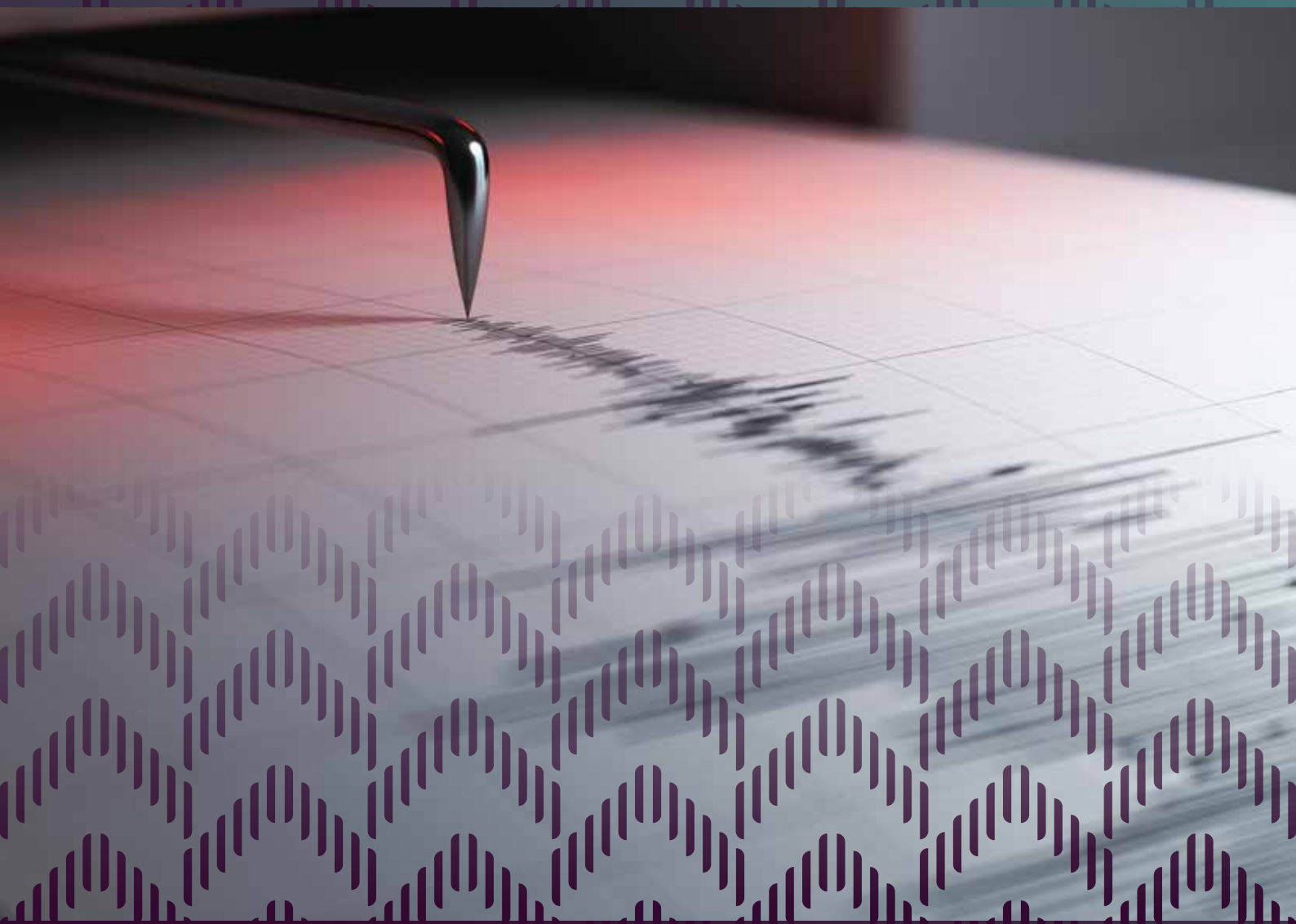
Te Tāhuhu o te Mātauranga
Ministry of Education

Seismic Risk Management Procedures for Existing School Buildings

Version 1 - August 2025



Te Kāwanatanga o Aotearoa
New Zealand Government

Contents

1 Introduction

1.1 Purpose

The purpose of this document, entitled *Seismic Risk Management Procedures for Existing School Buildings*, is to support School Property, the Ministry of Education, and those involved in the seismic assessment and upgrade of school buildings in implementing the School Seismic Policy.

1.2 School Seismic Policy

The school property portfolio consists of more than 15,000 school buildings across nearly 2,100 state schools, each with various investment needs. The School Seismic Policy outlines how the Ministry manages seismic risk in a workable and proportionate way across the property portfolio. The School Seismic Policy covers the following aspects:

a) seismic risk management of existing school buildings

b) obtaining, updating, recording and communicating seismic information

c) occupancy decisions relating to buildings with Low Seismic Ratings

d) seismic requirements for the strengthening of existing school buildings

e) seismic performance objectives and requirements for new school buildings

f) requirements for future school property commitments.

While the School Seismic Policy scope is limited to state school buildings only, the principles are aligned with the way the Ministry manages seismic risk in its corporate buildings.

1.3 Former school seismic assessment programmes and ongoing management

Over the past 30+ years, the Ministry has invested significantly in identifying and managing the seismic risk of its school property portfolio. From 1998 – 2001 the Ministry commissioned a structural survey by registered engineers of all school buildings. This survey identified and remediated vulnerable building elements such as heavy roofs, brick walls and heavy ceilings, with 11% of buildings across the portfolio being remediated[1]. The survey also focused on identifying visible structural weaknesses and assessments undertaken where required.

More recently, following the 2010/11 Canterbury Earthquake Sequence, the Ministry established the Detailed Engineering Evaluation (DEE) programme covering the greater Christchurch area and the Earthquake Resilience (EQR) programme covering other parts of the country. These programmes sought to manage the seismic assessment of school buildings across New Zealand and formally ended in 2014 and 2016 respectively. Buildings assessed below 34%NBS were prioritised for remediation while buildings that rated below 67%NBS upgraded where they were subject to other planned building interventions such as building refurbishment or weathertightness remediation.

While these assessment programmes have ended, the Ministry continues to actively manage the seismic resilience of its property portfolio, incorporating seismic risk review into future asset investment decisions as per the School Seismic Policy.

[1] Making Schools Safer - The New Zealand Experience Ministry of Education, New Zealand - January 2004

1.4 Engineering Advisory Group (EAG)

Established in 2012 following the Canterbury Earthquake Sequence, the Ministry's Engineering Advisory Group (EAG) provides technical leadership and oversight of the Ministry's seismic resilience policies and technical design guidelines. The EAG also supports the Ministry and school boards by providing technical engineering advice on a range of engineering matters, including but not limited to buildings with Low Seismic Ratings.

The EAG is chaired by the Ministry's *Chief Advisor – Engineering and Resilience* and includes expert external engineers with extensive structural, seismic and geotechnical experience.

1.5 Further information and feedback

The Ministry is constantly seeking to improve the content and usability of its documents. If anything in this document requires clarification or if you would like to provide feedback, please contact the Ministry through the School.Design@education.govt.nz mailbox.

2 Background

2.1 Seismic risk in New Zealand

Seismic risk is fundamentally comprised of ***hazard likelihood***, ***building vulnerability***, and ***consequence*** (the exposure of people or response criticality).

With respect to *hazard*, New Zealand is an earthquake-prone country with GNS Science recording over 20,000 earthquakes on average each year, with only about 100 – 150 large enough to be felt[2]. While thousands of earthquakes are recorded each year the occurrence of major earthquakes that cause widespread damage is rare. However, notwithstanding the very low annual probability of a major earthquake, the rupturing of the Hikurangi Subduction Zone and the Alpine Fault have an estimated 25% and 75% probability of generating a magnitude 8+ earthquake in the next 50 years[3] and seismic risk management is required to minimise the potential impacts of major earthquakes.

Building vulnerability refers to the presence of structural weaknesses that can lead to partial or complete structural failure in levels of earthquake shaking much lower than provided for in current design standards.

Consequence relates to the exposure of people inside a building, in an adjacent building and in publicly accessible spaces adjacent to a building.

2.2 Management of seismic risk in existing buildings

The seismic risk of existing buildings in New Zealand is primarily managed through the Building (Earthquake-prone Buildings) Amendment Act 2016 which categorises New Zealand into three seismic risk areas and regulates how seismic risk is identified and remediated (through strengthening or demolition). The purpose of the Act is to ensure seismic risk is managed in a workable and proportionate way recognising the costs, practicalities and associated timeframes of strengthening or removing earthquake-prone buildings. Legislated timeframes for remediation vary from 7.5 years (Priority Buildings such as school classroom buildings in a High Seismic Zone) through to 35 years (all buildings in a Low Seismic Zone).

A review of the current regulatory arrangements is currently being undertaken by MBIE, and changes to earthquake-prone building provisions to be implemented in 2026.

2.3 Seismic assessment and upgrade prioritisation

Seismic assessment and upgrade work should be prioritised based on potential seismic risk (seismic rating and building typology), seismic zone and other planned non-seismic upgrades.

2.3.1 Building typologies

School buildings are categorised into different typologies (types A-F, S & T) based on their construction and seismic risk potential (refer Table 1). Building types A, B, and C align with the MBIE Profile Categories in the EPB Methodology, while types D through T represent decreasing potential seismic risk based on construction date, number of storeys, and presence of heavy building elements like concrete floors or cladding panels. Timber-framed buildings with lightweight floors and cladding represent the lowest seismic risk[4] [5].

If a building has multiple construction eras or types, the highest risk typology should be assumed unless an engineering assessment shows a lower risk typology is appropriate. A building that has been previously

[2] https://www.gns.cri.nz/our-science/natural-hazards-and-risks/earthquakes/

[3] https://af8.org.nz/news/2022/december/the-big-ones

[4] Report on Structural Testing of a Standard Classroom Block in Christchurch in December 2013

[5] Establishing the resilience of timber framed school buildings in New Zealand 2014

strengthened will likely have a lower risk potential than those that have not been strengthened and are the same building type, particularly buildings strengthened post 2013.

Table 1 - School building seismic typologies.

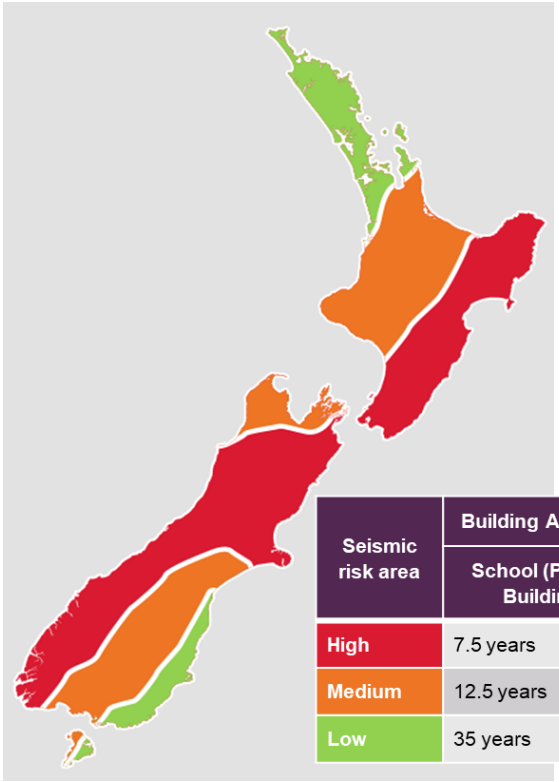
Building typology	Construction era and type	Comments	Risk
A	Unreinforced masonry (URM)	MBIE Profile Category A	Decreasing risk potential
B	**Pre-1976** heavy construction of **three or more storeys**	MBIE Profile Category B	
C	**Pre-1935** heavy construction of **one or two storeys**	MBIE Profile Category C	
D	**1936 to 1975** heavy construction of **one or two storeys**	Includes buildings with concrete block walls and masonry infill panels	
E	**Post-1976** concrete and steel construction **of three or more storeys**		
F1	**Post-1976 one or two storey** construction with **precast concrete** suspended floor and/or wall elements	Predominantly tilt-up concrete wall panel or concrete masonry wall construction Includes gyms with precast perimeter walls.	
F2	**Post-1976 one or two storey** construction with **insitu concrete** suspended floor and light or medium-weight cladding	Includes buildings with concrete block walls	
S	**Steel-framed** one or two storeys with **lightweight** floors and cladding		
T	**Timber framed** one or two storey buildings with **lightweight** floors and cladding	Includes buildings with brick veneer[3]	

Notes:

1. Buildings designed post 2013 to follow procedure outlined for modern buildings.
2. Type S not to include buildings with heavy (concrete) floors and cladding – to be assessed as Type B, C, or F as appropriate.
3. Brick veneer in older buildings should be inspected to ensure the veneer ties are in good condition.

2.3.2 Seismic risk areas and legislated timeframes for earthquake-prone buildings

The Building Act 2004 categorises New Zealand into three seismic risk areas: High, Medium and Low. It also sets legislative timeframes for building owners to undertake seismic work on earthquake-prone buildings. School buildings are generally considered Priority Buildings and are given shorter timeframes for seismic work in High and Medium seismic risk areas compared to non-Priority buildings (e.g. multistorey office buildings or warehouses). The seismic risk areas and current legislated timeframes are summarised in Figure 1.



Seismic risk area	Building Act seismic work timeframes	
	School (Priority) Buildings	Normal (Non-priority) Buildings
High	7.5 years	15 years
Medium	12.5 years	25 years
Low	35 years	35 years

Figure 1 - Legislative timeframes for upgrade or removal of earthquake-prone buildings.

2.3.3 Prioritisation framework

The school property portfolio consists of more than 15,000 school buildings across nearly 2,100 state schools, each with various investment needs requiring regular prioritisation. The prioritisation model in Figure 2 provides a framework for prioritising seismic assessment and upgrades based on building typology and seismic risk area. The prioritisation framework combined with the buildings NBS rating should inform decisions for regional and portfolio prioritisation.

Seismic upgrades to buildings with Low Seismic ratings should be prioritised within legislative timeframes or the timeframes recommended in the Seismic Risk Evaluation (refer section 4.2), whichever is the lesser.

Type	Construction Era and Type	Low Hazard	Medium Hazard	High Hazard
A	Unreinforced masonry (URM)			
B	**Pre-1976** heavy construction of **three or more storeys**			
C	**Pre-1935** heavy construction of **one or two storeys**			
D	**1936 to 1975** heavy construction of **one or two storeys**			
E	**Post-1976** concrete and steel construction **of three or more storeys**			
F1	**Post-1976 one or two storey** construction with **precast concrete suspended floor and/or wall elements**			
F2	**Post-1976 one or two storey** construction with **insitu concrete** suspended floor and light or medium-weight cladding			
S	**Steel-framed** one or two storeys with **lightweight** floors and cladding			
T	**Timber framed** one or two storey buildings with **lightweight** floors and cladding			

Figure 2 - Prioritisation framework for building typology and seismic zone.

3 Operational procedures

3.1 Key roles and responsibilities

The following roles and responsibilities are involved in the key activities outlined in the generalised seismic risk management procedures in section 3.2:

Role	Teams	Responsibilities
Schools	Senior leadership and boards	To be informed of any plans to obtain new seismic information or changes to seismic information due to strengthening works or seismic review. To be consulted and provide opportunity to input into the Seismic Risk Evaluation as part of an occupancy decision relating to a building with a Low Seismic Rating.
	External school Project Managers	Those that plan and manage school property projects are responsible for identifying whether a project will trigger the need for seismic triage and are often the primary contact with the school.
School Property	Asset Planners, Property Advisors, Construction Advisors, Delivery Managers, Regional Infrastructure/Asset Managers	Those that plan and manage school property projects are responsible for identifying whether a project will trigger the need for seismic triage and are often the primary contact with the school.
	Engineering Advisory Group Experienced Structural Engineer approved by the *Chief Advisor – Engineering and Resilience*	Conducts the seismic Triage, prepares the Seismic Assessment Brief, reviews seismic assessments and provides technical advice to the Ministry and Board, including technical recommendations for buildings with Low Seismic Ratings.
	Chief Executive for School Property	Makes a building occupancy decision based on the Seismic Risk Evaluation Report.
	School Property Engagement Team	Supports the Ministry to update schools about seismic information or building project updates, and schools to update their community and other interested stakeholders, including media.
The Ministry of Education	Education Advisors, Director of Education	Review the impact of buildings with Low Seismic Ratings on education delivery and support the development of building and non-building solutions.
	Network	Provides demand information to support decision making.

3.2 Generalised procedure

Outside of a specific seismic assessment programme, seismic risk information is to be reviewed, validated and updated where required as part of normal asset management and investment planning, such as 10-Year Property Plans (10YPP), site-wide master planning, or specific capital investment projects such as building extensions, weathertightness remediation and significant refurbishments.

The general process for updating seismic information is outlined in Figure 3, which summarises the stages under activity phases. The key aspects associated with each activity phase are outlined further in this section.

The review and outcome process pathways for new draft seismic assessments under the *Assess* and *Review* activity phases are outlined further in Figure 4.

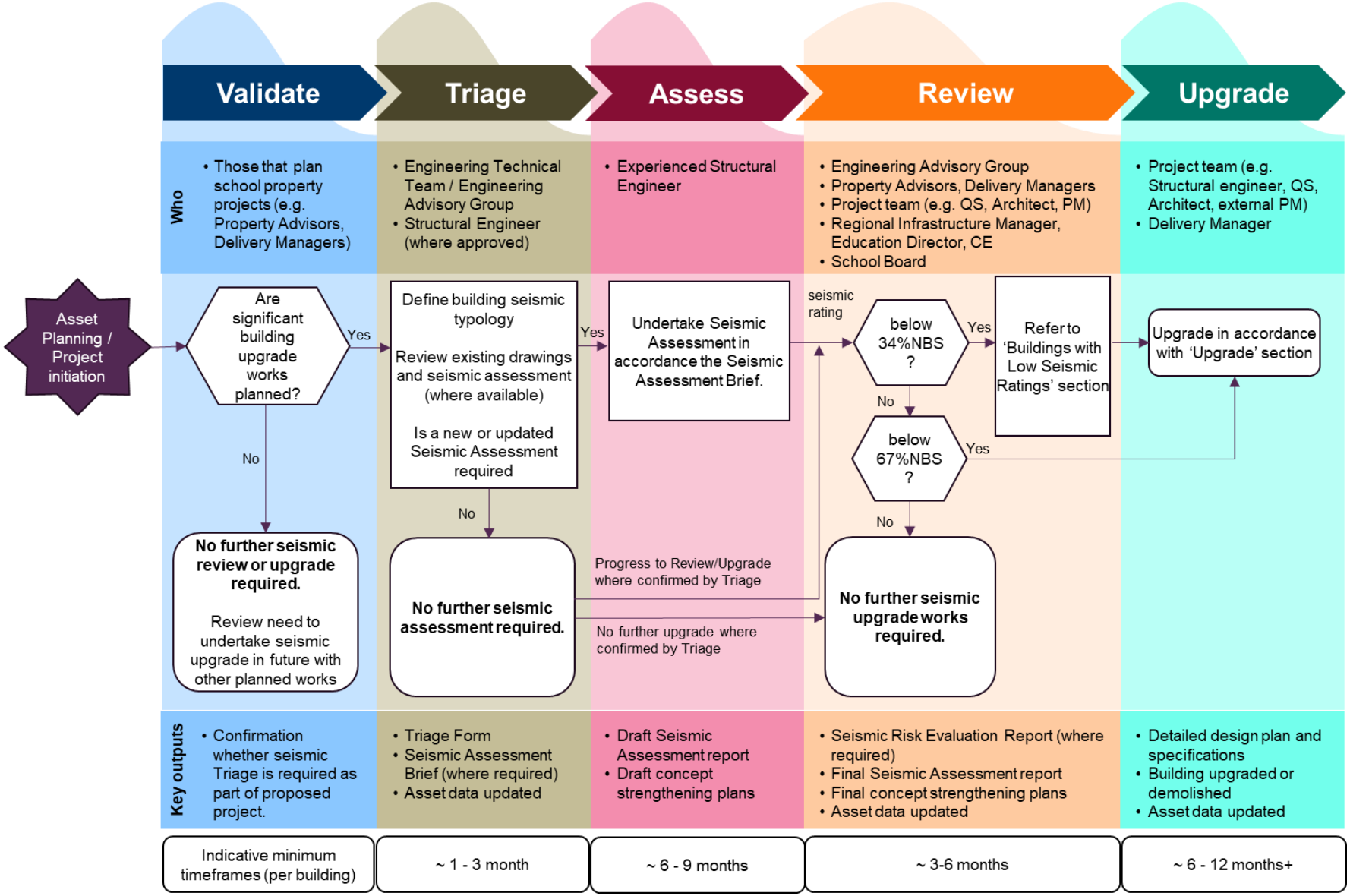


Figure 3 - Generalised process for updating seismic information and upgrade (Note - the indicative timeframes provided do not include time between successive activities as these are subject to funding and prioritisation decisions).

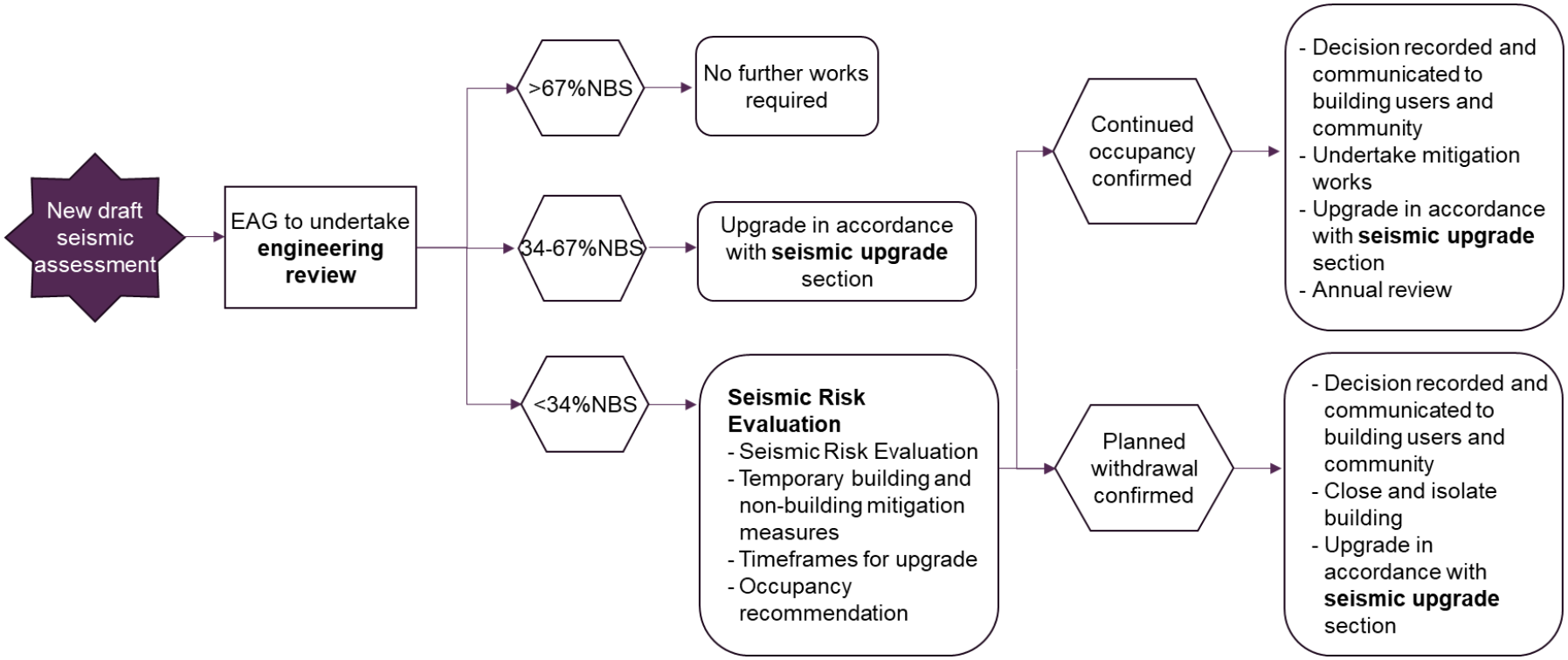


Figure 4 - Review and outcome pathway process for new seismic assessments.

3.2.1 Validate

Validation is identifying whether a project or new information triggers the need for seismic Triage. Seismic Triage is only required when significant upgrade works are planned, or if other issues have been identified that warrant further review. This generally includes any work requiring a building consent and that necessitates vacating the building for several weeks, such as weathertightness remediation or major building refurbishment. Smaller projects that don't involve a building consent or recladding typically do not require seismic assessment.

No review or seismic assessment is generally required if no planned works are proposed.

The Validation is undertaken by those that plan school property projects (e.g. property advisors, delivery managers, external school project managers).

3.2.2 Triage

The triage process identifies potential building vulnerabilities requiring further Seismic Assessment by reviewing existing assessments, building drawings and geotechnical information (where available). The process confirms the building's seismic typology, completes the building Triage Form, and where required, prepares the Seismic Assessment Brief for procuring engineering consultants.

In general,

a) for building types A - F, older seismic assessments may need review and possible updating, or new assessments may be required, particularly those with heavy concrete floors or walls or buildings constructed post-1997.

b) no seismic assessment is typically required for one or two storey lightweight timber or steel framed buildings (types S and T), where no obvious seismic hazards exist.

c) no seismic assessment is typically required for standalone buildings designed and constructed post-2013 ('modern buildings') as these are of sufficiently modern design that they can be presumed to rate above 67%NBS, unless specific issues have been identified.

Triaging is to be undertaken by a member of the EAG or, another Chartered Professional Engineer where approved by the *Chief Advisor – Engineering and Resilience*.

3.2.3 Assess

An experienced structural engineer is engaged to undertake a Seismic Assessment in accordance with the Seismic Assessment Brief with appropriate geotechnical engineering input (where needed).

Seismic assessments should utilise the Ministry's standard report templates and be submitted in draft for the Ministry's EAG review prior to being finalised. The assessment brief generally includes preparing draft concept level strengthening drawings to support obtaining cost information to inform next steps and upgrade decisions.

There are several types of Seismic Assessment to establish the seismic rating of a building:

a) **Initial Seismic Assessment (ISA):** an attribute-based procedure in which the seismic rating is established by comparing a building to buildings of similar age and construction.

b) **Detailed Seismic Assessment (DSA):** involves undertaking a seismic analysis of the whole structure and determining the overall seismic rating, including its elements, where they might constitute a significant life safety hazard.

c) **Targeted Seismic Assessment (TSA):** involves specific calculations for selected elements only, that the assessor or Triage engineer considers critical. This would normally be used to inform

adjustments to an ISA, to update a DSA, or to a provide further information for a seismic upgrade process.

All forms of Seismic Assessment are valid, but require specific selection to meet the requirements of the Ministry for the particular building. An ISA performed by or under the supervision of an experienced structural engineer who has taken the time to understand the building may be of more value than a highly analytical DSA executed without properly understanding the building or outcome from the analysis.

The type of assessment required will be identified in the Triage process and outlined in the Seismic Assessment Brief.

As the assessment progresses there may be some instances when new information requires a change to the assessment type. The assessing engineer should discuss this with the Ministry to agree changes to the Assessment Brief, including programme impacts.

3.2.4 Review

All Seismic Assessments should be submitted to Engineering.Advisory@education.govt.nz for high-level qualitative review and recommendations (refer Figure 4).

In some instances, the high-level review may recommend further targeted or full quantitative reviews as part of finalising the Seismic Assessment. Further information and guidance on the types of reviews can be found in the April 2025 Guidance for Commissioning and Undertaking Reviews of Seismic Assessments.

The outcomes of the reviewed Seismic Assessment determine the required course of action:

- *seismic rating below 34%NBS*

  Refer to 'Buildings with Low Seismic Ratings' section. Seismic upgrade works should meet the Seismic Upgrade requirements (refer to section 3.2.5).

- *seismic rating between 34% and 67%NBS*

  Continued occupancy is assumed to be appropriate unless specific concerns are identified. Plan seismic upgrade works to meet the Seismic Upgrade requirements (refer to section 3.2.5).

- *seismic rating above 67%NBS*

  No seismic upgrade work required.

Finalised Seismic Assessments are to be sent to Engineering.Advisory@education.govt.nz for updating the Ministry's asset database. The final assessment should also be provided to the school for their records.

3.2.5 Upgrade

3.2.5.1 Upgrade policy

The Ministry adopts a risk-based approach to improving the seismic performance of the school property portfolio over time, allowing seismic upgrades to be appropriately planned and funded.

Seismic upgrades are often complex, intrusive and costly. They can significantly disrupt school operations and require thoughtful planning and ideally coordination with other planned building interventions, such as refurbishments or weathertightness remediation. When planning seismic upgrades, the most appropriate upgrades that improve seismic performance while balancing other objectives, such as operational (education disruption) or functional requirements, time and funding constraints should be considered.

In some cases, significant improvement in seismic performance can be achieved through relatively minor and cost-effective interventions, allowing a high %NBS rating to be targeted. In other cases, achieving a higher %NBS rating may require the introduction of new structural elements that significantly impact building

functionality, increase project complexity, or result in disproportionate costs. In such instances, a lower %NBS rating may be appropriate.

It may also be appropriate to stage seismic upgrade works over time. This is particularly relevant where interim risk reduction measures can be implemented in the short term (i.e. for buildings that rate below 34%NBS) or where limited interventions can be incorporated into other planned works ahead of a major redevelopment or investment.

To support informed decision-making, a range of upgrade options must be explored and documented. These options should include:

- The scope, scale and staging (where appropriate) of proposed interventions
- The expected %NBS rating outcomes
- Associated costs, timelines, and impacts on building use
- Identification of vulnerabilities addressed and those remaining

This approach means that the Ministry does not mandate a fixed %NBS target for all buildings. Instead, it requires that reasonable and proportionate strengthening be undertaken at the time of upgrade or refurbishment. The only exception to this approach applies to buildings that are rated below 34%NBS, which must be strengthened to at least 34%NBS in accordance with the requirements of the Building Act 2004 (refer also to section 4).

All seismic upgrades that target a rating below 67%NBS shall be reviewed and endorsed by the *Chief Advisor – Engineering and Resilience*.

Further guidance on seismic upgrades can be found in the Structural and Geotechnical Requirements.

3.2.5.2 Completion of upgrade projects

At the completion of seismic upgrade works the following documents should be sent to Engineering.Advisory@education.govt.nz:

- The latest construction issue architectural and structural drawings.
- The final version of the Design Features Report.
- Compiled site visit records.
- The signed construction Producer Statement (PS4) stating the achieved NBS rating.

3.3 Communication of seismic information

Effective and ongoing communication of seismic information is crucial, particularly for buildings with Low Seismic Ratings.

3.3.1 Communication with school leadership and boards

School leadership and boards should be informed where new or updated seismic information is being obtained. This includes the outcomes of the seismic triage process, when new or updated Seismic Assessments are obtained, and following the completion of seismic upgrade works.

Should as part of the Assess activity engineers identify any aspects that would classify a building(s) as dangerous under the Building Act or raise any other imminent safety concerns, school leadership and boards should be notified immediately.

For buildings with Low Seismic Ratings (i.e. those that rate below 34%NBS), school senior leadership and boards should be directly informed following the completion of the EAG review. This typically involves a briefing by School Property (e.g. Regional Infrastructure Manager, Property Advisor or Delivery Manager), Te Mahau (e.g. Education Director) and a member of the EAG. Meetings should be followed up with written communications that outline what was discussed and include next steps, actions and agreed timing of ongoing meetings and/or updates.

3.3.2 Communication within the Ministry of Education and School Property

All new seismic information should be recorded in the Ministry's asset database to support planning (refer section 5).

For buildings with Low Seismic Ratings, key staff (both regionally and nationally) should be informed of the seismic assessment following EAG review, including the plan for communicating with the school Board, their stakeholders and proposed next steps. This includes the following:

- Regional School Property staff, including the school's Property Advisor, Infrastructure Manager, Regional Engagement Advisor, and Regional Infrastructure / Asset Manager.
- Regional Education staff, including the school's Education Advisor, Manager Integrated Services, and Director of Education.
- National School Property Staff including the GM Asset Management, Head of Property and Chief Executive.
- Minister's Office via No Surprises report and Information Updates where necessary.

The information should also be inputted into the School Property's risk database (ERIC), so that the issue and its progress can be viewed and monitored internally.

3.3.3 Communications to school community

Schools are responsible for leading the communication of seismic information to their staff, students and community.

For buildings with Low Seismic Ratings, the School Property Engagement team are available to work with schools to develop a communications plan and specific communications, and School Property can make available key staff and EAG members to attend briefings or to input into written communications.

3.3.4 Communication with territorial authorities

New or updated Seismic Assessments for building types A, B, and C (i.e. MBIE Profile Categories) should be communicated to the local territorial authority, regardless of seismic rating, on completion of the Seismic Assessment.

Seismic Assessments for buildings with Low Seismic Ratings should be provided to the local territorial authority once finalised and following the communication of the assessments to the school and their community.

The *Chief Advisor – Engineering and Resilience*, or a designated representative, will be responsible for providing and communicating seismic assessments to the territorial authority.

4 Buildings with Low Seismic Ratings

4.1 Generalised process for buildings assessed below 34%NBS

The Ministry has obligations under the Health and Safety at Work Act 2015 (HSWA) and the Building (Earthquake-prone Buildings) Amendment Act 2016 in relation to managing the risk of earthquake-prone buildings. Worksafe issued a Position Statement in 2018 which outlines the requirements for the owners of an earthquake prone building (EPB)[6] to:

a) comply with the Building Act 2004

b) monitor new or emerging information

c) actively manage work related health and safety risk, in accordance with the HSWA.

This includes managing the risk of occupying buildings with Low Seismic Ratings.

As outlined in the MBIE Seismic Risk Guidance for Buildings, there are very few buildings that rate less than 34%NBS that are not able to continue to be occupied for a short to medium timeframe, while decisions about longer term upgrading or demolition are made and/or plans are prepared.

The nature of the risk relates to the likelihood of a significant earthquake occurring, given the relatively low probability of an earthquake in any given year, combined with an assessment of the criticality of the vulnerability(ies) of the building.

All Seismic Assessments, including those that rate a building below 34%NBS should be subject to specific engineering review (refer section 3.2.4). In some cases, engineering review may result in an assessed rating increasing above 34%NBS and no further seismic risk review is required. In other cases, the assessed rating will remain below 34%NBS and will trigger the need for a Seismic Risk Evaluation (section 4.2) and decisions related to the ongoing use of the building (section 4.3). Refer also to Figure 4 for a graphical representation of the process.

[6] Dealing with earthquake-related health and safety risks: information for PCBUs and building owners, June 2018, Worksafe

4.2 Seismic Risk Evaluation

Decisions around whether to vacate a building should not be made solely based on a %NBS building rating.

As emphasised in Seismic Risk Guidance for Buildings, % NBS is not a predictor of building performance, nor is it an assessment of safety in a particular earthquake. %NBS building ratings were not intended to be used as part of building occupancy decision-making.

The %NBS metric is a way of characterising how a building is expected to perform in an earthquake compared to the minimum life safety seismic performance requirements of the Building Code. It simplifies complex risk factors about a building and should be viewed as indicative of an engineer's confidence in the expected seismic performance of the building, not a prediction.

MBIE Seismic Risk Resource for Commercial Building Tenants – April 2024

A Seismic Risk Evaluation is a critical tool for evaluating the seismic risks associated with buildings rated below 34% New Building Standard (%NBS). It is based on national guidance and provides the necessary technical and contextual information to support informed decisions regarding the continued use of such buildings until full seismic strengthening can be undertaken.

Completing the Seismic Risk Evaluation Report is a collaborative process involving key members from the school Leadership, school Board, the EAG, School Property and Te Mahau. The key inputs by each group is generally as outlined in the table below.

Role	Responsibilities
Engineering Advisory Group (EAG)	The EAGs involvement typically includes the following: **Technical review**: A high-level review of the Structural Assessment to verify its technical accuracy and quality. Recommendations for further targeted or comprehensive reviews will be made if necessary. **Vulnerability verification:** Confirmation of the nature and extent of key structural vulnerabilities and their potential impact on building occupants. **Site inspection and identification of potential mitigation works**: On-site inspection of the building to identify any short-term risk mitigation measures that may be required to reduce short-term risks. **Seismic Risk Evaluation:** Technical input to the Seismic Risk Evaluation, including an assessment of the likely building performance over the timeframe the building is anticipated to be used prior to the completion of seismic upgrades. **Briefings/advice:** Present the seismic assessment findings and associated technical risk advice to school Leadership and the school Board.
School Property	Provide information about the likely timeframes for both interim mitigation works and permanent seismic upgrades. Provide information on alternative risk mitigation options (e.g. available decant space).

Te Mahau	Provide information on non-building risk mitigations (e.g. online learning) and impacts on educational outcomes and on the community.
School/school Board	Provide information about building usage, impacts on alternative risk mitigation options (e.g. online learning) on school operations and educational outcomes, and information to support development of communication messages.

4.3 Occupancy decisions and actions

Where a building has a Low Seismic Rating, or other identified structural shortcomings, the Chief Executive for School Property, or delegated authority, will make an occupancy decision on the recommendations in the Seismic Risk Evaluation report. Occupancy decisions shall be informed by the following:

- Worksafe Position Statement (2018), which outlines the responsibilities of building owners in relation to earthquake-prone Buildings
- MBIE Seismic Risk Guidance for Buildings (July 2022)
- BRANZ Managing earthquake-prone council buildings – a decision framework (2021)
- Seismic Risk Evaluation Report (refer section 4.2).

The Seismic Risk Evaluation and occupancy decision, along with plans to manage the short-term risk, should be communicated to school staff, wider school community and regular users of the buildings.

Where continued occupancy is confirmed, an annual review is to be undertaken by the EAG. The review should identify if any changes have or are likely to occur to either the occupancy of the building or timeframes for mitigation or decanting, or to the understanding of the key vulnerabilities. The review should be shared with the school Leadership and Board.

Where continued occupancy is not confirmed, actions will be taken to close and isolate the building within a reasonable period of time.

4.4 Funding and interim seismic upgrades

The Ministry shall respond to, and fund recommendations outlined in the Seismic Risk Evaluation. This includes non-structural mitigations (e.g. signage or temporary fencing), interim risk reduction works, and support for decanting to existing school facilities if a planned withdrawal is advised.

Where interim strengthening works are recommended, these should be scheduled during school holiday periods to minimise disruption to teaching and learning, provided this aligns with the Seismic Risk Evaluation. In some cases, a staged approach will be necessary, with work carried out over multiple holiday periods.

Permanent strengthening or building replacement plans are more complex and will be subject to the Ministry's normal property prioritisation and funding processes.

5 Recording and monitoring seismic information

5.1.1 Recording of seismic information

All new or updated seismic information should be sent to Engineering.Advisory@Education.govt.nz to ensure the information is stored and recorded in the Ministry's asset database.

5.1.2 Monitoring of buildings with Low Seismic Ratings or other identified issues

Buildings with Low Seismic Ratings should be reviewed annually to ensure seismic risks are managed. The review should identify any changes in occupancy, timeframes for mitigation or decanting, or understanding of key vulnerabilities. This review is typically completed by a member of the EAG, in conjunction with the school board.

Following a significant earthquake (e.g. >magnitude 5), a structural engineer should be engaged to undertake an inspection of the building to assess if there is any change in the occupant risk levels that warrant further review or action.

Appendix A – Glossary

Importance Level	A categorisation assigned to all buildings under the NZ Building Code, related to the building occupancy and use. In general: IL3: school buildings with more than 250 occupants and buildings that may contain crowds (e.g. halls) IL2: school buildings with less than 250 occupants
%NBS	The seismic rating of a building expressed as a percentage of New Building Standard.
Low Seismic Ratings	A seismic rating below 34%NBS
Seismic Risk Evaluation	A building specific assessment comprising a technical engineering risk evaluation plus consideration of non-technical aspects and used to inform decisions relating to buildings with Low Seismic Ratings.
Seismic Assessment	There are several types of seismic assessment to establish a buildings %NBS rating: a) **Initial Seismic Assessment (ISA):** Recommended first qualitative step in the overall assessment process or as a sole method of seismic assessment for simple buildings, and in accordance with Part B of the national Seismic Assessment Guidelines. b) **Detailed Seismic Assessment (DSA):** Comprehensive quantitative assessment of the strength and deformation capability of a building in accordance with Part C of the national Seismic Assessment Guidelines. c) **Targeted Seismic Assessment (TSA):** A partial quantitative assessment of the strength and deformation capability of selected elements within a building, typically used to modify an ISA or to update an older DSA and generally carried out in accordance with Part C of The Guidelines.

Te Tāhuhu o te Mātauranga
Ministry of Education

He mea tārai e mātou te mātauranga kia rangatira ai, kia mana taurite ai ōna huanga

We shape an education system that delivers equitable and excellent outcomes

Te Kāwanatanga o Aotearoa
New Zealand Government