MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Regulatory Impact Statement: Effectively managing seismic risk in existing buildings

Decision sought	*Analysis produced for the purpose of informing Cabinet decisions.*
Agency responsible	*Ministry of Business, Innovation and Employment*
Proposing Minister	*Minister for Building and Construction*
Date finalised	*22/8/2025*

Summary of the regulatory proposal.

1. The future Earthquake Prone Building (EPB) system will regulate high risk 3+ storey buildings of heavy construction (generally concrete), and unreinforced masonry (URM) buildings. All other building types will be out of scope.
2. EPBs in low seismic zones (Auckland, Northland, and the Chatham Islands) will no longer be designated as earthquake-prone and no new EPBs will be identified there. Dunedin and coastal Otago will be reclassified from a low to medium seismic zone.
3. EPB mitigation requirements will be based on seismic zone, building type, and urban/rural location. The remediation requirement for each building will be as follows:

		BUILDING TYPE		
		3+ storey high risk heavy construction (eg concrete) buildings	**Unreinforced masonry buildings (URM)**	
			1-2 storey	**3+ storey**
LOCATION	**Rural or small town**	Targeted retrofit[1]	Risk register[2]	Façade securing[3]
	Urban centre		Façade securing	Full retrofit[4]

4. The New Building Standard (%NBS) assessment methodology will no longer be part of the regulatory system. Instead:
   - high risk 3+ storey concrete buildings will be identified by an engineer, using the new targeted retrofit methodology

[1] A retrofit for high risk multi-storey concrete buildings that addresses their worst vulnerabilities.

[2] The EPB will be recorded on the EPB Register (along with all other EPBs).

[3] A retrofit for unreinforced masonry buildings that secures façades and walls facing onto public spaces or above adjacent properties.

[4] A retrofit that addresses all significant building vulnerabilities (in addition to façade securing) to a level comparable to the current mandatory minimum.

- URM buildings will be deemed EPBs because of their risk profile and no building assessment will be required.

5. Remediation deadlines will remain unchanged, but building owners will be able to apply to a Territorial Authority (TA) for deadline extensions up to a cumulative total of five years, at the TA's discretion.
6. The requirement for an EPB to be fully remediated (typically 67-80%NBS) when its use is changed (eg from commercial to residential) will be removed.
7. Building consent applications for seismic work that brings a building up to the EPB threshold (as per the table above) will not trigger a requirement to carry out additional work to comply with Building Code requirements for fire escape and disability access/facilities.
8. 1-2 storey unreinforced masonry buildings in small towns and rural areas will not need to display an EPB notice. All other EPBs will still need to display these notices.
9. The Building Act's 'identify at any time' pathway will be amended so that:
   - it may only be applied to multi-storey buildings of heavy construction that were constructed before the amended EPB system comes into effect
   - EPB designations made via this pathway will require MBIE's authorisation.

Summary: Problem definition and options

Why is a change required?

10. The current EPB system was established after the 2011 Canterbury earthquakes, which highlighted the significant risks posed by URM and multi-storey concrete buildings to occupants and pedestrians. Its primary aim was to ensure that high risk buildings were identified and remediated, so that if a major earthquake occurs, harm to people and disruption to essential services will be minimised.
11. While progress has been made remediating EPBs, much of the work to date has focused on the 'low hanging fruit' – the buildings that are easiest or most cost-effective to strengthen. Future progress is expected to become increasingly difficult. If large numbers of EPBs are not remediated by their deadlines (as is likely under current settings), the system will fail to achieve its intent. This is for two core reasons.

The EPB system is not effectively targeting the highest risk buildings

12. While the system was designed to require remediation of high-risk buildings, many EPBs are actually low risk.
13. TAs use three profile categories—height, age, and construction materials—to identify potential EPBs. This process generally works as intended. But, the separate "identify at any time" pathway allows TAs to classify any other type of building as an EPB also. This pathway is increasingly being used to capture low risk buildings that were not meant to be part of the system. The EPB system encourages conservative engineering assessments because engineers tend to overestimate risks to avoid liability, and territorial authorities are reluctant to challenge these assessments, reinforcing a risk-averse approach. These 1,790 buildings now account for 34% of all EPBs.

Current strengthening requirements result in costs that are disproportionate to risk

14. Under the current EPB system, entire buildings must be strengthened—even when most parts do not pose a life safety risk. This blanket requirement leads to high

remediation costs. In many cases, the cost is uneconomic. Where building owners lack sufficient financial reserves, remediation may also be unaffordable.

What are the views of regulated parties and other stakeholders?

15. Feedback from engineers, TAs, building owners, insurers, and property developers has underscored the significant financial pressures created by the current regulatory framework. They want a more risk-based approach to managing EPBs. Public submissions also highlighted the need for more proportionate regulatory settings, particularly in relation to heritage and residential buildings.

16. There is widespread concern about the use of the % New Building Standard (NBS) metric as a regulatory threshold. Stakeholders report that %NBS is poorly understood, applied inconsistently, and misaligned with actual life safety risk.

If the intervention involves a restriction on the use and exchange of private property, why is that desirable?

17. Some mandatory mitigation requirements for EPBs are warranted to protect life safety. Buildings that are structurally vulnerable pose a significant risk to occupants and the public during earthquakes.

18. The EPB system aims to mitigate this risk by requiring remediation of buildings that fall below a minimum seismic performance threshold. While this imposes costs and limitations on property owners, the policy is grounded in the principle that the public interest in preventing injury and death outweighs these costs.

19. Removing the regulatory regime altogether is one the options analysed in this RIS. It is not recommended, for reasons that are set out in detail in Section 2 below.

What are the policy objectives?

20. The current EPB system has captured buildings that pose a relatively low risk and imposed remediation costs that don't align with life safety benefits. Accordingly, the policy objective is to effectively manage seismic life safety risk in existing buildings in a proportionate and cost-effective way.

21. We will measure success by monitoring by the number of EPBs that are remediated by their deadline, and inviting ongoing feedback from building owners, TAs and other stakeholders.

What policy options have been considered, including any alternatives to regulation?

22. This RIS analyses the following options:

    1) Improve the current system
    2) Reduce the current system's scope but retain its essential features
    3) Focus regulatory obligations on high-risk concrete and unreinforced masonry buildings
    3.1) Option 3 + low seismic zone EPBs removed and streamline mitigation requirements
    4) Remove the EPB regime entirely.

23. <u>The Minister's preferred option is 3.1.</u> Our analysis scores option 3.1 the highest – of the regulatory options it scores highest in the 'reducing costs to building owners', 'ease of administration' and 'proportionate' criteria.

Summary: Minister's preferred option in the Cabinet paper

Benefits and Costs (note – all numbers and percentages below are approximate)

Benefits

24. The Minister's preferred option (3.1) removes EPB status from 55% of current EPBs and requires risk notification on the EPB Register rather than remediation for another 16%. In total, 70% of current EPBs (3700) will no longer be subject to mitigation requirements. Almost all of the remaining EPBs will be able to use more cost-effective remediation methodologies.
25. Consequently, Option 3.1 reduces the total estimated remediation costs for building owners from $10.9 billion under the status quo to $2.7 billion – an $8.2 billion reduction. This cost saving is the most significant benefit of the new system.
26. Administrative costs for regulators, including MBIE and TAs, should also decline due to the 55% reduction in buildings within the EPB system.
27. Disruption costs to tenants and businesses (eg vacating premises during retrofitting) will fall, given the lower number of buildings requiring extensive remediation work.
28. Regulatory burden and stress will be reduced for building owners, with fewer buildings subject to remediation requirements and more cost-effective remediation options available for those who remain in the EPB system.

Costs and risks

29. Remediation Costs: building owners must pay for strengthening costs. Option 3.1 reduces these costs from $10.9 billion under the status quo to $2.7 billion. This reduction is due to fewer buildings being subject to mandatory remediation, and cheaper retrofit options for remaining EPBs.
30. Administrative Costs: TAs will, over time, have a smaller administrative burden. With 55% fewer buildings in the EPB system, costs associated with identification, enforcement, and compliance monitoring will decline.
31. Disruption Costs: tenants and businesses face indirect costs due to remediation work-related disruptions. These will decrease under the preferred option, as fewer buildings undergo extensive remediation.
32. Avoided Losses: modelled avoided losses from earthquake damage decrease from $181 billion under the status quo to $75 billion under Option 3.1. This reflects the smaller number of buildings required to be remediated and the reduced scope of that work. These figures are based on a modelling assumption that a major earthquake affects all of New Zealand's building stock simultaneously. While this simplifies comparison across options, it does not reflect the localised nature of earthquakes.
33. Life Safety Risk: Under full compliance, Option 3.1 is projected to increase the risk to building occupants and pedestrians by 30% compared to the status quo. However, this estimate likely overstates the actual risk, as it assumes full compliance under the current EPB system—a scenario that is highly unlikely given existing levels of non-compliance. The increased risk primarily arises from the removal of many buildings from the EPB system and the reduced remediation requirements for those that remain.

Distributional Impacts

34. Building Owners: Remediation requirements will be fully removed for 70% of EPB owners, while another 24% will benefit from more affordable remediation options.

Around 80 3+ storey URM buildings will not see cost reductions. Some of these will be apartments – we are unsure of the exact number.

35. As currently, prospective building owners will need to undertake due diligence, including checking the EPB Register to understand the seismic status of any potential purchase. This process will be more important for 1 – 2 storey URM buildings in small towns and rural areas, as they will no longer need to display a physical EPB notice.
36. Tenants and Occupants: tenants in buildings where remediation requirements are removed will benefit from reduced disruption. Tenants of 1 - 2 storey URM buildings in small towns and rural areas will not be able to use physical notices to determine the building's EPB status.
37. Territorial Authorities: TAs will play a key role in implementing the new system, but will also benefit from reduced ongoing enforcement and compliance costs.
38. Regions: removing EPB regulations in low seismic zones (including Auckland) while maintaining them elsewhere may have a marginal influence on business investment decisions.

Competition impacts

39. No significant competition impacts are expected.

Balance of benefits and costs

Will the benefits of the Minister's preferred option outweigh the costs?

40. Option 3.1 presents higher benefit-cost ratios than the status quo across most New Zealand regions (refer Annex One). Also, the lower cost of remediating EPBs is likely to increase compliance. There is increasing evidence that building owners are unable to comply with the current system because remediation costs are too high.

How will the benefit-cost ratio change over time?

41. Benefit cost ratios may shift over time due to better information emerging about:
    - seismic risk in different areas
    - the cost of new remediation methodologies (which are largely yet to be tested in practice).
42. The nature, extent and timing of any such shift, however, is unknown.

Implementation

How will the proposal be implemented, who will implement it, and what are the risks?

43. TAs will have key implementation responsibilities. These include removing EPB status from ~2, 800 buildings and informing another ~2,400 EPB owners of their new remediation obligations.
44. MBIE will endeavour to provide each TA with a list of EPBs within their jurisdiction that should be delisted or face new remediation requirements. This will streamline the process, allowing TAs to notify building owners and update records without conducting a new identification process.
45. In the new system, TAs will be able to consider applications for remediation deadline extensions from EPB owners. This may increase their workload. They can, however, cost recover these applications.
46. MBIE will update the EPB Methodology, including to remove use of the 34%NBS threshold for a building to have EPB status.

When is it planned to come into effect? Will transitional arrangements be required?

47. Implementation timeframes are still being worked through, but the general intent is that the new system commence as soon as practical after the Act is passed.

What are the risks?

48. Under full compliance, Option 3.1 increases life safety risk by 30% over the status quo. However, this estimate likely overstates the actual risk, as it assumes full compliance under the current EPB system—a scenario that is highly unlikely given existing levels of non-compliance. This significant increase is primarily due to the removal of mandatory remediation requirements for lower-risk buildings.

49. Actual compliance under the current system is likely to be suboptimal, because remediation costs are so high. Option 3.1 sets more affordable and cost-effective remediation obligations, so it will be easier to comply with. This could partially offset the increased life safety risk.

Limitations and constraints on analysis

50. MBIE was not subject to any constraints on the scope of our analysis.

51. The cost benefit analysis necessarily relies on assumptions about hypothetical earthquake scenarios. Accordingly, it should not be interpreted as definitive. Rather, it should be taken as a general indication of the likely balance of benefits.

52. Cost-benefit analysis modelling assumes full compliance under each policy option to enable a fair and consistent comparison of outcomes. This likely overstates actual risk, as full compliance under the current EPB system is unlikely given existing non-compliance. While we expect non-compliance to remain an issue, projected future compliance rates are uncertain because most councils have not undertaken comprehensive assessments. Therefore, a sensitivity analysis to predict nationwide compliance rates was not considered appropriate.

53. We have utilised multiple forms of consultation to inform our analysis, including convening a Steering Group, targeted consultation with 19 key stakeholder groups, and accepting public submissions on the Seismic Review through an online portal.

54. The options in this RIS were not subject to public consultation. We understand that the Minister intends for the Select Committee process to provide this opportunity.

I have read the Regulatory Impact Statement and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the preferred option.

Responsible Manager(s) signature:
Matthew McDermott
Manager, Building Performance and Resilience
22/08/2025

Quality Assurance Statement

Reviewing Agency: Ministry of Business, Innovation and Employment	**QA rating:** Partially meets

Panel Comment:

The Regulatory Impact Analysis Review Panel at the Ministry of Business, Innovation and Employment (MBIE) has reviewed the Regulatory Impact Assessment *Effectively managing seismic risk in existing buildings*, and we have determined that the paper partially meets the criteria.

Section 1: Diagnosing the policy problem

Context behind the policy problem

1. New Zealand is one of the most seismically active countries in the world. It sits on the boundary between two major tectonic plates—the Australian Plate and the Pacific Plate. These plates constantly shift, and their interactions—colliding, sliding past each other, or moving apart—generate earthquakes.

2. This tectonic activity has shaped New Zealand's landscape over millions of years, forming features like the Southern Alps. The ongoing strain between these plates is released through frequent earthquakes—over 15,000 are recorded annually, with 100–150 strong enough to be felt. New Zealand's location within the Pacific Rim further contributes to its high seismic risk.

3. Before the Canterbury earthquakes, New Zealand's approach to managing earthquake-prone buildings evolved gradually in response to past seismic events and international engineering developments. Key safeguards included seismic design standards introduced from the 1930s onward, a formal seismic zoning system by 1965, and local authority powers to manage dangerous buildings from 1968.

The Canterbury earthquakes highlighted the importance of seismically resilient buildings

4. The Building Act 1991 first defined "earthquake-prone buildings," and the 2004 Act expanded this to include all seismically vulnerable structures, and introduced the %NBS (New Building Standard) to assess seismic performance.[5] But enforcement was inconsistent, and many older buildings remained at risk.

5. The 2011 Canterbury earthquakes exposed these weaknesses and particularly the risks posed by URM and poorly designed concrete buildings.

    - URM buildings are constructed using materials such as brick, stone, concrete block, or adobe, without internal steel reinforcement. These types of buildings are especially vulnerable during earthquakes, as their façades, walls, and parapets can detach and fall on pedestrians, vehicles and neighbouring buildings.

    - Concrete buildings can be dangerous during earthquakes because they lack the ability to absorb and dissipate seismic shaking, making it prone to collapse if not properly reinforced. Pre-1976 concrete buildings often lack modern seismic design features and adequate reinforcement, increasing the risk of failure.

6. The 22 February 2011 earthquake resulted in 185 deaths and upwards of $40 billion in property damage. Most fatalities were caused by the collapse of two structurally deficient concrete buildings: the six-storey Canterbury Television (CTV) building and the five-storey Pyne Gould Corporation building.

7. Outside of these two major building failures, 70% of the deaths were caused by masonry falling on pedestrians and vehicles. A further 110 people were injured by falling masonry. These incidents underscored the serious public safety risks posed by URM buildings and highlighted the need to address their structural vulnerabilities.

[5] The New Building Standard evaluates the building's structural components to determine their ability to withstand ground shaking during an earthquake, with the lowest-performing element typically determining the overall %NBS score. This includes critical structural parts such as columns, walls, parapets, and façades—especially those that pose significant life safety risks if they fail.

What the EPB system aims to achieve

8. The subsequent Royal Commission of Inquiry recommended widespread changes to the EPB system. These culminated in the *Building (Earthquake-prone Buildings) Amendment Act 2016,* which passed in 2016 (shortly before the Kaikōura earthquake), and came into effect in 2017. It aimed to create a nationally consistent, risk-based approach to seismic safety by:
    - requiring TAs to identify EPBs and list them on a national register
    - mandating seismic remediation within set timeframes, with shorter deadlines in high seismic zones (see Table 1 below)
    - updating the %NBS standard to reflect the 2017 building code.

9. By requiring remediation of EPBs, the Amendment Act aimed to minimise harm, reduce disruption, and support the long-term resilience of New Zealand's towns and cities. It sought to do so while balancing cost, heritage preservation, and clarity of responsibilities for building owners and local authorities.

Table 1: Timeframes for EPB remediation

Seismic zone[6]	Identification	Assessment	Remediation
Low	15 years	12 months from issue of earthquake prone building notices	35 years
Medium	10 years, 5 years for priority buildings[7]		25 years, 12.5 years for priority buildings
High	5 years, 2.5 years for priority buildings		15 years, 7.5 years for priority buildings
Category 1 Heritage Buildings	Dependent on corresponding seismic zone above		May apply for an extension of 10 years

10. As with other risk management regimes, the EPB system seeks to manage difficult trade-offs between life safety risk and cost. But, unlike many other regulatory systems, the physical infrastructure at risk is largely privately owned.

11. While there are public benefits from remediating EPBs, the distribution of those benefits depends on who is exposed to risk. In low-traffic areas or small towns, an EPB primarily presents a risk to its occupants, while buildings such as hospitals, schools, or retail stores may pose a broader risk to the public inside and outside the building due to higher levels of use and foot traffic.

12. This misalignment between who bears the cost and who benefits has led to challenges in achieving remediation, particularly where costs are high and unaffordable for some owners. These issues have led to concerns about the effectiveness of the EPB system. In April 2024, Cabinet directed MBIE to review the framework to ensure seismic risks in existing buildings are being managed appropriately.

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[6] In low seismic zones, the hazard factor is relatively high compared to other countries. For example, a seismic zone deemed low risk in New Zealand would be classified as a moderate to high in Australia.

[7] A priority building requires quicker seismic strengthening due to its high risk or being critical for emergency response. Priority buildings include hospitals, emergency service buildings, educational facilities, strategic transport corridors, and URM buildings with parts that could fall onto public areas.

The current system has some positive features…

13. An independent review of the implementation and operationalisation of the EPB system by MBIE, TAs and engineers found that the system is broadly being implemented as intended, with several positive outcomes:
    - TAs have made significant progress identifying approximately 8,100 EPBs[8], especially in high-risk seismic zones
    - around 1,500 EPBs have been remediated[9]
    - the EPB methodology has led to more consistent national practices compared to the pre-2017 system, which was fragmented and inconsistent.

But, overall, is not likely to meet its objective

14. Prior to the recent four year remediation deadline extension, it was likely that many EPBs would not have met their remediation deadlines.[10] According to the EPB register just prior to the extension taking effect, 107 EPB remediation notices were going to reach their deadlines in 2025 (including 66 in Christchurch and 33 in Wellington) and 242 in 2027 (of which 178 were in Wellington). Wellington City Council has estimated that at least 63% of the EPBs in its jurisdiction were at risk of not being remediated by the 2025 and 2027 deadlines.

15. Furthermore, current settings are in some cases leading to suboptimal outcomes. The EPB system's cost and compliance challenges will increase as more EPBs are identified. The issues are set out below.

The EPB system is capturing buildings that were not intended to be captured.

16. TAs must use three profile categories to identify potential EPBs:
    - All URM buildings.
    - Pre-1976 buildings that are three or more storeys high, or 12 metres or more in height.
    - Pre-1935 buildings that are one or two storeys high.

17. A TA may also identify a building as an EPB under the 'identify at any time' pathway, if it receives information indicating that the building may be earthquake-prone for any other reason.

18. The original intent of the EPB system was that most EPBs would fall into one of the three profile categories and that the 'identify at any time' pathway would be used sparingly, to capture buildings outside of the profile categories with significant life-safety vulnerabilities (such as the CTV building). But it has been used much more frequently than was intended, eg to capture low-risk buildings such as timber buildings with minor masonry elements. These 1,790 buildings now make up 34% of all EPBs.

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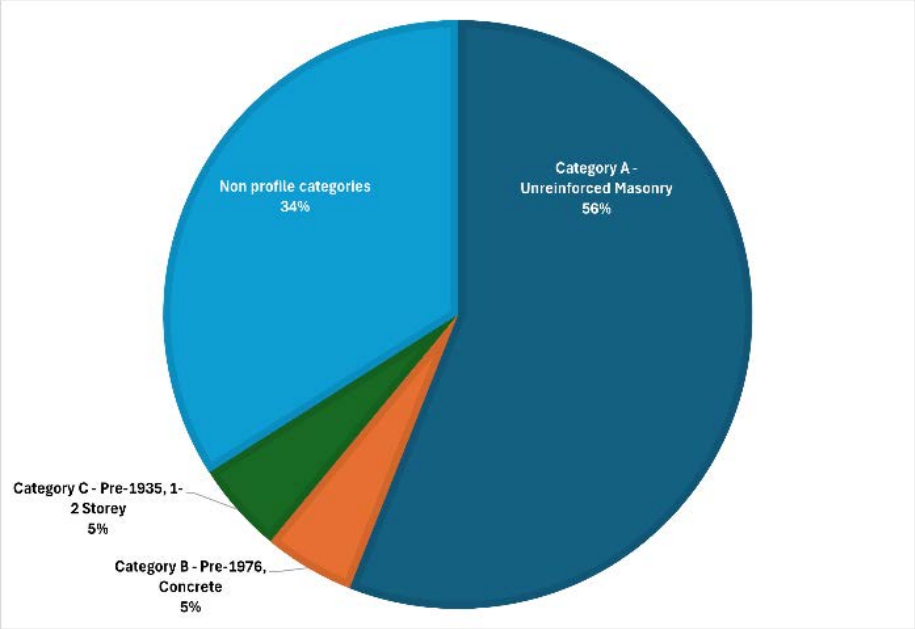
[8] As of 21 August 2028, the number of buildings on the EPB Register continues to fluctuate as new buildings are identified and added.

[9] This includes approximately 500 buildings that have been removed from the EPB Register after being assessed as exceeding the 34% NBS threshold.

[10] In 2024, the Government extended all current remediation deadlines by four years (except buildings with notices that expired on or before 1 April 2024) to reduce immediate pressure on building owners. TAs were also granted a one-off power to further extend remediation deadlines by up to two years, if required.

Figure 1: Distribution of EPBs by Profile Category



Current strengthening requirements result in costs that are disproportionate to risk

19. If all EPB owners remediated their buildings to the minimum standard of 34%NBS, the estimated national retrofit cost (including seismic assessment and construction) would total around $10.9 billion.

20. Under the current EPB system the whole building must be strengthened, even if most of it doesn't pose a life-safety risk. This blanket approach often leads to significantly higher remediation costs than are warranted. In many cases, the cost of strengthening is disproportionate to the building's value, making remediation economically unviable.

21. For example, the cost of seismic strengthening may be close to or exceed the building's market value. For owners without substantial financial reserves, these costs can be prohibitive or unaffordable. This particularly applies to small businesses, apartment, and heritage building owners.

22. The need to vacate buildings during strengthening works disrupts residential and commercial activities, and the system's "all or nothing" approach - mandating remediation of all parts rated below 34%NBS - offers no flexibility to prioritise the most critical structural vulnerabilities. Additionally, remediation can trigger further obligations under the Building Act, such as fire safety and disability access upgrades, which compound costs, time and complexity.

EPB remediation deadlines are difficult to enforce

23. If an EPB deadline expires without remediation occurring, the TA can apply to a District Court for a fine of up to $300,000 (or $1.5 million for a body corporate), to strengthen or demolish the building and recover costs from the owner, or place a charge on the land.

24. TAs consider that these enforcement tools are unworkable, however. For example, if a TA wanted to carry out mandatory remediation, it would require a court process (including dealing with any appeals) and then the TA would need to fund and organise the work up front. While some remediation costs may eventually be recovered, there is a significant risk of unrecoverable costs.

25. We are aware of this power being used on two occasions. In 2019, after unsuccessful attempts to engage with the building owners, Wellington City Council applied to the District Court to carry out the remediation of two heritage buildings with expired notices. Although initially declined, the Council's appeal to the High Court in 2021 was successful.

26. Despite this legal success, the Council has not proceeded with remediation due to the high costs involved. One of the buildings was later demolished following extensive fire damage, while the other remains vacant and derelict. Other territorial authorities will likely similarly struggle with enforcement on a large scale, especially those with fewer resources than Wellington City Council.

Heritage rules create additional cost and complexity

27. Heritage buildings face a more complex and uncertain consent process due to interactions between the Building Act and the Resource Management Act. These can make strengthening or altering these buildings more time consuming and costly.

28. In some cases, owners delay maintenance or strengthening, leading to "demolition by neglect"—where buildings deteriorate to the point of being unsafe and are then allowed to be demolished. This is often driven by the high cost of remediation, limited financial incentives, and the perception that heritage protections restrict viable reuse or redevelopment options.

The %NBS metric has become widely misunderstood and misused

29. The New Building Standard is designed to assess life safety risk in the event of an earthquake, with buildings rated below 34%NBS classified as earthquake-prone and subject to mandatory remediation. But %NBS has become widely misunderstood and misused. A low %NBS rating does not necessarily mean a building is imminently dangerous, and buildings with similar ratings can pose very different risks depending on their structure and use.

30. While %NBS is intended to reflect life safety risk, it is often interpreted as a measure of overall building resilience, unduly influencing decisions about occupancy, insurance, financing, and property value. Also, %NBS assessments are based on the 2017 Building Code, which no longer reflects current engineering practice. This can lead to inconsistencies between EPB assessments and those undertaken for non-regulatory purposes.

Expected Development of the Status Quo

31. If no changes are made to the EPB system:

- **Building owners will be required to spend significant sums remediating buildings that pose a low risk.**
- **Compliance rates are likely to decline**, especially as deadlines approach in medium and low seismic zones (2027 and 2032).
- **Life safety risks will persist**, particularly in high-risk buildings that remain unremediated due to cost or complexity.
- **TAs will struggle to enforce deadlines**, leading to more derelict buildings.
- **Public confidence in the EPB system will erode**, as it becomes seen as unfair or unworkable.

What is the policy opportunity?

32. The broad application of mandatory remediation obligations has imposed substantial financial burdens on building owners. The system has captured buildings not originally intended to be included, such as low-risk timber structures, diluting its focus and reducing efficiency. Many buildings remain unremediated due to cost, complexity, or lack of access to finance.

33. The policy opportunity is to redesign the EPB system to better align regulatory obligations with seismic risk and reduce compliance costs. Addressing the highest risk buildings will deliver significant life-safety benefits for people using or passing by these buildings in the event of an earthquake.

34. A reformed EPB system should aim to target the highest-risk buildings with scalable and cost effective mitigation options. It should also improve consistency in how EPBs are identified, reduce administrative costs, and prevent regulatory scope creep.

Regulated parties and stakeholder perspectives

35. As part of our review of the EPB system, we established sector-specific reference groups. The groups included engineers, local government, government EPB building owners, residential building owners, the insurance and banking/finance sector, commercial building owners (including Chambers of Commerce and the Property Council), community building owners, tenants and property developers.

36. We also met with WorkSafe and core government agencies. Their views inform the problem definition above, elaborated in more detail in the MBIE report *Earthquake-prone building system and seismic risk management review*.

37. We also sought public submissions on the management of seismic risk in existing buildings, which received 77 written submissions. Nearly all highlighted the financial burden for EPB owners. Other concerns included inconsistencies between engineering assessments, distrust of the system and consultants, and the impact of EPB status on property values. Other common themes were criticism of how %NBS is interpreted and applied, and calls for engineers' assessments to be more prescriptive and transparent.

38. Most submitters suggested a more risk-based approach that better considers seismic risk by region, building type, and public exposure. Submitters also called for financial support in some form, especially for heritage and residential building owners.

39. Independent research we commissioned has found that:

- there is strong public support for regulatory measures to mitigate life safety risk
- most people think that that building owners should bear remediation costs, while half support some tax funding for private apartments and medical facilities
- market behaviour plays a key role in encouraging upgrades in the commercial sector, but less so in residential, not-for-profit, and provincial contexts[11]
- retrofitting URM buildings yields the greatest life safety benefits, especially in high seismic zones like Wellington

[11] Commercial buildings are often upgraded for seismic resilience due to market pressures from tenants, investors, insurers, and lenders who demand safety and compliance, whereas residential upgrades are less common due to limited financial incentives, low awareness, and lower property values that make upgrades economically unviable.

International best practice to addressing seismic risk

40. New Zealand's EPB system is distinctive in its reliance on mandatory remediation or demolition as the primary means of managing seismic risk in existing buildings. This contrasts with international best practice, where seismic risk mitigation typically combines financial incentives, phased retrofitting and risk disclosure systems. In many jurisdictions, mandatory requirements are limited to public buildings or critical infrastructure, with private buildings subject to voluntary or incentivised schemes.

Have non-regulatory options been explored?

41. The risks posed by EPBs extend beyond the property owner to the other building users, pedestrians, vehicle occupants, people in neighbouring buildings, and emergency services. Without regulation, owners may choose not to invest in seismic strengthening because they do not bear the full cost of potential harm to others.

42. The non-regulatory option in this RIS is Option 4, which is analysed in Section 2 below. It would remove the EPB system entirely and rely on insurance requirements, tenant expectations and voluntary action by building owners to drive seismic risk mitigation.

43. While Option 4 would eliminate compliance costs and administrative burdens, it would likely lead to publicly unacceptable levels of life safety risk. A voluntary approach to reducing life safety risk in EPBs may be suitable in contexts where market mechanisms are strong and public risk is low. These conditions do not apply here. The misalignment between private incentives and public safety justifies some regulatory intervention.

What objectives are sought in relation to the policy problem?

44. The primarily objective for the EPB system under the 2016 Amendment Act is to mitigate the risk to life safety in earthquakes for vulnerable existing buildings. The "willingness to pay" report prepared by Resilient Organisations concludes that society continues to place life safety as the most important building performance attribute.

45. We therefore think reducing life safety risk in existing buildings should remain the primary system objective. In consideration of the remediation barriers faced by EPB owners, however, we propose to place increased emphasis on reducing life safety risk in a proportionate and cost-effective way. If remediation is not affordable, the work will not be done, and life safety will not be protected. Furthermore, remediation costs should not be imposed where the cost is not justified by risks to public safety.

What consultation has been undertaken?

46. We have utilised multiple forms of consultation to inform our analysis, including convening a Steering Group, targeted consultation with key stakeholders, and accepted public submissions through an online portal. We have not, however, consulted on specific policy options, including those discussed in this RIS.

Steering Group

47. The Steering Group was comprised of staff from territorial authorities, engineers, risk management experts, and building owners. Its members met regularly, and their input shaped the policy direction both through their own expertise, and through their networks with wider audiences.

48. The Steering Group supports a more targeted approach to managing seismic risk. It noted that success will depend on the detailed design settings, incentives and support mechanisms, and ensuring the technical methodologies support the policy intent.

49. It cautioned against mistaking ‘low seismic hazard’ for low risk, noting that what is classified low hazard here would be considered medium to high hazard in many other countries. Accordingly, it noted that care should be taken to avoid weakening requirements in lower hazard zones in ways that could unduly undermine life safety.

50. New Zealand’s seismic hazard zones are based on robust scientific modelling, including the updated National Seismic Hazard Model, which incorporates thousands of fault scenarios and formal uncertainty measures. While confidence in the relative differences between zones is high, our understanding of seismic risk continues to evolve, and new faults or local conditions could alter risk assessments.

Targeted Consultation

51. We also established several sector-specific focus groups. They included engineers, local government, government EPB building owners, residential building owners, insurance sector, bank/finance sector, commercial building owners (including Chambers of Commerce and the Property Council), community building owners, tenants and property developers. In total, we met with 19 different stakeholder groups.

52. All the focus groups we met with supported transitioning to a more risk-based approach to managing EPBs. But they often noted that the detailed design settings will ultimately determine the system’s worth. They also noted that regulatory changes won’t resolve issues with insurance and finance for EPB owners.

Public Submissions

53. Since August 2024, we have received 77 submissions about people’s experiences with the current EPB system. Submitters included building owners, tenants, advocacy groups, investors and engineers.

54. Nearly all submissions highlighted the significant financial burdens imposed on EPB owners. Other concerns included inconsistencies between engineering assessments, distrust of the system and consultants, the impact of EPB designations on property values, and a lack of information or support from central and local government.

55. Almost all submitters favoured a more risk-based approach that better considers seismic risk by region, building type and public exposure. Many submitters called for financial support in some form, especially for heritage and residential building owners. The next most common theme was criticism of how %NBS is interpreted and applied.

56. Other suggestions included excluding buildings in low seismic areas from the EPB system altogether, or requiring risk disclosure notices for heritage and residential buildings in these areas. As with the focus groups, submitters noted that regulatory change will not resolve ongoing difficulties with lending and insurance.

Independent research

57. We also commissioned independent research which found there is strong public support for regulatory measures to mitigate life safety risk, but not necessarily beyond that (eg to ensure resilience and avoid disruption). Most survey respondents think that that building owners should bear remediation costs, while half support some tax funding for private apartments and medical facilities.

Section 2: Assessing options to address the policy problem

What options are being considered?

58. The options we considered are summarised in the section below. A full description of each option is contained in the MBIE report '*Earthquake-prone building system and seismic risk management review'*, which will be released alongside this RIS.

Option 1 – improve the current system

59. Option 1 adjusts the current EPB system's rules and practices without changing the Building Act. It involves the least amount of change and retains the highest level of regulation of the options discussed below. It would see refinements to the regulatory framework that aim to reduce the number of buildings classified as EPBs in the future. The changes would primarily be achieved through adjustments to the EPB Methodology and Engineering Assessment Guidelines.

60. Its key elements are to:

- clarify the 'identify at any time' pathway (see paragraph 17 / 18) – provide clearer guidance to ensure that voluntary seismic assessments commissioned by building owners do not automatically trigger an EPB classification unless the building presents a high risk
- refine scope of 'parts' – narrow the definition of building 'parts' to focus on heavy elements such as parapets, chimneys and decorative facades that have a higher likelihood of failure in a moderate earthquake and pose a greater life safety risk due to their potential to fall on multiple people in public spaces
- exclude buildings or areas of buildings with low and infrequent occupancies from EPB obligations
- support the removal of EPB notices by:
    - enabling more cost-effective ("simple strengthening") retrofit options for one or two storey URM buildings[12]
    - enabling the use of latest engineering knowledge (ie updates of Seismic Assessment Guidelines issued after July 2017), to:
        i. re-evaluate earlier assessments
        ii. demonstrate through retrofitting that a building is no longer considered EPB
- introduce new engineering statements for low risk building typologies to avoid the need for full reassessment.

61. Seismic assessments and %NBS ratings would still be used to determine whether buildings are earthquake-prone or not. The proposed adjustments would maintain current use of seismic hazard data and building vulnerability assessments, while placing greater emphasis on consequence (human exposure).

62. Under this option, 46% of all EPBs (one to two storey URM) would qualify for simple strengthening (which is about 40% cheaper than strengthening to 34%NBS). All other EPB owners would be required to fully strengthen their building to at least 34%NBS.

[12] Simple strengthening is an easier to implement "acceptable solution" or standardised retrofit to the minimum EPB threshold for most one and two storey URM buildings. It provides a more cost-effective way of addressing a building's most vulnerable structural elements.

63. In future, we expect that fewer EPBs would be identified in Medium and Low seismic zones and that there would be a reduced assessment burden for TAs where EPB identification is ongoing.

Table 2: Indicative impacts of Option 1 by building type

Building owner type	Impact
Residential apartment buildings	*Limited change* for those multi-storey buildings currently EPB or likely to be identified as potentially earthquake prone.
Commercial buildings	*Some reduction* in current and future EPBs for URM buildings in rural and small towns, and buildings in larger retail centres, and other buildings with lower risk façade elements.
Government agencies, Councils and Lifeline Utilities	*Significant reduction* in current and future EPBs for smaller, more infrequently used buildings and those with lower risk parts.

Option 2 – reduce the current system's scope but retain its essential features

64. Option 2 would require legislative, regulatory and methodology changes to significantly reduce mandatory EPB assessments, and enable removal of EPB obligations for buildings not considered high risk. Its key elements are:

- create a mechanism to remove remediation obligations for most EPBs that are outside the Profile Categories,[13] except for limited high risk cases
- remove remediation obligations for lower risk buildings and allow façade securing[14] for low-rise URM buildings in low seismic zones
- extend timeframes for:
  - low-rise buildings with limited exposure
  - priority buildings in medium and high seismic areas, except URM buildings.

65. Under this option, EPB owners could experience a remediation cost saving (compared to current requirements) of:

- 100% for the around 45% of current EPBs which would no longer be classified as an EPB (most of these are non-Profile Category Buildings)
- 80% cost savings for around 18% of URM buildings in low seismic zones would only require façade securing
- 40% cost savings for around 28% of current EPBs, by implementing simple strengthening (URM one to two storey - medium and high seismic zones)
- No savings for the remaining 9% as these buildings would require strengthening to 34%NBS.

66. Towns and provincial centres would experience a considerable relaxation in requirements for URM buildings by enabling façade securing and some extended

[13] TAs are required to obtain seismic assessments of these building types because of their inherent risk. They are (Category A) URM buildings, (Category B) pre-1976 buildings that are 3+ storeys or over 12m, and (Category C) pre-1935 buildings of 1-2 storeys (other than URM).

[14] Façade securing is the most cost effective way of remediating URM buildings because the danger these buildings pose is largely to people outside the building (as was evidenced in the 2011 Christchurch earthquake). It is around 80% cheaper than full remediation.

timeframes. There would be a notable reduction of EPBs in metropolitan centres due to the removal of most buildings outside the Profile Categories.

Table 3: Indicative impacts of Option 2 by building type

Building owner type	Impact
Residential apartment buildings	Pathway created for low-rise URM apartment buildings in low zones (current and future EPBs) that involves a significant reduction in scope of remediation work.
Commercial buildings	Non-profile commercial buildings would no longer be classified as earthquake-prone, eliminating remediation obligations entirely. Other commercial buildings would benefit from lower-cost retrofit options, such as façade securing for low-rise URM buildings in low seismic zones, and extended timeframes for compliance.
Government agencies, Councils and Lifeline Utilities	Significant reduction in current and future EPBs for smaller, more infrequently used buildings and other buildings outside the Profile Categories.

Option 3 - focus regulatory obligations on high-risk concrete and unreinforced masonry buildings

67. This option determines the required risk mitigation actions based on the assessed risk to human life. The mitigation requirement for each building will be based on a fuller consideration of risk that includes the three elements of:

- building vulnerability (building type/class)
- consequence of failure (level of human exposure); and
- seismic zone (medium or high).

68. Consequence of failure (level of human exposure) involves three levels, which are:

- Low – for example, non-priority URM buildings that are 1-2 storey and all buildings outside medium, large and metro urban centres.
- Medium – for example, non-priority URM buildings of 3 or more storeys; priority URM buildings of 1-2 storeys; and pre-1976 concrete buildings of 3 or more storeys but less than 3,000 square metres gross floor area.
- High – for example, pre-1976 concrete buildings of 3 or more storeys and more than 3,000 square metres gross floor area, and priority unreinforced masonry buildings of 3 or more storeys (except for buildings that are used for industrial or primary industry).

69. EPB owners who continue to have remediation obligations will be able to use more cost-effective approaches, such as securing facades for URM buildings, and targeted retrofits for concrete buildings.

70. %NBS would no longer be used to identify EPBs. Instead:

- high risk 3+ storey concrete buildings will be identified by an engineer, using the new targeted retrofit methodology
- URM buildings will be deemed EPBs because of their risk profile and no building assessment will be required.

71. There will be an initial administrative burden for TAs during the transition, but once completed, we estimate that around 45% of current EPBs could be taken off the register with no further obligations. Like Option 2, most of these would be buildings outside the Profile Categories, such as low-rise timber-framed buildings.

The system would target high-risk building types only

72. The new EPB system will cover high-risk multi-storey buildings and URM buildings only. This reflects their higher seismic vulnerability. These building types represent a narrowed version of Profile Categories A and B in the existing EPB Methodology.[15]

73. 1,794 buildings that are not either high-risk multi-storey or URM buildings will also be removed from the system. This represents 34% of all EPBs.

74. Category C buildings—defined as pre-1935 non-URM buildings that are one or two storeys high—would be removed from the EPB system, as the buildings have not demonstrated a high risk of failure in past earthquakes.

Mitigation requirements will be based on building risk

75. Compared to the current EPB system, which requires full remediation (to at least 34%NBS) for all EPBs, there will instead be a spectrum of mitigation requirements that includes:

- risk notification – 100% cost reduction (11%, 520 buildings)
- simple strengthening – ~40% cost reduction (15%, 800 buildings)
- façade securing – ~80% cost reduction (25%, 1300 buildings)
- targeted retrofit – ~20% cost reduction (3%, 150 buildings)
- retrofit to EPB threshold – no cost reduction (1%, 50 buildings).

76. The full set of remediation requirements is set out on page 39 of the MBIE report *Earthquake-prone building system and seismic risk management review*.

77. For URM buildings, the primary risk is to people outside, due to falling masonry during an earthquake. Façade securing can significantly reduce this risk and is around 80% cheaper than a full retrofit.

78. In contrast, for concrete buildings, the cost difference between a targeted retrofit and a full retrofit is smaller—around 20%. This methodology, however, offer protection to people both inside and outside the building, whereas URM façade securing does not.

The "identify at any time" pathway

79. A TA can identify a potential EPB that does not fit into the profile categories at any time. This pathway has been used more frequently than expected, in some cases to address non-compliance with the Building Code. This has resulted in buildings being captured by the EPB system are not the types originally intended, and that may not pose a significant risk.

80. Option 3.1 involves amending the Building Act so that the identification of EPBs by TAs using this pathway will require approval from MBIE. Before deeming a building to be an EPB, MBIE would need to take expert technical advice (separate from that provided by the TA), and consult with the building owner.

[15] The EPB Methodology is set by the CE of MBIE and is used by territorial authorities and engineers to identify, assess, and make decisions on potentially earthquake-prone buildings.

81. There will also be more robust criteria, most notably that the only buildings that can be made EPBs via this pathway would be 3+ storeys of heavy construction, which exhibit one or more high risk vulnerabilities. These are the highest risk buildings (the CTV building falls into this category).

82. Impacts on building owners are set out in the table below.

Table 4: Indicative impacts of Option 3 by building type

Building owner type	Impact
Residential apartment buildings.	Owners of non-priority URM buildings that are three storeys or taller, and priority URM buildings that are one to two storeys, may choose to secure the façade instead of undertaking full seismic strengthening—potentially reducing costs by approximately 80%.
Commercial buildings	Significant reduction in current and future EPB for URM buildings in rural and small towns, and a large reduction in the number of current and future EPBs.
Public agencies, Councils and Lifeline Utilities	Large reduction in current and future EPBs as the majority appear to be low rise, and/or non-profile category buildings.

83. Option 3 reflects international best practice, such as:

- not using a full seismic assessment to identify buildings that require mitigation
- allowing incremental retrofitting for certain building types
- enabling more cost-effective retrofits (ie 80/20 approaches to managing risk)
- relying on disclosure, rather than requiring remediation, for lower-risk buildings.

Option 3.1 – remove low seismic zones from scope of the EPB regime and streamline remediation requirements

84. This is the option put forward in the Cabinet paper. It is a variant of Option 3, with three key differences:

- all buildings in low seismic zones (Auckland, Northland and the Chatham Islands) are removed from the EPB system
- the simple strengthening retrofit option is removed and remaining URM buildings require either façade securing or full retrofits
- One to two storey URMs in rural and small towns will no longer be required to display an EPB notice on the building. These buildings will only be listed on the EPB Register and be categorised as ‘risk data only’.

85. Of the regulatory options, Option 3.1 removes the greatest number of EPBs (2,850 - 55% of current EPBs). This is around 13% (665) more than Option 3, due to the removal of EPBs in low seismic zones. Of the regulatory options, Option 3.1 provides the greatest total cost savings to EPB owners ($8.2 billion).

86. The Cabinet paper proposes to shift Dunedin and coastal Otago from a low to medium zone. This is consistent with the latest 2022 National Seismic Hazard Model. This would mean that around 150 EPBs in Dunedin continue to be in scope of the EPB system.

87. The mitigation requirements that will apply are set out in the matrix below.

Table 5: Future EPB risk mitigation requirements, by building type and location

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="3">BUILDING TYPE</td></tr>
<tr><td rowspan="2">3+ storey high risk buildings of heavy construction (typically concrete)</td><td colspan="2">Unreinforced masonry buildings</td></tr>
<tr><td>1-2 storey</td><td>3+ storey</td></tr>
<tr><td rowspan="2">LOCATION</td><td>Rural or small town</td><td rowspan="2">Targeted retrofit[16]</td><td>Risk data[17]</td><td>Façade securing[18]</td></tr>
<tr><td>Urban centre</td><td>Façade securing</td><td>Building collapse mitigation[19]</td></tr>
</table>

88. They would apply as follows:

- risk data only – 100% cost reduction (36%, ~ 840 buildings)
- façade securing – ~80% cost reduction (52%, ~ 1200 buildings)
- targeted retrofit – ~20% cost reduction (9%, ~ 220 buildings)
- retrofit to EPB threshold – no cost reduction (3%, ~ 80 buildings).

89. The requirement for physical notices to be attached to EPBs that do not have a mandatory remediation requirement (1-2 storey URM buildings in small towns and rural areas) would be removed. This information will continue to be stored on the EPB Register, however. All other EPBs will still need to display a notice.

90. While not required to remediate by a set deadline, EPBs with a 'risk data' requirement must undertake at least façade strengthening to have their EPB status removed.

Table 6: Indicative impacts of Option 3.1 by building type

Building owner type	Impact
Residential apartment buildings.	Some URM 1-2 story apartments will not be required to remediate, and others will be able to do so via façade securing rather than full strengthening.
Commercial buildings	Significant reduction in current and future EPB for URM buildings in provincial centres, and a large reduction in the number of current and future EPBs.
Public agencies, Councils and Lifeline Utilities	Largest reduction in current and future EPBs as the majority appear to be low rise, and/or non-profile category buildings.

Low seismic zones removed from scope of the EPB system

91. Option 3.1 sees all EPBs in low seismic zones (Auckland northwards, and the Chatham Islands) removed from scope of the EPB system. These zones are further from plate boundaries or major faults, and the faults that do exist often move very slowly or haven't ruptured in a long time. While strong earthquakes can still happen,

[16] A remediation methodology for multi-storey concrete buildings that addresses the worst vulnerabilities.

[17] The EPB will be recorded on the EPB Register (along with all other EPBs).

[18] A remediation methodology for unreinforced masonry buildings which addresses the risk of facades and parapets falling on people and vehicles outside the building.

[19] Remediate all identified vulnerabilities to the equivalent of the current mandatory minimum.

they're much less likely to occur in any given year—sometimes only once every few hundred or even thousand years.

92. The Cabinet paper proposes to shift Dunedin and coastal Otago from a low to medium zone. This is consistent with the latest 2022 National Seismic Hazard Model. This would mean that around 150 EPBs in Dunedin continue to be in scope of the EPB system.

Change of use and alterations

93. Option 3.1 changes the Building Act's requirements for upgrades associated with change of use and alterations.

Change of use

94. When undergoing a change of use (eg from commercial to residential) a building must be seismically strengthened "as nearly as reasonably practicable" to Building Code standards. This is a lower standard than full compliance with the Building Code and is generally interpreted as being in the region of 67%-80%NBS.

95. The Minister's preferred approach is to remove this requirement for EPBs, so a change of use will have no impact on their seismic remediation requirement. This is to encourage their reuse and redevelopment, and to ensure that EPBs' remediation obligations remain based on vulnerability and exposure.

Alterations

96. When a building undergoes alterations, it must be brought as nearly as reasonably practicable to current Building Code standards in areas such as seismic resilience, fire safety, and access/facilities for disabled people. However, the requirement to upgrade fire safety and accessibility features can discourage some building owners from undertaking seismic strengthening. To address this, Option 3.1 removes the requirement for additional fire and accessibility upgrades when a building is being remediated to its statutory requirement (as per Table 5 above).

Option Four - remove the EPB regime entirely

97. Option 4 removes mandatory remediation obligations and instead relies on market forces such as insurance providers, lenders, and the real estate market to drive seismic risk mitigation. MBIE and TAs would have no statutory power to intervene but could retain a supporting and monitoring role, potentially with non-regulatory tools such as case management.

98. The Government could encourage its agencies to remediate their building stock as required. Without a statutory requirement to do so, however, remediation would be discretionary, requiring agencies to balance the cost against their competing priorities.

What criteria will be used to compare options to the status quo?

99. We have assessed the policy options against the criteria set out below. The criteria are equally weighted and, taken together, aim to highlight the option(s) that will prove most effective, proportionate and workable in practice. Additionally, these criteria aim to capture the lessons learned since 2016.

Table 7: Analytical criteria used in this RIS

Criteria	Explanation
Reduces life safety risk	The extent to which the option is modelled to decrease risks to life safety (assuming full compliance).
Reduces costs to EPB owners	The extent to which the option makes mandatory remediation requirements more affordable.
Proportionate	The extent to which: • the regulatory system captures only high risk buildings • permitted retrofit methodologies are scaled to risk.
Ease of administration	The system is straightforward to administer and doesn't require significant resourcing from TAs. Effort is focused on remediating buildings, rather than on assessing (and reassessing) them.

Life safety risk

100. Life safety risk in the RIS was modelled by Beca, a New Zealand-based engineering consultancy that conducted the economic analysis for the seismic risk management review. Its approach estimated the likelihood and severity of harm to building occupants during earthquake scenarios using engineering models that accounted for structural vulnerabilities and occupancy patterns.

101. These models incorporate real-world data from past earthquakes, including Canterbury and Kaikōura, to quantify the probability of injury or fatalities inside and near buildings. The resulting risk figures reflect the expected frequency and magnitude of harm under various upgrade scenarios and earthquake intensities, enabling comparison of policy options against the status quo.

Retrofit costs

102. Beca also modelled costs for each option by designing typical upgrade solutions for ten common building types in different regions. It based costs on standard designs, adjusted for local construction prices and the amount of work needed in each seismic zone. Costs included structural work, building repairs, and extra expenses like fees and contingency. All estimates were independently peer-reviewed and expressed as a cost per square metre for each building type and location.

103. Total costs are the sum of regional calculations for different building types. Indicative retrofit costs are set out below.

Table 8: Estimated retrofit costs

Estimated URM façade securing cost	
Average two-storey URM:	$235,000
Cost saving compared to status quo:	*$950,000*
Average one-storey URM:	$100,000
Cost saving compared to status quo:	*$400,000*
Estimated concrete targeted retrofit cost	
Average multi-storey concrete building:	$1.7M - $3.4M
Cost saving compared to status quo:	*$650,000*

104. There is a trade-off between reducing life safety risk and managing costs, as more expensive building retrofits generally improves survivability during an earthquake. For

instance, securing the façades of URM buildings helps protect people outside the building, but does not enhance safety for those inside.

Proportionality

105. The proportionality criterion is intended to capture lessons learned since the current EPB system was introduced. As noted above, the current system is not producing proportionate outcomes:

- increasing numbers of low risk buildings are being identified as EPBs
- remediation costs for those EPBs are not scaled to the risk posed, and so in many cases greatly outweigh the life safety benefits.

106. The proportionality trend from options 1 to 4 can be approximated to some extent with reference to the Benefit Cost Ratios (BCRs) set out in the Beca report *CBA Results for Revised Seismic Risk Mitigation Approach for New Zealand's Earthquake-Prone Buildings* (refer table 17, page 25). The Beca modelling indicates that options 3 and 3.1 deliver the best BCR ratios.

Ease of Administration

107. Ease of administration is important for TAs, who remain the central node of the EPB system under all the options. The system is not cost recovered, so they need to ensure that their costs and the resource impost remain manageable. Three factors are relevant to the ease of administration criterion:

- the number of EPBs in the system. The more there are, the higher administration costs will be. Lowering the number of EPBs therefore enables a higher score on this criterion.
- the (albeit time limited) burden of implementation activity acts to lower the score for this criterion.
- the current %NBS methodology relies on detailed engineering assessments. This presents opportunities to relitigate EPB determinations, adding to administrative complexity. Replacing the %NBS methodology with simpler and more objective assessment methodologies enables a higher score on this criterion.

Option analysis

108. Table 9 summarises the remediation costs and estimates of residual life safety risk of each option. It is based on a Cost Benefit Ratio model developed by Beca. Its report *Economic Analysis of New Zealand's: Earthquake Prone Building System* (to be proactively released alongside this RIS) explains the methodology used.

109. Of note, that methodology assumes full compliance with each option. In reality, this is unlikely – particularly for Options 1 and 2, where remediation costs per building would be significantly higher.

110. The sections below draw on this information and discuss how the options score against our assessment criteria. Table 7 summarises the scoring.

Table 9: summary of costs and buildings retained across options

Option	Retrofit cost	Life safety risk compared to status quo - 1:500 APoE	Buildings within the EPB system
Status Quo	$10.9 billion	1	100% (5,212)
Option 1	$8.5 billion	1	100% (5,212)
Option 2	$5 billion	1.2	55% (2820)
Option 3	$4 billion	~1.2	55% (2820)
Option 3.1	$2.7 billion	~1.30	45% (2,350)
Option 4	$0	2.04	0%

Option 1

111. Option 1 does not increase life safety risk from the status quo, meaning that of the options analysed, it scores highest on the reduces life safety risk criterion. It also has the highest costs of all the options, however.

112. It is also the least targeted to risk. In particular, it does not address the issue of many low risk buildings being on the EPB Register. It therefore scores low on the cost and proportionality criteria.

113. Of the options that retain regulation, Option 1 is simple to implement as there is little change, but it retains reliance on the %NBS methodology. It also makes no change to the number of EPBs in the system. Option 1 therefore scores the same as the status quo for ease of administration.

Option 2

114. Option 2 increases life safety risk from the status quo but by less than options 3, 3.1 and 4. It also imposes higher remediation costs on building owners than these options. Option 2 improves proportionality from the status quo by better aligning mitigation requirements with risk.

115. There is more implementation effort required than for the status quo (at least initially) and the %NBS methodology is retained, but this option also sees more EPBs removed from the system. For ease of administration, these factors largely balance out.

116. This option offers meaningful cost savings for nearly half of current EPB owners by allowing simple strengthening. However, it still retains costly remediation obligations for buildings with low life safety risk, and the introduction of varied retrofit pathways adds complexity to administration.

Option 3

117. Option 3 further increases life safety risk, largely by removing mandatory mitigation requirements from more buildings. This is the principal means by which it lowers costs for building owners.

118. It is also more targeted to risk – all lower risk building types are removed from the system, and changes to the ‘identify at any time’ pathway introduced under Option 3 ensures that in future, only high risk buildings become EPBs. This ensures that limited resources are directed to buildings that pose the greatest life safety risk.

119. Option 3 requires a similar implementation effort as Option 2, but removes use of the %NBS methodology. Also, it removes more EPBs from the system. It therefore scores higher for ease of implementation.

Option 3.1

120. Option 3.1 excludes all buildings located in low seismic zones from the EPB framework. This approach relies on the rationale that seismic risk in these areas is sufficiently low to no longer justify mandatory regulation.

121. While earthquakes can still occur in low seismic zones, the likelihood of a major event is significantly lower than in medium or high seismic zones. Consequently, Option 3.1 scores lowest among the regulatory options for life safety risk—but only slightly lower than Option 3. However, this projection likely overstates the actual risk, as it assumes full compliance under the current EPB system—a scenario that is highly unlikely given existing levels of non-compliance. It also reflects the economic realities in small towns, where buildings often have low market value, owners struggle to access finance for seismic remediation, and insurance typically does not cover the cost of strengthening.

122. Option 3.1 reduces costs – the primary barrier to remediation – more effectively than the other regulatory options. It does so by enabling cheaper retrofit options for more EPBs. As a result, 3.1 scores highest on this criterion of the regulatory options.

123. Option 3.1 scores highest for proportionality, as remediation obligations are focused exclusively on the most critical building vulnerabilities. Under this option, requirements for URM buildings are narrowed to façade securing for 1–2 storey buildings, and full retrofit for a small number of high-risk 3+ storey URMs (approximately 80 buildings). Façade securing is the most cost-effective remediation method for URM buildings, as the greatest danger is typically to people outside rather than inside the building. By removing simple strengthening as a retrofit option, Option 3.1 significantly reduces costs, and maintains a comparable level of life safety benefit.

124. Option 3.1 performs better than Option 3 for ease of administration due to further reducing the number of buildings that require monitoring and compliance. The transition will be complex due to the redefinition of scope and mitigation pathways, but the long term administrative burden for TAs should be significantly lower than the status quo.

Removing physical EPB notices

125. While Option 3.1 simplifies administration and reduces costs, it also removes the requirement to display EPB notices on one to two storey URM buildings in small towns and rural areas. Although this change eases the burden on territorial authorities and building owners, it may reduce transparency and make it harder for occupants and prospective buyers to make informed decisions about seismic risk. The information will remain available on the EPB Register and on LIMs, but the absence of visible notices places greater responsibility on individuals to proactively seek it out. In small towns, the public are unlikely to take this step, and hence won't be aware of a buildings' EPB status.

Removing buildings in low seismic zones from scope of the EPB system

126. Removing EPBs in low seismic zones from the EPB system is, on balance, a proportionate and evidence-based adjustment. These zones are further from plate boundaries or major faults, and the faults that do exist often move very slowly or haven't ruptured in a long time. While strong earthquakes can still happen, they're much less likely to occur in any given year—sometimes only once every few hundred or even thousand years.

127. The economic case for this change is reasonably strong. Beca's cost-benefit analysis found that low seismic zones like Auckland return a low benefit-cost ratio (0.3) under the status quo—indicating a poor return on investment.

128. The case would be even stronger if a lower Value of Statistical Life (VOSL) were applied.[20] Beca applied a VOSL of $17.5 million in its modelling of fragility curves and consequence scenarios, aligning with Treasury guidance on the social cost of life loss.[21] Industry data from the Financial Services Council suggests average life insurance payouts are closer to $150,000–$200,000. A lower VOSL would reduce the estimated benefits of avoided injuries and deaths, thereby improving the proportionality score of lower cost options.

129. The Seismic Review Steering Group supported a more targeted approach to seismic risk but cautioned against assuming that low seismic zones equate to low risk. It noted that what is considered low seismic zones in New Zealand could be seen as medium or high seismic zone overseas. They urged caution to ensure that any changes did not unduly compromise life safety.

130. On balance, focusing regulatory effort on higher-risk areas allows for more efficient use of resources and reduces compliance costs in areas where the risk is demonstrably lower. The proposed reclassification of Dunedin and coastal Otago to a medium zone, based on the 2022 National Seismic Hazard Model, demonstrates that the system remains responsive to updated science and seismic risk.

Changing requirements for alterations and change of use

131. Building owners undertaking seismic strengthening have been deterred by Building Act requirements to also upgrade fire safety systems, improve disability access, and meet modern standards when there's a change of use—all of which can significantly increase costs and complexity.

132. The Royal Commission of Inquiry into Building Failure Caused by the Canterbury Earthquakes heard evidence that these provisions can discourage strengthening efforts. The Commission noted that it would be preferable for consents for strengthening work to proceed without requiring full compliance with disabled access rules, while acknowledging the importance of safe egress during a fire or earthquake. This reflects the need to strike a balance between regulatory compliance and the practical importance of ensuring seismic upgrades are actually carried out.

133. The current interpretation of these provisions has been widely seen as a disincentive to undertaking seismic upgrades. The Commission acknowledged this concern and agreed that change is warranted. We have also heard consistent feedback that these interpretations discourage strengthening work. Accordingly, we agree that change is warranted.

134. Option 3.1 introduces changes to Building Act provisions related to fire safety, disability access upgrades, and change of use, which are arguably reasonable in light of the Royal Commission's recommendations.

135. The new change of use rules would mean that most URM buildings undergoing a change of use would require façade securing rather than more comprehensive

[20] In 2017, VOSL was calculated as $4.9 million.

[21] Fragility curves estimate how likely a building is to be damaged in an earthquake. Consequence scenarios use this to predict what might happen—like injuries or costs—so decision-makers can weigh the benefits of strengthening buildings against the risks.

upgrades. One to two storey URM buildings in small towns and rural areas would not require any upgrades.

136. However, there are trade offs. On one hand, this is a lost opportunity to require a more safety-enhancing upgrade. On the other, it increases these buildings' potential for continued productive use and potential for rental income (meaning that future upgrades may become more affordable). Enabling easier change of use of existing buildings may also assist with revitalisation of town centres.

Option 4

137. Option 4 increases life safety risk most of the options analysed in this RIS. International evidence indicates that voluntary or market-led approaches to seismic risk management are largely ineffective. For example, in California, jurisdictions that implemented voluntary URM remediation schemes achieved retrofit rates of only 13–25%. In contrast, jurisdictions with mandatory retrofit requirements saw compliance rates of approximately 90% over a 20-year period.[22]

138. This option also reduces costs the most. Any expenditure on seismic remediation would be voluntary. For the purposes of cost/benefit analysis, we have assumed that none happens. In reality, however, in the absence of government requirements, some remediation will continue to be driven by market forces. This will shift the focus from life safety to broader building resilience (repairability and business continuity). Managing these risks requires more investment that managing life safety risks alone.

139. Also, in the absence of Building Act coverage, some building owners and tenants may consider that they are instead covered by Health & Safety at Work Act obligations. This is again likely to lead to higher remediation costs for some building owners than would be intended under this option – due to the market expectations for buildings to be between 67 and 80 %NBS compared to the regulatory minimum of 34 %NBS. For these reasons, Option 4 does not receive the maximum score for reducing cost.

140. We have not scored Option 4 against the proportionality criterion because:

- there will not be a regulatory system so the question of how well it captures only high risk buildings does not arise
- no retrofit methodology will remove EPB status, as this status will not exist, so the question of how well these methodologies are scaled to risk does not arise.

141. Option 4 scores highest on the ease of administration criterion, as neither TAs nor MBIE would have any administrative role. This said, however, it is likely that they would need play some role in this area (even if informal or ad hoc), due to the public safety considerations involved.

[22] California's local bodies were required to identify URM buildings, establish seismic risk mitigation programmes and report progress. Each could design their own scheme - 134 opted for mandatory schemes, and 39 for voluntary ones.

Table 10: How the options compare to the status quo (scoring ranges from +5 to -5).

Note: Scoring roughly indicates of scale of difference from the status quo. It is not based on a formula.

	Status Quo	**Option 1 – Improve the current system**	**Option 2 – Reduce the current system's scope but retain its essential features**	**Option 3 - focus regulatory obligations on high-risk concrete and unreinforced masonry buildings**	**Option 3.1 – Option 3 + low seismic zone EPBs removed and streamline mitigation requirements**	**Option Four - remove the EPB regime entirely**
Reduces life safety risk The extent to which the option is modelled to decrease risks to life safety (assuming full compliance). *This option is scored negatively because increased life safety risk is not desirable.*	0	0 Theoretically, Option 1 would not increase life safety risks beyond the status quo. This does assume full compliance however, which in our view is not likely.	-1 Option 2 slightly increases life safety from the status quo.	-2 Option 3 further increases life safety risk from the status quo.	-3 There is a further increase to life safety risk.	-5 No mandated reduction of risk more than doubles existing life safety risks.
Reduces costs to building owners The extent to which the option makes mandatory mitigation	0	+1 A relatively small reduction in costs over the status quo	+2 Costs to building owners are halved (total retrofit cost: $5 billion)	+3 Costs to building owners fall by nearly two-thirds (total retrofit cost: $4 billion)	+4 Costs to building owners fall by three quarters (total retrofit cost: $2.7 billion)	+5 No mandatory remediation costs, but market-driven remediation will likely be more expensive than is necessary to

requirements more affordable.						manage life safety risks.
Proportionate The extent to which: • the regulatory system captures only high risk buildings • permitted retrofit methodologies are scaled to risk.	0	+1 Does not address the issue of many low risk buildings being on the EPB Register, and potential remains for more low risk buildings to be identified as EPBs.	+2 Better aligns mitigation requirements with risk. Introduces more scaled remediation methodologies.	+3 All lower risk building types are removed from the system, and changes to the 'identify at any time' pathway ensure that only high risk buildings become EPBs.	+4 To better align with risk-based priorities, all buildings in low seismic zones and the simple strengthening retrofit pathway have been excluded, with the focus shifting to more proportionate interventions such as façade securing	N/A
Ease of administration The system is straightforward to administer and doesn't require significant resourcing from TAs. Effort within the system is focused on remediating buildings, rather than on	0	0 Similar administrative burden to status quo	0 More implementation effort required and the %NBS methodology is retained, but more EPBs removed from the system. These factors balance out.	+2 Requires a similar implementation effort as Option 2, but removes use of the %NBS methodology. Also, it removes more EPBs from the system.	+3 Further reduces the number of buildings that require monitoring and compliance.	+4 No requirements (but some government monitoring/ support still likely to be needed, hence does not receive the maximum score)

assessing (and reassessing) buildings.						
	0	**2**	**3**	**6**	**8**	**4**

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

142. Option 3.1 is the Minister for Building and Construction's preferred approach. Of the regulatory options it delivers the greatest cost savings by only imposing mitigation obligations on buildings that pose the highest life safety risk and enabling more affordable and targeted remediation options.

143. Option 3.1 has the biggest increase in residual life safety risk, of the regulatory options. This estimate likely overstates the actual risk, as it assumes full compliance under the current EPB system—a scenario that is highly unlikely given existing levels of non-compliance. As a result, this risk may be partially offset by significantly higher compliance rates and a higher BCR in each region of the country, except Taranaki compared to the status quo. Importantly, the option aligns well with the overall policy objectives, which do not aim to mitigate all seismic vulnerabilities at any cost. As outlined in the context section of this RIS, this has not proven feasible.

144. Overall, MBIE considers that the proposed approach, Option 3.1, will result in a more effective, efficient, and proportionate system, that improves compliance by enabling more cost effective remediation.

Is the Minister's preferred option in the Cabinet paper the same as the agency's preferred option in the RIS?

145. Yes. MBIE scores Option 3.1 highest.

Monetised and non-monetised costs and benefits

146. Our estimates of where the costs and benefits fall for Option 3.1 are set out below.

Table 11: key costs and benefits (relative to status quo) of the preferred option

Cost Type	Who Bears It	Nature of Impact	Change vs. Status Quo
Avoided Losses	New Zealand (Govt, public, businesses)	$76 billion	Avoided losses are $181.8b under the status quo – hence reduce by $105.8 billion[23]
Life Safety risk	People	30% increase	Increased life safety risk by 30% under full compliance (which is unlikely to occur)
Retrofit Costs	Building owners	Savings ($2.7 billion)	Reduced from $10.9 billion
Administrative Costs	Councils	Savings	Reduced due to less buildings in EPB system
Disruption Costs	Tenants, businesses	Savings	Reduced due to fewer retrofits
Social Disruption	Communities	Savings	Reduced – less construction activity

[23] This assumes that an earthquake impacts each region of the country equally, which is implausible but required for modelling purposes. Actual costs will be localised.

Regulatory Burden	Building owners	Savings	Reduced – fewer compliance requirements

Distributional Impacts of the Intervention (Option 3.1 vs. Status Quo)

147. The preferred policy option significantly reduces upfront costs to building owners but at the expense of more losses and damage in a major earthquake, with a potential 30 percent increase in life safety risk compared to the status quo (assuming full compliance). This estimate likely overstates the actual risk, as full compliance under the current EPB system is unlikely.

148. The modelling also assumes that an earthquake impacts each region of the country equally. this is implausible but it is necessary for modelling purposes. In reality, actual costs and impacts will be localised.. Annex One provides BCRs broken down by region.

149. Obligations and the corresponding costs still exist for high-risk buildings that pose a moderate to high risk to occupants, visitors, pedestrians and the wider public. As private owners in most cases provide a public safety benefit, the full value of that benefit does not fall solely to the building owner.

Building Owners

150. 97% of building owners benefit from reduced or eliminated retrofit obligations, with around 86% facing no retrofit costs at all. This will be particularly beneficial for building owners in low seismic zones (Auckland and Northland) and 1-2 storey URMs in provincial towns.

151. This reflects a fairer allocation of costs, as obligations are now concentrated on buildings that pose the highest life safety risk—namely, large URM and multi-storey concrete buildings in medium and high seismic zones. Owners of these high-risk buildings continue to bear full remediation costs (albeit at a reduced cost under this proposal), which is justified given the elevated risk their buildings pose.

Multi-unit apartments

152. Some apartment buildings (eg buildings in low seismic zones) will be removed from the EPB system. But owners of EPB apartment buildings in medium or high seismic zones will still face full or partial remediation obligations. These buildings often have complex ownership structures (eg unit titles), which can make coordination and financing more difficult. Option 3.1 does not resolve these challenges, as they are outside the scope of the regulatory system.

153. Relevant Ministers and officials have been proposed to lead work on further regulatory relief options for EPB apartment buildings. Potential measures include:

- liberalising resource management settings, such as removing height restrictions to incentivise rebuilding
- amending the Overseas Investment Act to facilitate foreign investment in EPB remediation or redevelopment
- adjusting heritage requirements, for example, requiring only best endeavours to preserve heritage features during remediation
- reforming the Unit Titles Act 2010 to support collective decision-making and prevent ownership stalemates.

154. MBIE intends to collaborate with relevant agencies throughout the legislative process to progress these options.

Heritage EPB owners

155. Heritage buildings often face higher retrofit costs due to design constraints, heritage protection requirements and complex consent processes. Under Option 3.1, many heritage buildings—particularly those in low seismic zones or with low human exposure—will be removed from the EPB system or subject only to façade securing or risk notification. This approach could reduce the likelihood of "demolition by neglect" and support the preservation of culturally significant structures.

156. However, high-risk heritage buildings such as large 3+ storey URM structures will still require full remediation to the current threshold, which remains costly and complex. These owners may continue to face difficulties accessing finance or insurance. While regulatory reform improves proportionality, it does not fully resolve these issues. New remediation methodologies are being explored that may reduce these costs.

Tenants and Occupants

157. Tenants are likely to face less disruption under Option 3.1 due to fewer remediation works, as only the most critical EPB vulnerabilities are addressed. However, removing obligations for certain buildings—especially concrete buildings in low seismic zones—will increase seismic risk if owners don't retrofit voluntarily.

158. Eliminating visible EPB notices on one to two storey URM buildings in rural and small towns will reduce public awareness, making it harder for tenants and buyers to identify risks, despite information remaining available on the EPB Register. This places greater responsibility on individuals to seek out this information.

Local Authorities

159. Local authorities will face an initial increase in workload as they reclassify buildings and update the EPB Register. But, beyond the immediate transition, Option 3.1 will significantly reduce administrative, enforcement, and legal costs.

160. MBIE will provide support to territorial authorities during the transition, helping to ease the administrative burden. Despite these benefits, councils may face criticism from the public and building owners who previously invested in costly retrofits under the older, more stringent requirements.

Public

161. Option 3.1 potentially increases life safety risk to the general public, largely because many of the lower risk EPBs are removed from the system or move to risk data only. Public perception of reduced safety standards may be a concern.

162. This must be balanced, however, against the fact that the current system is unlikely to meet public expectations in the longer term, due to low compliance rates and high remediation costs 'trickling down' in the form of higher prices and rentals.

Competition impacts

163. Removing EPB regulations in Auckland while maintaining them in medium and high seismic zones may influence business investment decisions, giving Auckland-based businesses a cost advantage by avoiding compliance-related expenses such as engineering assessments, retrofitting, and administrative overhead.

164. But we consider that any impact will be marginal. Business migration toward Auckland has been ongoing for years, driven by factors such as population growth, infrastructure investment and access to skilled labour. Seismic regulation is one of many variables influencing location decisions, and its impact is likely outweighed by these broader structural drivers.

165. The preferred option could also generate positive impacts on economic growth. Removing EPB regulations in low seismic zones such as Auckland could create a more favourable environment for investors and developers, potentially lowering barriers to entry and enabling broader participation in the commercial property market.

166. The targeted nature of the regulation—focusing only on high-risk buildings in medium and high seismic zones—also improves fairness by aligning obligations with actual risk. The reduction in regulatory burden and retrofit costs may encourage more commercially productive forms of investment, with higher economic returns.

167. Overall, the proposal in the Cabinet paper could enhance competitive conditions by making seismic compliance more proportionate and predictable, especially for businesses operating in lower-risk regions.

Table 12: Marginal costs and benefits of the Minister's preferred option

Affected groups	Comment	Impact	Evidence Certainty
Additional costs of the preferred option compared to taking no action			
Regulated groups	Seismic strengthening work for those remaining in EPB system.	$2.7 billion cost to EPB owners remaining in the system	High confidence in the retrofit costs and savings to owners. Beca drew on its extensive cost database to produce accurate retrofit and replacement cost estimates for the ten most common building typologies. Where cost variations were significant, estimates were tailored to specific locations. To ensure robustness, the cost modelling was independently reviewed by quantity surveying firm Rawlinsons.
Tenants	Increased life safety risk for tenants living/ occupying buildings removed from the EPB system	Low to medium impact: These buildings have been deemed to be low-risk buildings due to their seismic zone, building typology and human exposure levels. There is an increase in life-safety risk compared to the status quo but in many cases this risk was not being addressed due to costs. This is mitigated by the more affordable retrofit options and the methodological approach to removing buildings from the EPB system. Removing the requirement to display EPB notices on buildings without mandatory remediation will reduce transparency and make it harder for occupants and prospective buyers to make informed decisions about seismic risk, particularly in rural areas and small towns.	High confidence
Regulator	Territorial Authorities	Low impact:	Low confidence

		Potential reputational risks for territorial authorities, especially from owners who previously invested in costly upgrades under the previous / current system.	
Others	Construction industry	Low to Medium impact: Loss of revenue - reduced number of mandatory seismic retrofits and work available. Though they are likely to shift to alternative construction projects.	Medium – it is a long and complex process to progress seismic retrofits under the current system and low levels of compliance point to low levels of existing activity for sector.
	Businesses in medium and high seismic zones	Low impact Equity and competition concerns, as businesses in low seismic zones may benefit from reduced compliance costs, potentially distorting investment patterns across regions.	Medium confidence - this is a marginal concern, as business migration toward Auckland and away from Wellington is already occurring. This trend cannot be solely attributed to seismic regulations but rather reflects broader business operating conditions.
Total monetised costs		$2.7 billion	High confidence
Non-monetised costs		Low to medium - for tenants of removed EPBs, construction industry, TAs and businesses in medium and high seismic zones	Medium confidence
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Avoided building strengthening costs (on-off)	**$8.2 billion in total savings** for building owners who are no longer required to remediate their earthquake-prone buildings under the revised obligations.	As above per Beca's estimates.
	Avoided compliance effort	Low to medium benefits through reduced stress and regulatory burden for 86% of EPB owners.	Strong evidence gathered through Seismic Review.
Regulators	Avoided administrative and implementation costs	High impact: TAs in low seismic zones - removes all monitoring and reporting on EPB system	We have broken the EPB Register into building typologies by seismic hazard zone and have high confidence in the

	The proposal is expected to significantly reduce administrative costs for a TA monitoring the EPBs within its region, issuing compliance and enforcement notices, and legal fees for non-compliant building owners displaying an EPB notice or missing its EPB remediation deadline. Will likely allow resources to move to other parts of council.	Medium to low impact: TAs in medium seismic zones - 70% reduction in buildings under the EPB system and most buildings remaining will have significantly cheaper retrofit options that are 20% to 80% cheaper, which should reduce compliance and enforcement efforts. Medium impact: TAs in high seismic zones: impact – 50% reduction in buildings under the EPB system and cheaper retrofit options compared to status quo as above	approximate percentage of buildings that will fall into different remediation obligations.
Others (eg, wider govt, consumers, etc.)			
Communities	Avoided social disruption	Low to medium Indirect – reduced social disruption through less construction activity	Medium confidence
Total monetised benefits		$8.2 billion	High confidence
Non-monetised benefits		Low to medium benefits for TAs, EPB owners, communities	Medium confidence

Section 3: Delivering the preferred option

How will the proposal be implemented?

One-off implementation functions for Territorial Authorities and MBIE

168. After implementation, the EPB system will be easier for TAs to administer and enforce due to the significantly reduced number of EPBs. But TAs will have two critical implementation functions:

    - Removing EPB status from:

        i. all non-Profile Category buildings apart from post-1976 3+ storey of heavy construction, and

        ii. all EPBs in Auckland, Northland, and the Chatham Islands

    - In medium and high seismic zones, determining each EPB's mitigation requirement and notifying the building owner of that requirement

169. MBIE will endeavour to provide each TA a list of the EPBs within its jurisdiction that can be delisted. If the data is available, this would mean that the TA simply needs to notify the building owner and update its records. No further identification process will be required.

170. MBIE will need to update the EPB Methodology including by setting out standard criteria to be used to identify EPBs (instead of %NBS).

New ongoing functions for Territorial Authorities

171. EPB owners will be able to apply to their TA for extensions to seismic remediation deadlines, up to a cumulative total of five years. The TA may impose conditions to ensure continued progress is made. TAs do not have this power currently and will need systems to manage these applications.

172. In cases where an extended deadline is breached, TAs will have greater assurance that the owner has been given a reasonable opportunity to demonstrate progress. This will strengthen the basis for compliance action. For building owners, the provision encourages incremental progress and provides more flexibility to deal with resource constraints.

173. These changes do not affect the existing provision for heritage buildings, which allows owners of qualifying EPBs to apply for deadline extensions of up to ten years.

How will the proposal be monitored, evaluated, and reviewed?

174. TAs must report regularly to MBIE on their progress towards identifying potentially EPBs. These reports enable MBIE to monitor whether TAs are on track to meet identification timelines, track remediation rates, and update the EPB Register.

175. Reporting timeframes vary by seismic risk area:

    - High – annually
    - Medium – every two years
    - Low – every three years (will no longer be required as removed from the system).

176. TAs with multiple seismic risk areas are required to report on progress across their whole district at the frequency required according to the highest seismic risk area in their region.

177. Where issues arise, MBIE will engage with the relevant TA to understand the underlying causes. While MBIE has no statutory authority to intervene where problems do emerge, opportunities to assist include facilitating information sharing across regions, disseminating best practice, and providing informal ‘second opinions’ on problematic issues.

178. TAs can also use building consent data and annual surveys to assess progress. These tools can help estimate whether remediation is likely to occur before deadlines, based on consent activity or stated intentions. This approach was used during the EPB Review to inform the decision to extend remediation deadlines.

Annex 1: Benefit/Cost ratio of Option 3.1 by region

179. The preferred policy option is more cost-effective, with higher Benefit-Cost Ratios (BCRs) across nearly all regions—except Gisborne, Taranaki and Otago compared to the status quo.

180. The BCR analysis was conducted only for the status quo and the preferred option. Given the time constraints and the significant modelling effort required, it was not feasible to assess options that were not under active consideration. Instead, the focus was placed on understanding the impacts of the preferred policy option in more depth.

181. In theory, the status quo should deliver significantly greater reductions in life safety risk and greater avoided losses in the event of a large earthquake, but this comes at a substantially higher cost and lower efficiency. In practice, however, the retrofit costs under the current EPB system are often prohibitively high, meaning many building owners are unable to carry out remediation work. As a result, the intended life safety benefits are not being realised in most cases.

182. The preferred option offers a more targeted and cost-effective approach, focusing on the "worst of the worst" buildings that pose the greatest life safety risk, while excluding lower-risk buildings. This means that although the modelled life safety benefits appear lower, the actual risk reduction may be closer than the numbers suggest when realistic compliance rates are factored in.

183. Given that an earthquake in one location will not affect the entire country equally, comparing policy options using Benefit-Cost Ratios on a regional level opposed to national is the most appropriate method for comparing the policy options. It is not possible to provide BCRs for Auckland. This is because there would no longer be any remediation costs in these regions.

184. Auckland has been excluded from the EPB system due to its classification as a low seismic zone.

Table 1: Benefit cost ratio of preferred option and status quo by location

Region	Status Quo	Option 3.1
Auckland	0.3	N/A
Waikato	0.9	1.5
Bay of Plenty	1.8	2.6
Gisborne	*2.3*	*3.6*
Hawke's Bay	4.2	9.9
Taranaki	*0.8*	*0.7*
Manawatū-Whanganui	3.0	7.5
Wellington	3.2	4.6
Tasman	3.0	15.4
Nelson	3.2	8.2
Marlborough	3.1	13.4
West Coast	1.9	3.2
Canterbury	2.0	2.5
Otago	*1.4*	*1.9*
Southland	2.3	6.8

185. Table 1 shows that the preferred policy option is more cost-effective, with higher BCRs across nearly all regions—except Taranaki compared to the status quo. In Taranaki's case the difference is marginal (0.1).

186. It is not appropriate to use a national BCR or weighted average due to the nature of earthquakes meaning that an earthquake will not be felt equally depending on several factors including the earthquakes epicentre. For this reason, the commissioned benefit cost ratios have been provided on a location basis to enable comparison back to the status quo.

187. The benefit-cost analysis considers both the costs of upgrading buildings and the benefits of avoiding damage and harm during earthquakes.

Modelling assumptions

188. The full modelling assumptions can be found in Annex 2: Economic Analysis of New Zealand's: Earthquake Prone Building System.

189. Costs include seismic and energy efficiency upgrades, carbon emissions from construction, and potential repair or replacement of buildings and contents. Benefits are measured by the avoided impacts—such as deaths, injuries, mental health effects, displacement, business disruption, search and rescue costs, and environmental impacts like energy use and carbon emissions.

190. Repair costs are capped at the full replacement value, and the analysis uses modelling to estimate damage and loss. Social impacts are valued using Treasury's guidance on the Value of Statistical Life (VOSL), with adjustments for large-scale disasters. A 2% discount rate is applied, consistent with Treasury's approach for public investments.

191. VOSL under Treasury's new guidance is $17.5 million, this is extremely high and outweighs the remediation costs of most buildings alone.

Annex 2: Economic Analysis of New Zealand's Earthquake Prone Building System (Beca, 2025)

Annex 3: Earthquake-prone building system and seismic risk management review