*Date: 24th June 2025* 

To: Hon Chris Penk, Minister for Building and Construction

From: Dr Erica Seville, Independent Chair, Seismic Review Steering Group

Subject: Steering Group Reflections on the Earthquake-Prone Building System Review

Dear Minister,

The Steering Group for the Seismic Risk Management in Existing Buildings under the Earthquake-Prone Building System Review welcomes the opportunity to provide our independent reflections on MBIE's draft report.

# **Key Takeaways**

- The Steering Group are collectively supportive of Option 3 as a more risk-based, proportionate approach to managing seismic life-safety risk.
- The proposed system should reduce the number of buildings captured, lower remediation costs, and support higher compliance while still focusing regulatory effort where it will have the greatest life-safety impact.
- Success will depend not only on the strength of the policy, but also on how the broader conditions are shaped including alignment with other legislation and a clear focus on removing real-world barriers to compliance.

This review presents an important opportunity to recalibrate how seismic life-safety risk is managed across the country. We see strong potential in the direction outlined – and welcome the chance to shape a system that better reflects actual risk, supports compliance, and endures over time.

#### **Comments on the Review Process**

The Steering Group commends MBIE for its professionalism and the way it has approached the review. The depth of engagement, and commitment to undertaking the research needed to develop a sound evidence-base for the review, has helped us to grapple with the complexity of the current system and explore credible options for change.

We appreciate the substantial progress made within the time available for this review. Recognising the pace at which this work has been delivered, we see the next phase as an important opportunity to build on this – refining the policy detail, developing practical implementation tools, and calibrating risk tolerances to ensure the system is robust and workable.

As the next phase of work moves into detailed policy design, we encourage continuing to leverage the expertise within the Steering Group to test and refine key elements. Careful

attention to implementation detail will be critical to ensuring that the final system delivers on the intent of the proposed reforms.

# **Endorsing a Risk-Based System**

The current Earthquake-Prone Building system is capturing many more buildings than originally intended. Along with other market drivers, it is resulting in unintended consequences that are placing an unrealistic financial burden on owners where seismic upgrade is simply uneconomic.

We are therefore supportive of the direction proposed in Option 3 of the report, which introduces a more structured, risk-informed approach for managing seismic risk. By factoring in seismic hazard, building vulnerability *and* human exposure, it enables a more proportionate system that places greater obligations on buildings where failure could kill or maim large numbers of people, while easing requirements on those with low occupancy and foot traffic.

This shift creates the opportunity to focus regulatory effort where it will have the greatest life-safety impact. It will also reduce remediation costs and support higher compliance. In provincial areas, for example, where older buildings are common but the density of people in and around those buildings is lower, Option 3 better reflects both actual risk profiles and the economic realities faced by building owners.

## • Other Options Considered

The report includes two alternative options (3a and 3b) to illustrate alternative ways that Option 3 could be scaled. There were differing views, but overall the Group concluded that any scaling of Option 3 should be managed within the framework itself – through careful calibration of the risk matrices, clear thresholds for high, regular, and low human exposure, and the development of targeted retrofit methodologies. While we recognise the intent behind Options 3a and 3b, we have reservations about their suitability:

- Option 3a's focus on Priority Buildings draws on elements of the current system that have proven complex and inconsistent in practice. If retained, we recommend using a new term and refining the criteria to ensure buildings with both high vulnerability and high human exposure remain within scope. We also note that delegating decisions to territorial authorities risks reintroducing regional disparities, places pressure on councillors to make complex risk judgements, and risks deterring urban regeneration by creating uncertainty around future EPB triggers.
- Option 3b shifts the emphasis of the system away from life-safety and toward postevent functionality. In our view, this introduces a different risk objective that does not align well with the purpose of the EPB system. We are also concerned that Option 3b would, in practice, lead to outcomes similar to Option 4 – with many buildings posing significant life-safety risks likely to remain un-remediated. Option 3b

places focus on Importance Level 4 (IL4) Buildings that represent only a very small subset of the building stock. As an example, in hospital complexes, only acute services buildings are typically IL4.

# **Balancing Life-Safety Risk Across All Building Types and Regions**

A well-designed system needs to balance risk reduction with practical feasibility — especially where further requirements would add cost without meaningful life-safety gains. It must feel fair and proportionate now, and hold up under scrutiny when a major earthquake puts it to the test.

Overall, we support the introduction of human exposure into the risk framework – taking into account how many people are likely to be in or around a building. This provides a powerful lever for setting meaningful risk thresholds.

We also support the introduction of targeted and simplified interventions, where appropriate, that focus building retrofits on the most critical life-safety issues. This approach may result in a higher life-safety risk for some buildings, but it is likely to increase overall compliance and improve net outcomes.

# High-Risk Buildings Outside Profile Categories

The current system includes an "at-any-time" pathway that allows territorial authorities to take action on potentially earthquake-prone buildings where there is reason to believe they pose a significant risk. In practice, this pathway has captured a broad range of buildings within the EPB system — many of which do not represent the highest life-safety risks. While all buildings carry some level of seismic risk, many currently identified through this mechanism are significantly lower risk than originally anticipated when the legislation was introduced. Removing these buildings from the mandatory upgrade regime is not considered to materially increase overall life-safety risk — and could allow for a more targeted and efficient use of resources.

At the same time, we support retaining a refined mechanism to address exceptional cases — buildings that fall outside standard profile categories but clearly present elevated seismic risk. High-risk buildings that don't fit neatly into existing profiles can still pose significant danger; the CTV building is a tragic example. Technical work to date indicates that there are simpler, more effective ways to identify truly high-risk buildings — better aligning with the original intent and avoiding the subjectivity and inefficiency seen in parts of the current regime.

Striking the right balance in this area will be critical. The system must avoid over-reach that creates unnecessary uncertainty or burden for building owners, while still ensuring that buildings posing the highest life-safety risks are identified and remediated. While there was some debate within the Group about how best to achieve this, we strongly recommend the establishment of an expert review panel as a practical and credible mechanism to apply rigour without losing proportionality.

#### Low Seismic Hazard Zone

It is important to recognise that what we classify as "low seismic hazard" in New Zealand would be considered medium to high hazard in many other countries. For example, recent modelling suggests that a 1-in-250-year event in Auckland could result in over \$25 billion in direct losses from EPBs alone. The wider cascading impacts would be significantly greater, given Auckland's role as New Zealand's economic hub. It is therefore essential that "low hazard" is not mistaken for low risk. In this context, care must be taken to avoid overly weakening requirements in lower hazard zones in ways that could undermine life-safety objectives.

#### • Risk-Notification

The Steering Group supports the proposed use of risk-notification as a valuable transparency mechanism for buildings that are earthquake prone but present lower (though still significant) life-safety risk. It helps ensure that owners, tenants, and communities are informed, even where mandatory upgrades are not required. While notification can prompt market-driven action, international experience shows it is often ineffective without supporting incentives — and can cause significant anxiety for owners. We recommend that notification remains a feature of the new system, but is carefully designed and communicated to support informed, proportionate responses.

# **Additional Work Needed to Further Remove Barriers for Compliance**

While the report's focus is on the proposed policy settings, it also highlights several areas where further work is needed beyond the policy itself. We want to underscore how critical these elements will be to the successful design and implementation of the overall programme.

# Multi-Unit Residential Buildings

Multi-unit residential buildings can present significant life-safety and implementation challenges, depending on their design, occupancy, and ownership structure. These buildings often face structural complexity, dispersed ownership, and financial and governance barriers to remediation. While the number of apartment buildings classified as EPBs is expected to reduce significantly through the technical work underway, many will still be captured under Option 3. Without targeted support, some owners may be left with limited or unviable pathways to compliance. Although the report acknowledges these challenges, we wish to emphasise the need to develop tailored support mechanisms for this building type. Many of the barriers are non-regulatory in nature, and we recommend establishing a dedicated working group to explore and develop practical solutions that reflect the unique characteristics of multi-unit residential buildings.

#### • Heritage Buildings

Whilst heritage is mentioned within the report as posing increased difficulty for seismic restoration, this does not mean there is a lack of support for heritage retention. Rather, it acknowledges that owners of heritage buildings may face higher restoration costs. By their nature, historic buildings have special value and represent a level of public amenity in terms of both visual and cultural preservation. It will be important to develop targeted and simplified retrofit solutions suitable for heritage contexts – ensuring these buildings can also benefit from more accessible compliance pathways.

#### Staged Upgrades

The current "substantial alteration" trigger in the Building Act can unintentionally discourage investment. A more flexible approach, that enables buildings to be upgraded in stages over time, would better support progressive remediation, without forcing building owners into an all-or-nothing choice between full compliance and inaction.

#### • Insurance and Lending Constraints

The behaviour of insurers and lenders can amplify both risk aversion and costs for building owners. While these dynamics sit outside the regulatory framework itself, they are having a material impact on compliance and viability — with many owners unable to fund remediation, even where willing. Much of the Steering Group's discussion focused on the interplay between regulatory settings and market forces, and how these shape behaviour and outcomes. We encourage further cross-sector work to better align financial practices with the intent of the new system — and, if needed, to design financial or insurance solutions that support EPB owners to comply.

# **Key Enablers for Success**

Option 3 is not a minor adjustment but a fundamental redesign to the Earthquake-Prone Building (EPB) System. It will require significant up-front investment in system design, tools, and training. While it may ultimately be simpler to administer, this will only be the case once the foundational work is complete.

To make the new system workable, credible, and fair, we therefore see four areas that need particular focus during the next stage of the policy development:

#### • Further Design Work Required to Calibrate Settings:

Many of the policy aspects within Option 3 have not yet been developed. It will be important that the next phase of work allows sufficient time for detailed modelling and calibration of exposure thresholds (e.g. what constitutes high, regular, or low exposure), and technical criteria within the system so that final policy decisions can be informed by

more nuanced cost-benefit trade-offs. Other policy features, such as enforcement tools and remediation timeframes are also yet to be defined.

This is a major change. The next phase will need to lay strong foundations – including tools, training, and support – so that everyone involved can operate confidently under the new rules.

### • Incentives and Support Mechanisms

International experience shows that a balanced approach — combining clear regulatory expectations with meaningful support — is critical to achieving real progress in remediating vulnerable buildings. The new policy settings will significantly reduce the number of EPBs, potentially making targeted support more feasible. The introduction of depreciable building expenditure is a welcome step that will meaningfully improve the feasibility of seismic upgrades for commercial building owners. However, we note that this incentive is temporary and not currently available to residential owners, who face similar cost challenges. We encourage creative thinking about the full range of levers available to support compliance — including low-interest loans or rates relief, tailored insurance solutions, accessible technical guidance for non-experts, reinvigorated support services for bodies-corporate managing apartment buildings (informed by lessons from the earlier pilot), extending depreciation of seismic retrofits, and regulatory flexibility for staged or prioritised upgrades. The report rightly highlights this as a key focus for the next stage of work. We want to underline how important this work will be to the overall success of the system.

# • Ensuring Technical Methodologies Support Policy Intent

Feasibility work on targeted retrofit approaches for reinforced concrete buildings is now well advanced, and we believe it warrants greater emphasis in the report. This work provides an important foundation for the effective technical implementation of Option 3.

Most significantly, the approach enables many currently classified EPBs to be filtered into a much smaller subset of genuinely high life-safety risk buildings – those that warrant mandatory remediation. While this has the benefit of reducing average retrofit cost, the real gain is the reduced number of buildings captured by the system. This will make compliance more feasible, particularly for multi-unit residential buildings, many of which are expected to benefit from this approach.

This technical framework will also be key to ensuring the "at-any-time" pathway is used appropriately – focused only on high life-safety risk buildings, and avoiding the overreach seen under the current system.

It is therefore critical that this technical work continues in step with the next phase of policy development and implementation. Just as important will be a clear mechanism – involving MBIE and a representative stakeholder group – to ensure that the technical thresholds and assumptions used are proportionate, practical, and aligned with the

policy's overall intent, particularly with regard to the level of residual life-safety risk that remains in the system.

# • Communicating the Reform

Public understanding and trust will be critical to the success of the revised system. It will be important to clearly convey that these changes reflect a smarter, more risk-based approach – one focused on improving overall compliance, not lowering safety standards. Where buildings are no longer included under the revised framework, owners and communities will need clear explanations of why, and what that means in practical terms. It may also help to acknowledge that seismic risk is just one of many societal risks we manage, and that the goal is to strike the right balance between protection and economic sustainability.

A recurring challenge is that the intent of the EPB legislation is often misunderstood. It is focused specifically on reducing life-safety risk – not on broader measures of building resilience. Concepts such as repairability, post-event usability, and economic loss are often conflated with the purpose of the EPB system. Even with effective life-safety upgrades, many retrofitted buildings may still suffer significant damage in a moderate or severe earthquake and could be uneconomic to repair. It is also important to communicate that, under any system, a degree of residual life-safety risk will remain – our communities will still contain buildings that could injure or kill people in an earthquake – even if fully compliant with the legislation. The EPB framework is about reducing, not eliminating, the most critical life-safety risks.

Finally, clearer alignment between the EPB system and the Health and Safety at Work Act will be key. Current uncertainty has led some directors to prohibit use of EPBs regardless of actual risk. Providing clarity for how these different pieces of legislation work together will be essential for sound, practical decisions.

#### **Final Reflections**

The Steering Group considers that Option 3 represents a well-considered and appropriate platform for reform. This new approach remains grounded in keeping people safe, while recognising that not all buildings carry the same risk – and not all owners have the same capacity to act. The current system is falling short of both public expectations and practical implementation. Within the Steering Group, with our wide range of perspectives and backgrounds, we found strong alignment that Option 3 is the most constructive path forward.

This is, however, a significant shift in approach – and the scale of change required to deliver it successfully should not be underestimated. The new system, supported by the technical work underway, should significantly reduce the number of buildings and owners captured by the EPB system – allowing focus and investment to be more effectively targeted at those buildings that present the highest life-safety risk. Success however will depend on how well

the system is refined, resourced, communicated and implemented in a way that builds public confidence and supports practical action across the country.

Reducing life-safety risk from earthquake-prone buildings depends not only on the Earthquake-Prone Building legislation, but also its interplay with other legislation and non-regulatory factors such as access to finance, insurance, technical guidance, and community support. A successful system will depend on a broad coalition of support – across sectors, professions, and political lines, to create enduring conditions that enable and encourage timely, practical action.

Given the complexity of the system and the importance of getting the details right, maintaining this breadth of perspective will be critical to ensuring that policy settings are both workable and capable of delivering on the system's core objectives. The Steering Group remains willing and available to contribute structured, cross-sector input to support the next phase of detailed design and implementation planning.

We thank you for the opportunity to contribute to this important work.

Yours sincerely,

Dr Erica Seville

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Independent Chair, Seismic Review Steering Group

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