



Natural Hazards Commission Toka Tū Ake

Resilient Homes and Buildings Action Plan

2026–2030



**Natural Hazards
Commission**
Toka Tū Ake

Preface

This is the second Resilient Homes and Buildings Action Plan (Action Plan) developed by the Natural Hazards Commission Toka Tū Ake (NHC Toka Tū Ake). The first plan (2022–2027) introduced a set of actions, many of which have been delivered or become embedded in our everyday work. Some of these foundational actions remain in this plan to reaffirm our ongoing commitment to improving resilience of the built environment in New Zealand. This plan also introduces new actions to address gaps and opportunities. These have been identified and prioritised in collaboration with our partners and stakeholders.

Since the first plan was published, our organisation has undergone a transformation. The changes include the introduction of the Natural Hazards Insurance Act 2023, the establishment of our new identity as the Natural Hazards Commission Toka Tū Ake, the revised Resilience Strategy for Natural Hazard Risk Reduction 2024–2029 and a new Risk Reduction Strategy 2025–2029. This updated plan reflects these developments.



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Terminology

Adaptation	The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects. ¹
Built environment	Includes people and communities, land and the identified values and characteristics of land, structures, and infrastructure. ²
Climate change	A change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods. ³
Functional recovery	A post-natural hazard event performance state in which a building or lifeline infrastructure system is maintained, or restored, to safely and adequately support the basic intended functions associated with the pre-event use of occupancy of a building, or the pre-event service level of a lifeline infrastructure system. ⁴
Natural hazard	Any atmospheric, earth, or water-related occurrence – including earthquake, hydrothermal activity, landslide, tsunami, volcanic activity, flood, storm, or natural hazard fire – the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment. ³
Resilience	The ability to anticipate and resist the effects of a disruptive event, minimise adverse impacts, respond effectively post-event, maintain or recover functionality, and adapt in a way that allows for learning and thriving. ⁵
Risk	The potential loss of life, injury, or destroyed or damaged assets that could occur to a system, society, or a community in a specific period of time, determined as a function of hazard, exposure, vulnerability and capacity. ⁵
Risk reduction	Reducing existing natural hazard risk, avoiding or minimising future risk, and managing residual risk. ⁶

1 Intergovernmental Panel on Climate Change, 2018

2 Planning Bill

3 Resource Management Act 1991

4 FEMA P-2090/NIST SP-1254 (January 2021)

5 National Disaster Resilience Strategy (2019)

6 NHC Risk Reduction Strategy 2025–2029

Executive summary

The Natural Hazards Commission Toka Tū Ake (NHC Toka Tū Ake) seeks to support resilient homes and buildings across New Zealand but can't do this alone.

Strong building regulation and governance is one of the most effective ways to manage natural hazard risks. Along with land use planning, insurance, and resilient infrastructure, it helps determine how communities come through natural hazard events.

NHC Toka Tū Ake insures New Zealand's homes, buildings, and the land they stand on against natural hazard damage. This includes all residential buildings, regardless of the quality or standard of their design or construction. This is one of the reasons we inform, enable, and encourage natural hazard risk reduction. This action plan supports that goal.

The goal of this action plan is to highlight gaps and opportunities to increase the resilience of homes and buildings, for the safety and wellbeing of all those living in New Zealand.

This document addresses challenges that span professions, sectors, institutions, building uses, and people. It describes how to increase resilience, including opportunities for decision-makers, practitioners, and individuals.

This action plan complements our Resilient Land Use, Natural Hazards Intelligence, and Climate Change Action Plans. Together, and through several cross-cutting actions, they will enhance the resilience of New Zealand communities to natural hazards.

This action plan is based on three objectives, each with associated milestones, and outcomes. These are summarised on the following page.



Resilient Homes and Buildings Action Plan

Increase the resilience of homes and buildings for the safety and wellbeing of all those in New Zealand



Enable higher levels of resilience in new design and construction

Support improved functional recovery outcomes.

Build for resilience and climate change.

Help drive best practice.



New homes and buildings are designed and built for resilience.



Encourage the gradual, ongoing improvement of existing buildings

Promote effective strategies to retrofit and strengthen existing buildings.

Investigate residential risk reduction incentives.

Support investigation and research into 'unknown unknowns'.

Increase resilience through build back better in recovery.



Existing buildings are assessed and managed so they are safe and resilient.



Demonstrate resilience leadership in the built environment

Actively collate and share lessons learnt.

Support engineering science into practice.

Actively contribute to national policy development.

Support improvements in risk reduction governance.



The built environment system is enduring and fit for purpose.

Introduction

New Zealand's built environment is facing urgent challenges. In the past decade especially, natural hazards like earthquakes and storms have repeatedly highlighted the weaknesses in our building stock.

The ongoing global climate emergency will significantly amplify the impacts and frequency of natural hazard events, which in turn will affect our people and property. In addition, New Zealand has a national housing crisis, with too little space to house people, made worse by ever-increasing construction costs. Further, since the COVID-19 pandemic, what people expect and need from their homes and buildings has dramatically changed. A resilient housing stock contributes to wellbeing and allows people to shelter in place, while keeping a significant portion of the nation's economy moving amidst a crisis. The resilience of our built environment has never been more important.

Many stakeholders and interest groups contribute to New Zealand's built environment. These include builders, tradespeople, engineers, researchers, architects, planners, developers, and local, regional, and central government. While their roles differ, their decisions and actions collectively shape the resilience of our homes and buildings.

A well-functioning built environment system depends on these decisions and actions being risk informed. When risk is consistently understood and applied, buildings are more resilient, experience less damage from natural hazard events, and reduce impacts on people. This underpins our Resilience Goal.⁷

This Action Plan sets out how we will contribute to greater resilience for homes, buildings and communities, through clear objectives, actions, and milestones. We will support strong building regulation as one of the most effective strategies for reducing natural hazard risk in our built environment. This plan calls for collaboration and coordination across the building sector to make sure our homes and buildings are fit for purpose, and that they remain resilient in an uncertain future.

The role of the built environment in natural hazard risk management

Hazard risk in New Zealand is primarily managed across three pieces of legislation: the Resource Management Act 1991 (RMA), the Local Government Act 2002 (LGA), and the Building Act 2004.

7 NHC Resilience Strategy for Natural Hazard Risk Reduction 2024–2029

From these three frameworks, governance decisions are made to manage natural hazard risks for communities, businesses, and individuals. Regulation of the built environment is a significant tool to reduce risks in New Zealand.

The built environment is made up of our homes, the buildings we spend time in each day, the infrastructure and services supplying them, and the designed spaces connecting them like roads, transportation networks, and public areas. It is the setting where most human activity takes place. Many of society's functions depend on suitably designed and reliable spaces. This is why the built environment plays such a significant role in natural hazard risk management.

Robust building codes – and their governance – are one of the most effective drivers of natural hazard risk reduction alongside land use planning. In hazard-prone communities around the world, there are consistently striking differences between the outcomes of those with stronger building regulatory systems and those with weak building governance structures. Building standards set the minimum performance objectives our homes and buildings must meet to acceptably serve communities. Alongside supporting infrastructure, they play a major role in determining the outcomes of natural hazard events.

Building standards work in tandem with land use planning to minimise risks to life and property. Developed alongside the Resilient Land Use Action Plan, this plan recognises that effective risk reduction requires smart land use decisions and well-designed, resilient buildings, underpinned by good data

and information. While land use planning helps avoid or reduce exposure to hazards, strong building performance ensures our homes and buildings can better withstand them.

Why are we interested in the resilience of homes and buildings?

NHC Toka Tū Ake is a Crown entity that provides residential property insurance for natural hazard damage and invests in research and education to improve understanding and management of natural hazard risks.

The financial risk associated with natural hazards in New Zealand is significant and is carried by NHC Toka Tū Ake on behalf of the Crown. As such, we have a strong interest in reducing risk and increasing resilience across the country. The potential for future insurance retreat from high-risk areas poses serious implications for homeowners, mortgage holders, and communities.

Everything we invest in supports our overarching goal: to reduce the impact of natural hazards on people, property, and the community. To ensure our investment delivers value, it is essential that the tools and insights we develop, or fund, are used to inform and prioritise risk reduction actions. Achieving this will require new partnerships and effective communication with policymakers, planners, engineers, asset managers, and homeowners. The aim is to ensure the right knowledge reaches the right people, in the right format, at the right time. This action plan is one tool to help realise that goal.

Highlights from the previous Action Plan (2022–2027)

The first version of the Action Plan made several contributions to the resilience of the built environment. The following project highlights – spanning capability, guidance, and research – provide the platform upon which this new Action Plan builds.

Supporting practice and capability

- We continued our long partnership with the New Zealand Society of Earthquake Engineering (NZSEE) through its journal and annual conference, and with novel initiatives like the Resilient Buildings Project.
- We partnered with the Ministry of Business, Innovation and Employment (MBIE), New Zealand Transport Agency (NZTA), and Engineering New Zealand to establish the Building Resilience in Design Guidance and Engineering (BRiDGE) project, providing strategic vision and coordinating sector needs with regulatory agency priorities.



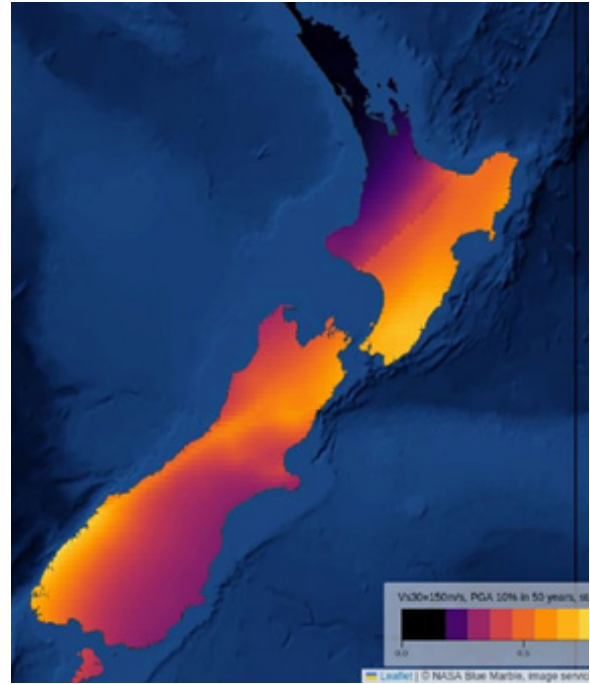
Published guidance

- We partnered with MBIE to deliver the Low Damage Seismic Design (LDSD) guidance.
- We published our risk tolerance methodology and associated literature review.
- We partnered with the New Zealand Geological Society (NZGS) to develop a series of Slope Stability Geotechnical Guidance units.



Strong pipeline from research to impact

- We supported the 2022 update of the National Seismic Hazard Model (NSHM), which prompted the revision of a major standard used for building design. Technical Specification (TS) 1170.5:2025 Structural design actions Part 5: Earthquake actions – New Zealand was published in 2025.
- Many other researchers we've supported and their work also contributed to how the new seismic model should be applied to new building design.



This Action Plan is part of our strategy to reduce risks

This Action Plan is a component of our wider strategies to reduce natural hazard risks by operationalising elements of both the **Resilience Strategy for Natural Hazard Risk Reduction 2024–2029** and the **Risk Reduction Strategy 2025–2029**.

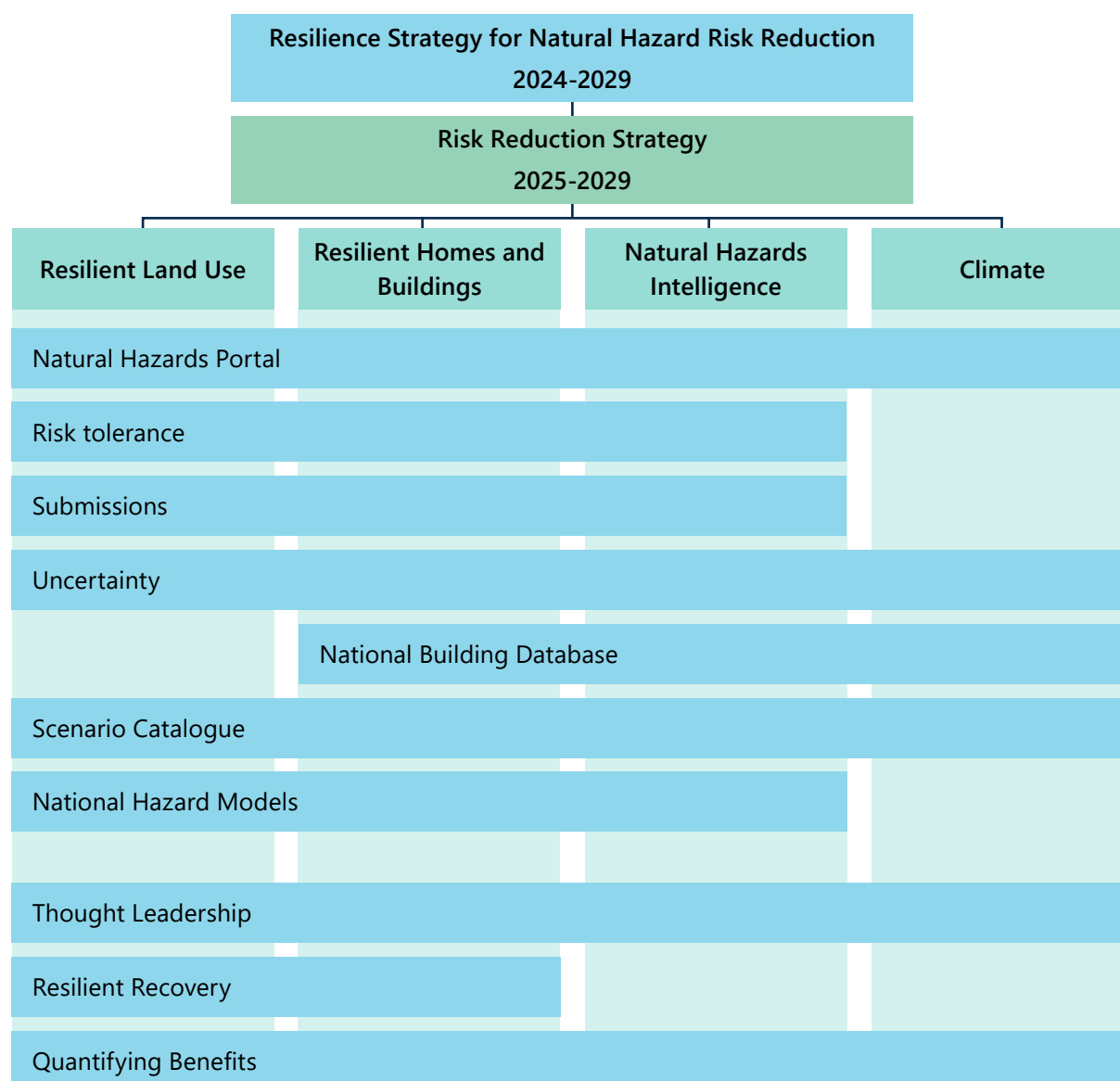
It translates the strategic goals of these documents into practical, targeted actions that strengthen resilient land use planning, reduce exposure and vulnerability, and support long-term resilience across New Zealand.



This Action Plan is also part of a suite of aligned cross-cutting actions and initiatives – most notably the **Resilient Land Use Planning Action Plan**, **Natural Hazards Intelligence Plan**, and **Climate Action Plan**. Together, these plans reinforce each other by ensuring land use planning, building performance, and natural hazard information work cohesively to reduce risks and support safer, more resilient communities.

Action Plan	Description
Resilient Land Use	How we work to reduce current and future risks through smarter, risk-informed land use planning.
Natural Hazards Intelligence	How we will understand, translate and use natural hazard risk and loss data to reduce risk and build resilience.
Climate	How we will strengthen internal capability to understand and respond to climate-driven natural hazard risk.

Resilience Action Plans - Cross-cutting initiatives



Te Ao Māori

Te Ao Māori represents Māori worldviews, encompassing values, knowledge systems, and relationships with the environment. In the context of the built environment, Te Ao Māori provides a holistic approach that integrates cultural, environmental, and social dimensions of risk reduction and resilience.

This Action Plan operationalises our **Te Ao Māori Strategy 2025–2028** within the built environment.

It draws on the strategy's four priorities – capability development; intelligence and insights; partnerships and engagement; and operational practice – to guide how we embed Māori perspectives in built environment resilience and risk reduction actions.

These priorities ensure, where appropriate, that our actions build organisational and sectoral capability, integrate Mātauranga Māori into guidance and tools, and strengthen partnerships with iwi and hapū.



Strategic overview of Action Plan

Goal

Our goal is to increase the resilience of homes and buildings for the safety and wellbeing of all those in New Zealand.

This contributes to our resilience goal – “More resilient buildings reduces damage and impacts” with the aim that “the vulnerability and exposure of New Zealand's built environment to natural hazards events is reduced”.⁸

Objectives

This plan has three objectives, each with their own actions, milestones and intended outcomes:

1. Enable higher levels of resilience in new design and construction.
2. Encourage the gradual, ongoing improvement of existing buildings.
3. Demonstrate hazard risk management leadership in the built environment.

These objectives are interconnected. Some actions contribute to more than one objective, and all are designed to collectively contribute to the NHC Risk Reduction Strategy 2025–2029 goal to “inform, enable, and influence evidence-based risk reduction decision-making and action.”

Scope

The scope of this Action Plan is confined to those actions that enable a resilient built environment and decision-making across all levels of government and the private sector. It addresses geological and weather-related hazards, recognising that climate change will increase the frequency and magnitude of many of these natural hazards. Climate change is therefore included within the broad terminology of ‘natural hazard’.

The actions in this plan span central, regional, and local government, the private sector, science and research, and building users and occupants.

The performance of a building cannot realistically be separated from the ground below it. This means the consideration of resilient homes and buildings goes beyond structural engineering and building to geotechnical engineering and land improvement. However, it stops short of land use or land use planning, which we reflect on in the Resilient Land Use Action Plan.

Actions related to public communication, insurance, and infrastructure resilience are out of scope for this plan but are covered by our other plans and initiatives and partner agencies.

Intended outcomes

This action plan will influence resilience decision-making in the built environment for existing buildings and future development. To ensure New Zealand homes and buildings are more resilient to natural hazards, the outcomes of this action plan are:

- **raised standard of new buildings:** our new buildings are designed and built to higher standards that avoid or minimise future hazard impacts
- **gradual improvement of existing buildings:** older buildings built to lower standards are gradually improved or replaced over time with more resilient buildings
- **the system enables better resilience:** robust underlying knowledge and information supports capable practitioners who deliver resilient and code-compliant building solutions.



Objective 1

Enable higher levels of resilience in new design and construction

Codes, standards, and practice shaping the built environment create a sustainable, resilient building stock that supports intergenerational outcomes.

Actions

Support improved functional recovery outcomes

Functional recovery is achieved when the built environment has been designed to maintain some basic level of operation after a natural hazard. We will support new design procedures to achieve this, including through projects like the Low Damage Seismic Design guidelines.

Build for resilience and climate change

A resilient building is a sustainable building and to support this, we will investigate developing 'low carbon' guidance for design professionals to highlight the carbon impacts of design decisions. We will also quantify the embodied carbon benefits of increased natural hazard resilience through life cycle assessments and explore 'nature-based' solutions to natural hazard mitigation.

Help drive best practice

We will engage closely with practitioners and regulators to enable best practice. We will support the ongoing development, improvement, and review of standards and guidance, especially for 'good practice' or 'above code' design. We will also pursue tailored risk reduction guidance for a wider range of natural hazards.

Objective 2

Encourage the gradual, ongoing improvement of existing buildings

Effective mitigation strategies are developed and implemented so that existing buildings are gradually improved over time.

Actions

Promote effective strategies to retrofit and strengthen existing buildings

We will enable retrofit and strengthening by translating targeted research into technical guidance and support for builders or homeowners, like pre-approved solutions that do not require building consents. We will also investigate strengthening standards for older buildings to understand the level of performance achievable relative to new building standards.

Investigate residential risk reduction incentives

We will scope how incentives can more directly enable reduction initiatives for homeowners. This scoping exercise will investigate a range of incentives to prompt action, including their potential costs, benefits, and how they may be administered. Guided by the outcomes of this exercise, we will work with stakeholders across the built environment, central and local government, and financial institutions to incentivise more effective risk reduction.

Support investigation and research into 'unknown unknowns'

We will continue to support researchers working to understand unknown fragilities in our built environment. We will commission targeted research to support delivery of the opportunities identified in this plan. This knowledge will then be translated into practice or policy through our research connections, public education, and professional development initiatives.

Increase resilience through build back better in recovery

We are highly invested in supporting recovery efforts that focus on building back better, given our commitment to post-event recovery and fostering resilience in the built environment across generations. We will clarify our expectations and ambitions for build back better to our partners and customers, and exercise thought leadership to produce guidance on build back better in recovery for New Zealand.

Objective 3

Demonstrate resilience leadership in the built environment

Coordinated vision and action enables a thriving system that promotes resilience and risk-informed decision-making.

Actions

Actively collate and share lessons learnt

We will continue to invest in broadening our collective understanding of building performance and behaviour. We will use our unique relationships with researchers, government agencies, insurers, and policymakers to put new lessons into practice and policy. Practitioners and researchers must normalise sharing lessons learnt as part of working together.

Support engineering science into practice

New Zealand's long-taken innovative and adaptive approach to managing natural hazard risk must be continued through the Building Code, regulation, consenting systems, and guidance. We will continue investing in and shepherding work along the research to policy and practice pipeline. We will also work closely to engage with those undertaking, but also using, the research and its outputs to understand needs and prioritise investment.

Actively contribute to national policy development

We will influence national policy to move New Zealand towards a better future. There are significant opportunities to improve how New Zealand's legislation addresses natural hazard risk. This is especially relevant as the Resource Management Act 1991 is revised and replaced, alongside ongoing updates to the system governing seismic risk in existing buildings. Natural hazard resilience co-benefits can be highlighted to support adjacent policy initiatives with a robust evidence base for risk-informed decision-making.

Support improvements in risk reduction governance

We will contribute to the development of a better regulatory system through strengthening its pipeline from research into practice and policy. We will contribute to research and engagement around expectations of the built environment, enable more regular hazard model updates, and look for non-regulatory avenues to support the system where inertia or other limitations exist. We will leverage our position between research, practice, policy, and finance to effect change and enable resilience across the system.

Delivery of actions

We will monitor progress of the Action Plan against the delivery of the following milestones.

Common abbreviations:

- BRANZ – Building Research Association of New Zealand
- BRiDGE – Building Resilience in Design Guidance and Engineering
- MBIE – Ministry for Business, Innovation, and Employment
- NZSEE – New Zealand Society for Earthquake Engineering
- SESOC – Structural Engineering Society of New Zealand

Objective 1 – Enable higher levels of resilience in new design and construction			
Year	Milestone	Outcome	Partners
Support improved functional recovery outcomes			
1	Deliver training seminars to support uptake of the Low Damage Seismic Design (LDSD) guidelines.	Designers are aware and technically competent in the use of the LDSD guidelines.	SESOC; MBIE
2-3	Monitor uptake and implementation of LDSD.	Gaps and opportunities in implementation are identified.	SESOC; MBIE; councils
3-5	Undertake cost-benefit analyses to collect evidence of the value of LDSD.	Robust evidence base quantifies the benefits of above-code design.	SESOC; researchers
3-5	Explore additional functional recovery solutions and performance objectives.	Additional pathways to higher performance levels are identified and prioritised for development.	SESOC; MBIE; researchers
Build for resilience and climate change			
1	Produce a feasibility report to develop low-carbon design guidelines.	Understand the requirements (research, financial, practice, etc) to develop low-carbon design guidance.	BRiDGE; SESOC; BRANZ
2-3	Quantify embodied carbon benefits of natural hazard resilience through life cycle assessments.	Understand the co-benefits of natural hazard resilience and carbon emission abatement.	Researchers
Ongoing	Investigate 'nature-based' or green infrastructure risk reduction solutions.	Highlight wider range of strategies to mitigate some natural hazards.	Researchers

Year	Milestone	Outcome	Partners
Help drive best practice			
1	Develop a Residential Design Roadmap.	Gaps and risks in standard practice are highlighted through a staged plan to address them.	BRiDGE; practitioners
Ongoing	Develop guidance for “above regulatory minimum” design.	Building owners, users, and designers are enabled to exceed code-minimum performance levels.	BRiDGE; NZSEE; SESOC; MBIE
2-3	Produce hazard-specific design guidance targeting natural hazards not addressed by the Building Code.	Enable multi-hazard resilience beyond the provisions of the current Building Code.	BRiDGE; researchers
2-3	Explore simple or non-technical tools to aid in design and risk communication.	Simplified risk communication supports better design decisions.	Practitioners
Ongoing	Promote regular review of building regulation, standards, and guidance.	Identify opportunities to advocate for natural hazard resilience.	MBIE
Ongoing	Engage closely with professional technical societies.	NHC Toka Tū Ake can support and guide sector capability.	Technical societies

Objective 2 – Encourage the gradual, ongoing improvements of existing buildings			
Year	Milestone	Outcome	Partners
Promote effective strategies to retrofit and strengthen existing buildings			
1	Produce simplified guidance for retrofitting and strengthening without a building consent or specific engineering design.	Information barriers to strengthening are reduced or removed.	
Ongoing	Support new research into retrofitting and strengthening solutions.	Our knowledge and understanding are tested and adapted.	Researchers
2-3	Quantify the value or return on investing in strengthening.	Evidence justifies and helps prioritise risk reduction actions.	Researchers

Year	Milestone	Outcome	Partners
Investigate residential risk reduction incentives			
1	Produce a thinkpiece on resilience incentives.	Options and examples of resilience incentives are understood.	
2-3	Investigate barriers to risk reduction in the current system.	The most significant barriers to risk reduction action are understood.	
2-3	Prioritise risk reduction interventions which maximise avoided losses.	Risk reduction investment is confident in its value for money.	
3-5	Scope and design a risk reduction incentive scheme.	A roadmap of how resilience incentives can be used in New Zealand guides potential action.	
3-5	Assess policy implications and social impacts of a scheme.	Adverse effects of resilience incentives are highlighted and mitigated.	
Support investigation and research into 'unknown unknowns'			
Ongoing	Continue directed investment into research.	Our understanding and knowledge base grows.	Researchers
Ongoing	Support reconnaissance missions to appropriate natural hazard events.	New Zealand can benefit from lessons experienced in other countries.	Practitioners; researchers; technical societies
Ongoing	Draw on international experience where relevant to the New Zealand context.	International expertise is leveraged to avoid duplication.	BRiDGE; technical societies
Increase resilience through build back better in recovery			
1	Clarify our definition and expectations of "build back better".	Recovery partners clearly understand and agree on the scope of build back better.	
1	Produce a position statement on "build back better" in recovery.	Build back better opportunities are highlighted.	
2-3	Produce guidance on build back better in recovery.	Other recovery partners are supported and enabled to build back better.	
2-3	Explore opportunities with financial institutions to enable build back better initiatives.	Creative, innovative approaches help resolve financial barriers.	Banks, lenders, insurers

Objective 3 – Demonstrate hazard risk management leadership in the built environment			
Year	Milestone	Outcome	Partners
Actively collate and share lessons learnt			
2-3	Investigate our claims information to inform design criteria.	Past damage claims help prioritise the most-damaged building elements to control.	
Ongoing	Develop design guides or quick-reference resources.	Simple solutions enable better design.	BRIDGE; technical societies
Ongoing	Investigate use or translation of international resources in the New Zealand context.	International expertise is leveraged to avoid duplication.	BRIDGE; technical societies; researchers
Support engineering science into practice			
Ongoing	Continue directed research investment.	Our understanding and knowledge base grows.	Researchers
Ongoing	Engage closely with professional technical societies.	We support and guide sector capability.	Technical societies
Ongoing	Support the BRIDGE programme.	A sustainable mechanism delivers high-priority and high-value projects for the sector and funders.	BRIDGE
Actively contribute to national policy development			
Ongoing	Help build a robust evidence base to inform policy development.	Robust evidence bases drive risk-informed decision-making.	Researchers
Ongoing	Actively submit on plans, policy, etc.	Resilience is advocated for at all levels.	
Ongoing	Advocate for more explicit consideration of existing buildings.	Clearer compliance and improvement pathways enable strengthening and retrofit.	
Ongoing	Explore opportunities to integrate natural hazard considerations into related frameworks and programmes.	Resilience is taken up as a shared goal and motivation across other agencies.	
Support improvements in risk reduction governance			
1	Produce a thinkpiece on building rating systems and how they could be used to encourage resilience.	Understand how building risk can be communicated to drive decision-making.	
2-3	Develop 'pre-certified' building designs that exceed code-minimum requirements.	Barriers to adopting higher levels of resilience in design and construction are reduced or removed.	Practitioners; MBIE
2-3	Identify decision points, decision-makers, triggers, and opportunities for resilience through design and (re)construction processes.	Specific opportunities for interventions and influence are highlighted.	
2-3	Contribute to the 2027 World Forum of Catastrophe Programmes	The role of insurance to influence resilience and reduce losses is promoted, leading to less insured losses.	Insurers

Partnerships and stakeholders

Each objective involves the expertise of, and engagement with, various partners and stakeholders. Partners actively collaborate toward shared goals, with defined roles and resource commitments, whether formally or informally. Stakeholders are any individuals, groups, or organisations interested in or impacted by a project, policy, or decision, but do not necessarily work directly with us.

Partnerships

We have formalised partnerships with several agencies and organisations, including NZSEE, MBIE, Land Information New Zealand (LINZ), and the recently established BRiDGE programme. These organisations share specific goals with us, whether it be in engineering, professional practice, or natural hazard risk data. We are committed to working with each of them to realise the goals in this Action Plan.

Stakeholders

We classify stakeholders as primary (directly involved) and secondary (kept informed).

Māori interests are considered and enabled at every opportunity	Category	Primary stakeholders	Secondary stakeholders
	Central government	MBIE; LINZ	Housing and Urban Development (HUD); Kāinga Ora; National Emergency Management Agency (NEMA); New Zealand Transport Agency (NZTA) Waka Kotahi
	Local government	Councils; building consent authorities	Local Government New Zealand (LGNZ)
	Research community	Universities; Professional Research Organisations; QuakeCoRE; Natural Hazards and Resilience Platform; Building Research Association of New Zealand (BRANZ)	Private consultants
	Practitioners	Structural engineers; earthquake engineers; geotechnical engineers; other engineering design professionals; NZSEE; SESOC; NZGS; BRiDGE; Engineering NZ	Architects; industry groups; New Zealand Institute of Architects (NZIA); builders associations
	The public	Homeowners; levy-payers	Residents

Risks to successful Action Plan implementation

Risk	Mitigation
A significant event (e.g., a natural hazard event) shifts organisational, public, and political will and attention away from the delivery of this Action Plan.	Shift priorities as required to support the wider organisation and recovery. Some actions more directly support a resilient recovery, so pivot to the opportunities that arise during the event.
Government fiscal positions reduce or remove support for programmes of work under this Action Plan.	Be strategic in investments and clearly articulate benefits (under the legislative benefit test). Maintain a respect for public funding and prioritise actions to align with government objectives.
A change of government brings in new motivations and priorities, either pausing or stopping work under this Action Plan.	Develop a robust monitoring system for these actions, including articulating and tracking the benefits associated with each action.
The reputation of NHC Toka Tū Ake (and of EQC), either among the public or other organisations, prevents widescale acceptance and implementation.	Be strategic in public engagement, and partner with other organisations wherever possible. Nurture and leverage professional networks to engage and involve other organisations.
Some of the actions or principles of this action plan are perceived as beyond our mandate.	Demonstrate the benefits and relevance of these actions through robust monitoring and tracking, including how and to what degree each meets our legislative benefit test.

Benefit test

The Natural Hazards Insurance Act 2023 requires us to assess and demonstrate the benefit of any risk reduction or resilience-focused activities, ensuring levy funds are used effectively for the Natural Hazards Insurance scheme and for insured persons. This 'benefit test' ensures that all proposed activities align with our statutory objectives and functions (sections 128 and 129), and that they have a reasonable potential to benefit insured persons or reduce the future cost of natural hazards cover. Any activity that cannot demonstrate alignment or benefit will not proceed, and all assessments are documented for monitoring and governance purposes.

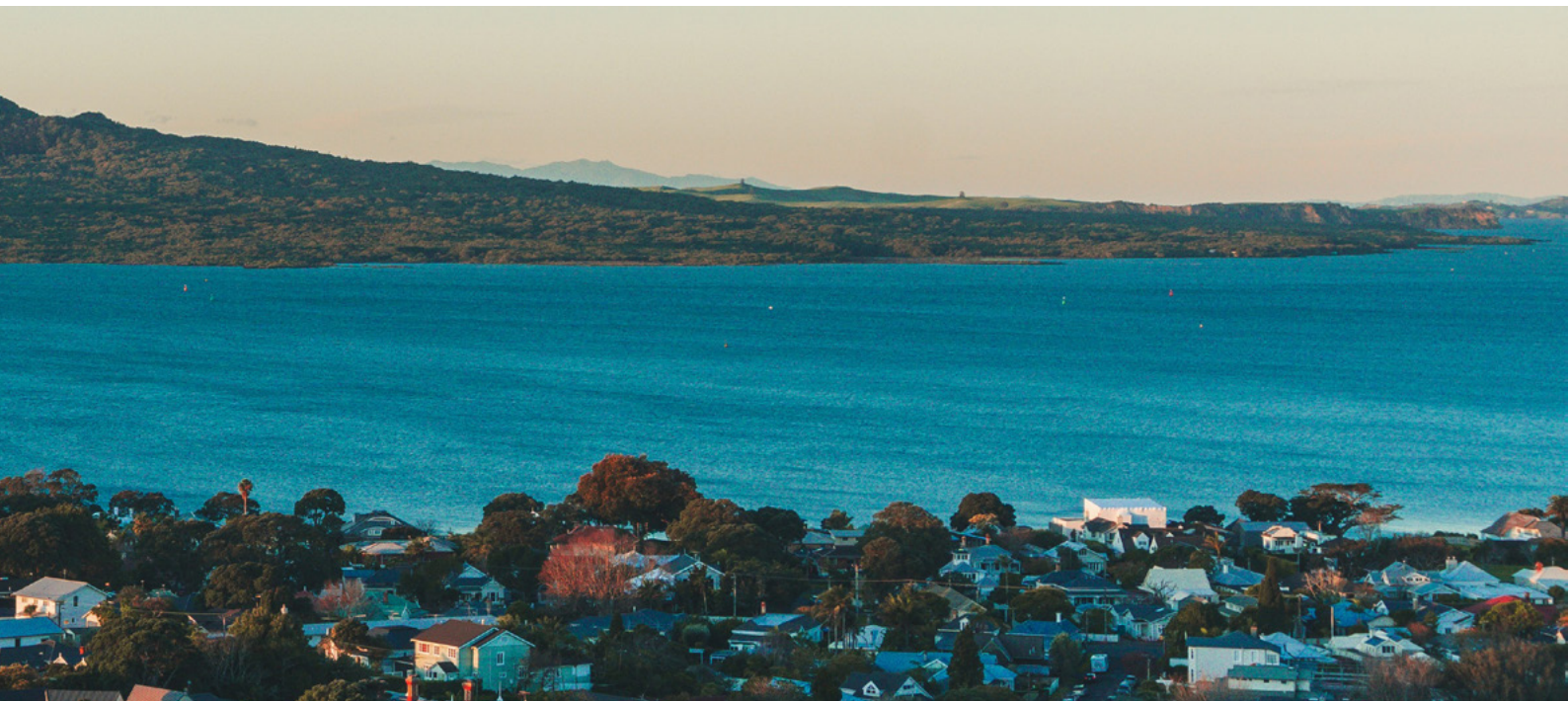
Assessment of this Action Plan confirms that it meets the Act's benefit requirements by contributing to improved natural hazard knowledge, reduced exposure and vulnerability, stronger built environment resilience, and more-informed risk management practices. Evidence from domestic and international studies shows that reducing natural hazard risk – through planning, resilient construction, engineering interventions, and adaptation – lowers long-term impacts and costs, supporting the affordability and sustainability of natural hazards insurance. These benefits, alongside alignment with section 129(e) information-sharing functions, demonstrate the Action Plan's relevance and value. The full assessment is provided in Appendix A.



Looking ahead

This Action Plan is a living document. As legislation evolves, new knowledge emerges, and communities face changing natural hazard profiles, we will adapt and refine our actions to ensure they remain relevant and effective.

Resilient homes and buildings underpin our lives and livelihoods. The choices we make now will create ripples that magnify our stability and wellbeing today and for future generations. We remain committed to a resilient built environment that allows New Zealanders to thrive in the face of natural hazards, and we hope others will join us.



Appendix A – Benefit test assessment

The Natural Hazards Insurance Act 2023 requires the Natural Hazards Commission to assess and demonstrate the benefit of any risk reduction and resilience-focussed activities we undertake. This includes whether the activity has the potential to a) provide a benefit to insured persons, or b) reduce the future cost of providing natural hazard cover.

This requirement is to ensure the funds that the Natural Hazards Commission receives through levy contributions are used in a way that achieves benefit for the scheme and for levy payers. The requirement supports the financial governance elements of the Act. This Action Plan is designed to align with the objectives of the Natural Hazards Commission as outlined in section 128 and the functions of the Natural Hazards Commission as outlined in section 129(e).

Any new risk reduction activities or expenditures we will be assessed by documenting answers to the following questions:

- Does the activity align with the Commission's objectives (section 128) and functions (section 129) of the Natural Hazards Insurance Act?
- Does the Natural Hazards Commission believe, on reasonable grounds, there is potential that insured persons will benefit from funding the activity?

- Does the Natural Hazards Commission believe, on reasonable grounds, that there is the potential to reduce the future cost of natural hazard cover?
- What is the evidence of the potential benefit or reduced cost to the Scheme?

If the activity or expenditure cannot adequately answer or address the above, it will not be completed. This assessment along with the outcomes will be recorded for monitoring purposes.

This Action Plan under the benefit test

The following assessment demonstrates the Action Plan's relevancy, adequacy, and purpose under the Natural Hazards Insurance Act 2023.

Does the activity align with the objectives (section 128) and functions (section 129) of the Natural Hazards Insurance Act?

This Action Plan has been developed to align with the objectives in section 128 and the functions in section 129 of the Natural Hazards Insurance Act 2023.

The Goal, Objectives and Actions have been specifically designed to deliver on section 129(e):

- *To contribute to the sharing of information, knowledge, and expertise (with the Crown, public and private entities, and the public generally) including in relation to:*
 - *Natural hazards and their impacts;*
 - *Damage to residential buildings, residential land, and other property as a result of natural hazards, including how that damage might be prevented or reduced;*
 - *Community resilience to natural hazards;*
 - *Natural hazard risk management; and*
 - *Planning for, and recovering from, natural hazards.*

Does the Natural Hazards Commission believe, on reasonable grounds, there is potential that insured persons will benefit from funding the activity?

Work delivered under this Action Plan will contribute to reducing the risk of natural hazards on insured persons under the scheme. Reducing risk by understanding and reducing our vulnerability and/or exposure will reduce impact and losses when a natural hazard event occurs. Exposure and vulnerability can be reduced in many ways. This has been demonstrated in this Action Plan in how we will inform, enable, and influence matters such as land use planning, built environment resilience and building

knowledge of risk mitigations, all of which contributes to the retention of insurance.

Insurance is a balance of taking on risk, knowing that the likelihood of payouts is low and/or controlled. This means insurers care about the way we manage and adapt to risk. Not increasing our exposure or vulnerability, i.e. building smartly, resiliently, and safely and reducing our risk by improving how we hard engineer (e.g. flood defences) and adapting to risk by moving communities in high-risk areas (e.g. planned relocation), will support the retention of natural hazards insurance.

We will use data, information, knowledge, and expertise to reduce natural hazard risk and thereby support insured persons. An example can be seen in how we are working to build stronger homes, promoting building above code for new builds and building back better when a natural hazard event occurs. Figure 1 below shows designing and building above minimum code is becoming cheaper. This is because our technical capabilities are becoming better and recourses easier to access and more cost effective. The Natural Hazards Mitigation Saves 2019 Report 9F⁹ investigates the cost-benefit of natural hazard mitigation, when designing and building to improved codes/exceeding building codes. The report suggests building above code can save \$4 for \$1 invested. By providing this information to hazard risk management professionals and working with subject matter experts we can actively influence and enable changes within the built environment.

Building Better is getting more affordable over time

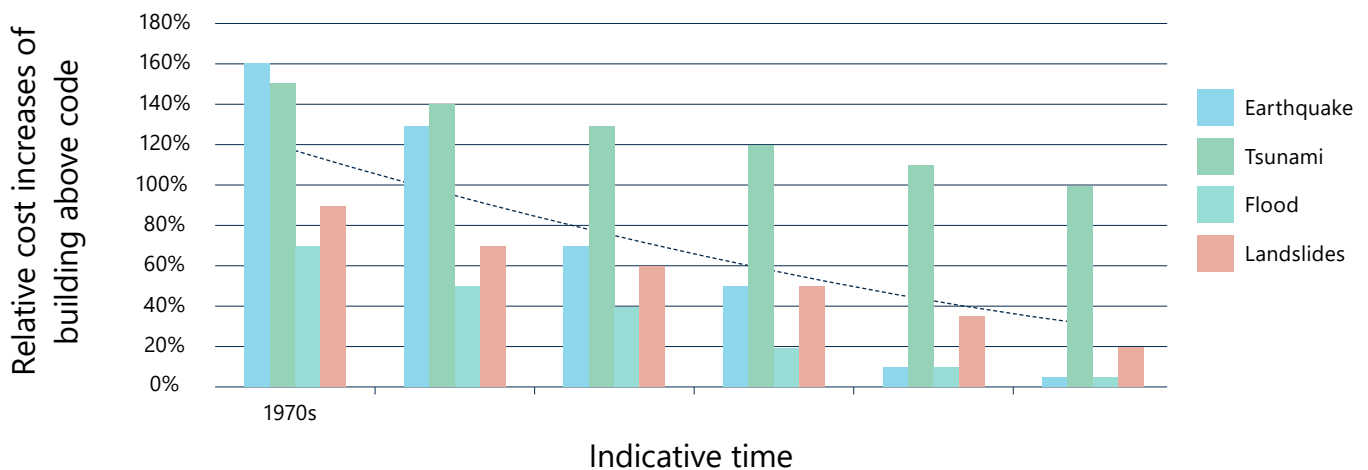


Figure 1: Affordability of building above code over time

Does the Natural Hazards Commission believe, on reasonable grounds, that there is the potential to reduce the future cost of natural hazard cover?

Reducing natural hazard risk will help us to maintain or reduce the cost of natural hazard insurance cover. This has also been summarised on Page 10 of NHC's Risk Reduction Strategy.

New Zealand's contingent liability for natural hazards damage, based on loss modelling is approximately \$1.2 Billion per year. Reducing risk will not only save lives, property, and wellbeing, it will reduce our liability and protect insurance for the future.

As described in the Risk Reduction Strategy, we can reduce risk by understanding and reducing our vulnerability and/or exposure. These concepts are the premise of the actions within this Action Plan and all other work that will be completed under it.

What is the evidence of the potential benefit or reduced cost to the Scheme?

There have been success stories domestically, and internationally, that demonstrate that early intervention to reduce natural hazard risk has resulted in decreased costs and impacts on people, property, and the economy. Evidence suggests that reducing natural hazard risk is more cost effective than response and recovery. This type of information provides the cost-benefit analysis for advocating for change and improving our approaches to investing in risk reduction and natural hazards risk management.

While reducing risk is financially and socially hard, especially through engineering and planned relocation, the benefit of investment is becoming clearer.

Using the goal of the Risk Reduction Strategy and this Action Plan, we will build existing evidence to influence and enable these impacts in New Zealand, thereby addressing this aspect of the benefit test. Useful examples include, but are not limited to:

- Natural Hazard Mitigation Saves (2019), The National Institute of Building Science - a study of mitigation measures and their associated benefit-cost ratios meant to guide and support hazard mitigation decision-making. It assesses the trade-offs of adopting model codes, exceeding code minimums, federal funding, private retrofit, and infrastructure investment against flooding, hurricane surge, wind, earthquake, and wildland-urban interface fire.
- Sendai Framework for Disaster Risk Reduction 2015-2030 (United Nations) – a global framework for how nations should prevent new and reduce existing disaster risks. It has 4 priorities: 1) Understanding disaster risk, 2) Strengthening disaster risk governance to manage disaster risk, 3) Investing in disaster risk reduction for resilience, 4) Enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery.
- Unlocking the Triple Dividend of Resilience: Why investing in disaster risk management pays off (Global Facility for Disaster Reduction and Recovery, 2015) – provides evidence for how investing in resilience can yield a 'triple dividend' by 1) avoiding losses when disasters strike, 2) unlocking development potential by stimulating innovation and economic activity, 3) through the social, environment and economic co-benefits of disaster risk management investments even if a disaster does not happen for many years.
- Being prepared for the Next Disaster Pays Off. A new economic study finds every \$1 spent on climate resilience and preparedness saves communities \$13 in damages, cleanup costs, and economic impact.¹⁰

10 U.S. Chamber of Commerce 2024 The Preparedness Payoff: The Economic Benefits of Investing in Climate Resilience



**Natural Hazards
Commission**
Toka Tū Ake