



Building Research Levy Investment Portfolio Statement

2022-2023



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Introduction

This Levy Investment Portfolio Statement (LIPs) provides guidance on how the Building Research Levy which will be allocated in 2022/2023.

These investment signals provide guidance both for BRANZ Ltd and external researchers seeking funding from the Building Research Levy.

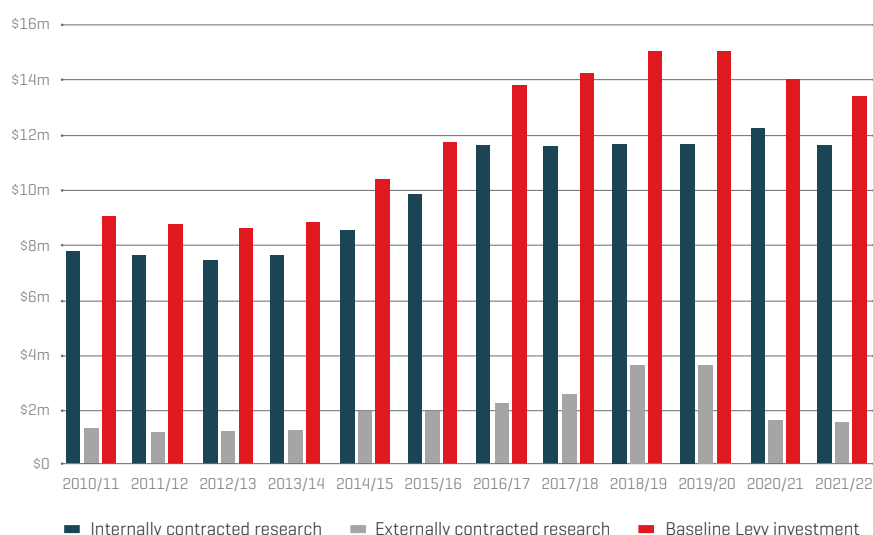
Wise **Levy Stewardship** underpins our portfolio

Income from the Building Research Levy and commercial services make up BRANZ's annual income.

Total income for 2021/22 was \$38 million:

- \$29.8 million from the Building Research Levy to fund industry research and knowledge transfer
- \$7.7 million from commercial services
- \$0.5 million of other income.

With the steady increase in Levy receipts since 2010/11 we have been able to lift investment in research from \$8 million 11 years ago to \$14 million in 2021/22.



This investment statement should be read in conjunction with:

- **Levy in Action.** These documents provide information about BRANZ's current research activities.
- **2022 Prospectus.** BRANZ also issues a Prospectus document for proposals led by researchers external to BRANZ. This document contains research questions reflecting the priorities contained in this investment statement. It is focused on seeking proposals from external providers.

These documents can be found on the BRANZ website. www.branz.co.nz

How we invest

BRANZ is the steward of the Building Research Levy and invests it through a range of mechanisms which include:

- Work initiated and contracted with BRANZ Ltd (this can include sub-contracts with external providers);
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- Scholarships to support the next generation of researchers and help support tertiary capability elsewhere in New Zealand;
- Strategic initiatives that invest in significant activities above and beyond BRANZ’s baseline of research investment; and
- Agile investments that are able to respond to urgent industry issues or take advantage of opportunities that may emerge outside of programmed investment rounds.

BRANZ invests the Building Research Levy through two key approaches:

- Into BRANZ Ltd, the wholly owned subsidiary of BRANZ Inc, through an ongoing re-investment process. Proposals for new research are led by BRANZ programme and project

leaders, in conjunction with external researchers and industry input to guide and shape the research. Proposed research is reviewed annually by the Levy Allocation Advisory Group (LAAG), who are representatives from industry with a mix of regulatory, industry and research expertise and experience. The LAAG provides advice to the BRANZ Inc. Board on the appropriate mix of projects/programmes that respond to the investment signals for approval.

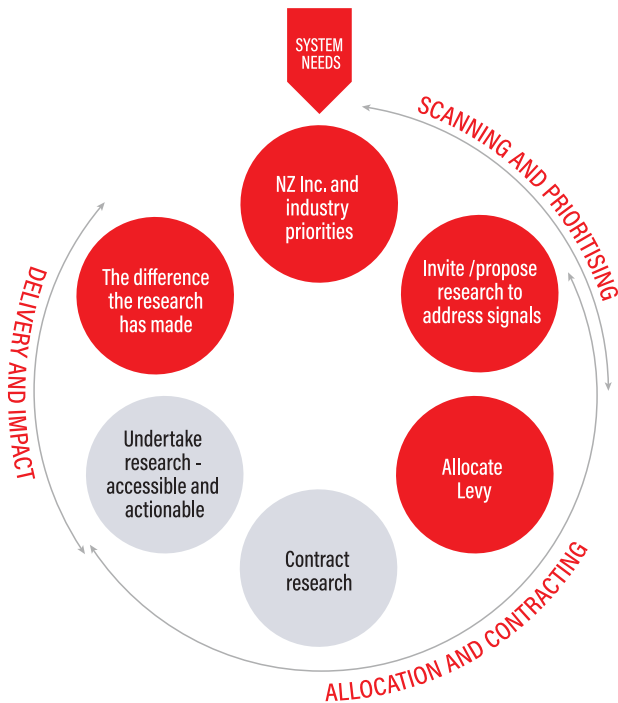
- Our annual Prospectus/Scholarship rounds seek projects from external researchers, to add capability and capacity to BRANZ expertise and uncover new ideas and approaches. We also fund student scholarships to improve the capability of the sector. Masters and PhD level projects are sought through our annual Scholarships round.

Further details on how we invest can be found at www.branz.co.nz/investing-research.

BRANZ recognises opportunities may be driven by urgent or timely insights or events, we use agile investment to act quickly to undertake new research throughout the year. Both BRANZ Ltd and external researchers are invited to use this mechanism.

Our annual cycle of investment and timeline is set out in the graphic below.

Annual cycle of investment



General timeline

	BRANZ Ltd	Scholarships	Prospectus
Jan - April	Industry needs identified		
April	LIPS released		Prospectus released
May			Expressions of interest due
June	Proposals developed		Assessment
July			Full proposals
August	LAAG panel		Decisions
September		Round open	
October	BRANZ Inc. Board decisions		
November		Round closes	
December			
January			
February		Decisions	

Indicative **Building Research Levy** funding

The level of investment available for research and knowledge dissemination activities is set by the BRANZ Inc Board in keeping with its long-term Levy utilisation policy.

The following information is provided to help inform the level of funding sought by proposals responding to this statement.

BRANZ Ltd.

Indicative Funding for 2023/24



Committed **\$7.5m**
Available **\$6.0m**

External providers

Indicative Funding for 2022/23



Committed **\$1.0m**
Available **\$2.4m**

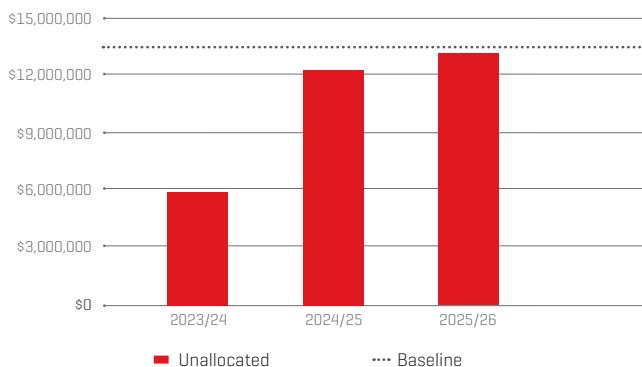
Future years

Under our current approach to research investment, most investments made by BRANZ Inc are multi-year. As an investment approach we wish to ensure that sufficient investment remains unallocated in future years. This is so that we can have confidence that there is sufficient headroom for new ideas and new knowledge to meet developing or unknown industry needs through agile investment.

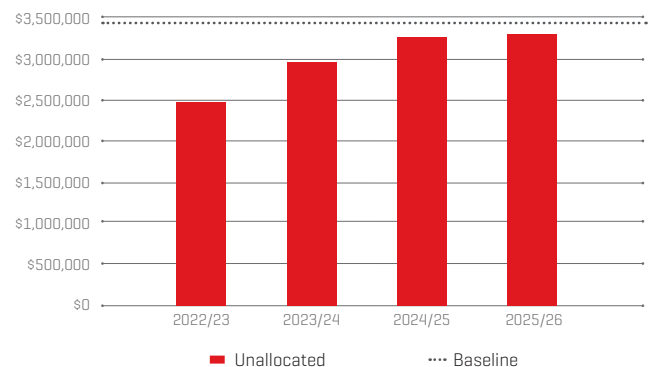
Forward unallocated investments

based on baselines and subject to change

BRANZ Ltd. - unallocated



External providers - unallocated



We do not wish to set levels or parameters for unallocated investment for future years. Rather, we wish to share this information to support providers in their own planning. BRANZ Inc will actively manage unallocated baseline funding, noting this investment is spread across multiple providers.








BRANZ's portfolio

This Levy Investment Portfolio Statement is focused on securing contributions to advance research across BRANZ's portfolio areas.

What we do in the building and construction sector impacts New Zealand's economy, environment and peoples' wellbeing. BRANZ, along with other research organisations, carry out research to better understand the nature of particular issues and how they interact. The BRANZ vision is to challenge Aotearoa NZ to create a building system that delivers better outcomes for all.

The graphic below sets out key areas in which BRANZ undertakes research. Areas of focus are highlighted in red.



Portfolio theme	Current investment
 Low carbon - Reduced emissions of greenhouse gases from the built environment and construction sector over the whole of a building's life cycle. BRANZ is supporting this through its Transition to Zero Carbon Programme of Work.	\$8 m
 Thriving cities, regions and communities - Improved people-focused urban environments that respond to the needs of communities at the neighborhood, town, city, or regional level. BRANZ is supporting this area through its research into medium-density housing.	\$0.3 m
 Resilience of built environment - Reduced risks to buildings from natural hazards to improve life safety and post-event economic and social recovery. BRANZ plays a role through supporting research improve seismic performance and through its Building Fire Safe Densified Housing programme.	\$9 m
 Quality and performance of homes and buildings - Improved performance of buildings to meet or exceed customer and / or Building Code requirements. BRANZ's "Warmer, Drier, Healthier Homes" programme supports efforts to provide New Zealanders with warm dry healthy homes. Additionally, evidence from BRANZ research informs regulation and standards relating to building performance.	\$20 m
 Vibrant industry - A high performing building and construction sector. BRANZ supports the industry through a wide range of research e.g, mental health, and the provision of information and education.	\$11 m
 Meeting NZ's population needs - Future requirements for the number, types of buildings and occupants' experience of buildings that supports and enhances community wellbeing. BRANZ is supporting research including scoping a building stock model.	\$0.3 m
 Housing affordability - Informs debate about cost of buying, building, or renting buildings; or leads to reduced cost of building and/ or operating buildings while maintaining or improving building quality. BRANZ supports research into this area including the Building Better Homes Towns and Cities research stream in "Affordable Housing for Generations".	\$0.7 m

Our portfolio overview

The graphic below provides a sample of planned outcomes from BRANZ research and its relationship to the BRANZ portfolio.

All proposals seeking funding are expected to explain how research proposed may ultimately lead to impact and a proposed pathway to help achieve that.

Note that the model is not setting out a linear path from researchers carrying out research and handing it over to others to implement. BRANZ will be placing more emphasis on co-design from ideating to delivery to help bring about behaviour change. Applicants are asked to factor into proposals the effort to effectively involve stakeholders, commensurate with the nature of the research to be undertaken.

COMPONENTS SHAPED BY LEVY INVESTMENT PORTFOLIO STATEMENT (LIPS)

[Indicative examples]	2019/20	2020/21	2021/22	2022+
ELIMINATING QUALITY ISSUES 	Priority problems tackled through new focus and tools	New types of knowledge transfer focus on behaviour change	Research provides evidence that quality problems are being addressed	Quality issues are being addressed as solutions take hold
WARMER, DRIER, HEALTHIER BUILDINGS 	Key insights support shift in quality of existing rental housing stock	Solutions to lift the quality of indoor environments in high density living are being developed	Solutions around improved indoor living conditions are rolled out	Evidence from this programme has led to policy changes lifting the quality of both new and existing housing stock
TRANSITION TO ZERO-CARBON BUILT ENVIRONMENT 	Programme of action launched	Existing solutions being shared and new solutions being fast-tracked	Tools to support low carbon building are becoming mainstreamed	Low carbon construction has become mainstreamed as a core element of New Zealand's building system
FIRE-SAFE DENSIFIED HOUSING 	Key partners brought together to identify action around high density living	First projects from new programme begin	New solutions developed	Shift in construction practices around fire safety begins on back of new insights driven by the programme
INVESTMENT ON EMERGING ISSUES 	BRANZ is able to act quickly and decisively on urgent issues as they emerge, for example urgent work to address retrofit gap around pre-cast concrete flooring systems			
DISTINCT, STANDALONE PROJECTS 	Projects initiated by both researchers and end users, for example over framing of timber buildings			
SCHOLARSHIPS 	Helping ensure that New Zealand has strong research capability in core STEM and building science areas			
INDUSTRY TRANSFORMATION 	Industry Transformation Agenda development and evolution in alignment with Construction Sector Accord	Projects developed that tackle root cause challenges faced by building systems	Project solutions trialed, refined and rolled out	Shift in industry performance can be measured against baseline

Core activities that make our research and knowledge accessible and actionable

Publications	Services	Long term studies	Tools
<ul style="list-style-type: none"> Build Guideline Bulletins Factsheets Research Nows Study Reports 	<ul style="list-style-type: none"> Seminars Live webinars E-Learning modules Helpline Information management Advisory services 	<ul style="list-style-type: none"> Durability verification database Weathering site Levy forecast House condition survey 	<ul style="list-style-type: none"> MyBRANZ knowledge B-RISK User Support Artisan BRANZ Co₂nstruct ALF LCAQuick

For more information on core activities, see www.branz.co.nz

Details on all BRANZ projects are published annually in our [Levy in Action](#).

Investment Signals

This section sets out Levy Investment Signals that have been prioritised by BRANZ Inc.

The signals highlight areas that are considered important to addressing key contributions of the building industry to the future prosperity and well-being of New Zealand and New Zealanders.

Investments will be sought from:

- BRANZ Ltd to predominately begin in the 2023/24 financial year
- External agencies, researchers and students through the annual Prospectus and Scholarship round – to begin in the current or next financial year.

Note that BRANZ is open to receiving proposals at any time that respond to urgent or timely industry needs.

There are two types of signals provided.

- **General signals** which reflect high-level expectations for how proposals are developed, managed and lead to impact.
- **Specific signals** that set out the areas where BRANZ is inviting proposals in this investment cycle.

BRANZ is embarking on a journey to understand how to bring Te Ao Māori into our research, our ways of working and the way we invest the Building Research Levy. We anticipate that in coming years, these concepts will be increasingly visible in our investment signals. In the interim, we welcome the inclusion of these concepts in proposals.

Systems Approach

BRANZ is taking a systems approach, recognising that many issues faced by the industry are complex. Changing the system may require different behaviour across a range of individuals, groups, or organisations. We are asking researchers to look at their research and whether it:

- Identifies systemic issues.
- Helps understand complex issues facing the industry.
- Brings about system-wide improvement.
- Informs solutions designed to bring about behavioural change.

Note that research can still address a clearly defined industry issue with a discrete solution e.g., a technical solution that that can be readily implemented.

Proposals should clearly describe if a discrete need or system wide issue is being addressed. Proposals should clearly describe:

- the wider issue,
- how the research proposed helps understand / resolve the issue,
- who the key players are in the system to be engaged in the research and why, and
- the anticipated impact or behavioural change from the research.

BRANZ is embarking on a journey to understand how to bring Te Ao Māori into our research, our ways of working and the way we invest the Building Research Levy. We anticipate that in coming years, these concepts will be increasingly visible in our investment signals. In the interim, we welcome the inclusion of these concepts in proposals.

There are two types of signals provided.

- **Behaviour change and research excellence** which reflects high-level expectations for how proposals are developed and managed resulting in clearly identified pathways to influence behaviour change.
- **Areas of focus** that set out where BRANZ is inviting proposals in the 2022/23 investment cycle.

Behaviour change

Proposals should:

- Demonstrate how stakeholder's have been involved, or will be involved, from research design to uptake to:
 - Explain why the research is needed.
 - Help ensure uptake of research and/or solutions.
 - Describe expected pathways to deliver impact, including (if the research is successful) what a solution may look like and how this might be assessed in future.

To support the above proposals should provide evidence of:

- Who has been involved in identifying the need for the research?
- Who will be involved over the duration of the project?
- Key stakeholders that need to be committed to driving behaviour change.
- How stakeholders above are supporting this research, what time and/or other resources (funding, access to equipment etc) are they providing or intending to provide?

Research excellence

Proposals should have a commitment to excellence in research, including:




- Methodology appropriate to addressing research questions and behaviour change.
- Strong multi-disciplinary teams that demonstrate appropriate inter-organizational collaboration (note this may not be required for all research).
- Leveraging and co-ordinating with other research, or related activities, and knowledge developed in New Zealand and overseas.

Area of **focus**

There is a focus in the coming year on investing in complimenting ongoing research, better understanding complex issues and testing interventions that can bring about behaviour change.

1. BRANZ is committed to supporting its flagship programmes as they continue to address areas of need for New Zealanders.

These are:

	Warmer, Drier, Healthier Homes
	Transition to a Zero Carbon Built Environment
	Building Fire-safe Densified Housing in New Zealand

Programme leaders, when reviewing progress against programme objectives, are encouraged to:

- Focus on activities that accelerate the uptake and usage of the entire programme's outputs (existing and new), support relevant players to leverage outputs and bring about enduring behaviour change.
- Engage stakeholders and support by working in partnership with others (e.g., access to resources or funding) that enhances the capacity and capability to achieve programme goals and objectives.
- For the Transitions to a Zero Carbon Built Environment – begin to scope implications of tighter requirements for environmental protection as proposed in the Natural and Built Environments legislation.

2. The current situation (including matching demand and supply of buildings, skills, and material shortages) has continued to shine the spotlight on the sectors' resilience and ability to plan for the longer term. BRANZ wishes to signal its ongoing support for:

- Research that improves the resilience and vibrancy of the sector, and firms in it. How do we strengthen the resilience of the building and construction system? Are there "weak spots" in the system (in and across financial, economic, social, technological, environmental, legal components) that if identified can help prepare the industry for the future?
- Research that addresses any system transformation activity highlighted by or aligned to the Construction Sector Accord. This investment will be additional to the baseline investment that BRANZ Inc. makes available for research and knowledge transfer activities carried out by BRANZ Ltd and external providers.

3. Researchers have strong relationships with stakeholders that surfaces industry needs. They also have subject matter expertise and domestic and international networks that can provide important insights. We recognize this as a valuable source of potential proposals.

However, new proposals will only be considered where there is:

- Alignment to existing research priorities or as set out in the BRANZ Prospectus; or
- Demonstrated industry need and buy-in to bringing about change. This includes scoping to develop evidence around emerging issues or supports the resolution of known issues; or
- Trials or tests of interventions to bring about change in the building system.

NB: This signal applies to proposals submitted into the LAAG or agile investment mechanisms.

4. BRANZ is committed to turning research findings into actionable knowledge that responds to defined industry needs. BRANZ uses multiple channels to ensure that this knowledge is widely accessible. Examples include BUILD magazine and seminars.

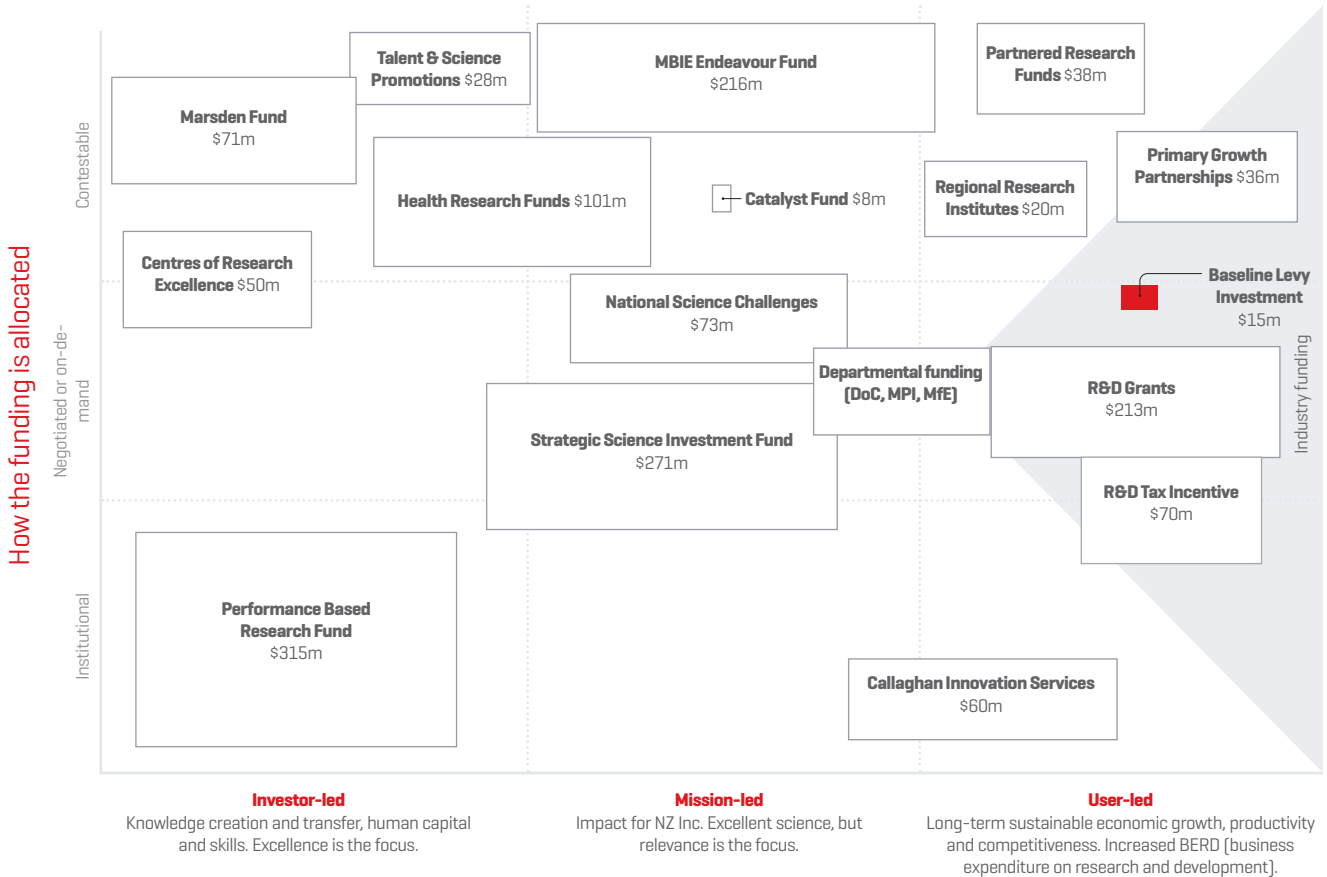
- Existing knowledge transfer activities should:
 - Have, or be developing, a strong focus on behaviour change.
 - Continue to demonstrate ongoing value for continued support. This includes evidence around ongoing or changing needs, use or demand. This should include self-assessment against agreed targets and external feedback to demonstrate need.
 - Consider (and where appropriate, demonstrate) how BRANZ's commitment to moving to "digital-first" is being progressed.
- New activities will be considered where it demonstrates stakeholders have been actively involved in co-development and are committed to delivering them to bring about behaviour change.

5. BRANZ invests in long-term enabling activities such as longitudinal studies (e.g. House Condition Survey), weathering sites (to support its durability related research) and large-scale facilities (e.g. for fire research).

- Existing activities should continue to demonstrate value for continued support. This includes evidence around ongoing or changing needs, use or demand. This should include self-assessment against agreed targets, and external feedback to demonstrate need.
- New activities will be considered where it is demonstrated that they are required to provide evidence to support existing research or ongoing issues.

Research Funding Landscape

The Building Research Levy is the largest dedicated research fund in New Zealand focussed on the built environment. This diagram indicates how the Business Research Levy is situated in relation to government-funded science and innovation investments, by allocation method and type of investment.



Adapted from MBIE, National Statement of Science Intent, 2018

Other significant key built environment science investments

- He Kainga Oranga: Research to maximise the health and wellbeing gains from housing [\$4.9m, University of Otago, HRC] 🧑🏠
- Quake Centre of Research Excellence (QuakeCORE) [\$4.1m, University of Canterbury, TEC] 🏠
- Building Innovation Partnership: Infrastructure Engineered for improved resilience, quality and affordability [\$12.5m, QuakeCentre, MBIE, industry] 🏠
- Accelerating the advent of physics-based ground motion simulation for seismic hazard analysis [\$1m, University of Canterbury, Marsden Fund] 🏠
- Ending homelessness in NZ: Housing First [\$2.91m, University of Otago, MBIE] 🧑🏠
- A wave and finite element method for calculating sound transmission in lightweight buildings [\$1m, University of Auckland, MBIE]
- Building Better Homes, Towns and Cities: National Science Challenge [\$47.9m to 2024, BRANZ, MBIE] 🏠
- Resilience to Nature's Challenges: National Science Challenge [contains some built environment research, GNS, MBIE] 🌊
- Ageing Well: National Science Challenge [contains some built environment research, University of Otago, MBIE] 🧑🏠
- Deep South: National Science Challenge [contains some built environment research, NIWA, MBIE] 🌍
- Public housing and urban regeneration: maximising wellbeing [\$12.3m, UoO, MBIE] 🏠
- Enhancing the impact of major urban regeneration on community wellbeing [\$8m, AUT, MBIE] 🏠
- Reducing flood inundation hazard and risk across Aotearoa-New Zealand [\$15.5m, NIWA, MBIE] 🌊
- Creating Capacity and Capability for the New Zealand Construction Sector [\$9m, Massey, MBIE] 🏠
- Amiomio Aotearoa – A circular economy for the wellbeing of New Zealand [\$11m, UoW, MBIE] 🌍
- Geonet and other earthquake related research [\$20m, EQC] 🏠

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