

REDUCING RISK BUILDING RESILIENCE

EQC'S RESEARCH PROGRAMME

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EQC'S RESILIENCE GOAL



Stronger homes, built on better land, served by resilient infrastructure, supported by affordable risk capital.





PRIORITIES OVER THE NEXT THREE YEARS

1



ENHANCING LOSS MODELLING/ IMPACT ESTIMATION PRODUCTS

Initial steps:

- Understanding and developing resilience outputs
- > Understanding the 'wishlist'

2



A RENEWED FOCUS ON THE STRATEGIC VALUE OF DATA AND INFORMATION

Initial steps:

- > Data domain plan
- > Geotechnical data in high risk areas

3



COORDINATED AND TARGETED SCIENCE INVESTMENT

Initial steps:

- > Research programme 'reset' (1 Nov 2019 launch)
- > Research Investment Priorities Statement

4

5



ACCELERATING THE SYNTHESIS AND TRANSLATION OF RESEARCH OUTPUTS



DEVELOPING RECIPROCAL PARTNERSHIPS

Initial steps:

- > Science-to-policy forums
- > Capability
 analysis ->
 guidance, training

Initial steps:

- > Central government policy
- > Local government data and research





19/20 COMMITMENTS

- GeoNet \$13m
- University Capability Programme \$1.125m
- Biennial Grants \$500k
- Post-Doc Grants \$500k
- Regional programmes \$500k
- Science-to-Practice Grants \$350k
- Local/Central govt initiatives \$350k
- QuakeCentre Industry Fellowship \$250k
- Fulbright Scholarship \$100k

- NZ Geotechnical Database
- NZSEE MOU (incl World Conference bid)
- National Lifelines Council
- (Sponsorships)
- (Public education)
- (RiskScape 2.0)
- (Geospatial)





UNIVERSITY CAPABILITY PROGRAMME RESET

- All current university contracts expire at the end of June 2020

 opportunity to reset
- Desire to cover more ground subject matter and geographic extent, while also being more targeted to needs
- 1 November 2019 launch for July 2020 funding round
- Invitation to submit proposals (due 10 Feb 2020)
- 3 year agreements
- Open to all universities
- Investigator briefings first week November





WE ARE LOOKING FOR:

- Alignment with:
 - EQC Resilience Strategy
 - EQC Research Investment Priorities Statement
 - Request for Proposals
- A programme/partnership approach
- Builds researcher capability
- A clear view of pathways to implementation
- Opportunities for 'translation', education, and outreach
- A willingness to work closer with EQC, including possible contribution to: media, social media, research evaluation, return on investment, and future priority setting





RESEARCH INVESTMENT PRIORITIES

Understanding our natural hazard risk profile

Understanding and improving building and infrastructure performance

Understanding, improving, and managing land performance and use

Understanding
the governance
and economics
of disasters and
disaster risk
management

Understanding how people understand and manage risk

- > Improved hazard models, which lead to improved risk and loss modelling
- > Innovative technology capabilities for natural hazards and risk mitigation.
- Mātauranga Māori approaches to the assessment of risk, and hazard risk management

- Cost-effective risk reduction for residential buildings
- > Costs and benefits of resilient buildings and infrastructure
- Supporting the effectiveness of low damage design
- Improving the endto-end building design process
- > Improved vulnerability models
- > Concrete issues!

- > Effectiveness of development control mechanisms
- > Dynamic adaptive planning to address risk now, and in the future
- > Barriers and constraints for local and central government in controlling land use
- Supporting the integration and effectiveness of iwi management plans

- > Consequences and cascading effects of risk-based pricing
- > Future insurance markets
- > Economic cost of social impact
- > Multi-capital decision making tools
- > How policy affects the national risk profile
- > Measuring and assessing resilience

- > What leads people to avoid, control, or accept risk?
- > Improving sociocultural inputs to risk modelling
- > Drivers of and solutions to underinsurance
- > Māori and Pasifika participation in disaster risk reduction
- Factors determining EQC's operational effectiveness



THANK YOU

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