



ADVISORY GROUP – STRAND MARSDEN FUND PROJECT

TERMS OF REFERENCE

MARCH 2022

PREAMBLE

The STRAND Marsden Fund Project (“the STRAND project” or “the Project”) is an interdisciplinary Royal Society of New Zealand Marsden Fund project running between 2021 and 2024. The project is managed by Co-Principal Investigators (Co-PI) Ivan Diaz-Rainey and Tony Moore.

The Objectives of the STRAND Project are:

To explore climate-change related flood hazard [CCRFH] risks to residential property values across space and time, and the related implications for financial stability in New Zealand (NZ). This project is ‘blue skies’ research seeking to develop methods that might lead to translational research with end-users

The Mission of the STRAND Project is:

Our research will explore when, and to what extent, increasing flood frequencies and severity will impact property values in NZ’s coastal cities given that markets are forward looking and have imperfect information. The project will also examine potential flow-on effects of these losses (risks) on the stability of the NZ banking system. We will add value to, and complement existing traditional climate impact assessments, by incorporating more nuanced understanding of CCRFH impacts on property prices and financial stability. New integrated approaches will be adopted by the interdisciplinary team of experts in climate change, geographical information systems, geology, real-estate and banking to address these issues. Our research framework learns from Māori traditions of considering multiple generations in decision-making and Māori investment principles where environment and people are integral to a systemic view of investment decisions.

To achieve its Mission, the Project will:

- Develop and formalise a theoretical framework for the project, from physical modelling to valuation impacts.
- Model current physical state using coastal features, geohydrology and terrain data
- Model future physical state (coastal hazards) using projections of sea level rise and precipitation using regional climate model projections to generate projections of flooding
- Conduct decision support modelling to generate coastal asset risk index [CARI]
- Analyse future impact on financial stability using bottom-up stress-testing across climate change scenarios, account for informational efficiency and market foresight, imperfect information, behavioural biases, learning and fire sales

These Terms of Reference outline the general purpose, scope, composition and operational principles for the Advisory Group (“the AG”), which will be appointed by the team members of the Project.

PURPOSE

The AG is an advisory body (not a governance body), the purpose of which is to be a channel to build relationships between the STRAND project, other researchers and stakeholders. It is a mechanism to help ensure key stakeholders and related researchers are informing and informed by the STRAND project’s research.

SCOPE

We seek AG members to provide

- **Relationships:** ideas about opportunities for collaboration and partners in the STRAND project
- **Technical Input:** technical input and suggestions on the implementation of the STRAND objective including a dialogue about up-to-date climate projections and related research
- **Dissemination:** stakeholder perspective on research dissemination including developing, testing and validating communication/engagement approaches and materials for different sectors and, where appropriate, the public
- **Knowledge Transfer:** stakeholder perspectives on research outputs and knowledge transfer opportunities and future projects (keeping in mind it is a ‘blue skies’ project)

COMPOSITION

The AG consists of members from project partners (notably RBNZ and CoreLogic) and stakeholders related to the STRAND objectives from science, education, banks, local government, regulators and related businesses, including Māori perspectives.

OPERATIONAL PRINCIPLES

The AG and the Project team will operate in accordance with the following principles:

- The Project will use best endeavours to accommodate recommendations from the AG in its research and engagement planning, where such recommendations help the Project deliver its Objectives and Mission;
- AG members will use their best endeavours to assist the Project, and will declare any actual or potential conflicts of interest to ensure the integrity of the AG’s advisory processes;
- The Project and the AG members may on occasion share commercially sensitive information during meetings. Any information provided by the Project or AG members is to be considered confidential unless otherwise indicated, and permission must be sought from the owner of any confidential information if it is to be copied or discussed outside of the Project.

ADMINISTRATIVE PROCESSES

The Project will provide administrative support for the AG via access to meeting agendas and minutes. AG members will in general be guided by the following proposed processes:

- members will be invited to participate on the AG for the term of the project (ending in 2024).
- one of the Co-PI’s will Chair the AG
- the AG will meet approximately two to three times a year via Zoom/Teams and will last between one and one and a half hours (in April and October)
- AG members will not be remunerated