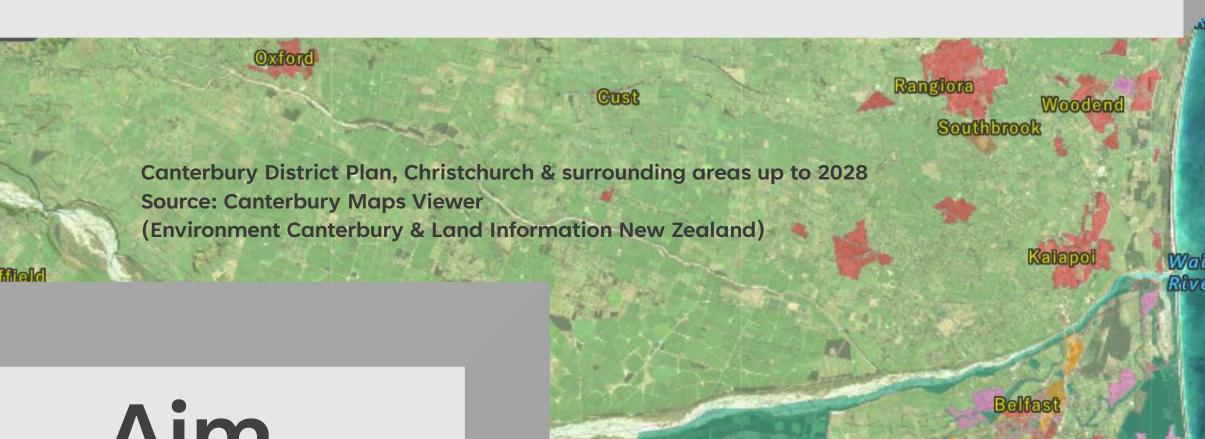
# Building Future Urban Development Scenarios into Assessments of Future Flood Risk

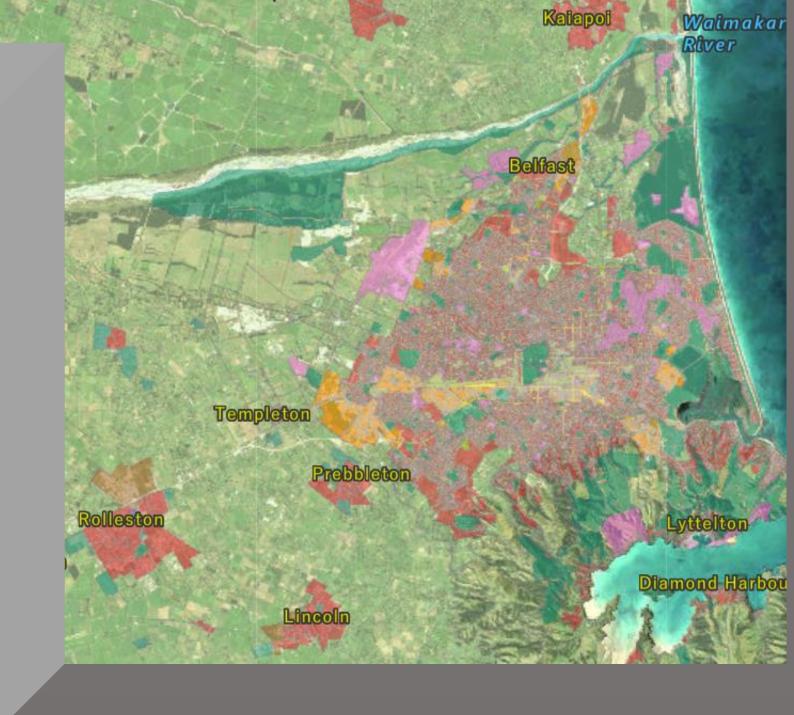
## Research Problem

The devastating impact of flood events demonstrates the need for more comprehensive assessments of future flood risk in urban policy. Risk assessments based on future flood projections paired with current urban plans are missing a key characteristic of the hazard – what will urban areas in Aotearoa-NZ look like in 2050 or 2100?



#### Aim

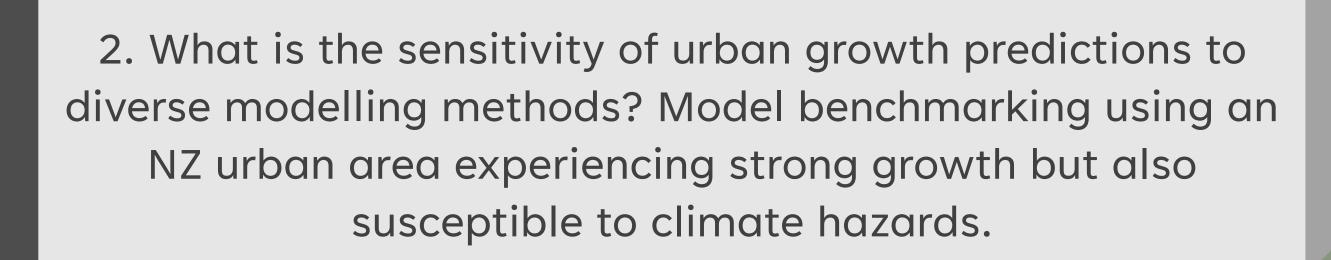
To determine how urban growth models can be utilised to generate alternative long-term scenarios of future urban form for integrating into assessments of future flood risk.



### Research Methods

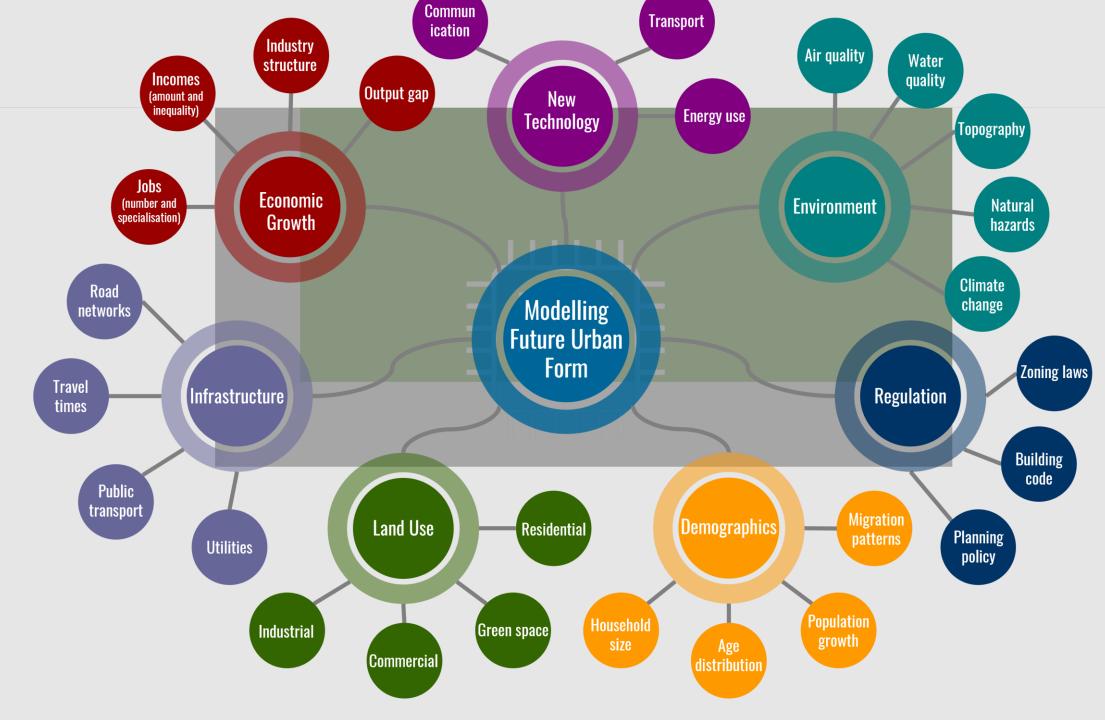
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1. How do methods for modelling urban growth vary across NZ? Interviews with NZ councils. What are the key issues identified by urban planners and policy makers? What would a useful tool for them look like?

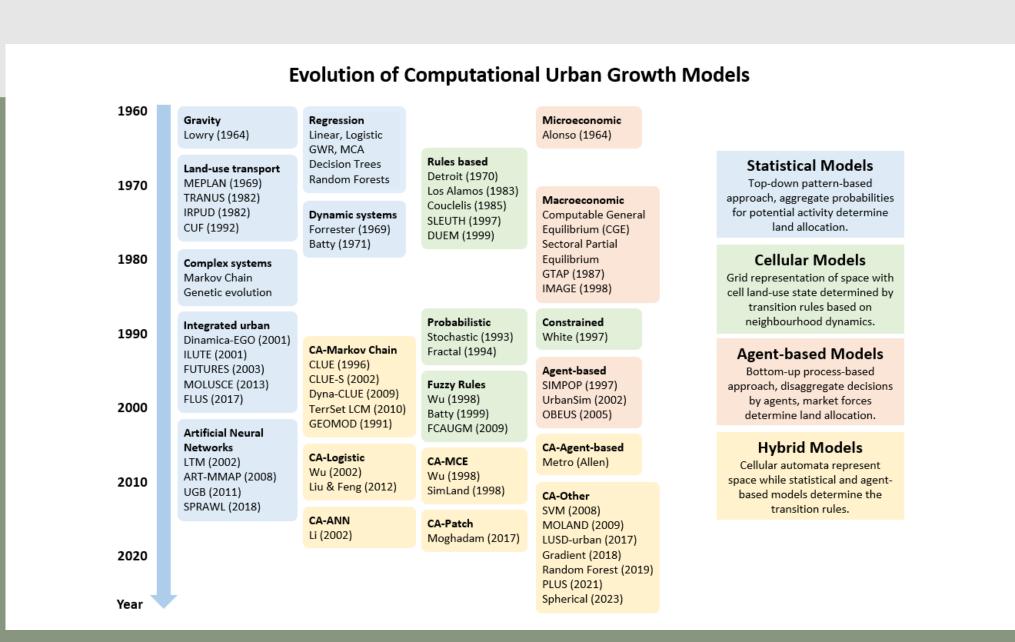


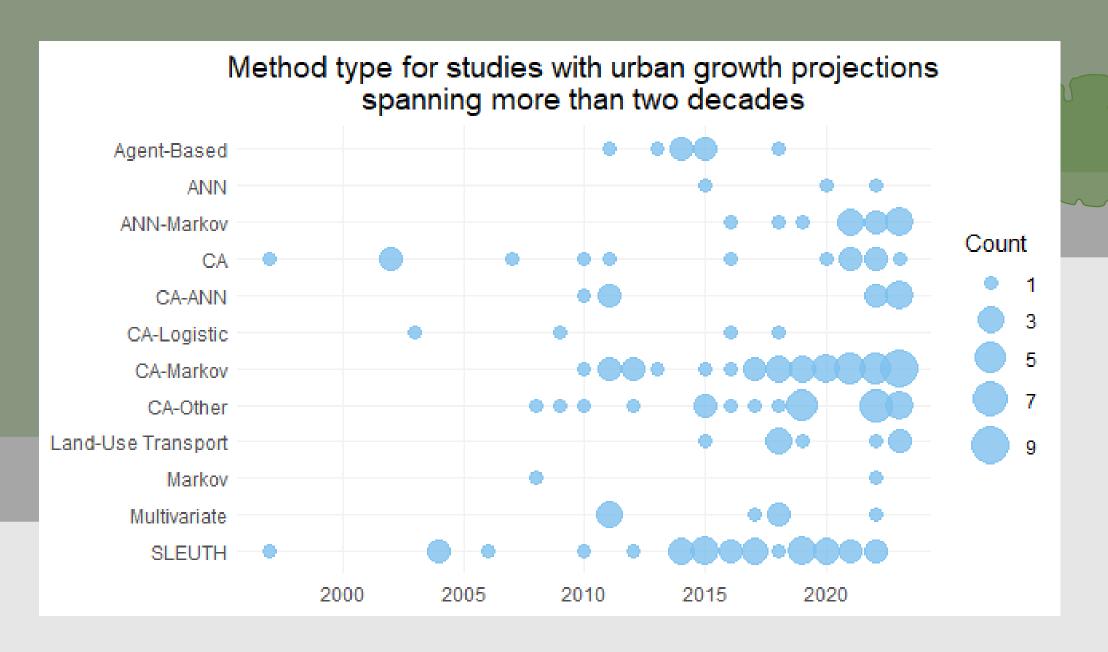
3. How can a range of urban futures be generated and integrated with flood risk models? Simulating a range of scenarios for future urban development and testing urban growth model compatibility with RiskScape software.

Drivers of Urban Growth



# How is Future Urban Form Modelled?





What are the advantages and limitations of each method for long-term prediction and scenario generation?

#### Goal

A range of possible urban futures that can be coupled with flood projections to provide a more comprehensive picture of the uncertainties of future flood risk.

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