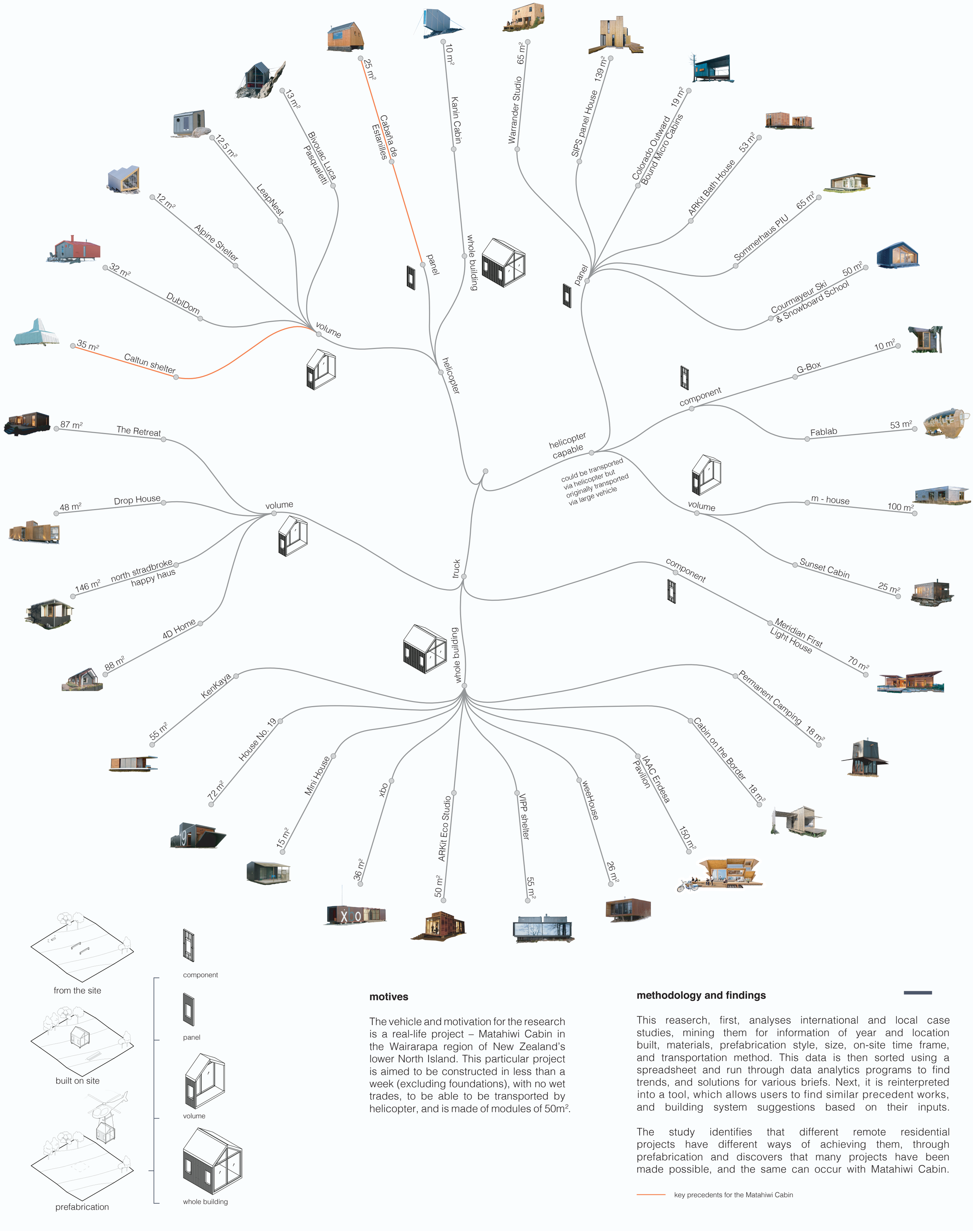
# remote residential

**summer research project 222**
**research assistant: Chiara Shim**
**principal researcher: Nilesh Bakshi**
**associate researchers: Michael Donn, Evzen Novak**

Working with sites that are remote and difficult to access can require unique construction methods that differ from traditional construction of dwellings. This project aims to provide suggestions for building systems that work for different briefs for remote dwellings in New Zealand, based upon precedent case studies both within New Zealand and overseas.




## motives

The vehicle and motivation for the research is a real-life project – Matahiwi Cabin in the Wairarapa region of New Zealand's lower North Island. This particular project is aimed to be constructed in less than a week (excluding foundations), with no wet trades, to be able to be transported by helicopter, and is made of modules of 50m².

## methodology and findings

This reaserch, first, analyses international and local case studies, mining them for information of year and location built, materials, prefabrication style, size, on-site time frame, and transportation method. This data is then sorted using a spreadsheet and run through data analytics programs to find trends, and solutions for various briefs. Next, it is reinterpreted into a tool, which allows users to find similar precedent works, and building system suggestions based on their inputs.

The study identifies that different remote residential projects have different ways of achieving them, through prefabrication and discovers that many projects have been made possible, and the same can occur with Matahiwi Cabin.

key precedents for the Matahiwi Cabin