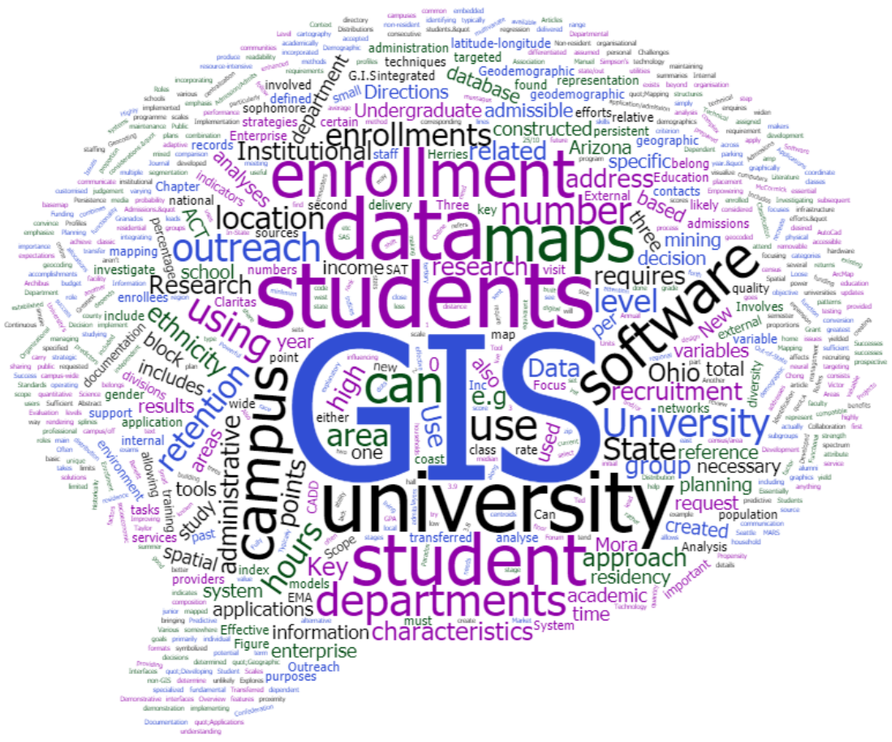
Where Are Our Students Coming From?

A Look Into Victoria University's Student Outreach

Introduction

The decision to pursue tertiary study is an important choice made by thousands of students every year. What factors effect this choice? To better understand what factors may affect why students choose Victoria University of Wellington (VUW), we explored the spatial distribution of VUW's student population.

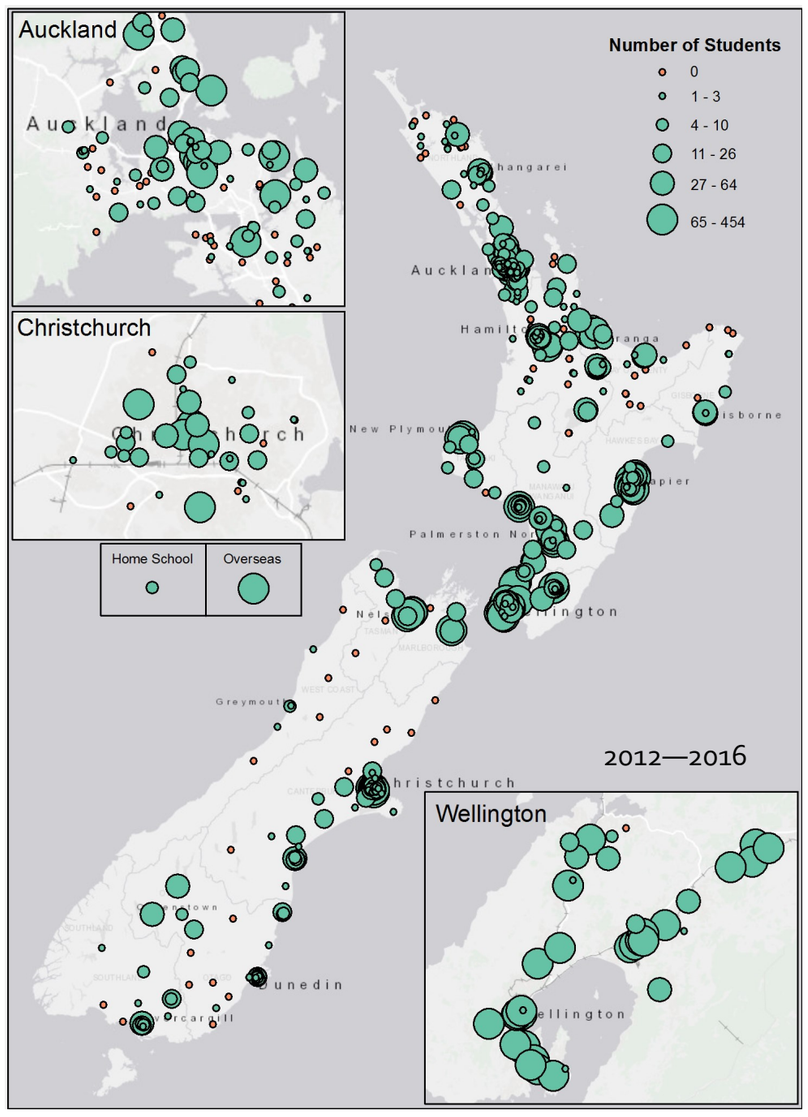
This project integrated VUW's student registration database (identification details such as name and student id were removed) and secondary school information from the Ministry of Education.



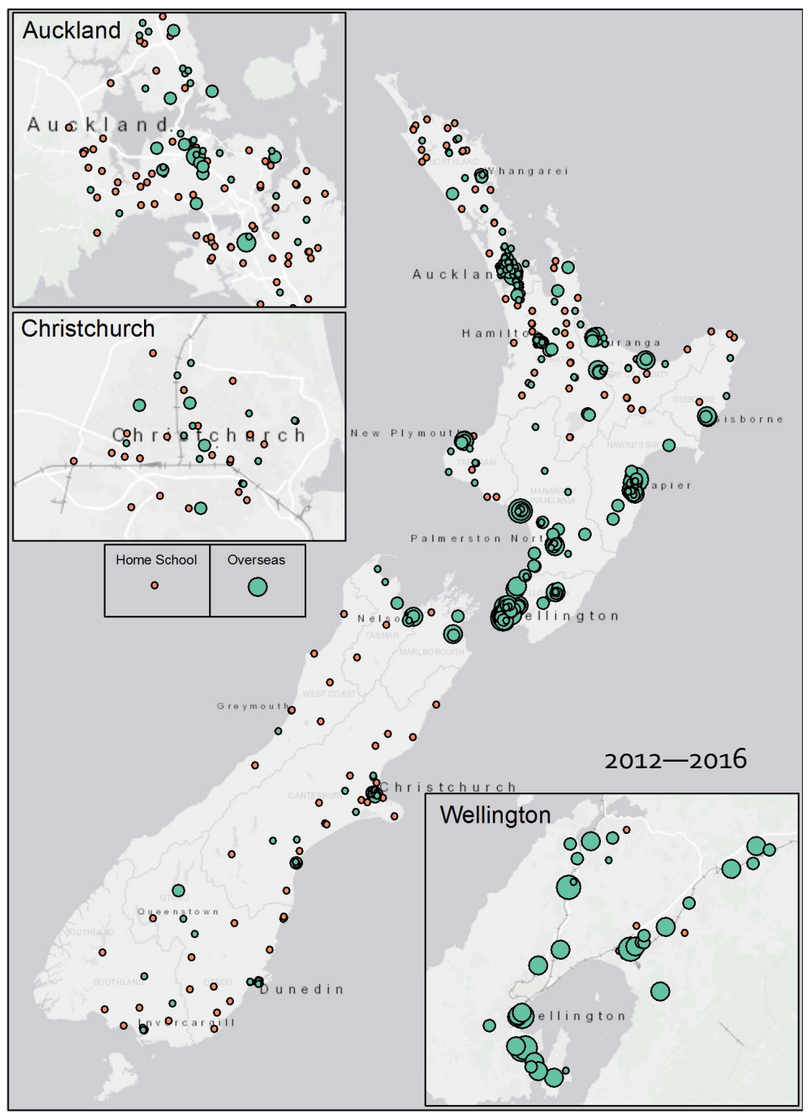
GIS in student recruitment and retention

The use of Geographic Information Systems (GIS) in university recruitment is uncommon. Ohio State University's admissions programme used GIS to reveal that a campus visit, a number of contacts in the university area before enrolment, and distance to university were among the powerful variables influencing student enrolment. Arizona State University identified that transferred hours (courses from another university), residency/distance (in-state vs. out of state), and ethnicity were all important factors for student retention. These and other factors could influence a student's choice to study at VUW.

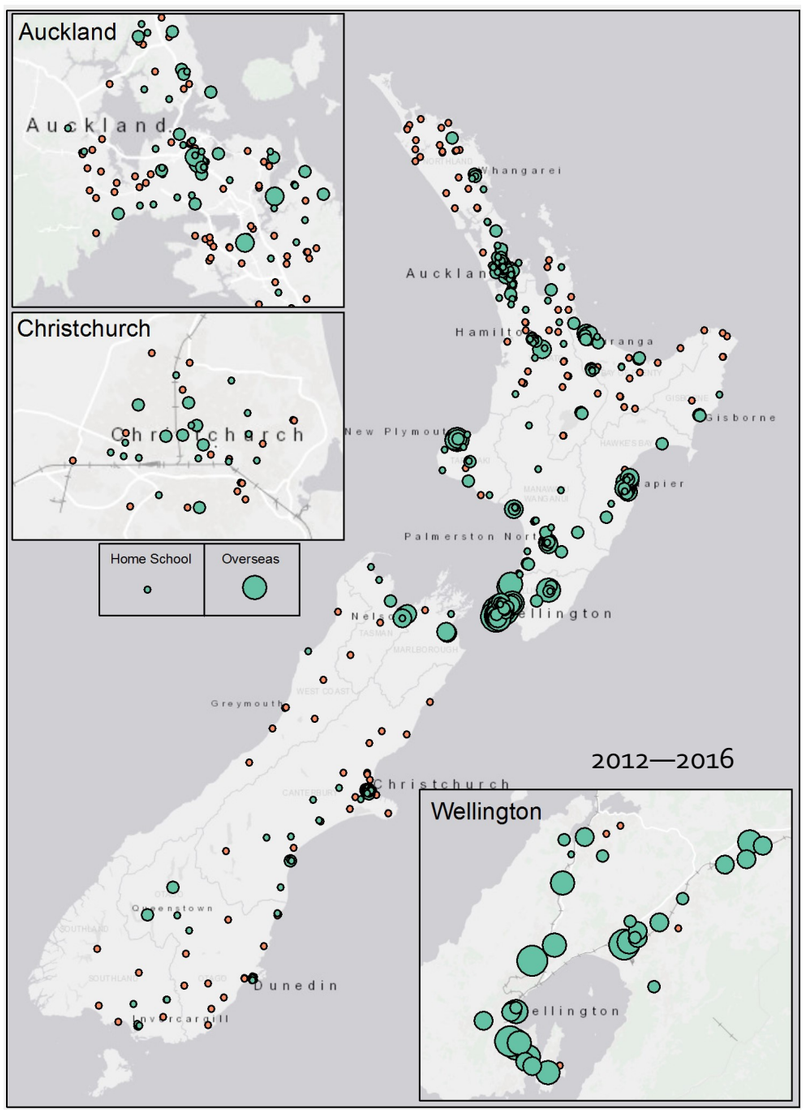
Map 1 - All Students



Map 2 - Iwi Affiliated Students

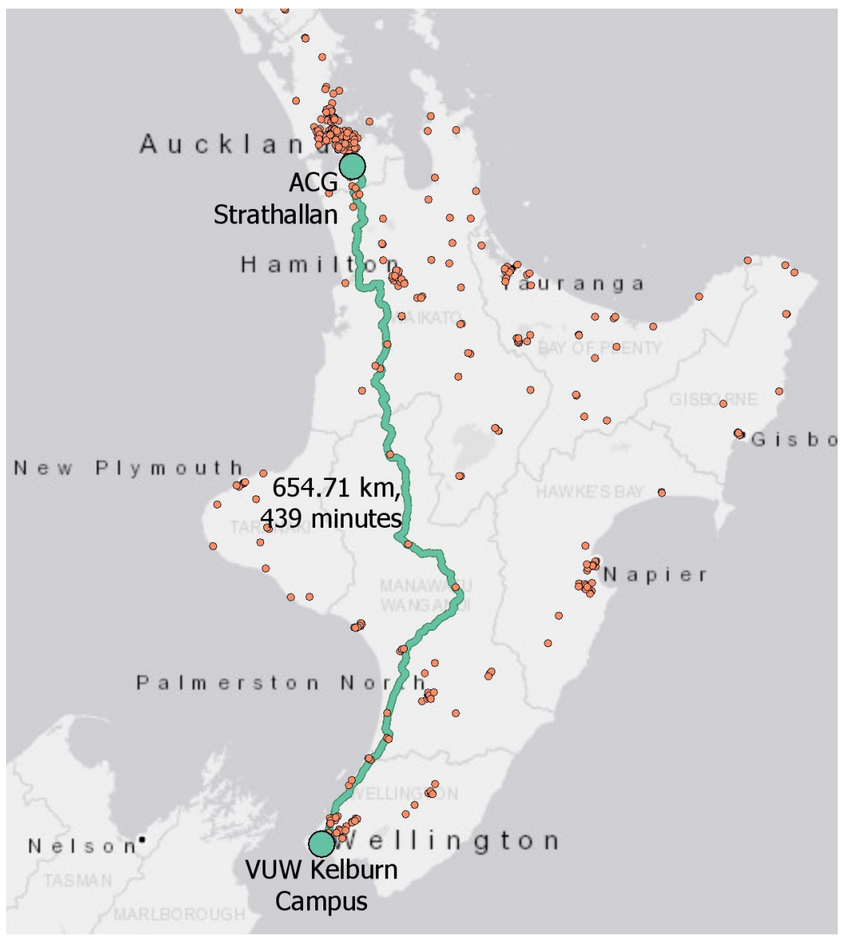


Map 3 - BSc Students



Preliminary Results

Each VUW student in the registration database was assigned to their secondary school for the 2012 – 2016 academic years. The majority of VUW's secondary school leavers come from schools in the local Wellington region, the Hawkes Bay region, and the main centres (Map 1). Iwi affiliated students exhibit a different distribution, with students predominantly coming from North Island schools (Map 2). The spatial distribution of students in different faculties also differs and Bachelor of Science (BSc) degree students primarily come from local Wellington schools (Map 3). In general, far less students come to VUW from rural schools and South Island



Where to from here?

Using secondary school locations and a New Zealand road network, we are analysing routes to determine distances and drive times between each school and VUW. We intend to contrast this with the distance measured 'as the crow flies'. In doing so, we can test the assumption that distance is a factor in the attraction of students to VUW. We will then compare this information with other factors, such as school decile and gender to establish which factors influence a student's decision to apply at VUW. Relationships found may explain why some areas closer to VUW than other more popular but distant schools do not relate to the number of student applications.

This analysis is intended to help improve VUW's outreach activities.

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Special thanks to Dr Leon Bakker and his team in Planning and Management Information for their support