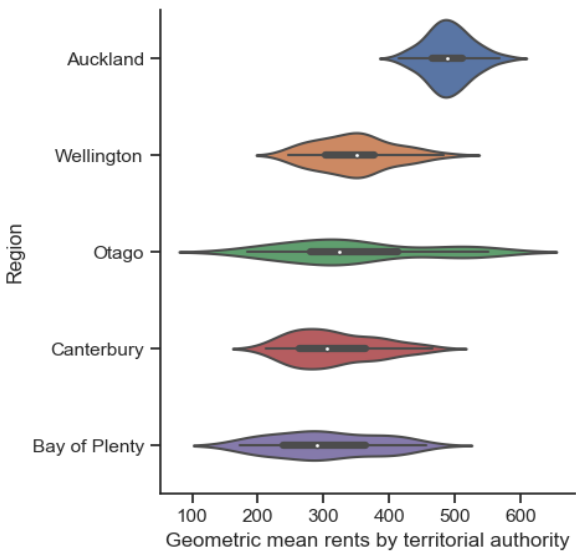


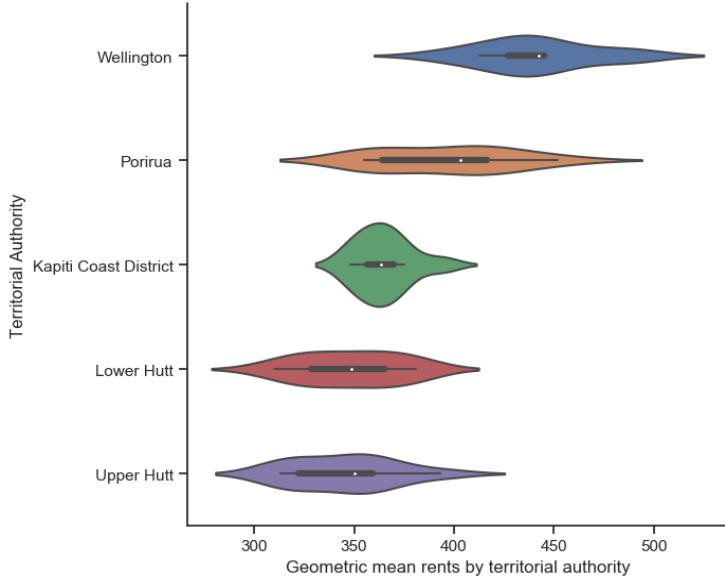
Why are Wellington’s rental prices so high?

Prediction model based on gradient boost regression
Rental bond data from [MBIE](#) and other public datasets

Top 5 Rental Markets by Region – 2016-2018



Top 5 Rental Markets in Wellington Region – 2016-2018

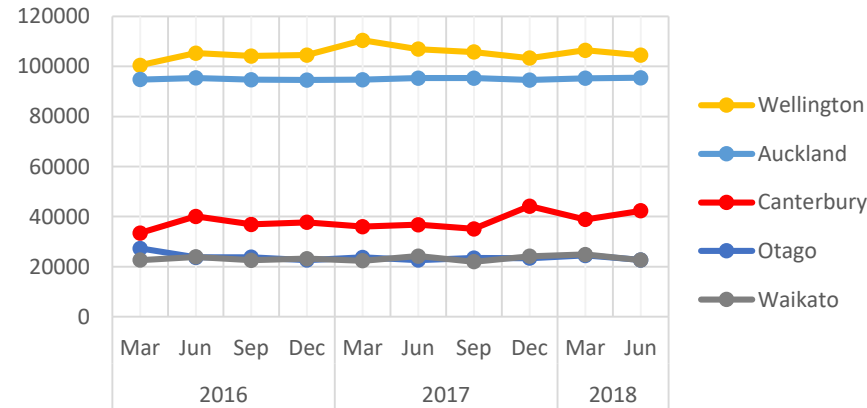


Avg time to Kelburn campus *
0
26-50 min
45-1h 10min
20-40 min
35-55 min

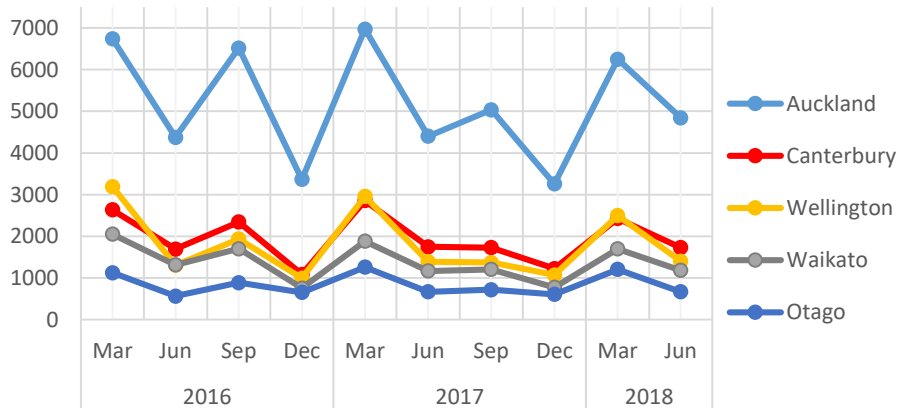
*by car on weekdays leaving @ 8am

Wellington is the second most expensive rental market in NZ, second only to Auckland. It is not uncanny that the top 5 most expensive rental markets also correspond with the top 4 out of 5 regions with the most lodged bonds indicating high demand vs short supply is a strong driver to increasing rent prices. Despite common belief due to the recent rise of Wellington’s rent prices, the average rent price is still a long way off matching Auckland’s rent prices comparing their rental distributions. Additionally, renting in Lower and Upper Hutt seems like the best compromise in saving money with a manageable commute where rental prices in Porirua and Kapiti remain quite high with a hefty commute.

Top 5 Student Enrolments by Region – 2016-2018

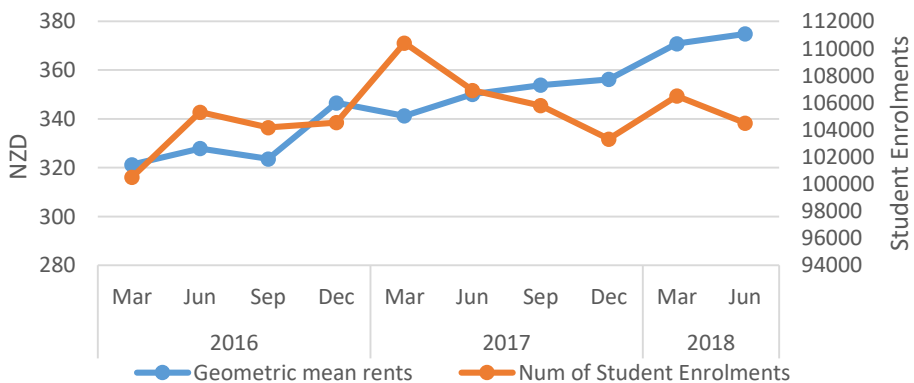


Top 5 Lodged Bonds by Region – 2016-2018



Surprisingly, Wellington’s student enrolment numbers are slightly higher than that of Auckland’s however these numbers includes polytechnics, institutes of technology and wanangas as well. However, observing the trend of student enrolments in Wellington more closely, the number of student enrolments in Wellington has actually dropped significantly in the last year from 110 405 students in Mar 2017 to 106 493 students in Mar 2018 despite increasing rent prices.

Geometric mean rents vs student enrolments in Wellington

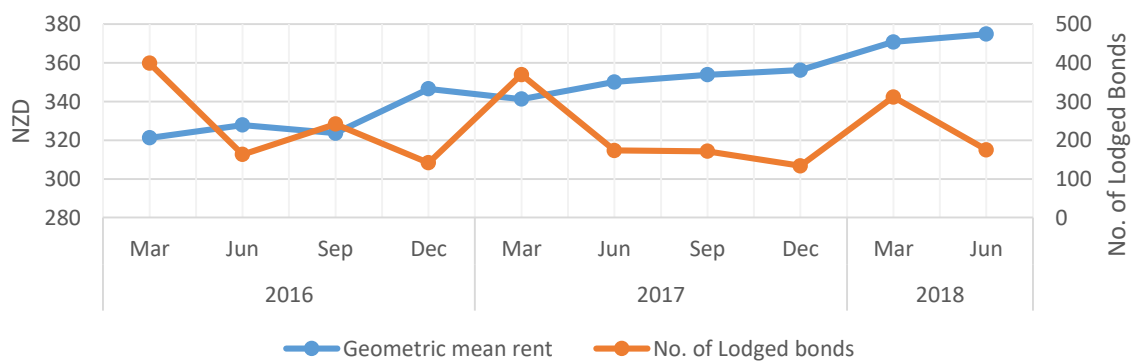


Relative Feature Importance for predicting geometric mean rents by territorial authority

	NZ		Wellington		Auckland	
1	TA	100%	Lodged bonds by TA	100%	Lodged bonds by TA	100%
2	Lodged bonds by TA	67.37%	TA	64.36%	TA	62.63%
3	Student Enrolments	37.36%	No. of Residential Building Consents	33.91%	Date	27.03%
4	Regional GDP	36.70%	Approved Student Visa	28.72%	Approved Student Visa	26.39%
5	No. of Residential Building Consents	26.05%	Date	26.02%	No. of Residential Building Consents	25.52%
6	Date	19.98%	Student Enrolments	22.36%	Median Weekly Earnings 20-29	21.39%
7	Region	13.77%	Median Weekly Earnings 20-29	22.36%	CPI	20.80%
8	CPI	11.39%	CPI	22.26%	Mortgage floating rate	15.63%
9	Approved Student Visa	8.41%	Mortgage 2 year fixed rate	13.92%		

From the table of relative feature importances above we can see that the largest driving factor of Wellington and Auckland’s high rent prices is the shortage of rental properties as indicated by the decrease in lodged bonds and the no. of residential building consents. This may be due to tighter restrictions and standards in light of the 2016 Kaikoura earthquake which greatly impacted Wellington. The fact that the number of approved student visas is the 4th most important feature suggests that rental demand is also driven by the increase in international students. Additionally, rental costs are also rising due to increased living costs as indicated by median weekly earnings and inflation (CPI) as well as increasing costs on landlords as indicated by mortgage rates.

Wellington’s Geometric mean rents vs lodged bonds by territorial authority



Wellington’s Geometric mean rents vs Number of Residential Building Consents

