ALP technical exercise

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Contents

Fenner, a key electorate in the Australian Capital Territory, demonstrates a vibrant and diverse demographic profile. With a total population of 132184, the electorate showcases a broad array of ancestries, religions, and educational backgrounds, reflecting a rich cultural tapestry. The average population across its statistical areas stands at 319, indicating a densely populated urban environment.

The housing landscape reveals a total of 60827 dwellings, with an average of 147 dwellings per statistical area, pointing towards a well-developed residential sector, with almost 3 people living in a house. Ancestry within Fenner is predominantly **Australian** (30131), supplemented by significant Chinese (4,476), and Indian (4,444) communities, highlighting its multicultural character. There are almost 3000 people from filipino and vietnamese ancestory.

Religious affiliations are varied, with Christianity being the major religion (41,871), followed by a substantial number of residents identifying with no religion 41142, and a smaller Muslim population. This diversity in belief systems underpins the electorate's inclusive nature.

Transportation preferences among Fenner's residents underscore a reliance on cars, with a significant number choosing driving as their primary mode of transport to work (See Figure 1). This is complemented by other modes such as public transport and cycling, reflecting a range of commuting preferences. In almost half of the statistical areas (237), no one chooses light train/tram as their mode of transport to go to work, which suggests these areas are underdeveloped or don't have enough residents to make such a big investment.

Mode of transport taken to work car_driver - bus - tram_light_rail - walk - bike - 0 10000 20000 30000 40000 mode of transport

Figure 1: Mode of transport chosen

Age distribution indicates a balanced demographic, with a significant proportion of the population in their prime working ages (18 to 49 years: 62,381). This suggests a dynamic workforce contributing to the electorate's economic vitality. The distribution of proportion of people in their prime to people people who are still young or old to work seems normal. (See Table 1)

Table 1: Distribution

0%	25%	50%	75%	100%
0	0.4203225	0.4639129	0.5287101	1

Property ownership patterns reveal a mix of outright ownership (11988), mortgages (25446), and rentals (17610), showcasing diverse housing tenures. Education levels are high, with a considerable number of residents holding bachelor (11,988) and postgraduate degrees (25,446), alongside those in tertiary education (17,610). Statistical areas with more people still in process of attaining their tertiary education have more rented dwellings as there is a positive correlation (See Figure 2).

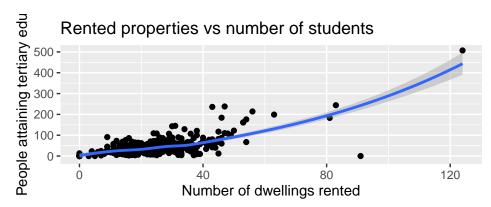


Figure 2: Correlation plot

If assumed, that total population taking transportation to work is employed, the correlation between unemployed population and population with bachelor's or higher shows positive relationship which is a matter of grave concern as it depicts academic unemployement. (**Figure 3**)

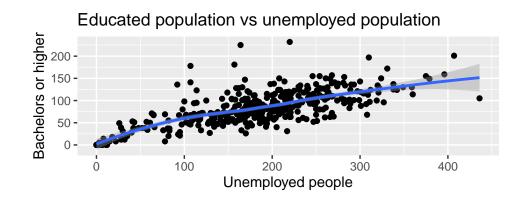


Figure 3: Academic unemployement rate