

M. Gale, personal communication, August 8, 2023

Puspa Barua, Jarred Bowden, Rebecca Hanna, Georgina Lawry, Antonius Scholte

Student numbers for tertiary providers in Canterbury have been increasing steadily since 2015 (Dyason et al, 2021; Lincoln University, 2022; University of Canterbury, 2022). The largest tertiary provider in Canterbury, University of Canterbury (UC), has indicated that by 2031, 800 additional beds will be needed to keep up with their increasing student numbers as this shortage of accommodation is likely to have negatively affected enrolments for 2023 (G. Scot, personal communication, September 5, 2023). Currently, out of the three largest tertiary providers in Canterbury (Ara, Lincoln University (LU), and UC), only Ara has student accommodation in the Central Business District (CBD), with a maximum capacity of 192 students (Ara Institute of Canterbury, n.d.; Lincoln University, 2023; University of Canterbury, 2023a). The main purpose of this project is to investigate if demand from students exists for tertiary accommodation in the CBD, and if so, aims to influence the design of this accommodation. Therefore, the research question for this project is: "What are the benefits and challenges of tertiary student housing in the Christchurch Central Business District (CBD)?".

Given the current typology of tertiary accommodation in Christchurch, this research will delve into receptivity of such a shift in the type of accommodation. The findings of this report are predominantly based on data gathered from UC, but any tertiary students in Canterbury could benefit from this proposed accommodation. This also lines up with the goal from the Christchurch City Council (CCC) to increase the number of people living in the CBD to 20,000 by 2028, to increase economic growth and social prosperity (CCC, n.d.). Before any student accommodation can be built however, it is crucial to understand both practical and social considerations - which are the underlying basis of this report. Practical considerations include topics such as amenities, barriers, and transport - ensuring that the physical needs of the students are met to enable them to live in the city. Social aspects, such as social cohesion and diversity have been considered to ensure that the environment is healthy and inclusive.

ChristchurchNZ is the community partner for this project, who are the economic development, and marketing agency for Christchurch. Their goals are to help improve the city's tourism, economy, and social livelihood, and are primarily funded by CCC (ChristchurchNZ, n.d.). ChristchurchNZ has an urban development division that works with businesses, organisations, iwi, and government to help develop projects in the city. One topic currently being explored is developing student accommodation in the city, which is the purpose of this research project.

This paper will cover a review of relevant literature, the collection methods of both the primary and secondary data, the analysis methodology, the results, a discussion of these results, and conclusion.

The literature review for this project engaged with topics of liveable cities, transport, economic factors, culturally inclusive spaces, and the enhancement of student lifestyle. Stephanson (2010) illustrates that the relationship between people and place incorporates the three foundations of humankind: the well-being of human life, the connectivity of society, and the quality of environment. Thus, the relationship between people and place is fundamental - highlighting that an individual's life is based on the influence of their physical, cultural, and social environment.

Graells-Garrido et al. (2021) set an example illustrating that an interactive neighbourhood has more access to educational, retail and greenspace facilities. This concept links to the idea of a '15-minute city', which highlights that residents should have access to living, working, commerce, healthcare, entertainment, and greenspace within 15 minutes using active transport (Moreno et al., 2021). This

concept holds high significance in any development of an urban environment, with particular importance to encouraging students into the CBD.

Transport is a key issue for student accommodation in the CBD as both LU and UC are outside of this area. Most UC students either drive or walk to UC (Gillard and Morris, 2020). Students driving from the CBD would have to pay for parking both there and on campus, and LU and UC students that walk

The main distribution methodology followed a snowball sampling approach (Naderifar et al. 2017), pushed further by posting on the UCSA noticeboard to encourage students to participate. In total, there were 105 respondents, 98 from UC, 4 from Ara, 2 from LU, and 1 from Yoobee. These results were put through a linear regression model to gain the statistical significance of the relationships.

8 UC students were interviewed for this project. These included a range of demographics, such as: post-graduate, first year, a residential assistant, international and local students, and a Mori graduate from Te Akatoki. A transcript was created for further analysis.

The methodology of this study has been broken down into five categories and analysed using both primary and secondary data.

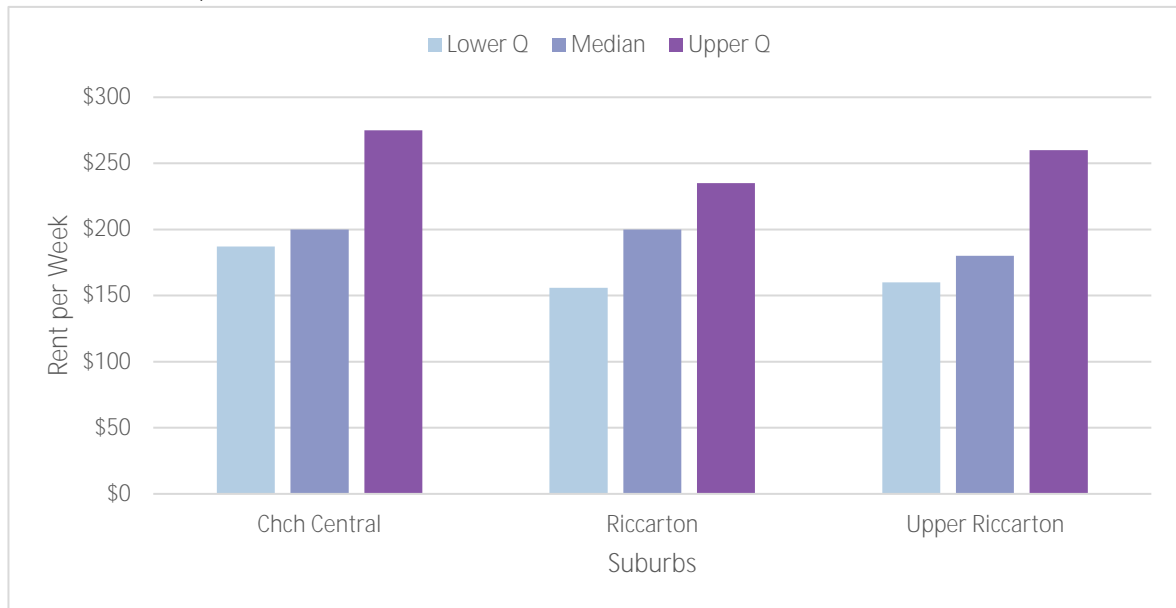
The purpose of this is to understand current student accommodation in Christchurch and its future demand. This was achieved by analysing various reports from tertiary providers in Canterbury.

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- Ara annual report 2021 (Ara Institute of Canterbury, 2021)
- Ara O-house (Ara Institute of Canterbury, n.d.)
- LU annual report 2022 (Lincoln University, 2022)
- Otago - Christchurch campus redevelopment (University of Otago, n.d.)

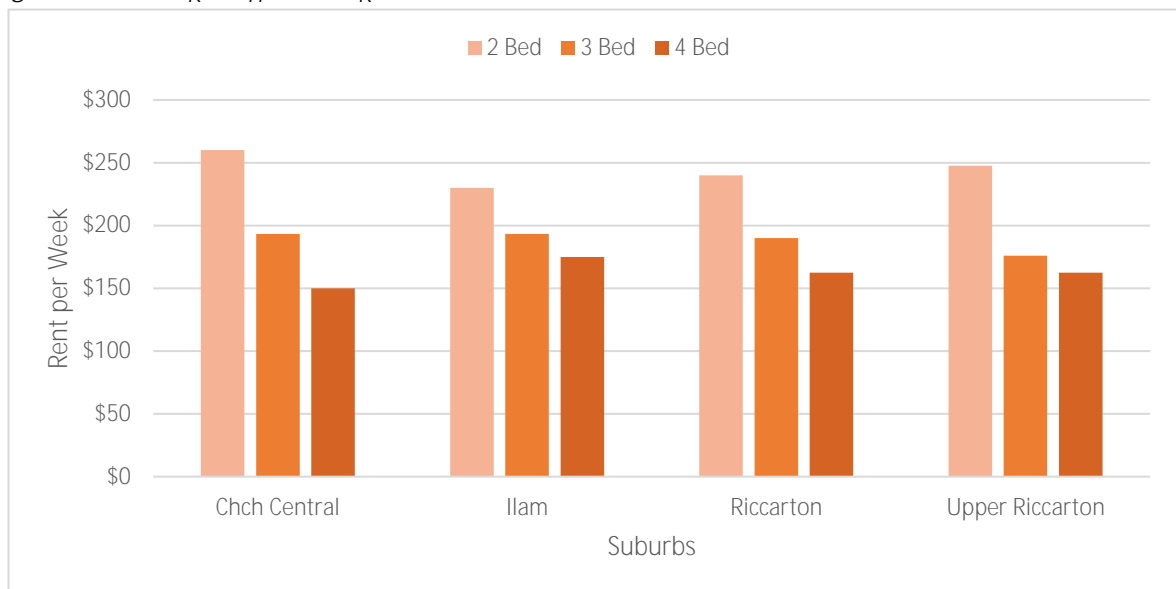
The purpose of this is to understand the role transport plays in accommodation activity

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Note. Median price of a room in the CBD, compared to suburbs around UC. Data from 1 February 2023 to 31 July 2023. Adapted from <https://www.tenancy.govt.nz/rent-bond-and-bills/market-rent/>. Copyright 2023 by Tenancy Services.)

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Note. Rent prices for 2-4 bedrooms, divided by the number of rooms to get the per room cost. Comparing rent in the CBD to suburbs surrounding UC. Data from 1 February 2023 to 31 July 2023. Adapted from <https://www.tenancy.govt.nz/rent-bond-and-bills/market-rent/>. Copyright 2023 by Tenancy Services.

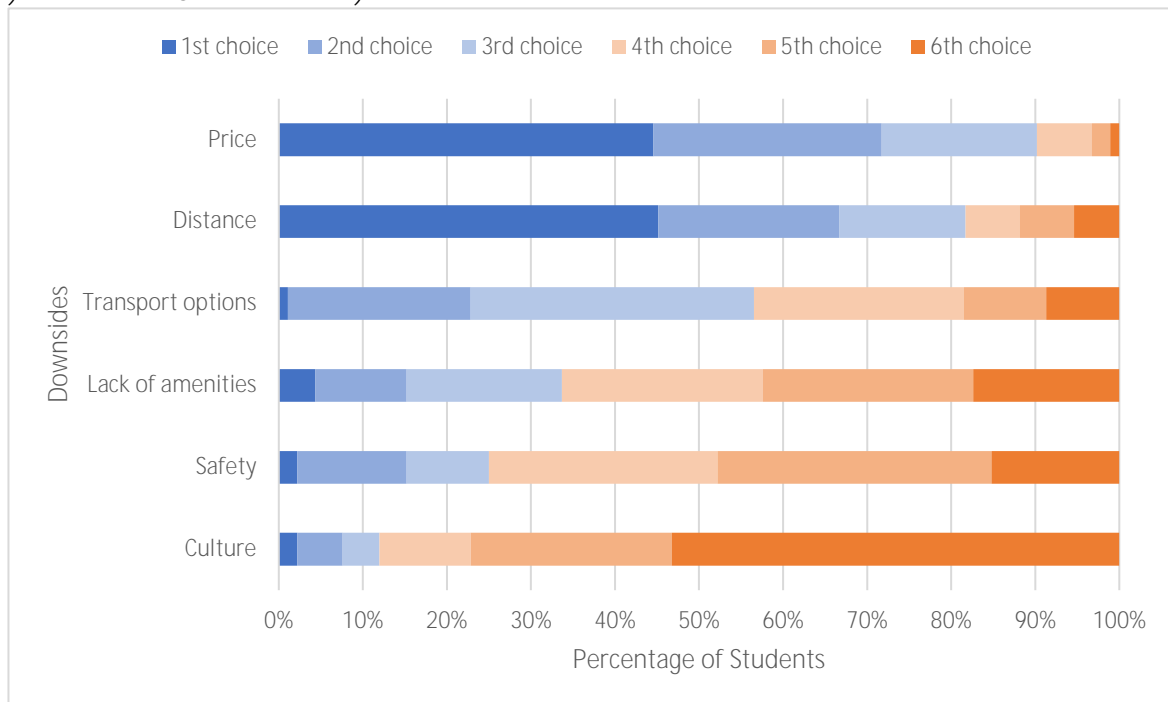
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Note. Students were asked to rank these four transport incentives based on which would most encourage them to live in the CBD.

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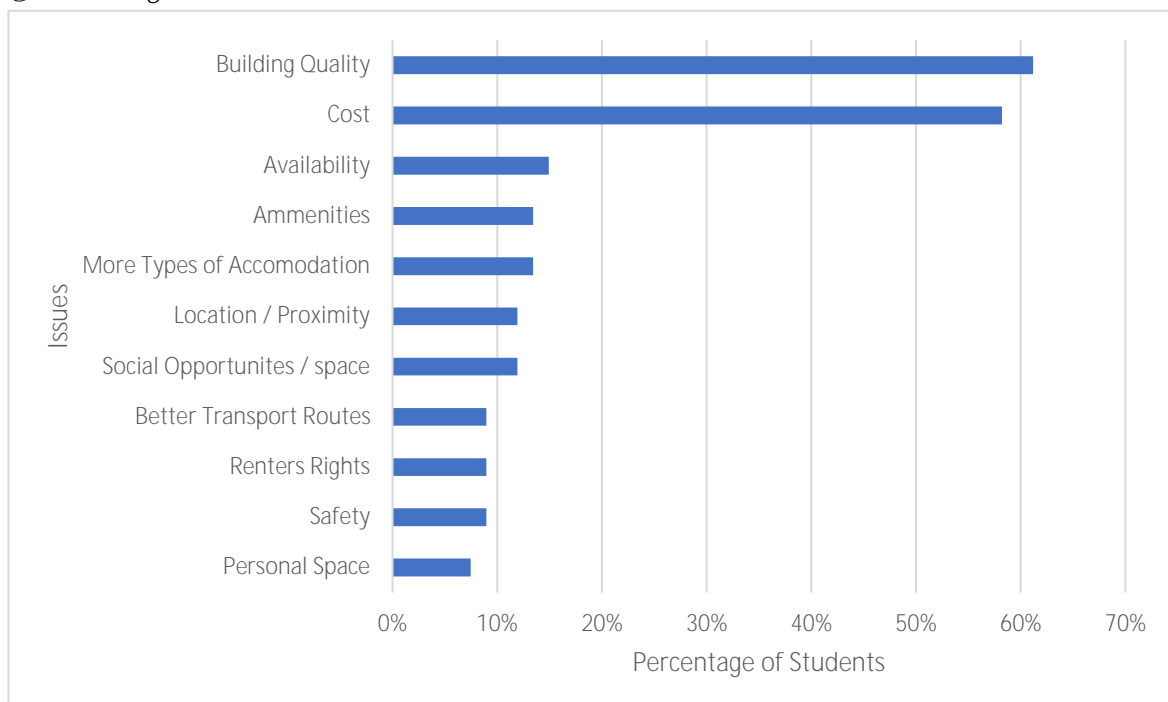
Note. Students were given the 5 options above to rank their most important accommodation factors.

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Note. Students were asked to rank what they thought would be the downsides to living in the CBD.

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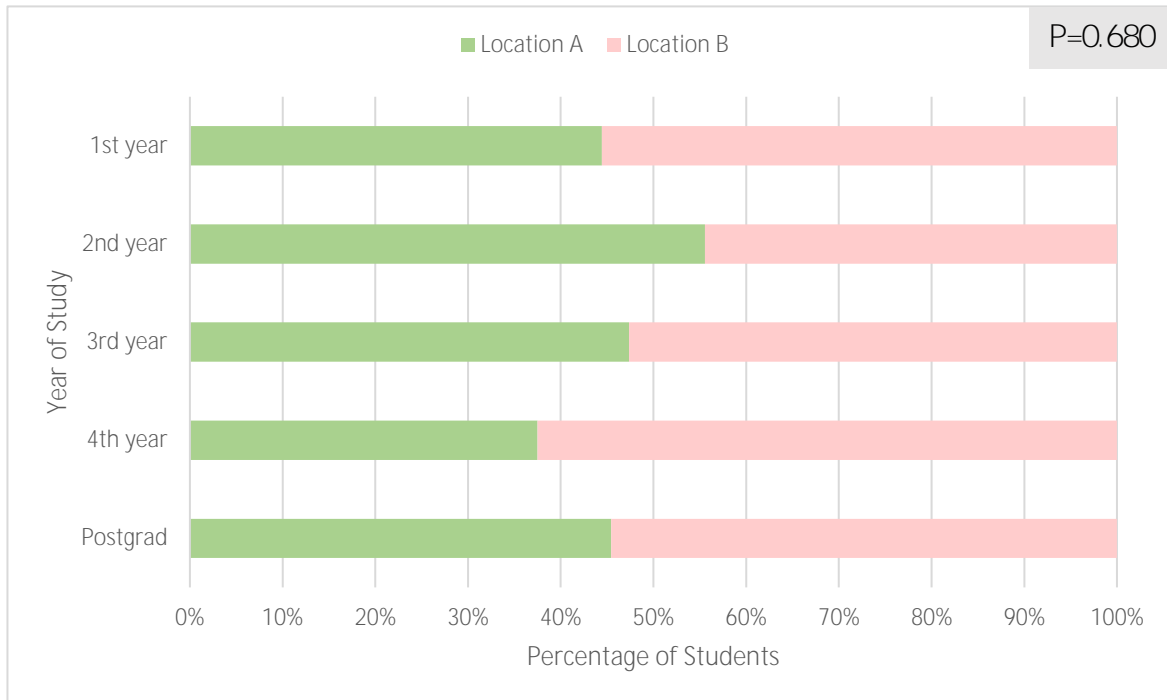


Note. Students were asked what their three key issues with student accomodat on were currently, which has been categorised to show what percent of students ment oned each issue.

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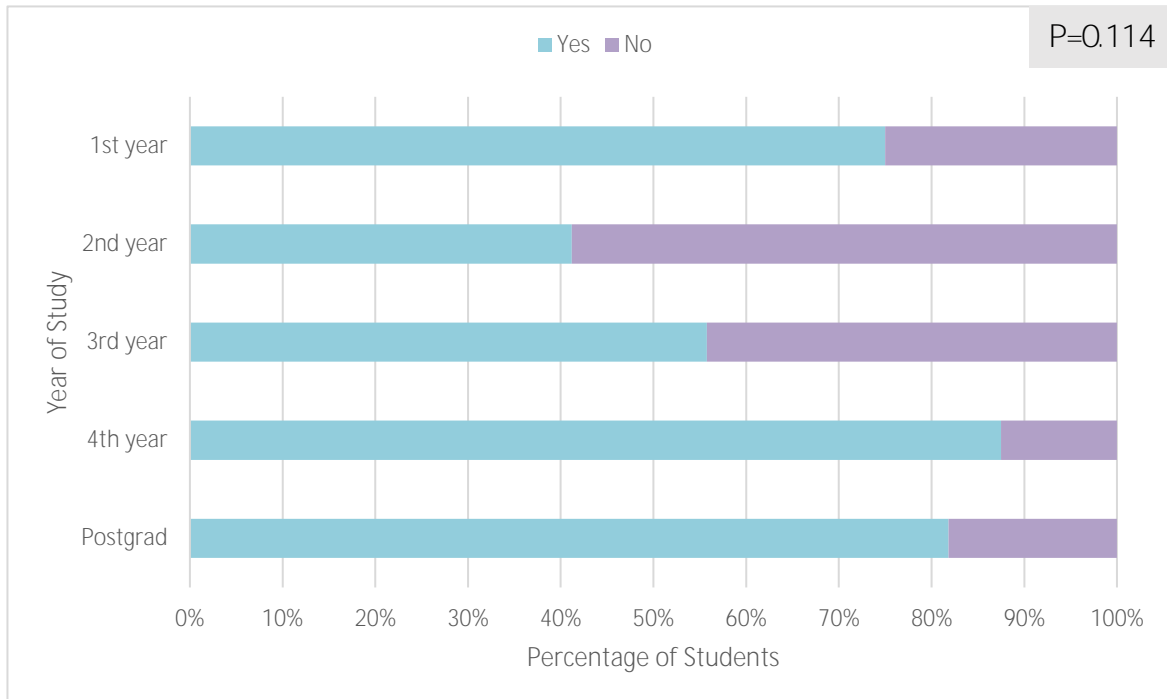
Note. Students were asked to rank their preference for living in a 1-

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Note. Students were asked if they preferred Locat on A or B, which has been broken down by year of study.

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Note. Students were asked if they think that living in the CBD would increase their social opportunities, which has been broken down by year of study.

There are approximately 41,000 tertiary students in Canterbury, with over half at UC (Figure 1). Therefore, whilst data is missing for the remaining tertiary providers, looking at UC data provides a representative snapshot. The state of student accommodation at UC (Figure 2) shows that they currently have over 2,700 rooms, which in 2023 was at full capacity, with an additional 800 needed by 2031 (G. Scott, personal communication, September 5, 2023). This is like LU, with their accommodation at capacity in 2022 (Lincoln University, 2022). This highlights that the current growth of student numbers is creating demand for tertiary accommodation without consideration of external factors increasing growth further.

Based on survey responses, 58% of students currently pay between \$150-199 per week in rent (Figure 3). Over half of respondents selected \$100-149 per week to live in the CBD (Figure 4). Comparing the relationship between this data in Figure 5, shows that 83% of students currently paying less than \$149 per week would pay more to live in the CBD, however, most students paying more than \$149 are unwilling to pay anymore. This shows that \$150-\$199 per week is the boundary of what most students are willing to pay. When looking at secondary data, Figure 6, showed that the lower quartile for a room per week is about \$30 higher in the CBD. Figure 7 shows that when comparing the per room cost of homes per week, 2-bedroom CBD homes are the most expensive. What UC students pay for halls can be seen in Table A1 & A2. This data highlights that current rental prices in the CBD are higher than the surrounding UC area overall, with some outliers. This means that new student accommodation should not be priced based on the current rental market price in the CBD as this data shows that it is currently outside of what students are willing to pay.

Looking at transport connectivity, students would mostly choose to bus (42%), or bike (35%) between the CBD and their tertiary provider (Figure 8) - meaning that more students would take active transport if they lived in the CBD. However, they would prefer to drive (32%), bike (30%), or walk (24%) (Figure 8). Therefore, there is a discrepancy between preferred modes of transport and ones that would be practical in the context of the proposed student accommodation. Similar data was found by Gillard and Morris (2020), which showed that 40% of UC students travel to UC by car and over 25% walk. Breaking down the transport choices by chosen location, 41% of students who chose Location A would bike to their tertiary provider, while 52% of those that chose Location B would bus (Figure 9). This makes sense for Location B as it is nearby to the bus interchange. The number 3 bus would be crucial for UC students busing from the interchange. Students at Location A can take multiple different buses to the interchange, or the 95 bus further to Ara (Figure 10). However, for Location A, there is no connection to dedicated cycle paths - only cycle lanes as shown in Figure B2. Location B would make more sense for students to bike from as there is access to two key cycle paths to UC from the CBD as well as Ara and Otago's Christchurch campus (Figure 11). Understanding these characteristics is important to enable easy connections between student accommodation and tertiary providers. This links strongly to the amenities and barriers that influence accommodation decisions.

When students were asked to rank the five factors provided in choosing accommodation, affordability and proximity were the main factors (Figure 13). This was then seen again when they were asked to rank the provided downsides of living in the CBD (Figure 14 & C2). To follow up, they were asked what were considered the main issues with student accommodation (Figure 15), which showed building quality and affordability being key issues. When asked about why they choose either location A or B, transport was the biggest theme (Figure C1). These patterns were also observed in interviews (Table C1). This could be addressed with transport incentives, which Figure 12, showed that a dedicated

to further understand the associated impacts of this accommodation typology shift. Student accommodation in the CBD has an opportunity to thrive and change the dynamics of the city, however, it needs to be designed in a way that considers student aspirations to achieve these goals.

Our group would like to acknowledge the extensive support received throughout this project. Our

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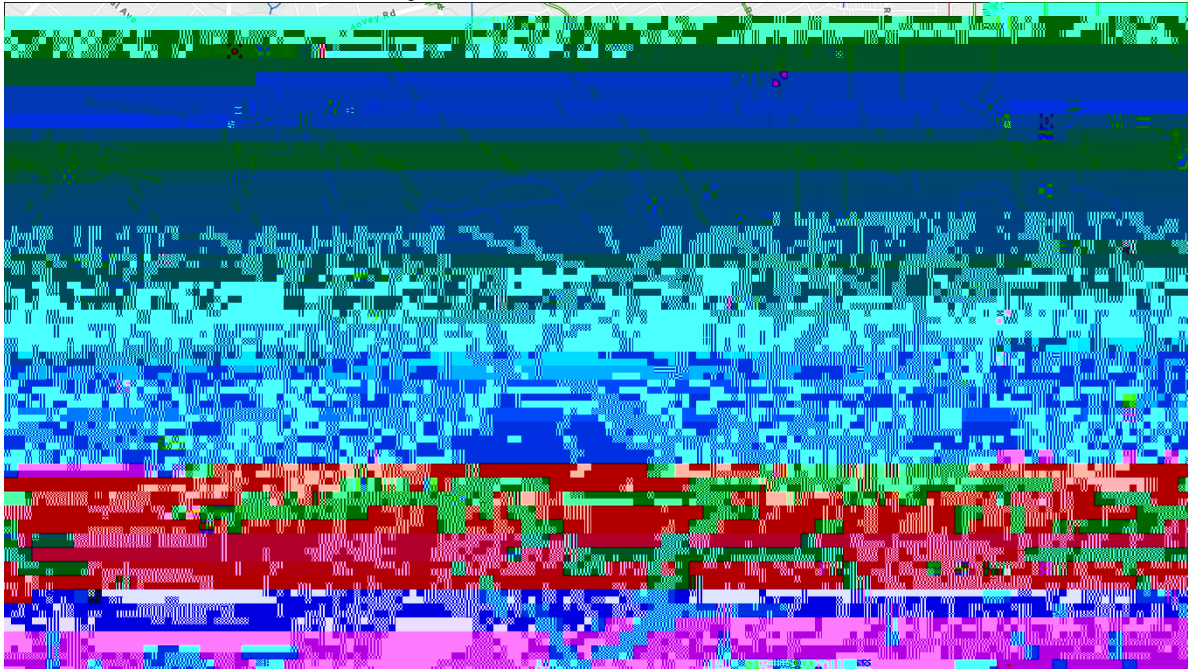
Arcady Hall	162		\$ 23,500
College House	159		\$ 26,083
Ilam Student Accommodation	847	Hinau 3-5 Bed	\$ 11,578
		Kowhai 6 Bed	\$ 12,152
Kirkwood Avenue Hall	64	Single	\$ 11,865
		Ensuite	\$ 13,259
Rochester & Rutherford Hall	192		\$ 23,000
Tupu nuku	504	Single	\$ 21,418
		Ensuite	\$ 22,894
University Hall	553	West (s)	\$ 18,671
		East (s)	\$ 20,844
		East	\$ 21,746

Note. Pricing of all halls available to first year UC students in 2024. Adapted from <https://www.canterbury.ac.nz/media/documents/accommodation/First-Year-Hall-Comparison-Chart-2024.pdf>. Copyright 2023 by University of Canterbury.

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Hayashi	78	King Single (2:5)	\$ 13,856
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Note. All cycle paths in the CBD and surrounding UC area. Adapted from <https://opendata-christchurchcity.hub.arcgis.com/datasets/ChristchurchCity::cycleway-opendata/explore>. Copyright 2023 by Christchurch City Council.

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	"It would be cool to be in a whole kind of situation where you have your own-bedroom and your own space and all that, but then right next-door, or whatever, there's people that are doing the same sort of thing."
	"I think three is a good amount of people in terms of having like a bit of a buffer person. You're not stuck with someone for too long, but I think compared, four can be a lot even though four was I think was my second preference."
	"Single-bed and the two-bedroom. Were my two!" "Just because I feel like it's the least people you live with is chillier. I like my me time. So I prefer to live with one or two people. That's kind of it."
	"The three bedroom one." "I like the idea of living with other people. I feel like the single bed one is lonely if you're just on your own. If you're just studying by yourself and you're in a city."
	"Yeah, probably site B, like, because it's probably, it seems to be like, further in town. And it's like, close to the bus exchange." "I picked site-A." "I think to me it's