Merit
NZQA Intended for teacher use only

# Land use survey and map

The map on the following page is of the area you will be conducting your research. Complete the key below and map as instructed by your teacher.					
LAND USE TYPE	KEY CODE/ COLOUR	WYNYARD QUARTER	VIADUCT HARBOUR	COMMERCIAL BAY	
INDUSTRIAL (warehouses / factories etc)	1	#4 111	Q	0	
COMMERCIAL (office / business / banks etc)	2	1111	###	1111	
RETAIL (cafes / shops / tourist facilities / restaurants etc)	3	#####	##	## ## ##	
RESIDENTIAL (apartments / houses etc)	4	1111	###	D	
RECREATION (public space / play parks / sculptures / sitting areas etc)	5	## 111	1/1/	//	
ACCOMMODATION (hotels, backpackers, motels)	6	III	11	111	
CARPARK	7	HH III	11	1	
OTHER	8	//	D	1 (train station	



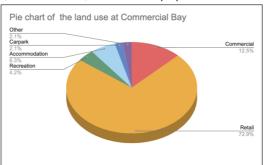
## **Findings**

## Land use at Commercial Bay

Commercial Bay is the one of the most visited areas in Auckland city as it has multiple features that have shaped what this area is used for. The data collected shows that 72.9% of the land around the Commercial Bay area is used for retail purposes. This is the majority of how the land is being used with most of these shops and restaurants

being inside of the Commercial Bay mall. This shows the pattern that most (72.9%) of the land is being used for retail purposes in comparison to only (27.1%) being used for other purposes such as commercial offices, accommodation, and recreation purposes.

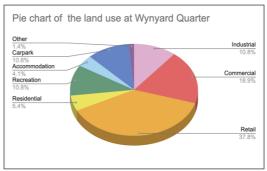
As shown on the graph there is no industrial uses or residential uses for land at Commercial Bay and very little, only 2.1% being used for car parks. This is because of the central location of the Commercial Bay precinct. The central location makes the land more desirable which therefore increases the price of the land. Many land uses such as industrial and residential cannot afford this land so they are driven to the cheaper areas of the city.



#### Land use at Wynyard Quarter

Land at Wynyard Quarter has the most diverse uses in comparison to Commercial Bay or the Viaduct Harbor. This is although it is still mostly used for retail purposes which are restaurants which is shown on the graph as Retail uses make up 37.8% of the land.

Wynyard Quarter was originally used as an area for ships to store supplies in the large silos that still remain around Wynyard Quarter but has since been transformed into a public space to host events such as the America's cup and the Rugby world cup. Land at Wynyard Quarter is more on the outskirts of the city, so it is more affordable. This allows there to be more variety in land uses such as Industrial areas and large recreational parks that are at Wynyard Quarter. This is shown in the data with

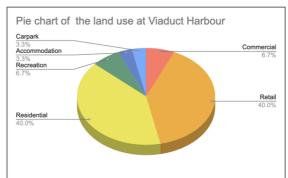


there being 10.8% of the land being used for recreational uses such as parks and another 10.8% being used for industrial purposes.

#### Land use at Viaduct Harbour

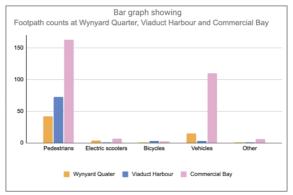
Viaduct Harbour has Retail and residential areas that each make up 40% of the land with the remaining 20% of the land being used for other purposes. The unique aspect of the marina being in the middle of the Viaduct Harbour makes this area nicer and more enticing of a place to live. Although Retail and Residential land uses make up 80% of the total land uses making them the two most popular land uses at this precinct, there are also some commercial offices and the public spaces that make up 6.7% of the land

used. I think there are not many car parks with only making up 3.3% of the land in this area because the land is desirable to live in, so the land prices are too high for parking use.



### Footpath counts

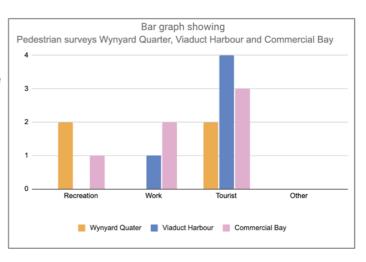
This multi bar graph shows that the more central the area the more people it has travelling through it. This is why the amount of foot traffic and vehicles was significantly more at Commercial Bay than in comparison to Wynyard Quarter and Viaduct Harbour. For example, in Commercial Bay there were 90 more pedestrians than in viaduct and there were 121 more pedestrians in Commercial Bay than in Wynyard



Quarter. Because most of the facilities in the city are within walking distance, in all three locations pedestrians were counted the most.

### Pedestrian surveys

There are different reasons that people come into the city for whether it's for work, shopping or as a tourist exploring the city. The time that the responses were taken impacted the results, for example as on a Monday around midday, most of the people we asked were tourists. This is because most adults would be at work and children would be at school. At Commercial Bay there was the most variety of people with 40% being tourists, another 40% being for work reasons and 20% being for recreation purposes.





Evaluation

The collection of the data faced many limitations. A limitation that could have affected my understanding was that the group was not able to count the individual shops in the mall of Commercial Bay because of time restraints, however if Commercial Bay would have just been indicated as one cluster of Retail shops it would change the overall data, as having just one point on the graph would not show that the majority of the Commercial Bay precinct was Retail, as there would not be as many Retail data points on the graphs. This is why making an informed assumption was better,

although it is not truly accurate. So, this could have limited my understanding of Commercial Bay and the waterfront environment because the data was not accurate. Another limitation with the data which could have affected my understanding was that it didn't account for multilevel buildings that would have different uses on each floor such as Commercial Bay. The lower levels of Commercial Bay are used for Retail shops and Restaurants but higher up there are Commercial offices and a hotel is currently being built on top. As the land use map is only 2 dimensional it makes it difficult to account for these different uses which also makes the data less accurate and could have limited my understanding.

For the collection of the footpath path counts, the problem that was encountered was that they were only taken once in each location and at a random time in the day. This means that with a slight change of time or day of the week the results could have been completely different and limited my understanding. Such as if the data would have been collected early on the Monday morning there would have been many more people counted because of the work rush hour. Likewise, if the data would have been taken on the weekend there would be more people in each location for different reasons such as recreational shopping. So, more data from more times or days would strengthen my understanding of the waterfront because the little daily differences would not change the results of my overall understanding of the waterfront.

Although the data had many limitations, one of the consistent strengths is that the data is primary data. This guarantees that the collection of the data is consistent and fair throughout and could have strengthened my understanding of the waterfront environment. Another strength was that each footpath count was measured for the same amount of time.

To further improve the data, it could be compared to secondary data however it could be difficult to find data that is taken under the same conditions as the primary data.

## Conclusion

In conclusion, the three precincts of Wynyard Quarter, Commercial Bay and the Viaduct Harbour along Auckland's waterfront have different land uses because of the different natural features that each area has to offer. In the three precincts Retail land uses make up most of the land, but in Wynyard Quarter Retail and Residential uses each make up 40%. This data comes to the conclusion that the more central the area the more densely used the land becomes.