

Year 10 Geography of Human Wellbeing

To access the Australian Urban Observatory, go to auo.org.au

This resource is a Geographic Information System (GIS) which has collated data on Australia's 21 largest cities.

- In this lesson you will focus on three key factors that affect human wellbeing – health, wealth and education. The AUO categorises metadata into nine **indicators**.
- Click on the link “**What we measure**” to understand the data collected by the AUO.

1. Classify the nine **indicators** under the three key factors in the table. It is possible that an **indicator** could relate to more than one factor?

Health	Wealth	Education

Measuring Health Indicators

- Watch this video to understand the site: <https://auo.org.au/using-the-indicators/>
- To explore the map, you will need to create a login. Click on **Sign up**
- Select Melbourne as the city and choose the *Social Infrastructure Index*. The map is shaded according to **decile** values.

► Indicator information

Selected indicator:

❶ Health social infrastructure (2021)

Average:	3.7 / 6
Range:	0 to 6 / 6
Interquartile Range:	3 to 4.7 / 6

- To find out what each **indicator** measures click on the green tab on the right-and side labelled “Indicator information” and click on the ‘i’ to see a pop-up box with definition.

Indicator: A measure to monitor and track progress on an issue over time and used to understand if a situation is improving, staying the same or getting worse over time .

Decile: Divides the data into ten equal intervals. In the AUO the lower 5 deciles are shaded pink (less liveable representing 0–50%) and the upper 5 deciles are shaded green (more liveable representing 50–100%).

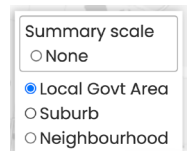


1. This measure looks for the presence of six key health services within a threshold distance of 1km. What are some of these services?

2. What pattern do you observe on this map, based on the shading used?

3. Change the scale between Local Government Area, Suburb and Neighbourhood located on the right hand side of the map.

Does the pattern stay the same? Describe what you see.



4. Choose the suburb scale and perform a search using the magnifying glass in the top left corner. The percentile results can be changed by clicking on the blue layers icon on the right hand side menu.



Complete the table below by looking at the **indicator** information that appears under the green tab on the right-hand side of the website.

► Indicator information

Suburb	Colour	Percentiles		Average score	Does this suburb fit the general pattern or is it an exception?
		National	Local Gov't		
Mickleham					
Melton					
Fitzroy					
Caulfield East					
St Albans					
Koo Wee Rup					
Bayswater					





7. Choose an **indicator** map related to Alcoholism. This data applies to the Local Government Area only so switch the map scale. Use the "i" under 'Indicator Information' to find out about this **indicator**.



a. What is meant by off and on-license alcohol outlets?

b. Explain why this is considered a measure of wellbeing and how distance and quantity are useful measures of this **indicator**.

c. Explain the interconnection between the distribution of alcohol outlets and its implications for wellbeing in these areas. Provide examples.

d. Outline some possible reasons why this pattern exists.



Measuring Wealth Indicators

The AUO provides many **indicators** relating to wealth and some combine factors relating to health and wealth.

8. Change the map scale to suburb and choose the **indicator** map for Average distance to closest GP clinic with bulk-billing from the list.

a. What is meant by bulk-billing and how is this a measure of both health and wealth?

b. Identify the spatial association between the bulk-billing map and the following maps:

i. the map relating to alcoholism chosen in question 7

ii. the *Health social infrastructure* map

Using ABS Data

► ABS

On the right-hand side of the website choose the orange button which displays ABS (Australian Bureau of Statistics) data. Start clicking around various suburbs throughout Melbourne and tracking the Median weekly household income, median age and average household size.

9. Identify some average trends or ranges for the ABS statistics across Melbourne

Median Age range: _____

Median Weekly Household income range: _____

Average household size: _____

10. Conduct a search using the magnifying tool for the following suburbs. Make inferences about the population that live in this suburb using the ABS data and their access to bulk billing GPs:

Cairnlea

Dandenong South

McCrae

Heidelberg West

Carlton

[illegible]



Click on the pink tab on the right-hand side of the screen, labelled Score Card. Housing Affordability Stress is a measure relating to low-income households (lowest 40% of income) who spend more than 30% of their income on housing.

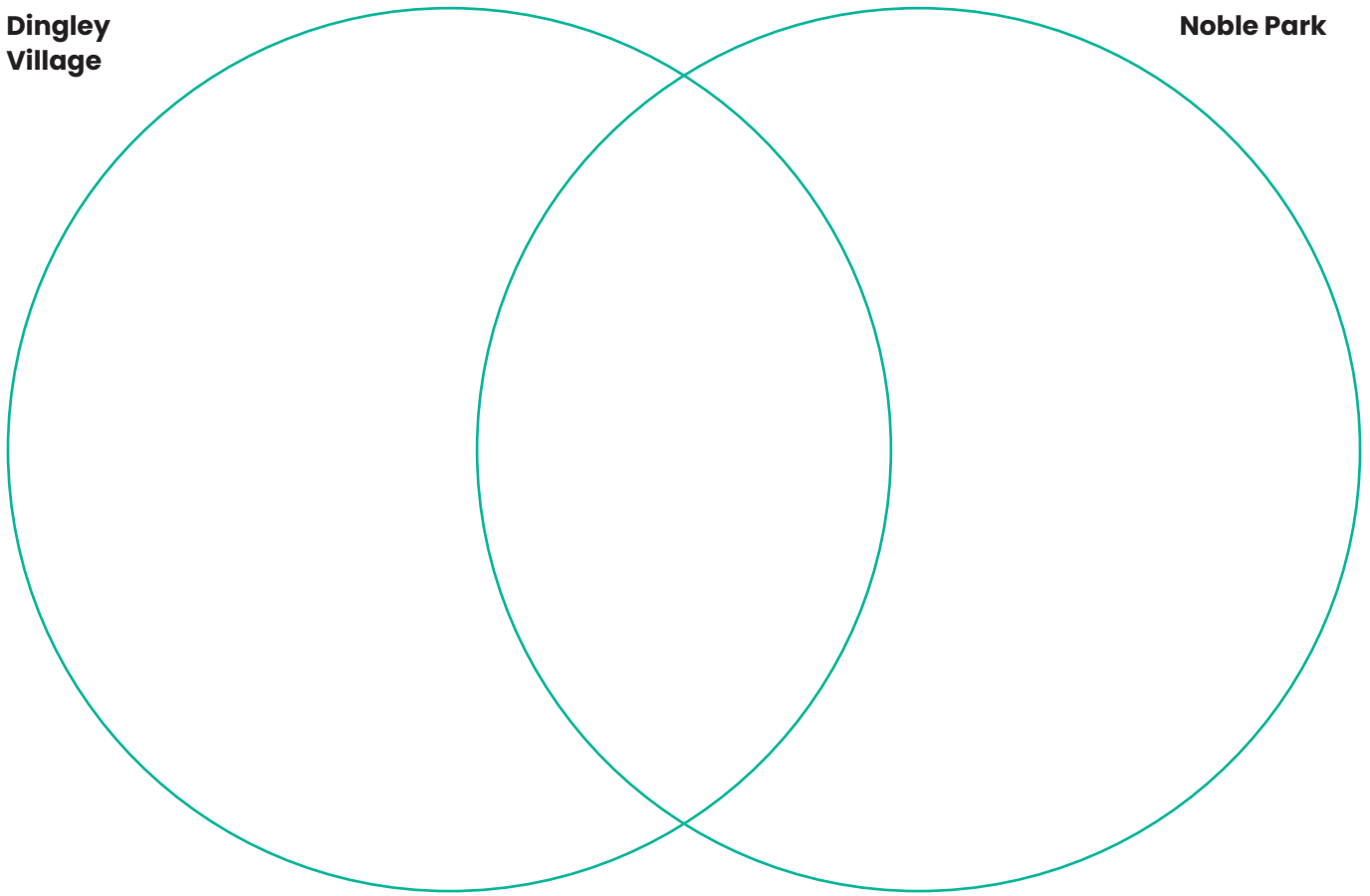
► Score card

12. Compare the length of the green bar for the two nearby suburbs of Dingley Village and Noble Park. Complete the Venn Diagram noting their similarities and differences. To support your answer, you may wish to visit this site to see the average house price in each suburb <https://www.realestate.com.au/vic/>.



**Dingley
Village**

Noble Park



13. Based on all score card **indicators**, suggest in which of these two suburbs a young couple would experience a higher level of wellbeing. Give some reasons for your answer.

Measuring Education Indicators

Choose the **indicator** map for *Education social infrastructure* and use the “i” button to understand what this **indicator** measures.



14. Explain what this **indicator** measures and how it relates to women’s wellbeing and the economy, especially after two years of COVID-19 lockdowns.

15. Suggest two suburbs where more education social infrastructure could be established. Use the ABS data to check the population data matches the characteristics of a young family area. Include data in your answer.





Click on the blue tab on the right-hand side of the screen, labelled Layers Selection. Change the map scale to Local Government Area and zoom into your area. Click on the option to show Primary schools and Secondary schools.

► Layers selection

16. Count how many primary and secondary schools are in your LGA.

17. Evaluate the distribution of schools across your LGA. Are they sufficient, are there gaps or is it based on the most populated neighbourhoods in the LGA?

Final Community Report

18. Write a wellbeing community profile for the suburb in which you live. Explore all the AUO data covered in this worksheet to assess the strengths and weaknesses of your suburb based on factors affecting health, wealth and education. Include data to support your findings. Conclude your report by making recommendations which could further improve wellbeing in your suburb.