

Analysing Australia's capital cities

Lesson Map: <http://esriaustralia.com.au/education/SpatialActivity38>

Engage

Our capital cities

→ 66% of Australians live within our eight capital cities. The highest population lives in Sydney, followed by Melbourne. The smallest population belongs to Hobart and Darwin. Even some of our cities, such as the Gold Coast and Newcastle have a higher population than Hobart and Darwin.

? The spatial distribution of Australia's capital cities is on our coastlines. Name at least two reasons why cities are located near the sea?

Historically, cities are established near the sea for many reasons. Ports are necessary to establish trade routes for goods and other products, whilst the climate in these locations often provide fertile lands for agriculture.

→ We know why our cities are located near the sea, but what are some reasons they cannot be located in the centre of Australia?

Much of Australia's land is inhabitable for population and is instead used for agriculture or left in its natural state. This is due to climate and barren lands, which would make settlement difficult. A large portion of Australia's land is either World Heritage Sites or National Parks, which ensures the protection of these areas. Many of these areas are traditionally managed by Indigenous Australians.

Explore

Exploring a capital city

→ Click on the Lesson Map URL above to open the map. In the 'Details' pane, under 'Content', tick the first checkbox to turn on the layer '2016 Total Population'. Turn off all other layers.

→ Each capital city is bookmarked. If you live in a capital city, navigate to that city. If you don't, navigate to the capital city of your state. To open the bookmarks, click the **Bookmark** button next to the address bar.



Download student worksheet [here](#).

Time
30 minutes

Activity

Investigate our capital cities, including the most advantaged and disadvantaged areas

Learning Outcome

Students will be able to:

- Identify key factors in the creation of a capital city
- Study the population distribution of their chosen capital city
- Analyse disadvantage for their chosen capital city
- Analyse access to services and facilities for their chosen capital city

ACARA Curriculum Link

Year 11 Geography | Sustainable Places

[ACHGE041](#) | [ACHGE044](#)

Teacher Feedback:

To share your feedback on this, or any Spatial Activity, please contact education@esriaustralia.com.au

- ? Looking at the population layer of your capital city, what areas contain the highest population?

Student own answer and dependent on chosen capital city.

Explain

Advantage vs Disadvantage

- Turn on the layer '2016 SA1 SEIFA' and turn off all other layers. Still say focused on your capital city.
- SEIFA is based off the ABS data on income, education, and employment. The darker the red, the lower rank the area scored.
- ? As defined by the ABS, what areas have the lowest rank in your capital city? Please note that this is SA1 area, so you will need to talk about the spatial distribution in general.

Student own answer and dependent on chosen capital city.

- ? Turn on the layer '2016 SA2 SEIFA Best and Worst'. These areas use the same SEIFA data, but instead isolate the highest ten and lowest ten SEIFA scores. Looking at your capital cities, what areas are scored the highest and lowest? Are you surprised by this?

Student own answer and dependent on chosen capital city.

Extend

Lifestyles

- The following sets of data were produced by the State of the Environment report, which provides insight into factors influencing liveability.
- ? Fill out the table on the next page, which looks at access to shops, health services and public transport of your capital city.

Student own answer and dependent on chosen capital city.

Data Set	General Trends	Areas of Concern	Areas of High Access
<i>Access to education</i>			
<i>Access to public transport</i>			
<i>Access to health services</i>			

? Can you see any trends between areas of advantage/disadvantage and access to services or facilities?

Next Steps:

Request a free ArcGIS Online Account for your school:

Australian schools can request a free ArcGIS Online account as part of Esri Australia's Classroom GIS Initiative. A school subscription provides additional map layers, content, features and privacy. Learn more about ArcGIS Online, and apply for your ArcGIS Online School subscription at <http://esriaustralia.com.au/education>