

Case Study: Liveability in Ballarat

Lesson Map: <http://esriaustralia.com.au/education/SpatialActivity11>

Engage

How is public transport located around Ballarat?

- ➔ Click on the map URL above to open the lesson map. A heat map showing the density of bus shelters around Ballarat is visible.
- ? What do you notice about the distribution or the most bus shelters? *[Higher density along main road, particularly Albert St and Sturt St]*
- ? Based on the map, where would you assume the Ballarat CBD is located?
[Answers will vary – some students may identify the suburb of Ballarat, however hotspots of bus shelters are somewhat spread both North and South]

Explore

What is the relationship between bus shelters and schools?

- ➔ In the Details pane, under the heading Content, tick the checkbox to turn on the layer called Schools. Leave the Bus Shelters lay on also.
- ? What is the relationship between bus shelters and schools in Ballarat? *[Most schools sit within bus shelter hotspot]*
- ? Which schools are not accessible by bus? Click on the School icon to investigate.
- ? Brainstorm some environmental, social and economic negatives of schools sitting outside of public bus routes. *[Answers will vary – but may include cost of driving private vehicles, and subsequent environmental damage etc.]*

Explain

Who uses active transport methods in Ballarat?

- ➔ In the Details pane, under the heading Content, tick the checkbox to turn on the layers Bike Racks, and Schools. Turn off all other layers.
- ? Is there any relationship between the location of public bike racks, and schools in

Download student worksheet [here](#).

Time
20 minutes

Activity

Investigate the features which contribute to livability, through a case study of Ballarat, Victoria.

Learning Outcome

Students will be able to:

- Investigate spatial patterns and derive meaning
- Understand the importance of Town Planning to improve liveability and safety
- Analyse the features in public spaces, and propose action to improve these spaces.

ACARA Curriculum Link

[Year 7 Geography - Unit 2: Place and liveability](#)

[ACHGK043](#) | [ACHGK044](#) | [ACHGK046](#)
| [ACHGK047](#) | [ACHGS051](#) |
[ACHGS050](#) | [ACHGS054](#)

Special Thanks:

Special thanks to the City of Ballarat for providing the data used to create this map.

Teacher Feedback:

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

Ballarat? *[No]*

? Where are most bike racks located? *[In the suburbs of Ballarat and Bakery Hill]*

→ Click the Bookmarks button, and select 'Ballarat CBD'.

→ Click the Basemap icon, and select Open Street Map basemap

? Who is using the bike racks? Zoom in within the CBD to investigate landmarks near the cluster of bike racks. *[City workers, Federation University students students at ACU, hospital workers or visitors, Old Library, Old Gallery, multiple parks]*

Extend

How liveable are public spaces in Ballarat?

? What sort of features do Governments add to an area to improve liveability and perceptions of safety? *[Toilets, lighting, gates, footpaths, CCTV etc.]*

→ In the Content page, tick the checkbox to turn on the layers Public Lighting, Public Toilets, BBQ's, Playgrounds and CCTV Location. Turn off all other layers.

→ Click the Basemap icon, and select the Imagery with Labels Basemap.

→ Open the Legend to understand symbology.

? Where are the most CCTV cameras located? Why would they be here? *[Proximity to University campus, cinemas, coffee shops and bar. Reasoning will vary]*

? In Bookmarks, select Victoria Park. Is this a liveable public space? Why, why not? *[Answers will vary –park has BBQs, ovals, playground, and toilets. Potentially not enough lighting or toilets]*

? Investigate livability in other Bookmarked parks – Botanical Gardens, Midlands Reserve, Marty Busch Reserve and the Ballarat North Community Parks.

? Discuss the features you would include if you were to create your own park *[Answers will vary]*

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>