



SCIENCE AND
INDUSTRY
ENDOWMENT
FUND



Generation STEM Community Partnerships Program

Campbelltown local scenario

Western Sydney Aerotropolis - Bradfield

The Western Sydney Airport will bring not only increased tourists to the area but will result in a 24 hour a day transport hub across Australia and around the world. The surrounding areas are being developed as the aerotropolis – an economic precinct that will target industries such as defence, aerospace, advanced manufacturing, freight and logistics, agribusiness, health, education and tourism. Looking at the success of similar aerotropolises in the USA and other countries, the Western Sydney Aerotropolis is expected to be a catalyst for economic growth and new jobs in one of the fastest growing regions in Australia.

Development of new, 24 hour access transport links to and from the airport is underway as part of the Sydney Metro Greater West development with plans for rapid bus connections to Campbelltown using the new M12 motorway and road upgrades. Without access to a direct rail link, the increased road travel will result in greater congestion and longer journey times.

Already committed to establishing a presence in the area are the aerospace and defence industries with the Australian Space Utility, CSIRO, Northrop Grumman and BAE Systems Australia. The agribusiness precinct will include the Integrated Intensive Production Hub over 5000 hectares with the potential to produce 96 000 tonnes of fresh food for distribution. Hitachi will be developing a facility based on their Kyoso-no-mori facility in Japan which promotes collaborative creation-style research between business, academics and government. The University of Newcastle, University of NSW, University of Wollongong (NUW Alliance) and Western Sydney University will be participating in a new higher education institution with TAFE and a specialist STEM high school being situated in close proximity. These are just the first of those signing up to participate.

The wide range of skills and expertise needed for the development of this precinct and the ongoing operation provides many opportunities for the residents in Campbelltown. These include the infrastructure requirements but the energy, utilities biosecurity, technology, research, trade agreements and market access.

Campbelltown City Council have the challenge to ensure that they support their community to participate and benefit in these new opportunities.



¹ p9 A Western Sydney Aerotropolis concept

Your task

Your task is to use the information above, and resources provided below as a start to identify a local problem and design a STEM-focussed solution.

(Question, Design, Explore, Communicate)

Resources

CSIRO research

- NSW Digital Twin <https://data61.csiro.au/en/Our-Research/Our-Work/Future-Cities/NSW-Digital-Twin/NSW-Digital-Twin>

Reports

- NSW Spatial Digital twin <https://nsw.digitaltwin.terria.io/>
- ¹ A Western Sydney Aerotropolis Maximising the benefits of Badgerys Creek <https://www.nswbusinesschamber.com.au/NSWBC/media/Policy/Thinking%20Business%20Reports/A-Western-Sydney-Aerotropolis.pdf>
- NSW Government Western Sydney Aerotropolis – key actions and documents <https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis/Key-actions-and-documents>
- Australian Government Department of Infrastructure, Transport, Cities and Regional Development https://www.westernsydneyairport.gov.au/sites/default/files/Factsheet_Accessing_Western_Sydneys_airport.pdf

Articles

- Meet smart mobility experts <https://imoveaustralia.com/smart-mobility-expert/>
- List of iMove projects <https://imoveaustralia.com/projects-listing/>
- Government News Tokyo science city inspires WSA 2 June 2019 <https://www.governmentnews.com.au/tokyo-science-city-inspires-western-sydney-aerotropolis/>
- News <https://www.wcaa.sydney/news>
- Macarthur Adviser 1 June 2020 <https://www.macarthuradvertiser.com.au/story/6776202/west-sydney-airport-metro-line-expedited/>
- United States Study Centre 2018 <https://www.ussc.edu.au/analysis/american-airport-cities-lessons-for-western-sydney-airport>
- AFR 30 June 2017 <https://www.afr.com/companies/infrastructure/dallasfort-worth-is-the-texan-model-for-sydneys-next-airport-at-badgerys-creek-20170629-gx14tp>
- Careers in the Western Sydney Aerotropolis <https://www.youtube.com/watch?v=wZlpKqB69GQ&feature=youtu.be>