



SCIENCE AND
INDUSTRY
ENDOWMENT
FUND



STEM Community Partnerships Program

Blacktown local scenario

Transport

The Blacktown local government area (LGA) is predicted to grow to approximately 500,000 people and 180,000 dwellings by 2036. To be a community that supports the wellbeing of its inhabitants, Blacktown City Council works with the State and National government bodies to implement and oversee a range of initiatives that lead to the safe and free flowing movement of people, including in relation to local transport needs.

Blacktown's fastest growing sectors are transport, postal work, and warehousing. This highlights the strategic importance of the City's proximity to major transport routes. The NSW Government is aiming to provide a 30-minute city where people can reach their nearest metropolitan and strategic centres within 30 minutes, seven days a week by public transport. This involves developing public transport links, fostering a diverse range of industries and ensuring there are adequate public transport links to local training and job opportunities.

According to the 2016, Census shows that 19.1% of the employed population in the Blacktown LGA travelled to work using public transport (compared with 16% in NSW) and 70.1% travelled in a car (compared with 64.6% in NSW).¹ Whilst road infrastructure improvements are highlighted in Blacktown's Integrated Transport Management Plan (ITMP), there is also a strong recommendation to shift the community's reliance on personal cars. More sustainable options such as walking, cycling and public transport are of priority.

With the arrival of new transport connections and development of technology advances in driverless cars, new fuels to power cars and other vehicles, as well as changes in transportation trends and remote working as a result of COVID-19, the next Census results may be quite different.

How your Council tackles the complexity of this issue impacts you and your community now and in the future.

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)



Sunnyholt Road Construction -
<https://blacktownmemories.recollect.net.au/nodes/view/6190>

Resources

CSIRO research

- Global megatrends report <https://www.csiro.au/en/Do-business/Futures/Reports/Our-Future-World>
- National Hydrogen Roadmap https://www.csiro.au/~media/Do-Business/Files/Futures/18-00314_EN_NationalHydrogenRoadmap_WEB_180823.pdf?la=en&hash=36839EEC2DE1BC38DC738F5AAE7B40895F3E15F4

Reports

- ¹ Blacktown City - Method of travel to work, Census, 2016 <https://profile.id.com.au/blacktown/travel-to-work>
- Blacktown City Council Integrated Transport Management Plan (ITMP) <https://www.blacktown.nsw.gov.au/Plan-build/Stage-2-plans-and-guidelines/Transport-road-and-parking-plans/Integrated-Transport-Management-Plan-ITMP>
- Australian Government Department of Infrastructure, Regional Development and Cities <https://westernsydneyairport.gov.au/>
- Charting Transport, Update on Australian transport trends, December 2020 <https://chartingtransport.com/2021/01/03/update-on-australian-transport-trends-december-2020/>
- Urban Transport Crowding and Congestion, Infrastructure Australia, June 2019 <https://www.infrastructureaustralia.gov.au/publications/urban-transport-crowding-and-congestion>

Articles

- 5 Sustainable Transport Options to Watch In 2019, Triple Pundit, January 2019 <https://www.triplepundit.com/story/2019/5-sustainable-transport-options-watch-2019/82201>
- How digital twins of cities can help to improve urban mobility, PTV, January 2021 <https://blog.ptvgroup.com/en/city-and-mobility/digital-twins-urban-mobility/>
- How close is Sydney to the vision of creating three 30-minute cities? The Conversation, May 2019 <https://theconversation.com/how-close-is-sydney-to-the-vision-of-creating-three-30-minute-cities-115847>
- Sydney's transport is doomed to fail its users, even when it's actually succeeding, ABC, January 2018 <https://www.abc.net.au/news/2018-01-11/sydney-rail-chaos-public-transport-nsw-subway-metro/9319908>

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