



SCIENCE AND
INDUSTRY
ENDOWMENT
FUND



LIVERPOOL
CITY
COUNCIL

STEM Community Partnerships Program

Liverpool local scenario

Transport

To be a community that supports the wellbeing of its inhabitants, Liverpool 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. In the local area, this may include provisions for pedestrians, cyclists, drivers, those using public transport and those in disadvantaged groups.

Western Sydney is one of the fastest growing areas in Sydney and work is continuing to build for future generations to improve safety and ease congestion on roads. There are currently more than 8,450,000 journeys to work that start and end in Western Sydney: 64% of those trips are taken by private cars. Several key road corridors pass through Liverpool and the traffic in Liverpool is expected to grow due to residential and commercial development in Western Sydney. Not only does this lead to congestion on the roads, but it also presents parking challenges in hubs such as the Liverpool Central Business District (CBD).

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 fostering a diverse range of industries and work opportunities in the area and ensuring there are adequate public transport links to local training and job opportunities.

According to the 2016 Census, 70% of people in the Liverpool local government area travelled to work in a private car, 13.9% took public transport compared to compared with 22.7% and 56.6% respectively in Greater Sydney. 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 now and in the future.



'Major new transport interchange': Stations confirmed for airport metro line September 2020, Liverpool Champion

<https://www.liverpoolchampion.com.au/story/6922554/major-new-transport-interchange-stations-confirmed-for-airport-metro-line/>

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-focused solution.

(Question, Design, Explore, Communicate)

Resources

CSIRO research

- Global megatrends report, April 2010 <https://csiropedia.csiro.au/megatrends-and-megashocks-a-new-view-of-our-future-world/>
- National Hydrogen Roadmap <https://www.csiro.au/en/work-with-us/services/consultancy-strategic-advice-services/csiro-futures/futures-reports/hydrogen-roadmap>

Reports

- Three cities for Sydney: Unlocking Sydney as a global gateway with three CBDs <https://future.transport.nsw.gov.au/designing-future/three-cities-for-sydney>
- Planning for rail services west of Bankstown Station in 2024, Transport for NSW, December 2020, <https://yoursay.transport.nsw.gov.au/west-of-bankstown>
- Liverpool Bike Plan 2018-2023, <https://www.liverpool.nsw.gov.au/trim/documents?RecordNumber=021381.2019>

Articles

- Sustainable transport in cities <https://www.carbontrust.com/news-and-events/insights/sustainable-transport-in-cities>
- 5 Sustainable Transport Options to Watch In 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, Jan 5, 2021 <https://blog.ptvgroup.com/en/city-and-mobility/digital-twins-urban-mobility/>
- 'Major new transport interchange': Stations confirmed for airport metro line, Liverpool Champion, September 2020, <https://www.liverpoolchampion.com.au/story/6922554/major-new-transport-interchange-stations-confirmed-for-airport-metro-line/>
- Transport grants to help deliver shared pathways, Liverpool Champion, October 2020 <https://www.liverpoolchampion.com.au/story/6968726/transport-grants-to-help-deliver-shared-pathways/>

- New parking spaces created at Woodward Park, Liverpool City Champion, March 2020, <https://www.liverpoolchampion.com.au/story/6664765/new-parking-spaces-created-at-woodward-park/>
- 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>
- Peak hour in Austral is so bad, commuters are driving on the wrong side of the road to avoid it, ABC March 2021, <https://www.abc.net.au/news/2021-03-12/austral-development-causing-commuter-chaos-at-liverpool/13234658>

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