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## Smart transport and spatial data



"Smart Transport Research Centre"



Opening up transport related data has improved traveller information systems and allowed users to make informed decisions.

Crowd sourcing apps such as WAZE can reduce traffic congestion and have also highlighted the need for more real-time information to be made available to transport system users.

The Smart Transport Research Centre (STRC) is a world-class research centre at QUT, collaborating with the Department of Main Roads (TMR) and Brisbane City Council (BCC), using open spatial data to focus on smart transport systems which will reduce traffic congestion and deliver multi-modal network optimisation for Australian and international cities.

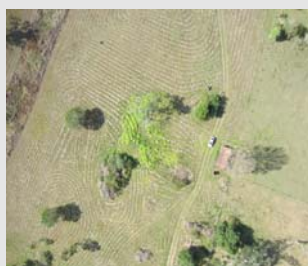
"Harvesting publically available information, STRC built SEQ Commuter, a personalised email service aimed at cutting down travel times and frustration."  
Dr Marc Miska, Science and Engineering Faculty, QUT

<http://www.strc.org.au/>



Bangkok Traffic by Mark Fisher  
<https://www.flickr.com/photos/fischerfotos/7457911072> CC BY-SA 2.0

## Spatial Data Finder



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Leveraging existing QUT infrastructure developed in previous ANDS funded projects, **Spatial Data Finder** is a metadata registry where spatially integrated data is described, connected and published.

Spatial categories conform to ISO19115 and the ANZLIC system used by the Queensland government, for ease of integration between data sources.

The collection of spatially integrated datasets across different subject areas from within QUT and from external collaborators such as the Department of Agriculture, Fisheries and Forestry, helps to extend research possibilities for QUT researchers.

QUT's CyPhy Lab was founded in 2010 by Profs. Gordon Wyeth and Peter Corke to create autonomous robotic systems. CyPhy Lab projects span robotic vision, sustainable agriculture, lifelong autonomy, neuroscience and robotics plus applications in flying, ground and underwater robotics. A range of CyPhy related datasets have been described in Spatial Data Finder involving developments in aerial mapping and SLAM (Simultaneous Localisation and Mapping) algorithms.

<https://researchdatafinder.qut.edu.au/spatial>



Spatial Data Finder: <https://researchdatafinder.qut.edu.au/display/n937>

## Community engagement

The Cube Globe is a world leading interactive display that provides a visual solution to the analysis of data.

Using open source spatial data from collaborators such as the Department of Natural Resources and Mines, the Cube Globe communicates complex ideas, scenarios and data to reach an expanded audience for the benefit of business, the economy and community.

The G20 Summit was held in Brisbane in November 2014 and brought together leaders from the world's major economies to deal with the biggest economic challenges. QUT's Spatial Data Finder describes the datasets exhibited on the Cube Globe as part of the G20 event. Spatial Data Finder links data from researchers at QUT and within Queensland Government departments to allow questions in agriculture, construction, culture, education, tourism, resources and the science sectors to be examined in an accessible way.



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<http://www.thecube.qut.edu.au/project/cube-globe>