

Update on ANZLIC Strategic Plan 2020-24 implementation

September 2020

Since publishing the [ANZLIC Strategic Plan 2020-24](#) in March 2020, ANZLIC and its delivery arm, the Intergovernmental Committee on Surveying and Mapping (ICSM), have progressed work on a range of key priorities from the strategic plan.

1. *Modernise ANZLIC's Foundation Spatial Data Framework (FSDF)*

ICSM has recently completed an interim Australian Land Borders dataset to provide a consistent and accurate national-level representation of borders across Australia's states and territories. ICSM is currently consulting with key jurisdictions and users of the dataset.

ICSM is also progressing a review of ANZLIC's FSDF to ensure it is fit for purpose and supports increased discoverability and accessibility for foundation spatial data. This includes scoping inclusion of new themes in the FSDF, such as building and settlements, population distributions, geology and soils and physical infrastructure.

2. *Digital Twins and Smart Cities*

Victoria's \$45 million Digital Cadastre Modernisation project is progressing well. Vendors have been appointed for all four stages of the project and 1 million parcels have now been digitised, covering 20 Local Government Areas.

Victoria is aiming to launch the Fisherman's Bend Digital Twin in the next few months. Engagement with local, state and federal government agencies, as well as industry bodies will guide future development and refinement of the platform. Victoria has embarked on a new digital twin project involving a broad acre residential subdivision in the City of Brimbank in partnership with Development Victoria and the Victorian Building Authority (known as the Cairnlea Digital Twin Initiative). Victoria has also completed a mobile and airborne scan for the Great Ocean Road which will be a key component in the future management of the Great Ocean Road and surrounding land.

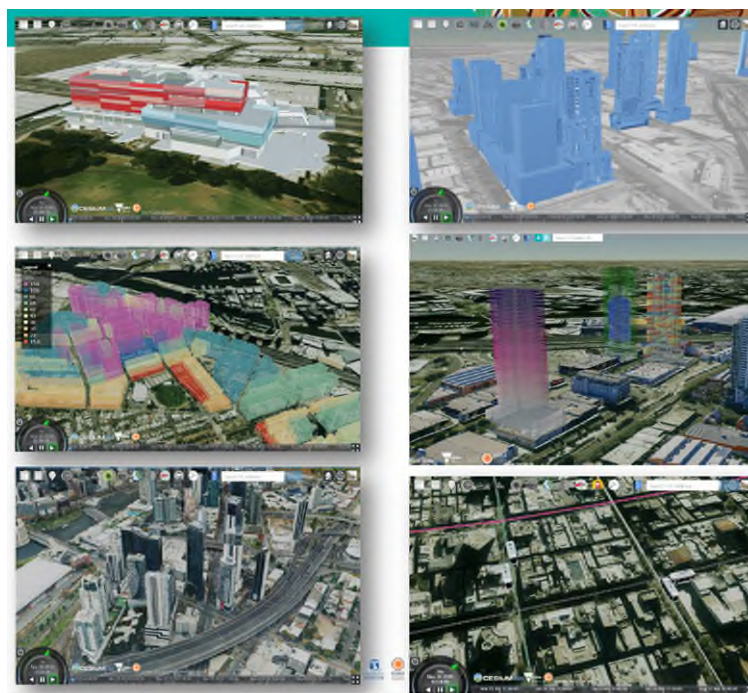


Figure 1: Fisherman's Bend Digital Twin

New Zealand is leading ANZLIC's work to develop a 3D digital cadastre data model, and has released a request for proposal in August 2020. This project seeks to facilitate consistent, seamless exchange of 3D cadastral survey data between the cadastral surveying profession and land information agencies throughout Australia and New Zealand. To this end, the project will (i) deliver a harmonised 3D cadastral data model that supports the cadastral data, system and regulation requirements of all jurisdictions, and (ii) identify a range of possible¹ exchange (or transfer) format(s) that can (or will) be supported by major survey/geospatial software vendors. Further information on this work is available [here](#).

New South Wales is progressing a range of work related to the NSW Spatial Digital Twin, including working with Infrastructure New South Wales to integrate NSW infrastructure data into the digital twin to support project monitoring and reporting.

Queensland has progressed work on a Digital Twin Proof of Concept, which leverages Data61's work with NSW on the NSW Spatial Digital Twin. Queensland is also exploring Internet of Things (IoT) examples and integration of IoT sensor data. Data61 has recently completed a draft Queensland Spatial Digital Twin Framework. This document is an important next step following publication of ANZLIC's [Principles for Spatially Enabled Digital Twins of the Built and Natural Environment in Australia](#), published in December 2019.

Western Australia has commenced a project to explore the concept to develop a consolidated 4D location information environment, supporting digital workflows and enabling smart city and digital twin capability. Landgate is currently consulting with government agencies to strategically justify the concept for the WA Minister for Lands.

3. *Australian Geospatial Reference System (AGRS) Modernisation*

ICSM has continued its work with land agencies in each Australian jurisdiction to coordinate the release of foundation spatial data on GDA2020.

In June 2020, ICSM published updated metadata tools and guidance, including guidance to support data custodians, managers and users to adopt GDA2020. ICSM has also [developed and released tools](#) to assist users to transform data between GDA94 and GDA2020 and from GDA2020 ellipsoidal and Australian Vertical Working Service (AVWS) heights.

4. *Improved spatial data delivery*

In conjunction with its work related to ANZLIC's FSDF, ICSM has completed an end user survey to inform next steps for development of a new spatial data metadata roadmap. ICSM is also continuing work to finalise its strategy for the Enhanced Location Value InfrastructureS (ELVIS).

5. *Coordinated earth observation (EO) data acquisition*

ANZLIC jurisdictions have shared forward capture programs for aerial photography through the ICSM Elevation, Depth & Imagery Working Group. Some ANZLIC jurisdictions are scoping options for more coordinated approaches for EO data acquisition.

6. *Place Names*

ICSM is progressing a review of indigenous place naming principles across Australia's state and territory governments. ICSM continues to publish place name data through ELVIS via aggregated data feeds from jurisdictional naming authorities.

¹ Or most suitable, or most widely accepted by software vendors

7. *Space and Spatial Integration*

ANZLIC is continuing to contribute to the development of Australia's Space and Spatial Industry Roadmap 2030, via collaboration as part of the project's Steering Committee.

8. *Stakeholder engagement*

Over the past few months, ANZLIC Members have presented at a range of online events and webinars both within their jurisdictions and on ANZLIC's behalf. Some key engagements have included:

- *Bruce Thompson, 'Foundational Spatial Data Framework and Spatially Enabled Digital Twins', Consulting Surveyors National Conference 2020, 5 June 2020*
- *Craig Sandy, 'ICSM implementation of the Foundation Spatial Data Framework to support digital twins', Consulting Surveyors National Conference 2020, 5 June 2020*
- *Sandy Caruthers represented ANZLIC at the Space and Spatial Industry Roadmap Steering Committee meeting on 5 June 2020*
- *Alison Rose, 'ANZLIC's Strategic Plan' UN-GGIM, 9 June 2020*
- *Letter from ANZLIC to UN-GGIM on 23 June 2020 in support of the report on [Future Trends in geospatial information management](#) and to share information about ANZLIC's work*
- *Bruce Thompson, 'Spatial Digital Twin – The New Digital Workbench' Locate Connect, 8 July 2020*
- *Steven Jacoby, 'Positioning Queensland: Queensland's Cadastral Modernisation Program' Locate Connect, 8 July 2020*
- *Craig Sandy, 'A Modernised 3D Digital Cadastre underpins a Smart City' Locate Connect, 8 July 2020*
- *Roger Fraser, 'Lessons learned in Victoria's Digital Cadastre Modernisation Project – From pilot study to production' Locate Connect, 9 July 2020*
- *Melissa Harris, 'ANZLIC Strategic Directions', Locate Connect, 20 August 2020*

9. *Diversity and inclusion*

ANZLIC is collaborating with key peak bodies including the Survey and Spatial New Zealand, Consulting Surveyors National, SSSI, and SIBA – GITA to consider options for developing a national-level survey into diversity and inclusion in the spatial sector.

10. *Skills and capability*

As part of its recent stakeholder engagement activities, ANZLIC has continued its advocacy for, and information sharing related to, spatial skills and capability.