

TASSIC Forum

25 November 2020

Discussion Panel

Moderator

Craig Perkins, CEO, Regional Development Australia (Tasmania)

Panelists

Daryl Connelly, CEO, Cradle Coast Authority

Alex Crothers (answers in orange), Program Leader (Topographic Data), Land Tasmania LIST

Wayne Patterson, Director Spatial Operations, Spatial Services NSW

For Daryl Connelly

1. What do you see as the key priorities or challenges for the Spatial Industry to support Regional Development?

Daryl:

- a. I suspect the majority of spatial professionals are employed in and engaged by, local and state government, rather than regional organisations.
- b. Many staff and other influencers in regional development organisations don't have good skills and knowledge in this area.
- c. The sector has an awareness problem; many regional development staff and influencers "don't know what we don't know"; perhaps the sector could do more promotion.

For Alex Crothers

2. Are there any plans to provide the state aerial photo overlay as a time dated overlay that we can scroll through in the same manner as Google earth? (Richard Peck)

Alex: It is certainly a future goal but not currently planned. Resources to support that level of service are significant and not currently available.

3. Alex or TASSIC – Any comment about State level readiness for a digital twin framework? (Andrew Ritchie)

Likely a question for TASSIC.

See comment below from Michael Giudici

4. Is the digital Twin the next step for LIST or is Digital Twin the next Australia wide LIST? Can we make the New Bridgewater Bridge project available in LIST as Digital Twin? (Birgit Kruse)

Alex: Again possibly a question for TASSIC. However, I encourage you to look at nationalmap.gov.au with new features due in December. Some spatial design files can be uploaded for viewing in National Map and in 3D.

Also see answer below from Michael Giudici.

For Wayne Patterson (as related to Alan Smart)

5. I would be interested to find out more about the integration and relationship between State and Local Government levels with regards to developing managing and supporting the Digital Twin. (Chris Walsham)

Response conveyed via Alan Smart.

Close collaboration between State and Local Government is essential to managing and supporting digital twin models. Spatial digital twin models build on foundations spatial data such as the LIST. To this can be added additional data such as that available from sensor feeds or other data to build a 3D and 4D format.

Information on the NSW digital twin program can be found at https://www.spatial.nsw.gov.au/what_we_do/projects/digital_twin. The digital twin viewer is open to public access and can be found at <https://nsw.digitaltwin.terria.io/>

6. I am keen to understand the licence fees ... who is paying to make this application (i.e. the data viewer) publicly available? (Robert Stevenson).

The foundation spatial data on which the digital twin platform depends is in most cases funded by governments. Funding in NSW is through Spatial Services, a division of the Department of Customer Service.

The 2018 NSW State Infrastructure Strategy called for the development of a business case for an upgrade of the state's Foundation Spatial Data Framework (FSDF) from a two-dimensional map to a four-dimensional model (3D + time). That is a full three-dimensional model of the state's physical environment, capable of recording past conditions and visualizing future scenarios.

To develop the inputs necessary to build the business case, a Minimum Viable Product (MVP) has been developed by Spatial Services. Given the level of infrastructure investment, as well as economic and social significance, the area chosen for the Digital Twin MVP is the eight Local Government Areas comprising the Western Parkland City and Greater Parramatta and the Olympic Peninsula.

The NSW Spatial Digital Twin is upgrading the existing two-dimensional creating a digital real-world model of NSW cities and communities which will facilitate better planning, design and modelling for future needs.

7. Any discussions had with Tas government Wayne? (Andrew Ritchie)

Response prepared by Michael Giudici.

Whilst Land Tasmania is yet to enter the space of planning for digital twins, we continue to focus on the improvement of our foundation spatial data which underpins any digital twin capability.

Earlier this year we received a report from TASSIC, summarising the expectations of users of LISTdata and Services, and including some recommendations for consideration. Land Tasmania is actively looking at implementing aspects of the report and building in a response to forward business plans. For example, we are presently recruiting a new LIST training officer who will be responsible for developing new training content and arranging delivery. We have also initiated a systematic review of our Tasmanian Imagery Program model which Alex Crothers referred to in the seminar.

Also, in the new year we will begin a LIST architecture review including analysis of moving service to a cloud environment. We are working with other jurisdictions to understand what this may look like.

Land Tasmania remains available to work in a strategic way with local government and regional communities, especially in the provisioning of foundation spatial data. As and when local governments look to adopt digital twin capabilities, Land Tas will be a partner in delivery.

8. Would it be possible to integrate social data to spatial data in the spatial digital twin? (Sahar Shahpari)

Any data, including social data, can be integrated with the foundation data in a digital twin model as long as it can be geo-referenced.

All presenters

9. Are LGAs intimidated by getting into the spatial space? (Michael Giudici)

Alex: Perhaps somewhat intimidated but also easily overlooked. Good spatial services that function well appear simple, ubiquitous and up-to-date to the end users, but require substantial resourcing and commitment to maintain.

10. What measurable ROI has been achieved in the projects shown by Wayne and Alex. If we look at these projects, particularly the NSW and Launie example there was significant funding provided by either state or federal governments (Wayne quoted "billions") - simply what are the immediate financial ROIs or for the next 5-10 years, given the \$ spent. (Robert Rowell)

Alan: see comments above. The NSW Spatial Services is currently developing a business case for expansion of the NSW Digital Twin Model.

Alex: In Tasmania, a question the Office of the Coordinator General.

11. A comment on social integration Wellington City Council in NZ has done work in this space. (Deanna Hutchinson)

12. Have we reached the point where the use of spatial technologies, to provide evidence to support decision making, and creating a set of spatial tools for ongoing management and monitor progress, is no longer always a 'after thought'? We establish systems to manage the money, but now perhaps the data used to make decisions and needed to monitor progress will be better managed. (Peter Taylor)

Alex: Even with the abundance of data and technologies there is an ongoing (emphasis on ongoing) operational need for the resources to collect, manage and curate data into information, to support decision making. It is a constant process of raising awareness and advocacy to prevent slippage back to an 'after thought'. I would say we are not there yet.