School Infrastructure NSW collaborates with ReSSE to bring 3D Reality Mesh to life

Remote Sensing Services and Equipment (ReSSE) Prequalification Scheme

August 2022

At a Glance

Customer: School Infrastructure NSW (SINSW)

Website: schoolinfrastructure.nsw.gov.au

Country: Australia

Industry: Government – Department of Education

Products and services: School infrastructure – building, maintenance, community support, industry partnerships

Customer size: Corporate

Innovation of asset lifecycle through new capabilities and datasets

Customer challenges

In line with the NSW Government's Digital Strategy, the SINSW digitalisation program aims to connect disparate data sets to inform better decision making. However, with each major capital investment, SINSW must undergo a business case process in line with the Infrastructure Assurance framework.

Compared with construction, the business case phase can take up to twice as long to complete. A key challenge for SINSW was understanding the spatial technologies and capabilities available, how to access the data and having the subject matter expertise to digitise the information.

Partner solution

Managed by the DCS Spatial Services, the ReSSE Prequalification Scheme provided a solution to meet the challenging demands of this program by delivering high-resolution 3D reality meshes for eight school sites across NSW.

Established in 2018, the ReSSE Scheme aims to slash red tape to deliver streamlined spatial imagery and elevation data to government agencies through procurements to the private sector enterprises.

Choosing ReSSE provided SINSW with a range of benefits including:

- In-house technical expertise with DCS Spatial Services subject matter experts providing assistance in the development of scope of requirements, product specifications, proposal evaluation and quality assurance.

- Opening the door for SINSW to access spatial data services (including RPAS) from multiple market-leading private enterprises.

- Significantly enhancing overall project completion time with independent contracts being awarded for each school site, resulting in concurrent imagery capture across the sites.

- A team that provides project management including requirements gathering, contracts administration, project status reporting and vendor consultancy on behalf of SINSW.

Customer benefits

The Department of Education feedback indicated the 3D reality meshes will be beneficial during the design phase, helping to generate fast and accurate master plans and school designs, and reduce site visits.

"We'll be able to identify issues and risks early in the planning phase, which will help us achieve cost savings. We can see there will be time savings in the business case process as well, as we are able to remove duplication and inconsistencies across projects. The 3D reality meshes will also help us to monitor the current condition of our school assets – the potential to save time on site visits is a huge advantage for our work with schools."

"Harnessing the benefits of digitalisation will result in faster planning and design, reduced costs and the opportunity to deliver more school projects across NSW."

Department of Education - Program Director, Digitisation

Access to market leading innovative technology

The imagery data was processed into orthomosaic and 3D reality mesh products, ready for usein Geographic Information System and asset management systems

High-quality imagery delivered (≤1cm Ground Sample Distance) for all school sites