

Lidar Used in Award-winning Airport Digital Twin Project



At the 2022 Technology Impact Awards in British Columbia, Vancouver International Airport (YVR) recently received the Excellence in Industry Innovation Award from the BC Tech Association. The award-winning project involved a digital twin that was produced by GEO1 using RIEGL Lidar in partnership with GeoSim and Talon Helicopters.

A digital twin is a virtual representation that serves as the real-time digital counterpart of a physical object or process. Digital twin models are being used at an increasing rate by airports to anticipate passenger movement and deploy resources such as staff and vehicles. They can also be used to develop simulations for training ground personnel and first responders, as well as to model emergency events or visualize future infrastructure development.

Once the data for YVR had been acquired by [GEO1](#) with two RIEGL VUX-1LR laser scanners at an oblique angle for improved coverage, the data could be stitched together by [GeoSim](#) to produce the final 3D model. As the second largest airport in Canada, this digital twin positions YVR at the forefront of innovation in the industry.

With an array of [Phase One 150MP](#) cameras and [RIEGL VUX-1LR](#), the GEO1 team collected data at a rate of almost 1,000 megabytes per second.

Read more about how YVR is utilizing their digital twin [here](#) and [click here](#) to read more about the 2022 Excellence in Industry Innovation Award.

