CESO

3D Scanning

Laser Sharp Focus

The advancement of technology has created paths for process optimization in the field. In particular, 3D scanning is redefining the way land surveying can be performed.

The process for site selection or suitability analysis can be overwhelming, time-consuming, and costly if not conducted efficiently. Whether for an industrial complex, roadway project, or retail development, it is the role of a land surveyor to assess the existing conditions of a property's improvements to aid clients in making informed decisions relating to the feasibility of a project. To mitigate project risk, the field data collected must be reliable and accurate.

Through the utilization of 3D scanning, CESO's team of surveyors can enhance project outcomes with their ability to scan the interiors and exteriors of natural areas or human-made structures. 3D scanning involves a contactless process of digitally projecting a laser line or multiple lines onto a dimensional shape or object and capturing its reflection with a sensor. When an object's physical features disrupt a laser line, a sensor translates the form into millions of points of data called a point cloud. A computer can then render the point clouds into 3D designs of virtually life-like imagery highlighting topographic features and details.



Increases project visualization capabilities



Mitigates project risks



High precision and accuracy of data



Significantly reduces field time



Interfaces with existing point clouds of data



National Reach

We have collaborated on civil engineering projects from coast-to-coast. With **12 offices** throughout the country and more than **100 licensed professionals**, we are positioned to assist you where you need us, when you need us.

Across Markets

At CESO, we empower our people to impact communities by bringing our clients' visions to life. Within each sector, we seamlessly integrate our expertise to design solutions that support our mission to create value in our communities, by helping solve some of the challenges that exist in the lives of others where we live and work.



Survey | Environmental | Civil Engineering | Inspection | Landscape Architecture | Architecture | Interiors

