



TRC's 3D Facility Mapping Delivers Transformative Results

CAPTURE ACCURATE DATA AT A FRACTION OF THE TIME AND COST

TRC offers a complete solution for 3D facility mapping and digital twin creation. Combining deep utility expertise with advanced imaging technologies and proven machine learning models, we help utilities generate precise, actionable asset data at scale, improving workflows and increasing safety and reliability.

Modern Facility Mapping

Unlike outdoor assets, indoor equipment and components, such as compressors, regulators and meters, can be challenging to map accurately using traditional approaches. Modern geospatial tools solve this problem. Using advanced imaging and technologies, TRC's 3D facility mapping solution improves the process of capturing, modeling and analyzing a facility's physical environment.

Geo-enabled mapping, unlike traditional 2D schematics or point-based GIS entries, leverages specialized cameras and machine learning to create photorealistic digital twins that include asset location and attributes such as item make, model and serial number. This reduces time to value from months to days, enabling rapid, comprehensive image capture and automated asset extraction.

Superior Digital Twins

Utilities can create accurate, dynamic digital twins faster and more cost-effectively than ever, with progressive levels of detail, from basic shape renderings to photorealistic detail. This includes integration OT platforms and operational data

that can be displayed using real time map-based dashboards. Users access high-powered data visualization and location analytics for improved decision support.

We deliver a complete solution set so utilities can harness the full power of 3D facility mapping and digital twins. This includes flexible deployment models, from turnkey services to training teams for ongoing image capture and data management.

Our approach combines decades of experience working with utility clients around the world, combined with cutting-edge expertise from leading solutions architects, engineers, programmers and analysts. From design to construction, maintenance and replacement, all phases of the facility asset lifecycle are improved using locationally-aware digital representations of real-world infrastructure.

TRC's 3D facility Mapping Solutions Deliver:

- Improved data and analytics
- Superior decision-making
- Enhanced network operations
- Predictive maintenance
- Cost and time saving

