DOE INFRASTRUCTURE PLANNING CAPABILITIES

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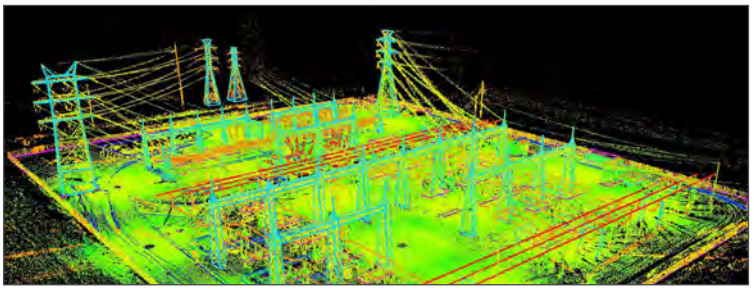
Inaccurate data increases your risk and, potentially, your cost. This risk grows with project scale and complexity and often isn't realized until the later stages of project when mitigation costs you both time and money.

Starting a project with the right data minimizes the potential for delays and costly rework. Merrick's infrastructure planning builds a strong foundation for your project with critical information gathering up front.

High Quality Data Collection

- Locate and validate underground utilities
- Capture as-built conditions
- Create digital twins
- Scan hundreds of square miles efficiently

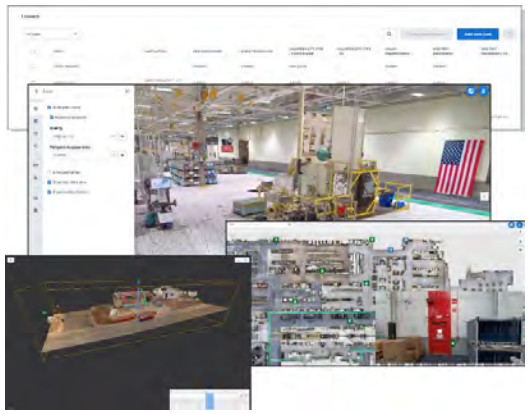
Our high quality data collection capabilities set you up for success—at the start of a project, during fabrication, construction and after completion.



Accessible Data via Secure Web App

- No new software
- No cloud storage.
- 24/7 access to data
- Access controlled datasets
- Functionality similar to a smartphone map application
- Measuring and markup tools

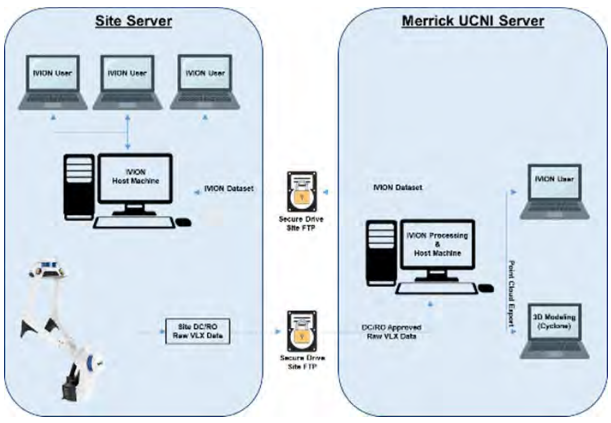
The IVION web application allows you to grant access to engineers for designs, conduct virtual tours and training, and plan maintenance—reducing downtime for all parties.



Secure Workflows that Protect Your Data

- No cloud storage
- Data stored on locally secured servers
- Security system audited to NIST standards
- Personnel approved for site access, including "Q" clearances

Merrick has deployed mobile lidar technology at some of the most secure DOE sites. We understand the processes required for secure data and hardware handling and have proven our ability to keep your data secure.



HIGH QUALITY DATA COLLECTION SERVICES

Subsurface Utility Engineering

Infrastructure projects involving legacy buildings don't always have adequate information or documentation on subsurface utilities including power, communication, gas, and fluid lines. Merrick's Subsurface Utility Engineering (SUE) capabilities validate existing documentation or fill gaps in information through two methods: surface-level detection (Quality Level B on the ASCE Standard Quality Levels) or absolute confirmation of the surface-level scan through a process called "daylighting" (Quality Level A) that uses test holes to confirm location, type, size, condition, and material of underground utilities.

Quality Level A significantly mitigates risks, allowing the project to proceed with high quality information.

Learn More About Our Lidar Scanning Capabilities

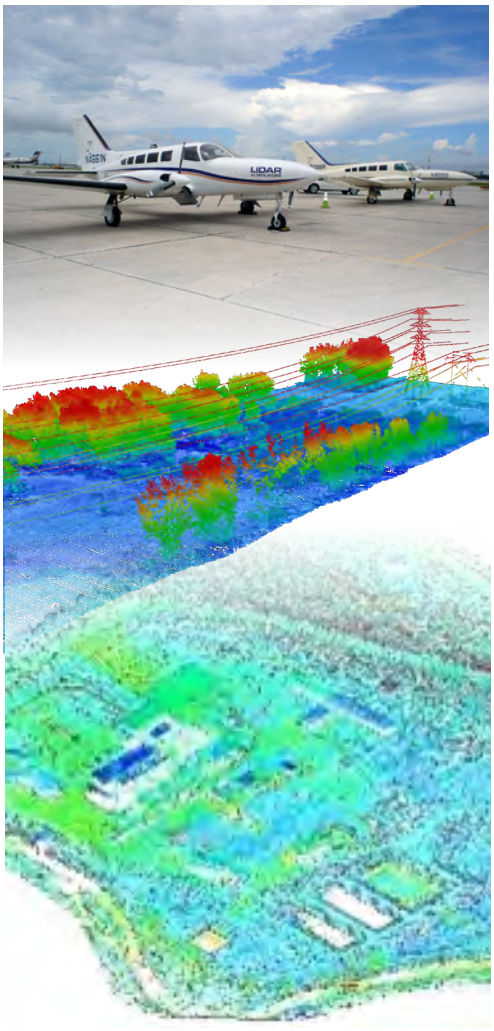
Mobile Lidar & Digital Twins

Mobile lidar captures as-built conditions of equipment and structures during the fabrication and construction phases and can document concealed or inaccessible utilities. In addition, post-construction captures document bare facilities and populated equipment.

The data gathered with mobile lidar can be converted to a digital twin of these assets with multiple outputs into CAD software. These digital twins enable accurate designs, limit process interruptions, facilitate increased production, and provide great virtual training opportunities.

Aerial Lidar Surveying

Data captures for projects that span campuses or multiple build sites require a larger scale than practical for ground mobile assets. Using airborne assets, Merrick can scan hundreds of square miles of land and structures efficiently. Larger projects—such as roadways, wastewater, clean water, power, communications, gas, and multi-site construction planning benefit through more accurate designs that are derived from this more comprehensive dataset, increasing the chances the project is executed on budget and on schedule.



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