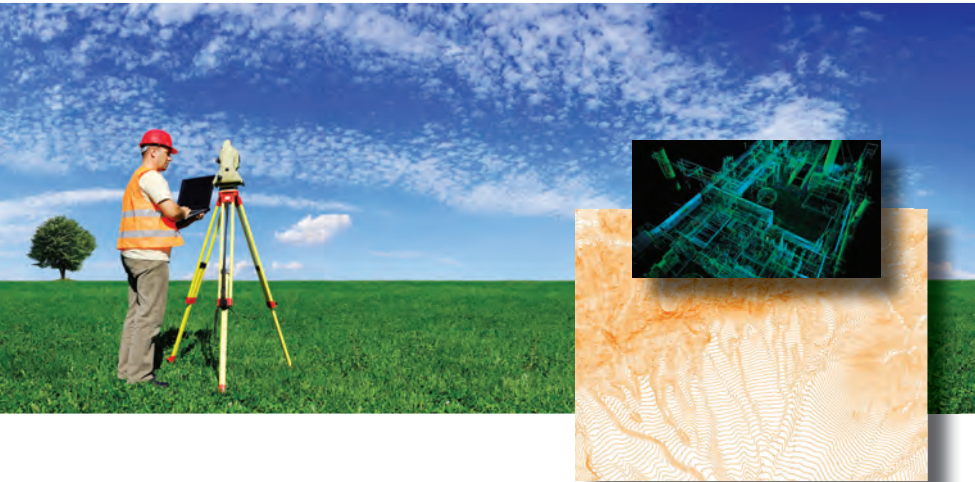


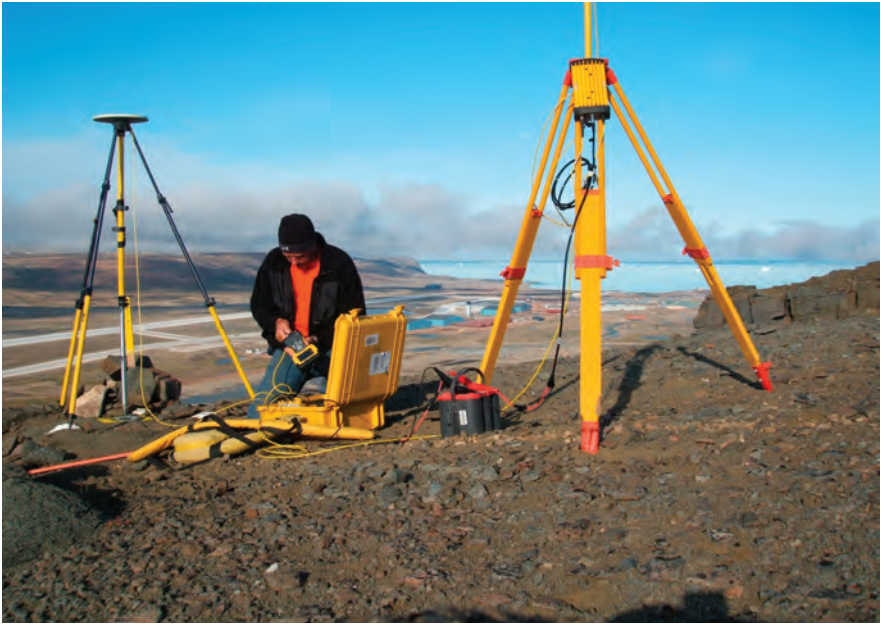
# C R I + I G E N



## **Rely on Critigen for your Land Surveying, Aerial Mapping, Hydrographic Surveying and 3D Laser Scanning projects.**

- Full-spectrum of geospatial technology expertise including Spatial Consulting, GIS, and Surveying & Mapping services
- Over 65 years of geospatial experience as a divested division of CH2M HILL
- Serving Federal, State, Local Municipalities, and private sector clients

For complete details visit [critigen.com/surveyingmapping](http://critigen.com/surveyingmapping)

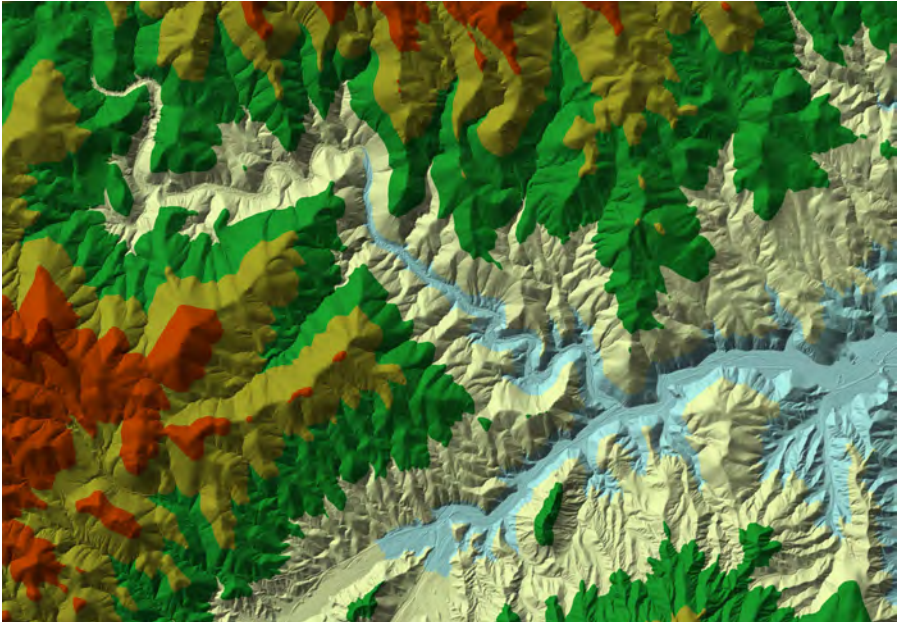


## Land Surveying

Critigen leverages current technology, instrumentation, and software to provide timely, detailed, accurate, legally certified and defensible land survey data acquisition and services. Our highly experienced staff utilizes industry standard CAD platforms, data management solutions, and coordinate system transformation engines to meet and exceed client requirements in support of planning, design, and construction project specifications.

- Planning & Routing Surveys
- Design Surveys
- Topographic Surveys
- Boundary Surveys
- ALTA/ACSM Land Title Surveys
- Right of Way Research & Mapping
- Control Networks
- Survey Project Management
- Quality Control Reviews
- Record of Surveys & Final Mapping
- Land Divisions/Monumentation
- Construction Support Services
- Legal Descriptions
- Certifications

Contact Gordon Anderson, PLS at +1 720.872.4220 or [Gordon.Anderson@critigen.com](mailto:Gordon.Anderson@critigen.com)



## Aerial Mapping

Critigen manages the planning, acquisition, production, conversion, and quality control required to deliver precision aerial mapping and high-resolution imagery products. Our experienced staff utilizes the most current technologies in digital softcopy photogrammetric workstations, high-resolution scanning, LiDAR processing, editing, and QA/QC, Digital Terrain Modeling, contour generation, and 3D planimetric feature collection to meet all our client's geospatial mapping requirements.

- Detailing Project Planning & Specifications
- Aerial Imagery Acquisition
- DTM & Contour Generation
- Planimetric Feature Mapping
- Digital Orthophotography Production
- CAD & GIS Mapping Services
- Hardcopy Map Scanning & Digitizing
- Imagery Reprojection, Mosaicking & Compression
- LiDAR Processing & QA/QC
- 3D Visualizations

Contact Dave Hendrickson at +1 530.229.3263 or [Dave.Hendrickson@critigen.com](mailto:Dave.Hendrickson@critigen.com)

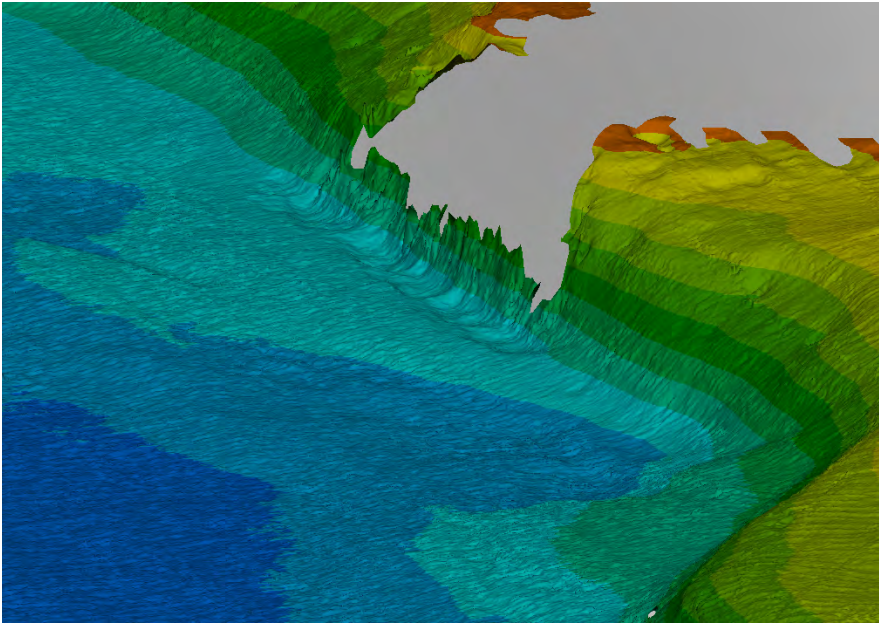


## 3D Laser Scanning

When documentation of existing conditions is required on a project, 3DLS saves time and money by capturing large quantities of spatial information quickly and efficiently. 3DLS acquires the positional geometry and location information through remote scanning, making it particularly effective for measuring structures in high-density, inaccessible, or hazardous environments. The resulting product is a highly detailed, geometrically accurate, photorealistic documentation of physical environments as they currently exist.

- Planimetric Mapping
- 3D Modeling
- BIM Validation
- Architectural Restoration
- Fabrication & Construction Inspection
- Historical and Legal Archiving
- As-Built Surveys
- Site & Engineering Surveys
- Rapid Prototyping
- Animations

Contact Brad Oswald, PLS at +1 728.872.4090 or [Brad.Oswald@critigen.com](mailto:Brad.Oswald@critigen.com)



## Hydrographic Surveying

Hydrographic surveying is the science of measurement, definition, and description of underwater features which affect and aid maritime navigation, marine construction, dredging, offshore drilling and oil exploration industries. Allowing for a greater understanding of the benthic habitat, hydrographic surveying can also be used for biological studies, marine conservation, and natural resource management needs.

- Singlebeam or Multibeam Bathymetry and Underwater Sonar Acoustics
- Port Channel Clearance Analysis
- Ship Docking Facilities
- River Tributaries
- Dredging Operations
- Sea-floor Mapping
- Underwater Bridge Analysis
- Debris Research & Recovery
- Bathymetric & Contour Maps
- Cross Section Plots
- Volume Computations
- Shoaling Analysis
- 3D Visualizations & Animations

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