

RENEWABLE ENERGY ASSET MANAGEMENT

ACQUIRE
ANALYZE
ANSWER



Wind Turbines

NV5 Geospatial is a full-service remote sensing firm specializing in data generation, integration, and analysis for clients worldwide.

Why NV5 Geospatial?

NV5 Geospatial is the trusted partner for major utilities, infrastructure developers, and asset owners that want to map, model, and better manage their business.

- **End-to-end services deliver insights that advance business goals**
- **Over nine decades of collective maturity in conducting aerial surveys and providing geospatial point and pixel data**
- **Heavily invested in R&D to ensure we are always delivering the best possible solution for a wide range of customers**
- **“Right-sized” teams to deliver results rapidly while keeping costs controlled**

We collect state-of-the-art topographic lidar, bathymetric lidar, orthoimagery, hyperspectral imagery, thermal imagery, oblique imagery, and oblique video; as well as provide comprehensive mapping, modeling, and geospatial-derived solutions for business intelligence.

Our client base includes a host of energy utilities; oil and gas companies; renewable energy companies, local, county, state, regional, and federal agencies; and many of the top engineering and industrial firms in North America.



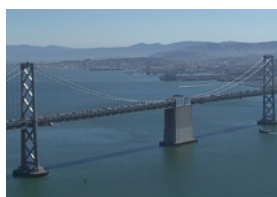
ELECTRIC UTILITIES

We are trusted by some of the nation's largest utilities for asset management, including: Transmission Line Modeling, Vegetation Mgmt., Transmission Line Siting, Hydroelectric Dams, Substation Mapping, and Geological Hazard Mapping.



OIL & GAS

We deliver precise geospatial insights that support a variety of decision makers with services including: Exploration, Siting, Environmental Monitoring, Geologic Hazards, HCA Identification and Class Location, and ROW Encroachment Detection.



TRANSPORTATION

We provide geospatial services for freeways, tollways, turnpikes, state routes, and rail infrastructure. In each case we work with our client to select the appropriate platform, methodology, and analytics for the project. Services include Planning, Design, Documentation, and Enterprise GIS.



GEOGRAPHIC ANALYSIS

We have developed advanced terrain and forestry analysis methodologies, including Landslide Detection, Fault Lineaments, Contours & Slope Elevations, Terrain Imaging, Risk Assessment, Change Detection, Wildfire Modeling, Carbon and Biomass Estimation, Tree Delineation and Watershed Analysis.

INFRASTRUCTURE INSPECTION SOLUTION

NV5 GEOSPATIAL

NV5 Geospatial believes providing a complete end-to-end solution guarantees the most accurate assessment of the customer's assets, enabling efficient work management and reducing unnecessary repeat or manned inspections, thereby reducing overall costs.

Our UAS fleet is sized to enable both rapid deployments for ad-hoc work as well as longer term missions that require detailed planning. The team includes (17) certified 107 pilots, (2) fixed wing UAS, (5) heavy lift UAS, and (10) asset inspection UAS. In addition, we are able to flex with a network of national partners.



ACQUIRE: UAV

NV5 is a leader in the field of deploying UAVs for collecting survey (2d and 3d) data. Our UAVs are capable of carrying a variety of sensors including traditional color (RGB) cameras, multi-spectral and thermal cameras, and LiDAR. Using these revolutionizing technologies, the NV5 team is expert in deriving ortho-rectified photographs and 3D topographic data sets. NV5 Geospatial has more than 15,000 UAV flights across a variety of asset classes and environmental conditions.

ANALYZE: IMAGE RECOGNITION

NV5 Geospatial's proprietary software accurately detects objects associated with a variety of utility & green energy infrastructure. Our processes leverage the most advanced machine learning approaches combined with training data informed by our decades of experience working with utility & energy clients. Our tools let us identify not only equipment of interest, but the condition of that equipment. Combined with NV5 Geospatial's risk management & work optimization analysis, we help our clients use these technologies to operationalize the results of these analyses. We use best-in-class cloud & on-prem compute resources to expedite the delivery of this valuable information to our customers.



ANSWER: THE INSITE PLATFORM

INSITE allows your organization to easily share geospatial data across business units and teams. INSITE provides core functionality, such as cloud hosting, analytics, and business rules to all users. Functional modules targeted at specific roles, including facility inspection and vegetation management, enable risk analysis, mobile work management, and configurable electronic forms. The extensible design makes it simple to add modules or functionality as your geospatial needs evolve.

