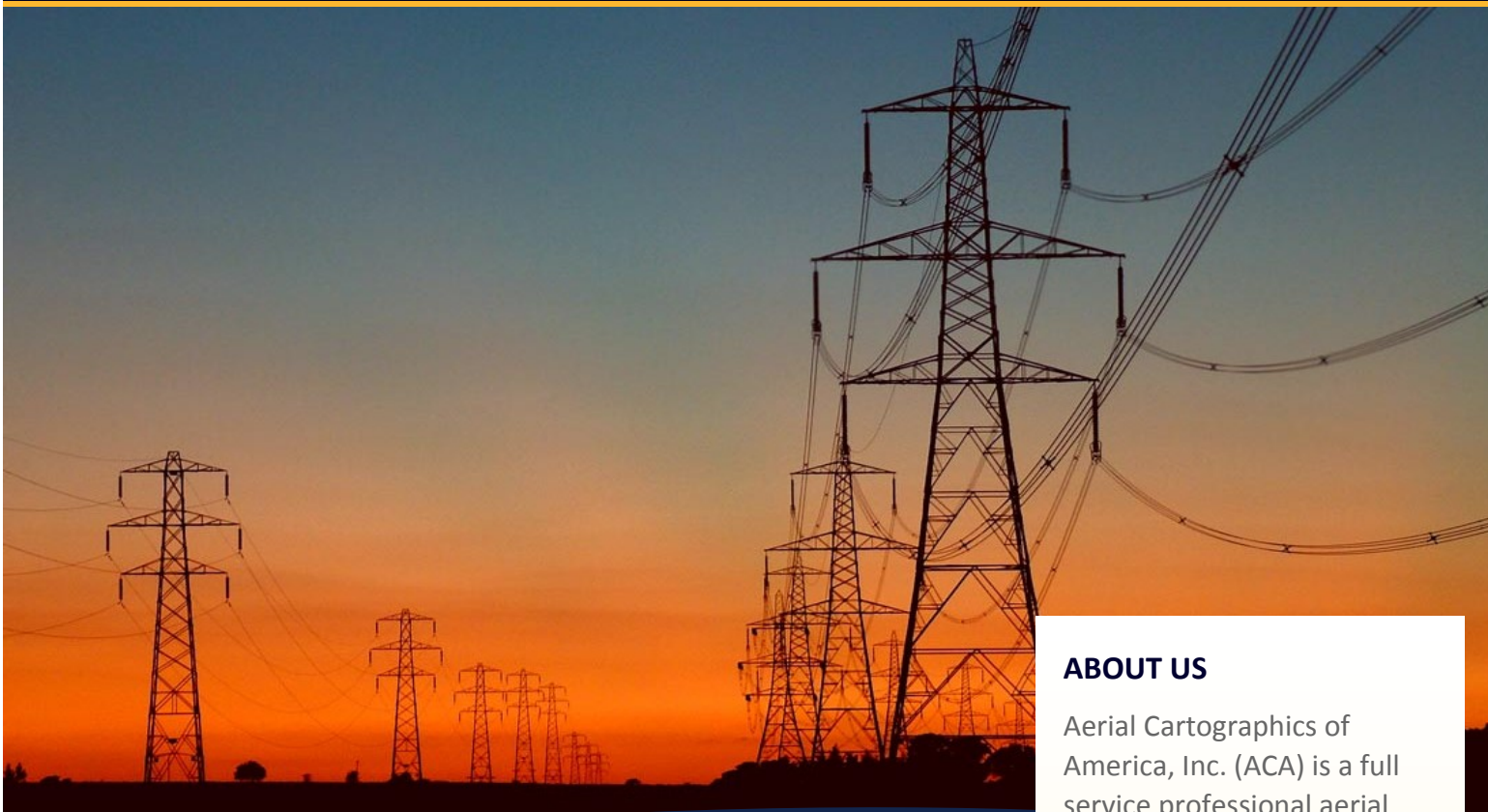


# TRANSMISSION LINE MAPPING

AERIAL CARTOGRAPHICS OF AMERICA, INC.

*"Going Beyond all Maps and Boundaries"*



## ABOUT US

Aerial Cartographics of America, Inc. (ACA) is a full service professional aerial mapping firm located in Orlando, FL. Established in 1973, ACA has built a reputation as one of the premier mapping firms excelling at precision mapping products. With a large staff of professionally licensed surveying and mapping associates, ACA has the extensive experience and knowledge providing a full range of high quality products and services.

## APPLICATIONS OF LIDAR, DIGITAL IMAGING & VIDEO

- Cellular Network Design
- Transmission Line Design
- Solar / Wind Farm Design
- Power Plant Design/Expansion
- Urban 3D Modeling

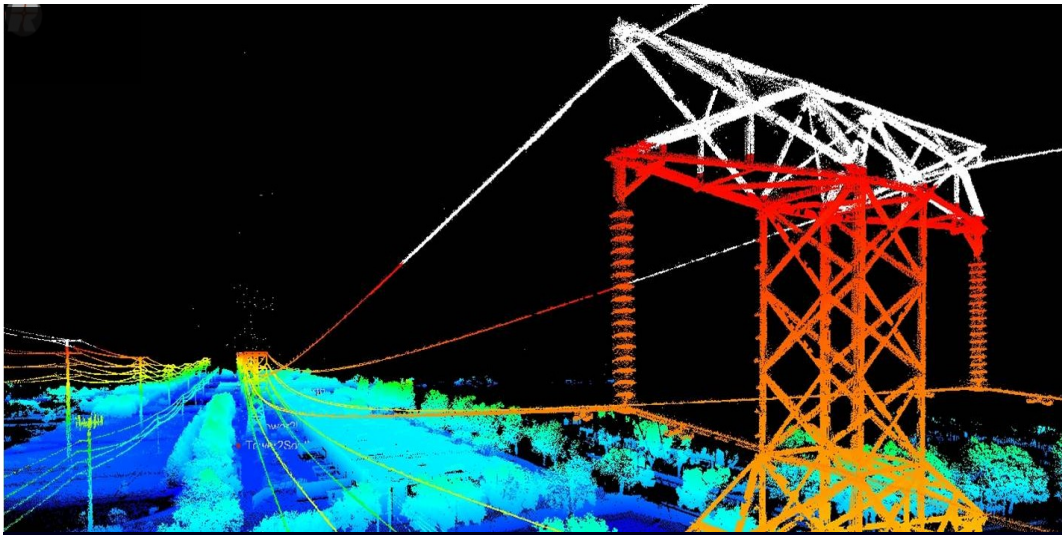
## COMPLETE CORRIDOR MAPPING

**A**CA is among the nation's leading experts in Power Line LiDAR acquisition, processing, and mapping. ACA operates multiple airborne sensors, including LiDAR, Large Format Digital Mapping Cameras, and High Definition Video/Oblique & Nadir, to provide a broad range of high quality digital solutions that meet and exceed our customer's need for precision power line/corridor mapping.

ACA provides advanced LiDAR mapping solutions using the latest Riegl LMS-Q680i 400Khz Full Waveform Sensor, UCX Large Format Mapping Camera, and Sony High Definition Video Systems. Us-

ing helicopter and fixed wing aircraft ACA provides cost effective accurate 3D surface models of the Ground, Vegetation, Tree Canopy, Structures, Catenaries Cable Crossovers, Encroachment, and Roads.





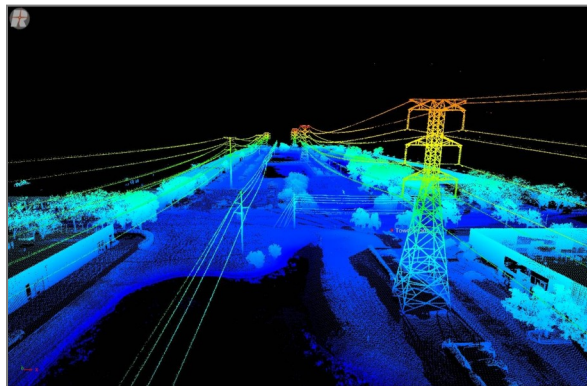
## RELEVANT EXPERIENCE

### PROGRESS ENERGY CAPITAL LiDAR PROJECT

ACA provided aerial services providing digital imagery and LiDAR data sets throughout the State of Florida. Deliverables included Digital Elevation Models, Cantenaries, Cable Crossings, Structures and Tree Canopy along Progress Energy's distribution route to evaluate power pole required maintenance. A classified LiDAR data set in PLS CADD format was provided. Final images were delivered in PLS CADD software.

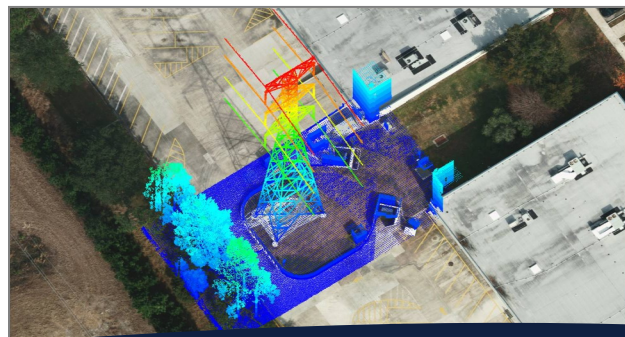
### FP&L CALUSA WEBB 230KV Route of Line Survey

ACA provided imagery and new helicopter LiDAR data, 35 points per SM along this 12.5 mile project Ft Myers, FL corridor. Deliverables included Digital Terrain Models, Cantenaries, Cable Crossings, and Structures in Auto CADD format.



### SIMULTANEOUS IMAGERY AND LiDAR DATA ACQUISITION

ACA has pioneered the ultimate mapping solution using the most advanced LiDAR sensor and the Largest Format Digital Mapping Camera, saving time and money on any power line project. ACA's technical approach achieves 40 points per sq meter fused with 1 inch pixel ortho imagery .



## MAPPING SERVICES

### Aerial Imaging & Elevation Data Acquisition

- Digital Aerial Imaging
- LiDAR Acquisition
- Simultaneous Imagery and LiDAR Acquisition
- Low Altitude Mapping Photography (LAMP)
- ABGPS & IMU Processing
- Photographic Reproduction
- Historical Photography Archive

### Photogrammetric Mapping

- Digital Mapping (Aerial Triangulation/Stereo compilation/ Feature Extraction)
- Digital Terrain Modeling
- LiDAR Processing
- LiDARgrammetry
- Digital Orthophoto Production
- Data Fusion: Smart Orthos with X, Y, Z readout
- Impervious Surface Auto Calculation
- Intelligent 3D Surface Models, Bare Earth, Structures, Vegetation
- Airport Obstruction Surveys: FAA 16A, 17b, 18b Compliant
- Seagrass & Vegetation Mapping
- Volumetric Analysis

### GIS

- Data Capture/ Conversion
- Application Development
- FAA 18b Compliant

**WE ARE THE FULL DIGITAL SOLUTION FOR YOUR MAPPING AND GIS NEEDS**

