



"Measure from images"

Professional drone mapping and photogrammetry software

case study

"GEO Jobe selected Pix4D for its flexibility and the options to edit the models and the project."

Jeff Lawrence, UAV Business Development at GEO Jobe UAV

Pix4D Recognizes GEO Jobe GIS & UAV Services for 3D Drone Mapping for Smart Cities

A UAV project conducted by the GEO Jobe UAV Services in Lewisburg, Tennessee was selected as a weekly Monday "3D" spotlight feature by popular UAV solution/software provider, Pix4D. Each Monday, Pix4D highlights a customer / client user project in a popular segment they call #3DMonday. Details of the UAV project, including technical specifications and details are shared around the World to the Pix4D user community and via their social media channels.

Established in 2011, Pix4D software has been committed to creating professional, georeferenced maps and models from drone imagery. The company was founded as a spinoff of EPFL in Switzerland. pix4d.com

The Project

The Lewisburg water utility is a GEO Jobe GIS Consulting client, contracting GEO Jobe for a number of services, including mapping their utility assets and network. GEO Jobe secured a contract to provide base mapping services and feature extraction for the City of Lewisburg. We used photogrammetry to create orthomosaics to assist the client in capturing and updating GIS features for Emergency 911 address databases, facility management, asset location, and building information models. Additionally, a side product we created in the form of a 3D model for City marketing and planning uses.

The Solution

- Technical details:
- Device used DJI Phantom 4 Pro
- Image capture path (circular/grid/free terrestrial/aerial) Combined grid and free flight aerial
- Pix4D software used: Pix4Dmapper
- Platform used (desktop or cloud)
- Editing (did you add MTPs, edit the point cloud or added surfaces to the mesh?) We added 5 centimeter-level ground control points.

The water utility is a GEO Jobe GIS Consulting client, with GEO Jobe responsible for a number of services, including mapping their utility assets and network. The advantages of having a skilled GIS consultant to manage the utility's facilities and network has spread to other city service providers and users.



There are a wide variety of uses and advantages for using a UAV for construction-related projects. Below is a list of some typical applications for UAS that we can provide:

- Earthwork volumetric surveys and 3D modeling
- Topographic mapping
- Infrastructure/deformation monitoring
- Infrastructure inspection
- Asset inventory surveys
- Visualisation surveys
- “Progress mapping” suitable for BIM
- Environmental surveys
- Thermal inspection surveys

The Results

GEO Jobe UAV provides high-resolution digital mapping products to public sector clients in local and county governments, as well as private sector clients in the engineering, construction, utilities, and Land Surveying industries. We use drones to deliver standard ortho-aerial updates on sites ranging from 3 acres to almost 600 acres. We also deliver topographic data and models with 1' contour lines for survey, drainage analysis, and grading compliance

With a fleet of Unmanned Aerial Vehicles (UAV's, or drones) GEO Jobe is now offering high resolution low altitude orthophotography services in Tennessee and surrounding areas (Arkansas, Mississippi) and hosting options via our GeoPowered Cloud. We are providing orthophoto planimetric mapping products including small area rectified mosaics, digital surface models (DSM), digital terrain models (DTM), and 3D models as well as UAV data hosting & image services.



www.pix4d.com

www.geo-jobe.com/uav