

Survey Management

Licensed Land Surveyor with extensive experience in performing accurate field surveys, developing detailed 3D models, and analyzing GIS maps.

Well-versed in managing NGS OPUS Projects, as well as providing guidance in surveying, mapping, and construction for innovative practices across the state. Experience in working on construction site, establishing control networks, and performing highly accurate Geodetic Surveys in timely manners. Broad knowledge of drones, lidar scanners, Computer-Aided Design, Trimble, Survey Pro, Carlson software, and GNSS networks. Instrumental in leading cross-functional surveyor teams in developing new surveys and mapping manuals. Demonstrated expertise in data processing/integration, 3D reality capture/modeling, geodetic surveys, and CORS network administration. Skilled in collecting, collating, and evaluating data to provide well-placed findings, aiming to assist in complex regulatory compliance activities. Exceptional communication, mentorship, employee development, and Critical thinking skills.

Areas of Expertise

- Photogrammetry
- Control Database Management
- Global Navigation Satellite System
- 3D Scanning
- Project Management
- Budgeting & Forecasting
- Strategic Planning & Execution
- Team Leadership & Development
- Global Positioning System

Career Experience

PA Surveyor LLC

2022 – Present

Business CEO / Principal Surveyor

Perform property and land surveyors' surveys. Confirm data accuracy by evaluating previous records and evidence. Develop and implement methods for conducting surveys. Utilize equipment and tools to estimate land features, including longitudes and latitudes. Create maps, sketches, and charts.

- Offered unique pay-per-service items, including drone mapping, LiDAR scanning, boundary surveys, construction software, and services by creating full-service surveying firm.

PennDOT, Pennsylvania Department of Transportation

1992 – 2023

Section Chief – Photogrammetry and Surveys Manager (2019 – Present)

Designed and implemented new geodetic control surveys and photogrammetric standards, procedures, techniques, and applications to attain engineering and final design data, as well as deploy changes into departments. Served as Director of State-wide Survey Policy to supervise Equipment Budgets and implement innovation strategies across the department.

- Uncovered and shared TRB and NCHRP information with DOTs, vendors, and professional societies.
- Directed four open-ended contracts, 12 direct reports, 11 engineering district surveyors, and \$500K statewide equipment budget.

Geodetic Surveys Manager / Photogrammetry Manager (2015 –2019)

Acted as administrator of PennDOT CORS Network and created key processing and reporting protocols. Performed surveys to determine elevation of points, lines, areas, and land surface features. Deployed Crowdsourcing Survey Control Database. Leveraged geodetic survey methods, such as traversing, triangulation, and trilateration to measure surface features.

- Transformed survey asset websites into fully crowdsourced statewide services.
- Gathered and evaluated data from geodetic surveys and managed remote-sensing systems.

**Engineering District 8-o
Party Chief / Survey Technician Supervisor**

2001 – 2015

Prepared, coordinated, and analyzed unit's work, while overseeing staff workload and creating performance requirements and technical standards. Supervised surveying projects and maintained instruments, such as electronic distance measuring equipment.

- Implemented GPS equipment and procedures for District use, while delivering services as lead.

Additional Experience

Adjunct Faculty (Civil Engineering Technology) - Harrisburg Area Community College (HACC)

Chief of Surveys – Surveyor II – District 8-o – PennDOT

Various internship and technical positions within PennDOT

Education

Associate in Arts in General Studies - HACC – 2016

Studied Civil Engineering Technology - University of Pittsburgh at Johnstown 76 Credits completed

Awards

Highway Admin Performance Award, 2022

Productivity Improvement Fund Award for Lidar Solutions, 2020

District Executive Performance Award, 2004

30+ Years of service with PennDOT

Professional Development

Professional Land Surveyor 2012 - Present

National Geodetic Survey State Co-coordinator for Pennsylvania

Survey Champion for 3D2025

Digital Delivery Directive

Experienced presenter at conferences and committees

Published article in Pennsylvania Surveyor

Creation and updates to Department Surveying Manuals/ Trainings/ Publications