

Cartographers and Photogrammetrists

SOC: 17-1021 • Career Profile Report

■ Key Facts

\$78,380

Median Salary

13,400

Employment

+6.0%

Growth Rate

■ Requirements & Salary Range

Education: Bachelor's degree

■ Automation Risk Assessment

Low Risk - 17.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

8.6/10 - Excellent work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.2/10	Investigative	8.8/10
Artistic	6.4/10	Social	5.2/10
Enterprising	5.8/10	Conventional	6.6/10

■ Top Skills Required

Communication skills, Computer skills, Critical-thinking skills, Detail oriented, Problem-solving skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Cartographers and Photogrammetrists typically perform the following tasks:

- Compile data required for map preparation, including aerial photographs, survey notes, records, reports, and original maps.
- Delineate aerial photographic detail, such as control points, hydrography, topography, and cultural features, using precision stereoplottting apparatus or drafting instruments.
- Prepare and alter trace maps, charts, tables, detailed drawings, and three-dimensional optical models of terrain using stereoscopic plotting and computer graphics equipment.
- Study legal records to establish boundaries of local, national, and international properties.
- Inspect final compositions to ensure completeness and accuracy.
- Revise existing maps and charts, making all necessary corrections and adjustments.
- Identify, scale, and orient geodetic points, elevations, and other planimetric or topographic features, applying standard mathematical formulas.
- Collect information about specific features of the Earth, using aerial photography and other digital remote sensing techniques.
- Examine and analyze data from ground surveys, reports, aerial photographs, and satellite images to prepare topographic maps, aerial-photograph mosaics, and related charts.
- Build and update digital databases.
- Determine map content and layout, as well as production specifications such as scale, size, projection, and colors, and direct production to ensure that specifications are followed.
- Determine guidelines that specify which source material is acceptable for use.
- Select aerial photographic and remote sensing techniques and plotting equipment needed to meet required standards of accuracy.
- Travel over photographed areas to observe, identify, record, and verify all relevant features.
- Estimate resources, such as production hours, required for projects.
- Use drone technology to capture high-resolution images and data for map creation and updating.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/architecture-and-engineering/cartographers-and-photogrammetrists.htm>