

GEOSPATIAL TECHNICIANS

Geographic Information Systems Technicians assist scientists, technologists, or related professionals in building, maintaining, modifying, or using geographic information systems (GIS) databases. May also perform some custom application development or provide user support.

DUTIES

A person in this career:

- Designs or prepares graphic representations of Geographic Information Systems (GIS) data, using GIS hardware or software applications.
- Maintains or modifies existing Geographic Information Systems (GIS) databases.
- Analyzes Geographic Information Systems (GIS) data to identify spatial relationships or display results of analyses, using maps, graphs, or tabular data.
- Enters data into Geographic Information Systems (GIS) databases, using techniques such as coordinate geometry, keyboard entry of tabular data, manual digitizing of maps, scanning or automatic conversion to vectors, or conversion of other sources of digital data.
- Reviews existing or incoming data for currency, accuracy, usefulness, quality, or completeness of documentation.
- Performs geospatial data building, modeling, or analysis, using advanced spatial analysis, data manipulation, or cartography software.
- Designs or coordinates the development of integrated Geographic Information Systems (GIS) spatial or non-spatial databases.
- Selects cartographic elements needed for effective presentation of information.
- Provides technical support to users or clients regarding the maintenance, development, or operation of Geographic Information Systems (GIS) databases, equipment, or applications.
- Interprets aerial or ortho photographs.

Today, maps are created on computers by experts. These experts use a software system called geographic information systems, or GIS. GIS specialists use data sets to create the components for all kinds of maps. Using special software, they capture and store geographic information. Then, they visually display it in the form of a map.

GIS specialists do other tasks as well. They design and develop new ways to capture and store data. They also analyze the information they collect. Sometimes, they present to other people on their findings.



SALARY INFORMATION

Location	2018				
	10%	25%	Median	75%	90%
California	\$48,850	\$67,900	\$97,600	\$131,210	\$168,020

*Pay period based on yearly amount.

EMPLOYMENT OUTLOOK

Stable growth rate is estimated to be **14%**

2,940 estimated annual job openings

GIS technology is used in many industries. Real estate companies use maps to show houses for sale within a certain price range. Banks use GIS to show which areas have the most active ATMs. Police stations use GIS to find high-crime areas. Anyone who needs a visual display of data can use these systems.

GIS specialists don't just create the maps. They also write reports on, and create budgets for, GIS projects. As they are the system experts, they can do a variety of jobs related to these projects. For example, they might update files or transfer data from one agency to another.

These specialists also train others how to use GIS systems. They often provide technical support for users.

RELATED OCCUPATIONS

Software Developers, Systems Software 🌞🌿

Geospatial Information Scientists and Technologists 🌞🌿

Cartographers and Photogrammetrists 🌞

Mapping Technicians

Remote Sensing Scientists and Technologists 🌿

