

CARTOGRAPHER/GIS SPECIALIST

DEFINITION

Performs geo-processing (processing information linked to physical location of various GIS components) of property boundary databases, and contributes to the development and maintenance of the Geographic Information System (GIS). Specific duties depend on project assignments and may include assessing reliability and entering documents such as right-of-way deeds, property deeds, recorded easements, plat road plans, subdivision plats, surveys, or other data; researching questions concerning conflicting measurements of boundaries and other related matters; preparing information for input to the GIS system; or assisting in the development of automated procedures for linking the GIS base map to existing database systems.

CLASS CHARACTERISTICS

This class is distinguished from positions in the Cartographer/GIS Technician class by performing a lead role in project design and coordination of work plans, using independent judgment.

SUPERVISION RECEIVED AND EXERCISED:

Receives directions from a department supervisor or manager.

May exercise technical and functional supervision over Cartographer/GIS Technicians.

EXAMPLES OF DUTIES - Duties may include, but are not limited to the following:

Revises and maintains existing cadastral maps using existing manual processes and C.A.D.D.

Creates new maps performing geo-processing using various databases and files which include review of legal documents such as right-of-way deeds, property deeds, recording easements, surveys, plats road plans, and title transfer instruments. Also reviews private, state and federal geographic and demographic data sources.

Performs database interpretation and transfer to digital format and inputs data to appropriate GIS systems. This includes ability to evaluate conflicting boundary line measurements and deciding which is the most reliable measurement. This may require comparison of survey and deed records.

LANE COUNTY
Cartographer/GIS Specialist (continued)

EXAMPLES OF DUTIES (con't):

Uses coordinate geometry to create and align geographic data through bearing/rotation and coordinate translation.

Examines requests for mapping products and determines best method of using the GIS to produce end products.

Establishes specifications for a variety of property cadastral mapping products to be provided from the GIS.

Utilizes the GIS to generate and print maps.

Creates and updates geographic information which may include cadastral maps, survey records, road networks, etc.

Coordinates with outside organizations for geographic data.

Trains, assigns and coordinates the work of assigned staff.

MINIMUM QUALIFICATIONS

Knowledge of:

Principles, practices and techniques of cartography and surveying.

Applicable rules and regulations as apply to the preparation of maps.

Geographic information systems or computer-aided drafting equipment, software and techniques.

Geo-base theory and functions as it relates to provision of services and computer-assisted production of maps.

Legal descriptions, instruments of title, survey and subdivision plats and other records related to mapping property.

Coordinate geometry and spatial data analysis.

Private, city, county, state and federal sources of demographic data.

Basic principles and practices of supervision and training.

LANE COUNTY
Cartographer/GIS Specialist (continued)

Ability to:

Operate and use various computers, computer-aided devices and software such as graphic workstations, PCs and digitizer.

Interpret and translate geographic data using coordinate geometry and spatial analysis.

Conduct research of documents necessary for the construction and update of GIS database.

Evaluate the reliability of input data; read and interpret legal documents, maps and surveys.

Communicate effectively both orally and in writing.

Determine and present information in cartographic and statistical formats.

Perform accurate mathematical calculations.

Understand and utilize complex data processing programs and systems related to GIS.

Establish and maintain effective working relationships with the public, other employees, and representatives of other agencies.

Provide training and assign and coordinate the work of Cartographer/GIS Technician.

Experience and Training

Training:

Associates degree with major course work in computer science, geography, surveying, engineering, or a related field.

Experience:

Four years' experience working with survey mapping or geographic information systems.

An equivalent combination of experience and training which would provide the applicant with the desired skills, knowledge and ability required to perform the job is qualifying.

Memo outlining job classification title change from Cadastral/GIS Specialist to Cartographer/GIS Specialist and deminimus changes approved by County Administrator 1/05/06.