

HIDALGO COUNTY PRECINCT #4

GIS OPERATOR III

GENERAL DESCRIPTION

Performs highly complex (senior-level) geographic information system work: Work involves input and manipulation of geographic information to create, maintain, display, update, and produce accurate maps and other representation of data; May supervise the work of others; Works under limited supervision with considerable latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Reviews maps, graphs, or diagrams using geographic information software and related equipment

Reviews geographic data from sources including censuses, field observations, satellite imagery, aerial photographs, and existing maps

Digitizes and maintains spatial databases of relevant information, document procedures, validates data for accuracy and completeness, completes approved metadata forms, and produces maps of the resulting information

Evaluates information and data from outside sources; determines the quality of the data, and converts data to assist users

Imports, creates, reformats, and processes data to produce spatial distribution maps for various studies

Writes programs and develops user interfaces, menus, and macro-level commands to meet user needs

Coordinates the entry and validation of database records

Provides consulting services in fields such as resource development and management, environmental hazards, transportation management, regional cultural history, and urban social planning

Develops geographic information systems that may link parcel maps or orthophotos with environmental data, historic data, transportation data, and health data to produce maps or quantify information about the impacts of features on parcel ownership

May supervise the work of others

Performs related work as assigned

GENERAL QUALIFICATION GUIDELINES

Experience and Education

Experience in geographic information systems analysis and design work

Graduation from an accredited four (4) year college or university with major course work in computer science, computer information systems, geography, geographic information system technology, management information systems, or a related field

Education and experience may be substituted for one another

Knowledge, Skills, and Abilities

Knowledge of terminology related to geographic information systems, including legal descriptions, cartography, engineering, construction plans, aerial photography, and orthophotography

Skill in solving problems; in testing, installing, and implementing geographic information system programs; and in troubleshooting system issues

Ability to analyze geographic information systems and procedures; to read and interpret surveys, legal descriptions, cartography, engineering documents, construction plans, aerial photography, and orthophotography; to communicate effectively; and to supervise the work of others

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job

While performing the duties of this job, the employee is required to sit and use hands to fingers, or feel objects, tools or controls. The employee is required to stand; walk; reach with hands and arms; and stoop, kneel

The employee must occasionally lift and/or move up to twenty-five (25) pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounter while performing the essential functions of this job.

The noise level in the work environment is usually moderate.

SAFETY REQUIREMENTS:

Maintain physical conditions appropriate to the performance of assigned duties and responsibilities which may include the following:

- sitting for extended periods of time
- standing for extended periods of time
- operating assigned equipment

Maintain mental capacity which permits:

- making sound decisions and using good judgment
- demonstrating intellectual capabilities

Effectively handle a work environment and conditions which involve:

- working closely with others
- working in a multi-task environment

Maintain effective audio-visual discrimination and perception needed for:

- making observations
- reading and writing
- operating assigned equipment
- communication with others
- required to follow the Hidalgo County Accident Prevention Plan and department's safety regulations