

Uintah County

Job Description



Title:	GIS-GPS Technician	Code:	300
Division:	GIS	Effective Date:	3/07
Department:	County Commission	Last Revised:	08/14
FLSA Cat:	Non-Exempt	Pay Grade:	26

GENERAL PURPOSE

Performs a variety of **advanced, complex technical duties** related to the development or creation of digitized maps through a geographic information system (GIS) using ArcINFO, ArcGIS or related ESRI computer program application(s). Performs GPS technical functions to mark and record various mapping content for the county GIS system.

SUPERVISION RECEIVED

Works under the general guidance and direction of the County Commission and Assistant GIS Manager.

SUPERVISION EXERCISED

Provides functional supervision to county-wide end users accessing GIS system.

ESSENTIAL FUNCTIONS

Conducts field exercises utilizing GPS equipment to pinpoint coordinates and measurements for various county parcels, roads, structures, vegetation, etc.; may perform general field survey duties as needed; utilizes ArcGIS, AutoCad and related GIS software along with digitizing table, plotter and GPS equipment to create various computerized maps.

Performs post processing and downloading of GPS data; assembles data from GPS, local surveys, utilities, state and federal agencies and other entities for mapping and analysis; completes data editing and organizes data to ensure compatibility with county database.

Researches records of plats and property descriptions to determine property location, boundaries and size; digitizes appropriate changes or additions to existing maps; coordinates with Records office to resolve issues related to property descriptions.

Performs GIS system and file backup dealing with county/city systems such as water, sewer, storm drains, streets, unpaved county roads, electrical, weed/mosquito infestations, etc.; maps and plots locations of lines, valves, manholes, lift stations, etc. as installed.

Reproduces maps, surveys, engineering drawings, graphics and data base reports from GIS system and related software; operates computer and digitizer board as needed; operates computer to analyze, compose and converting mapping data.

Assists to maintain county SDE enterprise GeoDatabase; participates in the development and maintenance of GIS databases, posting changes, verifying and reconciling various Geodatabase versions, etc.; recommends procedures to enable access privileges; oversees activity and process for updating county-wide spatial data.

Maintains various data/GIS layers within the system; ensures accuracy of the system by verifying changes; utilizes ArcGIS to effectively update the system; ensures linked elements of the database retain proper integrity and accuracy.

Performs ongoing and daily problem-solving; researches command chains within the GIS system; makes changes in command sequences as needed to remedy problems and maintain the system.

Receives project assignments as requested by various county departments; evaluates project timelines and assists to establish operational tasks; analyzes various tasks to determine opportunity to automate or combine steps and processes; utilizes custom software, "Automation Builder" to streamline and simplify database management and changes.

Produces custom maps upon request from the public and county officials; utilizes various mapping and cartography skills to finalize computerized cartographic hard copy maps; writes system commands to isolate various criteria and demographics to be included in map content; creates various layers of maps illustrating targeted areas of interest.

Engages in various project processes involving metadata, spatial analysis, GPS information gathering, data conversions, Geoprocessing, Geocoding, and various aspects of programming requiring use of VB, VBA, AML, Managing ArcIMS, Managing ArcServer, etc.

Performs related duties as required.

MINIMUM QUALIFICATIONS

1. Education and Experience:

A. Graduation from college with an associate degree in geography, cartography, computer science or related field;

AND

B. Two (2) years of related experience;

OR

C. An equivalent combination of education and experience.

2. Knowledge, Skills, and Abilities:

Working knowledge of state cartography certification requirements; ESRI related programs, technical tools and equipment; complex math and computer aided engineering; technical tools and equipment associated with drafting and cartography; mapping scales and their most appropriate use; legal documents and terminology; computerized mapping software and methods (AUTOCAD, ARCVIEW, ARC/INFO, WINDOWS, etc.); various geographic databases, including State of Utah, USGS digital line graphics, surveying practices including GPS point retrieval, State Plane Coordinate Systems, GLO map interpretation and Area Reference Plan (ARP) interpretation; quality assurance and control methods; county geography; legal documents and terminology; functions of the office of County Recorder. Working knowledge of inter-relationships of various federal, state and local agencies which impact upon mapping activities of the county.

Skill in the use of various software applications including, ESRI applications, Arcview GIS, ArcInfo, ArcTools, Building Geodatabases, etc.; motorized vehicles and operation of GPS equipment.

Ability to perform complex computer mapping and mapping evaluation; read and understand legal documents; perform complex mathematical computations; read and understand computer printouts; recognize and solve problems related to hardware and software applications; communicate technical information effectively, verbally and in writing; perform mechanical duties related to installations of PC's, printers, hardware and related items; operate calculators and standard office equipment; work independently; lift 50 lbs; develop effective working relationships with supervisors, fellow employees, and the public.

3. Special Qualifications:

Must become certified by State of Utah in Cadastral Mapping within 18 months of hire.
Must possess a valid Utah driver's license.

4. Work Environment:

Incumbent of the position performs in a typical office setting with appropriate climate controls. Tasks require variety of physical activities, not generally involving muscular strain, such as walking, standing, stooping, sitting, reaching, talking, hearing and seeing. Rapid work speed required to perform keyboard operations. Common eye, hand, finger, leg and foot dexterity exist. Mental application utilizes memory for details, verbal instructions, emotional stability, discriminating thinking and guided problem solving.

Disclaimer: The above statements describe the general nature, level, and type of work performed by the incumbent(s) assigned to this classification. They are not intended to be an exhaustive list of all responsibilities, demands, and skills required of personnel so classified. Job descriptions are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, delete, or modify any and/or all provisions of this description at any time as needed without notice. This job description supersedes earlier versions.

I _____ have reviewed the above job description. Date: _____
(Employee)