DEFINITION:

Under general supervision, plans, coordinates and participates in the development, implementation, integration, operation, and maintenance of the County's geographic information system (GIS); designs and implements information systems for provision of access to GIS data for County staff and the public; interprets and applies County Code to assign and correct county-wide addresses; develops and implements specialized GIS applications; directs and assigns work of GIS technicians; participates in the design and development of databases associated with the GIS base map; performs a variety of technical tasks relative to assigned area of responsibility and does related work as required.

DISTINGUISHING CHARACTERISTICS:

This is the expert level for GIS technical staff. This position requires advanced technical knowledge and experience with ArcInfo, ArcView, ArcOnline and AutoCAD map; strong skills with project management, time management, oral and written communication ; ability to establish and maintain effective interpersonal relationships at all organizational levels within County Government, with external agencies and with the public; ability to interpret and apply addressing requirements established by County Code; ability to quickly learn new skills; possesses a solid overall knowledge of computer systems and networks; ability to remain knowledgeable in developments in the geographic information systems field.

EXAMPLES OF DUTIES:

- Plans, coordinates, and participates in the acquisition, installation, administration, and operation of the County's geographic information system (GIS); coordinates software release installs and updates.
- Coordinate and participate in the design and development of all databases associated with the GIS base map including relational databases; develop standards and strategies for maintaining database security.
- Coordinate and participate in providing graphic services including preparation, layout, and design of a variety of reports, displays, literature, maps and computer graphics; ensure the accuracy and completeness of digital GIS maps and data files.
- Collaborates and participates in County Addressing Standards; assigns and modifies County addresses as needed.
- Coordinate, provide direction and instruct staff in the operation of the geographic information system.
- Direct, coordinate and verify the work of GIS Technicians for accuracy, proper work methods, techniques and compliance with applicable standards and specifications.
- Serve as project lead for special GIS projects including planning, system integration, database development, implementation and application development; meet with various GIS users and Information Technology and County management to plan and discuss system requirements; provide project status updates as needed.

- Serve as system administrator for GIS ensuring that application software and hardware operates efficiently and meets the County's needs for information technology; update layers as changes occur.
- Coordinate the integration of GIS with other computer applications; meet with users and review requests; develop and tailor applications to meet user needs; prepare documentation.
- Collaborates and participates in setting priorities and deliverables for GIS team.
- Research and investigate geographic information system industry techniques and products; evaluate and recommend GIS software and hardware systems.
- Coordinate with software and hardware vendors as well as service consultants on planning issues, price quotes, problem reporting, and contracts.
- Attend and participate in professional group meetings, seminars and trainings in order to stay abreast of new trends and innovations in the field of GIS technology.
- Produce custom reports for County departments.

SPECIAL REQUIREMENTS:

Valid California Driver's License may be required.

MINIMUM QUALIFICATIONS:

Knowledge of:

Operations, services, and activities of GIS system; uses, capabilities, and operations characteristics of GIS systems equipment and specialized hardware including ArcInfo, ArcOnline, ArcView and computer mapping applications; cartographic standards, principles and procedures; methods and techniques of engineering, land surveying, planning, and spatial analysis as it relates to GIS; operation and maintenance of computer software and hardware, operating systems, local and wide area networks, internet and remote access computer systems; concepts of relational database systems; database design and development; principles and practices of training; and pertinent federal, state and local laws, codes and regulations.

Ability to:

Provide highly technical support to GIS programs; provide assistance, training, and knowledge transfer to technicians and staff; oversee multiple projects, tasks, and priorities to achieve desired goals; analyze spatial data by linking tabular information from ArcInfo, ArcView and ArcMap; create geographically referenced data sets; design implement, maintain and administer relational database management systems; prepare accurate maps and records; install and implement GIS technology to distributed desk top users; operate system software and database programs; troubleshoot GIS network and application problems; read, comprehend, and interpret complex scientific and technical information as it relates to GIS;

provide instruction and assistance in using various computer applications; use independent judgement and initiative in making recommendations regarding database applications; install software and hardware components; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships with those contacted in the course of work. Ability to interpret the Addressing Code; properly assign new addresses; maintain documentation of problematic addresses; update and maintain Addressing Layer in the GIS system; disseminate proper or corrected addresses to property owners and effected County Departments and Agencies.

Training, Education and Experience:

Equivalent to an Associate's degree from an accredited college with major course work in cartography, GIS or a related field. Must have completed college level courses and/or professional training seminars in ESRI applications AND four years of increasing responsibility journey level experience performing duties similar to a GIS Technician with at least two of the years of experience performing duties similar to a GIS Technician III. Experience working with ESRI GIS software or AutoCAD map software is required.

PHYSICAL DEMANDS AND WORKING CONDITIONS:

Mobility to work in a standard office environment; use standard office equipment; physical ability to sit or otherwise remain stationary at work post for long periods of time; manual dexterity to use standard office equipment and supplies and to manipulate both single sheets of paper and large documents holders (binders, manuals, etc.); vision to read handwritten and printed materials and a computer screen; hearing and speech to communicate in person and by telephone.

OTHER REQUIREMENTS:

This class description lists the major duties and requirements of the job and is not all-inclusive. Not all duties are necessarily performed by each incumbent. Incumbents may be expected to perform job-related duties other than those contained in the documents and may be required to have specific job-related knowledge and skills.

Established: November, 1999
Revised: June, 2016 Preliminary Budget