



CITY OF OMAHA CLASS SPECIFICATION

CLASSIFICATION TITLE: GEOGRAPHIC INFORMATION SYSTEMS ANALYST

BARGAINING UNIT: [CIV MANAGEMENT](#) **CODE NUMBER:** 1495

PAY RANGE CODE: [18.1 MC](#) **REVISION DATE:** 7/27/17

NATURE OF WORK:

This is professional technical work involving the design, development, and maintenance of maps, databases, applications, and workflows relating to Geographic Information Systems (GIS). It involves determining user needs; assisting in the development, implementation, and maintenance of geospatial data and technologies in response to those needs, and training and supporting users in the use of the resulting geospatial data, maps, and applications. The work also involves establishing maintenance processes, quality control checks, usage policies, and supporting documentation as applied to participating agency GIS resources. An incumbent in this classification exercises considerable independence in the performance of duties and receives general guidance from a superior.

ESSENTIAL FUNCTIONS: *(Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)*

Develops geospatial data models for participating agencies, including raster and vector-based geographic data layers, and related data. Assists in developing geospatial data maintenance procedures.

Designs, implements, and supports field data collection workflows using mobile devices and GIS/GPS (Global Positioning Systems) technologies.

Assists in the planning, design, development, integration, implementation, training, and support of GIS applications among the participating agencies. Promotes the adoption and enhancement of GIS technologies.

Identifies opportunities where geospatial data and GIS applications can impact existing and potential business functions. Assists in the development of improved business practices and operational efficiencies through the application of geospatial applications, data, services, maps, reports, and analysis.

Provides technical support to agency users in the form of training, data maintenance, quality control, hardware/software installation, configuration, and troubleshooting, and integration of new geospatial and non-spatial data sources.

Produces graphic output in the form of maps, charts and other presentation materials as needed for the City Council, Planning Commission, developers, consultants and other miscellaneous boards and committees and the general public.

Pursues training opportunities to remain current in developing GIS technology and, when applicable, recommends changes in existing hardware, software, or processes.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of the software, hardware, databases, operating systems, and utilities currently in use in the GIS field.

Knowledge of web development environments and deployment architectures for GIS applications.

Knowledge of programming/scripting resources for geographic analysis, geoprocessing, and methods and standards for data collection and analysis.

Knowledge of relational database systems design, development, and administration.

Knowledge of techniques and standard practices of field data collection using GIS, GPS, and mobile device hardware

Knowledge of operating systems, client-server architecture, and computer network operation and maintenance.

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Skill in the preparation of maps, reports, and related documents.

Skill in the installation and modification of desktop and server computer hardware and software.

Skill in the detection of hardware and software malfunctions and their timely resolution.

Skill in developing, modifying, and supporting GIS application configurations and scripts.

Skill in designing and building geospatial databases; skill in using and administering geospatial relational databases in an enterprise environment.

Skill in designing, deploying, and supporting Web and mobile-based GIS applications.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to work independently, with periodic general guidance, on a number of projects simultaneously.

Ability to train others in the use of GIS hardware and software.

Ability to understand and follow complex oral and written instructions.

Ability to communicate effectively, orally and in writing.

Ability to establish and maintain effective working relationships with fellow employees and members of the general public.

Ability to adhere to safety policies, procedures, and guidelines.

Ability to stand, walk, or lift from 51 to 75% of the time; to reach, bend, stoop, squat, kneel, crouch, crawl, push, pull, sit, or type from 26 to 50% of the time; and to climb and balance up to 25% of the time.

Ability to use up to one hundred (100) pounds of force up to 33% of the time, up to fifty (50) pounds of force from 34 to 66% of the time, and up to twenty (20) pounds of force from 67 to 100% of the time to move objects.

EDUCATION AND EXPERIENCE: *(The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)*

Bachelor's Degree in Geographic Information Systems, Geography, or a related field

AND

Two (2) years of experience in the design, implementation, maintenance, and administration of geographical information systems.

SPECIAL QUALIFICATIONS

Must possess and maintain a valid motor vehicle operator's license.

WORKING CONDITIONS: *(The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)*

Work is performed primarily in an office setting amid normal levels of dust, odors, fumes, and noise. However, at times an incumbent may be required to work outdoors in all weather conditions.

EQUIPMENT OPERATION: *(Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)*

Computer
Printer
Mobile Devices

Copier
Telephone

Calculator
Scanner

Previous Revision Date(s): 4/11/06