CITY OF CHATTANOOGA
Classification Specification Title: GIS Analyst 2

Department: Technology Services

Supervision Received From: GIS Systems & Database Mgr

Supervisory Responsibility For: None

Pay Grade: GS.11

FLSA Status: Exempt

Established Date: 2/19/08

Revision Dates: 3/28/25;

1/08/25; 10/20/23; 1/11/23

CLASSIFICATION SUMMARY:
Incumbents in this classification are responsible for GIS Project Management that includes developing, programming and maintaining the City's geographic information system using GIS system program tools such as: ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise, ArcGIS API for Python, ArcGIS Dashboards, ArcGIS Survey123, ArcGIS Field Maps, ArcGIS Insights, ArcGIS Urban, ArcGIS Experience Builder, ArcGIS Web AppBuilder, ArcGIS Arcade, and Cityworks.. Designs, manages and develops GIS applications using custom GIS Tools. Performs senior level project management and analysis of GIS projects. Assists management in GIS technical specifications for software applications, RFP's, bids and proposals.

Develops and programs complex GIS applications and solutions for city departments and outside agencies; manages the checking of topographic and other maps created by outside contractors and agency staff; assists in developing procedures for maintaining the City GIS; creates various plots and data sets for users; provides spatial analysis of data sets; creates and updates map layers. Edits, programs and alters data formats of tabular data, exports graphic maps to different formats; assists with software management including upgrades and researching/acquiring new software. Work is performed with limited supervision.

SERIES LEVEL: The GIS Analyst 2 is the third level of a five-level GIS series.

ESSENTIAL FUNCTIONS:
(*The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*)

Serves as the project lead providing senior level project management, leading team members and outside vendors to develop timelines, monitor data collection schedules and provide quality control of the data.

Performs advanced GIS calculations and programming models that are used in planning of the City's infrastructure to include Sewer Systems and StormWater Systems.

Performs programming updates and maintenance of Cityworks, Geodatabases, SDE and ArcGIS Server data sets.

Performs senior level analysis and programming of GIS Data sets using data from multiple data areas.

Creating 3D models of physical assets like buildings, infrastructure, and landscapes using GIS tools to build a comprehensive digital twin representation.

Manages the quality control checking of topographic maps created by outside contractors and agency staff.

Provides Senior level GIS analysis using specialized programs within GIS Data Sets for city department projects by request as needed.

Provides spatial analysis to large amounts of data for designing complex map layers.

Utilizes GIS programming for computational analysis of large amounts of data for designing complex map layers within GIS programs.

Provides management of the ArcGIS Enterprise Portal, ArcGIS Server, and SDE. Model building for all weekly database updates.

Performs after hours database maintenance.

Develops procedures for maintaining the GIS.

Analyzes, manipulates, and prepares reports from GIS applications.

Performs program database administration by creating and revising tables.

Creates queries, forms, and reports that contain a variety of information.

Provides senior level support to users by troubleshooting and training users on GIS, Cityworks, and GPS applications.

Creates, maintains and programs GIS layers in applicable databases.

Coordinates, develops, tests, and modifies GIS applications for use by end-users, including entry/inquiry screens and print layouts.

Develops related system documentation and creates user guides.

Reviews and processes requests associated with public works fees; collects fees for plans, specifications, and/or other related items.

Collects and verifies field data by conducting GPS and visual inspections of applicable sites.

Assists in providing information and assistance to customers regarding a variety of issues, which may include: supplying initial statistics to potential bidders on City contracts; inputting and communicating contract information to interested parties; coordinating appeal processes;

responding to fee change requests; locating and issuing maps; and/or, performing other related activities.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other duties as assigned.

DEPARTMENT SPECIFIC DUTIES (if any):

MINIMUM QUALIFICATIONS:
Bachelor of Science Degree with training emphasis in Geography or Computer Science, mapping, database design, or other closely related field or five (5) years previous experience involving geographical information systems project management or relational databases design and maintenance.

LICENSING AND CERTIFICATIONS:
Valid Driver's License
GISP Certification Preferred

KNOWLEDGE AND SKILLS:
Knowledge of Esri GIS software stack, data analysis, data modeling, FME (Feature Manipulation Engine) as it supports data integration, transformation, and automation across various GIS platforms and formats; 3D modeling; understanding of 3D modeling techniques to create detailed digital twin representations; Esri GIS software, Esri SDE and MS Sql Server database projects, data analysis, data modeling and GIS system design.

Management skills to work on projects with outside contractors and agency staff for computerized mapping, digital data creation, conversion, manipulation and analysis.

GIS database administration principles, methods and techniques, including quality control methods and practices; relational databases; cartographic principles as it relates to GIS; and, customer service principles.

Skill in creating and interpreting data models and quality control using a computer and related software applications; converting data to and from multiple platforms; reading a variety of technical maps, drawings, and other related items; understanding, using and applying database management systems, tools, and techniques; collecting, interpreting and integrating relevant geographic data from multiple sources; preparing accurate GIS cartographic products; and, communication and interpersonal skills as applied to interaction with coworkers, supervisor, and the general public, sufficient to exchange or convey information and to receive work direction.

Ability to integrate diverse data sources from different systems into a unified digital twin environment.

PHYSICAL DEMANDS: Positions in this class typically require: reaching, fingering, grasping, talking, hearing, seeing and repetitive motions.

WORK ENVIRONMENT: Sedentary Work: Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects, including the human body. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.

SPECIAL REQUIREMENTS

Safety Sensitive: N
Department of Transportation - CDL: N
Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.