Capital Area Council of Governments
Job Description

CAPCOG Title:	GIS Database Specialist II
Division:	Regional Planning and Services
Reports to:	GIS Program Manager
State Title & Salary Grade:	GIS II/B20
FLSA Status:	☐ Exempt ☒ Non-Exempt

GENERAL DESCRIPTION

Performs complex Geographic Information Systems (GIS) work, including data management, spatial analysis, mapping (cartography) in both desktop and web-based systems, and the development of workflows and scripts to enhance efficiency and meet user needs. Primary work is focused on 9-1-1-GIS data maintenance, editing and quality control. Works under general supervision with moderate latitude for the use of initiative and independent judgment.

ESSENTIAL FUNCTIONS

Essential duties and functions may include the following. Other related duties may be assigned.

- Works with Emergency Communications department staff on 9-1-1 related issues, including trouble-tickets related to Automatic Location Identification-(ALI) (Telephone Number) reports or PSAP Public Safety Answering Point-(PSAP)/Emergency Communications Center-(ECC) mapping problems.
- Coordinates the collection and assembly of 9-1-1-GIS datasets on at least a monthly update cycle from local governments.
- Updates PSAP mapping application.
- Participates in conference calls, workshops, document reviews, and other forms of communication to ensure data models adhere to the National Emergency Number Association (NENA) Next Generation 9-1-1 (NG911) evolving standards.
- Validates GIS data quality by performing topology analysis and utilizing specialized data quality control tools (i.e. GeoComm's GIS Data Hub, etc.) to align with NENA NG9-1-1 standards.
- Coordinates with 9-1-1-GIS County Addressing Coordinators to perform collaborative data editing and quality control -- specifically for those counties with the greatest issues, but with others as necessary
- Proposes and implements improvements to 9-1-1-GIS processes (Quality Assurance), including technological advancements.
- Prepares county 9-1-1 Quality Control performance reports through the use of automated scripts
- Writes scripts and develops user interfaces, menus, and macro-level commands to meet user needs.
- Uses ArcGIS Online workflows for 9-1-1-GIS data editing collaboration.
- Deploys ArcGIS Online workflows for disaster-incident management, including WebEOC, and ArcGIS emergency management solutions (i.e. Collector, Survey 123, Operations Dashboard, etc.).
- Updates and helps manage the CAPCOG Open Data Site
- Coordinates with local emergency managers and their needs related to Homeland Security technology committee objectives.
- Prepares data 9-1-1 GIS data for use in Regional Notification System (RNS) monthly updates using Python scripting.
- Acquires data to perform data management, spatial analysis, and mapping (cartography), using GIS tools for other CAPCOG projects or external customers
- Documents all job-related workflow processes and concepts which may include documenting with graphics.
- Develops training material, and may train other staff or regional colleagues, including scripting for GIS and/or Microsoft Excel
- Participates in staff and regional meetings.

GENERAL QUALIFICATIONS

Education

GIS Certificate, Bachelor' degree in GIS, or other undergraduate or Master's degree with strong GIS course work required.

Experience

Minimum 3 years of experience as a GIS professional using ArcGIS Desktop/ArcGIS Pro, and ArcGIS Online is required. An equivalent combination of education, training, and job experience may be substituted as determined by the supervisor. Experience or training in the use of ArcGIS Enterprise and management of geodatabases is preferred.

Knowledge, Skills, and Abilities

- Knowledge of spatial data structures, coordinate systems, editing/topology, geoprocessing, and spatial analysis.
- Knowledge of database management (with respect to GIS), including data entry, field statistics, field calculations, data summaries, table joins, and attribute queries.
- Ability to think critically and spatially to solve problems independently.
- Ability to create scripts and data models to automate tasks and commands in ArcGIS and Excel
- Possess strong interpersonal skills, an excellent work ethic and team-oriented attitude, and strong written and oral communication skills.
- Ability to evaluate analytical results and present that information effectively.

Other Requirements

- Dependable transportation for travel within the region, valid driver's license and proof of vehicle insurance as required by the State of Texas.

Physical Requirements

Remain in a stationary position at a desk throughout the workday.	Frequently
Stand and perform tasks throughout the workday. May be stationary for periods of the day.	Seldom
Move about inside the office to perform different tasks of the position such as access the copy machine, file papers, or deliver mail to the reception area.	Seldom
Coordinate precise movements of the fingers in order to use office productivity machinery or perform intricate tasks.	Regularly
Move objects weighing up to designated # of pounds.	Seldom - 15 lbs
Lift objects from the floor and up onto a shelf or desk weighing up to designated # of pounds.	Seldom - 15 lbs
Converse with others both in person and over the phone.	Seldom
View details at close range (within one to two feet of the observer) and distinguish color-coded materials.	Regularly
Move body into multiple positions to perform different tasks such as in the following examples: under desks, between walls, around servers and furniture, or to retrieve files from the bottom or top drawers of file cabinets.	Seldom
Performs duties in professional office environment.	Frequently
Performs duties while exposed to conditions of heat, cold, humidity, wind and/or rain.	Seldom
Drives a vehicle to perform CAPCOG business.	Seldom

KEY

☐ *Never 0%* ☐ *Seldom 0-30%* ☐ *Regularly 30-60%* ☐ *Frequently 60-90%* ☐ *Constantly 90-100%*

- *Seldom would be up to 12 hours per week or 0 to 2.4 hours per day*
- *Regularly would be 12 to 24 hours per week or 2.4 to 4.8 hours per day*
- *Frequently would be 24 to 36 hours per week or 4.8 to 7.2 hours per day*
- *Constantly would be 36 hours to 40 hours per week or 7.2 to 8 hours per day*

I have read and understand all aspects of this job description. I have discussed any questions I have about my duties with my supervisor.

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Employee Printed Name, Signature and Date

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Supervisor Printed Name, Signature and Date