CITY OF BRISBANE

GEOGRAPHIC INFORMATION SYSTEMS (GIS) MANAGER

Definition

Under general direction, plans, develops, and manages the City's Geographic Information Systems (GIS) and related database systems; works with other departments and/or interdepartmental project teams to identify, develop, and maintain new and existing GIS projects and systems. Supervises and occasionally completes skilled graphics work translating requirements into presentations, and assisting the organization with branding and outreach.

Class Characteristics

This is a professional-level position in which the incumbent performs routine, difficult and complex technical work, where assignments are subject to infrequent review while work is in progress and upon completion. This position uses independent judgment and analytical abilities, which require sound grounding in municipal government and/or civil engineering fundamentals, as well as the ability to solve problems of moderate difficulty without supervision. Strong creative, visual, written, verbal, interpersonal and human relations skills are essential for incumbents assigned to this classification.

Supervision Received and Exercised

Receives direction from and reports to the City Engineer or her/his designee.

Supervises the GIS analyst, other assigned support staff, and interns when assigned.

Examples of Important and Essential Duties - *the duties described below are provided as examples and are not to be considered as exclusive or all-inclusive:*

- Plan, direct, and participate in the acquisition, installation, administration, and operation of the City's geographic information system (GIS); oversee software release installs and updates for the GIS system.
- Develop new GIS layers as required, and update existing GIS layers using a variety of GIS software applications (including ArcGIS, AutoCAD, and CMMS).
- Coordinate, train, and instruct staff in the operation of the geographic information system.
- Oversee 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.
- Create graphical and tabular output such as maps, charts displays and spreadsheets for use in project analysis, council presentations, public reference/promotions/outreach, etc.
- Supervise the use, care and operation of GIS equipment.
- Serve as project lead for special GIS projects including the planning, system integration, database development, implementation, and application development; meet with various GIS users and IT management to plan and discuss system requirements; provide project status updates as needed.
- Coordinate with the City's IT department, to ensure that GIS application software and hardware operates efficiently and meets the City's needs for information technology and integrates with other computer applications; update layers as changes occur.
- Meet with City staff and users and review requests; develop and tailor applications to meet user needs; prepare documentation.

- Oversee the design and development of all databases associated with the GIS base map including relational databases; develop standards and strategies for maintaining database security.
- Plan and develop citywide user training for geographic information systems and permit systems; develop policies and procedures for users and output requirements for GIS services.
- Coordinate the design and development of user-specific GIS databases and user types; configure system operational functions; prepare reports as necessary.
- Research and investigate geographic information system industry techniques and products; evaluate and recommend GIS software and hardware systems; review vendor proposals, negotiate GIS contracts, and prepare specifications for service contracts and RFP's.
- Periodically review system operations, recommend changes to improve the system, and assist user departments in the periodic reassessment of their information needs.
- Coordinate with software and hardware vendors as well as service consultants on planning issues, price quotes, problem reporting, and contracts.
- Coordinate GIS activities with other staff, the public and private agencies as needed.
- Represent City geographic information systems interests to various governmental and professional geographic information systems related agencies, and to the community as needed.
- Attend and participate in professional group meetings, seminars and trainings in order to stay abreast of new trends and innovations in the field of geographic information systems technology.
- Develop and administer the City's Internet GIS Mapping applications in coordination with the City's webmaster.
- Plan, supervise, and evaluate the work of lower-level technical staff or interns; verify the work of assigned employees for accuracy, proper work methods, techniques and compliance with applicable standards and specifications.
- Develop staff reports and procedural documents, facilitate the coordination of the GIS Strategic Plan, and assist in the development and oversight of the GIS budget.
- Operate a variety of standard office equipment, including personal and on-line computer systems, scanners, printers and plotters; and work with external printing services as needed.
- Prepare specific maps, drawings, plans, specs, or standard details upon request for City staff
- Serve as the City's GIS primary point of contact.
- Perform related duties as required.

Qualifications
Knowledge of:
- Basic principles and practices of civil engineering as performed by a paraprofessional engineering position. Principles and practices of project management, training, and supervision.
- Current principles, practices, terminology, and trends in GIS usage and modern land-based mapping application theory.
- Operating principles and practices of multiple mapping, drafting, illustration, and office software such as AutoCAD, AutoCAD Maps, Civil 3D, and the ESRI suite of products including ArcGIS Pro, ArcGIS online, Story Maps, Microsoft Office Products, and the Adobe suite including Photoshop and Illustrator.

Skill to:
- Manage, organize, and display the City's geographical records
- Design, prepare and create visual content of the City's assets
- Supervise and manage assigned employees.
- Facilitate interdepartmental cooperation in the absence of a direct chain of command.

- Understand Civil Engineering and Public Works workflows, needs, and standards
- Map, draft and manage database with speed and accuracy
- Manage interdepartmental communications and workflow priorities
- Use office automation and software applications to facilitate public relations activities
- Read, comprehend, and interpret complex scientific and technical information as it relates to GIS

Education and Experience:
Any combination of experience and education that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Education: Possession of a Bachelor's degree from an accredited college or university with major course works in Cartography, Civil Engineering, Geographic Information Systems, or Graphic Design. Experience beyond that required below in a professional or support capacity in a government department may be substituted for the required education on a year-for-year basis.

Experience: Three years of increasingly responsible experience utilizing geographic information systems, with a minimum of 2 years' experience as a GIS Technician or similar position.

Licenses: Possession of a valid California driver's license, and have a satisfactory driving record. Possession of or the ability to obtain ArcGIS Desktop Certification issued by ESRI. Possession of certification as a Water Distribution Operator and/or Sewer Collections is highly desirable.

Working Conditions: Work in a standard office environment with some exposure to outdoors, mechanical hazards, traffic, and electrical hazards. Must be able to travel to various locations to fulfill job responsibilities.

Physical Demands: Able to use standard office equipment, including a computer; sit, stand, walk, and maintain sustained posture in a seated or standing position for prolonged periods; vision to read printed materials and a computer screen; hearing and speech to communicate in person, over the telephone, and to make presentations; lift and carry 35-pound boxes, files, and materials.

Approved Date: December 9, 2021
Resolution: 2021-75

Revised Date:
Resolution:

Bargaining Unit: Mid-Management/Professional Group
Resolution: 2021-75

Former Titles:
Abolished: