

Frankfort Plant Board - Final Draft

Geographic Information Systems (GIS) Administrator

Job Description

Job Code:

Exempt: Yes

Department: Information Technology

Reports To: Information Technology Director

Location: FPB Office

Grade: 113

Date Prepared: July 10, 2017, August 28, 2013

Date Revised:

GENERAL DESCRIPTION OF POSITION

Under general direction, the role of the GIS Administrator is to coordinate, implement, and manage the organization's strategies and initiatives for GIS. This individual is responsible for ensuring the development and maintenance of applications based upon spatially referenced data and digital mapping. The GIS Administrator will also preserve the integrity and design of geographic information databases, as well as coordinate with a team of IT professionals to support GIS functions. This individual also maintains current GIS landbase maps; instructs and trains users in operation of the GIS; processes outside requests for information; acts as liaison to contractors, developers, and the city/county governments; performs related work as required.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Lead, coordinate, and manage all aspects of GIS implementations.
2. Participate in design of new GIS analysis methodologies, applications, and strategies.
3. Participate in development and/or implementation of policies, procedures, and technologies (including firewalls) to ensure GIS security.
4. When necessary, coordinate and administer the acquisition of satellite imagery; conduct analysis of digital imagery.
5. Conduct research on GIS-related hardware and software in support of procurement and system development efforts.
6. Maintain, augment, and verify integrity of GIS data and links to other tables/databases.
7. Coordinate and conduct GIS training sessions for GIS staff and end users with client-facing application needs.
8. Provide GIS guidance and support to the enterprise; act as single point of contact for GIS-related issues, both internal and external, including contractors, developers, and the city and county governments.
9. Responds to GIS open records requests, collects fees, provides maps, survey data, etc.
10. Lead transitions of GIS applications to next-generation environments and/or cross-functional systems.

11. Oversee development of the organization's demographic database; collaborate with database administrators and engineering departments to achieve this end.
12. Maintain GIS landbase maps to include updates relating to changes in base map features (i.e., highways, subdivisions, buildings, etc.).
13. Coordinate with network engineering to ensure availability, reliability, and scalability of GIS applications to meet business demands.
14. Troubleshoot and resolve hardware and software problems.
15. Perform data audits and quality control measures.
16. Recommend and execute modifications to GIS software in order to improve efficiency, reliability, and performance.
17. Develop and maintain GIS manuals and systems documentation.
18. Makes presentations relating to GIS.
19. Perform any other related duties as required or assigned.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty mentioned satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

EDUCATION AND EXPERIENCE

Bachelor's degree in Geographic Information Science (GIS), Geography/Cartography, Earth Science, Engineering, Computer Science, or a related field from an accredited college or university, plus 5 years progressively responsible GIS systems experience with a GIS system (preferably ArcGIS). Additional GIS system experience may be substituted for the educational requirement on a year for year basis. Experience desirable in basic SQL and Windows operations, internet mapping technology, and implementing an enterprise GIS.

COMMUNICATION SKILLS

Ability to read, analyze, and understand common scientific and technical journals, financial reports, and legal documents; Ability to respond to complex or difficult inquiries or complaints from customers, regulatory agencies, or members of the business community.

MATHEMATICAL SKILLS

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane, algebra, solid geometry and trigonometry.

CRITICAL THINKING SKILLS

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

REQUIRED CERTIFICATES, LICENSES, REGISTRATIONS

Certification: ArcGIS Desktop Professional or obtained within first 6 months.

PREFERRED CERTIFICATES, LICENSES, REGISTRATIONS

Certification: ArcGIS Desktop Professional

Certification: GISP (Certified GIS Professional)

SOFTWARE SKILLS REQUIRED

Advanced: ESRI ArcGIS, ArcMap, ArcInfo, ArcSDE

Basic: MS Excel, MSSQL, Programming Language: Python

INITIATIVE AND INGENUITY

SUPERVISION RECEIVED

Under administrative direction, setting up own standard of performance. Virtually self-supervising.

PLANNING

Considerable responsibility with regard to general assignments in planning time, method, manner, and/or sequence of performance of own work, in addition, the organization and delegation of work operations for a group of employees engaged in widely diversified activities.

DECISION MAKING

Performs work operations which permit frequent opportunity for decision-making of major importance which would have considerable effect on the final attainment of multiple major activities and the organization's projects of a large organization component and organization's clientele.

MENTAL DEMAND

Close mental demand. Operations requiring close and continuous attention for control of operations. Operations requiring intermittent direct thinking to determine or select the most applicable way of handling situations regarding the organization's administration and operations; also to determine or select material and equipment where highly variable sequences are involved.

ANALYTICAL ABILITY / PROBLEM SOLVING

Oversight. Activities covered by expansive policies and objectives, and oversight as to execution and review. High order of analytical, interpretative, and constructive thinking in varied situations covering multiple areas of the organization.

SUPERVISORY RESPONSIBILITIES

None.

RESPONSIBILITY FOR FUNDS, PROPERTY and EQUIPMENT

Occasionally responsible for organization's property where carelessness, error, or misappropriation would result in moderate damage or moderate monetary loss to the organization. The total value for the above would range from \$150,000 to \$1,000,000.

ACCURACY

Probable errors would normally not be detected in succeeding operations and could possibly affect organization-patron relationship, involve re-work, or additional expenditures in order to properly resolve the error. The possibility of such errors would occur quite frequently in performance of the job. May also cause inaccuracies or incomplete information that would be used in other segments of the organization as a basis for making subsequent decisions, plans, or actions.

ACCOUNTABILITY

FREEDOM TO ACT

Directed. Freedom to complete duties as defined by wide-ranging policies and precedents with mid to upper-level managerial oversight.

ANNUAL MONETARY IMPACT

The amount of annual dollars generated based on the job's essential duties / responsibilities. Examples would include direct dollar generation, departmental budget, proper handling of organization funds, expense control, and savings from new techniques or reduction in manpower.

Job does create a monetary impact for the organization from \$100K to \$1MM.

IMPACT ON END RESULTS

Moderate impact. Job has a definite impact on the organization's end results. Participates with others in taking action for a department and/or total organization.

PUBLIC CONTACT

Regular contacts with patrons where the contacts are initiated by the employee. Involves both furnishing and obtaining information and, also, attempting to influence the decisions of those persons contacted. Contacts of considerable importance and of such nature, that failure to exercise proper judgment may result in important tangible or intangible losses to the organization.

EMPLOYEE CONTACT

Contacts with other departments or offices and also frequently with individuals in middle level positions; consulting on problems which necessitate judgment and tact in presentation to obtain cooperation or approval of action to be taken. Also, important contacts with associates as required in advanced supervisory jobs.

USE OF MACHINES, EQUIPMENT AND/OR COMPUTERS

Regular use of highly complex machines and equipment; specialized or advanced software programs.

WORKING CONDITIONS

Normal working conditions as found within an office setting, wherein there is controlled temperature and a low noise level, plus a minimum of distractions.

ENVIRONMENTAL CONDITIONS

The following work environment characteristics described here are representative of those an employee encounters while performing essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The noise level in the work environment is usually moderate.

PHYSICAL ACTIVITIES

The following physical activities described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions and expectations.

Semi-repetitive, low physical. Semi-repetitive type work which requires periods of concentration for varied time cycles as prescribed by the tasks.

While performing the functions of this job, the employee is continuously required to sit, use hands to finger, handle, or feel; frequently required to reach with hands and arms, talk or hear; and occasionally required to stand, walk. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision; and color vision.

ADDITIONAL INFORMATION

Subject to Random Drug and Alcohol Testing: No

