

CITY OF WEST LINN

JOB DESCRIPTION

Job Title: GEOGRAPHIC INFORMATION SYSTEMS (GIS) SPECIALIST

General Functions:

Under general direction and supervision, performs advanced level duties involving geographic information systems (GIS) and is primarily responsible for developing, preparing, automating, maintaining and amending a variety of specific GIS data sets and equipment as assigned by the GIS Coordinator.

Duties and Responsibilities:

(An employee in this classification may perform any of the following duties; however, these examples do not include all the specific tasks that an employee may be expected to perform)

1. Contributes to a positive work environment.
2. Maintains a positive relationship with contacts specific to them and positions outside the City organization.
3. Creates models of GIS processes and writes Visual Basic script routines to automate GIS functions in ArcMap utilizing ARC/Objects.
4. Document changes to data sets. Maintain metadata in the City's data dictionary. Thoroughly document GIS data processing steps.
5. Develops geodatabase designs, methods and processes.
6. Reviews and prepares map and geographic record materials for entry into GIS databases and uses customized software to enter and maintain GIS data sets.
7. Develop methods to exchange data between GIS public utility data and asset management software. Perform periodic data exchanges and maintain archival records of all data transferred.
8. Convert GIS data to various formats as required by each GIS application.

Geographic Information System (GIS) Specialist

Job Description

Page 2 of 4

9. Uses GIS software and analytical techniques to produce maps in support of assigned projects.
10. Design, develop, and maintain specific GPS data collection projects to be used by others. Provide technical support to GPS users collecting field data. Resolve discrepancies between field collected data and data from other sources. Import field data into existing GIS data sets using local base stations and differential correction processes.
11. Conducts site/field visits to clarify information on engineering as-built drawings.
12. Communicates with other department staff regarding source documentation and other information used for maintaining GIS data.
13. Uses large format scanner to create images of drawings and documents. Uses imaging software to accurately maintained digital archives of scanned drawings and documents.
14. Assists in the design, layout and cartographic solutions for conveying and representing information through mapping symbology, text, color and design.
15. Conducts property legal description research, analyzes data through the use of tax maps, road maps, fire maps, and reference files.
16. Identifies and corrects GIS data, conducts inventories of maps and replaces, as needed.
17. Provide input for GIS project and long range planning. Evaluate software for future City use.
18. Interpret as-built engineering drawings, aerial photographs, legal descriptions, and maps.
19. Perform regular quarterly back up of all GIS data.
20. Clean and perform routine maintenance of specialized GIS equipment including scanners, large format plotters, and GPS field equipment.

Geographic Information System (GIS) Specialist

Job Description

Page 3 of 4

SPECIFICATIONS:

(Job preparation and prior work experience requirements are minimum standards. Other equivalent combinations of education, training and experience may be considered)

1) Job Preparation:

a) Education:

- i) Requires Associate's Degree in geographic information systems, computer technology, drafting, civil engineering, geography or a related field. Qualifications must include technical expertise in ESRI GIS software, including ARC/GIS, ARC/INFO and Arc View; computer mapping techniques and theory; compilation and research of data sources, including paper maps, property related documents, as-built engineering drawings, aerial photography, land zoning, and site addressing information. Requires knowledge of tabular information, mathematics, statistics and spatial analysis, as they relate to GIS project work, organizational skills and competency in data documentation. Requires working knowledge and abilities in GIS scripting and programming languages. Any satisfactory equivalent combination of experience and training which ensures the ability to perform the work may be substituted for the above.

b) Training:

- i) Requires two years of experience with file management and text editing, operation of personal computers, word processing and spreadsheet software, plotters, scanners, GPS equipment, and other peripherals, necessary.
- ii) Must have two (2) years experience with GIS software, including the development of geodatabase designs, conversions, models and methods, scripting and programming, conversion of geographic data as it relates to other software products.
- ii) Requires effective communication orally and in writing and the ability to establish and maintain cooperative working relationships with staff in City Departments.
- iii) Must have a valid driver's license at time of appointment.

Geographic Information System (GIS) Specialist

Job Description

Page 4 of 4

2) Supervision:

Received: Receives project direction from the GIS Coordinator, who assigns work and outlines general projects and procedures. Work is reviewed for effectiveness and results obtained. May be asked to perform as lead worker overseeing the training of temporary staff.

Exercised: Supervision of others is not a normal responsibility of positions in this classification.

3) Communication:

Requires frequent communication with department staff and software technical support personnel.

4) Cognitive Functions:

Knowledge of GIS concepts including technical aspect (computer systems, relational databases, software models, computer programming, etc.) and spatial relationships (map overlays, locational and spatial analysis, statistics, and interpretation of engineering and authoritative maps.). Ability to develop and interpret functional requirements in the development of GIS improvements and integration. Ability to research solutions and troubleshoot software problems relating to GIS.

5) Working Conditions:

Normal working conditions include work performed in an office setting and some fieldwork. Has normal business hours.

6) Resource Accountability:

Position is responsible to assist the GIS Coordinator in the proper maintenance of GIS computer system and the maintenance and storage of maps, drawings, charts, data documentation, and other related records.

May commit City resources for small purchases.

The job classification description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.