

CITY OF MILWAUKIE

CLASSIFICATION: GIS COORDINATOR

Department: Information Systems Technology (IST)
Location: Public Safety Building

Grade Number: 13(63)
Union: AFSCME

FLSA: Non-exempt
EEO Category: 3 - Technician

DESCRIPTION:

Performs a variety of routine to complex technical Geographic Information Systems (GIS) activities. These include, but are not limited to the following: design, implementation and maintenance of City spatial database structures, spatial analysis and research, map production, GIS application development including internet mapping, GIS project management, participation in the development and maintenance of electronic databases for use in City business, and providing information to City staff, other government agencies and the general public. Provides user training to various departmental personnel and resolves problems. This position works under the general supervision of the Information Systems and Technology Director.

DUTIES AND RESPONSIBILITIES:

(Tasks listed are intended to be descriptive and not restrictive. An employee in this classification may perform any of the tasks listed; however, these examples do not include all the tasks which an employee may be expected to perform.)

ESSENTIAL DUTIES AND RESPONSIBILITIES:

1. Designs, develops and implements GIS applications through commonly used programming languages; designs program logic to meet specifications; tests and debugs GIS programs to ensure operational accuracy; ensures the effective operation of GIS operating systems and servers; evaluates new software and recommends implementation strategies; researches changes, trends and technologies related to GIS.
2. Coordinates the planning of GIS projects related to existing or proposed systems; prepares estimates and tracks project time and costs; confers with users and departments to analyze current and projected data information needs, and resources; prioritizes user requests and determines methods for completion; establishes a work plan in relation to the capacity and limitations of computer hardware, operating time and available personnel.
3. Provides project management for the development of special GIS related projects from inception to completion, including databases as needed to support project goals, understanding and interpreting the scope, goals and objectives for projects, ensuring steps in the process are achieved, and assisting departments in the implementation of departmental GIS needs.
4. Manages and develops data, including developing new digital data as required on a project level basis or through departmental request, developing the graphical component and database design and structure, ensuring the accuracy and completeness of digital data layers to project level needs and non-base layer components, and providing graphical display of digital data in the form of cartographic map products.
5. Coordinates the work of a project team composed of staff, regional government personnel, partner agency personnel, vendors and users; guides and formulates project needs and requirements; manages

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and completes projects within specific time and budget constraints; prepares progress reports and revises projections to reflect current status.

6. Provides leadership and direction in the development of short and long range plans; gathers, interprets, and prepares data for studies, reports and recommendations; coordinates activities with other departments and agencies, as needed.
7. Develops detailed design specifications, definitions, diagrams, performance criteria, and testing methods for GIS projects; writes, develops, and documents operational procedures for data elements and sources; devises schedules for GIS application implementation; provides training and technical guidance to users and staff in the use of new or modified systems and procedures.
8. Maintains various GIS database(s) through map preparation, data entry, digitizing, map editing and quality control techniques. Codes and digitizes maps and geographic feature data and perform quality control checks to ensure the integrity of the database(s).
9. Prepares and administers electronic and hard copy records for creation and retirement of information.
10. Reviews GIS-related contracts and provides feedback to management.
11. Contributes to City's Internet and Intranet web development projects.
12. Assists with the installation and configuration of software, maximizes the functionality of hardware systems.
13. Maintains positive public relations with customers and is responsive to customer needs.
14. Develops safe work habits and contributes to the safety of self, co-workers and the general public.
15. Performs other duties as assigned.

JOB SPECIFICATIONS:

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

1. Job Preparation:

a) Education:

- i) Bachelors degree from an accredited college or university with major coursework in geography, computer science, or closely related field; or
- ii) Any equivalent combination of education and experience.

2. Prior Experience:

a) Work Experience:

- i) Three (3) years of progressively responsible related experience; or
- ii) Any equivalent combination of education and experience.

b) Necessary Knowledge, Skills and Abilities:

- i) Knowledge of principles and practices of Geographic Information Systems, cartography and modern electronic data processing theory.
- ii) Knowledge of GIS database design principles and techniques.
- iii) Knowledge of management information systems and spatial data systems.
- iv) Knowledge of GIS applications and programming languages to include ARC/INFO, ARC/View, ARCGIS, ARCSDE, ARCIMS, Arc, ArcEdit, ArcPlot, and AML.
- v) Knowledge of office automation and computerized financial applications.
- vi) Knowledge of management information systems and spatial data systems.
- vii) Knowledge of computer hardware and software systems in support of GIS systems.

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- viii) Knowledge of legal descriptions and other records related to property mapping, zoning and addressing.
- ix) Knowledge of Geodatabase design, SQL, Visual Basic and HTML applications and programming.
- x) Skill to plan and manage projects.
- xi) Skill to operate the listed tools and equipment.
- xii) Ability to gather, compile and present information in cartographic and tabular formats.
- xiii) Ability to prepare and analyze complex reports.
- xiv) Ability to perform advanced math.
- xv) Ability to plan and maintain efficient and effective complex computer systems in distributed client/server environment.
- xvi) Ability to perform basic and advanced programming.
- xvii) Ability to collect, analyze, evaluate and prepare recommendations regarding GIS, user needs and requirements.
- xviii) Ability to develop and manage projects within established timelines and budget requirements.
- xix) Ability to troubleshoot PC, server, and GIS systems in a distributed client/server environment.
- xx) Ability to understand GIS role in the city planning process including current, comprehensive, and transportation planning, Municipal Code and ordinances, and statewide land use laws and processes.
- xxi) Ability to communicate complex technical information.
- xxii) Ability to establish and maintain effective working relationships.
- xxiii) Ability to work as a team member.
- xxiv) Ability to perform the essential functions of the job.

3. Special Requirements:

- a) Must possess, or be able to obtain by time of hire, a valid Oregon or Washington State Driver's License;
- b) Must be able to pass the department's security clearance standards including a review of driving record.

4. Tools and Equipment Used:

- a) Network servers (UNIX, NT and Windows 2000); wire plant; networked printers and plotters; digitizer; personal computer, including word processing, spreadsheet, presentation and graphics software; GIS software; telephone; copy machine; fax machine; communications software including Microsoft based word processing.

5. Supervision:

- a) This position does not provide supervision to any other staff.
- b) This position operates highly independently with general direction and supervision of the IST Director.

6. Communications:

- a) Communications are often of a complex, technical and confidential in nature.
- b) Requires ability to translate technical data into lay terminology.

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7. Cognitive Functions:

- a) Some policies/procedures exist. Guidelines consist of city codes and regulations, departmental policies and procedures, user system specifications and technical standards and manuals.
- b) Person in this classification determines own practices and procedures by contributing to the development of new concepts. Most problems are quite difficult with precedent occasionally available.

8. Work Environment:

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

- a) Work is performed mostly in office settings with extensive computer workstation inflexibility in order to input and retrieve information from the computer system.
- b) Some outdoor work is required to obtain perspective of various land use developments, City geography, or facilities.
- c) Travel between City facilities and to outside locations required.
- d) Occasional evening and weekend hours required to maintain operating systems.
- e) Constant interruptions while working on technical information.
- f) Occasionally required to access awkward or small crawl spaces to reach computer terminals etc.
- g) The employee must occasionally lift and/or move up to 40 pounds.

9. Resource Accountability:

- a) This classification may make budgetary recommendations and partially accountable for control of capital assets.
- b) Persons in this classification are responsible to make purchasing decisions resulting in the most efficient solution for the lowest cost.
- c) Has extensive impact on GIS and department data and documents.

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.

Drafted: 7/08/93
Adopted: 9/16/93
Revised: 3/26/97
Revised: 8/06/04
Revised: 11/30/04