CITY OF BELLINGHAM

JOB DESCRIPTION

JOB TITLE: **Planning Senior GIS Analyst** **UNION:231**
SG:6
DEPARTMENT: **Planning & Community Development** **CS:N**
FLSA:N
EEO4CODE:PR

JOB SUMMARY:

Provides a full range of Geographic Information System (GIS) support for departmental, inter-departmental, and interagency projects. Responsible for the management, quality control and delivery of GIS services for the Planning Department. Performs a wide variety of advanced analytical and geo-processing functions to create, maintain and retrieve data from the City's GIS. Acts as project manager, or technical consultant and liaison to interdisciplinary project teams. Responsible for evaluating project requirements, providing oversight and guidance with respect to design and implementation of technical project framework; responsible for assignment and application of most-appropriate GIS resources to meet specific project needs; responsible for design, development, and implementation of GIS tools, geospatial databases, and statistical analysis products. Provides professional interpretation of spatial analysis results in terms appropriate to specific project disciplines including: urban planning, civil engineering, architecture, design, transportation, public safety, and environmental science. Presents results, and provides interpretive analysis, and/or expert testimony to project teams, department heads, elected officials, boards, commissions, judicial bodies, and the public.

SUPERVISORY RELATIONSHIPS:

Reports to Senior Planning staff as assigned. Provides technical leadership for departmental GIS functions. Works under general guidance and direction and applicable City and Departmental policies, procedures, protocols and technical engineering standards. Provides technical leadership and daily direction to GIS Specialist and Analyst positions, interns, work-study students and temporary or regular, non-benefitted staff.

ESSENTIAL FUNCTIONS OF THE JOB:

1. Responsible for evaluation of Planning Department GIS program needs and development of appropriate GIS architecture to meet those needs. Coordinates with other City GIS and IT staff on decisions involving changes to enterprise databases, applications, and protocols.

2. Leads integration of Planning Department data systems with GIS analytic functions. Identifies key business requirements; writes and produces appropriate GIS functional specifications and work flows to meet those requirements. Writes and updates data models, scripts, and programs in support of specific application needs such as asset management, monitoring land supply, housing inventory, watershed property acquisition model, statistical reporting, cartographic production, and automation of routine processes. Works within City legislative procedures, including the Planning Commission/City Council legislative process, and Municipal Code requirements. Applies knowledge of urban design principles, including

3D visualization, floor-area-ratio analysis, residential density modeling, and employment and population statistics.

3. Manages and monitors versioned edit and quality control processes on the City's spatial data server. Designs editing and data update workflows to ensure business system requirements are achieved. Responsible for optimizing database design and data manipulation on the spatial data server. Serves as primary data steward for datasets related to Planning, Land Use, and Environmental features.

4. Coordinates work plan and provides support for special mapping and data analysis projects and services for other City departments, outside agencies, the public, private developers, and consultants. Facilitates technical dialogue with parties to determine product specifications and standards. Provides customized presentations, reports, and exhibits. May provide explanation and interpretation of research, determinations, analysis methods, and deliverable materials in private and public meetings. Effectively applies industry-standard cartographic design principles in the production of multi-media, digital, and hardcopy work products. Responsible for ensuring spatial data is accurately and appropriately portrayed for intended audiences, and uses.

5. Responsible for development and application of quality control measures on citywide and departmental GIS datasets. Ensures spatial integrity, attribute consistency, and proper integration between GIS data and other business systems.

6. Prepares and maintains documentation of GIS databases (metadata), procedures, standards, and other reference materials. Manages integration of this documentation with other City business systems.

7. Prepares written reports and documentation which describe project or system status, procedures, functions, requirements, and recommendations.

8. Coordinates and performs research, data collection, and data entry for the creation and maintenance of GIS data.

9. Administers the City's *ArcGIS Server* mapping services, including cartographic design, feature information delivery, system updates, and integration with key business systems.

10. Creates and maintains ArcGIS online map services and story maps. Effectively applies industry-standard web mapping and web design principles. Functions as an administrator for ArcGIS Online Enterprise system.

11. Responsible for annual City of Bellingham population estimate submittal to WA State Office of Financial Management (OFM). Requires understanding of permit system information, ability to perform complex queries and ensure data integrity of permit tracking system (Trakit).

12. Responsible for serving as point-of-contact, and compiling information for mandated state and federal reports (WA State OFM, U.S. Census Bureau, etc).

ADDITIONAL WORK PERFORMED:

1. Provides input in making hiring decisions regarding technical staff.

2. Performs other related work of a similar nature or level.

PERFORMANCE REQUIREMENTS (Knowledge, Skills, and Abilities):

INTERPERSONAL AND COMMUNICATION

Knowledge of:
- Working knowledge of the functions of City departments, office operations and interdepartmental working relationships.

Skill in:
- Excellent interpersonal skills for establishing and maintaining effective working relationships with staff, vendors, consultants, and the public.
- Working both as a member of a team and as a project leader.
- Writing in clear concise language to produce technical reports and other required documentation.
- Good oral communication skills, including good listening skills, to communicate with technical and non-technical audiences.

TECHNICAL COMPETENCIES

Knowledge of:
- Working knowledge of advanced GIS concepts, geoprocessing functions and techniques, and spatial database management procedures. Comprehensive working knowledge of database concepts.
- Demonstrated knowledge of GIS programming languages.
- Demonstrated knowledge of scripting languages such as Python.
- Operating systems, products and concepts involved in the operation of desktop computers.
- Structure Query Language (SQL) and its applications with GIS analysis and data/system integration.
- SQL Server and ESRI ArcSDE Spatial Data Server.
- Demonstrated knowledge of GIS database design (geodatabase).
- Development, configuration and optimization of web mapping services (ArcGIS Server).

Skill in:
- Demonstrated skill in operating, installing and maintaining GIS hardware, software, and related peripheral equipment as required to accomplish assigned duties.
- Utilizing ESRI GIS software including desktop enterprise and online platforms for analysis and mapping.
- Demonstrated skill in producing quality graphic designs, infographics and other production-level reports for presentation.

PROBLEM SOLVING

Ability to:
- Demonstrated ability at combining knowledge of GIS databases and software with common sense and insight in solving problems and making decisions.
- Systematically identify and analyze the important dimensions of a problem, determining potential causes, obtaining relevant information, and specifying alternate solutions, then carrying out solutions or referring to the appropriate authority.

ORGANIZATION AND MANAGEMENT

Knowledge of:
- Working knowledge of principles and procedures of project coordination.

Skill in:
- Good planning, organizing, decision making and time management skills, including the ability to appropriately prioritize assignments.
- Working independently under pressure and with minimal supervision to solve problems and meet deadlines.

GENERAL

Ability to:
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Maintain consistent and punctual attendance.
- Physical ability to perform essential functions of the job including:
  - Hearing adequate to communicate in person and by telephone;
  - Manual dexterity, correctable vision and color perception sufficient to operate a computer and design and produce graphics;
  - Ability to occasionally lift light weight (10-15 lbs).

WORKING ENVIRONMENT:

Work is performed in an office setting and requires sitting or standing for extended periods at a computer work station.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Bachelor's degree with coursework in cartography, planning, environmental science, geography, GIS or related field.
- Four (4) years of GIS experience, with at least 2 years at the analyst level, in a planning, environmental science or related field utilizing professional geo-processing software including at least two years of experience in: Esri Desktop Enterprise software; independent project leadership; multiple disciplinary fields; and, working with consultants and outside agencies.
- An equivalent combination of education and experience sufficient to provide the applicant with the knowledge, skills and ability to successfully perform the essential functions of the job will be considered.

NECESSARY SPECIAL REQUIREMENTS

- Employment contingent upon passing a criminal conviction and local background check.

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10/18