

## CITY OF BELLINGHAM

### JOB DESCRIPTION

**JOB TITLE:** Public Works GIS Specialist

**UNION:**231

**CLASS TITLE:** GIS Specialist

**SG:**S-6

**CS:**N

**DEPARTMENT:** Public Works

**FLSA:**N

**EEO4CODE:**PR

#### **NATURE OF WORK:**

Performs a variety of advanced GIS analytical and geo-processing functions to create, maintain, and retrieve data from the City's geographic information system (GIS), maintains and updates mapping records system, produces cartographic products and generates statistical reports. Position also provides GIS information to the public, contractors and consultants.

#### **SUPERVISORY RELATIONSHIPS:**

Reports to and receives technical direction and supervision from the GIS Manager. Works independently under the guidance of applicable City and Departmental policies, procedures, protocols and technical engineering standards.

#### **ESSENTIAL FUNCTIONS:**

1. Ensures the accurate and timely updates to the City's and/or Department's GIS files. Determines update priorities of map information based on analysis needs and service requirements. Develops update procedures and schedules to attain mapping goals.
2. Conducts research, data collection and data entry for the creation and maintenance of GIS data.
3. Determines and applies analysis procedures for spatial and non-spatial data, including adjacency, containment, and proximity. Determines nature of information to be queried, such as location, characteristics of location, trend, pattern, routing, and modeling various series of events.
4. Determines effective presentation of information using appropriate cartographic elements
5. Creates output, such as maps and graphs, using computer and GIS software and related equipment, including plotter, and presents information to users and answers questions.
6. Assists in the development of GIS and data collection standards to ensure uniformity and compatibility in the citywide system of mapping.
7. Prepares and maintains the documentation of the GIS databases (metadata) and procedures. Maintains records of completed assignments.
8. Researches information and provides technical assistance and information to the public and private developers; uses GIS to generate customized reports; assists with research for planning studies performed by consultants.

9. Trains City staff in the use and applications of GIS software and information.
10. Assists other City departments with GIS analysis and mapping as needed.

**ADDITIONAL WORK PERFORMED:**

1. Other related duties within the scope of the classification.

**KNOWLEDGE AND SKILLS:**

- Considerable knowledge and understanding of GIS practices related public works.
- Considerable knowledge of cartographic principles, terms, concepts, techniques and procedures; local government mapping requirements and standards; GIS concepts and procedures.
- Considerable knowledge of GIS concepts, geo-processing functions and techniques.
- Knowledge and ability to operate and use GIS hardware, software and related peripheral equipment such as plotters, printers, digitizers, copiers, etc.
- Knowledge of algebra, trigonometry, and coordinate geometry to perform technical calculations.
- Good problem-solving skills.
- Ability to interpret maps, and legal descriptions.
- Ability to understand technical manuals and follow established procedures.
- Ability to maintain records and prepare necessary technical reports.
- Ability to perform technical design and drafting, produce and maintain computer-generated maps and other graphics.
- Ability to manually prepare and edit maps for digitizing; to input, manipulate and/or edit geographic data; and produce maps and reports.
- Ability to read, interpret, and translate information from a variety of formats on complex plans and specifications.
- Ability to communicate effectively, both orally and in writing.
- Ability to prioritize workload, solve problems, and to meet deadlines with a minimum of supervision.
- Ability to work independently and as part of a team.
- Ability to establish and maintain effective working relationships with diverse groups of people including other employees, contractors, engineers, vendors, developers, public officials and the general public.
- Physical ability to perform essential functions of the job.

**WORKING ENVIRONMENT:**

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

**EXPERIENCE AND TRAINING REQUIREMENTS:**

- A bachelor's degree in GIS, Cartography or field related to the specific position AND one year of GIS experience in a planning, environmental science or related field utilizing professional geo-processing software.

**- OR -**

- an AA degree in engineering or GIS technology; AND four years of GIS experience in a field related to the specific position and at least 2 years experience utilizing professional geo-processing software.
- Working knowledge of relational database products such as Oracle, SQL Server, Informix and/or Access required.
- A combination of education and experience, which provides the applicant with the required knowledge, skills and abilities, will be considered.

**NECESSARY SPECIAL REQUIREMENT:**

- Valid Washington State Driver's License by time of hire and a good driving record. A three-year driving abstract must be submitted prior to hire.

**PREPARED BY:** C. Behee/D. Burdick/  
L. Klemanski/  
1/03

**REVIEWED BY:** \_\_\_\_\_  
Richard E. McKinley, Director  
of Public Works

**REVIEWED BY:** \_\_\_\_\_  
Tom Rosenberg, Assistant Director  
of Public Works

**JOINT CLASSIFICATION COMMITTEE ALLOCATION: 1/21/2003**