CITY OF BELLINGHAM

JOB DESCRIPTION

JOB TITLE:	**What-Comm GIS Systems Analyst**	**UNION:231**
		SG:3
DEPARTMENT:	**Police**	**CS:N**
		FLSA:N
		EEO4CODE:PR

JOB SUMMARY:

Provides support of critical systems at the What-Comm 911 communications center. Responsible for the preparation and maintenance of geographic data sets and other information for use in geographic information system (GIS), computer aided dispatch (CAD), and mobile data terminal (MDT) systems. Validates and ensures accuracy of GIS spatial data, 911 Dispatch data, and the telephone company's Master Street Addressing Guide (MSAG) database. Creates and maintains cartographic maps for both the Dispatch CAD system and for emergency response vehicles (MDT's). Provides technical support for computer and telephone systems including CAD, 911 phone system, 911 radio system and 911 recording system.

SUPERVISORY RELATIONSHIP:

Reports to the What-Comm 911 Communications Center Deputy Director. Works under general supervision and the guidance of City and Departmental policies and procedures. May supervise lower level staff as assigned.

ESSENTIAL FUNCTIONS OF THE JOB:

GIS Functions

1. Performs database management, geoprocessing, geospatial analysis, map compilation, programming. Reviews and documents business processes, requirements and work flow and establishes data collection and mapping techniques and standards and project coordination as needed.

2. Performs management and maintenance of emergency response GIS geospatial data. Prepares and formats GIS data such as street centerlines, addresses, emergency response zones, jurisdiction boundaries, and law reporting areas using ArcGIS software for upload to the geofile module of the Whatcom County E-911 public safety system.

3. Creates, updates and maintains maps within the Computer Aided Dispatch (CAD) system used by E911 dispatchers as well as maps in Emergency response vehicle MDT systems.

4. Performs data management and manipulation of all provided regional data sets including normalizing, merging and revisions as well as ensuring data is synchronized and current.

5. Collaborates with federal, state and local government agencies in collecting and merging GIS datasets required for E-911 county wide dispatch and mapping. Responsible for developing project schedules, communicating with stakeholders and other GIS and Public Safety personnel, and overseeing completion of activities.

6. Develops GIS business processes to support the E-911 mapping system and emergency services. Works with professionals in a variety of disciplines within the City and Whatcom County to coordinate and develop strategies to incorporate multiple GIS data sets for use in E-911.

7. Provides resources, technical support and acts as liaison on behalf of What-Comm with other regional GIS departments, 911 professionals, emergency services professionals, consultants, and agencies.

8. Participates in State E911 GIS subcommittee regarding input and collaboration in creating statewide GIS dataset to be used for future Next Generation 911 call routing technology. Requires manipulating, uploading and correcting County wide data sets in order to adhere to State adopted data requirements.

9. Attends relevant conferences and training to stay current with industry trends.

MSAG Functions

10. Develops and maintains the Emergency Service Zone boundaries as well as Emergency Service Number (ESN) boundaries.

11. Maintains the Master Street Address Guilde (MSAG) database system which consists of address and street data connected to emergency services districts (ESD). Includes maintaining the integrity between public safety GIS and MSAG Emergency Service Zone Boundary layers to ensure essential accuracy of E911 telephone requests for service.

12. Acts as a central point of contact for emergency responders and dispatch personnel to coordinate MSAG and Public Safety System changes or discrepancies if discovered.

13. Coordinates with phone companies to ensure all names, telephone numbers, addresses, road names and emergency service numbers in database are available and correct in order to aid communications personnel with dispatching the correct agency to the exact location of the 911 emergency.

14. Coordinates address modifications with local jurisdictions to insure MSAG is kept current. This requires researching and correcting errors or discrepancies in addresses, street names, and number ranges. Researches and corrects all telephone service issues relating to MSAG validation and E-911 data failures. Checks new addresses and verifies that they fit within the proper address range.

15. Monitors annexations in municipal areas and coordinate with county and city officials regarding associated changes in street range numbers, community name and jurisdictional boundary as well as their emergency service and response zones.

Systems Support

16. Performs high quality, detailed consultation, technical support and troubleshooting for systems including CAD hardware, applications and databases, front-end call taking application as well as MIS Databases, 911 phone system, Digital Call Recorders, SQL and Informix databases. Evaluates current procedures and recommends changes and improvements. Stays up to date with current systems and procedures; provides instruction on procedures and use of hardware and software.

17. Responds to problems 24/7 experienced in Computer Aided Dispatch (CAD), 911 phone system, 911 radio system, 911 recording system and other essential systems within the 911 communications center as assigned.

18. Stays current with developments and changes in the desktop computer and related hardware and applications software industry. Participates in reviewing and testing new hardware and software applications for potential use.

ADDITIONAL WORK PERFORMED:

1. May direct lower level staff including training, prioritizing and reviewing work, as assigned.

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

PERFORMANCE REQUIREMENTS (Knowledge, Skills, and Abilities):

Knowledge of:
- Working knowledge of advanced GIS concepts, geo-processing functions and techniques, and spatial database management procedures.
- Comprehensive working knowledge of database concepts.
- Demonstrated knowledge of GIS programming and scripting languages .
- Operating systems, products and concepts involved in the operation of desktop computers.
- Structured Query Language (SQL) and its applications with GIS analysis and data/system integration.
- Oracle DBMS/SQL Server and ESRI ArcSDE Spatial Data Server.
- Demonstrated knowledge of GIS database design (geodatabase)
- The development, configuration and optimization of web mapping services (ArcGIS Server).
- Working knowledge of systems including CAD, 911 phone system, 911 radio system and 911 recording system
- Working knowledge of the functions of City departments, office operations and interdepartmental working relationships.
- Working knowledge of principles and procedures of project coordination.

Skills in:
- Excellent interpersonal skills for establishing and maintaining effective working relationships with clients, vendors and associates.
- Good oral communication skills, including good listening skills, to communicate with technical and non-technical internal clients.
- Working both as a member of a team and as a project leader.
- Writing in clear, concise language to produce reports and other required documentation.
- Operating, GIS hardware, software and related peripheral equipment as required to accomplish assigned duties.
- ESRI GIS software skills, including ArcInfo and ArcView for analysis and mapping.
- 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.

Ability to:

What-Comm GIS Analyst

- Combine 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.
- 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:
  - Adequate hearing, correctable vision, and manual dexterity;
  - Frequently operate a computer and read a computer screen or typewritten page;
  - Move between work sites;
  - Ability to occasionally lift light weight (up to 25 lbs).

WORKING ENVIRONMENT:

Work is primarily performed in a secured office environment and requires sitting or standing for extended periods at a computer work station.

EXPERIENCE AND TRAINING REQUIREMENTS:

- A Bachelor's degree with coursework in Geographic Information Systems (GIS), information systems management or related field.
- Three years of GIS experience, or
- Three years of experience providing support for major software systems with at least one year of experience working with GIS software.
- Experience providing support for business processes with integrated systems.
- Experience providing technical support for major software systems preferred.
- An equivalent combination of education and experience which provides the applicant with the required knowledge, skills and abilities to successfully perform the essential functions of the position will be considered.

NECESSARY SPECIAL REQUIREMENT:

- Employment contingent upon passing a criminal convictions check, background investigation, polygraph examination and fingerprinting. Subject to re-check every five years.
- Adaptability and flexibility to accept schedule changes as necessary, and willingness to accept "standby" status or respond to call outs for emergency situations.

PREPARED BY:

C. Turner
S. Grunhurd
A. Sullivan

REVIEWED BY: _____

Flo Simon,
Interim Chief of Police

REVISED BY:

What-Comm GIS Analyst

G. Erickson
5/21