



GIS ANALYST

PAYGRADE: 23

FLSA Status: Non-exempt

LAST REVIEWED: April 2021

GENERAL PURPOSE:

Under the direction of the Performance Measurement Division Chief, the GIS Analyst will perform advanced technical work using Geographic Information System (GIS) software and workstations.

Work involves GIS database design, end-user support, application development, user interface development, and integration between GIS and other application software. Responsible for providing assistance, guidance, and direction to the RFA's GIS program with emphasis on infrastructure mapping, query, data transfer, map creation and acquisition, input, management, analysis, and presentation of data into and out of the GIS.

ESSENTIAL FUNCTIONS:

- Implement, maintain, and work within ArcGIS Enterprise Server/Portal, ArcGIS Online, Autodesk, Geocortex, and other data management systems.
- Advanced use of programming/scripting tools, such as Python, VB Script, JScript, Perl, and SQL Server to automate tasks.
- Develop GIS enterprise framework, policies, and goals to meet the broad range of RFA demands.
- Advanced understanding of GIS concepts, geoprocessing functions and techniques, and spatial database management including time-based modeling.
- Define, develop, and maintain all mapping layers, spatial databases, GIS-based applications, metadata, and associated standards.
- Create and maintain technical and user documentation for GIS processes and applications.
- Develop geoprocessing and web GIS services, web editing/mapping applications to ArcGIS Enterprise Server/Portal to publish maps in support of web and mobile mapping apps.
- Design, development, and maintenance of GIS databases including acquisition, input, management, analysis, and presentation of GIS data.
- Other duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge:

- Geographic Information Systems, specifically current versions of ArcGIS Desktop, ArcGIS Pro, and spatial analytic tools, including Network and Spatial Analyst
- Windows operating system, MS Office, PowerBI, and Adobe
- Operating and managing computer hardware peripherals, such as plotters, operating systems, field and mobile data collection and display devices utilizing associated software packages within the RFA's GIS.
- Principles and practices of cartography, surveying, and mapping as well as interpretation of engineering plans and aerial imagery.
- Federal Geographic Data Committee (FGDC) policies and guidelines
- National Alliance for Public Safety GIS (NAPSG) mission, vision, and resources

- Developing, interpreting, applying, and explaining documents such as policy manuals, technical computer manuals and procedures, and business periodicals
- Applicable laws, codes, regulations, and legal descriptions

Skills:

- Interpersonal skills using tact, patience, and courtesy.
- Analyzing situations accurately and adopting effective courses of action.
- Planning and balancing multiple projects and shifting priorities within tight deadlines.
- Detail orientated and organized.
- Effective written, oral, and visual, communication and presentation skills
- Current in GIS programming and scripting languages

Abilities:

- Coordinate and manage specialized GIS projects individually or as part of a team.
- Develop and maintain standardized GIS metadata.
- Utilize relational database management systems including SQL Server and SSRS.
- Analyze and interpret aerial imagery, assessor's maps, and engineering plans.
- Analyze complex problems, evaluate alternatives, and make sound independent decisions and recommendations within established guidelines.
- Prepare and maintain clear and accurate routine reports, correspondence, and procedures.
- Understand, apply, and explain documents such as policy manuals, technical computer manuals, procedures, business periodicals, applicable laws, codes, regulations, and legal descriptions.
- Foster and develop interpersonal relationships with stakeholders of the RFA.
- Work effectively independently or as part of a team to help solve routine and complex problems.
- Present GIS Projects, Workflows and Data to internal and external audiences.
- Prepare and maintain clear and accurate reports, correspondence, and workflow documentation.
- Recognize the need for change and make recommendations to the supervisor.
- Authenticate attribute data through consistent quality-control checks performing frequencies, statistics, and summaries.
- Propose innovative and alternative solutions to resolve technical problems and complete work within established procedures and timelines.
- Become familiar with, follow, and actively support the Puget Sound RFA's mission, vision, and core value statements.

MINIMUM REQUIREMENTS:***Education:***

Bachelor's degree in Geography, Computer Science, or bachelor's degree in other related fields with acceptable GIS certification.

Experience:

Six (6) years of progressively responsible experience in GIS.

Preferred:

- Background in public safety or emergency management
- Working knowledge of analytic tools for public safety including time-based modeling

- Documented participation in technical user groups
- GISP Certification through GIS Certification Institute (GISCI)

Or:

In place of the above requirement, the incumbent may possess any combination of relevant education and experience which would demonstrate the individual's knowledge, skill and ability to perform the essential functions listed above.

PHYSICAL DEMANDS AND WORKING CONDITIONS:

- While performing the duties of this job, the employee is regularly required to sit for extended periods of time; use hands to finger, handle, or feel; and talk and hear. The employee frequently is required to type on keyboard for extended periods of time. The employee is occasionally required to stand; walk; reach with hands and arms; climb or balance; and stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 25 pounds.
- Work is performed in a typical office environment, which includes a technical workstation, a computer room with a controlled environment, as well as working with customers on site. The noise level in the work environment is usually moderate.