

GEOGRAPHIC INFORMATION SYSTEMS SPECIALIST I/II/III

GIS Division

DEFINITION

GIS Specialist I

Under general supervision, assist with the development and maintenance of core GIS functionality and datasets, develop on a limited basis, deploy, and maintain web-based GIS services, maps, and tools, provide support to GIS staff and other end-users, provide insight and recommendations regarding 'Best Practice' uses of GIS, and perform other duties as assigned.

GIS Specialist II

Under general supervision, support with the development and maintenance of core GIS functionality and datasets, develop, deploy, and maintain web-based GIS services, maps, and tools, provide support to GIS staff and other end-users, provide insight and recommendations regarding 'Best Practice' uses of GIS, and perform other duties as assigned.

GIS Specialist III

Under limited supervision, provide a leadership role in development and maintenance of core GIS functionality and datasets, design, develop, deploy, and maintain web-based GIS services, maps, and tools, provide support to GIS staff and users, provide insight and recommendations regarding 'Best Practice' uses of GIS and associated technologies, guide GIS application support and development, and perform other duties as assigned.

DISTINGUISHING CHARACTERISTICS

GIS Specialist I

This is the entry level Specialist position which is primarily responsible for the maintenance of the day-to-day technical operations of the agency GIS and its components. Incumbents work independently and with limited direction to ensure smooth operation and functionality of the agency's GIS, develop and deploy basic web services and tools, and to troubleshoot and resolve issues that arise. Incumbents must be able to manage small-medium sized projects with support and direction from senior staff. A high-level view and broad understanding of the use cases, implementation opportunities, and technology direction of GIS is expected of candidates in this position.

GIS Specialist II

This is the mid-level Specialist position which is primarily responsible for the oversight and maintenance of the day-to-day technical operations of the agency GIS and its components. Incumbents work independently and with limited direction to discover, research, respond to, and resolve various issues that may arise with the implementation of GIS at an Enterprise/organizational level. Incumbents must be able to manage medium sized projects with limited support and direction from senior staff, and is expected to possess a strong understanding of the work required to complete these projects. A high-

level view and broad understanding of the use cases, implementation opportunities, and technology direction of GIS is required.

GIS Specialist III

This is the Team Lead and supervisory position which is primarily responsible for the oversight and management of the day-to-day technical operations of the GIS and its components. The incumbent in this position shall possess the skill required to work independently and with limited direction to discover, research, respond to, and resolve various issues that may arise with the implementation and maintenance of GIS at an Enterprise/organizational level. This individual will be required to manage large sized projects with limited support and direction from the GIS Coordinator, and is expected to possess a strong understanding of the work required to complete these projects. A high-level view and broad understanding of the use cases, implementation opportunities, and technology direction of GIS is required.

REPORTS TO

GIS Specialist I & II:

- GIS Specialist III
- GIS Manager
- Information Technology Director

GIS Specialist III:

- GIS Manager
- Information Technology Director

CLASSIFICATIONS DIRECTLY SUPERVISED

GIS Specialist I: None, though some mentorship of the GIS Technician series may be assigned.

GIS Specialist II: None, though some mentorship of the GIS Specialist I and Technician series may be assigned.

GIS Specialist III: GIS Specialist I, II & GIS Technician I, II, III

EXAMPLES OF DUTIES

GIS Specialist I

- Duties include but are not limited to the following:
- Provides assistance for the maintenance and development of the corporate GIS data resource, and makes recommendations for improving data quality.
- Assists with the administration of GIS servers, including database, file, and web servers.
- Assists with the development, maintenance, and management of scripts and procedures required for daily automation procedures and updates.
- Provides support, oversight and project management as needed by other staff in the organization.
- Assists with designing, developing, and implementing GIS tools and applications.
- Assists with the implementation and transition of technologies that relate to GIS, including version updates, interfaces to other systems, and certain customization efforts.
- Develops and provides trainings for agency users.

- Assists with the development, evaluation, and implementation of standards, procedures, policies and documentation.
- Works with a project team to learn to analyze, design, configure, install, and manage complex application software involving interaction between multiple desktop and server application software systems.
- Attends trainings, seminars and user conferences to gain subject area knowledge.
- Maintains confidentiality.
- Performs other duties as assigned.

GIS Specialist II

- Provides guidance and assists with the maintenance and development of the County's GIS data resource, and recommendations for improved data quality and use.
- Administers GIS servers, including database, file, and web servers.
- Develops scripts and procedures required for daily automation and update tasks.
- Provides support, oversight and project management as needed by other staff in the organization.
- Develops & implements GIS tools & applications on the web and other mediums.
- Provides technical direction to the implementation and transition of technologies that relate to GIS, including version updates, interfaces with other systems, and customization efforts.
- Develops and hosts trainings for agency users.
- Assists with the development, evaluation, and implementation of Countywide Standards, procedures, policies and documentation.
- Works with a project team to learn to analyze, design, configure, install and manage complex application software involving interaction between multiple desktop and mainframe application software systems.
- Identifies new technology that has potential to enhance County productivity.
- Attends trainings, seminars and user conferences to gain subject area knowledge.
- Maintains confidentiality.
- Performs other duties as assigned.

GIS Specialist III

- Oversees and assists with the maintenance and development of the County's GIS data resource, and makes recommendations for improved data quality and use.
- Oversees and participates in the administration of GIS servers, including database, file, and web servers.
- Oversees the development of scripts and procedures required for automation and updates.
- Provides support, oversight and project management as needed by other staff in the organization.
- Assists with the development & implementation of GIS tools & applications on the web and other mediums.
- Provides technical direction to the implementation and transition of technologies that relate to GIS, including version updates, interfaces with other systems, and customization efforts.
- Develops and hosts trainings for County and Town GIS users.
- Assists with the development, evaluation, and implementation of Countywide Standards, procedures, policies and documentation.

- Leads a project team to learn to analyze, design, configure, install and manage complex application software involving interaction between multiple desktop and mainframe application software systems.
- Identifies new technology that has potential to enhance County productivity.
- Maintain a high level of education and knowledge of current and future desktop computing systems
- Attends and presents at relevant meetings, trainings, seminars and user conferences.
- Maintains confidentiality.
- Performs other duties as assigned.

QUALIFICATIONS

GIS Specialist I

Thorough knowledge of:

- Principles and applications of microcomputers relevant to GIS
- Data development and editing skills within ArcGIS Desktop.
- ESRI's Desktop product line, beginning at most one release back.
- ESRI Personal Geodatabase data model.
- GPS technologies.

Working knowledge of:

- ESRI Enterprise Geodatabase model.
- Server-based Enterprise GIS.
- SQL Server, ArcSDE.
- Python and server-side scripting languages.
- HTML and the basics of web design and maintenance.

Some knowledge of:

- Esri ArcGIS Online or Portal.
- Basic administration for Windows servers, including web server, scheduled tasks, etc.
- Development APIs and associated web development protocols.

Ability and Willingness to:

- Assist with the maintenance of core GIS server-based applications.
- Develop, deploy, and support basic web-based GIS applications and tools.
- Provide on-going support and maintenance of corporate data sets.
- Provide support to the user community and other GIS staff through training and mentoring.
- Work alone and in a small team environment, often without supervision.
- Think creatively for the good of the County and arrive at service oriented solutions.
- Assist with strategic planning efforts.
- Make group presentations.
- Maintain a high level of education and knowledge of current and future desktop computing systems.
- Effectively represent the County's Information Technology Department.
- Serve as a Disaster Service Worker during certain emergency situations.
- Maintain documentation of County GIS systems and (metadata).
- Establish and maintain cooperative working relationships.
- Maintain confidentiality, where necessary.

GIS Specialist II

Thorough knowledge of:

- ESRI's Desktop and server product line, beginning at least one release back.
- Server-based Enterprise GIS.
- ArcSDE, SQL Server, and the Enterprise Geodatabase model.
- Python and server-side scripting languages.
- GPS technologies and data collection workflows.

Working knowledge of:

- Esri ArcGIS Online or Portal.
- ESRI development APIs and associated web development protocols.

Some knowledge of:

- Basic administration for Windows servers, including web server, scheduled tasks, etc.

Ability and Willingness to:

- Develop and maintain GIS server-based applications.
- Develop and maintain corporate GIS datasets.
- Provide support to the user community and other GIS staff.
- Work alone and in a small team environment, often without supervision.
- Think creatively for the good of the County and arrive at service-oriented solutions.
- Assist with strategic planning efforts.
- Make group presentations.
- Maintain a high level of education and knowledge of current and future desktop computing systems.
- Effectively represent the County's Information Technology Department.
- Serve as a Disaster Service Worker during certain emergency situations.
- Maintain documentation of County GIS systems and data (metadata).
- Establish and maintain cooperative working relationships.
- Maintain confidentiality, where necessary.

GIS Specialist III

Thorough knowledge of:

- ESRI's Desktop and server product line, beginning at least one release back.
- Esri ArcGIS Online or Portal.
- Server-based Enterprise GIS.
- ArcSDE, SQL Server, and the Enterprise Geodatabase model.
- Python and server-side scripting languages.
- GPS technologies and data collection workflows.
- ESRI development APIs and associated web development protocols.

Working knowledge of:

- Administration of Active Directory permissions and security.
- Understanding of domain network protocols and infrastructure.
- Administration of Windows servers, including web server, scheduled tasks, etc.

Some knowledge of:

- Principles, practices, and methods of training and mentoring.

Ability and Willingness to:

- Design, develop and maintain GIS server-based applications.

- Design, develop and maintain corporate GIS datasets.
- Provide support to the user community and other GIS staff.
- Prepare clear, concise, and accurate presentations and reports to varied audiences.
- Provide mentoring, functional supervision, and leadership to other members of the GIS Division.
- Work alone and in a small team environment, with limited supervision.
- Think creatively for the good of the County and arrive at service oriented solutions.
- Assist with strategic planning efforts.
- Maintain a high level of education and knowledge of current and future desktop computing systems.
- Effectively represent the County's Information Technology Department.
- Serve as a Disaster Service Worker during certain emergency situations.
- Maintain documentation of County GIS systems and data (metadata).
- Establish and maintain cooperative working relationships.
- Maintain confidentiality, where necessary.

TRAINING AND EXPERIENCE:

Any combination of training and experience which would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities might be:

GIS Specialist I

A recently completed Bachelor's or Associate's degree or certificate in a field that had formal GIS training as part of its curriculum and three (3) years of experience; Mono County Information Technology Bargaining Unit: MCPEA September, 2016

OR

A minimum of four (4) years of experience working as a GIS Technician with solid editing and data management skills.

GIS Specialist II

A recently completed Bachelor's or Associate's degree or certificate in a field that had formal GIS training as part of its curriculum and five (5) years of GIS experience with at least four (4) years performing tasks akin to a GIS Specialist I/II;

OR

A minimum of six (6) years of experience working in the GIS field including at least four (4) performing tasks akin to a GIS Specialist I/II.

GIS Specialist III

A Bachelor's degree from an accredited college or university with computer related curriculum and five (5) years of GIS experience with at least four (4) years performing tasks akin to a GIS Specialist I/II;

OR

A minimum of six (6) years of experience working in the GIS field including at least four (4) performing tasks akin to a GIS Specialist I/II.

TYPICAL PHYSICAL REQUIREMENTS

Sit for extended periods; frequently stand, walk, stoop, kneel, and crouch; physical ability to lift and carry objects weighing up to 50 pounds on an occasional basis and in excess of 50 pounds with assistance;

normal manual dexterity and eye-hand coordination; corrected hearing and vision to normal range; verbal communication; use of office equipment including computers, telephones, calculators, copiers, and FAX.

TYPICAL WORKING CONDITIONS

Work is performed in an office; occasionally works outside; exposure to electrical energy and dust; frequent contact with staff and the public.

SPECIAL REQUIREMENTS:

Satisfactory completion of a Department of Justice background investigation.

Possession of a valid driver's license.

May work other than a normal 8:00 AM to 5:00 PM shift.

May drive in excess of 100mi/day

This job specification should not be construed to imply that these requirements are the exclusive standards of the position. Not all duties are necessarily performed by each incumbent. Additionally, incumbents will be required to follow instructions and to perform other job related duties as may be required.

Created : April, 2012

Modified : October 2023

Salary Range 75