



## GEOGRAPHIC INFORMATION SYSTEMS JOB FAMILY

### CAREER PATH

Positions in this family design, coordinate, and implement the development of integrated Geographic Information Systems (GIS) spatial or non-spatial databases; create, maintain, or modify existing GIS databases; create data visualizations using GIS hardware or software applications; and perform geospatial data building, modeling, or analysis using advanced spatial analysis, data manipulation, or cartography software.

#### Typical functions

The functions within this job family will vary by level, but may include the following:

- ❖ Analyze spatial data.
- ❖ Design, develop, and maintain databases and GIS applications.
- ❖ Utilize specialized software to create maps applications.
- ❖ Provide technical support to GIS software users.
- ❖ Ensure adherence to security standards.

The work assigned to positions in this series ranges from capturing and storing geographic information to managing geographic projects and supervising staff.

#### Geographic Information Systems Technician

**Pay grade:** 18, 22, 25

This is a first-level Geographic Information Systems (GIS) position responsible for assisting in capturing, manipulating, documenting, converting data, and displaying geographically referenced information from a variety of sources. The primary focus is on routine GIS data creation and maintenance. This position uses queries and GIS applications to monitor and enhance data quality, and provides technical support to GIS users and responds to basic requests for map generation.

**Minimum Requirements** *(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.):*

Associate's degree from an accredited institution.

#### Geographic Information Systems Specialist

**Pay grade:** 28, 30

This is a professional level position responsible for supporting an individual agency or an agency division. This position plans, designs, develops, and implements applications to ensure data integrity, compatibility with existing systems, and compliance with standards, policies, and other



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guidelines. This position provides technical support and guidance to GIS users and staff regarding GIS applications, data acquisitions and creations, data editing, GIS desktop software issues, and design, implementation, and management of geodatabases, and assists with assigned projects.

**Minimum Requirements** *(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.):*

Bachelor's degree from an accredited institution and two years of geographic information systems experience.

#### **Geographic Information Systems Developer**

**Pay grade: 33**

This is a professional position serving as an expert in planning, designing, implementing, and maintaining GIS systems. It is responsible for designing and developing web applications, and geodatabase design, implementation, and management. This position is accountable for providing consultative guidance and technical expertise for GIS and geodatabase administration, application development, and project management. This position also coordinates with other information technology areas.

**Minimum Requirements** *(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.):*

Bachelor's degree from an accredited institution and four years of geographic information systems experience.

#### **Geographic Information Systems Supervisor**

**Pay grade: 30, 33**

Positions at this level are responsible for supervising GIS professionals, specialists, and technicians. Positions are accountable for GIS projects, technology integration, and application development and maintenance. This position uses spatial data to improve the agency's operation and services, and oversees development, enhancement, and maintenance of GIS applications. This position recommends creation and modification of standards and procedures. This position directs GIS projects including creating project plans, identifying resources, and developing timelines. The first-line supervisor recommends hiring and disciplinary action, evaluates performance, provides training and coaching of new employees, and assigns work.



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**Minimum Requirements** *(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.):*

Bachelor's degree from an accredited institution and six years of geographic information systems experience.

#### **Geographic Information Systems Manager**

**Pay grade: 34**

This is a managerial position accountable for integrating GIS technology in agencies, improving services and operations, and applying business solutions. This position approves the creation and modification of standards and procedures, and is responsible for project oversight, coordination of system architecture development for GIS infrastructure, GIS application portfolio management, and issue resolution. This position is responsible for assisting the Chief Information Officer (CIO) with strategic planning and direction.

**Minimum Requirements** *(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.):*

Bachelor's degree from an accredited institution and ten years of geographic information systems experience.

#### **ADDITIONAL INFORMATION**

Some Patrol duties relate to criminal activity. Therefore, employees may be exposed to written material, photographs, and/or verbal language of a sexual nature. The requirements of this position are not intended to create a hostile work environment; however, it is work of an extremely sensitive nature. A copy of the Missouri State Highway Patrol policy on sexual harassment is available upon request.

Once a job offer has been made, employment with the Missouri State Highway Patrol is contingent upon the successful results of a background investigation and Patrol administered drug test. The Missouri State Highway Patrol is a Drug Free Workplace.

Employees must be a United States Citizen, or a legal resident of a country participating in the Visa Waiver Program (VWP).



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**EEO STATEMENT:** The Missouri State Highway Patrol is an equal opportunity employer. All qualified applicants will be considered for employment without regard to race, color, religion, sex, age, national origin, veteran status, ancestry, sexual orientation, or disability.

Click [HERE](#) to view our employee benefits.

To be eligible for employment with the Patrol, applicants must meet all dress and appearance requirements. Click [HERE](#) for more details about dress and appearance requirements.

**Effective:** 02/01/2025

**Reviewed:** 02/01/2025

**Revised:** --