

DATA SYSTEMS MANAGER (GIS)

General Statement of Duties

In general, the Data Systems Manager (DSM) specializes in transforming complex data into creative visualizations that make information more accessible, easy to understand, and more engaging. Developing websites, interactive and publication quality maps, info-graphics, and social media are key functions of this position and add significant value to the agency's work program. The DSM reports to the Deputy Executive Director, and works closely with professional planning staff on multiple projects, including: public health, economic development, housing, transportation, tourism, stormwater management, and outdoor recreation.

Examples of Work

Provides leadership on multiple work elements from the Commission's work program;

Provides data, maps and other information to planners, citizens, businesses and local officials;

Creates a variety of maps for data analysis using ESRI ArcGIS Desktop software;

Updates and edits project layers and regional background data in a file geodatabase structure;

Builds interactive web map applications using ArcGIS Online tools, such as Story Maps, Web AppBuilder, and JavaScript API;

Provides spatial analysis and queries to satisfy internal/external client needs as required;

Produces tables and graphs from Census, state, local and other data sources;

Imports and exports databases in MS Excel and MS Access;

Downloads spatial data from the Internet and converts to different formats and datum as needed;

Prepares reports, articles and publications;

Makes presentations at meetings and workshops;

Attends applicable conferences relating to GIS technology;

Participates in professional associations;

Organizes, documents and backs up data files, GIS and other digital data in a Windows environment;

Handles sensitive information

Evaluates and procures all software and computer hardware for the Commission;

Serves as coordinator for the New River Valley GIS Users Group

Oversees the Commission's computer technology, including: website, internet access, email accounts, and data backup system;

Provides computer and GIS training to staff as needed;

Supervises GIS technicians and interns;

Represents the Commission at various meetings in a professional manner;

Represents the Commission at local or state GIS meetings or working groups;

Performs other duties as assigned.

Required Knowledge, Skills, and Abilities

Extensive knowledge of Geographic Information System hardware and software components; application of GIS to local and regional projects; basic GIS data analysis functions. Understanding of different projections and datum of spatial data. Ability to perform GIS analysis and mapping in ArcGIS, AutoCAD, or similar mapping/GIS software. Ability to create and maintain websites. Familiarity with web programming and markup languages such as HTML, CSS, and JavaScript. Experience with scripting, statistical, database, or server languages such as Python, R, SQL, or PHP is a plus. Knowledge of using graphic editor programs, such as Photoshop. Strong familiarity with Census and similar demographic data. Ability to work with digital data in spreadsheets and database programs. Ability to prioritize multiple tasks and respond promptly. Strong written and oral communication skills. Ability to establish and maintain effective and cordial working relationships with professional colleagues, government officials, subordinates, representatives of other agencies and the general public. A background check is required for this position.

Education and Experience

Any combination of education and experience equivalent to graduation from an accredited college or university with a BA/BS in Geography, Computer Science Information Systems, or related discipline with a minimum of four years of relevant experience, or; Master's Degree in Geography, Computer Science Information Systems, or related discipline with a minimum of two years' experience. GISP Certification a plus.

Continuing Education

Dedication and willingness to continue education through attendance of conferences, participation in professional associations; and/or completion of courses, certificates, seminars, or distance learning modules is encouraged.