GEOGRAPHIC INFORMATION SYSTEMS (GIS) Data Specialist

Occupational Code: 1585
Salary Range: 28A
Status: Classified
FLSA: Exempt
Established: 12/05

NATURE OF WORK:

This is responsible professional work in the design, development, maintenance and implementation of Geographic Information Systems (GIS) based information and data.

This position involves technical, professional work in planning, designing, developing, implementing and maintaining of the City of Miami’s GIS (Geographic Information System) information, using ESRI software tools such as ArcView, ArcEditor, ArcInfo, ArcIMS and ArcSDE.

This position reports directly to the Senior GIS Staff or a higher-level professional administrator. Work performed by the incumbent in this classification is subject to careful technical review both while in progress and upon completion.

ESSENTIAL FUNCTIONS:

Performs tasks, as assigned by GIS Coordinator or designee, to create, verify and/or modify geographic-related data using ESRI (Environmental Systems Research Institute) software packages such as ArcGIS
Creates the GIS Based files for the Computer Aided Dispatch (CAD) system
Performs property and address updates to the Account Receivable Property System (ARPS) mainframe system
Prepare layers, shape files, maps, charts and sketches using ESRI based GIS software and related tools.
Maintains the Conformal layers to including but not limited to: Street Network, Zoning, Future Land Use, Parcel, City Addresses, Preservation Layers, and other layers the City deems necessary.
Performs analysis on data and prepare reports, graphics and maps based on analyzed data.
Provides support for Emergency Operations Centers during an emergency as needed.
Edit and align GIS layers, edits and maintains folio based property record information, street network information, building information, City address information, and read and interpret property legal descriptions for the maintenance of the City of Miami’s GIS Property database.
Conducts field surveys and inspections utilizing GIS and GPS tools

Participate in GIS team meetings, conferences and various planning sessions as required.

Gathers information (demographic and other) about the City and other areas of study

Prepare drafts of recommendations and reports on GIS products, applications, studies and data sets for review by GIS Team members, ITD or City Staff.

Review and interpret property legal descriptions, aerials, real estate information, plats, Zoning, land uses, property and other municipal GIS-related layers for proper alignment, data accuracy and content.

Monitor, review, maintain, analyze and implement the monthly updates received from the Miami-Dade County Tax Appraiser’s database against the City’s GIS Property Database.

Work with external information from outside agencies, such as US Census, FEMA, Miami Dade County and Florida DOT to research and verify various data, layers and reporting information.

Adhere to the established Systems and Programming standards and departmental policies.

Assist with various projects and perform other duties as may be required

**DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS**

Thorough knowledge of Statistics, Geography, GPS and Cartography

Thorough knowledge of ESRI ArcGIS Platform, 9.0 or higher including ArcToolBox and related Extensions.

Thorough knowledge of the layers typically found in a Municipality setting and their inter-relationships.

Ability to work with program specifications, work flows, diagrams and charts

Ability to communicate effectively, both orally and in writing

Ability to establish and maintain effective working relationships with employees, City Officials and vendor’s representatives

Ability to work independently with minimal supervision and general instruction
GEOGRAPHIC INFORMATION SYSTEMS (GIS) Data Specialist (Cont.)

Working knowledge of database management systems and techniques, with Microsoft SQL Server preferred.

Ability to create SQL Statements and DTS job packages for MS SQL Server

Ability to perform well under pressure

Ability to self-train in technical subject areas through use of manuals and computer-based training

Working knowledge of GIS programming and database tools.

TRAINING AND EXPERIENCE

Associate’s degree in any field from an accredited college or university and considerable (2 – 4 years) experience utilizing geo-spatial tools to create, update, analyze, or maintain digital maps, layers, or GIS-based information, preferably using ESRI-based GIS software

OR

An equivalent combination of training and experience beyond an Associate’s degree.

NOTE: Degrees above the associate’s level may be required to be in specific majors, such as cartography, Geology, Geography, Urban/Regional Planning, Architecture, Engineering or Computer Science, based upon departmental needs and industry standards.

TOOLS AND EQUIPMENT

May use mainframe computer, personal computer and other general office equipment. May use plotters, digitizers, scanners, and software programs.

PHYSICAL DEMANDS:

While performing the duties of the job, the employee is frequently required to sit, stand, talk, hear, use hand to finger, handle, operate objects, tools or controls; and reach with hands and arms; see color and depth perception; drive a motor vehicle; light to moderate lifting is occasionally required.

WORK ENVIRONMENT:

The noise level in the work environment is quiet to moderately loud. Sometimes work is stressful when working under stringent time constraints.