COUNTY OF LEELANAU
JOB DESCRIPTION

GIS ANALYST

Supervised by: Equalization Director
FLSA: Non-Exempt

General Summary:
Primary functions of the job are, in addition to performing the duties of a Mapping Technician, administering and troubleshooting GIS databases, administering grants, managing special projects, and assisting with evaluating and selecting new equipment. Employees in this job have no formal supervisory role; however, incumbents may train, guide, prioritize, or lead employees in the designated work unit. Employees work as part of a team and are responsible for ensuring the team meets its objectives.

Employees must meet the minimum requirements, conditions of employment, and be able to perform successfully all essential duties and responsibilities with or without reasonable accommodations.

This position may require irregular hours. It may also require travel by the employee in his/her own vehicle.

Primary Duties and Responsibilities *(may include but are not limited to the following):*

- Maintains and administers applicable GIS systems. Assists with master street index, GIS street centerline, and address point files.
- Prepares GIS layers, datasets, and applications for applicable internal departments and local municipalities; prepares related metadata and customized GIS interfaces.
- Develops and works with geospatial databases
- Prepares high-quality cartographic products being detail oriented while maintaining efficiency
- Performs spatial analyses
- Maintains GIS functionality of Leelanau County CAMA (BS&A .NET) software by importing and configuring accurate and relevant GIS layers.
- Develops, maintains and updates Enhanced 911 street centerline data for traffic routing of emergency service vehicles
- Provides mapping and GIS technical assistance in support of the Leelanau County Sheriff's Office, and all other departments within the Government Center
- Maintains GIS critical infrastructure datasets in support of Leelanau County Emergency Management

- Supports IT staff with software installation, support, troubleshooting and general website maintenance
- Coordinates with LIAA to maintain Leelanau County's web mapping application and ensures that web mapping data is accurate and up to date. Develops software and technical recommendations for future web map renovations
- Provides GIS and CAMA related technical support to township assessors
- Develops and maintains technical documentation, instructional manuals and tutorials
- Provides document and graphic services for Leelanau County departments in the form of document scanning and plotting
- Exports, updates and maintains Leelanau County Data Disc information from CAMA (BS&A .net) software
- Conducts QA/QC cross comparisons of GIS and CAMA datasets to ensure data accuracy
- Coordinates and manages county-wide aerial photography projects (Ortho and Oblique imagery, LiDAR)
- Strong Macro /C/C++/Visual Basic/Python programming skills and RDBMS skills including development skills
- Excellent verbal/written communications skills
- Genuinely excited and enthusiastic about learning and pushing technical limits/finding new solutions
- Knowledgeable of and/or willing to learn math and statistical analysis
- Good writing skills – for documentation, training, processes
- Good analytical/problem solving skills
- A basic understanding of the concepts behind data management in a relational database
- Good IT technical skills
- The ability to think and solve problems
- The ability to generate and provide calculations on geospatial and tabular data
- Verifies legal descriptions of deeds, land contracts, and plats/condominium projects to insure accuracy of descriptions and closure prior to recording of document and to determine tax identification numbers in order to certify currency of tax payments.
- Performs special studies and analyses of various agency operations to define problems and determine methods of adapting GIS applications.
- Performs a variety of administrative activities in support of department operations, which may include: assisting with GIS portion of budget; ordering equipment; reviewing invoices for accuracy; preparing administrative and service contracts.
- Renders technical advice and recommendations in support of grant writing and Requests For Proposals
- Researches descriptions, identifies and corrects problems in descriptions, and keeps inter-related departments and township officials informed.

- Develops and maintains tax maps and tax map books for departmental and county use. Researches and recommends ways to improve the tax mapping process. Utilizes ArcGIS Data Driven Pages to automate, update and print County tax maps

- Maintains databases and keeps information current

- Updates and creates GIS layers related to the Equalization tax mapping projects and readjusts or corrects parcel layers to fit the County's framework, scanning in and georectifying subdivision plats for digitizing, researching discrepancies through deeds and surveys. Develop knowledge of spatial adjustment procedures

- Gathers and verifies field data for utilization in mapping applications, the 911 system, and other parties who have an interest in accurate location of address points and other point features

- Prints map books, ensuring compliance with standardized formats

- Produces map products for County departments, townships, and the public

- Provides information and assistance to other County employees and the general public concerning County maps and property

- Attends meetings, conferences, workshops and training sessions. Reviews trade publications to remain current on principles, practices and new developments in the GIS field

- Provides guidance and training to other staff members and interns

Education, Formal Training, and Experience *(minimum requirements):*
The requirements listed below are representative of the knowledge, skills, abilities and minimum qualification necessary to perform the essential functions of the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the job.

- Bachelor's Degree in GIS, geography, computer science, environmental sciences, engineering, cartography, or related field

- Two to four years of experience in the use of ESRI GIS software, including ArcMap, ArcGIS Online, ArcGIS Pro, Spatial Analyst, ArcPublisher, ArcReader, and Model Builder or other related computer experience (SDE); and prefer exposure to project planning

- Additional two years of directly related experience may substitute for each year of education (up to two years of education) if there is demonstrated knowledge, ability and skills to perform the work

Certifications, Licenses *(minimum requirements):*
- Requires a valid driver's license and personal vehicle insurance and must maintain eligibility to drive as per the County's Vehicle policy

- Requires at minimum a level 1 assessor certification (MCAT – Michigan Certified Assessing Technician) within one year of hire date

Conditions of Employment *(legal or contractual pre-employment obligations and/or requirements, such as drug testing, background check, etc.):*

A background check may be required initially and periodically for an individual hired, transferred, reclassified, promoted, or currently working in this job. Appointment to or continued employment in this job is contingent upon a satisfactory background check which may include, but is not limited to: confirmation of a persons' identity; review of criminal conviction records; verification of educational degree, license, or certificate required for the position; review of Department of Motor Vehicles records; Department of Justice fingerprint scan; and/or drug and alcohol testing as required and allowable by law. A satisfactory background check is defined as the absence of a criminal history record which bears a demonstrable relationship to the applicant or employee's suitability to perform the required duties and responsibilities of the position.

Distinguishing Characteristics:
Work involves evaluating the relevance and importance of theories, concepts, and principles to develop different approaches or tactical plans to fit specific circumstances where guidelines may not exist, but are flexible and open to considerable interpretation. Independent judgment, personal discretion, and resourcefulness are needed to interpret and apply guidelines. Errors at this level could cause serious, long-term consequences involving substantial financial costs, significantly reduced service to the public, and/or negative media reaction, and could impact others outside of a department and may require the intervention of an agency head to resolve.

Compared to the Mapping Technician classification, work is more varied and complex, requiring more experience to provide expertise in the field.

Physical Demands, Work Environment, and Other Requirements:
- May be required to reach with hands and arms; sit; stand; stoop, kneel, or crouch; talk and hear; use hands to finger, handle, or feel.

- May occasionally work in an outdoor environment with potential exposure to weather-related heat and cold, rain, wind, and related elements.

- May occasionally be required to lift/move up to 50 pounds.

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Knowledge, Skills, Abilities, Competencies *(minimum requirements):*
- Proficiency in English grammar, spelling, punctuation, and simple mathematical functions such as addition, subtraction, multiplication, division, percentages, ratios, etc.

- Considerable knowledge of Geographic Information Systems, including programming procedures and techniques.

- Knowledge of the principles, methods, and techniques of map creation, land descriptions, parcel numbers, and related concepts.

- Knowledge of the principles, methods, and techniques of property appraisal and tax assessing as applied to land, buildings, and personal property.

- Knowledge of current state and local laws governing real estate and tax assessments.

- Knowledge and ability to use a personal computer to prepare maps, enter and maintain data, create maps and reports, and search for and compile data.

- Knowledge and ability to collect and implement field-collected GIS data

- Interpersonal skills necessary to work courteously and effectively with other employees and the public.

- Skill in operation of modern office equipment such as personal computers, facsimiles, copiers, scanners, and telephones.

- Ability to understand and interpret property descriptions and plat maps.

- Ability to work independently.

- Ability to think analytically, detect errors, determine causes, and make corrections.

- Ability to comprehend, process, and apply both verbal and written skills appropriate to the job.

- Ability to consistently demonstrate sound ethics and judgment.

- Ability to maintain the confidentiality of information and professional boundaries.

- Ability to use County resources effectively and efficiently.