

GIS ANALYST

Basic Function: Develops and maintains Geographic Information Systems databases and the Esri (Environmental Systems Research Institute, Inc.) GIS mapping software. Develops methodology, structure, and formats for use in GIS programming, databases and related software throughout the Township. Acquires, creates, analyzes and maintains spatial and tabular GIS data and appropriate metadata.

Supervision Received: Work is performed under the direction of the Director of Public Works.

Responsibilities and Duties: An employee in this position may be called upon to do any or all of the following: (Employee may be expected to perform additional tasks as required.)

1. Perform a variety of advanced-level tasks needed for the design, development, usage, maintenance and enhancement of the Township's GIS databases.
 - a. Maintain the Township's GIS databases through a combination of desktop GIS editing procedures and field operation of GPS hardware.
 - b. Implement, maintain and operate GPS hardware and software solutions.
 - c. Coordinate the development and maintenance of systems documentation.
 - d. Oversee the design of new or revised GIS datasets, map revision workflows, analysis methodologies, applications and implementation strategies.
 - e. Design, implement and follow procedures and protocols to ensure GIS data integrity.
 - f. Coordinate the transitions of GIS applications to next-generation environments and/or cross-functional systems.
 - g. Participate in coordination with IT personnel to ensure availability, reliability, and scalability of GIS applications to meet business demands.
 - h. Provide recommendation of and implementation of modifications to GIS software in order to improve efficiency, reliability and performance.
 - i. Conduct research on GIS-related hardware and software in support of procurement and system development efforts.
2. Facilitate greater use of GIS within the Township
 - a. Provide training and support to Township staff with GIS application needs.
3. Perform related work as required.

Desirable Qualifications for Employment: An employee in this class, upon appointment, should have the equivalent of the following knowledge, training and experience.

1. Experience supporting and using ArcGIS Pro, ArcGIS Enterprise/Portal and ArcGIS Online.
2. Knowledge of principles, practices, and trends of GIS technology.
3. Experience with programming and scripting languages (e.g., Python, SQL, ESRI Model Builder).
4. Knowledge of general mapping principles, spatial analysis and cartography.
5. Experience installing, configuring and maintaining geographic information systems.

6. Demonstrated ability to provide training in the use of GIS applications.
7. Ability to conduct research into GIS issues and products as required.
8. Knowledge of GPS devices or applications and their usage
9. Effective written, oral and interpersonal abilities
10. Ability to present ideas in work-place friendly and user-friendly language.
11. Highly self-motivated and directed, with keen attention to detail.
12. Ability to effectively prioritize and execute tasks.
13. Knowledge of water and wastewater infrastructure
14. Desired training includes a bachelor's degree in geographic information systems, geography, urban/regional planning, natural resources, engineering or related field, and at least two years of progressively responsible experience in the design, development, usage, and support of GIS and related technologies. GISP certification a plus.
15. A valid motor vehicle operator's license is required.