GENERAL PURPOSE

Under direction, provides GIS support to the Planning Department; analyzes and implements GIS tools needed to visualize complex issues; trains and assists end users in using new and modified systems capabilities, and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This single incumbent position provides journey-level technical and professional duties related to the overall development, operation, and maintenance of GIS in support of the Planning Department. Assignments are received in the form of oral or written instructions and require the application of knowledge, experience and independent judgment. Completed work is reviewed in terms of compatibility with requirements, effectiveness and expected results.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class.

Performs a variety of GIS analyses in support of Planning, capital improvement projects, growth projections, environmental studies, and demographic analyses to compile critical data in a variety of formats to generate and document solution alternatives for comparison which involves establishing relationships with other local agencies; makes modifications to data.

Demonstrates proficiency with ESRI ArcGIS and ESRI extensions; works with and integrates related software, such as Microsoft Excel, Word and PowerPoint; writes and debugs application programming to support the GIS functions as required utilizing standard coding techniques; prepares documentation in support of customized software, procedures or presentation styles.

Generates reports, maps, diagrams, exhibits, and displays for the Planning Department to present to the Board, general public, external agencies and developers.

FLSA DETERMINATION: Meets the administrative exemption from overtime.
Performs a wide arrange of professional level analyses in support of on-going and ad-hoc reporting requirements as assigned.

Works independently, manages tasks/assignments, and coordinates planning analyses for special projects and studies such as projection updates and demand studies.

Designs and develops report formats based on presentation style and to meet management information needs; works with Information Systems and other departments to develop or modify systems to analyze and develop required data.

Provides technical assistance to others on administrative and analytical matters.

Prepares, or coordinates with consulting engineers, to complete studies, research projects, etc.

Attends meetings with officials of other governmental agencies, businesses and community groups and the public regarding assigned projects; responds to requests for information from the public on District programs or projects.

Coordinates with internal stakeholders, consultants, other agencies, and developers to communicate District policies and requirements for project initiations and development.

Organizes, prioritizes, monitors, and maintains the ESRI Geographic Information System, insuring data integrity through integration of the GIS with other District systems and databases.

Develops spatial indexes and spatial operators to reference internal District data sets and performs all coordinate data integration into GIS; work with support of Information Systems to administer and implement Spatial Database Engine (SDE), and to recommend specialized GIS hardware requirements based on software extensions and analytical requirements.

In cooperation with Information Systems, administers data integration, linkage, and structure relating to data importing and exporting, versioning and required maintenance of GIS library structure and geo-database conversions used in the Planning Department; creates a variety of exhibits and maps.

Maintains a software change management program to ensure GIS system integrity, reliability, and recoverability.

**FLSA DETERMINATION:** Meets the administrative exemption from overtime.
May provide work direction to other analysts and support staff on a project or on a day-to-day basis. Provides support to system users regarding custom data and mapping products, and provides training to users on GIS software and uses expertise to assist end users.

Maintains necessary records; prepares oral and written reports.

Performs related duties as assigned.

**DESIRED MINIMUM QUALIFICATIONS**

**Knowledge of:**

GIS concepts and analytical techniques, including computerized mapping and digital data conversion, manipulation, and analysis; database administration principles, methods, and techniques; applications development methods, tools, and utilities applicable to the GIS system; program and project management; principles and practices of business communication; programming techniques for geographic analysis; mathematical and statistical procedures commonly supported by system applications.

**Ability to:**

Understand, analyze, and define user requirements; prepare clear and concise program documentation, user procedures, reports of work performed, and other written materials; make sound independent decisions within established guidelines; understand and follow written and oral work instructions; communicate clearly and concisely, orally and in writing; establish and maintain effective working relationships with those contacted in the course of work; organize, plan, complete projects efficiently, and maintain software change management related to GIS.

**Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from an accredited college or university with a bachelor’s degree in GIS, civil engineering, or related field; and three years experience in the design and development of GIS systems and applications; or an equivalent combination of training and experience.

**PHYSICAL AND MENTAL DEMANDS**

*The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable*

**FLSA DETERMINATION:** Meets the administrative exemption from overtime.
accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Physical Demands**

While performing the duties of this job, the employee is regularly required to walk, stand and sit; talk and hear, both in person and by telephone; use hands to finger, handle, feel or operate standard office equipment; and reach with hands and arms. The employee is regularly required to lift objects weighing up to 10 pounds and occasionally up to 50 pounds.

Specific vision abilities required by this job include close vision, color vision and the ability to adjust focus.

**Mental Demands**

While performing the duties of this class, the employee is regularly required to use oral communication skills; read and interpret information and documents; analyze and solve problems; observe and interpret situations; use math/mathematical reasoning; learn and apply new information and skills; and perform highly detailed work on multiple, concurrent tasks.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee usually works under typical office conditions where the noise level is generally quiet. Employees may regularly be required to work in special no-light or low-light areas.

**FLSA DETERMINATION:** Meets the administrative exemption from overtime.