

CITY OF CHATTANOOGA

Classification Specification Title: Traffic Signal Design Specialist

Department: Technology Services

Pay Grade: GS.10

Supervision Received From: Smart Cities Director

FLSA Status: Exempt

Supervisory Responsibility For: None

Established: 12/06/12

Revision Dates: 4/4/25;

10/20/23; 1/11/23

CLASSIFICATION SUMMARY:

Incumbents in this classification are responsible for providing technical analysis of and solution for traffic control issues related to the City's emerging intelligent transportation system (ITS). Duties may include coordinating contracted signal and ITS projects; investigating traffic problems; conducting field studies; maintaining and analyzing traffic data; conducting traffic signal timing analysis and adjustment; serving as a liaison with vendors and contractors for related traffic control systems hardware and software. Work requires moderate to limited supervision and the use of independent judgment and discretion.

SERIES LEVEL: The Traffic Signal Design Specialist is a stand-alone classification.

ESSENTIAL FUNCTIONS:

(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)

Designs and coordinates traffic engineering projects; reviews engineering plans.

Prepares and updates technical specifications and supervises field installations.

Plans, coordinates, and leads a variety of traffic signal system related studies, field evaluations, and research which may include signal warrant analysis, signal timing investigation, system-level signal timing fine-tuning, before and after intersection and corridor traffic capacity studies; research on new technologies and ITS devices.

Develops, maintains, and refines arterial traffic signal timing plans for traffic-responsive and adaptive traffic signal control systems.

Maintains applicable databases (hardware inventory and timing database), files, plans, and/or other related documents related to traffic engineering data and information.

Coordinates and collaborates with various internal City divisions/departments to determine and maintain up-to-date various traffic control information technology and geographic information systems and databases.

Prepares a variety of reports related to traffic data and study results; makes recommendations based on findings.

Reviews, investigates, and processes timing requests to evaluate the need for modification or expansion; coordinates appropriate personnel to assist in facilitating traffic control for special events and/or other related street closures.

Serves as liaison with contractors and vendors for various traffic control hardware and software; provides troubleshooting and problem solving as needed.

Participates in/on a variety of meetings, committees and/or other related groups in order to receive and convey information.

Uses, carries, and answers their cell phone for business purposes as determined by the assigned job duties and the Department Head.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers, and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other duties as assigned.

DEPARTMENT SPECIFIC DUTIES (if any):

MINIMUM QUALIFICATIONS: Bachelor's Degree in Civil Engineering and two (2) years of work experience in traffic engineering that includes computer-aided design of traffic signals, capacity analysis, traffic operations studies, and traffic signal timing; or any combination of equivalent experience and education.

LICENSING AND CERTIFICATIONS: Valid motor vehicle operator's license.

SUPPLEMENTAL INFORMATION:

Knowledge of traffic engineering principles; traffic signal design principles; traffic analysis software; applicable federal, state and local laws, ordinances, codes, rules, regulations, standards, policies and procedures; mathematical concepts; GIS applications; investigative methods and traffic study principles and practices.

Skill in using a computer and related software applications (Synchro/SimTraffic, HCS+, ArcGIS); conducting traffic studies and investigations; investigating traffic problems; collecting and analyzing data and information and making appropriate recommendations based on findings; reading and interpreting technical drawings; operating CAD systems; utilizing applicable tools and equipment of the trade; performing mathematical calculations; communication and interpersonal skills as applied to interaction with coworkers, supervisor, and the general public, sufficient to exchange or convey information and to receive work direction.

PHYSICAL DEMANDS: Positions in this class typically require reaching, standing, walking, fingering, grasping, talking, hearing, seeing, and repetitive motions.

WORK ENVIRONMENT: Light Work: Exerting up to 20 pounds of force occasionally and/or up-to 10 pounds of force frequently and/or a negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work. Incumbents may be subjected to extreme temperatures.

SPECIAL REQUIREMENTS:

Safety Sensitive: N

Department of Transportation - CDL: N

Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.