## City of Fresno

## SUPERVISING TRAFFIC SIGNAL OPERATIONS SPECIALIST

### DEFINITION

Under general supervision, supervises and participates in traffic data collection, traffic signal timing, traffic signal coordination, and traffic systems monitoring; and may provide supervision to assigned staff.

### SUPERVISION RECEIVED/EXERCISED

This classification receives supervision from a Division Manager or designee. May exercise supervision over assigned professional and technical staff.

### **DISTINGUISHING CHARACTERISTICS**

Supervising Traffic Signal Operations Specialist plans, coordinates, and supervises traffic signal operations in the Public Works Department Intelligent Transportation Systems (ITS) Program. This classification is distinguished from the Traffic Signal Operations Specialist in that incumbents of the latter is the journey level classification and incumbents do not have supervisory responsibility.

# EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

may include, but not limited to, the following:

Plans, coordinates, supervises and evaluates activities and the work of assigned staff within traffic signal operations.

Operates and maintains the Traffic Operations Center (TOC), City-Wide Advance Transportation Management Systems (ATMS), Adaptive Signal Control Technology (ASCT), and legacy Bitrans systems.

Maintains records of the TOC operations for all new and legacy traffic control systems.

Reviews signalized intersections and corridors, analyzes and models traffic data, and implements traffic signal timing and traffic signal coordination. Gathers, organizes, analyzes, and archives traffic data.

Analyzes, tests, installs, maintains, and prepares operations and maintenance plans for ITS components for traffic signal operations.

Prepares plans, specifications, and cost estimates for the modification and alteration of the TOC systems.

Assists with design plans, specifications, and cost estimates for ITS capital and traffic signal projects.

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Selects, trains, motivates, and evaluates assigned personnel; provides or coordinates staff training.

Coordinates work with contractors to update, modify, and repair TOC systems; assists in the inspection and monitoring of contract work on ITS capital projects and traffic signal projects.

Exchanges data with other agencies, such as Caltrans, Fresno County, City of Clovis and other traffic control centers.

Makes recommendations and presents solutions related to traffic signal problems.

Performs related work as required.

# JOB RELATED AND ESSENTIAL QUALIFICATIONS

### Knowledge of:

Industry systems and equipment, such as Intelligent Transportation Systems, Advance Transportation Management Systems or Traffic Center operations and management; knowledge of traffic signal timing, synchronization and maintenance.

Applicable local and state laws and standards for the design and operation of traffic signals.

The fundamentals of electrical and electronics systems and network telecommunication systems.

Principles and practices of effective employee supervision, including selection, training, work evaluation, and discipline.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

### Skill to:

Operate computerized systems and software for the operation and synchronization of traffic signals.

Operate electronic tools and computerized equipment to maintain ITS components.

Operate a variety of electronic and computerized traffic signal operating controls and test equipment.

Safely operate a motor vehicle and bucket truck with a boom.

## Ability to:

Plan, coordinate, supervise, and evaluate the performance of assigned staff.

Prepare and deploy traffic signal timing plans and corridor synchronization plans.

Maintain ITS components of traffic signal cabinet assemblies, controllers, and communications systems.

Review and approve plans and specifications for ITS capital and traffic signal projects.

Comprehend electric logic diagrams, fiber optic diagrams, electrical drawings and specifications.

Work indoors and outdoors, and in adverse weather conditions; lift 30 lbs, work in traffic signal cabinets and underground vaults; and ability to work at heights and distinguish colors.

Communicate effectively both orally and in writing.

Carry out assignments given in general terms and to exercise independent judgment in the performance of assigned tasks.

Establish and maintain effective working relationships with those contacted during the course of work.

## MINIMUM QUALIFICATIONS

Graduation from an accredited college or university with a Bachelor's degree in engineering, physics, computer science, information technology or related field and one year of experience in traffic signal operations, timing, or maintenance; OR, graduation from high school or equivalent and five years of current experience in traffic signal operations, timing, or maintenance.

### Special Requirements

Possession and continued maintenance of a valid California Driver's License at time of appointment.

APPROVED: \_\_\_\_\_

\_\_\_\_\_ DATE: \_\_\_\_\_

Director of Personnel Services

NEW: JTC:scm: 9/10/15