



<b>DATE</b>	June 2024
<b>JOB CODE</b>	
<b>FLSA</b>	NON-EXEMPT
<b>EEO</b>	

JOB TITLE: Signal Systems Operator  
 DEPARTMENT/DIVISION: Public Works  
 REPORTS TO: Traffic Operations Supervisor

**SUMMARY:** Responsible for performing activities related to programming traffic signal systems, video monitoring and signal timing plans. Responsible for maintaining signal timing data, programming timing plans, flashers and field adjustments. Trains Signal Technicians on Traffic Management Software. Work is performed with limited supervision.

**ESSENTIAL JOB FUNCTIONS:**

- May serve as a lead to sign and signal crew staff, which includes: prioritizing, assigning, and monitoring work; providing direction; and/or, performing other related activities.
- Interface with Traffic Signal technicians to maintain the traffic signal system, including wireless data and video communications from traffic signal cabinets.
- Work with the signal technician staff, which includes prioritizing and monitoring waork to address maintenance issues; providing direction and/or answering questions as needed; assisting with new signal activations, traffic signal updates and traffic switches.
- Partners with Engineering Dept. in maintaining current signal timing data for traffic signals utilizing a centralized computer system.
- Assist in obtaining, processing and analyzing traffic signal system performance measurement data. Respond to requests for assistance and information from and telephone inquiries.
- Partners with Engineering Dept. with the implementation of the programming of signal timing plans, school zone flashers, and field adjustments of applicable signals.
- Collaborate with the Information Technology Dept. to maintain server and network support for the traffic operations center.
- Participates in/on a variety of meetings, committees, and/or other applicable groups to receive and/or convey information.
- Performs inspections of work performed by external contractors involved in constructing traffic signals, installing street lights, and performing underground boring.
- Participates in performing plan reviews to ensure compliance with applicable codes and ordinances.
- Responds to emergency and on-call situations.
- Performs other duties as assigned.

**SUPERVISORY/BUDGET RESPONSIBILITIES:**

- May serve as a lead to sign and signal crew members and Technicians.
- Regular responsibility for giving direction and guidance to employees as a lead worker, project manager or internal advisor.

- Able to step into the Traffic Operations Supervisor role in the event of the Traffic Operation Supervisor's absence.
- Assists in divisional budget preparations.

### **KNOWLEDGE, SKILLS, AND ABILITIES:**

- Knowledge of applicable traffic management software systems
- Knowledge of closed-loop coordinated single systems
- Knowledge of traffic signal operations
- Knowledge of construction principles
- Knowledge of basic electronic principles
- Knowledge of safe work methods
- Knowledge of general design standards
- Knowledge of signal construction principles and practices
- Knowledge of the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and MUTCD.
- Knowledge of various hardware and software necessary to build a functional network, including routers, switches, firewalls, hubs, wiring, and how TCP/IP packets flow through the system.
- Knowledge of electric circuit boards, processors, chips, and basic hardware and software, which includes radio-based and fiber optic communications systems.
- Skilled in prioritizing and assigning the work of staff
- Skilled in preparing and maintaining a variety of records related to operational activities
- Skilled in performing mathematical calculations
- Skilled in programming traffic signals
- Skilled in reading and interpreting schematics and blueprints
- Skilled in troubleshooting and resolving problems related to traffic signals
- Skilled in applying independent judgment, personal discretion, and resourcefulness in interpreting and applying guidelines
- Skilled in operating applicable tools and equipment of the trade
- Skilled in performing advanced repair and maintenance activities
- Skilled in performing construction activities
- Skilled in performing manual labor
- Skilled in observing safety rules and regulations
- Skilled in operating a computer and related software applications
- Skilled in communicating effectively with a variety of individuals

### **MINIMUM QUALIFICATIONS:**

- Work Zone Safety Certification
  - IMSA Signals Level I Certification
- AND
- High School Diploma or G.E.D.
  - Four years of related traffic signal timing, maintenance, and troubleshooting experience
- OR

- An equivalent combination of education, experience and training that provides the required knowledge, skills and abilities.

**PREFERENCES:**

- TACTICS Programming Certification IMSA Signals Level II Certification
- Class A CDL

**WORKING CONDITIONS:**

- Frequent climbing, balancing, reaching, sitting, standing, walking, stooping, kneeling, crouching, talking, seeing, hearing, driving and manual dexterity.
- Occasional lifting and carrying up to 100 pounds.
- Work is typically performed in standard office and outdoor environments, with potential exposure to adverse weather conditions.
- Work is performed in high and precarious places and near moving mechanical parts.
- Potential exposure to risk of electrical shock.

**CONDITIONS OF EMPLOYMENT:**

- Must possess a valid motor vehicle driver license
- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.
- Class A CDL within 6 months of employment
- IMSA Signals Level II Certification within 1 year of employment
- TACTICS Programming Certification within 1 year of employment