

Missouri Department of Transportation Job Description

Job Title: Traffic Signal and Lighting Technician

Title Code: R02381

Salary Grade: 4

Exemption Status: Non-Exempt

Supervisory Responsibilities: None

District/Division: District Offices – Traffic

Effective Date: 10-01-2026

Replaces (Effective Date): 12-16-2024

General Summary

The traffic signal and lighting technician performs duties related to the installation, maintenance and repair of traffic signals, roadway lighting, communications equipment, and other electronic devices. Responsibilities are performed under direct supervision.

Minimum/Required Qualifications

- High school diploma or GED/HiSET.
- One of the following:
 - Completion of a formal-secondary technical training program in one or more of the following: electrical, electronics, or networking (of at least 30 credit hours or one school year in duration),
 - Completion of both phases of the department's traffic signal and lighting apprenticeship program which is only available to internal employees,
 - One year of signal and lighting field experience.
- A passing grade on the written portion of the commercial driver's license (CDL) exam is required prior to hire date. Must pass the driving portion of the CDL exam with tanker endorsement, no air brake restrictions (Class B), and interstate status (either Excepted Interstate [EI] or Non-Excepted Interstate [NI] within 60 days after being hired into this position.
- Successful completion of a work simulation examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires heavy physical exertion and effort, including the ability to move materials by hand, operate hand tools, and perform stationary flagging.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.
- Job requires exposure to working at heights requiring the use of fall protection and aerial boom equipment.
- Job may require operation of vehicle to plow snow and spread ice control materials.

Examples of Work

1. Assists on emergency calls, such as malfunctioning equipment and traffic crashes involving equipment for signals, lighting, Intelligent Transportation System (ITS), aviation and navigational lighting, and communication systems, and takes appropriate action.
2. Assists in the investigation of customer service reports regarding signal and lighting operations and other electronic/electrical traffic control devices and report of findings.
3. Responds to routine utility locate requests from Missouri One Call.
4. Assists in the installation, repair, and maintenance of traffic signal equipment, radio communication equipment, ITS, roadway, aviation and navigational lighting, and other electronic/electrical traffic control devices.
5. Assists in the interpretation of signal circuit plans and schematics for troubleshooting problems with electronic/electrical components.
6. Utilizes software to communicate with and program electronic traffic control devices and radio communication equipment.
7. Assists in the installation, repair, and troubleshooting of communication devices including fiber networks, wireless devices, and radios.
8. Assists in the inventory of electronic/electrical parts and supplies.
9. Assists in the completion of the department's signal and lighting preventative maintenance programs.
10. Maintains required records and documentation on the installation, maintenance, repair, or replacement of signals, lighting, and communication equipment.
11. Performs other responsibilities as required or assigned.