

Missouri Department of Transportation Job Description

Job Title: Senior Traffic Signal and Lighting Technician

Title Code: R02008

Salary Grade: 8

Exemption Status: Non-Exempt

Supervisory Responsibilities: Lead Worker

District/Division: District Offices – Traffic

Effective Date: 10-01-2026

Replaces (Effective Date): 01-16-2025

General Summary

The senior traffic signal and lighting technician leads signal and lighting maintenance activities within the district and coordinates with the traffic engineer to ensure efficient signal and lighting operations. Responsibilities are performed under general 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), AND four years of signal and lighting experience and demonstrated knowledge of all applicable standards and procedures for job tasks within signal and lighting.
 - Completion of both phases of the department's traffic signal and lighting apprenticeship program which is only available to internal employees, AND four years of signal and lighting experience and demonstrated knowledge of all applicable standards and procedures for job tasks within signal and lighting.
 - Five years of signal and lighting experience and demonstrated knowledge of all applicable standards and procedures for job tasks within signal and lighting.
- Certification of discipline applying for: International Municipal Signal Association Level II Certification Traffic Signals and/or International Municipal Signal Association Level II Certification Roadway Lighting.
- Valid Class B commercial driver's license with no air brake restriction and interstate status (either Excepted Interstate [EI] or Non-Excepted Interstate [NI]).

- 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. Responds to 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. Investigates and responds to customer service reports regarding signal and lighting operations and other electronic/electrical traffic control devices.
3. Responds to routine and emergency utility locate requests from Missouri One Call and attends Missouri One Call regional meetings.
4. Schedules, checks, directs and/or supervises 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. Provides training to employees on safety, fleet equipment, technical procedures, and related topics.
6. Provides expertise in signal, lighting, or other electronic/electrical traffic control devices during construction project development and implementation.
7. Reads and interprets signal circuit plans and schematics for troubleshooting problems with electronic/electrical components.
8. Serves as lead in utilizing software to communicate with and program electronic traffic control devices and radio communication equipment.
9. Attends contract meetings and oversees the inspection of contracts regarding signal or lighting equipment or other electronic/electrical traffic control devices.

10. Coordinates and performs advanced installation, repair, and troubleshooting of communication devices including fiber networks, wireless devices, and radios.
11. Makes recommendations regarding equipment and material needs, maintains inventory of electronic/electrical parts and supplies, and orders or purchases replacement parts.
12. Ensures completion of the department's signal and lighting preventative maintenance programs.
13. Maintains required records and documentation on the installation, maintenance, repair, or replacement of signals, lighting, and communication equipment.
14. Performs lead worker responsibilities, which may include providing general instruction, assigning and reviewing work, coaching and training, providing guidance and instruction in the proper and most efficient methods of accomplishing tasks, and providing input to the direct supervisor on staffing decisions and performance management.
15. Performs other responsibilities as required or assigned.