

Missouri Department of Transportation Job Description

Job Title: Senior Bridge Inspector

Title Code: R05041

Salary Grade: 9

Exemption Status: Non-Exempt

Supervisory Responsibilities: Lead Worker

District/Division: District Offices - Maintenance / Bridge Division

Effective Date: 09-01-2026

Replaces (Effective Date): 08-16-2026

General Summary

The senior bridge inspector performs federally mandated inspections on state and locally owned bridges and culverts within the assigned areas of responsibility, including planning, scoping, maintenance work planning, and providing guidance to the region's bridge maintenance personnel. Responsibilities are performed under general supervision.

Minimum/Required Qualifications

- Bachelor's degree in engineering from an ABET-accredited college or university curriculum, **AND** four years of structural experience in highway or transportation engineering, **OR**
- Team Leader certified for bridge inspections in accordance with 23 CFR 650.309, **AND** five years of structural inspection related experience in accordance with National Bridge Inspection Standards requirements.
- Candidates with an ABET-accredited engineering degree must be certified as a Team Leader for bridge inspections, in accordance with 23 CFR 650.309, within 6 months of hire or promotion.
- Successful completion of a range of motion examination and a medical-physical examination.
- Required to pass a cardiopulmonary function test yearly, attend training on the use of respirators, and pass a respirator fit test every six months.

Special Working Conditions/Job Characteristics

- Job requires regular travel within the district.
- Job requires occasional (regular for Bridge Division) statewide and out-of-state, overnight travel.
- Within Bridge Division, the job includes planning, performing, leading, and reporting for underwater bridge inspections for the Dive Team.

- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment.

Examples of Work

1. Schedules and performs safety inspections on bridges and culverts to evaluate maintenance needs and assign condition and appraisal ratings.
2. Performs bridge and culvert inspections, including initial routine, in-depth, fracture critical, special, data collection, damage, scour monitoring, and underwater.
3. Prepares reports and correspondence, maintains and updates inspection-related data in the department's Transportation Management System database for all structures, and collects bridge related information on new locally owned structures.
4. Serves as a technical resource for bridge related issues on locally owned and state owned structures.
5. Lead in performing Bridge Rehabilitation Checklists for upcoming bridge construction projects.
6. Communicates and coordinates with local public officials regarding inspections, inspection findings, load postings, and inventorying of bridges and culverts. Communicates with Bridge Division, Maintenance Division, and district personnel to explain maintenance needs or inspection findings on state owned structures.
7. Updates bridge maps, files, and computer records; monitors load posting compliance on state and locally owned bridges and culverts; monitors progress on resolution of critical inspection findings.
8. Assists the district bridge engineer in developing the district's Bridge Maintenance Plan.
9. Performs post-incident bridge safety inspections, including determined severity of damage and ensuring follow-up actions such as load restrictions and bridge closures are implemented.
10. Assists with the inventory and inspection of other structures which are not part of the National Bridge Inventory, such as retaining walls and sign trusses.
11. 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.
12. Performs other responsibilities as required or assigned.