

Missouri Department of Transportation

Code: R05446

Title: Pavement Engineer

Exemption Status: Exempt

Grade: 18

Job Description

Effective Date 03-01-2008

**Replaces
(Effective Date)** 04-01-2006

General Summary The pavement engineer designs new pavements, conducts forensic analysis of pavement failures and develops repair solutions, examines and tests pavements to develop preventive maintenance or rehabilitation strategies, and updates and develops pavement standards and specifications. Responsibilities are performed under general supervision.

**Minimum/Required
Qualifications** Bachelor's Degree: Civil Engineering
Licensed as a Professional Engineer in the State of Missouri.
Six years of progressive experience in engineering positions, including demonstrated ability to manage teams and multiple projects, and focus on several functional areas of engineering positions.

**Supervisory
Responsibilities** None

Location Central Office - Construction and Materials

**Special Working
Conditions/Job
Characteristics** Job requires regular, statewide, overnight travel.
Job requires exposure to moderately adverse and undesirable environmental conditions.

Examples of Work

- (1) Designs new pavements using mechanistic-empirical modeling tools.
- (2) Analyzes substandard pavements and develops solutions for different design life scenarios; recommends preventive maintenance treatments.
- (3) Calibrates the department's mechanistic-empirical pavement design guide model through field surveys and materials testing.
- (4) Analyzes early pavement failures to determine cause and develops corrective measures.
- (5) Interprets pavement design and construction practices for district personnel.
- (6) Develops and updates pavement policy guidelines and performance specifications for pavement designs and materials.
- (7) Reviews all construction contracts for compliance with the department's pavement policies.

- (8) Manages the design and construction of experimental pavement sections; monitors and analyzes performance data from experimental pavement sections and reports findings, conclusions and recommendations.
- (9) Gives pavement-related presentations at state and national conferences.
- (10) Performs other responsibilities as required or assigned.

The Missouri Department of Transportation promotes an equal opportunity workplace that includes reasonable accommodation of otherwise disabled applicants and employees. Please see your manager should you have any questions about this policy or these job duties.