

STATE OF MONTANA

JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: Data Collection Aide **Location:** Helena HQ

Department: Transportation **Division and Bureau:** Engineering /Geotech and Pavement

Section and Unit: Pavement Analysis/Pavement Management **Position Number:** 90812

Job Overview: This position serves as a Seasonal Data Collection Aide for the PvMS Management Unit of the MDT Geotechnical and Pavement Bureau. The position assists the Road Profile Analyst to complete statewide pavement data collections. Extensive, overnight travel is required. Duties include making travel arrangements, monitoring vehicle and pavement data collection systems, conducting quality control assessments, driving, and other duties as assigned. As a member of a team, this position serves an integral role in determining the severity and extent of pavement distresses on Montana’s highways, which provides information needed for the pavement management and engineering activities. The position reports to the PvMS Management Unit Supervisor.

Essential Functions (Major Duties or Responsibilities):

Pavement Analysis & Data Collection—95%

The Data Collection Aide participates in preliminary training and quality assurance exercises provided by the Road Profile Analyst to learn and consistently monitor data collection operations and quality; ensure the application of proper protocols for recording data collection and quality control; and ensure proper operation of equipment and application of procedures.

Assist Road Profile Analyst with planning of data collection trips to ensure data collection activities are cost-effective and safe. Duties include assisting with determining efficient route sequencing, travel schedules, and lodging arrangements. The Data Collection Aid supports the Road Profile Analyst with driving duties by operating the data collection vehicle as needed, observing traffic and roadway conditions for unsafe conditions, using good judgment concerning safety while working in high-speed traffic, and coordinating with the supervisor or law enforcement if needed.

The Data Collection Aids’ primary duty is to monitor data collection vehicle systems and troubleshoot errors in real-time while vehicle is operated at highway speeds. These duties include:

- Monitor pavement data collection computers to ensure the systems (laser profiler, 3D imagery, perspective and right-of-way cameras, LiDAR, inertial measurement unit, and DMI) are operational.
- Monitor pavement data collection computers to ensure they are accurately recording the location using Departmental corridor route naming, mileposts, and lane identification criteria. Edit computer information for correct route location if needed.

- Troubleshoot errors in coordination with the Road Profile Analysis, the data collection vehicles vendor, and applicable MDT staff.
- Proactively communicate and collaborate real time with the Road Profiler Analyst as a team to collect quality data.
- Assist and/or perform weekly equipment calibrations and record accurate results.
- Daily quality checks and documentation of the data collection vehicle and external components, Assure they are clean and free of debris which may inhibit safety and quality results.

Assist the Data Quality Analyst with QC/QA activities by determining the type, description, severity levels, and quantification of pavement distresses observed using specialized software (PathView). Use judgment to determine the type of defect, the severity of the defect, and the severity to which the road surface is affected by the defect.

Accurately measure and record pavement features in PathView by applying math functions and established data recording protocols. Quantify field data using math functions (fractions and percentages) and enter all information regarding pavement condition in the appropriate tools. Work with supervisor or Data Quality Analyst verifying data collection cycle completion and verify information availability for upload into the databases.

Other Duties as Assigned—5%

Perform a variety of other technical and administrative work in support of section activities as assigned by the supervisor.

Supervision: This position does not have supervisory duties.

Physical and Environmental Demands:

- Independent lifting (up to 20lbs.) of equipment.
- Extensive travel (more than 1,000 miles/week avg.) within the state by automobile
- Remaining seated or standing for extended periods of time, with occasional walking; standing; bending.

Knowledge, Skills and Abilities (Behaviors):

Knowledge: This position requires knowledge of the procedures and sources of information related to identifying pavement distress types; computerized relational databases; mathematical calculations; safety and traffic control protocols and procedures; geography of the State of Montana; expense policies and procedures; the operation, tape measures, width gauges, and distance measuring instruments; and knowledge of basic vehicle maintenance.

Skills: This position requires skill in the use and operation of computers with multiple windows and software; measurement instruments of all types; operating field equipment and software; reading and interpreting maps; and effective communication in a team environment.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through high school diploma or equivalent.

This position requires a minimum of 1 year of job-related work experience.

A valid Montana Driver’s License is required.

Other combinations of directly related education and experience may be considered on a case-by-case basis.

Alternative Qualifications: Education, personal, and/or work experience involving various software programs including navigation systems, Google Suite, and/or Microsoft Office may be credited toward work experience for this position.

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Signatures

My signature below indicates the statements in the job description are accurate and complete.

Immediate Supervisor	Title	Date
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Administrative Review	Title	Date
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My signature below indicates that I have read this job description.

Employee	Title	Date
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Human Resources Review

Job Code Title: **Job Code Number:**

My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

- | | |
|---|--|
| <input type="checkbox"/> FLSA Exempt | <input checked="" type="checkbox"/> FLSA Non-Exempt |
| <input type="checkbox"/> Telework Available | <input checked="" type="checkbox"/> Telework Not Available |
| <input checked="" type="checkbox"/> Classification Complete | <input type="checkbox"/> Organizational Chart attached |

Human Resources:

Signature	Title	Date
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