

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: Safety Data Program Specialist **Number: 08014**

Location: Helena **Department: MDT**

Division and Bureau: Engineering / Traffic & Safety

Section and Unit: Safety Section

Job Overview: This job includes providing critical support to MDT's Safety Program including the Highway Safety Improvement Program (HSIP). Work includes data management to maintain MDT's crash database with the Safety Information Management System (AASHTOWare). This includes working with several software programs, multiple groups within MDT and the Montana Highway Patrol (MHP). This position is the Section lead Arc Map user and AASHTOWare Safety administrator. Work also includes training staff on safety related software.

Essential Functions (Major Duties or Responsibilities):

Program and Project Management – 70%

Position is responsible for quality control of crash data and carcass data. This includes writing PL/SQL coding to extract data from the database and identify miscoded data. Resolution of the miscoded data would also be required. Develop a solid understanding of the crash data and its variables.

- Use PL/SQL Developer to query known data error types and identify miscoded data. Coordinate with the Montana Highway Patrol (MHP) as part of this work.
- Generate and maintain quality assurance/control procedures for MDT's Safety program, HSIP.
- Work with MDT Planning and MDT Information Services Division (ISD) to create Geo Nodes for intersections.
- Assist ISD with converting crashes from MHP to MDT databases.
- Assist ISD & Safety's Crash Database Vendor in trouble shooting software/programming breaks.
- Maintain animal carcass database. Limited manual entry and locating of carcass reports.
- Retrieve new MHP crash reports using SmartCop or through access to MHP's server. This includes preparing reports for uploading into Numetrics. Oversee and coordinate multiple data management and projects, while anticipating and resolving problems. Identify errors and discrepancies related to process and procedural requirements and other factors. Determine and implement corrective actions as necessary.
- Create and maintain MDT Safety geospatial web services that provides access to MDT's data for external and internal use.

Safety Data Analysis and Other Duties as Assigned– 20%

Revision Date: 06/2022

Position provides support to engineering staff developing the HSIP Annual Project List.

- Create complex queries and reports in AASHTOWare Safety and PL/SQL to retrieve specific data for miscellaneous data requests.
- Develop software functions, operations, and other parameters necessary to collect, manipulate, analyze, and apply relevant geospatial data. Creates original scripts, queries, processes and models to meet specific project needs and requirements. Coordinates with MDT ISD on internal software and application development, testing, and implementation issues.
- Provide input to agency managers and others regarding potential new uses for GIS software within MDT. Involves conducting in-depth assessments and analyses of current and upcoming business processes, resolution of existing and potential system problems, and anticipating future uses and needs to maximize GIS operations.
- Maintain live links from the crash/maintenance databases to ArcGIS.
- Create and maintain spreadsheets, graphs, and charts in Excel.
- Create various custom map layers in ARCMAP (GIS dataset).
- Update annual reports, charts, graphs, and maps.
- Generate annual reports and Arc map for public information access.
- Create new AASHTOWare Safety profiles and maintain user accessibility.

Training – 10%

- Develop training materials and curricula; coordinate and deliver formal training to new employees, interns, rotational engineers, and various other approved users of AASHTOWare Safety on Safety's analysis tools.
- Create and maintain technical process documents for use by MDT staff to provide guidance and direction on data collection and analysis parameters, other guidelines and standards for geospatial data management.
- Create training manuals and reference documents for documenting MDT specific processes in relation to the crash database. This includes ARCMAP, AASHTOWare Safety, PL/SQL, and other applications.

Supervision

The number of employees supervised is: 0

The position number for each supervised employee is: N/A

Physical and Environmental Demands: Applicant would need to be able to lift boxes 20-30 pounds and sit long stretches of time at a computer.

Knowledge, Skills and Abilities (Behaviors):

- Knowledge of engineering principles used in road design such as terminology, drafting symbols and abbreviation is preferred.
- Knowledge of developing queries to quality control related data elements as well as being able to extract data effectively from the database.
- Knowledge of PL/SQL Developer, ArcGIS, Microsoft Office Products and Adobe.
- Ability to learn new programs that are specific to this Section, i.e., AASHTOWare Safety (MDT crash database) and SmartCad (Montana Department of Justice SmartCop).

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to an associate degree in Drafting, Programming or related fields. Four (4) Years related experience may substitute for a related degree.

This position requires a minimum of 1 year of experience using ArcGIS.

Certifications, licensure, or other credentials include: GIS Certification preferred.

Alternative qualifications include: Any combination of additional related work experience and education equivalent to the minimum qualifications.

Special Requirements:

List any other special required information for this position

☒	Fingerprint check	x	Valid driver's license
☐	Background check	☐	Other; Describe
035-MFPE	Union Code		Safety Responsibilities

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:

☐ FLSA Exempt

☒ FLSA Non-Exempt

☒ Telework Available

☐ Telework Not Available

☐ Classification Complete

☐ Organizational Chart attached

Human Resources:

Signature

Title

Date