# 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: Operations Research Analyst Position Number: 22066

**Location: Helena** 

**Department: Montana Department of Transportation** 

Division and Bureau: Motor Carrier Services Division, Commercial Vehicle Operations

Bureau

**Section and Unit: Operations** 

## **Job Overview:**

The Operations Research Analyst manages the MCS Division's statistical data collection, and field technology programs. Ensures compliance with federal regulations, Administrative Rules of Montana and Montana laws through research and analysis. Completes information and data collection, evaluation, analysis, reporting, and systems maintenance, as well as technical and user support for these programs; oversees the research necessary to identify and document efficient business procedures; and re-engineers business processes by developing and implementing plans, specifications, and schedules.

The Operations Research Analyst produces private sector technical specifications for service and repair contracts and manages the technical repair and maintenance programs for division field systems; conducts new and ongoing research, analysis, development and implementation of technical enhancements and business improvements to division information, data, statistical, information. Coordinate's research and analysis activities, and develops, implements, maintains, and enforces related high technology project protocols.

## **Essential Functions (Major Duties or Responsibilities):**

## **Computer Database Maintenance and Support - 75%**

This position provides database support, research, and reporting for MDT's Commercial Vehicle Operations Bureau, Enforcement Bureau, MCSAP section, and the MCS Division.

- Reviews and verifies nightly imports to the Motor Carrier Services (MCS) permitting
  system's Restriction Manager for the Automated Routing System (ARS). The ARS safely
  routes oversize overweight Commercial Motor Vehicles (CMVs) through Montana on routes
  without restrictions based on the vehicle size and weight. This position is the Division's
  quality data manager for the Restriction Manager and interfaces to the different Department
  systems.
- Using Standard Query Language (SQL), creates Ad-hoc reports from the ARS. Creates and analyzes reports for upper management within the Department and quarterly reporting to the federal government.
- Analyzes routes submitted from carriers using the Bridge Analysis Tool / Automated Routing System to route overweight CMVs saving bridge engineer's time and shortening the turnaround time for permits.
- Monitors the state's Weigh-In-Motion (WIM) sites and provides MCS District Captains with reports showing overweight CMVs. District Captains utilize these reports to schedule officers in areas where possible overweight violations may be occurring on an on-going basis.
- Analyze commercial vehicle plate and DOT camera data at WIM sites to determine which commercial vehicles were not legally permitted for running overweight.
- Create Commercial Motor Vehicle Crash maps to support Division strategies to reduce crashes. Analyze high crash corridors in Montana to see what causes the crashes to include driver error, vehicle issues, weather, etc. Research strategies nationwide to address causal factors of crashes and makes recommendations to upper management.
- Provides backup support for MCS's permitting system when commercial motor carriers open an account to self-issue permits. This includes setting up accounts with the correct carrier information and issuing security to the permit system for carriers.
- Routinely purge incomplete or unused data from the ePART permitting system.
- The Operations Research Analyst will attend daily MCS management meetings during the legislative sessions. The position will track any potential bills that might impact the division and department.

# Division Grant, Contract Support, and Technology - 20%

This position provides the MCS Division support for development and tracking of Motor Carrier Safety Assistance Program (MCSAP) grants, division contracts, and research new technology.

- Supports new initiatives implemented using Federal Motor Carrier Safety Administration (FMCSA's) Innovative Technology Grant funding. Receives, monitors, researches and analyzes comprehensive data, statistics and information originating from state, private, and federal databases and develops performance plans, graphs, charts, and assessments requested or required by the federal government. Assist MCSAP and Enforcement with the MCSAP grant and the FMCSA Electronic Commercial Safety Plan (eCVSP) by developing the annual budget and providing bi-weekly updates on the progress at a divisional level.
- Develops contracted service agreements concerning MCS data collection, equipment specifications, software, installation, and maintenance of equipment. Provides project

management and oversight to assure on- schedule, cost-effective technology purchases and deployments for MCS. Develops and submits Information Technology Procurement Request (ITPR) for the MCS Division for existing IT contracts and new technologies.

- Research new field technology and makes recommendations to upper management for implementing the new technologies. This position submits timely and accurate statistics and information on behalf of Montana through MCS to FHWA and FMCSA.
- This position manages report development for MCS Division activity data based on research, collection, analysis, and evaluation for state and federal reporting.

C. Other Duties 5%

Identify operating efficiencies in procedures and make recommendations to the Operations Section Supervisor on changes to improve efficiencies. Performs other duties as assigned.

# **Supervision**

The number of employees supervised is: 0
The position number for each supervised employee is: N/A

## **Physical and Environmental Demands:**

• This position functions in a typical office environment.

# **Knowledge, Skills and Abilities (Behaviors):**

This position requires knowledge of principles, theories, and management of research, data, statistics and information collection and reporting, monitoring, evaluation, analysis, trend development and forecasting; knowledge of the principles of mathematics including algebra and trigonometry; knowledge of the Federal Highway Administration's size and weight enforcement and certification program; the Federal Motor Carrier Safety Administration's Motor Carrier Safety Assistance Program and its plan and certification program; and, project management practices and procedures.

Guidelines, manuals, or written procedures supporting this position including agreements, contracts, Notice of Funding Opportunities, FMCSA MCSAP comprehensive policy, scale design plans, and special provisions.

Knowledge of database management, computer troubleshooting, and technology problem resolution.

Communicating orally and in writing to subject matter experts and upper MCS/MDT management alike.

# Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to an associate's degree, 2 years college, vocational training, or a related field.

This position requires a minimum of 3 years of experience in Business, Business Management, Business Administration, Public Administration, Accounting, Economics, Finance, Statistics, Math, Management, or related field.

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

Special Requirements:						
$\boxtimes$	Fingerprint check		$\boxtimes$	Valid driver's license		
$\boxtimes$	Background check			Other; Describe.		
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.						
Imme	diate Supervisor	Title		Date		
Admin	nistrative Review	Title		Date		
My signature below indicates that I have read this job description.						
Emplo	yee	Title		Date		

# **Human Resources Review**

Job Code Title: Research A	nalyst 2	Job Code Number: C23012
My signature below indicates has made the following determ		Resources has reviewed this job description for completeness and
FLSA Exempt		
Telework Available		Telework Not Available
Classification Complete		Organizational Chart attached
Human Resources:		
Signature	Title	Date