



## VEHICLE PERFORMANCE ANALYST

**JC:** MC830

**PG:** F

**FLSA:** Exempt

**BU:** 31 (AFSCME)

**Created:** May 2002

Revised July 2018

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

### **DEFINITION**

Under general supervision, analyzes, monitors and documents system and equipment performance and service delays; ensures work quality and adherence to established policies and procedures; provides highly responsible and complex administrative support to the Group Manager, Rolling Stock and Shops; and performs related duties as assigned.

### **CLASS CHARACTERISTICS**

This is an advanced journey level classification which performs specialized technical analysis related to rail vehicle system and equipment performance and reliability. This includes tracking of vehicle failures, evaluation of incidents causing service delays, analysis of data, and development of recommendations and alternatives. This classification also reviews maintenance records and evaluates effectiveness of preventative maintenance programs and cycles and performs trend analysis. Positions in this class assist higher level managerial staff in planning and evaluating programs which ensure and increase vehicle performance and reliability. This classification is distinguished from the financial analyst in that the latter is responsible for the administration and analysis of budgets, labor and material costs.

### **REPORTS TO**

This position reports to the Group Manager, Rolling Stock and Shops.

**EXAMPLES OF DUTIES:** *Duties may include, but are not limited to, the following:*

1. Analyzes vehicle performance, identifying major impacts to vehicle reliability, efficiency, operations and activities.
2. Performs complex data analysis using various databases and methods; develops reports which include performance tracking, vehicle reliability, technical and other data; uses available business intelligence platforms.
3. Establishes schedules and methods for providing timely analysis of vehicle performance.

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4. Tracks and documents vehicle failures; determines failure rates; identifies trends and incidents that cause a delay; analyzes data; and develops recommendation to appropriate area for remedy.
5. Reviews, monitors, and evaluates effectiveness of remedies and programs; documents and prepares analytical status reports.
6. Identifies resource needs; review needs with appropriate management staff; allocates resources accordingly.
7. Participates in the development and implementation of goals, objectives, policies and priorities for assigned programs; recommends and administers policies and procedures.
8. Monitors work activities to ensure compliance with established policies and procedures; makes recommendations for changes and improvements to existing standards and procedures.
9. Coordinates and participates in the preparation of reliability performance documents including performance, reports, test results and special reliability studies.
10. Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of reliability engineering.
11. Interfaces with various stakeholders and Information Technology (IT) group, as required, to develop or enhance tools.

## **QUALIFICATIONS**

### **Knowledge of:**

Operations, services and activities of a vehicle performance program.  
Operational characteristics of enterprise grade relational databases.  
Operational characteristics of Enterprise Asset Management (EAM) systems.  
Concepts and techniques related to computer programming for reliability testing and analysis.  
Statistical, mathematical and comparative analysis techniques and formulas.  
Advanced methods and techniques of data collection and analysis.  
Methods and techniques for assessing performance against established objectives.  
Fundamentals of technology used in transit operations.  
Principles and practices of statistical recordkeeping and reporting.  
Current office equipment including computers and supporting word processing and spreadsheet applications;

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### **Skill in:**

Performing complex statistical, mathematical and comparative analysis on vehicle performance.

Analyzing system and equipment performance and vehicle reliability test results.

Reading and interpreting technical complex documents and specifications.

Advanced use and manipulation of spreadsheets and database information

Designing, documenting and implementing data driven processes and data collection tools.

Preparing a variety of highly complex technical and analytical reports.

Analyzing problems, identifying alternative solutions, projecting consequences of proposed actions and implementing recommendations in support of goals.

Interpreting and explaining District policies and procedures.

Preparing clear and concise reports.

Communicating clearly and concisely, both orally and in writing.

Establishing and maintaining effective working relationships with those contacted in the course of work.

### **MINIMUM QUALIFICATIONS**

#### **Education:**

A Bachelor's degree in engineering, physical sciences, mathematics, computer science or a related field from an accredited college or university.

#### **Experience:**

Three (3) years of (full-time equivalent) equipment performance and reliability data analysis, modeling and reporting experience. Experience with Enterprise Asset Management systems, such as Maximo, is preferred.

#### **Substitution:**

Additional professional experience as outlined above may be substituted for the education on a year-for-year basis. A college degree is preferred.

### **WORKING CONDITIONS**

#### **Environmental Conditions:**

Office environment; exposure to computer screens; shops and train station environment.

#### **Physical Conditions:**

May require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time.

**BART EEO-1 Job Group:** 0710 – Management Analyst

**Safety Sensitive:** No