

Office: 202-384-1520 · Website: www.wmsc.gov

The Washington Metrorail Safety Commission (WMSC) is seeking a **Safety Certification Program Manager (Safety Certification and Hazard Management)** to join our growing team.

The WMSC is the designated State Safety Oversight Agency (SSOA) responsible for overseeing the safety of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system, which operates rail transit in Maryland, Washington, D.C., and Virginia. The WMSC is responsible for implementing an oversight program in compliance with federal and other applicable regulations.

Position Overview

The successful candidate will serve as the manager of the WMSC's oversight program for WMATA Metrorail's safety certification process. This work includes identifying and ensuring Metrorail mitigates hazards to provide for the safety of the public, Metrorail personnel, and first responders in accordance with its Public Transportation Agency Safety Plan (PTASP) and Safety and Security Certification Program Plan (SSCPP), the WMSC Program Standard, federal regulation, and industry best practices such as the use of system safety engineering processes.

The WMSC oversees Metrorail's safety certification work through document review, in-person inspections, meetings, and other activities necessary based on the status or nature of each project and Metrorail's overall safety certification program. If any issues are identified, they are acted upon through communication to Metrorail and are then tracked and monitored. The WMSC also oversees Metrorail's development of its Safety and Security Certification Program Plan (SSCPP) revisions.

The candidate will help to ensure the WMSC's commitment to effective safety oversight program administration through collaboration and establishment of working relationships with internal WMSC personnel, WMSC contractors, WMATA Metrorail personnel, and others. The candidate will be responsible for leading and implementing the WMSC's Safety Certification Oversight Program. This role is supervised by the Director of Systems Engineering.

Responsibilities

- Lead the implementation of the WMSC's overall Safety Certification Oversight Program, with assistance from the Director of Systems Engineering and other WMSC personnel.
- Independently, and as part of effective teamwork and coordination with others, identify, investigate, analyze, and review hazards on any part of the Metrorail system and Metrorail operations.
- Review Metrorail's approach to and effectiveness at identifying and managing hazards through systems engineering processes.
- Review project-specific documentation, including technical and engineering documentation, at each stage of Metrorail projects (such as preliminary design review, final design review, and project implementation), for comparison against applicable standards and safety process or systems engineering principles.
- Review project-specific documentation regarding potential consequences of identified hazards, including Metrorail's assessment of the severity and likelihood of such consequences being realized.
- Review WMATA's project-specific Preliminary Hazard Analyses, Hazard Analyses, Verification Matrices, and other relevant documentation (e.g. Failure Modes and Effects Analysis, Failure Modes Effects and Criticality Analysis,

Bowtie models, Fault Tree Analysis) to determine whether items are appropriate, effective, complete, and compliant with relevant requirements.

- Support other WMSC staff in conducting other oversight such as activities related to Inspections, Investigations, Audits, and Corrective Action Plans.
- Perform duties in a safe, efficient manner in compliance with all applicable rules and safety procedures.
- Actively monitor WMATA Metrorail Safety Certification projects.
- Prepare written reports and provide other regular updates to the WMSC leadership and Commissioners, including oral presentations during the WMSC public meetings.
- Provide supporting materials for and participate in presentations to internal and external audiences at various organizational levels and levels of technical knowledge.
- On own initiative, identify opportunities for improvements and propose solutions to continuously improve the effectiveness of the WMSC's oversight of Metrorail's Safety Certification Program.
- Demonstrate attention to detail.
- Exercise focus, discipline, and organization with regard to all tasks.
- Track, prioritize, and adhere to deadlines.
- Perform other responsibilities as assigned.

Qualifications

Experience

Must demonstrate at least 5 years of progressively increasing responsibility, working independently and in teams, in an area such as system design, system safety analysis, or hazard analysis, for high reliability or safety-critical activities, including 3 years implementing, managing, or enforcing safety programs.

Preferred experience in a transportation-related field.

Preferred experience with rail transit systems or railroads and familiarity with standards such as the American Railway Engineering and Maintenance-of-Way Association (AREMA) Communications and Signals Manual, the AREMA Manual of Railway Engineering, American Public Transportation Association (APTA), Federal Transit Administration (FTA), or other similar standards and regulations.

Preferred familiarity with control systems or industrial automation and knowledge of the principles of design for vital and fail-safe systems.

Education

Bachelor of Science in System Safety, Mechanical Engineering or a similar degree in another engineering discipline from an accredited institution.

Residency Requirement

This position is primarily remote; however, given the nature of the WMSC's oversight of the WMATA Metrorail system it does require in-person work from time-to-time. Therefore, it is required that the candidate resides within 30 miles of any WMATA Metrorail station.

Physical Requirements

- The ability to safely move for long periods on potentially rocky and uneven surfaces along rail right-of-way, in rail yards, and in maintenance facilities on an occasional basis.
- The ability to position oneself to take measurements.

- The ability to ascend/descend ladders and narrow staircases, and to board and disembark rail vehicles including those designed for passenger use and maintenance vehicles.
- Work may take place at any time of day as warranted by emergency conditions or scheduled oversight activities (e.g., responding to a Metrorail event or conducting observations of overnight maintenance work).
- Work may take place on or about WMATA property where WMSC personnel must be alert at all times for the approach of trains or rolling equipment; slips/trips/fall hazards; and hazardous materials.
- While on-site, WMSC personnel must also take precautions with electrical hazards associated with passenger and non-passenger vehicles and equipment, the third rail, and other power equipment throughout the Metrorail system.
- WMSC personnel may be exposed to unfavorable weather conditions, including temperature extremes and precipitation, and other environmental discomforts such as insects and vegetation on or about rail property..
- Personal protective equipment (PPE) will be required for specific job functions (and will be provided). All WMSC
 personnel will comply with WMATA requirements for PPE as applicable to the circumstances, as well as with
 applicable industry standards.
- The physical demands described here are not exhaustive but are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation will be made to enable individuals with disabilities to perform the essential functions.

Certifications

Candidate must possess and maintain a valid driver's license or provide reliable means to arrive to and leave a rail station, rail yard, maintenance facility, the WMSC office, or other facility or location.

Candidate will be required to enroll in and complete the Public Transportation Safety Certification Training Program (PTSCTP) within 3 years of designation by the WMSC and then, upon successful completion, maintain that certification in good standing thereafter. Candidate is encouraged, but not required, to enroll in and complete the Transit Safety and Security Program as well.

Preferred: Certified Safety Professional (or similar) certification.

Other Required Skills, and Abilities:

- Excellent English-language written and verbal communication skills.
- Ability to use Zoom, Microsoft Teams, Microsoft Office, SharePoint, and other common software for conducting
 daily work including, but not limited to, preparing work products such as presentations, reports, graphs, tables,
 and for ensuring proper record retention.
- Ability to apply broad safety process engineering and systems engineering principles when reviewing WMATA's Safety Certification documents.
- Familiarity with the concepts in MIL-STD-8882E when assessing hazards, their mitigations, and categorization.
- Ability to work in a remote team environment comprised of individuals from diverse cultures and geographies.
- Ability to observe, receive, and otherwise obtain relevant information regardless of information source.
- Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- Ability and enthusiasm to acquire needed knowledge to perform duties.
- Ability to manage multiple priorities to meet deadlines and commitments.
- Ability to manage projects to fruition, on time.
- Ability to take direction and constructive criticism from supervisor, management, and others.
- Ability to consistently conduct all aspects of the position.
- Ability to be a team player who assists the WMSC in fulfilling its overall safety oversight mandate.
- Ability to adhere to strong professional ethics.

- Ability to independently carry out duties following direction by supervisor/management and recognize any related duties on own initiative.
- Ability to effectively use the internet and other collaboration software to perform assigned work.

Other Requirements

Availability of a home office or other suitable, professional setting for conducting daily responsibilities. Alternatively, the WMSC office is available for this purpose.

WMSC offers a robust compensation and benefit package

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.

Office Location: 750 First Street NE, #900, Washington, DC 20002

Apply by sending your cover letter with salary requirements and resume to hr@wmsc.gov.

The most up-to-date information regarding this job posting is available via the WMSC employment opportunities page at <u>Employment Opportunities — Washington Metrorail Safety Commission (wmsc.gov)</u>.