



General Engineer

Are you interested in meaningful work that allows you to apply your engineering skills while benefiting transit rail commuters in the Washington Metropolitan area? This engineering position requires an engineering professional with at least 7 years of performing engineering work, requiring independent technical judgment, the ability to analyze regulations, and experience operating in safety-critical environments. This is not an entry-level engineering role.

The WMSC is the designated state safety oversight agency responsible for overseeing the safety of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system, which operates rail transit in Maryland, the District of Columbia, and Virginia. The WMSC safety oversight program complies with the WMSC Compact, federal law, and other applicable safety standards.

This General Engineer position is part of the Washington Metrorail Safety Commission (WMSC) systems engineering team, which provides engineering advice and assistance to the nine appointed Commissioners, senior leadership, and Commission staff to continue to meet the WMSC's state safety oversight obligations. As a General Engineer at the WMSC, you will apply your engineering expertise to provide general engineering support to assess and monitor the safety of Metrorail's track, structures, electrical infrastructure, rail cars, and other mechanical assets. Your responsibilities will include reviewing engineering drawings, design documents, technical reports, and maintenance programs to assess compliance with industry standards and regulatory requirements. You will conduct inspections of Metrorail facilities, infrastructure, assets, and personnel. You will collaborate across disciplines including operations experts, training experts, investigations experts, signals experts, program managers and executive managers to ensure system-wide safety. This position will report to the Director, Systems Engineering.

Responsibilities

- Review and assess Metrorail design documents, engineering drawings, specifications, technical studies, and maintenance programs.
- Evaluate WMATA compliance infrastructure and asset maintenance, inspection, and repair procedures.
- Independently evaluate safety concerns related to rail vehicles, track, structures, high-voltage electrical systems, and other functional areas that require engineering input.
- Monitor testing, commissioning, and safety certification of various Metrorail engineering projects.
- Lead or support technical reviews, audits, investigations, inspections, and corrective action plan (CAP) processes, from development through implementation and verification.
- Write and edit technical reports, communications and presentation, safety assessments, and recommendations for audiences with varying engineering knowledge.
- Perform on-site inspections of rail vehicles, maintenance facilities, rail maintenance machines, elevators and escalators, traction power, track infrastructure, and training associated with job categories associated with inspection, maintenance, repair and engineering.
- Perform other duties as assigned.

JOB QUALIFICATIONS

Experience

- Minimum of seven (7) years of progressively responsible engineering experience in rail transit systems, heavy infrastructure, transportation systems, or other safety-critical environments.
- Direct experience in rail or heavy transportation systems is strongly preferred and expected for competitive candidates.
- Demonstrated ability to perform engineering tasks, document results, and present the results in a clear, persuasive, and timely manner.
- Familiarity with applicable laws and industry standards (e.g. American Public Transit Association (APTA), American Railway Engineering and Maintenance-of-Way Association (AREMA)).

Education

Bachelor's degree in civil, electrical, or mechanical engineering from an accredited institution is required.

Preferred Qualifications and Credentials

- American Railway Engineering and Maintenance-of-Way Association (AREMA), American Society of Safety Engineers (ASSE), World Safety Organization (WSO) certification.
- Current Professional Engineer (PE) license preferred.
- Prior experience working with State Safety Oversight Agencies (SSOAs) or rail transit authorities.

Residency Requirement

This position currently 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 to attend Washington, DC area meetings, conduct inspections on the rail right of way, at rail facilities and on board. Therefore, it is required that the General Engineer live within 30 miles of any WMATA Metrorail station no later than 30 days from the first day of employment.

Must have availability of a home office or other suitable, general setting for conducting daily responsibilities. Alternatively, the WMSC office is available for this purpose.

Certifications

The Successful candidate will be required to complete all courses of the Public Transportation Safety Certification Training Program (PTSCTP) within 3 years of joining the WMSC.

WMSC staff 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, a WMATA office, or other facility or location in the Washington, DC metropolitan area.

This position also requires training and testing for Level 1 Roadway Worker Protection.

Other Skills and Abilities

- Ability to work independently and be self-driven to maintain and improve WMSC work programs.

- Ability to quickly shift priorities for new and fast-moving initiatives.
- Strong organizational and time management skills, with the ability to prioritize multiple tasks under tight deadlines.
- Ability to exercise sound judgment, maintain ethical integrity, and build effective working relationships.
- Proficiency in engineering software tools.

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 ascend/descend ladders and narrow staircases, and to board and disembark rail vehicles, including those designed for passenger use and maintenance.
- 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 oversight 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; hazardous materials and electrical hazards.
- WMSC personnel may be exposed to unfavorable weather conditions, including temperature extremes and precipitation, and other environmental discomforts such as insects and vegetation.
- 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 provided to enable individuals with disabilities to perform the essential functions.

WMSC LOCATION, SALARY, AND HOW TO APPLY

The WMSC is located at 750 First Street NE, Suite 900, Washington, D.C. 20002.

The WMSC offers a robust benefits package, including medical, dental, and vision insurance for employees and qualified dependents.

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.

Interested candidates must submit a résumé including general engineering license documentation if applicable, cover letter, and salary requirements to hr@wmsc.gov.

This job announcement may result in multiple hires.