

| Cap ID          | Finding(s)  | Source  |
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| FTA-17-1-10     | Finding 4: Traction power cables are often loose on the ground, subjecting them to contamination, vibration, and damage from movement.<br>Finding 9: There is insufficient dielectric insulation for cable terminations used in the traction power system.<br>Finding 17: The cable replacement and upgrade program for 8-car train roll out has been deferred.<br>Finding 18: WMATA's negative return system (at traction power substations) has not been upgraded to address plans for 50 percent and 100 percent operation of 8-car trains.<br>Finding 19: WMATA has suspended its contact rail expansion joint elimination program until further analysis is completed. | Special Directive 17-1<br>(12/6/2016)               |
| FTA-TSR-18-003  | The WMATA does not consistently implement its Hazard Management Procedure.  | Special Directive 18-2<br>(1/19/2018)               |
| NTSB R-8-004-A  | Promptly implement appropriate technology that will automatically alert wayside workers of approaching trains and will automatically alert train operators when approaching areas with workers on or near the tracks.   | Safety Directive 16-2<br>(12/15/2015)               |
| WMSC-19-C0008-B | Metrorail does not currently have an effective hours of service policy.   | Re-issued by WMSC (9/10/2019)                       |
| WMSC-19-C0026   | WMATA does not conduct annual culvert inspections as specified in Section 105.1 of the TRST-1000.   | Track Maintenance and Training<br>Audit (2/13/2020) |
| WMSC-20-C0037   | Third rail power restoration is routinely rushed by ROCC management with a focus on restoring train service rather than a focus on following safety procedures.   | WMSC Directive (5/12/2020)                          |
| WMSC-20-C0042   | WMATA employees are not consistently following RWP Rule 5.12 for equipment calibration.   | RWP Audit (6/18/2020)                               |
| WMSC-20-C0049   | ROCC management contributes to a chaotic environment. Use of profanities, threats and racial, sexual or other forms of harassment are regular features of the control centers environment, which makes it difficult for controllers to do their jobs and drives low morals and significant turnover.  | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0051   | Metrorail does not record all critical ROCC communications, limiting the lessons that can be learned from safety events.  | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0052   | There is no consistent, clear, concise, immediate and reliable Metrorail communication process for safety-critical information between Metrorail personnel and fire liaison.  | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0053   | Some Metrorail procedures lack the required urgency to address life-safety issues.  | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0055   | WMATA does not always follow or clearly define its fatigue risk management procedures for the Rail Operations Control Center, including those limiting the length of controller shifts.   | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0056   | Metrorail ROCC recruitment and retention approach is failing. Some controller trainees have left the ROCC immediately after or shortly after the training course, which is scheduled to last nine months.   | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0057   | A high rate of staff turnover in the Rail Operations Control Center contributes to staffing challenges and a lack of positive institutional knowledge that can contribute to safety challenges.   | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0058   | Controllers still have too many responsibilities and are frequently rushed to complete tasks by management.   | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0059   | WMATA has failed to regularly update the Rail Operations Control Center Procedures Manual.  | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0060   | WMATA has not reviewed SOPs or OAPs on a regular basis.   | ROCC Audit (9/8/2020)                               |
| WMSC-20-C0061   | Ride alongs are not effectively utilized to increase controller knowledge, contributing to a lack of controller understanding of what is actually happening on the roadway.   | ROCC Audit (9/8/2020)                               |

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| WMSC-20-C0065 | Not all controllers experience emergency drills. If each ROCC controller does not get this experience, it diminishes the value of the drills  | ROCC Audit (9/8/2020)                                   |
| WMSC-20-C0066 | The certification process for ROCC instructors, assistant superintendents, superintendents and controllers is inconsistent, not properly documented, and lacks proper controls to ensure the integrity and meaning of certification.  | ROCC Audit (9/8/2020)                                   |
| WMSC-20-C0068 | WMATA does not have a standardized training program for personnel working at desks such as the MOC or ROIC. Metrorail could not provide any documentation of MOC training materials, a curriculum or a training description. Metrorail provided only a study guide for the ROIC.  | ROCC Audit (9/8/2020)                                   |
| WMSC-20-C0070 | Metrorail puts the integrity of safety event investigation at risk by not following procedures requiring proper chain of custody and control of evidence as outlined in SOP 800-01 and Policy/Instruction 10.4/1, not following procedures requiring direct access for investigators to all information, recordings and other evidence that is potentially relevant to the investigation, and not fully training all personnel on the steps they are required to take when a safety event occurs. | WMSC Directive (10/20/2020)                             |
| WMSC-21-C0072 | WMATA does not have load ratings for its bridges and aerial structures.   | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0076 | Metrorail does not have important structural steel inspection tools available that are listed in its Structural Inspection Manual.  | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0077 | Metrorail does not have consistent requirements for refresher or additional training for structures inspection and maintenance teams.   | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0080 | Metrorail inspection, repair and design data are spread across disparate systems in a way that makes certain work challenging, creating the risk that safety issues could be misidentified or slip through the cracks.  | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0081 | Metrorail does not review contractor credentials, qualifications or trainings before a contractor conducts an elevated structure inspection.  | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0083 | Ten Metrorail structures have steel rocker bearings, which created a seismic risk in the event of an earthquake other seismic events.   | Elevated Structures Audit (1/25/2021)                   |
| WMSC-21-C0084 | Metrorail is not following and does not have effective safety certification and acceptance procedures for new RMMs. There is no Metrorail-wide safety certification procedure to implement the SSCP.  | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0087 | Metrorail is not utilizing reliability data for its RMMs, including the specific nature of any failure, which prevents WMATA from realizing the safety benefits of a complete, ongoing analysis program.  | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0088 | Equipment operators are not fully trained on each type of vehicle they may be directed to operate. Some training has not included sufficient hands-on experience.   | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0090 | Supervisors or others have no way of confirming while in the field whether an operator is properly trained to operate a specific RMM.   | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |

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| WMSC-21-C0091 | Metrorail risks key safety and maintenance work coming to a halt due to insufficient succession planning and training.  | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0095 | CTEM mechanics get only limited training on specific vehicles that would assist them in moving and maintaining RMMs, and do not get adequate refresher training.  | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0098 | Several Metrorail preventive maintenance instructions do not include acceptable tolerances for required measurements.   | Roadway Maintenance Machine (RMM) Inspection (3/9/2021) |
| WMSC-21-C0099 | A lack of an Intrusion Detection Warning (IDW) .  | WMSC Directive (3/31/2021)                              |
| WMSC-21-C0100 | Metrorail is not maintaining a fully functioning radio communications system in all rail yards and shops.   | WMSC Directive (4/30/2021)                              |
| WMSC-21-C0101 | Metrorail does not have, provide training on, or otherwise follow specific rules related to rail vehicle and switch movement in non-signalized territory. Further, Metrorail provides no controls on or oversight of movement in dark territory.        | WMSC Directive (4/30/2021)                              |
| WMSC-21-C0102 | Metrorail has not adequately trained ATCM employees on safety procedures to ensure that all employees fully understand their roles with respect to safety.  | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0103 | Metrorail has continued efforts to return to Automatic Train Operation without following its safety certification procedures.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0104 | WMATA is not conducting all inspections and maintenance required by its ATC manuals and ATC manuals have incorrect or incomplete information and outdated references.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0105 | Metrorail allows employees to use tools that have not gone through any safety review or approval process.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0106 | Metrorail does not have a standardized determination of which preventive maintenance work must be prioritized as safety critical.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0107 | There is no formal process for ATCM, the department that performs the work in the field, to initiate or request an engineering modification or manual change from ATCE.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0108 | Departments responsible for ATC do not have clear, documented, effective working relationships which contributes to communication and coordination challenges that limit safety improvements.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0109 | WMATA does not have a standardized process to prioritize and advance ATC capital projects.  | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0110 | Training and parts needed for maintenance appear to be an afterthought in WMATA procurements.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0111 | Metrorail does not have adequate replacement parts or materials and has not planned for the obsolescence of critical equipment.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0112 | Metrorail has no specific minimum training course requirements, documented OJT requirements or equipment certifications for ATCM employees, or requirements that individuals be trained on a system element prior to conducting maintenance work on it. | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0113 | Metrorail is not effectively managing turnover, vacancies and experience levels of ATC personnel.   | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0115 | Metrorail's written procedures do not reflect changes that employees are being directed to implement  | ATC Audit (10/29/2020)                                  |
| WMSC-21-C0118 | Metrorail does not consistently follow its safety certification process, which leads to project activation and use without proper hazard identification and mitigation, putting Metrorail customers, personnel and first responders at risk.            | WMSC Directive (8/13/2021)                              |

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| WMSC-21-C0119 | Finding 1. Safety sensitive physicals are not conducted as required by Metrorail policy, and Metrorail does not document or track when these physicals are due for all existing employees.  | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0120 | Finding 2. Metrorail ignores the minimum daily release period (rest period) requirements in its Fatigue Risk Management Policy.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0121 | Finding 3. There is not adequate access to, documentation of, or compilation of data for WMATA to assess compliance with its hours of service requirements.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0122 | Finding 4. WMATA does not conduct safety sensitive physicals at the time of or soon after hire as required by its policies.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0123 | Finding 5. Not all safety sensitive employee position have fully documented and up-to-date physical and medical requirements  | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0124 | Finding 6. Many follow up and random drug and alcohol tests required by Metrorail policies and federal regulations were not completed with no documented reason why the tests were missed.  | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0125 | Finding 7. WMATA does not have written criteria for post-incident testing and does not consistently implement post-event testing.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0126 | Finding 8. Supervisors are not receiving reasonable suspicion training, as required by Metrorail policy and federal regulation.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0127 | Finding 9. WMATA does not provide adequate, clear, understandable information to employees regarding what over-the-counter medications must be disclosed.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0128 | Finding 10. WMATA does not have procedures to confirm that employees are consistently removed from service for positive drug and alcohol test results in a timely manner as required by federal regulations.                            | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0129 | Finding 11. WMATA does not have a documented procedure for and training to carry out fitness for duty checks prior to or during shifts on a regular basis for all covered employees as specified in the APTA fitness for Duty Standard. | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0130 | Recommendation 1. Metrorail does not collect fitness for duty data in a manner that allows for identification, tracking and trending of issues.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0131 | Recommendation 2. Metrorail is not providing medical oversight of contractors and does not include any requirement in contracts that contractors meet WMATA medical, fatigue or hours of service standards.                             | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0132 | Recommendation 3. WMATA does not have a policy in place to test employees or contractors involved in a safety event who are hospitalized but conscious and providing consent.   | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0133 | Recommendation 4. Metrorail does not confirm the accuracy of new hires' self-reported list of prior DOT-covered employers.  | Fitness for Duty Audit (12/14/2020)                  |
| WMSC-21-C0134 | Metrorail's 6000-Series rehabilitation program, including coupler overhaul work, was implemented by CMOR, CENV and CMNT without safety certification and approvals required by WMATA's SSCPP.   | Revenue Vehicle (Railcar) Programs Audit (2/12/2021) |
| WMSC-21-C0135 | SAFE approved SMP documentation that was incomplete and that did not match approved forms, and Metrorail did not comply with safety certification requirements defined in the SSCPP.  | Revenue Vehicle (Railcar) Programs Audit (2/12/2021) |
| WMSC-21-C0136 | 6000 Series cars that underwent rehabilitation were put into service without SAFE approval.   | Revenue Vehicle (Railcar) Programs Audit (2/12/2021) |
| WMSC-21-C0137 | Metrorail removed the coupler overhaul from the 6000 Series SMP process without documenting that change or completing a review of that change by the SCRC.  | Revenue Vehicle (Railcar) Programs Audit (2/12/2021) |
| WMSC-21-C0138 | Metrorail does not require or receive all necessary OEM documentation, parts or tools.  | Revenue Vehicle (Railcar) Programs Audit (2/12/2021) |

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| WMSC-21-C0139 | The 7000 Series rehabilitation and subsystems overhaul program is being developed without full SAFE coordination, involvement or approval.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0141 | Metrorail does not have adequate document control practices for car maintenance job plans.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0142 | Metrorail does not have a systematic process to ensure that mechanics and engineers are trained for the specific tasks they are assigned to perform.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0143 | Metrorail does not consistently follow a standard process to address wheels out-of-round, to prevent cars with wheels out-of-round from operating, and to identify and address the root causes of wheels out-of-round.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0144 | Metrorail does not clearly define the proper use of engineering modification instructions (EMIs), service bulletins (SBs), and other railcar engineering change documents.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0145 | Metrorail utilizes multiple versions of the same inspection form that do not all include the same pass/fail criteria.  | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0146 | Metrorail railcars do not include inward-and outward-facing audio and image recorders in all operating compartments.   | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0147 | Part numbers are not being consistently entered in Maximo Work Orders for 7000 Series railcars.  | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0148 | Some WMATA job descriptions have not been reviewed in more than 20 years.  | Revenue Vehicle (Railcar)<br>Programs Audit (2/12/2021)  |
| WMSC-21-C0149 | WMATA has not fully implemented sufficient protections against the unauthorized movement of trains with zero speed commands.   | FTA Safety Directive 16-5 from investigation to stop signal overruns; WMSC requested modification to FTA-RED16-003-B (8/15/2016) |
| WMSC-21-C0150 | Metrorail is not complying with its safety certification and approval requirements that are specified in its SSCPP before installing and placing traction power systems into service   | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0151 | Metrorail is not documenting, tracking and conducting all preventive maintenance inspections that are required by WMATA policy, manuals and instruction.   | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0152 | Metrorail is relying on vital traction power equipment that is beyond its useful life and has not fully followed through on implementation of prioritized renewal plans to ensure a state of good repair.  | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0153 | There is inadequate awareness, documentation, interdepartmental coordination, training and supervisory oversight to ensure knowledge of and compliance with documented procedures.   | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0154 | Traction Power Maintenance employees do not get all required information and training to maintain equipment that they are directed to work on, and there is no process in place to ensure that personnel are trained on specific equipment prior to working on that equipment. | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0155 | Metrorail is not effectively identifying, tracking and mitigating hazards related to high voltage and traction power.  | High Voltage Traction Power<br>Audit (6/3/2021)  |
| WMSC-21-C0156 | Metrorail is behind schedule on its floating slab testing to monitor for deterioration due to stray current.   | High Voltage Traction Power<br>Audit (6/3/2021)  |

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| WMSC-21-C0157 | The latest as-built schematics are not available in each traction power facility, as required by the TRPM-1000 and Metrorail preventive maintenance instructions.  | High Voltage Traction Power Audit (6/3/2021)                 |
| WMSC-21-C0158 | Metrorail does not have a policy, process or procedure to ensure effective prioritization of corrective maintenance work orders  | High Voltage Traction Power Audit (6/3/2021)                 |
| WMSC-21-C0159 | Metrorail risks equipment quality and availability issues that impact operational safety due to gaps in materials tracking, storage, and procurement practices.  | High Voltage Traction Power Audit (6/3/2021)                 |
| WMSC-21-C0160 | Metrorail databases include many electrical tools that are beyond their required calibration dates.  | High Voltage Traction Power Audit (6/3/2021)                 |
| WMSC-21-C0161 | Some WMATA job descriptions have not been reviewed in more than 30 years.  | High Voltage Traction Power Audit (6/3/2021)                 |
| WMSC-22-C0162 | Finding 1. Metrorail does not consistently follow the incident command system (ICS) structure and has procedures that do not comply with National Incident Management System (NIMS)/ICS requirements such as the use of plain language. Further, Metrorail's training requirements are insufficient to prepare personnel to respond to and/or manage emergencies within the NIMS/ICS framework. These deficiencies have contributed to ineffective and improper emergency response and emergency management. | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0163 | Finding 2. Metrorail created and implemented an "Incident Management Official" (IMO) position without documented training, responsibilities, communication or coordination, and without adequate staffing to ensure other emergency management and preparedness activities were not interrupted.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0164 | Finding 3. MTPD personnel routinely enter the roadway despite not having RWP qualifications required by Metrorail rules and procedures, exposing themselves and others to the risk of serious injury or death.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0165 | Finding 4. MTPD general orders do not reflect current operational realities and procedures, and areas for improvement from prior events are not effectively communicated to frontline MTPD personnel.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0166 | Finding 5. Metrorail's calls to public safety answering points (911 call centers) are inconsistent, incomplete and contribute to delayed or ineffective emergency response.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0167 | Finding 6. Metrorail has not clearly defined and communicated the authority and duties of its Fire Marshal and any other fire prevention roles or positions, and does not have effective continuity plans in the event the Fire Marshal is unavailable.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0168 | Finding 7. Metrorail does not ensure that experts in fire and life safety are included in and have a documented role in Metrorail project development, planning, review and approvals, which contributes to hazards being introduced into the Metrorail system or hazards being allowed to continue to exist without adequate mitigation.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0169 | Finding 8. There is inadequate coordination among organizational units charged with developing, inspecting and maintaining critical fire and life safety assets, and there is no unified process to identify, prioritize and address fire and life safety risks.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0170 | Finding 9. Metrorail does not routinely conduct hazard assessments to evaluate and prioritize fire and life safety and emergency management issues. Further, Metrorail has not established a fire and life safety and emergency management hazard identification, tracking and open item resolution process for prioritizing and implementing safety improvements.   | Emergency Management and Fire Life Safety Programs (2/22/22) |

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| WMSC-22-C0171 | Finding 10. Emergency equipment in station medical cabinets is expired and covered in dirt. There is no inspection procedure or responsible party assigned to inspect and maintain this safety equipment.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0172 | Finding 11. Metrorail does not conduct systematic underground inspections to ensure safe egress and fire and life safety response, and has set minimum tunnel emergency lighting levels that are not compliant with NFPA minimum standards.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0173 | Finding 12. The exit stairwell from Rosslyn Station is not protected from obstructions, which creates a risk that the hatch will not be able to be opened in an emergency, trapping customers inside.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0174 | Finding 13. Metrorail does not consistently inspect and maintain current certification status of all fire extinguishers, particularly those on the roadway.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0175 | Finding 14. Metrorail does not consistently perform or document all elements of its Fire & Intrusion Alarm System Inspection Preventive Maintenance Instructions.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0176 | Recommendation 1. Metrorail has opportunities to improve and expand training and training coordination related to fire and life safety and emergency management.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0177 | Recommendation 2. MTPD does not have a useable incident checklist for emergencies.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0178 | Recommendation 3. Metrorail fire and life safety signage is not consistent throughout the system.  | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0179 | Recommendation 4. Metrorail's organizational structure contributes to mismatches between fire and life safety and emergency management personnel and their responsibilities.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0180 | Recommendation 5. Metrorail does not assess and communicate radio system outages to MTPD officers.   | Emergency Management and Fire Life Safety Programs (2/22/22) |
| WMSC-22-C0181 | Finding 1. Elements of Metrorail have a culture that accepts noncompliance with written operational rules, instructions, and manuals.  | Rail Operations (4/7/22)                                     |
| WMSC-22-C0182 | Finding 2. Metrorail does not effectively identify, track, communicate and address operational hazards as required by its Agency Safety Plan.  | Rail Operations (4/7/22)                                     |
| WMSC-22-C0183 | Finding 3. Metrorail creates safety risks by not requiring and conducting territory familiarization and physical characteristics training, and not assessing knowledge of physical characteristics prior to assigning operations personnel work on a line, in a terminal or in a yard. | Rail Operations (4/7/22)                                     |
| WMSC-22-C0184 | Finding 4. Metrorail has inadequate internal communication, coordination and processes to effectively manage change as required by its PTASP, the WMSC and the FTA.  | Rail Operations (4/7/22)                                     |
| WMSC-22-C0185 | Finding 5. Metrorail is not effectively training and certifying personnel authorized to operate trains on all active railcar fleets.   | Rail Operations (4/7/22)                                     |
| WMSC-22-C0186 | Finding 6. Metrorail is not meeting its operational refresher training and recertification requirements.   | Rail Operations (4/7/22)                                     |

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| WMSC-22-C0187 | Finding 7. Metrorail has not documented procedures for terminal supervisors, and has not established the effective formal training for terminal supervisors needed to safely perform their duties.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0188 | Finding 8. Metrorail does not have documented criteria to determine student proficiency in practical demonstrations of safety critical operational tasks.   | Rail Operations (4/7/22)                                 |
| WMSC-22-C0189 | Finding 9. Metrorail does not ensure personnel serving as on-the-job training instructors, including those personnel described as line platform instructors (LPIs), are effective and have specific training and direction on what to teach and how to assess their assigned students.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0190 | Finding 10. Metrorail does not provide safety oversight of all safety equipment that is or may be past its calibration date that may be in use by operations personnel.   | Rail Operations (4/7/22)                                 |
| WMSC-22-C0191 | Finding 11. Some RTRA QA/QC audits contain conclusions that do not match actual conditions. RTRA's QA/QC procedures do not include complete work instructions for all audits or specific instructions for removing personnel from service.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0192 | Finding 12. Metrorail closes internal corrective actions and identified issues, including those related to RTRA QA/QC audits, without fully identifying or completing required improvements or changes.   | Rail Operations (4/7/22)                                 |
| WMSC-22-C0193 | Finding 13. With frequent modifications due to temporary and permanent orders, and outdated versions of Metrorail's rulebook being distributed to personnel when hard copies are available, the latest Metrorail rules are not easily accessible to train operators. This creates document control issues and makes a rule requiring personnel to carry the latest version of the Metrorail Safety Rules and Procedures Handbook (MSRPH) unrealistic. | Rail Operations (4/7/22)                                 |
| WMSC-22-C0194 | Finding 14. Metrorail does not conduct effective oversight of training instructors.   | Rail Operations (4/7/22)                                 |
| WMSC-22-C0195 | Recommendation 1. Metrorail operations departments do not have effective processes to consider and act upon safety input from employees at all levels of the organization.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0196 | Recommendation 2. Metrorail has an opportunity to improve training by assigning dedicated instructors to each division.   | Rail Operations (4/7/22)                                 |
| WMSC-22-C0197 | Recommendation 3. Interlocking operators are authorized to hand crank switches, are not being certified to take this action.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0198 | Recommendation 4. Metrorail has an opportunity to improve the integrity of its certification process by establishing a procedure providing for QA/QC personnel to be certified by an entity other than their own colleagues.  | Rail Operations (4/7/22)                                 |
| WMSC-22-C0199 | Finding 1. Metrorail has not developed and implemented a comprehensive water intrusion and remediation program covering stations, elevators and escalators, which contributes to damage and deterioration of structures and other assets, to electrical hazards and to other safety risks.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0200 | Finding 2. Metrorail does not consistently communicate and follow its procedures governing change management and requiring interdepartmental coordination.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0201 | Finding 3. Metrorail is not ensuring that ELES personnel work only on the specific types of equipment that they are trained to inspect, maintain, and repair.   | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0202 | Finding 4. Metrorail has not reviewed its ELES standard operating procedures on a regular basis as required by WMATA policy, and has conflicting procedures for elevator and escalator employees.   | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |

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| WMSC-22-C0203 | Finding 5. Metrorail does not clearly define what helpers (entry-level ELES personnel) are authorized to do or prohibited from doing, including whether helpers are permitted to work alone and any restrictions required to ensure that work is done safely.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0204 | Finding 6. Metrorail does not ensure that ELES personnel sign in on log books as required by WMATA SOP to ensure their safety.   | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0205 | Finding 7. Metrorail has not maintained a formalized, documented training process for ELES mentors (on-the-job training instructors) who play a key role in the training of entry-level ELES personnel.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0206 | Finding 8. Metrorail began new inspections referred to as “visual” or “routine” ELES inspections prior to finalizing, communicating and formally implementing an effective procedure.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0207 | Finding 9. ELES Supervisors are not completing all aspects of required QA checks.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0208 | Recommendation 1. Metrorail has an opportunity to improve safety by ensuring an adequate number of trained personnel are available to perform tasks that are assigned to Plant Maintenance.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0209 | Recommendation 2. Metrorail has effective training instructors for ELES personnel, however their experience does not match the written requirements for the positions.   | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0210 | Recommendation 3. Metrorail has an opportunity to improve data collection and analysis necessary under its Public Transportation Agency Safety Plan (PTASP) by providing more PLNT and ELES personnel with improved, formal training on the use of Metrorail’s maintenance management information system (Maximo). | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0211 | Recommendation 4. Metrorail can improve the safety of escalators by formalizing procedures to ensure that escalators are regularly operated opposite their normal direction when safe to do so.  | Station Maint.,<br>Elevator/Escalator Audit<br>(5/25/22) |
| WMSC-22-C0212 | This CAP builds on C-0037, which was developed to address WMSC finding issued on May 12, 2020: Third rail power restoration is routinely rushed by ROCC management with a focus on restoring train service rather than a focus on following safety procedures.   | Improper Power Restoration<br>Order (5/17/2022)          |