

Why QICO Performed This Review:

- This internal review is intended to provide Metro's senior management with an assessment of the state of Metrorail Structural Inspections and promote the actions needed to address any concerns.
- QICO is independent from the functions it oversees, authorized by the GM to conduct objective reviews with unrestricted access to all functions, records, assets and employees under its purview.

QICO's Methodology:

- Developed relevant review activities by identifying and assessing risks to quality of work, compliance with standards, records management and safety.
- Reviewed maintenance documentation, observed maintenance and inspection work while in-progress, and interviewed key personnel
- Review findings and required actions are rated based on risk, which ranges on a scale from "Insignificant" to "High."

Note: An itemized Corrective Action Plan (CAP) is developed for each required action to achieve effective and measureable resolution of identified concerns. To check the status of CAP implementation go to www.wmata.com/initiatives/transparency/.

June 2017

Metrorail Structural Inspections

QICO's Review Results:

Improving Quality of Inspections and Timeliness of Reporting Will Ensure the Authority Achieves and Sustains a State of Good Repair.

The process of structure inspection can be improved with the implementation of procedural documents, internal quality checks, and engineering input. Based on our review results QICO identified and noted several Wins (What Worked Well) and Areas for Improvement:

- ✓ Procedural documents have been developed.
- ✓ Good housekeeping practices.
- ✓ Training certifications/records up-to-date.
- Structural findings that do not pose an imminent danger to passengers or others are not being addressed efficiently.
- Condition assessments performed by different parties determined different levels of defect.
- Unavailable inspection equipment.
- Inadequate coordination with external parties for bridge inspections.
- Inconsistent recording and reviewing of inspection activities.
- Long lead-times for completing inspection reports.
- Noncompliance with existing internal QC requirements.
- Inconsistent reporting in Monthly Preventive Maintenance Summary.
- Under-utilization of the enterprise asset management system for inspection documentation.
- Ineffective management of inspection data through current reporting software.
- Expired materials in storage areas.

Required Actions:

- QICO-SIM-17-01: WMATA must continue developing a strategy to address structural findings. (*Risk Rating: Elevated*)
- **QICO-SIM-17-02:** Establish formal processes to ensure that critical inspections are completed according to schedule. Alternatively, evaluate the potential outsourcing of critical inspections to ensure these items are completed on-time. *(Risk Rating: High)*
- **QICO-SIM-17-03:** Perform an evaluation of current inspection and reporting practices employed by the structures inspection team, in relation to WMATA's standards and industry best-practices, instituting corrective measures and management controls to eliminate deficiencies identified in the evaluation. (*Risk Rating: Elevated*)
- **QICO-SIM-17-04:** Establish and implement written requirements to govern the capture, completion, quality control, and engineering review of inspection activities/reports. *(Risk Rating: Elevated)*
- QICO-SIM-17-05: Establish formal practices for the capture of inspection defects in the enterprise asset management system for improved data quality/integrity. (*Risk Rating: Moderate*)