



COMPREHENSIVE INTERNAL REVIEW SUMMARY

What is QICO?

- It's an internal management function that reports to the General Manager (GM/CEO) that provides quality and compliance assessments to assure departments are fulfilling business objectives, addressing corrective actions, and complying with NTSB, FTA, TOC, MSC, and other agency requirements and recommendations, promoting transparency and accountability. Results of these reviews are presented to senior management to communicate what went well, and to promote the implementation of actions to address areas for improvement.

Purpose of this Review:

- The comprehensive nature of this internal review encompasses four distinct projects underway at WMATA for both rail vehicles and infrastructure improvements; the Metrorail Vehicle Capital Improvement Program, 7000-Series Railcar Acquisition Program, Metrorail Power Systems Upgrade Program, and Metrorail Radio Infrastructure Replacement Program; accounting for the 11th – 14th installments of QICO's 20-part CY2017 internal review. Each of these reviews was conducted in the third and fourth quarters (Q3 & Q4) of calendar year (CY) 2017, and are intended to collectively provide an overall assessment of project management and execution to Metro's senior management to improve future capital program planning.

Methodology:

- QICO developed relevant review activities by assessing risks to integration management, scope management, time management, cost management, quality management, human resource management, communication management, risk management, procurement management, stakeholder management and records management.
- QICO reviewed the project's governing documentation and records, assessed their conformance to requirements, and interviewed key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges from 'Insignificant' to 'High' scale. Each is associated with either project-specific areas, or identified as a systemic issue across capital program management.

Note: An itemized Corrective Action Plan (CAP) is developed for each required action to achieve effective and measurable resolution of identified concerns. To check the status of CAP implementation go to:

<https://www.wmata.com/initiatives/transparency/upload/Overview-of-Internal-Compliance-Actions.pdf>

<http://www.wmata.com/transparency>

Capital Program Management



December 2017

17. Metrorail Vehicle Capital Improvement Program

Key Takeaway: Standardized project management processes that meets the requirements are essential towards successful delivery of projects.

Wins:

- ✓ Comprehensive Quality Management Plan for the 5000 Series HVAC Overhaul, including predefined inspection criteria.
- ✓ Comprehensive Master Program Schedule for the 5000 Series HVAC Overhaul.

Areas for Improvement:

- Effective Quality Management Plan is essential to the quality of project deliverables.
- Comprehensive activity based schedule is essential to timely project delivery.

Required Actions:

- One [Project-Specific Required Action](#) has been developed to address the areas for improvement noted above, resulting in one corrective action plan for this review.

18. Metrorail Power Systems Upgrade Program

Key Takeaway: New processes and controls need to be implemented to help improve the successful delivery of an upgraded traction power system.

Wins:

- ✓ Proactive planning of specific work areas has enabled effective resource allocation for the execution of project activities.
- ✓ Project roles and responsibilities are clearly defined and understood by the project team.

Areas for Improvement:

- Consistent inspection reporting standards are required to promote effective communication and accurate accounting of work within the project.

Required Actions:

- One [Project-Specific Required Action](#) has been developed to address the areas for improvement noted above, resulting in one corrective action plan for this review.

19. 7000-Series Railcar Acquisition Program

Key Takeaway: Better Coordination with Internal Stakeholders will Improve Long-Term Asset Management of the 7000-Series Railcar and Improve the Next Railcar Procurement.

Wins:

- ✓ Quality management has representation at all stages of manufacturing.
- ✓ The document management system is well organized.
- ✓ Periodic inspection activities are occurring in a timely manner.

Areas for Improvement:

- Establishing policies and procedures regarding Train-to-Wayside-Data-Transfer (TWDT) capabilities is essential.
- Timely and through troubleshooting training is required..
- Timely delivery of spare parts is required to address ongoing maintenance issues.

Required Actions:

- Three [Project-Specific Required Actions](#) have been developed to address the areas for improvement noted above, resulting in three corrective action plans for this review.

20. Metrorail Radio Infrastructure Replacement Program

Key Takeaway: New processes and controls need to be implemented, both authority-wide and at the project level, to help improve the successful delivery of an upgraded radio system.

Wins:

- ✓ Project adherence to safety briefing requirements prior to field assessments promotes a positive safety culture throughout the team.

Areas for Improvement:

- Identification of clear roles and responsibilities of project personnel is essential.
- Consistent enforcement of design package requirements is essential.
- Consistent acceptance procedures are necessary for effective project delivery.
- Consistent, documented inspections of equipment installation are essential.

Required Actions:

- Three [Project-Specific Required Actions](#) have been developed to address the areas for improvement noted above, resulting in three corrective action plans for this review.

Summary of System-Wide Results

Key Takeaway: A formalized framework for capital program management, with system-wide standard requirements and processes, will help improve consistency and effectiveness of Metro's capital program planning and execution.

Areas for Improvement:

- Incorporation of performance-driven targets in WMATA's long-term capital planning process will improve alignment of project planning with the authority's mission and goals.
- Standard project controls for managing cost and schedule will support effective project execution and promote accountability.
- Consistent methods for reporting project progress and status will improve coordination of project activities and promote accountability.
- Clearly defining the roles and responsibilities for capital planning and monitoring will promote effective interdepartmental coordination and project execution.

Required Actions:

- **QICO-CPM-17-01:** Establish standards for asset condition and/or useful life benchmarks and their use in capital program planning to better align with WMATA's strategic objectives.
- **QICO-CPM-17-02:** Standardize project controls for managing cost and schedule, defining methods to measure project performance in accordance with these requirements.
- **QICO-CPM-17-03:** Establish standard reporting requirements for projects and define methods to measure project performance in accordance with these requirements.
- **QICO-CPM-17-04:** Establish a framework of roles, responsibilities and processes for capital program planning that incorporates stakeholder departments and promotes cooperation.