



STATE OF NEW YORK OFFICE OF THE STATE COMPTROLLER

December 6, 2023

Janno Lieber Chair and Chief Executive Officer Metropolitan Transportation Authority 2 Broadway New York, NY 10004

> Re: Rolling Stock Programs Department – Selected Aspects of the M9 Rail Car Project Management Report 2023-F-10

Dear Mr. Lieber:

Pursuant to the State Comptroller's authority as set forth in Article X, Section 5 of the State Constitution and Section 2803 of the Public Authorities Law, we have followed up on the actions taken by officials of the Metropolitan Transportation Authority Long Island Rail Road to implement the recommendations contained in our initial audit report, *Rolling Stock Programs Department – Selected Aspects of the M9 Rail Car Project Management* (Report 2020-S-50).

Background, Scope and Objective

The Metropolitan Transportation Authority (MTA) is a State public authority created pursuant to Article 5, Title 11 of the Public Authorities Law. One of the MTA's six agencies, the Long Island Rail Road (LIRR) is one of the oldest commuter railroads still in operation today with a charter dating back to the 1830s. The LIRR maintains over 700 miles, serves 126 stations, and transports more than 200,000 weekday commuters across its system as of June 2023. It remains an important transportation artery for the New York region.

On September 18, 2013, LIRR awarded a contract to procure new M9 rail cars. The procurement is managed by LIRR's Rolling Stock Programs Department's nine employees, with the assistance of subject matter experts representing LIRR's operating departments. The contract included a firm initial base order of 92 cars with options for an additional 584 M9 cars for LIRR and/or Metro-North Railroad. (Metro-North Railroad later dropped out of the contract.) In July 2017, LIRR exercised its first option for an additional 110 cars for a total of 202 LIRR M9 cars. The cars are assembled at the contractor's plant in Lincoln, Nebraska with final assembly in Yonkers, New York. The first M9 rail car entered revenue service on September 11, 2019. The project is funded through MTA's capital program, with the base order of 92 cars (project L-601-01-MA) funded by \$354.8 million from the 2010-2014 Capital Program. The optional order of 110 cars (project L-701-01-ME) was funded by \$368.8 million from the 2015-2019 Capital Program.

The objective of our initial audit, issued on March 25, 2022, was to determine whether LIRR's Rolling Stock Department managed the M9 contract so that the contractor delivered the

cars on time, within the required scope and quality, and within budget. The audit covered the period from September 2013 to November 2020.

Specifically, the audit found that the contractor was behind schedule in the delivery of the 92 base cars by almost 3 years and over budget by \$8.9 million. In addition, LIRR had not assessed or collected liquidated damages of \$5.5 million from the contractor for delays as of September 2020, and accepted 62 rail cars with deficiencies under a Conditional Acceptance (CA) contract clause. Further, we noted the deficiencies were not corrected timely and did not always comply with the All-Agency Contractor Evaluation Guidelines (Guidelines) as LIRR failed to send written notification to the vendor about the less-than-satisfactory performance.

Since our initial audit was issued, 110 (172-62) additional M9 cars have been conditionally accepted as of July 2023. According to LIRR officials, they expect to conditionally accept the remaining cars by the end of May 2024.

The objective of this follow-up was to assess the implementation, as of September 13, 2023, of the 12 recommendations included in our initial audit report.

<u>Summary Conclusions and Status of Audit Recommendations</u>

MTA LIRR officials made some progress in addressing the issues we identified in the initial audit report. Of the initial report's 12 recommendations, three were implemented, three were partially implemented, and six were not implemented.

Follow-Up Observations

Recommendation 1

Account for the MTA Capital Program funds as originally budgeted.

Status – Not Implemented

Agency Action – LIRR officials continue to disagree with this recommendation because they claim there is no benefit in tracking the funds – MA (base) and ME (optional) – separately as the combined procurements will not exceed the overall budget. However, the original audit found that the original base order was over budget. While both projects have a total budget of \$733.6 million, the budget for procurement of the M9 cars has increased by over \$2.1 million to \$735.7 million since the initial audit.

Recommendation 2

Require the contractor fix the issues detected in testing at the Pueblo or contractor's facility before cars are delivered to the LIRR.

Status – Not Implemented

Agency Action – LIRR officials continue to disagree with this recommendation because they state that defects found at Pueblo for the test cars were corrected and additional defects were found based on further testing done at the LIRR. However, the original audit found that tests that were supposed to be conducted at Pueblo were not done and issues disclosed by other tests were not addressed. Instead, the contractor determined that they would be addressed at LIRR facilities. LIRR did not provide additional documentation to support that the contractor conducted all of the tests and the defects were fixed.

Recommendation 3

Notify the contractor that LIRR will not pay for increased costs related to directives for work not completed to contract specifications as well as increased consultant costs and LIRR's administrative and oversight costs.

Status - Not Implemented

Agency Action – LIRR officials stated that they did not notify the contractor because the contractor is well aware that work done as part of directives is part of the contract. Further, LIRR plans to address this at the end of the contract.

Recommendation 4

Cap renumeration for rail car procurement contracts with contractual disagreements by only allowing a limited time to correct deficiencies in conditionally accepted cars.

Status - Not Implemented

Agency Action – LIRR officials maintain their position that the cost of a rail car is set per contract. LIRR is focused on conditionally accepting the cars first and then on correcting the deficiencies in the conditionally accepted cars.

Recommendation 5

Create a formal procedure to periodically assess and collect the liquidated damages.

Status - Partially Implemented

Agency Action – LIRR did not create a formal procedure to assess and collect liquidated damages. However, it has assessed \$4.9 million of liquidated damages by withholding payment of this amount. LIRR will not assess additional liquidated damages until the end of the contract, if appropriate.

Recommendation 6

Prioritize the correction of all outstanding items on CA cars so that they can be finally accepted.

Status – Not Implemented

Agency Action – LIRR officials stated they are focused on conditionally accepting the remaining M9 rail cars. Correction of all outstanding items will then be done as part of the Field Modification Instruction (FMI) program.

Recommendation 7

Work with the contractor to establish a schedule for developing proposed resolution of the open items, obtaining any necessary approvals, and making the repairs that allows the issues to be resolved by an agreed-upon future date.

Status - Not Implemented

Agency Action – According to the M9 FMI Status Report received from LIRR on August 22, 2023, the FMI program is still under development and has not been finalized.

No repairs were done, and no date is set to start the repairs. LIRR officials restated that repairs will not start until all 202 M9 cars are conditionally accepted.

Recommendation 8

Ensure that the contractor tests the PTC equipment after installation.

Status – Implemented

Agency Action – We sampled 10 pairs (20 cars) of M9 rail cars. LIRR provided documentation that showed the Positive Train Control (PTC) equipment was installed and tested on the 10 pairs of M9 rail cars.

Recommendation 9

Ensure the contractor conducts all required software system FMECAs, including the ATC software FMECA, and make the document available to Rolling Stock officials.

Status - Partially Implemented

Agency Action – LIRR provided documentation that the Failure Mode Effects and Criticality Analysis (FMECA), including the Automatic Train Control (ATC) system analysis, and hazard analysis for the software systems was conducted. However, LIRR provided no assurance that it covered all the potential hazards or risks.

Recommendation 10

Prepare a hazard database to identify all software and hardware systems.

Status – Partially Implemented

Agency Action – LIRR officials stated they do not need a hazard database to manage the contract and that it is not a requirement in the contract. They added they have a database for all the documents in their construction management consultant's SharePoint that they can access. While we were able to find the documents in SharePoint, it did take guidance from LIRR to locate them.

Recommendation 11

Notify the contractor using the Performance Improvement Letters, as required by the Guidelines.

Status – Implemented

Agency Action – LIRR has notified the contractor of unsatisfactory ratings in the All-Agency Contractor Evaluations (ACE) using Performance Improvement Letters.

Recommendation 12

Ensure that the ACE evaluator role is assigned to a Project Manager or above.

Status – Implemented

Agency Action – Since April 2021, the ACE evaluator for the M9 projects has been assigned to the Senior Project Manager.

Major contributors to this report were Robert C. Mehrhoff and Sean Liao.

We would appreciate your response to this report within 30 days, indicating any actions planned to address the unresolved issues discussed in this report. We thank the management and staff of the Metropolitan Transportation Authority – Long Island Rail Road for the courtesies and cooperation extended to our auditors during this follow-up.

Very truly yours,

Carmen Maldonado Audit Director

cc: M. Woods, MTA, Auditor General
D. Jurgens, MTA, Assistant Auditor General
Division of the Budget