

Official Audit Report – Issued July 19, 2018

Massachusetts Port Authority

For the period July 1, 2014 through June 30, 2017



July 19, 2018

Mr. Lewis G. Evangelidis, Chair Massachusetts Port Authority 1 Harborside Drive, Suite 200S East Boston, MA 02128

Dear Mr. Evangelidis:

I am pleased to provide this performance audit of the Massachusetts Port Authority. This report details the audit objectives, scope, and methodology for the audit period, July 1, 2014 through June 30, 2017. My audit staff discussed the contents of this report with management of the agency, whose comments are reflected in this report.

I would also like to express my appreciation to the Massachusetts Port Authority for the cooperation and assistance provided to my staff during the audit.

Sincerely,

Suzanne M. Bump

Auditor of the Commonwealth

cc: Thomas P. Glynn, PhD, Chief Executive Officer, Massachusetts Port Authority

Mr. Houssam Sleiman, Director of Capital Programs & Environmental Affairs, Massachusetts Port Authority

Dr. Luciana Burdi, Deputy Director of Capital Programs & Environmental Affairs, Massachusetts Port Authority

TABLE OF CONTENTS

EXECUTIVE SUMMARY
OVERVIEW OF AUDITED ENTITY
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

LIST OF ABBREVIATIONS

CP&EA	Department of Capital Programs & Environmental Affairs
DCAMM	Division of Capital Asset Management and Maintenance
Massport	Massachusetts Port Authority
OIG	Office of the Inspector General
SCC	Suffolk Construction Company, Inc.

EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Massachusetts Port Authority's (Massport's) administration of design and construction contracts for the Logan Airport Terminal E Renovation and Enhancement Project for the period July 1, 2014 through June 30, 2017.

In this performance audit, we examined whether Massport's administration of its design service contract with AECOM USA of Massachusetts and its construction service contract with Suffolk Construction Company, Inc. was consistent with applicable laws, regulations, contractual terms and conditions, and other guidance.

Our audit revealed no significant instances of noncompliance that must be reported under generally accepted government auditing standards.

OVERVIEW OF AUDITED ENTITY

The Massachusetts Port Authority (Massport) is an independent public authority that was established by Chapter 465 of the Acts of 1956. Massport owns, controls, operates, and manages Boston Logan International Airport; Laurence G. Hanscom Field; Worcester Regional Airport; the Port of Boston; and various industrial, commercial, and residential properties located mainly in East Boston and South Boston. Massport's combined operations have a major economic impact on the regional economy. It relies on its operating revenue to meet its operating expenses and is not taxpayer funded.

Massport's Department of Capital Programs & Environmental Affairs (CP&EA) administers Massport's five-year Capital Program. In June 2014 and March 2015, CP&EA awarded design and construction contracts to AECOM USA of Massachusetts and Suffolk Construction Company, Inc., respectively, to design and construct the Logan Airport Terminal E Renovation and Enhancement Project, with a combined estimated final contract value of \$167 million. The project involved creating just under 100,000 square feet of new space and renovating 150,000 square feet of existing space to accommodate new and existing airlines and their fleets of aircraft. Renovations and enhancements included constructing a new terminal wing with two-level jet bridges to accommodate new large-capacity aircraft such as the Airbus A380; new and reconfigured offices, ticket counters, passenger and baggage screening areas, and airline clubs; extension of the west end of the terminal to add three boarding gates; Wi-Fi-enhanced passenger holding areas; and new and reconfigured concession and retail spaces.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Massachusetts Port Authority (Massport) for the period July 1, 2014 through June 30, 2017.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is a list of our audit objectives, indicating each question we intended our audit to answer and the conclusion we reached regarding each objective.

Ob	jective	Conclusion
1.	Were Massport's design and construction contracts procured in compliance with Sections 44–52 of Chapter 7C of the General Laws for design contracts and Sections 1–13 of Chapter 149A of the General Laws for construction contracts?	Yes
2.	Were Massport's design and construction contract costs necessary, properly authorized, and compliant with contract terms, and was the contract completed within established timeframes?	Yes
3.	Were all consultants, subconsultants, general contractors, and subcontractors legally eligible to enter into contracts with state agencies and authorities?	Yes

To achieve our objectives, we gained an understanding of the internal controls we deemed significant to our audit objectives and evaluated the design and effectiveness of controls related to contractor payments and change order management. We also performed the procedures described below.

We reviewed the two exemption letters¹ issued during the audit period by the Division of Capital
Asset Management and Maintenance (DCAMM) Designer Selection Board to ensure that
Massport's exemption from the board's jurisdiction was in effect when Massport procured
design services from AECOM USA of Massachusetts for the Logan Airport Terminal E Renovation
and Enhancement Project.

^{1.} To request exemption from the jurisdiction of the Designer Selection Board, agencies must submit their designer selection procedures to the board for approval. The procedures must comply with Sections 45–53 and 56 of Chapter 7C of the General Laws. If approved by the board, exemption letters are sent to agencies to exempt them from the board's jurisdiction for two years.

- We reviewed the three annual letters issued by the Office of the Inspector General (OIG) during
 the audit period that approved Massport's procedures for procuring construction-manager-atrisk² services. To ensure compliance with the procedures, we reviewed documents, including
 Massport's selection committee minutes, public notices and advertising for Requests for
 Qualifications and Requests for Proposals, public bidding records, and contract award letters.
- We verified that Massport's procurement of construction-manager-at-risk construction services from Suffolk Construction Company, Inc. (SCC) was fully compliant with Chapter 149A of the General Laws.
- We verified that Massport's 2015 construction-manager-at-risk procedures, used to manage the
 construction of the Terminal E Renovation and Enhancement Project, were approved by OIG as
 required by Section 4 of Chapter 149A of the General Laws.
- To test design consultant costs, we selected a nonjudgmental sample of 3 out of a population of 26 payment requisitions from the audit period, totaling \$6,223,722, to ensure that design costs billed to Massport by AECOM USA of Massachusetts were allowable, properly documented, approved, paid, and posted to the general ledger.
- To test consultant labor costs for work performed by AECOM USA of Massachusetts personnel, we judgmentally selected a nonstatistical sample of 15 consultants from a population of 70 and examined some timesheets, payroll registers, and overhead allowances³ to ensure that labor costs were accurately calculated, reasonable, adequately supported, and compliant with contractual labor rates.
- To test design subconsultant costs billed to Massport, we judgmentally selected a nonstatistical sample of 23 subconsultant invoices from a population of 42 to ensure that labor costs were reasonable, adequately supported, and compliant with contractual labor rates.
- To test construction cost payments, we judgmentally selected 3 payment applications, valued at \$28,673,639, from a population of 33 to ensure that construction costs submitted to Massport by SCC for payment were allowable, properly documented, approved, paid, and posted to the general ledger.
- To determine whether construction change orders were necessary, properly authorized, documented, and accurately calculated per contract terms, we reviewed the population of 32 change orders valued at or above \$250,000 from the audit period by testing a random nonstatistical sample of 5 change orders with a total value of \$3,697,875.
- To verify that the Terminal E Renovation and Enhancement Project was completed within the timeframe specified in the construction contract, we verified the execution date of the Master Construction Services Agreement, the initial payment requisition date, and the Partial and Full Beneficial Occupancy Permits issued by the City of Boston.

^{2.} Construction-manager-at-risk services entail a commitment by the construction manager to deliver a project at or below a guaranteed maximum price that is based on the construction documents and specifications.

^{3.} Overhead allowances are amounts specified and included in a contract for ongoing business expenses of the contractor.

- To test the accuracy of budget estimates and project approvals, we examined construction budgets that were prepared by AECOM USA of Massachusetts's independent cost estimator and SCC and were used to determine the final construction budget, as well as minutes from the Massport board of directors' meetings, to ensure that all project costs were approved before they were incurred.
- To determine whether all consultants, subconsultants, general contractors, and subcontractors were legally eligible to enter into contracts with state agencies and authorities, we compared a list of all consultants, subconsultants, general contractors, and subcontractors paid for work on the Terminal E Renovation and Enhancement Project to debarment⁴ lists obtained from DCAMM, the state Division of Industrial Accidents, and the state Office of the Attorney General.

We used nonstatistical sampling and did not project the results of our audit tests to the entire populations.

Data Reliability

Massport uses Oracle's PeopleSoft financial reporting system to record its financial transactions. We determined the reliability of the payment data for the audited contracts by obtaining original source documentation, such as contractor payment applications, and reconciling them to the general ledger. We determined that the data were sufficiently reliable for the purposes of our audit.

For the Terminal E Renovation and Enhancement Project, Massport used PMWeb's project management information system to record all project cost information, including change orders. We assessed the reliability of the data by reconciling the change order log to the SCC job cost ledger. In addition, we traced a nonstatistical random sample of data to source documents. We determined that the data were sufficiently reliable for the purposes of our audit.

^{4.} Debarment is a legal action that prohibits a business from bidding on, or participating in, any state-funded or municipally funded contracts for a period of time for violations of certain laws governing public buildings or other public works.