

LOGAN INTERNATIONAL AIRPORT CBIS RECAPITALIZATION/OPTIMIZATION PROGRAM



OWNER:
MASSACHUSETTS PORT AUTHORITY

BNP PROJECT TEAM:
STEVE LAPORTA
TOM JENNINGS
ALEX HEAD

LOCATION:
BOSTON, MASSACHUSETTS, USA

CONTRACT PERIOD:
2014 - 2016

BHS CONSTRUCTION AMOUNT:
\$75 MILLION (ESTIMATED)

TOTAL CONSTRUCTION AMOUNT:
\$150 MILLION (ESTIMATED)

REFERENCE:
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SCOPE OF SERVICES:
DESIGN DEVELOPMENT
CONTRACT DOCUMENTS
CONSTRUCTION SUPPORT

RELEVANCE:
CHECKED BAGGAGE SCREENING

In 2002, in-line Checked Baggage Inspection Systems (CBIS) were installed and commissioned in various locations in Terminals B, C and E of Boston Logan International Airport (BOS) – one of the first major U.S. airports to implement in-line EDS screening to comply with the TSA's 100% checked baggage screening requirement. Terminal A was subsequently constructed with an entirely new baggage handling system that also included an in-line CBIS.

BNP designed each of these screening systems, which were state of the art at the time of their installation. However, they were designed well before the existence of the Planning Guidelines and Design Standards (PGDS) established by the TSA in 2009 (and subsequent updates) and therefore differ from some of the design practices that have since become standard in the industry.

The primary objectives of the Logan (BOS) CBIS Recapitalization/Optimization Program, which was completed June 2016.

- Provide a centralized location for TSA On-Screen Resolution (OSR) workstations
- Replace the existing EDS machines with new modern-day equivalent
- Modify the Checked Baggage Reconciliation Areas (CBRA) to improve performance and/or reduce injuries through improved ergonomics; the design objective being compliant with current PGDS guidelines
- Where opportunities may exist, and are achievable within budgetary restrictions, modify, replace and/or combine systems to take better advantage of newer EDS machine capabilities and increase efficiency by potentially reducing the number of EDS machines, associated maintenance costs and staffing requirements.

Once again, the Massachusetts Port Authority has looked to BNP (as a part of their design team) to help them work with the TSA to determine the best solution for each of the various systems, handle the associated BHS design responsibilities and provide on-site full-time construction administration services, inspections and testing support.

The resulting designs include eight (8) in-line baggage screening systems with a total of 33 in-line EDS machines (4 - L3 eXaminer 3DX 6600, 29 - L3 eXaminer 3DX 6700) reduced from 41.

- Five (5) existing screening systems wherein the existing EDS machines were systematically replaced in a phased-in implementation process (within an operational environment), the existing CBRAs reconfigured or replaced to improve ergonomics, comply with current standards, and targeted performance enhancements.
- Three (3) new screening systems to effectively replace several smaller existing systems; providing a more efficient solution for screening the associated bags by reducing the number of EDS machines, associated maintenance costs and staffing requirements.