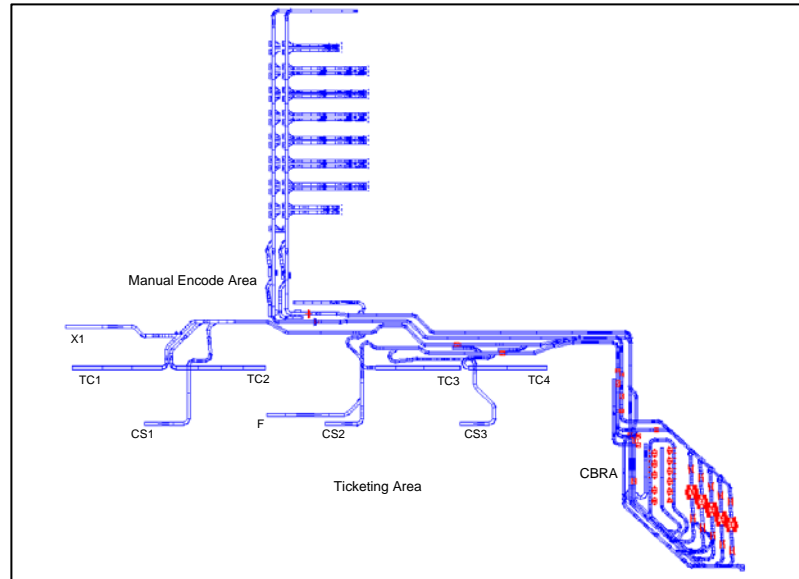




Los Angeles International Airport (LAX) – Terminal 4 Checked Baggage Inspection System (CBIS)



Layout of Terminal 4 CBIS

Client Name: American Airlines

Date Started: April 2013

Date Completed: May 2014

American Airlines is currently in the process of updating its Terminal 4 (T4) in-line checked baggage inspection system (CBIS) at Los Angeles International Airport (LAX). Since American Airlines is merging with US Airways, a combined June 2014 flight schedule was developed by AA Capacity Planning to determine the peak month (based on load factor data). Based on discussions with the Transportation Security Administration (TSA) it was agreed that the LAX T4 CBIS will have MDI CTX-9800 machines.

TransSolutions developed a 3D simulation model of the LAX Terminal 4 CBIS design developed by CAGE, Inc. The Terminal CBIS was modeled using AutoMod™, a 3D modeling tool, widely used for material handling applications. The model tracked all individual bags from check-in, through TSA security screening until the bags are delivered to a make-up device.

TransSolutions' analysis included:

- Performing Average Day Peak Month (ADPM) Analysis to generate passenger and baggage demand and to compute Explosive Detection System (EDS) requirements, On-screen Resolution (OSR) requirements, and Explosive Trace Detection (ETD) requirements.
- Identifying bottlenecks and making the CBIS compliant to TSA's *Planning Guidelines and Design Standard (PGDS) v4.1*.
- Developing and evaluating simulations models of proposed designs and to ensure that all CBIS are *PGDS v4.1* compliant.
- Evaluating impact of system faults and jams on baggage delivery performance