

LAX Remodels Baggage Handling at Terminal 3 for Speed, Efficiency



The Terminal 3 passenger lobby at Los Angeles International Airport (LAX) used to be filled with check-in counters, passengers with bags, airport and airline staff, security, and massive truck-sized explosive detection machines. Not anymore.

To improve passenger safety and movement in the lobby area, Los Angeles World Airports, the Department of Homeland Security -Transportation Security Administration initiated the Terminal 3 In-Line Baggage Handling System renovation project. Improvements to the Terminal 3 baggage handling system included replacing the existing baggage handling spaces, constructing new baggage screening rooms, replacing outbound baggage conveyor systems, and installing/integrating Transportation Security Administration-provided explosive detection system machines as well as extensive relocation of electrical, security and fire systems. The new equipment was installed into approximately 35,000 sq ft of renovated space within the existing terminal along with building additions of approximately 8,000 sq ft.

PBS&J's Construction Management Division coordinated and executed the baggage handling system renovation process and schedule. The construction management activities at an airport differ from other similar projects in that airport is a 24-hour operational and high security entity. Close attention to all security and operational details at all times was critical.

In an effort to avoid impacting normal airport operations, the team divided work on the baggage handling system into several phases, completing most work at night when the terminal was less crowded.

Temporary Facilities

The first phase involved the construction of a temporary baggage conveyor and two canopy-covered carousels in a new temporary area on the eastern side of the terminal.

Keep in mind that at any time, day or night, the Terminal 3 airlines must use the conveyor and carousel system to transport hundreds of bags for every flight. Even late at night, there are at least three or four flights loading and boarding in any given hour.

Close coordination and communication with the airlines was required when it was time to stop the use of the four existing conveyor and carousels system and start the use the new temporary system. A mitigation plan was in place to avoid any disturbance to the operations of the daily

flights. This mitigation plan included making sure that extra baggage handling staff and equipment were available to move the baggage by hand if necessary.

Once the temporary conveyor and carousels system was constructed, the team was able to phase out the old system within few hours. It all went extraordinarily well and all baggage made it to the appropriate airplane.

Out with the Old

The second phase of the project included demolition of the existing baggage handling system including the conveyors and carousels, as well as installation of the new explosive detection systems. Again, the construction management team closely monitored and coordinated activities between all construction trades and the explosive detection system installers during the process to ensure on time schedule delivery.

The final phase was removal of the old baggage screening machines from the Terminal 3 lobby.

To support the project, the construction management team facilitated partnering between the contractor and client which resulted in a smooth and trusting relationship between the main parties. The team also attended frequent stakeholder meetings to give them a heads-up on upcoming activities and incorporate their input.



This is an important lesson for all construction management projects: the stakeholders did have valid concerns about potential impacts to their daily operations. However, they also had excellent suggestions about preventive measures to ensure smooth transitions during the work. When working in an area as demanding as an operating airport, proactive communications really paid off.

By Andy Nahle, principal project director, PBS&J

Andy leads the LAX North Terminals Inline Baggage Construction Management Team. He can be reached at 310-577-3463 or anahle@pbsj.com.