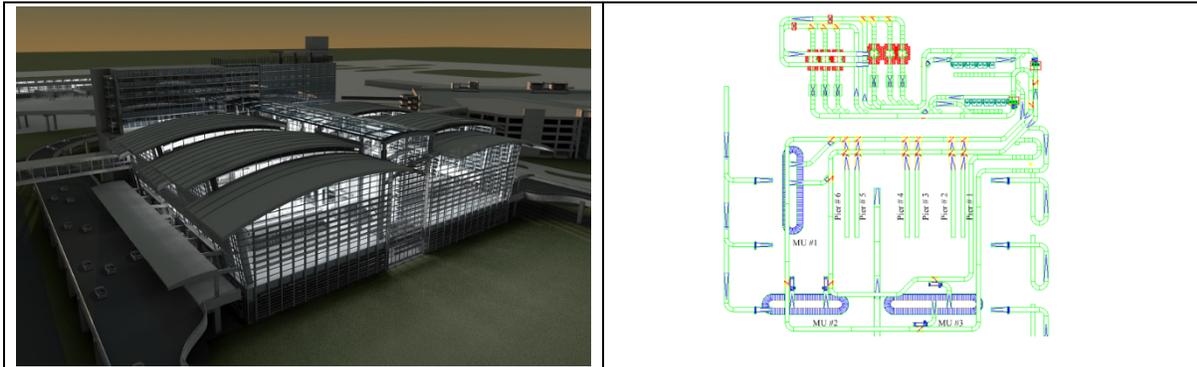


Sacramento International Airport – Terminal Modernization Program Phase III



Proposed Central Terminal B and Central Terminal B Baggage System

Client Name: Corgan Associates, Prime contractor to Sacramento County Airport Systems

Date Started: December 2006

Date Completed: December 2007

As part of the Terminal Modernization Program at Sacramento International Airport (SMF), TransSolutions was retained by Corgan Associates to assist in the design development phase of Central Terminal B and Terminal A. The expansion is the largest in the Airport's 40-year history, and the \$1B renovation includes a four-story steel-and-glass central terminal building, a jet gateway concourse in the north airfield, and an automated tram connecting the two facilities.

Using analyses and simulation modeling, TransSolutions was tasked to validate space and operational requirements for the following areas:

- Check-in Lobby and Curbside Check-in
- Outbound Baggage Handling Systems
- Inbound Baggage Claim
- Central Terminal B Automated People Mover (APM)
- Vehicle Curbside and Roadway

As part of the team, TransSolutions simulated these areas of the terminal and roadway under a forecasted 2015 demand to help SMF ensure that the proposed systems were able to satisfactorily accommodate the forecasted passenger, baggage, and vehicular demand and to provide acceptable Levels of Service (LOS) to passengers.

Early in the project, TransSolutions collected vehicular- passenger-and bag-specific data on-site at SMF and participated in discussions with the design team to ensure that the performance criterion, modeling assumptions, proposed designs and passenger flows were accurately modeled.

TransSolutions developed simulation models of the roadway network, passenger check-in, security screening, and in-bound baggage claim processes. These models were used to evaluate the performance of the systems under the design demand.

Statistics were reported on passenger wait times, queue lengths, and LOS; vehicle delays and curbside LOS; and baggage handling system performance such as the number of mishandled bags and time-in-screening. TransSolutions' detailed analysis had a significant impact in helping the project stakeholders assess the operational viability of the chosen design and gave them confidence that the terminal would provide passengers with the desired LOS.