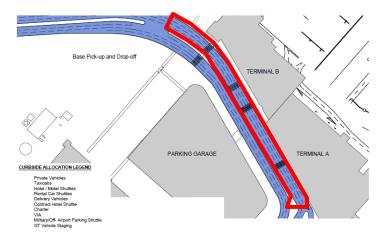


San Antonio International Airport Curbside Roadway - Taxi Dispatch and Contract Shuttle Operations



Client Name: San Antonio International Airport

Date Started: May 2011 Date Completed: August 2011

In November 2010, San Antonio International Airport (SAT) opened the new replacement Terminal B. Several methods had been used to stage and dispatch taxis in the terminal area since the opening of the new terminal. Historically, taxis moved from the taxi hold lot into a large loading queue. At the end of the loading queue was a four-space active loading zone for Terminal A. Based on flight schedule and demand, taxis were dispatched from this loading zone to wait in a four-space loading zone at Terminal B. This method was not preferred by some taxi operators who proposed that a single, central 10-space loading zone located between Terminals A and B be used instead.

SAT requested that TransSolutions provide an analysis of four scenarios to determine the relative performance of the two aforementioned taxi queue scenarios (each with or without contract hotel shuttle parking on the inner curb).

TransSolutions developed a vehicle simulation model of the lower-level inner arrivals roadway. The model tracked passenger movements from the terminal doors to their vehicle. The scope of the simulation model of the curbside is shown above highlighted in red.

Based on the time and space considerations of this analysis, TransSolutions recommended that the dual queue system for dispatching taxis remain in place, but with additional controls to protect taxis from waiting too long when demand wanes at Terminal B.

Additionally, TransSolutions discovered that removing the contract hotel shuttles from staging on the inner curbside reduced the maximum occupancy of the curbside sidewalk even under current passenger demand. Under future demand, the reduction in curbside sidewalk congestion is reduced by 50%. Since the lower level arrivals curbside sidewalk is very narrow, especially adjacent to Terminal A—the most active terminal, TransSolutions determined that relocation of the contract hotel shuttles to the outer curb would proactively serve to mitigate passenger congestion.