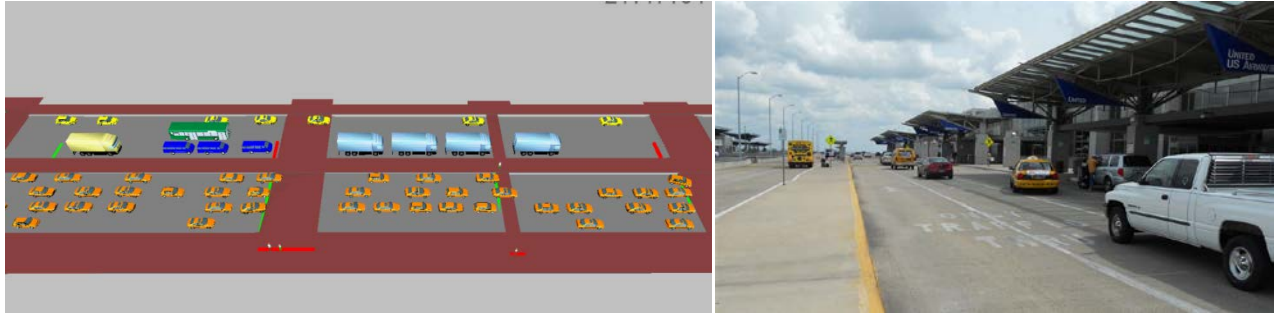




Austin Bergstrom International Airport Curbside and Parking Improvements Analysis



Client Name: Reynolds, Smith & Hills (RS&H) / City of Austin Department of Aviation

Date Started: September 2011

Date Completed: August 2013

The new consolidated rental car facility being developed at Austin Bergstrom International Airport (ABIA) will result in a vacant third floor of the terminal parking garage. TransSolutions was part of the design team for converting this third floor to patron parking along with investigating the terminal curbside performance and updating the north parking plaza exit.

TransSolutions was tasked with analyzing use, capacity, and performance of the upper- and lower-level curbside roadways at the ABIA terminal. Specifically, the curbside analysis included an initial investigation to identify probable causes of current curbside congestion and a simulation analysis to refine and include additional detail into the curbside performance review. Analyses of the curbside was performed to address the peak-season issues which take place in the spring, related to spring break vacation traffic and the South by Southwest festival, at a future-year demand level.

The team performed an on-site traffic survey and data collection to identify current conditions, vehicle demand, operations, behavior, and other pertinent data pertaining to the terminal curbsides and north parking plaza exit. TransSolutions then developed a Vissim simulation model of the vehicular flows on the curbsides. The baseline findings identified a very poor Level of Service (LOS) on the inner curbside of the lower-level. Two possible improvements were analyzed:

- Direction and/or enforcement of traffic by airport personnel to balance curbside use and move vehicles down the curbside.
- Providing vehicle right-of-way at the highly-used crosswalks in the center of the curbside.

Next, the peak hour traffic demand was increased in the simulation model to investigate curbside congestion and LOS with the expected growth in traffic. Various improvements were tested to provide acceptable LOS, including signal re-timings at some crosswalk rights-of-way. The design team used TransSolutions' analyses in developing their plans for the curbsides and parking plaza exit.