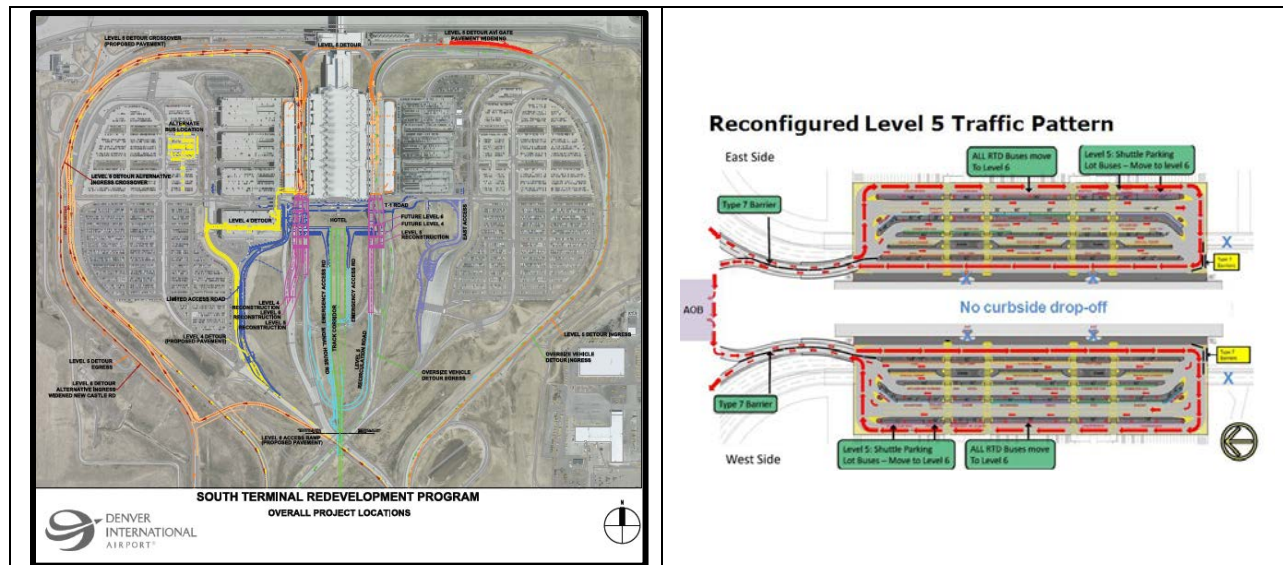




## Denver International Airport South Terminal Redevelopment Program



Denver International Airport – Access Roadway Network and Traffic Patterns

**Client Name:** Parsons  
**Date Started:** March 2012

**Date Completed:** July 2012

TransSolutions was retained by Parsons to validate the design of the revised flows of passenger and commercial vehicles as a result of the bridge reconstruction project using a projected 2012 flight schedule. The model provides a validated baseline model useful for sensitivity analysis throughout project construction. An animation of the roadways and curbsides was also provided.

TransSolutions created a simulation model that tracks vehicles as they enter the airport environs and proceeded along the access roads to the arrival and departure curbs, the commercial curb, and the parking lots.

The 2011 flight schedule (increased by 4.25% to reflect growth to 2012) was used to generate vehicle and passenger demand and two vehicle flow scenarios were then studied:

- 1) Current roadway configuration and flow (Baseline Access and Circulation Plan)
- 2) Modified flow due to bridge reconstruction (Temporary Access and Circulation Plan)

Travel times for different vehicle types (private, door-to-door / parking shuttle, taxi, limo, bus, etc.), including time spent to pick-up/drop-off passengers and any delays due to travel or congestion were analyzed.

Vehicle occupancies at every segment of the model were also recorded and analyzed. Congested areas were identified and possible causes of this congestion were investigated, such as a shift in where passengers were dropped off (as curbside drop-off on Level 5 was eliminated for the Temporary Access and Circulation scenario), or flow changed due to construction.