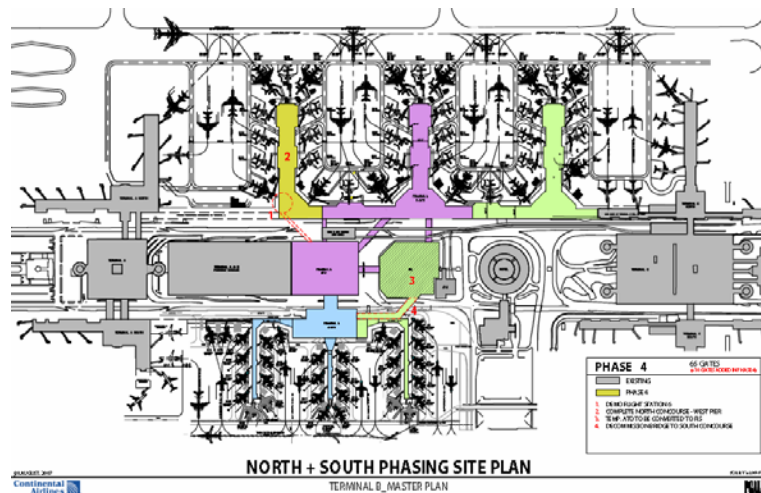




Airport Ramp Congestion and Delay Simulation Analysis



IAH Airfield after Concourse B North and South Expansion

Client Name: PGAL, Prime contractor to Continental Airlines

Date Started: April 2007

Date Completed: January 2008

In recent years, George Bush Houston Intercontinental Airport (IAH) Terminal C has been improved and Continental Airlines has opened a modern Terminal E, while Terminal B basically has the same original design as when the airport opened in 1969. Continental undertook a master planning project for Terminal B that will add capacity, accommodating additional operations. PGAL asked TransSolutions to simulate and analyze IAH airfield movement near the proposed expansion of Terminal B South and North in the Airport's primary operating configuration to determine if Continental Airlines' planned 2011 schedule can be handled efficiently.

TransSolutions updated the calibrated *SimmodPLUS!*[®] model used in the 2004 IAH Airfield Capacity Analysis to reflect the new terminal expansion, including gate access and ramp operations. This model was then used to assess the impact of these terminal expansions. The model including arriving aircraft within 10 nm. of the landing runway, landing, exiting the runway and taxiing until reaching the ramp area of their respective terminal. Departures were modeled from leaving the ramp area of their respective terminal, taxiing to the runway, takeoff, and on initial departure heading.

Based on the analysis, taxiway delays for aircraft gated at Terminal B South and North under the 2011 traffic demand are well within acceptable limits, indicating that the terminal expansion does not create a chokepoint or potential problem for aircraft taxiing near these terminals. Further, the delays experienced by aircraft waiting to access the east bridge, while higher than preferred, is well within acceptable limits and does not cause aircraft queues to extend back onto nearby parts of the airfield.

This analysis provided Continental Airlines and PGAL with the information needed to move forward with construction and to be confident that the proposed expansion is not expected to cause unforeseen delays on the planning horizon.