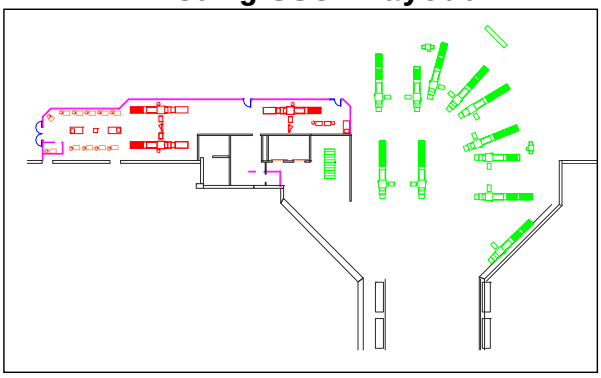
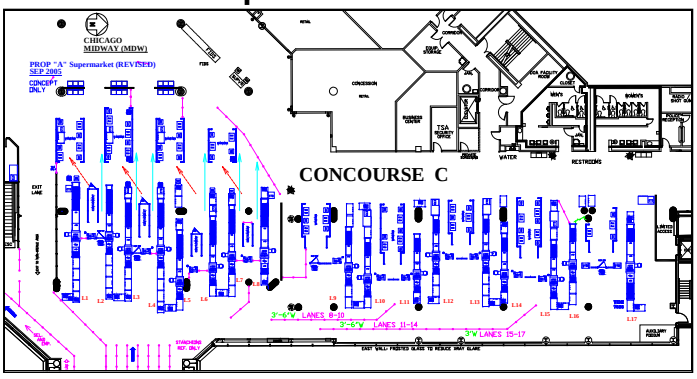
TRANSSOLUTIONS

Security Screening Checkpoint (SSCP) Analysis

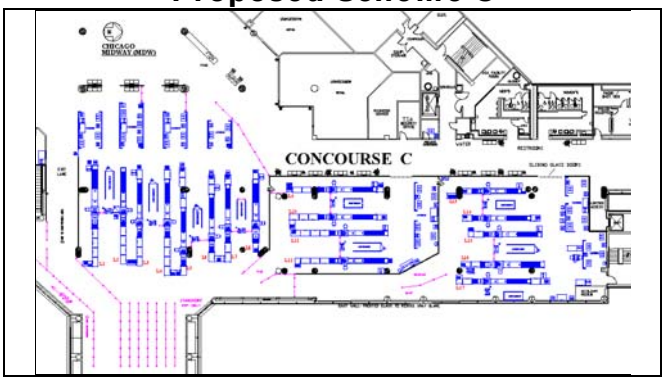
Existing SSCP Layout



Proposed Scheme A



Proposed Scheme C



Chicago Midway Airport (MDW)

Client Name: AvAirPros
Date Started: September 2005 **Date Completed:** November 2005

AvAirPros retained TransSolutions to evaluate the performance of the two preferred schemes – Scheme A and Scheme C – for expanding the Security Screening Checkpoint (SSCP) at Midway International Airport (MDW). The objectives of the study were to compare the performance of the future layouts with the existing layout, assess the performance of the future layouts, and identify the best layout for the SSCP at MDW. To achieve these objectives, TransSolutions developed a discrete event simulation model that tracks individual passenger movements arriving to, queuing for, and entering the SSCP.

Analyses showed that the two proposed layouts perform similarly. Neither layout provided significantly better service than the other one. Findings support that a major contributing factor in SSCP performance is ID Check processing capacity. Adequate ID Check capacity not only provides better service at the ID Check queue but also minimizes the starvation of passenger flows to the magnetometer and x-ray queues. In order to support 17 SSCP lane throughputs, ID Check capacity needed to be improved by either increasing the number of ID Check resources and/or reducing ID Check processing times.