

1096-VR-2539 **Scott A Rega*** (s.a.rega@iup.edu), 4608 Greenfield Road, Bethlehem, PA 18017. *Airport Simulation and Optimization of Passenger Flow using Arena*. Preliminary report.

The model simulation of the Newark Liberty International Airport focuses on Terminal C, United Airways. Using passenger flow from their initial arrival through transportation and various check-in methods, I was able to find different scenarios and results of how quickly each customer progresses and also the total amount of customers which move through the system. Using Process Analyzer, I was able to come up with an optimal method to increase multiple utilization functions while still preserving the integrity of the waiting and total times of passengers within the system. A goal of this project is to save time for the check-in line queues, so therefore one thing I will modify in the simulation is the amount of resource workers for the airline, therefore to accommodate more customers at once. There could be more stations for the heavier populated airlines, such as United Airways in Newark Airport. (Received September 17, 2013)