The Convention Registration Simulator provides a simple visual representation of what the convention center may look like on registration day. This representation allows the staff to make well educated decisions on the number of registration windows that are needed. The program allows the convention center management to change the different variables to see how crowded the registration area will become based on different expected values.

Currently, management wants to have enough registration windows to keep the lines below five registrants at all times. Based on the simulation, the convention center will need to have four registration windows open to keep the lines to a maximum of five registrants. When the simulation was run with three registration windows, the lines exceeded six people in every simulation while averaging about four to five people in each line. When the simulation was run with four lines, there was an average of three people in each line throughout the simulation and a max of five.

If management is very strict and wishes to never have more than five people in each line, they should open four registration windows. If management is willing to allow a very small portion of lines to reach six people, they could only open three registration windows. Opening only three windows would save management on staff, but it may increase frustration of the registrants because the average waiting times will be longer. If management would like the lines to average two people in each line and only reach a maximum of four registrants, they should open five registration windows. If many more registrants show up than are expected, having six windows would guarantee that there would be enough room in each line for those extra registrants.