

J. W. Marriott Hotel Complex – Indianapolis



Client Name: CSO Architects, Inc.

Date Started: March 2008

Date Completed: June 2008

CSO Architects tasked TransSolutions with performing pedestrian flow analysis in the special event space is on three levels of the J. W. Marriott Hotel Complex. The simulation model included all access to the complex, travel in the corridors, elevator and escalator access and queuing. Each pedestrian's movement is tracked throughout the model of the complex, allowing a detailed evaluation and measurement of level of service and wait times. The objectives of this study were to:

- Verify that patrons for several events can exit the building simultaneously without creating unacceptable levels of interference and delay
- Ensure that corridors, lobbies and exhibition/ballroom/meeting room exits are sized adequately so that no bottlenecks exist
- Confirm that the escalator system (escalators and pedestrian landings) are sized adequately so that pedestrians can exit from each level during the peak hour safely and without experiencing significant congestion
- Confirm that the elevators and elevator lobbies provide a good level of pedestrian service without significant delays or congestion
- Compare various alternatives through iterative "what-if" analyses
- Compare traffic flow to and from garage; including access to and through the signal lights at the intersection serving the hotel
- Provide animation files to help decision makers visualize areas of interest

CSO Architects used TransSolutions' analyses and animations to verify the design and present alternatives to stakeholders. The simulation model made it easy to understand the proposed flow to all involved parties.