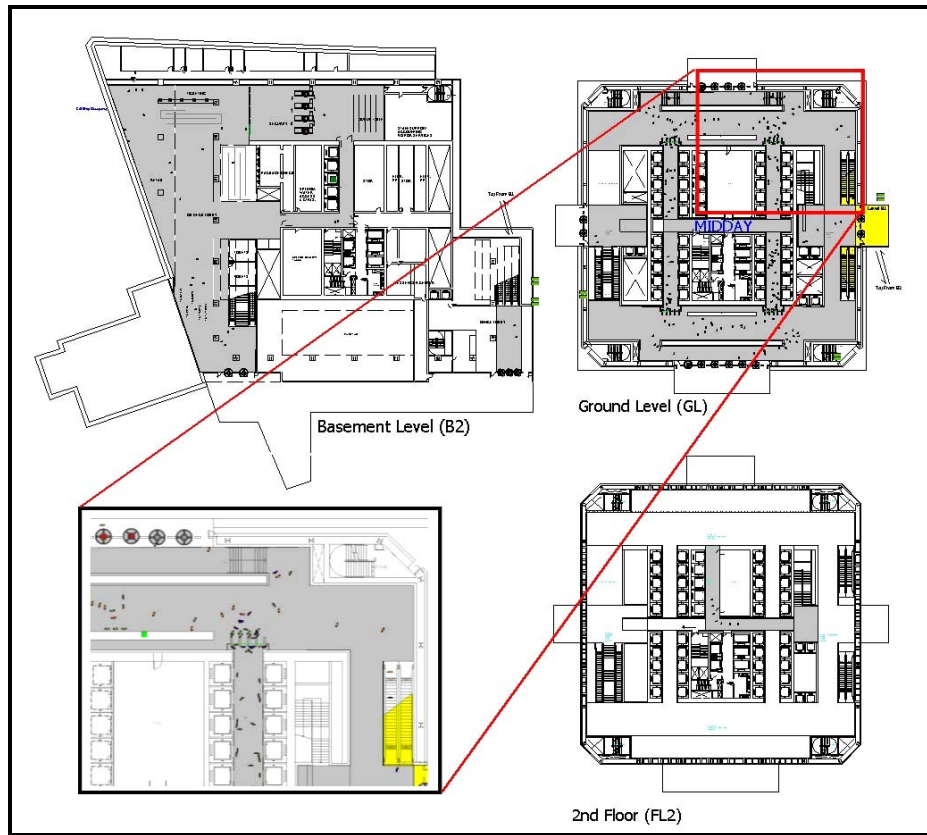


## World Trade Center Lobby & Pedestrian Flow Analysis



**Client Name:** Skidmore, Owings & Merrill LLP

**Date Started:** August 2005

**Date Completed:** October 2005

Skidmore, Owings & Merrill LLP (SOM) tasked TransSolutions with performing pedestrian flow analysis of the public lobby for the *updated* World Trade Center design. To perform the analysis, TransSolutions made changes in the detailed simulation model developed in 2003 during the initial design phase. The model included all access to the lobby via turnstiles and elevators/ escalators; travel in the lobby, check-in processing for visitors, elevator access and queuing, observation floor access, restaurant access, travel and queuing. The simulation model tracked each pedestrian's movement throughout the model of the lobby, allowing a detailed evaluation and measurement of level of service and wait times. The objectives of this study were to:

- Quantify the impact of variation in processing areas (access, check-in, elevators, escalators), and pedestrian travel speed
- Compare various alternatives through iterative "what-if" analyses
- Provide an animation of the lobby activities to help decision makers visualize areas of interest

SOM 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.