



LONDON SCHOOL OF ECONOMICS CROWD FLOW SURVEY LONDON, UK

The London School of Economics (LSE) is one of the leading social science institutions in the world. The campus has many buildings, connected by various streets, and closure of any of these can impact student circulation and cause congestion on adjacent streets.

BuroHappold Engineering's Smart Space team was commissioned by LSE to survey the flow of people on the Houghton Street and Clements Inn Passage at various times of day, in order to assess the impact that the possible closure of these roads would have during planned renovation works on adjacent buildings.

During the survey, our team measured the widths of all routes, and captured videos and photo images of the movement of people. Brief questionnaires were also prepared to help establish the profile of the route users and determine whether they were students, staff or members of the public, their origin, destination and the likelihood of them using an alternative route through the buildings.

Our study revealed what the peak hour flow rate on the streets was and where the pinch points were, both inside the building and on the streets. We were also able to see how activities taking place on the street throughout the day affected peoples' movements, and observe the effect of having temporary stalls on the route.

We then used the findings from the study to determine the expected peak hour flow rate through alternative routes. This allowed us to provide recommendations for various factors including the widths of routes inside the building, widths required for the pinch points, and the width required for doors at either end of the alternative route, enabling LSE to make an informed decision on their temporary people movement strategy.

We also made simple operational recommendations that would help to ensure smooth flows, avoid queues and maintain the 'hub' feel of university life on the campus.

CLIENT
London School of Economics

DURATION
Completed 2011

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Smart space, people movement