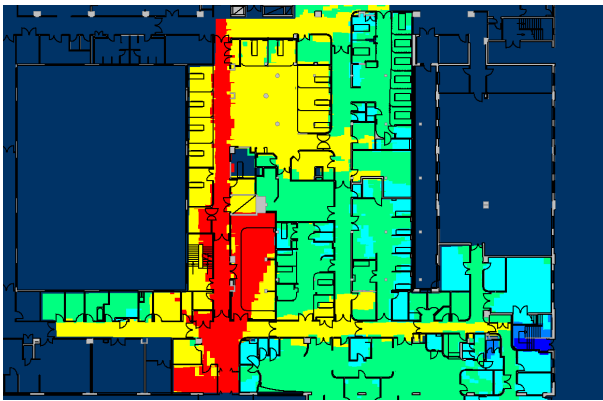


## Visibility Analysis

*The software at the heart of Intelligent Space's pedestrian model*

Intelligent Space has developed advanced software for visibility graph analysis. This software provides a computer model of the 'desire lines' for pedestrian movement within a street network, public space or building.



Wayfinding of an accident and emergency department from the main A&E entrance

### What is Visibility Analysis?

Visibility analysis is a way of modelling what pedestrians can see and where they can go within buildings and street networks. Using accurate maps and design CAD files, Intelligent Space's "Fathom" software identifies which routes will be visible to a pedestrian from every square metre of a plan. The computer then travels from each square metre to every other and maps the accessibility of all routes for pedestrian journeys. This identifies the desire lines for movement.

### Benefits

Visibility analysis is an objective tool for:

- Identifying desire lines for movement at the design stage.
- Highlighting potential locations of conflict between pedestrians and traffic.
- Locating signage for wayfinding and evacuation.
- Optimising retail design for improved foot traffic.
- Three dimensional modelling of buildings or streets showing impact of level changes on movement routes.

Some applications of visibility analysis:

- Visibility analysis has been used to support the planning of pedestrian movement routes for major urban developments such as the Greenwich Peninsula Masterplan and the 1.6km long "Europa Boulevard" development in the centre of Frankfurt.
- The analysis has been used to locate new road crossing facilities in transport planning schemes such as the Shoreditch Triangle traffic reform and the "Drive Through to Destination" masterplan for the transformation of Streatham High Road.
- Visibility analysis provided the benchmarks used for design guidance on wayfinding in new NHS Accident and Emergency Departments.
- This analysis was used to evaluate the retail potential of new designs for the redevelopment of Milton Keynes shopping centre.



Visibility analysis of the Greenwich Peninsula masterplan