



Application - Architects

Modelling London's Development with City Heights

Overview

Since the 1990s, there has been a renewed interest in high buildings due to the limitations of land availability in London's prime locations.

For the city to maintain its distinctiveness, tall buildings need be assessed both in terms of their impact on their immediate surroundings and their impact at the wider city scale.

The Problem

To carefully address the potential impact of building design on London's skyline and to protect strategic local views, architects need to plot the location and elevation of buildings within the city. Gathering such detailed information is, however, a difficult, expensive and resource intensive task.

The Solution

City Heights, published by The GeoInformation Group, offers an immediate, off-the-shelf database providing accurate 3D height data for every building across London.

The database gives architects direct access to building elevation data on either a small or large scale ensuring that more informed design decisions can be made direct from the desktop.

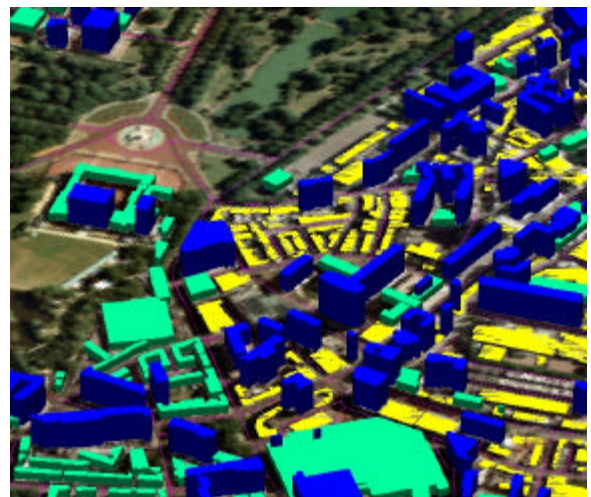
Geographically accurate, City Heights can also be used within a range of CAD and GIS programs that enable height critical applications to be undertaken for the built environment.

City Heights™ offers an accurate building-by-building height database for London. Available off-the-shelf, City Heights provides a baseline 3D model ideal for master planning, planning applications and public consultation processes.



Benefits of City Heights

- ??Off-the-shelf: available immediately, reducing project implementation and delivery time
- ??Creates a highly detailed 3D view of the city environment
- ??Offers the option to colour-code buildings by height
- ??Highlights developments violating height restrictions
- ??Realistically considers issues concerning over-shadowing and visual intrusion
- ??Enhances communication and understanding
- ??Facilitates visibility analysis



3D view of London's buildings



Examples of use

?? Height restrictions

Buildings that may violate local height restrictions can now be detected with ease.

?? Sun/Shadows Analyses

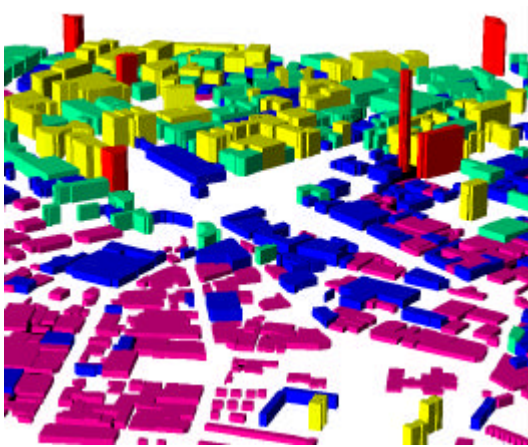
Reliable shadow studies and lighting analyses can be quickly determined to demonstrate the amount of light a proposed building will block for neighbouring offices and dwellings.

?? Strategic Views

Protecting strategic views from new building developments, such as St Paul's Cathedral, can be verified in a matter of minutes.

?? Public consultation

Providing realistic 3D simulation can now be achieved and used as a powerful and effective communication tool when discussing proposed building development.

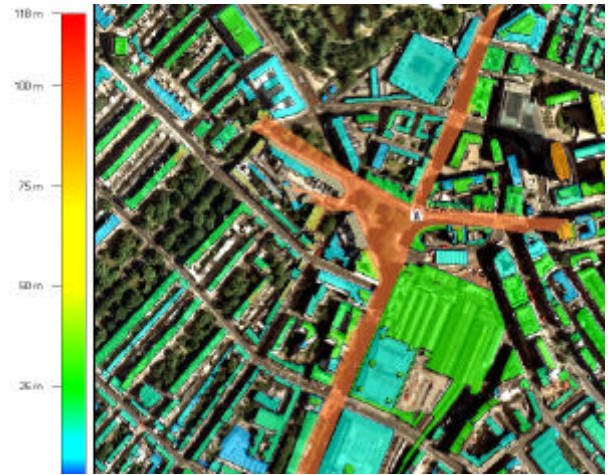


3D buildings are colour-coded by height value

About City Heights

City Heights forms one of the five layers within the Image to Information (I2I™) suite of intelligent geographical information databases offered by The GeoInformation Group.

The height database is photogrammetrically derived from Cities Revealed™ high-resolution aerial photography. Aiming to achieve a vertical accuracy of +/-0.5m at 95% confidence level, this detailed and accurate height database is provided in a format suitable for use by all users that can be directly linked into OS mapping.



Aerial photograph overlaid with City Heights. Orange zones indicate those areas visible from a building

Aerial Photography

City Heights may also be used in conjunction with Cities Revealed's high-resolution aerial photography. Recently captured at 12.5 cm resolution for the whole of London, the photography provides an immediate and highly detailed site assessment from the air.

Furthermore, all Cities Revealed photography is supplied with its own free desktop data viewing software, CRImage Manager. This powerful yet easy to use software requires no training and enables quick access to large image datasets with the addition of useful management and reporting tools.

Data Supply

Available in a range of vector formats including GIS and CAD formats.



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