## **Planning through** e-government

e are on the edge of a revolution in the way we communicate and visualise our built environment. Research at the Centre for Advanced Spatial Analysis, University College London, under the title 'Online Planning' (www.onlineplanning.org) has been focusing on how to deliver a planning system over the internet for the last five years. A series of prototypes have been developed, some of which we detail here, that present the possibility to radically change how local authorities and government agencies communicate aspects of urban policy to the public.

e-Government is the current buzz word in the field of public participation. Using digital devices linked to the internet, people can interact and communicate with the various parties involved in managing our built environment. While the aims of the Government are admirable, in terms of the planning system, they are perhaps too conservative. Research in the United Kingdom is leading the world in the ability to move the planning system into the third dimension, by building Virtual Cities viewable over standard internet connections and home computers. We naturally view the world in the third dimension, yet the planning system is still two dimensional, focusing on plans and maps. This is partly the reason why, when a development has passed planning permission and is built, it rarely looks as intended. It is difficult for the layperson to visualise a building from a two dimensional plan and any Computer Aided Design (CAD) images supplied have often been drawn up by the developer as marketing tools, rather than a balanced view of the development. How many developments include visualisations with hot air balloons in view, sunny skies and cut out people in suits? The answer is too many, and if we are to see truly what a new development will look like and communicate it to the public, we need a three dimensional visualisation built by local agencies into which new developments can be inserted.

We have developed such a system at CASA, an Online Planning System, whereby local areas can be rapidly visualised and placed online for discussion. The aim is to roll this out for the whole of London as part of our Virtual London initiative which, to date, has focused on a pilot project as part of the regeneration of Woodberry Down in Hackney, North London. The Woodberry Down Regeneration project is ambitious, aiming to regenerate some 2,500 housing units at a cost of £150m over a 20 year period. The process of demolition, refurbishment and decanting the local population begins in 2003 and the residents have been at the heart of the consultation process via public meetings and an innovative website.

The Woodberry Down Regeneration Team (WDRT) has set ambitious objectives for the project. They argue that for the project to succeed, it must have at least a 20 year life, probably longer. All the lessons and mistakes of past attempts at renewing social housing and the problems of involving the local community have been taken on-board. The Team define three major components to their regeneration - taking account of social transformation posed by changing lifestyles which will clearly alter the way people use socially provided housing in the future, accounting for the ecological balance between the area and the community, and incorporating '... new developments in IT into new and existing homes, and the establishment of new networks connecting residents...'. This concern for empowerment through the use of IT reflects a more general concern for community participation through consultation and involvement. The delivery of information and innovative opportunities to interact in the design process are central to the programme. WDRT see this as consistent with the wider agenda of 'Modernising Government', which is being advocated more locally by the GLA through Nicky Gavron. The ultimate goals of the regeneration are to provide a better physical and social environment and as part of this, the provision of online IT services is seen as a crucial objective. A step towards this is the design of the website, a first step in wiring the wider community.

The website itself (www.hackney.gov.uk/woodberry) is being designed by many stakeholders. WDRT are overseeing this but much of the material has been compiled by the local community, acting through the

Andrew Hudson-Smith, Research Fellow at University College, London, illustrates the potential the internet possesses in the field of urban development... Estates Development Committee (EDC), a 30 strong body representing all 104 housing blocks which comprise the estates. The Centre for Advanced Spatial Analysis (CASA) within University College London (UCL) has taken the lead in the technical design, with the Architecture Foundation and Hackney Building Exploratory providing the conduits for funding from the Regeneration Team and contacts to the local community. The basic design of the website began in early 2001 and involved a series of meetings between CASA, the WDRT and the EDC, in which preliminary designs were proposed and tested with the focus on making the site exciting and useful.

As the site is under active development, visual information about the existing site and future plans are contained under the '3D Virtual Tour' menu, which lets users select from 104 blocks, load pannable and zoomable aerial photographic maps, and thence select digital panoramas of different parts of the site, giving some feel for what the place is like now. For Rowley Gardens, for example, we have developed three options which enable the user to see the present configuration of housing blocks and to test three alternative designs which can be explored in 2D and 3D. To do this, the user needs to download a plug-in this happens automatically if the user enters this area - and then, through point and click, the users can explore different options. In the second phase, this facility will be extended to all the housing blocks comprising the estates, as attention begins to be focused on the use of the website for active involvement of the community in future designs.



A sample from the Woodberry Down website illustrating 3D design options

Central to the design feedback is a discussion area which enables messages to be posted, and active and archived discussion to be viewed, while a search facility and contact details let the user explore the site efficiently and keep in touch with the WDRT. The board also allows the ability to vote securely online; again this is central to the concept of electronic government. There is much more that might be said about the site but only by accessing it can users gauge its real potential in regeneration. The site is continually being extended to include more multimedia and information concerning the area while the team are hard at work to illustrate to residents how effective this resource is. We are conscious that this kind of public participation is very new, and people need to learn how to use it to the best effect. We are but at a beginning in the use of new technologies for public participation but there is great optimism that these new ways of communication will help the community better than anything we have done hitherto. In this, Woodberry Down is pointing the way.

More recently, a Best Practice website has been launched by the Architecture Foundation which uses similar technology. The Glass-House (www.theglasshouse.org.uk) is a new service offering design advice, training and support to tenants in areas undergoing regeneration. Launching the service at 'The Value of Architecture Centres' conference, Lord Rooker, the new Minister of State for Housing and Planning, said, "This is an excellent example of how modern technology can be a really positive tool to get people involved in decision-making. The end product has to be exponentially better when people have been involved this way".



Images from the Glasshouse website illustrating 3D options, panoramas and a photorealistic model of the site

The technologies behind The Glass-House were implemented by Plannet Visualisations Ltd a company which offers services to architects and planners wishing to use internet-based technologies for public participation in the planning process. We have only provided a glimpse of what is now possible in terms of electronic government. We are leading the way in the United Kingdom; all that is required now are forward thinking government agencies to pick up on the research and use it to communicate with the public. 'There is much more that might be said about the site but only by accessing it can users gauge its real potential in regeneration.'



Andrew Hudson-Smith Research Fellow Centre for Advanced Spatial Analysis University College London 1-19 Torrington Place London WC1E 7HB Tel: 020 7679 1782 Fax: 020 7813 2843 asmith@geog.ucl.ac.uk