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Come on out – we know you're there! Encouraging community participation in borough planning using ICT

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Main points

- Citizen participation encouraged via targeted mailshots & Internet publishing inc. maps

- GIS and graphics used to clearly communicate planning policy

- Project delivered solely by in-house staff at low cost

- Community participation increased by over 400%

Synopsis

We know they are out there. The 56,000 address points tell us so, as do the aerial photo surveys. But who are "they"? "They" are the persons who make up the communities of Halton Borough, the people who keep the council staff in jobs, and those who will be impacted by the statutory Unitary Development Plan (UDP).

Halton is currently challenged with producing a UDP. This plan will impact upon the lives of everyone in the borough until 2011. They should take an interest, and the council actively encourage them to. After all, it is their borough.

The entirety of Halton Borough's planning policy is location based. The key therefore in understanding this policy is to map it. Once illustrated at the borough level an overall understanding of geographic relationships can be built up and communicated.

Accompanying the weighty UDP document is a policy map. It is this map that will display the future for the borough. The map brings the policy to life, suddenly the community can see what the future has in store for them, and now is their opportunity to influence that future.

Communicating with the community and encouraging participation in shaping the future is a difficult challenge. People need to be aware of this rare opportunity and know how to get involved in order to participate. Halton has successfully embraced and integrated the technologies of GIS, Internet and graphics to deliver planning policy to the community.

The major achievement of this project is that in-house staff have used their own skills resulting in low costs and the merit is in the clear way information has been communicated to the community. Public participation in borough planning has increased. This can be illustrated by examining the number of representations received over the draft UDP deposit period, which increased by 417% over the draft Local Plan deposit period.

Where is Halton?

Halton Borough Council is a Unitary Authority on the banks of the River Mersey between Liverpool and Manchester. The Borough covers the north west towns of Runcorn and Widnes and has an area of 35 square miles. Halton became a Unitary Authority on the 1st April 1998. It took on new powers to plan for how much

new housing and land for new businesses is needed. Preparations have started on the preparation of its first Unitary Development Plan (UDP) which contains all strategic and local planning policy relevant to Halton. It will provide the guidance, incentive and control for the development and use of land in Halton up to and beyond 2011. The impact will be upon the entire population of the Borough.
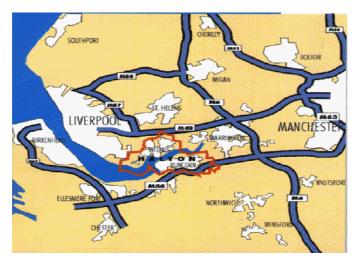

Figure 1: The Location of Halton

What is a UDP?

Unitary Development Plans are cumbersome, yet necessary, written documents containing all the planning policies relevant to the borough. They are a statutory requirement under the 1990 Town and Country Planning Act. Planning decisions on proposals to build on land or change its use should not be arbitrary, they must be considered against clearly set out criteria. The purpose of the UDP is to provide a reference to all the important factors that affect planning decisions in the Borough and sets out the Council's wishes for the development of the Borough, to guide developers. These factors include national and regional planning guidance from the government and material representations from interested parties.

Why Encourage Participation?

The government publication, Planning Policy Guidance Note 12 (PPG12), provides guidance on the production of UDPs. This guidance recommends involving local people and interested bodies by giving the opportunity to input their views on planning policy at the earliest stages. An advantage of doing this is that local people have a full understanding of the development proposals and potential land uses in their area. Involving the community at the early stages can reduce the number of formal objections to the plan. Objections can increase the time scale for the UDP becoming adopted as the statutory framework for determining planning applications and controlling land use.

No guidance exists on how consultation should be arranged. However, local authorities need to ensure that publicity for their proposals and the mechanisms established to feed back comments are sufficient to encourage all sectors of the community to be involved. As a UDP is produced for an entire borough the number of organisations who may have an interest in the content can be significant. In the preparation of Halton's UDP over 160 separate associations and organisations were invited to participate in key issues meetings.

Why have a Proposals Map?

Accompanying the weighty UDP document is a policy map, the Proposals Map. It is this map that displays the future for the borough. The map brings the policy to life; suddenly the community can see what the future has in store for them.

The guidance from PPG12 on the Proposal Map is that it should illustrate each of the detailed policies and proposals in the written plan. Sites should be defined on the map where particular developments or land

uses are planned such as the provision of land for housing or employment uses. Areas where specified development control policies will be applied, such as conservation areas, should also be illustrated. The map must also be on an Ordnance Survey base, with the scale and an explanation of the notations given. That is as specific as the guidance gets. No mention of GIS! The benefits of utilising GIS are discussed later in this document under 'On-line Proposals Map'.

Actually, PPG12 does mention GIS, but only in paragraph 30. The text barely scratches the surface of the benefits that GIS can bring to the UDP preparation process. It does not venture into the possibilities that can result from combining GIS with other Information Communication Technologies (ICT), such as the Internet.

Does ICT have a role?

ICT certainly should have a role in encouraging community participation in Borough planning. There is plenty of information available for dissemination in the preparation of a UDP. Examples include land use information, planning policies, site locations, plus the strategic and regional planning context.

The need to communicate UDP information is widely acknowledged and government guidance encourages the involvement of local people. Publicity can be achieved through the traditional methods of newspaper advertisement, cartographic presentations, the provision of leaflets, and displays in libraries and other public venues. More modern communication methods include the Internet, CD ROMs, targeted mailshots and video.

Technologies have never been so available and there are many on hand for deployment. Examples include GIS, DTP (desktop publishing), digital graphics capabilities, plus Internet technologies. In summary, all the elements of ICT are present; therefore it has an important role to play.

Halton's Story

Halton is currently in the transitional period between draft editions of its UDP. The first draft went on deposit in September / October 2000 for a six week period. All the representations received over this period from the public and interested bodies have been collated and analysed. The current phase is therefore one of negotiation where objectors are met and their objections discussed. Possible outcomes of negotiations are a change to a policy and a revised plan, the objection being withdrawn, or the unresolved objection going to the public inquiry. Figure 2 shows how lengthy a process UDP preparation is. If the council receives many objections adoption of the plan can be delayed significantly. The second deposit is scheduled for autumn 2001, followed by a public inquiry in the spring of 2002. Final adoption is aimed at by winter 2002.

In the public consultation phase of the "Key Issues Report", and over the first deposit period of the draft UDP, ICT has been embraced to deliver more information to the community more quickly and easily than ever before.

Figure 2: The Unitary Development Plan Process

ICT Consultation Methods

One of the more unusual consultation methods was the production of a video that highlighted the key issues facing the Borough's planners. This was sent to around 300 of the local organisations and interested groups. It was also a useful resource for blind members of the community as it contained a spoken narrative of the key planning issues facing the Borough.

Following experiences of producing a digital interactive CD for the Local Plan, adopted in 1996, ambitions grew to delivering a similar product via the Internet. This was seen as a quick and cheap way of consulting the public, together with supplying a more digestible product to those computer literate members of the community.

A full copy of the UDP along with the representation form was placed on the Council's website (www.halton.gov.uk). The aim was for any person or organisation to be able to obtain a copy of the UDP for free and make representations on-line. In order to cater for users with lower specification PCs and slower Internet access two versions of the on-line UDP were produced, one in full colour and one with reduced graphics in black and white.

Several commendations have been received from the public and organisations that have an interest in land in Halton but are not necessarily based within the Borough. Examples are landlords. In one particular case the individual was based in Birmingham and had heard about the deposit period. They were able to review the UDP on-line and make representations from the Midlands. Without the on-line resource the only options would have been a long car journey to view the document, purchasing the full document (a substantial £35), or forgoing the opportunity to make comments on the plan.

On-line Proposals Map

As the entirety of Halton Borough's planning policy is location based maps offer an excellent communication mechanism. Once illustrated at the borough level an overall understanding of geographic relationships between sites can be built up and communicated. The index to the planning policies contained within the UDP is the Proposals Map. In most cases this is the first reference for interested

individuals with attention being drawn to the area around their home. It is at this point that GIS makes entry into the proceedings.

GIS has been described by the epithet 'a technology in search of an application'. To some extent this is true, attributable to the flexibility to which GIS can be applied to many different disciplines, provided they deal with spatial objects and attributes. Planning is one of those applications in which GIS excels. In most cases, the planning department was the test ground for GIS and as a result most planners within local authorities have well-developed spatial systems and Halton is no exception.

With the proposals map forming an integral part of the UDP, geographical information systems offer excellent advantages over paper map production if they are employed. These advantages will be discussed in a summary form below and are based on Halton's experiences.

Having the plan in a digital format means that it is readily exportable to other software, including graphics packages to enhance presentation of GIS outputs. One of the areas where GIS has lacked capabilities is in the production of quality print output. More often than not GIS output is imported into a graphics package so that the presentation of the map can be improved. Particular examples include the representation of boundaries that may need to be 'fuzzy' rather than being represented by a hard line. Graphics packages are able to produce a 'washed over, fade out' colour effect to show the imprecise nature of some boundaries.

GIS can provide hardcopy output at any size or scale and full control of the appearance of information layers on top of base mapping is available. Paper copies can therefore be easily generated according to specific requirements for insertion into the UDP and supporting documents.

Other benefits of utilising GIS are that the proposals map can be readily updated and revised with the minimum of effort. This is especially important when the draft plan passes through the two deposit periods and policies are subject to negotiation and review. Extra information can easily be added through digitising, and amendments and deletions can be made with the same ease.

GIS allows the mapped information to be held and associated with the attribute information for each site / object. Attributes are the characteristics that go with each object, such as the employment use classification for a piece of land allocated to employment uses, or perhaps the area of that site. In addition to attribute information being recalled for sites, GIS software can now offer 'hotlinking' ability. Almost any digital file can be associated with a map object. Examples include photographs, scans of planning applications, text documents of planning policy, video and sound clips. Utilising GIS can produce a proposals map that is truly interactive.

Producing a Proposals Map with GIS means the data layers involved, such as employment and housing sites, areas of open space, areas of special interest (e.g. action areas for regeneration) are available for uses other than proposals map production. Monitoring the UDP policies is one such use. A good example is the provision of open space. Guidance on the provision of open space exists from both government and other organisations. This guidance states that particular amounts of open space should be provided per thousand head of population. If the open space areas for the Borough have been captured onto GIS then it is relatively easy to do the analysis and demonstrate the adherence, or otherwise, to this guidance. GIS packages are particularly suited to forms of analysis like thematic mapping, which is an excellent method of presenting summaries of spatial information like the area of open space available in each ward. Deficiencies in provision can easily be spotted and the appropriate action taken to rectify the situation.

The ability to produce digital publications from the GIS is a great advantage over paper Proposals Map production. It is this advantage that brings us back onto the subject of an on-line Proposals Map. Ideally, Halton would like to web-enable the proposals map GIS and this is a target for the future. Not only would citizens be able to view the policy text, they would also have access to the mapping and associated attribute information of the GIS layers. Theoretically, a user would access the proposals map on-line and an "applet" or "plug-in" would automatically download and enhance their Web browser's capabilities. Rather than build in extra capabilities to handle additional functionality the browser developers (such as Microsoft and Netscape) have begun to provide support for Java, ActiveX, and 'plug-ins' that add functionality to the browser on demand. In the case of GIS, developers are able to create small downloadable programs called

applets that become part of the browser software and add functionality when a user visits a site. This functionality includes simple functions from GIS like pan, zoom, and the query of map objects.

At the present time however, the costs of the technology for true web-enabled GIS are still prohibitive to most local authorities. Under these circumstances Halton came up with an innovative solution. This consisted of exporting the entire proposals map from MapInfo GIS into Corel Draw 8. Each separate GIS layer was transferred between the software packages using the Windows Metafile Format (.wmf). By importing each layer separately, full control over each layer was maintained. This meant individual boundaries could be adjusted and checked. Once within Corel, the proposals map could be properly 'designed' for clear presentation. The next stage involved converting the Corel file into a single raster image (tiff format). The raster file was then cropped into smaller rectangles of map and turned into PDF format. Each PDF page could then be linked together with navigation arrows at each of the four main compass points (Figure 3). The smaller rectangles of map were based on an Ordnance Survey 1:10,000 base and were indexed by a smaller scale map that formed the main 'overview' page (Figure 4).

Figure 3: 1:10,000 segment of the Proposals Map

When viewed on-line a user is presented with the 'overview' map and can click on an area of interest (in a similar fashion to image maps, where areas are designated as links to other files). Once the area of interest is selected the 1:10,000 base map automatically displays to give the user more detail. The navigation arrows can then be used to pan to adjacent areas of map.

Figure 4: The 'overview' map indexing the 1:10,000 segments

A second benefit resulting from the use of Corel Draw is that Corel is one of the few formats commercial printers will accept. As a hardcopy of the proposals map was necessary and a thousand copies were required it was necessary to do a commercial print run. The Corel Proposals Map was converted to CMKY format for printing, a capability few GIS had until recently. Finally, the digital Corel CMKY file was sent to the printers who output the digital file to film for the print run. Producing the Proposals Map in-house saved a great deal of money.

Traditional Consultation Methods

Recognising that not all sectors of the community have access to the more contemporary forms of information transfer (Internet, CDROM) there is a need to maintain the traditional approaches to consultation. The risk of excluding people is not the only reason for employing traditional approaches. In order for local authorities to comply with the requirements of the Regulations hard (i.e. paper) copies of the plan proposals and other documents must be made available for inspection during each step leading up to the adoption of the plan. By law the UDP has to be available for inspection 'on deposit' at public places for a period of six weeks.

The traditional approaches comprised several elements including topic meetings, questionnaire surveys, exhibitions in the Council's offices, libraries and town centres, plus the newspaper and press releases. Leaflets were sent to every household and business in the Borough. The layout of the leaflet was crucial, designed to provide a clear and simple message stating why the counsultees should get involved, how the UDP relates to them, and where the consultees can get involved in the review.

Two leaflets were dispatched to every home and business. The first summarised the main issues in the 'Key Issues Report' and contained a short freepost questionnaire on key planning issues. The second encouraged participation in the 1st draft plan deposit period informing the community on how to make representations. These leaflets were targeted using a door to door service provided by the Post Office. A list of postcodes within the Borough, plus those that overlap on the authority's boundary was submitted to the Post Office. Leaflets were then delivered to every household and business in that postcode. This is one way of trying to ensure everyone in the Borough receives notification of the UDP process. Halton felt it was important to consult those just outside the Borough's boundary, as communities do not respect these administrative divisions. Why should an individual miss the opportunity to have their say on developments that will effect their living environment just because a line on a map crosses to one side of their property? GIS played a role in the provision of this postcode information. Products such as OS Address Point and Code Point combined with ward and other administrative boundary data ensure that the list of postcodes is complete and covers the spatial spread of the borough. Prices for delivery of the leaflets by the Post Office are then based on the number to be distributed and weight.

Conclusions

The use of ICT can deliver substantial savings in the cost of producing a UDP. Examination of the following table illustrates this:

Item	Quantity	Cost	Cost Per Copy
Local Plan Hardcopy	1000	£35,000	£35
UDP Hardcopy	1000	£19,000	£19
Local Plan CD	300	£700	£2.30
UDP Web Site	N/A	Staff time	N/A

By producing the Proposals Map entirely in house (excluding the final print run) the costs of producing the UDP were substantially reduced from those incurred by the Local Plan. The use of digital media can reduce

these costs further. At the present time it is impossible to escape from hardcopy production because of legal obligations, however in the future this could change. In the mean time, by utilising interactive CDROMs and Web delivery, the demand for hardcopies can be reduced thereby keeping hardcopy print runs to a minimum. The Improvement and Development Agency (IDeA) have become involved with a project titled the Interactive Digital Development Plan (IDDP) project to encourage the use of digital media in plan presentation. The goal of the project is to assist local authorities in releasing adopted CD versions of Local Plans / UDPs from 2001 onwards. Further information on the IDDP project is contained within a paper that was presented at last years AGI 2000 conference. S. Brandwood and C. Capper authored the paper (Section W5.7 of the conference proceedings).

It is obvious that Planning Policy Guidance Note 12 should be reviewed and updated to bring it into line with other government policy. In the climate of e-government and technological progress Planning Policy should not be suffering from inertia, but actively encouraging the espousal of these initiatives and technologies.

The achievement and merits of Halton's UDP project are in the fact that in-house staff have achieved this using their own skills at relatively low cost and in the clear way information has been communicated to the community. Halton's Forward Planning team is relatively unique in the structuring of the group. Not only are policy makers present, but also staff members skilled in data analysis, cartography, GIS and graphic design. Halton believe that this mix of staff results in a successful team that can not only make planning policy put also communicate and present it effectively.

A particular measure of success attributable to the team's composition is that public participation in the development plan process can be shown to have increased. Examining the number of representations received for the UDP shows an increase of 417% over the Local Plan deposit period:

Local Plan Deposit Version	UDP Deposit Version
Representations made = 559	Representations made = 2332

It is believed that the increase in representations is due to the Council's efforts in publicising the UDP preparation process and the clear way information has been communicated to the communities of Halton. ICT has had a pivotal role to play in both the preparation of the UDP and in encouraging the community to participate in the process.

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