CHAPTER EIGHT
Woodberry Down Virtual Regeneration

The application detailed in this chapter relates to developing a fully operational Public Planning Support System (PPSS) as detailed in Figure 2.2. The opportunity to develop such a system came about as a result of demonstrating the previous research examples documented in Chapter 6 to the Woodberry Down Redevelopment Team (WDRT). As a result of the demonstrations, we were invited to bid for the development of WDRT website which was timed to go online at the start of the consultation process for the regeneration of the Woodberry Down area in Hackney, north east London. Before we explore the development of the site, it is worth detailing the background to the Woodberry Down project and the WDRT's views on public participation during the regeneration process.

8.1 Background to Woodberry Down

During the last decade, British local government has been dominated by problems of grappling with the issues relating to public housing, which were by and large created by those same governments two or more generations ago. The slum clearance programme and the re-housing of a very large proportion of the British population began in earnest in the 1950s and many inner cities came to be dominated by high rise dwellings under municipal control, built to relative poor standards, and housing an increasingly deprived population. The run down in this housing stock due to poor maintenance has been exacerbated by the migration of the most active and able into owner occupation, either privately or through the massive sell-off of public housing that has accompanied the demolition of the welfare state over the last 20-years. These inner areas are now dominated by a series of initiatives associated with regeneration, all of which involve frighteningly complicated sets of policies and instruments (Power, 1998). Many of these involve the financial underpinning of such actions using variants of the Private Finance Initiative in which the private

sector is encouraged to provide the funds in turn for long-term ownership of what is essentially public property.

There are 1370 housing estates in England, which have been defined as 'deprived' and 112 of these – 8 percent – are located in Hackney, which is one of the poorest London boroughs. The best way of illustrating the context is through the index of multiple deprivation (IMD) which is composed of 6 indicators – based on income, employment health, education, housing, and access, with child poverty identified as a critical subset of the income indicator. These 6 indicators are weighted as 25-25-15-15-10-10 and then aggregated to form the overall IMD. When mapped, they provide a picture of the relative geographical concentration of key problems and problem estates in the country. Hackney is one of 33 boroughs in London with a population of around 207, 000 in 2001. 40 percent of its population are ethnic minorities and 60 percent of its housing is in the public or ex-public sector. As a municipality, Hackney is the second most deprived borough in England but it has the largest concentration of deprived estates in the land. All 23 of its wards are in the most deprived 10% of all wards in England (where there are 8414 in total), 9 of these are in the top 3 percent and the ward in which the Woodberry Down estates are located is one of these. The pattern of deprivation is shown for Greater London, for Hackney and then for the estates in question in Figure 8.1.

In fact the various housing blocks that make up Woodberry Down do not contain the most deprived households in the borough but in terms of the housing indicator within the IMD, this is in the top half of 1 percent of the worst housing conditions in England.

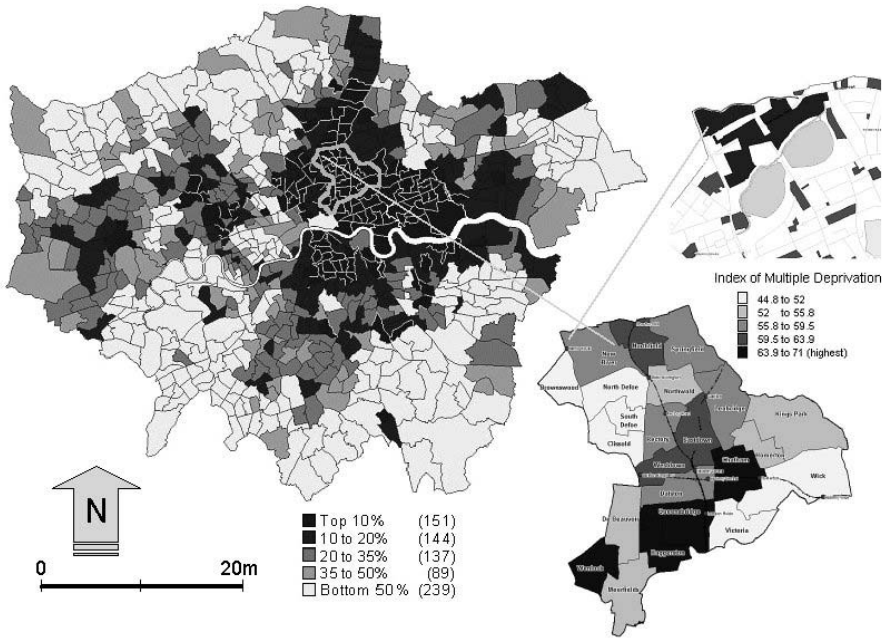


Figure 8.1: Deprivation in London, Hackney and the Woodberry Down Estates.

The Woodberry Down estates are in the Woodberry Down and Stamford Hill Single Regeneration Budget (SRB) area, the renewal projects being financed from this source of funds which is bid for competitively each year. In the wards that cover this area, more than 50 percent of all households reside in public housing and if the stock that has been sold off is added to this, then it becomes clear that the area is dominated by estates that are likely to require some substantial regeneration. We do not intend to develop an exhaustive analysis of the demographic profiles of the population for it is clear enough that the populations housed in these areas lack basic amenities. The estates in fact tend to be residual sinks for the worst-off and for immigrants in the area rather than being dominated by long-standing, aging residents. There are problems of aging of course but the key issue is one of poor housing conditions in the first instance. To provide a quick visual impression of the kind of housing that we are dealing with, we show a collage of views around the 25 blocks that make up the estate in Figure 8.2. Like so many illustrations, the real sense of how run down the area has become is hard to imagine from these photographs although there is a degree of desolation to the environment which is captured by these pictures.

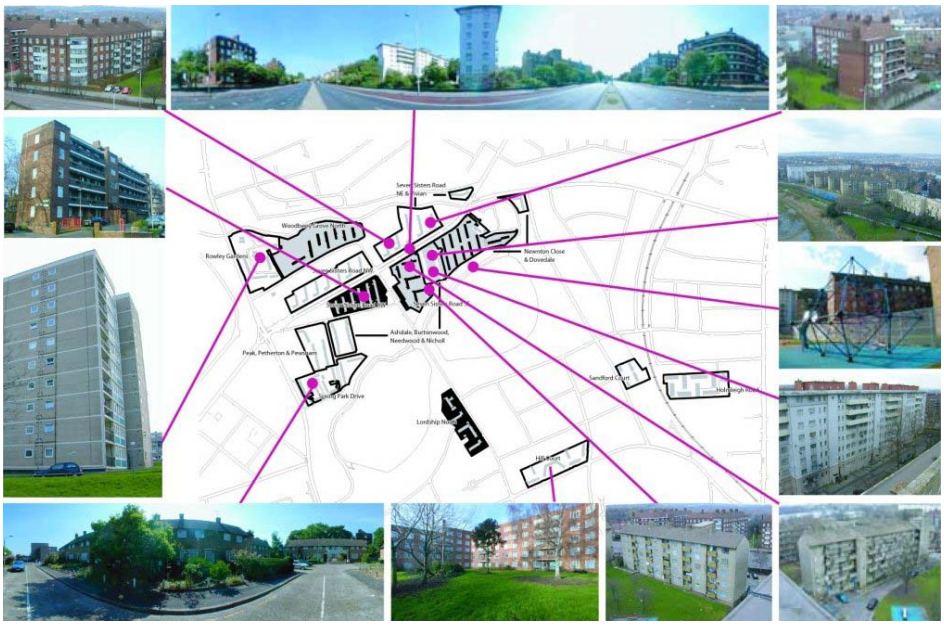


Figure 8.2: The Estates that Make up Woodberry Down.

The area, which is to be regenerated, is comprised of the estates shown in Figure 8.2 which physically cross various administrative and historically integrated, ethnic neighbourhoods. The estates were originally designed as part Herbert Morrison's vision for better housing in London and the first housing blocks were developed in the late 1940s by Forshaw as part of his and Abercrombie's vision for London. The form drew their inspiration from the Bauhaus, even appearing a couple of years ago in the film *Schindler's List*. The oldest blocks are listed. There are around 6000 residents in 2500 housing units of which some 29% are owner-occupied. The WDRT have divided the area into 18 distinct geographical areas although for purposes of resident consultation, these are currently aggregated into 14. There is considerable confusion with respect to tying the official statistics, noted above, to what actually happens on the ground and local surveys reveal that in these estates, the white population is in the minority at less than 40 percent with a strong dominance of Black and Turkish populations. These estates permeate the area of Stamford Hill, which has the largest concentration of orthodox Jewish population in the UK.

The Woodberry Down project began in 2000 with the establishment of the on-site team and the beginning of negotiations for a Single Regeneration Budget proposal for some £25m which has been successful. Currently much of the project is dominated by the negotiation of a Private Finance Initiative to find the lion's share of the cost which is estimated at some £160m over 10 years. However, the project did not get off to a good start. The WDRT were located on-site in public offices that were then a local library and the conversion to the team's HQ/centre led to substantial hostility amongst the local population. The team (WDRT, 2001a) report: "Local residents are still angry that not only was their library taken away but also that the centre is, to many of them, not providing any tangible benefit or service to the estate. The WDRT believes that this is not because of the fault of the resident managers but due to the conception and delivery of this project" (page 11). In fact what this issue reveals is that there is substantial community participation and representation in the area already and the entire project is attempting to manage the regeneration through utilising this.

In the area, there are nine Tenants' and Residents' Associations with another two in the process of registering. There are six estates Committees serviced by Hackney Council and these meet quarterly. The Stamford Hill Neighbourhood Committee meets nine times a year and is attended by Council officers and local Councillors. The Council's housing stock in Stamford Hill is managed by the Paddington Churches Housing Association and there is a monthly tenants' panel that discuss management. The Estates Development Committee (EDC) which has been set up to represent the regeneration of the estate cuts across these. It currently has 27 members whose role is to liase with the WDRT and to represent the views of those affected by the considerable disruption that is about to occur as the regeneration gets under way. The process of online participation has been both motivated and endorsed by the EDC and the WDRT, and the website reflects the close involvement of this Committee.

The WDRT have spelt out on behalf of the Council and the community very laudable and ambitious aims for the project (WDRT, 2001b). The approach of the WDRT to public consultation is refreshing; it acknowledges that the regeneration process is not solely about the area's physical reconstruction but also about improving the residents' standard of living not only in terms of environment but also in terms of education and social standing. Their approach encourages new community leadership and structures for the long-term management of the estate. They acknowledge that the opportunity exists at Woodberry Down to do things better and the website was intended to be central to this opportunity. WDRT define the use of the website in a similar fashion to the argument which has run throughout this thesis; a site which will inform residents, act as a discussion forum, and utilise the latest research in presenting images of the estates' current and future plans (WDRT, 2001a). The fact that the team were keen to utilise the latest research provided an unparalleled opportunity to develop a digital planning system into action with the full backing of all the parties involved.

The WDRT's consultation strategy was developed to address a number of issues. Firstly to follow the guidance in the Housing Green Paper (ODPM, 2000) "Quality and Choice: A Decent Home for All" that all local parties need to be involved in the production of a housing strategy and that authorities should set up consultative structures and be prepared to listen and empower others to play their part in delivering the strategy. Secondly it aims to address the current apathy in the resident's management of the estates to date. The team identified that that the residents take a view that the council does not listen to their views and even when it does listen, it does what it wants anyway (WDRT, 2000b, page 2). Residents have thus seen little point in getting involved in the management of their estate and a feeling of distrust between the residents and the local council has developed. With such an air of disillusionment a new open strategy was required. As the DETR "Code of Practice for the Dissemination of Information during Major Infrastructure Improvements" (2000) states, very

often the success of a proposed development is dependent to a greater or lesser extent upon the support and goodwill of the general public. This is a common sense point of view, yet one, which required considerable effort by the team to overcome the loss of support as a result of previous council decisions. As a result of this, the WDTR has sought from day one to maximise the resident's involvement in the project and ensure that all proposals and information are available to the public.

Before the development of the website which we detail later, all methods of consultation had been non-digital. The team had engaged in three rounds of consultation, firstly in visiting the existing estate committees and tenant and residents' associations to brief them on the regeneration proposals. Secondly a comprehensive program was put into place knocking on all 2500 front doors, leafleting twice and holding 12 local meetings. Such consultation provided the basic groundwork for rebuilding the public's trust and set out to inform all the parties involved that the area was planned for regeneration. Basic principles on consultation were established early on to ensure that the trust of residents was maintained (WDRT, 2000b, page 3). These are:

- Honesty - the WDTR know that it must keep any promises it makes and keep its word;
- Reality - it easier to deal with the reality as it is now. Once this has been acknowledged, it is possible to move on;
- Open file policy - residents know they can come and look at all the information that relates to themselves even it is commercially sensitive; and
- Local, open access office - residents know they can drop in anytime in a non-hostile (counter-free) informal environment.

As we have stated, these techniques to fulfil the WDRT's principles outlined above, fall squarely in non-digital forms of public participation reaching level 3 on Arnstein's Ladder of Participation (Figure 3.1). The process of informing the public is obviously not enough to ensure that sufficient levels of public involvement take place. In the third round of consultation, a

more formal structure for public feedback was needed, leading to the establishment of the Estate Development Committee (EDC). The EDC was formed by the election of residents from each of the 14 local consultation areas with the aim of creating a group representative of the overall background of the estate. As is typical in matters of public consultation, it takes a certain type of resident to wish to take part in meetings or become a member of an elected group. In recognition of this, the WDRT have identified 6 levels of public involvement for which consultation strategies need to be tailored. The first level comprises those residents that are actually willing to take part in representing the estate on a daily basis. These are residents who would be willing to become elected to groups such as the EDC and represent the highest level of public involvement. At a second level are residents that are willing to get involved in the regeneration process through actively taking roles in public meetings and steering groups; the team estimate that there are approximately 150 residents at this level. The numbers of residents in each group is based purely on observation during the first three rounds of consultation and experience of other regeneration schemes. As such, the actual numbers are unknown but it provides a useful guide on levels of public involvement to expect and therefore instigate methods to ensure all the residents are targeted in the most suitable manner.

As the proposed level of involvement decreases, the number of residents starts to rise. This is to be expected as the majority of residents will not have either the time or the inclination to commit to the consultation process. Level three provides a mid-range of involvement with residents attending public meetings and disseminating information via word of mouth to the residents at the lower levels of public involvement. It should be noted that word of mouth is not the most reliable method for information communication and structures are in place to ensure that rumours do not hamper the informing process.

The majority of residents are at level 4 with no real interest in getting involved or attending public meetings but still wanting to be kept

informed of the development changes. Within this category are residents that are unaware of the regeneration process. It is at this level that the consultation process needs to outreach and actively encourage residents to take an interest in their local environment. The team estimate there are approximately 1500 residents at this level. At the lowest level - level 6 - are residents who are at either ends of the age spectrum. The WDRT state that at this point there are barriers making it difficult for these residents to become involved but that they have the same rights as everyone else (WDRT, 2000b page 8). With 1300 residents at this level, it could be argued that digital communication would be the easiest method to reach such a demographic profile, especially the young.

To summarise the WDRT's views on consultation, they state that there must be much greater clarity about the differences, roles and purposes of public involvement, participation and consultation (WDRT, 2001a). It is accepted that paying lip service is no longer acceptable for public participation and only acts to alienate the residents as well as instigating an environment of mistrust in the whole regeneration process. The team believe that their methods of consultation represent a significant change in the way consultation is normally carried out (WDRT, 2001a). This is a bold statement which may or may not hold up to scrutiny in the long term but as a starting point, it is refreshing to see such a major redevelopment undertaken with the residents being central to the whole process. Of course such consultation requires strong leadership and a driving force behind it. We will return to this point later.

Such statements are consistent with the Government's 'Modernising Britain' campaign. The worrisome aspect of the project, like most such initiatives in Britain at present, is that it is beset by different kinds of financial bargaining. These continually threaten the scheme by throwing it off-course in terms of timing and diverting valuable resources to open-ended and inconclusive debates about showing 'best value for money'. We are currently three years in, £25m has been committed, £135m still has to be negotiated and signed off, designs have still to be prepared, and there is

nothing to show for any of this on the ground where it counts. Little wonder the resident community are frustrated. We believe that the web resources we have developed at least go a little way to pushing what is clearly a tortuous process forward, and to these we now turn.

8.2 Website Development

The decision to develop an online method for participation in Woodberry Down emerged in early 2000 as result of the applications referred to in Chapter 6. The first stumbling block to getting the project up and running was within the University itself. As the website was to be developed based on ongoing research, it was considered to be a consultancy project by research administration at University College London. With such a status, work carried out on a purely consultancy basis requires consultancy rates and 'overheads' to be charged. This incurred a substantial increase in cost, effectively placing the entire project in jeopardy. With the University demanding such rates to put research into practice, it is not surprising that academics only produce Klosterman's (1998) interesting prototypes. With this in mind, the Architecture Foundation was contacted as they had already shown considerable interest in the project. By running the project's finances through the Architecture Foundation who have charitable status, we were able to defray the University's 'overhead' cost and thus continue with the project. While it is understandable that Universities need to capitalise on research, it puts into doubt a research ideal and means that other routes need to be explored. Without the Architecture Foundation, the Woodberry Down project would not have gone ahead.

It was important during the development of the site that the residents felt they 'owned' the design, information, and interactive sections. It is this sense of ownership which makes 'Planning for Real' so successful. When moving to the purely digital realm, ownership it is not so easy to establish. With this in mind it was decided that the information on the site would be written by a local resident, Olwenn Martin. Olwenn was given the task of

compiling information for the site in January 2001 with the aim of it being launched in April. A new logo was designed for the website by an outside consultancy which also coincided with a rebrand of the WDRT information sheets and newsletter. The EDC were fully involved in both the design of the website and the information included. To ensure that a focus was maintained, a 'web sub-group' of the EDC was formed to oversee matters.

A first draft of the website was presented to the EDC in March 2001 with the aim of introducing the basic web concept for the site as well as the proposed interactive elements used to visualise the regeneration plans. As part of this meeting, the concept of wiring the residents' homes was introduced. Throughout this thesis, we have argued that to allow people a say in the planning and regeneration process the next step is to embrace the Internet. The logical argument against this is that the people for whom you are trying to provide information too often do not have access to a computer, let alone Internet access. To rectify this, we pushed the WDRT to fund a free computer with unrestricted Internet access for each of the members of the EDC. As a result of this, part of the overall funding was set aside to purchase enough computers with Internet access to enable each representative to go online. This was with the agreement that representatives would use their computer access to engage their wider community in the participation process. This decision was rooted in problems. The notion of a public authority providing residents with free computers, the fact that their usage could not be controlled and the requirement that representatives would engage those who they represented in their own homes – all these were highly controversial and debatable issues. The notion too that if representatives did not use their computer, they would be taken from them also raised difficult issues. As a result, the computers once purchased remained in a warehouse for the first 12 months of the project before the council agreed to their release. To an extent, the idea that homes would be wired when those very homes would then be demolished or refurbished goes against the grain too. Yet it represents a far-reaching issue – that to replace physical infrastructure one

may need to add to that infrastructure before the replacement takes place. We return to the issue of wiring residents homes later.

As we illustrated earlier in this thesis, many online resources for participation are one way; that is, interaction by users is passive, being based on rarely anything more than email and comment forms. However in Woodberry Down, interactivity - two-way communication between providers and users as well as between users themselves – is central to the process and the website is thus configured to contain various comment forms, bulletin boards, animations, fly-throughs, and pictorial manipulations. We would maintain that the structure of this site is more robust than several of those we have examined previously in Chapter 3 in that its foundations in basic software and community interests provide a robust basis for its continued development, an essential requirement given the length and severity of the problems governing the local community.

The website has a particularly simple organisation. Essentially there are four main types of information: *textual information* about the entire process of regeneration and the site itself, services, and related facilities; *multimedia* as maps and panoramas about the various component housing blocks which make up the estates; *design options* reflecting the kinds of designs that might be developed for the site; and a *discussion forum* which enables users to interact with the WDRT concerning any aspect of the regeneration process. Textual data forms the vast majority of information that the site is able to deliver and this is accessed as pages through various drop-down menus accessible from the home page. These menus cover seven topics: What We Are Planning, a 3D Virtual Tour, Regeneration and You, Your EDC, Background and Research, Community and Services, and Youth and Kids. We show a version of the home page in Figure 8.3.

Figure 8.3: The Woodberry Down Website Illustrating Drop-Down Link Navigation.

The site was constructed with a clear design brief - to allow each page of the site to be accessed from a drop-down menu. This is an important although often overlooked factor of planning websites in that the user interface needs to be clear and understandable. If the interface is poor, as for example in the Wandsworth example from Chapter 3, then people are not encouraged to fully utilise the site. The site contains a wealth of information to ensure that the residents have access to all the information that is currently available to the WDRT. As such, it has been divided into logical sections which act as a guide to the residents to show not only how the regeneration will affect them but also provide background into public participation and how the regeneration process operates. Next we will run through sections of the website, explaining how it was constructed in terms of web-based virtual reality and the concepts behind the display of textual information.

The first section of the site is entitled 'What We Are Planning' and provides access to four pages – relating to the vision for the future, the partnership which will enable the site to be developed through various private finance initiatives yet to be chosen, the first stage of the works with access to the 'decant status' of the various housing blocks, and the planning brief. As we have mentioned, each section of the site can be accessed via the drop-down menus and this is further supplemented by hotlinks for each section at the bottom of each page. We illustrate this layout in Figure 8.4 which is typical of the rest of the site.

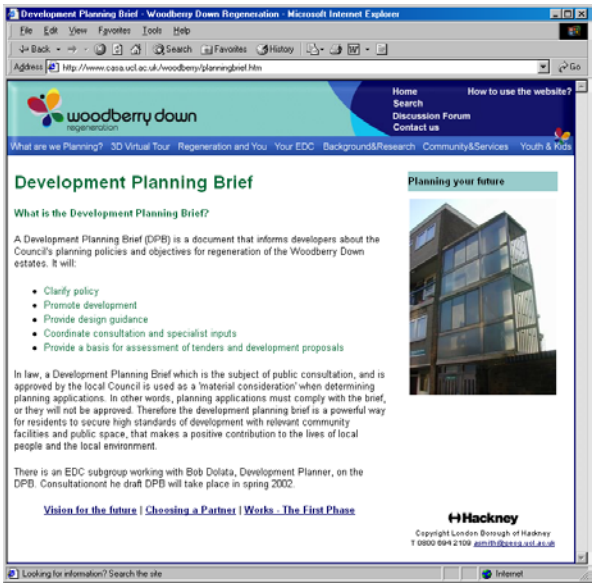


Figure 8.4: A Typical Page from the Woodberry Down Site.

Each page has a photo of the housing on the estate which is not only there as an aspect of design, but also to let those visiting the site from outside Woodberry Down gain an understanding of the type of housing planned for regeneration. As a website, it is obviously global in nature and thus the users will not exclusively be Hackney residents. We return to this later.

The process of regeneration is plagued by esoteric terminology and acronyms. Under the menu associated with Regeneration and You, there is a section on 'Frequently Asked Questions' (with answers), and a Jargon Buster which defines the various terms used by officials such as 'Basic Credit Approval'. There are links to the decant status page and to housing advice – links to other housing agencies from associated pages, while under Community and Services, there are links to housing management advice and local services, all of which lead to their own pages. There is a section here that lets users provide the WDRT with information about local events. Background and Research provides a brief history of the area as well as key documents referred to as 'Yellow Books' about the regeneration; these can be downloaded as Acrobat PDF files. To produce Acrobat files requires the appropriate software which was purchased for the project. PDF readers are free although hampered by a 8.6Mb

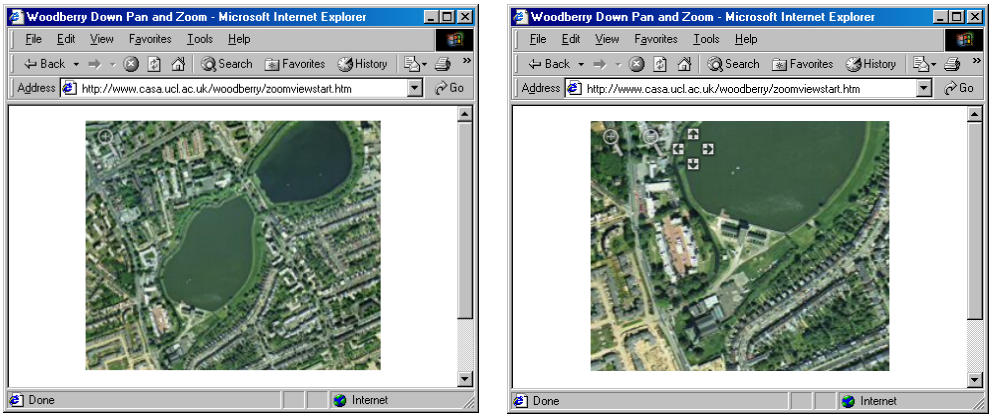
download. Such a file size take approximately an hour plus to download via a standard 56Kb modem with which the members of the EDC were provided. This is not an acceptable situation although one which we are unable to change or work around due the current standard of Acrobat for the distribution of documents over the Internet.

It is recognised that residents not involved in the consultation process may not be aware of the EDC. Therefore extensive information is provided about the constitution of the committee, how often it meets, what it does, and its local representation. We now move onto the main section of the site, the Virtual Tour. This 'Tour' was decided by the WDRT to be the main focus of the site, allowing the residents to gain a sense of location and place as well as providing a focus for 'what if' type scenarios. Before such scenarios were developed, the difficult task was how to capture the local area and display it online via a clear and user-friendly interface. Previous research has concentrated on VRML but for reasons we have already covered, this was quickly ruled out. It was also noted that while a sense of location and place was required, it would have to include both the second and third dimensions. Two-dimensional visualisation was required to provide some sort of map interface to the area. This would aid navigation as well as provide a base on which to display the various regeneration options.

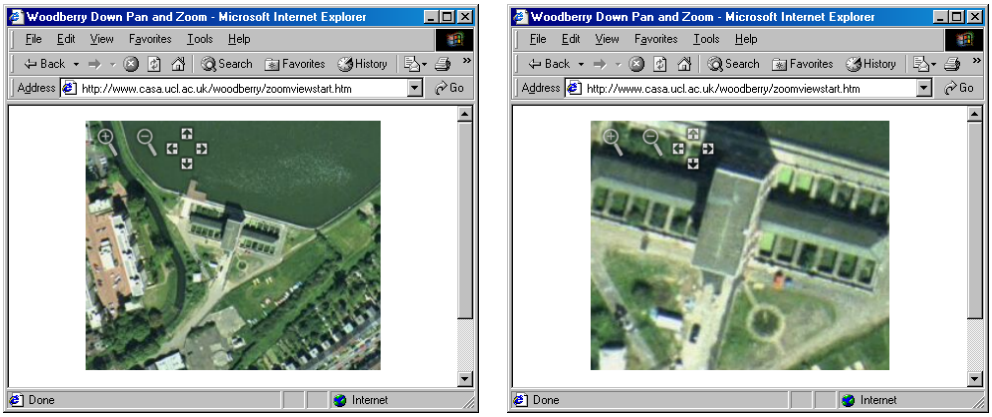
The first proposal was to use an Internet Map Server (IMS) to deliver maps online which residents could query. However then and now, it is not really possible to use typical map servers explicitly for the purpose we have in mind here. After an initial meeting and presentation to the EDC, it was decided that the residents did not want to query a map but they did need to see visual information in both two- and three-dimensions quickly and easily. They need to be able to do this over standard telephone lines. Thus although ESRI (UK) donated a copy of ArcIMS for this purpose, it was decided to move to much faster and simpler media, developing and using freeware/shareware based on various software products developed by Viewpoint (http://www.viewpoint.com/). We have examined

Viewpoint (then called Metastream) in terms of Shared Architecture in Chapter 7 from a three-dimensional modelling standpoint. An email to the developers of Viewpoint in New York revealed that they were also working on software to display high-resolution images over the Internet. Termed 'Zoomview', the software is defined as a serverless "pixels on demand" image transmission technology that makes high-resolution, detailed images available online, even over narrowband connections. Where a traditional web page would ordinarily display a low-resolution, thumbnail image, Zoomview permits the deployment of large, print-quality images online, allowing users to zoom in and examine the finest of details without the need for special graphics cards or high-speed Internet connections (Viewpoint, 2001). The software was initially aimed at publishing high-resolution images of consumer products over the Internet which we realised, in terms of this project, would be equally applicable to high resolution aerial image data.

Zoomview at the time had a number of advantages and disadvantages. The major advantage was its ability to divide an image up into sections depending on a user's level of zoom. This allows a low-resolution image to be displayed when the image is viewed at its full extent, similar in nature to a traditional website image. When zooming in, a new high-resolution image is streamed into view. This allows resolution to be maintained complying with Brutzman's (1997) components. The second advantage is the ability to zoom in smoothly with a click of a mouse, a feature which is not currently possible with ESRI's ArcIMS map server. ArcIMS is able to deliver high resolution images via the web from standard layers within the GIS but the images are merely refreshed when the user clicks, thus losing all sense of location and place. Using an aerial photograph donated to the project by Cities Revealed (http://www.crworld.com/), we were able to build in five distinct levels of zoom; we illustrate three of these in Figure 8.5



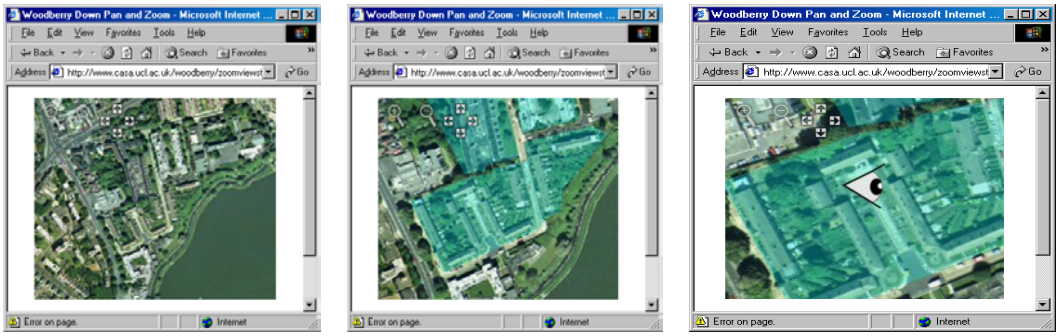
Woodberry Down zoomed out. Second Level of zoom.



Fourth level of zoom. Fifth level of zoom, highest detail view.

Figure 8.5: Woodberry Down Aerial Photograph Utilising Viewpoint's Zoomview Software.

The image is divided into 1085 segments according to layers based on the user's level of zoom. This is an important point. By using layers we can supplement further information according to which layer the user is zoomed into. This ability to zoom into layers with additional information is termed 'logical zoom' by Viewpoint (Viewpoint, 2001). In addition to multi-layers, Zoomview can integrate vector-based animation and information using Macromedia Flash. For the Woodberry Down interface, we integrated two levels of additional information overlayed onto the aerial photograph. An example of this is illustrated in Figure 8.6.



Layer 1: Aerial photograph.

Level 2: Overlay with redevelopment regions.

Level 3: Overlay showing interactive elements.

Figure 8.6: Multi-Layered Information in Zoomview.

While the map interface is of use, the residents needed to be able to easily identify and navigate to their own block of flats or area. In ESRI's ArcIMS, this would be carried out via a simple postcode search or flat number. Within Zoomview, separate scripts had to be added allowing the map to automatically zoom into an area dependent on a list of addresses covering each region. We illustrate this final aspect to Zoomview in Figure 8.7.

In order to impress a sense of location and place on the estate, a series of panoramas were captured for each area of Woodberry Down. The panoramas were in a sense similar in nature to the previous application Wired Whitehall but captured by a much higher resolution camera with a wider angle of lens. An increase in the field of view as well as the use of additional software allowed full 360 x 180 degree panoramas to be taken. We illustrate a sample in Figure 8.8.

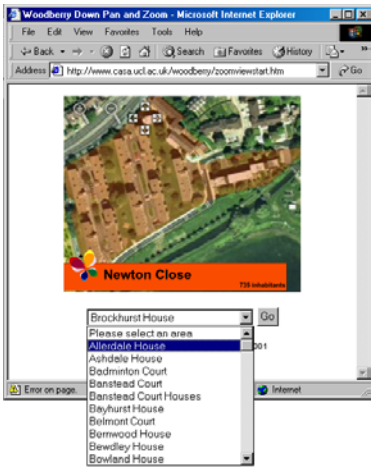
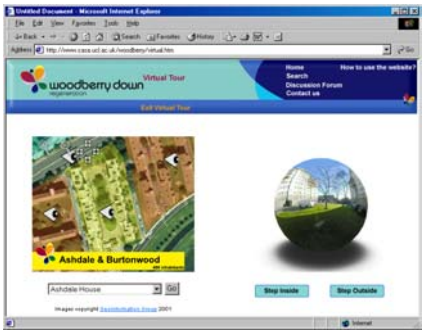


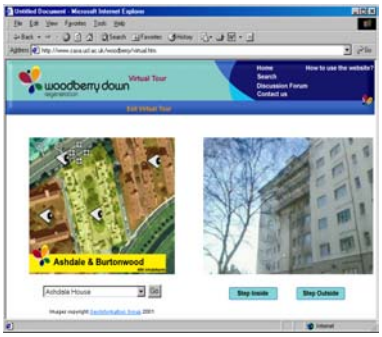
Figure 8.7: List of Residences in Zoomview.

Figure 8.8: Sample Panorama from Woodberry Down.

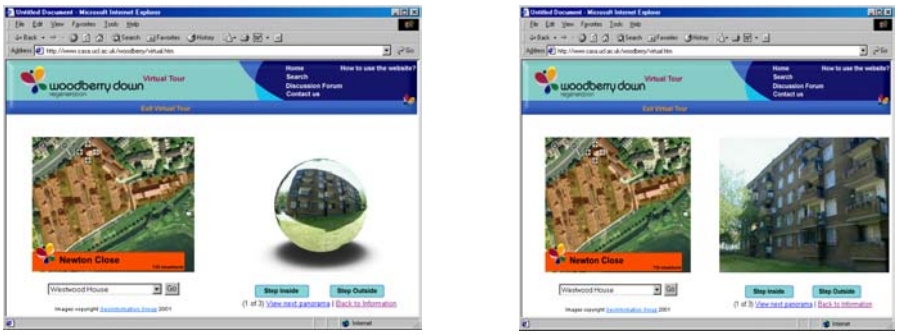
As each panorama has a 360 x 180 field of view, it can be texture-mapped onto a sphere to enable the photograph to be viewed interactively. We term these 'urban bubbles' and Figure 8.9 illustrates the Zoomview map linked to these bubbles.



Urban Bubble of Ashdale and Burtonwood.



Inside the Bubble.



Urban Bubble of Newton Close. Inside the Bubble.

Figure 8.9: Woodberry Down Interface: Zoomable Map Linked with Urban Bubbles.

The interface is a hybrid of Wired Whitehall and illustrates how far the technology has moved on during this research. We now turn briefly to the disadvantages of Zoomview in its use for such map-based interfaces. It obviously does not have the flexibility of an out-of-the-box GIS solution although we argue that this is far outweighed by the levels of interactivity achieved in this example. However, the levels of interactivity such as the ability to zoom-in to fixed locations and the use of multi-layered information, are hard coded. If new locations are added or information on the layer is changed, changing the code behind the site is a manual task which is both time-consuming and impractical. The software was also being developed whilst the site was being written. Acting as a Beta tester has advantages for it allows the research to be cutting edge, but at the same time, it is both unreliable and unintuitive to use. A number of problems were unearthed with the software which required the developers in New York to rewrite sections before the website development could continue. The outcome was, however, worthwhile as the software delivered both a usable interface and high level of interaction accessible via a standard modem. The aim of providing the residents with a sense of location and place about their environment was thus achieved.

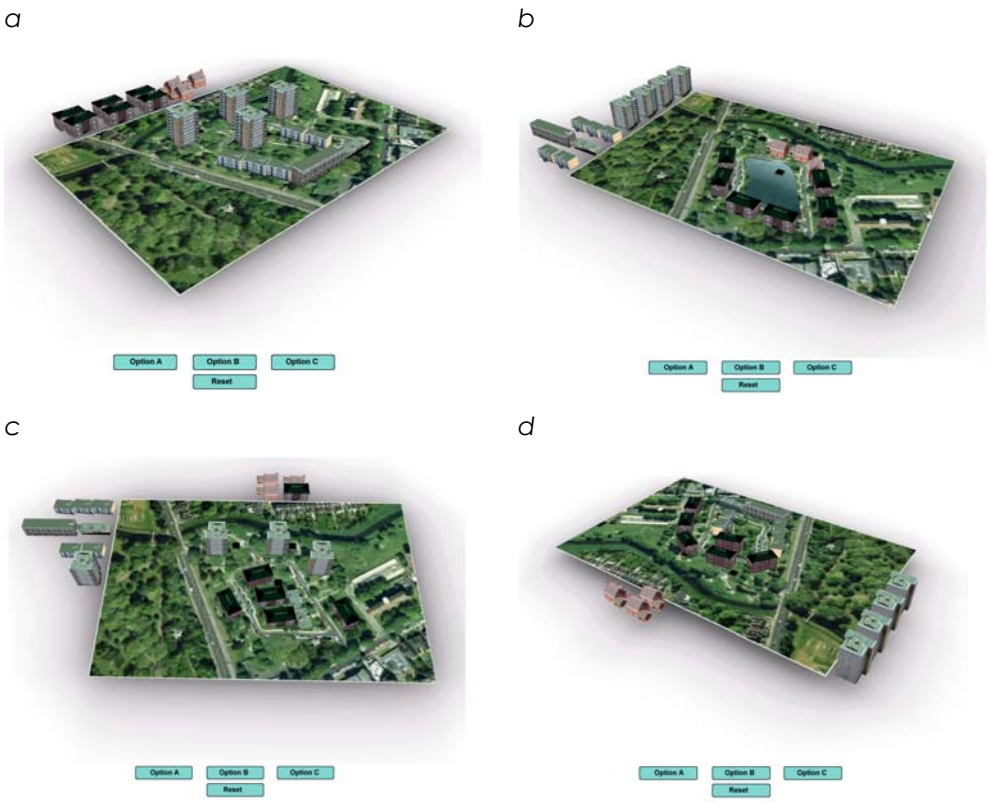


Figure 8.10: Options for the Redevelopment of Rowley Gardens.

When a user clicks on one of the options, the current configuration of housing at a) above moves to the side of the map and new housing options automatically assemble themselves in b), c) and d).

At the time of writing, there are no specific regeneration plans in place for Woodberry Down as the regeneration scheme is currently undergoing a cost appraisal which will complete by mid 2003. Once plans are developed, each panorama will be augmented to show any scenario which is developed, in a way similar to our previous Wates Built Homes example. Although augmented panoramas are highly visual, regeneration options also require a three-dimensional visualisation to fully appreciate any changes in the environment. With this in mind, a prototype was developed on the site to illustrate how future scenarios would be visualised. The prototype is based on the Rowley Gardens area of Woodberry Down which consists of four high-rise blocks of flats surrounded by mixed low-rise buildings. The models were developed in a similar fashion to those in Shared Architecture, from photographs. The optimal photographs for such models are oblique. However due to costing limits, we were not able to undertake an oblique aerial survey of

the site. This has meant that models have been built by gaining roof access to surrounding buildings which complement a ground-based photographic survey. We illustrate the three-dimensional options for Rowley Gardens in Figure 8.10.

The three-dimensional model interface was designed to ensure the users would be able to easily navigate the options presented. Navigation is notoriously difficult in three-dimensional packages but in the example we have presented, all the user is required to do is click on one of the options and the redevelopment animates automatically. Although this seems a simple enough procedure, again using Viewpoint Beta software, it required an element of hand-coding and time to ensure it met the requirements of the site. Once the options for each area are in place, the whole of Woodberry Down can be made three-dimensional. This is no longer a massive task for many of the problems have been ironed out during the first phase of the site's development.

The final section of the site is the discussion forum. The forum was set up to be the centre of the public participation and discussion, with the ability to vote on issues and discuss any element of the Woodberry Down regeneration process. Linking in the ability to vote and discuss issues with the virtual tour ties together all the elements we have argued for in terms of the requirements for digital planning. It allows residents to gain a sense of both their current and future environment while having a direct route to the WDRT and the ability to make their view count. The discussion forum was set up to ensure that each user had to register with a valid email address, username and password. This would allow voting to be restricted to local residents as well as allowing others to participate in the discussion. Electronic voting is a wider issue which we will not discuss further here but the procedures were put into place to allow it within the site. We illustrate the forum we have set up and the user interface to the discussion board in Figure 8.11. In Figure 2.2, we illustrated the factors required for the successful use of computing in planning and it is this which we turn back to now.

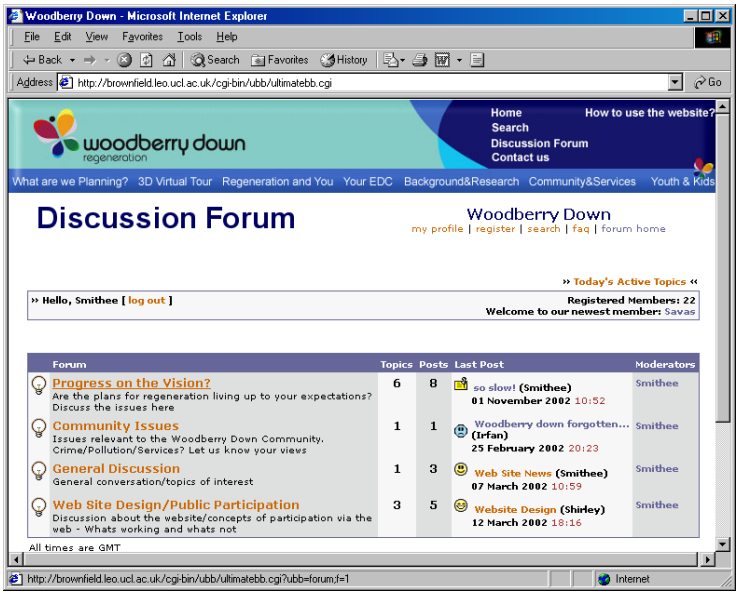


Figure 8.11: Woodberry Down Discussion Forum.

8.3 Evaluation of the Woodberry Down Website

In terms of research and software implementation, we have shown that it is possible to gain a strong sense of location and place via a website and implement procedures for consultation. Our techniques enable a considerable move up Arnstein's (1969) Ladder of Participation compared to non-digital methods. In one sense, this is where the research stops and other factors intervene over which we have little or no control. This has certainly been the case with Woodberry Down.

The site was officially launched by the Mayor of Hackney in November 2001 along with exhibitions of designs for the regeneration of the estate. One click of the mouse and the site went live; all the members of the EDC and the WDRT were in attendance. The site had been delayed from the original April deadline by a series of problems in collating text and images for the site. As the overall project management of the site was handled by the Architecture Foundation, this added another layer to the level of

communication between the site's development and the WDRT. As a result of this, messages did not always filter through and eventually it was decided by the WDRT to deal direct with the University to ensure that the development was moved forward as quickly as possible. In addition to these levels of communication was the main Hackney Council web team which further sub-contracted to a third party to upload any content to their web server on which the site is hosted. This caused further delays. (http://www.hackney.
gov.uk/woodberry/). Such delays are to be expected and minor in detail but they do add another issue to the factors governing the successful implementation of computers in planning.

Despite the delays once the site went live, it received the accolade of being named 'Editors Choice' by UKOnline.gov – the Government's e-democracy website. The site was the first local government initiative to receive this accolade for the process of e-democracy. The editor recommended that other parties involved in online participation look at the site as it provided a template for good practice. The site was also named 'site of the month' by Viewpoint for its use of the Zoomview and Viewpoint three-dimensional technologies. As such, the website had the full support of the WDRT as well as being flagged by the government as a site to take note of. Political support is a key factor in the successful use of computing in planning but it is also one of the most tenuous.

Every project needs a champion and the unsung hero of Woodberry Down was Micah Gold, the then head of the WDRT. Micah firmly believed that the website was central to the regeneration process and had driven the process forward, especially in securing the wiring of the residents' homes. The infighting that dominates such projects is legendary. Funds are always in short supply, residents always disadvantaged, tempers frayed, and good ideas sink without trace. The decision to stop the computers being given to residents' representatives, which was only revoked in May 2002, hardly helped. Hackney's continuing bankruptcy in the face of hard central government performance targets, and the failure of various

regeneration bids took their toll. Micah Gold resigned soon after the website was launched.

Micah's resignation had a considerable impact on the project. Without direct political support, the site did not continue to receive the drive it needed from the team. However this was expected as during the following 6-month period, two temporary replacements were found for Micah but he was not the only member of the original team to resign. Olween, the resident involved in providing text for the website, also resigned due to disagreements with fellow members of the team over her contract. This arguably had a greater effect on the website as it cut off the flow of information to ensure the site was up to date with current developments. Finally, the champion behind the project at the Architecture Foundation, Haruo Morishima, also resigned. Shortly after the site's launch, the only remaining member of the team was myself at CASA.

In light of this, a meeting was arranged with the WDRT to regain support for the project. Due to other issues taking a higher priority in the regeneration process, the website was not given the same level of support it had first received. Development of a website is an emotive issue and it needs a driving force behind it, advocating the view that this represents the future of e-democracy. The changes in the WDRT shifted this view to something that was of mere novelty value. Staff turn-over in local government is of course high, and this is especially the case in Hackney which has been suffering the kickbacks of bankruptcy and low morale. The WDRT has, at the time of writing, a new team leader and information is again beginning to flow to the website. We will return to the current state of affairs later after looking at the site's success in encouraging feedback from the residents.

The discussion forum is central to the whole site, allowing residents a free and unmoderated say in regeneration. The discussion forum was singled out in the original site plan as being of central importance to the

consultation of the regeneration project. The WDRT planned to log into the site at least once a day and reply to any posts from residents or other interested parties. To develop an online community behind a discussion forum takes time. Wooley (1998) states that to develop a successful forum online you need to take into account several factors involving issues such as a clear purpose, experienced hosts, interested participants, and good software. Such factors can be built into the issues already identified for the successful use of computers in planning and were taken into account when developing the forum. The software was carefully chosen to avoid creating a forum intimidating to new users. The forum was developed around the widely used 'Infopop' (http://www.infopop.com) forum system. The software was chosen both for its low cost ($199 per annum) and the ability to customise it to the specific needs of the forum members. A final consideration was its ability to run on an in-house server rather than using that on the main Hackney Council site. This was important to ensure that direct access to the board was maintained to deal locally with any malicious or litiginous posts. The board also had a clear purpose, defined in the topic headings of 'progress on the vision', 'community issues', 'general discussion' and 'website design'. Finally it had interested participants in the form of the WDRT, members of the EDC who had access to machines, and other interested parties using the public access facilities provided in the WDRT office.

The first posts were related to the website's overall design with a comment starting the discussion from a user with the online name of Ugo. Ugo posted that: '… (the website) is well designed/presented, allowed the community a say and promoted discussion amongst the parties concerned....well done Hackney (we know you have problems in other areas)'. The site was also a topic for discussion on other bulletin boards related to regeneration issues, specifically Regen.Net (http://www.regen.net). A notable post on Regen.Net came from a user called Richard who posted 'Take a look at the Woodberry Site, the residents have a real say in what's going on, read it and weep'. A total of 20 posts at the time of writing have been made on the site, a number

which is disappointing but understandable. We discuss the reason for the lack of posts after the last message to date which is displayed below. All text and grammar have been kept 'as is' from the discussion forum.

> the design and user friendliness of this site is great there is one major problem with it, it is so out of date.
> The whole point of a website is to keep those who use it up to date with news and information on the topic they are looking for.
> I dont see that here! I regularly log in to check on the regeneration of woodberry down for the LATEST information and it never changes!!!!
>
> I leave messages they are never answered!!!
> You should have a section with the latest and most recent events that have passed and not just go on about what you hope will happen.
> People on the estate are really under whelmed with the lack of progress on what has been so far achieved!
> We attend the meetings in the hope of new and exciting progress only to be told old regurgitated news weve heard time and time again!
>
> No answersd no progress just talk!
>
> You are messing people about when you talk of what and when you hope to achieve this report and that report while we sit around unable to make any plans of our own because we have lost our hope in the planning of this regeneration.
>
> No doubt a lot is happening behind the scenes but why oh why for the sake of those of us who work and cannot make the meetings can you not keep this website updated so we at least have some idea as to what is going on!
>
> I have absolutely no clue as to whether there has been any progress since July and am frankly at the end of my tether.
> SORT IT OUT!

The message above brings into focus the problems which have been encountered with getting up to date information from the WDRT for the website. It also notes the importance of the website to communicate information to the residents who are not able to attend any meetings. Despite the loss of Micah and Olween from the project, information has

been updated on the site although it is mainly out-of-date minutes of EDC meetings which do little to inform the residents of how the current regeneration process is progressing. As the message states, faith in the planning of the regeneration process is being lost and the website, rather than acting as a means to invest confidence in the residents, may also be the cause of a loss of faith. It is basic common sense that a website needs to be constantly updated to ensure that the information is current, thus encouraging debate about the issues via the bulletin board. Obtaining information from the WDRT has been a tortuous task, far from the team's original aims of developing a site which will inform residents and act as a discussion forum (WDRT, 2000b). While the lack of information can be put down to political and organisational changes in the team, and a minor hiccup in the long term process, the lack of replies by the WDRT has had a more serious impact on the consultation process.

Discussion forums involve multi-way communication between participants discussing shared topics and contributing to debates. To ensure the forums are used, there needs to be a constant flow of information in the first instance from the organisers, in this case the WDRT. Once residents observe that topics have been posted for debate and replies are received, an online community can start to develop. Such communities are tenuous and rely on strong leadership from the topic providers, especially in the first few months of usage. A major set back in the use of the site for public consultation has been the lack of any posts from the WDRT. This has not however been down to a lack of interest but due to Hackney Council informing the team that any posts on the site could be legally binding. As such, the team are now unable to post their views on the regeneration or answer any questions without having them checked first for any compromising comments. This has effectively made the discussion forum a one-way basis for communication with the only posts made by myself with whatever information I have to hand. Obviously this is not a satisfactory situation and it is one that was unforeseen when the idea of a discussion forum was put forward.

Digital networked communication has been around since 1972 in the form of email and since the 1990s it has become an invaluable business tool. With this tool however have come legal ramifications. As Halberstam (2002a) states, the consequences of being able to send anything to anybody has potentially serious implications for companies and individuals. Organisations need to be aware of the legal ramifications of email content as in the much publicised Western Provident Union defamation case which came about because they had discovered that Norwich Union were circulating untrue rumours about their finances on Norwich Union's internal e-mail system (Galashan, 2002). Thus the doctrine of vicarious liability applies equally to emails as it does to other forms of correspondence (Halberstam, 2002b). Making the logical leap, this doctrine also applies to bulletin boards and thus Hackney's inability to post in an official capacity. It was suggested that due to the anonymous nature of the Internet, members of the team could register with the site under a pseudonym and thus continue to post information. This was rejected by the team on ethical grounds, although it would, at least, provide a voice on the site for supplying information.

The other route for information to be provided on the site is via the members of the EDC who have been provided with free Internet access in their own homes as part of the project. The decision to wire the residents homes, as we have noted, has been controversial. A number of other problems have also been encountered during the process of installing computers. Some of the residents have been reluctant to have the computers in their homes for fear of theft. As a result, it was requested not to publicise details on the website that member homes have been wired. This, to some extent also goes against the original proposal as the members' homes were intended to be drop-in points for other residents wanting access to the website. The physical size of the computers has also caused unforeseen problems, although those purchased were the smaller Internet-only computers they were supplied with 15inch standard cathode ray tube-based monitors. These are bulky and due to the nature of the flats they are being installed in, residents often do not have the space to

house them. Finally not all residents have a phone line in their flats so arrangements have had to been made to install lines before they can access the Internet. Full training has been given to the residents on how to use their computers. But with all these setbacks of where to house them in the flats and the unwillingness to publicise the fact that residents have over £1000 of equipment in their homes, the use of the site by the EDC has been limited. Since installing the computers, the price of liquid crystal display monitors has fallen. These have a much smaller footprint and would now be a more suitable alternative. The team at first pushed for all the members of the EDC to have laptop computers which would have helped the issue of space. However these were at the time deemed both too expensive and foreseen as more controversial than the provision of standard computers.

By way of a brief conclusion and update, the WDRT have contracted CASA to carry on the development of the website until 2004. Weekly updates will now be provided on the front page of the site with a series of new three-dimensional visualisations planned to coincide with the publishing of full plans for the area's regeneration in late 2003. The issue of the bulletin board has also been resolved with any replies by the team to be approved by the Council's legal department before posting. Procedures have been put in place to ensure this happens as quickly as possible. The website has been has been the recipient of two awards, firstly the 'Best use of Technology in Panoramas' by http://www.360dof.com hosts of the Annual World Panorama Awards. Secondly it was awarded the 'Best Student Website Award' by the Association of Geographic Information (AGI) The site will be linked from the AGI as an example of best practice in communicating geographical information (http:// http://www.agi.org.uk/).