

***Bottom-up Environmental Justice in the UK:
A fairer, Greener London***

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San Francisco, April 2007

Outline

- Environmental Justice in the UK
- London 21 - background
- The Environmental Inequalities project
- Chiswick and Archway case studies
- Conclusions

Background: Environmental Justice in the UK

- Not a movement, but based on work of researchers and NGO's
- Emerging in the 1990s, based on international agreements (Rio 1992, Aarhus 1998), EU Directives and national pressure groups
- Framed within centralised government structure, with emphasis on 'evidence-based policy' and 'targets' or 'performance masseurs'.

Mitchell 2005: "Although the UK does not have an EJ movement to compare with that of the USA, interest in the field has grown rapidly in the last 5 years. The discourse on EJ has been led by academics (Dobson, 1998; Walker, 1998; Agyeman, 2000), NGOs (Boardman et al., 1999; SDC, 2002; Adebawale, 2003) and pressure groups (FoE, 2001; Dunion, 2003). These activities have supported the strong policy guidance from the EU, leading government to voice strong support for the principle of EJ, although this has not yet been translated into significant activity at the regional and local levels. A review of this emerging discourse is provided by Agyeman and Evans (2004), who conclude that the links between EJ and sustainability are becoming clearer and more widely understood in the UK, both by government and others.

This understanding has been fostered by empirical studies into the relationship between environmental quality

and social distributions. Friends of the Earth (FoE, 2001) conducted the first analysis of this type in the UK as part of their 'Pollution and Poverty' campaign, and concluded that the large polluting factories were disproportionately located in poor communities. Many similar studies have followed, including substantive small area national analyses for the Environment Agency in England and Wales (Walker and Mitchell, 2003) and on behalf of a group of Scottish NGO's (Fairburn et al., 2005). Whilst the conception of EJ in the UK is broader than that of the US (e.g. it addresses access to environmental 'goods' and fairness in procedural matters), most studies have similarly focussed on environmental pollution, as adequate small area data to support other analysis is generally poorly available. Whilst the evidence base for environmental injustice in the UK remains comparatively weak, a review of past research conducted for government, concludes that "In the UK, environmental injustice is a real and substantive problem.that afflicts many of our most deprived communities and socially excluded groups" (Lucas et al., 2004)."

This is suitable within the centralist framework of policy and governance in the UK (Europe) where the central government maintains

Example: Indices of Multiple Deprivation

- Created by the government's department responsible to neighbourhood renewal
- Based on statistics collected centrally, then applied on Super Output Areas (synthetic 'neighbourhood', produced computationally from the census)

"The Office of the Deputy Prime Minister (ODPM) commissioned the Social Disadvantage Research Centre (SDRC) at the Department of Social Policy and Social Research at the University of Oxford to update the Indices of Deprivation 2000 (ID 2000) for England.

Following two extensive public consultations, an academic peer review and a significant programme of work, the new Indices of Deprivation 2004 were produced in 2004.

The Index of Multiple Deprivation 2004 (IMD 2004) is a measure of multiple deprivation at the small area level. The model of multiple deprivation which underpins the IMD 2004 is based on the idea of distinct dimensions of deprivation which can be recognised and measured separately. These are experienced by individuals living in an

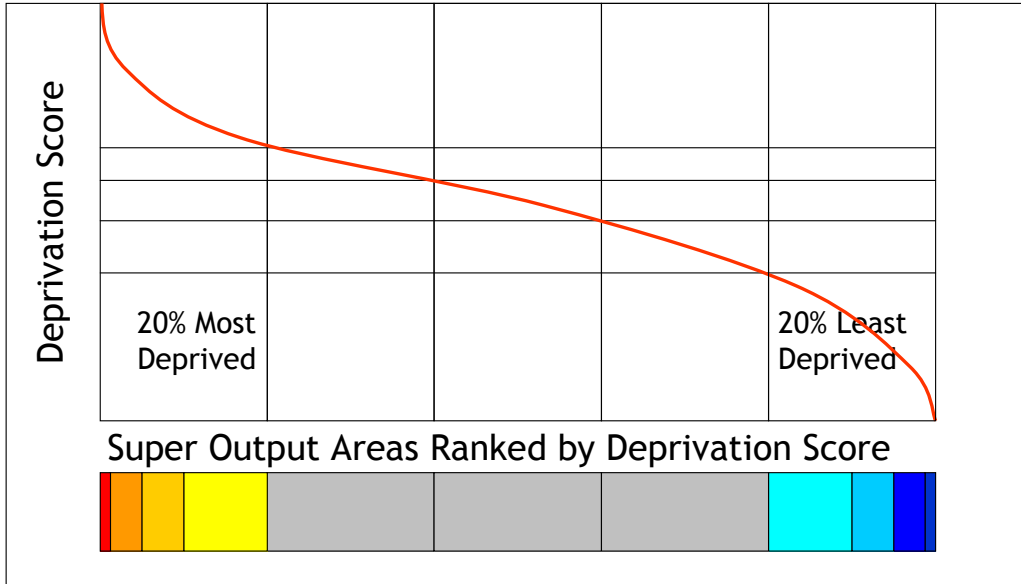
area. People may be counted in one or more of the domains, depending on the number of types of deprivation that they experience. The overall IMD is conceptualised as a weighted area level aggregation of these specific dimensions of deprivation." (ODPM 2004)

Indices of Multiple Deprivation

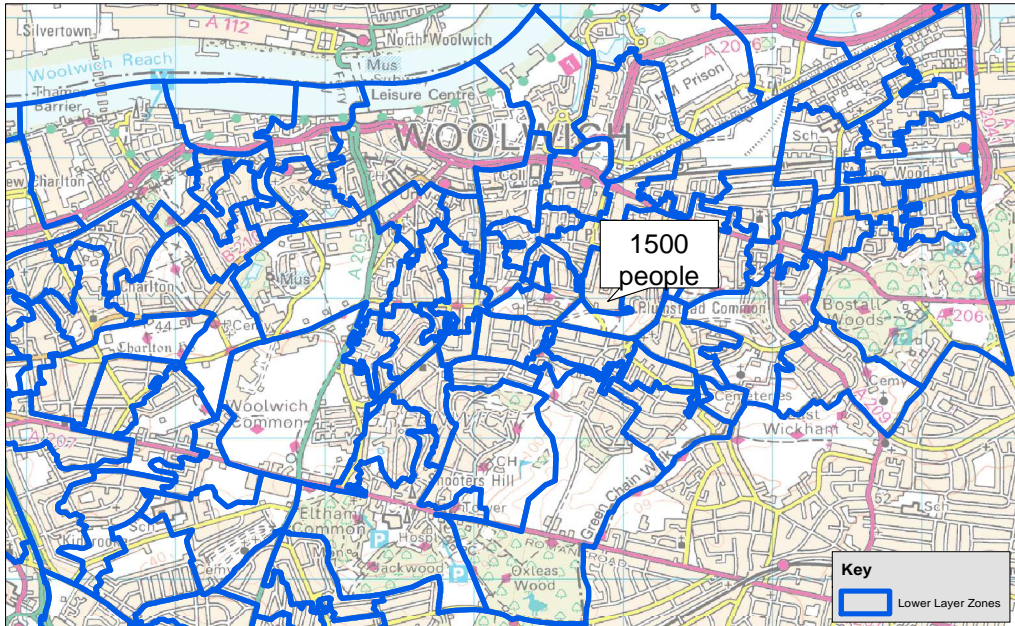
Deprivation Domain	England 2004	Scotland 2004	Wales 2000	Northern Ireland 2005
Income	22.5%	28.6%	25%	25%
Employment	22.5%	28.6%	25%	25%
Health & Disability	13.5%	14.3%	15%	15%
Education, Skills & Training	13.5%	14.3%	15%	15%
Housing	9.3%	4.8%	10%	×
Geographical Access to Services		9.5%	10%	10%
Crime	9.3%	×	×	5%
Living Environment	9.3%	×	×	5%

The composition of the IMD 2004 is based on various domains, combined together to produce the ranking of each SOA in England (about 36,000)

Indices of Multiple Deprivation - Typical Distribution of Scores



Greenwich lower layer SOAs



Example: Noise Mapping

- EU Directive relating to the assessment and management of Environmental noise 2002/49/EC
- Purposes: Monitoring, Informing the public, addressing local noise issue, developing an EU strategy
- In the UK, Noise mapping started in 1999, and in 2004 a model was completed for London

London Noise Map Web Viewer




The London Noise Map Web Viewer contains maps that show calculated levels of road traffic noise across the Greater London area. The maps do not include the effects of any other sources of noise, such as railways, aircraft, industrial or neighbour noise. One set of maps show noise from All Roads, and another set show only noise from Major Roads. Each map shows the level of noise using different ways of accounting for the variation of noise, both from moment to moment and at different times of day. These are called Noise Indexes. You can also view the maps at a selection of different sizes.

There are several ways of choosing the area of London that you wish to see in - by Post Code, by Street name, by Ordnance Survey Grid Reference, or for specialist users, by NoiseMap tile reference. Please read [important information](#) for more details on how the map was created, what it shows and its limitations.

For help on using the web viewer click [here](#).

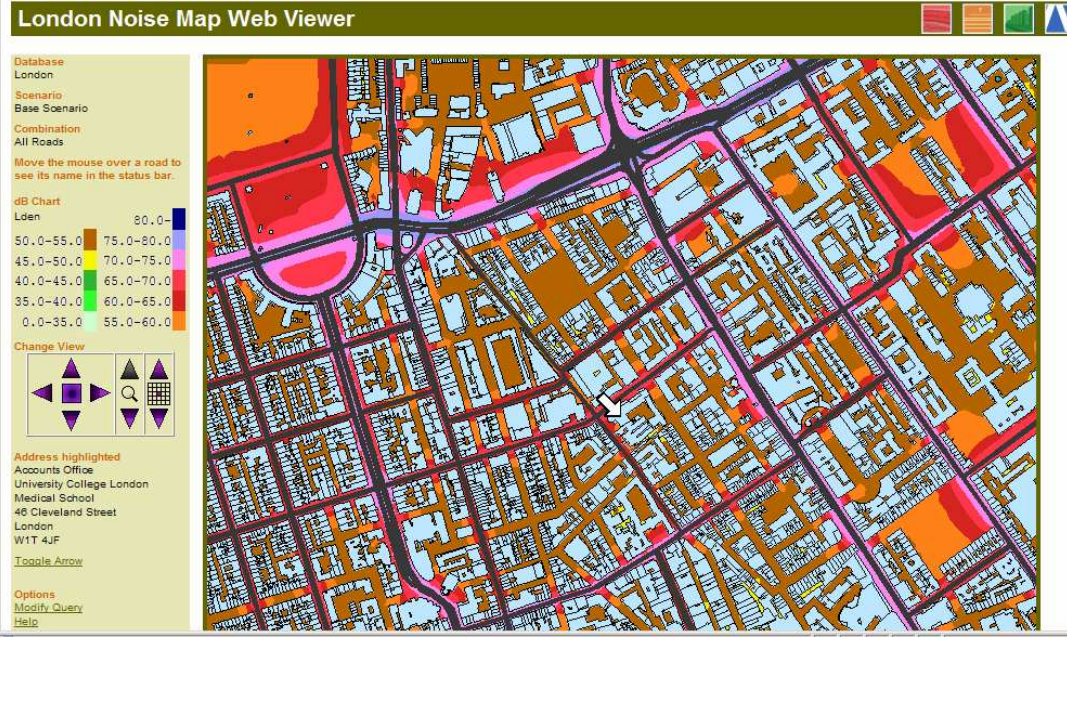
Please note: these pages require version 4 or later browsers. Mac OS users running Internet Explorer must be using version 5 or later.

Contour Options		Selection	
Scenario:	<input type="text" value="Base Scenario"/>	<input type="text" value="W1T 4JF"/>	
Combination:	<input type="text" value="All Roads"/>	Selection type:	
Contour Options:	<input type="text" value="Lden, 10.0m resolution, 4.0m above local ground"/>	<input checked="" type="radio"/> Post Code	
		<input type="radio"/> Street Match	
		<input type="radio"/> National Grid X,Y	
		<input type="radio"/> NoiseMap SE Grid Reference	
		<input type="button" value="Submit"/>	
Image Options			
Size:	<input type="text" value="Medium"/>		
Tile Surround:	<input type="text" value="2"/>		



<http://www.londonnoisemap.com/>

The London Noise Map site



Example of its output

Limitations

INDICES OF DEPRIVATION

- 1% Most Deprived
- 2 to 5%
- 5 to 10%
- 10 to 20%
- 20 to 80%
- 90 to 95%
- 95 to 99%
- 1% Least Deprived



EJ work in the UK – available resources

- Detailed accurate and high resolution digital mapping data available across the country from the Ordnance Survey
- Environmental information available from the British Geological Survey and the Environment Agency
- Access is privileged , hence the focus on research and central organisations (FoE)

The possibility of bottom up EJ work

- **Potential:**
 - Avoid data driven approaches (availability of Green Spaces, location of facility).
 - Understand local needs and concerns
 - Simple data collection, analysis and dissemination
- **Challenges**
 - Creating the interest by community groups
 - Access to data sets (even basic mapping)
 - Time and resources

London 21

- Created in 1998 from ‘Gathering for Change’ event
- A London network of organisations that promote sustainability
- A network of 1500 community groups and individuals
- Mission: “London 21 supports grassroots and disadvantaged Communities in acting to create a sustainable London. London 21 shares information and promotes good practice, raises awareness and recognises that Sustainable Development is a shared responsibility strengthened by collective action.”

From London 21 website:

London 21 is a network of community groups, individuals and representatives who work in all parts of London to help create a greener, healthier and more sustainable city. We are a registered charity and have been operating since 2000. London 21 is best known for LONDON SUSTAINABILITY WEEKS which takes place in June and involves 2 weeks of green events all over London.

London 21 also runs several projects including the Environmental Inequalities Project, the Black Minority and Ethnic Groups (BME) Project and the London Green Map which maps green activities, projects, businesses and organisations all over London. We also seek to provide information, advice, capacity building and networking to the community and voluntary sector on sustainable development. We send out a monthly e-newsletter which is received by about 1500 people and organisations. We also run several online discussion groups.

A Brief History

The need for a London network, which would link groups working on urban sustainability, arose in the 1990s when many London boroughs responded to the call from the 1992 UN Earth Summit for local councils to develop their own local version of the UN’s Agenda 21 action plan. The ‘Local Agenda 21’ programme led to close co-operation between many borough councils but relational links between the voluntary sector groups within those boroughs were in need of improving. A number of environmental networks in different boroughs held a meeting in April 1998 which was named ‘Gathering for Change’ out of which the London 21 Sustainability Network (London 21) was born.

London 21’s first AGM was held in May 2000. Initial support came from the Sustainable London Trust. London 21 is now chiefly funded by Bridge House Trust and the Big Lottery Fund.

Our Mission Statement

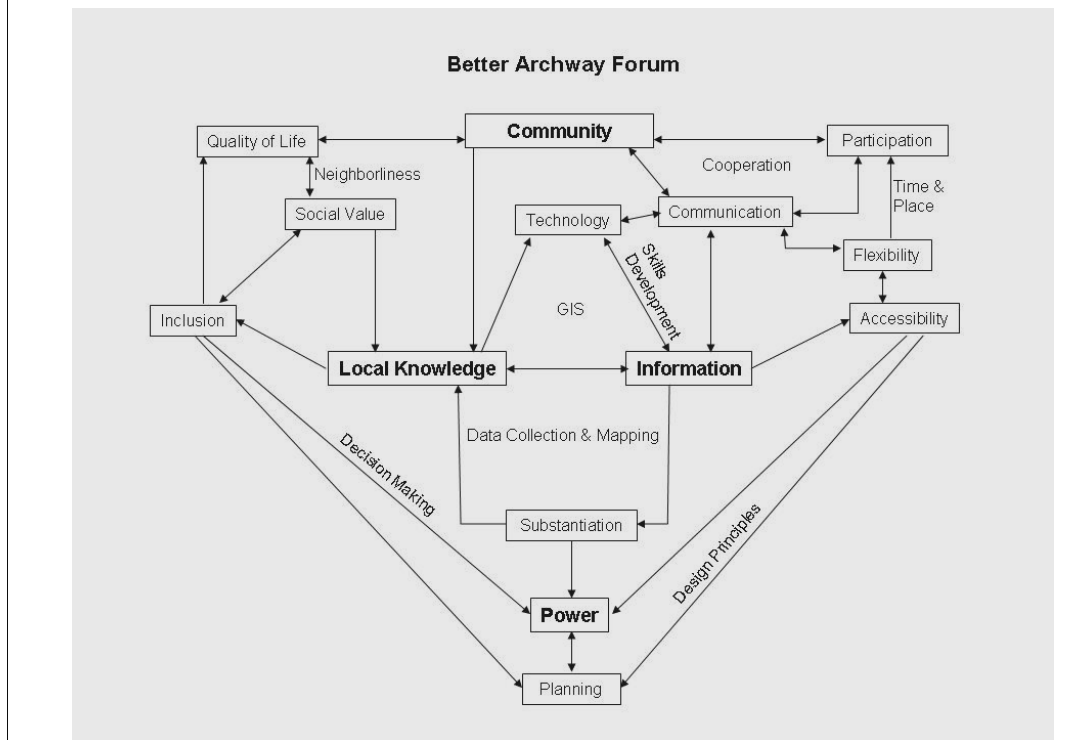
“London 21 supports grassroots and disadvantaged Communities in acting to create a sustainable London. London 21 shares information and promotes good practice, raises awareness and recognises that Sustainable Development is a shared responsibility strengthened by collective action.”

London 21 Environmental Inequalities project

1. To empower London's socially deprived communities to use data effectively to monitor local sustainability and, more specifically, environmental inequalities.
2. To engage young Londoners with sustainability and environmental inequality issues through environmental mapping.
3. To improve accessibility of environmental information to Londoners.

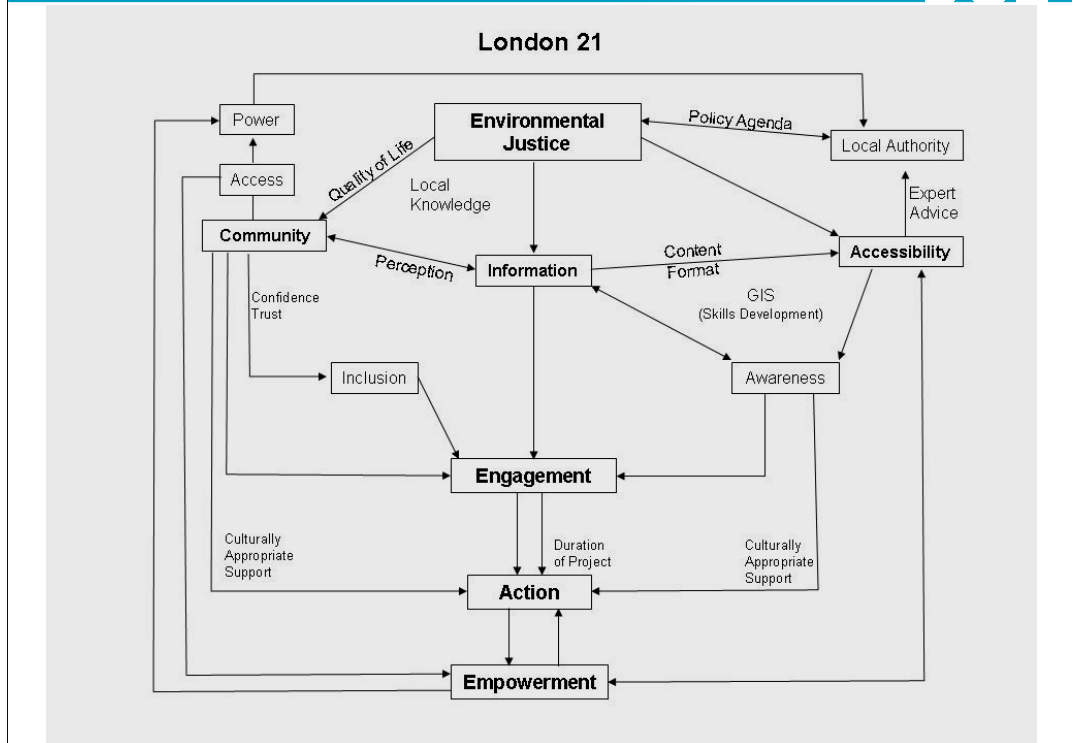
Case study I – Better Archway Forum





Through a process of focus group discussion and analysis of the transcripts, the current conceptualisation of EJ topics have been identified

The Figure represents thematically the expectations of the Better Archway Forum; the items in bold print represent those deemed most important to the focus group participants, while the arrows indicate the relative directions of influence and interaction between the themes. Of particular note here is the emphasis which the group places on the use of information to substantiate their local knowledge and their access to decision making (**Power**) and the planning process (**Planning**). This may not be the case for all groups participating in the project, so the themes were preserved in developing evaluative criteria, while the emphasis was not.

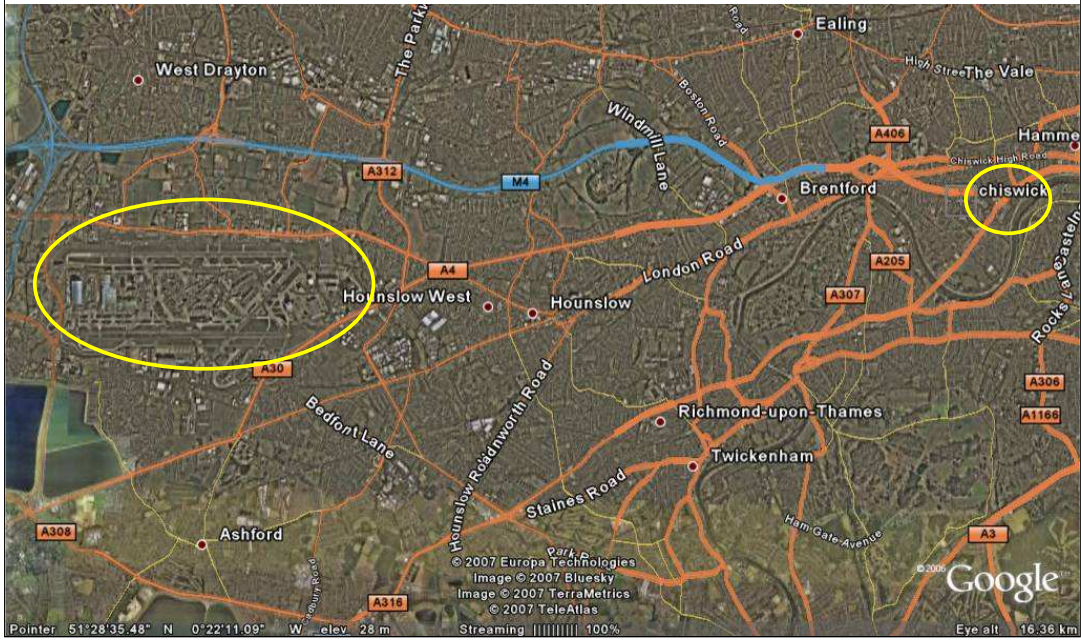


This Figure represents those aspects of the project important to the project staff. While the overwhelmingly noticeable emphasis on a single set of ideas, as seen in the BAF map, is lacking from London 21's expectations, the inclusion of Action and the interaction between Action, Empowerment, and Engagement are indicative of the organisation's focus. From the thematic maps and review of focus group transcripts, the two groups' expectations for a successful process and successful outcomes were determined,

Better Archway Forum – lessons

- Need for a flexible definition of EJ: Even within two small, community led organisations, there are differing views on the meaning
- Within the UK context, the concepts of inequality and social capital are more relevant for understanding EJ at the local level

Case study II – Chiswick



Case study II – Chiswick



Source: Flickr, Philip Sheldrake

Chiswick – a relatively affluent area of London, near the Thames but also next to main roads and on the flight path to and from Heathrow

Engaging with the people of Chiswick

- Through a active local forum (chiswickw4.com)
- Two focus groups using maps, focusing on:
 - Defining the top ten environmental issues in Chiswick
 - How data concerning these issues should be presented
 - How environmental data is displayed using examples of data currently available
- In addition, some interviews (professionals, officials)



The image has 'won' a competition to find an image that represents local environmental problems

Chiswick - outcomes

- **Attitude to information:**
 - Learning and informing
 - Creating new information to highlight a problem
 - Developing counter arguments
- **Accuracy and presentation:**
 - Accuracy and Credibility
 - Fitness for Purpose
 - Tenable Analysis
 - Local Knowledge as a Filter
 - Clarity
 - Scale
 - Presentation

During the focus groups it became apparent that presenting information to a group of people prompts different reactions from each group member dependant on their previous experiences of similar data and how they envisage putting that information to use. From analysing the transcripts from the focus groups we identified three roles for information, which can be summarised as follows:

The learning process - I want to know more about X.

Finding and providing new information - evolving my own indicators to identify and highlight an issue or problem because I feel current data is in some way inadequate.

Formulating a counter-argument – X's information shows something that, from my personal experience, I believe can't be true or I want to dispute because I feel it will have a negative impact on my lifestyle.

. From the perspective of the non-GIS user these issues arose while analysing the Noise maps and during the discussion on how we present environmental information:

Accuracy and Credibility

Fitness for Purpose

Tenable Analysis

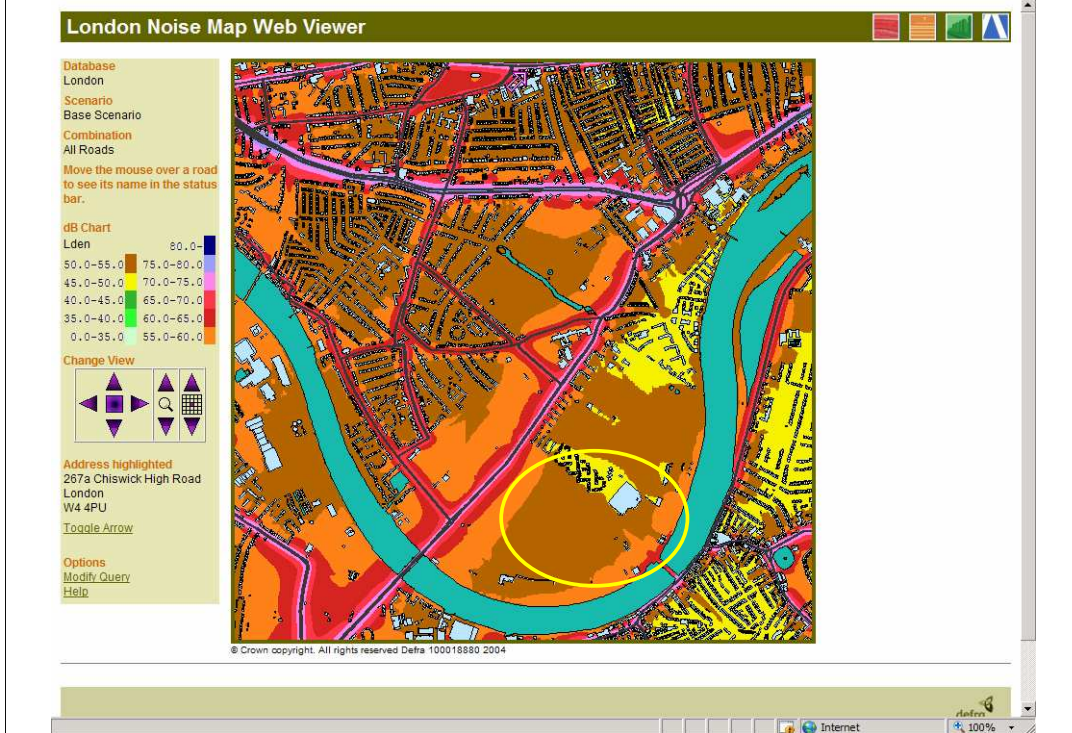
Local Knowledge as a Filter

Clarity

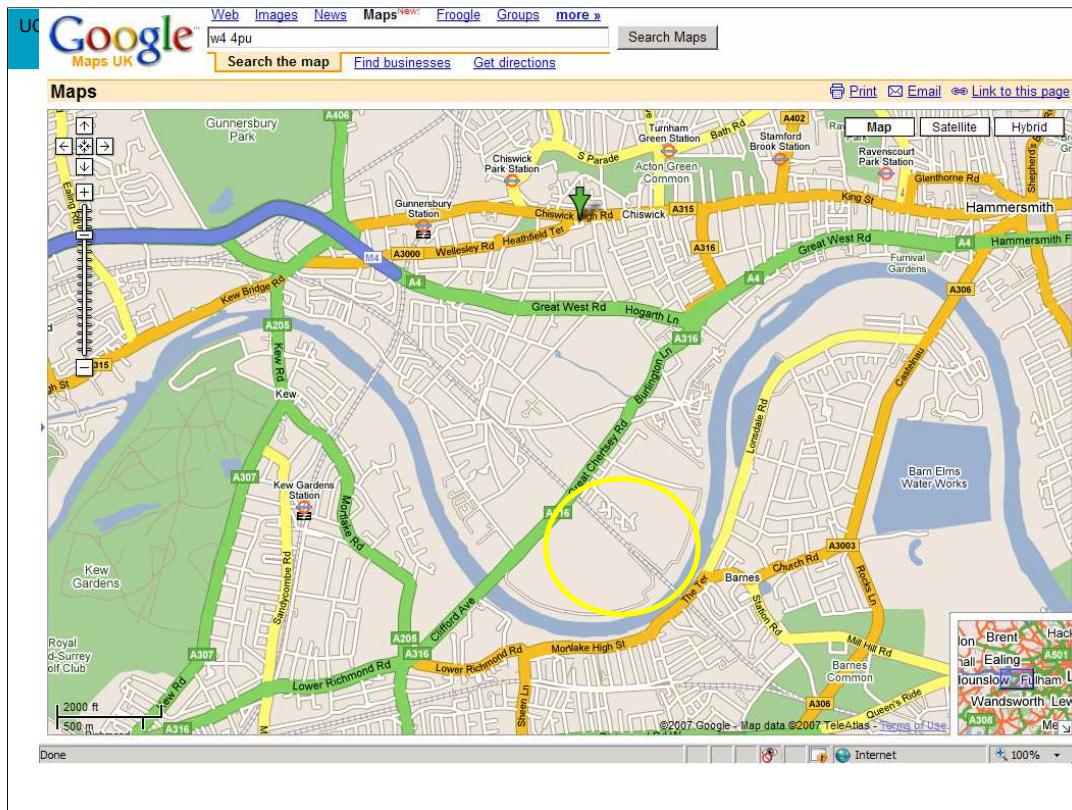
Scale

Presentation

It is interesting to compare the opinions of the GI Science community (which from now on will be referred to as GIS professionals) to non-GIS users' thoughts on accuracy, credibility and presentation when assessing data. This is because it is important to understand how the general public will evaluate information so that this can be taken into consideration when we present them with information produced by GI Systems.



When presented with the noise map, the group noticed that the level in the marked area are low



Yet there is a major railway in the area... discussion followed:

P5F1: they collected information in a few places just to understand what the pattern of traffic was. Then they created a traffic model and then on the basis of that using the topography from an Ordnance Survey map they have calculated the estimated noise level across London. What you think about the values and what you learn by your place from them?

P1F1: are you telling me this is just a computer guess this?

P5F1: yes

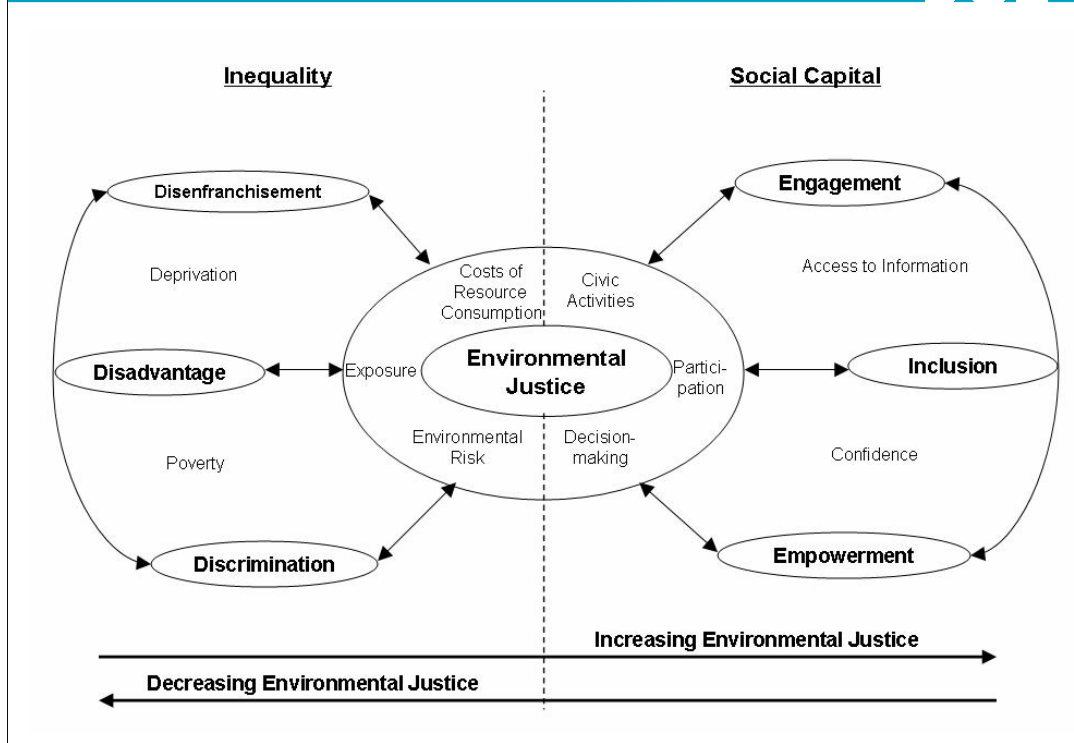
P1F1: Well then I learn nothing so I don't trust it

P3F1: I'm... I'm prepared to believe that this is actually the noisiest bit... (pointing to the M4) murmurs of agreement

P1F1: yes I'm prepared to believe that but this whole area here that doesn't tell me much!

Lessons from Chiswick

- Even without pronounced local community groups but with existing networks of communication it is possible to start meaningful EJ discussion
- Concepts of EJ are tangible, and linked to local concerns
- Active collection of information is valuable in engaging participation.



In summary, the bottom up approach can be framed with a model of positive and negative impacts, where the positive side can be incorporated under the concept of social capital, whereas the negatives are linked to concepts of inequalities

Summary

- Bottom-up EJ project is possible, but require a 'starter' - it is not prominent in the mind of communities
- The available information can be used as a basis and catalyst for local information gathering
- Social capital and inequalities can help in framing EJ within the UK context