the agi conference at GIS 2001

Track 2: Neighbourhood renewal





# **Better local information**

Dev Virdee, Office for National Statistics

## **Neighbourhood Statistics Service**

The Office for National Statistics is leading the development of a revolutionary new Internet based service – the Neighbourhood Statistics Service. At its heart will be the aim to supply the information needs for the National Strategy for Neighbourhood Renewal: "how to develop integrated and sustainable approaches to the problems of the worst housing estates, including crime, drugs, unemployment, community breakdown and bad schools...". Tackling these sorts of issues requires "... comprehensive and good quality information at a small area level .... to enable a better understanding of local problems and more effective targeting of solutions".

It is a joint initiative involving Central Government departments, the devolved administrations, local government and the wider public service, for the mutual benefit of all these bodies and for the community more generally. It promises to transform the availability of statistics and other information for thousands of areas across the country.

#### The need

Public services in the UK are seeking local solutions for local issues - whether they concern combating social deprivation or crime, providing housing, caring for the elderly or ensuring that the needs of school children or minority groups are met. But finding local solutions requires local information.

According to the report of Policy Action Team 18 on Better Information<sup>1</sup> published in April 2000 as part of the National Strategy for Neighbourhood Renewal, "The absence of information about neighbourhoods has produced a series of failings at national, local and community level", "...policies can easily be misdesigned or mistargeted" and "important trends have been missed by national and local government. Too often problems simply go unnoticed until they reach crisis point"

Equally, if the development and monitoring of social policy at the <u>national</u> level is to be on the basis of relevant evidence, the analysis of small-area data is often required. The patterns of social conditions across the country, how they interact and how they are affected by public service intervention, are critical parts of the evidence base.

## The service

In its full implementation the Neighbourhood Statistics Service will offer users ready access to a vast range of social and economic aggregate data on a consistent small-area geography and supported by a range of powerful analytical tools with which to turn the raw data into relevant and comprehensible information. Where exact geographic locations are not confidential, for example the location of post offices or other services, the aim will be to include precise point-references via an underlying geographic information system (GIS). A parallel service is to be developed in Scotland providing additional information to complement the UK service.

<sup>&</sup>lt;sup>1</sup> Social Exclusion Unit, Report of Policy Action Team 18: Better Information, TSO, 2000a

It will take a number of years to reach the goal of full implementation. The service will be built steadily over that period in a series of phases, set out in more detail below. The initial databases will contain data at the ward (electoral division) level where this is available. Later developments will extend the range of data, taking in the 2001 Census data in 2003, and introducing geographical units much smaller than wards. The detail and flexibility of analysis available will be enhanced by the inclusion of 'modelled' data using the latest techniques to provide estimates, of average household income for example, at the small-area level.

## Partnership

This new service will be developed in partnership with the many organisations that collect data which can inform the National Strategy for Neighbourhood Renewal. It will be guided by the needs of its users. Its range and quality will depend on the commitment and practical support of central government, the devolved administrations, local government and all other public services. Progress will be monitored and widely reported through consultative arrangements.

## Users

- local communities who want to draw attention to an issue or to look at ways their local services might be improved
- local authorities which act as community leaders and which manage many of the key public services at the county or district level; for example education, social services and social housing
- government administrations and departments some of which manage local services directly and many of which are responsible for socio-economic policies
- health authorities and other bodies concerned with the determinants of public health
- police and fire authorities which have their special areas of responsibility as well as working closely with local government on many issues
- other agencies and voluntary bodies which provide services to communities or groups within them
- professionals and commentators who analyse social data to inform or assess policy
- **businesses** which want to know about potential demands for commercial services of various kinds
- the citizen who wants to see and understand what is happening in his or her neighbourhood, influence policy or gauge progress against the objectives and goals to which services work

## **Benefits**

Some examples of the many ways in which the service will support good government by assisting neighbourhood renewal – to facilitate "a better understanding of local problems and effective targeting of solutions" – are as follows.

- deciding to act local data can provide the evidence that particular communities face problems of a kind that can be tackled locally. Many local authorities already do their best to draw together local data for planning purposes but are frustrated by lack of information from central sources.
- planning what to do providing the information needed to work out an effective approach for example by analysing the way social conditions influence school performance. More generally, using the data to understand why social and economic circumstances vary across the country in the way they do informs decision making.
- assessing relative need pinpointing those local areas which have the greatest need and assessing how other areas compare and doing so in a way which everyone can see to be fair. Information of this kind is vital for targeting and allocating the resources of central and local government.

- analysing providing the data needed for before-and-after analysis at the local level, to monitor change and help assess the impact of action taken, or identifying areas which meet specific criteria for the purposes of social research or for piloting government initiatives.
- monitoring progress against the objectives and goals that government and other agencies set.

#### **Phased development**

Hundreds of public bodies throughout the UK already collect local information which increases understanding about neighbourhoods and inform communities about the circumstances in their area. Under the National Strategy for Neighbourhood Renewal, a new focus on building up consistent databases of local information will be introduced into the existing arrangements.

The service will be built up over several years. Subject to the necessary resources, the key phases are likely to be:

- 1. Launch phase by early 2001 an initial database from existing sources, mainly for England, providing data down to ward level with some analytical tools. This phase will also see a major drive to explain and promote the service.
- 2. Incremental phase through 2001 and into 2002 additional datasets added from existing sources over a period of months.
- 3. Enhancements phase from 2002 still mainly at ward level but with a wide range of new estimates (building on small area estimation techniques) and improved analytical tools.
- 4. GIS implementation phase in 2002 a geographic information system will be incorporated and the first point-referenced data (location of services and social/physical infrastructure) added.
- 5. Census launch phase in 2003 a large amount of new Census data, and some other statistics, will be added at the Census Output Area level (20 times more detailed than wards).
- 6. Full service phase from 2003/2004 further datasets added at the Census geography, including specialised local ones, and the point-referenced data extended as far as is consistent with confidentiality. The service will be developed further in time to allow users the maximum flexibility in the output geography.

#### Management

The Neighbourhood Statistics Service will be managed centrally by the Office for National Statistics. Detailed policies on matters such as protecting the confidentiality of data on individuals, the criteria for inclusion of data, rules on updating and guidance for users will be developed in consultation with users and suppliers of data. The aim will be to balance the value of comprehensiveness against the hazards of including data of lesser quality or reliability.

#### Confidentiality

Absolute priority will be given to protecting the confidentiality of personal information at all stages. Stringent procedures will be put in place to ensure that confidential information is not detectable from the statistics, either directly or through the comparison of data sources. The Office for National Statistics will guide the work under a formal code of practice, working closely with the Data Protection Registrar.

#### Specialist tools

The Neighbourhood Statistics Service will offer some special services to help public bodies put their own data into a suitable format for Neighbourhood Statistics. These will provide a consistent way of estimating figures for the required small areas and will ensure that confidential information is not disclosed. These specialist tools will be of value in many other areas of analytical work as well:

• Geographic referencing tools – subject to resource allocation and the outcome of a major consultation exercise on the best way to bring in a consistent approach, computer software will be developed

centrally which will give a consistent geographic reference to any data relating to an address, place or area. These references will not be affected by postcode changes, address changes or boundary changes. This will in turn allow information from many sources to be analysed on a consistent geography.

- Small area estimation tools which will provide a consistent way to calculate estimates for one set of areas from figures for a different set, and so enabling estimates to be made for smaller areas than would otherwise be possible.
- Small area population estimates which will provide the best consistent estimates of the resident population in each of the small areas used in the Neighbourhood Statistics Service. As well being valuable in their own right, these estimates will enable users to standardise other figures and calculate rates.
- Disclosure control protocols which will ensure that information about individuals cannot be seen in, or deduced from, the databases supporting the Neighbourhood Statistics Service.
- Analytical package which will assist users in handling the vast amount of data available through the service.

#### Data development programme

The goal of consistent data for small geographical areas has implications for data management by public bodies and also the private sector. In some cases data systems are already able to provide the required level of detail. In others, estimation techniques will enable estimates to be drawn from existing sources. The 2001 Census will fill many gaps. But there are still many cases where the processes by which statistics are extracted from administrative sources, or estimated from surveys, will need to be improved. The Office for National Statistics will work closely with all those involved in data collection to identify the least burdensome and most efficient ways of improving source material. The work flowing from this initiative will be called the Data Development Programme.

#### Access and user registration

It is expected that the service will mainly be accessed via the Internet, from the National Statistics website, www.statistics.gov.uk. A newsletter and consultation group will be set up on the website and anyone wishing to be kept in touch with developments will be able to register to receive regular updates.