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Neighbourhood Statistics - Focusing on Local Statistics

This paper reviews the key features of the Neighbourhood Statistics Service and the expected benefits, and highlights a number of practical issues associated with development and implementation.

Advisory Group members are invited to note the paper.

1.   Introduction

1.1 The Office for National Statistics (ONS) is leading the development of a new Internet facility - the Neighbourhood Statistics Service (www.neighbourhood.statistics.gov.uk) designed to meet the information needs of the National Strategy for Neighbourhood Renewal.

1.2 This new service (NeSS) will be developed in partnership with many organisations that already provide statistical information and will take account of the needs of users. Its range and quality will depend on the commitment and practical support of Central Government departments, the devolved administrations, local government and other public services. It promises to transform the availability of statistics and other information for thousands of areas across the country.

1.3 Public services in the United Kingdom are seeking local solutions to local problems such as deprivation, social exclusion and crime. If we are to deal effectively with these matters access to comprehensive and good quality information at a small area level is essential.

1.4 When it is fully implemented the NeSS will offer users ready access to a range of social and economic aggregate data on a consistent small area geography. Where exact geographical 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).

1.5 It will take a number of years to reach the goal of full implementation. The service will be built up in a series of phases. Whereas the initial databases primarily contain data at ward or local authority levels, later stages will extend the range of data, taking in the 2001 Census results in 2003, and introducing information for smaller areas where appropriate.

1.6 This paper reviews the key features of the service, the expected benefits and highlights a number of practical issues associated with development and implementation.

2. High level objectives

2.1 The aim of this initiative is to draw on the wide range of statistics collected routinely for administrative purposes and, where appropriate, use estimation techniques to overcome gaps or facilitate the use of existing survey data at smaller area levels.

2.2 A common geographic referencing framework will be set up for use by all data suppliers. This framework will be supported by geographic referencing data, specific software tools or methods in order to facilitate the linking of data records to small areas.

2.3 Special measures will be taken to create a more stable geographic environment. In particular, steps will be taken to minimise the impact of electoral and administrative boundary changes for the derivation of statistics and the development of consistent time series by implementing changes on a common date.

2.4 A key aspect of the work will be the development and adoption of stringent disclosure control procedures to protect the confidentiality of personal information and allay any fears that the public may have about the collection and use of local level data.

2.5 The National Statistics Code of Practice and its associated protocols will be used as a basis for guidance and best practice on data sharing, confidentiality and other statistical issues.

3. Benefits

3.1 The aim of this work is to deliver a better statistical and technical infrastructure and information resource so that progress towards the high-level goals and targets of specific government policy initiatives can be measured and tracked over time. More specifically, the NeSS will provide easy and ready access to a comprehensive and up-to-date repository of statistical information to identify, assess and monitor changes in social conditions and deprivation across the country.

3.2 The availability of information for individual neighbourhoods will improve the design and targeting of policies and programmes, facilitate detailed evaluation of their impact and effectiveness and improve resource allocation.

3.3 By bringing together information from the 2001 Census and other sources, access to key statistics will be improved. A wider public user base for official statistics will be created and supported. Local people will be able to identify and focus on issues that are relevant to them.

4. Implementing the Neighbourhood Statistics Service

4.1 A number of different techniques will be used to develop the programme. Administrative records will be used extensively for the first time and major surveys such as the Labour Force Survey and the General Household Survey will be extended. Harmonisation of questions, data definitions and classifications will help to improve comparability, the matching and sharing of data. To maximise the identification and exchange of information a key part of the programme will involve working jointly with central and local government as well as other data providers across the public sector.

4.2 There will be a systematic programme to collect, on a continuous basis, a range of administrative data for nine key statistical domains including:

- Access to Services;
- Community Well-being;
- Community Safety;
- Economic Deprivation;
- Education, Skills and Training;
- Health;
- Housing;
- Physical Environment; and
- Work Deprivation.

4.3 Where feasible, statistical modelling techniques will be used to overcome the limitations of existing survey sources so that information for smaller areas, such as local authority districts or wards, can be provided.

4.4 A new common geographic referencing framework will be developed for all official statistics at national and local level. This will be based on national geo-referencing standards agreed with Ordnance Survey and will be based on a spatial data referencing warehouse that will consist of a series of time stamped layers of geographic information, such as addresses, boundaries, area hierarchies etc.

4.5 A high quality, high performance IT infrastructure will also be developed. The 'front-end' will include a web-based Geographic Information System (GIS) interface capable of supporting a flexible analytical and reporting framework. The 'back-end' of the IT infrastructure will facilitate the capture, cleaning, storage and dissemination of small area statistics including those from the 2001 Census.

4.6 A package of tools, training and support for data owners will be provided to make it easy for them to adopt the common geographic referencing framework. This will provide a consistent basis for the collection and collation of locally held administrative and other data.

4.7 Special attention will be given to the use of appropriate disclosure control procedures in order to ensure that no information about an identifiable individual or household is released.

5. Data development priorities

5.1 The administrative data sets to be included in the NeSS will be added in tranches as the data development programme proceeds over the next two years.

5.2 At present there are a limited number of data sets available in the system. Relevant details are summarised in Table 1.

Table 1   Data Sets Available from the Neighbourhood Statistics Service.

Area of Interest	Data Set
Crime	Notifiable offences recorded by the police
Economic Deprivation	Family Credit claimants
	Income Support claimants
Education Skills and Training	University admissions by place of residence, 1997 and 1998
	Primary school pupils at Key Stage 2, Summer 1998
Health	Attendance Allowance claimants
	Disability Living Allowance
	Drug mis-users presenting for treatment
	Hospital Episode Statistics, 1999/2000
Housing	Dwelling Stock by Council Tax Band, 2001

Work Deprivation	Jobseeker's Allowance claimants
	Incapacity Benefit claimants
	Severe Disablement Allowance claimants
	VAT registered enterprises by industry group, March 2000
	VAT registered enterprises by employment sizeband, March 2000
	Employee jobs, September 1998
	Claimant count - Oxford University ward level estimates
	Claimant count and claimant count rate (revised 29/09/01)
Indices of Deprivation	Indices of Deprivation for wards in England, 2000
	Indices of Deprivation for districts in England, 2000
	Indices of Deprivation for electoral divisions in Wales, 2000
Population and Vital Statistics	Oxford University population estimates for wards in England, mid 1998
	Vital Statistics, 1998
	Resident population estimates for local authorities in England, mid 1998
Other	Parliamentary Electorate 1997-98 (England), 1994-98 (Wales)
Cross-cutting	Countryside Agency's Ward Level Definition of Rural Areas

5.3 Statistical information from these data sets, based on aggregated administrative data collected for operational purposes, are available at various geographical levels ranging from wards to local authority districts as well as specially constituted Health Authority Areas.

5.4 As part of the data development programme, priority is being given to a number of data sets held by central government departments for key administrative purposes. Whereas some can be relatively easily incorporated into the statistical database, others will require further work, or will be the subject of detailed scoping exercises to assess their suitability for inclusion.

5.5 In accordance with agreed procedures and after consultation with key government users, work will focus on the development and delivery of data which will help to tackle multiple deprivation and social exclusion at local community or neighbourhood level. Examples of what this innovative programme aims to provide by 2004 is set out in Annex A.

6. Quality

6.1 It is essential that information designed to meet policy requirements is fit for purpose. In particular, all data should comply with National Statistics standards. At the same time, mechanisms are needed to ensure that appropriate procedures are used to assess, quality assure and, if necessary correct individual data sets.

6.2 Professional standards for the production of statistics are enshrined in the National Statistics Code of Practice and its associated protocols. Outputs made available through NeSS must comply with agreed quality standards and be fit for purpose. Outputs will need to take account of key quality attributes including:

- relevance;
- accuracy;
- timeliness;
- accessibility;
- comparability;
- coherence; and
- completeness.

6.3 These attributes will be used to develop a more detailed checklist of measures that will be agreed with individual data owners and suppliers. In addition, attention will be given to issues associated with geo-referencing including the quality of address data used, as well as methods of referencing. Although standard methods or approaches will be used whenever possible, consistency will need to be balanced by an understanding of the characteristics of individual data sets, fitness for purpose, costs, burden and the existing assessments available from suppliers.

6.4 Members of the Neighbourhood Statistics Service will work co-operatively with data providers to give guidance on quality standards and measures as well as to develop appropriate quality assurance and validation procedures.

7.   Conclusion

7.1 As well as developing Neighbourhood Statistics, the ONS is considering how small area information on population and housing will be supplied throughout the decade, leading up to a possible Census in 2011. Although much detailed research will be needed before final decisions are made, there can be little doubt that the development of NeSS represents a major step forward in improving the availability of a wide range of data at a small area level.

NeSS Data Development Programme
ONS
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Administrative Data Sets

Access to Services

Priority A	Cultural Facilities Register
	Transport
	Point Location of Services
Priority B	Community Legal Services

Community Well-being

Priority A	Best Value Performance Indicators
	Caring Responsibilities
	Population Turnover
	Voter Turnout
	Modelling of Quality of Life Indicators
	Development of Other Administrative Data
	Social Capital Indicators
	Social Capital Question Development

Community Safety

Priority A	National Fire Statistics Database
	Fire Statistics Incidents by UK Fire Brigades
	British Crime Survey Modelling
	Crime Data Extraction
To be scoped	Offender Data

Economic and Work Deprivation

Priority A	Population Migration
	Low Income Benefit Receipt
	Dynamic Measures of Worklessness
	Dynamic Measures of Low Income
Priority B	Business Register Employment Data
To be scoped	Labour Force Survey
	National Lottery Grants
	Telephone Disconnections
	Small Business Data
	Personal Income Data
	PA1003 Size Analysis of UK Businesses
	Annual Register Inquiry

Education, Skills and Training

        Priority A   Various Education Data Sets

Health

        Priority A   Hospital Episode Statistics
                                    Children Looked After
                                    Smoking Cessation
                                    Mental Health Data
                                    Healthy Lifestyles
                                    Disability Benefits
                                    Mortality Rates - smoothing methods
                                    Premature or Avoidable Mortality
                                    Life Expectancy

        Priority B   Local Doctors and Service Provision
                                    Accident and Emergency Statistics
                                    Children in Need

        To be scoped   National Drug Treatment Monitoring System
                                    Disability
                                    Dental Caries in Children

Housing

        Priority A   Council Tax Data
                                    Tenure
                                    House Prices/Changing House Prices
                                    Poor Quality Housing

        Priority B   Rent Levels

        To be scoped   Affordability

Physical Environment

        Priority A   Ambient Air Quality
                                    Abandoned Vehicles
                                    Information on Vacant Commercial and Industrial Space
                                    Floorspace and Rental Value/sq.m. of Commercial and
                                    Industrial Premises
                                    Liveability
                                    Town Centre Statistics
                                    National Land Use Data Set
                                    Open Space