

Indices of Deprivation 2004 for England

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Structure of presentation

- ◆ Introduction to Indices of Deprivation in the UK
- ◆ Indices of Deprivation 2004 for England (ID 2004)
- ◆ Use of the 2001 Census in the ID 2004
 - ★ Geography
 - ★ Denominators
 - ★ Indicators
- ◆ Questions and discussion

Introduction to Indices of Deprivation in the UK

What are Indices of Deprivation?

- ◆ Relative measure of social deprivation at small area level
- ◆ Multidimensional (i.e. not just restricted to income deprivation)
- ◆ Covers an entire country (e.g. England / Wales / Scotland / Northern Ireland)
- ◆ ‘Snap shot’ of situation at a particular point in time
- ◆ Can be combined to form ‘Index of Multiple Deprivation’

Recent Indices of Deprivation

- ◆ Index of Local Conditions, 1991
- ◆ Index of Local Deprivation, 1998
- ◆ Indices of Deprivation 2000 (ID2000)
- ◆ Welsh Index of Multiple Deprivation 2000
- ◆ Northern Ireland Measures of Multiple Deprivation 2001
- ◆ Index of Deprivation for Scotland 2003
- ◆ English Indices of Deprivation 2004 (ID2004)

Indices of Deprivation 2004 for England

ID 2004

- ◆ Commissioned by the Neighbourhood Renewal Unit (NRU) at the Office of the Deputy Prime Minister (ODPM)
- ◆ Developed by the Social Disadvantage Research Centre (SDRC) at the University of Oxford

Objective

- ◆ To create a relative measure of multiple deprivation at small area level
- ◆ Which is up-to-date and updateable

Usage

- ◆ Targeting of resources
 - ★ Neighbourhood Renewal Fund
 - ★ Area Based Initiatives (ABIs)
- ◆ Good summary measure of neighbourhood level deprivation therefore used as ecological explanatory factor in many analyses

Model of Multiple Deprivation

- ◆ Deprivation is (like social exclusion) multi-dimensional.
- ◆ Multiple Deprivation can therefore be conceptualised as the combination of individual dimensions or domains of deprivation.
- ◆ The individual Dimensions or Domains must be identified and carefully defined.
- ◆ Indicators are selected for each domain which are the best possible **direct** measures of that dimension of deprivation.
- ◆ The indicators are combined to create an **overall relative measure** of that dimension of deprivation.
- ◆ Domains are combined to form an overall **Index of Multiple Deprivation** (statistical techniques used to control cancellation effects)

Domains of Deprivation in the ID 2004

- ◆ Income Deprivation Domain
- ◆ Employment Deprivation Domain
- ◆ Health Deprivation and Disability Domain
- ◆ Education, Skills and Training Deprivation Domain
- ◆ Barriers to Housing and Services Domain
- ◆ Crime Domain
- ◆ The Living Environment Deprivation Domain

Use of the 2001 Census in the ID 2004

Geography

English Geography (2001 Census)

England

9 Regions

354 Local Authority Districts

7932 Wards*

32,482 Super Output Areas (SOAs)**

165,665 Output Areas (OAs)

* 2001 Census 'Standard Table' Wards

** 'Lower Layer' SOAs

Census Output Area Geography

◆ 2001 Census OAs...

- ...were built from clusters of adjacent unit postcodes
- ...reflect characteristics of the actual Census data (tenure & dwelling type)
- ...were therefore defined after data processing
- ...were designed to have similar population size
- ...and be as socially homogeneous as possible
- ...avoid urban / rural mixes where possible
- ...have approximately regular shapes
- ...were constrained by obvious boundaries
- ...were required to have a specified minimum population size

Census Super Output Area Geography

◆ 3 'Layers' of Super Output Area geography:

- ★ Lower Layer: min pop=1000; mean pop=1500

 - Built from OAs (typically 5) & constrained by ST wards

- ★ Middle Layer: min pop=5000; mean pop=7200

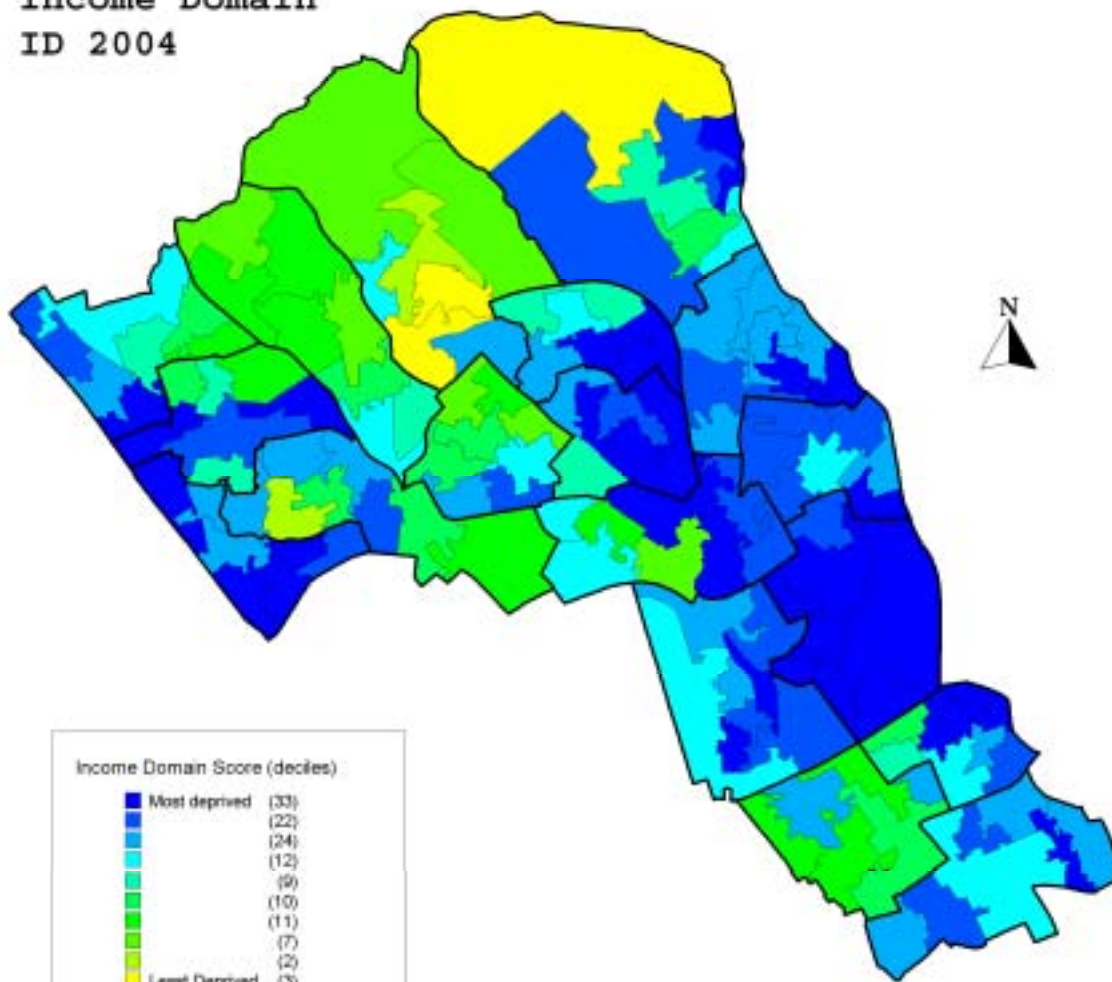
 - Built from SOAs & constrained by LAs

- ★ Upper Layer: to be determined; max pop=25000

The Geography of the ID 2004

- ◆ Prior to ID 2004, all UK Indices used electoral wards - problematic because of
 - ★ very large variation in size effectively hiding deprivation (range from 100 to 35,000 people)
 - ★ and constant ward boundary changes
- ◆ ID 2004 uses ‘Lower Layer’ Super Output Areas (SOAs) to overcome these shortcomings and enable better targeting of small areas (approx 1500 people each)

Camden
Income Domain
ID 2004



Denominators

Denominators

◆ Most indicators constructed as rates

- ★ e.g. rate of benefit receipt
- ★ e.g. rate of entry into higher education
- ★ e.g. rate of mortality/morbidity
- ★ e.g. rate of crime victimisation

◆ Denominators need to estimate 'at-risk' population

◆ Denominators need to be indicator-specific

Denominators

- ◆ Most indicators based on data for 2001
- ◆ Most indicators required denominators based on resident population only – but minus prison population!
- ◆ Various different age/sex breakdown requirements
- ◆ Estimates needed at SOA level for the whole of England

Crime Domain Denominators

- ◆ Crime Domain different to other domains in nature
- ◆ 4 composite indicators:
 - ★ Burglary
 - ★ Violence
 - ★ Theft
 - ★ Criminal Damage

Crime Domain Denominators

◆ Crime Domain different to other domains in nature

◆ 4 composite indicators:

★ Burglary

- property-based denom

★ Violence

★ Theft

★ Criminal Damage

- population-based denom

Estimates of properties / population 'at-risk'

- ◆ At risk properties =
 - Residential properties
 - + Commercial / industrial properties

- ◆ At risk population =
 - Resident population (minus prison)
 - + Workers
 - + Students
 - + Shoppers / recreational users
 - + Passers by
 - + etc...

Estimates of properties / population 'at-risk'

◆ At risk properties =

Residential properties
+ Commercial/industrial properties

**Total Dwellings (Census)
+ OS Address Point**

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Resident population (minus prison)
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+ etc...

**Resident Population
- Prison Pop
+ Non Resident Workplace Pop
(all from Census)**

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Indicators

Types of data used

◆ Primarily ‘administrative data’

- ★ e.g. Benefits data (DWP)
- ★ e.g. Pupil attainment data (DfES)
- ★ e.g. Hospital Episode Statistics (DoH)
- ★ e.g. Recorded crime data (39 police forces)

◆ But also...

- ◆ Survey data
- ◆ 2001 Census data

2001 Census-based indicators

◆ Education, Skills and Training Deprivation Domain

★ 'Working age adults (aged 25-59) with no or low qualifications'

◆ Barriers to Housing and Services Domain

★ 'Household overcrowding'

◆ Living Environment Deprivation Domain

★ 'Houses without central heating'

To conclude...

- ◆ ID 2004 is a key resource allocation mechanism
- ◆ 2001 Census utilised heavily
- ◆ 3 main areas of use:
 - ★ Geography
 - ★ Denominators
 - ★ Indicators

Thank you

Questions & Discussion