

## Area classifications

**Session organiser: Dr. Paul Norman, University of Leeds**

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### **Identifying change over time in small area socio-demographic deprivation.**

*Paul Norman, University of Leeds*

Geodemographic classifications and deprivation indexes aim to reduce multidimensional attributes to a summary description or score which captures an area's essence. Many studies use deprivation scores calculated cross-sectionally to identify areas in need of regeneration and to explain variations in health outcomes. It would be useful then to identify whether small areas have changed their level of deprivation over time and be able to: monitor the effect of industry closure; assess the impact of area-based planning initiatives; or determine whether a change in the level of deprivation leads to a change in health. However, the changing relationship with an outcome cannot be judged if the 'before' and 'after' situations are based on deprivation measures which use different, time-point specific variables, methods and geographies. This presentation will demonstrate how, across the UK, inputs to the Townsend index obtained from the 1991 and 2001 Censuses have been harmonised in terms of variable detail and with 1991 data converted to the 2001 Census ward geography. Deprivation has been calculated so that 1991 scores are directly comparable with those for 2001. Change over time can be then identified. Measured in this way, deprivation is generally shown to have eased due to downward trends in levels of lack of access to a car, non-home ownership, household overcrowding but most particularly, to reductions in levels of unemployment. Despite these trends, not all locations became less deprived with gradients of deprivation largely persisting within the UK's constituent countries and in different area types.

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### **Understanding inter-censal internal migration in Britain using a new migration classification framework.**

*Adam Dennett, University of Leeds*

Internal migration is one of the main drivers of population change in Britain, with around 10% of the population changing residential address every year. Understanding the patterns of flows which characterise internal migration is a challenge, with, even at the relatively coarse local authority district level, some 166,000 possible combinations of origins and destinations. This paper details a new migration-based area classification framework which offers the opportunity to reduce the complexity of internal migration flow patterns with advantages over more general purpose area classifications which fail to take sufficient account of migrants as a separate subset of an area's population. The paper will also report on the preliminary findings of a time series analysis of inter-censal internal migration flows in Britain using this new classification framework.

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## **A geodemographic classification of London primary schools.**

*Anne Gibbs, John Stillwell, Linda See, University of Leeds*

The density and diversity of the pupil population in London creates a complex pattern of relationships between primary schools and their neighbourhoods. One way of summarising these relationships is by classifying schools according to the key ethnic and socio-economic characteristics of their pupil populations. Such a classification not only highlights the similarities and differences between the schools, but also illuminates the contrasts between the demographic characteristics of their pupil populations and both the neighbourhoods within which the schools are located and those in which their pupils live. Using data from the National Pupil Database, a cluster analysis was undertaken to derive a geodemographic classification of state maintained primary schools in London. The resultant classification comprises 14 clusters. At one end of the spectrum, the clusters are characterised by suburban schools with predominantly well-off White British pupils. The continuum progresses through clusters of schools with varying proportions of ethnic minority Afro-Caribbean and South East Asian migrant pupils from poorer households, mainly in inner London. At the other end of the spectrum is a cluster of schools in which the majority of pupils are of Bangladeshi origin and very needy, located almost exclusively in the Borough of Tower Hamlets. Further analysis reveals evidence of ethnic and social sorting between schools. In line with the findings of Johnston et al. (2006), this indicates more ethnic segregation in schools than in neighbourhoods. Furthermore, in certain areas of the city, significant differentials are found between the deprivation rates of the schools' neighbourhoods and the residential areas from which their pupils are drawn. Reference: Johnston, R., Burgess, S., Wilson, D. & Harris, R. (2006) 'School and Residential Ethnic Segregation: An Analysis of Variation Across England's Local Education Authorities', *Regional Studies* 40(9), 973-990.

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