

**Institution: The University of Manchester** 

Unit of Assessment: 17a (Geography)

Title of case study: Deprivation Indices and Urban Regeneration Policy

# 1. Summary of the impact

Research at the Centre for Urban Policy Studies (CUPS) at the University of Manchester (UoM) has contributed significantly to the improvement and targeting of resources to deprived urban areas. Through the development of a matrix approach, this work has both informed and transformed the UK Government's 'deprivation index', the measure used to direct resources to areas most in need. More recently, a functional typology for use in the classification of deprived neighbourhoods has been developed. This was subsequently used by central government, local authorities and city-regions to better inform the nature and scope of regeneration initiatives.

## 2. Underpinning research

The research underpinning this case was undertaken within UoM's School of Geography, and led by Professor Brian Robson (1977-2007, now *Emeritus*) and Professor Michael Bradford (1971-2007, now *Emeritus*), alongside colleagues and research staff from CUPS.

**Department of the Environment**: A commissioned project for the UK Government, based on the 1991 Census return, resulted in the formulation of a new measure of deprivation (deprivation index) for England [E]. Prior to this work the deprivation index was a relatively crude measure, with a single value for an area, based on the summation of five or six standardised indicators. The research demonstrated that rather than a single index, governments should instead use a matrix approach, with the techniques and methods developed by the CUPS research team (to measure geographical variation in social and economic circumstances) shaping the manner by which measures of deprivation have since been calculated [D]. Specific innovations include:

- The use of a range of 'domains' to measure different aspects of deprivation. Rather than simply using one composite measure, domains are determined through factor analysis, which also guides the choice of appropriate indicators.
- The use of log-transformed chi-square values to measure the selected indicators. This is done in order to 'standardise' values, and to take account of the non-normal statistical distributions of socio-economic data.
- The calculation of deprivation scores in a matrix at three spatial scales:
  - (i) The overall degree of deprivation for each local authority.
  - (ii) The extent of deprivation within an authority, using the *per cent* of an authority's enumeration districts falling within the worst x% of enumeration districts nationally.
  - (iii) The intensity of deprivation based on the average value of the worst wards in an authority.

Department of the Environment, Transport and the Regions: In 1998 the UK Government invited Robson to update the index to take account of boundary changes within local authorities in England, with the index subsequently used to determine which areas should be eligible to receive or bid for regeneration resources. From 2000, the English Indices of Deprivation have been published every three years and are the Government's official measure of the relative deprivation of places [C]. In parallel, the Northern Ireland administration invited Robson to produce a measure for the Province; the resulting index better reflected the more rural character of the Province, and was used extensively to determine resource allocation, not least in the sensitive and highly contested areas of Belfast. An index was also developed for the Greater London Authority in 2002.

Department for Communities and Local Government: Ongoing research into the deprivation index model and the allocation of regeneration resources led the researchers towards the conclusion that existing measures of deprivation were static cross-sectional calculations, that did not take account the different functional roles played by specific neighbourhoods. In other words, one deprived neighbourhood is not necessarily similar to another, even though both may have identical deprivation scores. This insight, together with newly available very small-area data for Lower Layer Super Output Areas (LSOAs) from the 2001 census, and census information of where residents had lived one year previously, enabled the development of an innovative four-fold typology of deprived areas [A][B]. This new typology is based on the residential churn of

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households, identifying the pattern of who moves in/out of an area and to/from where. Defining a 'neighbourhood' as an LSOA permits the use of census data to illustrate the LSOAs to and from which residents had moved during the previous year. On this basis, deprived neighbourhoods were classified into four types, based on the different functional roles that they play in the housing market:

- **Transit areas**: Deprived neighbourhoods into which in-movers come predominantly from less deprived areas, and from which out-movers go to less deprived areas (characteristic of many deprived neighbourhoods in London's tight housing market);
- **Gentrifier areas**: Where in-movers come from less deprived areas and out-movers go to similarly deprived areas (in part due to displacement by more affluent in-comers);
- **Escalator areas**: Where in-movers come from more or similarly deprived neighbourhoods and out-movers go to less deprived areas (a process of moving onwards and upwards through the housing market); and
- **Isolate areas**: Where in-movers come from other deprived areas and out-movers go to similarly deprived areas (residents here might be considered 'trapped' in poverty).

This led to the realisation that deprived neighbourhoods differ in their functional roles, with some playing 'positive' roles in the housing market. The key implication is that **different types of deprived area need different types of policy intervention in recognition of the specific functions that they play**. In particular regeneration should be targeted towards areas designated as 'isolated' whereas previously deprived areas were generally considered equal.

- **3.** References to the research (all references available upon request AUR) The research has been published within both comprehensive policy reports, and influential peer reviewed journals.
- [A] (2009) Robson, B. w/ Lymperopoulou, K. & Rae, A. 'A Typology of the Functional Roles of Deprived Neighbourhoods' Department of Communities and Local Government (63pp.) (AUR)
- [B] (2008) Robson, B, Lymperopoulou, K. & Rae, A. "People on the Move: Exploring the Functional Roles of Deprived Neighbourhoods" *Environment and Planning A* 40(11) 2693-2714 doi:10.1068/a4024 (Google Scholar: 39 citations)
- [C] (2003) Deas, I., Robson, B., Wong, C. & Bradford, M. "Measuring Neighbourhood Deprivation: A Critique of the Index of Multiple Deprivation" *Environment and Planning C* 21(6) 883-903 (RAE 2008) doi:10.1068/c0240
- [D] (1995) Robson, B., Bradford, M. & Tye, R. "Constructing an Urban Deprivation Index: A Way of Meeting the Need for Flexibility" *Environment and Planning* A 27(4) 519-33 doi:10.1068/a270519 (Google Scholar: 39 citations)
- [E] (1995) Robson, B., Bradford, M. & Tye, R. '1991 Deprivation Index: A Review of Approaches and a Matrix of Results (Part 2: A Matrix of Deprivation in English Authorities, 1991)' Department of the Environment (52pp.) (AUR)

#### 4. Details of the impact

**Context:** Successive UK governments have sought to address the spatial aspects of social deprivation, with programmes consistently applying some form of area-based approach. This requires policymakers to identify where the most deprived areas are found. Research into the identification and classification of deprived areas has played a key part in this process, and has been used to inform resource planning and allocation at national, regional and local scales.

Pathways to Impact: In 1995 Robson and CUPS colleagues produced a new and vastly improved deprivation index based on 1991 census data, which they revised in 1998. Subsequent indices were developed at the Social Disadvantage Research Centre at the University of Oxford (2000, 2004, 2007) and then directly by the Department of Communities and Local Government (DCLG) from 2010. The indices all use the basic structure developed at CUPS; as corroborated by DCLG "The subsequent evolution of the Indices of Deprivation has involved a number of other experts and advisors... but key elements remain as originally devised and structured by Professor Robson and his team... Three elements of his initial development of the Index have continuously been part of its structure: the use of 'domains'... the range of spatial scales at which deprivation is measured; and the calculation of a matrix of types of measure... This structure has valuably reflected the complex nature of the distribution of deprived areas" [1]. The index is used by central government

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as a mechanism to shape strategy, determine eligibility for specific funding streams and focus regeneration spending and resource allocation within the most appropriate areas. Similarly, it is used by local authorities to identify areas that would benefit most from special initiatives or programmes. The index, as formulated by Robson *et al*, has thus continued to inform and structure work on the patterning and distribution of deprivation across the UK, during the period 2008-2013.

Impact on Government: The Index of Multiple Deprivation (IMD) was most recently published by the UK Government in 2010. As DCLG's Analysis and Innovation Directorate confirm: "The Indices of Deprivation (IOD) have had major influence on Government policy.... Although it can be hard to directly quantify impact, the IOD was a vital tool in making decisions about the allocation of some £3bn of public regeneration and renewal funds from 2001... The IMD was instrumental in determining eligibility for such funds as the Neighbourhood Renewal Fund. The Indices continue to be used by various parts of central and local government, and in public health, to identify places for targeting resources, to set local strategies, and to monitor progress and the impacts of interventions. They are also integral to analysis in a number of policy areas to understand local needs and challenges, and to explore and tackle inequality. IMD remains, in 2013, a valuable tool that Government is maintaining and investing in" [1].

Robson's later DCLG work fed into the 'National Strategy for Neighbourhood Renewal' evaluation. with DLCG confirming that his "typology of neighbourhoods based on their functional role in the wider geographic area.... significantly improved the understanding of officials and Ministers about how best to target regeneration spending, and informed the development of new programmes and strategies to help the most deprived areas in England – notably the £1.5bn Working Neighbourhoods Fund" [1]. Concurrently, CUPS research on the functional typology of deprived neighbourhoods was cited in the 2008 DCLG consultation 'Transforming Places, Changing Lives: A Framework for Regeneration', which used a draft version of [B] in its claim that: "Deprived areas are not all the same and they can play differing roles within the wider sub-regional economy. It is therefore important to analyse the movement of people into or out of an area as well as looking at the area overall" [2]. The ensuing 2009 'framework' noting the role of government to ensure investment is "driven at the right spatial level - and as close to communities as is practicable... and; targeted - not trying to transform everywhere - but investing where it will have most impact" [2]. Report [A] was also heavily cited in DCLG work on 'population churn', including a report which informed planning within the five London Boroughs involved in the Olympic Games [2]. In 2013 Robson was invited (one of three 'experts') to advise the Welsh Government on updating their 'deprivation index'.

Local Authority Impact: A number of local authorities have used the typologies generated from CUPS research to guide area programmes and regeneration strategies; responding to both the DCLG consultation, and accounts within trade journals and professional literature (e.g., Robson's article 'Understanding the Ins and Outs of Deprived Neighbourhoods'; New Start, 5/9/2008). Robson has been contacted directly by several local authorities to provide advice on the use and interpretation of the CUPS typology. Examples include Birmingham, Oldham, Sandwell, Glasgow, Greenwich and Manchester. A typical example of this kind of engagement can be seen with respect to the Royal Borough of Greenwich, who used the CUPS typology to further understand the character of deprived areas in Greenwich, and neighbouring boroughs. Pointing to the national significance and applicability of CUPS research, Greenwich's Principal Economic Development Officer confirms that that the research assisted the borough in three key ways: "in developing an understanding of the roles of deprived areas in Greenwich. So for example we were able to make a link between isolate areas and their high levels of 'worklessness'. As a result we designed policies and projects to target workless people in those areas. We were also able to see the benefits the Borough's housing policies had in developing transit areas and the importance that these do exist... to develop the Work and Skills Plan. This was a major document setting out how and where we will address low levels of skills and employment across Greenwich particularly in deprived areas... to explain social mobility in Greenwich in a strategic document entitled "Joint Strategic Needs Assessment"... a statutory document Public Health Authorities have to produce that will inform the commissioning of medical provision across the Borough" [3].

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Greater Manchester Impact: The CUPS typology has also played an important role at the regional level, and was a key part of the 2009 Manchester Independent Economic Review (MIER) in which Robson was part of a team led by AMION Consulting. MIER was a major assessment of the overall strengths, weaknesses and economic potential of Manchester, commissioned by Manchester's Commission for the New Economy (now New Economy) and launched in June 2008 by Secretary of State Hazel Blears and Chancellor of the Exchequer Alistair Darling. It formed part of the case to Government, whereby Manchester was declared an agglomerated city-region, and subsequently designated the first 'combined authority' (GMCA) across the 10 metropolitan boroughs that make up Greater Manchester. The review contained seven reports, including one on 'Sustainable Communities', in which Robson applied his typology of deprived areas to the case of Manchester. This report fed directly into the subsequent Greater Manchester Strategy developed by the Association of Greater Manchester Authorities (AGMA). As a partner at AMION Consulting confirms, this strategy "set out its high-level response to the fundamental policy challenges set out in the MIER. Amongst the strategic priorities were to improve life chances in the most deprived areas"; also summarising the value of Robson's contribution: "The research involved... [the] application of a neighbourhood typology to assess the different forms that deprivation can take in different areas... establish[ing] a new typology for categorising deprived neighbourhoods. The approach was a core part of the final report. It was used to assist the interpretation of changes in deprivation indicators and had significant implications for policy recommendations. In particular it helped identify that the 'isolate' category of areas... should be a particular focus for comprehensive area-based interventions. The typology formed a key component of the Sustainable Communities element of the MIER. Furthermore, the Department for Communities and Local Government (DCLG) has also made use of the typology to inform policy considerations [4]. New Economy, now a wholly owned company of GMCA responsible for sub-regional economic strategy, has also substantiated the impact of MIER, and in particular the 'new typology' it presented, based on Robson's research. Their Director of Economic Strategy attests that: "Professor Robson played a key role in the study, providing the thinking behind the actual typology, as well as advising on the emerging policy options emanating from the work... The review was published in 2009 referenced in the Chancellor's budget of the same year. The review has provided the main platform of evidence which has underpinned subsequent strategic developments in Greater Manchester; and given additional credibility to the GMCA and New Economy" [5].

Further Impact: Robson acted as an advisor in 2010 to an Institute for Public Policy Research North (IPPR North) project that used his functional typology work to classify neighbourhood areas, considering why some deprived areas within Northern England prospered ahead of others, even when the surrounding economy was strong [6]. His work has also been cited by both the Academy of Social Sciences and the Royal Geographical Society as exemplars of impact, both documents noting the impact of this work on decision making with regard to spending decisions in deprived areas [7]. Robson also advised the think tank 'Centre for Cities' on 'integration and isolation' [8].

#### **5. Sources to corroborate the impact** (all claims referenced in the text)

- [1] Testimonial from Analysis and Innovation Directorate, DCLG (23<sup>rd</sup> September 2013)
- [2] (2008) DCLG 'Transforming Places Changing Lives: A Framework for Regeneration' (July) (p.55); (2009) 'Transforming Places Changing Lives: Taking Forward the Regeneration' Framework (May) (p.6); (2009) Residential Mobility and Outcome Change in Deprived Areas: Evidence from the New Deal for Communities Programme (October) (passim); (2010) 'Population Churn and its Impact on Socio-Economic Convergence...' (December)
- [3] Testimonial from Principal Economic Development Officer, Greenwich Council (26th July 2013)
- [4] Testimonial from Partner/Director, AMION Consulting (21<sup>st</sup> June 2013); (2009) MIER 'Sustainable Communities' (March)
- [5] Testimonial from Director of Economic Strategy, New Economy (5<sup>th</sup> July 2013)
- [6] (2010) IPPR North 'Rebalancing Local Economies: Widening Economic Opportunities for People in deprived communities' (October)
- [7] Academy of Social Sciences Professional Briefings: The Impact of Social Science Research; Geographical Research Impact (Case study 2): Better Targeted Spending on Deprived Neighbourhoods RGS-IBG
- [8] (2008) Lucci, P. & Hildreth, P. 'City Links: Integration and Isolation' Centre for Cities (March