DEVELOPING HOUSEHOLD ESTIMATES AT NEIGHBOURHOOD LEVEL

Introduction

1.   The aim of this paper is to set out a draft outline specification, for discussion by HARG members, of research which we might commission under the Neighbourhood Statistics initiative for the development of household estimates, or equivalent at neighbourhood level.

2.   Members are invited to comment on:-

    2.1   The possible methodologies which we would wish to be assessed.
    2.2   Possible alternate approaches.
    2.3   Possible timescales.
    2.4   The best way of managing such a project.

Background

3.   The provision of, and maintaining regularly updated household estimates, (or a near equivalent) at neighbourhood is an important objective of the neighbourhood statistics project. Such estimates are important in their own right to allow monitoring of trends in numbers **and characteristics** of households in particular neighbourhoods of interest and are an important base, or scaling variable allowing other data – such as counts of numbers of households receiving benefits – to be placed in context.

4.   Key developments which affect our ability to develop and validate household (or near equivalent) estimates methodologies at neighbourhood level include:-

    4.1   The availability of census data for 2001, linking population, households and dwellings down to census output area level, provides an ideal opportunity to test possible methodologies.

    4.2   Data successfully obtained from Assessors giving numbers of dwellings by council tax band by unit post-code; which will now be updated annually.

    4.3   Secondary legislation which allows councils to supply non-personal data from council tax billing systems – including information on vacant and occupied dwellings.

    4.4   The provision by GRO(S) of annually updated neighbourhood level estimates of population by age and sex.

5.   Research might also consider the possible benefits from incorporating information, e.g. on changing patterns of household information, from surveys such as the national Scottish Household Survey; or locally run surveys such as local 'voluntary population surveys'.

Need for neighbourhood level household estimates

6.   The main objective is to get reliable annual counts of the total number of households at neighbourhood level, to provide a basic household denominator and monitor general trends. However monitoring and assessment at sub-local authority level for the purposes of local housing strategies and social inclusion policy requires information on trends in broad household types – for example single person households, households headed by elderly persons and single parent households.

Possible methodologies

7.   In previous discussion in HARG on methodologies which might be used to compile household estimates at national and local authority levels we have three broad approaches; which might also be combined:-

Stock based: Number of households as identified at census [1] is trended forwards on the basis of measured changes to the housing stock, adjusted for measured changes in numbers of vacant properties in the public sector and making assumptions about trends in sharing and vacant properties in other sectors.

Population based: Using information – from projections or survey sources – about trends in household size or composition to impute the number and possibly composition of households from the mid-year population estimates.

Use of administrative data, particularly Council Tax: Using an administrative source such as the council tax billing system to identify the number of occupied houses in an area at a particular time.

8.   Some of the main issues/ advantages/ disadvantages associated with these possible approaches for neighbourhood level estimates are:-

Stock based

- Change in housing stock from Census should be able to be measured accurately at neighbourhood level from Assessors data at present; and also for the future through the development of new build information, and the DNA project.
- Measuring change in vacant socially rented property at neighbourhood level will depend on the success of the development of the Social Landlord Database and SCORE projects.
- As for national/ LA estimates there is no reliable source of vacants in non social housing. This would be a major issue for neighbourhoods with a high proportion of privately rented properties.
- Council tax billing data is a potential source of vacant property at neighbourhood level covering all tenures. However, billing data may not give reliable information in high turnover areas.

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[1] Adjusted to mid-year and for the results of the follow-up survey of vacant properties.

- There is no obvious source of information about trends in sharing at neighbourhood level.

<u>Population based</u>

- Estimates on this basis might give a 'best estimate' of household composition as well as numbers.
- Our current experience of this approach is limited to comparing household projections with population composition to ensure that they are not inconsistent, and using fairly ad-hoc adjustments to bring them into line when they are not.
- Any methodology based on broad trends in household composition is likely to work best over fairly broad geographical areas. A major change in the nature of an area – for example the type of change which would come from the development of up-market residential property in a docklands area – would break a trend.

<u>Use of administrative sources/ particularly council tax billing</u>

- Legislative change now allows data to be collected, but it will take a while – 6 months – 1 year - to develop systems to obtain this.
- There is evidence, from comparing census with council tax billing data at LA level that the council tax source will tend to slightly overstate (by around 1% – 1.5%) numbers of occupied houses.
- The Council Tax overstatement seems likely to be skewed by area type, with a greater overstatement in areas of high turnover – e.g. areas with a high proportion of privately rented property.
- Council tax can identify (more or less) houses with a single adult (because of discount status), and can therefore give some insight into household composition.
- Council tax can identify all student households; through exemption status.
- Administrative systems are subject to the impact of legislative change. In particular the discount status of second homes/ empty properties might change. Depending on the legislation this could improve or damage the council tax as an information source.
- Council tax gives no information on sharing. It identifies occupied dwellings not households.
- Treatment of certain types of dwelling, including student halls of residence, needs to be considered carefully in interpreting council tax billing data.
- Benefits based sources might, potentially give information on numbers of particular household types in a neighbourhood receiving a given benefit or tax credit.

Next steps

8.   The Scottish Executive will continue, with councils' revenue departments and their IT suppliers to develop the means of extracting non-personal data from billing systems that will give us neighbourhood level counts by discount and exemption status.

9.   In addition, if we wish to **compile/ model estimates** by broad household type at neighbourhood level – distinguishing say single person households, single adult households with children and other households with children - the most fruitful approach would appear to be to combine data from the council tax and possibly other administrative sources with the small area population estimates.   To compile estimates in this way would involve the development of statistical methodologies – designed, for example, to give a best fit between the population estimates and the occupied dwellings count.

Timing

10.   A key issue is whether a research study into a small area household estimates methodology should be commissioned only after we have small area information from council tax billing systems covering a range of area types. This would suggest commissioning the work from autumn 2003[2].

11.   However, we might consider letting the research earlier to allow the work to develop over a number of phases:

> a)   Confirming the user requirement for neighbourhood level household estimates, in particular to support social justice and local housing strategies;
> b)   Developing a methodology to model household estimates from the small area population data alone; identifying key weaknesses and necessary assumptions;
> c)   Extending the methodology to incorporate neighbourhood level data from council tax billing systems and other administrative sources.

Project management

12.   Members of HARG and members of the Housing Related Neighbourhood Statistics working group will have an interest in both the detailed specification and steering of this work.   The best organisational approach would appear to be to have representation of both groups on the research steering group.   Given HARG interest in the technical issues and the read across to the development of methodologies for national and local authority level estimates it would seem best for the research steering group to report to HARG at key stages.

Conclusion

13.   Members of HARG are invited to comment on all aspects of the above outline and proposed approach to developing a neighbourhood level household estimates methodology.

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[2] Depending on the work programme agreed with councils' IT suppliers for developing data extraction from billing systems.