

AG(99)19

**INCOME DATA FOR SMALL AREAS  
SUMMARY OF RESPONSE TO CONSULTATION**

**Background**

- 1 Advisory Group Paper AG(99)18 sought the views of Advisory Committee members on the available options identified for attempting to meet needs for income data for small areas, namely:
  - a question on income in the 2001 Census;
  - benefit data from DSS; and
  - small area estimation/modelling techniques.
  
- 2 This paper presents a brief summary of the response from this consultation exercise, together with, a summary of the results of testing the income question - essentially a summary of what was originally set out in AG(99)18 - with the addition of some preliminary information from the Census Rehearsal that was not available at the time when the first paper was circulated. There is also some more up-to date information from the Census Quality Survey from that included in that Advisory Group paper.
  
- 3 **Advisory Group members are asked to note the paper.**

### **Suitability of alternative sources in meeting needs**

4. In accordance with the proposals set out in the Census White Paper, the Government Statistical Service set up a working group to investigate the feasibility of meeting users' requirements for income from alternative sources. A report has been produced combining the results of this work with an outline of users' requirements for income gathered as part of the consultation on requirements for the Census. The paper provided an overview of the strengths and weaknesses of three key options namely:
  - a question on income in the 2001 Census;
  - benefit data from the DSS; and
  - small area estimation/modelling techniques.
5. The report was circulated to members of the Government Statistical Service, Census Advisory Groups and other key users including the Social Exclusion Unit to enable them to comment on how well each of these options would meet their requirements. Users were asked to consider the suitability of the alternatives in the context of what can be done in both the short and long term.

### *Results of the Consultation Exercise*

6. As expected most users (59%) have confirmed their preference for a Census question. However, a number of inner city authorities were more concerned about the acceptability of the income question and the implications for response, and consequently did not favour including a question on income in the Census.
7. Almost all Government departments reiterated the advantages of Census information stressing their requirements for small area analysis, the cross-classification of census variables and the investigation of socio-demographic interrelationships. More specifically they re-emphasised the advantages of the Census for the investigation of poverty, social exclusion, resource allocation and deprivation. Similarly, other users underlined the importance of the information for

identifying disadvantaged communities, targeting activities, analysing the take-up of services and allocation of resources. In many cases they confirmed that while sources other than the Census would meet some of their needs, the Census was the only viable option for meeting all their requirements.

8. A number of respondents emphasised the advantages of having complementary information from both census and non-census sources as this would improve the range of income data at a time when there is increasing pressure to investigate and monitor poverty and deprivation. In addition both DSS benefits data and modelled income estimates would provide a useful means of updating census returns during the inter-censal period. In general it was agreed that resources should be provided for continuing work on benefit data and modelling to improve the accuracy and reliability of outputs. Furthermore, several respondents highlighted the importance of using other sources of information, most notably Inland Revenue data.

#### **A Census income question: Acceptability, risk to response and data quality**

9. The Census Offices have conducted a series of tests with the overall objective of identifying the most effective method for collecting information on income from a self-completion questionnaire. Whereas initial tests were primarily concerned with developing the basis for a suitable question and focused on identifying respondents' understanding of key concepts, the specific form and wording of the question, subsequent research mainly dealt with the analysis of overall acceptability and response rates.

#### *Format of the Question*

10. Early testing showed that a question on sources of income failed to elicit relevant information on all types of income. At the same time the merits of alternative individual and household questions were considered and demonstrated that a household question was less acceptable to members of the public and more likely to generate inaccurate responses.

11. The results of this work are reflected in the following question included in the Census Rehearsal (covering some 140,000 households in parts of Leeds, Bournemouth, Lincoln, Gwynedd, Ceredigion, Dundee, Angus and Northern Ireland) earlier this year:

**What is your total current gross income from all sources?**

Do not deduct Tax, National Insurance, Superannuation or Health Insurance payments.  
Count all income including:

- Earnings
- Pensions
- Benefits
- Interest from savings or investments
- Rent from property
- Other (for example, maintenance payments, grants)

<b>Per week</b>	<b>Per year (approx.)</b>
Nil	Nil
Less than £60	Less than £3,000
£60 to £119	£3,000 to £5,999
£120 to £199	£6,000 to £9,999
£200 to £299	£10,000 to £14,999
£300 to £479	£15,000 to £24,999
£480 or more	£25,000 or more

*Acceptability and Risk to Response*

12. Acceptability to the public is a primary requirement for all Census questions. A series of large and small-scale tests, culminating in the recent Census Quality Survey, have been undertaken to assess public reactions to an income question. In all cases responses have been mixed. Whereas some people had no objections and willingly answered the question, others were unhappy about providing details of their income but nevertheless did so, and some refused

outright. Favourable reactions were encouraged by banding the response categories (which was seen as less intrusive), reassurances about the security and confidentiality of Census information and an understanding of the purpose of the question.

13. In contrast, negative responses were associated with concerns about privacy and intrusion, failure to understand why the information was needed, irritation about the detail required to enable accurate calculations of income for each person in the household, and erroneous assumptions relating to the availability of such information from the Inland Revenue and other Government sources. More detailed results from the 1997 Census Test Evaluation Survey and the Census Quality Survey corroborate these findings.

14. As part of the 1997 Census Test, we carried out a Census Test Evaluation Survey, based on interviews with 1316 respondents and 354 non-respondents from households with and without an income question on their Census Test form. This survey was designed specifically to examine the acceptability of the question and reasons for non-response. The key findings are summarised below:

- 15 per cent of those with income on their Test form objected to the question.
- Income was the question that generated the highest number of objections. The objections were general and would have applied to any question on income, not just the one asked in the Census Test.
- In most cases people objected because they considered that information on income was personal. However, others complained because they did not know why the information was required.

More recent evidence from the 1999 Census Quality Survey substantiates these findings. As part of the detailed follow-up interview respondents who had completed a Census Rehearsal Test form were asked whether they objected to any questions on the form. Preliminary analysis shows that:

- Again 15 per cent of respondents objected to the income question
- Objections to the income question accounted for 34 per cent of all complaints
- Of those objecting to the income question, 19 per cent failed to answer it

### *Response Rates*

15. As one of the main aims of the 2001 Census is to minimise differential levels in response, the acceptability of an income question and the implications for coverage were investigated fully as part of the 1997 Census Test. This major test was statistically designed to allow comparison of response rates for those households that received forms with an income question and those that did not. Questionnaires were distributed to approximately 97,000 resident households in a representative selection of areas in England and Scotland including Birmingham, Brent, Glasgow, Alton, Thame, Bridlington, Craven and South West Argyll.

16. Analysis of response rates to the 1997 Census Test for Great Britain suggested that the inclusion of an income question lowered overall response from 57.4 per cent to 54.6 per cent. Statistical analysis showed that these differences were unlikely to have occurred by chance. These differences were more pronounced in the inner city areas of Birmingham and Brent (up to 6 per cent).

17. Results from the 1997 Census Test Evaluation Survey facilitated separate analysis of the causes and implications of non-response. Although most non-response was attributed to behavioural or motivational issues including time constraints, there were specific references to the test form, the way in which it was delivered and collected, and to individual questions, where the income question was mentioned most frequently. There was some evidence to suggest that non-responders in the Census Test tended to be younger and live in households with children. These findings, together with concerns about coverage in inner city areas, could create special

problems for the Census operation, particularly in relation to the reliability of outputs for specific areas or sub-groups of the population. Some particular results are:

- 22 per cent of respondents in the 1997 Census Test failed to answer the income question. In comparison, 8 per cent of respondents failed to answer the other potentially sensitive questions of ethnic group and religion.
- Initial results from this year's Census Rehearsal show that some 16 per cent of respondents failed to answer the income question. Comparable figures for the ethnic group and religion questions were 7 per cent and 10 per cent respectively.

## *Accuracy and Reliability of Outputs*

17. Every Census question must be capable of providing information that is accurate and reliable enough to meet users' needs. There is clear evidence from a series of small-scale tests that responses to the Census question on income are prone to error.

A number of specific sources of error have been identified including:

- confusion over the difference between 'net' and 'gross' income;
- the deliberate or inadvertent exclusion of some sources of income;
- the inaccuracy of proxy information;
- problems deciding who is the recipient of certain kinds of income, such as child benefit;
- difficulties encountered by those with joint incomes and the self-employed;
- confusion over the time period to which the question relates; and
- difficulties in calculating income. While some people were thorough and referred to relevant documents such as payslips, or carried out detailed calculations on paper, others relied on memory, simple estimation or guesswork.

Further, the accuracy and reliability of the outputs for households will be based on aggregations of banded individual returns. Errors in individual income bands will be compounded when added together to provide household income

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