STATISTICS ON WORKPLACE (AND PLACE OF STUDY) AND MIGRATION

Advisory Group members are asked to:-

- (a) note the report on consultation on origin-destination statistics
- (b) Address any comments to:-

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Statistics on Workplace (and place of study) and Migration

Report on consultation on origin-destination statistics

Introduction

- 1. The Census Office's proposals for output from the 2001 Census were presented at a series of Roadshows throughout the UK in spring 1999. The consultation included statistics that characterised the flow of people from an origin to a destination for daily travel (to work or study) and migration. The proposals for these statistics were contained in Supplement C to the main discussion paper. The supplement contained eight 'points for users comment'. Comments received are grouped below under these headings.
- 2. Advisory Groups are asked to note this summary of users' views. If all of these views are incorporated into the original proposals from the Census Offices the 2001 origin-destination products will contain the following features compared with 1991:
 - with counts of workers/students at workplace and of out-migrants at former address included in the Standard Tables and other 'singlegeography' products, the origin-destination statistics take on the simple form of flows only;
 - this implies a simpler format both for the user's understanding of the product and for the developer of software to handle the products;
 - the geography will also be more straightforward with symmetric zones;
 but special requests could be made for exceptions for a few geographically large workplace zones with many workers;
 - by imputing full postcode for each address a layer will be removed from each level of zones;
 - this imputation will also contribute to disclosure control obviating the need for suppressing small flows;
 - with a full set of postcodes the origin-destination products will be much richer;
 - a further simplification would be to have a single UK product for any geographical level;
 - the notion of the 'moving group' has been introduced.

Processes before tabulation

3. Users were specifically asked about the treatment of UK addresses where a full postcode cannot be assigned from information provided on the Census form.

- 4. Generally comments received favoured the Census Offices doing all possible to assign a full postcode using registers etc. In cases where full assignment was impossible, a postcode should be imputed. Reasons given included
 - if the imputation was done 'properly', the statistics will be much richer than if no imputation done;
 - the statistics will be simpler to analyse with a single layer of zones at any level:
 - imputation will add some 'noise' to the output and hence contribute to preventing disclosure.
- 5. The Census Offices will continue to investigate means of imputing addresses and will report the results.

Statistics on travellers at commuting destination and out-migrants

- 6. The proposal in Supplement C that analyses of workers and students at their destination and out-migrants at their former residence should be included in single geography products such as the Standard Tables and Census Area Statistics was generally welcomed. In fact, the proposals for these products (Supplements B and F) contained tables on these lines. The single geography products would thus be more complete and the origin-destination products would become purely ones of 'flows' between zones.
- 7. It remains to be seen how well the CAS to be produced for Output Areas with an average of 100 households or, in Scotland, 50 households can accommodate information on workers in an OA. The number of workers in such a zone will vary from zero to thousands. It may be that the standard CAS should contain a count of workers by mode of transport only and further analyses may be commissioned only if the number of workers justified it. This further analysis may include splitting the OA as workplace zone.

Extending statistics on workplace to include place of study (where information collected)

- 8. Information on travel to place of study will be collected in Scotland and will not be collected in England and Wales. At the time of writing, a decision has not yet been taken for Northern Ireland.
- 9. The proposal to include, where applicable, students and schoolchildren travelling to place of study with the statistics on workers travelling to place of work was accepted as long as
 - users can distinguish between the two groups;
 - clear rules are established to deal with those who have both work and study to which they travel, and to deal with destinations that are both places of work and study.

Definitions

- 10. In their responses, users expressed interest in definitions of
 - the origin of migration of a child aged under one (possibly to be based on the origin of 'next of kin');
 - the moving group those within a household sharing the same origin and how the head of a moving group might be selected.
- 11. Investigation of complex links between the moving group and family would be better carried out as part of a topic theme rather than in the Special Migration Statistics that concentrate on geography rather than detailed statistics.

Zones

- 12. Users generally favoured using the same zones for both origin and destination. The main exception to this was for workplace zones and is covered at paragraph 7 above.
- 13. There was some adverse comment about the use of ward as a zone because of its instability. To counter this, the Census Offices should be willing to re-zone its statistics from previous Censuses to the zones for the current Census.
- 14. Health authority areas should also be considered as zones.
- 15. There was support for using the same area types as zones both within and outside an area of interest. Creating a single UK product was a means of doing this.

Tables

- 16. As might be expected, users generally wanted more detailed classifications and more of them than proposed in the Annexes to Supplement C. In particular
 - age groups should be more detailed for the younger end of the classification (for migration) and for the older end (for both migration and travel);
 - household composition categories should be more self-explanatory and subdivided to take account of single pensioner households and dependent children;
 - for ethnic group, the South Asian categories should be separately identified;
 - more output should be produced for moving group;
 - the should be a more detailed classification of socio-economic class:

- in the travel tables, a clearer distinction should be drawn between workers and schoolchildren/students, and some tables which do not distinguish between them should do so;
- some table not showing a split by gender should do so;
- the travel tables should include one on car availability.

Software

- 17. Users would want to maximise the use of standard software which they will already be using for other purposes. Various standard products were mentioned of the following types: spreadsheet, database, tabulation and GIS.
- 18. There may still be a need for some specialist software to be used in conjunction with such standard software.

Customised output

19. There were various hints that, if a service to provide customised origindestination output were good enough, it would be used to supplement the standard products.

Conclusion

- 20. The Group is asked to note this summary. Any comments can be addressed to Frank Thomas, General Register Office for Scotland, Ladywell House, Ladywell Road, Edinburgh, EH12 7TF; tel: 0131 314 4217 (GTN 7166 217); fax: 0131 314 4344 (GTN 7166 344); e-mail: frank.thomas@groscotland.gov.uk.
- 21. The Census Offices will be bringing forward revised proposals later this year.

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Annex A

${\bf High\ Level\ Timetable\ for\ the\ Delivery\ of\ the\ Origin-Destination\ Statistics\ from\ the\ 2001\ Census}$

Timetable	Process	Comments
Mid- April 2000	Re-write Supplement C, issue as a specification for consultation	This will take into account feedback from the Output Roadshows.
May to end-July 2000	Consult on content by correspondence and forum	Forum will be organised if required.
June to October 2000	Consult possible suppliers of 'delivery' software.	This may involve a formal procurement?
November 2000	Finalise specification of origin-destination products	
Dec 2000 to Mar/Apr 2001	Produce test data	
June/July 2001	Develop, test and accept programme to accept SMS/SWS	Obviously, this work could begin sooner if different software was selected for o-d statistics than that used for the production of the main 2001 Census output.
July 2001 to Dec 2001.	Supply test data and run through preferred software.	This will still allow enough time, including contingency, to develop test data and use the preferred software to produce expected outputs.
Jan 2002 to Dec 2002	Evaluate software and fine-tune system in readiness for live data in 2003	Ensure 'delivery' software takes advantage of technological developments between 2001 and 2003.