

Household Analysis Review Group (HARG):

Minutes for the meeting of 19 March 2010
Room 1/G/8, Ladywell House, 10:30 – 12:30 pm

Present:

Thomas Robertson (chair)	General Register Office for Scotland (GROS): Household statistics
Adele Trainer	North Lanarkshire Council
Alan Sloan	GROS: Household statistics
Alistair Harvey	Edinburgh Council
Allison Craig	North Ayrshire Council
Ashley McCormick	Liverpool University
Charles Brown	Scottish Governments (SG) centre for housing analysis
Dorothy Watson	GROS: Household statistics
Esta Clark	GROS: Population and Migration Statistics
Jan Freeke	Glasgow Council
Keira Murray	GROS: Population and Migration Statistics
Kirsty MacLachlan	GROS: Demography
Kylie Hill	Communities Analytical Services Division (ASD)
Martin Macfie	GROS: Household statistics
Thomas Griffin	GROS: Household statistics
Tony Jenkins	Dundee City Council

Apologies:

Alison Hurd	SG: Planning
Jackie Wilkins	SG Housing Supply Unit
Jon Hunter	Communities ASD
Jonathan Davidson	SG: Local Government Finance statistics
Murdo MacPherson	SG centre for housing analysis
Tom Snowling	Aberdeen Council

Agenda Item 1: Welcome and Introductions

- 1.1 Thomas welcomed everyone to the meeting and introduced himself. Thomas has replaced Esther Roughsedge as the new manager for the Household Estimates and Projections branch.

Agenda Item 2: Minutes of last meeting

- 2.1 The actions of the previous meeting were checked and it was agreed that all had been completed. However, work is still ongoing under item 8.3 and a working group has now been set up to address the problem of identifying second homes.
- 2.2 Jan Freeke asked for clarification on point 3.4 on the coverage of data zone level information for small area household estimates. Martin said that this year there is good coverage for local authorities with only data for East Renfrewshire being incomplete. This is better than for last year's publication where data zone level figures were not complete for Clackmannanshire, East Renfrewshire and Fife.

Agenda Item 3: Household projections – provisional results, variant projections and communal establishments.

- 3.1 Dorothy Watson gave a presentation on the provisional results for the 2008-based household projections, which summarised HARG 2010 papers 1, 2 and 3. The 2008-based household projections project the number of households forward from 2008 to 2033 for Scotland and for each local authority area. There have been some changes to the methodology compared to the 2006-based household projections.
 - 1) GROS has updated figures on the number of people living in communal establishments using information dating from 2008, where possible. Figures on the number of people living in communal establishments are required for our household projections. This figure is subtracted from the total population in order to establish the private household population.
 - 2) For the 2006-based projections, GROS presented results for households headed by people in 10 different age bands. For the 2008-based projections, GROS is presenting results for 16 age bands.
 - 3) GROS is publishing sub-national low migration variant household projections for the first time this year, along with principal projections and high migration variant projections.

Communal Establishments

- 3.2 Dorothy presented a chart which compared the numbers of people living in communal establishments in 2008 and 2006 and in the 2001 Census. She identified local authorities where there have been considerable increases in the communal establishment population used for the 2008-based household projections. The biggest increases were in the numbers of people in student accommodation.
- 3.3 Kirsty MacLachlan noted that the number of people staying in hospitals had declined. Dorothy suggested that this may be due to the policy for care in the community.
- 3.4 Kirsty asked about other sources of data on people in communal establishments, such as hotels, which might be available from Tourist Boards. Dorothy replied that GROS are only interested in people who stay in a communal establishment for greater than 6 months and tourist boards do not hold this information so the best source of data is still the 2001 census. Tony Jenkins said that the number of people living in hotels in Dundee varied considerably over time.
- 3.5 Kylie Hill asked if numbers of people in Communal Establishments would be published for each local authority area. Dorothy explained that the actual numbers of people living in communal establishments are not but that instead the communal establishment rates for each local authority are published online.
- 3.6 Dorothy added that she has been working closely with the Census Division of GROS to ensure that she has an accurate and up-to-date list of Communal Establishments for the 2008-based projections.

Provisional Results

- 3.7 Dorothy presented provisional results for the 2008-based household projections. The 2008-based household projections will be constrained to the household estimates for 2008 and 2009 but at the time of the HARG meeting, the final 2009 household estimates were not available. Jan queried the effect of constraining the projections to the household estimates from 2001 to 2008 and asked if there could be a slowdown in household formation trends.

Action: Thomas/Dorothy to investigate further.

- 3.8 The projected increase in the number of households is largely explained by the projected increase in the population. The biggest projected increases are for households headed by older age groups.

Variant Projections

- 3.9 The variant household projections are based on the long-term migration assumptions which were used for the 2008-based sub-national population projections. The effect of the low, principal and high migration variant projections had different effects on the projected number of households in different local authorities in Scotland. For instance, there was a considerable difference in the principal and high-migration variant projections for the City of Edinburgh and Perth and Kinross local authority areas.

HARG members were satisfied with the provisional results, variant projections and communal establishment figures.

Agenda Item 4: Incorporating Survey Data

- 4.1 Dorothy outlined some investigative work she had done to potentially incorporate survey data to household projections. For household projections, data on household type and age group are obtained from the 1991 and 2001 Censuses. Unlike the Census, surveys only cover a sample of the population but they are carried out every year (or on a rolling basis), so they can provide more up-to-date overall figures.
- 4.2 Dorothy presented charts which compared the 2006-based household projections with results from the Scottish Household Survey, the Labour Force Survey and the Annual Population Survey. She highlighted some issues with sample sizes and confidence intervals, as well as weighting for under-counting in some groups such as for young men. Jan suggested that GROS household projections might be slightly too high for single adult households compared with results from the Scottish Household Survey and the Annual Population Survey.
- 4.3 Jan expressed concern about possible misuse of the current GROS household projections in relation to the split by household type. Thomas said that the GROS household projections contain caveats, which help to explain the quality of the data.

Action: Dorothy/Thomas to consider adding additional notes on data quality for the 2008-based household projections.

- 4.4 Jan queried whether it would be possible to incorporate, in the household projections, the more up-to-date evidence about household composition from the other sources of data. Dorothy said that we would have to investigate whether it is feasible to combine data from different surveys in order to improve reliability. She mentioned that the Scottish Government is reviewing how they are carrying out their surveys and considering centralised sampling which may help us with this in future.

- 4.5 Jan would like to see a link between projected headship rates by household type (e.g., family households) and other population indicators such as fertility rates. Ashley McCormick said that there is a lot of information available on population methodologies at the Centre for Population Studies at Southampton University. Ashley's PhD on the microsimulation of households is also relevant – please see Agenda Item 5.

HARG members agreed that information from surveys on household composition should be assessed against the 2008-based household projections. This may result in possible changes to the methodology for future household projections.

Agenda Item 5: Microsimulation and ScotSim

- 5.1 Ashley McCormick from Liverpool University gave a presentation on his work to develop a microsimulation model for Scottish household projections. It is named ScotSim.
- 5.2 Ashley explained that household projections supplied by ScotSim are constrained to GROS rates for fertility, mortality and migration. In addition GROS results for age-sex counts and household composition are used.
- 5.3 He emphasised that ScotSim uses differently scaled data than that used for GROS' cohort component model for population projections. GROS use average rates i.e. Scottish-level fertility rates. Data he has used for calculating rates in ScotSim comes from microdata from the Labour Force Survey (LFS) and the British Household Panel Survey (BHPS). These surveys give details for individual-level anonymised data. Therefore the different characteristics of individuals giving birth, or relationship formation/dissolution and migration can be analysed.
- 5.4 Data from the LFS and BHPS have been analysed using the statistical technique of logistic regression. Ashley has been able to identify how certain events are explained by certain factors. For example, how factors such as age group, gender, education level, socio-economic status influence the likelihood of relationship formation (marriage and cohabitation). Temporal trends have also been identified. For example, if there is a rise in relationships dissolving through time via increased divorce this trend will be continued in ScotSim for future projection years.
- 5.5 ScotSim will be able to model differential experiences of events. So, for example, it will be able to model what types of individuals will experience mortality. The spread of population change will also be captured and ScotSim will provide a spatial distribution of events by local authority area.
- 5.6 Ashley also mentioned an added bonus of ScotSim is that it will allow us to model 'what if' scenarios. For example, changes to the rates of fertility, mortality and migration can be modelled.
- 5.7 ScotSim will provide a wide array of complementary data and analytical results to current GROS household projections. It is intended that this will be provided as a user friendly free resource on the internet. There will also be an online user manual.

- 5.8 Jan queried whether ScotSim would be able to include the relation between household formation and migration (e.g. young adults setting up single households in cities and families moving to suburbs). Ashley replied that ScotSim would be able to take account of these situations.
- 5.9 Adele queried whether ScotSim would be able to provide results for geographies smaller than at local authority area. Ashley replied that this is a possibility but is dependent on the available time until the end of his PhD. He did indicate that analysis such as identifying separate projections based on the relative health of different parts of a city may be possible.
- 5.10 Ashley concluded by noting that ScotSim is an Economic and Social Research Council (ESRC) project funded by GROS and that ownership of ScotSim lies jointly with Liverpool University and GROS.
- 5.11 Further information on microsimulation in general can be found at <http://www.microsimulation.org/>

Agenda Item 6: Developments in alternative sources of household statistics and address lists

- 6.1 Martin described the work he has been doing to investigate alternative sources of household statistics and address lists. This is in light of the possible abolition of Council Tax, which may take place after the next Scottish Parliamentary election.
- 6.2 Last year the Electoral Register was considered as a possible alternative source of statistics on household statistics. This year Martin has looked at residential addresses on a local authority's Corporate Address Gazetteer (CAG). He has used the City of Edinburgh's CAG as case study. A CAG is an address list held and maintained by a local authority and it is the single definitive list of all addresses in that authority. Each local authority in Scotland has their own individual CAG.
- 6.3 Martin explained that there was a close match between residential addresses on the CAG for the City of Edinburgh and dwelling counts which GROS currently publishes. He concluded that this CAG would be a good alternative to our currently published statistics on dwellings, but that he would need to look at CAGs held by other local authorities to assess data quality in other areas. Martin noted that where there are differences between the two sources, the number of residential properties on the Council's CAG tended to be higher. This is often caused by areas of new housing or planned developments in which dwellings appear on the Council's planning systems but which are not yet on the Assessors' valuation lists.
- 6.4 GROS also publishes statistics on occupied and vacant dwellings at local authority area and data zone level. Martin noted that this forms the basis for our household estimates, as an occupied dwelling is approximately equivalent to a household. However, it appears that it is not currently possible to identify whether residential properties are occupied or vacant from the CAG. Therefore at the moment, we will not be able to use the CAG as an alternative source of data to approximate the number of households.

- 6.5 Martin outlined future steps which are planned. He intends to investigate the One Scotland Gazetteer. The OneScotland Gazetteer is a wider initiative, which aims to bring together information from all of Scotland's 32 local authority CAGs. At the moment, it is not possible to identify whether properties are residential or not from the OneScotland Gazetteer.
- 6.6 Martin also wants to assess how we can produce alternative statistics on occupied and vacant dwellings and second homes. He added that there may be developments on the OneScotland Gazetteer to try and identify whether properties are just completed, whether they are derelict or have another vacant status. However, it would still not be possible to obtain any information on second homes.
- 6.7 Tony noted that Dundee City's CAG has a flag to notify when a property is empty. He asked if Martin had calculated a correlation between GROS vacant properties and the empty property flag. Martin replied that he has not done this for his work on the City of Edinburgh's CAG as it does not contain the empty property flag. Tony added that Dundee City would be keen to work with Martin on their CAG.

Action: Tony to contact Martin and provide further information on Dundee City's CAG

HARG members were happy with the progress in the developmental work

Agenda Item 7: UK Statistics Authority Assessment

- 7.1 Thomas noted that Household Estimates and Projections are due to be assessed by the United Kingdom Statistics Authority (UKSA) in September, 2010.
- 7.2 He advised the group that we would be asked for a list of our users and that it was likely that they would be contacted by the UKSA for comments on our publications.

Agenda Item 8: Any Other Business

- 8.1 Thomas reminded the group that papers that they had received for this meeting were marked restricted and were pre-release statistics for quality assurance purposes only. He asked that papers are not passed on to anyone else without prior agreement. He added that if these provisional results had already been passed on to others we should be sent details of who they had been passed to and that any recipients of the papers should be informed of the obligation to treat the information as restricted and not further forward the figures.

Agenda Item 9: Date of Next Meeting

- 9.1 The next meeting is planned for September 2010 to coincide with when Ashley will next be working in GROS. The focus of this meeting will be on Ashley's work. It was suggested that it may be a good plan to include a workshop session for this meeting so that we can learn how to use ScotSim.