Sub-Council Area Projections
Frequently Asked Questions (FAQ) - Version 2

1. Updates
The FAQ has been updated on 02/07/15. Updates are highlighted in blue for convenience and changes have been made to points nine, thirteen and fourteen.

2. Why are we doing this?
There was a request from the Population and Migration Statistics Committee (PAMS) for National Records of Scotland (NRS) to produce sub-council area population and household projections (refer to paper from meeting on 6 May 2015).

3. How are we doing this?
NRS have secured funding for a temporary ten month post, filled by Angela Adams on secondment from Clydeplan (Glasgow and the Clyde Valley Strategic Development Planning Authority), to explore and produce the projections, and also for academic support from Professor Ludi Simpson. The project timescale is June 2015 to the end of March 2016. This is a one-off project. We will be using POPGROUP for population projections and an internal NRS system for household projections.

4. Who is doing this?
This area of work is being taken forward though a sub-group of PAMS. The Projections Sub-Group will report its findings to PAMS.

5. Projections Sub-Group meeting
The first meeting of the Projections Sub-Group is on Wednesday 19 August 2015, 10 am at The Dome, New Register House, Edinburgh. A list of those on the sub-group can be found in Annex 1.

6. Project criteria
In brief we have the following criteria for the projections:
- The projections will be 2012-based.
- We will produce the principal projection only; variant projections won't be prepared in the timescale available.
- The projection time period is likely to be 10 years.
- The proposed geography could be multi-member wards – or councils own chosen geography – based on whole (not apportioned) 2001 Data Zones.

7. Testing the methodology
The methodology will be developed, and we are going to run the projections for a sample authority to address any issues arising before progressing with the remaining projections. Fife Council have kindly agreed to be our test authority.

8. What do councils need to do?
We are consulting with council's on a number of items, listed below, including their preferred geography for the sub-council area projections (refer to email sent on 19 June 2015). The geography that we are using for the Fife sample is multi-member wards. It is necessary to establish the geography before work can progress,

therefore, given the timescale constraints of the project if we do not hear back from council's by **Friday 10 July 2015** we will use multi-member wards as your councils default geography.

We would like to invite council's views on the following:

A. Your preferred geography for the sub-council area projections (the geography must be best-fit from 2001 Data Zones).

B. As has been mentioned Fife have selected multi-member wards for their projection geography which tend to have a reasonable population size. We have created a 'best-fit' of 2001 Data Zones to multi-member wards using population weighted centroids and will use this for authorities who choose multi-member wards as their projection geography. Please bear in the mind the population of the area you would like to use for the projection, as the smaller the area the less reliable the projection can be. For smaller areas and island local authorities you may wish to consider combining smaller areas together. Please let me know if you would like the data zone to multi-member ward lookup table and do not hesitate to get in touch if you would like to discuss your choice of geography further.

C. Proposed projection time period – the proposed time period is 10 years, the reasoning being that the longer the time period the more uncertain and less sensible the projection becomes, particularly for smaller areas.

D. How council's intend to use the projections – please provide an indication of how your council may use the projections.

E. It would also be helpful if council's could indicate the priority we should give to processing each council's projections. They will be processed one at a time and if your council is particularly keen for early processing that will help us to prioritise the processing order.

9. Why are Ward boundaries the default geography?
We are aware of the review of ward boundaries and that the boundaries may change. We understand that the statutory consultation with councils ended in June 2015 and that there will be a public consultation later in 2015. Ward boundaries appeal to us due to their size and they are also fairly consistent. This is a one-off project and once the methodology is established it can potentially be applied to other geographies. If after this project is complete, councils make a case for sub-council area projections to be a regular output from NRS, then we will be in a better position to assess the robustness of data at different geographic levels that may be more appropriate in the longer-term. Some councils had already expressed their interest in ward level projections which gave us a starting point. If you would prefer a custom geography for your council then we will do our best to accommodate that. In this case please provide a 2001 Data Zone to your custom geography lookup in Excel.

A data zone to electoral ward lookup table has been provided for your convenience (refer to email dated 30/06/15).

10. Why is the geographic base 2001 Data Zones and not 2011 Data Zones?
We need to use 2001 Data Zones due to availability of data. We need to input historic data to POPGROUP to project the trend and that data is available at 2001 Data Zones for the 2012-based projections. If sub-council area projections are carried out again then this will be revised but in the restricted timescale for the project it was not sensible to try and change all of the input data that had been used for the 2012-based projections.

11. Why does the best-fit have to be from whole data zones?
We require a best-fit from whole data zones due to simplicity, data availability and the possibility of using sub-council area projections as an input to the Housing Need and Demand Assessment (HNDA) tool, which requires data inputs using whole data zones. The data is currently available for whole data zones, apportioning data zones would be an additional stage of work and would require extra checking. It also makes it more difficult to obtain data for these areas from different sources. Given the time constraints on the project, it is resource efficient to use whole data zones.

12. Is there a minimum population threshold for custom geographies?
We have not set a minimum population threshold for custom geographies because it depends on the volatility of an area, presence of communal establishments etc. POPGROUP user guidance notes *'As a crude rule of thumb for which there may be exceptions, we recommend a smallest population of three thousand.'* ([Small Area Projections in Scotland using POPGROUP software Guidance Part 1: Population projections](#), page three). In NRS's experience it is difficult to produce sensible and robust projections at this small level and authorities have also indicated that they have experienced this. There is a general understanding that a minimum population of ten thousand seems to be the level people feel projections are less volatile. We will review what size of area councils want to use for their projections as responses to the consultation are received.

13. Can projections be prepared for more than one geography within my council area?
Projections can only be produced for one geography per council area. This is due to the time constraints of the project, but also for consistency.

It is possible that different departments within councils and also strategic development planning authorities may want different projection geographies for different purposes. It is not practical for NRS to produce projections for multiple geographies. It is more appropriate for council departments to liaise together to decide the most suitable geography for this project.

We are not preparing projections at data zone level as these areas are too small, we are preparing them for the chosen higher-level geography, so any additional geography would require running a new projection.

14. Why are the projections trend-based?
NRS projections, in common with other UK statistics agencies, are trend-based projections. Some authorities have asked if we can take account of planned house building in the projections. Our position is that nationally produced projections should

be trend-based. Advice has been sought from Professor Ludi Simpson, who is a consultant on this project and he has advised the following.

Dwelling-led projections are a characteristic of land-use planning - they tell you the impact of a planned level of house completions in the future, on population and its age-sex composition. But it is usual for several plans to be evaluated in this way, not just one. Once there is a plan, then the council may argue that they want to plan other services around this future scenario, because although it may not come to fruition, it is what they are working towards and expect to happen, more so than the trend-based business-as-usual projection.

But
   (1) Different councils are at different stages of the planning process, and the plan changes from time to time, so it will not be easy for a council to provide the future net change in dwelling units each year for each small area, which is the key input into dwelling-led projections.
   (2) There is another input required for dwelling-led projections, the ratio of household to dwellings in the future, which is the result of future vacancy rates, holiday home rates, and sharing-household rates (all this is in the PG manual[1] - search for part that describes the use of the DFSupply file). It is usual to assume the same household/dwelling ratio as in the last census, but the assumptions are quite policy-laden.
   (3) For those who have POPGROUP or similar software, it is a relatively easy step to make dwelling-led projections once there are trend-based population and household projections. By the end of 2015 there will be a guide on this for POPGROUP users.

The Centre for Housing Market Analysis (CHMA) have also advised that dwelling-led projections are not consistent with the inputs required for the HNDA tool and that planned house building is a stage to be considered after the housing estimates from the HNDA tool have been generated.

15. Will the input data to the projections be made available to councils?
This will depend on the size of areas. We have lower level migration data that we can use than we are permitted to release, so we would need to make that decision when we have established the geography, but in principal if that is a desired outcome of the project we can look into what level of data we can share with councils.

16. What is next?
At the August meeting, the Projections Sub-Group will consider the project specification, draft methodology and potentially draft results of the sub-council area projections for our sample authority.

Footnote
1) The PG manual is the POPGROUPv.4 Population Estimation & Forecasting System Reference Manual, Edge Analytics, 2014 (PDF).

17. Can I join the Projections Sub-Group?
The sub-group members volunteered at the last PAMS meeting on 6 May 2015. If you would like to join the group then please get in touch. We will be restricted by numbers so may need to restrict members to one per council but will notify you if this becomes an issue. A small group will be able to explore the methodology more efficiently than in a larger group and the findings will be reported to PAMS.

18. Other relevant matters - National Population Projections New Methodology
As agreed at PAMS, the sub-group will also consider the new methodology for the council and NHS Board area level population projections, so the agenda will be split in two. For the meeting in August we will present the recommendations from Professor Phil Rees and colleagues, and our plans for taking the work forward. The sub-national population projection methodology is currently being reviewed for several reasons, including that the Office for National Statistics (ONS), who produce the population projections for the UK and its constituent countries, have reviewed the national method and these changes mean that the method we are currently using for areas in Scotland will no longer work with these new national inputs. Reviewing the method will also allow Scotland to move from using an outdated net migration method to incorporate the latest academic thinking on the best way to project populations in line with international best practice. This work is also being taken forward with the Projections Sub-Group.

19. Who do I contact if I have questions?
If you have any questions or would like further information please contact Angela Adams by phone 0131 314 4623 or via statistics customer services email statisticscustomerservices@nrscotland.gov.uk.

National Records of Scotland
Population & Migration Statistics Branch

Version 1 - 22 June 2015
Version 2 - Updated 2 July 2015

Annex 1 Projections Sub-Group – Local Authority Members

Name	Organisation
Andrew Strickland	East Lothian
Craig McNeill	East Lothian
Alistair Harvey	City of Edinburgh Council
Catherine Stewart	City of Edinburgh Council
Jenny Boag	Falkirk Council
Andrew Ballingall	Fife Council
Jan Freeke	Glasgow City Council
Cameron Thomas	Highland Council
Steve Morley	North Ayrshire Council
Lesley Mann	North Lanarkshire Council
Paul Davison	Perth and Kinross Council
Sandra Thomson	Perth and Kinross Council
Heidi Goodship	Scottish Borders Council
Allison Craig	South Ayrshire Council
Allan Lambie	South Lanarkshire Council
Nick Smith	Tayplan Strategic Development Planning Authority

There will be also be representation from academics, National Records of Scotland, other Scottish Government departments and other national administrations.