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# **Demography Division Statistics Plan 2012-13**

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## 1. Introduction

From 1 April 2011, the General Register Office for Scotland (GROS) merged with the National Archives of Scotland (NAS) to become the National Records of Scotland (NRS). The GROS and NAS websites will both remain active until they are replaced in due course by a new website for NRS.

The Demography Division of the National Records of Scotland publishes a wealth of statistical information about the people of Scotland.

This plan sets out our statistical work planned for 2012 13 and includes information on: priorities; resources ([Annex A](#)); statistical publications; and improvement activities.

More detailed information on the business objectives for 2012 13 is given in [Annex B](#), and progress against business objectives for last financial year (2011-12) is reported in [Annex C](#).

Our statistical planning is a continuous process, and we place strong emphasis on taking into account the views of the people who use our data. A draft of this plan (available on the NRS website) has been discussed with some representatives of users of our statistics at the [Population and Migration Statistics Committee](#) meeting on 3rd October 2012 on the NRS website. This final version has been circulated to members of the [ScotStat Register](#) (available on the Scottish Government website) who have indicated an interest in Demography.

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## 2. Priorities

### 2.1 Contribution to the Scottish Government National Performance Framework

The Government in Scotland set out their priorities within the [National Performance Framework](#) (NPF). The NPF supports delivery of the Scottish Government's Purpose which is: 'To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth'. Progress towards the Purpose is tracked by 7 Purpose Targets and it is supported by 16 National Outcomes - describing the kind of Scotland we want to be - and 50 National Indicators, covering key areas of health, justice, environment, economy, and education.

Like other Scottish public bodies, National Records of Scotland (NRS) Demography Division provides a range of information used to measure performance in the NPF. The Scottish Government's [Criteria for Assessing Performance](#) gives guiding principles and methodology for assessing and reporting progress on these measures.

NRS population estimates and data on birth and death registrations are a key part of measuring performance against Purpose Target 4 – Stimulate population growth and healthy life expectancy.

NRS data are also used in the measurement of some of the National Indicators, which the Scottish Government uses to track progress towards the achievement of its National Outcomes. For example, NRS provides the relevant population data where indicators are measured per head of population, or as a fraction of the total population.

NRS data contribute to the measurement of indicators on:

- Increase the number of businesses
- Reduce the proportion of individuals living in poverty
- Reduce premature mortality
- Reduce emergency admissions to hospital
- Increase the number of new homes

Where survey data has been used (for example, Scottish Household Survey data on the 'percentage of adults who smoke' indicator), aspects of the sample of the population surveyed (for example, age and sex) are typically compared to the NRS population estimates. Where necessary, the raw survey data are adjusted to ensure the results are representative of the actual population.

## 2.2 Contributions to Single Outcome Agreements

In 2007, representatives of the Scottish Government and Scottish local government signed a concordat. This concordat committed both to moving towards Single Outcome Agreements (SOAs) for all 32 of Scotland's councils.

SOAs are agreements between the Scottish Government and each council which set out how each will work in the future towards improving national outcomes for the local people, in a way that reflects local circumstances and priorities.

This has increased the need for data which can be used to measure progress against appropriate local indicators.

### 2.2.1 Data at sub-Scotland geographies

To address this need, we are working to:

- make information more accessible by:
  - Maintaining a table of [sub-Scotland data sources](#) on the NRS website which gives a detailed breakdown of all NRS data available at sub-Scotland geography levels (for example, council area or NHS Board area).
  - Revamping the Geography section of our website to make it easier to navigate.
- make more information available by:
  - Responding to requests for ad-hoc breakdowns of vital events statistics and other statistics for parts of Scotland, provided that this involves little risk of disclosing information about identifiable people and that the work can be done within the available staff time.
  - Consulting NHS Boards from time to time about possible improvements to the datasets on births, stillbirths and deaths which they receive from NRS each week.
  - Publishing variant projections for high and low migration at the same time as the principal projection for Strategic Development Plan and National park areas.

### 2.2.2 Professional statistical advice on suitability of NRS data for local indicators

- In addition to making sub-Scotland level data more accessible, and adding additional data, a key function of the NRS Demography Division is to provide advice on the use and understanding of its statistics. A user group for POPGROUP software continues to meet to improve the information and guidance available for users to produce their own small area projections.

## 2.3 Other user needs

In addition to taking into account requirements for the National Performance Framework and SOAs, we consider the needs of a wide range of demographic statistics users when planning our work.

Ways in which we engage with our users to establish their requirements are:

- [Consultation groups](#) (NRS website)
  - Population and Migration Statistics Committee (main ScotStat group)
  - Small Area Population Estimates Working Group
  - Household Analysis Review Group
  - National Population Projections Migration Assumptions Methodology Review Project
- [Events and seminars](#) (NRS website)
  - Population and Migration Statistics (PAMS) Conference, held every 2 years – last conference was held on [26 October 2011](#).
  - Seminars held on a range of topics relating to demography.
  - Visits to local authorities (for example, [Finding the Population Statistics You Need](#) event)
  - Meeting with Inverclyde Council to showcase our data to help them with their work.
  - Giving a talk on developments in Scottish household projections at a one-day event on '[Recent developments in household projections](#)' organised by the British Society for Population Studies (paper available on the London School of Economics and Political Science website).
  - One of the organisers for the Economic and Social Research Council (ESRC) Festival of Science Event on data linkage and data sharing
- Emailing links to any consultations we hold using the Scottish Government's [ScotStat Register](#).
- Other meetings and communications - for example, with Scottish Government (SG) policy and analytical staff, the Information Services Division (ISD) of NHS National Services Scotland, academics, COSLA, the Office for National Statistics (ONS); and by involvement with groups such as the National Forum on Drug-Related Deaths and the Scottish Suicide Information Database Steering Group.

## **2.4 Consultation**

The NRS recently consulted on its quarterly outputs for estimates of [Population by Country of Birth and Nationality](#) for Scottish areas and [Migration between Scotland and the Rest of the UK](#) (both available on the NRS website) to ensure they meet user requirements. Responses to the consultation will be used to determine the timing and content of future statistical outputs on population and migration. The consultation closed on 13th September 2012.

In Spring 2012, NRS consulted interested parties about the proposed collection, from every mother, when a birth or a stillbirth is registered, of information which is at present obtained only from married couples. The additional data could inform projections of the population and research into fertility and other topics. A report on the results of this consultation is available on the [NRS website](#).

## **2.5 Beyond 2011 and data linkage**

The system for providing population and socio-demographic statistics for the UK has, like many other countries, been built around a census of the whole population.

In recent times the census has become more expensive and challenging to conduct, especially with the increasingly mobile population. NRS is investigating alternative ways of meeting information needs for population statistics.

NRS have been investigating the possibility of using administrative data sources for the purpose of improving population statistics for a number of years. The Beyond 2011 project in Scotland was formally established in September 2011 to assess alternative options for producing demographic statistics, including the use of administrative data sources.

We are currently undertaking a programme of research and consultation with users, and aim to deliver an evidence-based report and recommendations for providing timely and cost-effective population and socio-demographic statistics fit for the 21st century that meet user needs.

Part of this will include an extended consultation process on the outputs from the census as well as views on alternatives to census. More details will be included in the Beyond 2011 Stakeholder Engagement Plan which is due to be published early 2013.

## **2.6 Census 2011 quality assurance and output production**

We are working with colleagues in Census Division to provide data and advice to quality assure the results from the 2011 Census. We are also involved in the production and quality assurance of the standard output tables due to be published in 2013.

### 3. National Records of Scotland (NRS) Demography Division Publications (2012-13)

Demography Division statistics are published on our website. A list of our planned publications for 2012-13 is below.

Quarterly update to Population by Country of Birth and Nationality	24 May 2012
Quarterly update to Migration between Scotland and the rest of UK	24 May 2012
Mid-2010 Population Estimates for Settlements and Localities in Scotland	24 May 2012
Mid-2011 Population Estimates Scotland	31 May 2012
Household Projections for Scotland, 2010 based	14 June 2012
Estimates of Households and Dwellings in Scotland, 2011	14 June 2012
Births, Deaths, and Other Vital Events: 1 <sup>st</sup> Quarter 2012	14 June 2012
Monthly Data on Deaths Registered in Scotland – 1 <sup>st</sup> Quarter 2011	14 June 2012
Weekly Data on Births and Deaths Registered in Scotland – 1 <sup>st</sup> Quarter 2011	14 June 2012
Population Projections for Scotland's Strategic Development Plan Areas and National Parks, 2010 based	12 July 2012
Total Migration To or From an Area, mid-2011 update	24 July 2012
Scotland's Population 2011: The Registrar General's Annual Review of Demographic Trends	2 August 2012
Deaths from various causes, 2011 update	2 August 2012
Vital Events Reference Tables 2011	9 August 2012
Drug-Related Deaths in Scotland in 2011	17 August 2012
2011 Small Area Population Estimates and Population Estimates for various Special Areas	28 August 2012
Quarterly update to Population by Country of Birth and Nationality	30 August 2012
Quarterly update to migration between Scotland and the rest of UK	30 August 2012
Local Area Migration 2011	30 August 2012
Births, Deaths and Other Vital Events: 2 <sup>nd</sup> Quarter 2012	13 September 2012
Monthly Data on Deaths Registered in Scotland – 2 <sup>nd</sup> Quarter 2012	13 September 2012

Weekly Data on Births and Deaths Registered in Scotland – 2 <sup>nd</sup> Quarter 2012	13 September 2012
Centenarians	11 October 2012
Winter Mortality in Scotland, 2011/12	30 October 2012
Quarterly update to Population by Country of Birth and Nationality	29 November 2012
Quarterly update to migration between Scotland and the rest of UK	29 November 2012
Household Projections for Scotland's Strategic Development Plan Areas and National Parks, 2010-based	5 December 2012
Births, Deaths and Other Vital Events: 3 <sup>rd</sup> Quarter 2012	13 December 2012
Monthly Data on Deaths Registered in Scotland – 3 <sup>rd</sup> Quarter 2012	13 December 2012
Weekly Data on Births and Deaths Registered in Scotland – 3 <sup>rd</sup> Quarter 2012	13 December 2012
2011 Census: First Results on Population Estimates for Scotland	17 December 2012
Babies' First Names – 2012	20 December 2012
Electoral Statistics, Scotland 2012	28 February 2013
Births, Deaths and Other Vital Events: 2012 (Preliminary)	14 March 2013
Births, Deaths and Other Vital Events: 4 <sup>th</sup> Quarter 2012	14 March 2013
Monthly Data on Deaths Registered in Scotland – 4 <sup>th</sup> Quarter 2012	14 March 2013
Weekly Data on Births and Deaths Registered in Scotland – 4 <sup>th</sup> Quarter 2012	14 March 2013

Additional information, including specific dates for publication where known, is also provided on the NRS website.

[Statistics at a Glance](#) provides information on key statistical trends, including

- [High Level Summary of Statistics](#) - overview of each of our main areas of activity
- [Council Area Profiles](#) - overview of each of the 32 council areas in Scotland

The [About Our Statistics](#) section of the NRS website also provides more information about the background to official statistics and the policies and practices used to produce them.

## 4. Continuous Improvement Activities

Continuous improvement is an integral part of the National Performance Framework and the UK Statistics Authority Code of Practice for Official Statistics, and we are always trying to improve the quality of statistics we produce.

[National Outcome 15: “Our public services are high quality, continually improving, efficient and responsive to local people’s needs”].

Improvement work planned for Demography Division in 2012-13 includes:

- Investigating new sources of administrative data to contribute to the improvement in quality of population and household statistics - for example, using Her Majesty’s Revenue and Customs (HMRC) and Higher Education Statistics Agency (HESA) data.
- Developing a new Vital Events information technology (IT) system to improve data processing and provide scope for additional data validation.
- Expanding the Vital Events statistical databases to include the new standard codes for occupations and various types of geographical area.
- Publishing a paper incorporating the results of a microsimulation model of Scotland's household composition, and comparing it to the 2010-based household projections.
- Improving the accuracy of the NHS Central Register (NHSCR) by adding additional reference fields.
- Investigating the potential of a range of sources of administrative data to contribute to the development of more efficient systems for population statistics.
- To extend the use of NHSCR as the Administrative Data Linkage Centre which has been identified as the likely Index for the new initiatives of the Data Linkage Centre, Revenue Scotland and the Administrative Data Liaison Service linked to the UK Advisory Council for Access to Administrative Data.
- Assuming Parliamentary approval, starting to collect, from every mother when a birth or a stillbirth is registered, information which is currently obtained only from married couples.
- Working with Scottish Court Service (SCS), NRS Registration Division and Scottish Government Civil Justice Statistics to develop the electronic supply of statistical data on divorces and dissolutions of civil partnerships, if required in the light of experience or any changes to SCS's systems and procedures.
- Making further improvements to the vital events statistical outputs, for example, by expanding the material that is available on the NRS website.
- Publishing high and low migration variants at the same time as the principal projection for Strategic Development Plan and National Park areas.
- Developing methods for revising population estimates for Council, NHS Boards and datazones for use after the results of the 2011 Census are known.
- Improving the methodology for mid-year estimates (e.g. estimation of the number of Armed Forces and investigation of improved sources of internal, cross-border and international migration).
- Contributing to the quality assurance of the 2011 Census and continue to develop methods for future quality indicators for population estimates.

- Implementing improvements to the Geography section of our website, including incorporating 2011 Census geography information.
- Continue working collaboratively with the Centre for Population Change. This is an Economic and Social Research Council (ESRC) funded project involving a consortium of Scottish universities and Southampton University.
- Contributing to UK wide projects on: improving migration statistics, population estimates and population projections; and options for future Censuses after 2011.
- Continuing to develop the Scottish Longitudinal Survey, linking the data from the 2011 Census and the 1947 Scottish Mental Survey.
- Ensuring statistical staff continue to develop their skills and competencies through a continuous development programme.
- Continuing work with the Boundary Commission for Scotland to provide improved quality assurance for the annual Electoral Statistics publication.
- Continuing work with the Scottish Assessors Association Electoral Registration Committee to improve the exchange of information.
- Continuing to work with the Data Linkage Framework to improve the data sharing landscape.
- Continue to engage with Stakeholders and the general public regarding the Beyond 2011 project.
- Publish the outcomes of the Beyond 2011 stakeholder engagement sessions on the Beyond 2011 section of the website.

If resources are available, we will also aim to

- Take forward the remaining work from the [Population Projections Working Group work plan](#), which is available in the Consultation Groups section of the NRS website.

**Annex A: National Records of Scotland (NRS) Demography Division Resources  
(2012-13 approved budget<sup>1</sup>)**

<b>Grade</b>	<b>Discipline</b>
<b>Statistical Information Services</b>	
1 x B3	Statistics
1 x B2	Administration
2 x B1	Administration
3 x A4	Administration
<b>Household Estimates &amp; Projections</b>	
0.6 x C1	Statistics
1.6 x B2	Statistics
1 x B1	Statistics
2 x A3 (Scottish Neighbourhood Statistics (SNS) funded)	Student (temporary)
<b>Population &amp; Migration Statistics</b>	
1 x C1	Statistics
2 x B2	Statistics
3 x B1 (one SNS funded)	Statistics
0.8 x A3	Administration
<b>Data Access &amp; Communications</b>	
1 x C1	Statistics
1 x C1	Solicitor
1 x B3	Statistics
4 x B2	Statistics
<b>Alternative Sources</b>	
1 x C1	Statistics
2 x B3	Statistics
1 x B3	IT
4 x B2	Statistics
1 x B1	Statistics
<b>Vital Events</b>	
1 x C1	Statistics
1 x B2	Administration
1 x B2	Statistics
0.64 x B1	Administration
2 x A4 (by the end of the year, following staff changes)	Administration
4.3 x A3 (by the end of the year, following changes)	Administration
<b>Statistical IT<sup>2</sup> (shared with Census Division)</b>	
1 x B3	IT
3 x B2	IT
3 x B1	IT
<b>NHS Central Register</b>	
0.6 x B3	Administration/Data Analyst
1 x B2	Administration/Data Analyst
2 x B1	Administration/Data Analyst
3 x A4	Administration/Data Analyst
11 x A3	Administration/Data Analyst
Total Demography Staff Costs	£2.35m
Total Non-staff Costs	£0.62m
Total Income	+£0.99m
<b>Total Resourcing<sup>2</sup></b>	<b>£1.97m</b>

**Footnotes**

- 1) Actual staffing level may vary from approved budget (for example, where posts are shared or vacant).  
2) If shared Information Technology (IT) staff resource is excluded, Total Resourcing = £1.09m.

## Annex B: National Records of Scotland (NRS) Demography Division Business Objectives (2012-13)

<b>Business Improvement Objectives</b>
<p>Dissemination of 2011 Census Outputs.</p> <ul style="list-style-type: none"> <li>• To deliver complete, accurate and accessible population statistics, which meet user requirements on a consistent and comparable basis nationally and for small areas and small population groups.</li> </ul>
<p>National Data Linkage Centre.</p> <ul style="list-style-type: none"> <li>• Creation of a National Data Linkage Centre to improve the sharing of data for statistics and research purposes across government.</li> </ul>
<p>Investigate the feasibility of alternative types of census.</p> <ul style="list-style-type: none"> <li>• Gain access to administrative data sources.</li> <li>• Identify and make required legislative changes.</li> <li>• Stakeholder engagement and consultation.</li> <li>• Methodological feasibility work on modelling population estimates using administrative data sources.</li> </ul>
<p>National Records of Scotland (NRS) website.</p> <ul style="list-style-type: none"> <li>• Contribute to production of new NRS website and the transfer of data from the current General Register Office for Scotland (GROS) and National Archives of Scotland (NAS) websites over to the new website.</li> </ul>
<p>Business Continuity Management.</p> <ul style="list-style-type: none"> <li>• Implement, develop and maintain a Business Continuity Management System across NRS which ensures there are measures in place to continue to operate selected services following a disruption.</li> </ul>
<p>NRS marketing strategy.</p> <ul style="list-style-type: none"> <li>• Contribute to production of NRS marketing strategy.</li> </ul>
<b>Statistical Information Services</b>
<p>Statistics Customer Services information requests.</p> <ul style="list-style-type: none"> <li>• Meet all customer requests for demographic data within published timescale (within 5 working days for almost all requests), providing appropriate advice and analysis as required.</li> </ul>
<p>Publication of Registrar General's Annual Review (RGAR) and other statistical publications; ongoing improvement of the NRS website.</p> <ul style="list-style-type: none"> <li>• Disseminate via the web and other means, agreed statistical outputs, including the Registrar General's Annual Review of Demographic Statistics 2010; make improvements to the NRS website to ensure it continues to meet the needs of users.</li> </ul>
<p>Cross-divisional activities.</p> <ul style="list-style-type: none"> <li>• Co-ordinate work that crosses more than one branch in the division, collating a joint Demography division response.</li> </ul>
<p>Centre for Population Change.</p> <ul style="list-style-type: none"> <li>• Ensure administration for Centre for Population Change is in place, e.g. disclosure checks have been completed.</li> </ul>
<b>Household Estimates &amp; Projections</b>
<p>Household estimates and projections.</p> <ul style="list-style-type: none"> <li>• Publish dwelling counts for small areas.</li> <li>• Collect and publish household estimates for each council, and small areas.</li> <li>• Publish household projections for each council, along with variant projections.</li> <li>• Publish household projections for Strategic Development Planning Authority areas and National Parks, along with variant projections.</li> <li>• Collect data on Communal Establishments for inclusion in the 2012-based household projections.</li> <li>• Contribute to the Registrar General's Annual Report.</li> </ul>

- Develop new information and provide support to our customers.
- Publish a paper incorporating the results of the microsimulation of Scotland's household composition, and comparing it to the 2010-based household projections.
  - Support the census Quality Assurance (QA) process, by providing information and advice.
  - Carry out review work, in consultation with our stakeholders, to decide how best to incorporate the 2011 Census data into the household projections, and carry out a general review of the projections.
  - Carry out review work, in consultation with our stakeholders, to decide how best to incorporate the 2011 Census data into the household estimates.
  - Contribute to cross-cutting work within NRS, including Beyond 2011.
  - Work with our key stakeholders in the Scottish Government and external organisations such as local authorities, academics and other Government Departments.
  - Carry out other work to meet our customers' needs, as appropriate, including answering all Parliamentary Questions, Freedom of Information requests and ad-hoc requests for data or information, within the agreed timescale.
  - Contribute to cross-office activity in the Scottish Government and NRS.

### **Population & Migration Statistics**

Publish population, migration and life expectancy statistics

- Publish the following key publications.
  - Population by Country of Birth and Nationality for Scottish Areas – quarterly updates.
  - Quarterly updates to migration between Scotland and the rest of the UK .
  - Mid-2010 Population Estimates for Settlements and Localities in Scotland (May 2012).
  - Mid-year Population estimates for 2011 (May 2012).
  - Population Projections for Scotland's Strategic Development Plan Areas and National Parks (2010 based) (July 2012).
  - Total Migration To or From an Area (mid 2011 update) (July 2012).
  - Four chapters for the RGAR (August 2012).
  - Local Area Migration – 2011 (August 2012).
  - Small Area Population Estimates (SAPE) for 2011 and for Special Areas (August 2012).
  - Centenarians estimates for 2011 (October 2012).

Improve the methodology and dissemination of our outputs and develop methods of revising our estimates after the 2011 Census.

- Develop revision methodologies for mid-year estimates and SAPE.
- Review the methodologies to produce mid-year estimates.
- Assess the use of the NHS Central Register (NHSCR) Extract for internal migration estimates at NHS Board, Council and datazone level working with Alternative Sources as necessary.
- Work with Alternative Sources to use new improved sources in the production and quality assurance of population and migration estimates e.g. linkage work for distribution of international migration data.

Demographic policy support and analysis.

- To provide informed advice and analysis to support users of demographic statistics, through liaison with key users, user groups, publications in journals and presentations including:
  - Fully participate in the Scottish Government's Demographic Analysis Working Group.
  - Visit 1 or 2 local authorities as part of our ongoing stakeholder engagement.
  - Work with Scottish Government policy teams (Fresh Talent, Strategy Unit and Economic Strategy Unit) to support the Population Purpose Target including any issues which arise from rebasing the mid-year estimates after the 2011 Census.
  - Work with other users (e.g. academics, Centre for Population Change, COSLA etc).

2011 Census Quality Assurance.

- Investigate the quality of Armed Forces data recorded in the Census and implications for the mid-year estimates.
- Work with the Census Down Stream Processing team on quality assurance and implications of the mid-year estimates.
- Look at the Census Coverage Survey data on 6-12 month migrants to inform final decision on population base for mid-year estimates.

### **Alternative Sources**

Management of research using the Census linked to other records.

- Provide ongoing support for Scottish Health and Ethnicity Linkage Study.
- Provide ongoing support for Scottish Longitudinal Survey.
- Implement Scottish Longitudinal Survey linkage to Census 2011.
- Link Census 2011 data to the Annual Population Survey to allow the production of a non-response study by the Office for National Statistics.

<p>Electoral statistics.</p> <ul style="list-style-type: none"> <li>• To collate and publish electoral statistics (February 2013). Contribute to Electoral Commission assessment of completeness and accuracy of Electoral Register (December 2013).</li> <li>• Carry out linkage between Electoral Register and Census/Labour Force Survey (LFS).</li> </ul>
<p>Statistical work stream on Beyond 2011 project.</p> <ul style="list-style-type: none"> <li>• Consider the development of two population spines, one based on Census and administration data and the other based purely on administration data.</li> <li>• Assess contribution of Scottish Longitudinal Survey and mid-year estimate approaches to alternative sources.</li> <li>• Investigate the differences between administration datasets and mid-year estimates, using Glasgow City as a case study.</li> <li>• Work with Geography Team to develop and assess address registers.</li> <li>• Commission and develop methodological approaches, and using administration data to produce population estimates.</li> <li>• Ensure work on data matching supports the Scotland-wide Data Linkage Framework for Statistics and Research.</li> <li>• Work with the Office for National Statistics and the Northern Ireland Statistics and Research Agency to ensure cross-administration learning and efficiencies are realised.</li> <li>• Consider implications of alternative sources on estimates of hard to count populations.</li> </ul>
<p>Support for Census.</p> <ul style="list-style-type: none"> <li>• Match the Census Coverage Survey to Census 2011 data.</li> <li>• Support the Census 2011 editing and imputation process.</li> <li>• Support Census 2011 early processing and oversee the production of the Household Composition Algorithm.</li> </ul>
<p>Provide support to division on use of NHSCR demographic extract.</p> <ul style="list-style-type: none"> <li>• Ongoing secretarial support for NHSCR Extract Working Group.</li> <li>• Maintain demographic NHSCR extract and metadata.</li> </ul>
<p><b>Data Access and Communications</b></p>
<p>Secure access to external data sources required by the Alternative Sources branch including:</p> <ul style="list-style-type: none"> <li>• Survey data (e.g. Scottish Household Survey).</li> <li>• Locally held data (e.g. School Census data).</li> <li>• Liaise with Alternative Sources around the management of the Great Glasgow and Clyde project.</li> <li>• Develop legislative strategy.</li> <li>• Undertake Privacy Impact Assessments (PIA), including a generic PIA for the B2011 project.</li> <li>• Undertake Data Access Agreements and Privacy Compliance Checks where necessary.</li> <li>• Work with the Data Linkage Framework (DLF) including being part of the working group on the DLF- Privacy Access Committee.</li> <li>• Manage the legal secondee to help facilitate quicker access to data sources.</li> </ul>
<p>Carry out stakeholder engagement activities.</p> <ul style="list-style-type: none"> <li>• Produce stakeholder engagement strategy.</li> <li>• Re-launch website and regularly update.</li> <li>• Raise awareness of Beyond 2011 project to stakeholders.</li> <li>• Consult with users on their population and socio-demographic statistical requirements.</li> <li>• Conduct consultation on alternative census options and outputs.</li> <li>• Identify and manage privacy concerns.</li> <li>• Help set up the National Data Linkage Centre.</li> </ul>
<p>Support Census Variant Design (CVD) workstream.</p> <ul style="list-style-type: none"> <li>• Provide statistical advice on surveys/questionnaire design to CVD workstream.</li> <li>• Liaise with Scottish Government survey managers and investigate potential of surveys for collecting attribute data.</li> <li>• Investigate sample size requirements for various levels of accuracy/geography.</li> </ul>
<p>Contribute to Ministerial advice on alternatives to the census.</p> <ul style="list-style-type: none"> <li>• Investigate and document costs and benefits associated with each alternative census option.</li> <li>• Draft business case, including cost benefit analysis results.</li> <li>• Produce a method to 'score' each alternative census option.</li> </ul>

## Vital Events

Process and output preliminary Vital Events data every week and every quarter.

- Processed records passed to NHS Boards etc within 3 weeks of initial receipt by NRS. (NB: this includes the time allowed for Informants and, perhaps, NRS's Examiners to check the details).
- 'Births, Deaths and other Vital Events' published (with the weekly and monthly web tables):
  - Q1 - 14 June 2012
  - Q2 - 13 September 2012
  - Q3 - 13 December 2012
  - Q4 - 14 March 2013
- Quarterly data distributed to customers within a week of the publication of the quarterly figures.

Disseminate Vital Events data for a year.

- Finalised annual datasets for 2011 sent to users.
- Other annual datasets (e.g. for Neighbourhood Statistics) produced within required timescales.
- Vital Events Reference Tables published.
- 5 Web sections on deaths from particular causes and age-standardised mortality rates updated.
- All Vital Events High Level Summary pages updated in the month that the Reference Tables are published.
- 'Drug-related Deaths' published in August 2012.
- 'Winter Mortality' (for Winter 2011/2012) published in October 2012.
- 'Babies' First Names' (for the first 11 months of 2012) published in December 2012.
- Preliminary figures for 2012 as a whole published on 14 March 2013.
- High Level Summary 'Births' and 'Deaths' headline pages updated in March 2012.

Improve aspects of the collection and coding of Vital Events data.

- Report on the results of the consultation about the possible amendment of the 1938 Population Statistics Act to collect from all mothers, when births are registered, their number of previous live births and stillbirths. If appropriate, seek an Order under the 2006 Family Law Act to amend the 1938 Act to collect this information from the start of January 2013.
- Introduce SOC2010 Occupation codes for incoming Vital Events data, for consistency with the results of the 2011 Census, and retrospectively allocate these codes to events registered from January 2011.

Improve aspects of the processing of the Vital Events data.

- With Registration Division, Scottish Courts Service (SCS) and Scottish Government (SG) Justice Analytical Services, resolve any remaining problems with the electronic supply and processing of data on divorces and civil partnerships, and implement any developments that may be required in the light of experience or following changes to the SCS's systems and procedures.
- Vital Events Rewrite: new modules for Marriages, Civil Partnerships, Births and Stillbirths developed by IT colleagues; user acceptance testing by branch; implementation by IT colleagues.

## Statistical IT (shared with Census Division)

Vital Events Information Systems (IS) Support.

- The continued redevelopment of Vital Events Systems, including installation of a production server environment and deployment of the celebrants application.
- Improvements to data extraction and dissemination functions, including automation of production of a range of outputs (e.g. the larger 'single year' reference tables for Scottish Neighbourhood Statistics).

General Demography IS Support .

- IS support for Demography projects and business functions, including re-write of migration processing system (NRSMIG) to use data from NHSCR extract, roll out of new version of SuperSTAR software, ongoing support for use of the NHSCR Extract and safe setting facility for the Scottish Longitudinal Study and Scottish Health and Ethnicity Longitudinal Study, as required and within agreed timescales, and implementing the re-write of mid-year estimates system to improve the processing of Community Health Index (CHI) data.

Alternative Sources.

- Expand the Downstream Processing Survey to allow the creation of an environment accredited to Business Impact Level 4 to support the Alternative Sources Team's work on data-matching and alternatives to the Census.

### **NHS Central Register (NHSCR)**

- To maintain our role as Custodian of NHSCR data we rigorously enforce and implement robust protocols and governance procedures.
- On behalf of the Scottish Government Health Department, to maintain and improve the excellent standards of accuracy and probity by continuing the rigorous regime of ongoing examination of data, by devising and issuing a comprehensive handbook of instructions covering all NHSCR processes and procedures.
- Act as advisor to influence and produce solutions for the provision of Medical Research data to assist academic findings.
- To influence, advise and manage the provision of NHSCR data updates for the Improvement Service and NRS.
- To maintain and develop verification systems that meet the data-sharing provisions contained in the Local Electoral Administration and Registration Services (LEARS) Act.
- To continually manage and develop our experienced properly trained staff to deliver excellent data linkage and quality outcomes.
- To explore widening our customer base and increase income for NHSCR.

## Annex C: Progress against Business Objectives in previous year (2011-12)

<b>Business Improvement Objectives</b>
<p>Quality assurance of 2011 Census outputs.</p> <ul style="list-style-type: none"> <li>All CACI data delivery milestones were met and contract is close to completion. Extensive planning and adding of additional resource has taken place, with 8 new statisticians and 4 new IT staff. Cleaned Processing Units are now being completed and the date is being quality assured by the new statisticians. Further work on imputation and coverage continue to be developed.</li> </ul>
<p>Data sharing.</p> <ul style="list-style-type: none"> <li>A Data Linkage Steering Group has been set up, chaired by the Scottish Government (SG), incorporating representatives from National Services Scotland Information Services Division (NSS:ISD), National Records of Scotland (NRS), Economic and Social Research Council (ESRC), academia, Society of Local Authority Chief Executives (SOLACE), and the Information Commissioner's Office. A project manager is being recruited to help establish the governance arrangements and develop the business plan for a National Data Linkage Service. A stakeholder consultation paper was published in March inviting views on draft data linkage principles. A research project has been set up to test public opinions of cross sectoral linkages, the results from which were published in September 2012. We are continuing to support record linkage projects such as the Scottish Longitudinal Study and the Scottish Health and Ethnicity Linkage Study and promote their outputs to improve the Scottish evidence base on demographic issues. We are also continuing to develop our skills and expertise in record linkage and help improve the knowledge base in this area in the wider SG and among the user community.</li> <li>A working group on the Data Linkage Framework – Privacy Access Committee has been established to formulate the structure of the PAC.</li> </ul>
<p>Census outputs.</p> <ul style="list-style-type: none"> <li>Communications and Dissemination strategies have been signed off by the Census Programme Board (CPB). Specification for dissemination solution is being widened to ensure scope is not too narrow to deliver a service that meets users needs. A dissemination prototype test will start at the end of April (for 10 days) and will inform further rounds of development.</li> <li>An implementation plan for Communications was produced and signed off by CPB. The next steps are to carry out a survey of organisations to find out what type of census data they are interested in, what they will use it for and how they would like to be communicated with in the period up to release of census results. This includes a redevelopment of the Scotland's Census website to act as the primary communication channel.</li> <li>We have been working closely with Office for National Statistics (ONS) on our table build plans and we should be able to make use of their information to quality assure our own process. ONS should be able to share a lot of their work with us, therefore saving a lot of time and resource for NRS staff to concentrate on production of Scottish specific tables.</li> </ul>
<p>Beyond 2011.</p> <ul style="list-style-type: none"> <li>There has been some progress in investigating alternatives to the census but there have been considerable delays because of resourcing, IT and data access issues. Funding was allocated at the Spending Review but there has been difficulty progressing the project because of staff secondments to work on the 2011 Census. The technical skills developed by staff working on census alternatives have been invaluable to the 2011 Census project. There have been difficulties in gaining access to data from administrative sources such as higher education student data in Scotland and data from local authorities. The provision of census data to link to data from administrative sources has also been delayed. Despite all these difficulties, progress has been made in evaluating linkage tools, assessing administrative data, developing methodologies for creating a population spine and engaging with stakeholders.</li> </ul>
<p>National Records of Scotland (NRS) website.</p> <ul style="list-style-type: none"> <li>Development framework document approved by Departmental Programme Group and Web Steering Group. Project will commence formally in May 2012 with implementation of the NRS website expected later in the year.</li> </ul>
<p>Business Continuity Management.</p> <ul style="list-style-type: none"> <li>This task has not been progressed as planned as a result of higher priority work. A programme of actions will be presented to Departmental Programme Group in May.</li> </ul>

### **Statistical Information Services**

- Ad hoc requests, production of the Registrar General's Annual Report and the web dissemination work have all been successfully achieved this year. Additional work on producing table build plans for the 2011 Census outputs was taken on half way through the year. This work involves co-ordination with colleagues in NRS Census Division as well as colleagues in other government departments, namely ONS and Northern Ireland Statistics and Research Agency (NISRA). The bulk of this work will be carried out in 2012-2013, however in this financial year we have been able to create some initial table build plans which has allowed us early identification of some issues that will need to be resolved.

### **Household Estimates & Projections**

- Our household estimates and projections publications, and small area statistics, were published in June.
- We are making a number of improvements to our publications, which have been welcomed by our stakeholders, including improving the quality of our communal establishment statistics, and including additional variants in our household projections publication. We have done some detailed analytical work to investigate the feasibility of incorporating survey results into our household projections to update the trends. We published a paper on this, which describes the analysis and results. Following discussion with our key stakeholder group, we concluded that this approach does not offer a substantial improvement over our current projections methodology.
- We have sponsored a PhD student to produce a microsimulation model of Scotland's population and households. He has now been awarded his PhD. In the next few months, we will be meeting with his supervisor to handover the model itself, along with documentation and a summary which we can publish. We will then produce an analysis paper comparing microsimulation results with the standard household projections.
- We are supporting the census quality assurance process.
- We have carried out a range of other ad-hoc analysis, for our customers.
- The SG is proposing to change the way that long-term empty properties are taxed under the Council Tax system. This could have an impact on our statistics, as they are based on Council Tax information on dwellings which are occupied or vacant. Therefore, we are monitoring this, and discussing the possible impacts with colleagues working in SG housing policy teams, SG local government finance statistics, and local authorities.
- The UK Statistics Authority had designated our statistics as National Statistics.

### **Population & Migration Statistics**

- All 12 publications were published on time. The following improvements were made: removing some bits from the Annual Review to shorten our sections; producing a new Migration Spreadsheet tool to replace the 9 Local Area Migration reports; produced new commentary for the Small Area Population Estimate (SAPE) publication, brought forward the publication date to August and published all the Special Area estimates for Nomenclature of Units for Territorial Statistics (NUTS), Scottish Index of Multiple Deprivation (SIMD), Scottish Parliamentary Constituencies (SPCs) etc at the same time; a new Life Expectancy publication was published combining the previous area and special area publications, including new analysis by SIMD over time and clear presentation of changes over time; the commentary for the Centenarians publication was improved; all variant projections were published at the same time as the principal projection for council and NHS board areas; and press and other queries for all publications were dealt with quickly. Population estimates for Settlements and Localities will be published in May rather than March due to lack of geography IT resource.
- All our statistics have been designated as National Statistics by the UK Statistics Authority. A range of support and advice has been delivered to policy colleagues in the SG and external users and we have been proactive in disseminating our statistics. Due to lack of resource visits to local authorities did not take place.
- A lot of the development work we had planned did not take place because we lost key staff to work on the 2011 Census. Despite this some progress was made with a clear project plan for implementing changes to the way we produce internal migration being drawn up and we have started thinking about issues to consider when rebasing the population estimates.
- We also contributed to the quality assurance of the 2011 Census by producing a Census day estimate of the population rolled forward from the 2001 Census as well as participating in meetings with Census colleagues.

### Alternative Sources

- Electoral Statistics were published as planned and National Statistics designation achieved. Preparation for all linkage projects was completed as planned but due to delays in census data, the Scottish Longitudinal Survey and the Census Coverage Survey matching studies have not yet started. Linkage tool evaluation was delayed as Secure Research Environment (SRE) was not available for 6 months. New data extracts were obtained from the Department of Work and Pensions, the Higher Education Statistics Agency (HESA) (England and Wales) and the NHS but not all data sharing issues were resolved around access to data from HESA (Scotland) and School Census data. Progress on stakeholder engagement and privacy impact assessment has pushed the work on alternative sources and the Beyond 2011 Programme forward. The branch supported the development of the Scotland-wide Data Linkage Framework for Statistics and Research and helped improve the knowledge and understanding of record level linkage across Scottish Government and the wider research community. Support for Scottish Health and Ethnicity Linkage Study and the Scottish Longitudinal Study has continued.

### Vital Events

- We processed the Vital Events statistical data for 2011, distributed and published all the final statistics for 2010 and the quarterly and preliminary annual figures for 2011, and responded to 214 ad-hoc requests for information and 179 bulk particulars searches, within the required timescales.
- We also made several improvements. We increased the range of Vital Events Statistics information available on the website, including adding four new Reference Tables, a new section on age-standardised death rates and several new pages of information about the basis of our statistics. We also expanded some of our existing outputs. More information about the [2011 improvements to Vital Events statistics](#) is available on the NRS website.
- There were also a number of improvements to which IT colleagues contributed greatly: implementing fully all the statistics-related aspects of the electronic supply of divorce data and the consequent changes to our procedures and statistical datasets; starting to use a secure server to improve the way in which frequently-provided data are supplied to some of our main customers; and reducing the manual input required for the production of some of our standard tables.

### Statistical IT (shared with Census Division)

Vital Events Information Systems (IS) Support.

- The Vital Events rewrite is currently on hold as resources that were allocated to the project have been reassigned to work on Census projects. However a number of improvements have been made to data extraction and dissemination functions, with a number of outputs now being automated. Further improvements will be made once the Vital Events rewrite is underway again,

General Demography IS Support.

- A new version of SuperSTAR software has been rolled out to staff, NHSCR extracts were provided on time, and hardware and software for the safe setting facility for the Scottish Longitudinal Study and the Scottish Health and Ethnicity Longitudinal Study was upgraded and support was provided as and when required.

### NHS Central Register (NHSCR)

All objectives have been achieved and in some cases the timing specification has been exceeded.

- Managed the NHSCR records 90% within 5 working days, 95% within 10 working days and 100% within 15 working days of NHSCR being notified of the event.
- Managed the Medical research and Improvement Service Updates.
- Allowed Scottish Government departments and others an identification verification source.
- Managed Scottish Government Health Department Service Level Agreement requirements.
- Managed our Atos (IT) requirements for the Contract Management Team (CMT).
- Managed and developed our staff and processes.
- Managed data linkage and quality.